METRORapid University Corridor

Preface: Categorical Exclusion Checklist/Report Appendices

December 2023

Preface: Categorical Exclusion Checklist/Report Appendices

These Appendices to the Categorical Exclusion Checklist/Report contain all of the environmental analysis reports completed for all the areas required under the National Environmental Policy Act (NEPA): Land Acquisitions and Displacements, Historic Resources Survey Report and Addendum, Archaeological Survey and Work Plan, Section 4(f) Evaluation (documents the use of park and recreation lands, wildlife and waterfowl refuges, and historic sites in accordance with Section 4(f) of the U.S. Department of Transportation Act), Environmental Justice, Hazardous and Contaminated Materials, Noise and Vibration, Biological Resources, Water Resources, and Traffic Analysis.

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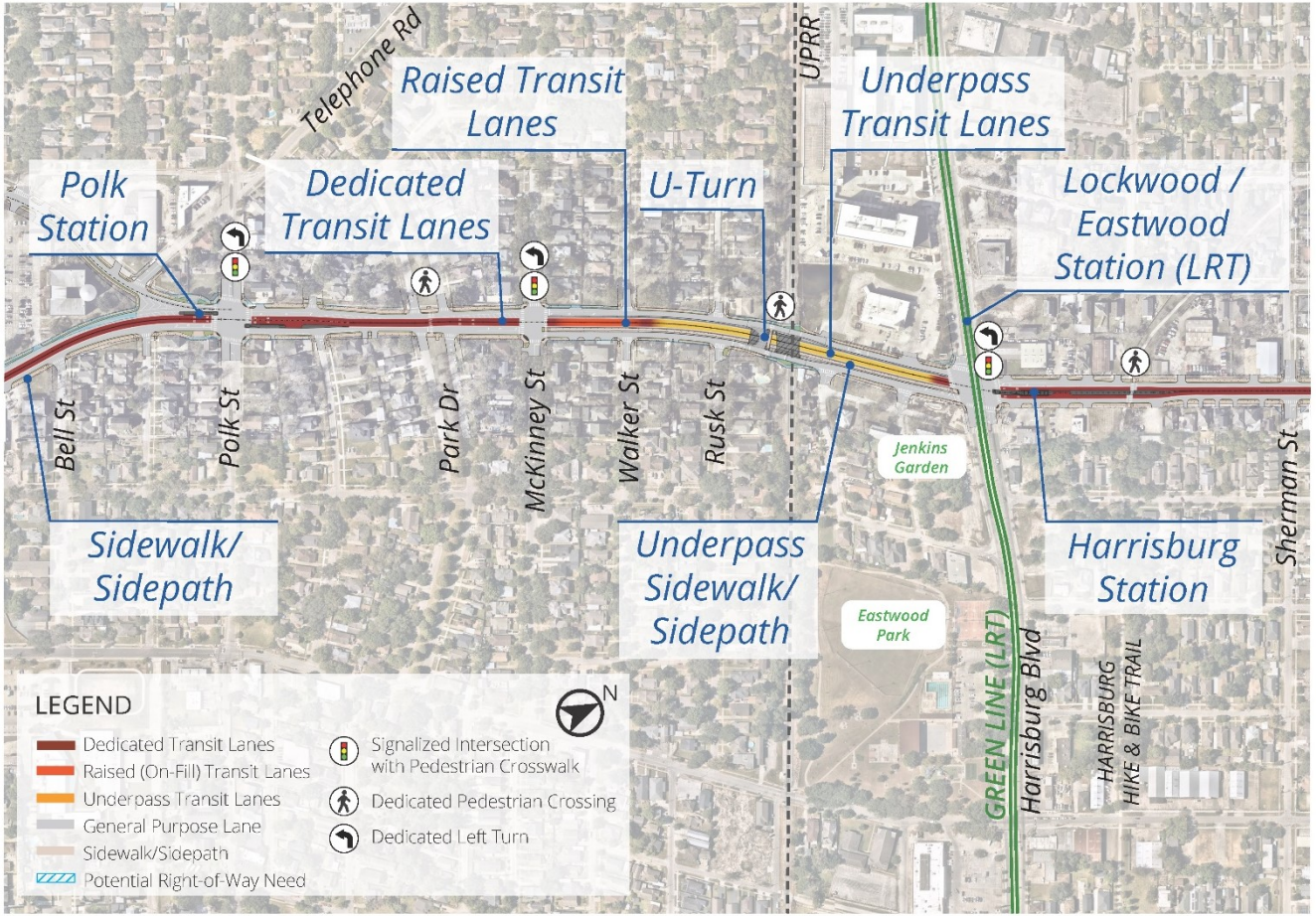

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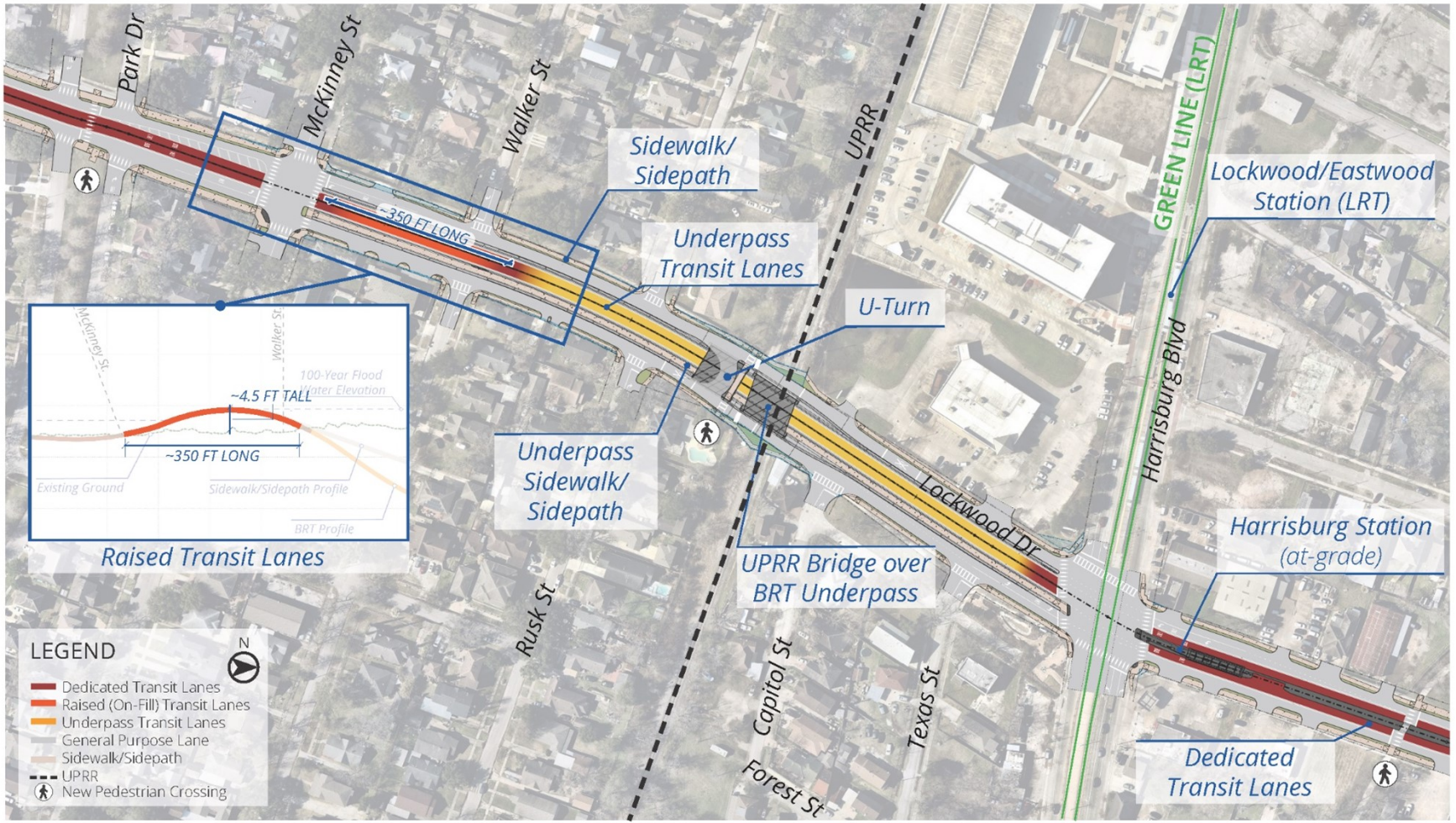

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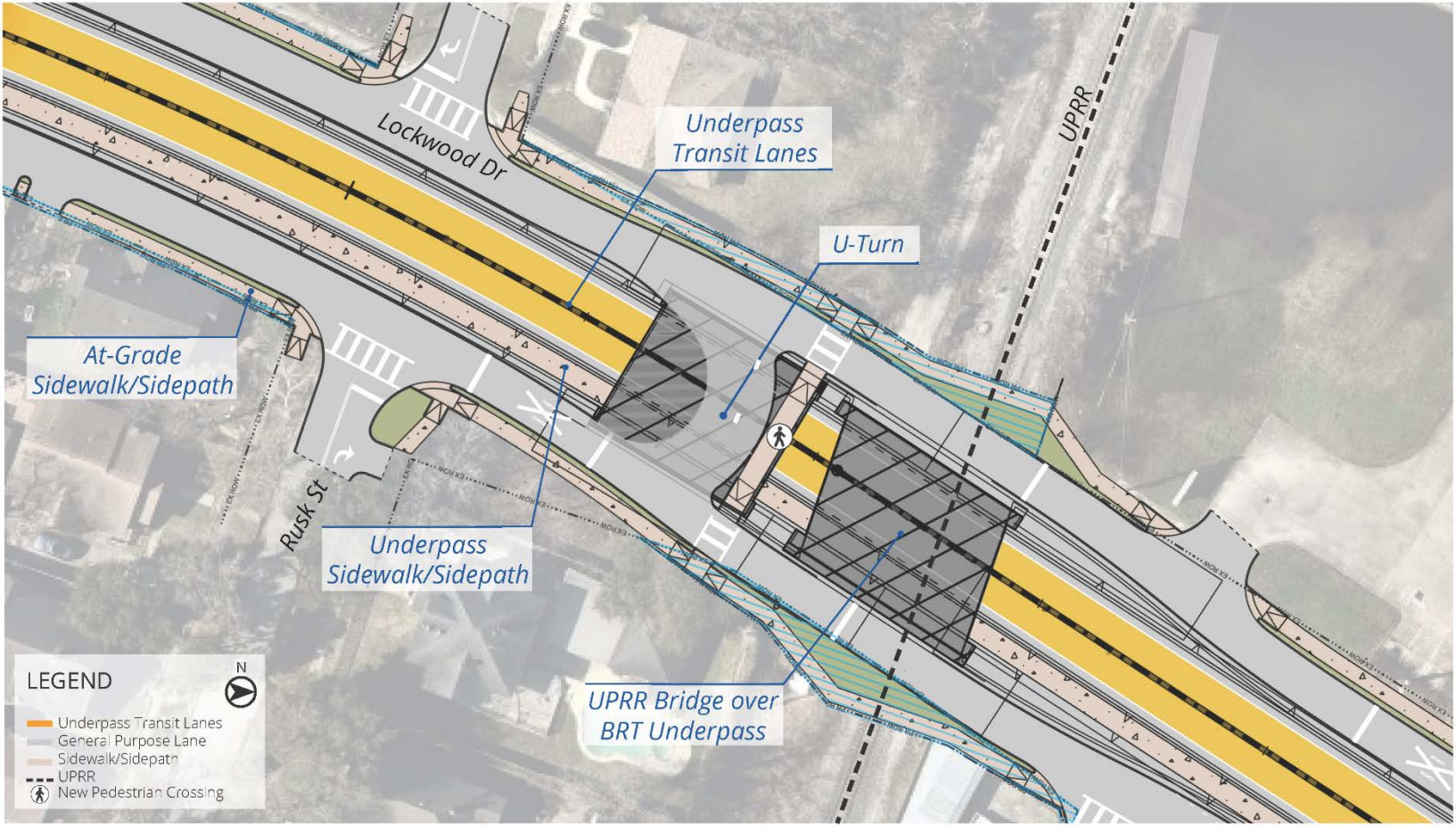

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APPENDIX B – Public Involvement

Table C-1: Public Involvement Conducted to Date

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
1	6/1/2021	TIRZ 27	METRORapid University Corridor Project Introduction	Virtual	Project Briefing	
2	6/1/2021	South Main Alliance	METRORapid University Corridor Project Introduction	Virtual	Project Briefing	
3	6/2/2021	Midtown Management District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	
4	6/3/2021	Uptown District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77056
5	6/4/2021	Emancipation Economic Development Council	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77003
6	6/7/2021	Southwest and St. George Place Management Districts	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77257
7	6/8/2021	Upper Kirby District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	
8	6/8/2021	St. George Place Management District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77257
9	6/9/2021	Eldridge/West Oaks Super Neighborhood Council	Super Neighborhood Council Meeting	Virtual	Project Briefing / Update	77077
10	6/10/2021	Southwest Houston TIRZ 20	Southwest Houston TIRZ 20 Board Meeting	Virtual	Project Briefing / Update	77227
11	6/11/2021	University of Houston	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77204
12	6/14/2021	Fifth Ward Community Redevelopment Corporation	Fifth Ward Community Redevelopment Corporation	Virtual	Project Briefing / Update	77020
13	6/23/2021	Houston First	Houston First	Virtual	Project Briefing / Update	77010
14	6/23/2021	University of St. Thomas	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77006
15	6/23/2021	OST/South Union GO Neighborhood	Strollin' and Rollin' Committee Meeting	Virtual	Project Briefing / Update	77007

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
16	6/24/2021	Houston West Chamber of Commerce	Government Affairs Committee Meeting-Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
17	6/24/2021	Texas Southern University	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77004
18	7/7/2021	5th Ward Super Neighborhood #55	5th Ward Super Neighborhood #55 Monthly Meeting	Virtual	Project Briefing / Update	77020
19	7/8/2021	Spring Branch Super Neighborhood Council - Central	Super Neighborhood Council 85 Meeting	VFW Post 8790	Project Update / Distributed project fact sheets/brochures	77055
20	7/12/2021	East Aldine Management District	East Aldine Mobility & Environmental Design Committee Meeting	Virtual	Project Briefing / Update	77039
21	7/19/2021	Gulfton Super Neighborhood Council	Gulfton Super Neighborhood Council Meeting	Virtual	Project Briefing / Update	77081
22	7/20/2021	Complete Streets Coalition	Monthly Steering Committee Meeting	Virtual	Project Briefing / Update	
23	7/26/2021	Little York/Homestead Super Neighborhood #47	Monthly Meeting	Virtual	Project Briefing / Update	77016
24	7/29/2021	Young Professionals in Transportation	METRORapid Tour and Membership Happy Hour		Project Briefing / Update	77054
25	7/29/2021	Eastex/Jensen Super Neighborhood #46	Monthly Meeting	Virtual	Project Briefing / Update	77093
26	8/6/2021	East End Chamber of Commerce	Staff Leadership Meeting	Virtual	Project Briefing / Update	77020
27	8/6/2021	Greater Northeast Coalition of Civic Clubs	Monthly Meeting	Virtual	Project Briefing / Update	77047
28	8/10/2021	St. George Place TIRZ #1	TIRZ Board Monthly Meeting	Virtual	Project Briefing / Update	77027
29	8/14/2021	Willow Fork Drainage District	Central Green Park - Back to School Glow Party Event	Central Green at La Centerra	Table / Tent Display	77494

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
30	8/23/2021	Southwest Management District	Southwest Management District Board Meeting	Virtual	Project Briefing / Update	77036
31	8/26/2021	Houston West Chamber of Commerce	Government Affairs Committee Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
32	9/1/2021	Katy Chamber of Commerce	B2B Business Expo	Embassy Suites by Hilton Houston West - Katy	Table / Tent Display	77094
33	9/13/2021	Southwest Management District	Business and Economic Development Committee Meeting	Virtual	Project Briefing / Update	77036
34	9/14/2021	Greenway Plaza	Greenway Plaza Tenants Meeting	Virtual	Project Briefing / Update	77046
35	9/15/2021	LGBT Chamber of Commerce	Fireside Chat with METRO	Virtual	Project Briefing / Update	77004
36	9/16/2021	Southeast Management District	Southeast Management District Monthly Meeting	Virtual	Project Briefing / Update	77004
37	9/16/2021	Houston Southeast	METRORapid University Project Update Meeting	Virtual	Project Briefing / Update	77004
38	9/18/2021	Willow Fork Drainage District	Hispanic Heritage Festival	Central Green at La Centerra	Table / Tent Display	77494
39	9/22/2021	Greater Northeast Coalition of Civic Clubs	Monthly Meeting	Youth Development Center	Project Briefing / Update	77016
40	10/5/2021	5th Ward SN # 55	5th Ward National Night Out	5th Ward Multi-Service Center	Table / Tent Display	77020
41	10/6/2021	Houston Bikeways Program	Cavalcade-Homestead Healthy Connections Corridor Public Meeting	Virtual	Table / Tent Display	77002
42	10/8/2021	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
43	10/13/2021	Southwest Management District	Southwest Management District Environmental and Urban Design Committee Meeting	Virtual	Project Briefing / Update	77036
44	10/14/2021	Southwest Houston TIRZ 20	Southwest Houston TIRZ 20 Board Meeting	Virtual	Project Briefing / Update	77227
45	10/29/2021	Young Professionals in Transportation	Annual Light Rail Pub Crawl	Downtown Area	Project Briefing / Update	77002
46	10/31/2021	Houston Texans	Rams @ Texans Home Game	NRG Stadium	Table / Tent Display	77054
47	11/5/2021	University of Houston	UH BRT Task Force Follow Up Meeting	Virtual	Project Briefing / Update	77204
48	11/30/2021	Houston Area Management Districts / TIRZs	METRORapid University Corridor Project Introduction	Virtual	Public Meeting	
49	12/5/2021	Houston Texans	Colts @ Texans Home Game	NRG Stadium	Table / Tent Display / Bus	77054
50	12/12/2021	Houston Texans	Seahawks @ Texans Home Game	NRG Stadium	Table / Tent Display / Bus	77054
51	12/12/2021	City of Houston	Sunday Streets Festival	Levy Park	Table / Tent Display	77098
52	2/5/2022	Chinese Community Center	Chinese Community Center 2022 Lunar New Year	Chinese Community Center	Table / Tent Display	77036
53	2/5/2022	Lunar New Year Houston	Viet Hoa 2022 Lunar New Year	Viet Hoa International Center	Table / Tent Display	77072
54	2/8/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
55	2/24/2022	Houston West Chamber of Commerce	Government Affairs Committee Luncheon	The Capital Grille	Presentation	77024
56	2/28/2022	Tech Rodeo	Panel Presentation	WeWork	Table / Tent Display	77002
57	2/28/2022-3/20/2022	Houston Livestock Show & Rodeo	METRO-Rodeo Information Booth	NRG Stadium	Table / Tent Display	77054
58	3/7/2022	Third Ward on Tap	Third Ward on Tap Community Meeting	Virtual	Table / Tent Display	77004
59	3/21/2022	City of Houston	Kashmere Gardens Multi-Service Center Senior Club	Kashmere Gardens	Project Briefing / Update	77026

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Multi-Service Center		
60	3/29/2022	Wheeler Transit Center Area Stakeholders	Wheeler Transit Center Stakeholder Meeting	Virtual	Project Briefing / Update	77002
61	3/29/2022	Trinity/Houston Gardens Super Neighborhood # 48	Monthly Meeting	Virtual	Project Briefing / Update	77028
62	4/4/2022	Eastwood Civic Association	Eastwood Civic Association Meeting	Virtual	Project Briefing / Update	77011
63	4/8/2022	The Ion	Wheeler Transit Center Meeting	The Ion	Project Briefing / Update	77002
64	4/9/2022	Fifth Ward Community Redevelopment Corporation	Lyons Avenue Renaissance Festival	Lyons Avenue	Table / Tent Display	77020
65	4/10/2022	Citizens' Environmental Coalition	Green Mountain Energy presents Earth Day at Discovery Green	Discovery Green	Table / Tent Display	77010
66	4/11/2022	Verde Forest Section II Civic Club	Civic Club Meeting	Grace Cathedral Church	Table / Tent Display	77078
67	4/21/2022	Raindrop Foundation	Neighborhood Iftar Dinner Event	Turquoise Center	Distributed project fact sheets/brochures	77031
68	4/23/2022	Spring Branch ISD & Spring Branch Foundation	Super Saturday-Unity in the Community	Darrell Tully Stadium Complex	Table / Tent Display	77079
69	4/25/2022	Indo-America Chamber of Commerce Greater Houston	Shell USA Distinguished Lecture Series - METRONext	Hilton America	Table / Tent Display	77010
70	4/25/2022	Memorial Super Neighborhood Council 16	Super Neighborhood Council 16 Monthly Meeting	Republic Square Building	Distributed project fact sheets/brochures	77079
71	4/26/2022	District A - Council Member Amy Peck	District CIP/Redistricting Public Meeting	Trini Mendenhall Community Center	Table / Tent Display	77055

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
72	4/28/2022	Houston Texans	Houston Texans Draft Day Party	Miller Outdoor Theater	Table / Tent Display	77030
73	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Judson Robinson Sr. Community Center	Table / Tent Display	77029
74	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Northside High School	Table / Tent Display	77009
75	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Acres Homes Multi Service Center	Table / Tent Display	77091
76	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	The Alliance for Multicultural Community Services	Table / Tent Display	77081
77	5/3/2022	Indo-American Chamber of Commerce Greater Houston	Women Mean Business Chamber Event	Junior League of Houston	Distributed project fact sheets/brochures	77027
78	5/20/2022	Houston Astros	Rangers @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
79	5/21/2022	Houston Parks Board	Houston Parks Board Art Bike Parade	MacGregor Park	Table / Tent Display	77004
80	5/21/2022	Grace Cathedral Church	Rebuilding the Bridge Between Church and Community	Grace Cathedral Church	Project Briefing / Update	77028
81	5/22/2022	Houston Astros	Rangers @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
82	5/24/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
83	6/1/2022	Emancipation Park Conservancy	Emancipation Park Back to School Fair	Emancipation Park Conservancy Community Center	Distributed project fact sheets/brochures	77004
84	6/6/2022	Eastwood Civic Association	Eastwood Civic Association Meeting	Virtual	Public Meeting / Presentation	77261
85	6/6/2022	Second Ward Super Neighborhood #63	Second Ward Super Neighborhood #63 Meeting	Virtual	Public Meeting / Presentation	77011
86	6/7/2022	East Lawndale Civic Club	East Lawndale Civic Club Meeting	Magnolia Multi-Service Center	Public Meeting / Presentation	77011
87	6/7/2022	Park Place Civic Club	Park Place Civic Club Meeting	Charlton Park Community Center	Public Meeting / Presentation	77017
88	6/8/2022	Greater Southeast Management District	Southeast Management District Board Meeting	Virtual	Project Briefing / Update	77004
89	6/9/2022	Katy Chamber of Commerce	Katy Area Infrastructure Summit	Embassy Suites by Hilton Houston West - Katy	Table / Tent Display	77094
90	6/9/2022	Northern Third Ward Implementation Project	Northern Third Ward Steering Committee Meeting	Virtual	Presentation	77004
91	6/11/2022	HISD Wraparound Services	East End Community Resource Fair	Evangelical Lutheran Church of the Redeemer	Table / Tent Display	77023
92	6/13/2022	Westchase Management District	Board of Directors Meeting	Westchase Hilton	Project Briefing / Update	77042

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
93	6/18/2022	Emancipation Park Conservancy	Emancipation Park 150th Juneteenth Celebration	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
94	6/21/2022	Katy Area Economic Development Council	Katy Area Economic Development Council General Assembly Meeting	Embassy Suites by Hilton Houston West - Katy	Distributed project fact sheets/brochures	77094
95	6/21/2022	Houston Astros	Mets @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
96	6/25/2022	PRIDE Houston	PRIDE Festival	City Hall	Table / Tent Display / Discover Bus	77002
97	6/27/2022	Greater Southeast Management District	1:1 Stakeholder Meeting	Virtual	Project Briefing / Update	77004
98	6/28/2022	Upper Kirby Management District	Stakeholder Meeting	Virtual	Project Briefing / Update	
99	6/30/2022	Houston Astros	Yankees @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
100	7/1/2022	Houston Astros	Angels @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
101	7/3/2022	Southwest Management District	Liberty Fest	PlazAmericas Mall	Table / Tent Display	77036
102	7/4/2022	City of Houston	Shell Freedom Over Texas 4th of July Celebration	Eleanor Tinsley Park	Table / Tent Display	77019
103	7/7/2022	University of Houston	1:1 Stakeholder Meeting	Virtual	Project Briefing / Update	
104	7/7/2022	Houston Management Districts/TIRZs	METRORapid University Project Update	Virtual	Project Briefing / Update	77227
105	7/8/2022	University of Houston	METRO / UH Task Force Stakeholder Meeting	Virtual	Project Briefing / Update	77204

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
106	7/12/2022	METRO	METRORapid University Public Meeting	Chinese Community Center	Public Meeting	77036
107	7/12/2022	METRO	METRORapid University Public Meeting	Emancipation Park Conservancy Community Center	Public Meeting	77004
108	7/13/2022	METRO	METRORapid University Public Meeting	BakerRipley - Ripley House	Public Meeting	77011
109	7/13/2022	METRO	METRORapid University Public Meeting	DoubleTree by Hilton Houston - Greenway Plaza	Public Meeting	77046
110	7/14/2022	West Houston Association	Regional Mobility - Future of Transit	Embassy Suites by Hilton Houston Energy Corridor	Distributed project fact sheets/brochures	77079
111	7/14/2022	METRO	METRORapid University Public Meeting	Wisdom High School Auditorium	Public Meeting	77057
112	7/14/2022	METRO	METRORapid University Public Meeting (Spanish)	Houston Community College - Felix Fraga Campus	Public Meeting	77011

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113	7/16/2022	METRO	METRORapid University Public Meeting	Julia C. Hester House	Public Meeting	77020
114	7/18/2022	METRO	METRORapid University Public Meeting	Third Ward Multi-Service Center	Public Meeting	77004
115	7/18/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Briefing / Update	77011
116	7/19/2022	Complete Street Coalition	Complete Street Coalition Steering Committee Meeting	Virtual	Project Briefing / Update	
117	7/19/2022	Idylwood Civic Club	Idylwood Civic Club Meeting	Harris County Raul C Martinez Courthouse Annex	Project Briefing / Update	77011
118	7/20/2022	CMAA - Houston Chapter	Future of City Transit Changing Trends - Innovative Strategies	La Griglia	Table / Tent Display	77019
119	7/20/2022	University of Houston	METRO / UH Task Force Planning Meeting	Virtual	Project Briefing / Update	77204
120	7/20/2022	Settegast/East Houston Super Neighborhood #49/50	Super Neighborhood Council 49/50 Monthly Meeting	Virtual	Project Briefing / Update	77028
121	7/20/2022	METRO	METRORapid University Public Meeting	Houston Community College – Central Campus	Public Meeting	77004
122	7/21/2022	METRO	METRORapid University Public Meeting	Northeast Multi-Service Center	Public Meeting	77016
123	7/25/2022	METRO	METRORapid University Public Meeting (Virtual)	Virtual	Public Meeting	

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124	7/26/2022	Neartown Association	Neartown Association Meeting	Virtual	Project Briefing / Update	77266
125	7/27/2022	METRO	METROLift Community Leaders Quarterly Update	Virtual	Project Briefing / Update	
126	8/1/2022	Second Ward Super Neighborhood #64	Community Stakeholder Meeting	BakerRipley - Ripley House	Project Briefing / Update	77011
127	8/2/2022	Harris County Constable Pct. 6 Sylvia Trevino	National Night Out Event	Harris County Constable Precinct 6	Table / Tent Display / Bus	77011
128	8/3/2022	Harris Health	LBJ Hospital Advisory Council Meeting	Virtual	Project Briefing / Update	77026
129	8/5/2022	Harris County Precinct One	Bright Futures Fair	NRG Stadium	Table / Tent Display	77054
130	8/8/2022		METRORapid University Public Meeting		Public Meeting	77020
131	8/8/2022	University of Houston	UH/METRO Traffic Data Coordination	Virtual	Stakeholder Coordination	77204
132	8/8/2022	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
133	8/9/2022	Oaklawn/Fullerton Civic Club	Meeting Notification Distribution	Segment 4 Area	Distributed meeting notices	77011
134	8/9/2022	West I-10 Chamber of Commerce	Chamber of Commerce General Membership Luncheon	The Hangar Unity Center	Table / Tent Display	77423
135	8/10/2022	South Main Alliance	South Main Alliance	Museum of Fine Arts	Project Briefing / Update	77004
136	8/10/2022	Eastwood Civic Club	Community Stakeholder Meeting	METRO Headquarters	Project Briefing / Update	77002
137	8/10/2022	Greater Eastwood/Lawndale/Wayside Super Neighborhood	Greater Eastwood/Lawndale/Wayside Super Neighborhood Meeting	Virtual	Project Briefing / Update	77011
138	8/11/2022	Houston Womens Chamber of Commerce	CDC Integrated Services - Anticipating Mitigating Conflict in the Workplace	Harold's Restaurant	Distributed project fact sheets/brochures	77008
139	8/13/2022	Holland Middle School	Back to School Fair	Holland Middle School	Table / Tent Display	77029

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
140	8/15/2022	Oaklawn/Fullerton Civic Club	METRORapid University Corridor Project Update	La Voz del Salvador Church	Project Briefing / Update	77011
141	8/16/2022	Settegast/East Houston Super Neighborhood #49/50	Super Neighborhood Council 49/50 Monthly Meeting	Virtual	Project Briefing / Update	77028
142	8/16/2022	Idylwood Civic Club	METRORapid University Corridor Project Update	Harris County Raul C Martinez Courthouse Annex	Project Briefing / Update	77011
143	8/19/2022	Houston Police Department	South Central Division Back to School Fest	Jack Yates High School	Table / Tent Display	77004
144	8/20/2022	City of Houston Parks Department	Emancipation Park Back to School Fair	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
145	9/1/2022	University of Houston	UH / METRO Traffic Signal Coordination Meeting	Virtual	Stakeholder Coordination	77204
146	9/8/2022	South Main Alliance	South Main Alliance Meeting	TMC Board Room	Project Briefing / Update	77098
147	9/14/2022	East End District	East End District Rail Safety and Mobility Taskforce Meeting	Virtual	Project Briefing / Update	77003
148	9/15/2022	QUE ONDA! Magazine-Houston	Que Onda Hispanic Heritage Event	The Ion	Table / Tent Display	77002
149	9/15/2022	Greater Third Ward Super Neighborhood Council #67	Greater Third Ward Super Neighborhood #67 Meeting	Virtual	Project Briefing / Update	77004
150	9/19/2022	Houston Police Department	Houston Police Department Positive Interaction Program Meeting	Eastside Police Station	Project Briefing / Update	77012

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
151	9/19/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Briefing / Update	77011
	9/20/2022	Harris County Commissioner Rodney Ellis Staff	Elected Official Office		Project Briefing / Update	
152	9/20/2022	Greater Houston Complete Street Coalition	Complete Street Coalition Monthly Meeting	Virtual	Project Briefing / Update	
153	9/20/2022	Clinton Park/Tri-Community Super Neighborhood Council	Clinton Park/Tri-Community Super Neighborhood Council Meeting	Clinton Park	Project Briefing / Update	77029
154	9/21/2022	Council Member Edward Pollard	Elected Official Office		Project Briefing / Update	
155	9/21/2022	Southeast Management District	Strategic Partnership Discussion	Virtual	Project Briefing / Update	77004
156	9/22/2022	Houston West Chamber of Commerce	Transportation Infrastructure - Electric vs Gas Vehicles - Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
157	9/24/2022	Katy Economic Development Council - METRO PE	Katy Area Networking Night	METRO Grand Parkway P&R	Project Briefing / Update	77449
158	9/26/2022	Asiatown Community/Business Leaders	METRORapid Segment 1 Briefing	1900 Main	Project Briefing / Update	77002
159	9/27/2022	Emancipation Economic Development Council	General Body Meeting	Virtual	Project Briefing / Update	77004
160	9/27/2022	Houston Country Club Estates Civic Club	Houston Country Club Estates Civic Club Meeting	Evangelical Lutheran Church Of The Redeemer	Project Update / Distributed project fact sheets/brochures	77023
161	10/1/2022	Nigeran Cultural Parade and Festival	Nigerian Cultural Parade and Festival	Root Square	Table / Tent Display	77002

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
162	10/3/2022	Second Ward Super Neighborhood Association	Second Ward Super Neighborhood Association Meeting	BakerRipley - Ripley House	Project Briefing / Update	77011
163	10/4/2022	Park Place Civic Club	Park Place Civic Club National Night Out	Charlton Park Community Center	Distributed project fact sheets/brochures	77017
164	10/4/2022	Magnolia Park Civic Club	Magnolia Park Civic Club National Night Out	Community Family Centers	Distributed project fact sheets/brochures	77012
165	10/4/2022	Eastwood Civic Club	Eastwood Civic Association National Night Out	Esplanade at intersection of Park Drive & Woodside St.	Distributed project fact sheets/brochures	77023
166	10/4/2022	Houston Country Club Place Civic Club	Houston Country Club Place Civic Club National Night Out	Neighborhood Resident	Distributed project fact sheets/brochures	77023
167	10/6/2022	University of Houston	UH / METRO BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
168	10/8/2022	Greens Bayou Coalition	Greens Bayou Regatta	Thomas Bell Foster Park	Table / Tent Display	77015
169	10/9/2022	Greens Bayou Coalition	Greens Bayou Regatta	Brock Park	Table / Tent Display	77044
170	10/11/2022	Third Ward is Our Home	Third Ward is Home Civic Club	Virtual	Project Briefing / Update	77004
171	10/11/2022	Briarmeadow HOA	Civic Association / HOA Meeting	Briarmeadow Club House	Project Briefing / Update	77063
172	10/12/2022	East End District	Rail Safety Taskforce Committee Meeting	Virtual	Project Briefing / Update	77003
173	10/15/2022	New Bethlehem Missionary Baptist Church	Jensen Jubilee	Shady Lane Park	Table / Tent Display / Bus Display	77093
174	10/15/2022	Emancipation Park Conservancy	Emancipation Park Conservancy presents Healthy Communities: Senior Day	Emancipation Park Conservancy	Table / Tent Display	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Community Center		
175	10/16/2022	Our Lady of Guadalupe Catholic Church	Our Lady of Guadalupe Catholic Church Fall Festival	Our Lady of Guadalupe Catholic Church	Table / Tent Display	77003
176	10/17/2022	State Representative Gene Wu	Elected Official Office		Project Briefing / Update	
177	10/17/2022	Council Member Abbie Kamin	Elected Official Office		Project Briefing / Update	
178	10/17/2022	Brookdale Memorial City Management	Brookdale Memorial City Senior Community Lunch & Tour	Memorial City Resident Center	Project Update / Distributed project fact sheets/brochures	77024
179	10/17/2022	St. George Place Civic Association	St. George Place Civic Association Monthly Meeting	St. George Place School	Table / Tent Display	77056
180	10/17/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Update / Distributed project fact sheets/brochures	77011
181	10/18/2022	Emerson Pines Senior Community	Emerson Pines Seniors - How to Ride Event	Emerson Pines Senior Community Center	Table / Tent Display	77080
182	10/18/2022	American Society of Civil Engineers - Houston Branch	Membership Luncheon	Marriott Westchase	Table / Tent Display	77042
183	10/19/2022	Harris County Commissioner Jack Cagle Staff	Elected Official Office		Project Briefing / Update	
184	10/20/2022	East End Chamber of Commerce	Port of Houston Appreciation Business Expo & Luncheon	Marriott South at Hobby Airport	Table / Tent Display	77017
185	10/20/2022	Greater Third Ward Super Neighborhood 67	Greater Third Ward Super Neighborhood 67 Meeting	Virtual	Project Briefing / Update	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
186	10/21/2022	Houston Police Department South Central Division	HPD South Central Division Spooktacular Event	HPD South Central Station	Table / Tent Display	77003
187	10/22/2022	Buffalo Bayou Partnership	Buffalo Bayou Partnership 15th Annual KBR Kids Day	Tony Marron Park	Table / Tent Display	77003
188	10/24/2022	Westchase Management District	Management District Board Meeting	Millennium Towers	Project Briefing / Update	77042
189	10/24/2022	Memorial SNC #16	Super Neighborhood Council Meeting	Nottingham Forest Club	Project Update / Distributed project fact sheets/brochures	77079
190	10/25/2022	Council Member Mary Nan Huffman Staff	Elected Official Office		Project Briefing / Update	
191	10/25/2022	State Representative Armando Walle	Elected Official Office		Project Briefing / Update	
192	10/25/2022	Council Member Tiffany Thomas	Elected Official Office		Project Briefing / Update	
193	10/26/2022	State Representative Mary Ann Perez	Elected Official Office		Project Briefing / Update	
194	10/29/2022	Magnolia Park Dia de los Muertos	Magnolia Park Dia de los Muertos Parade & Festival	Hidalgo Park	Table / Tent Display	77011
195	10/29/2022	Second Mt. Olive Baptist Church	Fall Harvest Festival	Second Mt. Olive Baptist Church	Table / Tent Display	77026
196	11/1/2022	Third Ward Community Cloth	Third Ward Community Cloth Cooperative General Meeting	Virtual	Project Briefing / Update	77004
197	11/4/2022	Houston West Chamber of Commerce	Salute to Veterans Luncheon	West Houston Institute	Table / Tent Display	77082
198	11/5/2022	Tech Fest Live	Tech Fest Live	The Ion	Table / Tent Display	77002
199	11/8/2022	State Senator John Whitmire Staff	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
200	11/8/2022	West I-10 Chamber of Commerce	West I10 Monthly Membership Luncheon	Midway BBQ	Table / Tent Display	77423
201	11/9/2022	Greater Southeast Management District	Greater Southeast Management District Meeting	Virtual	Project Briefing / Update	77004
202	11/10/2022	University of Houston	METRO / UH BRT Task Force	Virtual	Project Briefing / Update	77204
203	11/12/2022	Harris County Pct. 1	From Boys to Men Health Expo	Finnigan Park	Table / Tent Display	77020
204	11/19/2022	Second Mt. Olive Baptist Church	Second Mt. Olive Missionary Baptist Church Senior Luncheon	Mt. Olive Missionary Baptist Church	Project Briefing / Update	77026
205	11/24/2022	Uptown Management District	34th Annual Uptown Holiday Lighting	Post Oak Blvd.-btwn Westheimer & San Felipe	Table / Tent Display	77056
206	12/2/2022	Greater Houston Coalition of Complete Streets	2nd Annual Energy Corridor	Virtual	Project Briefing / Update	77079
207	12/6/2022	Third Ward Community Cloth Collaborative	Third Ward Community Cloth General Meeting	Virtual	Project Briefing / Update	77004
208	12/8/2022	METRO	Segment 3 Neighborhood Walk with City of Houston	Third Ward Area-Emancipation and Blodgett	Project Briefing / Update	77004
209	12/8/2022	City of Houston Council District D	District D Community Townhall - Bike Lanes	Pilgrim Congressional United Church	Project Briefing / Update	77004
210	12/9/2022	City of Houston Office of Complete Communities	Stakeholder Coordination Meeting (Segment 3)	Virtual	Project Briefing / Update	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
211	12/10/2022	Emancipation Park Conservancy	Holiday in the TRE	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
212	12/12/2022	State Representative Christina Morales	Elected Official Office		Project Briefing / Update	
213	12/12/2022	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
214	12/14/2022	State Senator Carol Alvarado	Elected Official Office		Project Briefing / Update	
215	12/14/2022	Houston-Galveston Area Council	H-GAC Freight and Technology Peer Exchange	E.B. Cape Center	Project Briefing / Update	77023
216	12/14/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
217	12/14/2022	Greenway Plaza	Greenway Plaza Tenants Meeting	Virtual	Project Update / Distributed project fact sheets/brochures	77046
218	12/14/2022	East End District	Rail Safety Task Force Meeting	Virtual	Project Briefing / Update	77003
219	12/19/2022	Greater Houston Coalition of Complete Streets	Steering Committee Sidewalk Audit Meeting	Virtual	Project Briefing / Update	77002
220	12/20/2022	Council Member Dr. Carolyn Evans-Shabazz	Elected Official Office		Project Briefing / Update	
221	1/4/2023	5th Ward Super Neighborhood #55	5th Ward Super Neighborhood #55 Meeting	Virtual	Project Briefing / Update	77020
222	1/9/2023	Greater Houston Coalition of Complete Streets	Steering Committee Sidewalk Audit Meeting (UH)	Virtual	Project Briefing / Update	77002
223	1/10/2023	Third Ward Community Cloth Cooperative	Third Ward Community Cloth General Meeting	Virtual	Project Briefing / Update	77004
224	1/11/2023	North Houston Association	NHA Regional Transportation Panel Discussion	CityPlace Marriott at	Project Briefing / Update	77014

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Springwood Village		
225	1/11/2023	Eldridge/West Oaks SNC 17	Monthly Meeting	Eagle's Trace Senior Living Community	Project Update / Distributed project fact sheets/brochures	77077
226	1/16/2023	Black Heritage Society	MLK Day Parade and Festival	Tranquility Park	Table / Tent Display	77060
227	1/19/2023	Third Ward Super Neighborhood	Third Ward Super Neighborhood General Council Meeting	Third Ward Multi-Service Center	Project Briefing / Update	77004
228	1/19/2023	Houston Police Department	Westside Divisional PIP Meeting	HPD Westside Station	Distributed project fact sheets/brochures	77082
229	1/21/2023	Chinese Community Center	Lunar New Year	Chinese Community Center	Table / Tent Display	77036
230	1/23/2023	Harris County Commissioner Lesley Briones	Elected Official Office		Project Briefing / Update	
231	1/26/2023	Heatherbrook Apartments	Start Here Succeed Here Residents Event	Heatherbrook Apartments	Table / Tent Display	77093
232	1/28/2023	Lunar New Year Houston	Lunar New Year at Viet Hoa	Viet Hoa International Center	Table / Tent Display	77072
233	1/29/2023	Lunar New Year Houston	Lunar New Year at Viet Hoa	Viet Hoa International Center	Table / Tent Display	77072
234	1/31/2023	Greater Houston Coalition of Complete Streets	Sidewalk Audit Planning Committee Meeting	Virtual	Project Briefing / Update	77002
235	2/1/2023	Uptown District	University / Gulfton BRT Briefing	Virtual	Project Briefing / Update	77056

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
236	2/2/2023	University of Houston	UH Student Fare Discussion	Virtual	Stakeholder Coordination	77204
237	2/2/2023	Spring Branch Central Super Neighborhood Council	Monthly Meeting	VFW Post 8790	Project Update / Distributed project fact sheets/brochures	77055
238	2/3/2023	Houston West Chamber of Commerce	West Houston Business Summit	Norris Conference Center	Project Briefing / Update	77024
239	2/8/2023	Harris County Commissioner Adrian Garcia	Elected Official Office		Project Briefing / Update	
240	2/8/2023	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
241	2/8/2023	Eldridge/West Oaks SNC 17	SNC 17 Monthly Meeting	Eagle's Trace Senior Living Community	Project Update / Distributed project fact sheets/brochures	77077
242	2/9/2023	METRO	METRORapid Gulfton Corridor Public Meeting	BakerRipley - Gulfton Sharpstown Campus	Table / Tent Display	77074
243	2/13/2023	State Representative Senfronia Thompson	Elected Official Office		Project Briefing / Update	
244	2/13/2023	State Representative Harrold Dutton	Elected Official Office		Project Briefing / Update	
245	2/13/2023	State Representative Jolanda Jones	Elected Official Office		Project Briefing / Update	
246	2/15/2023	Council Member Dr. Carolyn Evans-Shabazz	Elected Official Office		Project Briefing / Update	
247	2/15/2023	Kashmere High School	Kashmere High School Parent Meeting	Kashmere High School	Project Briefing / Update	77028
248	2/20/2023	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
249	2/20/2023	State Senator Carol Alvarado	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
250	2/21/2023	Harris County Commissioner Rodney Ellis Staff	Elected Official Office		Project Briefing / Update	
251	2/23/2023	METRO	METRORapid University Corridor Public Meeting	Kashmere Gardens Multi-Service Center	Public Meeting	77026
252	2/25/2023	METRO	METRORapid University Corridor Public Meeting	BakerRipley - Ripley House	Public Meeting	77011
253	2/27/2023	METRO	METRORapid University Corridor Public Meeting	Holiday Inn Crowne Plaza Hotel	Public Meeting	77098
254	2/28/2023	Greater Houston Coalition for Complete Streets	Sidewalk Audit Plan Coordination Meeting	Virtual	Project Briefing / Update	77002
255	3/1/2023	Museum District	Stakeholder Coordination Meeting	1900 Main	Project Briefing / Update	77002
256	3/1/2023	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
257	3/2/2023	Congresswoman Sylvia Garcia's Staff	Elected Official Office		Project Briefing / Update	
258	3/2/2023	Houston West Chamber of Commerce	Government Affairs Committee Meeting	Virtual	Project Briefing / Update	77042
259	3/3/2023	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
260	3/3/2023	State Representative Ana Hernandez	Elected Official Office		Project Briefing / Update	
261	3/3/2023		Meeting Notification Distribution	Lockwood between Eastwood Transit Center & 5th Ward/Denver Harbor Transit Center	Distributed meeting notices	77023

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
262	3/4/2023	METRO	METRORapid University Public Meeting	Third Ward Multi-Service Center	Public Meeting	77026
263	3/7/2023	METRO	METRORapid University Public Meeting	Emancipation Park Conservancy Community Center	Public Meeting	77002
264	3/8/2023	METRO	METRORapid University Public Meeting	Houston Community College - Felix Fraga Campus	Public Meeting	77011
265	3/9/2023	METRO	METRORapid University Public Meeting	Chinese Community Center	Public Meeting	77036
266	3/9/2023	Houston Police Department	Northeast Houston Police Department Positive Interaction Program (PIP) Meeting	Northeast Police Station	Project Briefing / Update	77028
267	3/10/2023	State Representative Ann Johnson	Elected Official Office		Project Briefing / Update	
268	3/15/2023	South Main Baptist Church	South Main Baptist/The ION Meeting	South Main Baptist Church	Project Briefing / Update	77002
269	3/21/2023	City of Houston Parks and Recreation Department	Settegast Seniors Group Meeting	Settegast Community Center	Project Briefing / Update	77003
270	3/21/2023	City of Houston CM Gallegos, District I	METRORapid University Community Meeting hosted by CM Gallegos & Eastwood Civic Association	E.B. Cape Center	Project Briefing / Update	77023

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
271	3/21/2023	Greater Houston Complete Streets Coalition	Steering Committee Meeting	Virtual	Project Briefing / Update	
272	3/21/2023	Fontaine/Scenic Woods Civic Club	METRORapid University Public Meeting	Houston Community College - North Forest Campus	Public Meeting	77016
273	3/22/2023	Council Member David Robinson	Elected Official Office		Project Briefing / Update	
274	3/27/2023	Eastwood Civic Association	Community Stakeholder Meeting	METRORail Service & Inspection Facility	Project Briefing / Update	77011
275	3/28/2023	Houston Country Club Place Civic Club	Houston Country Club Place Civic Club Meeting	Evangelical Lutheran Church of the Redeemer	Project Briefing / Update	77023
276	3/30/2023	Eastwood Civic Association	Community Stakeholder Meeting	METRORail Service & Inspection Facility	Project Briefing / Update	77011
277	3/30/2023	Houston Rotary Club	Membership Luncheon	Tonys Restaurant	Project Briefing / Update	77098
278	4/1/2023	Fifth Ward Community Redevelopment Corporation	Lyons Avenue Renaissance Festival	Lyons Avenue	Table / Tent Display / Discover Bus	77020
279	4/3/2023	State Representative Christina Morales	Elected Official Office		Project Briefing / Update	
280	4/3/2023	Congresswoman Sylvia Garcia	Elected Official Office		Project Briefing / Update	
281	4/4/2023	Council Member Mary Nan Huffman	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
282	4/4/2023	U.S. Representative Sylvia Garcia, District 29	METRORapid University Community Meeting hosted by U.S. Representative Sylvia Garcia	E.B. Cape Center	Project Briefing / Update	77023
283	4/6/2023	Brays Oaks Management District	Infrastructure Committee Meeting	Virtual	Project Briefing / Update	77096
284	4/6/2023	Leadership Houston	Leadership Houston Annual Luncheon	Junior League of Houston	Brochures	
285	4/7/2023	Houston Hispanic Chamber of Commerce	Annual Luncheon and Business Expo	Hilton Americas Hotel	Table / Booth Display	
286	4/10/2023	South Main Baptist Church	Wheeler Transit Center / City of Houston Meeting	Virtual	Project Briefing / Update	77002
287	4/12/2023	South Main Alliance	Community Stakeholder Meeting	Museum of Natural Science	Project Briefing / Update	77277
288	4/27/2023	Eastex/Jensen Super Neighborhood #46	Monthly Meeting	HTX ART	Project Briefing / Update	77093

APPENDIX C – Technical Reports

APPENDIX C-1 – Land Acquisitions and Displacements Technical Memorandum

METRORapid University Corridor

Preface to Design Documents

DATE: May 31, 2023

PREFACE

The intent of this Preface is to provide context to the various design documents received as part of the 30% submittal and to highlight previous efforts that helped establish the current design.

The paradigm of the METRORapid University Corridor Bus Rapid Transit (BRT) project (the "University Corridor" or the "Project") is **to repurpose the use of the existing Right-of-Way (ROW) to provide maximum mobility benefit for all travel modes while minimizing impacts**. The additional mobility benefits include the use of high-capacity, low-no emission transit buses, which carry more people than vehicles in the same space; wider pedestrian spaces with buffer zones; shared use pathways to accommodate bicycle travel; and an overall safer roadway design that aligns with Houston's Vision Zero principles. The impacts considered for the Project include minimizing additional ROW needs, maintaining acceptable vehicle traffic conditions on a transit-priority street, preserving existing trees, avoiding conflicts with major utilities, utilizing existing bridge structures with minimal modifications and reducing the amount of additional impervious area within the ROW in order to minimize potential flooding along the corridor.

To maximize the mobility benefits and minimize overall impacts, the Project design approach is to utilize the existing roadway footprint to service both the BRT and general purpose lanes. In general, one of the existing general purpose lanes in each direction would be converted to a dedicated BRT lane where the alignment is within the City of Houston (COH) ROW. This approach would introduce high-capacity transit buses onto existing streets within an exclusive BRT guideway, while minimizing impacts to the existing features within the COH ROW. With the removal of a general purpose lane in each direction, it is anticipated that vehicle traffic capacity will be reduced and impact traffic conditions. However, METRO and COH share the goal of prioritizing person throughput over vehicle throughput: simply stated, **the vision is to move more people in less space**. This shared goal is documented in a *Memorandum of Understanding* (MOU) approved by both entities on August 22, 2022, which is included as an appendix in the *Traffic Analysis,* dated May 31, 2023.

As the majority of the University Corridor will operate within COH ROW and along COH streets, continuous and constant coordination with COH during conceptual and preliminary design phases was paramount. Initial discussions of the person-throughput prioritization occurred early in the project to ensure all parties agreed with the approach. With input from COH, METRO developed a throughput methodology and provided some initial findings. This was documented in a *Throughput Methodology and Findings* memorandum prepared and updated by METRO on March 9, 2022, which is included as an appendix in the *Traffic Analysis*, dated May 31, 2023. Additional discussions with and input from COH continued as the traffic analysis and design progressed incorporating the conversion of general purpose lanes to BRT lanes and towards the 30% design milestone.

The traffic modeling and design efforts were performed in parallel with constant coordination to ensure that the lane configurations in both the traffic model and the design plans coincided with each other. As the traffic analysis focused on the impacts to vehicle traffic conditions, the design considered impacts resulting from ROW limitations, locations of existing trees and major utility facilities, existing roadway and bridge sections and the results of drainage analyses. At certain intersections within COH ROW with a projected vehicle Level of Service (LOS) that was less than desirable, several mitigation scenarios were analyzed to improve the LOS while considering the above referenced impacts with ROW needs being the most influential. These intersection locations and mitigation scenarios were discussed with COH during several coordination meetings. A summary of these meetings and the tables and exhibits prepared are included in the *Traffic Analysis*, dated May 31, 2023. These documents show the lane configurations considered for each mitigation scenario as well as demonstrate the trade-offs required to implement each scenario. As a result of these meetings, the preferred lane configurations were selected and included in the traffic model and in the design documents.

As part of the multi-modal approach for the Project, improved pedestrian mobility is also being considered. A pedestrian realm that is located between the back of curb or edge of pavement and the edge of ROW is included along the corridor that provides an unobstructed sidewalk or sidepath and a safety buffer area that separates the sidewalk from the roadway. Ideally, the pedestrian realm would be wide enough to accommodate both people walking and biking. However, the University Corridor extends along existing ROW of various widths and through different area types, including neighborhoods, businesses and schools. Considering these factors, the pedestrian realm dimensions will vary to remain sensitive to the area's local context and to minimize impacts to ROW. Where dimensions are less than desirable, discussions with COH have occurred to receive feedback and input. In a limited number of locations, design exceptions will be required to justify smaller pedestrian realm dimensions than COH standards and will need to be approved by COH as designs are progressed. Pedestrian design and exceptions are noted in the *Basis of Design* (BOD) documents for each Segment.

To further enhance pedestrian mobility, additional pedestrian crossings are being proposed along the University Corridor. In general, pedestrian crossings are provided at all of the signalized intersections along the alignment. However, this results in sections along the corridor with relatively long distances between proposed crossing points. With feedback and general guidance from COH, additional crossing locations are proposed that consider, among other factors: key destinations, local bus stops, distances between crossings and safety. These proposed pedestrian crossings will significantly enhance the ability of people to cross the BRT alignment by walking or biking at regular well-space intervals. These additional pedestrian crossings are reflected in the 30% design submittal.

METRORapid University Corridor

Land Acquisitions and Displacements

Technical Memorandum
September 2023



METRO NEXT

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Appendices

Appendix A Lists of Acquisitions and Maps

A-1 List of Property Acquisitions
A-2 Displacements Map Series

Acronyms and Abbreviations

ACRONYM	DEFINITION
ADA	Americans with Disabilities Act
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
CIG	Capital Investment Grant
EO	Executive Order
FTA	Federal Transit Administration
GIS	Geographic Information Systems
HCAD	Harris County Central Appraisal District
IDM	Infrastructure Design Manual
LRT	Light Rail Transit
LPA	Locally Preferred Alternative
METRO	Metropolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
ROW	Right-of-Way
TOD	Transit Oriented Development
TXDOT	Texas Department of Transportation
US	United States
USC	United States Code
USDOT	US Department of Transportation

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

This report describes the potential property acquisitions that could result from the Project. It also describes minimization strategies that METRO has taken to eliminate or reduce acquisition, as well as potential mitigation strategies that METRO will undertake as the Project advances to offset impacts. This report is based on the 30 percent preliminary engineering design. As the Project advances, the design will be refined to further reduce real estate impacts.

1.2 Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1. Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

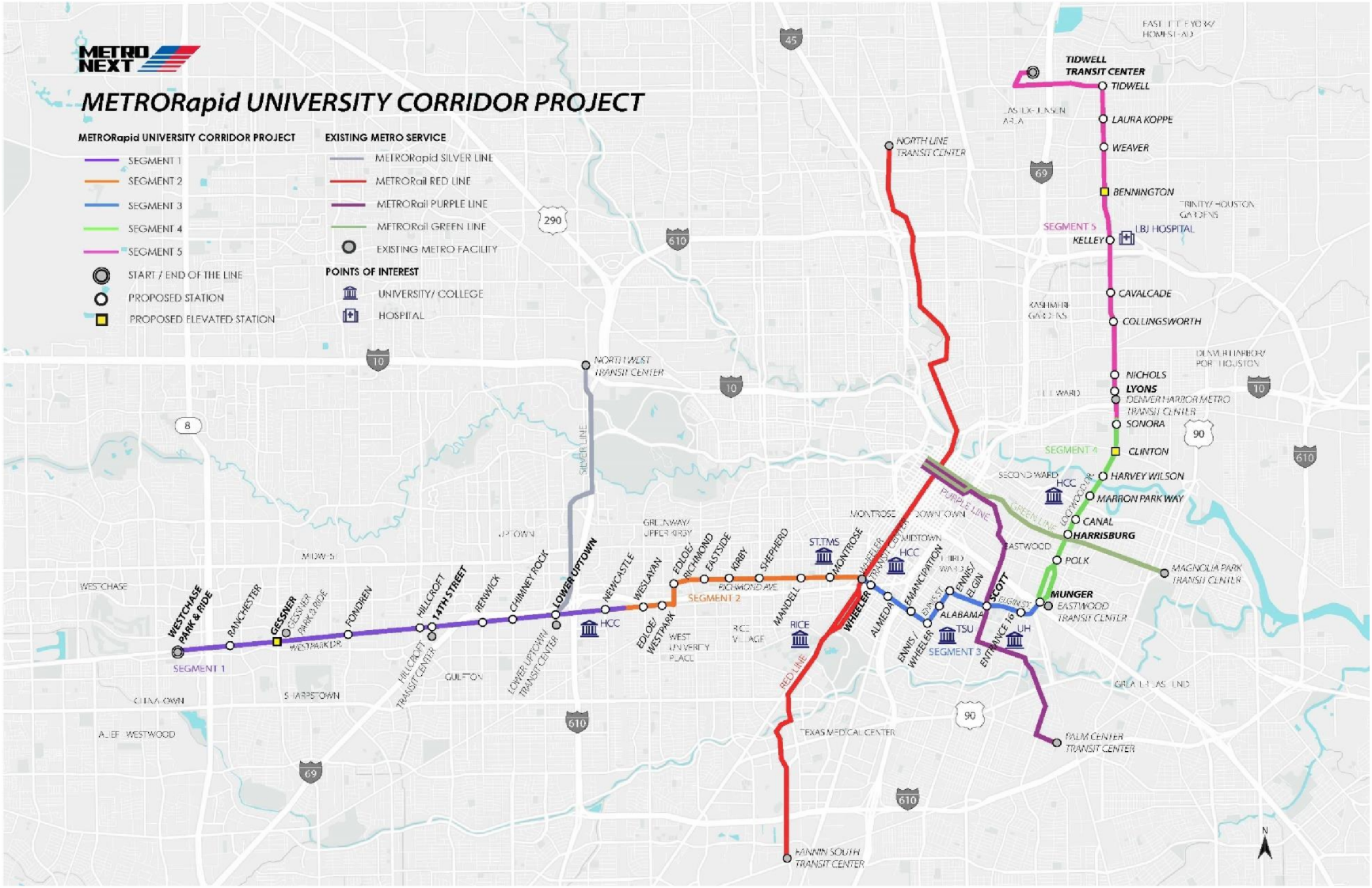
The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other service like METRORail, METRORapid, and local bus services. Two stations would be incorporated into existing METRO facilities, Westchase Park & Ride and Tidwell Transit Center. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

Table 1-1: University Corridor Segments

SEGMENT	FROM	TO
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Dr
2	Westpark Dr 1,500 feet east of UPRR tracks, east of Newcastle Dr	Richmond Ave at US-59
3	Richmond Ave at US-59	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at Margarita St.
5	Lockwood Dr at Margarita St.	Tidwell Transit Center

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Figure 1-1: University Corridor Proposed BRT Alignment



2 Methodology

2.1 Identification of Properties to be Acquired or Displaced

METRO differentiated acquisitions and displacements based on the type of property being acquired, including commercial, residential, and community resources. METRO obtained property information from the Harris County Central Appraisal District (HCAD) database and verified the condition and location of property and structures identified for acquisition or displacement through field visits and aerial photography.

METRO identified parcels to be fully or partially acquired, or that would be subject to an easement, based on the proposed ROW limits of the Project using aerial-based geographic information systems (GIS) parcel mapping with data obtained from the Harris County Central Appraisal District. METRO assumed a full acquisition if the whole property would be acquired for the Project. METRO assumed a full acquisition would also result in the displacement of the occupant(s). Further, if the acquisition would remove access to the property, METRO also assumed a displacement. METRO assumed that a partial acquisition if primary buildings, the majority of the property, parking, and access to the property would be preserved.

The following types of potential actions are described in this section:

- **Corner Clip –** a type of partial acquisition that cuts across the corner of the property forming a triangle. The City of Houston *Infrastructure Design Manual* (IDM) (2022) requires corner clips at intersections to accommodate space needed for traffic signal poles, pedestrian signal poles, sidewalks, handicapped ramps, and vehicular turning movements. The IDM requires corner clips for driver site lines at intersections.

- **Partial Acquisition** - the purchase of a portion of a property that does not affect buildings or the property's site features. A partial acquisition could include fee simple (permanent transfer of ownership) or permanent easement (for drainage, utilities, etc.). Permanent easements would not result in a transfer of ownership. Rather, ownership would remain with the current landowner, but the easement would allow another entity to use the land for a specified purpose.

- **Full Acquisition** - the purchase of all land ownership rights and interest in a property. A full acquisition is an acquisition that either severely impacts a building or the property's site features, which affect the property's intended use. This loss of parking severely impacts the property's intended use. Similar to a partial acquisition, a full acquisition could include fee simple (permanent transfer of ownership) or permanent easement (for drainage, utilities, etc.). Permanent easements would not result in a transfer of ownership. Rather, ownership would remain with the current landowner, but the easement would allow another entity to use the land for a specified purpose.

- **Displacement-** this would result from full acquisition or partial acquisition and conversion of the existing land use to transportation use. If the acquisition would result in the removal of

parking available and noncompliance with parking requirements, then METRO assumed a displacement. If the acquisition would remove or deny access to the property, METRO assumed a displacement. Displacement could also result where partial acquisition of a property includes a building. In the case where multiple tenants occupy a single tax parcel, METRO counted each tenant or household.

2.2 Displacement Analysis

The analysis of the impact of land acquisitions and displacements on the community as a result of the Project consisted of documenting all residential and non-residential units within the study area and describing the existing characteristics of potentially displaced buildings. The study area is comprised of abutting properties along the proposed alignment.

METRO sought to use existing linear transportation and utility ROW in developing the Project to minimize the need to acquire private property. By using this approach, most land area that METRO would need for the Project could be accommodated. However, some property acquisition and relocation of existing users of the properties would also be required to provide adequate ROW for the Project to accommodate station locations and other equipment along existing corridor. For partial acquisitions, METRO assumed only the portion of the parcel falling within the proposed ROW footprints would be acquired.

3 Existing Conditions

There are roughly 1,800 properties that are adjacent to the proposed alignment. Land uses along the University Corridor vary from residential to commercial to undeveloped. Changes to land use in the study area were analyzed to observe and predict potential issues, like community resources and habitat, as they related to project development. The properties adjacent to the proposed alignment are mostly developed with few vacant parcels. . The study area also has more industrial land, with significant freight rail and port facilities located in the eastern part of the study area. Along the University Corridor, there is more multiple land use areas compared to the City of Houston and Harris County as well. Multiple land use refers to an area used for more than one purpose. For example, commercial and residential land use occurring in the same designated area would be considered multiple land use. Segment 1 is diverse, with a more even mix of residential, commercial, and industrial uses. Other areas are relatively homogenous: over 80 percent of developed land in Segment 2 is residential or commercial. Segments 3 and 5 are predominantly residential, while Segment 4 is a mix of mostly residential, commercial, and industrial sites.

4 Environmental Consequences

4.1 Short-Term Construction Impacts

Temporary construction easements would be needed for staging and parking areas as well as maintenance of traffic and construction access. METRO anticipates that multiple staging areas would be used; some of which may only be used for part of the construction period. Temporary construction activity in staging areas and construction easements would convert the existing land on which they occur to a temporary construction use; the owner of such lands would temporarily lose the use of that land until construction activity ends. Features on that land, such as buildings and trees, may be

removed. The priority will be to identify vacant parcels for temporary construction easements. Specific construction staging and parking areas as well as construction access points will be identified as the Project advances.

4.2 Long-Term Operational Impacts

METRO sought to use existing linear transportation and utility ROW in developing the Project to minimize the need to acquire private property. By using this approach, most land area that METRO would need for the Project can be accommodated within the existing ROW. However, some acquisitions and relocation of existing users of the affected properties will also be required to provide adequate ROW and accommodate station locations and other equipment along existing corridors. In this assessment, a full property acquisition is assumed to also be a displacement of the occupant(s). For partial acquisitions, only the portion of the parcel falling within the proposed ROW footprints is assumed to be acquired. Final determinations regarding property needs and acquisitions will be made by METRO during the final design phase of the Project. A complete list of parcels identified in this analysis and a set of maps can be found in **Appendix A**.

Table 4-1 summarizes METRO's preliminary determination of the potential full and partial property acquisitions that would be needed for the Project based on the 30 percent level of planning and schematic design. Overall, based on the preliminary design, the Project would result in 23 full acquisitions, 110 corner clips, and 448 partial acquisitions, affecting roughly 18 acres. **Table 4-2** provides a list of the full acquisitions. METRO is constantly finetuning the number of acquisitions planned and will make the final determinations regarding property needs and acquisitions during the final design phase of the Project.

Table 4-1: Acreage and Acquisition Count by Type and Land Use by Segment

Acquisition Type	Segment					Total Corridor
	1	2	3	4	5	
Corner Clips						
Corner Clip Area (Acres)	0.00	0.03	0.06	0.01	0.25	**0.35**
Residential Parcels	0	0	6	2	15	**23**
Commercial Parcels	0	7	5	4	27	**43**
Vacant Parcels	0	1	0	1	21	**23**
Community Facilities	0	1	6	0	14	**21**
Industrial	0	0	0	0	0	**0**
Utilities	0	0	0	0	0	**0**
Total Number of Corner Clips*	**0**	**9**	**17**	**7**	**77**	**110**
Partial Acquisitions						
Partial Acquisition Area (Acres)	2.80	3.10	0.65	1.76	3.73	**12.04**
Residential Parcels	5	23	19	19	38	**104**
Commercial Parcels	21	61	12	17	71	**182**
Vacant Parcels	3	14	7	14	64	**102**
Community Facilities	2	7	15	11	14	**49**
Industrial	1	0	0	0	0	**1**
Utilities	7	2	0	0	0	**9**
Railroad	0	0	0	1	0	**1**
Total Number of Partial Acquisitions*	**39**	**107**	**53**	**62**	**187**	**448**
Full Acquisitions						
Full Acquisition Area (Acres)	0.01	2.74	0.83	1.09	1.28	**5.95**
Residential Parcels	0	2	3	1	5	**11**
Commercial Parcels	0	6	2	1	2	**11**
Vacant Parcels	1	0	0	0	0	**1**
Community Facilities	0	0	0	0	0	**0**
Industrial	0	0	0	0	0	**0**
Utilities	0	0	0	0	0	**0**
Total Number of Full Acquisitions*	**1**	**8**	**5**	**2**	**7**	**23**
Displacements						
Residential	0	3*	6**	1	5	**13**
Commercial	0	6	2	1	2	**11**
Community Facilities	0	0	0	0	0	**0**
Industrial	0	0	0	0	0	**0**
Total Number of Displacements	**0**	**9**	**8**	**2**	**7**	**23**

Sources: METRO, 2023; Harris Central Appraisal District, 2023.
*One single-family residence and one 2-family residence.
**Two single-family residences and one 4-unit multi-family residence.

Table 4-2: Full Acquisitions by Segment

Segment/Address	Property Type
Segment 1	
0 Newcastle Dr	Vacant - Commercial
Segment 2	
Diamond Shamrock, 2540 Richmond Ave	Commercial
Little Pappasito's Cantina, 2536 Richmond Ave	Commercial
Cigar Emporium, 3514 S Shepherd Dr	Commercial
Valero, 3519 S Shepherd Dr	Commercial
Lane Equipment, Co., 2054 Richmond Ave	Commercial
Lane Equipment, Co., 2030 Richmond Ave	Commercial
1610 Richmond Ave	Residential - Single Family
1604 Richmond Ave	Residential Two-Family
Segment 3	
Jack in the Box, 4403 Fannin St	Commercial
Green Seed Vegan, 4320 Almeda Rd	Commercial
1409 Wheeler St	Residential - Single Family
1411 Wheeler St	Residential - Single Family
1419 Wheeler St	Residential Multi-Family
Segment 4	
94 S Lockwood Dr	Residential - Single Family
0 Harrisburg Blvd	Vacant - Commercial
Segment 5	
6902 Lockwood Dr	Commercial
Buffalo Quick Stop Food Store, 8503 Lockwood Dr	Commercial
2209 Lockwood Dr	Residential - Single Family
7302 Lockwood Dr	Residential - Single Family
7306 Lockwood Dr	Residential - Single Family
8503 Lockwood Dr	Residential - Single Family
8507 Lockwood Dr	Residential - Single Family

Source: METRO, 2023; Harris Central Appraisal District, 2023.

5 Environmental Commitments

To avoid impacting adjacent property, METRO designed the Project to be primarily located within existing ROW, or on vacant or undeveloped parcels. Reducing the cross-section by eliminating sidewalks, bike lanes, and shared-use paths in the study area could also mitigate property impacts, but this approach would not meet the Purpose and Need for the Project because it would not improve intermodal connections, coordinate with existing mobility choices across all modes, enhance connectivity, or be consistent with local land use plans. The efforts METRO employed to avoid or minimize potential impacts are further described below.

The contents of the configuration of the Project, including the transitway, roadway lanes, tree and landscape zones, bicycle and pedestrian facilities, egress requirements, and safety buffers/barriers vary by location throughout the study area based on the needs and available ROW of each segment. In areas with constrained ROW, METRO reduced the ROW width of the proposed transitway to limit property impacts and acquisitions where possible. METRO utilized the following general measures to avoid or minimize property impacts in locations of constrained ROW:

- The Project includes separate bicycle and pedestrian facilities wherever possible, except for constrained ROW locations. In the constrained ROW areas, METRO used shared-use paths, rather than separate bike lanes and sidewalks, to reduce the footprint by 5 feet in each location.
- METRO eliminated tree and furniture/ landscaping zones in the design, between the bike lanes and sidewalk or between the roadway and shared-use paths, in areas where the ROW is constrained ROW locations to reduce the footprint of the Project by 5 feet to 7 feet. METRO will maintain the tree and furniture zones wherever possible to provide shade, except where they would result in significant impacts.
- METRO reduced setbacks, or the distance between the property line and the Project ROW, by 1 foot in locations of constrained ROW, rather than the standard 2 feet.

Ten businesses and 15 residences located on 22 parcels would be displaced by the Project. The current use for most of these sites is commercial parking and the potential to relocate the displaced businesses within the study area is low since most of the vacant parcels in the study area are slated for new development. Similarly, potential for relocating restaurant and other retail sites in the study area is also low. However, relocation may still be possible for these uses through the redevelopment of an existing site or by incorporating them into a larger development.

METRO will coordinate with individual property owners to mitigate property acquisitions and displacements. METRO is considering several options to limit impacts including, but not limited to, phasing acquisition and relocation activities, providing relocation consulting services, extending the timeframe for relocation activities, and expanding the replacement area to include other nearby cities. Property acquisition activities would occur in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and the State of Texas Landowner's Bill of Rights, and other laws that establish the process through which METRO may acquire real property through a negotiated purchase or through condemnation. The Uniform Act provides important protections and assistance for people affected by federally funded projects. Congress enacted the Uniform Act to ensure that people whose real property is acquired, or who move as a result of projects receiving federal funds, are treated fairly and equitably and receive just compensation for, and assistance in moving from, the property they occupy. The Landowner's Bill of Rights applies to any attempt to condemn property in the State of Texas through eminent domain. Eminent domain is the legal authority certain governmental and private entities have to condemn private property for public use in exchange for adequate compensation.

For short-term construction uses, METRO will work with potentially affected property owners, resulting in formal agreements to temporarily use land. METRO will restore properties affected by Project-related temporary land uses and restore owner access to such properties at the end of construction in accordance with individual agreements.

6 References

City of Houston Public Works. 2022. Infrastructure Design Manual (IDM). July 2022. (Internet website: https://www.houstonpermittingcenter.org/media/6371/download?inline).

Harris Central Appraisal District (HCAD). 2022. Property Search Database. (Internet website: https://hcad.org/property-search/real-property/).

METRO. 2023. Project Team Engineering and Acquisition Analysis.

State of Texas- Office of Attorney General. 2012. The State of Texas Landowner's Bill of Rights. May 2021. Austin, Texas. (Internet website: https://www.texasattorneygeneral.gov/sites/default/files/files/divisions/general-oag/LandownersBillofRights.pdf/).

APPENDIX A

LIST OF ACQUISITIONS AND MAPS

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
Segment 1						
1-304	0421540000011	Klar Carol Nathan	0 Newcastle Dr	Vacant - Colonia	348	348
1-002	1149760000044	Asim Enterprises LP	10850 Harwin Dr #82	Commercial	87,036	2,615
1-003	1149760000001	Khowaja Sultan A	0 Harwin Dr	Vacant - Colonia	6,339	229
1-004	1149760000050	Lk Pop Holdings LLC	10770 Harwin Dr	Commercial	39,617	1,138
1-005	0431820000005	Mehrinfar Hamid & Katherine	10520 Harwin Dr	Commercial	151,654	1,845
1-006	0431820000023	Alliance Harwin LP	10518 Harwin Dr	Commercial	82,523	2,412
1-007	0451590000005	Arabia Shriners Holding Corp	10510 Harwin Dr	Charitable	304,920	9,468
1-008	0431820000010	Chang-Sheng Properties LP	10402 Harwin Dr # 1	Commercial	184,259	1,870
1-009	0451590000008	Nnk Investment LP	10400 Harwin Dr	Commercial	200,812	4,035
1-010	0451590000021	Harwin Holdings LLC	10310 Harwin Dr	Vacant - Colonia	48,787	76
1-011	0421140000011	Harwin Holdings LLC	10310 Harwin Dr	Vacant - Colonia	101,116	1,009
1-012	0421140000006	Harwin Holdings LLC	10310 Harwin Dr	Commercial	216,493	473
1-013	0421140000002	Iglesia Mision Cristiana Houston Inc	5757 Ranchester Dr	Commercial	199,940	1,527
1-013.1		Harris County Flood Control District		Governmental		501
1-014	1096720000001	Sunblossom Cottages Ltd	10300 Harwin Dr # 253	Residential Multi-Family	304,920	2,467
1-015	1052540000001	Base Iii Id Houston LLC	10200 Harwin Dr	Commercial	130,680	1,331
1-016	1052550000001	Houlee Inv LLC	10190 Harwin Dr	Commercial	82,977	1,251
1-018	1052550000014	Cleancycle Corporation	10170 Harwin Dr # 11	Commercial	46,252	834
1-019	1052550000012	Zahani Investments LLC	10052 Harwin Dr	Commercial	175,546	1,801
1-020	1052550000002	Harwin Gessner Investment Inc	5700 S Gessner Dr	Commercial	251,672	861
1-021	0121440000027	Centerpoint Energy Hou Ele	0 Gessner Rd	Utility (Electric)	613,717	22,243
1-022	0121440000001	Centerpoint Energy Hou Ele	0 Harwin Dr	Utility (Electric)	898,161	24,417
1-030	0212470020001	Centerpoint Energy Hou Ele	0 Fondren Rd	Utility (Electric)	28,190	78
1-035	0520050060001	Centerpoint Energy Hou Ele	0	Utility (Electric)	375,487	301
1-036	0520030010010	Centerpoint Energy Hou Ele	0 Westpark Dr	Utility (Electric)	187,744	379
1-040	0410330050010	Imt Pavilion Iii LP	5401 Rampart St #1006	Residential Multi-Family	1,307,135	72
1-043	0370590250024	H & S Development Inc	5305 Renwick Dr	Commercial	26,230	1,473
1-044	0370590250017	Pioneer (S Tx Concrete)	5511 Renwick Dr	Commercial	306,633	2,483
1-045	1369010010001	Galleria Storage 18 (Tx) LLC	5400 Alder St	Commercial	235,677	2,275

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
1-046	0370590250003	Jjs Apartments LLC	5500 El Camino Del Rey St	Residential Multi-Family	711,666	283
1-047	0370590250021	Great Mvk Ltd Co	5302 Chimney Rock Rd	Commercial	16,048	1,082
1-048	0370540140001	Imt Chimney Rock LP	5401 Chimney Rock Rd # 970	Residential Multi-Family	1,245,092	2,189
1-049	1221860010001	Sams Real Estate Business	5310 S Rice Ave	Commercial	652,032	39
1-050	1353300010001	Store Construction LLC	5305 S Rice Ave	Commercial	159,168	874
1-064	0410170020670	Centerpoint Energy Hou Ele	0 Westpark Dr	Utility (Electric)	94,961	12,589
1-064	0410170020670	Centerpoint Energy Hou Ele	0 Westpark Dr	Utility (Electric)	94,961	5,072
1-300	1378690010001	Hearst Newspapers Ptnrshp LP	4747 Southwest Fwy	Industrial	913,288	9,140
1-301	0421540000004	Apt Towne Plaza LLC	4655 Wild Indigo St # 332	Residential Multi-Family	359,646	975
1-305	0421540000012	Texas Property Holdings LLC	3811 Newcastle Dr	Commercial	10,237	179
1-314	0410170020051	Avalon Dri Amrit Hotels LLC	4015 Southwest Fwy # 131	Commercial	89,193	136
Segment 2						
2-213	0410170080072	Phcg Investments	2540 Richmond Ave	Commercial	15,749	1,629
2-214	0410170080070	Phcg Investments	2536 Richmond Ave	Commercial	23,916	2,582
2-235	0630760050022	3514 Shepherd LLC	3514 S Shepherd Dr	Commercial	18,799	2,949
2-236	0561250000031	Platinum Global LP	3519 S Shepherd Dr	Commercial	12,052	1,480
2-237	0561250000026	Lane Equipment Co	2054 Richmond Ave	Commercial	8,059	819
2-238	0561250000021	Lane Equip Co	2030 Richmond Ave	Commercial	28,452	2,883
2-278	0522650000028	Wu Jianping	1610 Richmond Ave	Residential - Single Family	5,636	687
2-279	0522650000029	Tilton Resoureces Ltd	1604 Richmond Ave	Residential Two-Family	5,180	538
2-001	0410170020675	Centerpoint Energy Hou Ele	0 Westpark Dr	Utility (Electric)	114,998	56,271
2-048	0681250290022	Lawther David L & Jasmine K	3702 Westermen St	Vacant	10,290	840
2-049	1194260000001	Gsmv The Village At West University	5151 Edloe # 419	Residential Multi-Family	383,207	237
2-052	1193470010001	Weslayan Phillips 66 LP	4910 Weslayan St	Commercial		565
2-053	0752170040012	Centerpoint Energy Entex	0 Westpark Dr	Utility (Gas)		220
2-054	0752170040010	Texas Petroleum Group LLC #234	3939 Southwest Fwy	Commercial		1,926
2-059	1155390000008	Mwm Fund Ii Ltd	3777 Southwest Fwy	Commercial		28
2-060	0410170020425	Houston Board Of Realtors	3693 Southwest Fwy	Houston Board Realtors		187
2-071	0410170050077	Bank One Texas N A	3403 Richmond Ave	Commercial	96,468	1,186
2-072	1339250010002	Houston 3737 Buffalo LP	3737 Buffalo Speedway	Commercial	18,943	1,807

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
2-090	1010200000001	1996ft Seabrook LP	2658 Richmond Ave	Vacant - Colonia		304
2-091	1010200000002	1996ft Seabrook LP	3600 Kirby	Commercial	62,640	2,556
2-092	0260210010001	Lamesa Properties Ltd	3601 Kirby Dr	Commercial	50,074	2,596
2-093	1242890010001	Lago Bella LLC	2405 Richmond Ave	Commercial		434
2-100	0690270030007	Current Owner	2227 Richmond Ave	Vacant - Colonia		195
2-101	0690270030006	Current Owner	2223 Richmond Ave	Commercial		318
2-102	0690270030005	Current Owner	2219 Richmond Ave	Commercial		385
2-103	1164290000001	Lsi Oates LP	3636 Greenbriar Dr	Commercial	38,536	854
2-104	0441810000095	2006 Gb Farn Ltd	3800 Farnham Dr	Commercial	220,383	4,249
2-105	0540570000001	Barr Paul T	3601 S Sandman St	Commercial	10,304	1,245
2-106	0540570000002	Lube Properties Ltd	2107 Richmond Ave	Commercial	12,439	2,718
2-107	0540580000001	Jc Shepherd LLC	3607 S Shepherd Dr	Commercial	13,243	1,357
2-108	0540580000003	Jc Shepherd LLC	3615 S Shepherd Dr	Commercial	19,677	151
2-109	0571300010001	Jc Shepherd LLC	2049 Richmond Ave	Commercial	4,801	149
2-110	0571300010002	Dang Marie	2045 Richmond Ave	Commercial	4,673	130
2-111	0571210000001	Dang Dan Van	2039 Richmond Ave	Commercial	5,517	130
2-112	0571210000002	Jack Eseoghene Esther	1959 Richmond Ave	Residential Two-Family	5,400	111
2-113	0571210000003	Scarlet Q Rolling Fund Llp	1953 Richmond Ave # 1	Commercial	5,324	129
2-114	0571210000004	Rockstar Property LLC	1951 Richmond Ave	Commercial		104
2-127	0660870010002	Akin Ahmet	1839 Richmond Ave	Commercial		50
2-128	0660870010003	Galleria Series Investments LLC	1835 Richmond Ave	Commercial		158
2-129	0660870010004	Eskandary Afsaneh	1833 Richmond Ave	Commercial		275
2-130	0660870010005	Zal Concepts LLC	1829 Richmond Ave	Commercial		443
2-133	0660870020001	G & A Group LLC	1749 Richmond Ave	Commercial	11,199	1,002
2-134	0660870020003	G & A Group LLC	1749 Richmond Ave	Commercial	23,807	1,671
2-135	1286480010002	4300 Dunlavy Development LLC	4300 Dunlavy St # 208	Residential Multi-Family		2,297
2-136	1340410010001	Dunlavy Townhomes LLC	1669 Richmond Ave	Residential - Single Family		676
2-146	0441840000065	1601 Richmond Realty Ltd	1625 Richmond Ave	Commercial		161
2-147	0441840000070	1601 Richmond Realty Ltd	1623 Richmond Ave	Vacant - Colonia		344
2-148	0441840000050	1601 Richmond Realty Ltd	1601 Richmond Ave	Commercial		1,089

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
2-162	1413460010001	Poole Living Trust	1205 Richmond Ave	Commercial		150
2-164	0302490010001	Campanile South LP	4306 Yoakum Blvd	Commercial		657
2-165	0302450000001	1920 Manor LLC	4301 Yoakum Blvd	Commercial	10,962	1,333
2-166	0302450000020	1920 Manor LLC	1031 Richmond Ave	Commercial	8,252	1,009
2-167	1258090010001	102 104 Greenwich Street Manhattan LP	1003 Richmond Ave	Commercial	52,383	2,039
2-168	0360620000014	Jpmorgan Chase Bank	4313 Montrose Blvd	Commercial	5,197	426
2-175	0141500000001	Shaw Jimmy & Ida	801 Richmond Ave	Residential - Single Family	6,171	168
2-176	1446210010001	Avid Living 713 LLC	715 Richmond Ave	Residential Multi-Family	4,968	869
2-182	0141470010001	Shih Hue-Teh & Lue Jane	511 Richmond Ave	Commercial		124
2-183	0250230000009	401 Richmond LLC	411 Richmond Ave	Commercial		196
2-186	1266950010001	Lakeside Place Pfc	3660 Richmond Ave 296	Governmental	145,773	1,457
2-187	1259690010001	Rte LLC	3616 Richmond Ave #289	Residential Multi-Family	144,971	241
2-188	1416220010001	Richbuff Investors LLC	3440 Richmond Ave	Commercial	172,933	519
2-189	0410170050055	Camp Wampum Ltd	3336 Richmond Ave	Commercial	83,765	795
2-201	1356380010001	Richmond Eastside Holdings LLC	3000 Richmond Ave	Commercial	132,616	1,107
2-210	1244570010001	1996ft Richmond Rmx LLC	2626 Richmond Ave	Commercial		233
2-211	381710000003	Jpk Colquitt Ltd	2629 Colquitt St	Commercial		176
2-212	0381710000014	Jpk Colquitt LP	2602 Richmond Ave	Commercial	12,165	841
2-215	0410170080060	Swk Real Estate Partners LP	3401 Kirby Dr	Commercial	156,204	1,375
2-216	0410170080080	Pappas Partners LP	2410 Richmond Ave	Commercial	87,120	2,296
2-219	0690270020015	Gillespie Michael D	2238 Richmond Ave	Residential - Single Family	6,792	232
2-220	0690270020016	Cr1 Holdings LLC	2234 Richmond Ave	Commercial	6,865	215
2-221	0690270020017	Decardi Development Group LLC	2230 Richmond Ave	Vacant - Colonia	6,880	334
2-222	0690270020018	2226 Interests LLC	2226 Richmond Ave	Commercial	6,905	430
2-223	0690270020019	Current Owner	2222 Richmond Ave	Residential - Single Family	6,911	425
2-224	0690270020020	Current Owner	2218 Richmond Ave	Residential - Single Family	6,923	424
2-225	0690270020021	Koukatsikas Emmanuel G	2214 Richmond Ave	Residential - Single Family	6,907	441
2-226	0690270020022	Koukatsikas Emmanuel G	2210 Richmond Ave	Residential - Single Family	6,901	567
2-227	0690270020023	Barbosa Juan Carlos & Paulina	2206 Richmond Ave	Vacant - Colonia	6,947	714
2-228	0690270020024	Barbosa Carlos	2202 Richmond Ave	Commercial	6,969	950

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
2-229	1268520010001	Ntandem Properties Management LLC	2150 Richmond Ave	Commercial	13,754	1,626
2-230	0630760050015	Mindy Tran	2142 Richmond Ave	Residential - Single Family	6,252	730
2-231	0630760050016	Wolff Robert L & Susan M	2138 Richmond Ave	Commercial	6,252	717
2-232	0630760050017	Davis Valentina H	2134 Richmond Ave	Commercial	6,252	705
2-233	0630760050018	2130 Richmond LLC	2130 Richmond Ave	Vacant - Colonia	6,252	692
2-234	1313140010001	Mody Interests LLC	2108 Richmond Ave	Vacant - Colonia	23,276	2,488
2-240	1349650010001	2020 Richmond LLC	2020 Richmond Ave	Commercial	7,187	87
2-241	0561250000017	Scarbrough Daphne	2016 Richmond Ave	Residential - Single Family	7,458	140
2-252	0562730000014	Naspa Real Estate Investments LLC	1806 Richmond Ave	Commercial	5,625	827
2-253	0562730000012	Naspa Real Estate Investments LLC	4205 Woodhead St	Vacant - Colonia	2,501	309
2-254	0540350000012	La Tapatia Taqueria	1756 Richmond Ave	Commercial	6,252	475
2-255	0540350000011	Mosley Gary B	1748 Richmond Ave #5	Residential Multi-Family	6,252	471
2-256	1462690010001	1744 Richmond LLC	1744 Richmond Ave	Vacant - Colonia	6,252	445
2-257	1462690010001	1744 Richmond LLC	1742 Richmond Ave	Vacant - Colonia		333
2-258	1462690010001	1744 Richmond LLC	1736 Richmond Ave	Vacant - Colonia		210
2-264	1464070010001	City Of Houston	1700 Richmond Ave	Governmental		393
2-265	1464070010001	City Of Houston	1700 Richmond Ave	Governmental		300
2-266	1464070010001	City Of Houston	1700 Richmond Ave	Governmental		143
2-267	0522650000016	Current Owner	1660 Richmond Ave # 16	Residential Multi-Family	14,133	1,281
2-268	0522650000018	Torres Isaias D	1650 Richmond Ave	Residential - Single Family	6,067	488
2-271	0522650000021	Seo Ventures Inc	1640 Richmond Ave	Commercial	6,042	138
2-275	0522650000024	Thomas Stephen S Et Al	1624 Richmond Ave	Residential - Single Family		154
2-276	0522650000026	Thomas Stephen S Et Al	1620 Richmond Ave	Residential Two-Family		293
2-277	0522650000027	Clark Dwain	1612 Richmond Ave	Residential Two-Family	5,222	457
2-280	0540090000001	Menil Foundation Inc	4215 Mandell St	Art	62,535	3,956
2-281	0540090000006	Menil Properties	1416 Richmond Ave	Art	24,628	819
2-285	0261840010013	Homeowners Assn	0	Vacant		39
2-286	0261840010002	Aquila Dominic & Diane	1100 Richmond Ave	Residential - Single Family	1,325	6
2-293	0261630000001	Ust Realty Company	4200 Montrose Blvd	Commercial	51,004	970
2-294	0261620000008	Lagare Bethea Trust L	933 Richmond Ave	Commercial	15,503	1,450

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
2-295	0261620010001	Bethea Legare H Trust	920 Richmond Ave	Vacant - Colonia	10,301	1,193
2-296	0230810000004	Kazilas Living Trust	900 Richmond Ave	Commercial	9,098	1,487
2-300	0230720000005	Quoclong Investments Inc	806 Richmond Ave	Commercial	8,383	21
2-304	0230710000012	Adams Judy M	710 Richmond Ave	Residential - Single Family	5,426	90
2-305	0230710000014	Bootjack Ltd	706 Richmond Ave	Commercial	5,552	183
2-306	0230710000003	Foelber John H	702 Richmond Ave	Commercial	5,666	188
2-313	1309010010001	Post Richmond LP	510 Richmond Ave # 242	Residential Multi-Family	92,401	339
2-064	1201990010005	Gwp One LLC	1 Greenway Plz	Commercial	179,030	115
2-079	0410170050170	Turner / H Ltd	3101 Richmond Ave	Commercial	40,482	164
2-080	0410170050176	Kg Land Investors LP	3015 Richmond Ave	Vacant - Colonia	41,520	128
2-132	0660870120002	Arduite Properties LLC	943 Radcliffe Dr	Commercial	3,001	104
2-149	0392220000018	City Of Houston	1567 Richmond Ave	Governmental		272
2-159	1217120010001	Katz Real Estate LP	1401 Richmond Ave	Commercial		50
2-184	1202040020001	Gwp Eight Twelve LLC	8 Greenway Plz	Commercial	95,174	170
2-200	0410170050180	Cpif Richmond Office I LLC	3100 Richmond Ave	Commercial		60
2-248	0382280000005	Dlwldw Holdings LLC	1836 Richmond Ave	Commercial		50
Segment 3						
3-007	0250010210006	4403 Fannin LLC	4320 Almeda	Commercial	20,452	3,349
3-093	0502890040010	Megan Cung Series LLC	1409 Wheeler St	Residential - Single Family	1,733	181
3-094	0502890040017	Pena Nicomedes	1411 Wheeler St	Residential - Single Family	1,572	175
3-095	0502890040001	Sullivan Linda L	1419 Wheeler St # 4	Residential Multi-Family	4,450	608
3-107	0192760000023	Strickland Walter E	4320 Almeda Rd	Commercial	6,751	1,808
3-001	0250230000005	401 Richmond LLC	401 Richmond Ave	Commercial		667
3-002	0250220000013	Tivoli Realty Inc	4412 Main St	Vacant - Colonia		1,778
3-003	0250220000001	Tivoli Realty Inc	4422 Main St	Commercial		571
3-008	0250010210002	4400 San Jacinto LLC	4400 San Jacinto St	Commercial	16,144	1,964
3-009	0250020220003	State Of Texas	0 San Jacinto St	Governmental	5,331	915
3-010	0250020230009	Torrs Mario & Aracely	4403 Caroline St	Vacant	5,830	152
3-011	0250020230011	Torres Mario & Aracely	1314 Wheeler St	Commercial	5,062	188
3-012	0250020230004	Vicron LLC	4402 Austin St	Residential - Single Family	7,297	431

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3-013	1312680000003	Ortegas Properties LLC	1406 Wheeler St	Residential - Single Family	12,394	163
3-017	0502890090001	Gerrard Holdings LLC	1506 Wheeler St	Commercial	2,954	22
3-018	1282650010005	Current Owner	4410 Crawford St	Residential - Single Family	2,075	26
3-019	1282650010004	Current Owner	4408 Crawford St	Residential - Single Family	1,972	34
3-020	1282650010003	Sollers Clayton Cole	4406 Crawford St	Residential - Single Family	1,973	44
3-021	1282650010002	Black Jordan M	4404 Crawford St	Residential - Single Family	1,972	53
3-022	1282650010001	Li Bo	4402 Crawford St	Residential - Single Family	2,211	65
3-023	1330560010001	Young Gary	4401 Crawford St	Residential Two-Family	3,151	158
3-024	0521460130007	Exclusive Construction LLC	1608 Wheeler St	Residential - Single Family	5,776	177
3-025	0521460130008	Jennings Karen J	1610 Wheeler St	Residential - Single Family	6,827	353
3-026	0521460130009	Hale Kevin	1612 Wheeler St	Residential - Single Family	5,251	378
3-027	0521460120017	Ost Almeda Corridors	1622 Wheeler St	Governmental	5,251	396
3-028	0521460120015	Ost Almeda Corridors	0 Wheeler	Governmental	18,379	1,152
3-029	0521460120005	Womack Gerald W	4400 Almeda Rd	Commercial	10,841	477
3-030	0521450000001	Ft Legacy 4409 Almeda LLC	4409 Almeda Rd	Commercial	6,216	466
3-031	0521450000032	Asmarino Group Inc	1808 Wheeler St # 5	Residential Multi-Family		38
3-046	0521480010001	Potts Eric	0 Wheeler	Vacant		276
3-085	0082640000001	South Main Baptist Church	0 Wheeler	Religious		325
3-088	0220480000001	William Marsh Rice University	0 Wheeler Ave	Commercial	48,125	1,326
3-089	0220490000001	4200 San Jacinto LLC	0 San Jacinto St	Commercial	53,152	1,090
3-090	0250020230014	Potter Larry E	0 Wheeler Ave	Vacant	2,182	304
3-091	0250020230001	Current Owner	4310 Austin St	Residential - Single Family	4,317	201
3-092	0502890040005	Collective Synergy LLC	1403 Wheeler St	Commercial	4,774	388
3-096	0502890080005	Moiz Properties LLC	4315 La Branch St # 4	Residential Multi-Family	5,105	152
3-097	1252660020007	Ramos Sylvia	0 Wheeler Ave	Vacant	551	0
3-105	1380490010010	Otulana Olakumbi	1617 A Wheeler Ave	Residential - Single Family		49
3-106	1380490010015	Weil Christopher R	1621 A Wheeler Ave	Residential - Single Family	2,825	425
3-108	0192760000019	City Of Houston	0 Chenevert	Governmental	98,359	283
3-109	1372430010001	Houston Isd	1906 Cleburne St	Governmental	435,109	4,744
3-110	0192730000023	Augustana Luth Evang Ch	2001 Wheeler St	Governmental		899

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
3-111	0192670000018	State Of Texas	0 Barbee St	Governmental		10
3-120	0192680000005	Peden Tammy E	4314 Emancipation Ave	Commercial	10,000	8
3-121	0192680000008	Slbl LLC	4311 Emancipation Ave	Commercial	7,350	40
3-122	0611510000020	Shackelford-Pouncy Carol	2405 Wheeler St	Residential - Single Family		5
3-123	0611510000019	Williams Shae C	2411 Wheeler St	Residential - Single Family		4
3-151	0570820000012	Texas Southern University	3001 Rosewood St	Governmental		189
3-152	0570820000001	Texas Southern University	3000 Wheeler St	Governmental		838
3-153	0192590000030	Texas Southern University	3005 Wheeler St	Governmental		2,116
3-154	0730450000012	Texas Southern University	3001 Barbee St	Governmental		69
3-209	0611680410001	Brasier Karen	0 Truxillo St	Residential - Single Family		226
3-210	0611680410002	Igg Tx Holdings LLC	0 Ennis St	Vacant		191
3-211	0611680410003	Igg Tx Holdings LLC	0 Ennis St	Vacant		203
3-212	1250060010001	Texas Southern University	2908 Alabama St	Governmental		788
3-213	0192020000004	Texas Southern University	2801 Alabama St St	Governmental		494
3-288	0410070140045	University Of Houston	0 Calhoun	Governmental	7,572,351	1,928
3-015	1395400010002	Live Investment Inc	1414 Wheeler St	Residential - Single Family		8
3-045	0521350000003	Mcilveen Rosemary	2010 Wheeler St	Residential - Single Family		7
3-055	0521480010011	Armstrong Cline	4402 Emancipation Ave	Commercial	5,000	5
3-056	0611520000001	Texas Community Corp	4405 Emancipation Ave	Commercial	5,775	23
3-162	0611680340001	Gritertainment LLC	3002 Alabama St	Commercial		124
3-163	0192000030009	Sun Yuxiang	3003 Alabama St	Residential - Single Family		210
3-179	1451090010001	Holman Captial LP	0 Holman St	Residential - Single Family		43
3-180	0191540000034	Reverie Capital LLC	3005 Holman St	Commercial		14
3-194	0611650000011	Thompson Linda	2918 Wheeler St	Residential - Single Family		32
3-195	0611630300012	Washington Gia A	2917 Wheeler St	Residential - Single Family		83
3-216	0192020000001	Houston Isd	0 Ennis St	Governmental		10
3-217	1331740010001	County Of Harris	3204 Ennis St	Governmental		138
3-287	0410070120003	University Of Houston	0 Calhoun	Governmental	1,499,832	172
3-297	0190950000014	Emnora Properties LLC Series B	3115 Ennis St # 1	Commercial		25
3-348	0410070120007	University Of Houston	0 Elgin St	Governmental		12

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
3-349	0581130000015	University Of Houston	4105 Elgin St	Governmental		301
3-350	0410070120001	University Of Houston	4211 Elgin St	Governmental	597,773	1,448
Segment 4						
4-122	1282170030006	Six Westheimer Ltd	0 Harrisburg Blvd	Commercial		42,736
4-143	0280420000010	Williamson Michael	94 S Lockwood Dr	Residential - Single Family	4,816	4,816
4-002	0350360000020	State Of Texas	4601 Gulf Fwy	Governmental		740
4-003	0350360000018	State Of Texas	4601 Gulf Fwy	Governmental		199
4-004	0350360000023	State Of Texas	4601 Gulf Fwy	Governmental		2,211
4-006	0410070100012	City Of Houston	0 Dumble St	Governmental	396,021	1,515
4-007	1401710010001	Houston Isd	1700 Dumble St	Governmental		1,458
4-017	0512120010010	Hernandez Enrique	4603 Clay St #4	Residential Multi-Family	6,475	160
4-018	0512120010001	Davila Gerarado & Silvia S	4602 Polk St	Residential Two-Family	5,449	885
4-019	0130390000018	Coronado Felipe O	4601 Polk St	Residential - Single Family	4,803	146
4-020	0130390000001	Gonzales Freddie & Ana	4602 Woodside St # 6	Residential Multi-Family	12,884	141
4-024	0130320000011	Archer Matthew B	4601 Park Dr	Residential - Single Family	4,600	47
4-025	0130320000001	Robert Edward E	4602 Mckinney St	Residential - Single Family	7,500	121
4-026	0130260000017	Current Owner	4601 Mckinney St	Residential - Single Family	8,025	112
4-027	0130260000001	Rth Investment Group LLC	4602 Walker St #8	Residential Multi-Family	8,002	178
4-028	0130210000017	Rosales Eloy	4601 Walker St	Residential - Single Family	7,810	245
4-029	0130210000001	Moreno Maria	4604 Rusk St	Residential - Single Family		276
4-031	0130120070020	Missouri Pacific Railroad Company	77021 Railroad	Railroad		785
4-032	0280480000001	Russ & Company Real Estate	4700 Capitol St	Residential Two-Family		457
4-072	0371880000022	Calmat Co	600 Lockwood Dr	Commercial	905,612	1
4-076	0402630000021	Electric Wire & Cable Co	750 Lockwood Dr	Commercial	434,053	16
4-077	1346320010001	Comerica Bank	800 Lockwood Dr	Commercial	41,038	82
4-083	1210520010003	Texas C Stores Inc	990 Lockwood Dr	Commercial	87,120	44
4-087	0402620010019	Cdab Viii LP	1010 Lockwood Dr	Commercial	161,240	410
4-088	0402620010124	Westcore Alpha Houston I LLC	1020 Lockwood Dr	Commercial	246,981	913
4-089	0402620010123	Westcore Alpha Houston I LLC	1040 Lockwood Dr	Commercial	224,112	966
4-090	0402620010125	Westcore Alpha Houston I LLC	1060 Lockwood Dr	Commercial	270,155	255

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4-094	0402620000022	Cdab Iv LP	1140 Lockwood Dr	Commercial	67,095	324
4-095	0581480000013	Bourgeois Arga	0 Lockwood Dr	Vacant - Colonia	12,500	478
4-096	0581480000002	Bourgeois Arga	0 Lockwood Dr	Vacant - Colonia	4,167	354
4-097	0581460000012	Arzu-Estrada Irma J	1202 Lockwood Dr	Commercial	5,258	17
4-098	0350360000003	2103 Ernestine Street LLC	0 Munger Ave	Vacant - Colonia	2,042	2,160
4-101	1402140010001	2000 S Lockwood Venture	4500 Gulf Fwy	Commercial	N	19,811
4-102	1402140010002	3300 Sage Ltd	3300 Sage Ltd	Commercial		1,735
4-103	1371510010001	Houston Isd	0 Ernesting St	Governmental		5,344
4-104	410070100004	Houston Isd	4528 Leeland St	Governmental	577,170	10,376
4-105	0410070100016	City Of Houston	4500 Leeland St	Governmental	210,395	11,855
4-106	0130430380010	Jasso Rudolph G	4501 Clay St	Residential - Single Family	7,645	20
4-107	0130430380003	Martinez Jesus Et Al	0 Polk St	Vacant	8,792	2,107
4-108	0130380000011	Traynham Justin A	4543 A Polk St	Residential Two-Family		350
4-110	0130360000008	Gonzalez Manuel	4547 Woodside St	Residential - Single Family	5,544	203
4-111	0130360000004	Parker Steven E	4518 Park Dr	Residential - Single Family	12,426	1
4-115	0130270000014	Current Owner	4539 Mckinney St	Residential - Single Family	9,095	130
4-117	0130580070001	Aragon Irene & Kramer Sean	4539 Walker St	Vacant	10,905	10
4-118	013020000010	Perez Carlos E & Alberta	4542 Rusk St	Residential - Single Family	8,951	21
4-119	0130150100013	Copelin Shane	4545 Rusk St	Vacant	8,894	422
4-121	0371620000030	Missouri Pacific Railroad Company	77001 Railroad	Vacant - Colonia		232
4-125	0280100000012	Kopriva Evelyn J & John T	4623 Harrisburg Blvd	Vacant - Colonia	5,000	35
4-142	0280420000011	Williamson Michael Eugene	96 S Lockwood Dr	Vacant		81
4-165	0371880000115	Cg 233 Inc	0	Vacant - Colonia	34,277	176
4-166	0371880000072	Buffalo Bayou Partnership	0 Lockwood Dr	Governmental	94,362	9
4-170	0402630000012	Timvest 700 LLC	753 Lockwood Dr	Commercial		284
4-171	0402630000015	Timvest 700 LLC	0 Lockwood	Commercial		453
4-180	0402620010016	Advance Pro LLC	999 Lockwood Dr	Commercial	11,643	529
4-181	0402620010030	City Of Houston	0 Lockwood Dr	Governmental	11,875	118
4-182	0402620010161	Cdab Ii LP	0 Lockwood Dr	Vacant - Colonia	35,649	193
4-183	0402620000047	H A I Enterprises LLC	1025 Lockwood Dr	Commercial	538,837	2,761

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4-185	0581470000020	Vega Kimberly D	0 Lockwood Dr	Vacant - Colonia	250	312
4-186	0581470000024	Garces Micahel A	1101 Lockwood Dr	Vacant - Colonia	3,916	515
4-187	0581470000010	Benitez Jose F & Marta	5438 Margarita St	Residential - Single Family	4,150	320
4-190	0350360000002	L & J Final Edition Ltd	4445 Gulf Fwy	Commercial		47
4-191	0350320020002	2103 Ernestine Street LLC	0 Munger St	Vacant - Colonia		2,394
4-203	0130550000012	Silva Maria P	4443 Leeland St	Residential - Single Family		110
4-206	0410070100008	Bishop Byrne Home Assn	420 Telephone Rd	Charitable	59974	119
4-033	0280440000007	Gillespie Lawrence S Et Al	0 Lockwood St	Vacant		10
4-035	0280110000012	Witten Tim	315 Lockwood Dr	Commercial	17,359	59
4-084	0402620010011	Jan Deng Kui	5501 Clinton Dr	Commercial	37,871	151
4-109	0130380000024	Villagomez Fransico J	4550 Woodside St	Residential - Single Family		11
4-114	130310000010	Carter Kenneth D	4540 Mckinney St # 4	Residential Multi-Family		51
4-188	0581450000021	Morrow Mary M Estate	1203 Lockwood Dr	Commercial	4,648	4
4-205	0410070100014	Ernestine Street Inc	1475 Ernestine St # 5	Commercial	21910	24
Segment 5						
5-179	0660210000504	Armstrong Cline A	6902 Lockwood Dr	Commercial	1,985	1,985
5-191	0660200000258	Conejo Ma Concepcion Pineda	7302 Lockwood Dr	Residential - Single Family	17,995	17,995
5-192	0660200000259	Nieto Alberto & Lenda L	7306 Lockwood Dr	Residential - Single Family	17,700	17,700
5-240	0640190080016	Robles Gerardo	8410 Lockwood Dr	Residential - Single Family	5,500	5,500
5-322	0131230000010	Ocampo Adalberto & Maria	2209 Lockwood Dr	Residential - Single Family	2,500	2,500
5-523	0640190090001	Cooper Gary M	8503 Lockwood Dr	Commercial	4,500	4,500
5-524	0640190090016	Sariri LLC	8507 Lockwood Dr	Residential - Single Family	5,500	5,500
5-007	0402610000076	Evergreen Negro Cemetery	0 Market St	Cemetery	115,816	113
5-009	0630140030009	Lockwood Farmers Investments LLC	5512 Tremper St	Vacant	5,600	206
5-040	0131270000006	Sam Jack	2124 Lockwood Dr	Commercial	5,000	205
5-041	0131240000001	Pulido Sanjuana	2200 Lockwood Dr	Vacant - Colonia	5,000	383
5-042	0131240000002	Dabiri Ramin	2202 Lockwood Dr	Vacant	5,000	268
5-043	0131240000003	Davis James	2206 Lockwood Dr	Commercial	10,000	457
5-044	0131240000005	Valazquez Celedonio & Martha	2220 Lockwood Dr	Residential - Single Family	5,000	39

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5-074	0590250060003	Broussards Real Estate Investments Inc	0 Lockwood Dr	Vacant - Colonia	3,584	54
5-075	0590250060001	Mejia Astor E	0 Lockwood Dr	Vacant	3,584	316
5-076	0651250330848	Suber Monica D	3714 Lockwood Dr # 1	Commercial	16,400	1,319
5-077	0651250330849	Lawrence Jesse Jr	3716 Lockwood Dr	Commercial	5,837	2,596
5-126	0651290790935	City Of Houston	Lockwood Dr & Loop 610	Governmental	1,036	135
5-129	0651290910001	5516 Lockwood LLC	5516 Lockwood Dr	Commercial	33,842	575
5-130	0651290770855	Nails Herman C	5402 Troost St # 12	Residential Multi-Family	11,288	277
5-131	0651290770876	Realty Income Properties 13 LLC	5706 Lockwood Dr	Vacant - Colonia	11,400	270
5-132	0651290770853	Realty Income Properties 13 LLC	5706 Lockwood Dr	Commercial	9,500	225
5-133	0651290770875	Aftab LLC	0 Lockwood Dr	Vacant - Colonia	9,500	225
5-134	0651290770851	Aftab LLC	5718 Lockwood Dr	Commercial	11,400	270
5-135	0651290770849	Aftab LLC	5722 Lockwood Dr	Vacant - Colonia	22,688	542
5-136	0651290760814	Robinson Ola M Estate Of	5804 Lockwood Dr # 2	Commercial	11,288	284
5-137	0651290760813	Haq Imran	0 Lockwood Dr	Vacant - Colonia	11,400	543
5-138	0651290760809	Burger King Corp # 1306/Global New Millineum Partners LLC	5816 Lockwood Dr	Governmental	72,160	2,513
5-170	0660210000373	Washington Ronald D & Ruby L	6616 Lockwood Dr	Residential - Single Family	16,292	24
5-171	0660210000374	Mary B White Trust	6704 Lockwood Dr	Residential - Single Family	16,488	88
5-172	0660210000375	Singleton Andrew L	6708 Lockwood Dr	Residential - Single Family	16,500	109
5-173	0660210000376	Nematpour Mike	6712 Lockwood Dr	Vacant	16,500	133
5-174	0660210000377	Bryant Michael L & Libby K	6716 Lockwood Dr	Residential Two-Family	17,400	147
5-175	0660210000378	Tardy Bessie Mrs Estate Of	6718 Lockwood Dr	Residential - Single Family	15,180	167
5-176	0660210000496	Cjv Holding LLC Series 88	6722 Lockwood Dr	Vacant	10,400	179
5-177	0660210000379	Cjv Holding LLC Series 88	6726 Lockwood Dr	Vacant	6,650	360
5-178	0660210000380	Parsino Realty Investment LLC	0 Shreveport St	Vacant	9,172	2,120
5-180	0660210000381	Rose Michael & Kimberly	4904 Bennington St	Commercial	5,902	101
5-190	0660200000257	Conley Betty J	7226 Lockwood Dr	Residential - Single Family	17,712	1,239
5-193	0660200000260	Levan Wolf	7310 Lockwood Dr	Vacant	17,760	1,124
5-194	0660200000261	Reynolds Alba	7314 Lockwood Dr	Vacant	18,093	1,273

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5-195	0660200000262	Houston Land Bank	7318 Lockwood Dr	Governmental	18,117	1,280
5-196	0660200000263	Houston Land Bank	0 Lockwood Dr	Governmental	17,844	1,283
5-197	0660200000264	Franco Raul	7406 Lockwood Dr	Residential Two-Family	18,178	1,331
5-198	0660200000265	Calvary United Methodist	0 Lockwood Dr	Religious	18,178	1,362
5-199	0660200000266	Calvary United Methodist	0 Lockwood Dr	Religious	18,178	1,279
5-200	0660200000267	Calvary United Methodist	1 Lockwood Dr	Religious	23,369	1,123
5-201	0570050020001	3 Oaks Partners LLC	4901 Denmark St # 20	Residential Multi-Family	35,333	285
5-216	0570050020020	Barrientos Josue G	7724 Lockwood Dr	Residential - Single Family	20,615	83
5-218	1267220010002	Dhanani Investment Inc	5001 East Crosstimbers	Commercial	43,421	116
5-228	0570050020043	Rochon Michael	7948 Lockwood Dr	Commercial	4,960	79
5-229	0570050020044	Evins Sandra M	8004 Lockwood Dr	Residential - Single Family	5,016	455
5-230	0570050020045	Byrd Edward Jr	0 Lockwood Dr	Vacant	20,615	613
5-231	0570050020046	Smith Jessie M Et Al	8006 Lockwood Dr	Residential - Single Family	20,615	587
5-232	1370680010001	B & N Corporation	8020 Lockwood Dr	Commercial	20,434	1,386
5-233	0640190020001	Pak Sana E	8102 Lockwood Dr	Commercial	20,200	358
5-239	0640190080002	Santoyo Sergio	0 Jones St	Vacant - Colonia	9,000	571
5-241	0640190080015	Hayes Matthew W Ii	8412 Lockwood Dr	Vacant - Colonia	5,500	447
5-242	0640190100001	Reyes Jose	4903 Keeland St	Vacant	3,500	283
5-252	0710730020062	Chamberlain Emma D	0 Lockwood Dr	Vacant	6,180	32
5-253	0710730020063	Chamberlain Emma D	0 Lockwood Dr	Vacant	6,180	453
5-254	0710730020064	Carabantes Jorge	8722 Lockwood	Residential - Single Family	6,182	734
5-255	0710730020008	Twins Mcnoj LLC	4902 Laura Koppe Rd	Commercial	15,038	1,916
5-256	0731790000041	Twins Mcnoj LLC	4901 Laura Koppe Rd	Commercial	29,200	2,610
5-257	0731790000040	Lopez Marvin E	8814 Lockwood Dr	Residential - Single Family	14,630	66
5-270	0731790000171	Bonilla Arnold	9106 Lockwood Dr	Residential - Single Family	9,860	19
5-271	0731790000170	Deleon Octaviano	0 Lockwood Dr	Vacant	9,690	256
5-272	0731790000200	Ibarra Lorena R	9116 Lockwood Dr	Residential - Single Family	8,700	335
5-273	0731790000199	Arzola Roberto C	4906 Firnat St	Residential - Single Family	4,550	482
5-274	0731790000241	Rogers Elwin O Estate Of	9202 Lockwood Dr	Residential - Single Family	11,900	318
5-275	0731790000240	Smith Pearline Mcardell	9206 Lockwood Dr	Residential - Single Family	8,670	2

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-285	0731800020362	Wfg Lockwood Funeral Home	9402 Lockwood Dr	Vacant - Colonia	8,500	201
5-286	0731800020390	Wfg Lockwood Funeral Home	9402 Lockwood Dr	Vacant - Colonia	8,500	571
5-287	0731800020388	In & Out Tidwell LLC	4902 E Tidwell Rd	Commercial	20,400	2,788
5-288	0731800020421	Stevens Ted Dwayne	4901 E Tidwell Rd	Commercial	9,860	1,917
5-299	0620400040012	Holliday Robt	5408 Farmer St	Vacant - Colonia	4,835	197
5-301	0620390030011	Houston Ii Partners LP	1503 Lockwood Dr	Commercial	40,482	127
5-302	0541900000011	Jp Morgan Chase Bank	1605 Lockwood Dr	Commercial	33,932	169
5-303	0541900000013	Mancillas Maria	1615 Lockwood Dr # 9	Residential Multi-Family	6,135	224
5-318	0131290000008	Castille Gregory	2011 Lockwood Dr	Vacant	2,500	16
5-321	0131230000011	Dang Hai Sanh	2207 Lockwood Dr	Vacant - Colonia	5,000	733
5-323	0131230000009	Thomas Lona D	2213 Lockwood Dr	Residential Two-Family	2,500	243
5-324	0131230000008	Watson Autry Estate Of	2219 Lockwood Dr	Residential - Single Family	2,500	52
5-329	0131170000011	Gholami Mahin	2407 Lockwood Dr	Vacant	2,500	15
5-330	0131170000010	Hansford Mignon D & Ada V	2409 Lockwood Dr	Vacant	2,550	11
5-347	0140470000007	Odette Cormier Family Trust	3212 Cushing St	Vacant	3,819	215
5-348	0402660020040	Odette Cormier Family Trust	3535 Cushing St	Commercial		880
5-353	0590250050004	Ahmed Sumera	3513 Lockwood Dr	Vacant - Colonia	7,200	117
5-354	0590250050002	Wilturner Bufford	3515 Lockwood Dr	Commercial	3,043	154
5-355	0651250330796	Moton Abraham	0 Otis St	Vacant - Colonia	10,980	314
5-356	0651250330797	Moton Abraham	0 Lockwood Dr	Vacant - Colonia	10,970	329
5-357	0651250330798	Moton Abraham	0 Lockwood Dr	Commercial	10,939	325
5-358	0651250330799	Moton Younus	3719 Lockwood Dr	Commercial	12,530	716
5-359	0651250340801	Pinnock Michael S	3801 Lockwood Dr	Commercial	11,115	1,312
5-360	0651250340800	Dentvance LLC	3815 Lockwood Dr	Commercial	8,286	256
5-386	0651240290574	Ganim Mazen & Ibrhim	4409 Lockwood Dr	Commercial	15,400	1,207
5-414	0651290720718	Panjwani Properties Ltd	5513 Lockwood Dr	Vacant - Colonia	14,657	4
5-415	0651290720719	Surry Rachel	5601 Lockwood Dr	Residential - Single Family	14,867	135
5-416	0651290720720	Galvan Jose H	5605 Lockwood Dr	Residential - Single Family	14,980	249
5-417	0651290720721	Humphrey Janice M	5611 Lockwood Dr	Vacant	15,000	270
5-418	0651290720722	Harrison Dwayne Allen	5613 Lockwood Dr	Residential - Single Family	15,000	270

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-419	0651290720723	Benitez Modesto	5615 Lockwood Dr	Residential - Single Family	15,000	270
5-420	0651290720724	Wharton Ii Ltd Partnership	5701 Lockwood Dr # 36	Residential Multi-Family	30,000	540
5-421	0651290720726	Store Master Funding Viii LLC	5725 Lockwood Dr	Commercial	24,000	433
5-422	0651290720751	Nguyen Chinh Van	5729 Lockwood Dr	Commercial	21,000	379
5-423	0651290720727	Pacini & Sacco LLC	5815 Lockwood Dr	Commercial	133,555	1,967
5-424	0651290730663	Smcr Holdings LLC	5227 Kelley St	Commercial		198
5-476	0570050010002	Jones Ardell	7505 Lockwood Dr	Residential - Single Family	21,919	4
5-477	0570050010003	Huerta Marina F	7509 Lockwood Dr	Vacant	21,769	3
5-496	0570050010028	Hernandez Josue	7805 Lockwood Dr	Residential - Single Family	29,350	558
5-497	0570050010029	Cooper Ocella Estate Of	7809 Lockwood Dr	Residential - Single Family	21,618	331
5-498	0570050010030	Cooper Mitchell & Ocella	7809 Lockwood Dr	Vacant	21,618	316
5-499	0570050010031	Word Love Church	7901 Lockwood Dr	Religious	21,618	232
5-500	0570050010032	Word Of Love Church	7905 Lockwood Dr	Religious	21,618	14
5-512	0570050010044	Lopez Jr Juan	7949 Lockwood Dr	Residential - Single Family	42,755	68
5-513	0570050010046	Byrd Edward Jr & Sheila A	8033 Lockwood Dr	Commercial	32,622	854
5-514	0640190010001	Mynar Raymond J Estate Of	8103 Lockwood Dr	Vacant - Colonia	4,540	1,120
5-515	0640190010015	Mejia Martin C	0 Sadler St	Vacant	11,000	1,372
5-521	1411750010001	Walker Regina	8409 Lockwood Dr	Residential - Single Family	2,475	28
5-522	0640190070016	Jefferson Randy	4822 Keeland St	Residential - Single Family	2,025	254
5-549	1441800010001	Flax Gold Horizons LLC	9117 Lockwood Dr	Residential - Single Family	11,050	273
5-550	0731790000236	Alvarez Wilson Oberdan	9201 Lockwood Dr	Residential - Single Family	11,900	560
5-551	0731790000237	Gomez Juan C	9205 Lockwood Dr	Commercial	17,340	558
5-558	0731800020357	Smithford Carla	9405 Lockwood Dr	Commercial	18,574	65
5-559	0731800020393	Jai Ambe Hospitality Inc	0 Lockwood Dr	Vacant - Colonia	8,600	128
5-560	0731800020392	Jai Ambe Hospitality Inc	9417 Lockwood Dr # 18	Commercial	8,600	126
5-561	0731800020391	Lara Jose	4824 Tidwell Rd	Commercial	11,850	2,576
5-562	1462560010006	Moffitt Jo Ann	0 Tidwell Rd	Vacant	8,500	1,306
5-564	0422270000272	Brown Rudolph & Glory	9420 Jensen Dr	Commercial	63,245	1,531
5-565	0422270000284	Rudolph & Glory Brown Co	2920 Tidwell Dr	Commercial	34,198	899
5-566	0422270000271	Torres Martha F	3050 Tidwell Rd	Commercial	13,560	329

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-567	0422270000274	Longhorn Resale Shop LLC	3054 Tidwell Rd	Commercial	59,015	1,549
5-568	0422270000279	Longhorn Resale Shop LLC	3056 Tidwell Rd	Commercial	51,936	1,447
5-570	0670210000030	Martin Darrell E	3126 Tidwell Rd	Commercial	11,346	45
5-571	0670210000031	Pressleycaffee Angelena	3132 Tidwell Rd # 40	Residential Multi-Family	34,294	313
5-572	0670210000035	Torrecillas Juan M	3205 Hurlplan St	Vacant - Colonia	14,431	360
5-576	0670210000019	Garrett Group Inv	0 Herben St	Vacant	2,140	13
5-577	0422280000150	Ganpati LLC	3300 Tidwell Rd # 25	Commercial	49,576	751
5-578	0660410010001	Duron Juan & Oralia	3402 Tidwell Rd	Commercial	6,900	136
5-589	0660410020027	Ariel Group Inc The	3702 Tidwell Rd	Vacant - Colonia	17,422	199
5-599	0421000010157	County Of Harris	0 Friendly Rd	Governmental	41,946	82
5-600	0421000010133	Perez Enrique	4104 E Tidwell Rd	Commercial	8,045	338
5-601	0421000010134	Warrad Miriam A	4106 E Tidwell Rd	Commercial	17,860	556
5-602	0421000010026	Warrad Miriam A	4110 E Tidwell Rd	Commercial	37,692	3,621
5-603	0421000010087	Harris Rickey	4202 E Tidwell Rd	Commercial	11,249	2,474
5-604	0421000010082	River Of Jordan Evangelical Ministry	9272 Friendly Rd	Religious	146,387	5,405
5-605	0731800070877	Ojeda LLC	4306 E Tidwell Rd	Vacant - Colonia		681
5-606	0731800070878	Ojeda LLC	4306 E Tidwell Rd	Vacant - Colonia		607
5-607	0731800070879	Ojeda LLC	4306 E Tidwell Rd	Commercial	7,200	599
5-608	0731800070880	Salazar Maribel M	4314 E Tidwell Rd	Commercial	4,200	572
5-609	1501560010001	Kateebco Holdings LLC	4406 E Tidwell Rd	Vacant - Colonia	41,805	2,465
5-610	0731800030436	Scurlock Foundation	9514 Hirsch Rd	Vacant - Colonia	15,345	1,520
5-611	0731800030437	Wong Hong Chong	0 E Tidwell Rd	Vacant - Colonia	13,913	1,711
5-612	0731800030439	Vergara Jose R	4606 E Tidwell Rd	Vacant - Colonia	17,600	1,412
5-613	0731800030441	Sam O Ray Corporation	0 E Tidwell Rd	Vacant - Colonia	8,800	627
5-614	0731800030442	Sam O Ray Corporation	0 E Tidwell Rd	Vacant - Colonia	8,800	606
5-615	0731800030443	Amayo Jose D	4622 E Tidwell Rd	Vacant - Colonia	17,583	1,252
5-616	0731800030445	Morales Juan J	4626 E Tidwell Rd	Commercial	8,950	624
5-617	0731800030446	Zapeta Jose Armando Ixcoy	4634 E Tidwell Rd	Commercial	12,840	1,042
5-618	0731800020404	Eddies Place Co Inc	4700 E Tidwell Rd	Commercial	13,283	1,404

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-619	0731800020401	Hudson Sharon	0 E Tidwell Rd	Vacant - Colonia	17,598	1,176
5-620	0731800020400	Hudson Sharon	0 E Tidwell Rd	Vacant - Colonia	8,799	602
5-621	0731800020399	Gilliam R E	4720 Tidwell Rd	Residential - Single Family	8,800	599
5-622	0731800020398	Gilliam Roy E	4804 E Tidwell Rd	Vacant	8,750	584
5-623	0731800020396	Rose Sharon Baptist Church	4808 E Tidwell Rd	Religious	43,172	2,495
5-625	0583010000001	Linsan Inc	9502 Jensen Dr	Commercial	66,247	2,604
5-626	1502720010001	Tidwell C-Store	3117 Tidwell Rd	Commercial	129,678	1,875
5-627	1502720010002	Motawala Property LLC	0 Tidwell Rd	Vacant - Colonia	77,624	3,695
5-628	0670210000005	Sharina Shay Inc	3131 Tidwell Rd # 24	Commercial	22,699	3,022
5-629	0670210000076	Hagans Philip A	3110 Tidwell Rd	Vacant - Colonia	2,550	2,855
5-630	0670210000014	Current Owner	3110 Tidwell Rd	Vacant - Colonia	24,112	2,804
5-631	0740770050007	Farha International LLC	3301 Tidwell Rd	Commercial	75,084	1,692
5-645	0421000010157	County Of Harris	0 Friendly Rd	Governmental	41,946	24
5-646	0421000010033	Ahil Property LLC	4017 Tidwell Rd	Commercial	15,075	413
5-647	0421000010031	Ahil Property LLC	4017 Tidwell Rd	Commercial	59,416	833
5-648	0421000010028	Ahil Property LLC	4105 E Tidwell Rd # 8	Vacant - Colonia	17,001	2,578
5-649	1235460010001	Tsjp Investments Lc	4217 E Tidwell Rd	Commercial	31,441	5,107
5-650	0421000010160	Houston Hoteller Inc	4221 E Tidwell Rd # 31	Commercial	60,777	1,629
5-651	0421000010084	Arzola Salvador & Marisa	0 E Tidwell Rd	Vacant - Colonia	14,326	2,867
5-652	0731800070876	Arzola Salvadore	0 E Tidwell Rd	Vacant - Colonia	4,615	587
5-653	0731800070875	Arzola Salvadore	0 E Tidwell Rd	Commercial	5,257	496
5-654	0731800070874	White Guy E	0 E Tidwell Rd	Vacant - Colonia	5,969	535
5-655	0731800070873	Padron Yolanda	4315 E Tidwell Rd	Commercial	6,654	625
5-656	0731800070872	Padron Yolanda	4317 E Tidwell Rd	Commercial	6,887	766
5-657	0731800070870	Cre & Land LLC	4319 E Tidwell Rd	Commercial	14,377	1,856
5-658	0731800070869	Gomez Gonzalo	4319 E Tidwell Rd	Vacant - Colonia	10,574	1,119
5-659	1351500010001	Istrin Family Trust	4603 E Tidwell Rd	Commercial	84,972	6,680
5-660	0731800030426	Hernandez Diana	4635 E Tidwell Rd	Commercial	12,180	972
5-661	1381740010001	M And M Sisters Tidwell LLC	4701 E Tidwell Rd	Commercial	35,418	2,899
5-662	0731800020441	Henry Harold	4713 E Tidwell Rd	Commercial	17,002	1,340

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-663	0731800020411	Lahijani Fariborz	4815 E Tidwell Rd	Commercial	25,200	1,979
5-664	0731800020414	Cooper Gary	4821 E Tidwell Rd	Commercial	24,720	1,306
5-671	1466780010001	Angelone Carl Trustee	9715 Epsom Rd	Commercial	188,802	1,163
5-001	0581460000002	Formosa Management LLC	1202 Lockwood Dr	Vacant - Colonia		113
5-002	0581440000013	Coronado Arnulfo	5507 Arapaho St	Residential - Single Family		113
5-003	0581440000001	Barnes Glynell S	1212 Lockwood Dr	Vacant - Colonia		113
5-004	0581420000024	J Davis Real Estate Inc/Nayani Nizar	0 San Juan	Vacant - Colonia	3,523	113
5-005	0581420000002	J Davis Real Estate Inc/Nayani Nizar & Shelina Jan	0 San Jose	Vacant - Colonia	6,389	113
5-006	0631680020001	Convenant Community Capital Corporation	0 San Jose	Vacant - Colonia	7,153	226
5-025	0131330000001	Home Advocate Inc	0 Lockwood	Vacant	5,000	113
5-030	0131330000006	Dunevant T F	1920 Lockwood Dr	Residential - Single Family	5,000	113
5-031	0131300000001	Tran Kim	5501 Perkins St	Commercial	5,000	113
5-034	0131300000013	Grace United Methodist Church	2010 Lockwood Dr	Religious	5,000	113
5-035	0131270000001	Grace United Methodist Church	0 Lockwood Dr	Religious	5,000	113
5-045	0131240000015	Duncan Memorial Church Of God In Christ	2222 Lockwood Dr	Religious	5,000	113
5-046	0131210000001	Saldivar Marina D	2302 Lockwood Dr	Commercial	10,000	113
5-049	0131210000005	Greater Mt Leb Bapt Ch	2324 Lockwood Dr	Religious	10,000	113
5-051	1387840010001	Dimension 5 Holdings LLC	0 Lockwood Dr	Vacant	300	225
5-053	0131150000001	Campos Roberto	2504 Lockwood Dr	Residential - Single Family	4,050	113
5-070	0651250350843	Bashir Habib Enterprises LLC	3536 Lockwood Dr	Commercial	25,753	113
5-071	0590250060010	Pfirman Richard L	3604 Lockwood Dr	Residential - Single Family	14,400	113
5-088	0651240390669	Dhanani Investment Inc	3920 Lockwood Dr	Vacant - Colonia		121
5-089	1210350010001	Dhanani Investment Inc	4002 Lockwood Dr	Commercial		113
5-105	0651240420726	Delaney Jewel L	4518 Lockwood Dr	Residential - Single Family		113
5-106	0651240430632	Roberts William R	4600 Lockwood Dr	Commercial		113
5-109	0651240430624	K & J Food Store Inc	4718 Lockwood Dr	Commercial		120
5-110	0651240440623	City Of Houston	4802 Lockwood Dr	Governmental		113

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-117	0651240440609	Gudino Juan S	4922 Lockwood Dr	Commercial		113
5-118	0651240450611	City Of Houston	5411 Pardee St	Governmental		113
5-139	0651290750745	Shahzab Sara Inc	5902 Lockwood Dr	Commercial	19,065	113
5-238	0640190060016	Morales Joe D	0 Jones St	Vacant	3,850	113
5-277	0731800020268	Goldwright Investments LLC	9222 Lockwood Dr # 24	Residential Multi-Family	29,240	113
5-278	0731800020299	Iglesia Libertad Pentecostal Inc	9302 Lockwood Dr	Religious	11,900	113
5-283	0731800020330	Iglesia Libertad	9322 Lockwood Dr	Religious	5,950	113
5-284	0731800020360	Wfg Lockwood Funeral Home	9402 Lockwood Dr	Commercial	17,500	113
5-289	0581450000010	Spivey Jacqueline	5438 Arapahoe St	Vacant - Colonia		113
5-290	0581430000020	Reyes Manuel & Lydia	1209 Lockwood Dr	Commercial		113
5-291	0581430000010	Reyes Manuel & Lydia	1215 Lockwood Dr	Commercial		113
5-292	0581410000010	Mount Corinth Missionary	5438 San Jose St	Residential - Single Family	3,950	113
5-293	0581410000010	Joe & Lena Mandola Prop Inc	1217 Lockwood Dr	Residential - Single Family	3,888	113
5-294	1289600010001	Mcgowan Erwin	1315 Lockwood St	Commercial	14,745	226
5-310	0131350000007	Fair Living LLC	0 Hershe	Vacant	2,564	127
5-311	0131320000009	Mt Horem Baptist Church	0 Lockwood	Religious	3,750	113
5-313	0131320000005	Mt Horem Bapt Church	1915 Lockwood Dr	Religious	7,500	234
5-314	0131290000012	Sadberry Elijah/Tims Darleshia R	2001 Lockwood Dr	Vacant - Colonia	2,500	113
5-319	0131290000007	Tyson Samuel B	5410 Mulvey St	Vacant - Colonia	2,500	164
5-320	1301700010001	Scott R B	2133 Lockwood Dr	Commercial	25,984	357
5-325	0131230000014	Nieto Adrian M	2223 Lockwood Dr	Residential - Single Family	2,500	13
5-326	0131200000009	Ramirez Esther	2301 Lockwood Dr	Commercial	5,000	113
5-327	0131200000007	Bonilla Jose C	2315 Lockwood Dr	Commercial	10,000	50
5-328	0131170000016	Hieden Frank & Vasquez Jessica	2401 Lockwood Dr	Residential Two-Family	2,500	120
5-332	0131170000007	Alfaro Manuel	2419 Lockwood Dr	Residential - Single Family	3,050	255
5-333	0131140000010	Nelson James R	2501 Lockwood Dr	Vacant - Colonia	3,288	276
5-349	0590250050026	Dahu Maha	3525 Lockwood Dr	Commercial	7,200	113
5-373	0651240310666	Fountain Of Life Church International	3919 Lockwood Dr	Religious		113
5-374	0651240300552	Guevara Jose I & Ana C	5307 Crane St	Residential - Single Family		113
5-385	1320320010001	Strr Investments LLC	4317 Lockwood Dr	Commercial	13,207	113

Parcel No. on Plans	HCAD Parcel Number	Property Owner Name	Parcel Physical Address	Property Type	Existing Parcel Area (SF)	Acquisition Area (SF)
5-401	0651240290590	Specks Carnell Jr Et Al	4717 Lockwood Dr	Commercial		248
5-402	0651240280591	Specks Carnell Jr Et Al	Inactive	Commercial		273
5-405	0651240280595	Houston Isd	4901 Lockwood Dr	Governmental		113
5-406	1393920010001	Clnm Holdings LLC	5001 Lockwood Dr	Commercial		113
5-474	0660200000221	Davis Brenda J	7425 Lockwood Dr	Commercial	12,150	86
5-475	0570050010053	Church Meth Calvary	7203 Lockwood Dr	Religious	9,039	124
5-495	0570050010024	Gamble Joevelyn	7739 Lockwood Dr	Vacant	21,618	182
5-516	0640190030001	Hernandez Alberto Hernandez	8203 Lockwood Dr	Residential - Single Family	4,950	121
5-535	1267960010001	Emmanuel Church God Christ	8813 Lockwood Dr	Religious	225,035	114
5-552	0731800020271	Harold Henry	9215 Lockwood Dr	Commercial	37,840	141
5-553	0731800020296	Dixon Doris	9301 Lockwood Dr	Vacant	11,900	113
5-556	0731800020331	Durst Joe Jr	4826 Ireland St	Residential - Single Family	17,510	113
5-557	0731800020356	Davis Shelton B	9401 Lockwood Dr	Residential - Single Family	12,040	113
5-569	0670210000028	Fsh Professional Building Inc	3110 Tidwell Rd	Commercial	24,072	708
5-624	1382440010002	Allstate Bk Real Estate Holding Ltd	9501 Jensen Dr	Commercial	46,043	197
5-636	0650880010011	Jay Ashapuri Maa Enterprises Inc	3625 Tidwell Rd	Vacant - Colonia	11,838	116
5-637	0650880020001	Sohm Inc	3704 Turner Dr	Vacant - Colonia	23,800	113
5-667	0583010000005	Kingwood Diamond Inc	9530 Jensen Dr	Commercial	15,525	97
5-668	1343470010005	Lee Jin Kyu & Hyon Sook	0 Jensen Dr	Vacant - Colonia	95	99
5-675	0470430000120	Somaiah Kurre Prudhvi Properties Inc	9605 Jensen Dr	Vacant - Colonia	22,333	128
5-676	1254460010001	Nguyen Kim T	9625 Jensen Dr	Vacant - Colonia	46,573	109
5-678	0470430000065	Valdez Jose E	9631 Jensen Dr	Commercial	7,993	362
5-679	0461810000010	Quintanilla Enrique & Mary	9701 Jensen Dr	Commercial	25,490	194

APPENDIX C-2 – Historic Resources Survey and Section 106 Historic Resources Survey Addendum

METRORapid University BRT Corridor

Historic Resources Survey

Final Technical Report
May 2023



METRO NEXT

Abstract

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Bus Rapid Transit (BRT) Corridor Project (the "Project") in Harris County, Texas in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process, with the FTA as the Federal Lead Agency and METRO as the Local Project Sponsor responsible for implementing the Project under NEPA.

FTA is a federal agency, and as such Section 106 (36 Code of Federal Regulations [CFR] Part 800) of the National Historic Preservation Act (NHPA) of 1966, as amended, applies to the Project. In addition, METRO is considered a political subdivision of the State of Texas, therefore, the Antiquities Code of Texas (ACT; Texas Natural Resources Code [TNRC], Title 9, Chapter 191) and its associated regulations (Texas Administrations Code [TAC] Title 13, Part 2, Chapter 26) also apply to the Project. METRO plans to use both local and federal funds to construct the Project. In 2019, residents of METRO's service area voted in favor of a $3.5 million bond that will provide the local funds for METRO's METRONext: Moving Forward Plan, including the Project.

AmaTerra Environmental, Inc. historians, meeting the Secretary of Interior Professional Standards, performed historic structure surveys in 2022 and 2023 to document historic-age resources within the area of potential effect (APE) of the proposed Project. Historians identified two NRHP-listed resources and recommended 12 resources and one historic district as eligible for listing in the National Register of Historic Places (NRHP). Based on the Project definition, historians recommended no adverse effect to the NRHP-listed or recommended NRHP-eligible resources.

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Appendix B Segment 2: Historic Resources Survey Result Maps, Photo Sheets, and Tables

Appendix C Segment 3: Historic Resources Survey Result Maps, Photo Sheets, and Tables

Appendix D Segment 4: Historic Resources Survey Result Maps, Photo Sheets, and Tables

Appendix E Segment 5: Historic Resources Survey Result Maps, Photo Sheets, and Tables

Acronyms and Abbreviations

ACRONYM	DEFINITION
ACT	Antiquities Code of Texas
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
BBB&C	Buffalo Bayou, Brazos & Colorado
BRT	Bus Rapid Transit
CE	Categorical Exclusion
CFR	Code of Federal Regulations
COA	Certificate of Appropriateness
COH	City of Houston
FHA	Federal Housing Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
HAHC	Houston Archaeological and Historical Commission
HCAD	Harris County Appraisal District
HCC	Harris County Clerk
HD	Historic District
HISD	Houston Independent School District
HRSR	Historic Resources Survey Report
HTC	Historic Texas Cemetery
IH	Interstate Highway
IHC	International Harvester Company
LRT	Light Rail Transit
LULAC	League of United American Citizens
METRO	Metropolitan Transit Authority of Harris County
N/A	Not Applicable
N.D.	No Date
NEPA	National Environmental Policy Act
NHL	National Historic Landmarks
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OTHM	Official Texas Historical Markers
ROW	Right-of-way
RTHL	Recorded Texas Historic Landmarks
SAL	State Antiquities Landmarks
sf	square feet
THC	Texas Historical Commission
TSU	Texas Southern University
TXDOT	Texas Department of Transportation
UPRR	Union Pacific Railroad

ACRONYM	DEFINITION
UH	University of Houston
US	United States
VA	Veterans Affairs
WE	Western Electric
WWII	World War II

Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of the Historic Resources Survey Report (HRSR) is to provide compliance with NEPA, Section 106 of the National Historic Preservation Act (NHPA), and the Antiquities Code of Texas (ACT) by identifying historic-age resources eligible for inclusion in the National Register of Historic Places (NRHP) within the Project area of potential effect (APE) and determining how the Project may impact those resources.

1.2 Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States (US).

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 0-1. Figure 0-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other METRORail, METRORapid, and local bus services. Some stations would be incorporated into existing METRO facilities. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

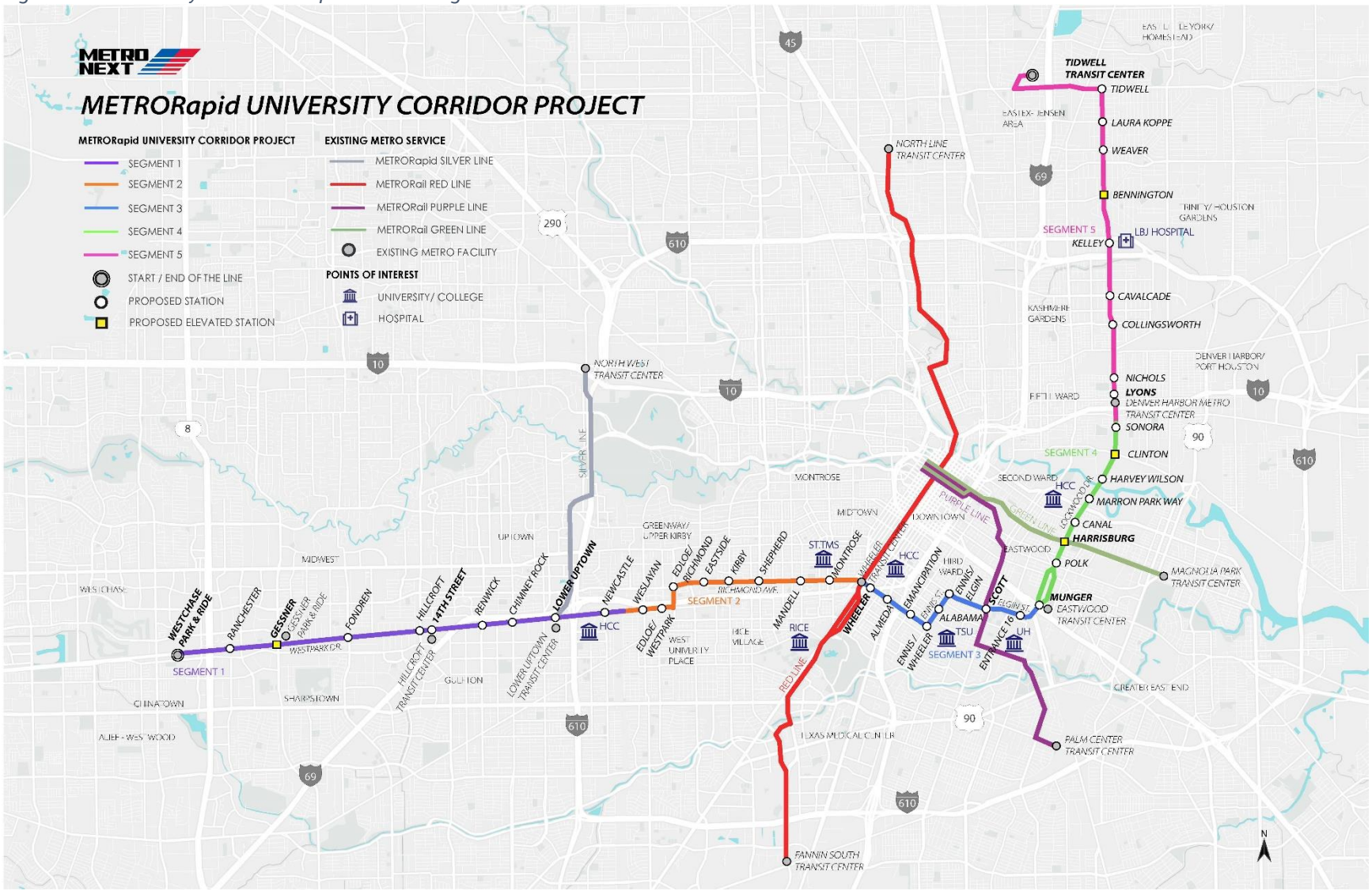
METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 9:30 PM to 12:30 AM. Weekend service

would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 0-1. University BRT Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr at Union Pacific Railroad (UPRR) tracks east of Newcastle Dr
2	Westpark Dr at UPRR tracks east of Newcastle Dr	Richmond Ave at Main St (Wheeler Transit Center)
3	Richmond Ave at Main St (Wheeler Transit Center)	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at Margarita St
5	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit Center)	Tidwell Transit Center

Figure 0-1 University Corridor Proposed BRT Alignment.



Regulatory Setting

FTA is a federal agency, and as such Section 106 (36 Code of Federal Regulations [CFR] Part 800) of the National Historic Preservation Act (NHPA) applies to the Project. METRO is considered a political subdivision of the state of Texas; therefore, the Antiquities Code of Texas (ACT), Texas Natural Resources Code, Title 9, Chapter 191 and its associated regulations (13 Texas Administrative Code [(TAC] 26) also apply to the Project. The City of Houston has a Historic Preservation Ordinance (Chapter 33 – Planning and Development, Article VII – Historic Preservation). Alterations to the exterior of a city-designated landmark or resource within a city-designated historic district requires a Certificate of Appropriateness (COA) issued by the Houston Archaeological and Historic Commission (HAHC).

METRO plans to use both local and federal funds to construct the University BRT Project. In 2019, residents of METRO's service area voted in favor of a $3.5 billion bond that will provide the local funds for METRO's METRONext: Moving Forward Plan (METRONext), including the University BRT Corridor.

Methodology

1.3 Previously Recorded Historic-Age Resources

Prior to conducting a field survey, historians conducted a desktop survey to identify previously recorded historic-age resources. Historians searched the Texas Historical Commission's (THC) Historic Sites Atlas and survey files (THC no date [n.d.]), the Texas Department of Transportation (TxDOT) Historic Resources of Texas Aggregator database (TxDOT n.d.), and the City of Houston Historic Districts and Landmarks database (COH Landmarks n.d.). Research focused on the identification of properties listed in the National Register of Historic Places (NRHP), National Historic Landmarks (NHL), Recorded Texas Historic Landmarks (RTHL), non-archeological State Antiquities Landmarks (SAL), previously surveyed properties eligible for listing in the NRHP, locally designated Houston Historic Landmarks and Historic Districts, and cemeteries. Official Texas Historical Markers (OTHM) were included in the search, although these subject markers by themselves are not indicative of a designated historic property. Neighborhood surveys appeared on the THC Atlas but were not singled out for identification.

Historians identified and reviewed the following historic resource surveys and reports that intersected with the first three segments of the Project corridor. The surveys included the *Reconnaissance Standing Structures Survey North Corridor Houston, Texas Supplemental Report and Findings* (Moss 2004); *Historic Resources Survey Report University Corridor Project Metropolitan Transit Authority of Harris County, Texas* (Hicks & Company 2007); the *Intensive Survey of Historic-Age Resources Metro Intermodal Terminal APE and Area North of Interstate Highway (IH) 10*, Houston, Harris County, Texas (Emery and Dobson-Brown 2007); the *African American Heritage of Third Ward Houston, Texas,* NRHP Multiple Property Listing nomination (Randall and Korfmacher 2008); the *North Houston Highway Improvement Project (NHHIP) HRSR* (Mitchell and Pettis 2019); and a desktop constraints

letter (Korfmacher 2021). No previous historic resource surveys were identified for Segments 4 and 5 during the literature review.

The *Historic Resources Survey Report University Corridor Project Metropolitan Transit Authority of Harris County, Texas* (Hicks & Company 2007) documented Segments 1, 2, and 3 with a historic-age date of 1963. Therefore, resources dating beyond 1964 and later were not documented during the 2007 historic resources survey. Exceptions to the 1963 historic-age date were made at the Richmond Avenue Modern Metropolitan Historic District. No explanation was provided in the 2007 survey for the deviation from the 1963 historic-age date. Because of the 2007 survey, THC determined a windshield survey would be completed for Segments 1, 2, and 3 using a historic-age date range from 1964 to 1978.

1.4 Literature Review

Existing reports, records, maps, and aerial photographs were examined. Information collected during the records research was obtained from sources including, but not limited to, City of Houston website, City of Houston Planning and Community Development, City of Houston Preservation Office records, Harris County Appraisal District (HCAD), Harris County Clerk, Handbook of Texas online, online newspaper databases, and general interest websites. The bibliography section provides a list of resources cited and reviewed.

1.5 Area of Potential Effect (APE) Coordination with THC

In consultation with THC, the area of potential effect (APE) for the Historic Resources Survey was set for each segment (THC 2022, Tracking #202210364). At the time of the APE coordination with THC, the Project design was at 10 percent. For all segments, the APE was a 150-ft radius from a center point for all the proposed bus stops.

Since Segments 1, 2, and 3 were previously surveyed and coordinated with THC in 2007, the THC requested windshield surveys for these three segments using a historic-age date range from 1963 to 1977. For Segment 1 a 150-ft APE from the current center line was used and only the south side of the route was surveyed as Segment 1 would be constructed in the abandoned Southern Pacific Railroad ROW and construction would occur south of the Westpark Tollway. For Segment 2, THC concurred with the APE as the footprint of the proposed alignment. Historians used a 100-ft APE from the current center line for proposed ROW during the survey to ensure historic-age resources with proposed ROW were documented. The THC requested a re-evaluation of the NRHP eligible Richmond Avenue Modern Metropolitan Commercial Historic District to determine its current eligibility status. For Segment 3, the THC concurred the APE were parcels with proposed ROW. Historians surveyed resources within a 100-ft APE from the current center line where new ROW was proposed for acquisition to ensure historic-age resources were documented.

Since no previous historic resource surveys were identified for Segments 4 and 5, the THC requested reconnaissance level surveys for these two segments using a historic-age date of 1978, and an APE of 100-ft from the center line where new ROW was required. For Segment 5, a 600-ft radius from a center point was used for the proposed new location of the Fifth Ward/Denver Harbor Transit Center.

1.6 Field Survey Methodology

Fieldwork was conducted by architectural historians meeting the Secretary of the Interior's professional qualifications (as defined in 36 CFR Part 61). Onsite surveys were conducted during June 2022 (windshield surveys for Segments 1 and 2), July and August 2022 (reconnaissance surveys for Segments 4 and 5), and January 2023 (windshield survey for Segment 3). Physical inspection of a historic-age resource consisted of a site inspection, photography, and documentation of relevant information such as style, construction date, and modifications to the property. All information was recorded on field notes and maps. Once the information was gathered, analysis of the integrity and significance of each resource was conducted to determine whether individual resources are eligible for listing in the NRHP or whether they contribute to the significance of a NRHP eligible historic district. Resources were given unique identification numbers that identified the segment and resource, and these were keyed to a resource location map, table, and property data sheet, which are in **Appendices A-E**.

1.7 ROW Acquisition and Design Changes

Field surveys were conducted at 10 percent Project design with a large amount of proposed ROW acquisition. The survey result maps shown in the Appendices may differ from the effect figures as the survey result maps reflect the 10 percent design ROW acquisitions while the effect figures reflect the 30 percent design ROW acquisitions. Section 7 – Effects provides an effective date for the proposed ROW acquisition to denote the 30 percent design. At the time the report was originally written, February 2023, the design plans included an overpass of Lockwood Road over the railroad tracks. Community concerns expressed by the Eastwood Civic Association and nearby residents asked for a design change from an overpass to an underpass at this location. This change has been made and is included in the effects assessment in **Section 7**.

Historic Overview

1.8 Settlement and Development (1837 – 1945)

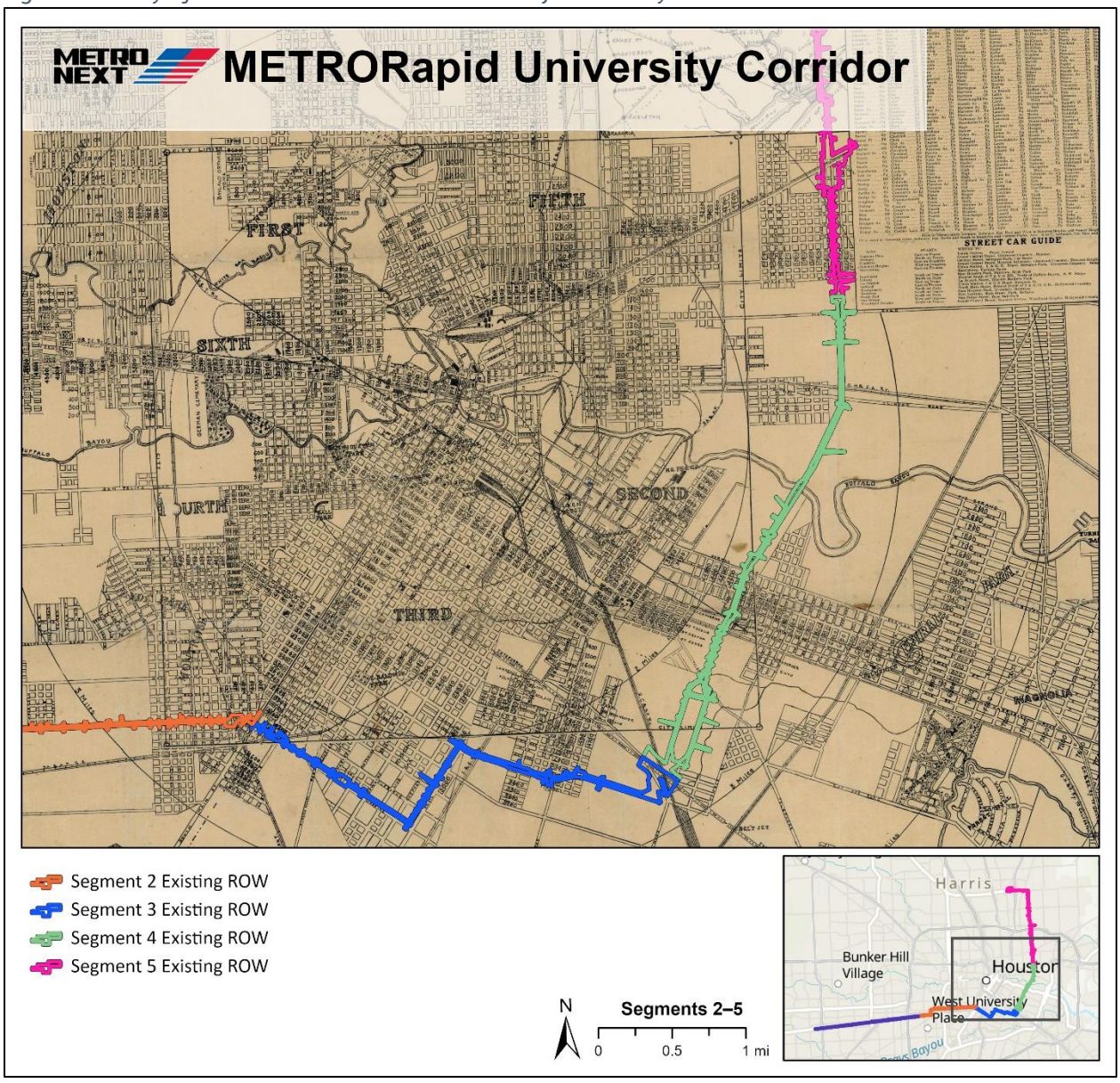
The town of Houston was surveyed, then mapped in a gridiron plan and incorporated in 1837 (McComb 2022). Houston established four wards, all centered on a point in downtown (see **Figure 0-1**). Agriculture was a major economic contributor to Houston's early economy, and settlers migrated from the south to Houston.

Slavery was practiced in and around Houston during its early years. After the Civil War, Houston experienced population growth with former slaves moving to the city for job opportunities. A concentration of emancipated African Americans settled in the Third Ward, establishing schools, churches, businesses, and Emancipation Park. A Jewish community built a synagogue around Hamilton and Cleburne Streets in the 1850s in the Third Ward (Randall and Korfmacher 2008: E-4). By 1872, influential African Americans raised funds and purchased four acres of land to establish the first-ever park for African Americans in Houston, Emancipation Park, in the Third Ward outside of the Project APE (Texas Happens n.d.). The African American population tripled between 1910 and 1930, from 22,929 to 66,357. During this time Dowling Street became the main commercial corridor owned

and patroned by the African American community (Texas Happens n.d.). Dowling Street was renamed Emancipation Avenue.

The population between Buffalo Bayou and White Oak Bayou became large enough to warrant government representation; thus, the Fifth Ward was created partly from the First and Second Wards in 1866. The rail yard and abutting industries, dependent on rail transportation, were the economic center for jobs in this part of town. In 1870 the Fifth Ward was the only Ward with a greater African American population than white population, albeit by a slim margin of 578 to 461 (Pando 2011: 34). The Ward system was discontinued in the early 1900s, but socio-economic associations with those areas are still recognizable and referenced today.

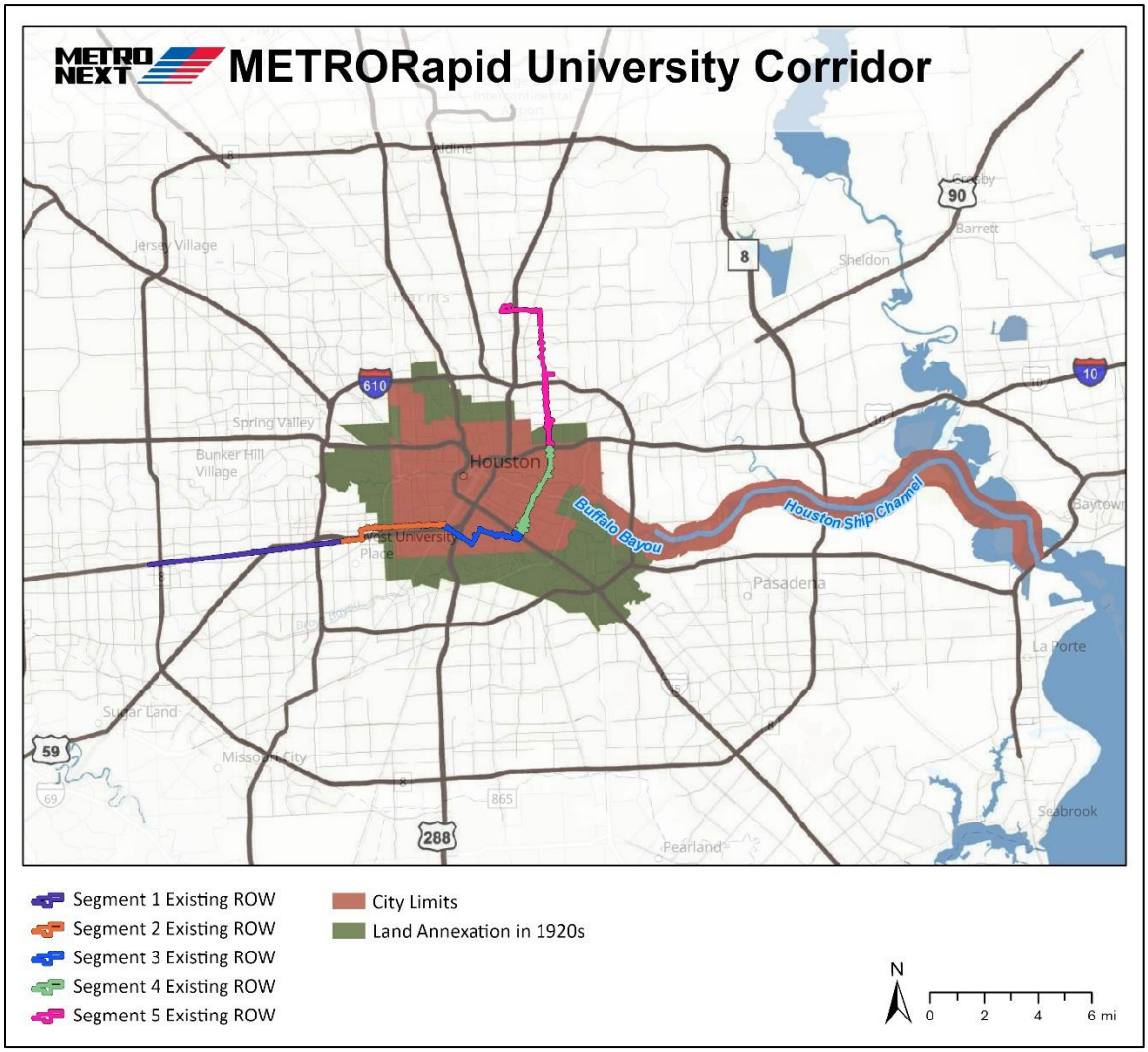
Figure 0-1. City of Houston Wards in 1913 with Project Overlay



Source: Wikipedia n.d. map 1913, AmaTerra 2023.

By 1900 Houston was nine square miles with a population of 40,000. Discovery of oil at Spindletop near Beaumont in 1901, in conjunction with the Buffalo Bayou Ship Channel's access to the Gulf of Mexico, made Houston an obvious choice for oil companies to locate their business. Mexican citizens migrated to Houston in the early 1900s seeking work at the railroads and ship channel. These immigrants primarily settled in the Second Ward or El Segundo Barrio (Rosales 1981: 224). In 1913 the City of Houston annexed land adjacent to the center core and along both sides of Buffalo Bayou (Houston Ship Channel), and the population of Houston almost doubled to 77,000 (COH Annexations n.d.). In 1920 the city covered 39 square miles (Kaplan 1981: 180). The demand for oil during World War I kept the economy growing. Annexation, economic growth, and an increase in population continued through the 1920s (see **Figure 0-2**). The Third Ward saw another influx of Jewish immigrants in the 1920s, and another synagogue was constructed to meet the growing community (Randall and Korfmacher 2008: 4-E).

Figure 0-2. City of Houston Annexation Map Showing 1920s Land Annexation in Green.



Source: COH Annexation 2019

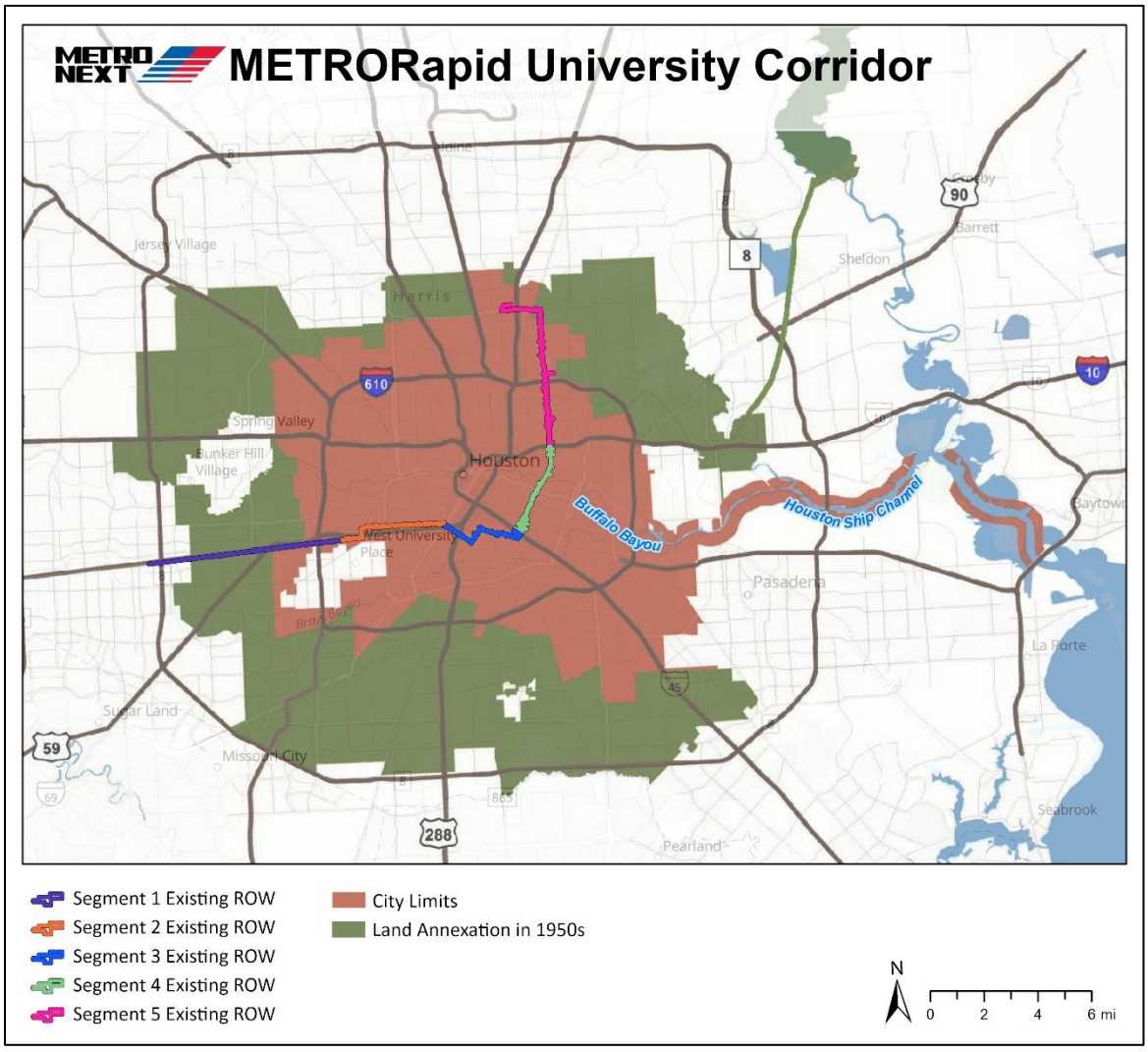
Starting in 1930 the City of Houston attempted to implement zoning regulations to guide the development and growth of the city. The effort failed. Houston recovered from the Great Depression by 1935 because of its industries and distribution capabilities, setting several records that year in export tonnage, telephone connections, and building activities (Emery et. al. 2009: 8-67). With improvements to the Houston Ship Channel, increasing depth and width the entire length, the Chamber of Commerce began an intensive campaign to draw new businesses to the city (Emery et. al. 2009: 8-67). The concentration of oil-related companies in Houston and distribution capabilities via the Houston Ship Channel ensured that Houston and its citizens continued to prosper during World War II (WWII).

1.9 Economic Boom (1945-1980)

Between 1940 and 1960, the City of Houston doubled its size twice through land annexation, reaching 350 square miles and almost one million residents (see **Figure 0-3**). Many buildings, both commercial and residential, were constructed during this time. The lack of zoning allowed property owners to develop the land with any use, creating a mix of commercial uses directly adjacent to residential uses. Kashmere Gardens in Segment 5 was annexed during this time (COH annexations n.d.). Houston's oil and shipping industries kept the city's overall economy strong. Growth and development were so rampant that the city placed a moratorium on development in many parts of Houston due to insufficient sewage treatment capacity (Fox 1985: 14). The growth lasted until oil prices started to fall in the early 1980s.

After World War II, there was a large shift of population moving from the downtown environs to the suburbs. A specific example of this occurred in the Third Ward. The Jewish population stayed within the inner-city area until the 1950s, when suburban development promised larger lots to build upon, and they relocated to be near new synagogues. As they began to move out, a large portion of the growing middle class African American population relocated from the Fourth Ward into the formerly Jewish neighborhoods of the Third Ward. This changed the Third Ward demographics from a mixture of ethnic groups to a predominance of African American residents (Randall and Korfmacher 2008: E-16). The gradual depopulation of vital neighborhoods had a negative impact on the built environment, with a lack of commercial investment and decline in local area employment as industry and retailers left.

Figure 0-3. City of Houston annexation map showing 1950s land annexation in green.



Source: COH Annexation 2019

1.10 Civil Rights Movement (1948-1970)

Upon returning home from World War II, financial assistance from the GI Bill (the Servicemen's Readjustment Act of 1944) afforded African Americans and Mexican Americans new opportunities for education and home ownership. However, they continued to encounter discrimination, and the League of United Latin American Citizens Council 60 of Houston (LULAC) became assertive in demanding equality (Rosales 1981: 244). After World War II, three landmark court cases helped moved the nation towards desegregation. The 1948 Supreme Court decision for Shelley v. Kraemer allowed non-Caucasian people to rent or purchase property previously denied to them due to restrictive covenants. In 1950 Sweat v. Painter helped establish a law department at the historically Black college at Texas Southern University (located in Segment 3) when Heman Sweatt was denied entrance to the University of Texas Law School. The landmark 1954 Brown v. Board of Education decision ruled that segregated schools were unconstitutional. In 1964, Congress passed the Civil Rights Act, prohibiting discrimination based on race, color, religion, sex, or national origin.

These Supreme Court decisions and federal laws did not mean automatic integration. However, with the booming economy after World War II and throughout the 1970s, African American people had more opportunities for education, work, and living options. This era also saw Houston's white population move to suburbs further from the city's downtown, as evidenced by the changing demographics of the Kashmere Gardens neighborhood (Segment 5) and the Jewish community leaving the Third Ward (Segment 3) for the suburbs.

The Fifth Ward flourished during the 1950s, with Lyons Avenue and Jensen Drive as primary commercial strips. "Over the next three decades the demographics of the neighborhood changed substantially. Specifically, in 1950, 83% of the population was white. Just ten years later, in 1960, the neighborhood had a majority Black population, at 71%. This history propelled Kashmere Gardens residents to lead the Houston fight to integrate public schools during the civil rights era." (COH KGCCAP 2020: 9). Houston Independent School District (HISD) did not automatically integrate their schools after the 1954 US Supreme Court decision ruled segregated schools unconstitutional (Brown v. Board). It took local lawsuits for the first Black student to attend an all-White school, Kashmere Garden Elementary, in 1960 (Houston Chronicle 1960). As middle-class families left to integrate into the suburbs and shop at regional malls, the Fifth Ward business district slowly died, leaving empty buildings and eventually leading to vacant lots (Pando 2011: 37).

1.11 Transportation (1874-1978)

1.11.1 Ship Channel

Brothers John and Augustus Allen choose the town site of Houston because of the water transportation potential of Buffalo Bayou (Sibley 2023). The bayou provided access for steamboats and smaller craft to travel from inland to the Gulf of Texas to transport people and agricultural goods. The Port of Houston was established in 1842 and officially took over maintenance and improvements of the channel. Houston merchants created the Buffalo Bayou Ship Channel Company to improve the channel and bypass Galveston Harbor. Success for the company did not occur until ship and railroad magnate Charles Morgan purchased it and dredged a channel from Clinton, Texas, to Galveston Bay in 1876 (Sibley 2023). Improvements continued in 1909 when Harris County created a navigation district to sell bonds and receive matching funds from the US government (Sibley 2023).

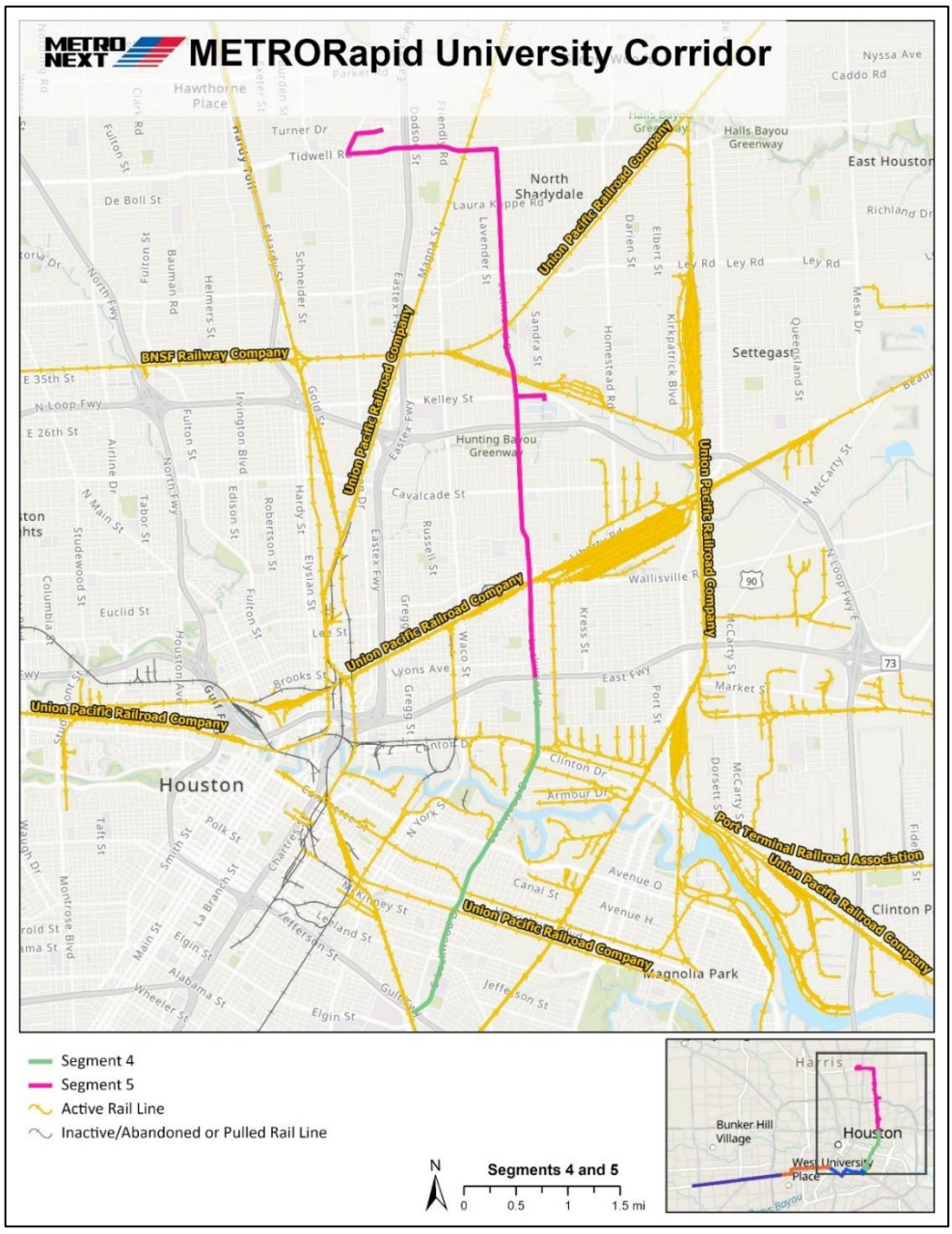
The combination of access by ocean-going vessels and the growing oil industry brought development to the waterfront, and by 1930, nine oil refineries operated along the channel (Sibley 2023). The Houston Ship Channel is not in the Project area, but the railroad system and location of industries in the Project area are connected to the waterway transportation network, and these influence the location and type of buildings in the Project area.

1.11.2 Railroads

With access to the Gulf of Mexico via Houston's ship channel, railroad companies established routes through Houston starting with the Buffalo Bayou, Brazos & Colorado (BBB&C) in 1851 (Willits, W.E. 2007: 2). With the shipping canal enlarged, the Houston Chamber of Commerce adopted the slogan of "Where 17 Railroads Meet the Sea" in the 1920s (Willits, W.E. 2007: 2). Industrial businesses located near the railroads flourished by taking advantage of this transportation option. Over time,

rail companies consolidated routes and abandoned lines as vehicle ownership and air travel reduced the need for rail service. Only six railroad lines operated in Houston by 1980 (HSSHP n.d.). Today, UPRR active rail lines and spurs still serve industry in the Project area, as shown by the map below in portions of Segments 4 and 5 (see **Figure 0-4**).

Figure 0-4. Map of Rail Lines and Rail Spurs in Segments 4 and 5.



Source: TxDOT Texas Railroads n.d., AmaTerra 2023.

1.11.3 Streetcars

Houston City Street Railway company is credited with the successful use of streetcars in Houston in 1874 (Baron 2014: 68). Their initial four lines were longer than the first streetcar routes built by other companies with one line extending to the old fairgrounds on the south end of town, a mile from downtown. Out-of-state investors purchased the rail system in 1890 and converted the mule-drawn system into an electric operation (Baron 2014: 70). Seven additional electric lines were added in the next two years, spurring construction of buildings along the route (Baron 2014: 70, 71).

When the ship channel was deepened in 1908, the streetcar service to Harrisburg Boulevard commenced, providing easy access to six miles of undeveloped land (Baron 2014: 77). The William A. Wilson Company stated in their advertisement that the Eastwood subdivision (Segment 4) could easily be reached by the Harrisburg Line (Wilson Company 1911: 9, 10). Construction of new lines in 1913 and 1914 extended to the Third Ward and Fifth Ward, including the Lyons Avenue line (Baron 2014: 79, 80). In 1927, there were 24 routes utilizing 90 miles of track (Baron 2014: 86). Increased ownership of vehicles, competition from jitneys (private vehicles used as taxis), and bus service added to the demise of the streetcar. The last streetcar discontinued service in 1940.

1.11.4 Roadways

As a railroad and sea hub, roadways have always been integral for the movement of goods through the city. Houston had 26 miles of pavement in 1903 and 196 miles of paved streets in 1915 (Papademeteriou 1983: 115). Houston's Mayor Oscar Holcombe hired the firm of Hare and Hare in 1924 to prepare a major street and thoroughfare plan (Fox 1985: 13), but the plan was not implemented. In 1940, the city created the Department of City Planning and hired Ralph S. Ellifirt, a landscape architect formerly employed by Hare and Hare (Fox 1985: 14). During his time, Ellifirt created a freeway network system, the Thoroughfare Plan of 1943, that became the building block of development in Houston. State funds financed Houston's first limited access highway, the Gulf Freeway, and construction was completed by the end of the 1950s. In 1956 the U.S. Interstate Highway Act was passed, with the goal to connect major towns and ports for movement of troops and goods during times of war. Houston received $453 million in highway funds, over half of the entire Federal appropriation for Texas (Emery et. al. 2009: Sec 8 Pg 70).

Formal plans to construct a "defense loop" around Houston started in the 1940s and resulted in today's Loop 610, which crosses east/west over Lockwood Road in Segment 5. Construction of IH 45 and US 59 in the mid-twentieth century divided established ethnic neighborhoods and demolished many buildings in the Third, Fourth, and Fifth wards (Randall and Korfmacher 2008: Sec E Pg 11). A specific example of the loss of housing stock due to freeway construction is evident in Segment 5 in the Parkwood Addition located at Lockwood and the East Freeway (IH 10), as one block of this small three-block subdivision was demolished.

National Register of Historic Places Evaluation Criteria

To be considered for listing in the NRHP, buildings, structures, objects, sites, and districts must meet standards of historic significance defined by the Keeper of the National Register (36 CFR 60). Each property must be evaluated within the framework of its historic context, and it must retain characteristics that make it a good representative of properties associated with that aspect of the past. The NRHP Criteria for Evaluation state that:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, setting, design, materials, workmanship, feeling, and association, and:

A. Are associated with events that have made a significant contribution to the broad patterns of our history; or

B. Are associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded or may be likely to yield information important in prehistory or history (Shrimpton, 2002).

1.11.5 Criterion A

A resource that is representative of an important trend or event may be eligible for the NRHP under Criterion A. This broad definition provides flexibility when determining the kinds of significant historical associations. However, a property is not eligible for inclusion in the NRHP simply because it was built during an important era in history or if it simply fulfilled its historic role. For a property to be eligible under Criterion A, it must be significantly associated under one or more defined historic context(s), convey a sense of the past, and remain recognizable to the period in which it was first constructed or achieved significance.

1.11.6 Criterion B

Criterion B applies to properties associated with individuals whose specific contributions to history can be identified and documented. However, it is important to determine not only what contributions are associated with the individual and how they compare with those of other persons, but also how the property represents or is linked to that individual and his or her accomplishments. The extent and duration of that association is particularly important for determining NRHP eligibility. Moreover, the significance of that person must be associated with defined contextual themes. Properties significant under NRHP Criterion B should be those most closely associated with a person who has made important contributions to the past, be associated with the person during the time he or she achieved significance, convey a strong sense of the past and remain recognizable to the period in which the person achieved significance.

1.11.7 Criterion C

Properties eligible for the NRHP under Criterion C derive significance from the physical qualities of their design, construction, and/or craftsmanship, including such disciplines as architecture, landscape architecture, engineering, and art. To be eligible under Criterion C, a property must embody distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic value; or represent a significant and distinguishable entity whose components may lack individual distinction (i.e., a historic district). A property significant under Criterion C is one that clearly represents a noteworthy example of a defined property type, dates from the period of significance of one or more historic context(s) and exhibits the character-defining features of its property type. Therefore, a property must retain a high degree of physical integrity, as well as having significance in the historic context.

1.11.8 Criterion D

Criterion D is applied most often to archeological resources, but it also may be used to evaluate the significance of extant buildings and structures. Properties significant under this Criterion are those that have the ability to yield important historic information, such as a rare type of construction. For these types of properties to be eligible under Criterion D, they must themselves be, or must have been, the principal source of important information, such as how construction expertise affected the evolution of local building development. Due to the nature of the reconnaissance level survey, evaluation under Criterion D is generally excluded unless historians feel a particular property warrants additional investigation or consideration by an archeological professional.

1.11.9 Criteria Considerations

On occasion, certain types of resources are also evaluated that are not normally considered eligible for the NRHP. These resources include religious properties, structures moved from original locations, birthplaces and graves, cemeteries, reconstructed buildings, commemorative properties, and properties achieving significance within the last fifty years. These properties can qualify for inclusion in the NRHP if they meet specific Criteria Considerations listed below, in addition to meeting the regular requirements:

A. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

B. A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

C. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or

D. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

E. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

F. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

G. A property achieving significance within the past 50 years if it is of exceptional importance.

1.11.10 Seven Aspects of Integrity

In addition to being significant under one or more of the Criteria listed above, an NRHP-eligible property must also retain historic integrity of those features necessary to convey its significance. The Keeper of the National Register has identified and defined seven aspects of integrity by which potential candidates for the NRHP must be measured:

- *Location* is the place where the historic property was constructed or the place where the historic event occurred.
- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.
- *Setting* is the physical environment of a historic property.
- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture of people during any given period in history or prehistory.
- *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time.
- *Association* is the direct link between an important historic event, person, or period and a historic property.

Determining which of these aspects of integrity are most important to a particular property requires knowing why, where, and when the property is significant. For Criteria A or B eligibility, the aspects of *location, feeling, setting*, and *association* take on greater importance in determining a property's integrity. To be eligible under these criteria, a property must be able to clearly convey its significant associations with the historic context. This often requires that a property's overall environment remains relatively unaltered from its period of significance. Properties eligible for the NRHP under Criterion C must retain a high degree of physical integrity, as well as retain some relation to the historic context. The most important aspects of integrity for Criterion C eligibility are *location, design, materials*, *workmanship*, and *feeling*.

At a minimum, a property eligible under Criteria A or B must retain its basic original form that identifies its property type and must be generally recognizable to its period of significance. However,

the significance of properties under Criteria A or B is not derived mainly from their design or construction value. Therefore, a greater amount of alteration to a building's historic physical features is allowable when compared to the more stringent standards set for Criterion C eligibility. Some minor alterations to the physical fabric of the building do not necessarily preclude Criterion C eligibility, although they may result in some loss of integrity. Such acceptable alterations could include replacement of roof materials or replacement of a minority of exterior doors and windows within the original fenestration pattern of the building. In some cases, non-historic outbuildings or landscape features could also be considered acceptable modifications to the property, if they are visually unobtrusive and compatible in design and scale with the original building and its setting. Major changes to a building's roofline, form, or overall massing are generally considered unacceptable, and would render a building not eligible under NRHP Criteria A, B, and C.

Historic Cultural Resource Survey Results

Following National Park Service (NPS) guidelines, the historic-age resources identified within the APE were divided into groups by segment and per function/use. Photo sheets have information for each individual resource. Tables for each segment provide a synopsis of each resource documented in the survey. The photo sheets and tables are in the Appendices.

1.12 Segment 1 Survey Results

Per THC coordination, historians conducted a windshield survey of Segment 1, only on the south side of the route, using a 150-ft APE for the route and a 150-ft APE for the proposed bus stations. Westpark Tollway is a four-lane facility. According to historic aerial photographs, land adjacent to the road was undeveloped or agricultural in 1964. Development along the corridor increased between 1973 and 1981. METRO purchased the Southern Pacific Railroad ROW in 1992, and construction of Westpark Tollway started in 2002.

1.12.1 Segment 1 Historic-Age Resources Surveyed

A total of eight historic-age resources were documented during the survey within the Project APE in Segment 1: three commercial buildings, three domestic complexes (apartments), an industrial facility, and a religious building (see

Table 0-1). All eight resources are recommended not eligible for listing on the NRHP. Survey result maps photo sheets, and a summary table for documented historic-age resources for Segment 1 are in **Appendix A**.

Table 0-1. Segment 1 Historic-Age Resources Recommended Not NRHP Eligible.

Resource	Address	Eligible	Circa Year Built	Style
S1 01	5612 Fondren Rd	No	1969	None
S1 02	5607 Forney Dr	No	1968	New Formalism influence
S1 03	6640 Harwin Dr	No	1971	None
S1 04	5401 Rampart St	No	1977	None
S1 05	5511 Renwick Dr	No	1970/1971/ 1996	None
S1 06	5500 El Camino Del Rey	No	1970	Spanish Colonial Revival influence
S1 07	5302 Chimney Rock Rd	No	1974/2019	Pagoda
S1 08	5401 Chimney Rock Rd	No	1979	None

Source: AmaTerra 2023.

Resources S1 01, S1 02, and S1 07 are all commercial buildings. Resource S1 01 is a one-story commercial building with no notable stylistic influences, constructed circa 1969. The walls feature concrete masonry unit construction, with full-height plate glass picture windows and double glass entry doors on the façade. A projecting flat awning supported by metal posts shades the façade. Alterations include a modern awning, windows, and doors. Resource S1 02 is a one-story commercial warehouse with pebbledash siding and gambrel roofs. Flat roofs project over the windows. The slim floor-to-roof pilasters reflect a New Formalism influence. Alterations include modern windows. Resource S1 07, Pizza Hut, is a one-story restaurant building with stone and fiber cement siding in the Pagoda Roof style. Per HCAD, the building was constructed in 1974 and remodeled in 2019. Alterations include new siding, windows, a door, an entryway, siding, and signage. The three commercial buildings in Segment 1 were all constructed after 1968 and reflect typical stand-alone buildings adjacent to Texas highways. The resources are recommended as not eligible for listing on the NRHP. See **Appendix A** for the survey results map, photo sheets, and tables.

Resource S1 03 *SANATAN SHIV SHAKTI MANDIR* [Hindu] is a one-story building of no particular style with three large domes. The walls are a combination of brick veneer and stucco siding topped with a shed roof. Alterations include a modern roof, modern doors, and siding, plus two additions to the west façade and a gazebo in the east parking lot. The first building was constructed in 1971. Per historic aerials, the domes were added by 2012, the gazebo by 2014, and the addition by 2020. Per the organization's website, they purchased this property in 2008 for Hindu religious rites and ceremonies and as a resource and education center for Hindu heritage and culture. The 1,000 sq ft addition is a Garbha Bruha to seat Hindu Deities and was dedicated in November 2013 (Shivshaktimandir n.d.). The resource is recommended as not eligible for listing on the NRHP. See **Appendix A** for the survey results map, photo sheets, and tables.

Resources S1 04, S1 06, and S1 08 are all apartment complexes. Resource S1 04, Pavilion Place Apartments, was constructed in 1977 and has 52 buildings of no particular style. Per HCAD, the buildings were remodeled in 2012 and 2017. Alterations noted during the survey were modern siding, windows, and roofing, plus a remodel of the leasing office. Resource S1 06, Alora Apartments,

was constructed in 1970 with a Spanish Revival influence indicated by the faux inset arches and stucco siding. Alterations include new siding, windows, and fencing. Resource S1 08, 5401 Chimney Rock Road, is a garden apartment complex with 66 buildings, of which three are clubhouses, constructed in 1979. There are four swimming pools. Most of the buildings are two stories with brick and synthetic siding and gabled roofs. Alterations include new siding and windows. The resources are recommended as not eligible for listing on the NRHP. See **Appendix A** for the survey results map, photo sheets, and tables.

Resource S1 05, Argos Southern Star Concrete, is an industrial processing plant. Access to the parcel was blocked due to a security gate. A one-story concrete block building was located near the entrance. The building did not have any obvious alterations, nor did it appear to have a unique or innovative architectural design. Per HCAD, there are six buildings on the parcel: three metallic warehouses (c. 1971 and 1976), two office buildings (c. 1970), and one warehouse (c. 1970). The resource is recommended as not eligible for listing on the NRHP. See **Appendix A** for the survey results map, photo sheets, and tables.

The surveyed buildings have no known association with important historic trends, events, or persons of historic significance under Criteria A and B. Due to the alterations, the buildings generally lack integrity of design, materials, and workmanship and do not represent good examples of any particularly architectural style or the work of a known architect under Criterion C. The resources are recommended not eligible for the NRHP under Criteria A, B, or C.

1.13 Segment 2 Survey Results

Per THC coordination, historians conducted a windshield survey of Segment 2 using a 100-ft APE for the route and a 150-ft APE for the proposed bus stations. Segment 2 is roughly bounded by Edloe and US HWY 59 traveling through an urban area with a mix of commercial and residential structures. The area between Edloe and Morningside Drive remained undeveloped in 1944. By 1953, residential subdivisions were added west to Wakeforest Avenue. By 1978, development - both residential and commercial - expanded west, beyond the Project limits.

1.13.1 Segment 2 Historic-Age Resources Surveyed

A total of 21 historic-age resources were documented during the survey within the Project APE in Segment 2, of which 10 resources were in the previously-determined NRHP Richmond Avenue Metropolitan Commercial Historic District (2007). Per THC request, historians re-evaluated the historic district and recommended two buildings in the district as no longer contributing, S2 12 and S2 16. Due to the loss of the two contributing buildings, the historic district is recommended as no longer NRHP eligible as the percentage of contributing buildings (eight) to the total number of buildings within the boundaries of the historic district (seventeen) falls below the general 50 percent threshold for district eligibility. The remaining 11 resources, outside of the Richmond Avenue Metropolitan Commercial Historic District, were recommended not eligible for listing on the NRHP. The NRHP eligible building at 1836 Richmond Avenue was not surveyed as it was previously determined eligible, and no ROW was proposed for the parcel.

1.13.2 Segment 2 NRHP Eligible Historic Resources Surveyed

Buildings in the previously determined NRHP-eligible Richmond Avenue Metropolitan Commercial Historic District (2007) abut both sides of Richmond Avenue between Buffalo Speedway and Eastside Street. The Richmond Avenue Metropolitan Commercial Historic District Survey from 2007 originally identified 10 contributing commercial buildings (see **Table 0-2**) out of a total of 17 buildings within the district (Hicks & Company 2007). Historians recommend a loss of integrity for two properties, S12 and S14 and that the district is no longer eligible.

Table 0-2. Segment 2 Historic Resources Recommended NRHP Eligible.

Resource	Address	Contributing to District	NRHP Eligible (2023)	Circa Year Built	Style
N/A[1]	1836 Richmond	N/A	Yes	N/A	N/A
S2 07	3336 Richmond	Yes	Yes	1965	New Formalism
S2 08	3334 Richmond	Yes	Yes	1970	New Formalism
S2 09	3323 Richmond	Yes	Yes	1961	Expressionism
S2 10	3322 Richmond	Yes	Yes	1964	International
S2 11	3311 Richmond	Yes	Yes	1969	New Formalism
S2 12	3131 Richmond	No	No	1959/2011	Modernism
S2 13	3121 Richmond	Yes	Yes	1961	New Formalism
S2 14	3118 Richmond	Yes	No	1965	International
S2 15	3101 Richmond	Yes	Yes	1964	New Formalism
S2 16	3100 Richmond	No	No	1962/2008	New Formalism

[1]Not surveyed, previously determined by others
Source: Hicks & Company 2007, and AmaTerra 2022.

The 2007 survey noted the buildings in Richmond Avenue were surrounded by parking lots, the buildings display regularity of form and advanced technologies of attenuated support columns and cantilevered roofs and floors, and a structural skeleton covered by a thin, non-structural skin. Individually and as a district the buildings demonstrated the concept of the International style with rectangular volumes, hovering planes, and lack of architectural decoration. Even though some of the buildings were less than 50 years old, they contributed to the overall feeling of the district as they followed the broad concepts set by the International style (Hicks & Company 2007: 22).

The previously-determined NRHP-eligible Richmond Avenue Metropolitan Commercial Historic District was surveyed in July 2022 to verify its architectural integrity. Two resources which were previously identified in 2007 as contributing resources are recommended as no longer contributing to the historic district in 2022 (see Table 0-2). Remodeling of Resource S2 16, 3100 Richmond Avenue, has reduced the building's integrity of materials and design. The vertical emphasis of repetitive cladding and windows was replaced by the inclusion of colored horizontal panels sporadically dispersed on the façade. Remodeling of Resource S2 13, 3131 Richmond Avenue, has reduced its integrity of materials and setting. The service station has been remodeled with modern

garage doors and a six-foot metal fence enclosing the front parking lot. Both buildings are recommended noncontributing to the previously-determined eligible NRHP historic district due to loss of integrity of material and design. The remaining eight buildings of the historic district still retain their integrity with seven buildings individually recommended as eligible for listing on the NRHP, S2 07, S2 08, S2 09, S2 10, S2 11, S2 13,and one, S2 15, under Criterion C in the area of Architecture at the local level of significance.

Based on the 2022 survey the district has 17 buildings total, with nine noncontributing and eight contributing. The district no longer retains integrity as more than 50 percent of the buildings are noncontributing. Therefore, the district is recommended as not eligible for listing on the NRHP. See **Appendix B** for the survey results map, photo sheets, and tables. The eight properties previously included in the district remain individually eligible, as does the property previously-recommended eligible at 1836 Richmond.

1.13.3 Segment 2 Historic-Age Resources Surveyed Recommended Not NRHP Eligible

The remaining historic-age resources surveyed in Segment 2 which are recommended as not eligible for the NRHP were related to commerce, except for S2 04, La Quinta Inn, which is categorized as domestic per NPS guidelines (see **Table 0-3)**. Streetscape photos, S2 01, 06, 18, 22, 26, and 27, were numbered sequentially with the historic-age resources to provide a location context. See **Appendix B** for the survey results map, photo sheets, and tables.

Table 0-3. Segment 2 Historic-Age Resources Recommended Not NRHP Eligible.

Resource	Address	Eligible	Circa Year Built	Style
S2 02a/b	4151 Southwest Fwy	No	1971	Spanish Colonial Revival influence
S2 03	4141 Southwest Fwy	No	1973	None
S2 04	4015 Southwest Fwy	No	1968	Spanish Colonial Revival
S2 05	3759 Southwest Fwy	No	1967	None
S2 17	2626 Richmond Ave	No	1973	Modernism
S2 19	3601 Kirby Dr	No	1979	Spanish Colonial Revival influence
S2 20a/b	2536 Richmond Ave	No	1970	None
S2 21	2107 Richmond Ave	No	1972	None
S2 23	2040 Richmond Ave	No	1978	None
S2 24	4215 Mandell St	No	1970	None
S2 25	1419 Richmond Ave	No	1970	None

Source: AmaTerra 2022.

Resources S2 02b and S2 03 are high-rise vertical block office buildings both constructed circa 1971 and 1973 respectively. Resource S2 02b is a multistory, two-part vertical block office tower with orange brick siding. The Spanish Colonial Revival style influence is evidenced by the brick color and the faux arch gallery. The original windows have been replaced. S2 02 has an associated, detached multi-floor parking garage (S2 02a). Resource S2 03 is a six-story vertical block building of no notable

design with stucco siding. The windows create a pattern of vertical stripes on the south and north facades. The resources are recommended as not eligible for listing on the NRHP.

Resource S2 04 is the La Quinta Motor Inn constructed c. 1968 based on HCAD. The motel consists of two buildings; one is an "H" plan centered around a pool while the second is a rectangular plan oriented to IH-69. Both buildings are two-stories with rooms accessed from the exterior. Alterations include changes to the main entrance and modern doors. La Quinta Motor Inns concept by Sam and Philip Barshop started in San Antonio, Texas, constructed for the 1968 World's Fair. The Barshops franchised in 1973 but discontinued licensing in 1977. The motels had 100 to 125 rooms, and buildings were standardized with precast concrete panels, prefabricated bathrooms, and architectural elements of the Spanish style. In 1990 La Quinta modified their signage and underwent renovation and remodeling of their older motels to rebrand the chain (Jakle, Sculle, and Rogers 1996: 205-206). The resource is recommended as not eligible for listing on the NRHP.

Resource S2 05 is a two-story, commercial building of no particular style. Alterations include modern windows, siding, and awnings, plus a roof tower added circa 2002. The resource is recommended as not eligible for listing on the NRHP.

Resource S2 17 is a two-story, commercial building constructed in the Modernism style. The wide marquee wall has been covered with metal siding reducing integrity of material and design. The resource is recommended as not eligible for listing on the NRHP.

Resources S2 19 and S2 20a and b are restaurants. Resource S2 19 is a one-story, gable roofed building in the Spanish Revival style constructed in 1979. Alterations include the side addition, gable roof (c. 2002) and red tiles (c. 2011). The resources are recommended as not eligible for listing on the NRHP.

Resource S2 20a was originally a gas station. The building is one story with a gable roof and brick siding. Alterations include the front façade addition (c. 2004), east façade addition (c. 2005), and a modern metal roof (c. 2012). The detached gas station canopy (S2 20b), built circa 1970, is used for sheltered parking. Resource S2 21 is a one-story building with an office and three service bays for automobiles. Based on aerial photos showing a gable roof and the 1970 year of construction, this was originally a gas station built in the Ranch style. Alterations include a modern metal parapet (c. 1995), a rear fence (c. 2020), and the loss of a canopy. The resource is recommended as not eligible for listing on the NRHP.

Resources S2 23 and S2 24 are one-story metal warehouses with gable roofs constructed circa 1978 and 1970, respectively. A warehouse generally has a large footprint, rolling garage doors, and pedestrian doors. Windows vary based on business needs and use. Roofs are generally flat or gabled. Warehouses are designed for function and not style and are ubiquitous. The resources are recommended as not eligible for listing on the NRHP.

S2 25 is a one-story retail center in a rectangular plan set at the rear of the parking lot. Alterations include modern windows, siding, a canopy, and a change in fenestration. The resource is

recommended as not eligible for listing on the NRHP. See **Appendix B** for the survey results map, photo sheets, and tables.

All the buildings lack integrity of materials, design, and workmanship or do not rise to the level of significance necessary for inclusion in the NRHP. The buildings have no known association with any historically significant events, trends, or persons under Criteria A and B. They suffer from integrity issues and are generally not noteworthy examples of a particular architecture style or known architect under Criterion C. Therefore, they are recommended not eligible under Criteria A, B, and C for listing on the NRHP.

1.14 Segment 3 Survey Results

Segment 3 was initially surveyed in 2007 using a cut-off date of 1963 (Hicks & Company 2007). For Segment 3, resources located in the NRHP eligible Third Ward Historic District were documented with streetscape photographs unless new ROW greater than corner clips for ADA sidewalk and ramp improvements was required. If ROW greater than corner clips for ADA sidewalk and ramp improvements was required, then the resource was individually documented. To reduce new ROW in the NRHP eligible Third Ward Historic District plus address concerns from TSU and UH, design engineers changed the route in the NRHP eligible historic district after APE coordination occurred with THC. The 10 percent design route coordinated with THC would have followed Wheeler Avenue, then north to Emancipation Avenue/Dowling Street, then east to Alabama Street. The new route would use Wheeler Avenue, turn north at Ennis Street, then east at Elgin Street. The new route greatly reduces new ROW required in the historic district except for corner clips at some corners to provide ADA compliance. Streetscape photos were included in the documentation per THC requirements.

At Wheeler and SH 288, Segment 3 enters the Third Ward Historic District and continues through the district until Elgin Avenue, at which point it passes through the University of Houston. A 1944 aerial photograph shows the area developed with residential buildings and the beginnings of the University of Houston campus. Texas Southern University, established in 1927 as the Houston Colored Junior College, moved to a 53-acre parcel in the Third Ward in 1947. Student petitions in 1951 brought about the name change to Texas Southern University (TSU n.d.).

1.14.1 Segment 3 Historic-Age Resources Surveyed

A total of 22 historic-age resources were documented during the survey within the Project APE in Segment 3. There were 16 resources outside of the NRHP-eligible Third Ward Historic District and 6 resources documented inside the historic district boundaries. Streetscape photos (S3 17- S3 23) of the Third Ward Historic District are available in **Appendix C**.

1.14.2 Segment 3 Historic Resources Recommended NRHP Eligible

A total of one NRHP eligible and two NRHP listed buildings and one NRHP eligible historic district were documented in Segment 3. Resource S3 16a, the Albert Sidney Johnston Junior High School building (Young Women's College Preparatory Academy), Resources S3 25a and S3 25b the Houston Negro Hospital and Nursing School at 3402 Ennis, and the Third Ward Historic District.

Resource S3 16a, the Albert Sidney Johnston Junior High School building (Young Women's College Preparatory Academy), was determined NRHP eligible under Criterion C in the area of Architecture at the local level of significance in 2019 (Mitchell and Pettis 2019:181). The building is a good example of an early twentieth century school constructed in the Beaux Arts style and designed by a prominent Texas architectural firm of Sanguinet, Staats, Hedrick, and Gottlieb, with Wm. Ward Watkin as consulting architect.

Alterations include a modern metal canopy supported by concrete columns added in 2017. Although the canopy blocks the view of the front façade it could be easily removed without destroying original materials of the school building and therefore the building is still recommended NRHP eligible under Criterion C, in the area of Architecture at the local level of significance.

The school campus is located west of and outside of the Third Ward Historic District. The campus includes the school building and the baseball field on one parcel bounded by the streets of Cleburne, Chartres, Chenevert, and Wheeler. A service road, parallel to Wheeler Avenue, connects Chenevert and Chartres Streets and bifurcates the campus physically and visually separating the baseball field and a parking lot from the school building. In the 2019 survey by Mitchell and Pettis only the school building was discussed as NRHP eligible with a map provided to identify boundaries (Mitchell and Pettis 2019: 181, 234). The baseball field (S3 16b) is modern, built circa 1995, and does not contribute to the eligibility of the school to convey its architectural significance under Criterion C, nor does the baseball field impact the integrity of the school building as the building only is recommended eligible, and not the campus or the building's physical setting.

The Houston Negro Hospital and Nursing School at 3204 Ennis (S3 25a and S3 25b) are both in the NRHP eligible Third Ward Historic District and individually listed in the NRHP. The Houston Negro Hospital is listed under Criterion A in the area of Ethnic Heritage/Black and Social History. The Nursing School is listed under Criterion A in the area of Ethnic Heritage/Black and Social History and Criterion C in the area of Architecture.

In 2008 and 2019, the THC determined the Third Ward Historic District eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development and eligible under Criterion C in the area of Architecture. At the time of the report, historians do not know why the NRHP nomination did not continue through the designation process.

Table 0-4. Segment 3 Historic Resources Recommended NRHP Eligible.

Resource	Address	Contribute to Historic District	Individually Eligible	Circa Year Built	Style
S3 16a	1906 Cleburne St School	N/A	Yes	1925	Beaux Arts
S3 16b	1906 Cleburne St baseball field	N/A	No	1995	N/A
S3 24	3401 Ennis St Third Ward HD	No	No	1910/2007	None
S3 25a	3204 Ennis St Third Ward HD	Yes	NRHP listed	1926/1952/ 1961	Spanish Colonial Revival
S3 25b	3204 Ennis St Third Ward HD	Yes	NRHP listed	1931	Spanish Colonial Revival
S3 26	2905 Elgin St Third Ward HD	Yes	No	1970	Contemporary
S3 27	3108 Ennis St Third Ward HD	Yes	No	1922	None
S3 28	3115 Ennis St Third Ward HD	Yes	No	1922	None
S3 29	3481 Elgin St Third Ward HD	Yes	No	1961	None

Note: HD: Historic District
Source: AmaTerra 2023.

The Third Ward Historic District along Wheeler Avenue remains intact (**Figure 0-1**). Modern infill development along Ennis Road across from TSU is starting to erode the eastern edge of the historic district (Figure 6-1). A significant number of shotgun style houses identified in the 2008 survey report (Randall and Korfmacher 2008) at the northwest corner of Alabama and Ennis were removed by 2012, and the lot remains vacant today (streetscape photo S5 23). At the windshield level and due to the size of the historic district, no recommendation is being made regarding Criterion C. Based on Criterion A, the Third Ward Historic District is recommended eligible for listing on the NRHP under Criterion A at the local level in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development.

Figure 0-1. Streetscape View of NRHP Eligible Third Ward Historic District with Infill Development.



Note: Looking northwest from intersection of Ennis and Cleburne streets. The detached two-car garage with a second-story apartment and the three-story building are examples of infill development occurring along Ennis Street.
Source: AmaTerra 2023.

1.14.3 Segment 3 Historic-Age Resources Recommended Not NRHP Eligible

The historic-age resources surveyed in Segment 3 that are recommended as not eligible to the NRHP included three commercial buildings and 12 domestic resources (see

Table 0-5). See **Appendix C** for the survey results map, photo sheets, and tables. Streetscape photos S3 17-23 were numbered sequentially with the historic-age resources to provide a location context.

Table 0-5. Segment 3 Historic-Age Resources Recommended Not NRHP Eligible.

Resource	Address	Eligible	Circa Year	Style
S3 01	4403 Fannin St	No	1966	None
S3 02	1403 Wheeler Ave	No	1970	None
S3 03	1409 Wheeler Ave	No	1925	Foursquare
S3 04	1411 Wheeler Ave	No	1930	Tudor
S3 05	1419 Wheeler Ave	No	1930	Tudor
S3 06	4414 La Branch St	No	1930	Bungalow
S3 07	4411 La Branch St	No	1935/2018	Colonial Revival
S3 08	4405 La Branch St	No	1925	Bungalow
S3 09	4401 La Branch St	No	1927	Craftsman influence
S3 10	4315 La Branch St	No	1930	Craftsman influence
S3 11	4311 La Branch St	No	1930/2023	None
S3 12	4305 La Branch St	No	1930	None
S3 13	1508 Barbee St	No	1930	Craftsman
S3 14	1510 Barbee St	No	1930	Craftsman
S3 15	4320 Almeda Rd	No	1965	None

Source: AmaTerra 2023.

Resource S3 01 is a one-story commercial building occupied by the Jack-in-the-Box restaurant. The building has been completely remodeled to reflect their current branding. Alterations include new siding, windows, and doors. There are new metal strips on the siding, as well as rods that support the modern metal awnings.

Resource S3 02 is a two-story commercial building with concrete and brick siding and fixed metal windows. Alterations include modern windows and a change in the fenestration on the second story.

Resources S3 03 through S3 14 are residential dwellings for both single and multi-families. According to HCAD, the houses were in the Rosewood subdivision; however, no plat was found in the Harris County Clerk's (HCC) online database. The buildings had various changes to materials, workmanship, and setting. The intrusion of large, three-story buildings increased the dwelling density per lot and changed the overall feel of the neighborhood.

Resource S3 15 is a small, one-story commercial building with fiber cement siding currently occupied by a restaurant. Alterations include modern siding, windows, and an angled soffit.

Individually and collectively the buildings and neighborhood are recommended not eligible for inclusion in the NRHP under Criteria A and C as they have no known association with important historic events or trends and are not noteworthy examples of an architectural style or the work of a known architect. They have no known association with persons of historic significance under Criterion B and are thus recommended not eligible for NRHP listing.

1.15 Segment 4 Survey Results

1.15.1 Segment 4 Historic-Age Resources Surveyed

No previous historic structure surveys were identified for Segment 4. A total of 81 resources were documented during the survey within the Project APE in Segment 4. Building categories were a mix of 23 commerce, 45 domestic, one funerary, three government, seven industry, one social, and one religious. The industrial buildings were concentrated between IH-45 and Buffalo Bayou. Historians recommend two industrial buildings, International Harvester (4901 Navigation Boulevard, Resource S4 61) and Western Electric Company (WE) (601 Lockwood Drive, Resource S4 62) as eligible for the NRHP.

Segment 4 Individual Resources Recommended as NRHP Eligible

International Harvester Company, 4901 Navigation Boulevard, Resource S4 61

International Harvester Company (IHC) started in 1902 when three firms that produced harvesting equipment merged and formed the new company in Chicago, Illinois (see Error! Reference source n ot found.). By 1910 the company had over 17,000 workers in the Chicago area and annual sales of $100 million. Responding to changing technology, company innovations replaced animal-powered equipment with motorized tractors and trucks and became a major international provider of farm equipment. World War I brought about innovation and expansion into trucks. The company continued operations during the Great Depression. IHC's 1936 Annual Report stated 1935 sales were up 57% from 1934 but 35% less than 1929 (IHC 1936: 9). The Houston Branch House was constructed in 1935 (IHC 1936: 27). In the 1930s IHC was a top manufacturer of trucks with a sales network of about 11,000 dealers nationwide (Wilson 2004).

Figure 0-2. Photograph of the International Harvester Houston Branch House circa 1936.



Source: IHC 1936:27.

During World War II, the US government permitted IHC to produce tractors for agricultural needs plus produce military vehicles, aircraft, guns, and ordnance. After the war, the company made the decision to diversify its operations and started an expansion program investing in new factories, products, and machine tools (IHC 1976: 27).

The International Harvester Houston Branch House represents the thriving economy of Houston and the investment of international firms into the economy during the Great Depression Era (1929-1941). Houston Branch House is recommended eligible under Criterion A, in commerce at the local level of significance. No evidence was discovered, at the reconnaissance level, connecting the building to an architect or architectural firm. Historians identified three IHC buildings constructed in 1939. As each was different, IHC did not have a standard building for their Branch House (IHC 1936: 30). The property is recommended not eligible under Criterion B. The building is designed in a modest Art Deco style with curved concrete coping, brick siding, and an exposed concrete base. The massing is a two-story horizontal block flanked by one-story wings on either side. The central entrance extends above the two-story roof line with stepped corbeling around the original main entrance. The original windows on the front and side façades have been bricked up with several sets of windows converted to openings with a garage door. The original recessed front entrance is bricked-up and flush with the front façade. Other windows on the side façade have been replaced with smaller windows and boards. Based on the alterations, the building lacks integrity of materials and workmanship and is recommended not eligible under Criterion C. See **Appendix D** for the survey results map, photo sheets, and table.

Western Electric Company, 601 Lockwood Drive, Resource S4 62

Western Electric Company (WE) originally owned this building (see **Figure 0-3)**. Western Electric Manufacturing Company was established in Chicago in 1872. Four years later, in 1876, Alexander Graham Bell invented the telephone, and the American Bell Telephone Company (Bell) was formed in 1877. WE received the contract to manufacture Bell's telephones and by 1925 was a subsidiary company of Bell.

Figure 0-3. Photograph of the Western Electric Building in 1948. Image direction southwest.



Source: AT&T Archives n.d.

Southwestern Bell Telephone (Bell) was formed in 1920 when several telephone companies were consolidated into one entity. The company saw growth in the 1920s and constructed a 31-story administrative building in St. Louis, Missouri in 1926, plus offices in Dallas, Kansas City, and Oklahoma City in 1929. Bell's operating companies were not as hard hit by the Depression as the Western Electric manufacturing subsidiary (AT&T 1971). The start of World War II ended the Depression, but materials and expansion were for the war effort. Bell expanded their company after the war to meet customer demand. In 1944 Bell had two million phones in service; three years later they had three million phones (AT&T 1971). The building at 601 Lockwood Drive was constructed in 1948 and was occupied by Southwestern Bell Telephone Company, Western Electric Company, and Whole Electric Supplies. The Southwestern Bell Telephone Company building represents the thriving economy of Houston after World War II.

Based on historic photographs, Austin Company Engineers and Builders constructed the building (AT&T 2022). Austin Company was started in 1878 by Samuel Austin in Cleveland, Ohio. His son, Wilbert, took over the business in 1904 and innovated the concept of a complete facility service that became known as the Austin Method. The company name changed to the Austin Company in 1916. The world's first all-welded structural steel framework commercial building (1928) is accredited to Austin Company (The Austin Company n.d.). A specific architect or architectural firm was not identified during the reconnaissance survey; therefore, the building is recommended not eligible under Criterion B.

The two-story building is a rectangular plan with a flat roof and brick siding in the Art Deco style. The multi-pane, metal casement windows create horizontal bands on both the first and second floors. The off-center entrance extends outward from the wall, and it has a concrete base and curved wall. The framed pedestrian entrance is a single glazed door with sidelights topped with transom windows. Glass blocks surround the entrance and extend to the second floor. The door and awning are modern, and a few windows and openings have been changed. The building is intact and a good example of the Art Deco style. As such, the building is recommended eligible under Criterion C at the local level of significance in the area of Architecture. See **Appendix D** for the survey results map, photo sheets, and table.

1.15.2 Segment 4 Historic-Age Resources Recommended Not NRHP Eligible

The historic-age resources surveyed in Segment 4 that are recommended as not eligible for the NRHP included 23 commercial resources, the Eastwood Subdivision with 20 domestic resources, the Oaklawn Subdivision with six domestic resources, 19 individual domestic resources, one funerary resource (Evergreen Negro Cemetery), three government resources, one healthcare facility, five industrial facilities, one recreation and culture facility, and one religious facility. See **Appendix D** for the survey results map, photo sheets, and complete inventory table.

Commercial Resources

Individually and collectively, due to alterations and/or additions and the lack of association with historically important persons, events, or trends under Criteria A and B, and a lack of architectural integrity and/or significance under Criterion C, the commercial buildings in Segment 4 do not rise to the level necessary for inclusion in the NRHP and are recommended not eligible. See Error! Reference s ource not found. for a list of the resources not recommended.

Table 0-6. Segment 4 Commercial Resources Recommended Not NRHP Eligible.

Resource	Address	Individually Eligible	Circa Year Built	Style
S4 01	4445 Gulf Fwy	No	1967	None
S4 02a/b	2000 Ernestine St	No	1970	New Formalism influence
S4 29	4619 Harrisburg Blvd	No	1930/1992/ 2009	Mission Revival
S4 30	311 Lockwood Dr	No	1976	None
S4 31	304 Lockwood Dr	No	1935/2008	None
S4 32	302 Lockwood Dr	No	1970	None
S4 33	220 Lockwood Dr	No	1955	None
S4 40	202 Lockwood Dr	No	1956	Contemporary influence
S4 43	110 Lockwood Dr	No	1935	None
S4 48	93-97 Lockwood Dr	No	1973	None
S4 50	4616 Canal St	No	1977/2018	None
S4 51	91 Lockwood Drive	No	1973	None
S4 53	215 Lockwood Dr	No	c. 1920	None
S4 67	951 Lockwood Dr	No	1953/1957	None
S4 68	5515 Clinton Dr	No	1936/1965	None
S4 69	1010 Lockwood Dr	No	1942	None
S4 70	1020, 1040, & 1060 Lockwood Dr	No	1975	None
S4 73	1110 Lockwood Dr	No	1947/1978	None
S4 74	1120 Lockwood Dr	No	1950/1990	None
S4 75	1140 Lockwood Dr	No	1960	None
S4 77	1203 Lockwood Dr	No	1966	None
S4 78	1202 Lockwood Dr	No	1949/2007	None
S4 80	1217 Lockwood Dr	No	1965	None

Source: AmaTerra 2023.

Domestic Resources

Domestic is a category of function and use of buildings identified by the National Park Service's Bulletin 15. Subcategories of domestic include single dwelling, multiple dwelling, secondary structure, and hotel. For this report, the term "ancillary building" describes secondary structures such as storage sheds, carports, garage apartments, detached garages.

Single family dwellings with and without ancillary buildings are the most common resource identified by the historic resources survey. The years following World War II saw the greatest homogenization of suburban housing stock as developers took subdivision projects to counteract a housing shortage and take advantage of government subsidized housing for veterans. Most of the

houses identified in Segment 4 can be divided into four styles: Folk Victorian, Bungalow/Craftsman, Minimal Traditional, and Ranch.

Folk Victorian Style (1870-1910)
The Folk Victorian style is a modest example of the high style Victorian styles such as the Queen Anne. Features include steep-pitched roofs, with gable front and wing roof or pyramidal roof the most common plan. Decorative detailing includes spindle columns and fretwork. The surveyed resources were modest examples of Folk Victorian style and had alterations to materials including modern siding, replacement of wood windows with vinyl windows, changes in fenestration, installation of modern metal doors, and additions.

Bungalow Style (1905-1930)
The Bungalow style is a modest example of the Craftsman Bungalow style which originated in California and quickly spread through magazines and pattern books. The bungalow is most notable for its front gable supported by large columns creating a wide front porch. The surveyed resources have the massing and coupled windows of a bungalow but failed to have architectural features such as the wide front porch to make them a notable example of the Craftsman bungalow.

Minimal Traditional (1935-1950)
Minimal Traditional styles houses were designed to provide the most efficient floor plan at the lowest cost thus providing the opportunity for home ownership to as many US citizens as possible. Following the Federal Housing Administration (FHA) guidelines insured financing for both the builder and homeowner (McAlester 2014: 589). The most prominent features are single-story, side gable roofs, rectangular plans, little or no eaves overhang, and minimal architectural details.

Ranch style (1935-1975)
The Ranch style (American Ranch, Western Ranch, or California Rambler) originated in the early 1930s in California. The style loosely followed the Spanish Colonial precedents in California and was influenced by Craftsman and Prairie house styles that had been widely popular earlier in the twentieth century. The Ranch style remained largely confined to California until after World War II. A combination of factors created a “perfect storm” that led to the wide popularity of the style in the 1950s and 1960s: the demand for single-family housing by World War II veterans starting families; the GI Bill, which provided many different types of loans for returning veterans to buy homes; an increase in automobile ownership, which freed workers from the need to live close to public transportation routes; and the strict FHA-Veterans Affairs (VA) guidelines under which developers operated in order to be able to market the houses to buyers using FHA and VA government-subsidized mortgages.

Ranch style houses have several notable, character-defining features. They are usually horizontally oriented parallel to the street with asymmetrical façades. The roof is low pitched, either gabled or hipped, with large eaves. Windows tend to be large and plentiful. Fixed picture windows and sliding glass doors are common. The overall form emphasizes the horizontal, accentuated by low walls, horizontal wood, brick, or stone siding, and a long, narrow shape with relatively simple floor plans and an attached garage (McAlester 2014: 597–612). Because Ranch houses are quite common, the bar of individual architectural significance tends to be high.

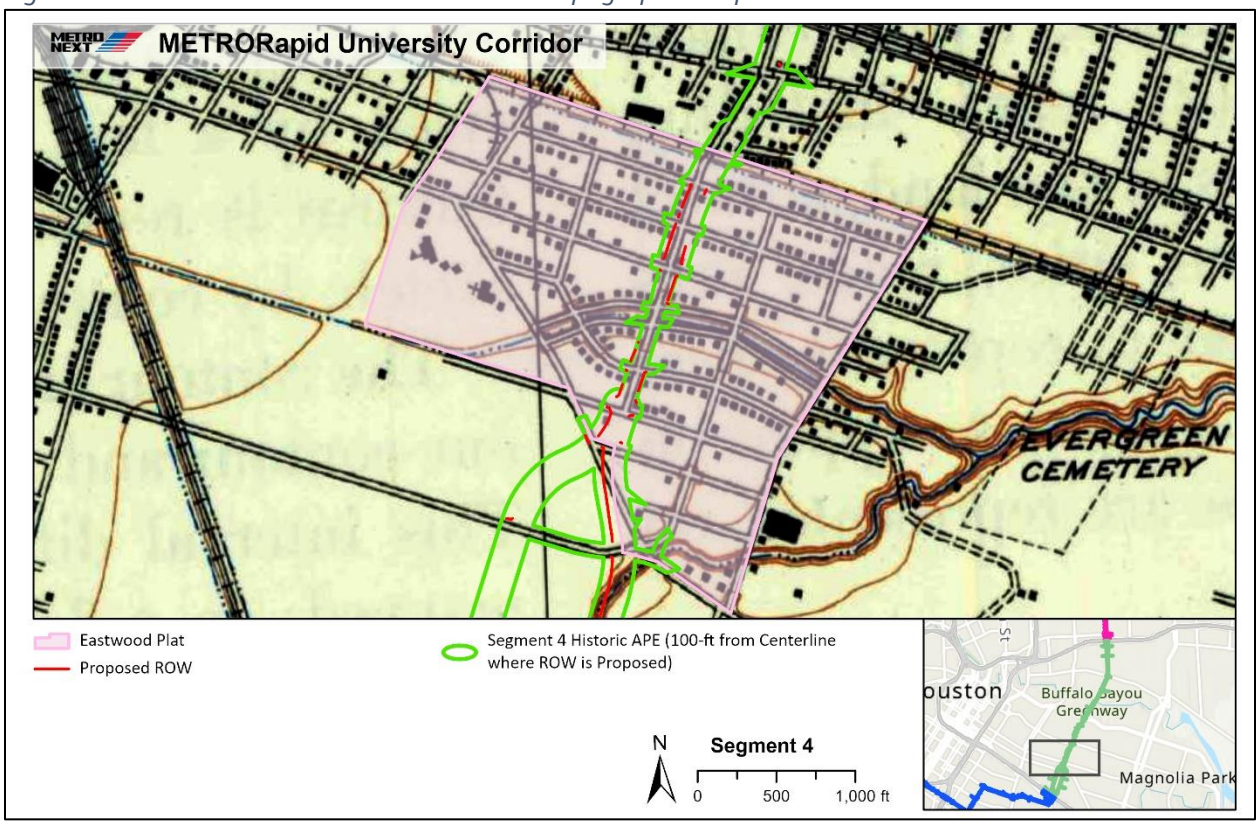
Included in the discussion of residential houses are their ancillary buildings, which include but are not limited to detached garages, detached carports, storage sheds large and small, and workshops large and small. These ancillary buildings are often added years after the original construction of the house to hold equipment and objects which cannot be stored in the primary house. Often, they are prefabricated structures or simple buildings and unless noteworthy, the buildings are included as part of the discussion of the primary residence.

The 26 residential properties identified by this survey possess no known significance under either Criteria A or B. The residential properties are not noteworthy examples of their architectural style under Criterion C and/or they possess unsympathetic alterations and/or additions reducing or substantially compromising the seven aspects of integrity. The domestic dwellings and their ancillary buildings are recommended not eligible under Criteria A, B, or C. Specific styles and select examples are discussed below. See **Appendix D** for the survey results map, photo sheets, and table.

Eastwood Residential Subdivision

The W.A. Wilson Company recorded the Eastwood Subdivision plat in 1913. The Eastwood plat, starting at the northwest corner, is roughly bounded by the Union Pacific Railroad (UPRR), Dumble, Leeland, Telephone, Polk, and Sidney streets (Error! Reference source not found.). The northeast p ortion of the plat extended to Harrisburg Road, but the platted lots were not developed and by 1957 the land was a park, today called Eastwood Park (www.historicaerials.com).

Figure 0-4. Eastwood Plat overlaid on a 1922 topographic map.



Source: AmaTerra 2023

Eastwood Plat

The Eastwood plat shows lots in a grid pattern between the UPRR and McKinney Avenue. At Park Drive the east/west roads are curved to follow a natural ravine. Streets were 60-ft. wide except for McKinley Street at 80-ft. Restrictions listed on the plat stated that the lots shall be used and occupied for residence purposes only, that no "negroes" should own or be tenants, and the lots shall not be used or sold to sell malts or liquors (HCC Eastwood 40: 42). Restrictions prohibited the "erection of tall flats and apartment buildings, which cut off air and sunshine from the adjoining home" (Wilson Company 1912: 7).

Streetcar Suburb (1888-1928)

The Houston Daily Post declared Eastwood a "model suburb, one of the most convenient, attractive and beautiful homesite additions in the city of Houston" in 1913 (ECA 2022). An advertisement booklet advised prospective buyers the property was two miles east of the courthouse, within the city limits, and accessible by the Harrisburg streetcar line or automobile. The subdivision was also accessible by auto following Harrisburg Road, which was brick paved to the property at that time, or from McKinney Avenue, which was the principal avenue through the property (Wilson Company 1911: 10).

The introduction of electrified streetcars in the US spurred development outside of downtowns as one could travel in 10 minutes the distance it took 30 minutes to walk (Ames and McClelland 2002: 17). Streetcar Suburbs were concentrated along radial streetcar lines platted with rectilinear blocks that formed continuous corridors with other platted subdivisions (Ames and McClelland 2002: 20). Eastwood has some rectilinear blocks, was adjacent to and accessible by streetcar, plus McKinney and Polk streets are examples of the continuous corridor. Eastwood Subdivision is an example of a Streetcar Suburb.

Houses

Styles documented in the survey APE included the Craftsman Bungalow, the Four Square and Colonial Revival (**Table 0-7**). Wilson's propaganda booklets specifically discuss the attributes of the Bungalow style (Wilson 1911: 9, 10). In addition to single-family buildings, several two-story apartment buildings were surveyed, Resources S4 10, S4 14, S4 19, and S4 23. Resources S4 14 and S4 23, are Ranch style apartments built later than the initial construction styles when the subdivision was platted. The modern apartments buildings are oriented to Lockwood instead of Woodside and Walker streets, respectively. The orientation to Lockwood, a north/south street, is a deviation from Wilson's original concept "to avoid throwing the rear of one home in the front or side of another home" (Wilson Company 2012: 7).

Historic topographic maps, aerial photographs, and HCAD records were reviewed to determine the number of houses constructed prior to 1945. Historians discovered there was no change to the number of buildings between topographic maps dated 1922, 1932, and 1949 (www.historicaerials.com). County Tax Assessor records had about 30 percent of the houses built prior to 1945 and based on visual desktop inspections the HCAD construction dates were inaccurate. Based on the reconnaissance level survey with the APE capturing only the lots adjacent to Lockwood Drive, Historians are unable to determine the percentages of houses that retain architectural

integrity. The buildings that were documented are recommended not eligible due to alterations such as replacement of original wood windows, loss of original columns, and additions. The buildings that did retain integrity did not rise to the level necessary for inclusion in the NRHP.

Table 0-7. Segment 4 Historic Resources in the Eastwood Subdivision Not NRHP Eligible.

Resource	Address	Individually Eligible	Circa Year Built	Style
S4 09	4501 Clay St	No	1920	Craftsman
S4 10	4603 Clay St	No	1935	Colonial Revival
S4 11	4602 Polk St	No	1935	Colonial Revival
S4 12	4601 Polk St	No	1935	Minimal Traditional
S4 13	4603 Polk St	No	1920	Craftsman
S4 14	4602 Woodside	No	1948	Ranch 6-plex
S4 15	4550 Woodside	No	1920	Craftsman
S4 16	4547 Woodside	No	1920	Craftsman
S4 17a/b	4601 Woodside	No	1920	Craftsman
S4 18	4539 Parkside	No	1920	Craftsman
S4 19	4540 McKinney	No	1935	4-plex apartment building
S4 20	4602 McKinney	No	1923	4-square
S4 21	4601 McKinney	No	1930	4-square
S4 22	4539 McKinney	No	1920	Craftsman
S4 23	4602 Walker St	No	1955	Apartment block
S4 24	4601 Walker St	No	1920	Craftsman
S4 25	4604 Rusk St	No	1920	Craftsman
S4 26	4542 Rusk St	No	1920	Craftsman
S4 27	4545 Rusk St	No	1950/2001	Ranch
S4 28	4609 Rusk St	No	1920	Craftsman

Source: AmaTerra 2023.

Plat Alterations

Two major changes impacted the original design and Wilson's vision of the Eastwood Plat. First, the ravine separating Park Drive was filled in between 1950 and 1953 removing the natural water feature. Historic aerial photographs show the area was retained as a greenspace and trees planted by 2002 (www.historicaerials.com). Second, Maplewood Avenue was renamed to Lockwood Drive between 1973 and 1976, when the road was widened from 60-ft to a four-lane divided road, roughly 100-ft, with a vegetated median. This changed the road use from a local road to a collector. Historians estimate about 24 houses were removed to make way for the road project. McKinley Road at 80-ft was designed by the Wilson Company to be the main thoroughfare. The widening of Lockwood Drive to 100-ft and four-lanes made Lockwood the widest street and the main thoroughfare in the plat. Lockwood's esplanade and a modern neighborhood sign reinforce Lockwood as the main thoroughfare of the neighborhood.

Comparative Analysis

According to an advertisement booklet, the William A. Wilson Company (Wilson Company) had been building homes throughout Houston since 1900 (Wilson Company 1910 n.d.). The advertisement continues to state that it was not until Woodland Heights that the company was able to demonstrate what a neighborhood surroundings should entail. The Wilson Company purchased 106-acres in 1907 to develop Woodland Heights. By 1910, $60,000 for improvements for 600 lots included engineering design, an 8-in. water main, a complete water system that serviced each house, graded and asphalt streets, cement sidewalks, curbs, plantings of hundreds of Live Oaks and Sycamore trees planted in regular rows on either side of the streets, and electric arc lights on several prominent corners (Wilson Company 1910 n.d.). In addition, plat restrictions included use of lots "for a saloon, blacksmith shop, livery stable or any other kind of trade or business whatsoever," the sale of liquor, and a minimum house value of $3,000. The Wilson Company retained engineers, architects, lawyers, and provided financing. The purchase of a large tract of land, with the developer installing improvements, and constructing the houses is an example of an operative builder (Ames and McClelland 2002:26).

Woodland Heights was located two miles northwest of downtown Houston on a streetcar line. The plat had rectilinear lots in a grid pattern. Advertisements stated the lots were either 30x100-ft or 50x100-ft. Wilson Company stated Woodland Heights "was the best example of our ideal of a high-class residence subdivision" (Wilson 1910 n.d.). Mr. Wilson himself resided in the subdivision (COH Woodland Heights n.d.). Based on the plat and streetcar access the neighborhood is an example of a Streetcar Suburb (Ames and McClelland 2002: 20). In 2011 the City of Houston designated the subdivision as a local historic district.

Since Woodland Heights is the first known example of a William A. Wilson Company subdivision, a locally recognized historic district, and the Eastwood Plat has had alterations to the character defining features of the original plat with the widening of Maplewood/Lockwood Drive and the original ravine to a flat greenspace, it is recommended the Eastwood Subdivision is not eligible under Criteria A, B, C, or D.

Oak Lawn Residential Subdivision

A cluster of Folk Victorian houses located on the east side of Lockwood Avenue, S4 34 through S4 39, prompted historians to research if the buildings were part of a subdivision. Per HCAD, the legal addresses of the properties identified Oak Lawn as the plat. A copy of the plat was not found (HCAD and HCC). A real estate website (www.neighborhoods.com) has the Oak Lawn neighborhood roughly bounded by Harrisburg Boulevard, Canal, Eastwood, and Edgewood Streets. Neighborhood boundaries may or may not represent historic plat boundaries. Commercial buildings from a later era were located on the west side of Lockwood. Infill housing, three stories tall, was visible from Lockwood Drive. A review of Google Earth aerial photographs shows infill development of modern three-story buildings in the neighborhood. Alterations to the surveyed buildings included modern materials such as asbestos and fiber cement siding and vinyl windows, plus a loss of material with replacement of columns and balustrades. The lack of cohesive building styles and infill development negates further investigation of Oak Lawn as a potential historic district. The subdivision is recommended as not eligible for listing as a historic district on the NRHP, and the resources are

recommended individually ineligible for the NRHP. See **Table 0-8** for a list of resources recommended not eligible.

Table 0-8. Segment 4 Historic-Age Resources in the Oak Lawn Subdivision Not NRHP Eligible.

Resource	Address	Eligible	Circa Year Built	Style
S4 34	213 Lockwood Dr	No	1910	Folk Victorian
S4 35	211 Lockwood Dr	No	1936/2012	Minimal Traditional
S4 36	209 Lockwood Dr	No	1910	Folk Victorian
S4 37	207 Lockwood Dr	No	1910	Folk Victorian
S4 38	205 Lockwood Dr	No	1910	Folk Victorian
S4 39	203 Lockwood Dr	No	1920	Craftsman

Source: AmaTerra 2022.

Individual Domestic Historic-Age Resources

Additional single-family dwellings were surveyed in the APE and had no known association with a plat or subdivision. The houses were plain examples of their styles and/or had alterations that reduced the integrity of material, workmanship, and design. Individually and collectively the domestic buildings are recommended not eligible for the NRHP. See **Table 0-9** for a list of resources recommended not eligible.

Table 0-9. Segment 4 Historic-Age Domestic Resources Not NRHP Eligible.

Resource	Address	Eligible	Circa Year Built	Style
S4 03	4443 Pease St	No	1935	Tudor influence
S4 04	4442 Leeland St	No	1930	Tudor
S4 06	4443 Leeland St	No	1930	Bungalow
S4 07a/b	4444 Bell St	No	1955	None
S4 41	113 Lockwood Dr	No	1910	Folk Victorian
S4 42a/b	109 Lockwood Dr	No	1940/2018	Bungalow
S4 44	102 Lockwood Dr	No	1936/2011	Colonial Revival
S4 45	4617 Brady St	No	1915/2021	Folk Victorian influence
S4 46a/b	4703 Brady St	No	1935/1935	Gothic influence
S4 47	99 Lockwood Dr	No	1938	Minimal Traditional
S4 49	94 Lockwood Dr	No	1925/1955	Bungalow
S4 54	4707 Ave I	No	1930	Bungalow
S4 55	301 Lockwood Dr	No	1935	Minimal Traditional
S4 56	303 Lockwood Dr	No	1930	Minimal Traditional
S4 57	305 Lockwood Dr	No	1910	Folk Victorian
S4 58	307 Lockwood Dr	No	1920	Craftsman
S4 59	335 N Burr St	No	1930	Bungalow
S4 76	5438 Margarita St	No	1930	Craftsman
S4 79	5507 Arapahoe St	No	1928	Bungalow
S4 81	5438 San Jose St	No	1925	Craftsman

Source: AmaTerra 2022.

Funerary Resources

Evergreen Negro Cemetery Resource S4 81

Evergreen Negro Cemetery was designated a Historic Texas Cemetery (HTC) in 2009. The designation is an official, honorary recognition with no restrictions or regulations on the cemetery or the cemetery owner (THC n.d.).

Cemeteries are present in every community in the United States, and although they have significance on an individual level (the descendants of those buried at the cemetery, for example), their local, regional, and national significance must be assessed using stricter metrics. According to the National Park Service's bulletin for evaluating cemeteries:

> "Individual and collective burial places can reflect and represent in important ways the cultural values and practices of the past that help instruct us about who we are as a people. Yet for profoundly personal reasons, familial and cultural descendants of the interred often view graves and cemeteries with a sense of reverence and devout sentiment that can overshadow objective evaluation. Therefore, cemeteries and graves are among those properties that ordinarily are not considered eligible for inclusion in the NRHP unless they meet special requirements. The National Register

> Criteria for Evaluation include considerations by which burial places may be eligible for inclusion in the National Register." (Potter and Boland 1992: 1).

In general, historic-age cemeteries must meet one or more of the seven criteria considerations (A-G) in addition to one or more of the four core criteria (A-D) to be considered eligible for listing. Because of the potential of discovery through archeological Review of cemeteries generally Archaeological sites, however, may be evaluated under Criterion D without the additional considerations.

Several local persons of note are buried in the cemetery: [redacted] When [redacted], the city removed approximately 490 persons to make way for the new construction. Those individuals were reinterred in other cemeteries. A record of a complete list of names of individuals interred in the cemetery is not available.

The first recorded burial is stated to be from 1887, greater than the minimum of fifty years for NRHP eligibility. However, the built environment surrounding the cemetery has changed over the years. A 1922 topographic map shows the cemetery as divided into two sections, north and south, by an unnamed road, but most likely today's [redacted]. A 1929 plat map shows the cemetery in today's west/east configuration, with plans for an 80-foot right-of-way (Lockwood Drive) to divide the two sections. The 1929 plat itself documents an "extension" to the Evergreen Negro Cemetery that overlaps the unnamed east-west road that initially bisected the two halves of the cemetery. This indicates the road, presumably [redacted], had bisected the cemetery until ca. 1929. Market Street was then relocated to border the southern edge of the cemetery. The vacated land, 40 feet in width, was subsequently used for burials.

The 1929 plat provides an outline of the original circulation patterns. Neglect, overgrowth, and time have removed any design features. The trace of [redacted] bordered by trees is evident. An estimated 1,200 persons were once interred and what grave markers remain are mostly in ruins.

Although the cemetery is the first African American cemetery in the Fifth Ward, it does not appear to have a direct association with a specific event important to the broader African American experience in Houston. Therefore, the Evergreen Negro Cemetery is recommended not eligible under Criterion A. The persons of note buried in the cemetery do not rise to the level of outstanding importance and therefore the cemetery recommended not eligible under Criterion B. The Evergreen Negro Cemetery was not designed by a master designer, nor does it possess high artistic values or distinctive characteristics, and therefore it is recommended not eligible under Criterion C.

Archaeological investigations were conducted in December 2022 within the area [redacted] The purpose of the investigations was to determine if human remains were present within [redacted], which was formerly part of the Evergreen Negro Cemetery prior to [redacted]. Cultural material documenting 33 grave locations was observed and

recorded, the majority of which contained [redacted]. Artifactual evidence indicates these burials were conducted after [redacted]. In addition, the burials appear to follow well-established late nineteenth and twentieth century practices with the remains housed in a wooden burial container and the body in a supine east-west alignment with the head facing west. The investigated burials within the cemetery are not unique and do not indicate the cemetery contains non-traditional cultural elements. The cemetery itself follows the nationwide "rural" or "garden" cemetery movement which establishes park-like settings surrounding monuments low to the ground (Potter and Boland 1992). Therefore, the cemetery is not likely to yield unique information on twentieth century burial practices of African American communities in urban environments. Criteria D analysis was completed with the recommendation of not NRHP eligible.

Government Resources

The category of Government encompasses buildings and sites associated with the operation of government that provide a public amenity. Subcategories include capitol buildings, city halls, fire stations, government offices, post offices, public works, and courthouses (NPS 1995). Three government resources were documented in the APE of Segment 4 (see **Table 0-10**).

Table 0-10. Segment 4 Historic-Age Government Resources Not NRHP Eligible.

Resource	Address	Eligible	Circa Year Built	Style
S4 05	619 Telephone Rd	No	1977	None/Fire Station
S4 60	333 Lockwood Dr	No	1978	New Formalism/Courthouse
S4 63	Lockwood @ Armour Dr	No	1975	Vacant/Water Treatment Plant

Source: AmaTerra 2023.

Resource S4 05, Fire Station #18, 619 Telephone Road, is a one-story building with office/living space and four bays of no particular style. The original Station #18 was constructed in 1926. In 1976, Station #18 was temporarily relocated, the old station was demolished, and a new facility was being constructed. Station #18 returned to 619 Telephone Road in 1980 (COH HFD n.d.). T. Leo Dawsy, Jr. was the architect. Harris County Courthouse Annex 39, 333 Lockwood Drive (Resource S4 60), is a two-story building with a flat roof and brick siding influenced by the New Formalism style. Changes in brick color indicated two openings, a door on the south façade, and a window on the east façade that have been bricked up. Currently used as a courthouse annex, a county employee stated she thought it originally was a Savings and Loan office. The lot was vacant in 1976, and the building appears on a 1981 aerial photograph (www.historicaerails.com) The first identified listing in city directories was 1983 for a labor union office. Alterations include bricked up openings thus changing the fenestration and reducing integrity of design and materials. Formally Lockwood Water Works, Resource S4 63 is located at Lockwood and Armour Drive. The site was abandoned by the city and is now owned by the nonprofit organization Buffalo Bayou Partnership (BBP n.d.). The property is slated to be turned into a public park. Individually and collectively, the three government resources are recommended as not eligible for listing on the NRHP as they have no known association with

important historic events, trends, or persons under Criteria A and B, and are not noteworthy examples of architecture or the work of a known architect under Criterion C.

Industrial Resources

The function or use of Industry covers buildings, structures, objects, or sites that extract raw materials or produce a product. Subcategories in Industry include manufacturing facilities, extractive facilities, waterworks, energy facilities, communication facilities, processing sites, and industrial storage (NPS NRB-15: 22). The five industrial resources documented in Segment 4 were located between Buffalo Bayou and the East Freeway, taking advantage of the ship channel and railroad. Individually and collectively, the buildings and compounds had alterations and additions that reduced integrity of style, workmanship, materials, and setting. All the industrial resources are recommended as not eligible for listing on the NRHP (see **Table 0-11**).

Table 0-11. Segment 4 Historic-Age Industrial Resources Not NRHP Eligible.

Resource	Address	Eligible	Cira Year Built	Style
S4 64	750 Lockwood Dr	No	1950	Quonset Hut
S4 65a-f	865 Lockwood Dr	No	1953/1973	None
S4 66a-d	900 Lockwood Dr	No	1953/1970	None
S4 71	1025 Lockwood Dr	No	1926/2014	None
S4 72a/b	1111 Lockwood Dr	No	1956/1968	None

Source: AmaTerra 2023.

Religious Resources

According to Criteria Consideration A, religious properties must have architectural, artistic, or historic significance to be eligible for listing in the NRHP (NPS NRB-15 1995: 21). Church buildings must meet the standards set forth in Criteria A, B, and/or C. Resource S4 52, 5719 Canal Street, is a two-story church with a gable roof in a rectangular plan. Based on the marquee and building form, plus HCAD's note of a "1950 Cinema Balcony", this was formerly a theater remodeled in 2000. Alterations include modern siding, windows, architectural ornamentation on the frieze, a rooftop sculpture, and a metal fence with stone columns. The building lacks integrity of materials, style, workmanship, feeling, and association. The resource is recommended as not eligible for listing on the NRHP.

Social and Culture Resources

Social properties are facilities used by organizations such as union halls, garden clubs, fraternal groups, or volunteers of a public service organization such as the American Red Cross (NPS NRB-15: 21). Resource S4 08, 420 Telephone Road, is the Knights of Columbus Hall. The one-story barrel-roof building has brick siding. The original entrance at the gable end has a central door flanked by three windows that are now bricked up. Additional alterations include several flat roof additions on the south façade and a flat roof addition on the west façade, plus additional bricked up windows. The building lacks integrity of materials, design, and workmanship. The resource is recommended as not eligible for listing on the NRHP.

1.16 Segment 5 Survey Results

No previous historic structure surveys were identified for Segment 5. A total of 258 resources were documented in Segment 5. Building types were a mix of 71 commerce, 166 domestic, two education facilities, one government (Kashmere Gardens Public Library), one healthcare, 15 religious facilities, one recreational resource, and 2 funerary resources. Historians recommend the Kashmere Garden Elementary School as eligible for listing on the NRHP. The remaining 257 resources are recommended as not eligible for listing on the NRHP. See Appendix E for the survey results map, photo sheets, and full inventory table.

1.16.1 Historic-Age Resources Recommended NRHP Eligible

Kashmere Gardens Elementary School, 4901 Lockwood Drive, Resource S5 103

Kashmere Gardens Elementary School was established in 1949 as a segregated, all-white school. In 1956, two Black students sued HISD to attend Sherman Elementary School and McReynolds Middle School. Beneva Williams and Delores Ross were denied attendance (Bryant 2004). In 1960, 12 students applied for admittance to all-white schools, and 11 were denied entrance. They sued HISD and won. United States District Judge Ben Connally ordered HISD to desegregate their schools. The result was the enrollment of eight children at Kashmere Gardens Elementary School with Tyronne Day as the official first "Negro" student attending the school, and Kashmere Gardens Elementary as the first integrated school in Houston. Three other schools each admitted one child (Houston Chronicle 1960). By 1984 the school was fully desegregated (Target Hunger n.d.). Kashmere Gardens Elementary School is recommended eligible under Criterion A in the area of Social History under the Civil Rights movement at the local level of significance.

Per the cornerstone plaque on the school, the supervising architect was Stayton Nunn with Lloyd and Morgan as the architects. Stayton Nunn got a BS in Architecture from Rice University. He worked for architectural firms, started his own partnership, taught at Rice University, and worked for Houston Independent School District from 1946-1958. He is best known for the River Oaks Community Shopping Center (Robert 1980). Hermon Lloyd graduated from Rice University and teamed with another Rice architectural student Harvin Moore. Their firm designed over 84 houses in Rivers Oaks (Docomomo US n.d.). After WWII Lloyd partnered with W.B. Morgan. Rice alumni Arthur Jones joined the firm in 1947 and became a partner in 1962, making the firm's name Lloyd Morgan Jones (Koush 2017: 31). The firm became well known in Houston and designed over 2,000 projects. Kashmere Gardens Elementary School is recommended not eligible under Criterion B; although designed by architects, the school has no unique features and is not the best representation of the work produced by these architects.

The historic-age school buildings have brick siding and walls of horizontal windows in the Contemporary Style (**Figure 0-5**). Based on architectural features, materials, and historic aerials (1953), originally there were three main buildings and three smaller buildings. Five additional buildings were added north of the courtyard circa 1981 and 2002 (www.historicaerials.com). Covered walkways connect the buildings. Based on the additions, the school lacks integrity of materials, design, workmanship, and setting. The school is recommended not eligible under Criterion C, Architecture.

Figure 0-5. Image direction East from Lockwood Drive.



Source: Houston Chronicle 1960

1.16.2 Historic-Age Resources Recommended Not Eligible for the NRHP

Commercial Resources

Commerce covers a wide variety of business activities, including retail stores, professional offices, warehouses, and restaurants. Many of the surveyed buildings had changes and/or additions as owners updated facades or expanded the building footprint to make the building marketable. Any association with significant persons, events, or trends discovered by Project historians was documented on the individual survey form. Commerce function subcategories include business, professional, organization, financial institution, specialty store, department store, restaurant, and warehouse (NPS NRB-15: 20). Overall, the commercial buildings lacked integrity of materials, workmanship, and design. The commercial resources are recommended not eligible for listing on the NRHP individually or as part of any historic districts (see **Table 0-12**).

Table 0-12. Segment 5 Commercial Resources Recommended Not Eligible to the NRHP

Resource	Address	Eligible	Circa Year Built	Style
S5 21	1702 Lockwood Dr	No	1969/2018	None
S5 26	1906 Lockwood Dr	No	1940	Minimal Traditional
S5 30	5501 Perkins St	No	1950	None
S5 32	2116 Lockwood Dr	No	1972	Ranch
S5 33	2124 Lockwood Dr	No	1955	Ranch
S5 40	2301 Lockwood Dr	No	1950	None
S5 41	2302 Lockwood Dr	No	1978	Spanish Revival influence
S5 48	3406 Lockwood Dr	No	1959	None
S5 49	3414 Lockwood Dr	No	1957	None
S5 50	3448 Lockwood Dr	No	1966	None
S5 52	3536 Lockwood Dr	No	1962/2016	None
S5 54	3525 Lockwood Dr	No	1964	None

Resource	Address	Eligible	Circa Year Built	Style
S5 55	3507 Lockwood Dr	No	1935	Minimal Traditional
S5 56	3509 Lockwood Dr	No	1960	Ranch
S5 57	3515 Lockwood Dr	No	1960	None
S5 58	3714 Lockwood Dr	No	1955	None
S5 59	3716 Lockwood Dr	No	1960/1980	None
S5 60	3719 Lockwood Dr	No	1950	None
S5 61	3801 Lockwood Dr	No	1950/2016	None
S5 62	3802 Lockwood Dr	No	1973	Contemporary
S5 65	3830 Lockwood Dr	No	1948	None
S5 73	3913 Lockwood Dr	No	1976	None
S5 81	4017 Lockwood Dr	No	1953	None
S5 84	4116 Lockwood Dr	No	1965	None
S5 85	4121 Lockwood Dr	No	1960	None
S5 87	4315 Lockwood Dr	No	1969	None
S5 88	4401 Lockwood Dr	No	1969	None
S5 95	4600 Lockwood Dr	No	1975/2010	None
S5 96	4605 Lockwood Dr	No	1957/2014	None
S5 97	4613 Lockwood Dr	No	1935	None
S5 101	4717 Lockwood Dr	No	1956	Ranch
S5 104	4902 Lockwood Dr	No	1940	Minimal Traditional
S5 106	4922 Lockwood Dr	No	1940	None
S5 108	5008 Lockwood Dr	No	1960/1988	None
S5 109	5101 Lockwood Dr	No	1962	Contemporary Ranch
S5 110	5104 Lockwood Dr	No	1966	None
S5 112	5201 Lockwood Dr	No	1962	None
S5 119	5815 Lockwood Dr	No	1969	Contemporary
S5 135	6729 Lockwood Dr	No	1953	None
S5 136	4906 Shreveport Blvd	No	1970	None
S5 139	6902 Lockwood Dr	No	1956	None
S5 140	7104 Lockwood Dr	No	1976	None
S5 176	7948 Lockwood Dr	No	1958	Ranch
S5 180a/b	8033 Lockwood Dr	No	1966/1980	Modern
S5 181	8020 Lockwood Dr	No	1976	None
S5 189	8503 Lockwood Dr	No	1976	Ranch
S5 197	4902 Laura Koppe Rd	No	1965	Modern
S5 198	4901 Laura Koppe Rd	No	1951	None
S5 223	9205 Lockwood Dr	No	1972	None
S5 224	9213 Lockwood Dr	No	1971	None
S5 233	4902 Tidwell Rd	No	1966	None
S5 234	4821 Tidwell Rd	No	1962	None
S5 237	4713 Tidwell Rd	No	1978	None

Resource	Address	Eligible	Circa Year Built	Style
S5 238a/b	4635 Tidwell Rd	No	1940	None
S5 239	4626 Tidwell Rd	No	1960	None
S5 240	4319 Tidwell Rd	No	1970	None
S5 241	4317 Tidwell Rd	No	1970	None
S5 242	4315 Tidwell Rd	No	1970	None
S5 243	4202 Tidwell Rd	No	1970	None
S5 244	4104 Tidwell Rd	No	1968	None
S5 247	3814 Tidwell Rd	No	1950	None
S5 250	3126 Tidwell Rd	No	1965	None
S5 251	3110 Tidwell Rd	No	1966	None
S5 252	3054 Tidwell Rd	No	1960	None
S5 253	9420 Jensen Dr	No	1962	None
S5 254	9502 Jensen Dr	No	1962/1990	New Formalism
S5 255	9607 Jensen Dr	No	1966/2002	None
S5 256	9629 Jensen Dr	No	1953	None
S5 257	9631 Jensen Dr	No	1973	None
S5 258	9701 Jensen Dr	No	1953	None

Source: AmaTerra 2023.

Domestic Resources

Domestic is a category of function and use of buildings identified by National Register Bulletin 15. Subcategories of domestic include single dwelling, multiple dwelling, secondary structure, hotel, and camp. For this report, the term "ancillary building" describes secondary structures such as storage sheds, carports, garage apartments, and detached garages. Subcategories of the Domestic function include single dwellings, multiple dwellings, secondary structures, apartments, and hotels/motels.

Single family dwellings with and without ancillary buildings are the most common resource identified by the standing structures survey. The years following World War II saw the greatest homogenization of suburban housing stock as developers undertook large subdivision projects to counteract a housing shortage and take advantage of government subsidized housing for veterans. Most of the houses identified in the survey can be divided into four styles: Folk Victorian, Bungalow, Minimal Traditional, and Ranch.

Bungalow Style (1905-1930)

The Bungalow style is a modest example of the Craftsman Bungalow style which originated in California and quickly spread through magazines and pattern books. The bungalow is most notable for its front gable supported by large columns creating a wide front porch. The surveyed resources have the massing and coupled windows of a bungalow but failed to have architectural features such as the wide front porch to make them a notable example of the Craftsman bungalow.

Tudor Style (1900-1940)

The Tudor style (1920-1940) is based on early English building styles and identified by their steeply pitched roof and front-facing gables. Other character defining features include massive chimneys, multi-pane windows, and decorative half-timbering in the gable end. (McAlester 2014: 449).

Minimal Traditional Style (1935-1950)

Minimal Traditional styles houses were designed to provide the most efficient floor plan at the lowest cost thus providing the opportunity for home ownership to as many US citizens as possible. Following the Federal Housing Administration (FHA) guidelines insured financing for both the builder and homeowner (McAlester 2014: 589). The most prominent features are single-story, side gable roofs, rectangular plans, little or no eave overhang and minimal architectural details.

Ranch Style (1935-1975)

The Ranch style (American Ranch, Western Ranch, or California Rambler) originated in the early 1930s in California. The style loosely followed the Spanish Colonial precedents in California and was influenced by Craftsman and Prairie house styles that had been widely popular earlier in the twentieth century. The Ranch style remained largely confined to California until after World War II. A combination of factors created a "perfect storm" that led to the wide popularity of the style in the 1950s and 1960s: the demand for single-family housing by World War II veterans starting families; the GI Bill, which provided many different types of loans for returning veterans to buy homes; an increase in automobile ownership, which freed workers from the need to live close to public transportation routes; and the strict FHA-Veterans Affairs (VA) guidelines under which developers operated in order to be able to market the houses to buyers using FHA and VA government-subsidized mortgages.

Ranch style houses have several notable, character-defining features. They are usually horizontally oriented parallel to the street with asymmetrical facades. The roof is low pitched, either gabled or hipped, with large eaves. Windows tend to be large and plentiful. Fixed picture windows and sliding glass doors are common. The overall form emphasizes the horizontal, accentuated by low walls, horizontal wood, brick, or stone siding, and a long, narrow shape with simple floor plans and an attached garage (McAlester 2014: 597–612). Because Ranch houses are quite common, the bar of individual architectural significance tends to be high.

Included in the discussion of residential houses are their ancillary buildings, which include detached garages, detached carports, storage sheds, large and small, and workshops. These ancillary buildings are often added years after the original construction of the house to hold equipment and objects that cannot be stored in the primary house. Often, they are prefabricated structures or simple buildings and unless noteworthy the buildings are not included as part of the discussion of the primary residence.

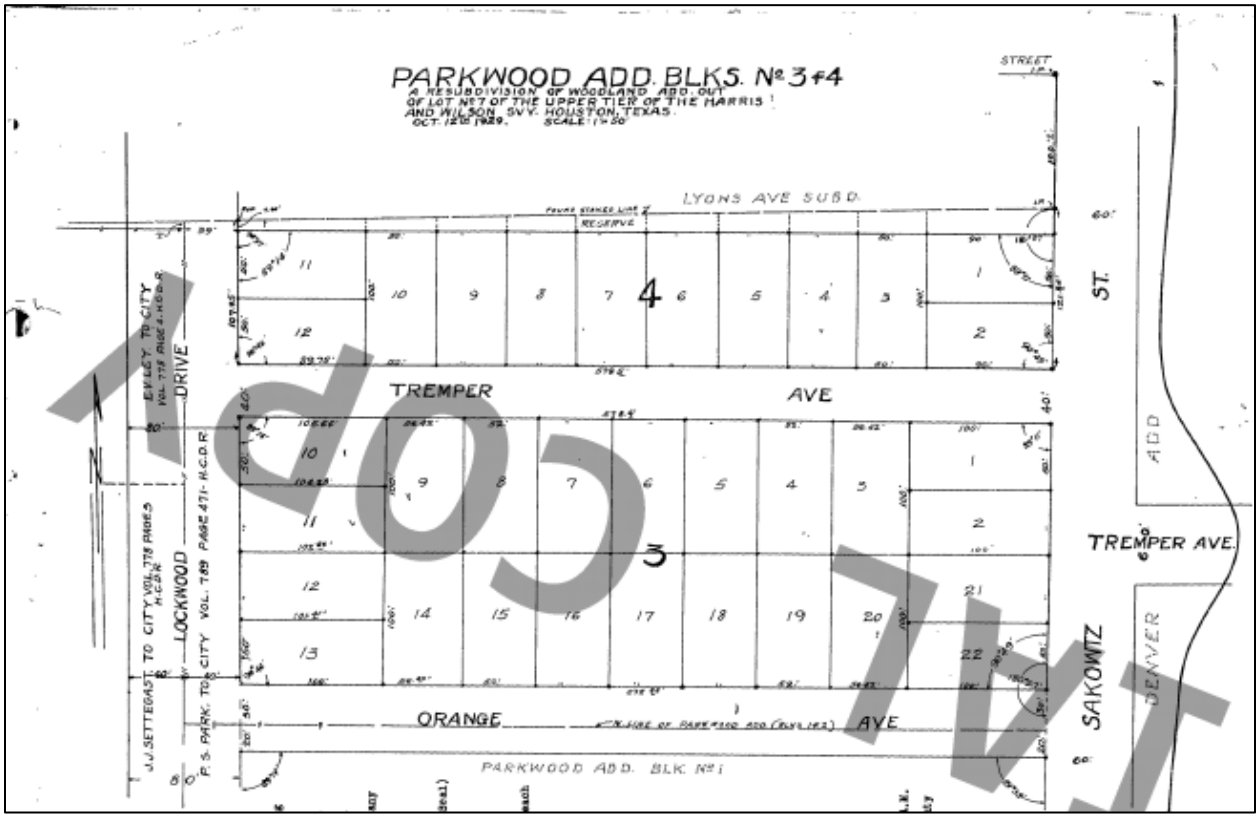
Parkwood Residential Subdivision

Parkwood Addition blocks 3 and 4 were a re-subdivision of Woodland Addition of lot number 7 of the upper tier of the Harris and Wilson Survey (HCC Vol. 013049 Pg. 1) (see **Figure 0-6**). According to the plat, filed in 1937, P.S. Park was the President of the Parkwood Company and owner of the land.

The plat map has two blocks, two streets, Tremper and Orange, and a total of 32 lots. Many of the houses in the Parkwood Addition were designed in the Tudor Style. At the time of the survey there were 10 lots with houses, four vacant lots, and the remaining lots were combined and had commercial buildings or were used for industrial storage. Based on the lack of a cohesive subdivision, the change in lots sizes and use, plus alterations and additions to the individual houses, Parkwood Addition and the buildings therein are recommended not eligible under Criteria A, B, and C individually or as a potential historic district (see

Table 0-13).

Figure 0-6. Map Portion of the Parkwood Addition plat filed in 1937.



Source: HCC Vol. 013049 Pg. 1.

Redlined

Table 0-13. Segment 5 Historic-Age Resources in Parkwood Subdivision Not Eligible to NRHP.

Resource	Address	Eligible	Circa Year Built	Style
S5 01	5516 Tremper St	No	1930	Tudor
S5 02	5520 Tremper St	No	1935	Tudor
S5 03	5536 Tremper St	No	1935	Tudor
S5 04	5540 Tremper St	No	1940	Minimal Traditional
S5 05	5531 Tremper St	No	1948	Minimal Traditional
S5 06	5535 Tremper St	No	1935	Tudor
S5 07	5538 Farmer St	No	1960	Ranch
S5 08	5540 Farmer St	No	1935	Bungalow
S5 09a-c	5542 Farmer St	No	1950	Ranch

Source: AmaTerra 2023.

Individual Domestic Historic-Age Resources

A total of 137 single-family dwellings, not identified with any plat, were surveyed in Segment 5. Residential properties are often the most common building type encountered during a survey. Most are single-family houses. Unsympathetic alterations, such as the application of synthetic siding or replacement of original windows, or additions that increase the square footage and change the original design, dimmish the building's architectural integrity and make it not eligible for NRHP listing (see **Table 0-14**).

Table 0-14. Segment 5 Individual Domestic Resources Recommended Not Eligible to NRHP.

Resource	Address	Eligible	Circa Year Built	Style
S5 11	5410 Farmer St	No	1925	Craftsman
S5 12	5406 Farmer St	No	1930	Minimal Traditional
S5 13	5314 Farmer St	No	1935	Craftsman
S5 14	5310 Farmer St	No	1950	Ranch
S5 15	5306 Farmer St	No	1950	Ranch
S5 16	5401 Farmer St	No	1949	Minimal Traditional
S5 17	5611 Lyons Ave	No	1935	Minimal Traditional
S5 18	5603 Lyons Ave	No	1925	Craftsman
S5 20	1707 Lockwood Dr	No	1946	Ranch
S5 22	1800 Lockwood Dr	No	1976/2011	None
S5 24	1803 Lockwood Dr	No	1940	Minimal Traditional
S5 25	1810 Lockwood Dr	No	1950	Ranch
S5 26	1906 Lockwood Dr	No	1940	Minimal Traditional
S5 27	1910 Lockwood Dr	No	1935	Minimal Traditional
S5 29	1920 Lockwood Dr	No	1955	Ranch
S5 34	2209 Lockwood Dr	No	1946	Minimal Traditional
S5 35	2213 Lockwood Dr	No	1960	Ranch

Resource	Address	Eligible	Circa Year Built	Style
S5 36	2219 Lockwood Dr	No	1970	Ranch
S5 37	2220 Lockwood Dr	No	1939	Minimal Traditional
S5 42	2314 Lockwood Dr	No	1939	Minimal Traditional
S5 46	2419 Lockwood Dr	No	1938/1988	Minimal Traditional
S5 51	3210 Cushing St	No	1949/1988	Minimal Traditional
S5 53	3604 Lockwood Dr	No	1940	Minimal Traditional
S5 64	3822 Lockwood Dr	No	1939	Minimal Traditional
S5 67	3901 Lockwood Dr	No	1940	Minimal Traditional
S5 70	3910 Lockwood Dr	No	1955	Minimal Traditional
S5 71	3912 Lockwood Dr	No	1955	Minimal Traditional
S5 74	3915 Lockwood Dr	No	1940	Minimal Traditional
S5 75	3917 Lockwood Dr	No	1950	Ranch
S5 77	4005 Lockwood Dr	No	1949	Ranch (vacant)
S5 78	4014 Lockwood Dr	No	1930	Craftsman
S5 79	4016 Lockwood Dr	No	1940	Ranch
S5 82	4115 Lockwood Dr	No	1945/2011	Minimal Traditional
S5 83	4117 Lockwood Dr	No	1945/2010	Minimal Traditional
S5 86	4201 Lockwood Dr	No	1950/2018	Minimal Traditional
S5 89	4414 Lockwood Dr	No	1925	Craftsman
S5 90	4502 Lockwood Dr	No	1935	Minimal Traditional
S5 92	4516 Lockwood Dr	No	1940	Minimal Traditional
S5 93	4518 Lockwood Dr	No	1944	None
S5 94	4601 Lockwood Dr	No	1945	Minimal Traditional
S5 100	4705 Lockwood Dr	No	1935/2013	Bungalow
S5 101	4717 Lockwood Dr	No	1956	Ranch
S5 102	4805 Lockwood Dr	No	1940	Bungalow
S5 105	4906 Lockwood Dr	No	1945	Minimal Traditional
S5 113	5601 Lockwood Dr	No	1925	Craftsman (vacant)
S5 114	5605 Lockwood Dr	No	1940	Minimal Traditional
S5 115	5613 Lockwood Dr	No	1940/1983	Minimal Traditional
S5 120	6406 Lockwood Dr	No	1940	Minimal Traditional
S5 121	6515 Lockwood Dr	No	1940	Minimal Traditional
S5 122	6520 Lockwood Dr	No	1930	Bungalow
S5 123	6522 Lockwood Dr	No	1953	Minimal Traditional
S5 124	6603 Lockwood Dr	No	1946	Ranch
S5 125	6606 Lockwood Dr	No	1964	None (vacant)
S5 126	6612 Lockwood Dr	No	1957	Minimal Traditional
S5 128	6616 Lockwood Dr	No	1957	Ranch
S5 129	6704 Lockwood Dr	No	1947	Minimal Traditional

Resource	Address	Eligible	Circa Year Built	Style
S5 130	6708 Lockwood Dr	No	1957	Minimal Traditional
S5 132	6707 Lockwood Dr	No	1953	Ranch
S5 133	6716 Lockwood Dr	No	1930	Minimal Traditional
S5 134	6718 Lockwood Dr	No	1930	Minimal Traditional
S5 137	4843 Shreveport Blvd	No	1953	Ranch
S5 141	7210 Lockwood Dr	No	1956/2012	Ranch
S5 142	7221 Lockwood Dr	No	1940	Minimal Traditional
S5 143	7227 Lockwood Dr	No	1938	Minimal Traditional
S5 144	7301 Lockwood Dr	No	1945	Ranch
S5 146	7306 Lockwood Dr	No	1947	Minimal Traditional
S5 148	7405 Lockwood Dr	No	1953	Minimal Traditional
S5 150	7419 Lockwood Dr	No	1935	Minimal Traditional
S5 154	7505 Lockwood Dr	No	1940	Minimal Traditional (vacant)
S5 159	7525 Lockwood Dr	No	1946	Minimal Traditional
S5 161	7618 Lockwood Dr	No	1955	Minimal Traditional
S5 162	7702 Lockwood Dr	No	1965	Ranch
S5 163	7709 Lockwood Dr	No	1950	Minimal Traditional
S5 164	7719 Lockwood Dr	No	1945	Minimal Traditional
S5 165	7724 Lockwood Dr	No	1950	Ranch
S5 167	7805 Lockwood Dr	No	1952	Ranch
S5 168	7809 Lockwood Dr	No	1958	Ranch (vacant)
S5 169	7901.5 Lockwood Dr	No	1945	Minimal Traditional
S5 170	7906 Lockwood Dr	No	1940	Minimal Traditional
S5 171a/b	7914 Lockwood Dr	No	1950	Minimal Traditional
S5 172	7925 Lockwood Dr	No	1966	Ranch
S5 173	7929 Lockwood Dr	No	1955	Ranch
S5 177	7949 Lockwood Dr	No	1957	Ranch
S5 178	8004 Lockwood Dr	No	1958	Minimal Traditional
S5 179	8006 Lockwood Dr	No	1946	Minimal Traditional (vacant)
S5 182	4825 Weaver Rd	No	1962	Ranch
S5 183	8215 Lockwood Dr	No	1950	Ranch
S5 184	8216 Lockwood Dr	No	1940	Minimal Traditional
S5 186	4815 Bostic St	No	1960	Ranch
S5 187	8401 Lockwood Dr	No	1960	Ranch
S5 188	4822 Keeland St	No	1940	Minimal Traditional
S5 190	8605 Lockwood Dr	No	1935	Minimal Traditional
S5 191	8609 Lockwood Dr	No	1935	Minimal Traditional
S5 192	8613 Lockwood Dr	No	1950	Minimal Traditional
S5 193	8617 Lockwood Dr	No	1940	Minimal Traditional

Resource	Address	Eligible	Circa Year Built	Style
S5 194	8618 Lockwood Dr	No	1945	Minimal Traditional
S5 196	8709 Lockwood Dr	No	1940	Minimal Traditional
S5 199	8814 Lockwood Dr	No	1950	Ranch
S5 200	8818 Lockwood Dr	No	1950	Minimal Traditional
S5 201	8817 Lockwood Dr	No	1967	Ranch
S5 202	8901 Lockwood Dr	No	1950	Minimal Traditional
S5 203	8906 Lockwood Dr	No	1950	Minimal Traditional
S5 204	8914 Lockwood Dr	No	1950	Ranch
S5 205	8913 Lockwood Dr	No	1950	Minimal Traditional
S5 206	8917 Lockwood Dr	No	1940	Minimal Traditional
S5 207	8918 Lockwood Dr	No	1950	Ranch
S5 208	9002 Lockwood Dr	No	1952	Minimal Traditional
S5 210	9007 Lockwood Dr	No	1955	Ranch
S5 211	9009 Lockwood Dr	No	1956	Ranch
S5 212	9015 Lockwood Dr	No	1952	Ranch
S5 213	9017 Lockwood Dr	No	1953	Ranch
S5 214	4902 Fitch St	No	1950	Minimal Traditional
S5 215	9102 Lockwood Dr	No	1950	Minimal Traditional
S5 216	9106 Lockwood Dr	No	1950	Ranch
S5 217	9113 Lockwood Dr	No	1950	Minimal Traditional
S5 218	4906 Firnat	No	1970	Ranch
S5 219	9202 Lockwood Dr	No	1964	Ranch
S5 220	9201 Lockwood Dr	No	1950	Ranch
S5 221	9206 Lockwood Dr	No	1950	Ranch
S5 222	9210 Lockwood Dr	No	1950	Ranch
S5 226	9302 Lockwood Dr	No	1946	Ranch (vacant)
S5 227	9305 Lockwood Dr	No	1946	Minimal Traditional
S5 229	9310 Lockwood Dr	No	1965	Ranch
S5 230	4826 Ireland St	No	1950	Ranch
S5 231	9401 Lockwood Dr	No	1946	Ranch
S5 236	4720 Tidwell Rd	No	1952	Ranch
S5 245a/b	4005 Tidford St	No	1940/1982	Minimal Traditional
S5 246	3912 Tidwell Rd	No	1945/1957	Ranch

Source: AmaTerra 2023.

Multi-family Dwellings

Segment 5 had the highest number of multi-family dwellings (31 parcels) in the Project APE. The typology included duplexes, former hotels converted to apartments, and apartment block buildings. In addition, several lots had multiple single-family dwellings on a single parcel. All the multi-family dwellings were recommended not eligible for listing on the NRHP (see **Table 0-15**).

Table 0-15. Segment 5 Multi-family Dwellings Recommended Not Eligible to NRHP.

Resource	Address	Eligible	Circa Year Built	Style
S5 19	1615 Lockwood Dr	No	1965	None
S5 39	2223 Lockwood Dr	No	1965	Ranch
S5 44	2401 Lockwood Dr	No	1965	Ranch
S5 45	2417 Lockwood Dr	No	1960/1965	Ranch
S5 68	3905 Lockwood Dr	No	1970/2018	None
S5 76a-d	4003 Lockwood Dr	No	1940	Bungalow/None
S5 80a/b	4114 Lockwood Dr	No	1944/1970	Ranch/None
S5 91	4515 Lockwood Dr	No	1970/2018	None
S5 99	4712 Lockwood Dr	No	1962/1985	None
S5 116	5401 Troost St	No	1964/2012	None
S5 117	5701 Lockwood Dr	No	1973	None
S5 118 a/b	5802 Lockwood Dr/ 5412 McGee St	No	1940/1969	Minimal Traditional/Ranch
S5 125	6606 Lockwood Dr	No	1964	None
S5 127 a/b	6611 Lockwood Dr	No	1960/2016	Ranch/None
S5 131 a/b	6705 Lockwood Dr	No	1963/1945	Ranch/None
S5 138 a/b	6915 Lockwood Dr	No	1957	Minimal Traditional/Ranch
S5 145	7302 Lockwood Dr	No	1940/2020	Minimal Traditional
S5 147 a-c	7309 Lockwood Dr	No	1940/1975/1975	Minimal Traditional/ None/Ranch
S5 149	7406 Lockwood Dr	No	1965	Ranch
S5 151a/b	7425 Lockwood Dr	No	1945/1945	Minimal Traditional/Ranch
S5 153	4921 Denmark St	No	1960	Ranch
S5 156 a/b	7511 Lockwood Dr	No	1951/1951	None/None
S5 157	7516 Lockwood Dr	No	1965	Ranch
S5 158	7521 Lockwood Dr	No	1965	Ranch
S5 171a/b	7914 Lockwood Dr	No	1950	Minimal Traditional/None
S5 175	7944 Lockwood Dr	No	1966/1993	Ranch
S5 185	4901 Bostic St	No	1960/2015	Ranch
S5 209	4825 Boicewood Dr	No	1960	Ranch
S5 225	9222 Lockwood Dr	No	1964	None
S5 248	3214 Tidwell Rd	No	1963	None
S5 249	3132 Tidwell Rd	No	1963	None

Source: AmaTerra 2023.

Funerary Resources

Resource S5 69, 3902 Lockwood Drive, was a conglomeration of three attached buildings. A one-story flat roof building is attached, on either side, to residential dwellings and the south façade had an attached carport (c. 2006). Alterations include boarded up windows, a change in fenestration, loss of the front porch and siding, plus a change in use. The building was vacant at the time of the survey.

Lockwood Funeral Home, S5 232, 9402 Lockwood Drive, started as a one-story Contemporary style building with brick siding. Alterations include modern windows, an attached carport, a two-story rear addition, and a large addition to the north façade that almost doubled the size of the original footprint (c. 1984). The funerary resources are recommended as not eligible for listing on the NRHP.

Government Resources

Kashmere Garden Branch Public Library, Resource S5 107, 5411 Pardee Street, was designed by the local architecture firm of Don J. Tomasco and Associates (see **Figure 0-7**). Constructed in 1971, the New Formalism style is evident in the wide overhanging eaves supported by oblong concrete columns set on a raised concrete foundation. The fluted columns have a cut-away base, giving the feeling of floating columns, while the fluting matches the pattern of wood of the frieze. The building's architectural features remain intact, and it is a solid example of New Formalism. No evidence was found to link the library to a specific event or trend. The architectural firm was not known for innovative architectural designs and no awards were identified with the building. Based on the known information the building does not rise to the level of significance necessary for inclusion in the NRHP under Criteria A, B, or C and is therefore recommended not eligible.

Figure 0-7. Kashmere Garden Public Library. Camera direction: Northeast.



Source: AmaTerra 2023.

Healthcare Resources

Resource S5 10, Leland Pharmacy, 5412 Farmer Street is a one-story, gable roof building with metal siding and brick wainscot. The building has no distinctive style. Alterations include modern windows,

roof, siding, a side addition, and a change in fenestration. The resource is recommended as not eligible for listing on the NRHP.

Recreation and Culture Resources

Resource S5 47, Lockwood Skating Palace, 3323 Lockwood Drive, is a one-story roller skate rink with fiber cement siding. The protruding porch extends around the buildings corner and is supported by pairs of columns set at about 30 degrees to form a "V" shape. Per HCAD the building was constructed in 1948. The current owners have operated the business since 1982 (Lockwood Skating Palace n.d.). Alterations include modern siding, a rear addition, and changes in fenestration. The building lacks integrity of design, material, and workmanship. The building has no known association with significant trends, events, or people. Resource S5 47 is recommended not eligible for the NRHP under Criterion A, B, and C.

Religious Resources

According to Criteria Consideration A, religious properties must have architectural, artistic, or historic grounds to be eligible for listing in the NRHP (NPS NRB-15 1995: 21). Church buildings must meet the standards set forth in Criteria A, B, and/or C. Segment 5 had the most religious buildings in the survey area. Churches as an institution are historically important to the African American community, not just for religion, but as a gathering space for shared community beliefs (The Registry n.d.). The term "Black Church" is a misnomer as the African American community is as diverse in their religious beliefs as any other ethnic group (The Registry n.d.). Based on the church names there was no obvious indication that any of the churches surveyed were directly associated with an African American congregation. In general, the buildings lacked architectural integrity due to alterations. All the religious facilities are recommended not eligible for inclusion in the NRHP (see **Table** 0-16).

Table 0-16. Segment 5 Religious Resources Recommended Not Eligible to NRHP.

Resource	Address	Eligible	Circa Year Built	Style
S5 23	1801 Lockwood Dr	No	1975	None
S5 28	1815 Lockwood Dr	No	1955	Ranch
S5 31	2010 Lockwood Dr	No	1970	Ranch
S5 38	2222 Lockwood Dr	No	1953	Contemporary Ranch
S5 43	2324 Lockwood Dr	No	1952	None
S5 66	3827 Lockwood Dr	No	1935	None
S5 72	3911 Lockwood Dr	No	1950	None
S5 98	4615 Lockwood Dr	No	1976	None
S5 111	5117 Lockwood Dr	No	1958	Contemporary influence
S5 152	4819 Denmark St	No	1938/1962	Contemporary
S5 155	7512 Lockwood Dr	No	1957/1989	Ranch
S5 174	7930 Lockwood Dr	No	1972	Ranch
S5 195	8622 Lockwood Dr	No	1953	None
S5 228	9311 Lockwood Dr	No	1972/1995	Contemporary
S5 235	4808 Tidwell Rd	No	1978	None

Source: AmaTerra 2023.

Eligibility and Effect

A total of 15 resources, one historic district and 12 individual resources, are recommended eligible and two are listed on the NRHP. Based on the criterion for an adverse effect, it is recommended there will be no adverse effect to the recommended eligible and/or listed resources. See **Table 0-1** for Recommended NHRP Eligible or Listed and **Table 0-2** for Recommended Effects on Eligible or Listed NRHP Resources.

1.17 Eligibility

Table 0-1. Recommended NHRP Eligible or Listed Historic Resources.

Segment	Historic Resources
Segment 1	No resources are listed or recommended eligible.
Segment 2	1836 Richmond Avenue is a Mission Revival style house eligible under Criterion C in the area of Architecture (TxDOT n.d.).
	S2 07, 3336 Richmond Avenue, is a New Formalism style building, designed by Neuhaus and Taylor, recommended eligible under Criterion C in the area of Architecture at the local level.
	S2 08, 3334 Richmond Avenue, is a New Formalism style building recommended eligible under Criterion C in the area of Architecture at the local level.

Segment	Historic Resources
	S2 09, 3323 Richmond Avenue, is an Expressionism style building, designed by Neuhaus and Taylor, recommended eligible under Criterion C in the area of Architecture at the local level.
	S2 10, 3322 Richmond Avenue, is an International style building recommended eligible under Criterion C in the area of Architecture at the local level.
	S2 11, 3311 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
	S2 13, 3121 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
	S2 15, 3101 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
Segment 3	Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy) at 1906 Cleburne Street was determined eligible for the NRHP under Criterion C in the area of Architecture (Mitchell and Pettis 2019).
	Third Ward Historic District. In 2019 the THC determined the district eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development and under Criterion C in the area of Architecture.
	Houston Negro Hospital at 3402 Ennis Street, S3 25a, is listed in the NRHP under Criterion A in the area of Ethnic Heritage/Black. The hospital and nursing school are on one parcel in the NRHP eligible Third Ward Historic District.
	Houston School of Nursing School at 3402 Ennis Street, S3 25b, is listed under Criterion A in the area of Ethnic Heritage/Black and Criterion C in the area of Architecture. The hospital and nursing school are on one parcel in the NRHP eligible Third Ward Historic District.
Segment 4	International Harvester Company (Texas Mattress Makers), 4901 Navigation Boulevard, Resource S4 61. International Harvester Houston Branch House represents the thriving economy of Houston and the investment of international firms into the economy during the Great Depression Era (1929-1941). Houston Branch House is recommended eligible under Criterion A in the area of Commerce at the local level of significance.
	Western Electric Company (Harris County Sheriff Offices), 601 Lockwood Drive, Resource S4 62. The building at 601 Lockwood Drive was constructed circa 1948 and was occupied by Southwestern Bell Telephone Company, Western Electric Company, and Whole Electric Supplies. The Southwestern Bell Telephone Company building represents the thriving economy of Houston after World War II and is recommended eligible under Criteria A, in the area of Commerce at the local level of significance. The building is intact and a good example of the Art Deco style. The building is recommended eligible under Criterion C in the area of Architecture at the local level of significance.

Segment	Historic Resources
Segment 5	Kashmere Gardens Elementary School, 4901 Lockwood, Resource S5 103, was an all-white school when it opened in 1949. Following a lawsuit by several Black families in 1960, the school became the first integrated school in Houston. It is recommended eligible under Criterion A in the area of Social History under the Civil Rights Movement at the local level of significance.

Source: AmaTerra 2023.

1.18 Recommended Effects to Eligible or Listed NRHP Historic Resources

Based on the updated Project design and updated ROW data dated January 27, 2023, and supplemented on March 25th. **Table 0-2** identifies potential impacts to the recommended eligible and listed NRHP resources.

Table 0-2. Recommended Effect on Eligible or Listed NRHP Resources.

Segment	Resource	Eligible or Listed Resources	Effect Recommendation
Segment 1	N/A	No resources listed or recommended eligible	No effect.
Segment 2	N/A	1836 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 07	3336 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 08	3334 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 09	3323 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 10	3322 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 11	3311 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 13	3121 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
	S2 15	3101 Richmond Avenue NRHP eligible under Criterion C	No adverse effect.
Segment 3	S3 16a	Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy) 1906 Cleburne Street NRHP eligible under Criterion C	No adverse effect.
		Third Ward Historic District NRHP eligible under Criteria A and C	No adverse effect.
	S3 25a	Houston Negro Hospital 3402 Ennis Street NRHP listed under Criterion A Contributing to Third Ward Historic District	No adverse effect.
	S3 25b	Houston Negro Hospital School of Nursing	No adverse effect.

Segment	Resource	Eligible or Listed Resources	Effect Recommendation
		NW corner of Holman and Ennis Streets NRHP listed under Criteria A and C Contributing to Third Ward Historic District	
Segment 4	S4 61	International Harvester Company (Texas Mattress Makers), 4901 Navigation Boulevard NRHP eligible under Criterion A	No adverse effect.
	S4 62	Western Electric Company (Harris County Sheriff's Office) 601 Lockwood Drive NRHP eligible under Criteria A and C	No adverse effect.
Segment 5	S5 103	Kashmere Gardens Elementary School, 4901 Lockwood NRHP eligible under Criterion A	No adverse effect.

Source: AmaTerra2023.

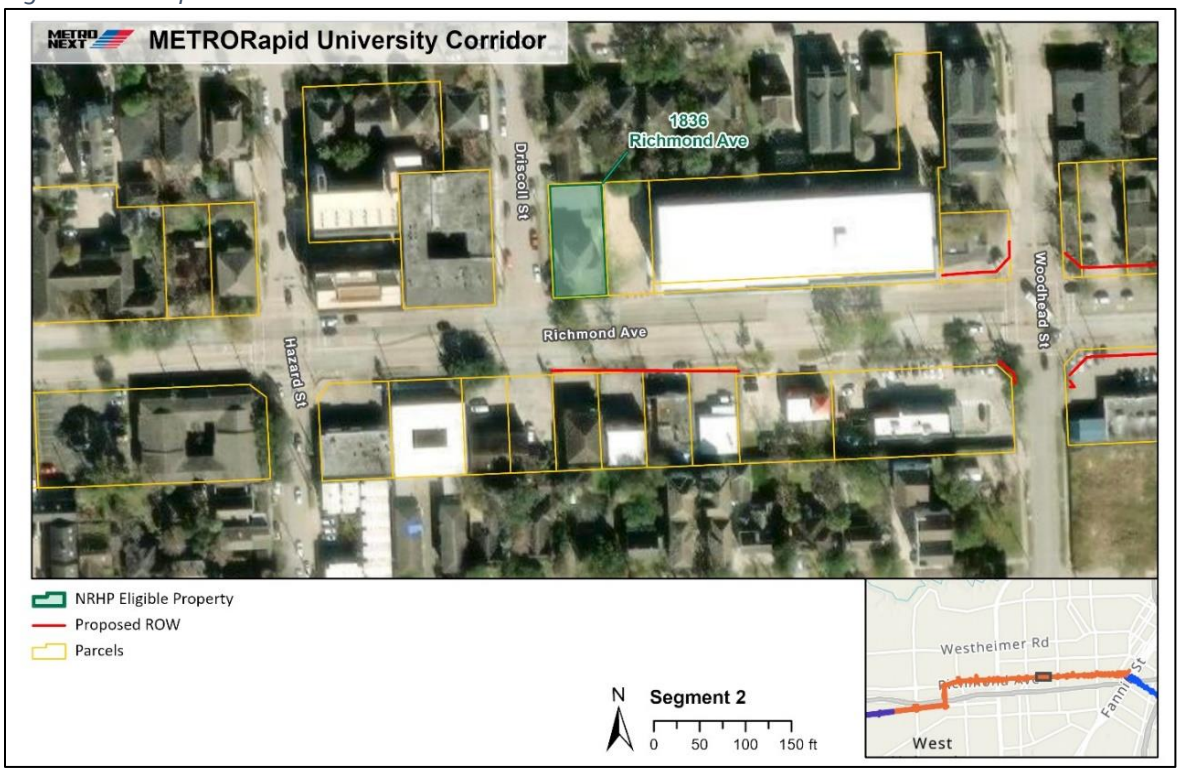
1.18.1 Segment 2 Effects on NRHP Eligible Properties

Segment 2 has eight NRHP eligible properties all eligible under Criterion C in the area of Architecture. As of January 27, 2023, new ROW was proposed at Avenue, 3336 Richmond Avenue, and 3101 Richmond Avenue.

1836 Richmond Avenue

The building at 1836 Richmond Avenue is eligible under Criterion C, Architecture. The front façade is oriented to Richmond Avenue and has a yard and sidewalk. There is no proposed ROW acquisition at this property and no change that would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. See **Figure 0-1**. The Project is recommended to have no adverse effect on 1836 Richmond Avenue.

Figure 0-1. Proposed ROW at 1836 Richmond Avenue.

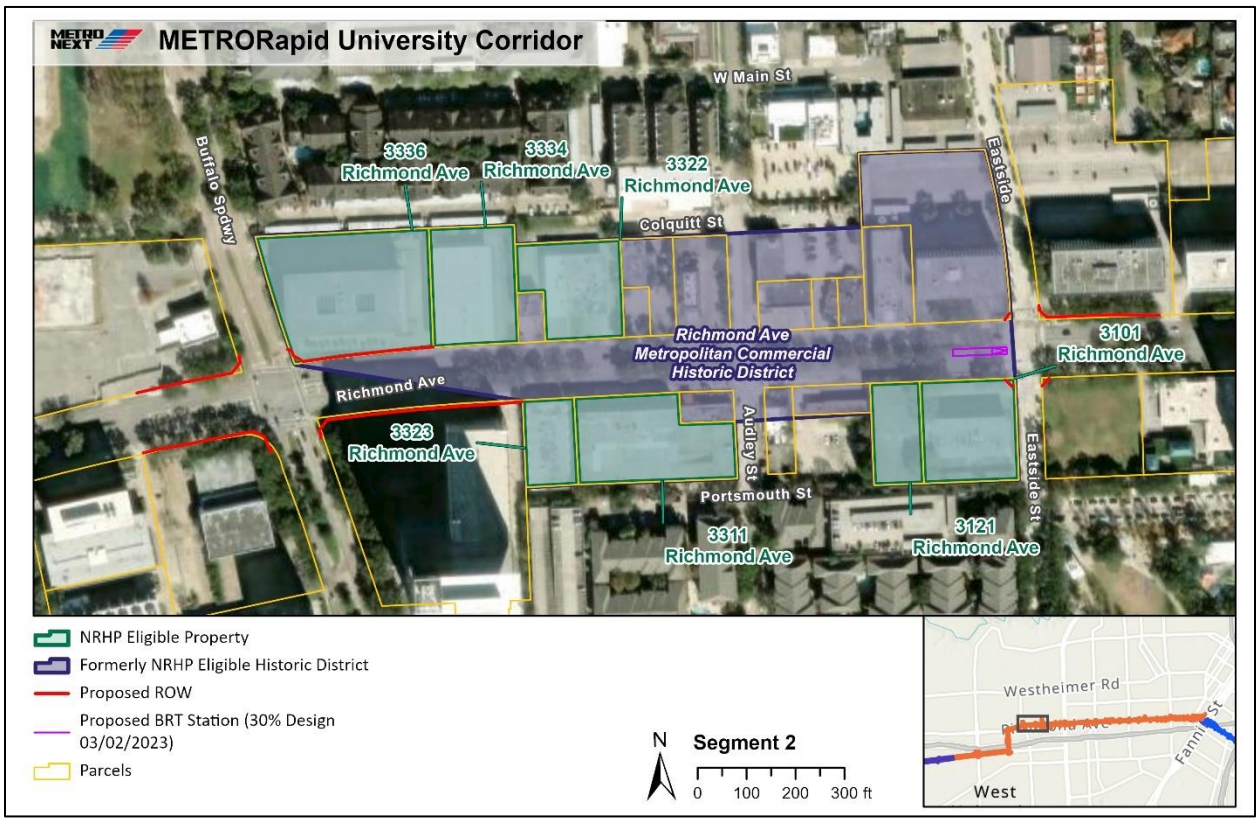


Source: AmaTerra 2023.

3336 Richmond Avenue

Resource S2 07, 3336 Richmond Avenue, is eligible under Criterion C, Architecture. The 83,765-square foot (sf) parcel is located at the northeast corner of Richmond Avenue and Buffalo Speedway. The ROW acquisition is 730-sf for a total percentage of 0.0087 of land. The building is sited at an angle to Richmond Avenue approximately 73 to 90-ft north of the existing curb. A parking lot, green space, a 3.5-ft sidewalk, green space, and a curb occupy the space between the building's front façade and Richmond Avenue. The land acquisition for the parcel is along Richmond Avenue reducing the green space to 2 to 4-ft in width and increasing the sidewalk to 8-ft. Landscaping will still be included in the same location, would not alter the characteristics that qualify the resource under Criterion C, and therefore the new ROW is recommended to have no adverse effect (**Figure 0-2**).

Figure 0-2. Aerial Photograph of the Richmond Avenue Metropolitan Commercial Historic District.



Source: AmaTerra 2023.

3334, 3323, 3322, 3311, and 3121 Richmond Avenue

No proposed ROW will occur at Resources S2 08, S2 09, S2 10, S2 11, and S2 13. Therefore, a finding of no adverse effect is recommended as there would be no change that would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

3101 Richmond Avenue

Resource S2 15, 3101 Richmond Avenue is a 40,482-sf parcel at the southwest corner of Richmond and Eastside streets. The ROW acquisition is 112-sf for a total percentage of 0.0027 of land. The building is sited parallel to Richmond Avenue and approximately 78-ft south of the existing curb. A parking lot, green space, a sidewalk, green space, and a curb occupy the space between the building's front façade and Richmond Avenue. The proposed new ROW is a corner clip at Richmond and Eastside Streets. It would not impact the building's integrity of location, design, setting, materials, workmanship, feeling, or association, and is recommended to have no adverse effect upon the building.

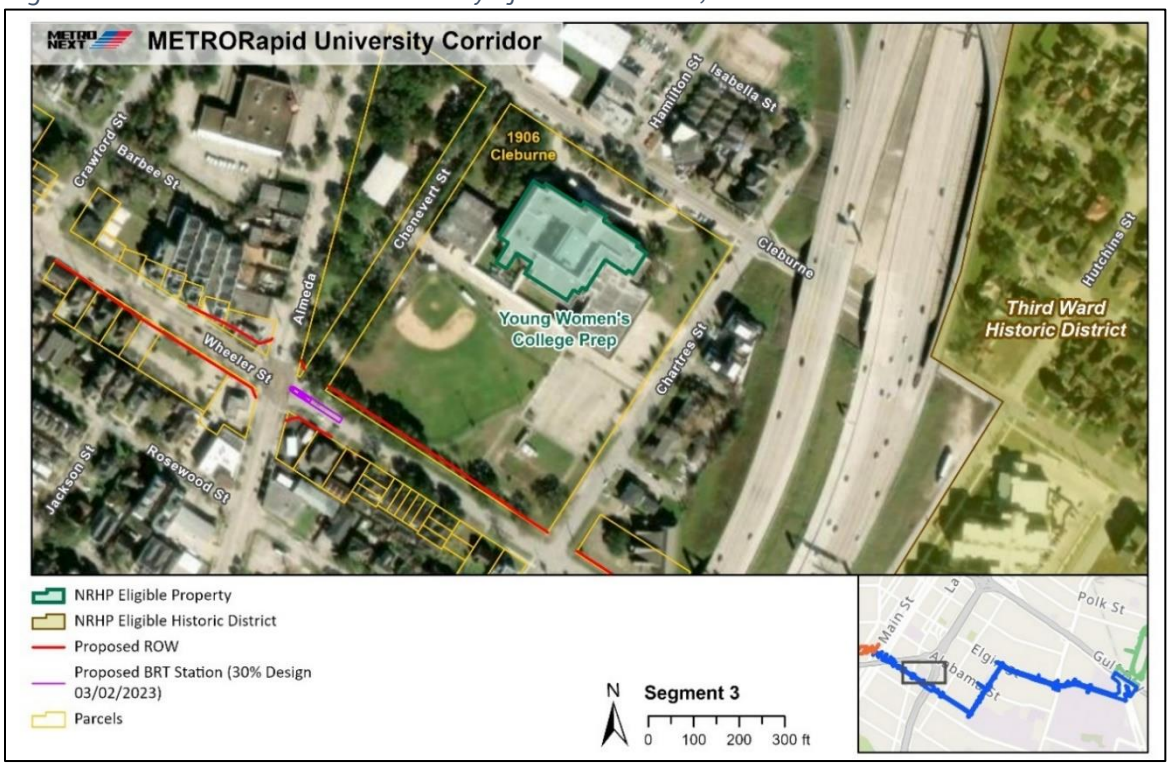
1.18.2 Segment 3 Effects on NRHP Eligible Resource

There are two NRHP eligible resources and two NRHP listed resources in Segment 3. The A.S. Sidney Johnston Jr. High School (Young Women's College Preparatory Academy) Resource S3 16a, and the Third Ward Historic District are eligible for the NRHP. The Houston Negro Hospital and Nursing School, S3 25a/b, are individually listed in the NRHP and located in the NRHP eligible Third Ward Historic District.

1906 Cleburne Street: Albert Sidney Johnston Jr. High School (Young Women's College Preparatory Academy)

Resource S3 16a, the school building, (NRHP eligible) is located within a 434,999-sf parcel, which also contains the baseball field (Resource S3 16b, not recommended NRHP eligible) The campus is bounded by the streets of Cleburne, Chartres, Chenevert, and Wheeler, with the NRHP eligible building oriented to Cleburne Street (see **Figure 0-3**). A service road, parallel to Wheeler Avenue connects Chenevert and Chartres Streets and bifurcates the campus, separating the NRHP eligible building (S3 16a) from a baseball field and parking lot (S3 16b). The proposed new ROW as of January 27, 2023, is 4,744-sf along Wheeler Avenue, roughly 400-ft southwest of the service road at the rear façade of the school, where S3 16b is located. The baseball field (S3 16b) is modern, built circa 1990, and is not part of the recommended boundary for the NRHP eligible school (S3 16a), The ROW acquisition would not impact the NRHP eligible property's integrity of location, setting, design, materials, workmanship, feeling, or association, nor its ability to convey its architectural significance under Criterion C. It is recommended the new ROW along Wheeler Avenue would have no adverse effect on the NRHP eligible school building.

Figure 0-3. Recommend NRHP Boundary of 1906 Cleburne, S3 16a.



Source: Mitchell and Pettis (2019), AmaTerra 2023

NRHP Eligible Third Ward Historic District

A substantial portion of Segment 3 travels through the NRHP eligible Third Ward Historic District. Within the historic district are two individually NRHP listed resources, The Houston Negro Hospital and Nursing School, S3 25a/b, both have proposed ROW acquisition. Multiple new corner clips are proposed throughout the district (see **Table 0-3** and **Figure 0-4**).

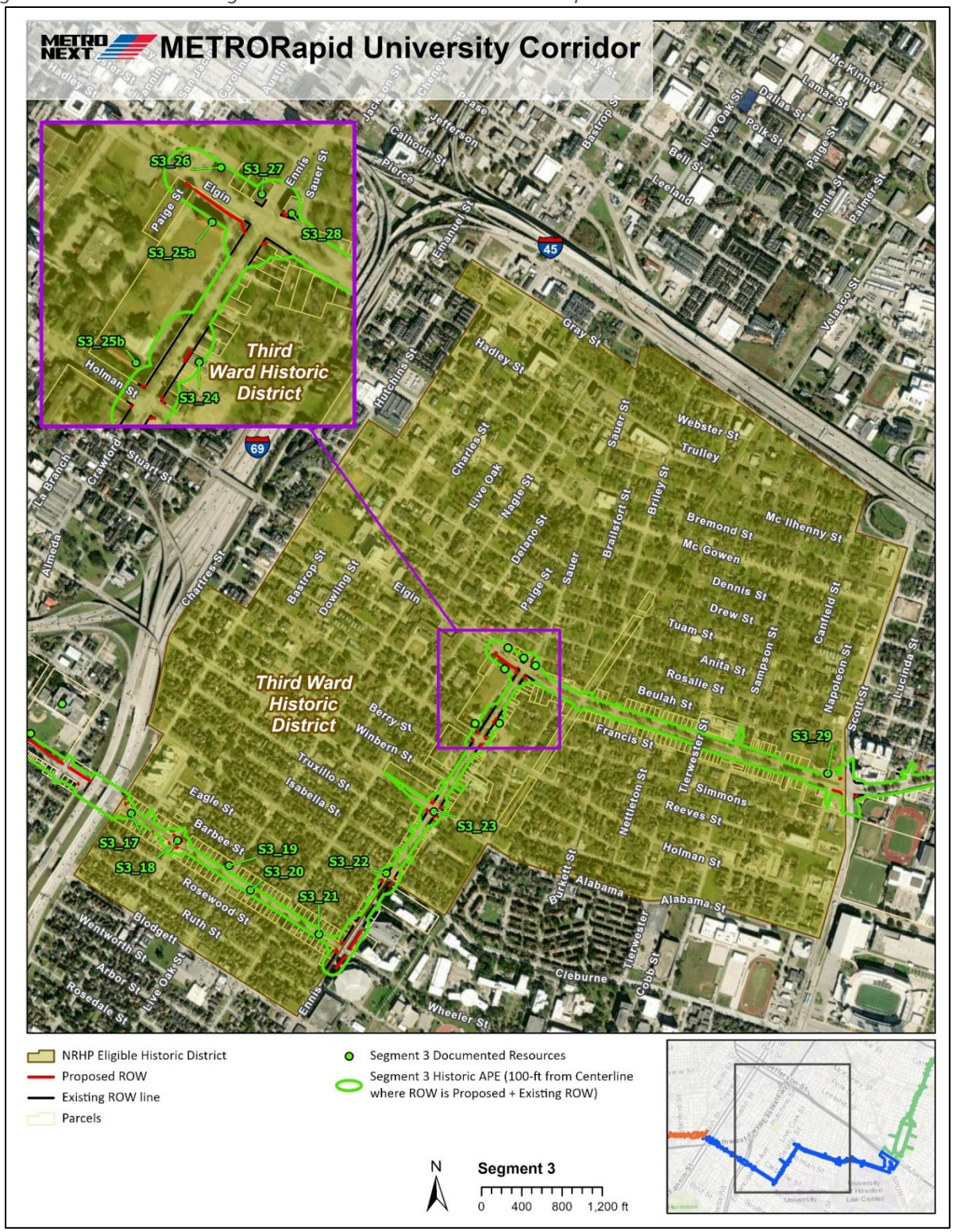
Table 0-3. ROW Acquisitions of Parcels with Buildings in the NRHP Third Ward Historic District.

	Address	Parcel Sq Ft	ROW (Sq Ft)	Notes
1	4314 Emancipation	10,000	5.0	Streetscape photo S3 18
2	4311 Emancipation	7,350	33.7	Streetscape photo S3 18
3	4405 Emancipation	5,775	22.3	Streetscape photo S3 18
4	4402 Emancipation	5,000	7.0	Streetscape photo S3 18
5	2918 Wheeler	5,250	31.6	Streetscape photos S3 21
6	2917 Wheeler	5,250	81.4	Streetscape photos S3 21
7	2918 Cleburne	5,250	17.7	N/A
8	3001 Cleburne	5,775	29.3	N/A
9	4014 Ennis	5,250	9.7	Streetscape photos S3 22
10	3204 Ennis	187,000	2,729.0	Resource S3 25ab
11	3115 Ennis	4,087	159.0	Resource S3 28
TOTAL	11 parcels	245,987	3,125	

Source: METRO 2023

In 2008 and 2019, the THC determined the Third Ward Historic District eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development, and eligible under Criterion C in the area of Architecture. A NRHP nomination completed in 2008 describes the architecture as varied and following national architectural movements. (Randall and Korfmacher 2008: E 19). There was no discussion of landscape or setting in the NRHP nomination. The NRHP nomination has not gone through the designation process at the time this report was written. The houses abutting Wheeler street are predominately Tudor style with front yards, a sidewalk and green space before the curb which is typical for this era. The historic district covers roughly 750 acres. The removal of 3,125 sq ft of landscaping for eleven parcels is nominal and would not alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association; therefore, it is recommended as no adverse effect to the historic district.

Figure 0-4. Third Ward Eligible NRHP Historic District with Proposed ROW.



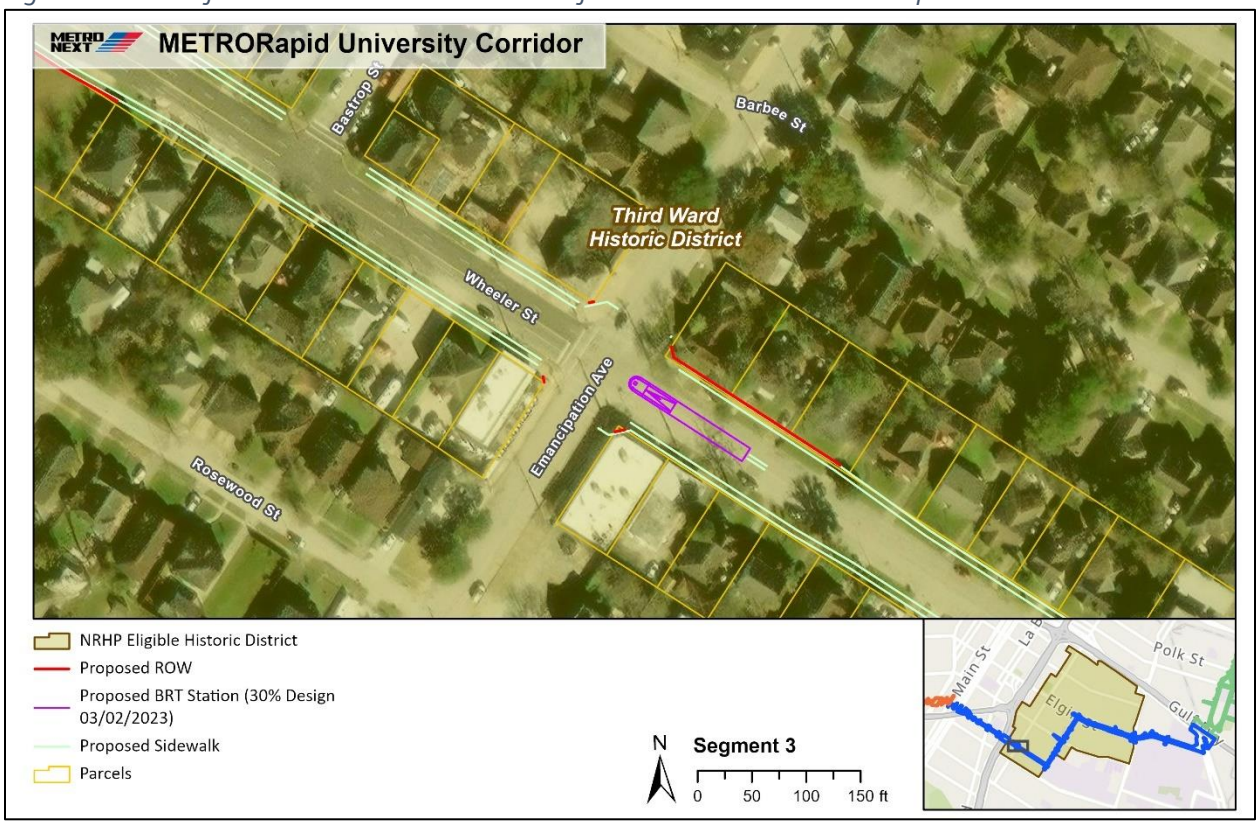
Source: AmaTerra 2023

Proposed ROW Greater Than A Corner Clip

4311 Emancipation, 2405 Wheeler and 2411 Wheeler streets

A center bus station is proposed for the 2400 block of Wheeler Avenue, east of Emancipation Avenue. To accommodate the station, the road would be widened thus decreasing the vegetated parkway (safety buffer) from roughly 11-ft to 2 to 4-ft wide. To accommodate pedestrian traffic the existing sidewalk, averaging 3.5 to 5-ft, would be widened to 6-ft. The landscape pattern of vegetated parkway, sidewalk, and front yard would remain intact. The new ROW is minimal per parcel and to the historic district (**Figure 0-5**). No buildings would be impacted the buildings. The Project is recommended to have no adverse effect as no change that would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Figure 0-5. ROW for bus station at intersection of Wheeler Street and Emancipation Avenue.



Source: AmaTerra 2023

3204 Ennis Street: the Houston Negro Hospital and Nursing School

Resources S3 25a and b, the Houston Negro Hospital and Nursing School, at 3204 Ennis, are listed on the NRHP as individual resources. Both buildings are located on the same parcel and contribute to the NRHP eligible Third Ward Historic District. The parcel is the length of one city block bounded by Ennis, Elgin, and Holman streets. The parcel is 187,000-sf with a parcel length of 251-ft adjacent to Elgin Street. Effective January 27, 2023, new ROW acquisition is 2,729-sf along Elgin Street would

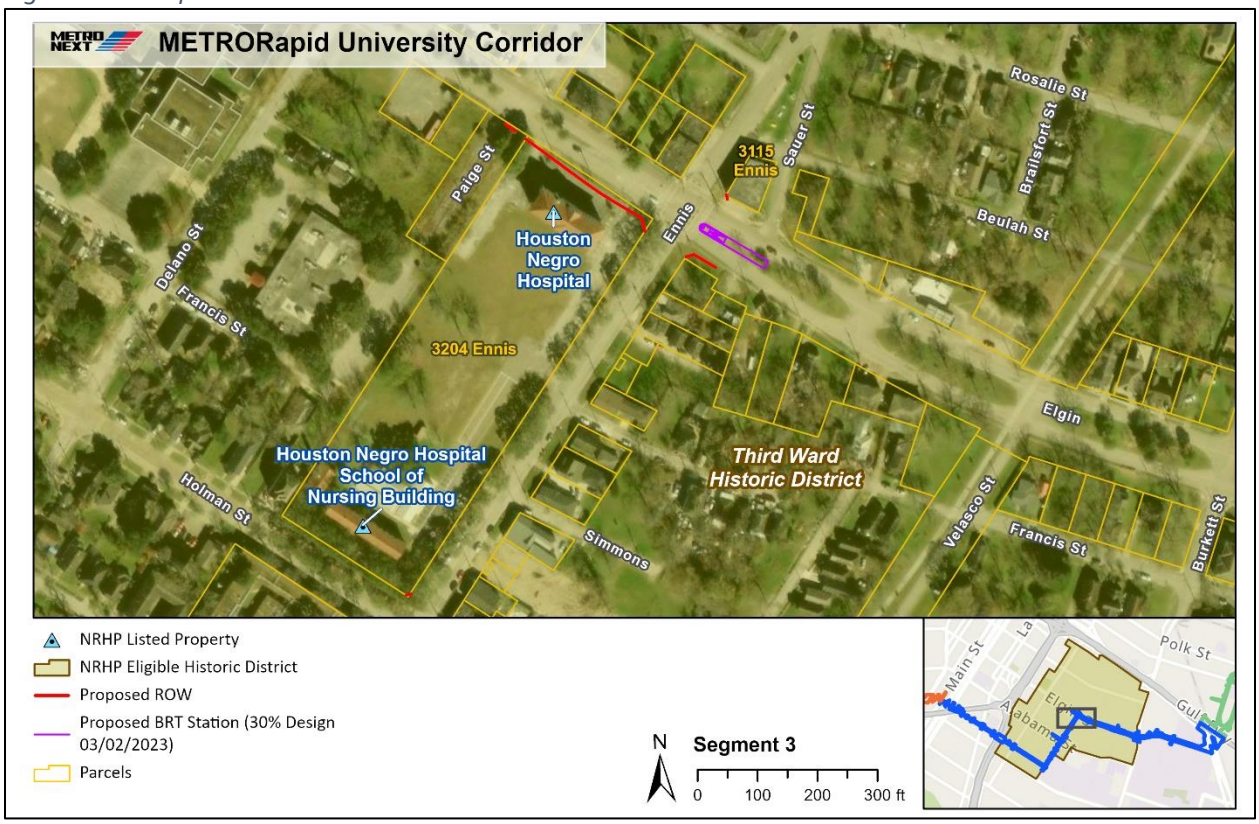
be required (**Figure 0-6**). The Hospital building is parallel to Elgin Street at the northern portion of the parcel where the new ROW is proposed. An asphalt parking lot, vegetation, and sidewalk occupy the space between the hospital and the road. The ROW would remove the sidewalk and grass; however, a new sidewalk be added. The hospital building is designated for its association with ethnic and social history, and the land proposed for ROW acquisition does not play a role in the resources' ethnic and social history. Based on the small percentage of land proposed for the ROW acquisition to the overall parcel and the hospital building's historic relationship to the road, it is recommended the proposed ROW would not impact the property's integrity of location, setting, design, materials, workmanship, feeling, or association, or impact the property's ability to convey its historic significance under Criterion A. A finding of no adverse effect upon the property is recommended.

The Nursing School (S3 25b) is located at the northwest corner of Holman and Ennis streets. ROW acquisition consists of a corner clip at an existing sidewalk for compliance with ADA. The building is located approximately 67-ft from the road intersection. The corner clip would not impact the property's ability to convey its significance under Criterion A or Criterion C or diminish its integrity of location, setting, design, materials, workmanship, feeling, or association. Therefore, it is recommended the corner clip would have no adverse effect on the historic property.

3115 Ennis Street

Resource S3 28, 3115 Ennis Street, is a two-story, two-part commercial block building that is currently vacant. The building is contributing to the NRHP eligible Third Ward Historic District. Head-in parking spaces are located on Elgin Street. The building is within the southwest corner of the existing ROW along Elgin Street. The current Project design would require additional ROW to add a ten-foot sidewalk, ADA ramps, and signals (see Figure 0-6). These proposed changes would remove the parking spaces on Elgin Street which are currently located within the existing ROW. According to historic aerial photographs, in 1957 Elgin Avenue dog-legged at 3115 Ennis avoiding buildings and vegetation located south of the subject building. Parking for the building was on the east side. By 1962, the dogleg was removed, and the subject building was now directly parallel to the road and the previous buildings and vegetation were gone as the space was occupied by the road. The parking spaces are not a vital or integral part of its contribution to the historic district. The building's contribution to the historic district is limited to its footprint and direct physical form, and not the street parking which comprises part of its setting. Therefore, it is recommended the corner clip would have no adverse effect on this contributing resource or the wider historic district.

Figure 0-6. Proposed ROW at 3204 and 3115 Ennis.



Source: AmaTerra 2023.

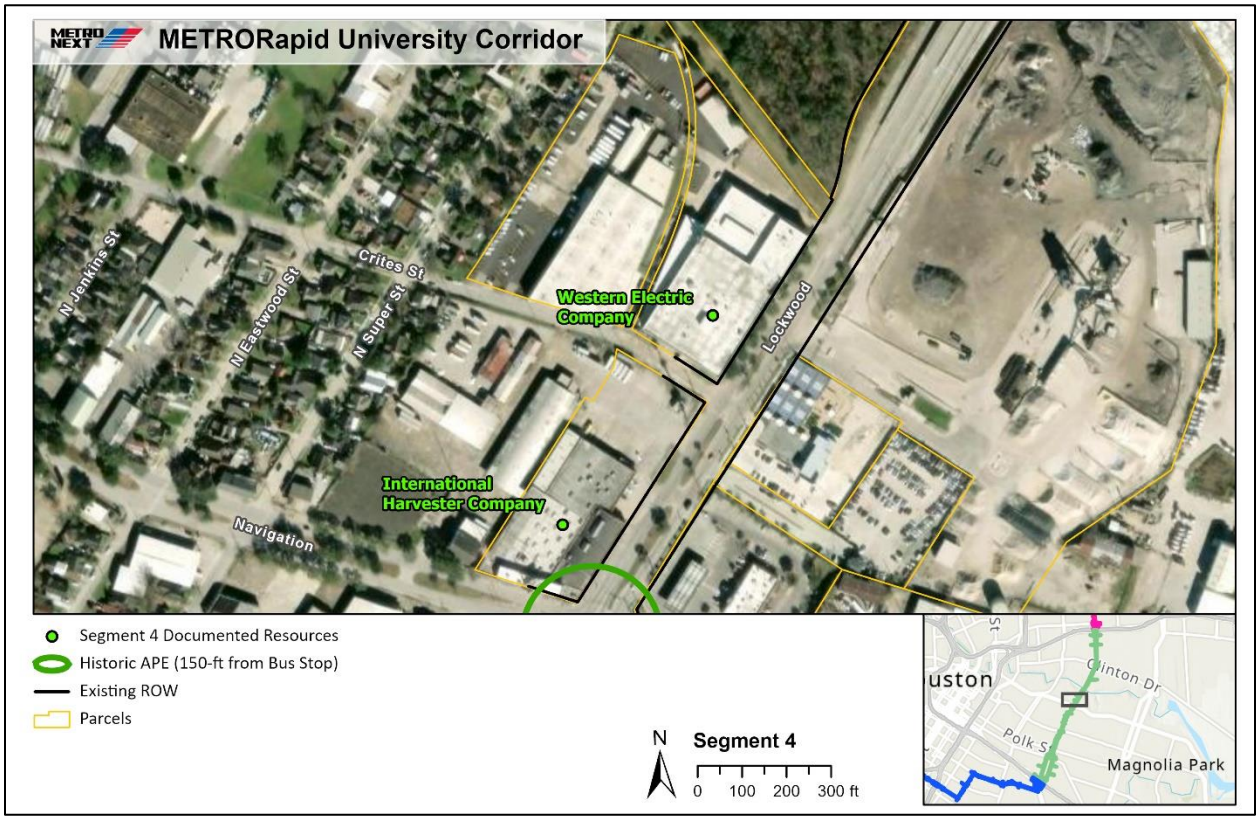
1.18.3 Segment 4 Effects on NRHP Eligible Resource

There are two recommended NRHP eligible resources in Segment 4: the International Harvester Company – Texas Mattress Makers (S4 61), and the Western Electric Company – Harris County Sheriff's Office (S4 62).

4901 Navigation Boulevard and 601 Lockwood Drive

Resource S4 61, the International Harvester Company/Texas Mattress Makers at 4901 Navigation Boulevard and Resource S4 62, the Western Electric Company/Harris County Sheriff's Office at 601 Lockwood Drive were documented as the buildings were in the APE when surveyed in July 2022. As of January 27, 2023, no new ROW would be acquired from Resources S4 61 or S4 62, it is recommended the Project would have no adverse effect upon either property (see **Figure 0-7**).

Figure 0-7. Aerial Photograph with Proposed ROW and APE.



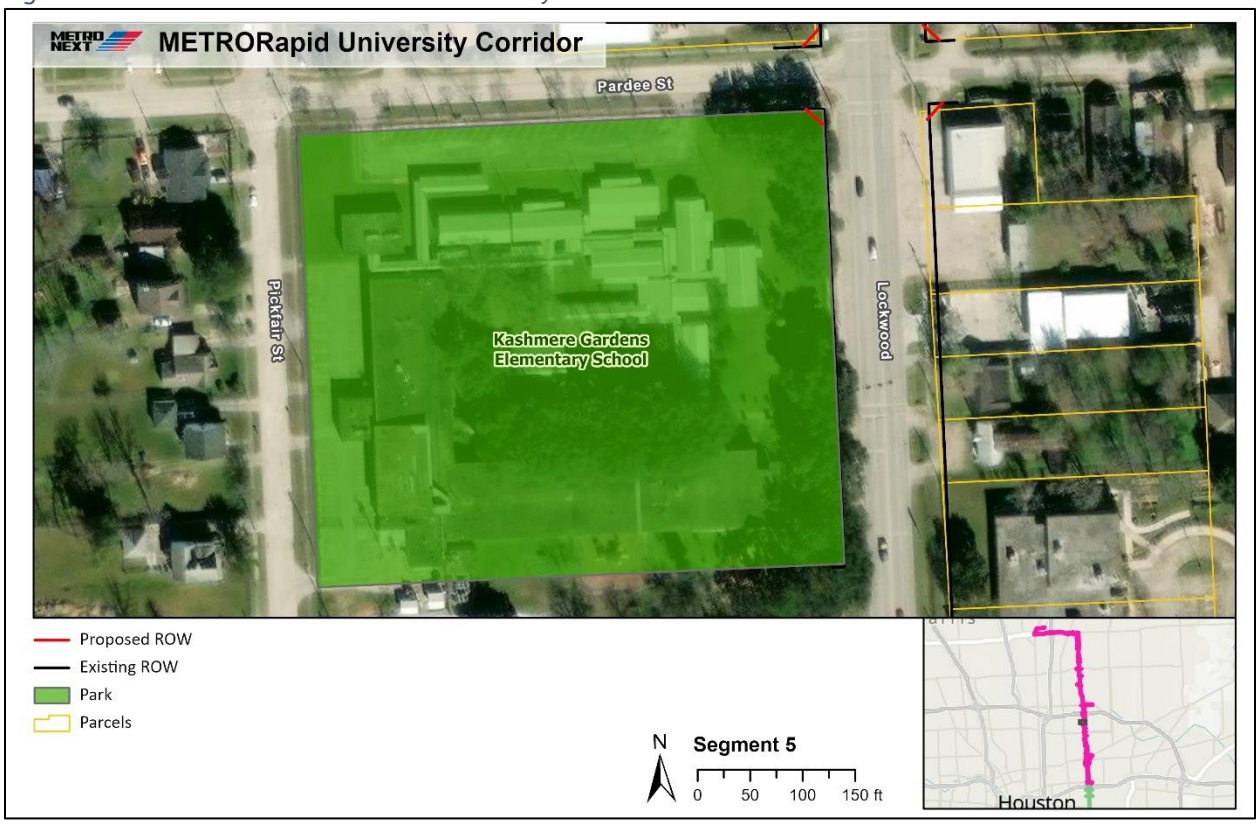
Source: AmaTerra 2023.

1.18.4 Segment 5 Effects on NRHP Eligible Resource

There is one recommended NRHP eligible resource in Segment 5, the Kashmere Gardens Elementary School (S5 103) at 4901 Lockwood Drive. The school campus covers about half a city block and is bounded by Lockwood, Pardee, and Pickfair Streets (see **Figure 0-8**).

The parcel is 217,500-sf with about 690 ft adjacent to Lockwood Drive. A proposed ROW of 113-sf would be acquired at the northwest corner of the lot abutting Lockwood Drive. The school is recommended eligible under Criterion A for its association with the Civil Rights Movement in Houston. The school campus and original school building have had multiple alterations and additions to the campus since it was built in 1949. The corner clip of 113-sf would not physically impact any buildings on the campus, nor would it affect aspects of the building's setting which are integral to its significance under Criterion A, and it would not affect the school's ability to convey its Criterion A significance. It is recommended the ROW acquisition would have no adverse effect upon the school.

Figure 0-8. The Kashmere Gardens Elementary School at 4901 Lockwood.



Source: AmaTerra 2023.

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APPENDIX A – Segment 1

METRO University BRT Project, Houston, TX
Historic Resources Survey
Segment 1

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S1 01	5612 Fondren Road	No	C. 1969	None	Commerce/specialty store	Alterations include modern awning, windows, and doors.
S1 02	5607 Forney Drive	No	C. 1968	New Formalism influence	Commerce/warehouse	Alterations include modern windows.
S1 03	6640 Harwin Drive	No	C. 1971	None	Religion/religious facility	Alterations include modern roof, doors, and siding, plus two additions to the west façade (c. 2012 & 2020) and a gazebo (c.2014) in the east parking lot.
S1 04	5401 Rampart Street	No	C. 1977	None	Domestic/multiple dwelling	Alterations to the apartment buildings include new siding, doors, and windows.
S1 05	5511 Renwick Drive	No	C. 1970/1971/1976	None	Industry/processing plant	A one-story concrete block building was located near the entrance. The building did not have any obvious alterations, nor did it appear to have unique or innovative architectural design. Five other buildings are on the property but are not visible from public ROW.
S1 06	5500 El Camino Del Rey Street	No	C. 1970	Spanish Colonial Revival influence	Domestic/multiple dwelling	Alterations include new siding, windows, and railing.
S1 07	5302 Chimney Rock Road	No	C. 1974/2019	Pagoda	Commerce/restaurant	Pizza Hut. Alterations include new siding, windows, door, entryway, siding, and signage.
S1 08	5401 Chimney Rock Road	No	C. 1979	None	Domestic/multiple dwelling	Alterations include new siding and windows.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 01	Address:	5612 Fondren Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1969	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building with no notable stylistic influences. The walls feature concrete masonry unit construction, with full height plate glass picture windows and double glass entry doors on the façade. A projecting flat awning supported by metal posts shades the façade. Alterations include modern awning, windows, and doors.



Camera direction: Southwest

Resource No.	S1 01	Address:	5612 Fondren Road
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 02	Address:	5607 Forney Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1968	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of material		

Description: A one-story warehouse with pebbledash siding and gambrel roofs. Flat awnings project over the windows. The slim, floor-to-roof pilasters reflect the New Formalism influence. Alterations include modern windows.



Camera direction: Northeast

Resource No.	S1 02	Address:	5607 Forney Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 03 SANATAN SHIV SHAKTI MANDIR [Hindu]	Address:	6640 Harwin Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1971	References:	HCAD, https://shivshaktimandir.org
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting.		

Description: A one-story building of no particular style with three large domes at the northwest corner. The walls are a combination of brick veneer and stucco siding topped with a shed roof. Alterations include modern roof, doors, and siding, plus two additions to the west façade and a gazebo in the east parking lot. Per historic aerials the dome addition was added in 2012, the gazebo by 2014, and the addition by 2020. Per the organization's website they purchased this property in 2008 for Hindu religious rites and ceremonies and as a resource and education center for Hindu heritage and culture. The 1,000 sq ft addition is a Garbha Bruha to seat Hindu Deities and was dedicated in November 2013 (https://shivshaktimandir.org).



Camera direction: West

Resource No.	S1 03	Address:	6640 Harwin Drive



Camera direction: Southwest



Camera direction: Northwest

Resource No.	S1 03	Address:	6640 Harwin Drive
 			
Images oriented North. Left aerial photo Google Earth 2/2004 and right aerial photo Google Earth 7/2022			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 04 Pavilion Place Apartments	Address:	5401 Rampart Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1977	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S1 04 is a large apartment complex located east and west of Rampart Street. Per HCAD there are 52 buildings with two of the buildings remodeled in 2012 and 2017. The apartment buildings are two stories with brick siding and stucco chimneys. The leasing office has been remodeled with new siding, windows, and roofing material. Alterations to the apartment buildings include new siding, doors, and windows.



Camera direction: Southwest

Resource No.	S1 04	Address:	5401 Rampart Street



Camera direction: Southeast



Camera direction: Southwest

Resource No.	S1 04	Address:	5401 Rampart Street



Image oriented North (Google Earth 7/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 05	Address:	5511 Renwick Drive
Resource Type:	Building	Function/Use:	Industry/processing plant
Estimated Year built:	C. 1970/1971/1976	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: Argos Southern Star Concrete processing plant. Access to the parcel was blocked due to a security gate. A one-story concrete block building was located near the entrance. The building did not have any obvious alterations, nor did it appear to have unique or innovative architectural design. Per HCAD there are six buildings on the parcel: three metallic warehouses (c. 1971 and 1976), two office buildings (c. 1970), and one warehouse (c. 1970).



Camera direction: East

Resource No.	S1 05	Address:	5511 Renwick Drive

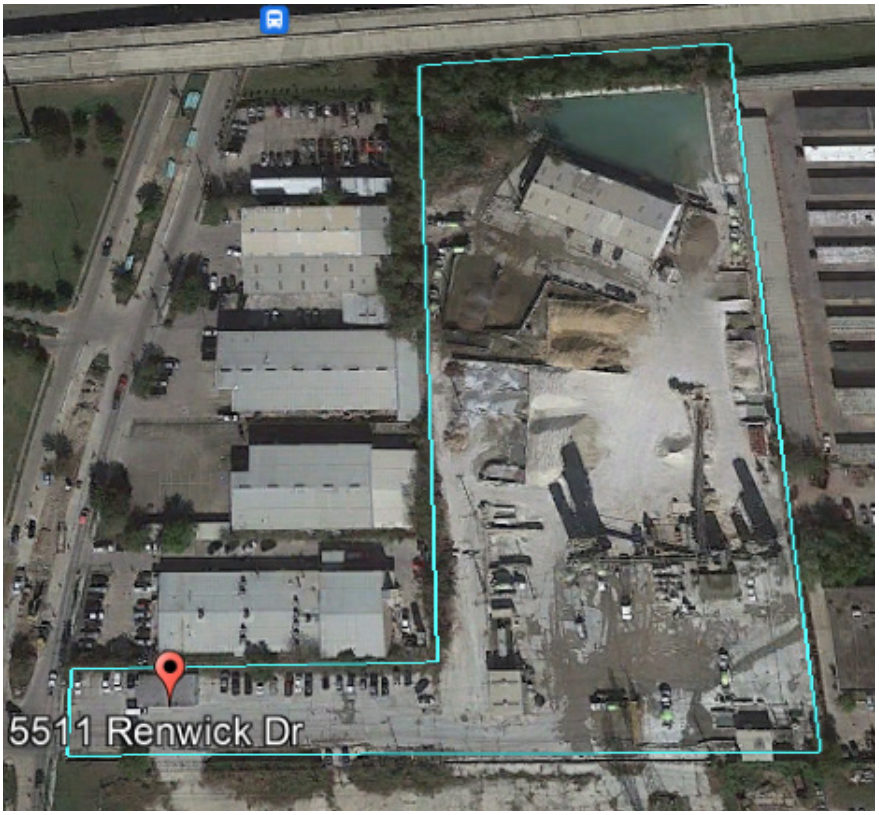


Image oriented North, parcel outlined in blue (Google Earth 11/2020)



View from Southwest Freeway. Image oriented Southwest (Google Earth 5/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 06	Address:	5500 El Camino Del Rey Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and design.		

Description: The Alora apartment complex has two and three-story walk-up buildings, a clubhouse, and a pool. Most of the buildings are two-story with mansard roofs. The Spanish Revival influence is indicated by the faux arches. Alterations include new siding, windows, and railing.



Camera direction: Northeast

Resource No.	S1 06	Address:	5500 El Camino Del Rey Street



Camera direction: Southeast

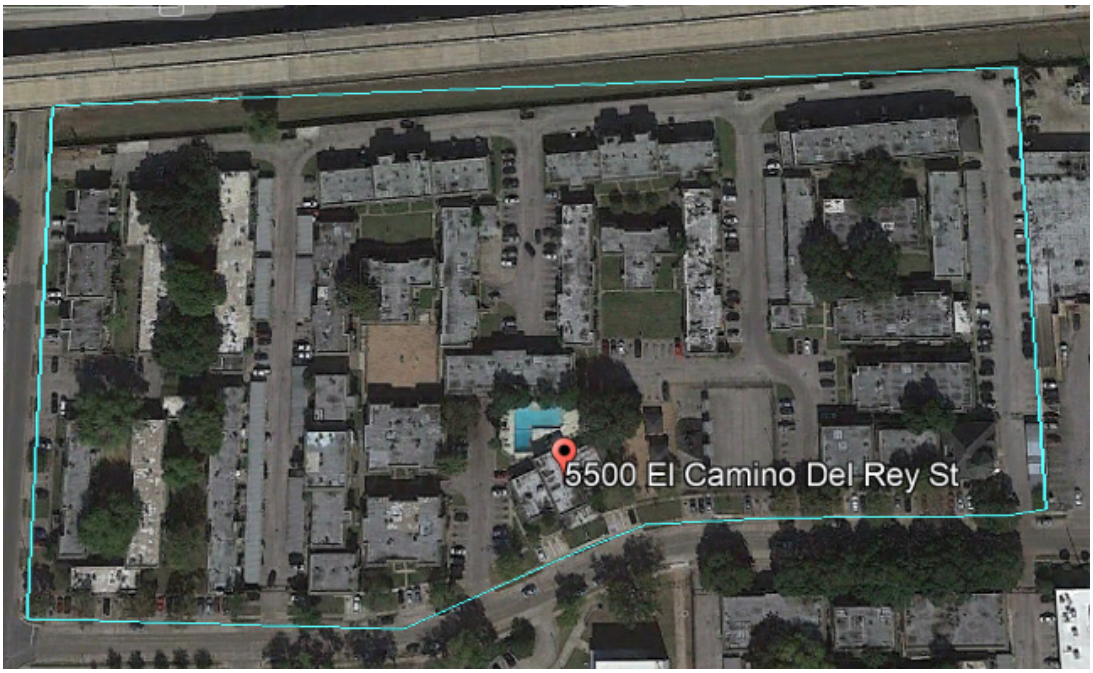


Image oriented North, parcel outlined in blue (Google Earth 11/2020)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 07 Pizza Hut	Address:	5302 Chimney Rock Road
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1974/2019	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story restaurant building with stone and hardiplank siding in the Pagoda Roof style. Per HCAD the building was remodeled in 2019. Alterations include new siding, windows, door, entryway, siding, and signage.



Camera direction: Northwest

Resource No.	S1 07	Address:	5302 Chimney Rock Road
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 1
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S1 08	Address:	5401 Chimney Rock Road
Resource Type:	Building	Function/Use:	Domestic/apartment complex
Estimated Year built:	C. 1979	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A garden apartment complex with 66 buildings, of which three are clubhouses. There are four swimming pools. Most of the buildings are two-story with brick and synthetic siding and gabled roofs. Alterations include new siding and windows.



Camera direction: Northwest

Resource No.	S1 08	Address:	5401 Chimney Rock Road

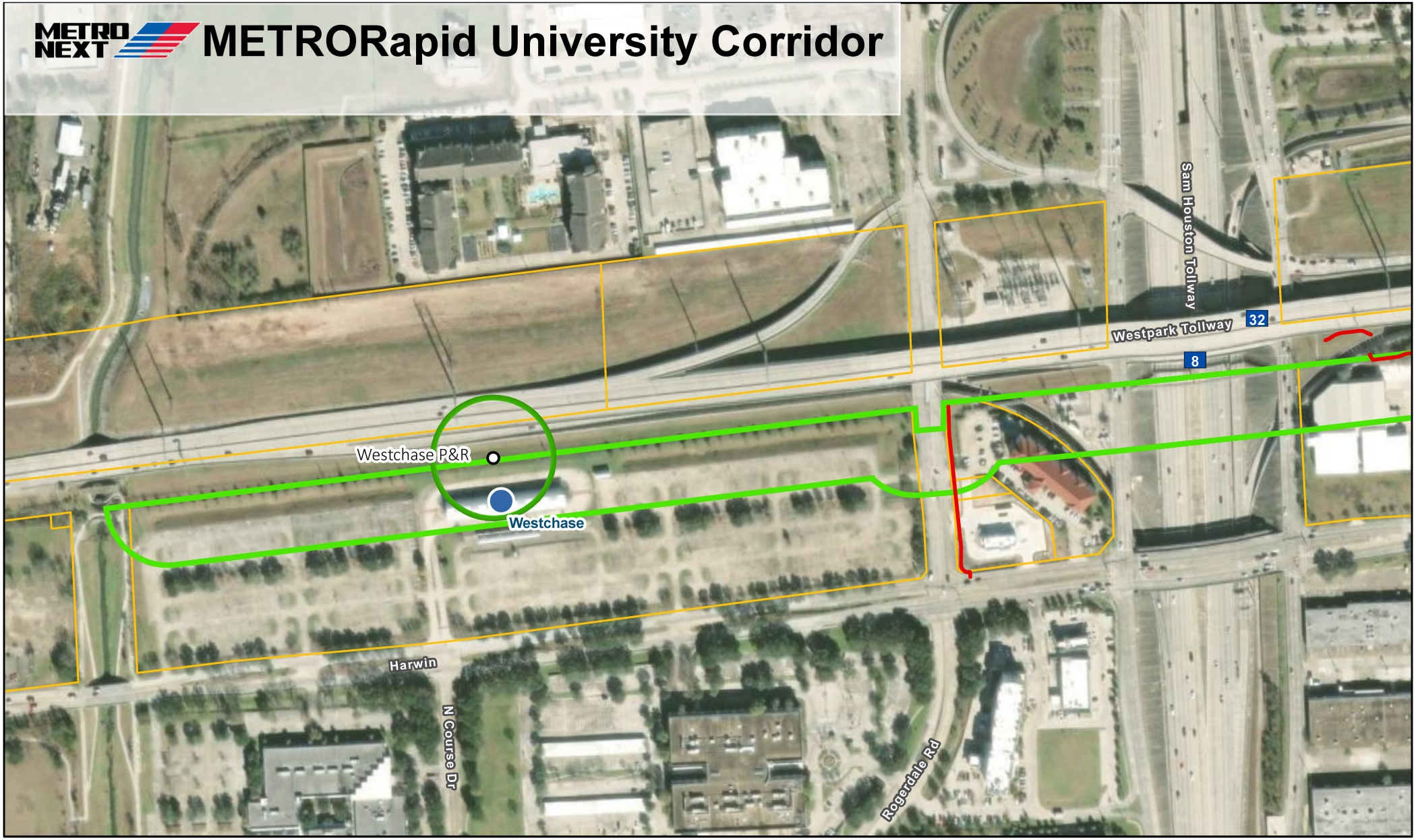


Camera direction: Southeast

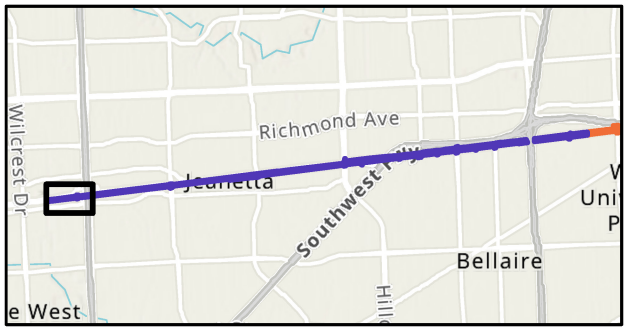


Image oriented North, parcel outlined in blue (Google Earth 11/2020)

METRORapid University Corridor



- Existing METRO Transit Center
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



N

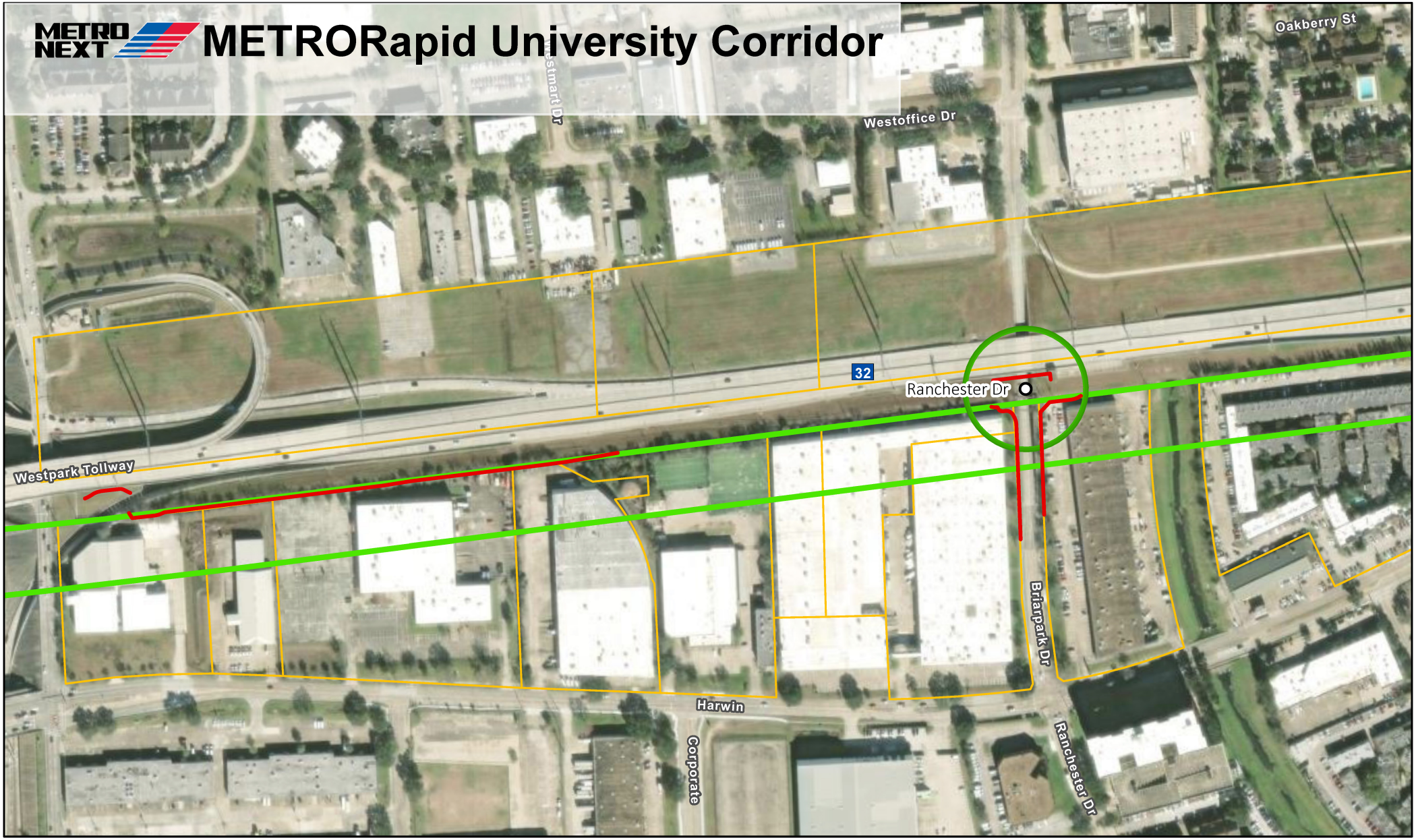
Segment 1, Map 1 of 12

0 200 400 ft

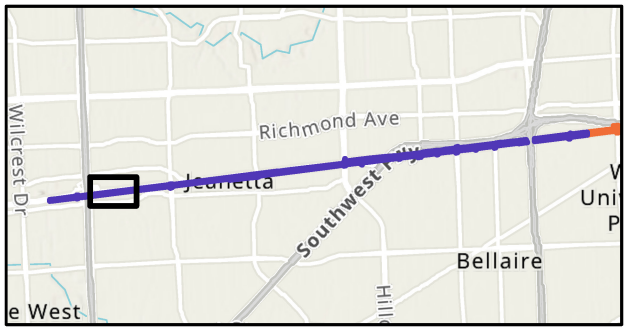
Document Path: G:\Projects\099_HNTB\013_21R_UniversityBRT\UniversityBRT_2023v3.aprx

Date: 3/16/2023

METRORapid University Corridor



- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



N

Segment 1, Map 2 of 12

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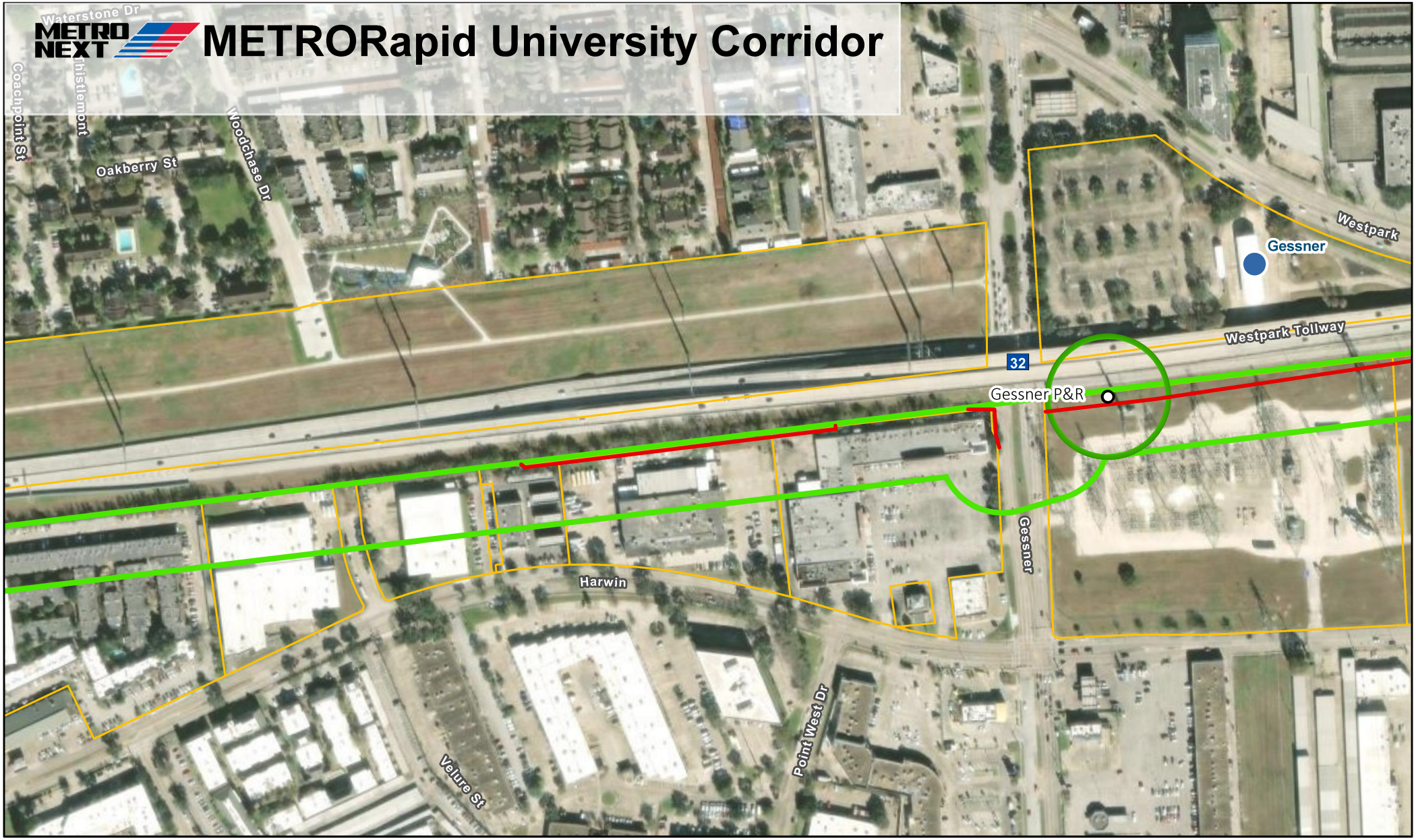
Date: 3/16/2023

METRORapid University Corridor



Existing METRO Transit Center

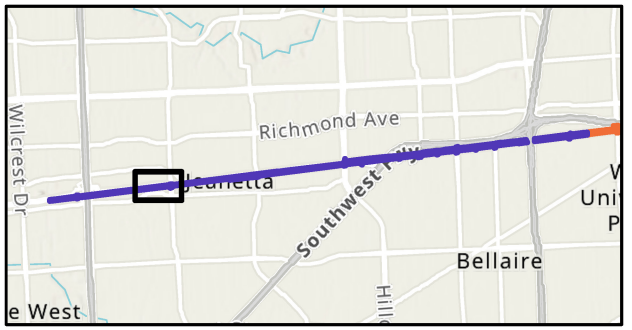
Proposed BRT Station (Preliminary Design)

Proposed ROW

Segment 1 Historic APE (150-ft south of Existing ROW)

BRT Station Historic APE

Parcels



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Segment 1, Map 3 of 12

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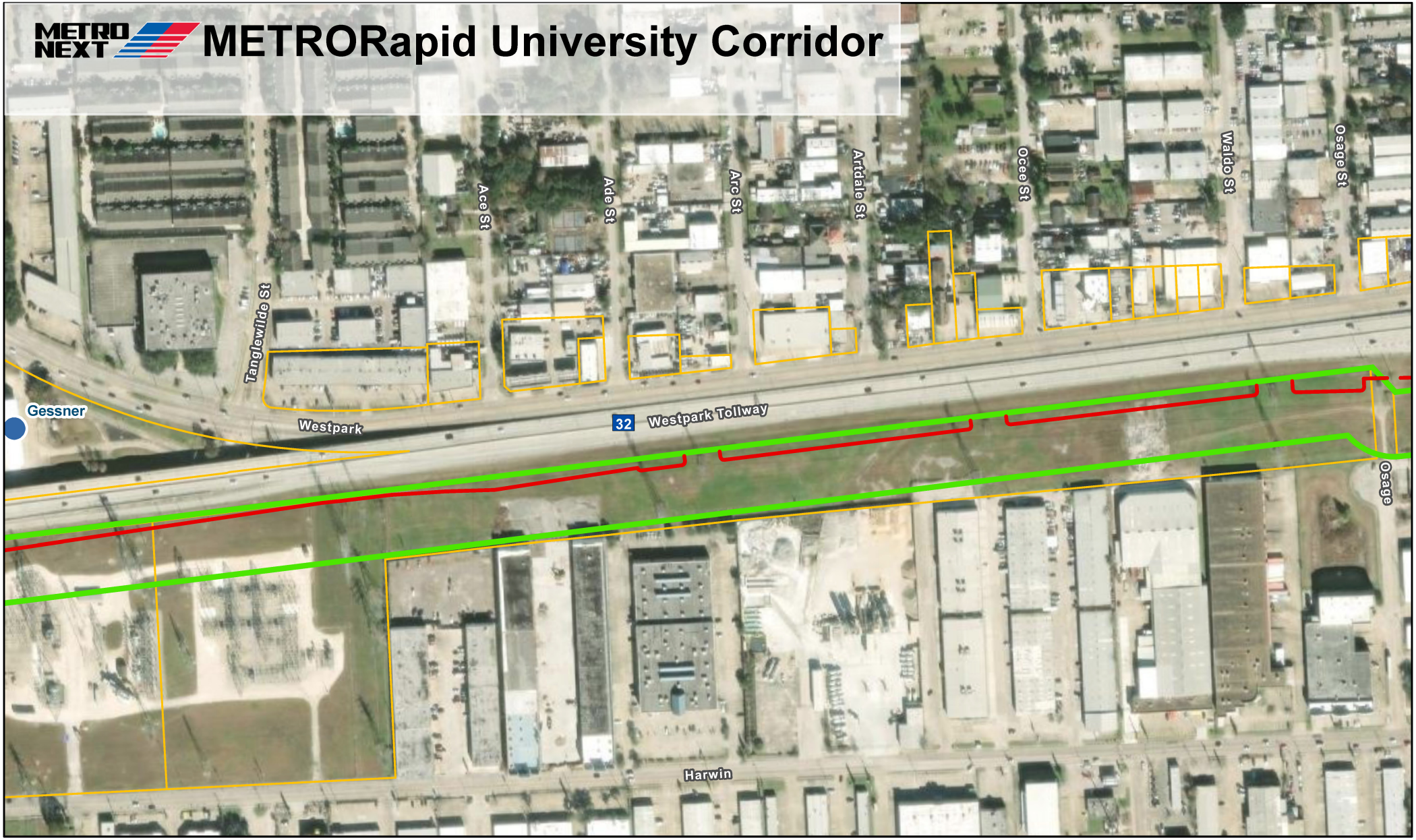
Date: 3/16/2023

METRORapid University Corridor

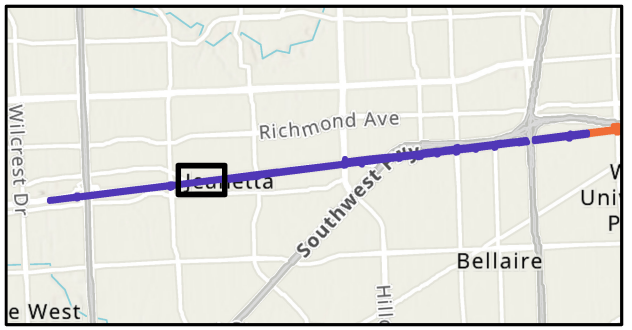


Existing METRO Transit Center

Proposed ROW

Segment 1 Historic APE (150-ft south of Existing ROW)

Parcels



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Segment 1, Map 4 of 12

0 200 400 ft

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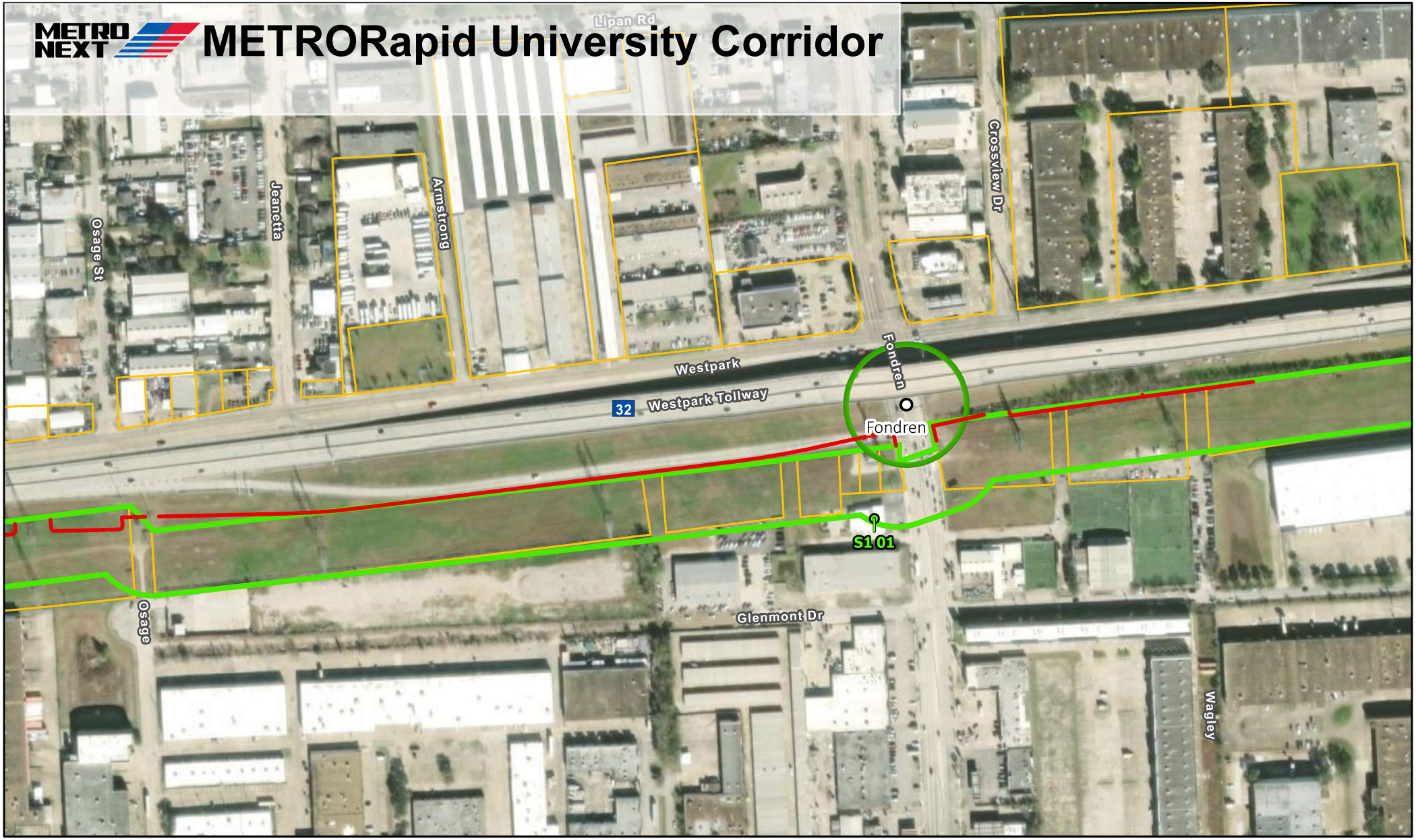
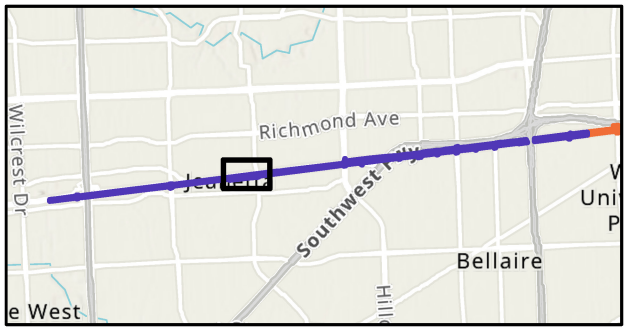
Date: 3/16/2023

METRONEXT METRORapid University Corridor



- Segment 1 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



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Segment 1, Map 5 of 12

0 200 400 ft

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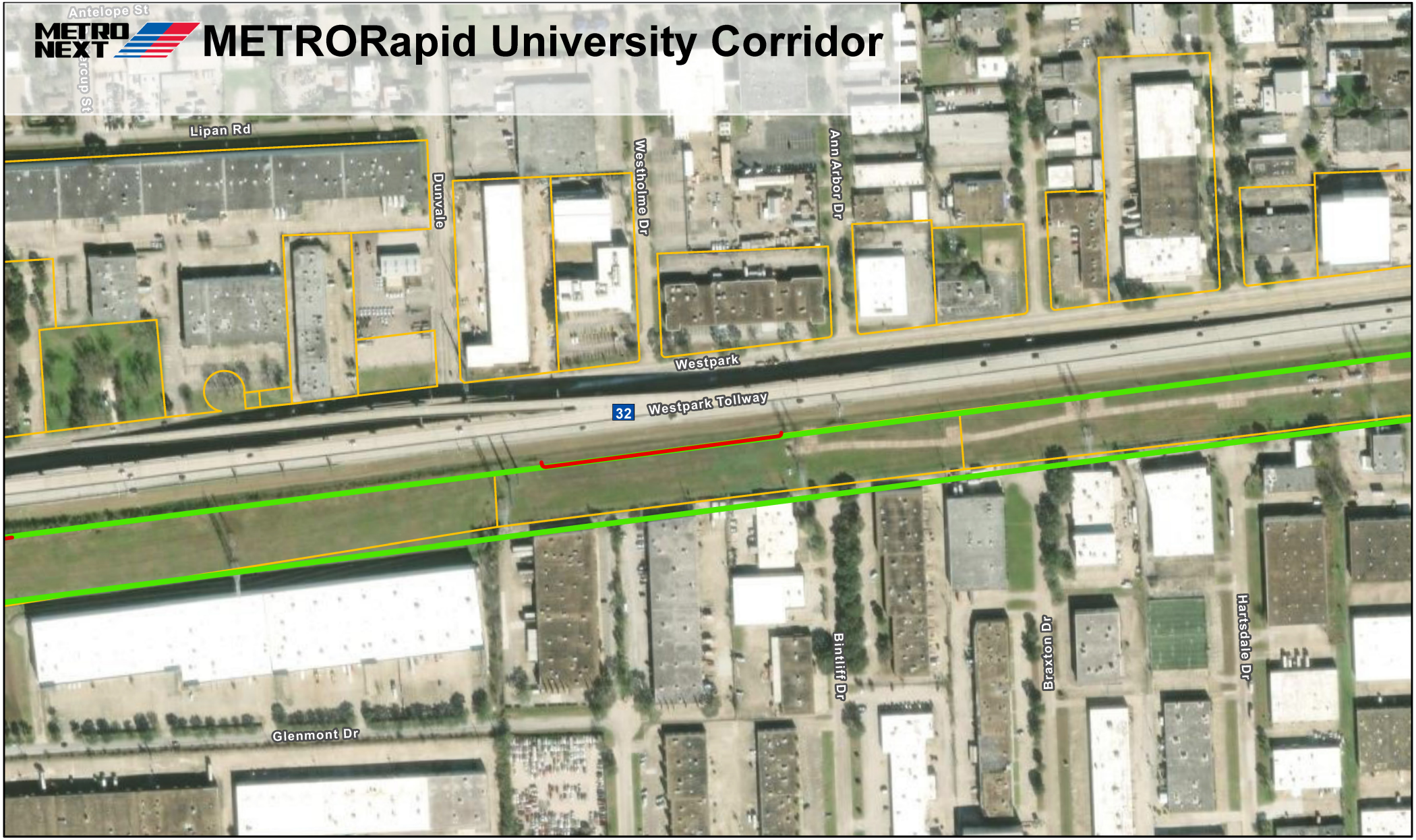
Date: 3/16/2023

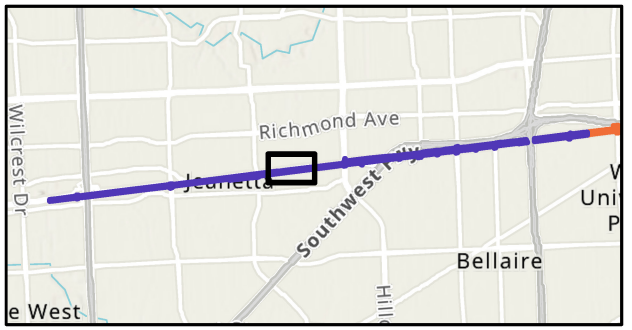
METRORapid University Corridor



Proposed ROW

Segment 1 Historic APE (150-ft south of Existing ROW)

Parcels



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Segment 1, Map 6 of 12

0 200 400 ft

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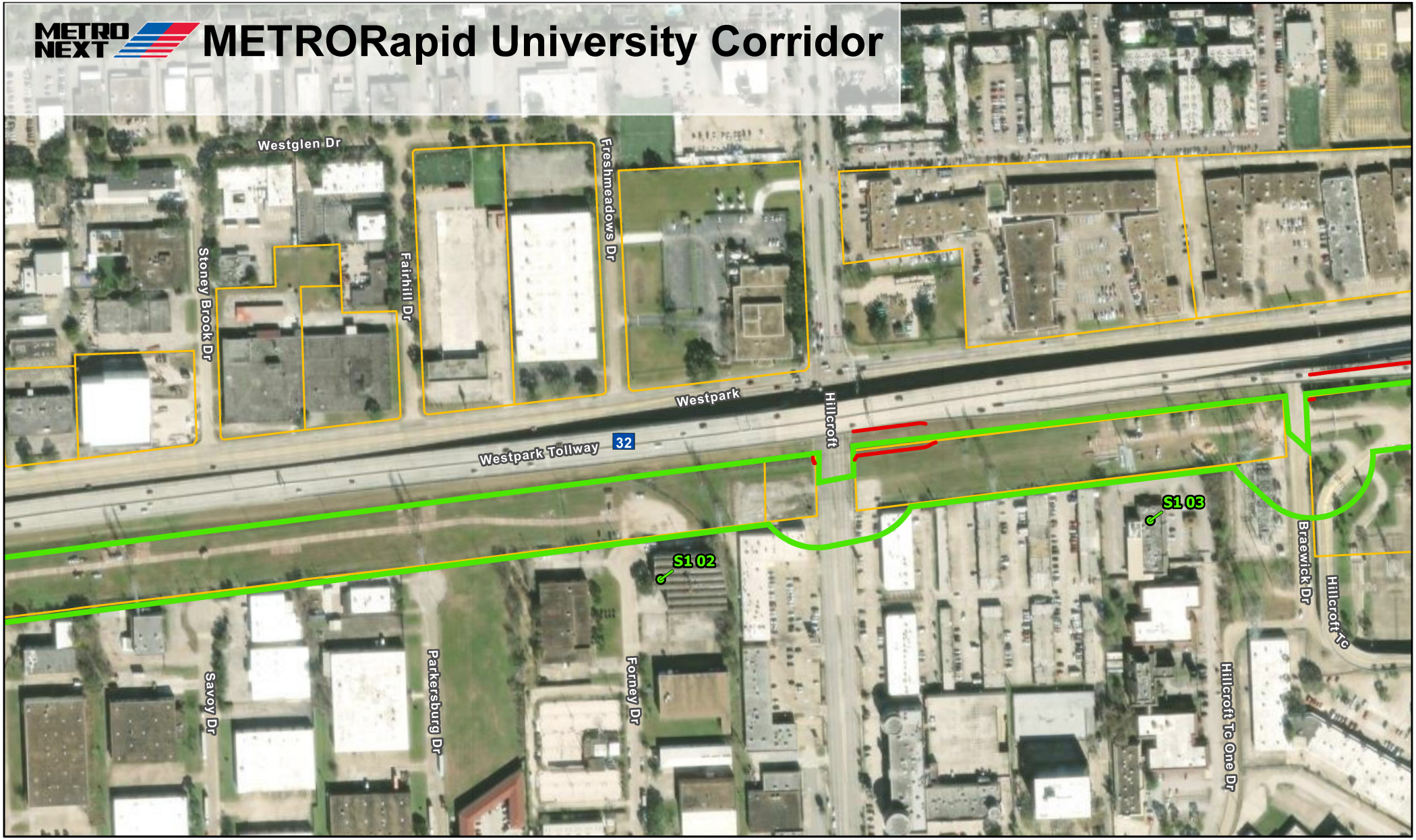
Date: 3/16/2023

METRORapid University Corridor

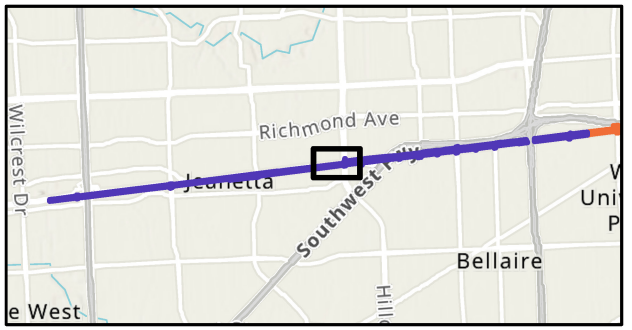


Segment 1 Documented Resources

Proposed ROW

Segment 1 Historic APE (150-ft south of Existing ROW)

Parcels



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Segment 1, Map 7 of 12

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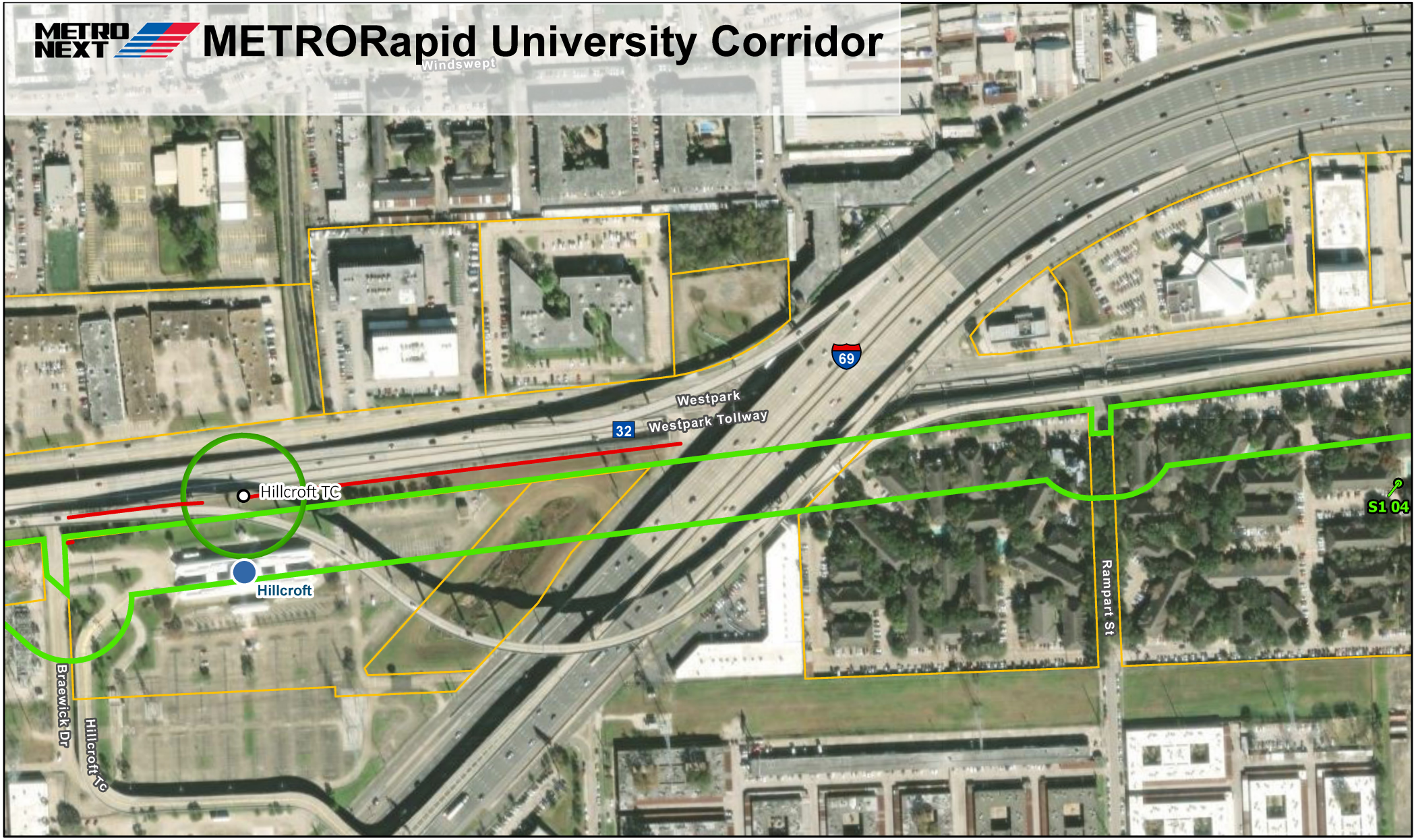
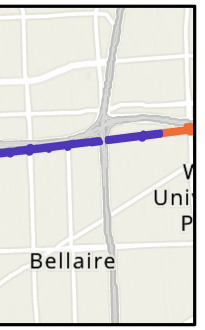
Date: 3/16/2023

METRORapid University Corridor



- Existing METRO Transit Center
- Segment 1 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



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Segment 1, Map 8 of 12

0 200 400 ft

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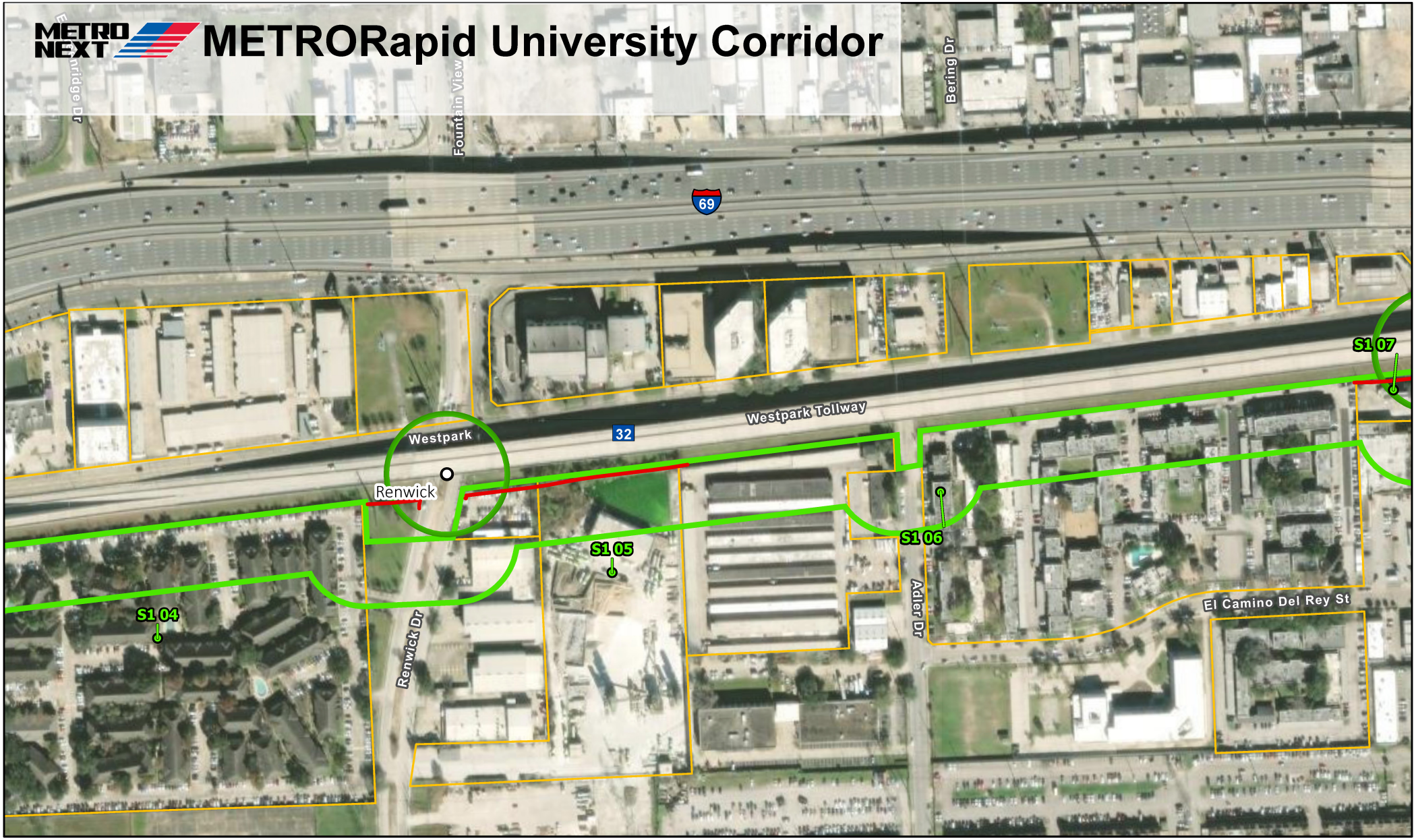
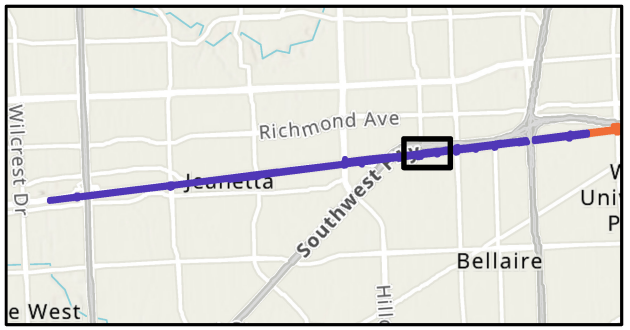
Date: 3/16/2023

METRORapid University Corridor



- Segment 1 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



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Segment 1, Map 9 of 12

0 200 400 ft

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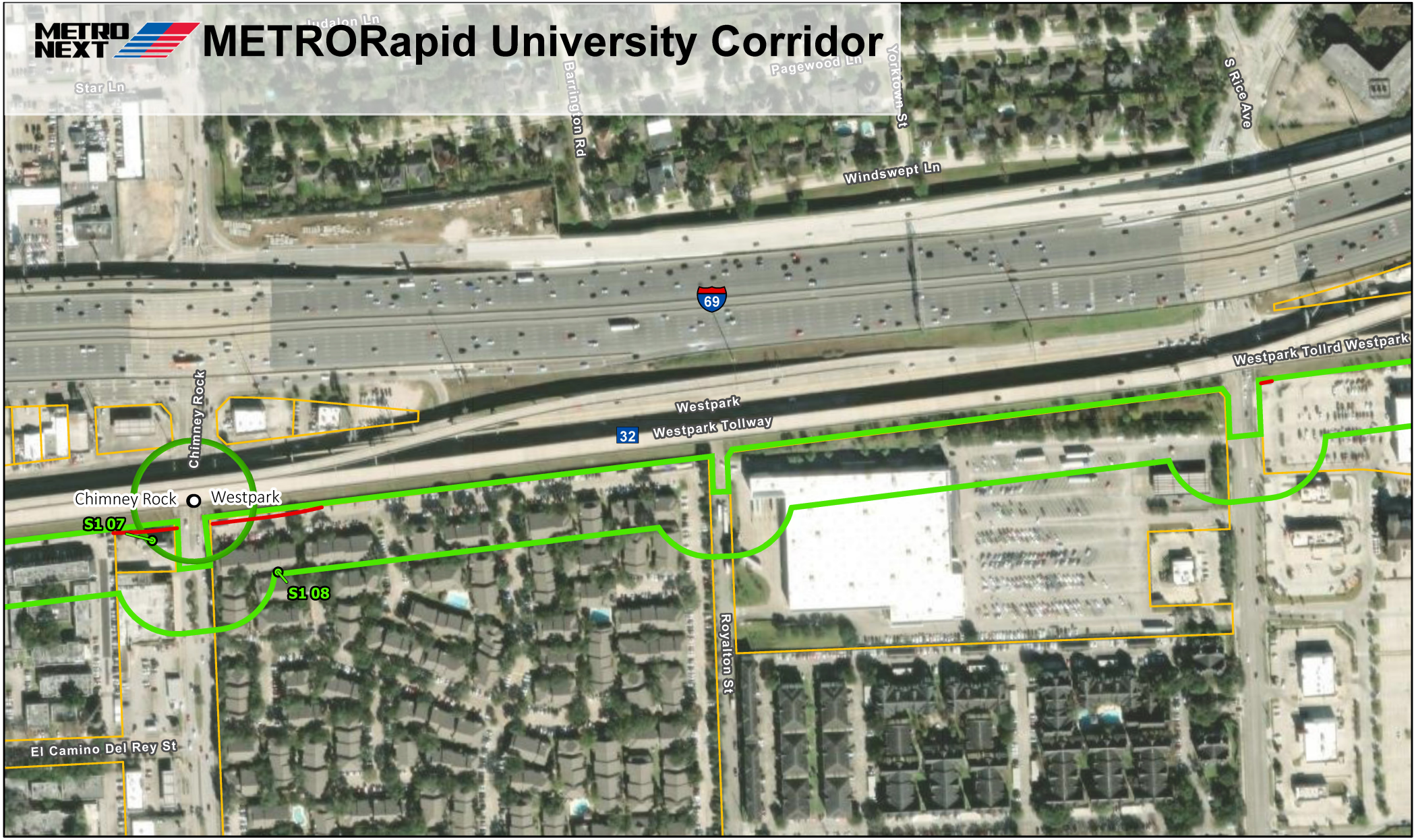
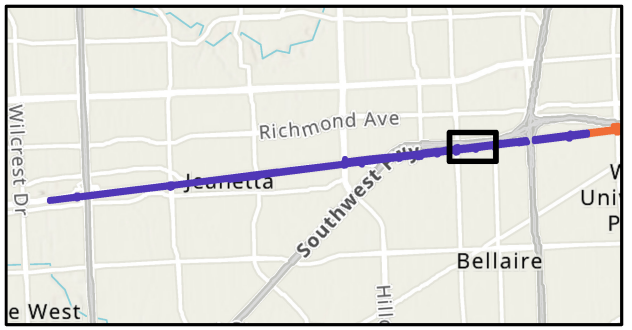
Date: 3/16/2023

METRORapid University Corridor



- Segment 1 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



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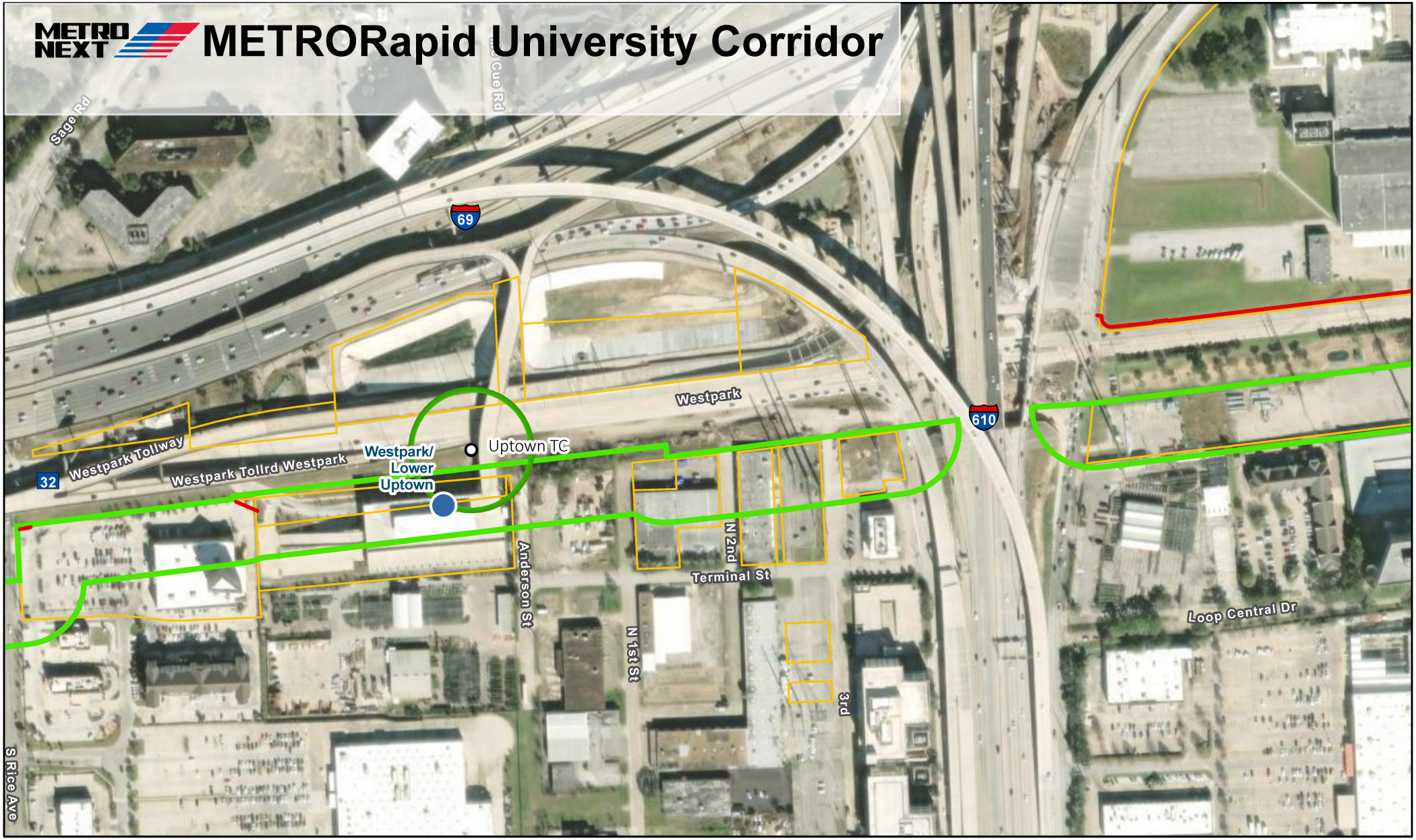
Segment 1, Map 10 of 12

0 200 400 ft

Document Path: G:\Projects\099_HNTB\013_21R_UniversityBRT\UniversityBRT_2023v3.aprx

Date: 3/16/2023

METRORapid University Corridor



Existing METRO Transit Center

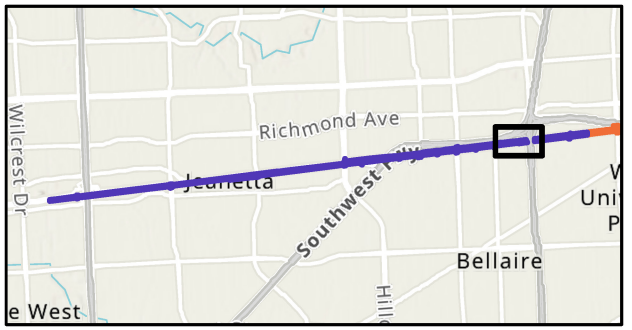
Proposed BRT Station (Preliminary Design)

Proposed ROW

Segment 1 Historic APE (150-ft south of Existing ROW)

BRT Station Historic APE

Parcels



N

Segment 1, Map 11 of 12

0 200 400 ft

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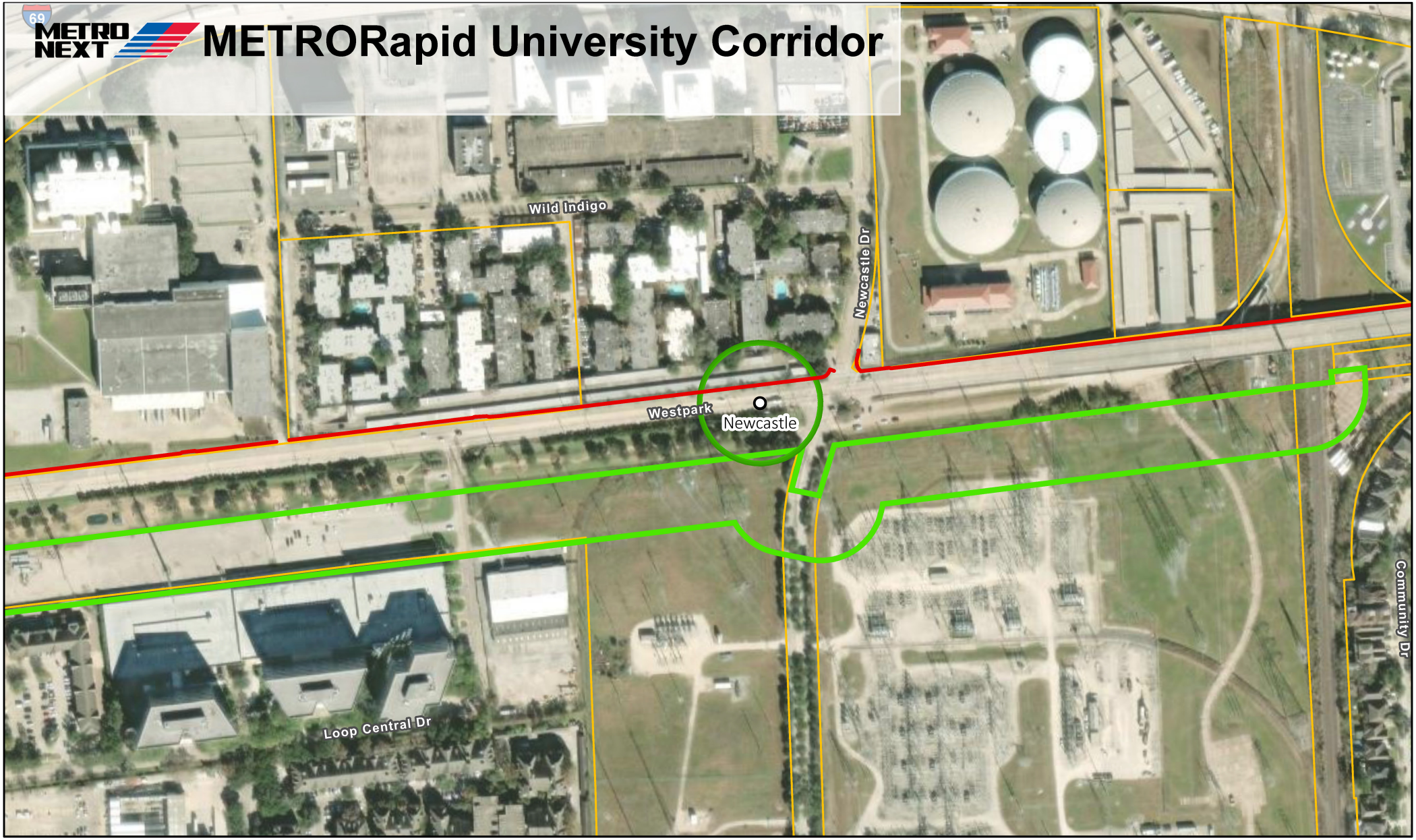
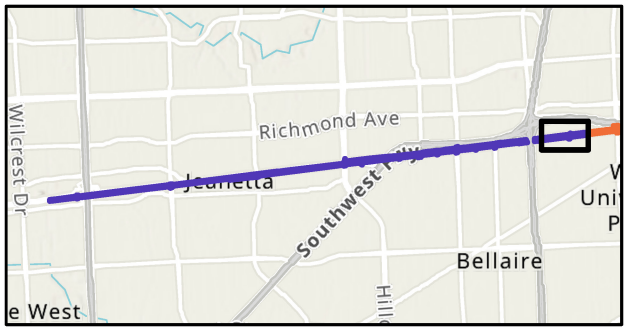
Date: 3/16/2023

METRORapid University Corridor



- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 1 Historic APE (150-ft south of Existing ROW)
- BRT Station Historic APE
- Parcels



N

Segment 1, Map 12 of 12

0 200 400 ft

Document Path: G:\Projects\099_HNTB\013_21R_UniversityBRT\UniversityBRT_2023v3.aprx

Date: 3/16/2023

APPENDIX B – Segment 2

Resource	Street	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S2 01	10500 blk Westpark Drive	N/A	N/A	N/A	N/A	**Streetscape view** of 10500 block of Westpark Tollway
S2 02a	4151 Southwest Freeway	No	C. 1971	None	Commerce/business	Insufficient significance under NRHP Criteria
S2 02b	4151 Southwest Freeway	No	C. 1971	Spanish Colonial Revival influence	Commerce/business	Insufficient significance under NRHP Criteria
S2 03	4141 Southwest Freeway	No	C. 1973	None	Commerce/business	Insufficient significance under NRHP Criteria
S2 04	4015 Southwest Freeway	No	C. 1968	Spanish Colonial Revival	Domestic/motel	La Quinta Inn. Alterations include changes to the main entrance and modern doors
S2 05	3759 Southwest Freeway	No	C. 1967	None	Commerce/vacant - not in use	Alterations include modern windows, siding, and awnings, plus a roof tower added circa 2002.
S2 06	3600 blk Richmond Avenue	N/A	N/A	N/A	N/A	**Streetscape view** of 3600 Block of Richmond Avenue
S2 07	3336 Richmond Avenue	Yes	C. 1965	New Formalism	Commerce/business	Individually eligible under Criterion C (Architecture) at the local level
S2 08	3334 Richmond Avenue	Yes	C. 1970	New Formalism	Commerce/business	Individually eligible under Criterion C (Architecture) at the local level
S2 09	3323 Richmond Avenue	Yes	C. 1961	Expressionism	Commerce/vacant -not in use	Individually eligible under Criterion C (Architecture) at the local level
S2 10	3322 Richmond Avenue	Yes	C. 1964	International	Commerce/business	Individually eligible under Criterion C (Architecture) at the local level
S2 11	3311 Richmond Avenue	Yes	C. 1969	New Formalism	Commerce/strip center	Individually eligible under Criterion C (Architecture) at the local level
S2 12	3131 Richmond Avenue	No	C. 1959/2011	Modernism	Commerce/service station	Building remodeled in 2011, alterations include modern windows, garage doors, and siding.
S2 13	3121 Richmond Avenue	Yes	C. 1961	New Formalism	Commerce/business	Individually eligible under Criterion C (Architecture) at the local level
S2 14	3118 Richmond Avenue	No	C. 1965/2010	International	Commerce/business	Building remodeled in 2010, alterations include larger replacement windows and an added support beam.
S2 15	3101 Richmond Avenue	Yes	C. 1964	New Formalism	Commerce/business	Individually eligible under Criterion C (Architecture) at the local level
S2 16	3100 Richmond Avenue	No	C. 1962/2008	New Formalism	Commerce/business	Alterations include new siding and windows. Based on the colors, different shapes of siding panels and changes to the fenestration, the remodel diminished the design and original vertical emphasis of the front façade.
S2 17	2626 Richmond Avenue	No	C. 1973	Modernism	Commerce/business	Alterations include the metal paneling on the marquee wall.
S2 18	Kirby Dr at Richmond Avenue	N/A	N/A	N/A	N/A	**Streetscape view** of the intersection of Kirby Drive and Richmond Avenue
S2 19	3601 Kirby Drive	No	C. 1979	Spanish Colonial Revival influence	Commerce/restaurant	Alterations include the side addition, gable roof (c. 2002) and red tiles (c. 2011).
S2 20a/b	2536 Richmond Avenue	No	C. 1970	None	Commerce/restaurant	Alterations include the front façade addition (c. 2004), east façade addition (c. 2005), and a modern metal roof (c. 2012).
S2 21	2107 Richmond Avenue	No	C. 1972	None	Commerce/specialty store	Alterations include modern metal parapet (c. 1995), a rear fence (c. 2020), and a loss of a canopy.
S2 22	Richmond Avenue	N/A	N/A	N/A	N/A	**Streetscape view** facing the intersection of Richmond Ave and S Shepherd Dr
S2 23	2040 Richmond Avenue	No	C. 1978	None	Commerce/warehouse	Insufficient significance under NRHP Criteria
S2 24	4215 Mandell Street	No	C. 1970	None	Commerce/warehouse	Insufficient significance under NRHP Criteria
S2 25	1419 Richmond Avenue	No	C. 1970	None	Commerce/strip center	Alterations include modern windows, siding, canopy, and a change in fenestration.
S2 26	1400 blk Richmond Avenue	N/A	N/A	N/A	N/A	**Streetscape view** of 1400 block of Richmond Ave
S2 27	Yoakum Bldv at Richmond Avenue	N/A	N/A	N/A	N/A	**Streetscape view** of northeast corner of Richamond Ave and Yoakum Boulevard

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S2 01	Location: 10500 block of Westpark Drive
View Facing	West and East	Description: ROW between Westpark Tollway and buildings



Camera direction: West



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 02a and S2 02b	Address:	4151 Southwest Freeway
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1971	References:	HCAD
NRHP Eligibility:	Not Eligible: Insufficient significance under NRHP Criteria		

Description: Parcel contains two buildings. S2 02a is a two-story parking garage with a central staggered ramp. The garage is adjacent to Westpark Drive.

S2 02b is a multistory, two-part vertical block office tower with orange brick siding. The windows create a pattern of vertical stripes on the south and north facades. The original windows have been replaced. The primary facade is oriented to IH-69 and has a faux arched gallery at the base. The Spanish Colonial Revival style influence is evidenced by the brick color and the faux arch gallery. Individually and collectively the buildings do not rise to the level of significance necessary to meet NRHP Criteria.



Camera direction: Northeast, rear façades facing Westpark Drive

Resource No.	S2 02a and S2 02b	Address:	4151 Southwest Freeway



Camera direction: Southwest, rear façade facing Westpark Drive

Resource No.	S2 02b	Address:	4151 Southwest Freeway



Camera direction: Northeast, façade facing Southwest Freeway

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 03	Address:	4141 Southwest Freeway
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1973	References:	HCAD
NRHP Eligibility:	Not Eligible: Insufficient significance under NRHP Criteria		

Description: Multi-story vertical block building with stucco siding. The windows create a pattern of vertical stripes on the south and north facades. The primary facade is oriented to the Southwest Freeway. The building has no unique features and does not rise to the level of significance necessary for inclusion in the NRHP.



Camera direction: Northeast

Resource No.	S2 03	Address:	4141 Southwest Freeway
			
Image orientation: Southeast (Google Earth 5/2022)			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 04 La Quinta Inn	Address:	4015 Southwest Freeway
Resource Type:	Building	Function/Use:	Domestic/motel
Estimated Year built:	C. 1968	References:	HCAD
NRHP Eligibility:	Not Eligible: lack of integrity of materials, workmanship, and design		

Description: The motel consists of two buildings, one is an "H" plan centered around a pool while the second is a rectangular plan oriented to IH-69. Both buildings are two-stories with rooms accessed from the exterior. Alterations include changes to the main entrance and modern doors.

La Quinta Motor Inns concept by Sam and Philip Barshop started in San Antonio, Texas, constructed for the 1968 World's Fair. The Barshops franchised in 1973 but discontinued licensing in 1977. The motels had 100 to 125 rooms and buildings were standardized with precast concrete panels, prefabricated bathrooms, and architectural elements of the Spanish Colonial Revival style. In 1990 La Quinta modified their signage and underwent renovation and remodeling of their older motels to rebrand the chain (Jakle, Sculle, and Rogers 1996: 205-206).



Camera direction: Southeast (front façade facing Southwest Freeway)

Resource No.	S2 04	Address:	4015 Southwest Freeway



Image orientation: Northwest (Google Earth 5/2022)



Image orientation: North (Google Earth 05/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 05	Address:	3759 Southwest Freeway
Resource Type:	Building	Function/Use:	Commerce/vacant - not in use
Estimated Year built:	C. 1967	References:	HCAD
NRHP Eligibility:	Not Eligible: Building lacks integrity of design, materials, and workmanship.		

Description: Two-story flat roof building of no particular style. Alterations include modern windows, siding, and awnings, plus a roof tower added circa 2002.



Camera direction: Northwest

Resource No.	S2 05	Address:	3759 Southwest Freeway
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S2 06	Location: 3600 Block of Richmond Avenue
View Facing	Northwest	Description: Landscaped medians, vegetated parkway, and sidewalks.



Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 07 Jefferson Chemical	Address:	3336 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1965	References:	HCAD, www.houstonmod.org
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: This New Formalism style building was designed by Neuhaus and Taylor. The façade is covered with horizontal black windows that reach from floor to ceiling. The overhanging roof is supported by thin columns. The top floor has black windows that are recessed on all sides and an overhanging roof.

3336 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as an excellent example of the New Formalism style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the green spaces and parking lots around the building retain their original orientations and sizes, although the specific vegetation in the green spaces has potentially been altered. Nonetheless as original components of the building's setting, they are considered contributing to the setting of the property. 3336 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

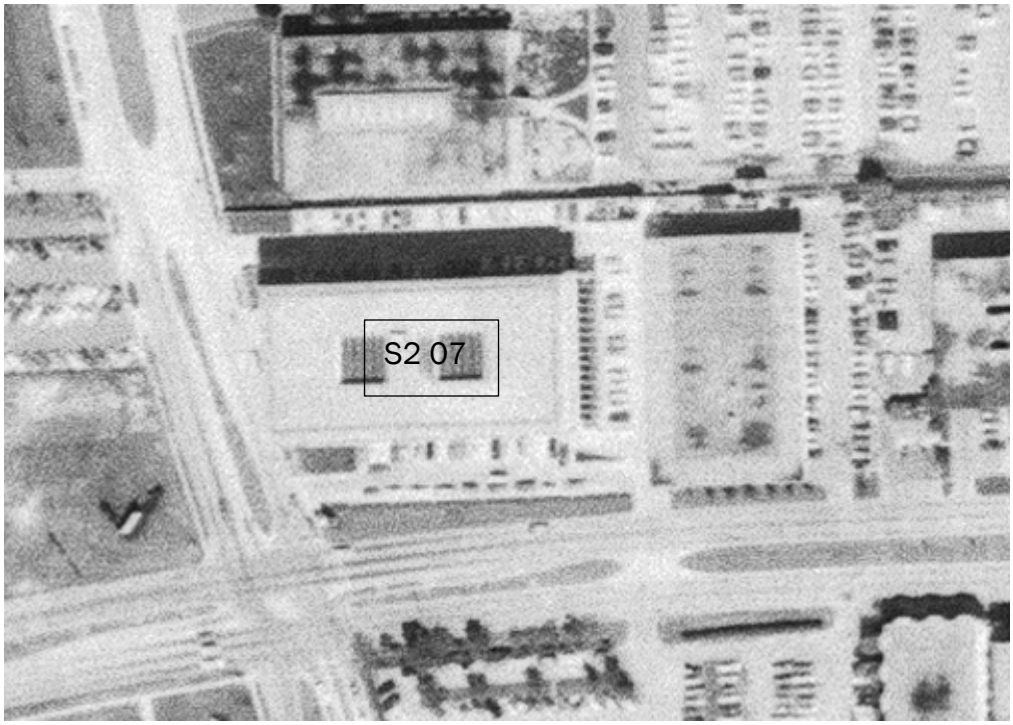


Camera direction: Northwest

Resource No.	S2 07	Address:	3336 Richmond Avenue



Camera direction: Northeast



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 08	Address:	3334 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1970	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: This one-story, New Formalism style building has wide, over-hanging eaves supported by thin, white columns.

3334 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as an excellent example of the New Formalism style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the green spaces and parking lots around the building retain their original positions, although the green spaces have been altered with new signage and planters. Despite the alterations, both are considered contributing components to the setting of the property. 3334 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

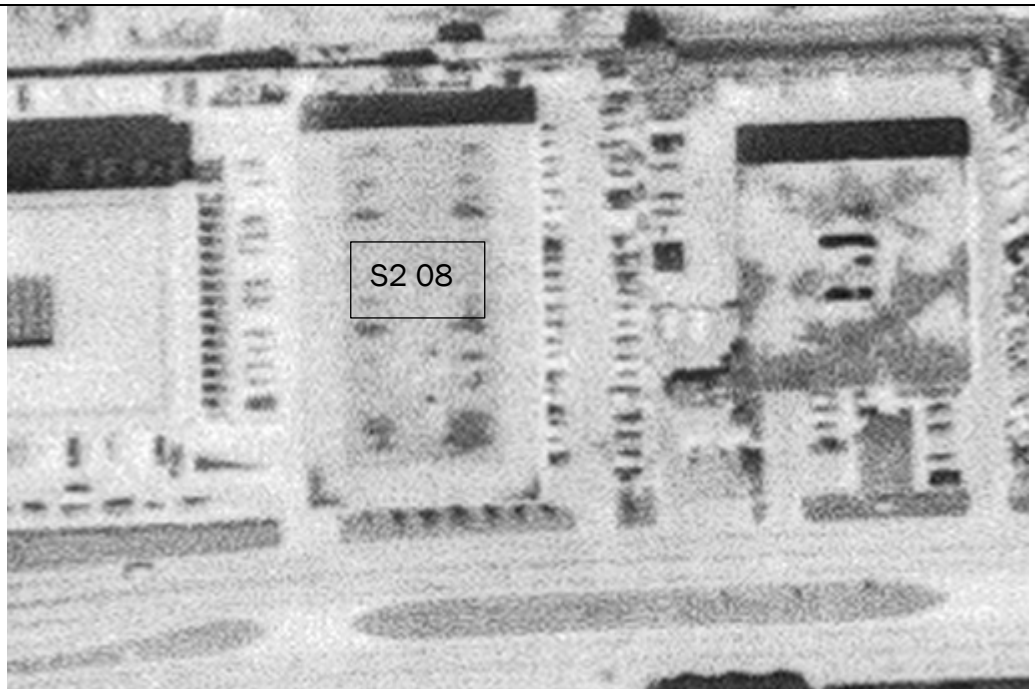


Camera direction: Northwest

Resource No.	S2 08	Address:	3334 Richmond Avenue



Camera direction: Northeast



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 09 Phoenix Insurance Co.	Address:	3323 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/vacant - not in use
Estimated Year built:	C. 1961	References:	www.houstonmod.org
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: Local architectural firm Neuhaus and Taylor designed this two-story building with office space on the top floor and parking/entrance at the ground floor. The Expressionism Style is evident in the curved, concreted arches cantilevered over the second-floor windows. The added fencing underneath is not original but not permanent and removable.

3323 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as an excellent example of the Expressionism Style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the grassy areas appear to be part of the original setting, but the trees/other vegetation do not and are considered non-contributing. 3323 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

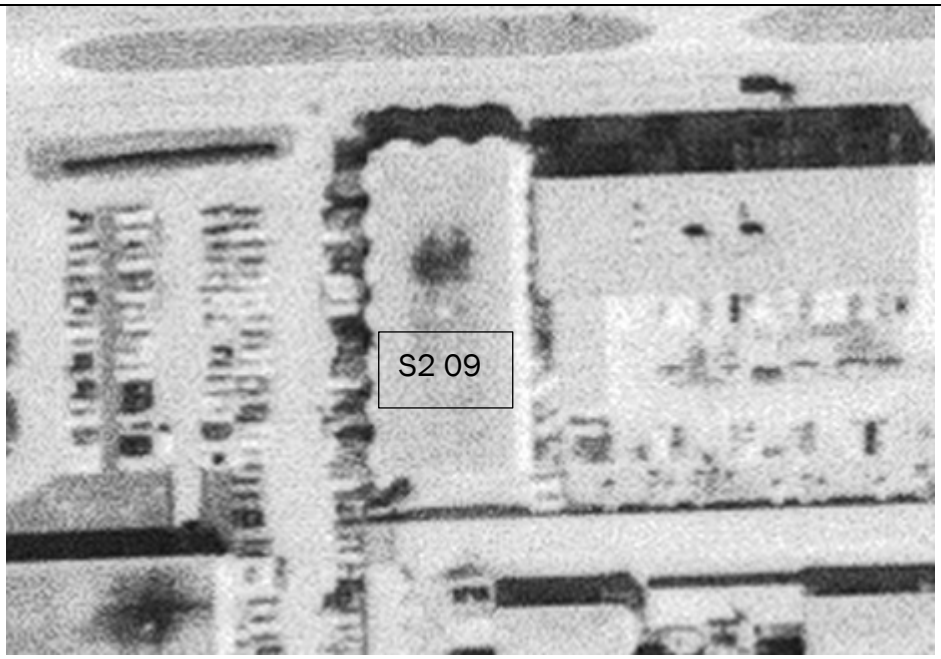


Camera direction: Southwest

Resource No.	S2 09	Address:	3323 Richmond Avenue



Camera direction: Southeast



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 10	Address:	3322 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1964	References:	HCAD, Hicks & Company, 2007
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: A two-story building of the International style. The flat roof has a wide eave and supports horizontal panels that hang past the eave line. The second-floor windows are the walls as they extend from floor to ceiling resting upon the concrete floor that cantilevers over the brick veneer base.

3322 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as a good example of the International Style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the vegetative areas and parking lots appear to be part of the original setting and are considered contributing. 3322 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

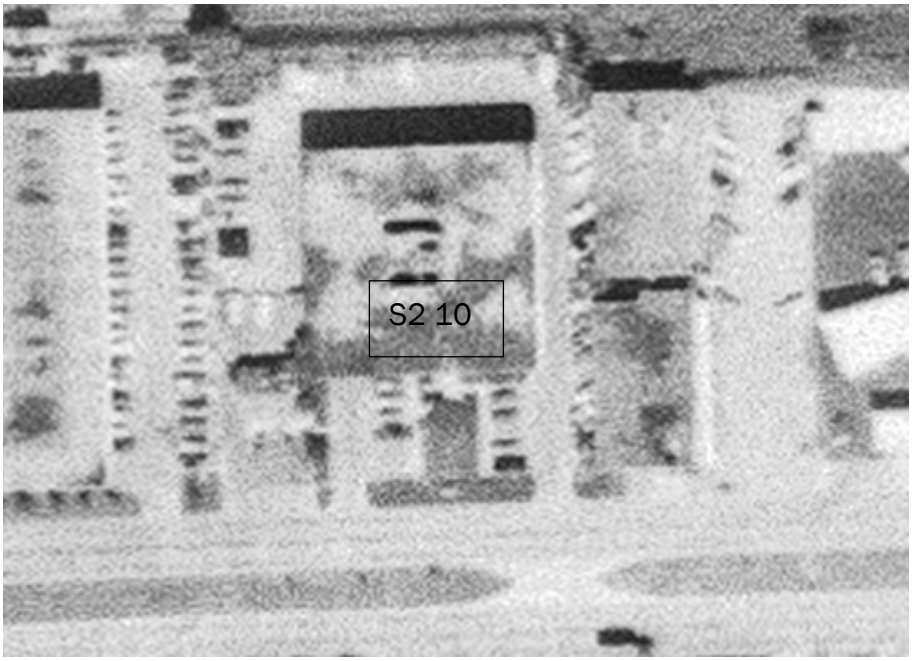


Camera direction: Southeast

Resource No.	S2 10	Address:	3322 Richmond Avenue



Camera direction: Northeast



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 11	Address:	3311 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/strip center
Estimated Year built:	C. 1969	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: Three-story commercial building in the New Formalism style. The glass walls are made of vertical windows of black glass that extend from floor to ceiling. The brick veneer side walls and white concrete roof extends beyond the windows. Six white columns extend from floor to ceiling on the front façade and connect to the second floor penetrating the window. A horizontal orange band acts as a sign and extends across five of the seven bays.

3311 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as a good example of the New Formalism style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the vegetative areas and parking areas appear to be part of the original setting and are considered contributing. 3311 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

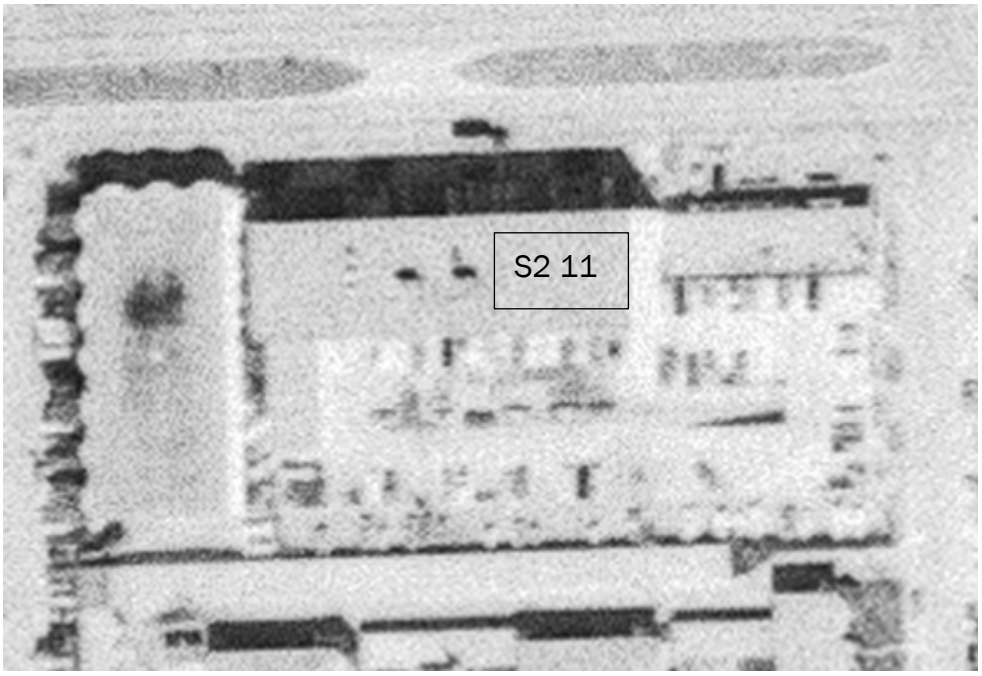


Camera direction: Southeast

Resource No.	S2 11	Address:	3311 Richmond Avenue



Camera direction: Southwest



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 12	Address:	3131 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1959/2011	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Not Eligible: Building lacks integrity of design, materials, and workmanship.		

Description: One-story automobile service station with seven bays and an office. HCAD has the building remodeled in 2011. Alterations include modern windows, garage doors, and siding, impacting integrity of design, materials, and workmanship.

3131 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.



Camera direction: Southwest

Resource No.	S2 12	Address:	3131 Richmond Avenue
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 13	Address:	3121 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1961	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: Two-story commercial building in the New Formalism style with parking below the second story. The second floor has recessed windows with wide overhanging eaves supported by square columns. According to www.Houstonmod.org this building was originally the Pontiac Motor Division building.

3121 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as a good example of the New Formalism style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the vegetative areas (including the trees) in front of the building appear to be part of the original setting and are considered contributing. 3121 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

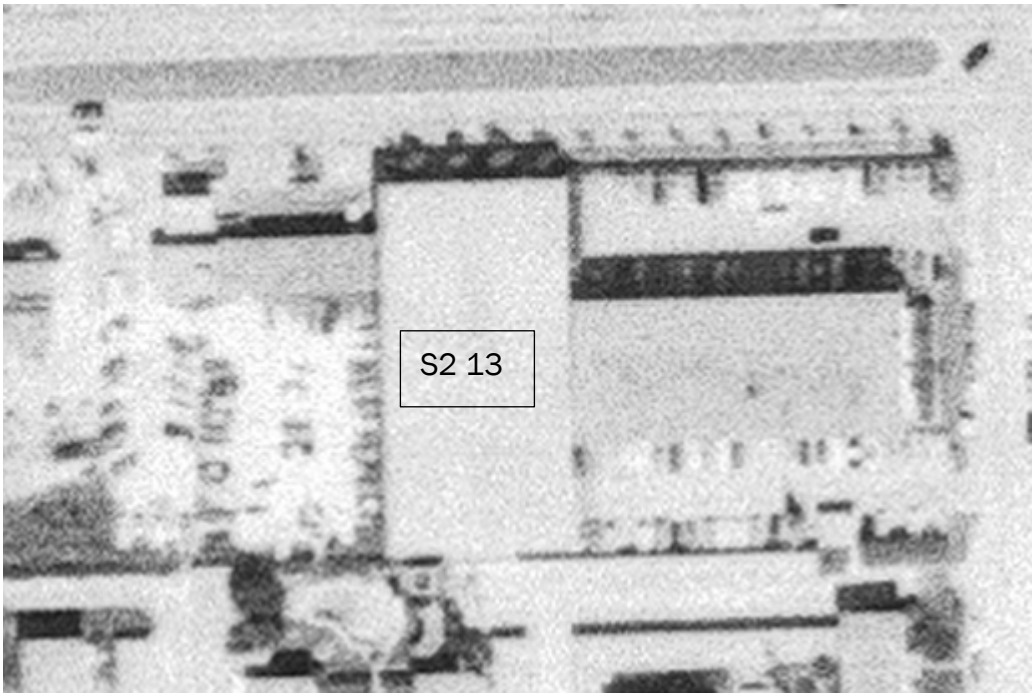


Camera direction: Southeast

Resource No.	S2 13	Address:	3311 Richmond Avenue



Camera direction: Southwest



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 14	Address:	3118 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1965/2010	References:	HCAD, Hicks & Company 2007
NRHP Eligibility:	Not Eligible: Building lacks integrity of design, materials, and workmanship.		

Description: Two-story commercial building in the International style. The second floor appears to be suspended above a glass box. The floor-to-ceiling black glass windows are recessed between overhanging eaves and cantilevered floors. A metal support beam has been added under the cantilevered upper floor. Older photos show the building was remodeled in 2010, with larger replacement windows and the added support beam impacting integrity of design, materials, and workmanship.

3118 Richmond Avenue is not recommended individually eligible under Criterion C due to the window changes and added support beam impacting its historic integrity. 3118 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.



Camera direction: Southwest

Resource No.	S2 14	Address:	3118 Richmond Avenue



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 15	Address:	3101 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1964	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Individually eligible under Criterion C (Architecture) at the local level		

Description: Two-story New Formalism style building set on a pedestal with vertical black windows and vertical white cladding, both extending from floor to ceiling providing a uniform monolithic appearance.

3101 Richmond Avenue is recommended individually eligible under Criterion C at the local level in the area of Architecture as a good example of the New Formalism style. The building retains integrity of location, design, setting, materials, workmanship, and feeling. Per historic aerials, the parking lot and vegetation strip in front of the building appear to be part of the original setting and are considered contributing. 3101 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.

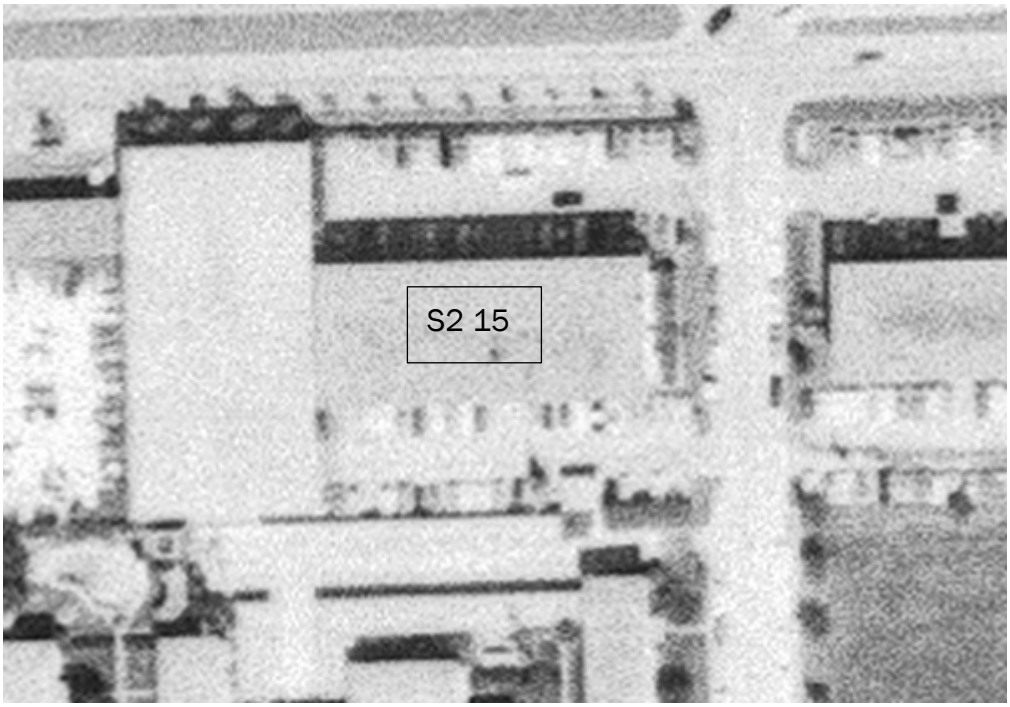


Camera direction: Southeast

Resource No.	S2 15	Address:	3101 Richmond Avenue



Camera direction: Southwest



1966 aerial photograph, image orientation: North (USGS)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 16	Address:	3100 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1962/2008	References:	HCAD, https://dahp.wa.gov
NRHP Eligibility:	Not Eligible: Building lacks integrity of design, materials, and workmanship.		

Description: A two-part vertical tower in the New Formalism style. The top floor has recessed windows with wide overhanging eaves. The vertical windows on the front and back facades extend from floor to ceiling. Per HCAD the building was remodeled in 2008. Alterations include new siding and windows. Based on the colors, different shapes of siding panels and changes to the fenestration, the remodel diminished the design and original vertical emphasis of the front façade, impacting integrity of design, materials, and workmanship.

3100 Richmond Avenue was previously recommended as contributing to the then-NRHP eligible Richmond Avenue Metropolitan Commercial Historic District in 2007.



Camera direction: Northwest

Resource No.	S2 16	Address:	3100 Richmond Avenue
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 17	Address:	2626 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1973	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria, lacks integrity of materials		

Description: Two-story building in the Modernism style with office space on the top floor and parking/entrance at the ground floor. A wide marquee wall with metal siding is in the center of the building on the front façade and extends beyond the roofline. Beige, pebbledash square panels are located at the eave line and belt line accentuating the building's horizontal lines. Alterations include the metal paneling on the marquee wall.



Camera direction: Northeast

Resource No.	S2 17	Address:	2626 Richmond Avenue
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view	S2 18	Location: Intersection of Kirby Drive and Richmond Avenue
View Facing	West	Description: view of Richmond Avenue



Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 19	Address:	3601 Kirby Drive
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1979	References:	HCAD
NRHP Eligibility:	Not Eligible: building lacks integrity of design, materials, and workmanship		

Description: Resource S2 19 is a one-story building influenced by the Spanish Colonial Revival style as evidenced in the red clay tile roof and stucco siding. Alterations include the side addition, gable roof (c. 2002) and red tiles (c. 2011).



Camera direction: Southeast

Resource No.	S2 19	Address:	3601 Kirby Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 20a/b	Address:	2536 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: building lacks integrity of design, materials, workmanship, association, and setting		

Description: Resource S2 20a is a one-story building with side gable roof and brick siding. Alterations include the front façade addition (c. 2004), east façade addition (c. 2005), and a modern metal roof (c. 2012).

The gas station canopy (S2 20b), c. 1970, on the corner lacks integrity of feeling, association and setting.



Resource No.	S2 20a	Address:	2536 Richmond Avenue



Camera direction: Northwest

Resource No.	S2 20b	Address:	2536 Richmond Avenue



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 21	Address:	2107 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1972	References:	Jones, Dwayne 2016, HCAD, Google Earth
NRHP Eligibility:	Not Eligible: The building lacks integrity of materials, design, and workmanship		

Description: One-story building with an office and three service bays for automobiles. Based on aerial photos showing a gable roof and year of construction this was originally a gas station in the Ranch style. Alterations include modern metal parapet (c. 1995), a rear fence (c. 2020), and a loss of a canopy.



Camera direction: South

Resource No.	S2 21	Address:	2107 Richmond Avenue
			
Camera direction: Southwest			
			
Image oriented North (Google Earth 5/2022)			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S2 22	Location: Intersection of Richmond Ave and S Shepherd Dr
View Facing	West	Description: Typical intersection on commercial road



Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 23	Address:	2040 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1978	References:	HCAD
NRHP Eligibility:	Not Eligible: Insufficient significance under NRHP Criteria		

Description: One-story metal warehouse with gable roof. The side façade has a central pedestrian door flanked on either side by a rolling garage door. The building lacks any unique architectural features or construction methods and does not rise to a level of significance to meet NRHP Criteria.



Camera direction: Northeast

Resource No.	S2 23	Address:	2040 Richmond Avenue
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 24	Address:	4215 Mandell St
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: Insufficient significance under NRHP Criteria		

Description: One-story warehouse in a rectangular plan with metal siding and roof. The building lacks any unique architectural features or construction methods.



Camera direction: Southwest

Resource No.	S2 24	Address:	4215 Mandell St



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S2 25	Address:	1419 Richmond Avenue
Resource Type:	Building	Function/Use:	Commerce/strip center
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: building lacks integrity of design, materials, and workmanship		

Description: One-story retail center in a rectangular plan set at the rear of the parking lot. Alterations include modern windows, siding, canopy, and a change in fenestration.



Camera direction: Southeast

Resource No.	S2 25	Address:	1419 Richmond Avenue
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view	S2 26	Location: 1400 block of Richmond Ave
View Facing	East	Description: Vegetated median and parkway

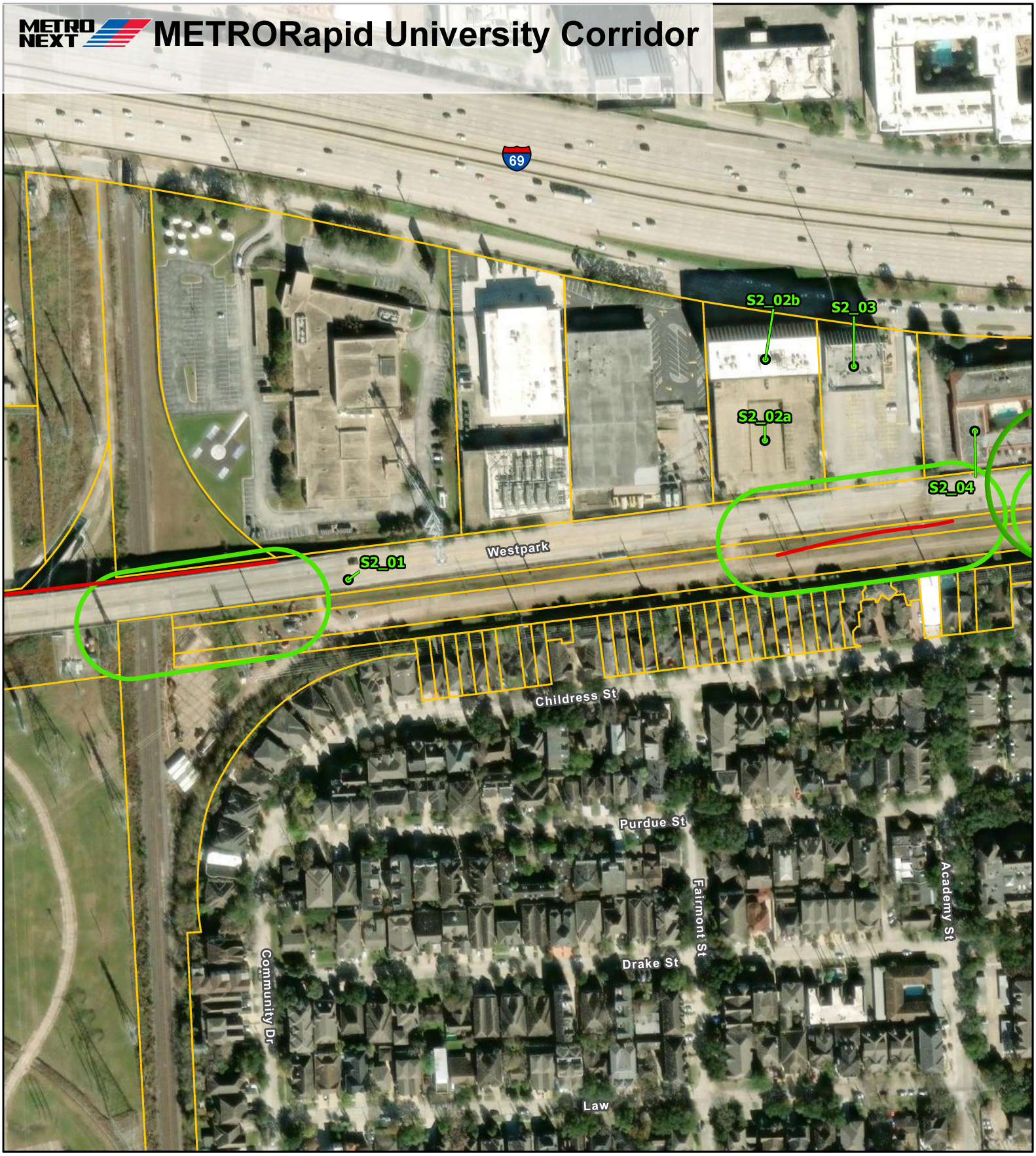


Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 2
Surveyed June 2022
Surveyors: Kurt Korfmacher and Erica Koteras, AmaTerra Environmental, Inc.

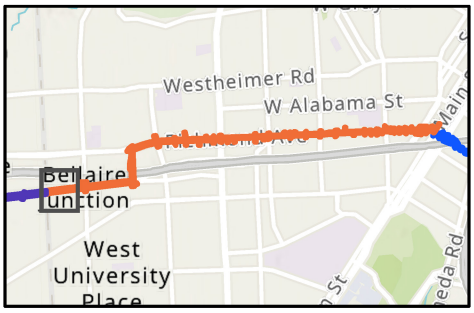
Streetscape view	S2 27	Location: Northeast corner of Richmond Avenue and Yoakum Boulevard
View Facing	Northeast	Description: View shows the varied styles, ages, and uses of buildings adjacent to Richmond Avenue.



METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



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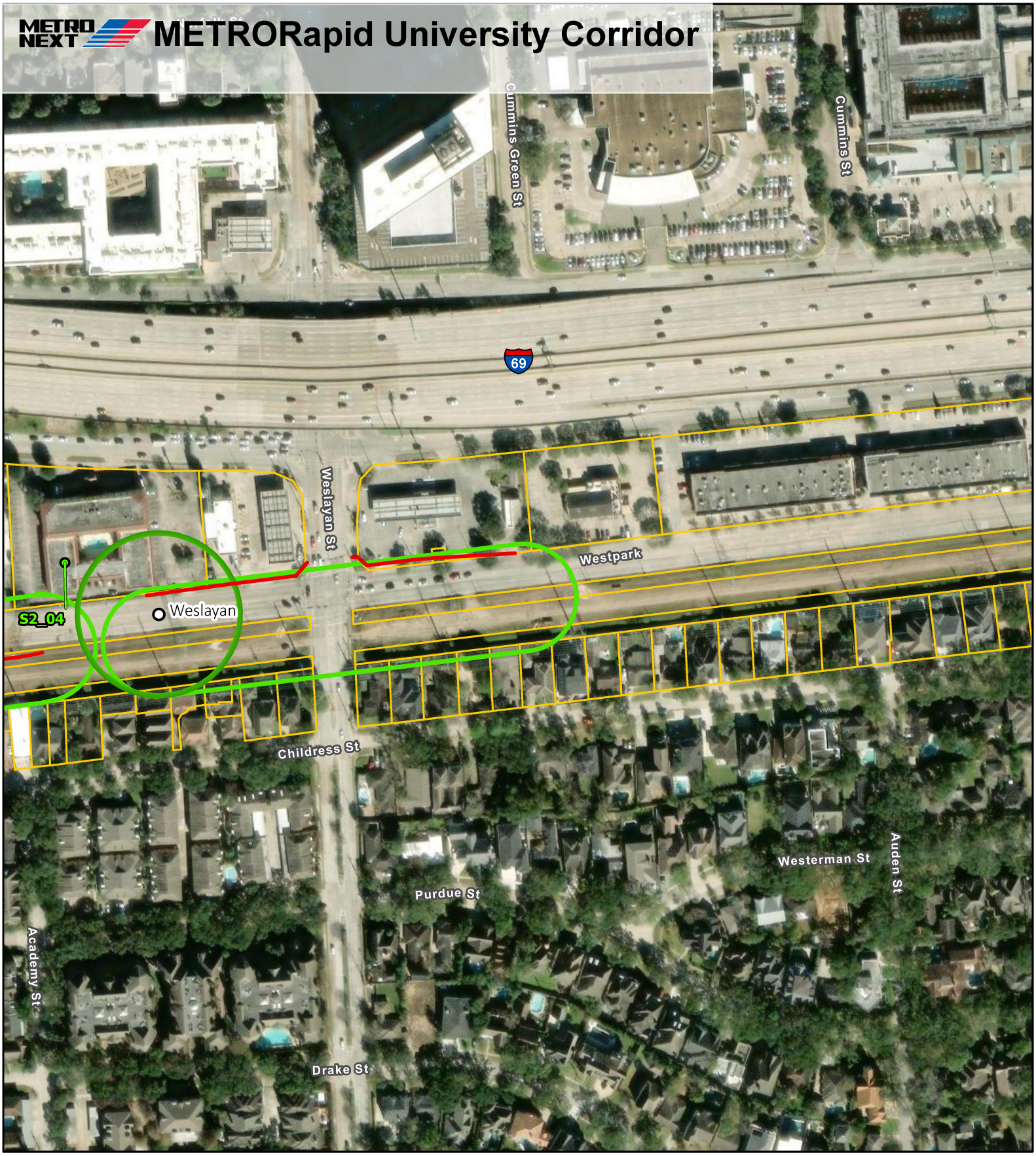
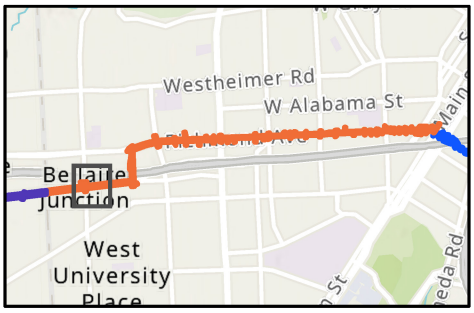
Segment 2, Map 1 of 13

0 100 200 300 ft

METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



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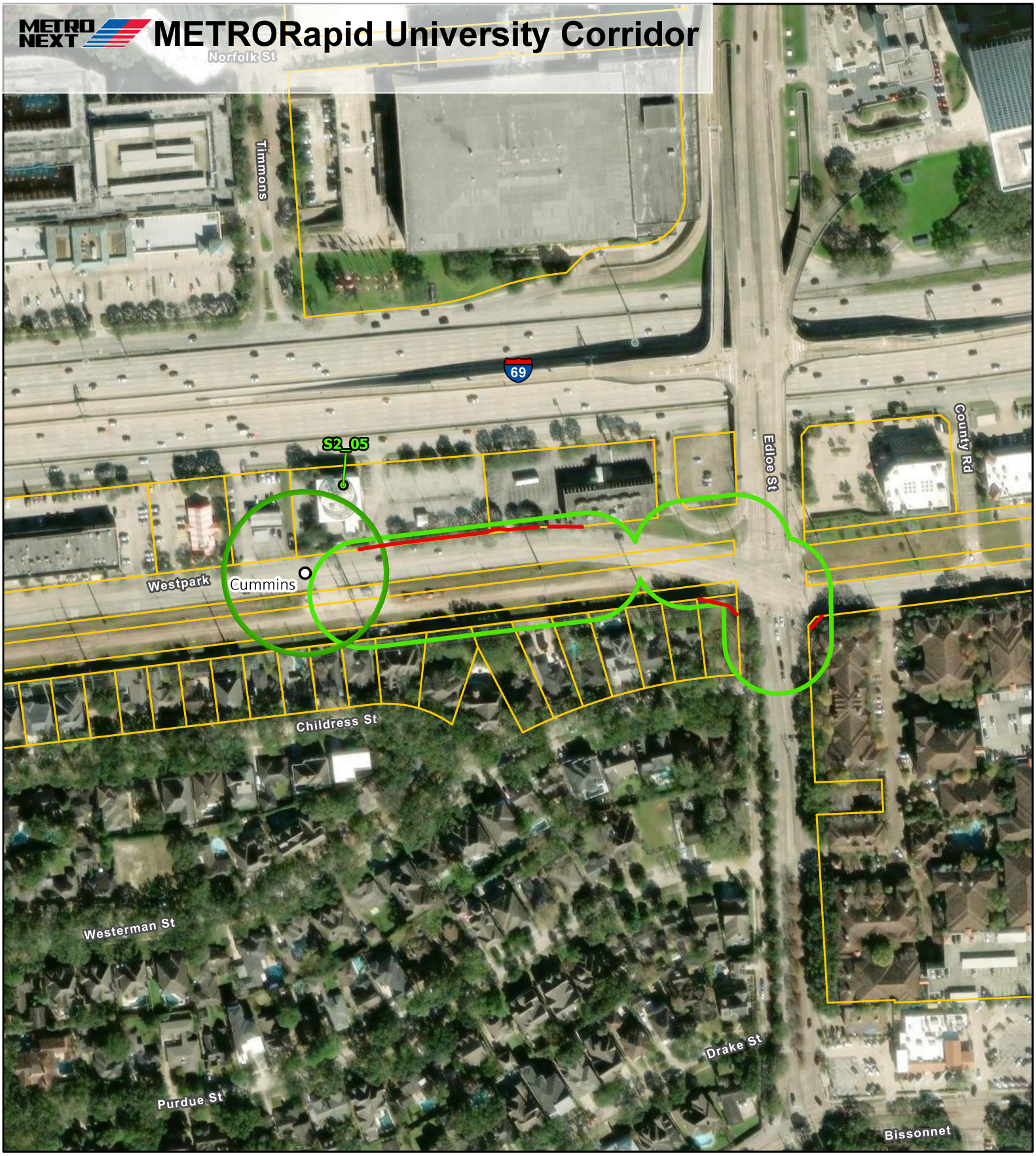
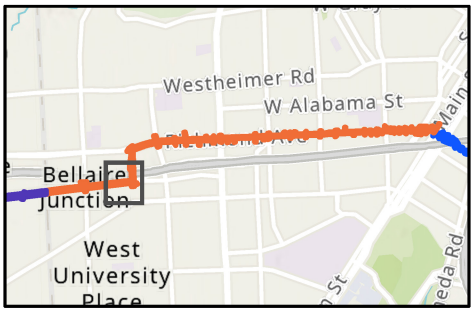
Segment 2, Map 2 of 13

0 100 200 300 ft

METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



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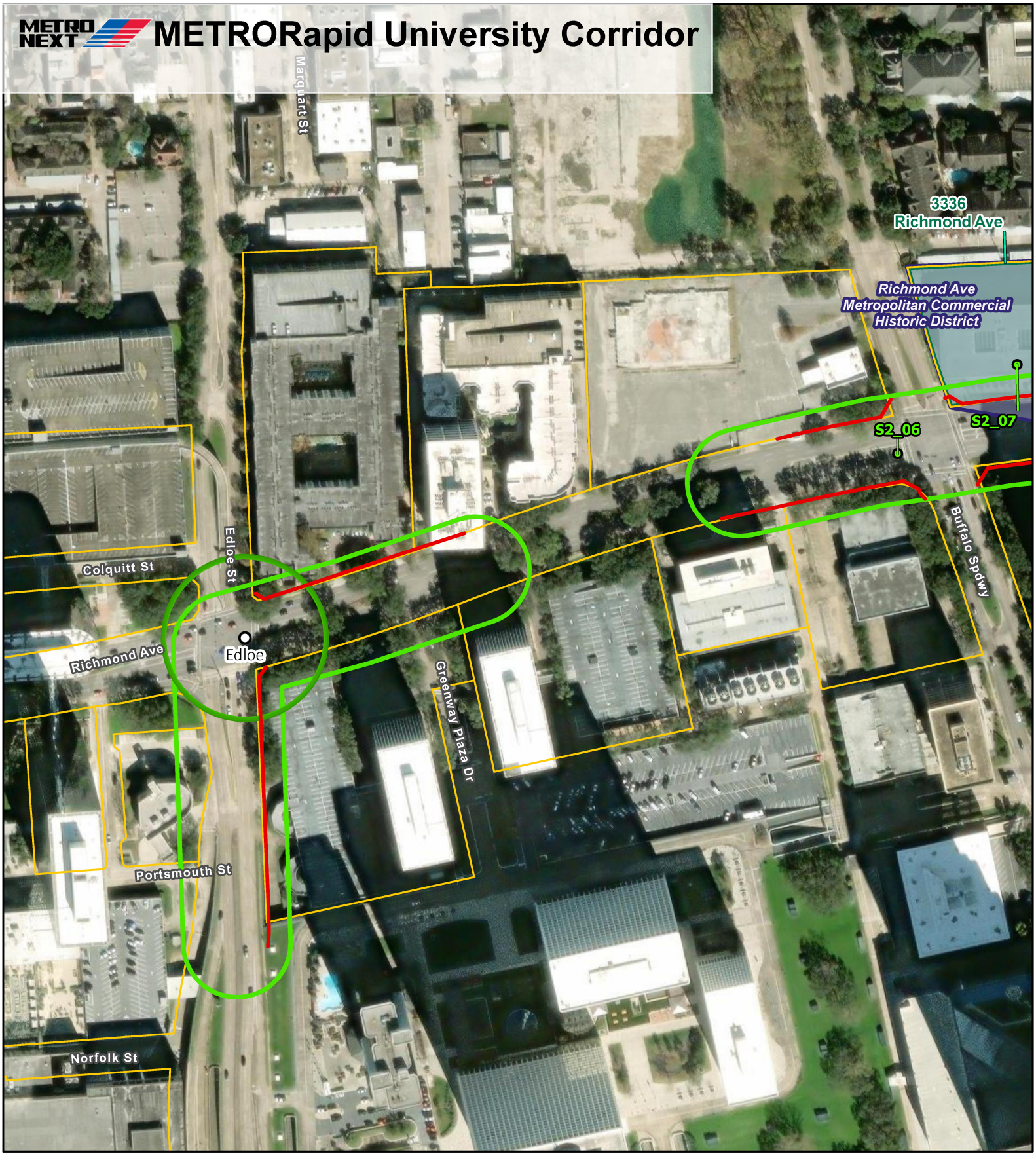
Segment 2, Map 3 of 13

0 100 200 300 ft

METRORapid University Corridor

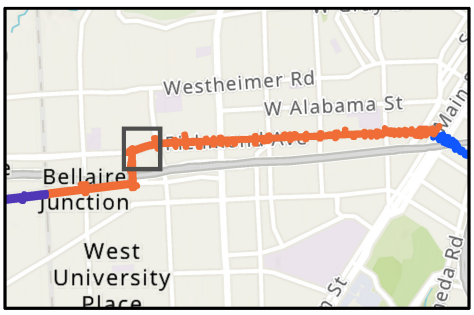


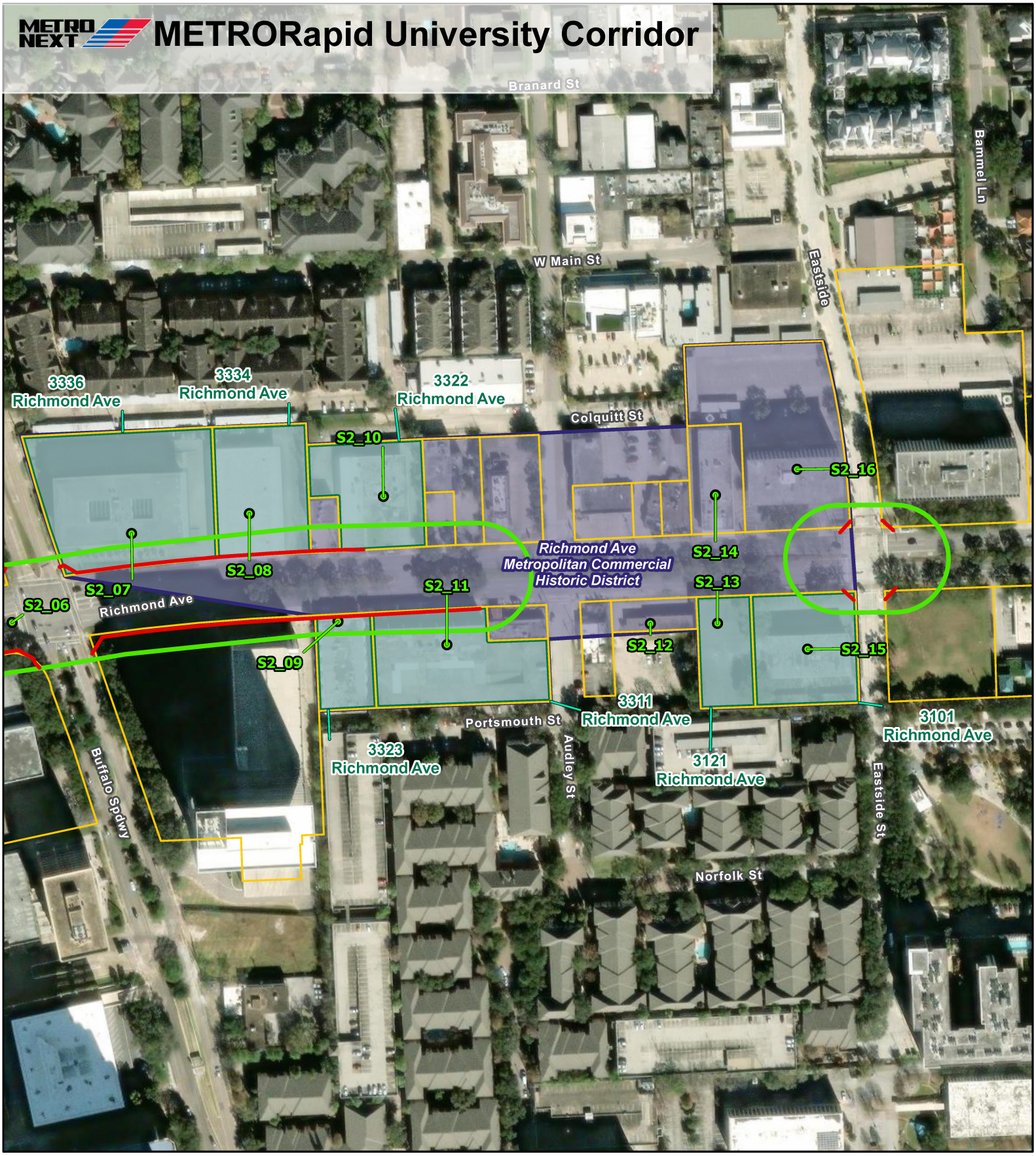
- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Formerly NRHP Eligible Historic District
- NRHP Eligible Property
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels

N

Segment 2, Map 4 of 13

0 100 200 300 ft





Segment 2 Documented Resources

Proposed ROW

Formerly NRHP Eligible Historic District

NRHP Eligible Property

Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)

Parcels

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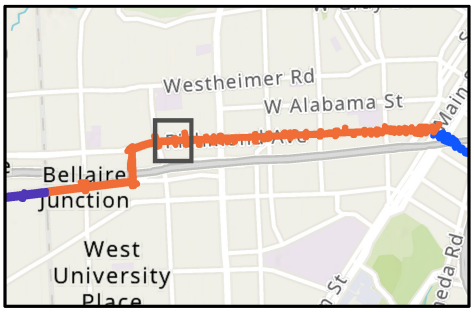
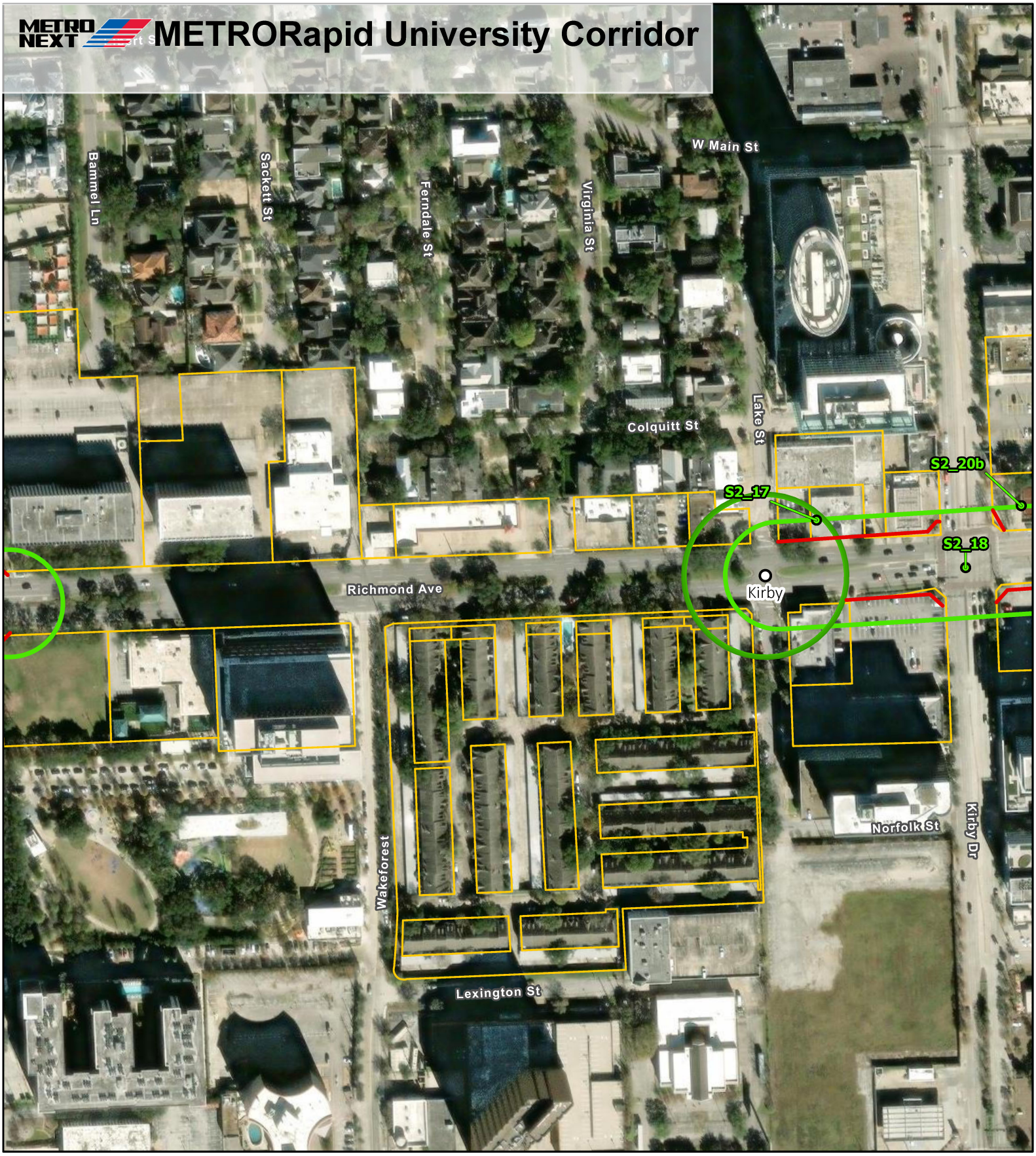
Segment 2, Map 5 of 13

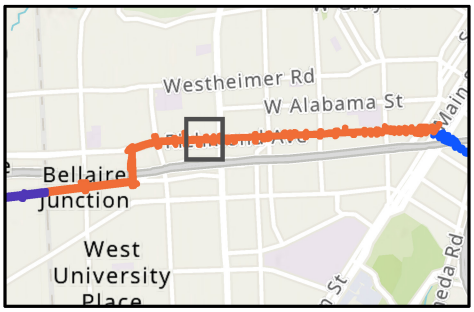
0 100 200 300 ft



METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



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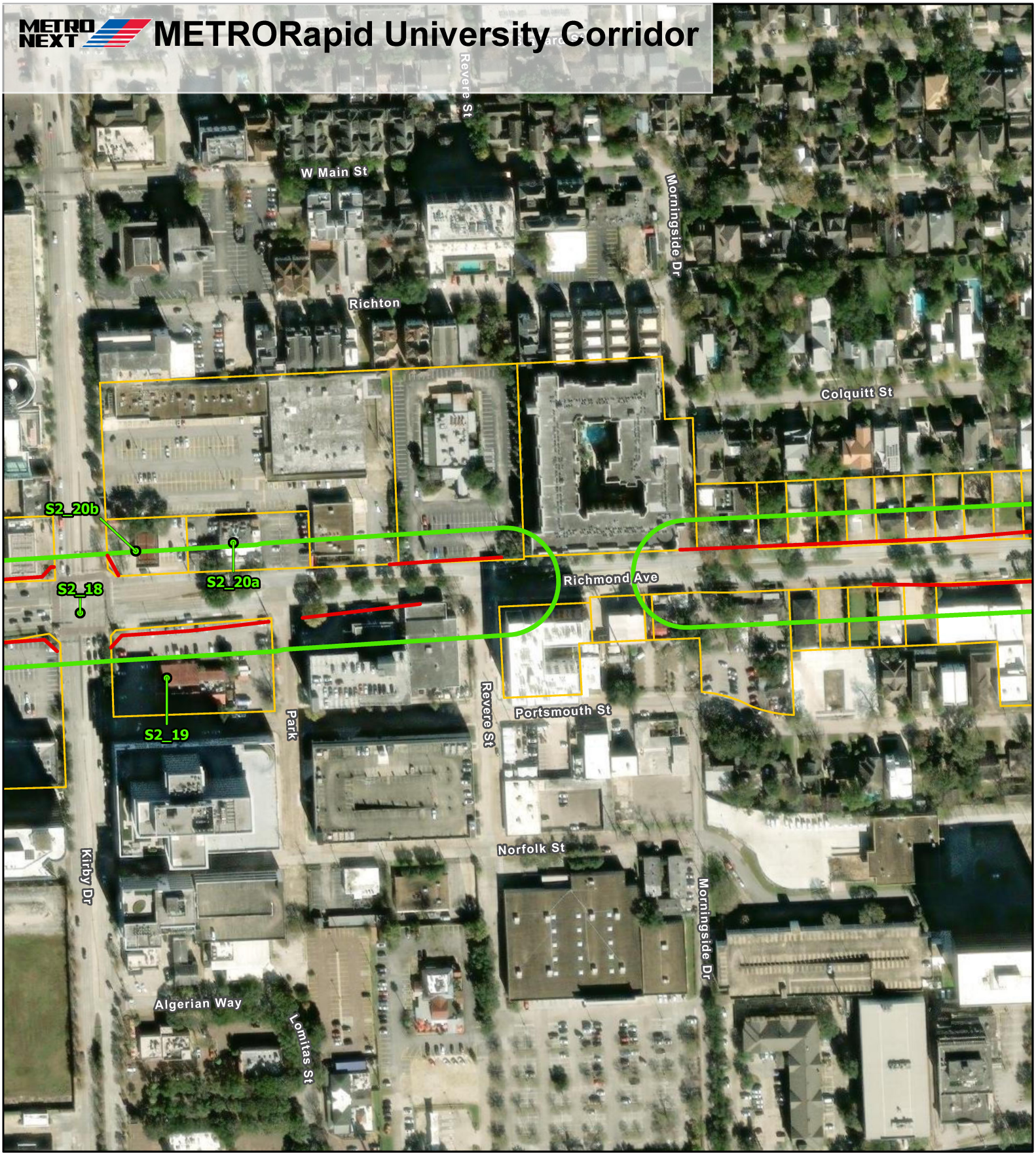
Segment 2, Map 6 of 13

0 100 200 300 ft

METRORapid University Corridor

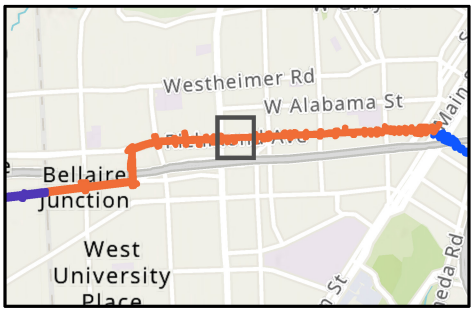


Segment 2 Documented Resources

Proposed ROW

Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)

Parcels

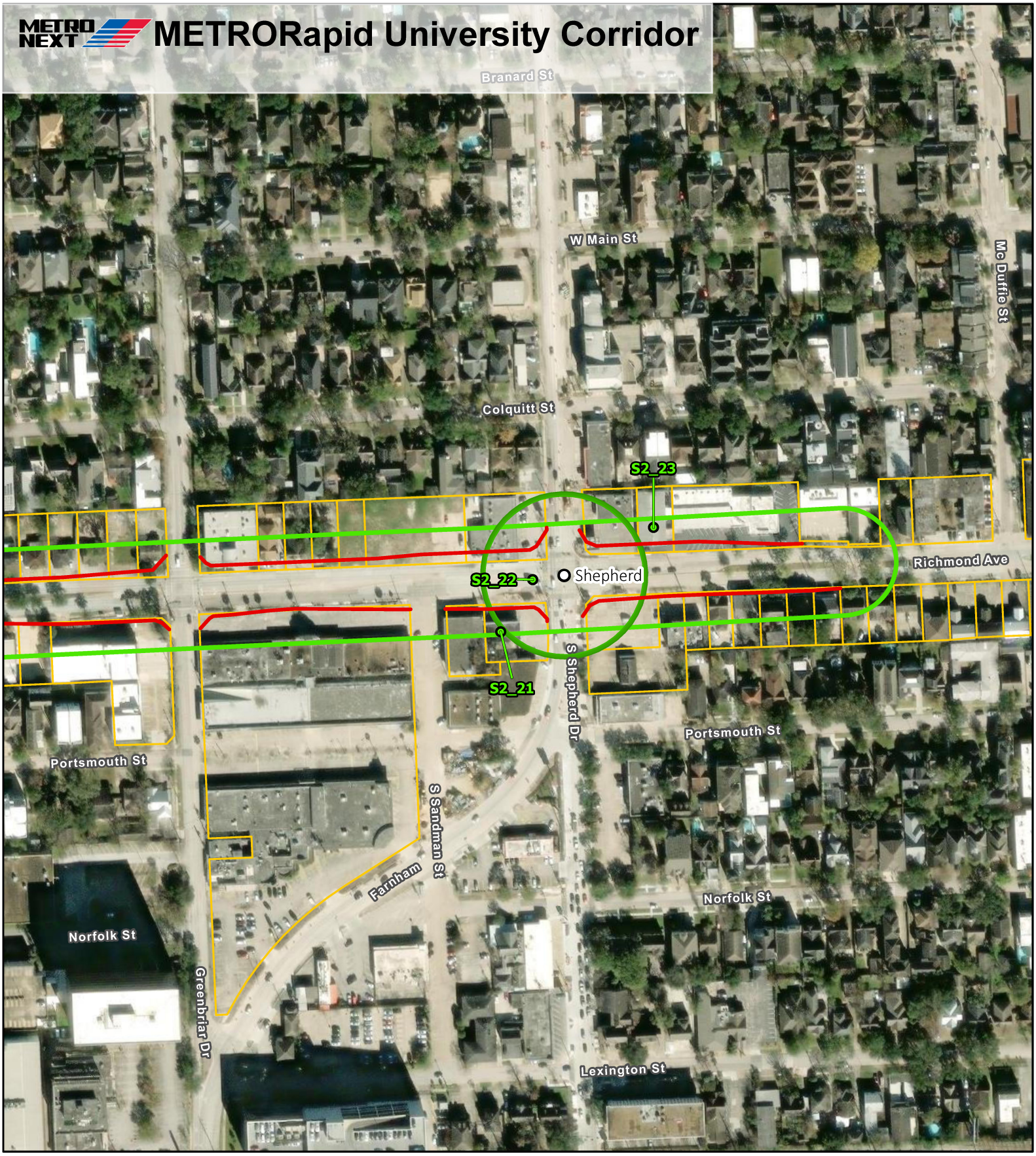


N

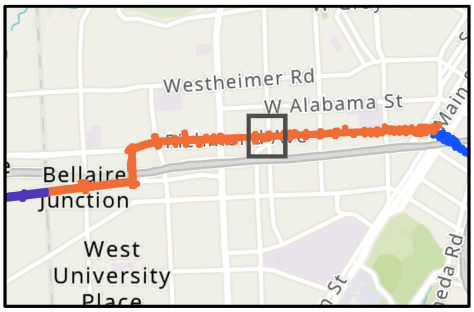
Segment 2, Map 7 of 13

0 100 200 300 ft

METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels

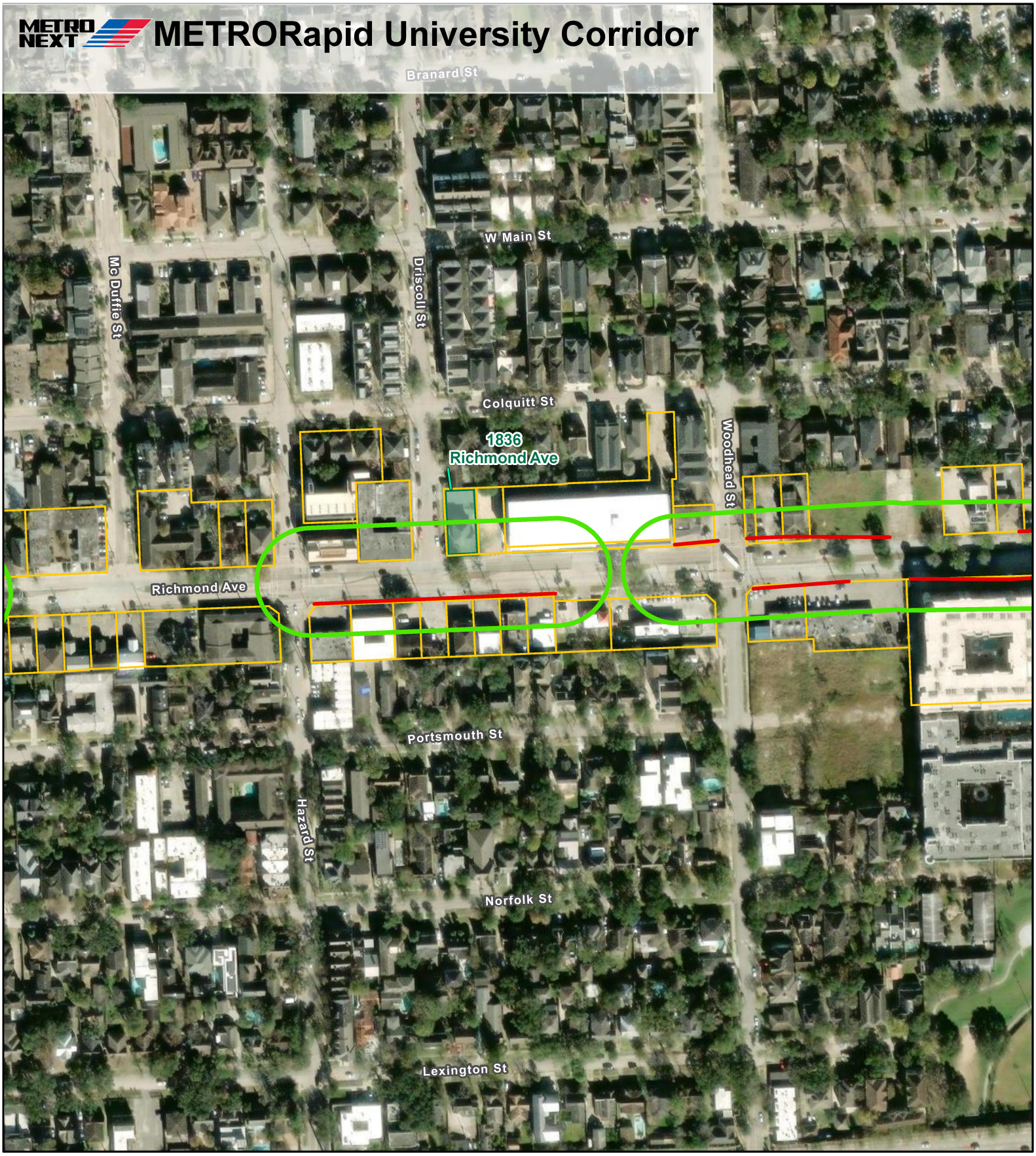


N

Segment 2, Map 8 of 13

0 100 200 300 ft

METRORapid University Corridor

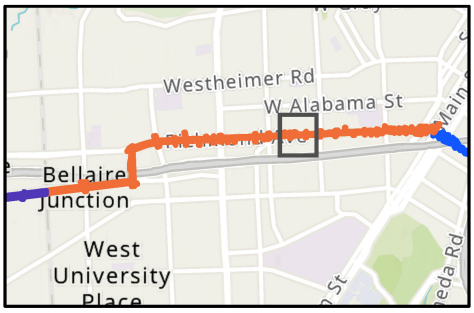


Proposed ROW

NRHP Eligible Property

Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)

Parcels

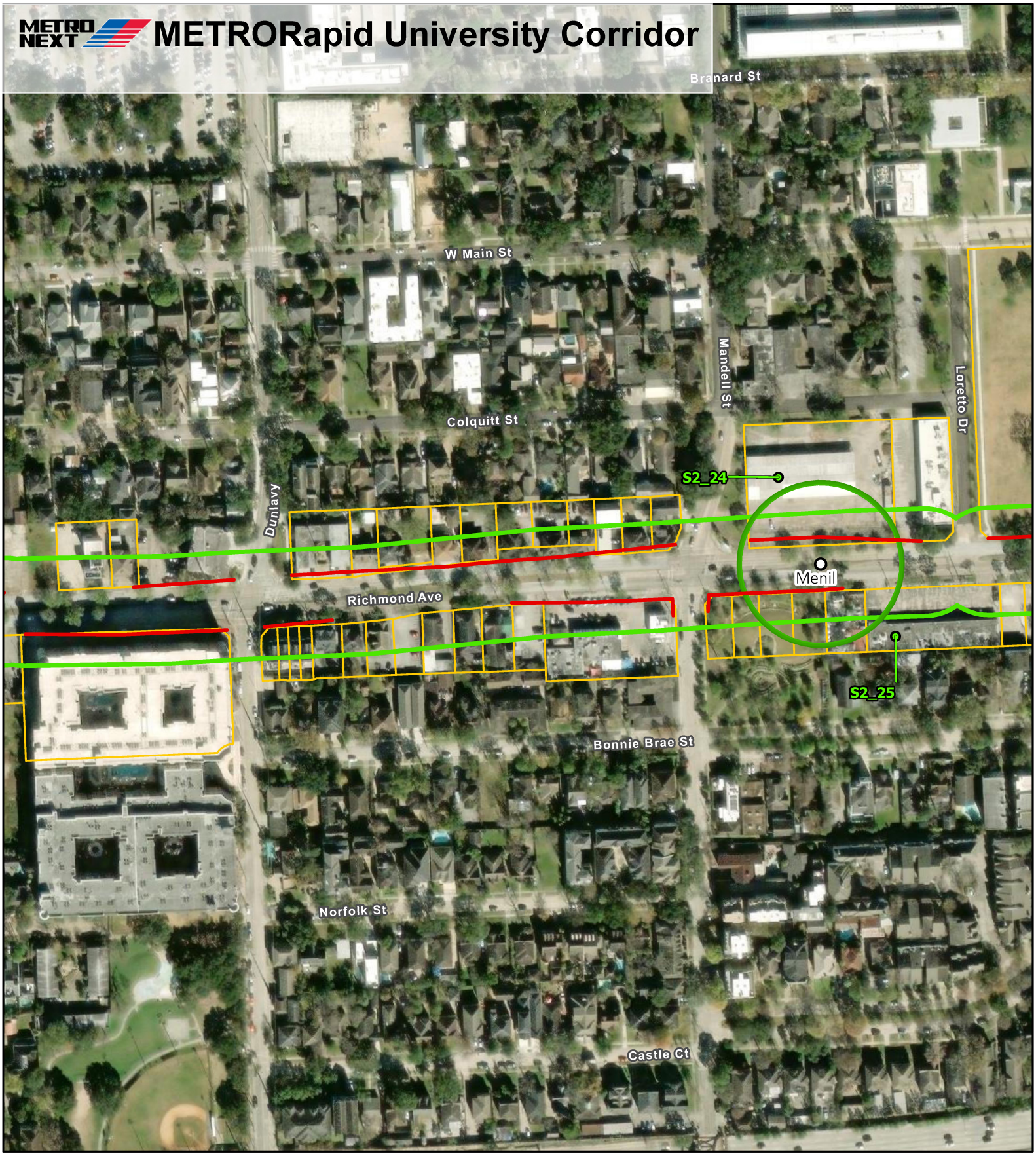


N

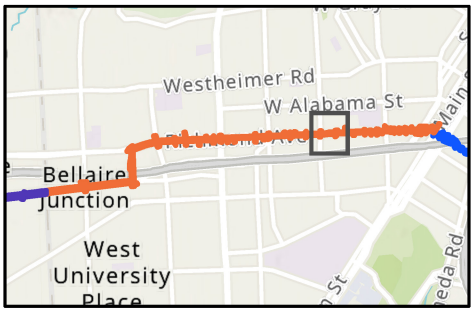
Segment 2, Map 9 of 13

0 100 200 300 ft

METRORapid University Corridor



- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels

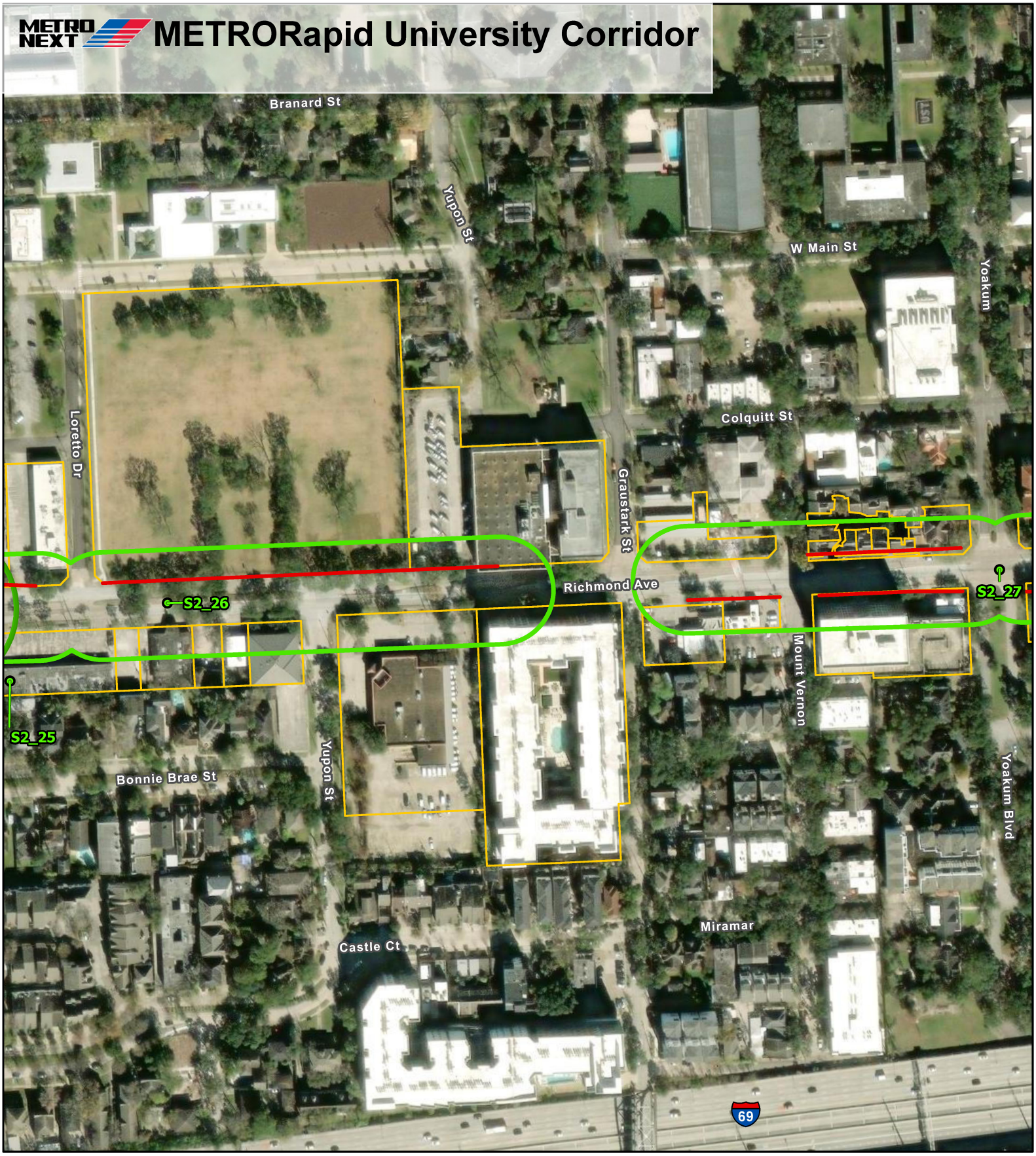


N

Segment 2, Map 10 of 13

0 100 200 300 ft

METRORapid University Corridor



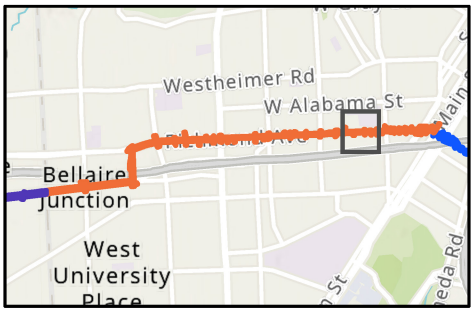
Segment 2 Documented Resources

Proposed ROW

Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)

BRT Station Historic APE

Parcels



N

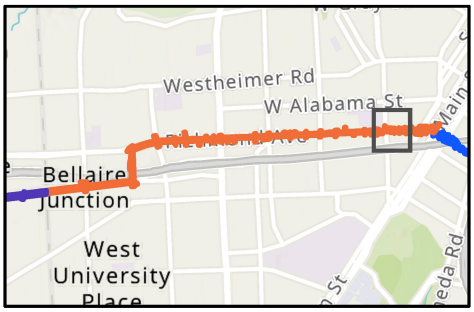
Segment 2, Map 11 of 13

0 100 200 300 ft

METRONEXT METRORapid University Corridor



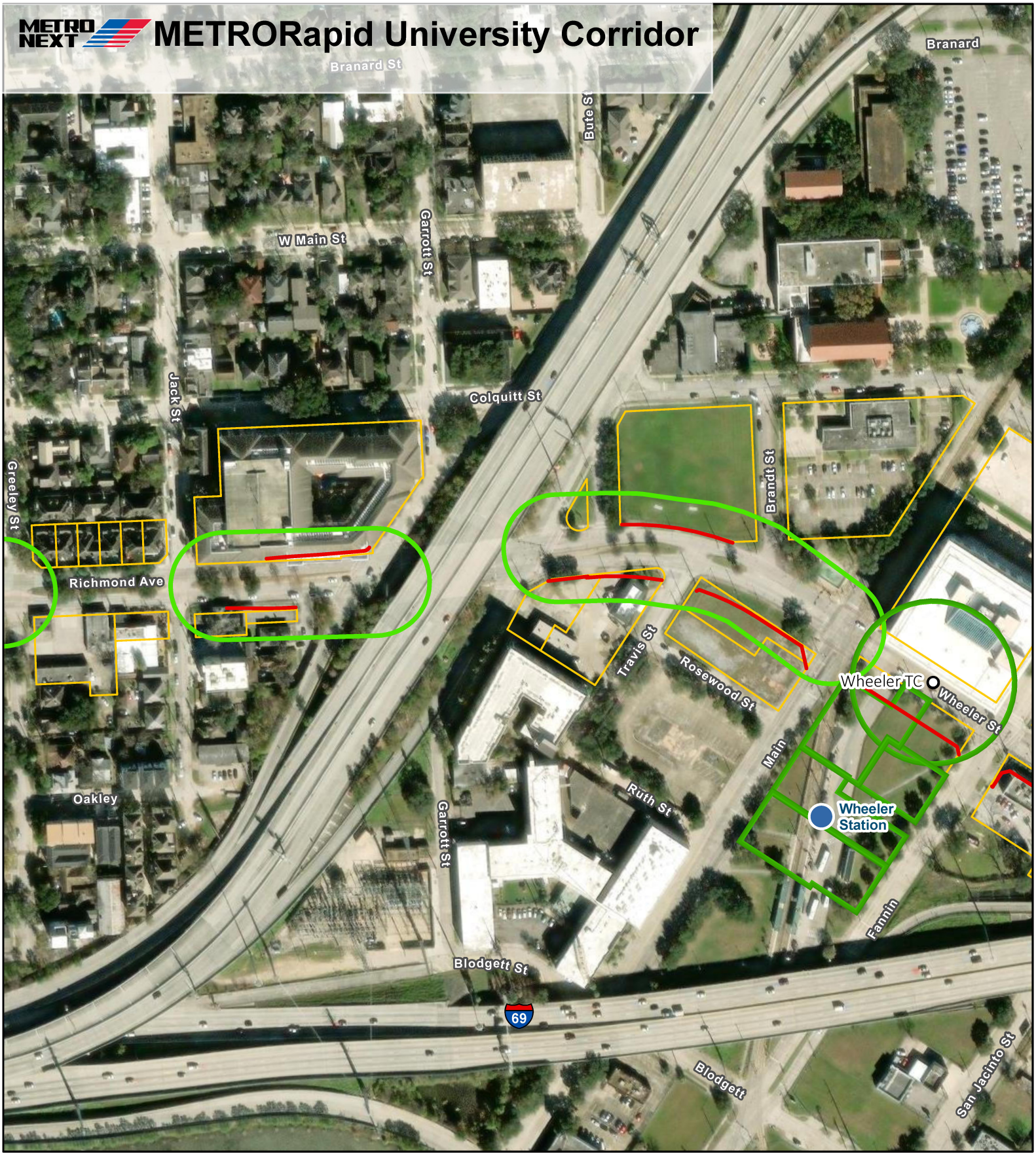
- Segment 2 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



N

Segment 2, Map 12 of 13

0 100 200 300 ft



Existing METRO Transit Center

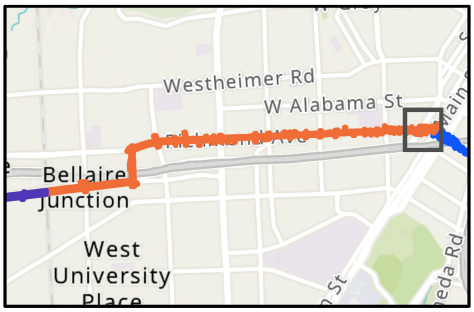
Proposed BRT Station (Preliminary Design)

Proposed ROW

Segment 2 Historic APE (100-ft from Centerline where ROW is Proposed)

BRT Station Historic APE

Parcels



N

Segment 2, Map 13 of 13

0 100 200 300 ft

APPENDIX C – Segment 3

Site ID#	Street	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S3 01	4403 Fannin St	No	C. 1966	None	Commerce/restaurant	Alterations include new siding, windows, and doors. There are new metal strips on the siding, as well as rods that support the modern metal awnings.
S3 02	1403 Wheeler Avenue	No	C. 1970	None	Commerce/specialty store	Alterations include modern windows and a change in the fenestration on the second story.
S3 03	1409 Wheeler Avenue	No	C. 1925	Foursquare	Domestic/single dwelling	Alterations include a new door, siding, and windows, plus an attached carport. Additions have been added to the front and side facades.
S3 04	1411 Wheeler Avenue	No	C. 1930	Tudor	Domestic/single dwelling	Alterations include a new awning on the front facade, a rear addition, and vinyl siding in the gable ends of the east and west facades.
S3 05	1419 Wheeler Avenue	No	C. 1930	Tudor	Domestic/multiple dwelling	Alterations include some enclosed windows and entrances.
S3 06	4414 La Branch St	No	C. 1930	Bungalow	Domestic/multiple dwelling	Alterations include new windows and fencing. Modern infill development surrounding the building removes the integrity of setting.
S3 07	4411 La Branch St	No	C. 1935/2018	Bungalow	Domestic/multiple dwelling	Alterations include enclosed sidelights at the front door, missing brackets in the eave line, and modern shutters. It was remodeled in 2018 per HCAD.
S3 08	4405 La Branch St	No	C. 1925	Bungalow	Domestic/multiple dwelling	Alterations include a side addition on the south façade, replacement of vegetation with concrete, plus a 6-foot metal fence around the property, which change the setting.
S3 09	4401 La Branch St	No	C. 1927	Bungalow	Commerce/specialty store	Alterations include an infilled bay and the original openings have been infilled with concrete blocks and metal. Other alterations include painted brick and a rear addition. A modern metal garage with a shed roof, rolling garage door and fixed windows is on the parcel.
S3 10	4315 La Branch St	No	C. 1930	Bungalow	Domestic/multiple dwelling	Alterations include new windows, front door, porch flooring, and lights. The 8-foot security fence around the property reduces integrity of setting.
S3 11	4311 La Branch St	No	C. 1930/2023	Bungalow	Domestic/single dwelling	Alterations include a new porch door, a king-post truss on the second story's gable, and a front addition.
S3 12	4305 La Branch St	No	C. 1930	None	Domestic/multiple dwelling	Alterations include a permastone wainscot, aluminum siding and a change in the fenestration. Based on the roof lines, the original house was extended and attached to a detached garage in the rear yard, plus a one-story addition was added to the east façade.
S3 13	1508 Barbee St	No	C. 1930	Craftsman	Domestic/single dwelling	Alterations include new windows, a partially enclosed porch, a carport, and a rear addition.
S3 14	1510 Barbee St	No	C. 1930	Craftsman	Domestic/single dwelling	Alterations include new windows, a new door, modern columns on the front porch, and a change in the fenestration. A detached modern garage is in the rear yard.
S3 15	4320 Almeda Road	No	C. 1965	None	Commerce/restaurant	Alterations include modern siding, windows, and an angled soffit.
S3 16a/b	1906 Cleburne Street Johnston jr high school	Yes	1925	Beaux Arts	Education/school	Albert Sidney Johnston Junior High School NRHP eligible under Criterion C. Alterations include a modern metal canopy supported by concrete columns added in 2017.
S3 17	2100 blk Wheeler Avenue	N/A	N/A	N/A	N/A	**Streetscape view**. NRHP eligible Third Ward Historic District. Streetscape view of 2100 block Wheeler Avenue
S3 18	2400 blk Wheeler Avenue	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic Distict. Corner clips for ADA improvement at Wheeler and Emancipation.
S3 19	2517 blk Wheeler Avenue	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic District. Jackson Mortuary in 2008 Third Ward MPS NRHP nomination.
S3 20	2600 blk Wheeler Avenue	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic District. Lester Williams house in 2008 Third Ward MPS NRHP nomination.
S3 21	2900 blk Wheeler Avenue	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic District. View facing east toward Texas Southern University entrance at Ennis Street.

Site ID#	Street	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S3 22	Ennis Street at Cleburne	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic District, view of Ennis Street from Cleburne.
S3 23	Ennis Street at Alabama	N/A	N/A	N/A	N/A	**Streetscape view.** NRHP eligible Third Ward Historic District, view of Ennis Street and Alabama Street intersection.
S3 24	3401 Ennis Street	No	C. 1910/2007	None	Domestic/multiple dwelling	NRHP eligible Third Ward Historic District. Alterations include modern siding, windows, and doors, a change in the fenestration, plus rear and front additions.
S3 25a	3204 Ennis Street	Yes, Listed	1926/1952/1961	Spanish Colonial Revival	Health Care/hospital, vacant/not in use	NRHP listed, Houston Negro Hospital. NRHP eligible Third Ward Historic District. Alterations include some new windows, some boarded up windows, a new awning on the second floor, and a modern exterior staircase.
S3 25b	NW corner Holman & Ennis Streets	Yes, Listed	1931	Spanish Colonial Revival	Education/vacant, not in use	NRHP listed, Houston Negro Hospital School of Nursing. NRHP eligible Third Ward Historic District. Alterations include boarded up windows. A sign in front of the structure states the building will be the future headquarters for Harris County Public Health.
S3 26	2905 Elgin Street	No, contributes	C. 1970	Contemporary	Health Care/clinic	Not individually eligible. Contributes to NRHP eligible Third Ward Historic District. Alterations include painted brick and new windows.
S3 27	3108 Ennis Street	No, contributes	C. 1922	None	Commerce/vacant, not in use	Not individually eligible. Contributes to NRHP eligible Third Ward Historic District. Alterations include painted brick, enclosed windows and enclosed doors, thus changing the fenestration.
S3 28	3115 Ennis Street	No, contributes	C. 1922	None	Commerce/vacant, not in use	Not individually eligible. Contributes to NRHP eligible Third Ward Historic District. Alterations included painted brick, enclosed openings, and a loss of awnings and balconies.
S3 29	3481 Elgin Street	No, contributes	1961	None	Commerce/restaurant	Not individually eligible. Contributes to NRHP eligible Third Ward Historic District. Alterations include a modern metal awning.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 01	Address:	4403 Fannin St
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This is a one-story commercial building occupied by a Jack in the Box restaurant. The building has been completely remodeled to reflect their branding. Alterations include new siding, windows, and doors. There are new metal strips on the siding, as well as rods that support the modern metal awnings.



Camera direction: Northeast

Resource No.	S3 01	Address:	4403 Fannin St



Camera direction: Northwest



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 02	Address:	1403 Wheeler Avenue
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship.		

Description: This is a two-story commercial building with concrete and brick siding and fixed metal windows. Alterations include modern windows and a change in the fenestration on the second story.



Camera direction: East

Resource No.	S3 02	Address:	1403 Wheeler Avenue



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 03	Address:	1409 Wheeler Avenue
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1925	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: This is a two-story American Foursquare style house with pressboard siding. Alterations include a new door, siding, and windows, plus an attached carport. Additions have been added to the front and side facades. The addition of a carport to the front façade and loss of yard to parking changes the setting.



Camera direction: North

Resource No.	S3 03	Address:	1409 Wheeler Avenue
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 04	Address:	1411 Wheeler Avenue
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: This is a two-story Tudor style house with hung windows and brick siding. Alterations include a new awning on the front facade, a rear addition, and vinyl siding in the gable ends of the east and west facades. The addition of the front porch awning used as a carport and loss of front yard to parking changes the setting.



Camera direction: Northeast

Resource No.	S3 04	Address:	1411 Wheeler Avenue



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 05	Address:	1419 Wheeler Avenue
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and design		

Description: This is a two-story Tudor style multiplex with brick siding and faux half timbering in the gable end. Alterations include some enclosed windows and entrances.



Camera direction: Northeast

Resource No.	S3 05	Address:	1419 Wheeler Avenue



Camera direction: Northwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 06	Address:	4414 La Branch St
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1930	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials, workmanship, and setting		

Description: This is a two-story Bungalow style apartment building with brick siding and a security fence around the property. Alterations include new windows, a change in fenestration in some locations, and added fencing. Modern infill development surrounding the building removes the integrity of setting.

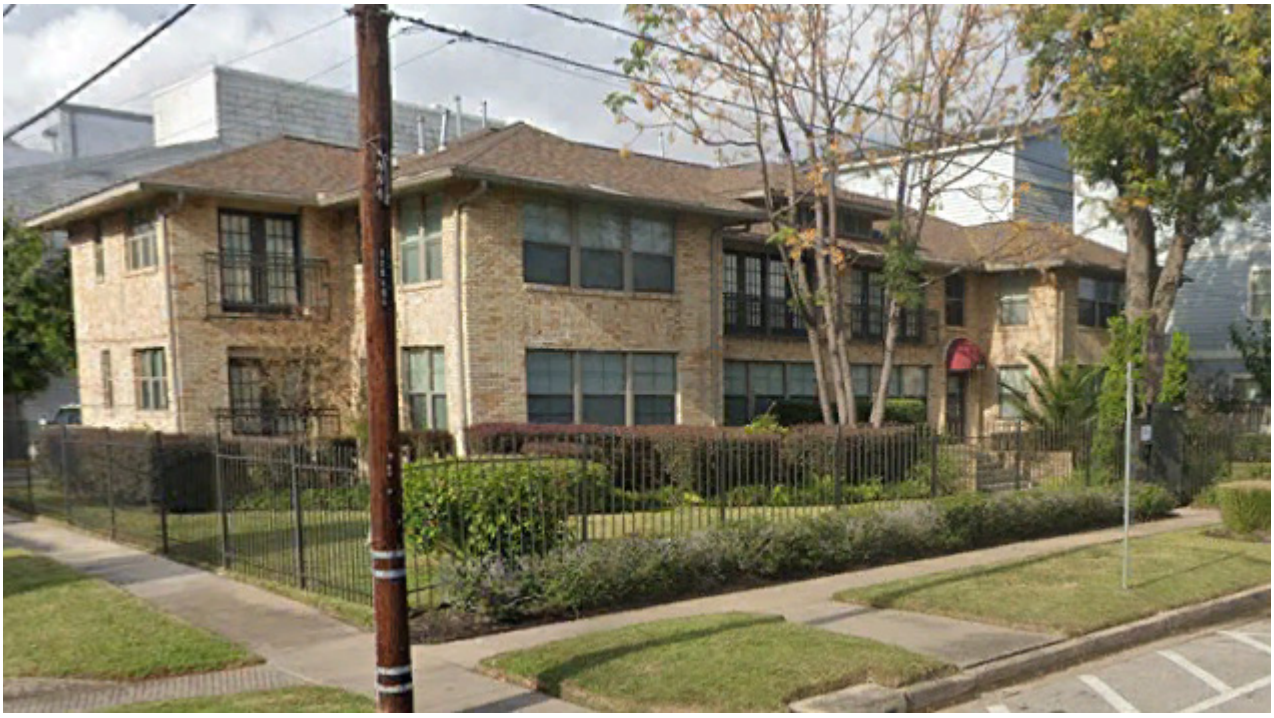


Image direction: West (Google Earth 12/2022)

Resource No.	S3 06	Address:	4414 La Branch St



Image direction: Southwest (Google Earth 12/2022)

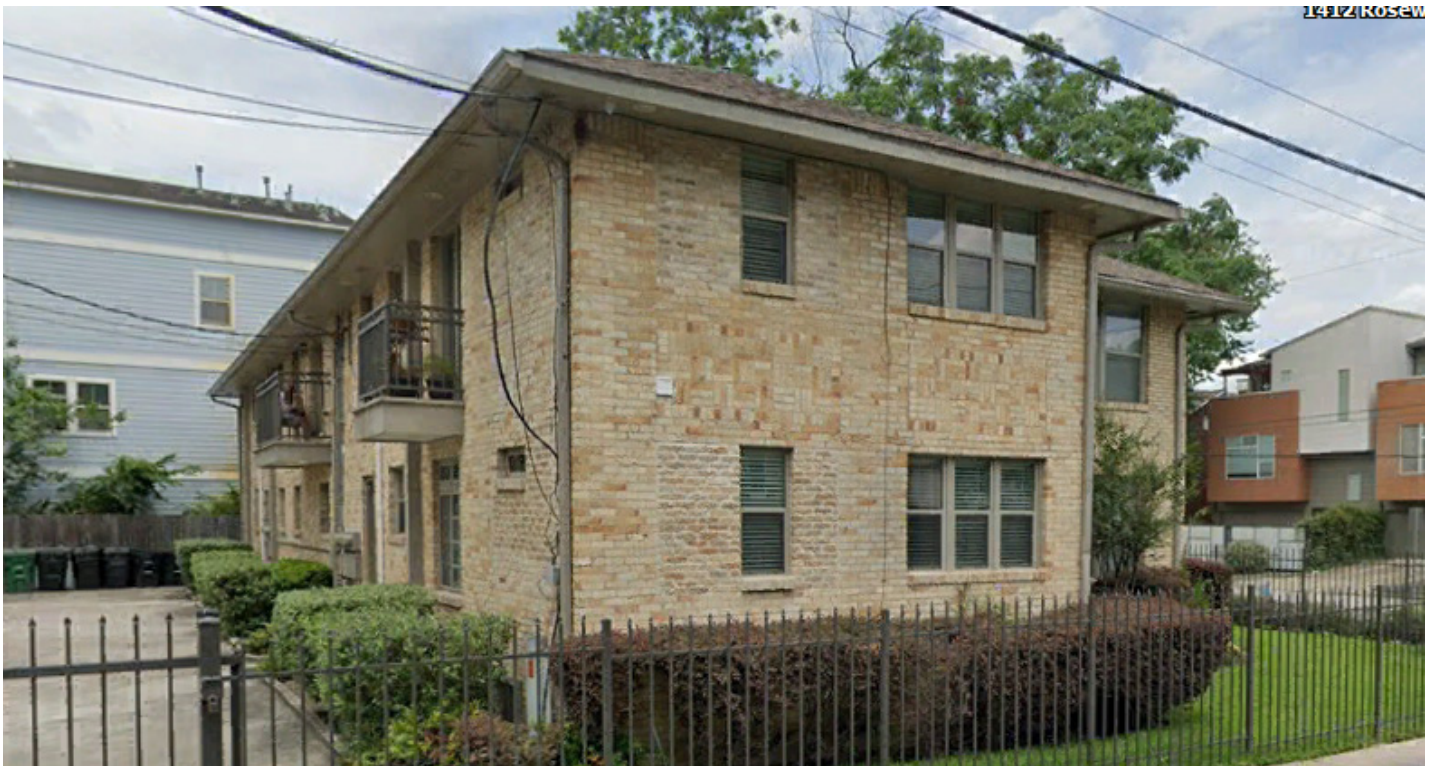


Image direction: Northeast (Google Earth 12/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 07	Address:	4411 La Branch St
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1935/2018	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials		

Description: This is a two-story multiplex with Colonial Revival influence and raked brick siding. Alterations include enclosed sidelights at the front door, missing brackets in the eave line, and modern shutters. It was remodeled in 2018 per HCAD.



Camera direction: Southeast

Resource No.	S3 07	Address:	4411 La Branch St
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 08	Address:	4405 La Branch St
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1925	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials and setting		

Description: This is a two-story Bungalow style multiplex with painted brick siding. The wood-framed windows are both double-hung and fixed. The smaller row of windows on the north façade plus the entrances indicate this building may have been a mixed used with commercial space on the bottom floor. Alterations include a side addition on the south façade, replacement of vegetation with concrete, plus a 6-foot metal fence around the property, which change the setting.



Camera direction: Southeast

Resource No.	S3 08	Address:	4405 La Branch St



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 09	Address:	4401 La Branch St
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1927	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling.		

Description: This single-bay auto repair shop was a former gas station constructed with a Craftsman style influence. Alterations include an infilled bay and the original openings have been infilled with concrete blocks and metal. Other alterations include painted brick and a rear addition. A modern metal garage with a shed roof, rolling garage door and fixed windows is on the parcel.



Camera direction: East

Resource No.	S3 09	Address:	4401 La Branch St



Camera direction: Southwest



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 10	Address:	4315 La Branch St
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1930	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials and setting		

Description: This is a two-story Craftsman influenced multiplex dwelling with brick siding. There is a detached four-car carport in the rear yard. Alterations include new windows, front door, porch flooring, and lights. The 8-foot security fence around the property reduces integrity of setting.



Camera direction: Northwest

Resource No.	S3 10	Address:	4315 La Branch St



Camera direction: Southeast



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 11	Address:	4311 La Branch Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930/2023	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling.		

Description: This is a two-story house with brick siding in the process of being remodeled. Alterations include a new porch door, a king-post truss on the second story's gable, and a large front addition that all greatly impact the building's historic integrity of materials, design, workmanship, and feeling. Changes in the neighborhood impact the property's integrity of setting.



Camera direction: Southeast

Resource No.	S3 11	Address:	4311 La Branch Street



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 12	Address:	4305 La Branch Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: This is a house converted into an apartment building. Alterations include a permastone wainscot, aluminum siding and a change in the fenestration. Based on the roof lines, the original house was extended and attached to a detached garage in the rear yard, plus a one-story addition was added to the east façade.



Camera direction: South

Resource No.	S3 12	Address:	4305 La Branch Street



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 13	Address:	1508 Barbee Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This is a one-story Craftsman style house with brick and wood siding. Alterations include new windows, a partially enclosed porch, a carport, and a rear addition.



Camera direction: South

Resource No.	S3 13	Address:	1508 Barbee Street



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 14	Address:	1510 Barbee Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This is a one-story Craftsman style house with wood siding. Alterations include new windows, a new door, modern columns on the front porch, and a change in the fenestration. A detached modern garage is in the rear yard.



Camera direction: Southeast

Resource No.	S3 14	Address:	1510 Barbee Street



Camera direction: Southwest



Camera direction: South

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 15	Address:	4320 Almeda Road
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This is a one-story commercial building with fiber cement siding. Alterations include modern siding, windows, and an angled soffit.



Camera direction: Northwest

Resource No.	S3 15	Address:	4320 Almeda Road
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 16a and S3 16b	Address:	1906 Cleburne Street
Resource Type:	Building	Function/Use:	Education/school
Estimated Year built:	1925	References:	Mitchell & Pettis 2019: 181, plaque
NRHP Eligibility:	NRHP Eligible under Criterion C, Architecture		

Description: S3 16a is the former Albert Sidney Johnston Junior High School (currently the Young Women's College Preparatory Academy). The school is a good example of an early twentieth century school constructed in the Beaux Arts style and designed by a prominent Texas architectural firm of Sanguinet, Staats, Hedrick, and Gottlieb, with William Ward Watkin as consulting architect. THC determined the school building only NRHP eligible under Criterion C, Architecture. The school grounds and setting were not relevant to the building's architectural significance. Alterations to the building include a modern metal canopy supported by concrete columns added in 2017. Although the canopy blocks the view of the front façade it could be removed without destroying original materials and therefore the building is still recommended NRHP eligible under Criterion C, in the area of Architecture.

S3 16b is the baseball field in the southern area of the Academy's property. Based on aerial photographs the field had been vacant until 1982 when a parking lot was added. The baseball diamond was added by 1995 (www.historicaerials.com). The setting of the school on the parcel and therefore the vacant land behind the school were not integral to the buildings architectural significance and therefore the addition of the baseball field does not impact the schools integrity.



Camera direction: Southeast

Resource No.	S3 16a	Address:	1906 Cleburne Street



Camera direction: Southwest



Plaque on School building.

Resource No.	S3 16a	Address:	1906 Cleburne Street



Figure 116. Proposed NHHIP ROW in relation to Resource 015.

Image from NHHIP Historical Resources Survey Report (Mitchell & Pettis 2019: 235).

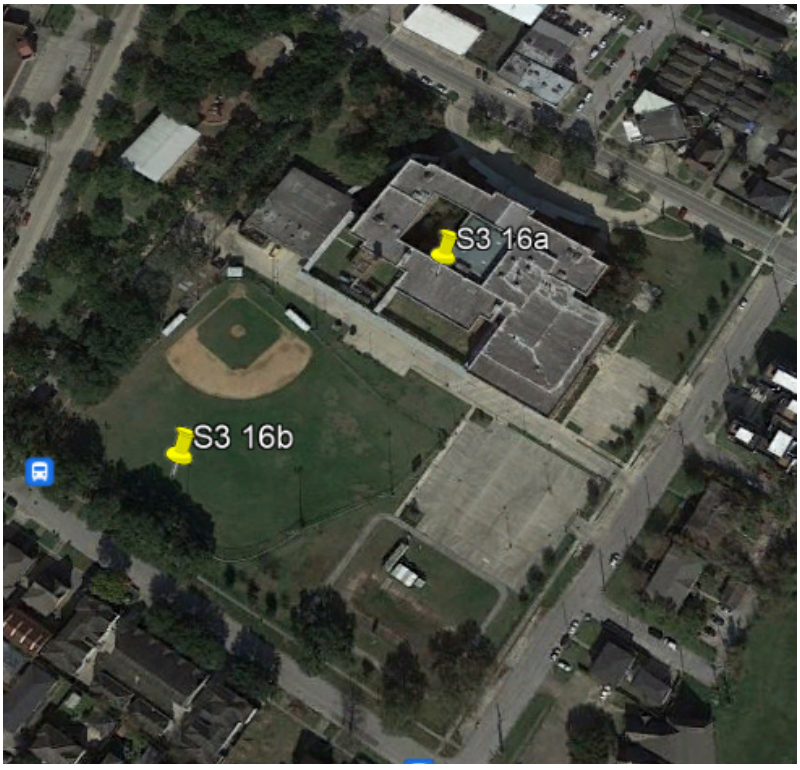


Image oriented North (Google Earth 12/2021).

Resource No.	S3 16b	Address:	1906 Cleburne Street



Camera direction: North



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 17	Location: Wheeler Avenue, 2100 Block
View Facing	North and South	Description: NRHP eligible Third Ward Historic District



Camera direction: North



Camera direction: South

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 18	Location: Wheeler Avenue, 2400 Block
View Facing	Northeast and East	Description: Corner clips for ADA improvement at Wheeler and Emancipation.



Camera direction: Northeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 19	Location: 2517 Wheeler Avenue
View Facing	Northeast	Description: NRHP eligible Third Ward Historic District



Camera direction: Northwest. Jackson Mortuary in 2008 Third Ward MPS NRHP nomination.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 20	Location: 2600 block of Wheeler Avenue, 2617 Wheeler Ave
View Facing	Northeast	Description: NRHP eligible Third Ward Historic District



Camera direction: Northwest



Camera direction: Northeast. Lester Williams house in 2008 Third Ward MPS NRHP nomination.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 21	Location: Wheeler Avenue, Block 2900
View Facing	East	Description: NRHP eligible Third Ward Historic District



Camera direction: East, toward Texas Southern University entrance at Ennis Street.



Camera direction: Northwest, intersection of Wheeler and Ennis.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 22	Location: Cleburne St, Block 3000
View Facing	Northwest	Description: NRHP eligible Third Ward Historic District, view of Ennis Street from Cleburne.



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Streetscape view:	S3 23	Location: Ennis Street at Alabama Street
View Facing	North, northwest	Description: NRHP eligible Third Ward Historic District, view of Ennis Street and Alabama Street intersection.



Camera direction: North



Camera direction: Northwest, showing loss of shotgun houses.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 24	Address:	3401 Ennis Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1910/2007	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling Noncontributing to the NRHP eligible Third Ward Historic District		

Description: This is a one-story apartment building with vinyl siding. Based on the rooflines the original portion of the building was a house. Per HCAD the building was constructed 1910 and remodeled in 2007. Per historic aerials and photographs a building occupied this site in 1922 and the roof line was different in 1966. Alterations include modern siding, windows, and doors, a change in the fenestration, and rear and front additions.



Camera direction: Northwest

Resource No.	S3 24	Address:	3401 Ennis Street



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 25a	Address:	3204 Ennis St
Resource Type:	Building	Function/Use:	Health Care/hospital, vacant/not in use
Estimated Year built:	1926/1952/1961	References:	https://atlas.thc.texas.gov/NR/pdfs/82004856/82004856.pdf
NRHP Eligibility:	NRHP listed in 1982 under Criterion A in the area of Ethnic Heritage – Black, Social History Contributing to the NRHP eligible Third Ward Historic District		

Description: The Houston Negro Hospital, later known as the Riverside General Hospital, is a three-story Spanish Colonial Revival style building constructed of reinforced concrete and hollow tile with stucco siding. Local architect Maurice J. Sullivan designed the hospital and developed the master plan. A wing was added in 1961 but has since been removed. The name was changed to Riverside General Hospital in 1961, and the hospital and nursing school were listed on the NRHP in 1982. Alterations include some new windows, some enclosed windows, a new awning on the second floor, and a modern exterior staircase. The hospital is NRHP eligible under Criterion A in the Area of Ethnic Heritage, the modern windows, awnings and exterior stairwell do not impact the building's integrity of location, association, feeling, design, and setting.

The Houston Negro Hospital was the first non-profit hospital for black patients in Houston and hired only black physicians. Per the master plan the one-block site originally would have contained multiple buildings. The hospital was the first building constructed, followed by the nursing school and two minor buildings (now demolished). An additional four buildings were never built.



Camera direction: Northwest

Resource No.	S3 26	Address:	3204 Ennis Street



Camera direction: Southwest



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 25b	Address:	NW corner of Holman and Ennis streets
Resource Type:	Building	Function/Use:	Education/vacant, not in use
Estimated Year built:	1931	References:	https://atlas.thc.texas.gov/NR/pdfs/82004857/82004857.pdf
NRHP Eligibility:	NRHP listed in 1982 under Criterion A in the area of Ethnic Heritage – Black, Social History and Criterion C in the area of Design/Architecture, Contributing to the NRHP eligible Third Ward Historic		

Description: The Houston Negro Hospital School of Nursing is a two-story building in the Spanish Colonial Revival style constructed of reinforced concrete and hollow tiles with an exterior of stucco. The school was the first educational institution created for the training of black nurses in Houston. Local architect Maurice J. Sullivan designed the building. Alterations include enclosed windows. A sign in front of the structure states the building will be the future headquarters for Harris County Public Health.

The School of Nursing retains integrity of design, workmanship, setting, location, feeling, and association.



Camera direction: Northwest

Resource No.	S3 25b	Address:	NW corner of Holman and Ennis streets
			
Camera direction: North			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 26	Address:	2905 Elgin Street
Resource Type:	Building	Function/Use:	Health Care/clinic
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Contributing to the NRHP eligible Third Ward Historic District, but the building is not individually eligible		

Description: This is a one-story Contemporary style building with brick and stone siding. Alterations include painted brick and new windows.



Camera direction: North

Resource No.	S3 26	Address:	2905 Elgin Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 27	Address:	3108 Ennis Street
Resource Type:	Building	Function/Use:	Commerce/vacant, not in use
Estimated Year built:	C. 1922	References:	www.historicaerials.com
NRHP Eligibility:	Contributing to the NRHP eligible Third Ward Historic District, but the building is not individually eligible		

Description: This parcel has two, one-story brick buildings that have been connected. Alterations include painted brick, enclosed windows and doors, thus changing the fenestration.

The buildings have been painted with art representing the Black Lives Matter movement, including the acronym painted above the awning, and a mural of George Floyd on the south façade.



Camera direction: Southwest

Resource No.	S3 27	Address:	3108 Ennis Street
			
Camera direction: North			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S3 28	Address:	3115 Ennis Street
Resource Type:	Building	Function/Use:	Commerce/vacant, not in use
Estimated Year built:	C. 1922	References:	www.historicaerials.com
NRHP Eligibility:	Contributing to the NRHP eligible Third Ward Historic District, but the building is not individually eligible		

Description: A two-story, two-part brick building. Alterations included painted brick, enclosed openings, and a loss of awnings and balconies. Murals on the building represent people whose death has sparked action amongst the Black Lives Matter movement. The building contributes to the district as an early commercial structure serving the local community and part of a cluster of commercial buildings at this intersection.

According to historic aerial photographs, in 1957 Elgin Avenue dog-legged at 3115 Ennis avoiding buildings and vegetation located south of the subject building. Parking for the building was on the east side. By 1962, the dogleg was straightened, and the subject building directly parallel to the road and the previous buildings and vegetation were gone as their space was occupied by the road. Parking moved to the south side of the building parallel to Elgin Avenue. The parking spaces are not an integral part of the setting.



Camera direction: Northwest

Resource No.	S3 28	Address:	3115 Ennis Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Windshield Survey (cut-off date 1977)
Segment 3
Surveyed January 2023
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

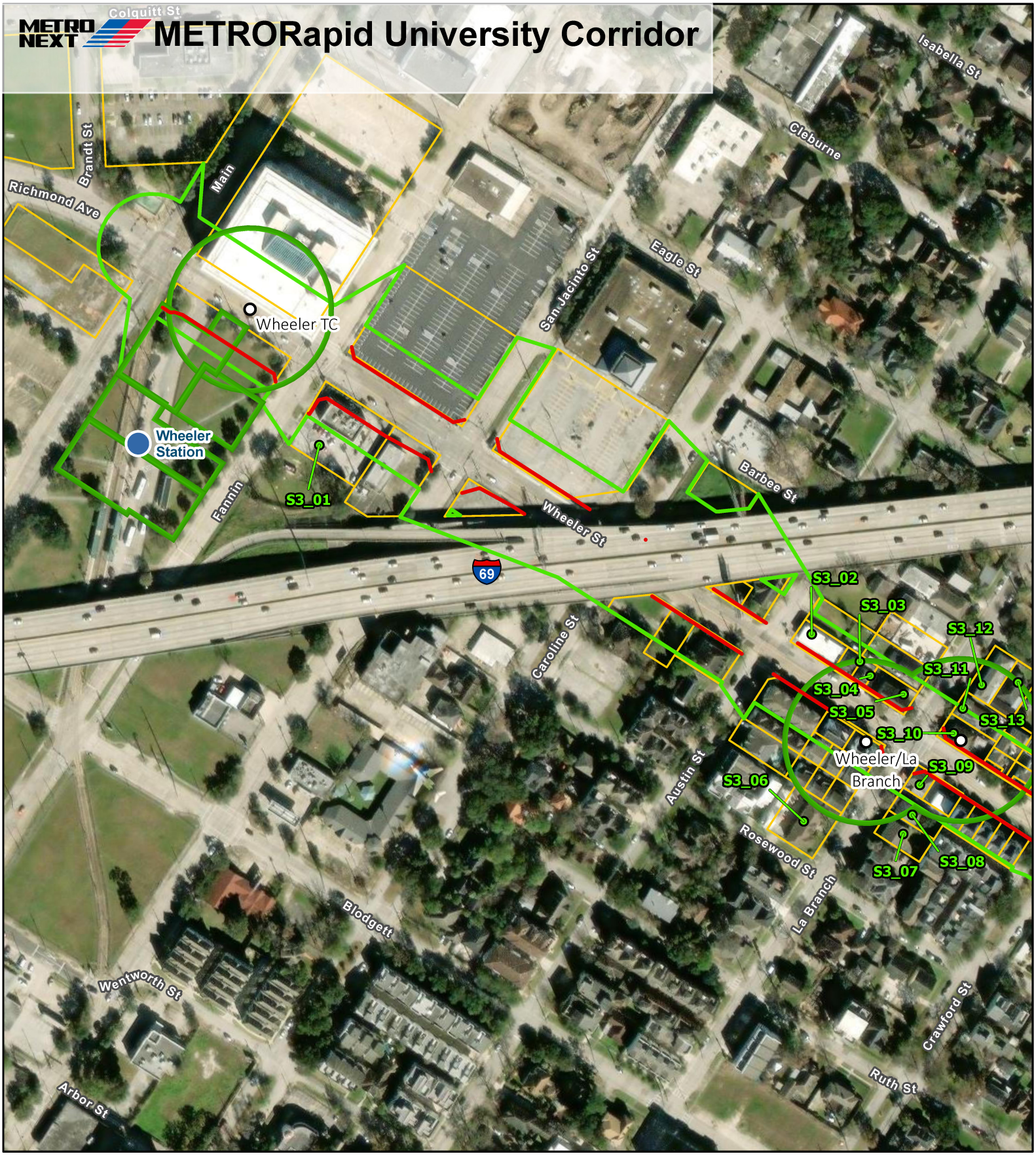
Resource No.	S3 29	Address:	3481 Elgin Street
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	1961	References:	Owner, sign on structure
NRHP Eligibility:	Contributing to the NRHP eligible Third Ward Historic District. The building is recommended not eligible.		

Description: A one-story prefabricated metal structure moved on site in 1961. The African American family that started the business continue to operate the commercial venture. Alterations include a modern metal awning. The resource is recommended not eligible.



Camera direction: Northeast

Resource No.	S3 29	Address:	3481 Elgin Street
			
Camera direction: Northwest			



Existing METRO Transit Center

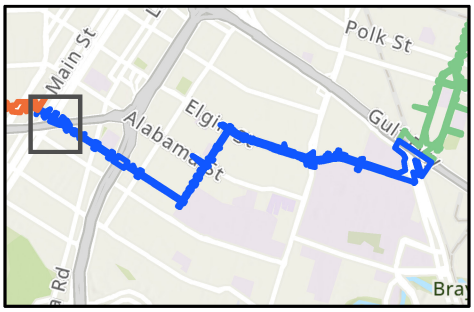
Proposed BRT Station (Preliminary Design)

Proposed ROW

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

Parcels

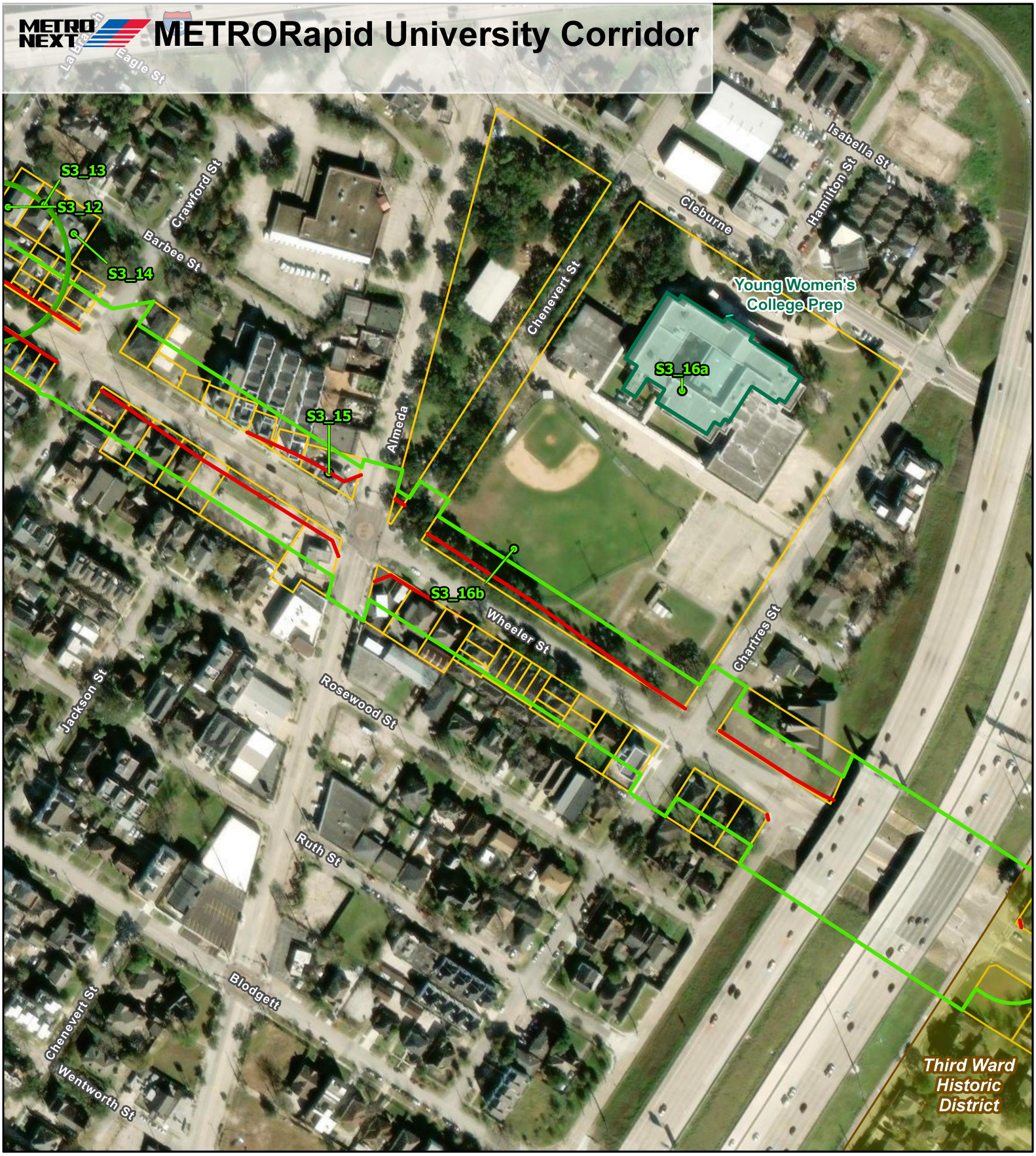


N

Segment 3, Map 1 of 9

0 100 200 300 ft

METRORapid University Corridor



Proposed ROW

NRHP Eligible Historic District

NRHP Eligible Property

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

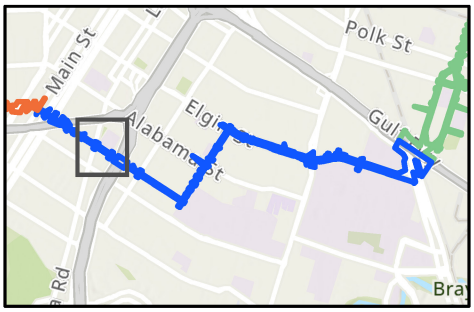
BRT Station Historic APE

Parcels

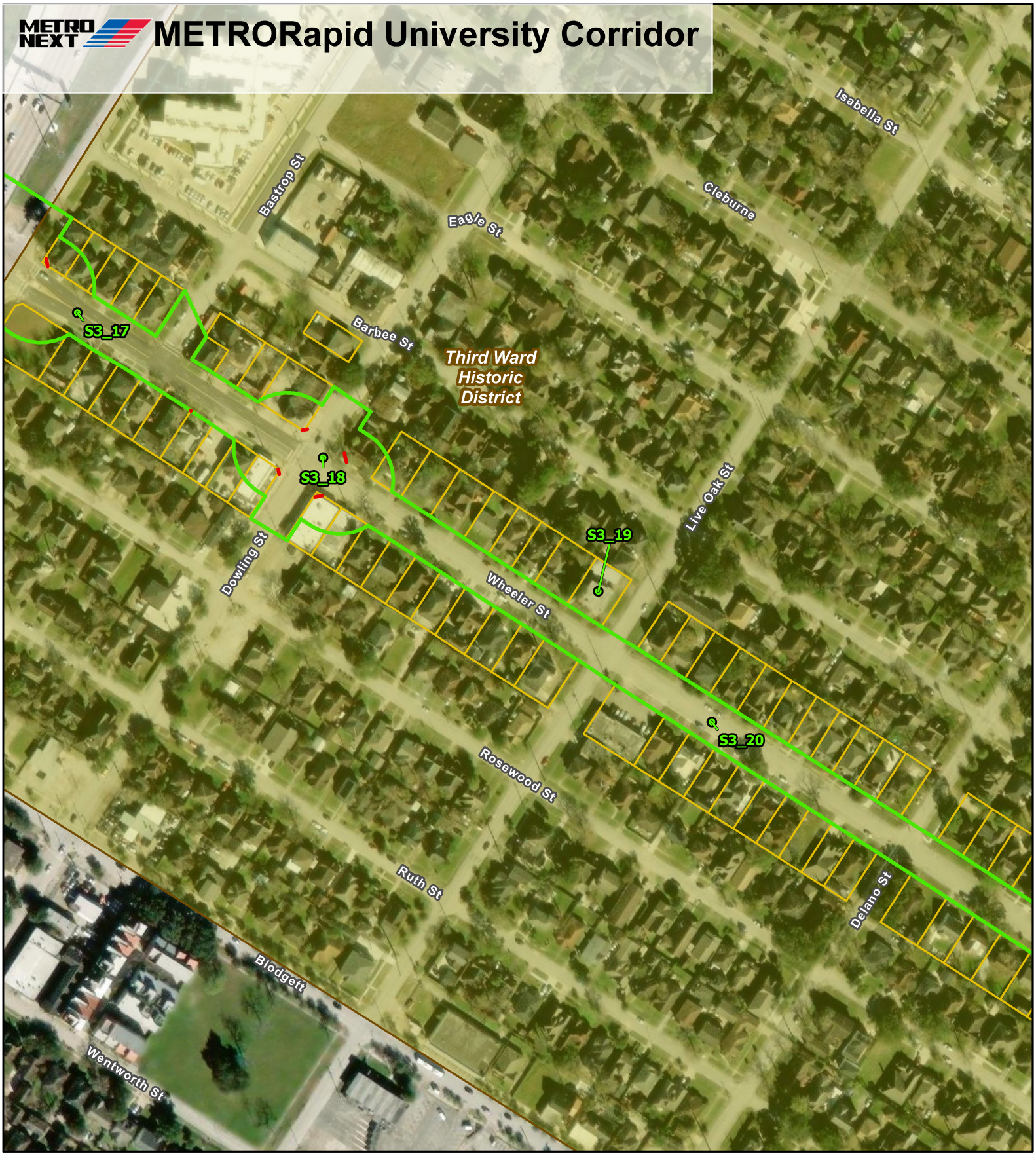
N

Segment 3, Map 2 of 9

0 100 200 300 ft



METRORapid University Corridor



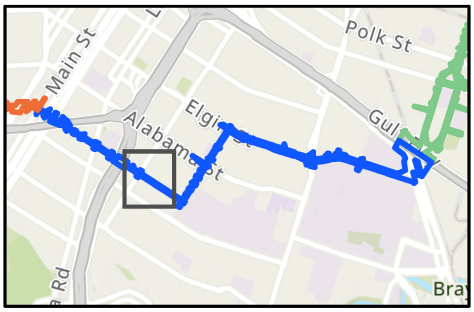
Proposed ROW

NRHP Eligible Historic District

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

Parcels



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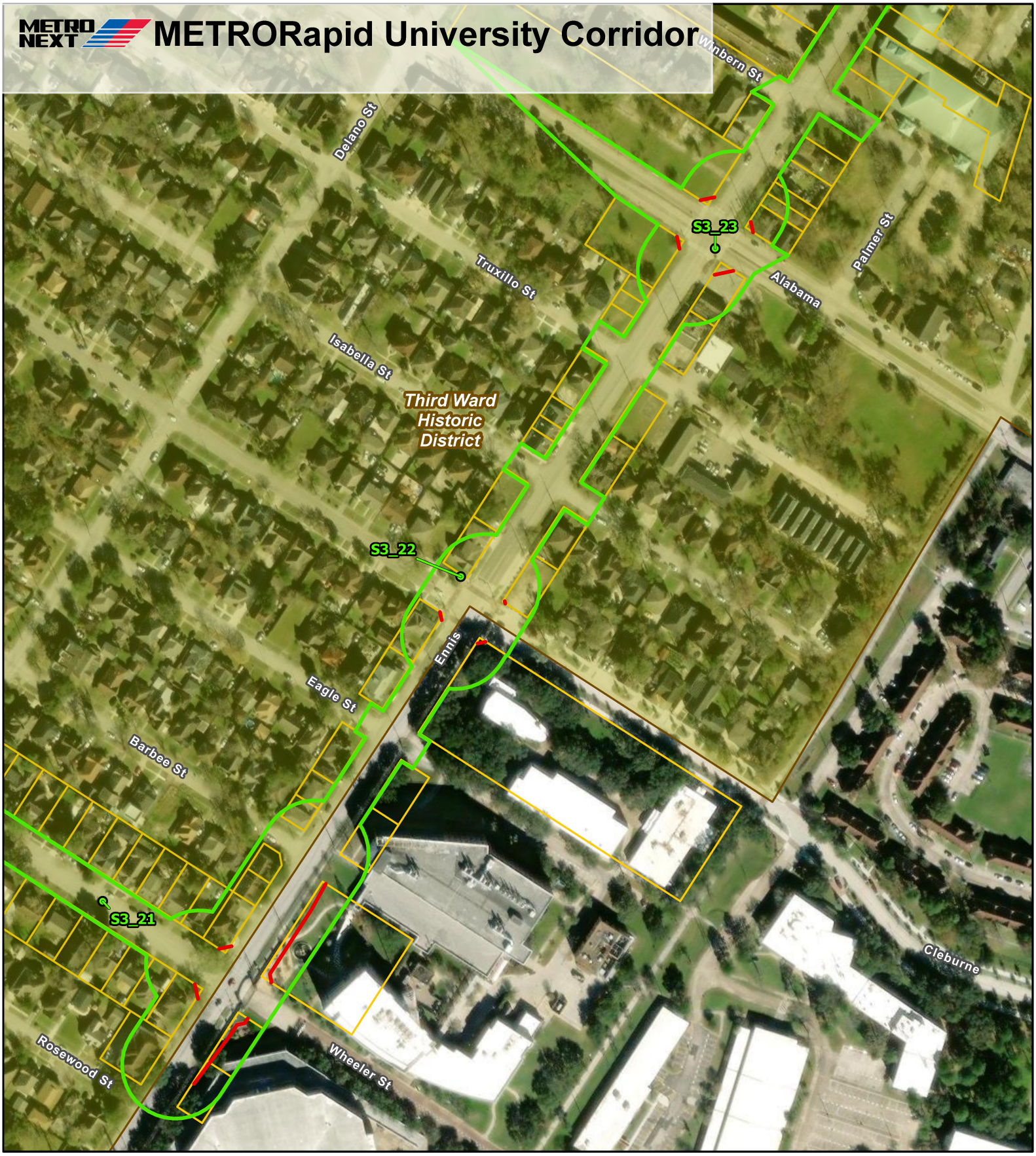
Segment 3, Map 3 of 9

0 100 200 300 ft

METRORapid University Corridor



Proposed ROW

NRHP Eligible Historic District

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

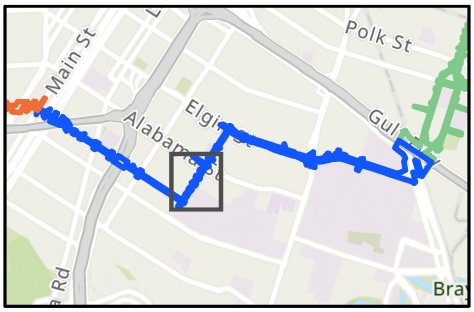
BRT Station Historic APE

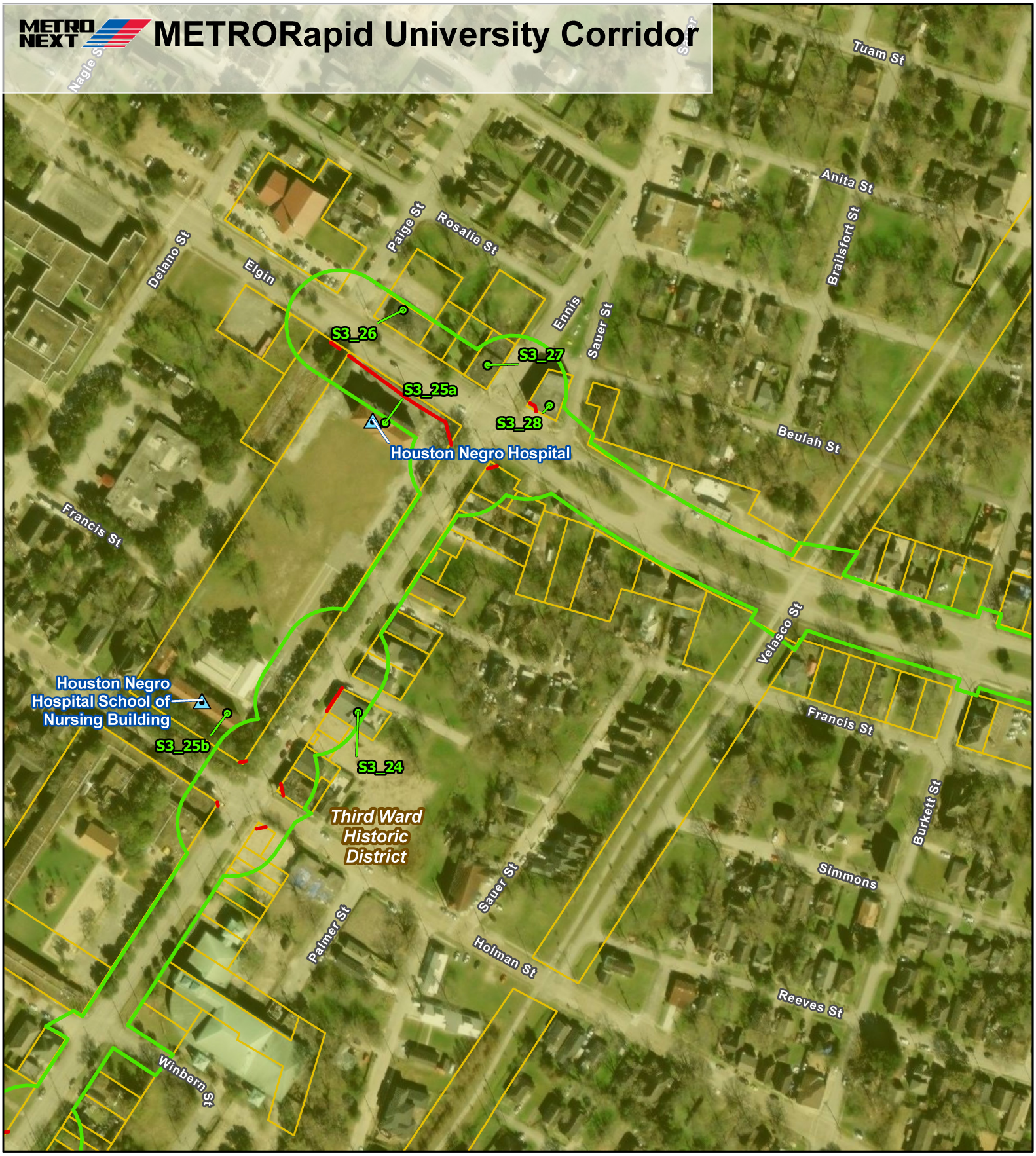
Parcels

N

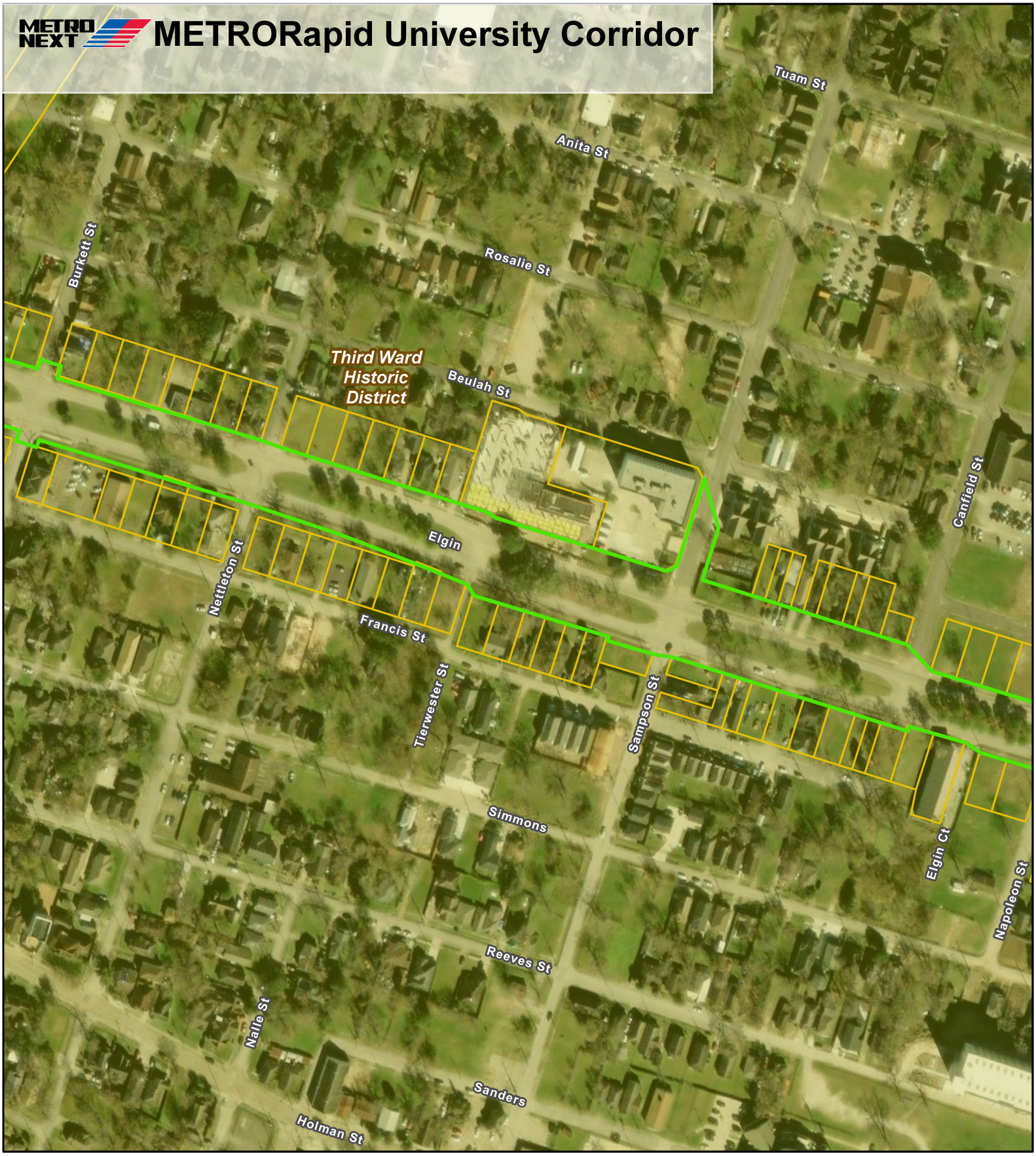
Segment 3, Map 4 of 9

0 100 200 300 ft




METRO NEXT
METRORapid University Corridor
Nagle St
Tuam St
Anita St
Brailsfort St
Paige St
Rosalie St
Delano St
Elgin
Ennis
Sauer St
S3_26
S3_27
S3_25a
S3_28
Houston Negro Hospital
Beulah St
Francis St
Velasco St
Houston Negro Hospital School of Nursing Building
S3_25b
S3_24
Third Ward Historic District
Francis St
Burkett St
Simmons
Sauer St
Palmer St
Holman St
Reeves St
Winbern St
NRHP Listed Property
Proposed ROW
NRHP Eligible Historic District
Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
BRT Station Historic APE
Parcels
N
Segment 3, Map 5 of 9
0
100
200
300 ft
Main St
Polk St
Alabama St
Gulf

METRORapid University Corridor

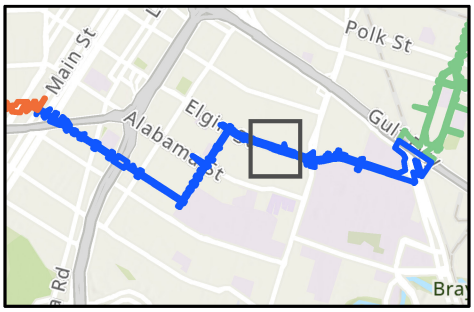


NRHP Eligible Historic District

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

Parcels

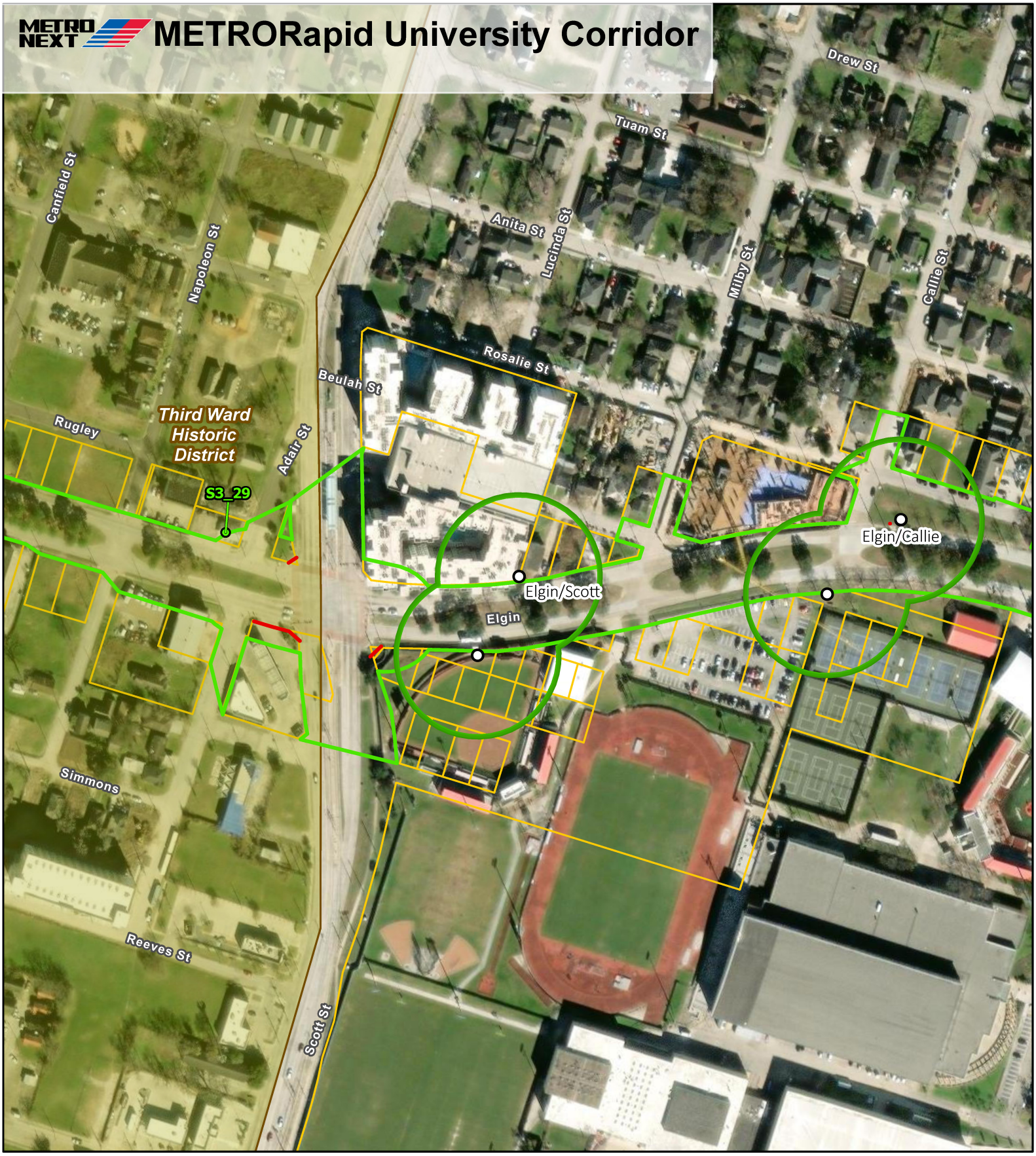


N

Segment 3, Map 6 of 9

0 100 200 300 ft

METRORapid University Corridor

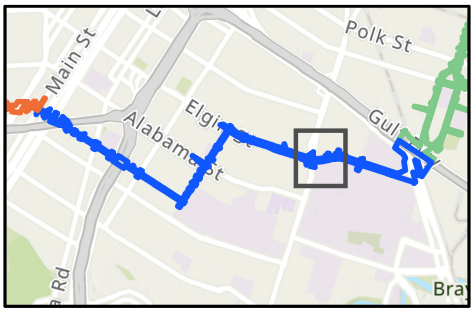


- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- NRHP Eligible Historic District
- Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
- BRT Station Historic APE
- Parcels

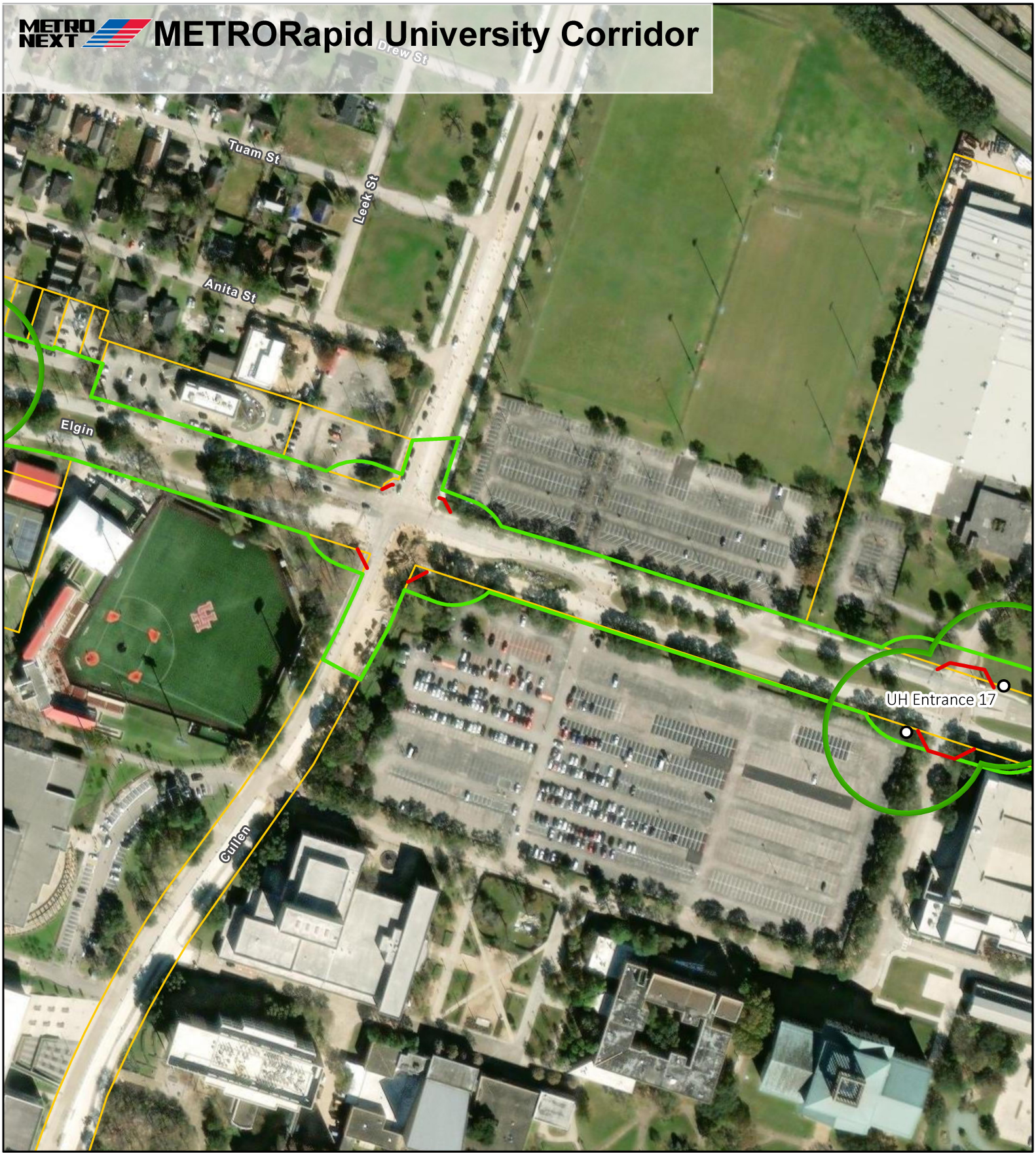
N

Segment 3, Map 7 of 9

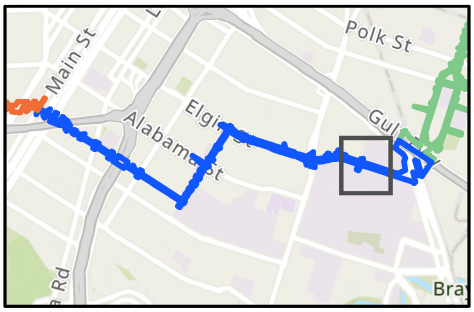
0 100 200 300 ft



METRONEXT METRORapid University Corridor



- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
- BRT Station Historic APE
- Parcels



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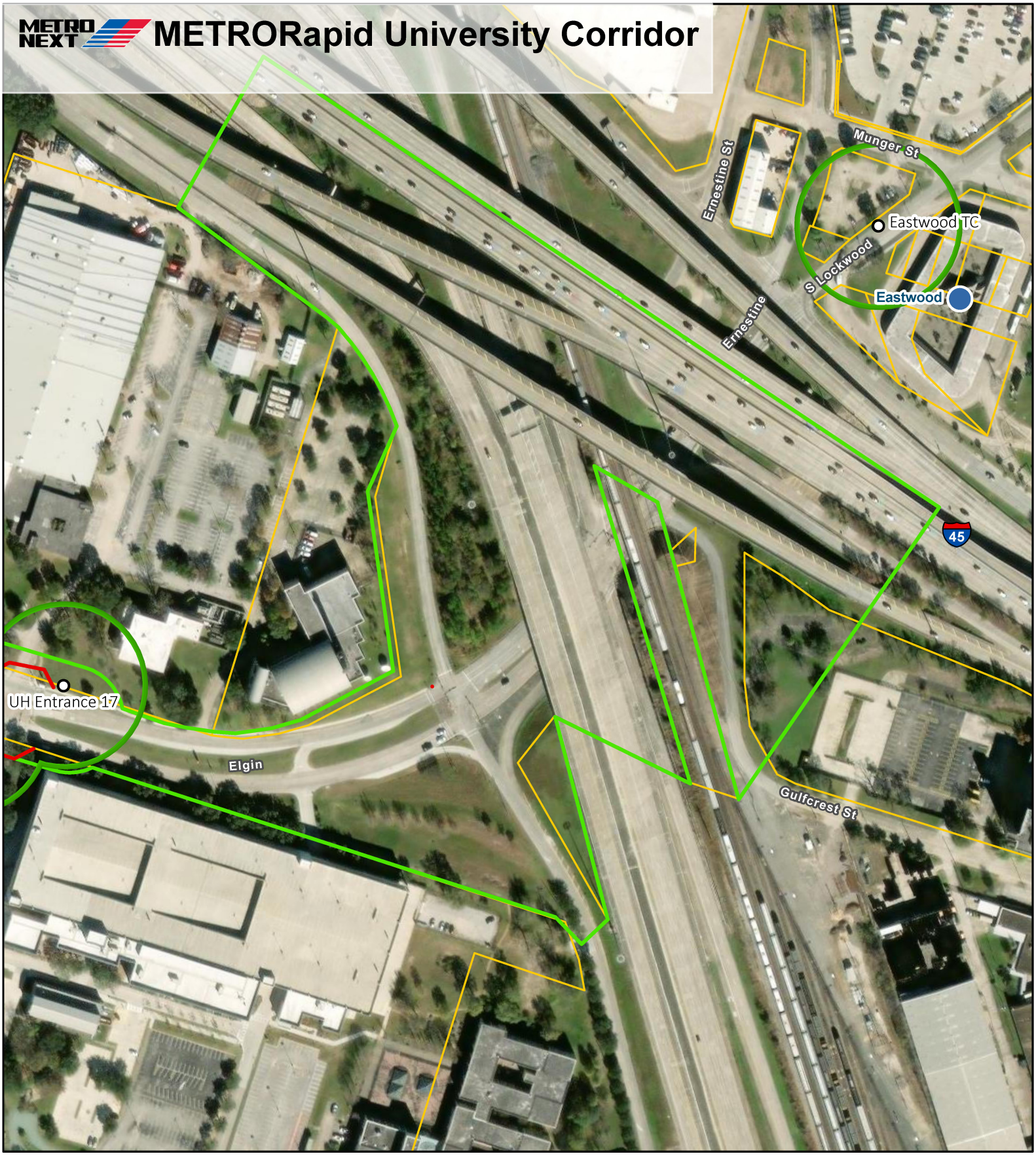
Segment 3, Map 8 of 9

0 100 200 300 ft

METRORapid University Corridor



Existing METRO Transit Center

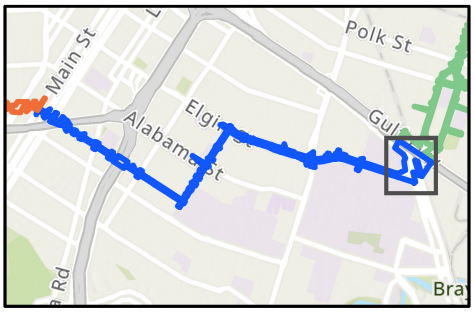
Proposed BRT Station (Preliminary Design)

Proposed ROW

Segment 3 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

Parcels



N

Segment 3, Map 9 of 9

0 100 200 300 ft

APPENDIX D – Segment 4

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 01	4445 Gulf Freeway	No	C. 1967	None	Commerce/business	Alterations include modern windows and siding, plus a change in the fenestration and a side addition.
S4 02a/b	2000 Ernestine Street	No	C. 1970	New Formalism influence	Commerce/warehouse	Alterations include an addition to south façade has no pilasters or pebbledash. Two skywalks connect warehouse S4 02a to warehouse S4 02b. The addition on S4 02a has no siding or pilasters.
S4 03	4443 Pease Street	No	C. 1935	Tudor influence	Domestic/single dwelling	Alterations include modern windows and an enclosed front porch. A ten-foot privacy wood fence abuts part of the front, and the side-yard changes the original setting.
S4 04	4442 Leeland Street	No	C. 1930	Tudor	Domestic/single dwelling	Alterations include a side patio with a half-wall of brick and a metal roof supported by metal columns.
S4 05	619 Telephone Road	No	1977	None	Government/fire station	Does not meet Criteria significance
S4 06	4443 Leeland Street	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include vinyl siding in the gable ends and eaves, modern windows, and extra columns.
S4 07a/b	4444 Bell Street	No	C. 1955	None	Domestic/multiple dwelling	Alterations include modern windows, changes to the central entrance, and a roof over the rear stairs.
S4 08	420 Telephone Road	No	C. 1947	None	Social/meeting hall	Alterations include several flat roof additions on the south façade and a flat roof addition on the west façade, plus additional bricked up windows.
S4 09	4501 Clay Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include the window in the front eaves which has been enclosed with plexiglass, and the one-car garage in the rear yard has modern pressboard siding.
S4 10	4603 Clay Street	No	C. 1935	Colonial Revival	Domestic/multiple dwelling	Eastwood Plat. Alterations include the brick has been painted.
S4 11	4602 Polk Street	No	C. 1935	Colonial Revival	Domestic/multiple dwelling	Eastwood Plat. Alterations include three dormer windows.
S4 12	4601 Polk Street	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Eastwood Plat. Alterations include modern siding, spindle columns, door, and windows, plus a side addition. There is a detached garage with carport in the rear yard.
S4 13	4603 Polk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows, front door, siding, and a new front porch. Based on exposed rafters on the east façade, an original side porch was enclosed.
S4 14	4602 Woodside Street	No	C. 1948	Ranch (6-plex)	Domestic/multiple dwelling	Eastwood Plat. Alterations include modern windows, doors, balcony railing, and front yard fencing. Apartment complex built after WWII.
S4 15	4550 Woodside Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include an enclosed rear porch.
S4 16	4547 Woodside Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern columns for the porte-cochere.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 17a/b	4601 Woodside Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern siding, painted brick, and a large, rear addition.
S4 18	4539 Park Drive	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. The building appears to be intact.
S4 19	4540 McKinney Street	No	C. 1935	Four-plex apt bldg	Domestic/multiple dwelling	Eastwood Plat. Alterations include painted brick, modern doors, a replacement awning, and modern windows. The side yard has a metal privacy fence that parallels S. Lockwood Drive.
S4 20	4602 McKinney Street	No	C. 1923	Four-Square	Domestic/multiple dwelling	Eastwood Plat. There were no obvious alterations.
S4 21	4601 McKinney Street	No	C. 1930	Four-Square	Domestic/single dwelling	Eastwood Plat. Alterations include a modern door, windows, porch columns, fenestration change on east façade, modern dormer windows, and an addition on the east facade.
S4 22	4539 McKinney Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include painted brick columns, a modern door, imbrication in the gable end, and a loss of railing.
S4 23	4602 Walker Street	No	C. 1955	Apt block	Domestic/multiple dwelling	Eastwood Plat. Alterations include modern windows and a six-foot metal fence. Apartment complex built after WWII.
S4 24	4601 Walker Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Noncontributing. Alterations include modern siding, some modern windows, and a chain-link fence in the front yard.
S4 25	4604 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows and front door.
S4 26a	4542 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows and doors, plus a change in the fenestration.
S4 26b	4542 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows, door, porch, and columns, plus a change in the fenestration.
S4 27	4545 Rusk Street	No	C. 1950/2001	Ranch	Domestic/single dwelling	Eastwood Plat. Alterations include a siding, windows, front porch railing, windows in gable end, and a horizontal wood fence in the front yard.
S4 28	4609 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include new siding, a modern door, a six-foot metal fence in the front yard, and modified gable ends.
S4 29	4619 Harrisburg Boulevard	No	C. 1930/1992/2009	Mission Revival	Commerce/specialty store	Gas station. Alterations include a change in the fenestration and two side additions on the west façade.
S4 30	311 Lockwood Drive	No	C. 1976	None	Commerce/specialty store	Alterations include modern materials on the canopy and eaves. Detached canopy over gas pumps added after 1985.
S4 31	304 Lockwood Drive	No	1935/2008	None	Commerce/specialty store	Alterations include loss of a front porch, modern windows and doors, and changes in the fenestration and siding.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 32	302 Lockwood Drive	No	C. 1970	None	Commerce/ warehouse	Alterations include an addition with a carport has been added to the north façade.
S4 33a/b	220 Lockwood Drive	No	C. 1955	None	Commerce/warehouse	Alterations include a one-story metal carport that has been added to the full-length of the east façade and a modern office building in the southwest corner of the lot (S4 33b).
S4 34	213 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern doors, windows, and a rear addition. There is a detached metal carport in the side yard.
S4 35	211 Lockwood Drive	No	1936/2012	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, columns, a door, windows, and a metal fence in the front yard. A metal carport is attached to the south façade.
S4 36	209 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, an enclosed front porch, and a change in the fenestration.
S4 37	207 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, windows, a change in the fenestration, the front door, columns, the railing, and a metal fence in the front yard. A large two-story building was added to the rear façade.
S4 38	205 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern columns and a new front porch railing.
S4 39	203 Lockwood Drive	No	C. 1920	Craftsman	Domestic/vacant-not in use	Alterations include modern columns, a side porch railing, windows, and brick wainscot. Remodeling of the house was occurring when the house was surveyed.
S4 40	202 Lockwood Drive	No	C. 1956	Contemporary influence	Commerce/vacant-not in use	Alterations include modern metal siding, a change in the fenestration, painted brick on the front façade, a modern door, and a rear addition.
S4 41	113 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern windows, new siding, an enclosed porch, missing columns and railings, south and rear additions, plus a change in the fenestration.
S4 42a/b	109 Lockwood Drive	No	1940/2018	Bungalow	Domestic/multiple dwelling	Alterations include modern siding, doors, windows, a front yard privacy fence, and change in the fenestration.
S4 43	110 Lockwood Drive	No	C. 1935	None	Commerce/warehouse	Alterations include modern windows, siding, doors, garage door, a metal roof, and the stepped parapet, plus a change in the fenestration. A metal carport is attached to the south façade.
S4 44	102 Lockwood Drive	No	1936/2011	Colonial Revival	Domestic/multiple dwelling	Alterations include modern siding, windows, and a front door, plus a rear addition and a change in the fenestration.
S4 45	4617 Brady Street	No	1915/2021	Folk Victorian influence	Domestic/single dwelling	Alterations include a new front façade and porch, modern windows, a change in the fenestration, and a metal fence in the front yard
S4 46a	4703 Brady Street	No	C. 1935	Gothic influence	Domestic/single dwelling	Alterations include a modern porch, door, and windows.
S4 46b	4703 Brady Street	No	C. 1935	Bungalow	Domestic/single dwelling	Alterations include a modern metal staircase, boarded up windows, and doors that change in the fenestration.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 47	99 Lockwood Drive	No	C. 1938	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, a door, windows, and front porch columns, plus a change in the fenestration.
S4 48	93-97 Lockwood Drive	No	C. 1973	None	Commerce/specialty store	Alterations include modern siding, a new canopy, and rooftop signs.
S4 49	94 Lockwood Drive	No	1925/1955	Bungalow	Domestic/single dwelling	Alterations include a new front façade that changes the look and feel of the house, and a detached garage in the rear yard.
S4 50	4616 Canal Street	No	1977/2018	None	Commerce/specialty store	Alterations include a modern façade, siding, roof, windows, and a change in the fenestration.
S4 51	91 Lockwood Drive	No	C. 1973	None	Commerce/specialty store	Alterations include modern siding, windows, and door, plus a change in the fenestration.
S4 52	4719 Canal Street	No	C. 1950/2000	None	Religion/religious facility	Alterations include modern siding, windows, architectural ornamentation on the frieze, a rooftop sculpture, and a metal fence with stone columns.
S4 53	215 Lockwood Drive	No	C. 1920	None	Commerce/warehouse	Alterations include metal siding on the north façade, a rear metal canopy addition, a bricked-up door and window, and a change in the fenestration.
S4 54	4707 Avenue I	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include modern siding, windows, and a door, a small rear addition, plus a change in the fenestration change.
S4 55	301 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include a modern door, windows, and a column plus a change in the fenestration. There have been multiple rear additions and a carport has been added to the rear façade. The metal sheeting on the side yard and the metal and wood fence in the front yard changes the setting.
S4 56	303 Lockwood Drive	No	C. 1930	Minimal Traditional	Domestic/single dwelling	Alterations include modern: windows, a front door, and a new front porch.
S4 57	305 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, a front porch, windows, a door, and a change in the fenestration.
S4 58	307 Lockwood Drive	No	C. 1920	Craftsman	Domestic/multiple dwelling	Alterations include modern siding, windows, and a porch railing.
S4 59	335 N Burr Street	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include modern columns, railing, windows, siding, and an attached carport to the south façade.
S4 60	333 Lockwood Drive	No	C. 1978	New Formalism	Government/courthouse	Harris County Courthouse Annex 39. Alterations include bricked up openings thus changing the fenestration.
S4 61	4619 Navigation Boulevard	Yes	1939	Art Deco influence	Industry/manufacturing facility	Alterations include bricked-up windows on the first floor changing the fenestration and new windows on the second floor. Interior rooms and materials are mostly intact.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 62	601 Lockwood Drive	Yes	1948	Art Deco	Government/government offices	Alterations include the entrance door and sidelights and some modern windows.
S4 63	Lockwood @ Armour Dr	No	C. 1975	Water Treatment Plant	Government/vacant - not in use	Not Eligible: lacks integrity of materials, design, workmanship, and association.
S4 64	750 Lockwood Drive	No	1950	Quonset Hut	Industry/manufacturing facility	Per Mr. Zaveri, office manager, the flat roof warehouses indicate the portion of the building reconstructed after a fire.
S4 65a-f	865 Lockwood Drive	No	C. 1953/1973	None	Industry/manufacturing facility	Alterations include modern windows, awnings, a roof, and a door, plus a rear addition attaching the office to the warehouse.
S4 66a-d	900 Lockwood Drive	No	C. 1953/1970	None	Industry/manufacturing facility	Alterations to the office include modern windows. The warehouses have had multiple additions through the years thus changing design and setting.
S4 67	951 Lockwood Drive	No	C. 1953/1957	None	Commerce/vacant-not in use	Alterations include the front addition, a modern garage door, missing windows, and a change in the fenestration.
S4 68	5515 Clinton Drive	No	C. 1936/1965	None	Commerce/warehouse	Alterations include a two-story rear façade and multiple additions on the east façade.
S4 69	1010 Lockwood Drive	No	C. 1942	None	Commerce/warehouse	Alterations include a new side porch and modern windows.
S4 70	1020, 1040, and 1060 Lockwood Drive	No	C. 1975	None	Commerce/warehouse	Alterations some modern loading docks and windows, plus a change in the fenestration.
S4 71	1025 Lockwood Drive	No	1926/2014	None	Industry/manufacturing facility	Alterations to the office include modern siding, windows, and awnings. Alterations to the warehouses include covered windows and openings, a modern roof (c. 2014 and 2016), and a change in the fenestration.
S4 72a/b	1111 Lockwood Drive	No	1956/1968	None	Industry/manufacturing facility	Alterations include an addition to the south façade. A modern raised parapet covers the front facade of two gable-roof warehouses removing integrity of materials, and design. The addition of new buildings reduces integrity of setting.
S4 73	1110 Lockwood Drive	No	1947/1978	None	Commerce/warehouse	Alterations include a modern roof to the office.
S4 74	1120 Lockwood Drive	No	1950/1990	None	Commerce/warehouse	Alterations include enclosed bays and modern windows.
S4 75	1140 Lockwood Drive	No	C. 1960	None	Commerce/warehouse	Alterations include a new roof and rear additions.
S4 76	5438 Margarita Street	No	C. 1930	Craftsman	Domestic/single dwelling	Alterations include modern siding, windows, and door.
S4 77	1203 Lockwood Drive	No	C. 1966	None	Commerce/vacant-not in use	Alterations include boarded up door and windows, and modern metal siding.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 78	1202 Lockwood Drive	No	1949/2007	None	Commerce/restaurant	Alterations include a side addition, a modern roof, painted brick, enclosed windows, plus a change in the fenestration.
S4 79	5507 Arapahoe Street	No	C. 1928	Bungalow	Domestic/single dwelling	Alterations include modern siding, door, windows, skirting, and columns.
S4 80	1217 Lockwood Drive	No	C. 1965	None	Commerce/vacant-not in use	Alterations include painted brick, bricked up windows, and a change in the fenestration.
S4 81	5438 San Jose Street	No	C. 1925	Craftsman	Domestic/single dwelling	Alterations include modern windows.
S4 82	Lockwood @ Market St	No	1893	Evergreen Cemetery	Funerary/cemetary	Does not meet Criteria Consideration D for persons, age, or design

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 01	Address:	4445 Gulf Freeway
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1967	References:	HCAD
NRHP Eligibility:	Not Eligible: Lacks integrity of materials, design, and workmanship		

Description: A two-story warehouse with metal and brick siding. Alterations include modern windows and siding, plus a change in the fenestration and a side addition.



Camera direction: North

Resource No.	S4 01	Address:	4445 Gulf Freeway



Camera direction: Southwest



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 02a/b	Address:	2000 Ernestine Street
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1970	References:	HCAD, www.loopnet.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel contains two large distribution warehouses with multiple bays, pilasters, pebbledash siding, and a New Formalism influence. Alterations include an addition to the south façade that has no pilasters or pebbledash. Two skywalks connect warehouse S4 02a to warehouse S4 02b. The addition on S4 02a has no siding or pilasters.

https://www.loopnet.com/portfolio-property/2000-Ernestine-St-Houston-TX/576590/



Camera direction: Northwest

Resource No.	S4 02a	Address:	2000 Ernestine Street



Camera direction: southwest



Image oriented north (Google Earth 12/2021)

Resource No.	S4 02b	Address:	2000 Ernestine Street



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 03	Address:	4443 Pease Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story house with a Tudor style influence. It has brick siding, a detached carport, and a garage in the rear yard. Alterations include modern windows and an enclosed front porch. A ten-foot privacy wood fence abuts part of the front, and the side-yard changes the original setting.



Camera direction: Northeast

Resource No.	S4 03	Address:	4443 Pease Street



Camera direction: North



Camera direction: West.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 04	Address:	4442 Leeland Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Tudor style house with brick siding and a detached two-car carport in the rear yard. Alterations include a side patio with a half-wall of brick and a metal roof supported by metal columns.



Camera direction: Southeast

Resource No.	S4 04	Address:	4442 Leeland Street



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 05	Address:	619 Telephone Road
Resource Type:	Building	Function/Use:	Government/fire station
Estimated Year built:	1977	References:	Plaque
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story fire station with office/living space and four bays of no particular style. The original Station #18 was constructed in 1926. In 1976, Station #18 was temporarily relocated as the old station was demolished and a new facility was being constructed. The building plaque has the year of construction as 1977 and the architect of record as T. Leo Dawsy Jr. Station #18 returned to 619 Telephone Road in 1980 (https://houstontx.gov/fire/about/history.html).

T. Leo Dawsy, Jr. (1925-2006) served as a pilot in the Army Air Corps during WWII. He studied architecture at Auburn University, graduated in 1951 and moved to Texas in 1961. Dawsey operated his own firm until his death in 2006.

https://obits.al.com/us/obituaries/mobile/name/t-dawsey-obituary?id=13923254



Camera direction: Northeast

Resource No.	S4 05	Address:	619 Telephone Road



Camera direction: Northeast



Camera direction: West, plaque inside bay.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 06	Address:	4443 Leeland Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Bungalow style house with brick siding and a detached garage in the rear yard. Alterations include vinyl siding in the gable ends and eaves, modern windows, and extra columns.



Camera direction: East

Resource No.	S4 06	Address:	4443 Leeland Street



Camera direction: Northwest



Image oriented West (Google Earth 12/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 07a/b	Address:	4444 Bell Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1955	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S4 07 consists of two, two-story multi-family apartment block buildings. Resource S4 07a has brick siding, deep overhanging eaves, and three pedestrian doors on the front facade that face Bell Street. Alterations include modern windows, changes to the central entrance, and a roof over the rear stairs. Resource S4 07b is an apartment with wood siding and a central entrance facing Ernestine Street. The building form, backyard location, and window types indicate the first building could have originally been a garage apartment.



Camera direction: Southwest

Resource No.	S4 07a	Address:	1506 Ernestine Street



Camera direction: Southeast



Image oriented North (Google Earth 4/2022)

Resource No.	S4 07b	Address:	1504 Ernestine Street



Camera direction: Northwest



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 08 Knights of Columbus Hall	Address:	420 Telephone Road
Resource Type:	Building	Function/Use:	Social/meeting hall
Estimated Year built:	C. 1947	References:	HCAD, www.tkofc.org/about/history
NRHP Eligibility:	Not eligible: lacks integrity of materials, design, and workmanship		

Description: The Knights of Columbus Hall is a one-story barrel-roof building with brick siding. The original entrance at the gable end has a central door flanked by three windows that are now bricked up. Alterations include several flat roof additions on the south façade and a flat roof addition on the west façade, plus additional bricked up windows. The Knights of Columbus is a Catholic fraternal charity organization started in 1882 in Connecticut.



Camera direction: Northwest

Resource No.	S4 08	Address:	420 Telephone



Camera direction: Southwest



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 09	Address:	4501 Clay Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	c. 1920	References:	HCAD, McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials and setting.		

Description: A one-story Craftsman with brick siding. Alterations include the window in the front eaves which has been enclosed with plexiglass, and the one-car garage in the rear yard has modern pressboard siding. After 1953, starting at Polk Street and headed south, Lockwood Street was split into two, one-way streets with Ernestine. This division of the street removed numerous houses, and commercial buildings and a church now occupy lots south of this house.



Camera direction: Northeast

Resource No.	S4 09	Address:	Clay Street



Camera direction: Southwest



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 10	Address:	4603 Clay Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials.		

Description: A two-story, multi-family dwelling in the Colonial Revival style. The building has brick exterior walls, wood sash windows, and a small projecting one-story covered porch. The exterior brick has been painted but the building otherwise appears unmodified.



Camera direction: Southwest

Resource No.	S4 10	Address:	4603 Clay Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 11	Address:	4602 Polk Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to level of significance		

Description: A two-story Colonial Revival style multiplex building. The building features red brick siding, multilight sash windows with decorative shutters, and an uncovered wood front door with paired side lights. Alterations include three dormer windows impacting integrity of design.



Camera direction: Southwest

Resource No.	S4 11	Address:	4602 Polk Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 12	Address:	4601 Polk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern siding, spindle columns, door, and windows, plus a side addition. There is a detached garage with a carport in the rear yard.



Camera direction: Northwest

Resource No.	S4 12	Address:	4601 Polk Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 13	Address:	4603 Polk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-and-a-half-story Craftsman bungalow style house with fiber cement siding. Alterations include modern windows, front door, siding, and a new front porch. Based on exposed rafters on the east façade, an original side porch was enclosed. Per HCAD the house was remodeled in 2008.



Camera direction: Northwest

Resource No.	S4 13	Address:	4603 Polk Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 14	Address:	4602 Woodside (1241 S Lockwood Drive)
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1948	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A two-story, Ranch style six-plex building with a gable roof and brick siding. Per HCAD the building was remodeled in 2008. Alterations include modern windows, doors, balcony railing, and front yard fencing, impacting integrity of materials, workmanship, and feeling.



Camera direction: Southeast

Resource No.	S4 14	Address:	4602 Woodside (1241 S Lockwood Drive)
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 15	Address:	4550 Woodside Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to significance level.		

Description: A one-story Craftsman bungalow style house with beveled wood siding, wood sash windows, and a projecting front porch with tapered wood columns atop brick piers. The roof eaves have multiple wood knee braces. Outside of an enclosed reach porch, the house is unaltered.



Camera direction: Southeast

Resource No.	S4 15	Address:	4550 Woodside Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 16	Address:	4547 Woodside Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to significance level.		

Description: A one-story Craftsman bungalow style house with beveled wood siding, wood sash windows, and decorative soffit boards. The projecting porch has tapered wood columns atop brick piers. A detached garage is located to the rear of the house, accessed via a concrete drive through a porte-cochere with replacement metal pole supports.



Camera direction: Northeast

Resource No.	S4 16	Address:	4547 Woodside Street
			
Camera Direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 17a/b	Address:	4601 Woodside Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials.		

Description: S4 17a: A one-story Craftsman bungalow style house with fiber cement siding. The wide, wrap-around porch has tapered wood columns atop brick piers, with a concrete cap running the length of the half-height brick porch walls. Alterations include modern siding, painted brick, and a large, rear addition.

S4 17b: The first floor in the detached two-story garage apartment in the rear yard was converted into a living space, changing the original association, and reducing integrity of materials, design, and workmanship.



Camera direction: Southeast

Resource No.	S4 17a	Address:	4601 Woodside Street



Camera direction: Northeast

Resource:	S4 17b	Address:	4601 Woodside Street



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 18	Address:	4539 Park Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to level of significance.		

Description: One-story Craftsman bungalow style house with horizontal wood siding, wood sash windows, and a side porch with a cross-gable roof supported by boxed wood columns on brick piers. The building appears to be intact.



Camera direction: Northeast

Resource No.	S4 18	Address:	4539 Park Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 19	Address:	4540 McKinney Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1935	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials and workmanship.		

Description: A two-story, four-plex apartment building in a rectangular plan with brick siding and a raised parapet. Alterations include painted brick, modern doors, a replacement awning, and modern windows. The side yard has a metal privacy fence that parallels S. Lockwood Drive.



Camera direction: Southwest

Resource No.	S4 19	Address:	4540 McKinney Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 20	Address:	4602 McKinney Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1923	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to level of significance.		

Description: A two-story, American Four-Square style building with brick siding, wood double-hung windows, and a small wood awning over the porch stoop. There are no obvious alterations.



Camera direction: Southwest

Resource No.	S4 20	Address:	4602 McKinney Street



Camera direction: Southeast



Detail photo of decorative tile on second floor of front façade. Camera direction: South

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 21	Address:	4601 McKinney Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A two-story, American Four-Square style house with wood siding. Alterations include a modern door, modern windows, replacement porch columns, a fenestration change on east façade, modern dormer windows, and an addition on the east facade.



Camera direction: Northeast

Resource No.	S4 21	Address:	4601 McKinney Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 22	Address:	4539 McKinney Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-story Craftsman Bungalow with wood siding wood sash windows, and an inset full-length porch with a combination of wood box columns on brick piers and square brick columns for support. Alterations include painted brick columns, a modern door, imbrication in the gable end, and a loss of railing on the porch.



Camera direction: Northwest

Resource No.	S4 22	Address:	4539 McKinney Street



Image oriented Northeast (Google Earth 12/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 23	Address:	4602 Walker Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1955	References:	HCAD, Eastwood Plat
NRHP Eligibility:	Not eligible, does not rise to level of significance.		

Description: A two-story apartment block building with brick siding and detached carports that parallel Lockwood Street. Alterations include modern windows and a six-foot metal fence.



Camera direction: East

Resource No.	S4 23	Address:	4602 Walker Street



Camera direction: South



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 24	Address:	4601 Walker Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-story Craftsman bungalow style house with asbestos siding, a mix of wood and vinyl sash windows, and a projecting porch with brick columns on brick piers. Alterations include modern siding, some modern windows, and a chain-link fence in the front yard.



Camera direction: Northwest

Resource No.	S4 24	Address:	4601 Walker Street



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 25	Address:	4604 Rusk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-story Craftsman bungalow style house with wood siding and a half-width projecting porch with decorative wood dentils and knee brackets and supported by wood columns on brick piers. Alterations include modern windows and front door.



Camera direction: Southwest

Resource No.	S4 25	Address:	4604 Rusk Street
			
Camera direction: South			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 26a/b	Address:	4542 Rusk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: S4 26a is a one-story Craftsman bungalow style house with wood siding and a detached apartment in the rear yard. Alterations include modern windows and doors, rear additions, and a change in the fenestration.

S4 26b is a Craftsman bungalow style house with wood siding. Alterations include modern windows, door, porch, and columns, plus a change in the fenestration.



Camera direction: Southwest

Resource No.	S4 26a	Address:	4542 Rusk Street



Camera direction: West



Image oriented North (Google Earth 4/2022)

Resource No.	S4 26b	Address:	4542 Rusk Street



Camera direction: West



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 27	Address:	4545 Rusk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	1950/2001	References:	HCAD, McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A one-story Ranch style house. HCAD has the original year built as 1900 with a 644 square foot addition in 1950 and the entire house remodeled in 2001. Based on the massing, form, and materials the 1900 and 1950 building is not visible and the house has been extensively remodeled. Alterations include siding, windows, front porch railing, windows in gable end, and a horizontal wood fence in the front yard.



Camera direction: Northwest

Resource No.	S4 27	Address:	4545 Rusk Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 28	Address:	4609 Rusk Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014, Eastwood Plat
NRHP Eligibility:	Not eligible, lacks integrity of materials, design, and workmanship.		

Description: A two-story Craftsman-influenced house with asbestos siding, wood sash windows, and a small projecting porch with wood columns on brick walls. The rear yard has a detached garage with a metal carport. Alterations include new siding, a modern door, a six-foot metal fence in the front yard, and heavily modified gable ends.



Camera direction: Northwest

Resource No.	S4 28	Address:	4609 Rusk Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 29	Address:	4619 Harrisburg Boulevard
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1930/1992/2009	References:	TxDOT Gas Station field guide, HCAD
NRHP Eligibility:	Not Eligible: Lacks integrity of materials, design, and workmanship		

Description: A one-story Mission Revival style gas station with stucco siding and attached canopy, red clay tile and curvilinear parapets. Alterations include a change in the fenestration and two side additions on the west façade. Per HCAD the metal warehouse was added in 1992 and the garage was remodeled in 2009.

https://ftp.txdot.gov/pub/txdot-info/env/toolkit/420-05-gui.pdf



Camera direction: Northwest

Resource No.	S4 29	Address:	4619 Harrisburg Blvd.



Camera direction: North



Image oriented North (Google Earth 3/2011)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 30	Address:	311 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1976	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, two-bay commercial building with brick siding and mansard roof canopy over the sidewalk. Businesses include a convenience store with gas station and a cell phone company. Alterations include modern materials on the canopy and eaves. The detached canopy over the gas pumps was added after 1985.



Camera direction: Northeast

Resource No.	S4 30	Address:	311 Lockwood Drive



Camera direction: West



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 31	Address:	304 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1935/2008	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association.		

Description: A one-story house with pyramidal roof and brick siding. Per HCAD the 1935 house was remodeled in 2008 and converted to commercial use. Alterations include loss of a front porch, modern windows and doors, and changes in the fenestration and siding.



Camera direction: Northwest

Resource No.	S4 31	Address:	304 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 32	Address:	302 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	c. 1970	References:	Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story warehouse with a metal gable roof plus brick and metal siding. Alterations include an addition with a carport added to the north façade.



Camera direction: Northeast

Resource No.	S4 32	Address:	302 Lockwood Drive
			
Camera direction: Southwest			

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 33a/b	Address:	220 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design and workmanship		

Description: S4 33a is a one-story metal warehouse with gable roof and rectangular plan. Alterations include a one-story metal carport that has been added to the full-length of the east façade and a modern office building in the southwest corner of the lot (S4 33b). The carport was lengthened when an additional carport was added to the north façade.



Camera direction: Northwest

Resource No.	S4 33a/b	Address:	220 Lockwood Drive



Image oriented North (Google Earth 4/2022)

Resource No.	S4 33b	Address	220 Lockwood Drive



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 34	Address:	213 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story Folk Victorian style house with wood siding and a small projecting porch. Alterations include modern doors, windows, and a rear addition. There is a detached metal carport in the side yard.



Camera direction: Northeast

Resource No.	S4 34	Address:	213 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 35	Address:	211 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1936/2012	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern siding, columns, a door, windows, and a metal fence in the front yard. A metal carport is attached to the south façade. Per HCAD the house was remodeled in 2012.



Camera direction: Northeast

Resource No.	S4 35	Address:	211 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 36	Address:	209 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Folk Victorian style house with asbestos siding. Alterations include modern siding and windows, an enclosed front porch, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S4 36	Address:	209 Lockwood Drive



Camera direction: Southeast

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 37	Address:	207 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: A one-story Folk Victorian style house. Based on a discussion with a neighbor and a review of Google Earth aerial photos, the original ell plan of the house was retained when it was remodeled in 2021. Alterations include modern siding, windows, a change in the fenestration, the front door, columns, the railing, and a metal fence in the front yard. A large two-story building was added to the rear façade.



Camera direction: Northeast

Resource No.	S4 37	Address:	207 Lockwood Drive
			
Camera direction: Southeast			

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 38	Address:	205 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials and design		

Description: A one-story Folk Victorian style house with wood siding and wood sash windows. Alterations include modern columns and a new front porch railing.



Camera direction: Northeast

Resource No.	S4 38	Address:	205 Lockwood Drive
			
Camera direction: Southeast			

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 39	Address:	203 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant-not in use
Estimated Year built:	C. 1920	References:	HCAD McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A two-story Craftsman influenced house with vinyl siding and metal sash windows. Alterations include modern columns, side porch railing, windows, brick wainscot, and replacement stone porch columns. Remodeling of the house was occurring when the house was surveyed.



Camera direction: Northeast

Resource No.	S4 39	Address:	203 Lockwood Drive



Camera Direction: Southeast

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Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 40	Address:	202 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant-not in use
Estimated Year built:	C. 1956	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story gabled-roof warehouse. There are Contemporary style details on the front façade include a built-in brick planter and triangular shaped brackets supporting the canopy. Alterations include modern metal siding, a change in the fenestration, painted brick on the front façade, a modern door, and a rear addition.



Camera direction: Southwest

Resource No.	S4 40	Address:	202 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 41	Address:	113 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Folk Victorian style house with vinyl siding. Alterations include modern windows, new siding, an enclosed porch, missing columns and railings, south and rear additions, and a change in the fenestration.



Camera direction: East

Resource No.	S4 41	Address:	113 Lockwood Drive
			
Camera direction: Northeast			

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Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 42a/b	Address:	109 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1940/2018	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, feeling, and setting		

Description: A one-story Bungalow style house that was remodeled in 2018. Alterations include modern siding, doors, windows, a front yard privacy fence, and change in the fenestration. The front façade of the house was removed and replaced thus creating a larger footprint and new façade and porch. An eight-foot privacy wood fence encloses the yard changing the setting. Per HCAD the detached two-story house (S4 42b) was newly constructed in 2019. Historic aerials show a building with a smaller footprint behind the house.



Camera direction: Southwest

Resource No.	S4 42ab	Address:	109 Lockwood Drive



Camera direction: Southeast



Images oriented North (Google Earth 12/2018 left and 4/2022 right)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 43	Address:	110 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1935	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: Lacks integrity of materials, design, and workmanship		

Description: A one-story building with a false front, stepped parapet. Alterations include modern windows, siding, doors, garage door, a metal roof, and the stepped parapet, plus a change in the fenestration. A metal carport is attached to the south façade.



Camera direction: Northwest

Resource No.	S4 43	Address:	110 Lockwood Drive
			
Camera direction: Southwest			

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Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 44	Address:	102 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1936/2011	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A two-story Colonial Revival style house with fiber cement siding. Alterations include modern siding, windows, and front door, plus a rear addition and a change in the fenestration. Per HCAD the house was remodeled in 2011.



Camera direction: Southwest

Resource No.	S4 44	Address:	102 S Lockwood Drive
			
Camera direction: Northwest			

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Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 45	Address:	4617 Brady Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1915/2021	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story house with Folk Victorian style influence. Per HCAD and Google Earth aerial photographs the house was remodeled in 2021. Alterations include a new front façade and porch, modern windows, a change in the fenestration, and a metal fence in the front yard. Two ancillary buildings were removed circa 2019.



Camera direction: Northwest

Resource No.	S4 45	Address:	4617 Brady Street



Camera direction: Southwest





Images oriented North (Google Earth 12/2018 left, and 12/2021 right.

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 46a/b	Address:	4703 Brady Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: S4 46a is a one-story house with a Gothic style influenced front porch. Alterations include changes to the porch and a modern door and windows.

S4 46b is a two-story house with some Craftsman influences and wood siding located at the back of the lot and parallel to Lockwood Drive. Alterations include a modern metal staircase, and covered or removed windows and doors that change the fenestration.



Camera direction: North

Resource No.	S4 46a	Address:	4703 Brady Street



Camera direction: Northeast



Image oriented North (Google Earth 11/2020)

Resource No.	S4 46b	Address:	4703 Brady Street



Camera direction: North



Camera direction: Northeast, façade facing Lockwood

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 47	Address:	99 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1938	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with fiber cement siding. Alterations include modern siding, a door, windows, and front porch columns, plus a change in the fenestration. A six-foot wood privacy fence surrounds the front yard changing the setting.



Camera direction: Southeast

Resource No.	S4 47	Address:	99 Lockwood Drive



Camera direction: East



Image oriented East (Google Earth 12/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 48	Address:	93-97 S Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1973	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story strip center with a low-pitched gable roof and metal siding. The front façade is ceiling to floor windows in metal frames. Alterations include modern siding, a new canopy, and rooftop signs.



Camera direction: Northeast

Resource No.	S4 48	Address:	93-97 S Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 49	Address:	94 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1925/1955	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: A one-story Craftsman style bungalow with wood siding. Alterations include a large front addition that changes the look and feel of the house, and a detached garage in the rear yard.



Camera direction: Northwest

Resource No.	S4 49	Address:	94 Lockwood Drive



Camera direction: Southwest



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 50	Address:	4616 Canal Street
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1977/2018	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: A one-story, three-bay strip center with gable roof. Per HCAD the building was remodeled in 2018. Alterations include a modern façade, siding, roof, windows, and a change in the fenestration.



Camera direction: West

Resource No.	S4 50	Address:	4616 Canal
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 51	Address:	91 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1973	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with a low-pitched gable roof and metal siding. Alterations include modern siding, windows, and door, plus a change in the fenestration.



Camera direction: Northeast

Resource No.	S4 51	Address:	91 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 52	Address:	4719 Canal Street
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1950/2000	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, style, workmanship, feeling, and association		

Description: A two-story church with gable roof in a rectangular plan. Based on marquee and building form, plus HCAD note of "1950 Cinema Balcony" this was formerly a theater. Alterations include modern siding, windows, architectural ornamentation on the frieze, a rooftop sculpture, and a metal fence with stone columns.



Camera direction: Northeast

Resource No.	S4 52	Address:	4719 Canal Street



Camera direction: Northwest



Camera direction: South

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 53	Address:	215 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1920	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, two-bay, brick warehouse with a stepped parapet. There are two garage doors, one pedestrian door and two windows on the front facade. Alterations include metal siding on the north façade, a rear metal canopy addition, a bricked-up door and window, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S4 53	Address:	215 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 54	Address:	4707 Avenue I
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman-influenced bungalow with asbestos siding. Alterations include modern siding, windows, and door, a small rear addition, plus a change in the fenestration. Based on the lack of a balcony, the side entrance, and single windows on the front protruding bay, the original front porch may have been enclosed.



Camera direction: Northwest

Resource No.	S4 54	Address:	4707 Avenue I
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 55	Address:	301 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include a modern door, windows, and a column plus a change in the fenestration. There have been multiple rear additions and a carport has been added to the rear façade. The metal sheeting on the side yard and the metal and wood fence in the front yard changes the setting.



Camera direction: Northwest

Resource No.	S4 55	Address:	301 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 56	Address:	303 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional shotgun house with wood siding. Alterations include modern windows, a front door, and a new front porch. A one-story house with attached garage is in the rear.



Camera direction: Northwest

Resource No.	S4 56	Address:	303 Lockwood Drive



Camera direction: Southwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 57	Address:	305 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1910	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Folk Victorian Style house with a large rear addition. Alterations include modern siding, a front porch, windows, a door, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S4 57	Address:	305 Lockwood Drive



Camera direction: Southwest



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 58	Address:	307 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1920	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with vinyl siding. Alterations include modern siding, windows, and a porch railing.



Camera direction: Northwest

Resource No.	S4 58	Address:	307 Lockwood Drive



Camera Direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 59	Address:	335 N Burr Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman influenced house with vinyl siding. Alterations include modern columns, railing, windows, siding, and an attached carport to the south façade.



Camera direction: Northeast

Resource No.	S4 59	Address:	336 N Burr Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 60	Address:	333 Lockwood Drive
Resource Type:	Building	Function/Use:	Government/courthouse
Estimated Year built:	C. 1978	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: Lacks integrity of materials, design, and association		

Description: Harris County Courthouse Annex 39 is a two-story building with a flat roof and brick siding influenced by the New Formalism style. Changes in brick color indicated two openings, a door on the south façade, and a window on the east façade, that have been bricked up. Currently used as a courthouse annex, a county employee stated she thought it originally was a financial institution (savings and loan). The lot was vacant in 1976 and the building appears in a 1981 aerial photograph (www.historicaerails.com). The first identified listing in city directories was 1983 for a labor union office. Alterations include bricked up openings thus changing the fenestration and reducing integrity of design and materials.



Camera direction: West

Resource No.	S4 60	Address:	333 Lockwood Drive



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 61	Address:	4619 Navigation Boulevard
Resource Type:	Building	Function/Use:	Industry/manufacturing facility
Estimated Year built:	1939	References:	HCAD, Sanborn Map, Interview with current owner
NRHP Eligibility:	Eligible: Under Criterion A, Commerce at the local level of significance		

Description: International Harvester Co. Motor Truck & Farm Machinery Sales & Service (Sanborn Map). A two-story warehouse with brick siding. Per Sanborn, steel frame – tile, BF [Brick Face] curtain walls. The stock room is full of W.G. skylights that still exist and work today.

The International Harvester Houston Branch house represents the thriving economy of Houston and the investment of international firms into the economy during the Great Depression (1929-1941). Houston Branch house is recommended eligible under Criterion A, in Commerce at the local level of significance. No evidence was discovered, at the reconnaissance level, connecting the building to an architect or architectural firm. Historians identified three IHC buildings constructed in 1939, each different; therefore, IHC did not have a standard building for their Branch House (IHC 1939: 30). IHC is recommended not eligible under Criterion B. The building is designed in the Art Deco style with curved concrete coping, brick siding, and an exposed concrete base. The massing is a two-story horizontal block flanked by one-story wings on either side. The central entrance extends above the two-story roof line with stepped corbeling around the original main entrance. The original windows on the front and side facades have been bricked up with several sets of windows converted to openings with a garage door. The original recessed front entrance is bricked-up and flush with the front façade. Other windows on the side façade and replaced with smaller windows and boards. Based on the alterations the building lacks integrity of materials and workmanship and is recommended not eligible under Criterion C.



Camera direction: North

Resource No.	S4 61	Address:	4619 Navigation Boulevard



Camera direction: Northeast



Camera direction: North

Resource No.	S4 61	Address:	4619 Navigation Boulevard



Camera direction: Southwest



Camera direction: Southwest

Resource No.	S4 61	Address:	4619 Navigation Boulevard



Camera direction: Southwest



Image oriented North (Google Earth 12/2021)

Resource No.	S4 61	Address:	4619 Navigation Boulevard

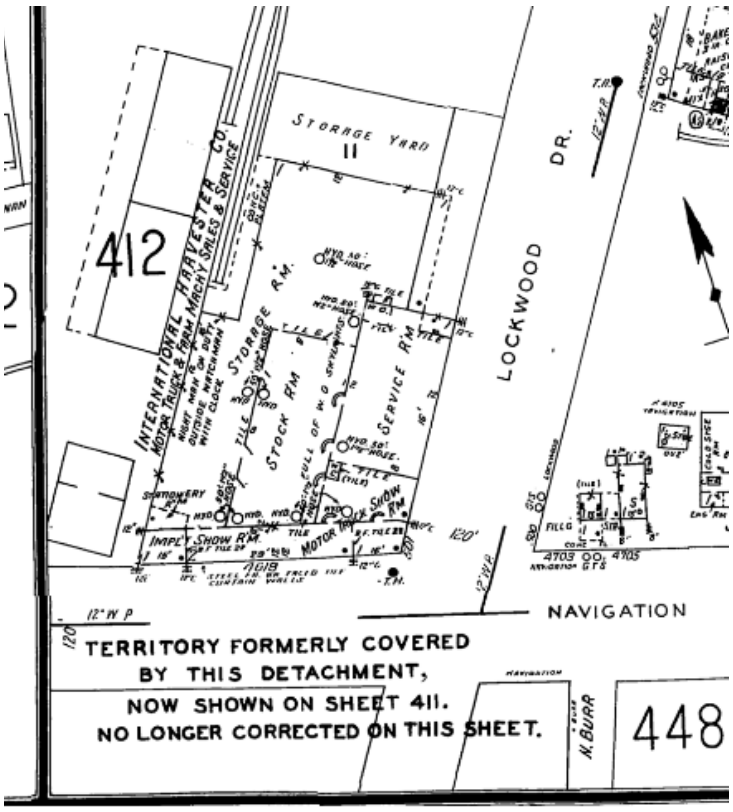


Image oriented North (Sanborn Fire Insurance Map, Houston Texas 1925-1951, Volume 4 page 412)



Image oriented Northwest (International Harvester Company Annual Report – 1936: 27)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 62	Address:	601 Lockwood Drive
Resource Type:	Building	Function/Use:	Government/government offices
Estimated Year built:	1948	References:	Sanborn Vol 4, P. 411, Google Earth
NRHP Eligibility:	Eligible: Criterion A, Commerce at the local level of significance		

Description: Western Electric Company (WE)/Southwestern Bell Telephone Company originally owned this building. Western Electric Manufacturing Company was established in Chicago in 1872. Alexander Graham Bell invented the phone in 1876 and the American Bell Telephone Company (Bell) was formed in 1877. WE manufactured Bell's telephones and by 1925 was a subsidiary of Bell (www.westernelectric.com). Austin Method Engineers and Builders constructed the building (AT&T archives).

The two-story brick building features a rectangular plan. Metal casement windows create a horizontal banding on the facades. The Art Deco entry has curved edge and glass brick windows. There are four loading bays on the south façade. Per Sanborn, the building has steel frame columns and beams, concrete floor, steel deck roof, and curtain walls with fireproof construction except where noted. Alterations include the entrance door and sidelights and some modern windows.



Camera direction: Northwest

Resource No.	S4 62	Address:	601 Lockwood Drive



Camera direction: Northwest



Camera direction: Northeast

Resource No.	S4 62	Address:	601 Lockwood Drive



Camera direction: North



Camera direction: Northwest

Resource No.	S4 62	Address:	601 Lockwood Drive



Image direction Southwest (AT&T archives San Antonio, TX)



Image direction Northeast (AT&T archives San Antonio, TX)

Resource No.	S4 62	Address:	601 Lockwood Drive

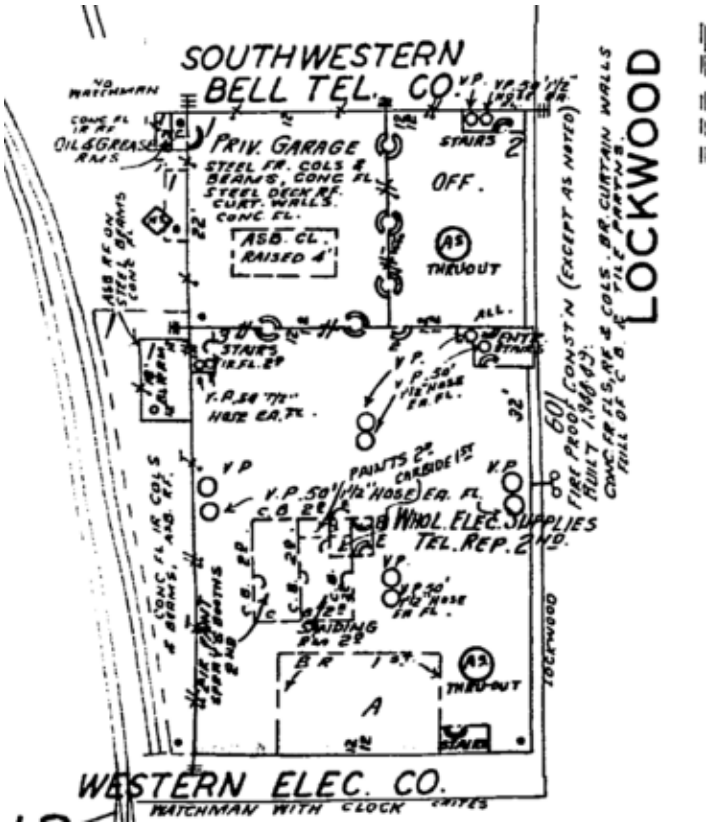


Image oriented North (Sanborn Fire Insurance Map, Houston Texas 1925-1951, Volume 4 page 411)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 63 Lockwood Water Works	Address:	Lockwood Drive @ Armour Drive
Resource Type:	Site	Function/Use:	Government/vacant – not in use
Estimated Year built:	C. 1975	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: Formally Lockwood Water Works, the site has been abandoned by the city and is now owned by the nonprofit organization Buffalo Bayou Partnership (BBP) (www.buffalobayou.org). In 2019 the city had plans to remove all of the infrastructure but BBP approached the city to purchase the property as is (Tommaney 2019). The property is slated to be turned into a public park.



Camera direction: Northeast

Resource No.	S4 63	Address:	Lockwood Drive @ Amour



Camera direction: Northeast



Image oriented North (Google Earth 4/2022)

Resource No.	S4 63	Address:	Lockwood Drive @ Amour



Image oriented North (*A Vision For Buffalo Bayou East: Master Plan* 2019: 12.)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 64	Address:	750 Lockwood Drive
Resource Type:	Building	Function/Use:	Industry/Manufacturing facility
Estimated Year built:	1950	References:	*Houston Chronicle*, July 9, 1950, p. A29
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A Quonset hut clad with permastone. The Quonset hut is attached to a large warehouse. The warehouse contains a flat roof portion and seven barrel-roof sections. Per Mr. Zaveri, office manager, the flat roof warehouses indicate the portion of the building reconstructed after a fire. The original owner of the building was National Steel Products Company.



Camera direction: Northeast

Resource No.	S4 64	Address:	750 Lockwood Drive



Camera direction: Southeast



Camera direction: Southeast

Resource No.	S4 64	Address:	750 Lockwood Drive



Image oriented North (Google Earth 12/2021)


THANKS, TEXAS!
- - AND THE GREAT SOUTHWEST!
THANKS ALSO TO OUR GENERAL CONTRACTOR, HUBBARD CONSTRUCTION COMPANY, AND THEIR SUBCONTRACTORS
FOR A JOB WELL DONE
OUR NEW OFFICE BUILDING
WHOLESALE ONLY
NATIONAL
NATIONAL STEEL PRODUCTS COMPANY
750 LOCKWOOD DRIVE
HOUSTON

Houston Chronicle, July 9, 1950, p. A29

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 65a-f Texas Iron & Metal	Address:	865 Lockwood Drive
Resource Type:	Building	Function/Use:	Industry/manufacturing facility
Estimated Year built:	C. 1953/1973	References:	Google Earth, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A parcel with multiple warehouses and an office building. Buildings S4 65a, b and c (the office and both triple-barrel roof Quonset huts) were in place by 1953. The expansion, loss, and addition of new buildings changed the setting and relationship between the buildings.

S4 65a is an office attached to a warehouse forming an "L" plan. Alterations include modern windows, awnings, a roof, and a door, plus a rear addition attaching the office to the warehouse. Buildings S4 65b and S4 65c are triple barrel Quonset huts. Alterations include painted siding, enclosed bays, modern doors, and a change in the fenestration. S4 65d was constructed by 1973 and doubled in size by 1981. The addition either encased or replaced a building to the north. S4 65e was constructed by 1976 and has a large rear addition by 1981. S4 65f was constructed between 1981 and 1995 and is not of historic age.

Per the owner, this family-owned business has been at this same location since the 1950s.



Camera direction: Northwest

Resource No.	S4 65a	Address:	Lockwood Drive



Camera direction: Southwest



Image oriented North (www.historicaerials.com 1953)

Resource No.	S4 65b	Address:	Lockwood Drive



Camera direction: Southwest



Image oriented North (Google Earth 12/2021). Building S4 065c not visible from right-of-way.

Resource No.	S4 65d	Address:	Lockwood Drive



Camera direction: West. Building S4 065d partially visible from right-of-way.

Resource No.	S4 65e	Address:	Lockwood Drive



Camera direction: Southwest

Resource No.	S4 65f	Address:	Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 66a-d	Address:	900 Lockwood Drive
Resource Type:	Building	Function/Use:	Industry/Manufacturing facility
Estimated Year built:	C. 1953/1970	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: An industrial complex that consists of an office S4 66a circa 1953, metal warehouses (S4 66b) and (S4 66c), circa 1953/1970, and a brick warehouse (S4 66d) circa 1990. Alterations to the office include modern windows. The warehouses have had multiple additions through the years thus changing design and setting.



Camera direction: Northeast

Resource No.	S4 66a	Address:	900 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 4/2022)

Resource No.	S4 66b	Address:	900 Lockwood Drive



Camera direction: Northeast

Resource No.	S4 66b	Address:	900 Lockwood Drive



Camera direction: East

Resource No.	S4 66c	Address:	900 Lockwood Drive



Camera direction: East



Camera direction: Southeast

Resource No.	S4 66d	Address:	900 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 67	Address:	951 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant- not in use
Estimated Year built:	C. 1953/1957	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, gable roof metal warehouse constructed circa 1953 with a modern garage door. A one-story, one part, two-bay commercial strip center constructed of concrete block was attached to the warehouse by 1957. Alterations include the front addition, a modern garage door, missing windows, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S4 67	Address:	951 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 68 Golden Tex	Address:	5515 Clinton Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1936/1965	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, one-part commercial block building with brick siding and steel casement windows. The front façade has a raised parapet and concrete string course. Alterations include a bricked-in loading bay, a two-story rear façade, and multiple additions on the east façade.



Camera direction: Northeast

Resource No.	S4 68	Address:	5515 Clinton Drive



Camera direction: Northeast



Camera direction: North

Resource No.	S4 68	Address:	5515 Clinton Drive
			
Image oriented North (Google Earth 8/2022)			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 69	Address:	1010 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1942	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with an office attached to a metal warehouse. The Art Deco office has a curved entrance and horizontal bandings of brick and windows. Alterations include a new side porch and modern windows.



Camera direction: Southeast

Resource No.	S4 69	Address:	1010 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 70	Address:	1020, 1040, and 1060 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1975	References:	Google Earth
NRHP Eligibility:	Not Eligible: does not meet significance criteria		

Description: The three warehouses are constructed of concrete block with brick siding and vertical bands of colored glazed brick on the front facades. Alterations include some modern loading docks and windows, plus a change in the fenestration.



Camera direction: Northeast – 1020 and 1040 Lockwood Drive

Resource No.	S4 70	Address:	1020, 1040, and 1060 Lockwood Drive



Camera direction: Southeast -- 1020 Lockwood Drive



Camera direction: Northeast - 1040 Lockwood Drive

Resource No.	S4 70	Address:	1020, 1040, and 1060 Lockwood Drive



Camera direction: Southeast - 1060 Lockwood Drive



Image oriented North (Google Earth 12/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 71	Address:	1025 Lockwood Drive
Resource Type:	Building	Function/Use:	Industry/manufacturing facility
Estimated Year built:	C. 1926/2014	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, style, workmanship, and setting		

Description: This parcel contains multiple connected buildings. Per HCAD the construction dates for four metal warehouses are: 1926, 1937, 1942, and 1951 (remodeled 2013). The office was constructed in 1948 and remodeled in 2014.

Alterations to the office include modern: siding, windows, and awnings. Alterations to the warehouses include covered windows and openings, a modern roof (c. 2014 and 2016), and a change in the fenestration.



Camera direction: Southwest

Resource No.	S4 71	Address:	1025 Lockwood



Camera direction: Southwest



Camera direction: Southwest

Resource No.	S4 71	Address:	1025 Lockwood

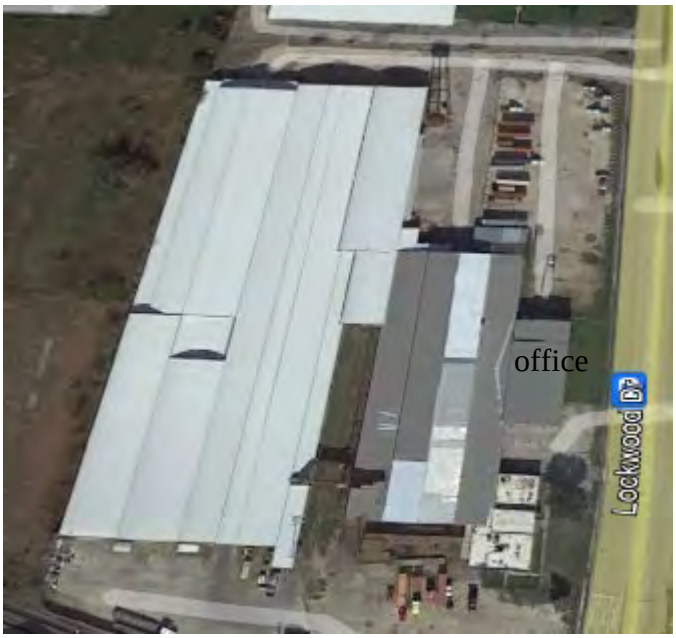


Image oriented North (Google Earth 12/2021)



Image oriented North (www.historicaerials.com 1953)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 72a/b	Address:	1111 Lockwood Drive
Resource Type:	Building	Function/Use:	Industry/manufacturing facility
Estimated Year built:	C. 1956/1988	References:	Google Earth, HCAD
NRHP Eligibility:	Not Eligible: not significant under NRHP Criteria, lacks integrity of materials, design, and setting		

Description: A parcel containing one brick office building (S4 72a) connected to multiple metal warehouses (S4 72b). The one-story office is a Contemporary style building with a winged gable roof, winged end walls, brick siding, and a horizontal band of windows at the eave line. Alterations include an addition to the south façade. Per HCAD construction dates for the warehouses are: 1981, 1960, 1956, 2006, 1960, 1980, 1960, 1988, 1960, 1960, and 1960. Per HCAD there are two office buildings, both dated 1980.

A modern raised parapet covers the front facade of two gable-roof warehouses removing integrity of materials, and design. The addition of new buildings reduces integrity of setting.

https://www.westbrookmfg.com/about



Camera direction: Southwest

Resource No.	S4 72a	Address:	1111 Lockwood Drive



Camera direction: West





Image oriented North (www.historicaerials.com 1976 left and 2018 right)

Resource No.	S4 72b	Address:	1111 Lockwood Drive



Camera direction: Southwest

Resource No.	S4 72b	Address:	1111 Lockwood Drive



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 73	Address:	1110 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1947/1978	References:	HCAD
NRHP Eligibility:	Not Eligible: not significant under NRHP Criteria, office lacks integrity of design and materials		

Description: A brick office connected to multiple metal warehouses. Per HCAD there are three metal warehouses and an office constructed 1947, 1978, 1978, and 1973 respectively. Alterations include a modern roof to the office. The office and warehouses are common designs and have no unique construction method or technology.



Camera direction: Southeast

Resource No.	S4 73	Address:	1110 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 8/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 74	Address:	1120 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1950/1990	References:	Google Earth, HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and setting		

Description: Per HCAD there are three metal warehouses and two distribution warehouses constructed 1950, 1960, 1990, 1990, and 1960 respectively. Based on visual inspection all the warehouses are connected. The warehouse closest to Lockwood Drive is a one-story brick building with a flat roof. Alterations include enclosed bays and modern windows. The warehouses are common designs and have no unique construction method or technology. The inclusion of the 1990 modern warehouses changes the setting.



Camera direction: Southwest

Resource No.	S4 74	Address:	1120 Lockwood Drive



Camera direction: Southwest

Resource No.	S4 74	Address:	1111 Lockwood Drive



Image oriented North (Google Earth 8/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 75	Address:	1140 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1960	References:	Google Earth, HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and setting		

Description: Per HCAD the parcel contains two metal warehouses constructed in 1960. Based on the roof line and siding, the warehouses have been joined under one roof and have had additions. Alterations include a new roof and rear additions.



Camera direction: Northeast

Resource No.	S4 75	Address:	1140 Lockwood Drive



Camera direction: Northeast



Image oriented North (Google Earth 8/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 76	Address:	5438 Margarita Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story house with Craftsman style influence. Alterations include modern siding, windows, and door.



Camera direction: South

Resource No.	S4 76	Address:	5438 Margarita Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 77	Address:	1203 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant- not in use
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, flat roof commercial building with brick and metal siding. Alterations include boarded up doors and windows, and modern metal siding.



Camera direction: Northwest

Resource No.	S4 77	Address:	1203 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 78	Address:	1202 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1949/2007	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building with a brick marquee wall. The original siding includes brick and pressed wood. Alterations include a side addition, a modern roof, painted brick, enclosed windows, plus a change in the fenestration. Per HCAD the building was constructed in 1949 and remodeled in 2007.



Camera direction: Southeast

Resource No.	S4 78	Address:	1202 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 79	Address:	5507 Arapahoe Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1928	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: A one-story Craftsman influenced house with fiber cement siding. HCAD has the year built as 1938. The house appears to be a shotgun with a large side addition. Other alterations include modern siding, door, windows, skirting, and columns.



Camera direction: Northwest

Resource No.	S4 79	Address:	5507 Arapahoe
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 80	Address:	1217 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant- not in use
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick siding and flat roof. Alterations include painted brick, bricked up windows, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S4 80	Address:	1217 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 81	Address:	5438 San Jose Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1925	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with mixed wood siding and a half-width projecting porch with wood columns on brick piers. Alterations include modern windows, some siding changes, and a heavy metal security fence around the perimeter.



Camera direction: Southeast

Resource No.	S4 81	Address:	5438 San Jose Street
			
Camera Direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 4
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S4 82 Evergreen Negro Cemetery	Address:	[redacted]
Resource Type:	Site	Function/Use:	Funerary/cemetery
Estimated Year built:	1893	References:	www.tshaonline.org, www.historicaerials.com
NRHP Eligibility:	Texas Historic Cemetery 2009 Not Eligible under NRHP Criterion A: this is the third oldest African American cemetery and does not meet the significance requirements under Criterion A Not Eligible under NRHP Criterion B: known individuals do not meet the significance requirements under Criterion B Not Eligible under NRHP Criterion C: lacks integrity of materials, design, and workmanship		

Description: Evergreen Negro Cemetery contains approximately 5.58 acres divided in two sections, west and east, [redacted]. Commercial buildings fronting [redacted]. Burials date from 1887 to 1950s (Johnson 2022). A 1922 topographic map shows the cemetery as divided into two sections (north and south) by an [redacted]. [redacted] Evergreen Cemetery was extended in 1929 (HCC Plat 015056) listing [redacted] as owner of the property. The 1929 plat states the property was conveyed by the City of Houston to [redacted]. Citing Deed Records Vol. 771, Pg. 710, it shows the cemetery in the west/east configuration, divided by an 80-foot right-of-way [redacted] between the two sections. By 1960 an aerial photograph shows the land [redacted] cleared of vegetation. The city split [redacted] with a large greenway to accommodate the construction of the [redacted] being built one block north of the cemetery. No research has been conducted to verify if burials were removed at that time to accommodate the construction of the new route for [redacted]

www.tshaonline.org/handbook/entries/evergreen-negro-cemetery, THC: 2009 HTC application Evergreen Negro Cemetery.

Resource No.	S4 82	Address:	[redacted]



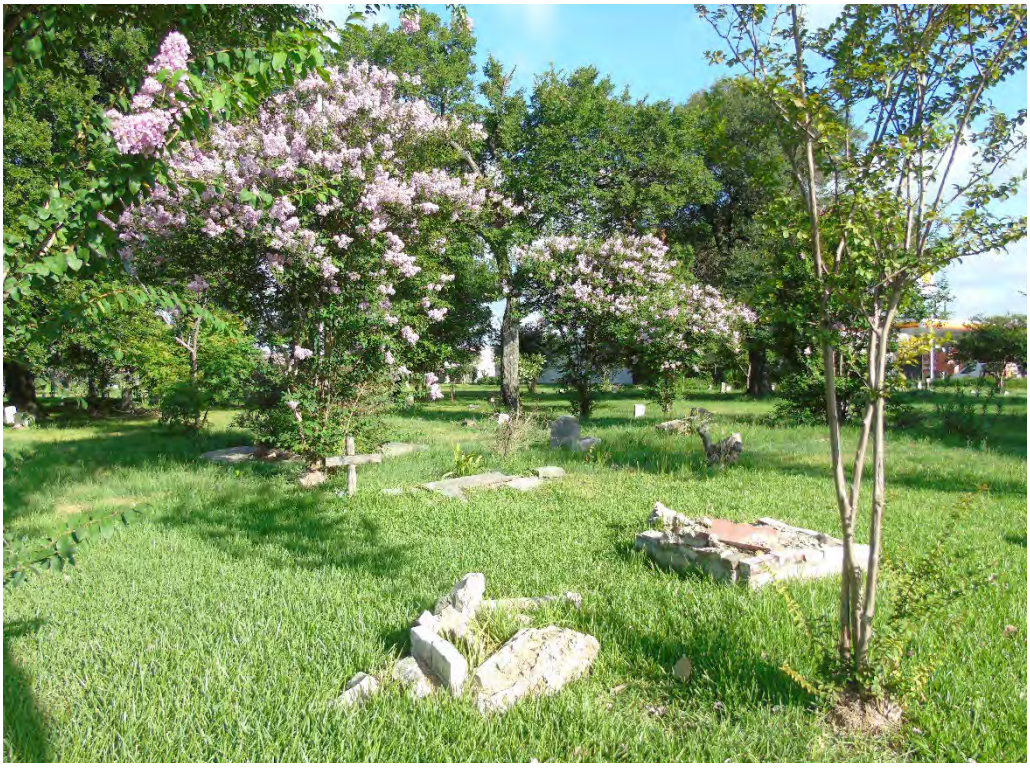
Evergreen Negro Cemetery in Houston's Fifth Ward was declared a Historic Texas Cemetery by the Texas Historical Commission in 2009. Image available on the Internet and included in accordance with Title 17 U.S.C. Section 107.

https://www.tshaonline.org/handbook/entries/evergreen-negro-cemetery accessed 8/2022



Camera direction: West

Resource No.	S4 82	Address:	[redacted]



Camera direction: Northwest



Camera direction: East

Resource No.	S4 82	Address:	[redacted]

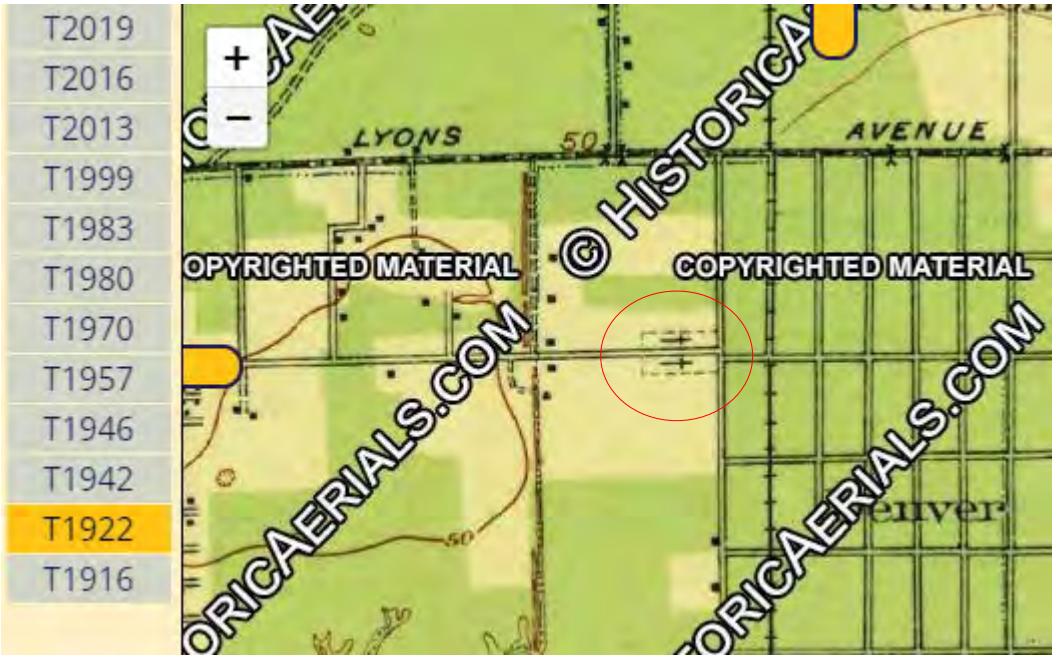
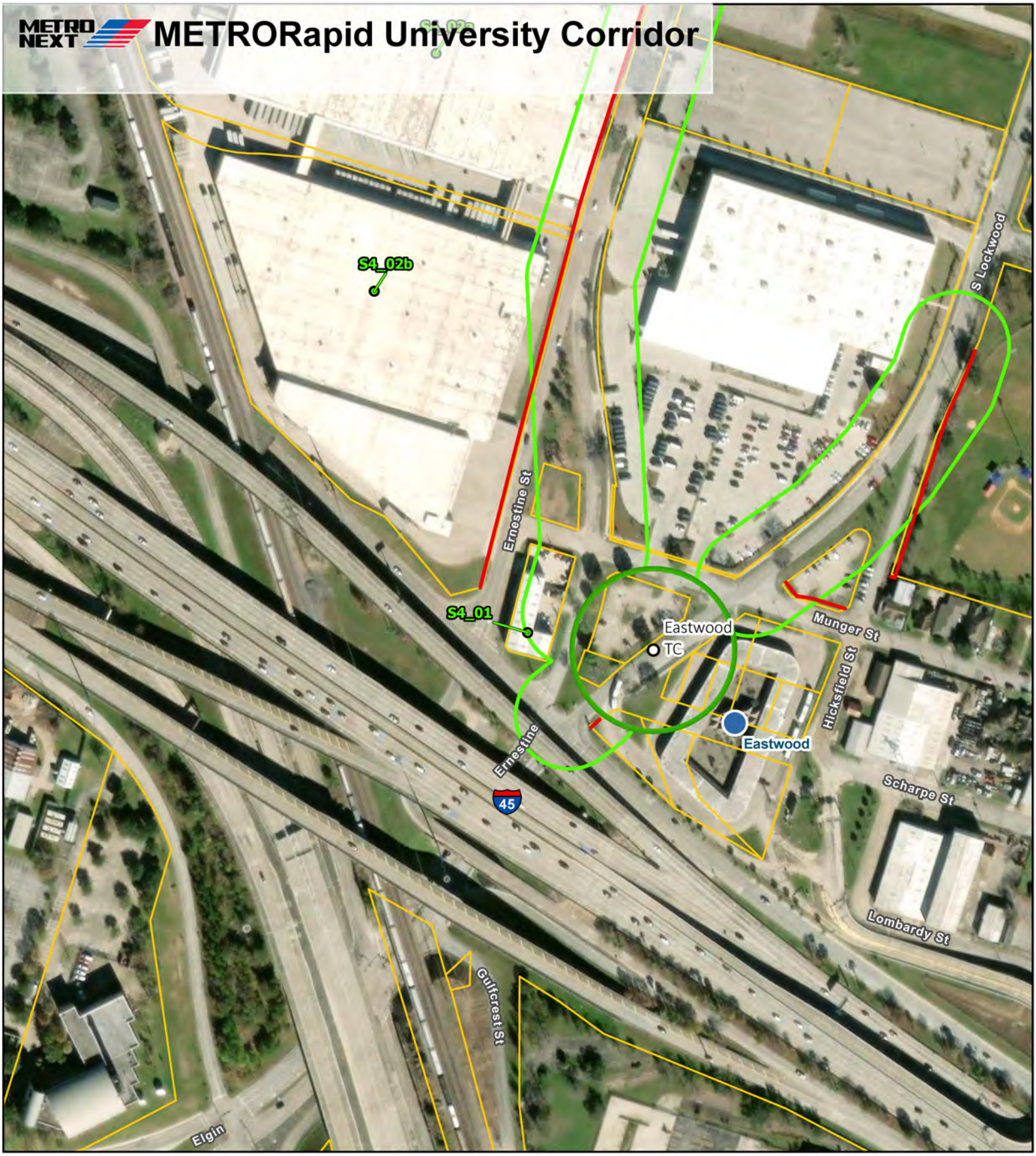
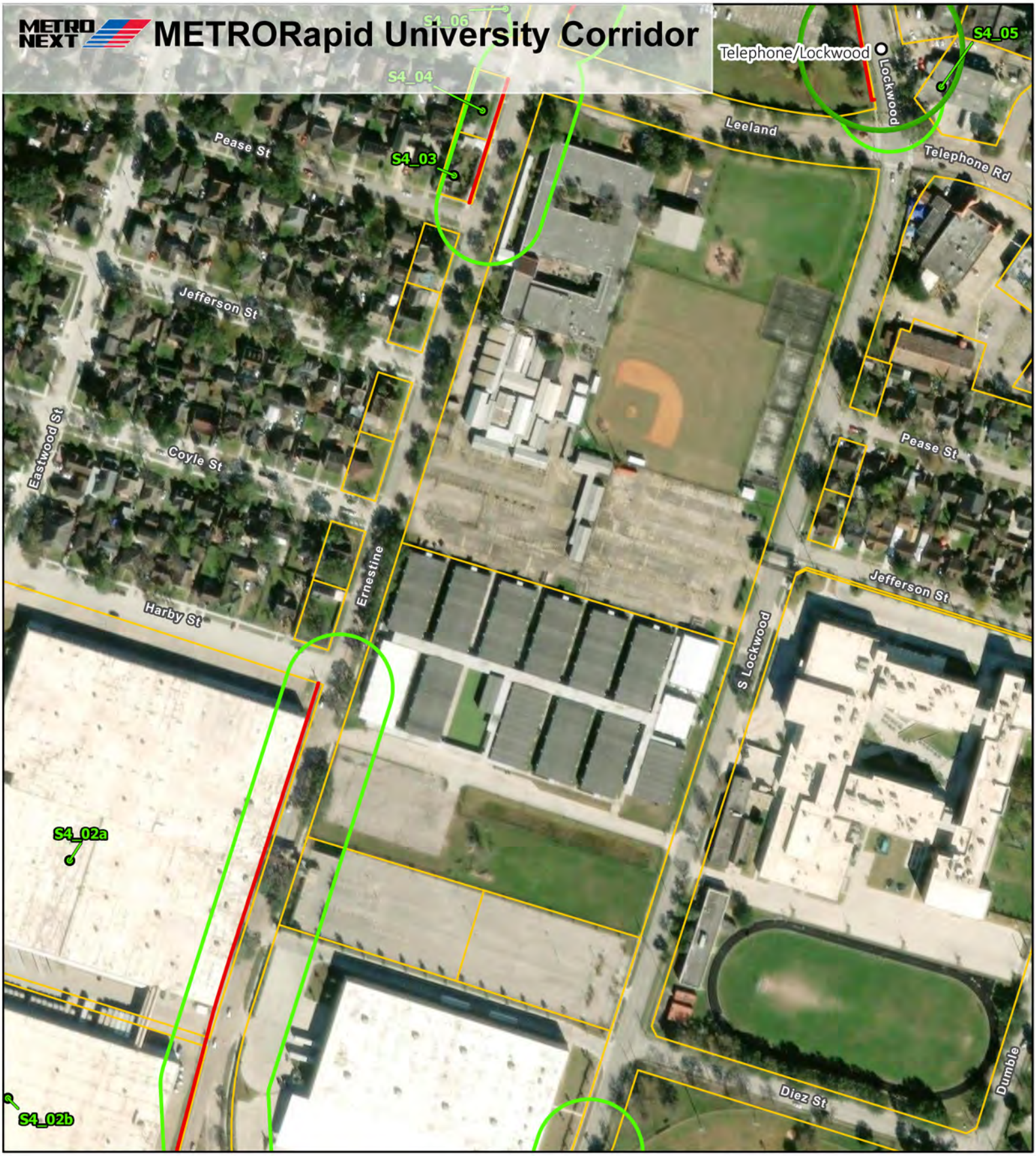


Image oriented North (www.historicaerials.com 1922)



Image oriented North (www.historicaerials.com 1946)


METRO NEXT
METRORapid University Corridor
S4_02b
S4_01
Ernestine St
Ernestine
Eastwood
TC
Eastwood
Munger St
Hicksfield St
S Lockwood
Scharpe St
Lombardy St
Gulfcrest St
Elgin
45
Existing METRO Transit Center
Segment 4 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
BRT Station Historic APE
Parcels
N
Segment 4, Map 1 of 10
0
100
200
300 ft
Eastex Fwy
Clinton Dr
Polk St
Magnolia Park

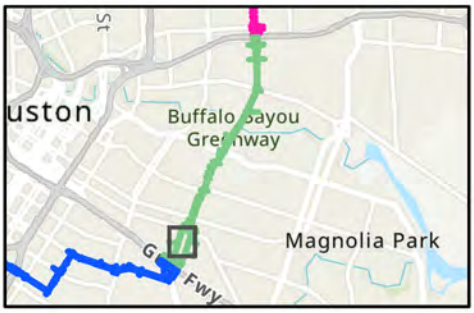


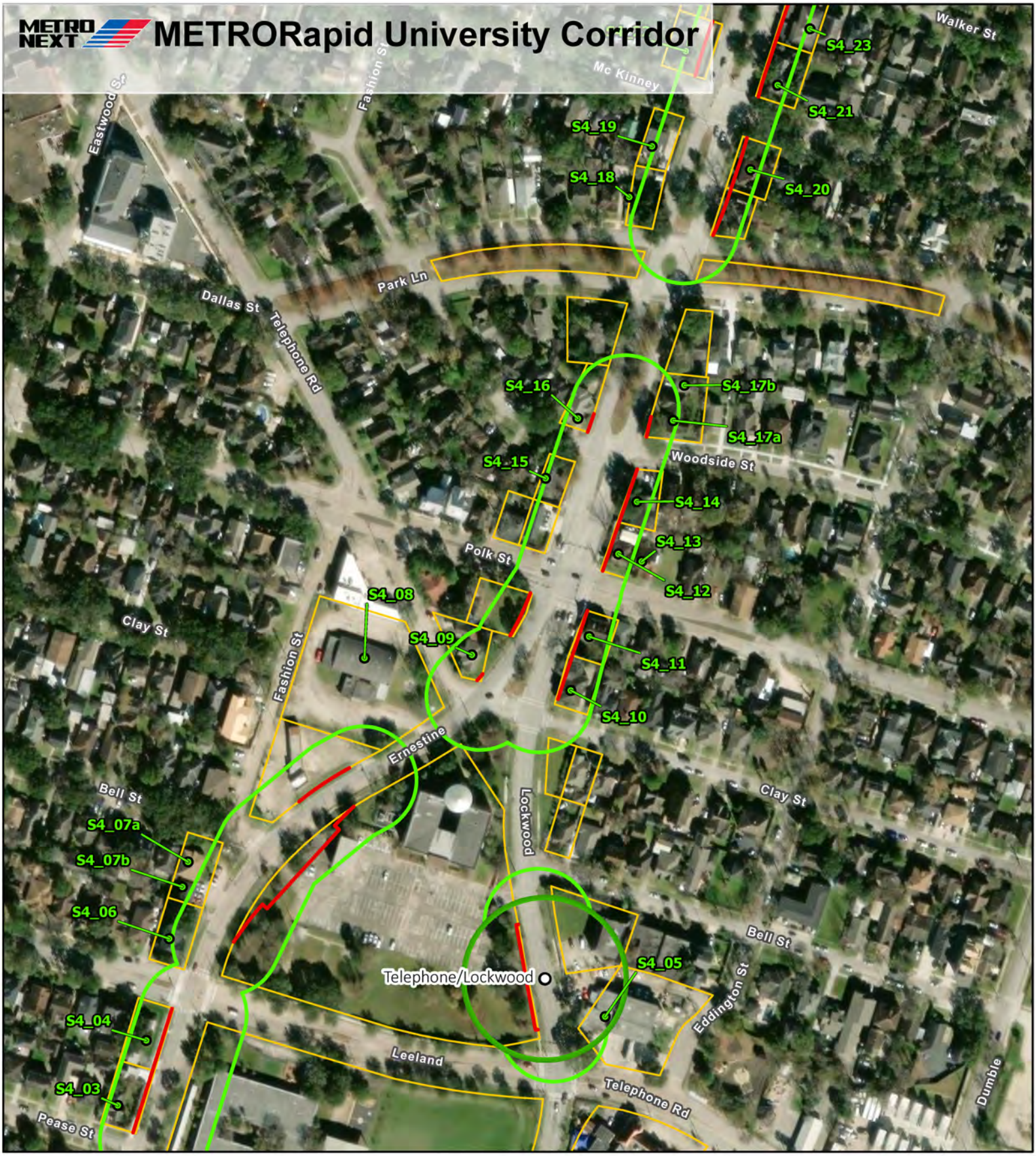
- Segment 4 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels

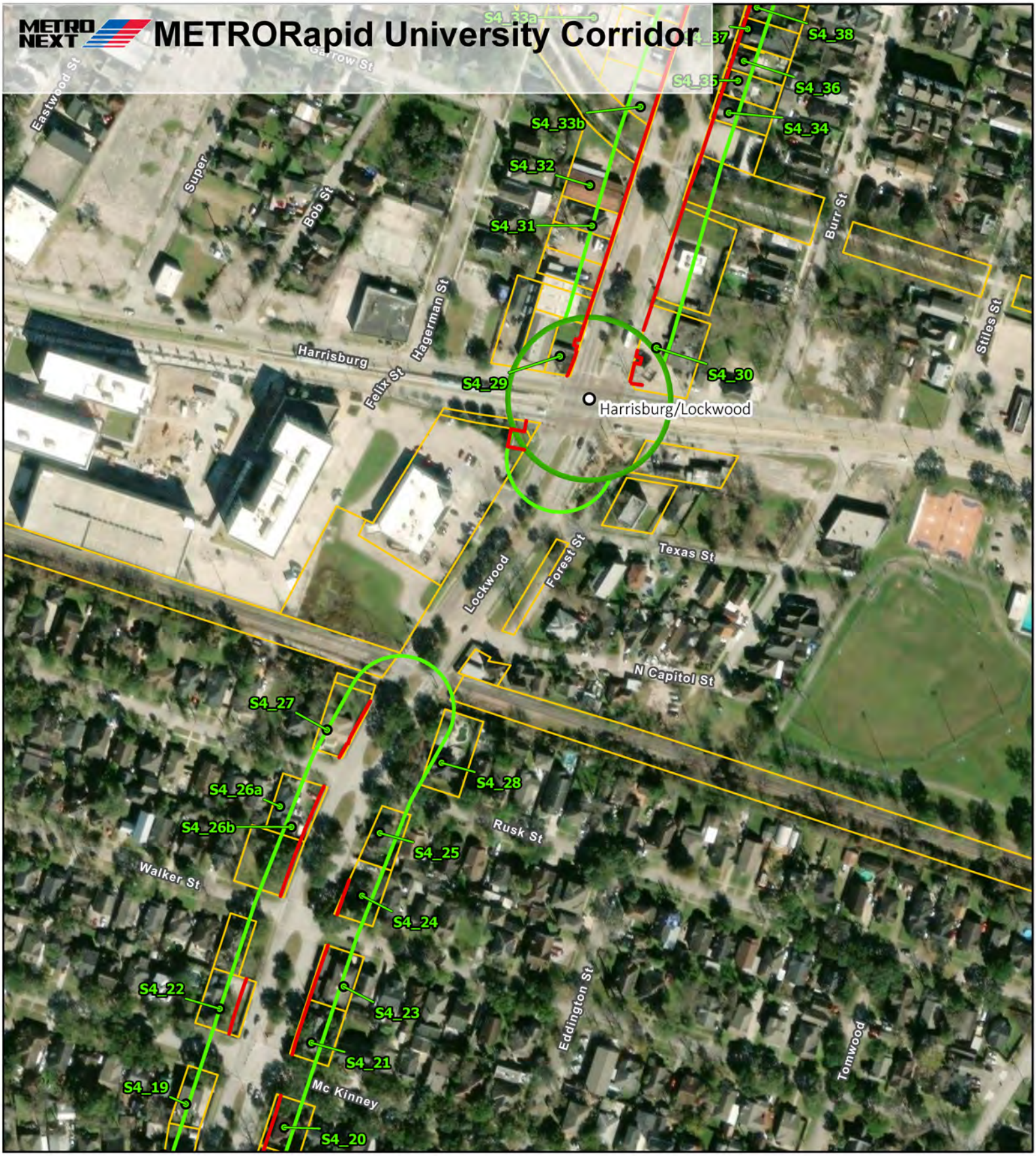
N

Segment 4, Map 2 of 10

0 100 200 300 ft




METRO NEXT
METRORapid University Corridor
Eastwood St
Fashion St
Mc Kinney
Walker St
S4_23
S4_21
S4_19
S4_18
S4_20
Park Ln
Dallas St
Telephone Rd
S4_16
S4_17b
S4_17a
Woodside St
S4_15
S4_14
S4_13
Polk St
S4_12
S4_08
Clay St
S4_09
S4_11
Fashion St
S4_10
Ernestine
Lockwood
Bell St
Clay St
S4_07a
S4_07b
S4_06
Bell St
Telephone/Lockwood
S4_05
Eddington St
S4_04
Leeland
Telephone Rd
S4_03
Pease St
Dumble
Segment 4 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
BRT Station Historic APE
Parcels
N
Segment 4, Map 3 of 10
0
100
200
300 ft
uston
Buffalo Bayou Greenway
Magnolia Park
Fwy

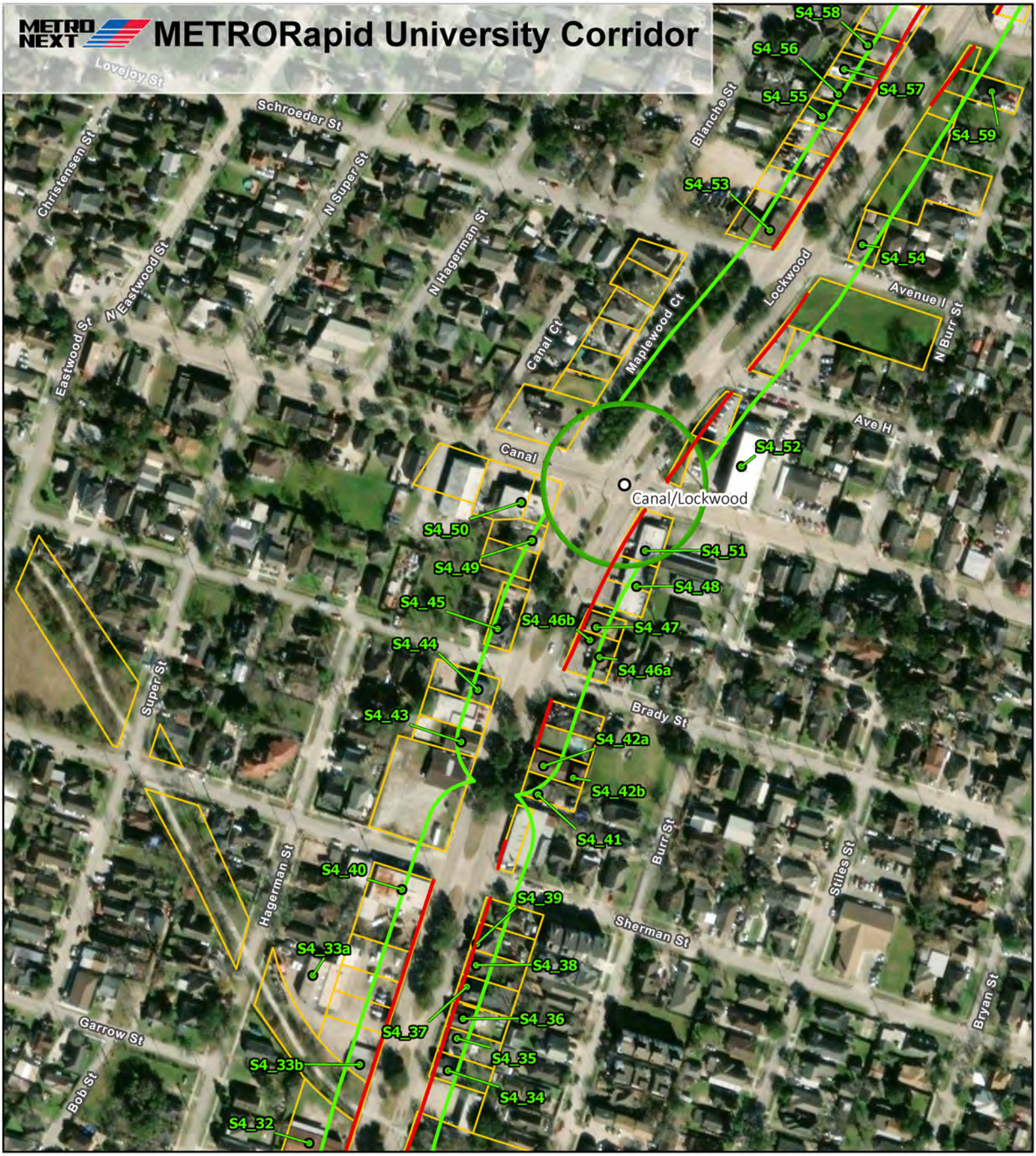


- Segment 4 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels

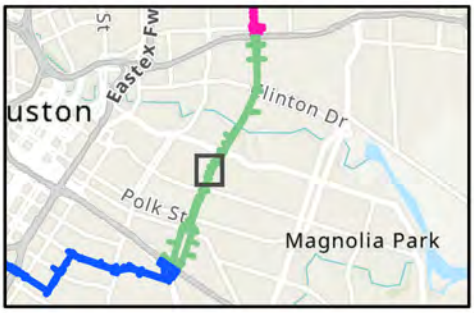
N

Segment 4, Map 4 of 10

0 100 200 300 ft



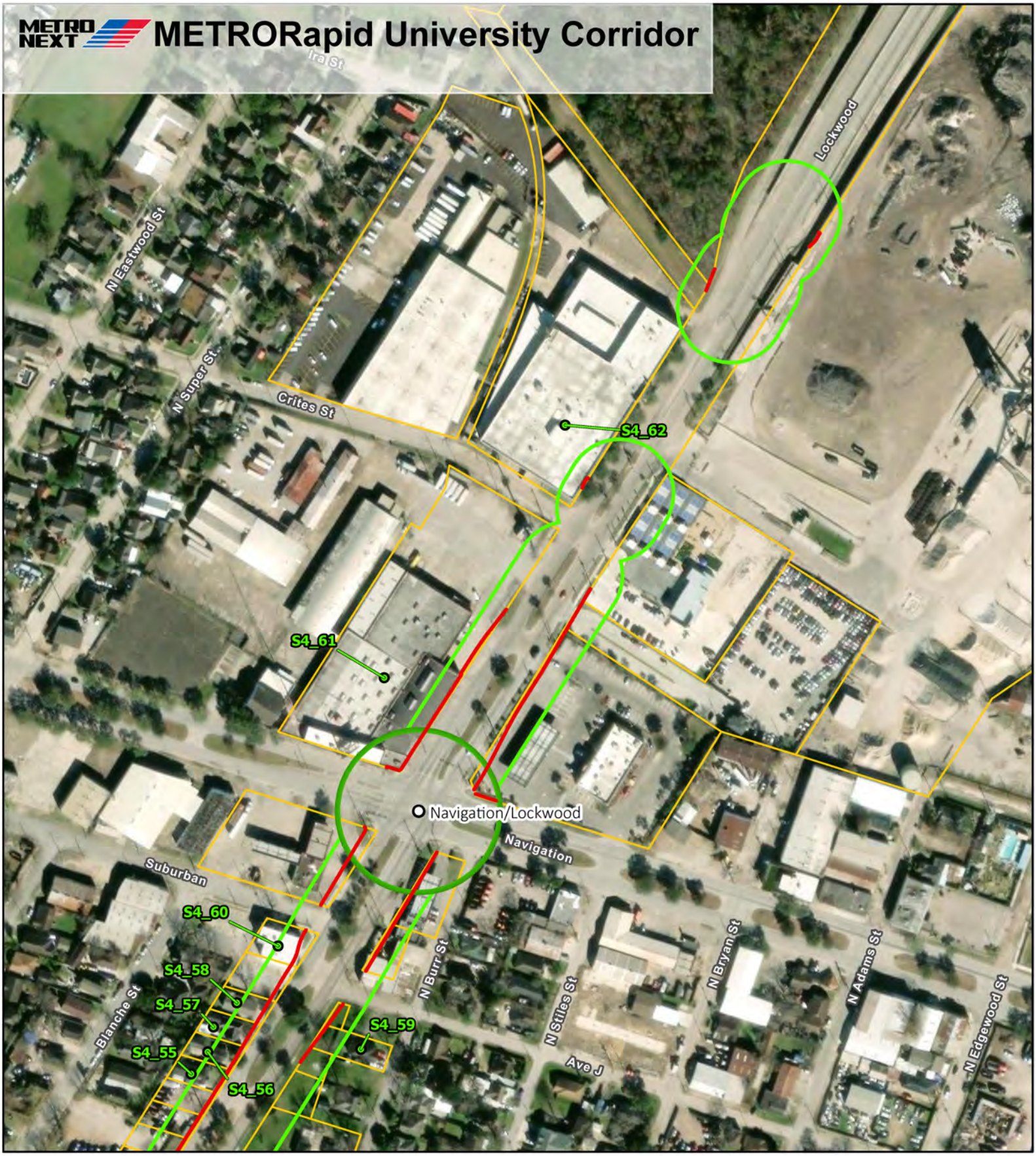
Segment 4 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
BRT Station Historic APE
Parcels



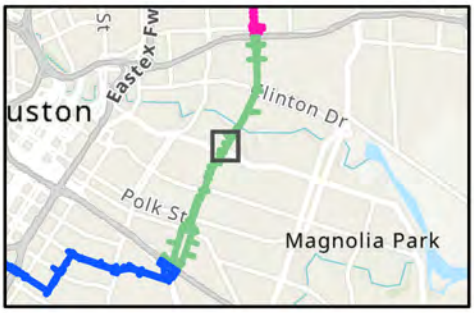
N

Segment 4, Map 5 of 10

0 100 200 300 ft



- Segment 4 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



N

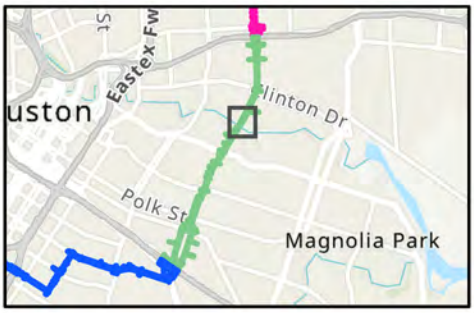
Segment 4, Map 6 of 10

0 100 200 300 ft

METRORapid University Corridor



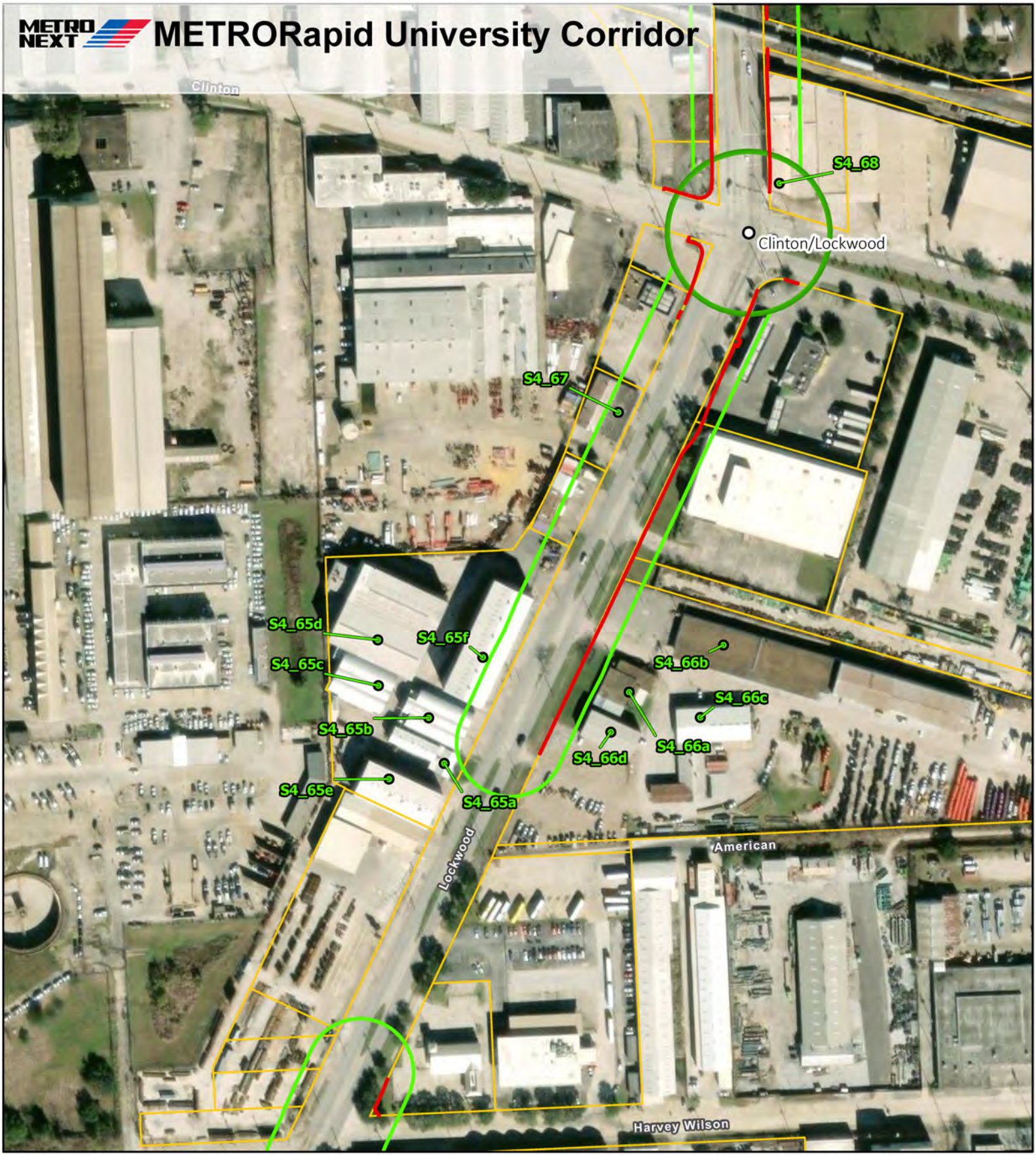
Segment 4 Documented Resources
Proposed ROW
Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
BRT Station Historic APE
Parcels

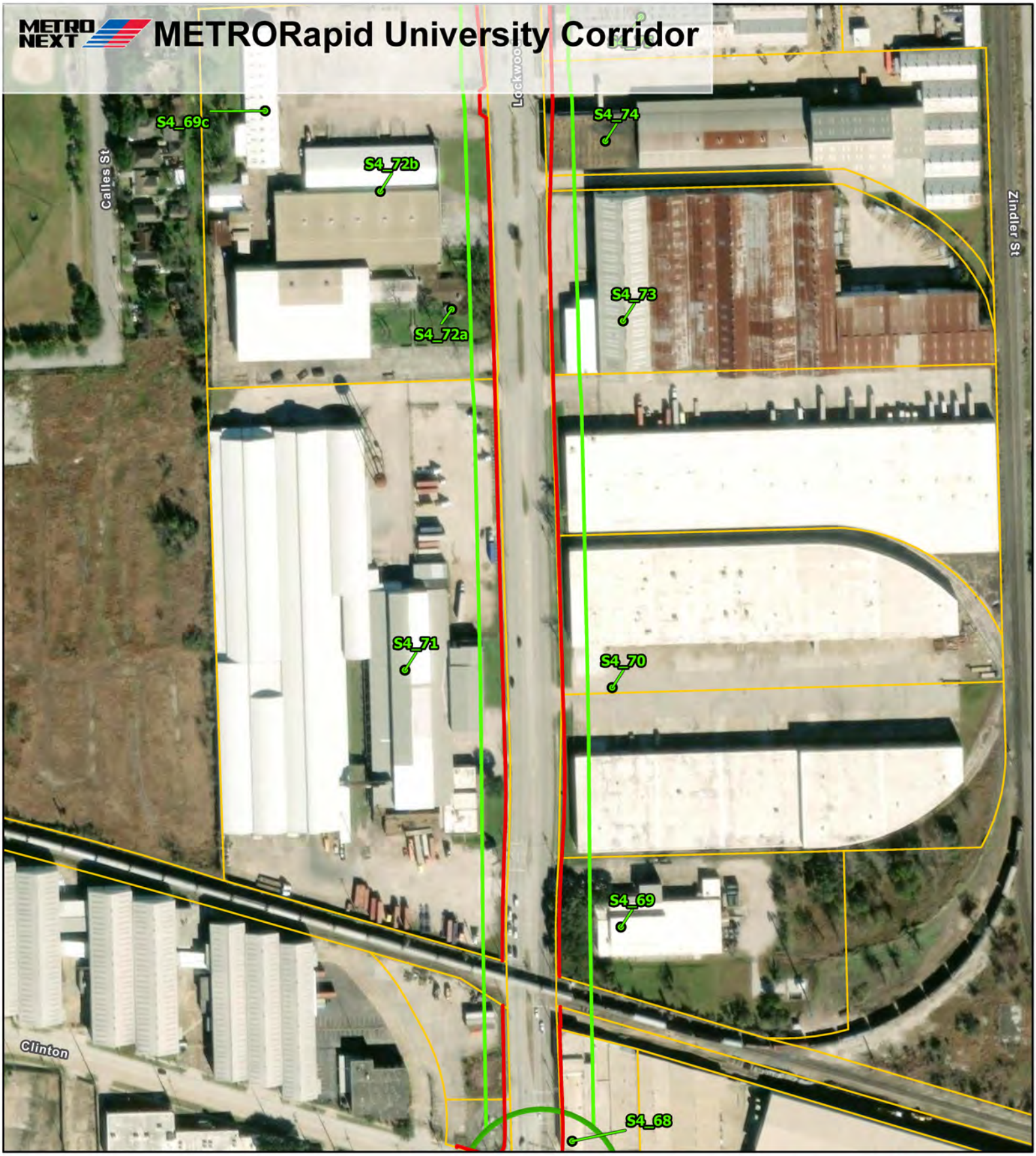


N

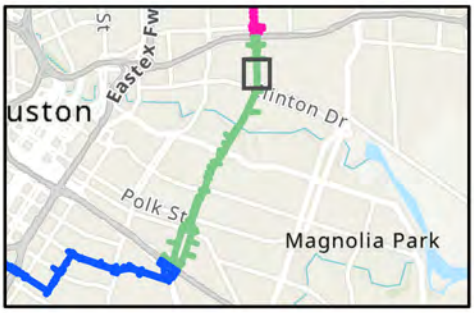
Segment 4, Map 7 of 10

0 100 200 300 ft


METRO NEXT
METRORapid University Corridor
Clinton
S4_68
Clinton/Lockwood
S4_67
S4_65d
S4_65f
S4_65c
S4_66b
S4_66c
S4_65b
S4_66a
S4_66d
S4_65e
S4_65a
Lockwood
American
Harvey Wilson
Segment 4 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
BRT Station Historic APE
Parcels
N
Segment 4, Map 8 of 10
0
100
200
300 ft
uston
Eastex Fwy
Polk St
Magnolia Park



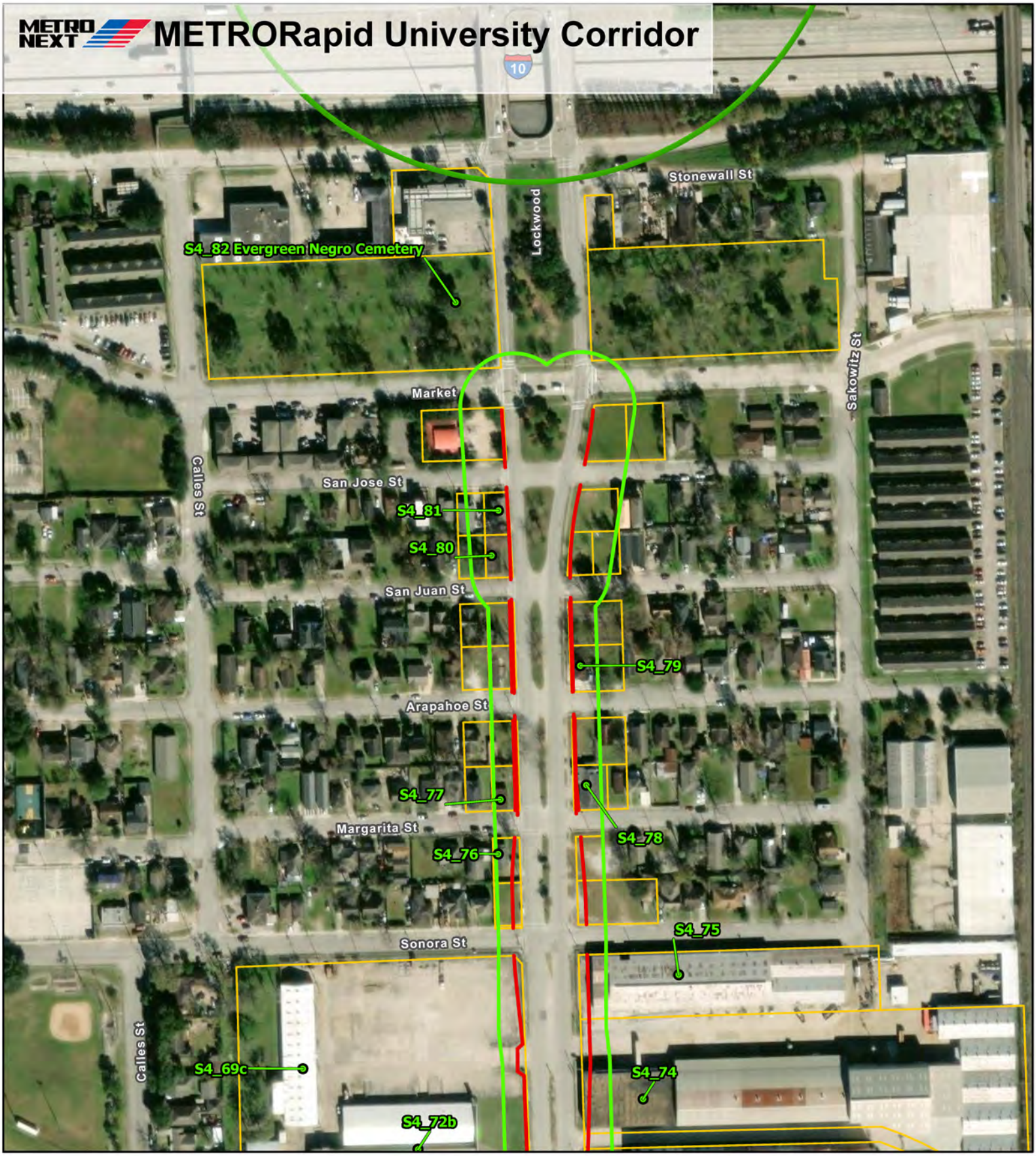
- Segment 4 Documented Resources
- Proposed ROW
- Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)
- BRT Station Historic APE
- Parcels



N

Segment 4, Map 9 of 10

0 100 200 300 ft



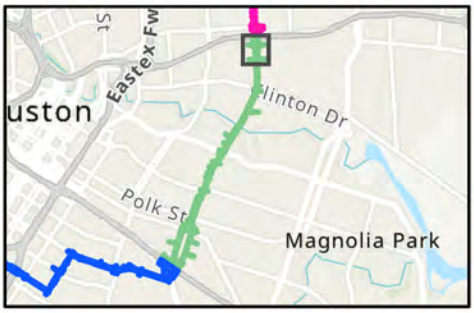
Segment 4 Documented Resources

Proposed ROW

Segment 4 Historic APE (100-ft from Centerline where ROW is Proposed)

BRT Station Historic APE

Parcels



N

Segment 4, Map 10 of 10

0 100 200 300 ft

APPENDIX E – Segment 5

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S5 01	5516 Tremper Street	No	C. 1930	Tudor	Domestic/single dwelling	Alterations include modern windows and a change in the fenestration. Parkwood Addition.
S5 02	5520 Tremper Street	No	C. 1935	Tudor	Domestic/single dwelling	Alterations include modern windows, door, siding, and front porch. Parkwood Addition.
S5 03	5536 Tremper Street	No	C. 1935	Tudor	Domestic/single dwelling	Alterations include a modern door, an awning, siding, shutters, and a rear addition. Parkwood Addition.
S5 04	5540 Tremper Street	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern doors, siding, and additions to the rear and side facades. A modern detached two-car garage is in the rear yard. Parkwood Addition.
S5 05	5531 Tremper Street	No	C. 1948	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, shutters, and a rear addition. Parkwood Addition.
S5 06	5535 Tremper Street	No	C. 1935	Tudor	Domestic/single dwelling	Alterations include modern doors, siding, windows, and fenestration. Parkwood Addition.
S5 07	5538 Farmer Street	No	C. 1960	Ranch	Domestic/single dwelling	Alterations include a rear addition, modern windows, columns, and siding. Parkwood Addition.
S5 08	5540 Farmer Street	No	C. 1935	Bungalow	Domestic/single dwelling	Alterations include modern windows, door, siding, and columns. Parkwood Addition.
S5 9a-c	5542 Farmer Street	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern columns, a new roof, and a new bay window. Parkwood Addition.
S5 10	5412 Farmer Street	No	C. 1935	None	Healthcare/medical business	Alterations include modern windows, a roof, a side addition, siding, and a change in the fenestration.
S5 11	5410 Farmer Street	No	C. 1925	Craftsman	Domestic/vacant - not in use	Alterations include modern windows and modern siding in the gable end.
S5 12	5406 Farmer Street	No	C. 1930	Minimal Traditional	Domestic/vacant - not in use	Alterations include modern windows, siding, and changes in the fenestration.
S5 13	5314 Farmer Street	No	C. 1935	Craftsman	Domestic/single dwelling	Alterations include modern siding, windows, and loss of original columns and railing.
S5 14	5310 Farmer Street	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include an enclosed garage, an attached carport, modern windows, and modern aluminum awnings.
S5 15	5306 Farmer Street	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern windows, doors, siding, roof, and a wood deck on the front façade. The rear addition includes a porte-cochere with possible living space.
S5 16	5401 Farmer Street	No	C. 1949	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, and door. Additions include a new front porch (c. 2008).
S5 17	5611 Lyons Avenue	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and a modern door. Foliage blocked the view of the house. Per Google Earth aerial photos there are two rear additions with metal roofs.
S5 18	5603 Lyons Avenue	No	C. 1925	Craftsman	Domestic/single dwelling	Alterations include modern siding, a loss of the front porch floor and a new railing.
S5 19	1615 Lockwood Drive	No	C. 1965	None	Domestic/multiple dwelling	Alterations include modern sidings, windows, and doors, plus painted lava stone, a porch roof over the front façade stoop, and a rear, one-story addition.
S5 20	1707 Lockwood Drive	No	C. 1946	Ranch	Domestic/single dwelling	The building appears to be intact but lacks any innovative design or style plus it is not part of a cohesive residential subdivision.
S5 21	1702 Lockwood Drive	No	C. 1969/2018	None	Commerce/specialty store	Alterations included painted cinderblocks, a modern parapet, a change in the fenestration, and a new side addition. Remodeled 2018 per HCAD.
S5 22	1800 Lockwood Drive	No	C. 1976/2011	None	Domestic/single dwelling	Alterations include modern siding, doors, windows, porches, and a large two-story rear addition.
S5 23	1801 Lockwood Drive	No	C. 1975	None	Religion/religious facility	Alterations include modern doors, siding, and a modern front porch enclosed with decorative iron bars.
S5 24	1803 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, door, windows, and a rear addition. Per HCAD the house was remodeled in 2019.
S5 25	1810 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include a new side addition that may have served as a garage at one time.
S5 26	1906 Lockwood Drive	No	C. 1940	Minimal Traditional	Commerce/business	Alterations include modern windows, a front door, change in the fenestration, and a new wood deck on the front façade.
S5 27	1910 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include a side and rear addition, modern windows, doors, and a front porch.
S5 28	1915 Lockwood Drive	No	C. 1955	Ranch	Religion/religious facility	Alterations include brick siding.
S5 29	1920 Lockwood Drive	No	C. 1955	Ranch	Domestic/single dwelling	Alterations include modern shutters, a garage door, a front door, and columns.
S5 30	5501 Perkins Street	No	C. 1950	None	Commerce/vacant - not in use	Alterations include painted brick and a change in the fenestration.
S5 31	2010 Lockwood Drive	No	C. 1970	Ranch	Religion/religious facility	Alterations include a side addition with a metal canopy and a new metal roof. Year built on cornerstone.
S5 32	2116 Lockwood Drive	No	C. 1972	Ranch	Commerce/specialty store	Alterations include one enclosed window.
S5 33	2124 Lockwood Drive	No	C. 1955	None	Commerce/department store	Alterations include bricked-over windows, painted brick, and a change in the fenestration.
S5 34	2209 Lockwood Drive	No	C. 1946	Minimal Traditional	Domestic/single dwelling	Alterations include an enclosed front porch, modern windows, siding, and a door. A modern detached 2-car garage is in the side yard.
S5 35	2213 Lockwood Drive	No	C. 1960	Ranch	Domestic/multiple dwelling	Alterations include modern doors.
S5 36	2219 Lockwood Drive	No	C. 1970	Ranch	Domestic/single dwelling	Alterations include a rear addition and modern doors.
S5 37	2220 Lockwood Drive	No	C. 1939	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, doors, and a change in the fenestration.
S5 38	2222 Lockwood Drive	No	C. 1953	Contemporary Ranch	Religion/religious facility	Alterations include modern doors on the front facade and a new rear addition. A dedication plaque was not found.
S5 39	2223 Lockwood Drive	No	C. 1965	Ranch	Domestic/multiple dwelling	The building appears to be intact but lacks any innovative architectural features or construction method.
S5 40	2301 Lockwood Drive	No	C. 1950	None	Commerce/vacant - not in use	Alterations include modern windows and a modern side addition with metal siding.
S5 41	2302 Lockwood Drive	No	C. 1978	Spanish Revival influence	Commerce/specialty store	Strip center. Alterations include modern windows.
S5 42	2314 Lockwood Drive	No	C. 1939	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, doors, awnings, and columns.
S5 43	2324 Lockwood Drive	No	C. 1952	None	Religion/religious facility	Alterations include a fabric canopy at the main entrance and a new side addition with an attached carport.

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S5 44	2401 Lockwood Drive	No	C. 1965	Ranch	Domestic/multiple dwelling	Alterations include modern doors and painted brick. The multiplex buildings behind the subject property are located on separate lots.
S5 45a/b	2417 Lockwood Drive	No	C. 1960/1965	Ranch	Domestic/multiple dwelling	Alterations include one boarded up window and the original doors have been replaced. The building located behind S5 45 is located on a separate legal lot and oriented to Harlem Street.
S5 46	2419 Lockwood Drive	No	C. 1938/1988	Minimal Traditional	Domestic/single dwelling	Alterations include a change in the fenestration, an enclosed porch, modern siding, windows, and doors.
S5 47	3323 E Lockwood Drive	No	C. 1948	None	Recreation/sports facility	Lockwood Skating Palace. Alterations include modern siding, a rear addition, and changes in the fenestration.
S5 48	3406 Lockwood Drive	No	C. 1959	None	Commerce/warehouse	Alterations include modern siding, an entry awning, and a change in the fenestration.
S5 49	3414 Lockwood Drive	No	C. 1957	None	Commerce/warehouse	Alterations include a modern carport on the front façade and multiple additions.
S5 50	3448 Lockwood Drive	No	C. 1966	None	Commerce/specialty store (car wash)	The buildings are utilitarian and do not have any unique features nor represent any unique methods of construction.
S5 51	3210 Cushing Street	No	C. 1949/1988	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and columns.
S5 52	3536 Lockwood Drive	No	C. 1962/2016	None	Commerce/specialty store	Strip center. Alterations include siding materials, columns, windows, and changes in the fenestration.
S5 53	3604 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/vacant - not in use	Alterations include siding, wainscot, missing front porch, and a side addition. Windows are currently boarded.
S5 54	3525 Lockwood Drive	No	C. 1964	None	Commerce/specialty store	Alterations include new parapet and canopy, bricked up windows, and a change in the fenestration.
S5 55	3417 Lockwood Drive	No	C. 1935	Minimal Traditional	Commerce/business	Alterations include modern siding and windows, a change in fenestration, an addition to the front façade, two additions to the rear facade, and a change in use.
S5 56	3509 Lockwood Drive	No	C. 1960	Ranch	Commerce/business	Alterations include modern siding, windows, and door, a change in the fenestration, and a change in use.
S5 57	3515 Lockwood Drive	No	C. 1960	None	Commerce/specialty store	Alterations include painted brick, modern windows, and doors, plus a rear addition.
S5 58	3714 Lockwood Drive	No	C. 1955	None	Commerce/vacant - not in use	Alterations include a loss of windows and a change in the fenestration.
S5 59	3716 Lockwood Drive	No	C. 1960/1980	None	Commerce/vacant - not in use	Per HCAD the metal warehouse was added in 1980.
S5 60	3719 Lockwood Drive	No	C. 1950	None	Commerce/specialty store	Alterations include enclosed windows, a change in the fenestration, and a modern metal parapet.
S5 61	3801 Lockwood Drive	No	C. 1950/2016	None	Commerce/specialty store	Alterations include a loss of windows, a change in the fenestration, and two additions, a metal warehouse addition, and a metal carport.
S5 62	3802 Lockwood Drive	No	C. 1973	Contemporary	Commerce/specialty store	Alterations include enclosed windows, modern siding in the gable end, and painted concrete block.
S5 63	3818 Lockwood Drive	No	C. 1940	Tudor	Domestic/single dwelling	Alterations include a modern porch and windows, a rear addition, and changes in the fenestration. A six-foot, solid metal fence is located on the front side yard changing the original setting.
S5 64	3822 Lockwood Drive	No	C. 1939	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and siding, a partially enclosed front porch, and additions to the rear and side facades.
S5 65	3830 Lockwood Drive	No	C. 1948	None	Commerce/specialty store	Alterations include a metal warehouse is attached to the original garage.
S5 66	3827 Lockwood Drive	No	C. 1935	None	Religion/religious facility	Alterations include modern awnings, loss of windows, stucco siding, a rear addition, plus a change in use.
S5 67	3901 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include porch, modern windows and siding, and a rear addition.
S5 68	3905 Lockwood Drive	No	C. 1970/2018	None	Domestic/multiple dwelling	Alterations include painted brick and modern doors.
S5 69	3902 Lockwood Drive	No	C. 1950	None	Funerary/mortuary	Alterations include boarded up windows, a change in the fenestration, loss of front porch and siding, plus a change in use.
S5 70	3910 Lockwood Drive	No	C. 1955	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, front porch, a modern door, and a side addition.
S5 71	3912 Lockwood Drive	No	C. 1955	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, door, siding, and porch.
S5 72	3911 Lockwood Drive	No	C. 1950	None	Religion/religious facility	Alterations include a loss of windows, change in the fenestration, modern doors, and a new gable roof. A secondary building is in the backyard.
S5 73	3913 Lockwood Drive	No	C. 1976	None	Commerce/specialty store	Alterations include painted metal siding and garage doors.
S5 74	3915 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include an attached carport and a front addition.
S5 75	3917 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include new siding, changes to some windows, and a rear addition.
S5 76a	4003 Lockwood Drive	No	C. 1940	Bungalow	Domestic/multiple dwelling	Alterations include painted brick veneer siding, some modern windows, and a modern porch railing.
S5 76b	4003 Lockwood Drive	No	C. 1940	None	Domestic/multiple dwelling	Alterations include an enclosed bay and modern windows.
S5 76c	4003 Lockwood Drive	No	C. 1940	Bungalow	Domestic/multiple dwelling	Alterations include modern siding, changes to the columns, some modern windows, and a rear addition.
S5 76d	4003 Lockwood Drive	No	C. 1940	Ranch	Domestic/multiple dwelling	Alterations include modern siding and windows, plus a new front porch.
S5 77	4005 Lockwood Drive	No	C. 1949	Ranch	Domestic/vacant - not in use	Alterations include modern windows, shutters, and a new railing.
S5 78	4014 Lockwood Drive	No	C. 1930	Craftsman	Domestic/single dwelling	Alterations include modern windows and a new door, a side porch addition, and a change in the front porch. A modern one-story house (c. 1996) is in the backyard.
S5 79	4016 Lockwood Drive	No	C. 1940	Ranch	Domestic/single dwelling	Alterations include boarded up windows, a missing porch railing and a rear addition.
S5 80a/b	4114 Lockwood Drive	No	C. 1944/1970	Ranch	Domestic/single dwelling	Alterations include modern windows and a change in the fenestration. A ten-foot metal fence and removal of grass in the front yard changes the setting.
S5 81	4017 Lockwood Drive	No	C. 1953	None	Commerce/specialty store	Alterations include a change of use, new siding, a new roof, and multiple additions.
S5 82	4115 Lockwood Drive	No	C. 1945/2011	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, door, siding, and a new porch.
S5 83	4117 Lockwood Drive	No	C. 1945/2010	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, a porch, a change in the fenestration, and a side addition.
S5 84	4116 Lockwood Drive	No	C. 1965	None	Commerce/specialty store	Alterations include painted metal siding and a new metal roof.
S5 85	4121 Lockwood Drive	No	C. 1960	None	Commerce/specialty store	Alterations include painted brick, an attached carport, modern windows, a door, a canopy, a change in the fenestration, and two rear additions.

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S5 86	4201 Lockwood Drive	No	C. 1950/2018	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, and a porch, a change in the fenestration, plus a rear addition.
S5 87	4315 Lockwood Drive	No	C. 1969	None	Commerce/vacant - not in use	Alterations included boarded up windows.
S5 88	4401 Lockwood Drive	No	C. 1969	None	Commerce/specialty store (strip center)	Alterations include modern doors, windows, siding, and a change in the fenestration. A large addition to the north façade doubled the size of the building.
S5 89	4414 Lockwood Drive	No	C. 1925	Craftsman	Domestic/single dwelling	Alterations include modern columns, a railing, and shutters.
S5 90	4502 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and a new door, a side addition, and a porch enclosed with metal safety bars.
S5 91	4515 Lockwood Drive	No	C. 1970/2018	None	Domestic/multiple dwelling	Alterations include painted brick and modern doors.
S5 92	4516 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, a door, and a new porch.
S5 93	4518 Lockwood Drive	No	C. 1944	None	Domestic/single dwelling	Alterations include modern siding, windows, a change in the fenestration, and multiple additions.
S5 94	4601 Lockwood Drive	No	C. 1945	Minimal Traditional	Domestic/vacant - not in use	Alterations include modern siding, some modern windows, and a change in the fenestration.
S5 95	4600 Lockwood Drive	No	C. 1975/2010	None	Commerce/specialty store	Alterations include a new façade, modern siding, signage, and new windows.
S5 96	4605 Lockwood Drive	No	C. 1957/2014	None	Commerce/specialty store	Alterations include modern siding, windows, doors, and a change in the fenestration.
S5 97	4613 Lockwood Drive	No	C. 1935	None	Commerce/specialty store	Alterations include modern siding, windows, and a porch, plus a change in the fenestration.
S5 98	4615 Lockwood Drive	No	C. 1976	None	Religion/religious facility	Alterations include a modern porch, siding, windows, doors, and a change in the fenestration.
S5 99	4712 Lockwood Drive	No	C. 1962/1985	None	Domestic/multiple dwelling	Alterations include some modern windows and modern shutters.
S5 100	4705 Lockwood Drive	No	C. 1935/2013	Bungalow	Domestic/single dwelling	Alterations include a modern porch, modern windows, a new door, a rear addition, and a new roof.
S5 101	4717 Lockwood Drive	No	C. 1956	Ranch	Commerce/vacant - not in use	Alterations include a modern front porch, new windows, a change in the fenestration, an addition to the rear façade, and a modern detached carport.
S5 102	4805 Lockwood Drive	No	C. 1940	Bungalow	Domestic/vacant - not in use	Alterations include modern windows, columns, and siding, plus a change in the fenestration.
S5 103	4901 Lockwood Drive	Yes	1949	Modern	Education/school	Kashmere Gardens Elementary School is eligible under Criterion A. Alterations include modern siding, doors, metal roofs, and covered walkways.
S5 104	4902 Lockwood Drive	No	C. 1940	Minimal Traditional	Commerce/business	Alterations include modern siding, roof material, windows, porch, and a large rear addition.
S5 105	4906 Lockwood Drive	No	C. 1945	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and siding.
S5 106	4922 Lockwood Drive	No	C. 1940	None	Commerce/specialty store	Alterations include painted brick, modern canopy, roof cladding, doors, and boarded up windows.
S5 107	5411 Pardee Street	No	1971	New Formalism	Education/library	There are no obvious alterations.
S5 108	5008 Lockwood Drive	No	C. 1960/1988	None	Commerce/business	Alterations include a new front door and rear addition.
S5 109	5101 Lockwood Drive	No	C. 1962	Contemporary Ranch	Commerce/vacant - not in use	Alterations include a modern door and new siding.
S5 110	5104 Lockwood Drive	No	C. 1966	None	Commerce/specialty store	Alterations include loss of windows, a change in the fenestration, a modern roof sign, and two modern plywood marquee walls extending beyond the roofline.
S5 111	5117 Lockwood Drive	No	C. 1958	Contemporary influence	Religion/religious facility	Alterations include additions that greatly increased the massing, plus modern entry doors and steeple.
S5 112	5201 Lockwood Drive	No	C. 1962	None	Commerce/specialty store	Alterations include modern siding, windows, cantilevered canopy, a gas canopy, and a change in the fenestration.
S5 113	5601 Lockwood Drive	No	C. 1925	Craftsman	Domestic/vacant - not in use	Alterations include modern siding and a concrete porch.
S5 114	5605 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding and a rear addition. By 2016 a large building was added in the backyard.
S5 115	5613 Lockwood Drive	No	C. 1940/1983	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, a modern door, and a side addition. Per HCAD the house was remodeled in 1983.
S5 116	5401 Troost Street	No	C. 1964/2012	None	Domestic/multiple dwelling	Alterations include a side addition and modern doors.
S5 117	5701 Lockwood Drive	No	C. 1973	None	Domestic/multiple dwelling	Alterations include modern doors, modern windows, and painted brick.
S5 118a/b	5802 Lockwood Drive	No	C. 1940/1969	Minimal Traditional/Ranch	Domestic/single dwelling	Alterations include an infilled porch, as well as modern siding, windows, and doors.
S5 119	5815 Lockwood Drive	No	C. 1969	Contemporary	Commerce/specialty store	Alterations include modern frieze, windows, metal awnings, signage, and stucco siding, plus a change in the fenestration.
S5 120	6406 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern columns and door, an attached carport, and loss of windows on the north façade.
S5 121	6515 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, door, windows, and columns, plus a change in the fenestration.
S5 122	6520 Lockwood Drive	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include modern windows and door, a change in the fenestration, and a rear addition.
S5 123	6522 Lockwood Drive	No	C. 1953	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and siding, and new doors on the detached two-car garage.
S5 124	6603 Lockwood Drive	No	C. 1946	Ranch	Domestic/single dwelling	Alterations include modern windows, door, patios, modern siding, and a change in the fenestration. A second modern house appears in the backyard but is not listed in HCAD.
S5 125	6606 Lockwood Drive	No	C. 1964	None	Domestic/vacant - not in use	Alterations include painted brick and new doors.
S5 126	6612 Lockwood Drive	No	C. 1957	Minimal Traditional	Domestic/single dwelling	Alterations include modern skirting, windows, siding, plus rear and front porch additions.
S5 127a/b	6611 Lockwood Drive	No	C. 1960/2016	Ranch/None	Domestic/multiple dwelling	Alterations include modern siding, doors, windows, a change in the fenestration, and a porte cochere.
S5 128	6616 Lockwood Drive	No	C. 1957	Ranch	Domestic/single dwelling	Alterations include modern windows and siding, a change in the fenestration, plus a new roof line indicating an addition.
S5 129	6704 Lockwood Drive	No	C. 1947	Minimal Traditional	Domestic/single dwelling	Alterations include a modern porch and windows, a rear addition, an attached one-car garage, and a change in the fenestration.
S5 130	6708 Lockwood Drive	No	C. 1957	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, a side porch, a change in the fenestration, and a rear addition.
S5 131a/b	6705 Lockwood Drive	No	C. 1963/1945	Ranch/None	Domestic/single dwelling	The building does not appear to have any exceptional features and is not part of subdivision representing any innovative planning techniques.
S5 132	6707 Lockwood Drive	No	C. 1953	Ranch	Domestic/single dwelling	Alterations include a modern porch, siding, windows, and metal awnings.

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S5 133	6716 Lockwood Drive	No	C. 1930	Minimal Traditional	Domestic/multiple dwelling	Alterations include modern windows, doors, siding, it is missing porch brackets, and has a rear addition.
S5 134	6718 Lockwood Drive	No	C. 1930	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, door, columns, and a rear addition.
S5 135	6729 Lockwood Drive	No	C. 1953	None	Commerce/specialty store	Alterations include infilled windows creating a change in the fenestration.
S5 136	4906 Shreveport Boulevard	No	C. 1970	None	Commerce/specialty store	Alterations include new doors, siding, and windows, plus a change in the fenestration, a rear addition, and an attached carport.
S5 137	4843 Shreveport Boulevard	No	C. 1953	Ranch	Domestic/single dwelling	Alterations include modern windows and siding, plus a change in the fenestration, and an attached carport and garage.
S5 138a	6915 Lockwood Drive	No	C. 1957	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, and a door.
S5 138b	6915 Lockwood Drive	No	C. 1957	Ranch	Domestic/single dwelling	Alterations include modern windows, doors, and siding.
S5 139	6902 Lockwood Drive	No	C. 1956	None	Commerce/vacant - not in use	Alterations include modern siding and a rear addition.
S5 140	7104 Lockwood Drive	No	C. 1976	None	Commerce/restaurant	Alterations include modern siding and canopy, plus painted brick, multiple additions, and a change in the fenestration.
S5 141	7210 Lockwood Drive	No	C. 1956/2012	Ranch	Domestic/single dwelling	Alterations include modern doors, windows, and siding, plus a rear addition and a new roofline.
S5 142	7221 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and columns, a change in the fenestration, and a rear addition which attaches a garage and carport to the house.
S5 143	7227 Lockwood Drive	No	C. 1938	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, and front porch.
S5 144	7301 Lockwood Drive	No	C. 1945	Ranch	Domestic/single dwelling	Alterations include new siding, windows, an attached carport, and additions to the front façade. The front yard has been paved and bricked, and the front yard is enclosed with a half concrete block, half wrought iron fence, thus changing the original setting.
S5 145	7302 Lockwood Drive	No	C. 1940/2020	Minimal Traditional	Domestic/multiple dwelling	Alterations include modern siding, door, and windows, a change in the fenestration, and a side addition with metal siding.
S5 146	7306 Lockwood Drive	No	C. 1947	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, and front porch, plus at least two rear additions.
S5 147a	7309 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and siding, plus a side addition.
S5 147b	7309 Lockwood Drive	No	C. 1975	None	Domestic/single dwelling	Alterations include modern columns and windows.
S5 147c	7309 Lockwood Drive	No	C. 1975	Ranch	Domestic/single dwelling	Alterations include modern windows.
S5 148	7405 Lockwood Drive	No	C. 1953	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, and an infilled front porch, plus a rear addition.
S5 149	7406 Lockwood Drive	No	C. 1965	Ranch	Domestic/multiple dwelling	There are no alterations visible. The buildings have no unique architectural design aesthetic and do not represent any planning ideology.
S5 150	7419 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include an enclosed porch, new shutters, a rear addition, and an attached one-car garage.
S5 151a/b	7425 Lockwood Drive	No	C. 1945	Minimal Traditional/Ranch	Domestic/single dwelling	Alterations include boarded up windows, modern siding, painted brick, some bricked-up windows, a rear addition, and a new door.
S5 152	4819 Denmark Street	No	1938/1962	Contemporary	Religion/religious facility	Alterations include red brick siding, a side addition with a modern shed roof, and a rear addition.
S5 153	4921 Denmark Street	No	C. 1960	Ranch	Domestic/multiple dwelling	Alterations include modern doors and painted brick.
S5 154	7505 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/vacant - not in use	Alterations include missing columns, boarded up windows, missing windows, a change in the fenestration, and a rear addition.
S5 155	7512 Lockwood Drive	No	C. 1957/1989	Ranch	Religion/religious facility	Alterations include painted brick, an infilled gable, bricked-in windows, a rear addition, and a change in the fenestration.
S5 156a	7511 Lockwood Drive	No	C. 1951	None	Domestic/multiple dwelling	Alterations include modern windows and siding, plus a change in the fenestration and a rear addition.
S5 156b	7511 Lockwood Drive	No	C. 1951	None	Domestic/multiple dwelling	Alterations include new windows, doors, and siding.
S5 157	7516 Lockwood Drive	No	C. 1965	Ranch	Domestic/multiple dwelling	The houses do not exhibit any unique architectural features and do not represent any innovative planning ideals.
S5 158	7521 Lockwood Drive	No	C. 1965	Ranch	Domestic/multiple dwelling	Alterations include painted brick, new doors, and windows.
S5 159	7525 Lockwood Drive	No	C. 1946	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding and windows, plus a rear addition.
S5 160	7611 Lockwood Drive	No	C. 1956	Ranch	Domestic/single dwelling	Alterations include a new metal porch roof and windows boarded-up with crisscross wood paneling.
S5 161	7618 Lockwood Drive	No	C. 1955	Minimal Traditional	Domestic/single dwelling	Alterations include new siding, front porch, windows, solar panels, plus a change in the fenestration.
S5 162	7702 Lockwood Drive	No	C. 1965	Ranch	Domestic/single dwelling	Alterations include two rear additions, and a six-foot metal-panel fence encloses the front yard, changing the setting.
S5 163	7709 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include a front porch, siding, door, windows, plus a change in the fenestration, and a rear addition.
S5 164	7719 Lockwood Drive	No	C. 1945	Minimal Traditional	Domestic/single dwelling	Alterations include new siding, doors, columns, windows, and a change in the fenestration.
S5 165	7724 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern windows and siding.
S5 166	7727 Lockwood Drive	No	C. 1957	None	Commerce/restaurant	Alterations include painted brick, modern windows, door, porch canopy, and a change in the fenestration.
S5 167	7805 Lockwood Drive	No	C. 1952	Ranch	Domestic/single dwelling	Alterations include painted brick, front and rear additions, plus a six-foot wooden fence in the front yard that changes the setting. Per HCAD the house was remodeled in 2014.
S5 168	7809 Lockwood Drive	No	C. 1958	Ranch	Domestic/vacant - not in use	Alterations include a detached, two-car garage (c. 1978) in the rear yard and an attached carport attached to the front façade, which is missing its doors.
S5 169	7901.5 Lockwood Drive	No	C. 1945	Minimal Traditional	Domestic/single dwelling	Alterations include new windows, doors, a change in the fenestration, and an attached building with a hip roof (c. 2012).
S5 170	7906 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, doors, windows, and multiple additions.
S5 171a/b	7914 Lockwood Drive	No	C. 1950	Minimal Traditional/None	Domestic/single dwelling	Alterations include new windows, an enclosed front porch with metal bars, and a rear addition.
S5 172	7925 Lockwood Drive	No	C. 1966	Ranch	Domestic/single dwelling	Alterations include painted brick and a large rear addition that changed the original roof line.
S5 173	7929 Lockwood Drive	No	C. 1955	Ranch	Domestic/single dwelling	Alterations include a new porch and a rear addition.
S5 174	7930 Lockwood Drive	No	C. 1972	Ranch	Religion/religious facility	Alterations include a side addition and new doors.

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S5 175	7944 Lockwood Drive	No	C. 1966/1993	Ranch	Domestic/multiple dwelling	Alterations include modern siding, windows, doors, shutters, and porch enclosures.
S5 176	7948 Lockwood Drive	No	C. 1958	Ranch	Commerce/business	Alterations include modern siding in the gable end, windows, a projecting flat roof over the front door, and a change in the fenestration.
S5 177	7949 Lockwood Drive	No	C. 1957	Ranch	Domestic/single dwelling	Alterations include an attached carport. A six-foot wood fence encompasses the front yard changing setting.
S5 178	8004 Lockwood Drive	No	C. 1958	Minimal Traditional	Domestic/single dwelling	Alterations include a modern front door and skirting material, plus a rear addition.
S5 179	8006 Lockwood Drive	No	C. 1946	Minimal Traditional	Domestic/vacant - not in use	Alterations include modern windows, doors, siding, and a change in the fenestration. The building is also missing its porch foundation.
S5 180a/b	8033 Lockwood Drive	No	C. 1966/1980	Modern	Commerce/specialty store (gas station)	Alterations include new windows and garage doors, a change in the fenestration, and attached RV carports to the rear and side facades.
S5 181	8020 Lockwood Drive	No	C. 1976	None	ommerce/specialty store (convenience store with ga	Alterations include modern windows, siding, and entrance, plus a change in the fenestration.
S5 182	4825 Weaver Road	No	C. 1962	Ranch	Domestic/single dwelling	Alterations include siding and windows, plus a change in the fenestration.
S5 183	8215 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern siding and a new door.
S5 184	8216 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, an enclosed porch, boarded up windows, and a change in the fenestration.
S5 185	4901 Bostic Street	No	C. 1960/2015	Ranch	Domestic/multiple dwelling	Alterations include new doors and new siding in the gable ends.
S5 186	4815 Bostic Street	No	C. 1960	Ranch	Domestic/single dwelling	Alterations include modern windows and an attached metal carport.
S5 187	8401 Lockwood Drive	No	C. 1960	Ranch	Domestic/single dwelling	Alterations include a large, shed-roof front porch, modern windows, and siding, plus a six-foot, metal-panel fence that changes the setting.
S5 188	4822 Keeland Street	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include a large side addition, modern siding, door, and windows.
S5 189	8503 Lockwood Drive	No	C. 1976	Ranch	Commerce/vacant - not in use	Alterations include new doors and an enclosed porch with security metal bars.
S5 190	8605 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, and door, plus an attached carport.
S5 191	8609 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include new windows, partially enclosed windows, a new front door, new porch columns, and a new railing.
S5 192	8613 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, metal window awnings, a new front door, and a new porch.
S5 193	8617 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, an attached carport, and a rear addition.
S5 194	8618 Lockwood Drive	No	C. 1945	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows and doors, a change in the fenestration, a side and rear addition, plus an attached, two-car metal carport.
S5 195	8622 Lockwood Drive	No	C. 1953	None	Religion/religious facility	Alterations include enclosed and new windows, an attached canopy, and a modern porch and a change in the fenestration.
S5 196	8709 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include new siding, doors, windows, and side porch, plus a front addition, and an attached carport.
S5 197	4902 Laura Koppe Road	No	C. 1965	Modern	Commerce/vacant - not in use (gas station)	Alterations include enclosed windows, modern siding, enclosed service bays, and a change in the fenestration.
S5 198	4901 Laura Koppe Road	No	C. 1951	None	Commerce/specialty store	Alterations include new siding, painted brick, a new awning and columns, modern windows, enclosed openings changing the fenestration, and a side addition.
S5 199	8814 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include new siding and an attached carport. A six-foot wood and metal privacy fence encompasses the front yard thus changing the original setting.
S5 200	8818 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include a rear addition and a detached RV carport on the front façade.
S5 201	8817 Lockwood Drive	No	C. 1967	Ranch	Domestic/single dwelling	Alterations include new siding in the gable ends and a rear patio addition.
S5 202a/b	8901 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, doors, siding, and multiple rear additions.
S5 203	8906 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include a modern door, skirting, windows, porch, a change in the fenestration, and a rear addition.
S5 204	8914 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern windows, siding, and column, plus a rear addition. The concrete paved front yard changes the setting.
S5 205	8913 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include an attached carport, a new door, boarded up windows, and a change in the fenestration.
S5 206	8917 Lockwood Drive	No	C. 1940	Minimal Traditional	Domestic/single dwelling	Alterations include new windows and siding, a change in the fenestration, and a rear addition.
S5 207	8918 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include siding, modern windows, an enclosed porch, and a rear addition.
S5 208	9002 Lockwood Drive	No	C. 1952	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, windows, door, columns, and an attached carport/patio on the side façade.
S5 209	4825 Boicewood Drive	No	C. 1960	Ranch	Domestic/multiple dwelling	Alterations include new columns and new doors.
S5 210	9007 Lockwood Drive	No	C. 1955	Ranch	Domestic/vacant - not in use	Alterations include an enclosed garage and boarded-up windows.
S5 211	9009 Lockwood Drive	No	C. 1956	Ranch	Domestic/single dwelling	Alterations include a modern door and columns, an attached carport, and a rear addition.
S5 212	9015 Lockwood Drive	No	C. 1952	Ranch	Domestic/single dwelling	Alterations include a new garage door and new siding.
S5 213	9017 Lockwood Drive	No	C. 1953	Ranch	Domestic/single dwelling	Alterations include modern windows, skirting, porch column, porch railing, and door.
S5 214	4902 Fitch Street	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, a rear addition, and a change in the fenestration. A six-foot wood fence encloses the front yard changing the setting.
S5 215	9102 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include a modern front porch, door, siding, windows, and a two-story rear addition.
S5 216	9106 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include modern windows, a large rear addition (c. 2020), and a change in the fenestration. At the time of the survey the house was being covered with synthetic siding.
S5 217	9113 Lockwood Drive	No	C. 1950	Minimal Traditional	Domestic/single dwelling	Alterations include a paved front yard that changes the setting, modern siding, windows, porch column, and door.
S5 218	4906 Firnat Street	No	C. 1970	Ranch	Domestic/single dwelling	Alterations include new siding in the gable ends, windows, and door, plus an attached garage.

Resource	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S5 219	9202 Lockwood Drive	No	C. 1964	Ranch	Domestic/single dwelling	Alterations include new and enclosed windows, and new siding in the gable ends.
S5 220	9201 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include some modern siding, windows, and door. A six-foot wood fence encompasses the front yard changing the setting.
S5 221	9206 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include an enclosed garage and a rear addition.
S5 222	9210 Lockwood Drive	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include a new front porch with a ramp and a rear addition.
S5 223	9205 Lockwood Drive	No	C. 1972	None	Commerce/warehouse	Alterations include a side and rear addition, and a new awning over the pedestrian door.
S5 224	9213 Lockwood Drive	No	C. 1971	None	Commerce/warehouse	Alterations include painted metal and a missing garage door for the middle bay.
S5 225	9222 Lockwood Drive	No	C. 1964	None	Domestic/multiple dwelling	Alterations include new siding, painted brick, and modern doors and windows.
S5 226	9302 Lockwood Drive	No	C. 1946	Ranch	Domestic/vacant - not in use	Alterations include some new windows, a modern door, a missing front porch, and a rear addition.
S5 227	9305 Lockwood Drive	No	C. 1946	Minimal Traditional	Domestic/single dwelling	Alterations include modern windows, siding, a side porch, and a change in the fenestration.
S5 228	9311 Lockwood Drive	No	1972/C. 1995	Contemporary	Religion/religious facility	Alterations include modern siding, entrance doors, enclosed windows that change the fenestration, and a side addition (c. 1995).
S5 229	9310 Lockwood Drive	No	C. 1965	Ranch	Domestic/single dwelling	Alterations include new siding, a modern door, windows, metal window awning, column, and a change in the fenestration.
S5 230	4826 Ireland Street	No	C. 1950	Ranch	Domestic/single dwelling	Alterations include new siding and modern garage doors.
S5 231	9401 Lockwood Drive	No	C. 1946	Ranch	Domestic/single dwelling	Alterations include a side deck, new siding in the gable ends, new garage doors, and a rear addition.
S5 232	9402 Lockwood Drive	No	C. 1967/1984	Contemporary	Funerary/mortuary	Alterations include modern windows, an attached carport, a two-story rear addition, and a large addition to the north façade that almost doubles the size of the original footprint (c. 1984).
S5 233	4902 Tidwell Road	No	C. 1966	None	Commerce/specialty store	Alterations include a new awning, windows enclosed with brick, and a change in the fenestration.
S5 234	4821 Tidwell Road	No	C. 1962	None	Commerce/vacant - not in use	Alterations include a parapet, canopy, enclosed windows, modern siding, and an addition on the front façade. Multiple modern buildings and structures are located on the parcel.
S5 235	4808 Tidwell Road	No	C. 1978	None	Religion/religious facility	Alterations include modern siding, windows, doors, a change in the fenestration, and a rear addition.
S5 236	4720 Tidwell Road	No	C. 1952	Ranch	Domestic/single dwelling	Alterations include modern siding, door, windows, a modern two-car carport and a detached garage.
S5 237	4713 Tidwell Road	No	C. 1978	None	Commerce/warehouse	Alterations include a rear addition, a front porch addition with a gable-roof awning and wood screening, new pedestrian doors, and a change in the fenestration.
S5 238a/b	4635 Tidwell Road	No	C. 1940	None	Commerce/specialty store	Alterations include new columns, siding, painted brick, a rear addition, and a change in the fenestration.
S5 239	4626 Tidwell Road	No	C. 1960	None	Commerce/specialty store	Alterations include new siding, a rear addition, and a change in the fenestration.
S5 240	4319 Tidwell Road	No	C. 1970	None	Commerce/specialty store	Alterations include a side addition with multiple open bays.
S5 241	4317 Tidwell Road	No	C. 1970	None	Commerce/specialty store	Alterations include new siding, a new roof, a metal awning, and enclosed windows.
S5 242	4315 Tidwell Road	No	C. 1970	None	Commerce/warehouse	Alterations include painted brick, enclosed bays, a modern garage door, and a new pedestrian door, plus a change in the fenestration.
S5 243	4202 Tidwell Road	No	C. 1970	None	Commerce/specialty store	Alterations include new metal siding, a change of use to an office, and a new metal fence.
S5 244	4104 Tidwell Road	No	C. 1968	None	Commerce/warehouse	Alterations include modern siding and doors, a rear addition, a side addition, plus a change in the fenestration.
S5 245a/b	4005 Tidford Street	No	C. 1940/1982	Minimal Traditional	Domestic/single dwelling	Alterations include a modern porch, new siding, plus a new roof and rear addition in 2009.
S5 246	3912 Tidwell Road	No	C. 1945/1957	Ranch	Domestic/single dwelling	Alterations include modern siding, new windows, a new door, a detached garage, a large rear addition C. 1957, and a change in the fenestration.
S5 247	3814 Tidwell Road	No	C. 1950	None	Commerce/restaurant	Alterations include a modern front patio, new siding, and new garage doors, enclosed windows, a rear addition, and a change in the fenestration.
S5 248	3214 Tidwell Road	No	C. 1963	None	Domestic/multiple dwelling	Alterations include modern windows, new siding, and new doors.
S5 249	3132 Tidwell Road	No	C. 1963	None	Domestic/multiple dwelling	Alterations include modern windows, new and enclosed doors, and added brackets.
S5 250	3126 Tidwell Road	No	C. 1965	None	Commerce/specialty store	Alterations include painted brick and a detached carport.
S5 251	3110 Tidwell Road	No	C. 1966	None	Commerce/specialty store (strip center)	Alterations include painted brick, new windows, awnings, and a change in the fenestration.
S5 252	3054 Tidwell Road	No	C. 1960	None	Commerce/warehouse	Alterations include a building attached to the front façade currently used as an office, a modern metal carport attached to the side façade, and a shed roof addition on the rear façade
S5 253	9420 Jensen Drive	No	C. 1962	None	Commerce/specialty store	Alterations include modern windows, a new awning, and a side addition.
S5 254	9502 Jensen Drive	No	C. 1962/1990	New Formalism	Commerce/department store	Alterations include painted brick, a new door, and a metal side addition added C. 1990 per HCAD.
S5 255	9607 Jensen Drive	No	C. 1966/2002	None	Commerce/warehouse	No right-of-entry. Portions of structures that were visible did not appear to have any unique architectural features.
S5 256	9629 Jensen Drive	No	C. 1953	None	Commerce/vacant - not in use	Alterations include new siding, a new awning over the front entrance, and multiple additions.
S5 257	9631 Jensen Drive	No	C. 1973	None	Commerce/vacant - not in use	Alternations include new windows and a new canopy, enclosed windows, modern siding, and multiple additions.
S5 258	9701 Jensen Drive	No	C. 1953	None	Commerce/vacant, not in use (gas station)	Alterations include new siding and windows, enclosed garage bays, a change in the fenestration, a side addition, and a change in use.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 01	Address:	5516 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-and-a-half story Tudor influenced house with wood siding and detached garage. Alterations include modern windows and a change in the fenestration.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southwest

Resource No.	S5 01	Address:	5516 Tremper Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 02	Address:	5520 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-story Tudor influenced house with vinyl siding and a modern, detached workshop. Alterations include modern windows, door, siding, and front porch.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southeast

Resource No.	S5 02	Address:	5520 Tremper Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 03	Address:	5536 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-and-a-half story Tudor style house with vinyl siding and detached storage building. Alterations include modern doors, awning, siding, shutters, and a rear addition.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southeast

Resource No.	S5 03	Address:	5536 Tremper Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 04	Address:	5540 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl and brick siding. Alterations include modern doors, siding, and additions to the rear and side facades. A modern detached two-car garage is in the rear yard.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 05	Address:	5531 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1948	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-story Minimal Traditional style house with wood siding and detached garage. Alterations include modern windows, shutters, and a rear addition.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: North

Resource No.	S5 05	Address:	5531 Tremper Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 06	Address:	5535 Tremper Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-story Tudor style house with mixed siding of wood, vinyl, and asbestos. Alterations include modern doors, siding, some modern windows, and fenestration changes.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Northeast

Resource No.	S5 06	Address:	5535 Tremper Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 07	Address:	5538 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1960	References:	HCAD, 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-story Ranch style house with brick siding. Alterations include a rear addition, modern windows, and replacement porch columns.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southwest

Resource No.	S5 07	Address:	5538 Farmer Street
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 08	Address:	5540 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: A one-story Craftsman influenced house with vinyl siding and a modern, detached two-car garage. Alterations include modern windows, door, siding, and porch columns.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southeast

Resource No.	S5 08	Address:	5540 Farmer Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 09a-c	Address:	5542 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD, www.historicaerials.com, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and feeling		

Description: Resource S5 09 consists of three buildings on one parcel: a house (S5 09a), a modern detached garage (S5 09b), and a secondary dwelling (S5 09c).

Resource S5 09a is a one-story Ranch style house with brick siding. Alterations include replacement columns, modified roofline, and a new bay window.

Resource S5 09b is a single-story, two-bay garage with a change in garage doors.

Resource S5 09c is a one-story bungalow style house with modern siding.

By 1964 construction of the East Freeway removed houses and several streets thus changing the setting and feeling of the Parkwood residential neighborhood.



Camera direction: Southeast

Resource No.	S5 09	Address:	5542 Farmer Street



Camera direction: Southwest

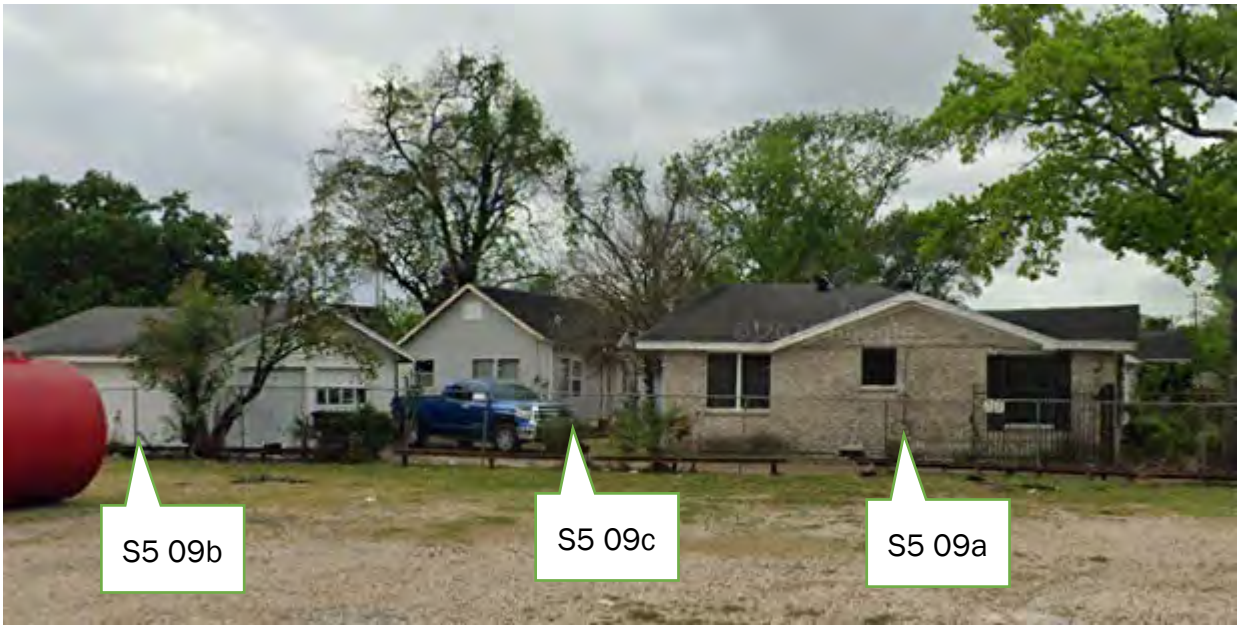

Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 10 Leland Pharmacy	Address:	5412 Farmer Street
Resource Type:	Building	Function/Use:	Healthcare/medical business
Estimated Year built:	C. 1935	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, gable roof building with metal siding and a brick wainscot. Alterations include modern windows and roofing, a side addition, siding, and a change in the fenestration.



Camera direction: North

Resource No.	S5 10	Address:	5412 Farmer Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 11	Address:	5410 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1925	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story Craftsman style house with brick siding and projecting porch with large square brick columns on brick fencing. Alterations include modern windows and modern siding in the gable end.



Camera direction: Southwest

Resource No.	S5 11	Address:	5410 Farmer Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 12	Address:	5406 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with asbestos siding. Alterations include modern windows, siding, and changes in the fenestration.



Camera direction: Southeast

Resource No.	S5 12	Address:	5406 Farmer Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 13	Address:	5314 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with vinyl siding and a detached, modern storage shed. Alterations include modern siding, windows, and loss of original columns and porch railing.



Camera direction: Northwest

Resource No.	S5 13	Address:	5314 Farmer Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 14	Address:	5310 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with wood siding. Alterations include an enclosed garage, an attached carport, modern windows, and modern aluminum awnings.



Camera direction: Northwest

Resource No.	S5 14	Address:	5310 Farmer Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 15	Address:	5306 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with vinyl siding. Alterations include modern windows, doors, siding, roof, and a wood deck on the front façade. The rear addition includes a porte-cochere with decorative windows.



Camera direction: Northwest

Resource No.	S5 15	Address:	5306 Farmer Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 16	Address:	5401 Farmer Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1949	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with brick siding. Alterations include modern siding, windows, and door. Additions include a new front porch (c. 2008). The original house remodel has been influenced by the Craftsman style.



Camera direction: Southwest

Resource No.	S5 16	Address:	5401 Farmer Street



Camera direction: North, Google Earth

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 17	Address:	5611 Lyons Avenue
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house. Alterations include modern windows and a modern door. Foliage blocked the view of the house. Per Google Earth aerial photos there are two rear additions with metal roofs.



Camera direction: Northwest

Resource No.	S5 17	Address:	5611 Lyons Avenue



Camera direction: Northwest



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 18	Address:	5603 Lyons Avenue
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1925	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with asbestos siding. Alterations include the altered siding, a loss of the front porch floor, added steps, and a new railing.



Camera direction: Northwest

Resource No.	S5 18	Address:	5603 Lyons Avenue
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 19	Address:	1615 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This apartment complex consists of two, two-story buildings with brick siding of no particular style. One building has an accent wall of lava stone. Alterations include modern windows and doors, plus painted lava stone, a porch roof over the front façade stoop, and a rear, one-story addition.



Camera direction: Northwest

Resource No.	S5 19	Address:	1615 Lockwood



Camera direction: North



Image oriented North (Google Earth 4/2022)

Resource No.	S5 19	Address:	1615 Lockwood
			
Camera direction: South			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 20	Address:	1707 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/professional
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: does not meet Criteria significance and lacks integrity of association		

Description: A one-story Ranch style house with asbestos siding. House use has changed from residential to commercial. The building appears to be intact but lacks any innovative design or style, and it is not part of a cohesive residential subdivision.



Camera direction: Southeast

Resource No.	S5 20	Address:	1707 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 21	Address:	1702 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1969/2018	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story concrete masonry unit building with a stepped, false parapet. Alterations included painted cinderblocks, a modern parapet, a change in the fenestration, and a new side addition. Remodeled 2018 per HCAD.



Camera direction: Southeast

Resource No.	S5 21	Address:	1702 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 22	Address:	1800 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1976/2011	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story house of no style with fiber cement siding. According to HCAD the house was remodeled in 2011. Alterations include modern siding, doors, windows, porches, and large two-story rear addition.



Camera direction: Southeast

Resource No.	S5 22	Address:	1800 Lockwood Drive



Camera direction: Northeast, Google Earth

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 23	Address:	1801 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/church
Estimated Year built:	C. 1975	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story church with brick and aluminum siding. Alterations include modern doors and an altered front porch enclosed with decorative iron bars.



Camera direction: West

Resource No.	S5 23	Address:	1801 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 24	Address:	1803 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house. Alterations include modern siding, door, windows, and a rear addition. Per HCAD the house was remodeled in 2019.



Camera direction: Southeast

Resource No.	S5 24	Address:	1803 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 25	Address:	1810 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design		

Description: A one-story Ranch style house with brick siding. Alterations include a new side addition that may have served as a garage at one time.



Camera direction: Northeast

Resource No.	S5 25	Address:	1810 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 26	Address:	1906 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story Craftsman influenced house with wood siding. Alterations include modern windows, a front door, change in the fenestration, and a new wood deck on the front façade. Based on signage, the house is now used for commerce.



Camera direction: Northeast

Resource No.	S5 26	Address:	1906 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 27	Address:	1910 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house. Alterations include a side and rear addition, modern windows, doors, and a front porch.



Camera direction: Southeast

Resource No.	S5 27	Address:	1910 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 28 Mt. Horem Baptist Church	Address:	1915 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1955	References:	Google Earth, plaque
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style church in a "T" plan with brick siding. Alterations include some window replacements with smaller windows and resultant siding changes.



Camera direction: Southeast

Resource No.	S5 28	Address:	1915 Lockwood Drive



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 29	Address:	1920 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1955	References:	Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with brick siding and soldier bricks at the eave line. Alterations include modern shutters, a garage door, a front door, and columns.



Camera direction: Southeast

Resource No.	S5 29	Address:	1920 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 30	Address:	5501 Perkins Street
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story strip center with brick siding and cantilevered roof over the front facade. Alterations include painted brick, replaced windows, enclosed openings, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 30	Address:	5501 Perkins Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 31 Grace United Methodist Church	Address:	2010 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1970	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story church with brick siding constructed in the Ranch style. Alterations include a side addition with a metal canopy and a new metal roof. Per HCAD the church was built 1952. Per the two plaques on the building the church was organized in 1926, located on the present site in 1935, and rebuilt in 1970.



Camera direction: Southeast

Resource No.	S5 31	Address:	2010 Lockwood Drive



Camera direction: Northeast





Plaques on Church building

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 32	Address:	2116 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1972	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story commercial building in the Ranch style constructed of concrete block with a brick veneer front facade. Alterations include one enclosed window. The building is of an ordinary design and does not display any innovative construction methods or architectural detailing.



Camera direction: Southwest

Resource No.	S5 32	Address:	2116 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 33	Address:	2124 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/convenience store
Estimated Year built:	C. 1955	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building of no style with brick siding. Alterations include bricked-over windows, painted brick, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 33	Address:	2124 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 34	Address:	2209 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with minor Craftsman influence, with vinyl siding. Alterations include an enclosed front porch, modern windows, siding, and a door. A modern detached 2-car garage is in the side yard.



Camera direction: Southwest

Resource No.	S5 34	Address:	2209 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 35	Address:	2213 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multi dwelling
Estimated Year built:	C. 1960	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story Ranch style duplex with brick siding. Alterations include modern doors. The building in the same style/design located behind the subject duplex is oriented to Harlem Street and on a separate legal lot.



Camera direction: Southwest

Resource No.	S5 35	Address:	2213 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 36	Address:	2219 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design and materials		

Description: A one-story Ranch style house with brick siding. Alterations include a rear addition and modern doors.



Camera direction: Northwest

Resource No.	S5 36	Address:	2219 Lockwood Drive

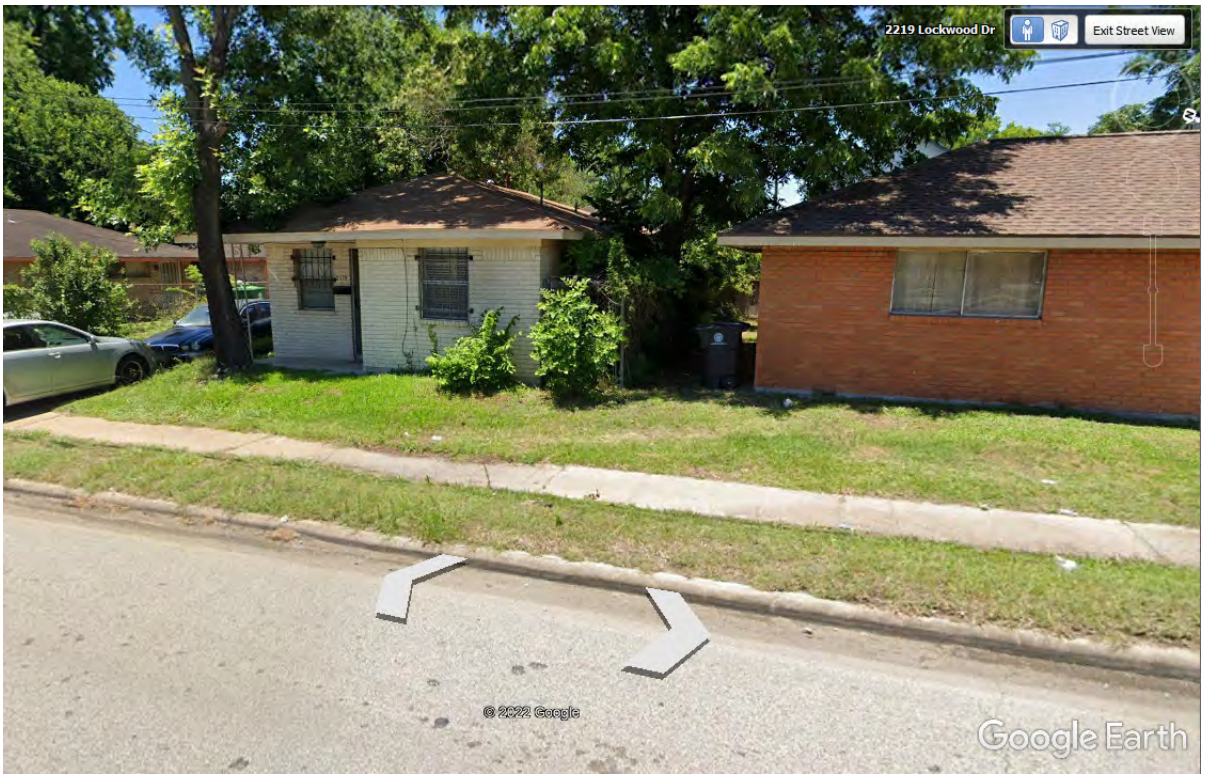


Image oriented Southwest (Google Earth 5/2022)

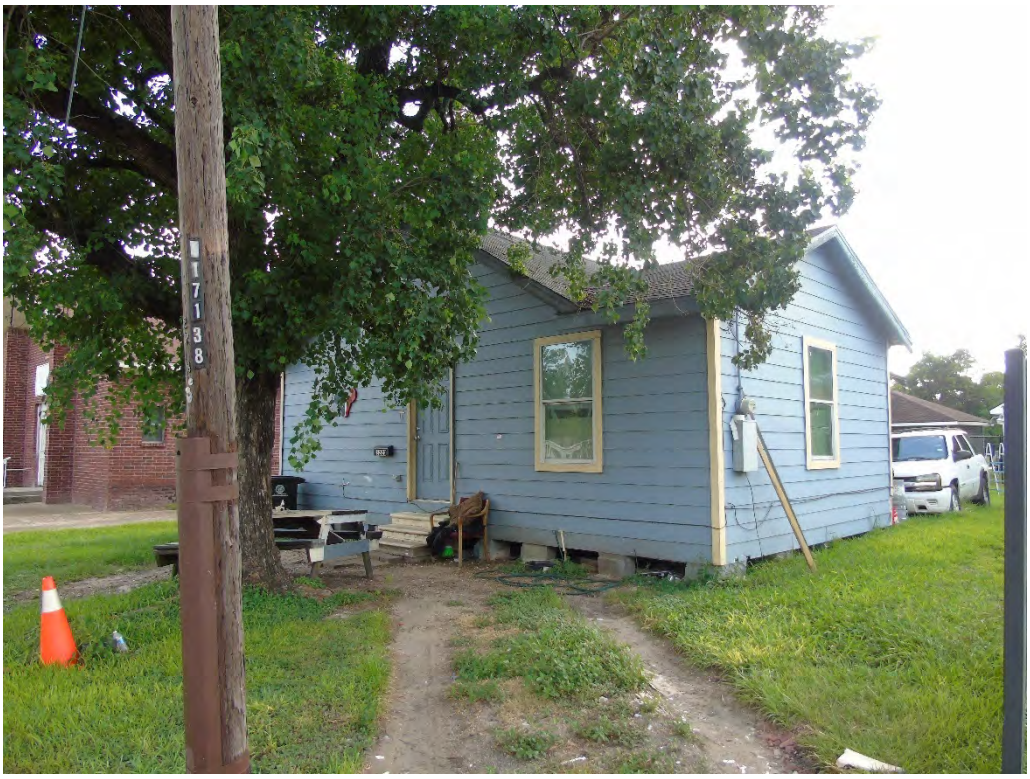
Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 37	Address:	2220 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1939	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern siding, windows, doors, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 37	Address:	2220 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 38 Duncan Memorial Church of God	Address:	2222 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1953	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story church in a Contemporary Ranch style with brick siding. Alterations include modern doors on the front facade and a new rear addition. A dedication plaque was not found.



Camera direction: Northeast

Resource No.	S5 38	Address:	2222 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 39	Address:	2223 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multi dwelling
Estimated Year built:	C. 1965	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story Ranch style duplex with brick siding. The building appears to be intact but lacks any innovative architectural features or construction method.



Camera direction: Southwest

Resource No.	S5 39	Address:	2223 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 40	Address:	2301 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant - not in use
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building of no style constructed of concrete masonry units. Alterations include modern windows and a modern side addition with metal siding.



Camera direction: Northwest

Resource No.	S5 40	Address:	2301 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 41	Address:	2302 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/strip center
Estimated Year built:	1978	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and design		

Description: A one-story commercial building constructed of concrete block with stucco siding. The Spanish Colonial Revival style influence is evident in the stucco siding, arcade patio, and red barrel tile. Alterations include modern windows and an added decorative wall behind the parapet.



Camera direction: Northeast

Resource No.	S5 41	Address:	2302 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 42	Address:	2314 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1939	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story Minimal Traditional style house with vinyl siding and Craftsman style influence. Alterations include modern siding, doors, awnings, and columns. Per HCAD the house was remodeled in 1969.



Camera direction: Southeast

Resource No.	S5 42	Address:	2314 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 43 Greater Mt Lebanon Baptist church	Address:	2324 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1952	References:	Cornerstone plaque
NRHP Eligibility:	Not Eligible: lacks integrity of design, materials, and workmanship		

Description: This eclectic style church has a three-story tower and brick veneer siding. The entrance is a two-story corbeled arch with an arched window over the double door. Alterations include a fabric canopy at the main entrance and a new side addition with an attached carport.



Camera direction: Southeast

Resource No.	S5 43	Address:	2324 Lockwood Drive



Camera direction: East



Camera direction: Northeast

Resource No.	S5 43	Address:	2324 Lockwood Drive





Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 44	Address:	2401 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story Ranch style duplex with brick siding and hipped roof. Alterations include modern doors and painted brick. The buildings behind the subject property are located on separate lots.



Camera direction: Northwest

Resource No.	S5 44	Address:	2401 Lockwood Drive



Camera direction: Southwest



Image oriented West (Google Earth 4/2022) showing original red brick color.

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 45a/b	Address:	2417 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multi dwelling
Estimated Year built:	C. 1960/1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials		

Description: Parcel contains two multifamily dwellings, a duplex and a triplex. Both buildings are one-story with brick veneer siding and a hipped roof. Alterations include one boarded up window and the original doors have been replaced. The building located behind S5 45a is located on a separate legal lot and oriented to Harlem Street.



Camera direction: Southwest

Resource No.	S5 45a/b	Address:	2417 Lockwood Drive
			
Image oriented North (Google Earth 2/2019)			

Resource No.	S5 45b	Address:	2417 Lockwood Drive



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 46	Address:	2419 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1938/1988	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house on pier and beams. Alterations include a change in the fenestration pattern, enclosed porch, modern siding, windows, and doors. Per HCAD the house was constructed c. 1938 and remodeled C. 1988.



Camera direction: Southwest

Resource No.	S5 46	Address:	2419 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 47 Lockwood Skating Palace	Address:	3323 E Lockwood Drive
Resource Type:	Building	Function/Use:	Recreation/sports facility
Estimated Year built:	C. 1948	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Lockwood Skating Palace is one-story roller skate rink with fiber cement siding. The protruding porch extends around the buildings corner and is supported by pairs of columns set at about 30 degrees to form a "V" shape. Per HCAD the building was constructed in 1959. The current owners have operated the business since 1982 (www.lockwoodskatingpalace.com). Alterations include modern siding, a rear addition, and changes in the fenestration.



Camera direction: Southwest

Resource No.	S5 47	Address:	3323 E Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 48	Address:	3406 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1959	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story warehouse with metal siding and a brick wainscot. Alterations include modern siding, an entry awning, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 48	Address:	3406 E Lockwood Drive



Camera direction: Southeast

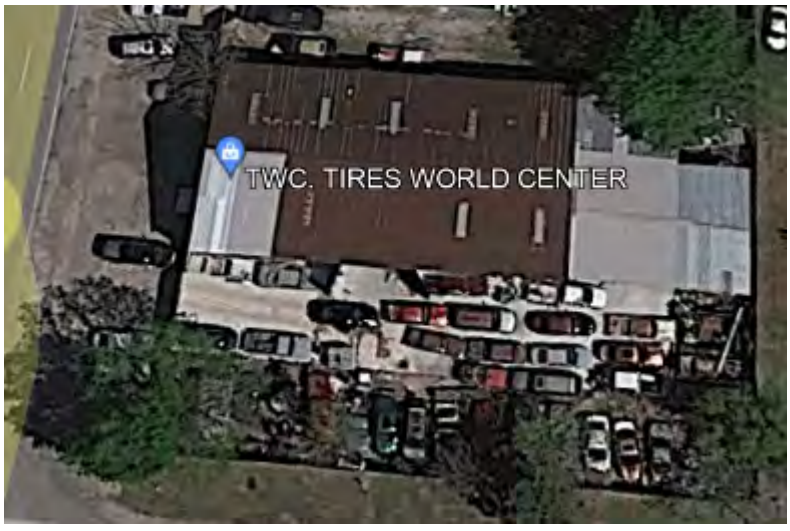


Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 49	Address:	3414 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1957	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A conglomeration of buildings. Per historic aerials, the original building is a one-story warehouse with metal siding. Alterations include a modern carport on the front façade and multiple additions. Based on the 2022 aerial photograph there is a detached metal warehouse located at the rear corner of the lot.



Camera direction: Southeast

Resource No.	S5 49	Address:	3414 Lockwood Drive



Camera direction: Northeast



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 50	Address:	3448 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/car wash
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: Resource S5 50 has two buildings, a three-bay carwash, and a two-bay carwash, both with metal siding. The buildings are utilitarian and do not have any unique features nor represent any unique methods of construction.



Camera direction: Northeast, resource S5 53a in foreground

Resource No.	S5 50	Address:	3448 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 51	Address:	3210 Cushing Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1949/1988	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include modern windows and columns. Per HCAD, the house was built in 1949 and remodeled in 1988.



Camera direction: Southeast

Resource No.	S5 51	Address:	3210 Cushing Street
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 52	Address:	3536 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/strip center
Estimated Year built:	C. 1962/2016	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: An ell plan, one-story strip center. Alterations include modern siding materials, columns, windows, and changes in fenestration. Per HCAD the building was remodeled in 2016.



Camera direction: Southeast

Resource No.	S5 52	Address:	3536 Lockwood Drive



Camera direction: Southwest



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 53	Address:	3604 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding and stone wainscot. Alterations include the siding and wainscot, missing front porch, and a side addition. The windows are currently boarded.



Camera direction: Northeast

Resource No.	S5 53	Address:	3604 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 54	Address:	3525 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1964	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with a concrete block parapet. Alterations include a new parapet and canopy, bricked up windows, and a change in the fenestration.



Camera direction: West

Resource No.	S5 54	Address:	3525 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 55	Address:	3417 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story Minimal Traditional style house with vinyl and metal siding. Alterations include modern siding and windows, a change in the fenestration, an addition to the front façade, two additions to the rear facade, and a change in use. A detached modern storage unit is at the rear of the lot.



Camera direction: Southwest

Resource No.	S5 55	Address:	3417 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 56	Address:	3509 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story Ranch style house with vinyl siding and a winged roof. Alterations include modern siding, windows, and door, a change in the fenestration, and a change in use. A large carport and ancillary building are also located on the lot.



Camera direction: Northwest

Resource No.	S5 56	Address:	3509 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 57	Address:	3515 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick siding. Alterations include painted brick, modern windows and doors, and a rear addition.

Note: address correct per HCAD and Google maps.



Camera direction: Southwest

Resource No.	S5 57	Address:	3515 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 58a-c	Address:	3714 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S5 58 has three buildings per HCAD, one commercial building (S5 58a c. 1955), and two residential buildings c. 1938 and c. 1955, converted to commercial use. A tall metal fence prohibited view of the buildings on the lot. Per the Google Earth 4/2022 aerial photo a house is visible on the lot as well as smaller buildings. Due to lack of visibility assessment, documentation was only conducted on S5 58a.

Resource S5 58a is a one-story building with a flat square and asbestos siding. Alterations include a loss of windows and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 58a	Address:	3714 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 59	Address:	3716 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1960/1980	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: Resource S5 59 is a conglomerate of three buildings, consisting of a one-story garage with multiple bays, a metal warehouse, and a small concrete block office. Per HCAD the metal warehouse was added in 1980.



Camera direction: Southeast

Resource No.	S5 59	Address:	3716 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 60	Address:	3719 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, two bay commercial building constructed of concrete block with brick veneer siding on the front facade. Alterations include enclosed windows, a change in the fenestration, and a modern metal parapet.



Camera direction: Southwest

Resource No.	S5 60	Address:	3719 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 61	Address:	3801 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1950/2016	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, one-part commercial block building constructed of concrete block. Alterations include a loss of windows, a change in the fenestration, and two additions: a metal warehouse addition, and a metal carport.



Image oriented West (Google Earth 4/2021)

Resource No.	S5 61	Address:	3801 Lockwood Drive



Image oriented northwest (Google Earth 4/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 62	Address:	3802 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	1973	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building in the Contemporary style. The building is constructed of concrete block with a cantilevered roof. Alterations include enclosed windows, modern siding in the gable end, and painted concrete block.



Camera direction: Northeast

Resource No.	S5 62	Address:	3802 Lockwood Drive
			
Camera direction: East			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 63	Address:	3818 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Tudor style house with vinyl siding. Alterations include modern siding, porch and windows, a rear addition, and changes in the fenestration. A six-foot, solid metal fence is located on the front side yard changing the original setting.



Camera direction: Northeast

Resource No.	S5 63	Address:	3818 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 64	Address:	3822 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1939	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Craftsman-influenced house with vinyl siding and a brick porch with decorative arched columns. Alterations include modern windows and siding, a partially enclosed front porch, and additions to the rear and side facades. A frame carport with metal roof in the front yard reduces integrity of setting.



Camera direction: Northeast

Resource No.	S5 64	Address:	3822 Lockwood Drive
			
Camera direction: East			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 65	Address:	3830 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1948	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Per HCAD the parcel contains four buildings: a garage c. 1948, two metal warehouses both c. 1984, and single-family residence c. 1948 converted to commercial use. The current building is a two-bay garage with a metal warehouse on the side and another addition to the rear. The metal warehouses have garage bays that face Makeig Street. No house is evident on the parcel and the adjacent house on Makeig Street has a separate fence and appears to be used as residence.

Alterations include a metal warehouse attached to the original garage.



Camera direction: Southeast

Resource No.	S5 65	Address:	3830 Lockwood Drive



Camera direction: Northeast, garage bays facing Makeig Street

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 66	Address:	3827 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story, one-part commercial building with two bays currently used as a church, Miracle Love Ministries. Alterations include modern awnings, loss of windows, stucco siding, a rear addition, and a change in use.



Camera direction: Northwest

Resource No.	S5 66	Address:	3827 Lockwood drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 67	Address:	3901 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman influenced house with vinyl siding. Alterations include changes to the porch, modern windows and siding, and a rear addition.



Camera direction: Southwest

Resource No.	S5 67	Address:	3901 Lockwood Drive



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 68 Legacy Apartments	Address:	3905 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1970/2018	References:	HCAD, https://www.apartments.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials and workmanship		

Description: An apartment complex with five, two-story buildings, in a "U" plan. Per HCAD the apartments were remodeled in 2018. The buildings have wood and brick veneer siding and original windows. The buildings are of a similar design to the Legacy Apartments at 4515 Lockwood Drive. Alterations include painted brick and modern doors.

https://www.apartments.com/the-legacy-apartments-houston-tx/y8g39qt/



Camera direction: Southwest

Resource No.	S5 68	Address:	3905 Lockwood Drive



Camera direction: Northwest



Image oriented Northwest (https://www.apartments.com/the-legacy-apartments-houston-tx/y8g39qt/) Date unknown

Resource No.	S5 68	Address:	3905 Lockwood Drive



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 69	Address:	3902 Lockwood Drive
Resource Type:	Building	Function/Use:	Funerary/mortuary
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A conglomeration of three attached buildings. A one-story flat roof building is attached, one either side, to residential dwellings and the south façade has an attached carport (c. 2006). Alterations include boarded up windows, a change in the fenestration, loss of front porch and siding, and a change in use.



Camera direction: Northeast

Resource No.	S5 69	Address:	3902 Lockwood Drive



Camera direction: Southeast

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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 70	Address:	3910 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Per HCAD the house was remodeled in 1983. There are two buildings and a carport in the backyard. Alterations include modern siding, front porch, a modern door, and a large side addition.



Camera direction: Southeast

Resource No.	S5 70	Address:	3910 Lockwood Drive



Camera direction: Northeast



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 71	Address:	3912 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern windows, door, replacement siding, and modified porch.



Camera direction: Northeast

Resource No.	S5 71	Address:	3912 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 72 Mission Evangelistica	Address:	3911 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story building in a rectangular plan with vinyl siding. Per HCAD the building was converted to commercial and remodeled in 2018. The frame garage was built in 1979 and a shed added in 2012. Alterations include a loss of windows, change in the fenestration, modern doors, and a new gable roof. A secondary building is in the backyard.



Camera direction: Southwest

Resource No.	S5 72	Address:	3911 Lockwood Drive



Camera direction: West



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 73	Address:	3913 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1976	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story, three-bay garage with metal walls and metal bay doors. Alterations include replacement garage doors.



Camera direction: Southwest

Resource No.	S5 73	Address:	3913 Lockwood Drive
			
Camera direction: Northwest			

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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 74	Address:	3915 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include an attached carport and a front addition.



Camera direction: Southwest

Resource No.	S5 74	Address:	3915 Lockwood Drive
			
Camera direction: Northwest			

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 75	Address:	3917 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with fiber cement siding. Alterations include the new siding, changes to some windows, and a rear addition.



Camera direction: Southwest

Resource No.	S5 75	Address:	3917 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 76a-d	Address:	4003 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

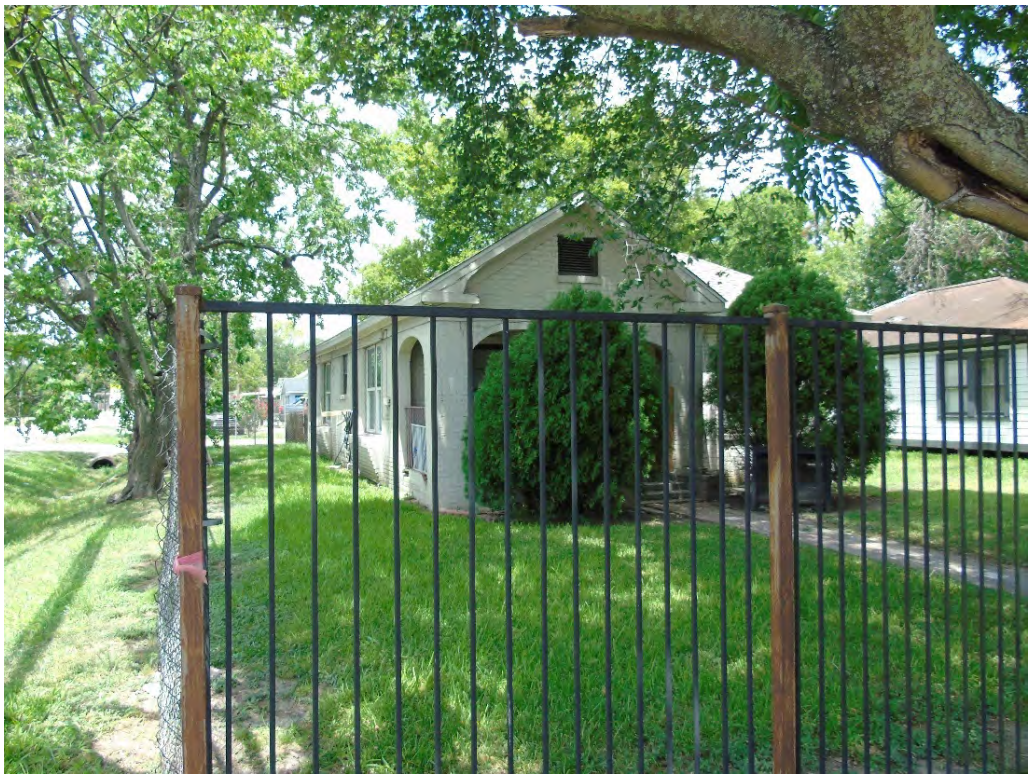
Description: A parcel with four separate buildings. Per HCAD the address is 5307 Crane Street with all buildings constructed in 1940 and the 1440 square foot duplex (S5 76d) remodeled in 2012.

Resource S5 76a is a one-story Bungalow style house with Craftsman influence. Alterations include painted brick veneer siding, some modern windows, and a modern porch railing.

Resource S5 76b is a two-story garage apartment with two garage bays and brick veneer siding. Alterations include an enclosed bay and modern windows.

Resource S5 76c is a one-story Bungalow style house with Craftsman influence and vinyl siding. Alterations include modern siding, changes to the columns, some modern windows, and a rear addition.

Resource S5 76d is a one-story Ranch style duplex with vinyl siding. Alterations include modern siding and windows, plus a new front porch.



Camera direction: Northwest

Resource No.	S5 76a	Address:	5307 Crane Street (4001 Lockwood Drive)



Camera direction: Southwest



Camera direction: West

Resource No.	S5 76b	Address:	5307 Crane Street (4001 Lockwood Drive)
			
Camera direction: Northwest			

Resource No.	S5 76c	Address:	5307 Crane Street (4003 Lockwood Drive)



Camera direction: Southwest

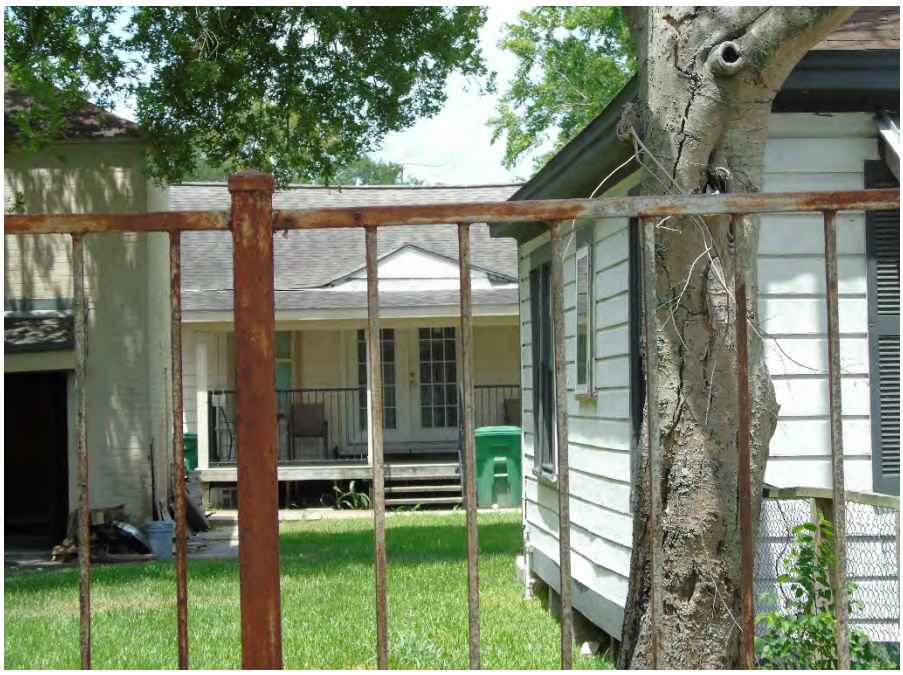


Camera direction: Northwest

Resource No.	S5 76d	Address:	5307 Crane Street



Camera direction: Northwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 77	Address:	4005 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1949	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with brick siding. Alterations include modern windows, shutters, and a new railing.



Camera direction: Southwest

Resource No.	S5 77	Address:	4005 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 78	Address:	4014 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with wood siding. Alterations include modern windows and a new door, a side porch addition, and a change in the front porch. A modern one-story house (c. 1996) is in the backyard.



Camera direction: Northeast

Resource No.	S5 78	Address:	4014 Lockwood Drive



Camera direction: Southeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 79	Address:	4016 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include boarded up windows, a modified porch, missing porch railing, and a rear addition.



Camera direction: Northeast

Resource No.	S5 79	Address:	4016 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 80a/b	Address:	4114 Lockwood Drive (per HCAD)
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1944/1970	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and setting		

Description: This parcel contains two buildings. A one-story Ranch style house with brick siding (S5 80a) and a one-story house with pyramid roof and wood siding (S5 80b) in the rear yard. Per HCAD both buildings were built in 1948 and the building uses include residential and as a warehouse. Both buildings appear on the 1944 Google Earth aerial. Based on the massing and windows Resource 80a has been completely remodeled. Alterations include modern windows and a change in the fenestration. A ten-foot metal fence and removal of grass in the front yard changes the setting.

Resource 80b is a one-story Minimal Traditional style house with wood siding. Visibility is limited due to vegetation and Resource 80a, but it appears to have replacement windows and a replacement metal roof, impacting integrity of materials, workmanship, and design.



Camera direction: Southeast

Resource No.	S5 80a	Address:	4114 Lockwood Drive



Camera direction: Northeast



Image oriented North (Google Earth 4/2022)

Resource No.	S5 80b	Address:	4018 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 81	Address:	4017 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1953	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story building with three bays and storage area on the front facade. Based on HCAD there was originally a house on this parcel that was converted to commercial use in 1960. Per www.historicaerials.com the building has been continually altered and enlarged. Alterations include a change of use, new siding, a new roof, and multiple additions.



Camera direction: Southwest

Resource No.	S5 81	Address:	4017 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 82	Address:	4115 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945/2011	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman-influenced bungalow with vinyl siding. Per HCAD the house was remodeled in 2011. Alterations include modern windows, door, siding, and a new porch.



Camera direction: Northwest

Resource No.	S5 82	Address:	4115 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 83	Address:	4117 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945/2010	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Per HCAD the house was remodeled in 2010. Alterations include modern siding, windows, a porch, a change in the fenestration, and a side addition.



Camera direction: Southwest

Resource No.	S5 83	Address:	4117 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 84	Address:	4116 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A six-bay carwash with a flat roof and metal siding. Alterations include a new metal roof.



Camera direction: Northeast

Resource No.	S5 84	Address:	4116 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 85	Address:	4121 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, one-part commercial block building constructed of concrete block and brick veneer on the front façade. Alterations include painted brick, an attached carport, modern windows, a door, a canopy, a change in the fenestration, and two rear additions.



Camera direction: Northwest

Resource No.	S5 85	Address:	4121 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 86	Address:	4201 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950/2018	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with vinyl siding. Per HCAD the house was remodeled in 2018 and is still residential in use. Alterations include modern siding, windows, and a porch, a change in the fenestration, plus a rear addition. Based on the lack of landscaping and the adjacent commercial buildings the building lacks integrity of setting.



Camera direction: Northwest

Resource No.	S5 86	Address:	4201 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 87	Address:	4315 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1969	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story commercial building with flat roof, brick siding, and a large porte-cochere on the front façade. The property is currently vacant and surrounded by a 12-foot chain link fence. Alterations included boarded up windows.



Camera direction: Northwest

Resource No.	S5 87	Address:	4315 Lockwood Drive



Camera direction: Southwest



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 88	Address:	4401 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/strip center
Estimated Year built:	C. 1969	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with metal siding and some brick veneer on the front facade. Alterations include modern doors, windows, siding, and a change in the fenestration. A large addition to the north façade doubled the size of the building.

HCAD has the address as 4410 Lockwood Drive.



Camera direction: Northwest

Resource No.	S5 88	Address:	4401 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 89	Address:	4414 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1925	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with beveled wood siding and wood sash windows. Alterations include replacement porch columns and porch railing, and added decorative shutters.



Camera direction: Northwest

Resource No.	S5 89	Address:	4414 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 90	Address:	4502 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story bungalow of no particular style with wood siding. Alterations include modern windows and a new door, a large side addition near the back, and a porch enclosed with metal safety bars. A six-foot privacy wood fence is in the front yard changing the setting.



Camera direction: Southwest

Resource No.	S5 90	Address:	4502 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 91	Address:	4515 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1970/2018	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: An apartment complex with three apartment buildings and one ancillary building (Legacy Apartments). The apartment buildings are two-story with brick siding and wood siding. The windows appear to be original. HCAD has the buildings remodeled in 2018. Alterations include painted brick and modern doors. The building style is similar to 3905 Lockwood Drive, and both are named Legacy Apartments.



Camera direction: Northwest

Resource No.	S5 91	Address:	4515 Lockwood Drive



Camera direction: Northwest



Image oriented North (Google Earth 4/2022)

Resource No.	S5 91	Address:	4515 Lockwood Drive



Camera direction: Northwest

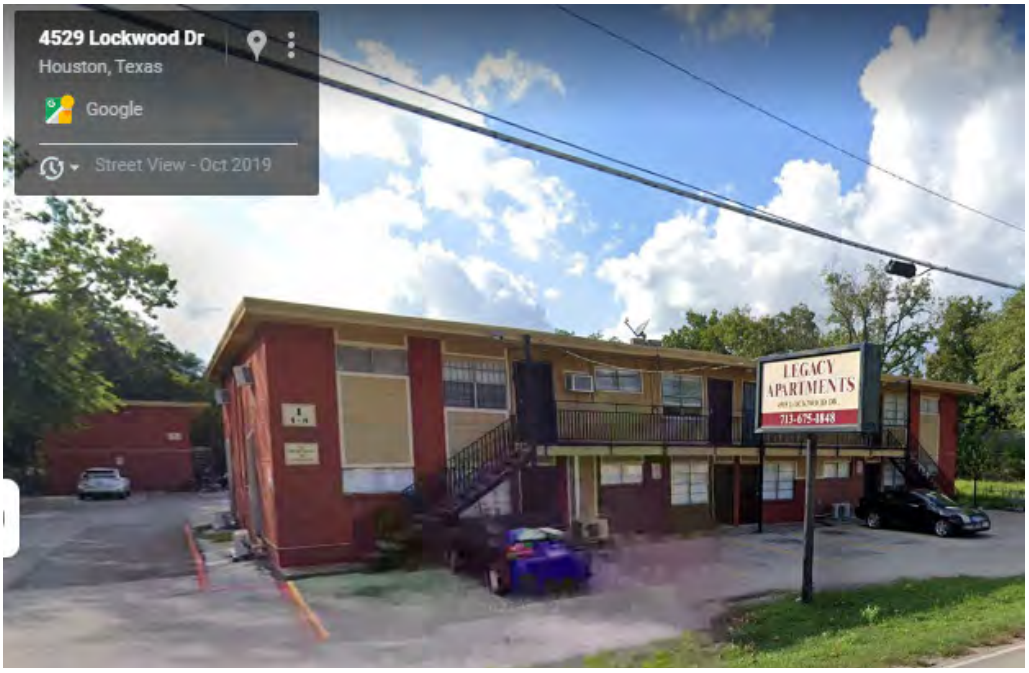


Image oriented North (Google 10/2019)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 92	Address:	4516 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow of no discernable style with vinyl siding. Alterations include modern siding, replacement windows, a modern door, and a new porch.



Camera direction: Southeast

Resource No.	S5 92	Address:	4516 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 93	Address:	4518 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1944	References:	Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and feeling		

Description: A conglomeration of buildings. A 1944 Google Earth aerial photograph shows a building at this corner. Additions have been made to the rear and side facades. Siding material includes brick, vinyl, stucco, and stone. Various types of windows have been used. Alterations include modern siding, windows, a change in the fenestration, and multiple additions.



Camera direction: Northeast

Resource No.	S5 93	Address:	4518 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 94	Address:	4601 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1945	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with mixed siding. Alterations include some vinyl siding, some modern windows, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 94	Address:	4601 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 95	Address:	4600 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1975/2010	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick and stucco siding (O'Reilly Auto Parts). According to HCAD the building was remodeled in 2010. Alterations include a new façade, modern siding, signage, and new windows.



Camera direction: Southeast

Resource No.	S5 95	Address:	4600 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 96	Address:	4605 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1957/2014	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, flat roof building with vinyl siding. Alterations include modern siding, windows, doors, and a change in the fenestration. Per HCAD the building was remodeled in 2014.



Camera direction: Southwest

Resource No.	S5 96	Address:	4605 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 97	Address:	4613 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building with asbestos siding. Alterations include modern siding, windows, and a porch, plus a change in the fenestration. Based on appearance this was likely originally a residence later converted to commercial use.



Camera direction: Northwest

Resource No.	S5 97	Address:	4613 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 98	Address:	4615 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1976	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building with vinyl siding. Alterations include a modern porch, siding, windows, doors, and a change in the fenestration.



Camera direction: West

Resource No.	S5 98	Address:	4615 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 99	Address:	4712 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1962/1985	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: An apartment complex with six buildings in a "T" plan. Two of the buildings are three-story with the remaining buildings being two-story. The siding is brick and wood. The apartment complex is similar to 4515 Lockwood Drive and 3906 Lockwood Drive. Alterations include some modern windows and added modern shutters and awnings.



Camera direction: Northeast

Resource No.	S5 99	Address:	4712 Lockwood Drive



Camera direction: Southeast

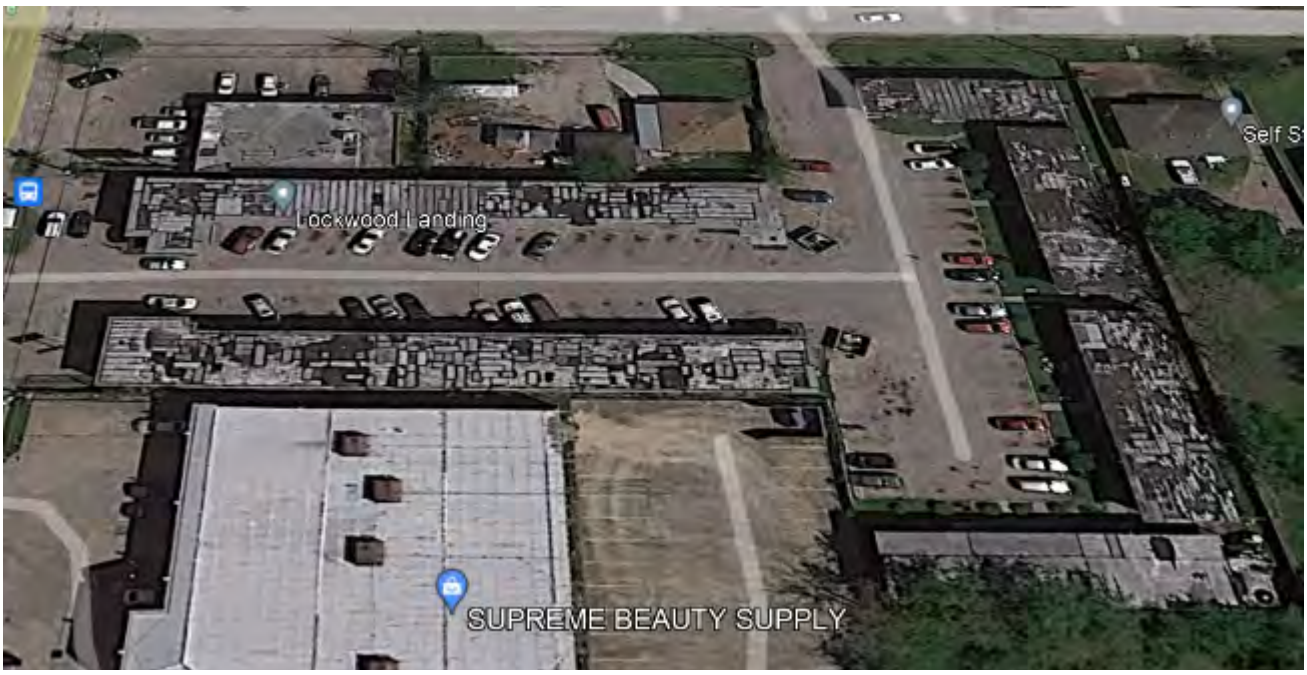


Image oriented North (Google earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 100	Address:	4705 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935/2013	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow of no discernable style with vinyl siding. A rear carport was added in the rear yard by 10/2012. HCAD has the house remodeled in 2013. Alterations include a modern porch, modern windows, a new door, a rear addition, and a new roof.



Camera direction: Northwest

Resource No.	S5 100	Address:	4705 Lockwood Drive



Camera direction: Southwest



Image oriented North (Google Earth 1/2010).

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 101	Address:	4717 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1956	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story Ranch style house with brick siding. Per HCAD the resource was changed from residential to commerce (restaurant) in 1976 that changes the association. Alterations include a modern front porch, new windows, a change in the fenestration, an addition to the rear façade, and a modern detached carport.



Camera direction: Southwest

Resource No.	S5 101	Address:	4717 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 102	Address:	4805 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with no discernable style with wood siding and protruding front porch. Alterations include modern windows, columns, and siding, plus a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 102	Address:	4805 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 103 Kashmere Gardens Elementary School	Address:	4901 Lockwood Drive
Resource Type:	Building	Function/Use:	Education/school
Estimated Year built:	1949	References:	HCAD, www.houstonisd.org, plaque
NRHP Eligibility:	Recommended eligible under Criterion A in the area of Social History, Civil Rights Movement		

Description: Kashmere Gardens Elementary School was established in 1949 as a segregated, all-white school. Alterations include modern siding, doors, metal roofs, and covered walkways. Desegregation started in 1960 when 12 Black children attended the school. Tyronne Raymond Day was admitted and attended the elementary school on September 8, 1960. He was the first Black child to attend an all-White school in HISD. Because of this, Kashmere Gardens Elementary is recommended eligible under Criterion A at the local level in the area of Social History, Civil Rights Movement. By 1984 the school was fully desegregated (www.targethunger.org). These students were not the first to force the issue of desegregation. Delores Ross went to Sherman Elementary School and Beneva Williams went to McReynolds Middle School in 1956 (Bryant 2004). Since the twelve kids at Kashmere were not the first students to attend an all-white school after the Brown vs. Board case, Kashmere Gardens Elementary is recommended not eligible under Criterion A.

The historic-age school buildings have brick siding and walls of horizontal windows in the Contemporary Style. Based on architectural features, materials, and historic aerials (1953) originally there were three main buildings and three smaller buildings. Additional buildings were added north of the courtyard circa 1981, 1995, and 2002 (www.historicaerials.com). Covered walkways were added to connect the buildings. Based on the additions the school lacks integrity of materials, design, workmanship, and setting and is recommended not eligible under Criterion C.

Per the cornerstone plaque on the school the supervising architect was Stayton Nunn with Lloyd and Morgan as the architects. Stayton Nunn got a BS in Architecture from Rice University, he worked for architectural firms, started his own partnership, and taught at Rice University and Is best known for the River Oaks Community Shopping Center. He worked for Houston Independent School District from 1946-1958. (https://av.lib.uh.edu/media_objects/44558d349). Hermon Lloyd graduated from Rice University and teamed with another Rice architectural student Harvin Moore. Their firm designed over 84 houses in Rivers Oaks. After WWII Lloyd partnered with W.B. Morgan. Rice alumni Arthur Jones joined the firm in 1947 and became a partner in 1962 making the firm's name Lloyd Morgan Jones (Koush 2017). The firm became well known in Houston and designed over 2,000 projects.
(https://www.houstontx.gov/planning/HistoricPres/landmarks/11L245_3720_Inwood_Dr_Murray-Bertrand_House.pdf)



Camera direction: Southeast

Resource No.	S5 103	Address:	4901 Lockwood Drive



Camera direction: East



Image oriented East (https://s.hdnux.com/photos/74/60/63/15928556/3/1200x0.jpg circa 1960)

Resource No.	S5 103	Address:	4901 Lockwood Drive



Camera direction: Northeast



Camera direction: Southeast

Resource No.	S5 103	Address:	4901 Lockwood Drive



Image oriented North (www.historicaerials.com 1953)



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 104	Address:	4902 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1940	References:	Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and association		

Description: A one-story Minimal Tradition style building with asbestos siding. The front yard has been converted to parking. Per HCAD the building was converted from residential use to commercial use. Alterations include modern siding, roof material, windows, porch, and a large rear addition.



Camera direction: Northeast

Resource No.	S5 104	Address:	4902 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 105	Address:	4906 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with mixed vinyl and asbestos siding. Alterations include modern windows and replacement siding and porch supports.



Camera direction: Northeast

Resource No.	S5 105	Address:	4906 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 106	Address:	4922 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story strip center with brick siding. Alterations include painted brick, a modern canopy, roof cladding, and doors, and boarded up windows.



Camera direction: Northeast

Resource No.	S5 105	Address:	4922 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 107	Address:	5411 Pardee Street
Resource Type:	Building	Function/Use:	Education/library
Estimated Year built:	1971	References:	Plaque, www.findagrave.com
NRHP Eligibility:	Not eligible as building does not rise to the level of significance necessary for NRHP		

Description: Kashmere Garden Branch Public Library built in 1971 in the New Formalism style as evident in the wide overhanging eaves supported by oblong concrete columns set on a raised concrete foundation. The fluted columns have a cut away base giving the feeling of floating columns while the fluting matches the pattern of wood of the frieze. The architect was Don J. Tomasco and Associates with B.D.G. & Inc. as general contractor. There are no obvious alterations.

"Mr. Tomasco again attended the University of Houston, where he received his fifth year Master's Degree in architecture while also working for the architectural firm of Wilson, Morris, Crain and Anderson, AIA. He became a Registered Architect in the State of Texas in 1961, continuing his practice as an architect and later as a contractor and as a real estate investor/developer. He became a licensed Texas Real Estate Broker in the mid-60's and was a long-standing member of the American Institute of Architects. He became a Texas Registered Interior Designer in February of 1993. Mr. Tomasco began his architectural and construction business in 1957 on a part-time moon-lighting basis" (https://www.findagrave.com/memorial/36680240/donald-joe-tomasco). Donald Joe Tomasco was born in 1931 Houston, Texas, and died in Houston, Texas in 1997. https://www.ancestry.com/genealogy/records/donald-joe-tomasco-24-1kxbmp8



Camera direction: Northwest

Resource No.	S5 107	Address:	5411 Pardee Street



Camera direction: Northeast



Camera direction: Southeast

Resource No.	S5 107	Address:	5411 Pardee Street
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 108	Address:	5008 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1960/1988	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship.		

Description: A one-story building with brick siding and gable roof. A two-story rear addition (1988 per HCAD) has a hip roof. Alterations include a new front door and the rear addition.



Camera direction: Northeast

Resource No.	S5 108	Address:	5008 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 109	Address:	5101 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1962	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials		

Description: A one-story Contemporary Ranch style building with brick and vinyl siding. Alterations include a modern door and modified siding.



Camera direction: Southwest

Resource No.	S5 109	Address:	5101 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 110	Address:	5104 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship.		

Description: A one-story big-box (12,600 sq ft) commercial building with brick siding on the front facade. The canopy extends three quarters of the front façade. Alterations include loss of windows, a change in the fenestration, a modern roof sign, and two modern plywood marquee walls extending beyond the roofline.



Camera direction: East

Resource No.	S5 110	Address:	5104 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 111 Canaan Baptist Church	Address:	5117 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/Religious facility
Estimated Year built:	1958	References:	Plaque, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of design and materials		

Description: A one-story church with Contemporary style influence evident in the flared gable roof. Alterations include additions that greatly increased the massing, plus modern entry doors and steeple. The detached building in the rear parking lot was constructed circa 2004. The congregation celebrated their 116th anniversary on August 7, 2022 (https://www.facebook.com/ThePromisedLandChurch5117/).



Camera direction: Northwest

Resource No.	S5 111	Address:	5117 Lockwood Drive



Camera direction: Northwest



Camera direction: West

Resource No.	S5 111	Address:	5117 Lockwood Drive



Image oriented North (Google Earth 4/2022)



Image oriented North (www.historicaerials.com 1962)

Resource No.	S5 111	Address:	5117 Lockwood Drive



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

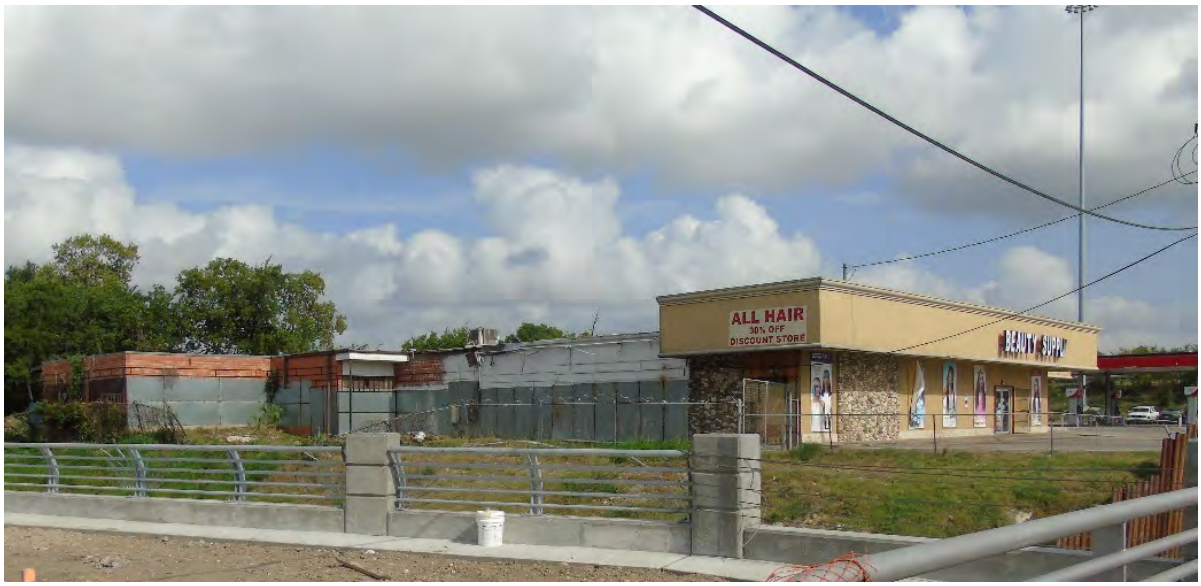
Resource No.	S5 112	Address:	5201 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1962	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship.		

Description: Large one-story commercial building with concrete block construction and some stone veneer. A review of historic aerial photographs shows the building started with two connected buildings, one with a flat roof and one with a gable roof. By 1964 an addition with a gable roof was added to the west facade. By 1966 an addition with a flat roof and rectangular plan was added to the roof façade. Alterations include altered siding, replacement windows, added cantilevered canopy, a gas canopy, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 112	Address:	5201 Lockwood Drive



Camera direction: Northwest



Camera direction: Southwest

Resource No.	S5 112	Address:	5201 Lockwood Drive



Image oriented North (Google Earth 4/2022)



Image oriented North (www.historicaerials.com 1962)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 113	Address:	5601 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1925	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman bungalow style house with vinyl siding and tapered wood porch columns on brick piers. Alterations include modern siding, concrete porch, and added decorative shutters.



Camera direction: Northwest

Resource No.	S5 113	Address:	5601 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 114	Address:	5605 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD, Google Earth, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern siding and a rear addition. By 2016 a large building was added in the rear yard.



Camera direction: Northwest

Resource No.	S5 114	Address:	5605 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 115	Address:	5613 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940/1983	References:	HCAD, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story Minimal Traditional style house with wood siding. Alterations include modern windows, added dormers, a modern door, and a side addition. Per HCAD the house was remodeled in 1983.



Camera direction: Southwest

Resource No.	S5 115	Address:	5605 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 116	Address:	5401 Troost Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1964/2012	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks sufficient significance under NRHP Criteria		

Description: A two-story apartment block in a rectangular plan with brick siding. Alterations include a side addition and modern doors. Per HCAD the building was remodeled in 2012 and notes there are 20 units.



Camera direction: Northeast

Resource No.	S5 116	Address:	5401 Troost Street
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 117	Address:	5701 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1973	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This resource is an apartment complex with four buildings. Three buildings create a "U" shape with parking in the middle. The fourth building is parallel to Lockwood Drive. Each building is two-stories with brick and wood siding. Alterations include modern doors, modern windows, and painted brick. Per HCAD the apartment complex was built in 1967, however the buildings do not appear on aerial photographs until 1973.



Camera direction: West

Resource No.	S5 117	Address:	5701 Lockwood Drive



Camera direction: Southwest



Image oriented North (Google Earth 4/2022)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 118a/b	Address:	5802 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940/1969	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel contains two buildings. The primary is a one-story Minimal Traditional style house with wood siding constructed circa 1940. Alterations include an infilled porch and modern siding, windows, and doors. The second building is a one-story Ranch style building with brick siding. Alterations include a modern porch and new doors, plus a change in the fenestration. Per HCAD the building was used for commerce.



Camera direction: Northeast

Resource No.	S5 118a	Address:	5802 Lockwood Drive



Camera direction: East



Image oriented North (Google Earth 8/2022)

Resource No.	S5 118b	Address:	5412 McGee Street (5802 Lockwood Drive)



Camera direction: Northeast



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed July 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 119	Address:	5815 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1969	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story shopping center with Contemporary style anchor store. Alterations include modern frieze, windows, metal awnings, signage, and stucco siding, plus a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 119	Address:	5815 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 120	Address:	6406 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with no discernable styling, with wood siding and a detached one-car garage. Alterations include replacement porch columns and modern door, an attached carport, and loss of windows on the north façade.

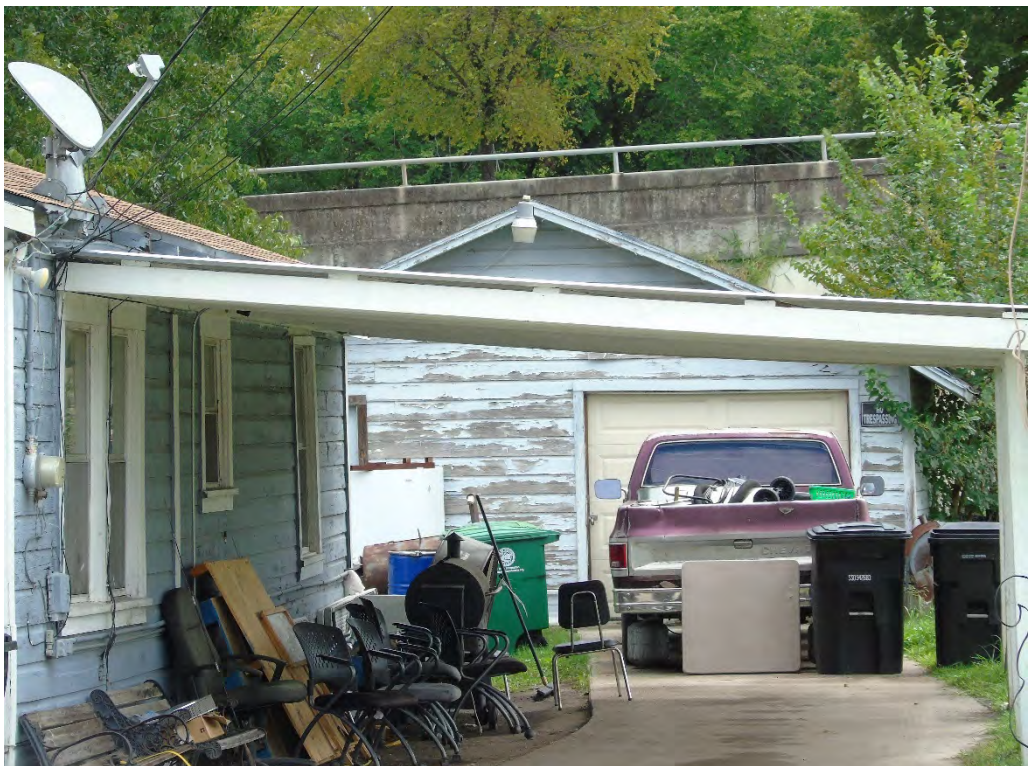


Camera direction: Northeast

Resource No.	S5 120	Address:	6406 Lockwood Drive



Camera direction: Southeast



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 121	Address:	6515 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with minor Craftsman detailing, with mixed wood siding and a detached storage shed. Alterations include modern siding on the front façade, modern door, replacement windows and columns, plus a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 121	Address:	6515 Lockwood Drive



Camera direction: Southwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 122	Address:	6520 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	McAlester 2013
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Craftsman-influenced bungalow with wood siding. Alterations include modern windows and door, replacement porch steps, a change in the fenestration, and a large rear addition.



Camera direction: Northeast

Resource No.	S5 122	Address:	6520 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 123	Address:	6522 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1953	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern windows and siding, and new doors on the detached two-car garage.

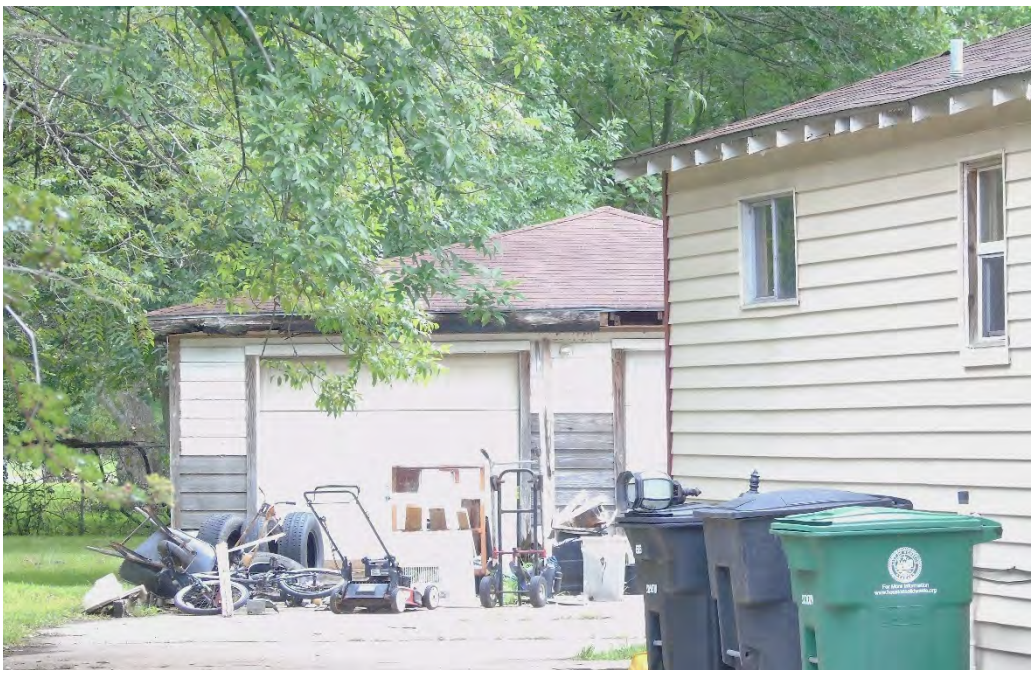


Camera direction: Southeast

Resource No.	S5 123	Address:	6522 Lockwood Drive



Camera direction: East



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 124	Address:	6603 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with asbestos siding. Alterations include modern windows, door, patios, modern siding, and a change in the fenestration.

Note: A second modern house appears in the backyard but is not listed in HCAD.



Camera direction: West

Resource No.	S5 124	Address:	6605 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 125	Address:	6606 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/ vacant – not in use
Estimated Year built:	C. 1964	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story apartment block building with brick siding. Alterations include painted brick, removed and replaced windows, and new doors.



Camera direction: Southeast

Resource No.	S5 125	Address:	6606 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 126	Address:	6612 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1957	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with fiber cement siding. The rear yard has a detached building and flat roof carport. Alterations include modern skirting, windows, siding, plus rear and front porch additions.



Camera direction: Northeast

Resource No.	S5 126	Address:	6612 Lockwood Drive



Camera direction: Southeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 127a/b	Address:	6611 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	1960/2016	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel contains two buildings. Resource S5 127a is a one-story Ranch style duplex with brick and fiber cement siding and a detached carport. Alterations include modern siding, doors, windows, a change in the fenestration, and an added porte cochere. Per HCAD the building was remodeled in 2016.

Resource S5 127b is a small, one-story, rectangular plan house, of no particular style, in the front yard. Alterations include modern windows, siding, and a new door.



Camera direction: Southwest

Resource No.	S5 127a	Address:	6611 Lockwood Drive



Camera direction: West



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 128	Address:	6616 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1957	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S5 128 is a one-story Ranch style house with mixed siding. Alterations include modern windows and altered siding, a change in the fenestration, plus a new roof line indicating an addition. The building was being remodeled at the time of the survey.



Camera direction: Northeast

Resource No.	S5 128	Address:	6616 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 129	Address:	6704 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1947	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include a modern porch and windows, a large rear addition, an attached one-car garage, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 129	Address:	6704 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 130	Address:	6708 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1957	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This is a one-story Minimal Traditional style house. Alterations include modern windows and siding, an added side porch, a change in the fenestration, and a rear addition.



Camera direction: Northeast

Resource No.	S5 130	Address:	6708 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 131a/b	Address:	6705 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1963/1945	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under the NRHP Criteria		

Description: Resource S5 131a is a one-story Ranch style house with brick siding. The house appears to retain its original materials and features. The building does not appear to have any exceptional features and is not part of subdivision representing any innovative planning techniques.

There are multiple buildings designated as Resource S5 131b in the rear yard. Per HCAD there is only one secondary building listed, constructed C. 1945. Both buildings are Ranch or Minimal Traditional style, with vinyl siding and modern windows and no distinctive design features. Visibility was limited due to no rights of entry and the primary building blocking the view.



Camera direction: Northwest

Resource No.	S5 131a	Address:	6705 Lockwood Drive



Camera direction: Northwest



Image orientation: North (Google Earth 12/2021)

Resource No.	S5 131b	Address:	6705 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 132	Address:	6707 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1953	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story modified bungalow of indeterminate style with synthetic siding and a detached two-car garage. Alterations include an extended porch, modern siding and windows, and added metal awnings.



Camera direction: Southwest

Resource No.	S5 132	Address:	6707 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 133	Address:	6716 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style duplex with a detached modern carport. Alterations include modern windows, doors, and siding, removed porch stoop supports, and a rear addition.



Camera direction: Northeast

Resource No.	S5 133	Address:	6716 Lockwood Drive
			
Camera direction: Southeast			

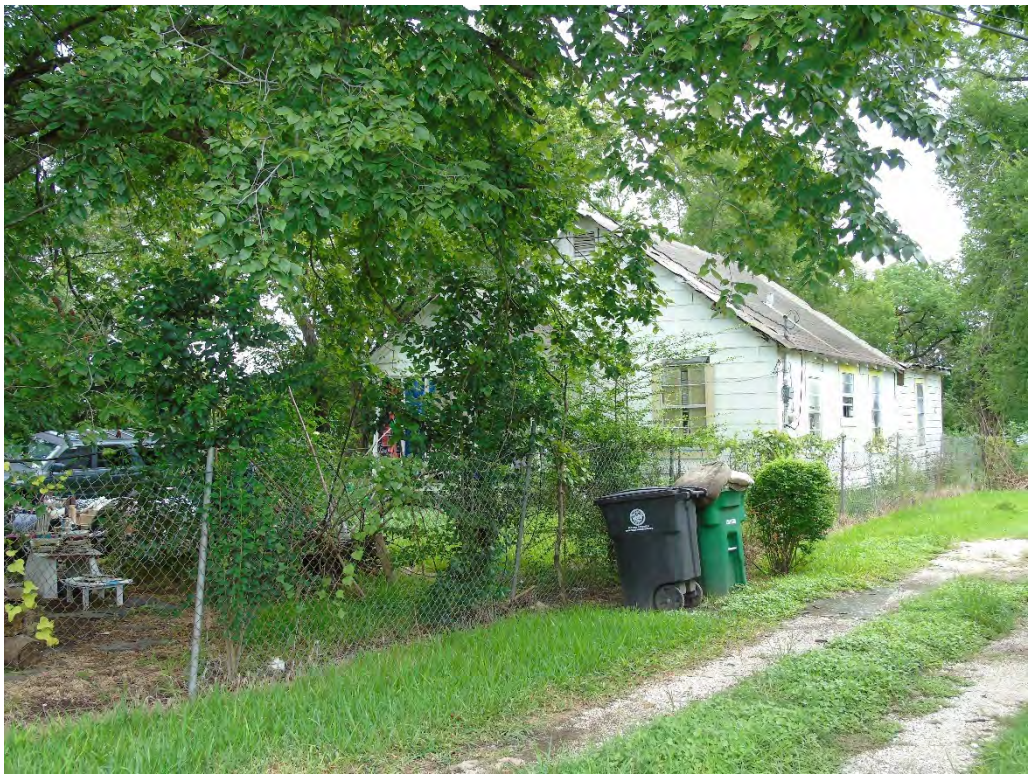
Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 134	Address:	6718 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1930	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story bungalow with very modest Craftsman influences and asbestos siding. Alterations include modern windows, replacement siding, door, and porch columns, and a rear addition.



Camera direction: Southeast

Resource No.	S5 134	Address:	6718 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 135	Address:	6729 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1953	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-store, one-part commercial block building, of no particular style, with brick siding. Alterations include infilled windows creating a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 135	Address:	6729 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 136	Address:	4906 Shreveport Boulevard
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: does not meet significance Criteria		

Description: A one-story commercial building with synthetic siding and exaggerated eaves. Alterations include new doors, siding, and windows, plus a change in the fenestration, a rear addition, and an attached carport.



Camera direction: Southeast

Resource No.	S5 136	Address:	4906 Shreveport Boulevard
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 137	Address:	4843 Shreveport Blvd
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1953	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house. The front façade has brick cladding, and the remaining siding is wood. Alterations include modern windows and siding, plus a change in the fenestration, and an attached carport and garage.

Note: Address noted on house, unable to locate HCAD file.



Camera direction: Southwest

Resource No.	S5 137	Address:	4843 Shreveport Blvd
			
Camera direction: North			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 138a/b	Address:	6915 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1957	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Two houses are on one lot. S5 138a is a one-story Minimal Traditional style house with asbestos and fiber cement siding. Alterations include modern siding, windows, and a door. S5 138b is a one-story Ranch style house with fiber cement siding. Alterations include modern windows, doors, and siding.



Camera direction: Southwest

Resource No.	S5 138a	Address:	6915 Lockwood Drive



Camera direction: Northwest



Image oriented North (Google Earth 12/2018)

Resource No.	S5 138b	Address:	6919 Lockwood Drive



Camera direction: Northwest



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 139	Address:	6902 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1956	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, one-part, commercial block building with mixed siding. Alterations include modern siding and a rear addition.



Camera direction: Northeast

Resource No.	S5 139	Address:	6902 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 140	Address:	7104 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1976	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick siding. Alterations include some siding changes and an added canopy, plus painted brick, multiple additions, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 140	Address:	7104 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 141	Address:	7210 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1956/2012	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with synthetic siding. Per HCAD the house was remodeled in 2012. Alterations include modern doors, windows, and siding, plus a rear addition and a new roofline.



Camera direction: Northeast

Resource No.	S5 141	Address:	7210 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 142	Address:	7221 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern windows and replacement columns, a change in the fenestration, and a rear addition which connects a garage and carport to the house.



Camera direction: Northwest

Resource No.	S5 142	Address:	7221 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 143	Address:	7227 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1938	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with Masonite siding. Alterations include modern windows, siding, and a modified front porch.



Camera direction: Southwest

Resource No.	S5 143	Address:	7227 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 144	Address:	7301 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with brick and fiber cement siding. Alterations include new siding, windows, an attached car port, and additions to the front façade. The front yard has been paved and bricked, and the front yard enclosed with a half concrete block, half wrought iron fence, thus changing the original setting.



Camera direction: Southwest

Resource No.	S5 144	Address:	7301 Lockwood Drive



Camera direction: West



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 145	Address:	7302 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1940/2020	References:	HCAD, Google Earth 2/2020
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Two buildings are on the parcel, a one-story Minimal Traditional style house and a two-story modern house (c. 2020) in the backyard. Alterations include modern siding, door, and windows, a change in the fenestration, and a side addition with metal siding.



Camera direction: Southeast

Resource No.	S5 145	Address:	7302 Lockwood Drive



Camera direction: Northeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 146	Address:	7306 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1947	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with fiber cement siding. Multiple ancillary buildings are located on the lot but were not visible from the right-of-way. Alterations include modern siding, windows, and front porch, plus at least two rear additions.



Camera direction: Northeast

Resource No.	S5 146	Address:	7306 Lockwood Drive



Camera direction: Northeast

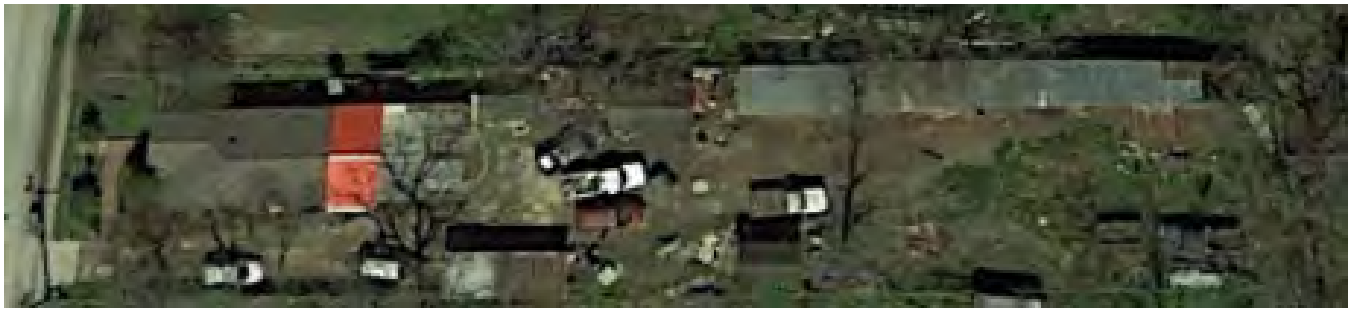


Image oriented North (Google Earth 2/2019)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 147a-c	Address:	7309 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940/1975	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: There are three buildings on this parcel.

Resource S5 147a is a one-story bungalow of no discernable style. Alterations include modern windows and siding, plus a side addition.

Resource S5 147b is a one-story house with wood siding. Alterations include modern columns and windows.

Resource S5 147c is a one-story Ranch style house with wood siding. Alterations include modern windows.



Camera direction: Southwest

Resource No.	S5 147a	Address:	7309 Lockwood Drive



Camera direction: Northwest

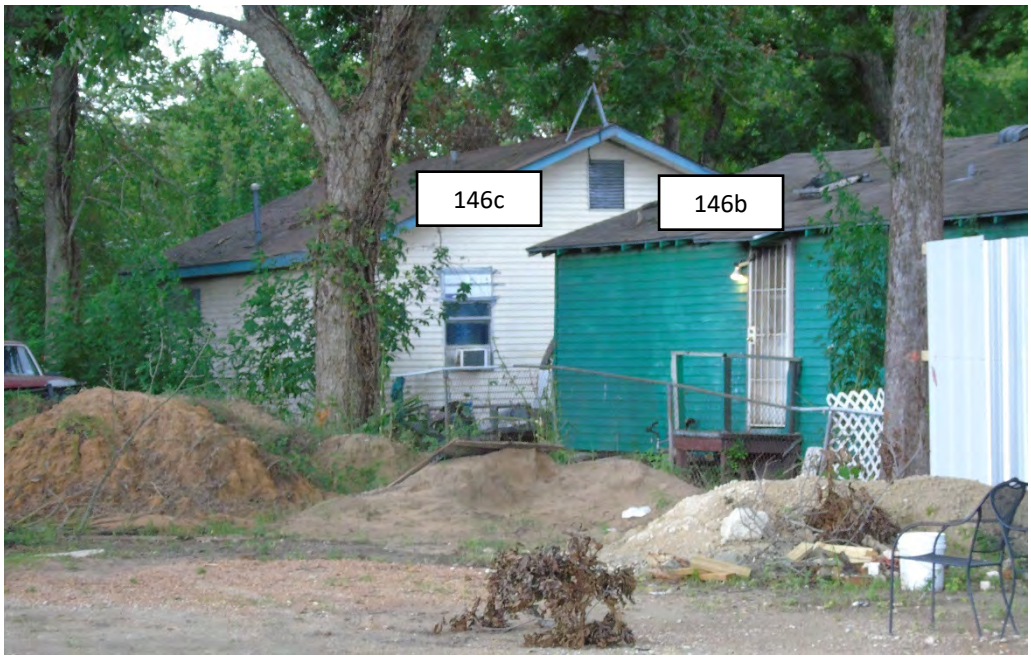


Image oriented North (Google Earth 12/2019)

Resource No.	S5 147bc	Address:	7309 Lockwood Drive



Camera direction: West



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 148	Address:	7405 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1953	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house. Alterations include modern windows and siding, an infilled front porch, and a rear addition.



Camera direction: Southwest

Resource No.	S5 148	Address:	7405 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 149	Address:	7406 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: This parcel contains four identical duplexes. The four Ranch style buildings are one-story with hip roofs and brick siding. There are no major alterations visible. The buildings have no unique architectural design aesthetic and do not represent any planning ideology.



Camera direction: Northeast

Resource No.	S5 149	Address:	7406 Lockwood Drive



Camera direction: Northeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 150	Address:	7419 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow house with Craftsman style influence evident on the front porch. Alterations include an enclosed porch, new shutters, a rear addition, and an attached one-car garage. A modern detached shed is in the rear yard.



Camera direction: Southwest

Resource No.	S5 150	Address:	7419 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 151a/b	Address:	7425 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1945	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel contains two buildings, a one-story Minimal Traditional style, boarded up house (S5 151a) and a one-story commercial building in the Ranch Style with brick siding (S5 151b). Per HCAD both buildings were constructed c. 1945.

S5 151a alterations include boarded up windows and modern siding.

S5 151b alterations include painted brick, some bricked-up windows, a rear addition, and a new door.



Camera direction: Southwest

Resource No.	S5 151a	Address:	7425 Lockwood Drive



Camera direction: Northwest



Image oriented North (Google Earth 12/2019)

Resource No.	S5 151b	Address:	7425 ½ Lockwood Drive



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 152 Calvary Methodist	Address:	4819 Denmark Street
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	1938/1962	References:	Plaque, www.calvaryumchouston.org
NRHP Eligibility:	Not Eligible: lacks integrity of design		

Description: A Contemporary style church with flared roofs and brick siding. Alterations include a side addition with a modern shed roof and a rear addition.

Calvary Methodist Church was organized in 1937 by the late Reverend Hirlton Huey and eight charter members. The first church was erected in 1938 and constructed out of old boxcar lumber. Contractor Amos Walker remodeled the church in 1962.



Camera direction: Northwest

Resource No.	S5 152	Address:	4819 Denmark Street



Camera direction: Southwest



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 153	Address:	4921 Denmark Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: An apartment complex with ten, one-story buildings in the Ranch style. Four of the buildings have a long rectangular plan and hipped roof while the remaining six buildings have a wider rectangular plan with hipped roofs. Alterations include modern doors and painted brick.



Camera direction: Southeast

Resource No.	S5 153	Address:	4921 Denmark Street



Camera direction: East



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 154	Address:	7505 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel contains two buildings, a one-story bungalow with wood siding and a small ancillary building with wood siding. Alterations include missing columns, boarded up windows, missing windows, a change in the fenestration, and a rear addition.



Camera direction: Southwest

Resource No.	S5 154	Address:	7505 Lockwood Drive



Camera direction: Northwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 155	Address:	7512 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1957/1989	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style church with brick siding. New Sunrise Baptist Church Founded in 1976 (Facebook). The rear addition was added by 1989. Alterations include painted brick, an infilled gable, bricked-in windows, a rear addition, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 155	Address:	7512 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 156a/b	Address:	7511 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1951	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: This parcel contains two buildings. **Resource S5 156a** is a one-story building. Based on the front facade windows it may have been used for commercial purposes around 1951 per HCAD. Alterations include modern windows and siding, plus a change in the fenestration and a rear addition.

S5 156b is a two-story garage apartment built 1952 per HCAD. Alterations include new windows, doors, and siding.



Camera direction: Northwest

Resource No.	S5 156a	Address:	7511 Lockwood Drive



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 157	Address:	7516 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1965	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: This complex has four, one-story Ranch style rental houses with brick siding. The front porch is inset and supported by decorative metal columns. The houses do not exhibit any unique architectural features and do not represent any innovative planning ideals.



Camera direction: Southeast

Resource No.	S5 157	Address:	7516 Lockwood Drive



Camera direction: Southeast



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 158	Address:	7521 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1965	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This complex has six, one-story Ranch style houses with brick siding. Alterations include painted brick, new doors, and windows.



Camera direction: Southwest

Resource No.	S5 158	Address:	7521 Lockwood Drive



Camera direction: West



Image oriented North (Google Earth 11/2020)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 159	Address:	7525 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with some Craftsman-influenced detailing and fiber cement siding. A detached garage and carport are in the rear yard. Alterations include modern siding and windows, plus a rear addition.



Camera direction: Northwest

Resource No.	S5 159	Address:	7525 Lockwood Drive



Camera direction: Southwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 160	Address:	7611 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1956	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house. A detached, metal two-car carport is in the front yard. Distance from the right-of-way, vegetation, the carport, and a motorhome blocked the view of the house. Alterations include a new metal porch roof and windows boarded-up with crisscross wood paneling. A six-foot sold metal paneling fence encompasses the front yard changing the setting.



Camera direction: West

Resource No.	S5 160	Address:	7611 Lockwood Drive



Image oriented North (Google Earth 12/2019)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 161	Address:	7618 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1955	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with fiber cement siding. Alterations include new siding, front porch, windows, solar panels, plus a change in the fenestration. A six-foot solid metal-panel fence enclosing the front yard changes the setting.



Camera direction: Northeast

Resource No.	S5 161	Address:	7618 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 162	Address:	7702 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1965	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of design, materials, and setting		

Description: A one-story Ranch style house with brick siding. Alterations include two rear additions, some infilled windows, and a 6-foot metal-panel fence encloses the front yard, changing the setting.



Camera direction: Northeast

Resource No.	S5 162	Address:	7702 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 163	Address:	7709 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with Masonite. A detached carport is in the rear yard. Alterations include a modified front porch, replacement siding, door, and windows, a change in the fenestration, and a rear addition.



Camera direction: Northwest

Resource No.	S5 163	Address:	7709 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 164	Address:	7719 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow of indeterminate styling with vinyl siding. A modern metal shed is in the rear yard. Alterations include new siding, doors, columns, windows, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 164	Address:	7719 Lockwood Drive



Camera direction: Southwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 165	Address:	7724 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with fiber cement siding. Two ancillary structures were added to the parcel after 2014. Alterations include modern windows and siding. A 6-foot fence that encloses the front yard changes the setting.



Camera direction: Southeast

Resource No.	S5 165	Address:	7724 Lockwood Drive



Camera direction: Northeast



Image oriented North (Google Earth 12/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 166	Address:	7727 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1957	References:	www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of design, materials, workmanship, and association		

Description: A one-story metal warehouse with brick wainscot on the front façade. Alterations include painted brick, modern windows and door, added porch canopy, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 166	Address:	7727 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 167	Address:	7805 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1952	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with brick siding. Alterations include painted brick, replacement windows, front and rear additions, plus a 6-foot wood fence in the front yard that changes the setting. Per HCAD the house was remodeled in 2014.



Camera direction: Southwest

Resource No.	S5 167	Address:	7805 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 168	Address:	7809 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1958	References:	HCAD
NRHP Eligibility:	Not Eligible: insufficient significance under NRHP Criteria		

Description: A one-story Ranch style house with brick siding. Alterations include a detached, two-car garage (C. 1978) in the rear yard and an attached carport on the front façade, which is missing its doors. The house appears to retain its original architectural features but does not exhibit any unique design elements nor is it in a subdivision that exhibits any innovative planning methods.



Camera direction: Northwest

Resource No.	S5 168	Address:	7809 Lockwood Drive



Camera direction: Southwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 169	Address:	7901.5 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story house of no discernable style with wood siding and an inset porch. Alterations include new windows, doors, a change in the fenestration, and an attached building with a hip roof (C. 2012). Based on historic aerials and small concrete pad near the front yard fence a building located in the front yard was torn down C. 2013.



Camera direction: Southwest

Resource No.	S5 169	Address:	7901.5 Lockwood Drive
			
Camera direction: West			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 170	Address:	7906 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with fiber cement siding. Alterations include modern siding, doors, windows, and multiple additions.



Camera direction: Northeast

Resource No.	S5 170	Address:	7906 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 171a/b	Address:	7914 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	McAlester 2014, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This parcel has multiple buildings, the house (**S5 171a**) and conglomerate of three buildings (**S5 171b**). A small shed with a metal roof is also present but only visible from aerial photographs. The one-story bungalow of no discernable style has wood siding and inset front porch. Alterations include new windows, an enclosed front porch with metal bars, and a rear addition. **Resource 171b** a one-car garage, a wood building with a gable roof, and a large metal, commercial size garage.



Camera direction: Southeast

Resource No.	S5 171a/b	Address:	7914 Lockwood Drive



Camera direction: Northeast

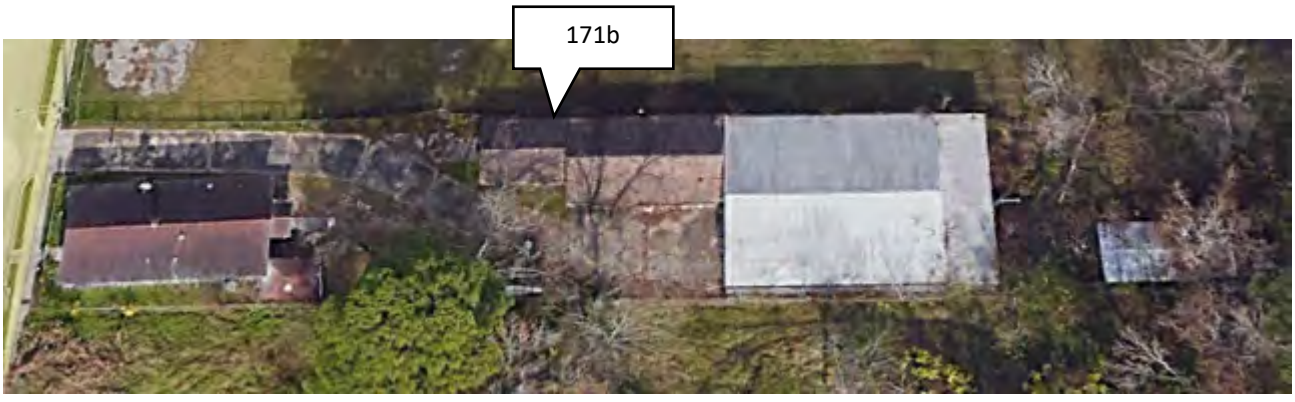


Image oriented North (Google Earth 1/2018)

Resource No.	S5 171b	Address:	7914 Lockwood Drive



Camera direction: Northeast, showing S5 175b conglomerate of buildings



Camera direction: Southeast, showing S5 175b conglomerate of buildings

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 172	Address:	7925 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design, materials, and workmanship		

Description: A one-story Ranch style house with brick siding. Alterations include painted brick and a large rear addition that changed the original roof line.



Camera direction: Southwest

Resource No.	S5 172	Address:	7925 Lockwood Drive



Camera direction: Northwest





Images oriented North (Google Earth). Top image 2018, bottom image 2019

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 173	Address:	7929 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-modified Ranch style house with brick siding and a detached carport. Alterations include a new porch and a rear addition.



Camera direction: Southwest

Resource No.	S5 173	Address:	7929 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 174 New Faith Unity Baptist church	Address:	7930 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1972	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style church with brick siding in an ell plan. Alterations include a side addition and new doors.



Camera direction: Northeast

Resource No.	S5 174	Address:	7930 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 175	Address:	7944 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1966/1993	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A single parcel containing two rows of detached houses for a total of 18 buildings. The Ranch style houses have inset front porches and wood siding. Per HCAD the buildings were remodeled in 1993 and per Google Earth (March 2021) and a visual inspection the buildings have been recently painted and had enclosures added to the porch. Alterations include modern siding, windows, doors, shutters, and porch enclosures.



Camera direction: Southeast

Resource No.	S5 175	Address:	7942 Lockwood Drive



Camera direction: Northeast



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 176	Address:	7948 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/business
Estimated Year built:	C. 1958	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style building with a gable roof and brick siding. The gable end façade has the central front door flanked by a window on either side. Alterations include modern siding in the gable end, windows, a projecting flat roof over the front door, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 176	Address:	7948 Lockwood Drive



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 177	Address:	7949 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1957	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design and setting		

Description: Due to distance from the right-of-way, a privacy wood fence, and vehicles in the front yard, the buildings on this parcel were not readily visible. The building appeared to be a one-story Ranch style house with pink brick siding. Alterations include an attached carport. A 6-foot wood fence encompasses the front yard changing setting.



Camera direction: Northeast

Resource No.	S5 177	Address:	7949 Lockwood Drive



Camera direction: Southeast



Image oriented North (Google Earth 12/2021

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 178	Address:	8004 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1958	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story modified Ranch style house with asbestos siding. A detached carport with a flat roof is in the front yard changing the design. Alterations include a modern front door and skirting material, plus a rear addition.



Camera direction: Southeast

Resource No.	S5 178	Address:	8004 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 179	Address:	8006 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant, not-in-use
Estimated Year built:	C. 1946	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with minor Craftsman detailing and synthetic siding. Alterations include modern windows, doors, siding, and a change in the fenestration. The building is also missing its porch foundation. The building was in a state of rehabilitation.



Camera direction: Northeast

Resource No.	S5 179	Address:	8006 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 180a/b	Address:	8033 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1966/1980	References:	HCAD, (Jones et al. 2016: 7-7)
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: This Modern style service station has an oblong box with a butterfly canopy and three service stations (S5 180a). A horse stable (S5 180b) is at the rear of the property (C. 1980). Alterations include new windows and garage doors, a change in the fenestration, and attached RV carports to the rear and side facades. The service station no longer serves gasoline and is auto repair only.



Camera direction: Southwest

Resource No.	S5 180a/b	Address:	8033 Lockwood Drive



Camera direction: Northwest



Camera direction: South

Resource No.	S5 180b	Address:	8033 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 181	Address:	8020 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store (gas station)
Estimated Year built:	C. 1976	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building of no particular style. The gas pumps with canopy were added circa 2016 per historic aerials and HCAD. Alterations include modern windows and siding, a modified entrance, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 181	Address:	8020 Lockwood Drive
			
Camera direction: Northwest			
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 182	Address:	4825 Weaver Road
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1962	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, and design		

Description: A one-story Ranch style house with mixed wood siding. A detached, modern carport is in the side yard. Alterations include modern windows and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 182	Address:	4825 Weaver Road
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 183	Address:	8215 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with horizontal siding of indeterminate material. Alterations include modern windows and a new door.



Camera direction: Southwest

Resource No.	S5 183	Address:	8215 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 184	Address:	8216 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story house with mixed or indeterminate styling. Alterations include replacement siding of various materials, an enclosed porch, boarded up windows, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 184	Address:	8216 Lockwood Drive
			
Camera direction: East			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 185	Address:	4901 Bostic Street
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1960/2015	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A single parcel containing two rows of detached houses for a total of nine buildings. The Ranch style houses have inset front porches and brick siding. Per HCAD the buildings were remodeled in 2015. Alterations include new doors and new siding in the gable ends.



Camera direction: Northeast

Resource No.	S5 185	Address:	4901 Bostic Street



Camera direction: Northeast



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 186	Address:	4815 Bostic Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with brick siding. A detached modern storage shed is in the front yard changing the setting. Alterations include modern windows and an attached metal carport.



Camera direction: Northwest

Resource No.	S5 186	Address:	4815 Bostic Street



Camera direction: West



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 187	Address:	8401 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with fiber cement siding. Alterations include a large, shed-roof front porch, modern windows and siding, plus a 6-foot, metal-panel fence that changes the setting.



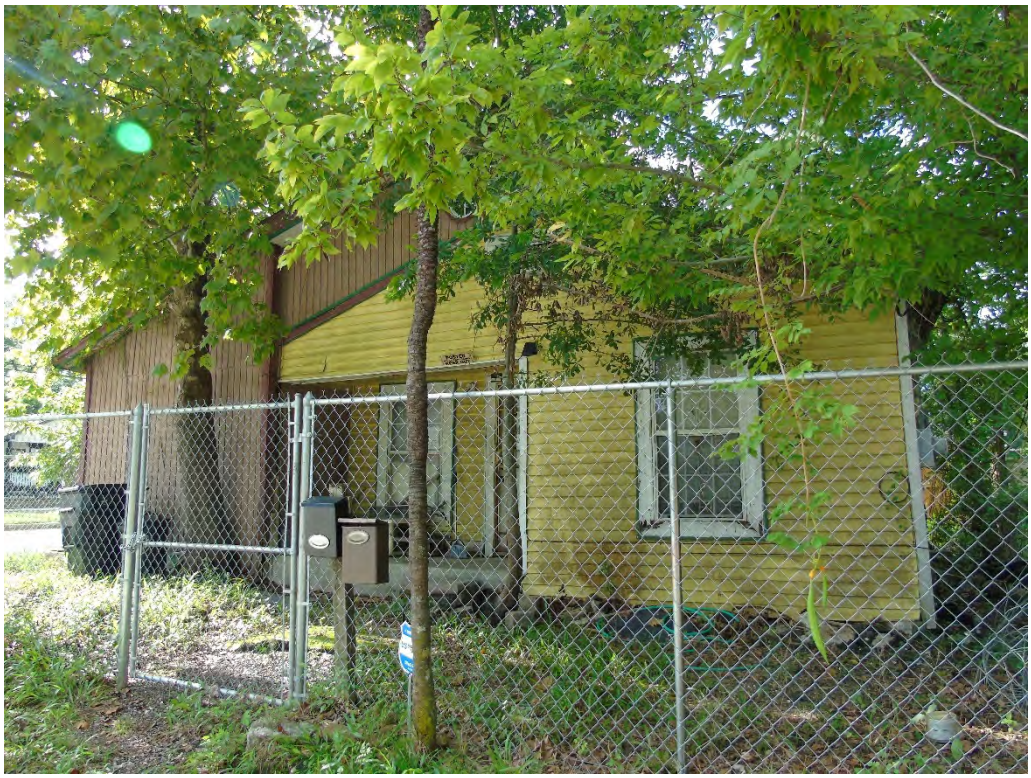
Camera direction: West

Resource No.	S5 187	Address:	8401 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 188	Address:	4822 Keeland Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include a large side addition, modern siding, door, and windows.



Camera direction: Southeast

Resource No.	S5 188	Address:	4822 Keeland Street
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 189	Address:	8503 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1976	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch-influenced commercial building with brick siding. Alterations include new doors and an enclosed porch with security metal bars.



Camera direction: Northwest

Resource No.	S5 189	Address:	8503 Lockwood Drive



Camera direction: Southwest



Camera direction: West

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 190	Address:	8605 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and setting		

Description: A one-story bungalow of no particular style with wood siding. Alterations include modern windows, siding, and door, plus an attached carport.



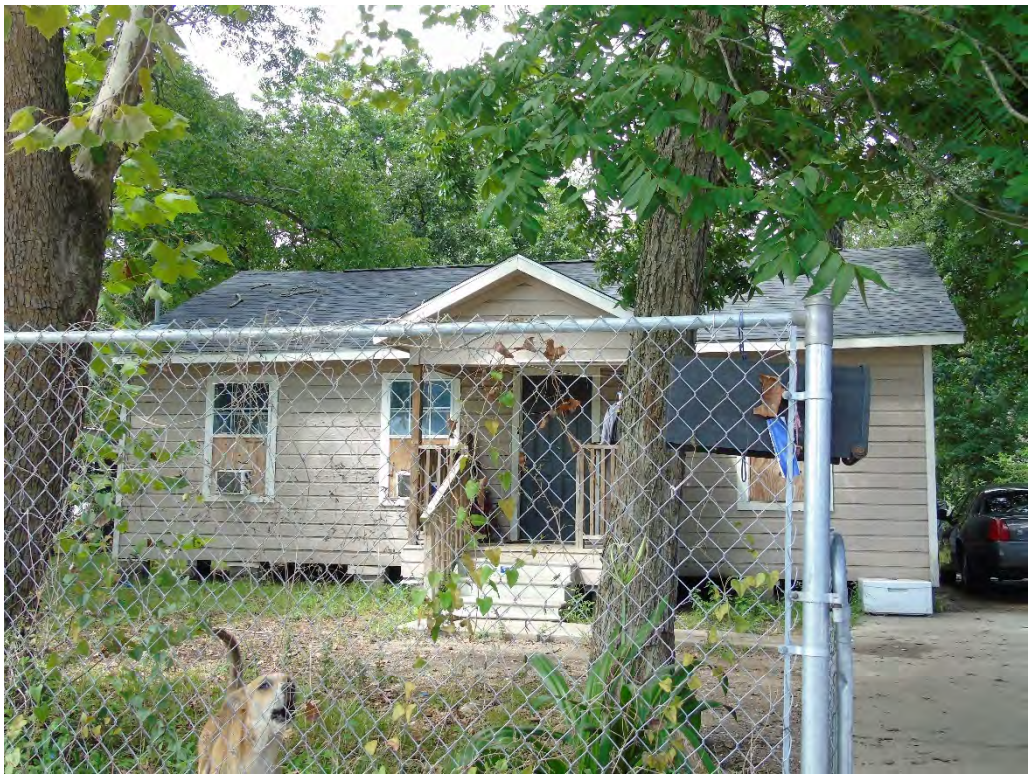
Camera direction: Southwest

Resource No.	S5 190	Address:	8605 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 191	Address:	8609 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1935	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include new windows, partially enclosed windows, a new front door, new porch columns, and a new railing.



Camera direction: Southwest

Resource No.	S5 191	Address:	8609 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 192	Address:	8613 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	Google Earth, McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story bungalow with Craftsman-influenced detailing and wood siding. Alterations include modern windows, metal window awnings, a new front door, and a new porch.



Camera direction: Southwest

Resource No.	S5 192	Address:	8613 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 193	Address:	8617 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl and permastone siding. Alterations include modern siding, windows, an attached carport, and a rear addition.



Camera direction: West

Resource No.	S5 193	Address:	8617 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 194	Address:	8618 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include modern windows and doors, a change in the fenestration, a side and rear addition, plus an attached, two-car metal carport.



Camera direction: Northeast

Resource No.	S5 194	Address:	8618 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 195 Bethlehem COGIC	Address:	8622 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1953	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story church with wood siding. Based on the massing, scale, and form, the church probably started as a house. Alterations include enclosed and new windows, an attached canopy, a modern porch, and a change in the fenestration.



Camera direction: Northeast

Resource No.	S5 195	Address:	8622 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 196	Address:	8709 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include new siding, doors, windows, and side porch, plus a front addition, and an attached carport.



Camera direction: Southeast

Resource No.	S5 196	Address:	8709 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 197	Address:	4902 Laura Koppe Road
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story, oblong box with canopy Modern style gas station constructed of concrete masonry units. Alterations include enclosed windows, modern siding, enclosed service bays, and a change in the fenestration.

https://ftp.txdot.gov/pub/txdot-info/env/toolkit/420-05-gui.pdf



Camera direction: Northeast

Resource No.	S5 197	Address:	4902 Laura Koppe Road



Camera direction: Southwest



Image oriented East (Google Earth 3/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 198	Address:	4901 Laura Koppe Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1951	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story, one-part commercial store. Alterations include new siding, painted brick, a new awning and columns, modern windows, enclosed openings changing the fenestration, and a side addition.



Camera direction: Northeast

Resource No.	S5 198	Address:	4901 Laura Koppe Road



Camera direction: Northeast

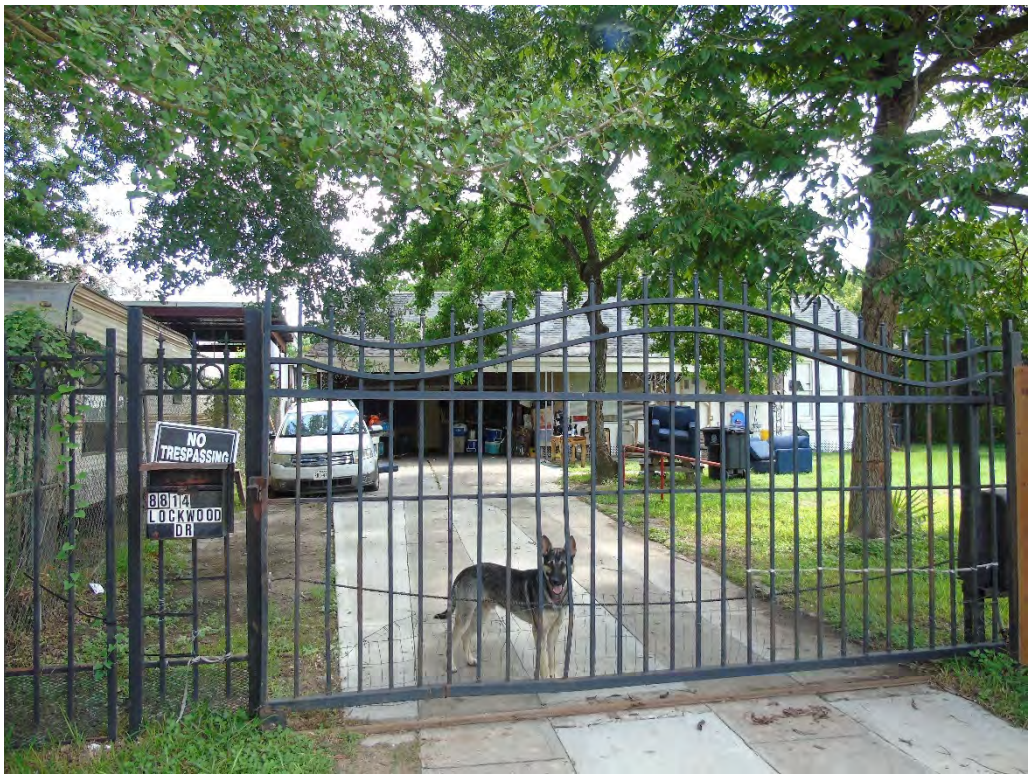


Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 199	Address:	8814 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house. Alterations include new siding and an attached carport. A 6-foot wood and metal privacy fence encompasses the front yard thus changing the original setting.



Camera direction: Southeast

Resource No.	S5 199	Address:	8814 Lockwood Drive
			
Camera direction: Southeast			

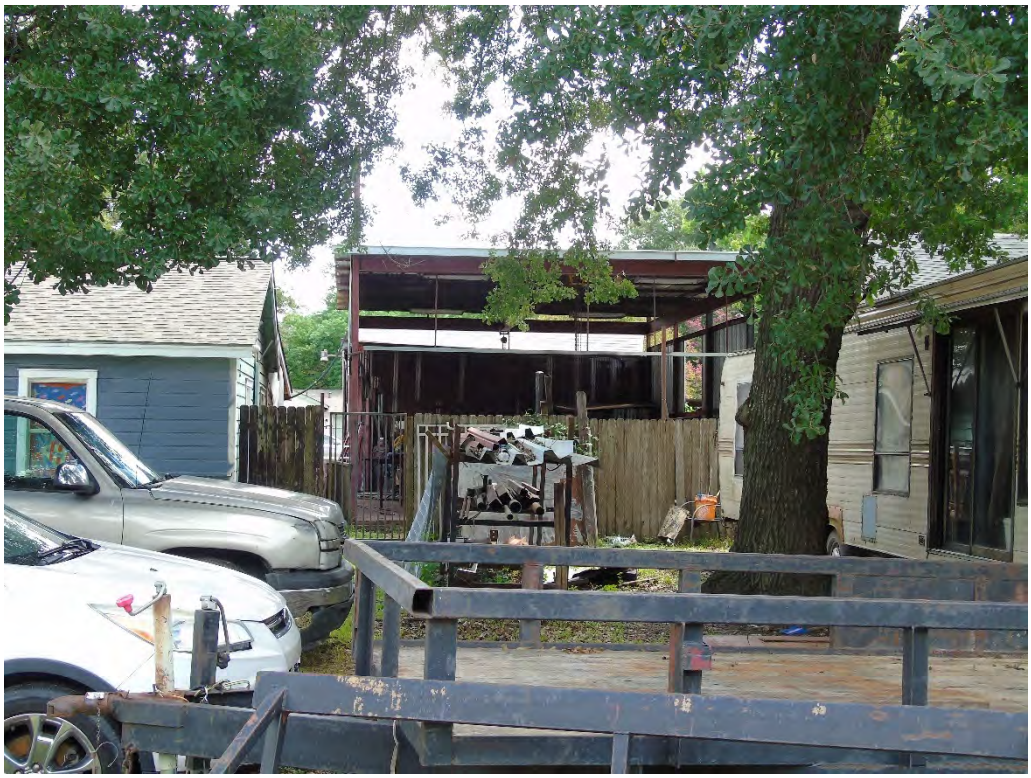
Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 200	Address:	8818 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include a rear addition with different siding and window materials, and a detached RV carport on the front façade.



Camera direction: Southeast

Resource No.	S5 200	Address:	8818 Lockwood Drive
			
Camera direction: East			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 201	Address:	8817 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1967	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with red brick siding. Alterations include new siding in the gable ends and a rear patio addition.



Camera direction: Southwest

Resource No.	S5 201	Address:	8817 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 202a/b	Address:	8901 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S5 202a started as a one-story Minimal Traditional style house. A small addition connects the house to a large addition which is attached to a two-car metal carport. This carport is a part of a metal building that is attached to a pole barn used to shelter a horse. Alterations include modern windows, doors, siding, and multiple rear additions.

The pole barn (**S5 202b**) is located at the west end of the lot and is connected to an animal pen.



Camera direction: Northwest

Resource No.	S5 202a/b	Address:	8901 Lockwood Drive



Camera direction: Southwest



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 203	Address:	8906 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with fiber cement siding. Alterations include a modern door, skirting, windows, porch, and a rear addition.



Camera direction: Northeast

Resource No.	S5 203	Address:	8906 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 204	Address:	8914 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with fiber cement siding. Per HCAD, the house was remodeled in 2015 increasing the square footage from 968 to 1768. Per Google Earth, there is a detached modern building (c. 2015) in the rear yard. Alterations include modern windows, siding, and column, plus a rear addition. The concrete paved front yard changes the setting.



Camera direction: Northeast

Resource No.	S5 204	Address:	8914 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 205	Address:	8913 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include an attached carport, a new door, boarded up windows, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 205	Address:	8913 Lockwood Drive
			
Camera direction: Northwest			

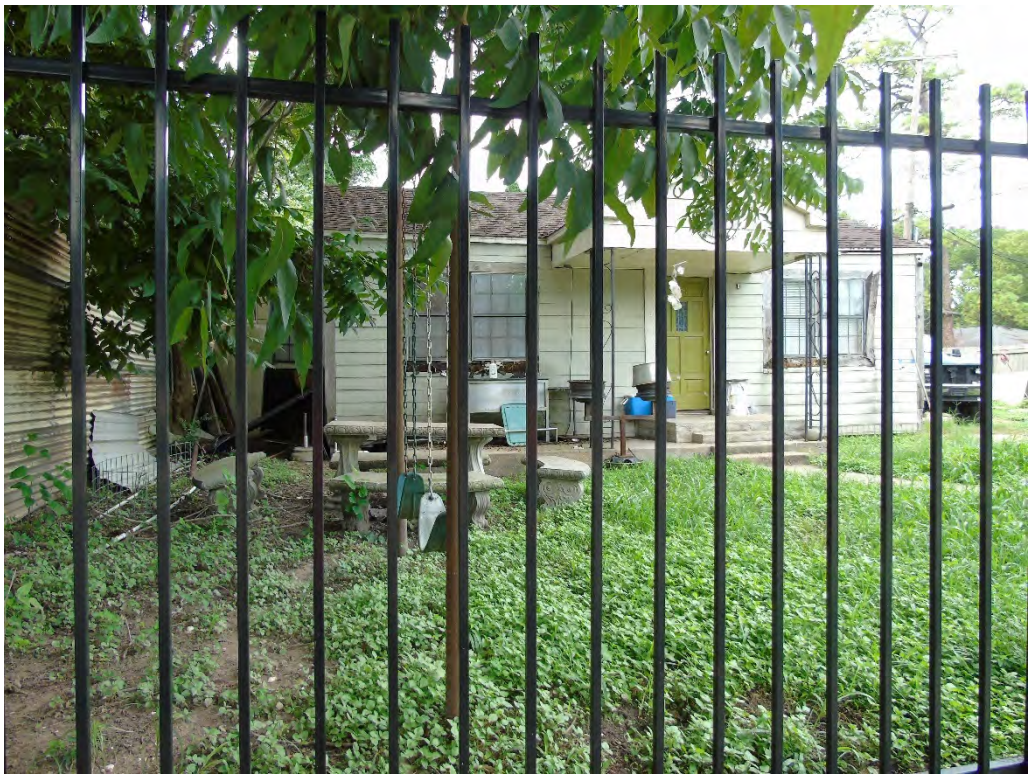
Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 206	Address:	8917 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include new windows and siding, a change in the fenestration, and a rear addition.



Camera direction: Southwest

Resource No.	S5 206	Address:	8917 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 207	Address:	8918 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with mixed siding of wood, asbestos shingle, and Masonite. Alterations include the replacement siding, modern windows, an enclosed porch, and a rear addition.



Camera direction: Northeast

Resource No.	S5 207	Address:	8918 Lockwood Drive
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 208	Address:	9002 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1952	References:	HCAD
NRHP Eligibility:	Not Eligible: does not meet significance Criteria		

Description: A one-story Minimal Traditional style house with vinyl siding. Alterations include modern siding, windows, door, columns, and an attached carport/patio on the side façade.



Camera direction: East

Resource No.	S5 208	Address:	9002 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 209	Address:	4825 Boicewood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and workmanship		

Description: A single parcel containing one row of detached duplexes for a total of three buildings. The one-story Ranch style houses have protruding front porches and brick siding. Alterations include new columns and new doors.



Camera direction: Southwest

Resource No.	S5 209	Address:	4825 Boicewood Drive



Camera direction: West



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 210	Address:	9007 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1955	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with asbestos siding. The building is in a deteriorated state. Alterations include an enclosed garage and boarded-up windows.



Camera direction: Southwest

Resource No.	S5 210	Address:	9007 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 211	Address:	9009 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1956	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with vinyl siding. Alterations include a modern door and columns, an attached carport, and a rear addition.



Camera direction: Southwest

Resource No.	S5 211	Address:	9009 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 212	Address:	9015 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1952	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Ranch style house with vinyl siding. Alterations include a new garage door and a change in siding.



Camera direction: Southwest

Resource No.	S5 212	Address:	9015 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 213	Address:	9017 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1953	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with wood siding. Alterations include modern windows, skirting, porch column, porch railing, and door.



Camera direction: West

Resource No.	S5 213	Address:	9017 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 214	Address:	4902 Fitch Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with wood siding. A modern three-car detached carport is in the rear yard. Alterations include modern windows, a rear addition, and a change in the fenestration. A 6-foot wood fence encloses the front yard changing the setting.



Camera direction: Southeast

Resource No.	S5 214	Address:	4902 Fitch Street



Camera direction: Southeast



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 215	Address:	9102 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with vinyl siding and faux stone wainscot. Alterations include a modern front porch, door, siding, windows, and a two-story rear addition.



Camera direction: Southeast

Resource No.	S5 215	Address:	9102 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 216	Address:	9106 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with brick siding. A detached one-story building is in the rear yard. Alterations include modern windows, a large rear addition (c. 2020), and a change in the fenestration. At the time of the survey the house was being covered with synthetic siding.



Camera direction: Northeast

Resource No.	S5 216	Address:	9106 Lockwood Drive



Camera direction: Southeast



Camera direction: East

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 217	Address:	9113 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with synthetic siding. Alterations include a paved front yard that changes the setting, modern siding, windows, porch column, and door.



Camera direction: Southeast

Resource No.	S5 217	Address:	9113 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 218	Address:	4906 Firnat Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and workmanship		

Description: A one-story Ranch style house. Alterations include new siding in the gable ends, and replacement windows and door.



Camera direction: Southwest

Resource No.	S5 218	Address:	4906 Firnat Street
			
Camera direction: South			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 219	Address:	9202 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1964	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story Ranch style house with limited visibility due to vegetation. Alterations include new and enclosed windows, and new siding in the gable ends.



Camera direction: East

Resource No.	S5 219	Address:	9202 Lockwood Drive
			
Camera direction: North			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 220	Address:	9201 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story house Ranch style with synthetic siding. A detached modern carport is in the rear yard. Alterations include some modern siding, windows, and door. A 6-foot wood fence encompasses the front yard changing the setting.



Camera direction: East

Resource No.	S5 220	Address:	9201 Lockwood Drive



Camera direction: Northeast



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 221	Address:	9206 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with mixed siding. Alterations include an enclosed garage, siding changes, and a rear addition.



Camera direction: East

Resource No.	S5 221	Address:	9206 Lockwood Drive
			
Camera direction: Northeast			

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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 222	Address:	9210 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with asbestos siding. There is a modern storage shed in the rear yard. Alterations include a new front porch with a ramp and a rear addition.



Camera direction: Southeast

Resource No.	S5 222	Address:	9210 Lockwood Drive



Camera direction: Northeast



Camera direction: East

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Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 223	Address:	9205 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1972	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and setting		

Description: A one-story single-bay metal warehouse. Alterations include a side and rear addition, and a new awning over the pedestrian door.



Camera direction: Northwest

Resource No.	S5 223	Address:	9205 Lockwood Drive
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 224	Address:	9213 Lockwood Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1971	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials		

Description: A one-story three-bay metal warehouse. Alterations include painted metal and a missing garage door for the middle bay.



Camera direction: West

Resource No.	S5 224	Address:	9213 Lockwood Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 225	Address:	9222 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1964	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: An apartment complex with two, two-story buildings, and one, one-story building that create a U plan around a central parking lot. Alterations include new siding, painted brick, and modern doors and windows.



Camera direction: Southeast

Resource No.	S5 225	Address:	9222 Lockwood Drive



Camera direction: Northeast



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 226	Address:	9302 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/vacant – not in use
Estimated Year built:	C. 1946	References:	HCAD, Goggle Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and setting		

Description: A one-story Minimal Traditional style house with wood siding. Alterations include some new windows, a modern door, a missing front porch, and a rear addition.



Camera direction: Southeast

Resource No.	S5 226	Address:	9302 Lockwood Drive



Camera direction: Northeast

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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 227	Address:	9305 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Minimal Traditional style house with wood siding. The building was undergoing rehabilitation at the time of the survey. Alterations include modern windows, altered siding, an enclosed or added side porch with bay window, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 227	Address:	9305 Lockwood Drive
			
Camera direction: Southwest			

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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 228 Community Baptist Church	Address:	9311 Lockwood Drive
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	1972/ C. 1995	References:	Plaque, Google Earth
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Contemporary style church with brick siding and wing roof. Alterations include modern siding, entrance doors, enclosed windows that change the fenestration, and a side addition (C. 1995).

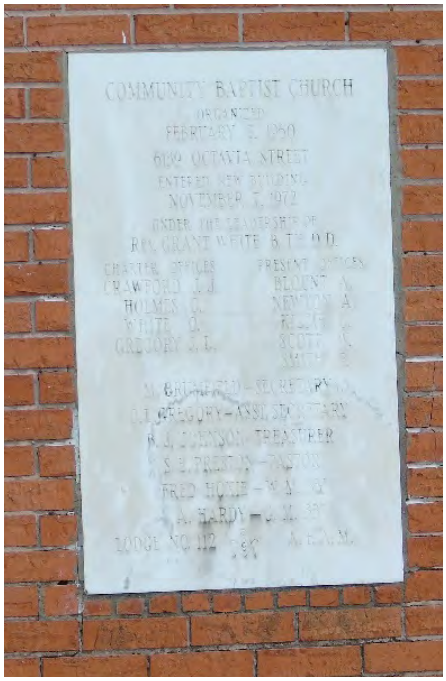


Camera direction: Southwest

Resource No.	S5 228	Address:	9311 Lockwood Drive



Camera direction: Northwest



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 229	Address:	9310 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house. Alterations include new siding, a modern door and windows, added metal window awning, column, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 229	Address:	9310 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 230	Address:	4826 Ireland Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house. A detached garage is in the side yard. Alterations include modified siding and modern garage doors.



Camera direction: Southwest

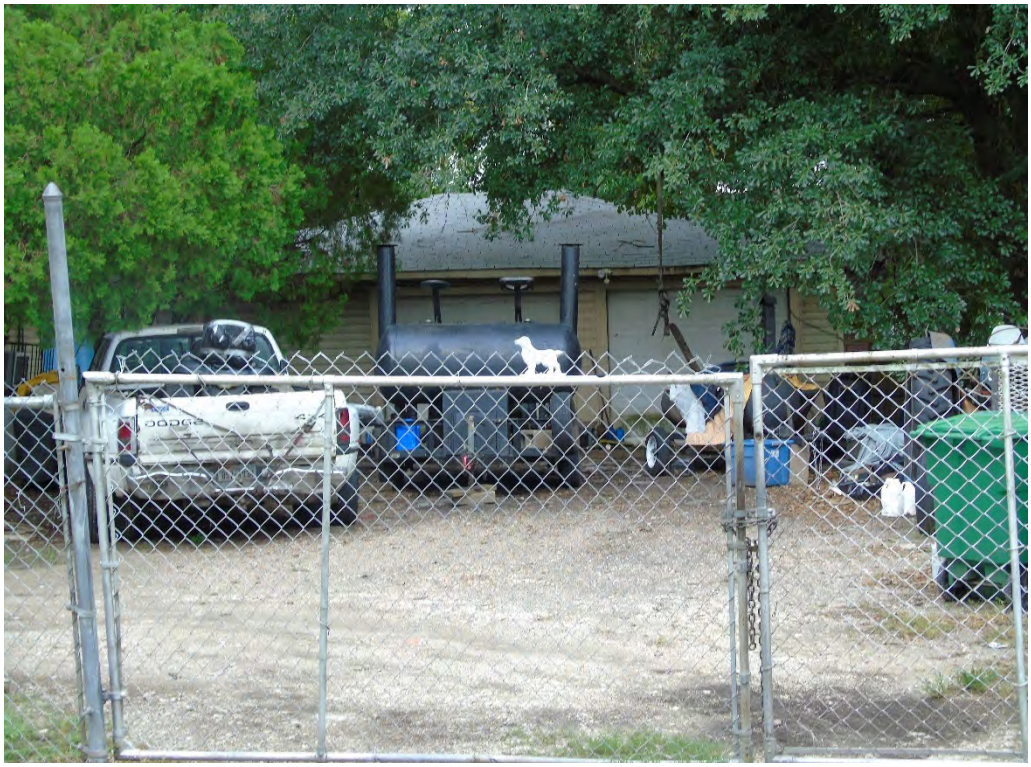
Resource No.	S5 230	Address:	4826 Ireland Street



Camera direction: Southeast



Camera direction: Northwest

Resource No.	S5 230	Address:	4826 Ireland Street
			
Camera direction: South			

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 231	Address:	9401 Lockwood Drive
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1946	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with brick siding. Alterations include a side deck, new siding in the gable ends, new garage doors, and a rear addition.



Camera direction: Southwest

Resource No.	S5 231	Address:	9401 Lockwood Drive



Camera direction: Northwest



Camera direction: Northeast

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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 232 Lockwood Funeral	Address:	9402 Lockwood Drive
Resource Type:	Building	Function/Use:	Funerary/mortuary
Estimated Year built:	C. 1967/1984	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Lockwood Funeral home started as a one-story Contemporary style building with brick siding. Alterations include modern windows, an attached carport, a two-story rear addition, and a large addition to the north façade that almost doubled the size of the original footprint (C. 1984).



Camera direction: Southeast

Resource No.	S5 232	Address:	9405 Lockwood Drive



Camera direction: Northeast



Image oriented North (Google Earth 12/2019)

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 233	Address:	4902 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick siding. Alterations include a new awning, windows enclosed with brick, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 233	Address:	4902 Tidwell Road
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 234	Address:	4821 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1962	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building. Alterations include an added parapet and canopy, enclosed windows, modern siding, and an addition on the front façade. Multiple modern buildings and structures are located on the parcel.



Camera direction: Northwest

Resource No.	S5 234	Address:	4821 Tidwell Road



Camera direction: North



Camera direction: Northeast

Resource No.	S5 234	Address:	4821 Tidwell Road



Camera direction: Northeast



Image oriented North (www.historicaerials.com) Left photo 1976, right photo 2018.

Houston's METRO Bus Rapid Transit (BRT) University Line
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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 235	Address:	4808 Tidwell Road
Resource Type:	Building	Function/Use:	Religion/religious facility
Estimated Year built:	C. 1978	References:	McAlester 2014, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story church with wood siding. Alterations include modern siding, windows, and doors, and a rear addition.



Camera direction: Southeast

Resource No.	S5 235	Address:	4808 Tidwell Road
			
Camera direction: Southwest			

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Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 236	Address:	4720 Tidwell Road
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1952	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story Ranch style house with vinyl siding. Alterations include modern siding, door, and windows, a modern two-car carport, and a detached garage.



Camera direction: Southwest

Resource No.	S5 236	Address:	4720 Tidwell Road



Camera direction: Southeast



Camera direction: South

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 237	Address:	4713 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1978	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A two-story metal warehouse. Alterations include a rear addition, a front porch addition with a gable-roof awning and wood screening, new pedestrian doors, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 237	Address:	4713 Lockwood Drive
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 238a/b	Address:	4635 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1940	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: Resource S5 238a is a one-story, one-part commercial multi-bay building with a shed roof. Alterations include new columns, siding, painted brick, a rear addition, and a change in the fenestration.

Resource S5 238b is a one-story, gable roof building with wood and synthetic siding. Alterations include a shed roof addition on the gable end and synthetic siding.



Camera direction: Southwest

Resource No.	S5 238a	Address:	4635 Tidwell Road



Camera direction: Northwest



Camera direction: North

Resource No.	S5 238b	Address:	4635 Tidwell Road



Camera direction: Northeast



Camera direction: North

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 239	Address:	4626 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story building of no particular style. Alterations include replacement siding, altered windows, a rear addition, and a change in the fenestration.



Camera direction: South

Resource No.	S5 239	Address:	4626 Tidwell Road
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 240	Address:	4319 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design		

Description: A one-story, gable roof, three-bay, metal warehouse with rolling metal garage doors. Alterations include a side addition with multiple open bays.



Camera direction: Northwest

Resource No.	S5 240	Address:	4319 Tidwell Road



Camera direction: Northeast



Camera direction: Northeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 241	Address:	4317 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1970	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, gable-roof, two-bay warehouse. The front façade is brick, and the side facades are metal. Alterations include new siding, a new roof, a metal awning, and enclosed windows.



Camera direction: Northwest

Resource No.	S5 241	Address:	4317 Tidwell Road
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 242	Address:	4315 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1970	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story, three-bay concrete block warehouse with a brick front façade. Alterations include painted brick, enclosed bays, a modern garage door, and a new pedestrian door, plus a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 242	Address:	4315 Tidwell Road
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 243	Address:	4202 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1970	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, setting, and association		

Description: This building was formally a gas station with an oblong box and attached canopy. Alterations include new metal siding, a change of use to an office, and a new metal fence.



Camera direction: Southeast

Resource No.	S5 243	Address:	4202 Tidwell Road
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 244	Address:	4104 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1968	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design, materials, and workmanship		

Description: A one-story metal warehouse with a gable roof. Alterations include modern siding and doors, a rear addition, a side addition, and a change in the fenestration.



Camera direction: Southeast

Resource No.	S5 244	Address:	4104 Tidwell Road



Camera direction: Southwest



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 245a/b	Address:	4005 Tidford Street
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1940/1982	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: There are two resources on this property, the primary dwelling facing Tilford Street and the detached garage/storage.

Resource S5 245a is a one-story house in the Minimal Traditional style with an end gable roof. Alterations include a modern porch, new siding, plus a new roof and rear addition in 2009.

Resource S5 245b is a one-story garage with storage. Per historic aerials the garage/storage building was added to the parcel C. 1982. Alterations include an enclosed garage opening.



Camera direction: South, from Tidwell Road showing rear façade.

Resource No.	S5 245b	Address:	4005 Tilford Road



Image Direction: North, from Tilford Street showing front façade of primary house (Google Earth 5/2022).

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 246	Address:	3912 Tidwell Road
Resource Type:	Building	Function/Use:	Domestic/single dwelling
Estimated Year built:	C. 1945/1957	References:	HCAD, www.historicaerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-and-a-half story Ranch style house. Alterations include modern siding, new windows, a new door, a detached garage, a large rear addition C. 1957, and a change in the fenestration.



Camera direction: North

Resource No.	S5 246	Address:	3912 Tidwell Road



Camera direction: Northeast



Camera direction: Northwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 247	Address:	3814 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/restaurant
Estimated Year built:	C. 1950	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with gable roof and wood siding. Alterations include a modern front patio, new siding and garage doors, enclosed windows, a rear addition, and a change in the fenestration.



Camera direction: Northwest

Resource No.	S5 247	Address:	3814 Tidwell Road
			
Camera direction: Northeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 248	Address:	3214 Tidwell Road
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1963	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials and workmanship		

Description: An apartment complex with three buildings, each two-story. Alterations include modern windows, new siding, and new doors.



Camera direction: Southwest

Resource No.	S5 248	Address:	3214 Tidwell Road



Camera direction: Southeast



Camera direction: Southeast

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 249	Address:	3132 Tidwell Road
Resource Type:	Building	Function/Use:	Domestic/multiple dwelling
Estimated Year built:	C. 1963	References:	McAlester 2014
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A two story apartment complex with brick siding. Alterations include modern windows, new and enclosed doors, and added brackets.



Camera direction: Southwest

Resource No.	S5 249	Address:	3132 Tidwell Road



Camera direction: Southeast



Camera direction: Southwest

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 250	Address:	3126 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/ specialty shop
Estimated Year built:	C. 1965	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick siding. Alterations include painted brick and a detached carport.



Camera direction: Southeast

Resource No.	S5 250	Address:	3126 Tidwell Road
			
Camera direction: Southwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 251	Address:	3110 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1966	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story strip center. Alterations include painted brick, new windows, awnings, and a change in the fenestration.



Camera direction: Southwest

Resource No.	S5 251	Address:	3110 Tidwell Road
			
Camera direction: Southeast			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 252	Address:	3054 Tidwell Road
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1960	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: This resource is a storage yard for building materials. The historic age building is a shed roof metal warehouse. Alterations include a building attached to the front façade currently used as an office, a modern metal carport attached to the side façade, and a shed roof addition on the rear façade.



Camera direction: Southeast

Resource No.	S5 252	Address:	3054 Tidwell Road



Camera direction: Southwest

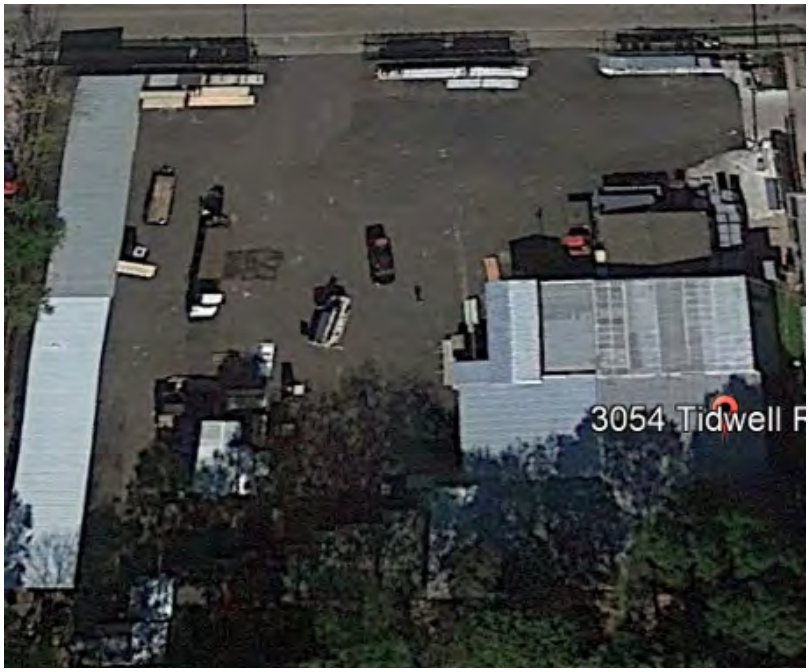


Image oriented North (Google Earth 1/2021)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 253	Address:	9420 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/specialty store
Estimated Year built:	C. 1962	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building. Alterations include modern windows, a new awning, and a side addition.



Camera direction: South

Resource No.	S5 253	Address:	9420 Jensen Drive
			
Camera direction: South			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 254	Address:	9502 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/department store
Estimated Year built:	C. 1962/1990	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of design		

Description: A one-story New Formalism style department store with pebbledash and brick siding. The overhanging eaves are supported by slim square columns creating a wrap-around covered patio. Alterations include painted brick, a new door, and a metal side addition added C. 1990 per HCAD.



Camera direction: Northeast

Resource No.	S5 254	Address:	9502 Jensen Drive
			
Camera direction: Northwest			

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 255	Address:	9607 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/warehouse
Estimated Year built:	C. 1966/2002	References:	HCAD
NRHP Eligibility:	Not Eligible: does not rise to significance criteria		

Description: Resources S5 255 is a fenced-in compound containing buildings and parked commercial vehicles such as concrete mixers. Three structures were visible: a one-story building with metal gable roof, a flat roof metal carport, and a gable-roof building with press-board siding. No right-of-entry. Portions of structures that were visible did not appear to have any unique architectural features.



Camera direction: Northwest

Resource No.	S5 255a	Address:	9607 Jensen Drive



Camera direction: Northwest



Camera direction: Southwest

Resource No.	S5 255b	Address:	9607 Jensen Drive
			
Camera direction: Southwest			

Resource No.	S5 255a/b	Address:	9607 Jensen Drive

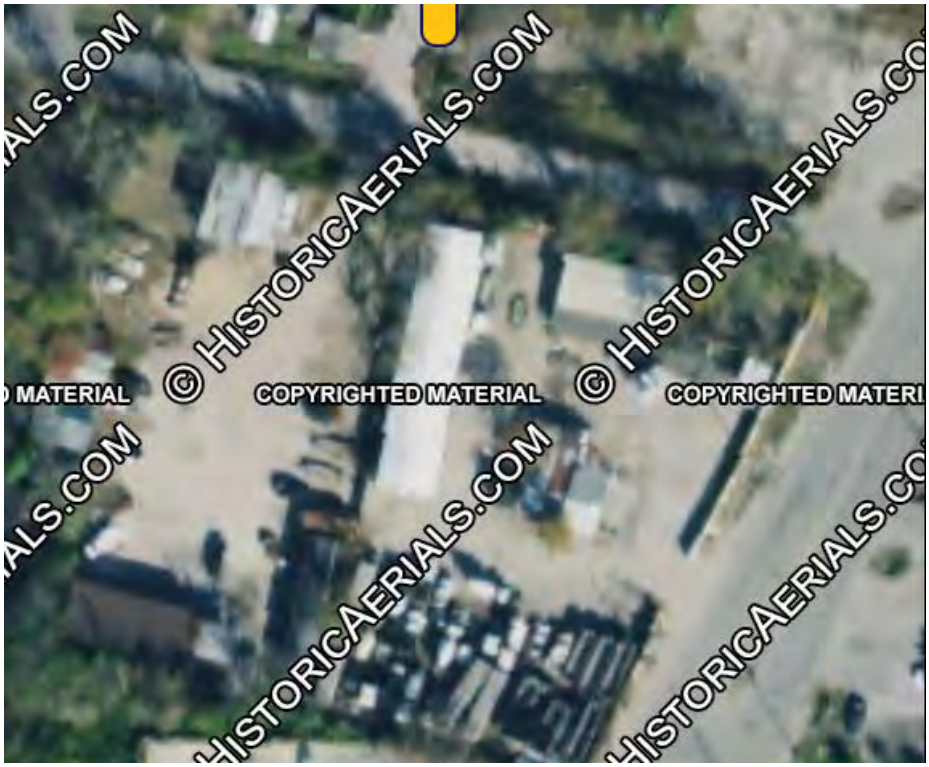


Image oriented North (Google Earth 1/2018)



Image oriented North (Google Earth 1/1957)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 256	Address:	9629 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1953	References:	HCAD, historic aerials.com
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: A one-story commercial building with brick and wood siding. Alterations include modified siding, a new awning over the front entrance, and multiple additions. Based on the pitch of the rear roof and historic aerial photographs, the building started out as house.



Camera direction: Southwest

Resource No.	S5 256	Address:	9629 Jensen Drive



Camera direction: Northwest

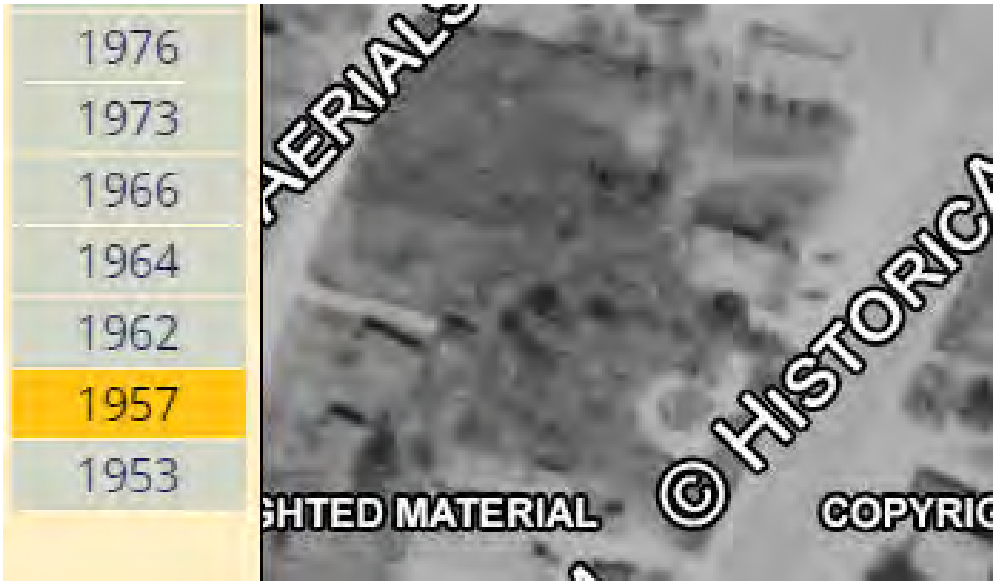


Image oriented North (www.historicaerials.com 1957)

Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

Resource No.	S5 257	Address:	9631 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1973	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, and workmanship		

Description: A one-story commercial building with brick and wood siding. Alternations include new windows and a new canopy, enclosed windows, modern siding, and multiple additions.



Camera direction: Southwest

Resource No.	S5 257	Address:	9631 Jensen Drive



Camera direction: Southeast



Image oriented West (Google Earth 1/2019)

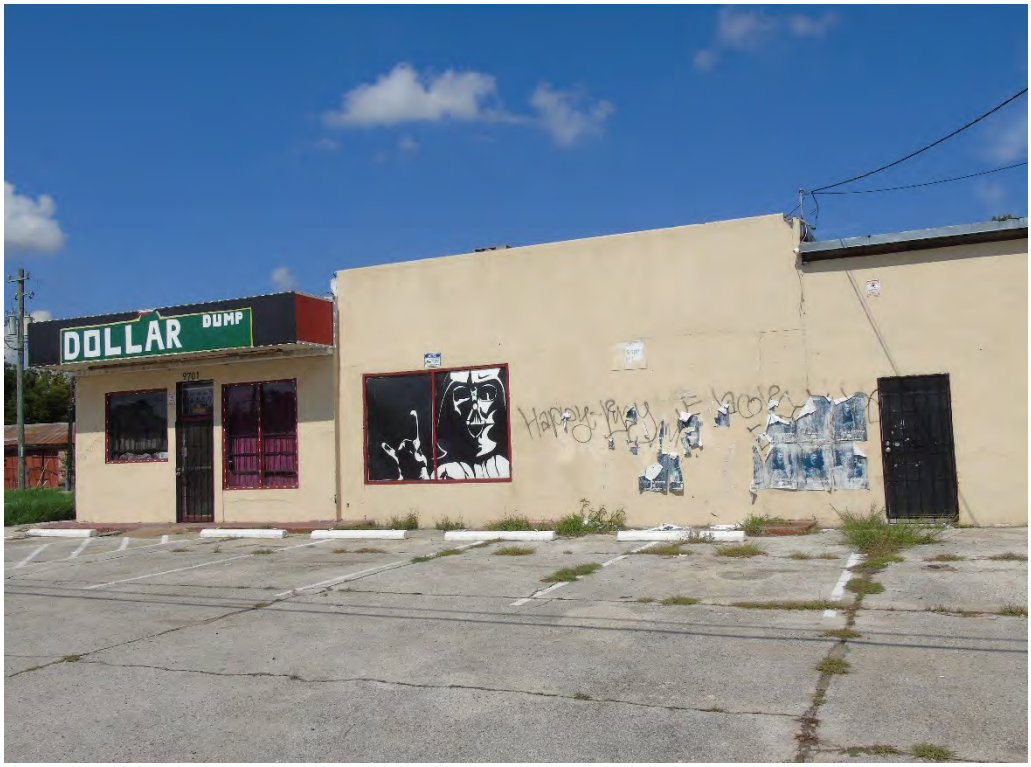
Houston's METRO Bus Rapid Transit (BRT) University Line
Historic Resources Reconnaissance Survey (cut-off date 1977)
Segment 5
Surveyed August 2022
Surveyors: Cherise Bell and Erica Koteras, AmaTerra Environmental, Inc.

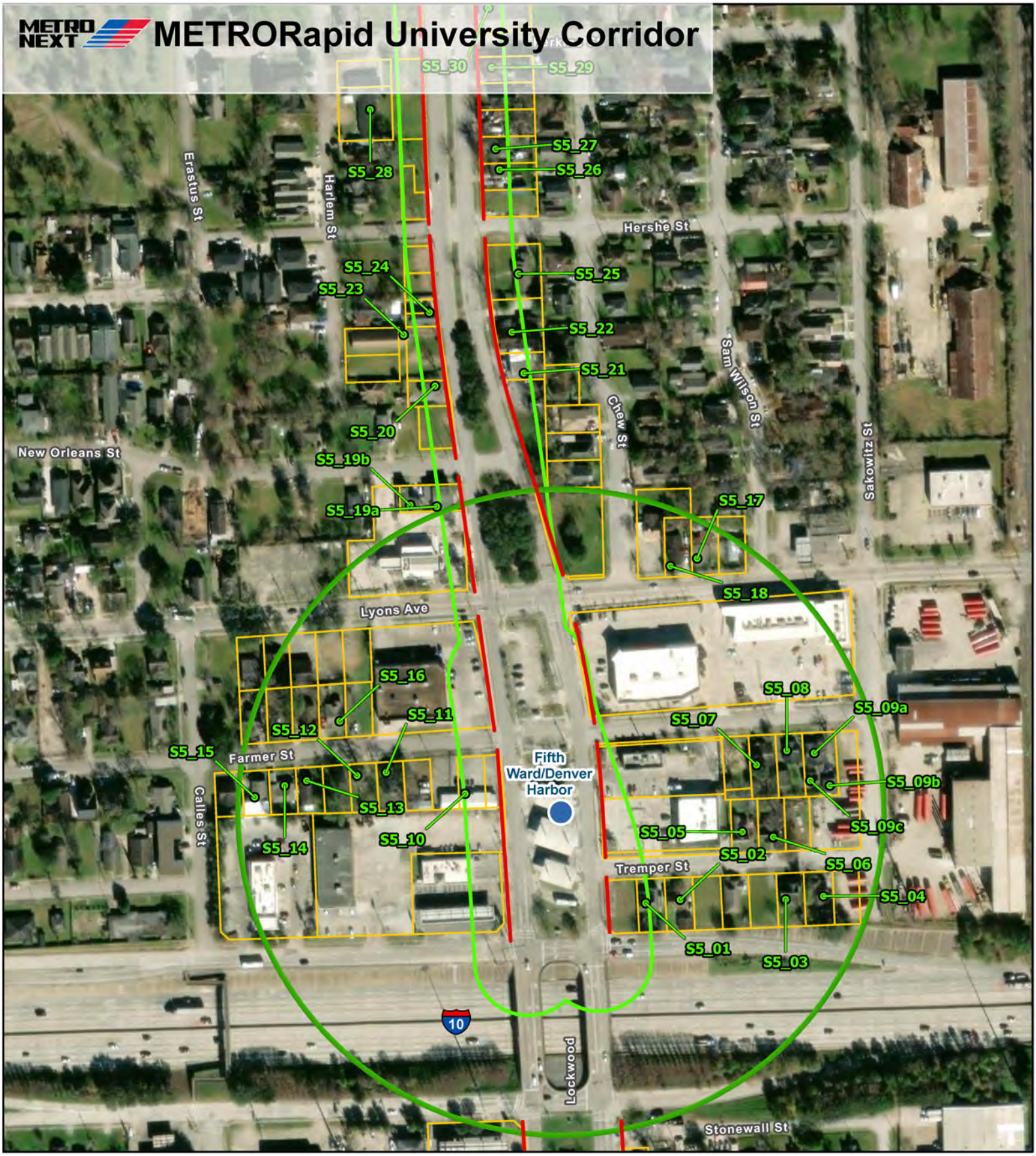
Resource No.	S5 258	Address:	9701 Jensen Drive
Resource Type:	Building	Function/Use:	Commerce/vacant – not in use
Estimated Year built:	C. 1953	References:	HCAD
NRHP Eligibility:	Not Eligible: lacks integrity of materials, design, workmanship, and association		

Description: This was a modern style gas station. It lacks ornamentation and has smooth surfaces. Alterations include new siding and windows, enclosed garage bays, a change in the fenestration, a side addition, and a change in use.



Camera direction: Northwest

Resource No.	S5 258	Address:	9701 Jensen Drive
			
Camera direction: Southwest			



Existing METRO Transit Center

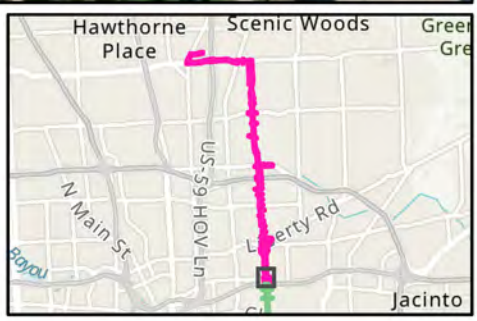
Segment 5 Documented Resources

Proposed ROW

Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

Parcels



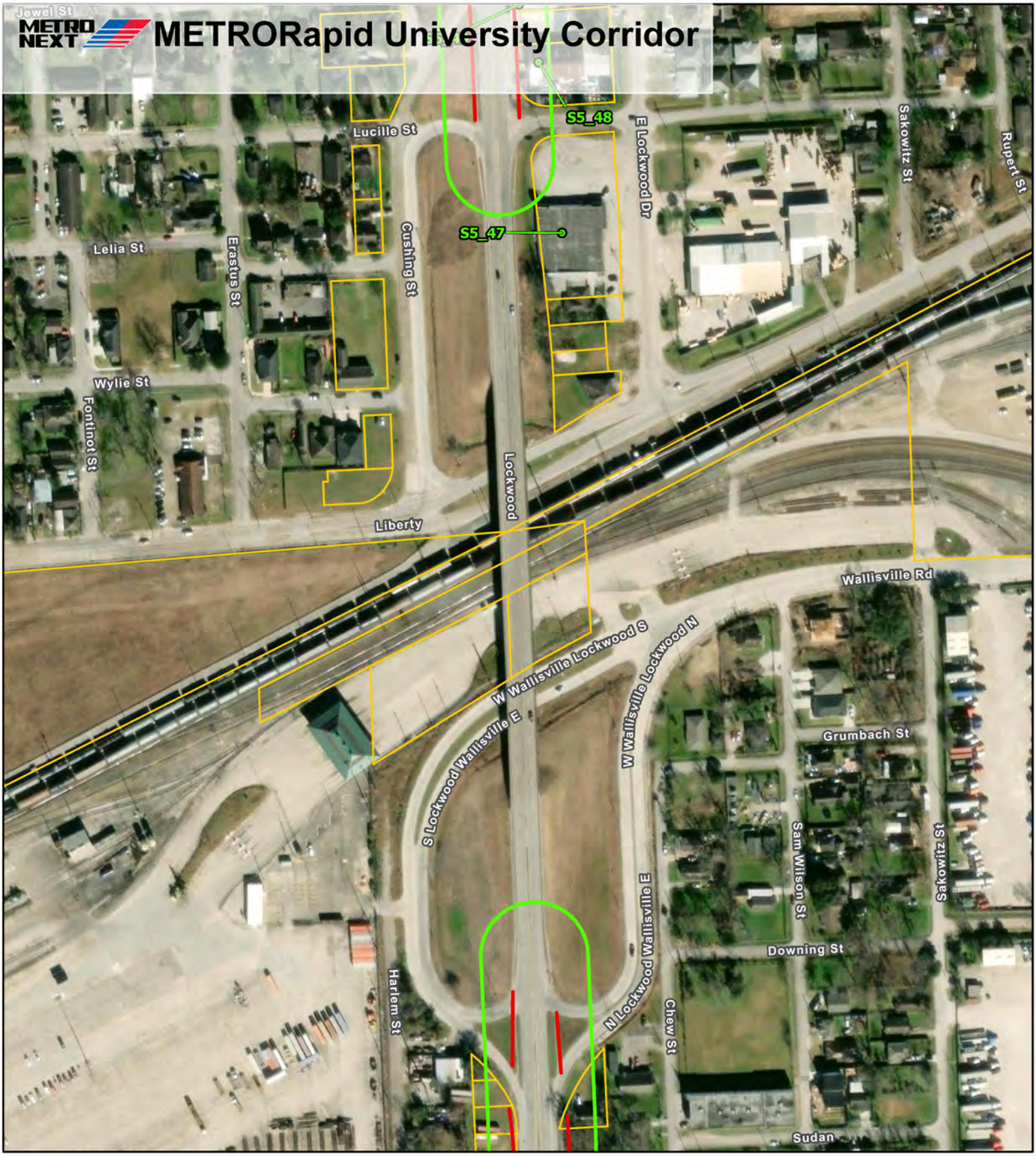
N

Segment 5, Map 1 of 19

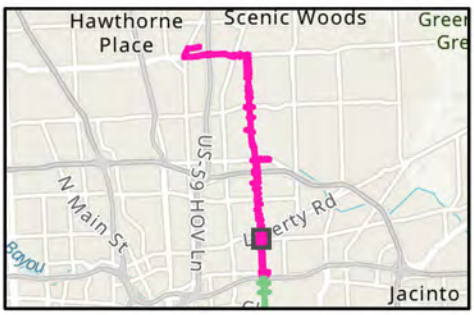
0 100 200 300 ft


METRO NEXT
METRORapid University Corridor
S5_46
Sudan
S5_45b
S5_45a
S5_44
S5_43
Harlem St
Suez
Chew St
Colfax St
S5_42
S5_41
S5_38
S5_40
S5_43
Erastus St
Lee St
S5_39
S5_36
S5_35
S5_34
Lockwood
Sam Wilson St
Sakowitz St
Glenarm St
S5_37
Nichols St
Nichols/Lockwood
S5_33
S5_32
S5_31
Fontinot St
Noble St
Mulvey St
S5_30
Perkins St
S5_29
Segment 5 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
BRT Station Historic APE
Parcels
N
Segment 5, Map 2 of 19
0
100
200
300 ft
Hawthorne Place
Scenic Woods
US-59 HOV Ln
N Main St
Liberty Rd
Bayou
Jacinto

METRORapid University Corridor



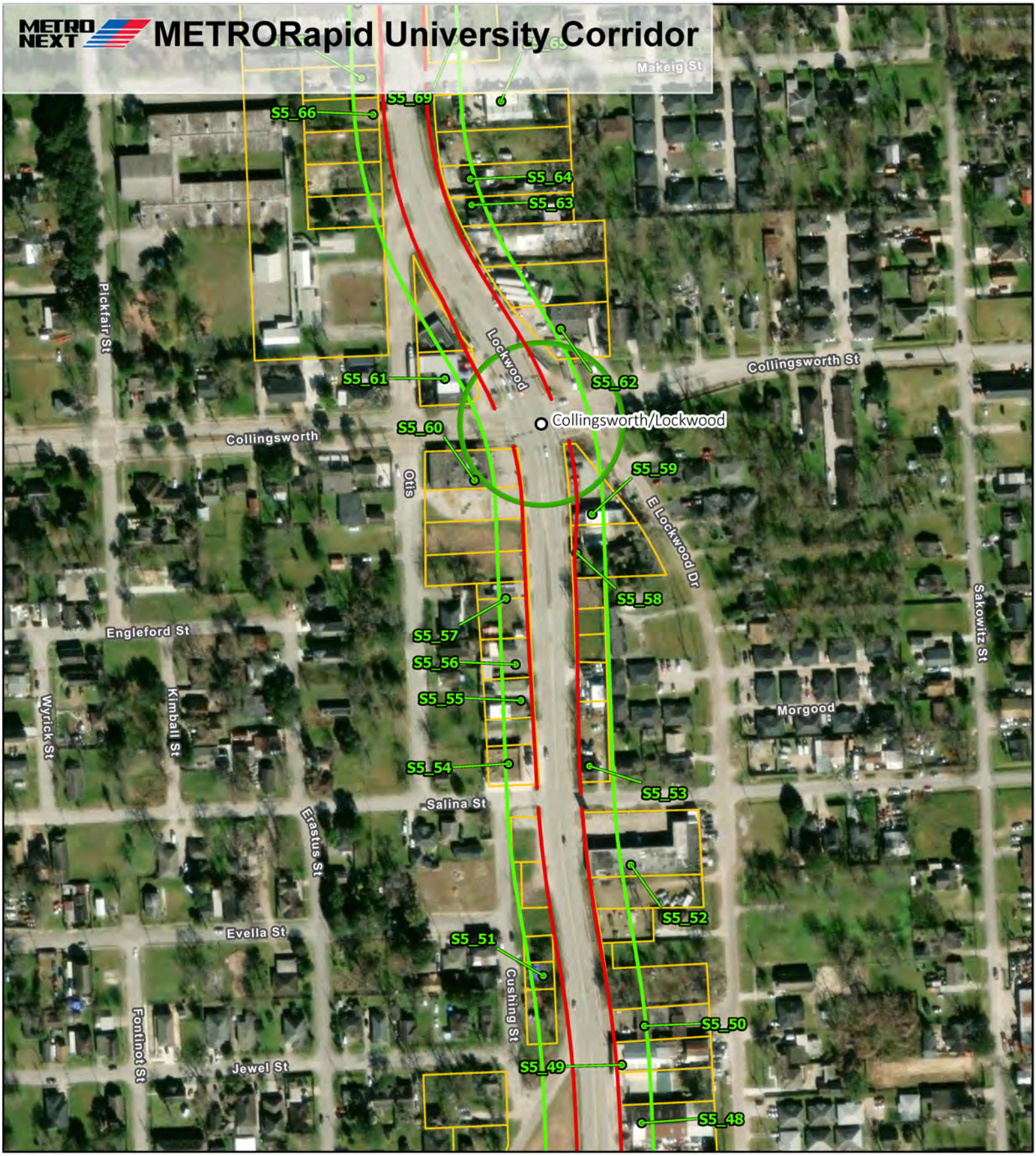
- Segment 5 Documented Resources
- Proposed ROW
- Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
- BRT Station Historic APE
- Parcels



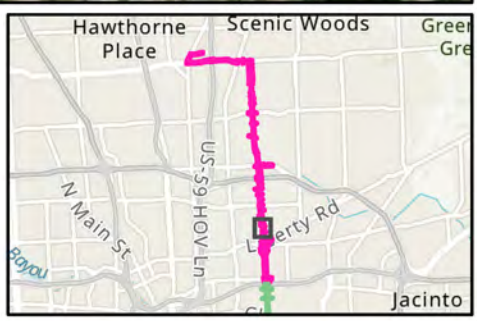
N

Segment 5, Map 3 of 19

0 100 200 300 ft



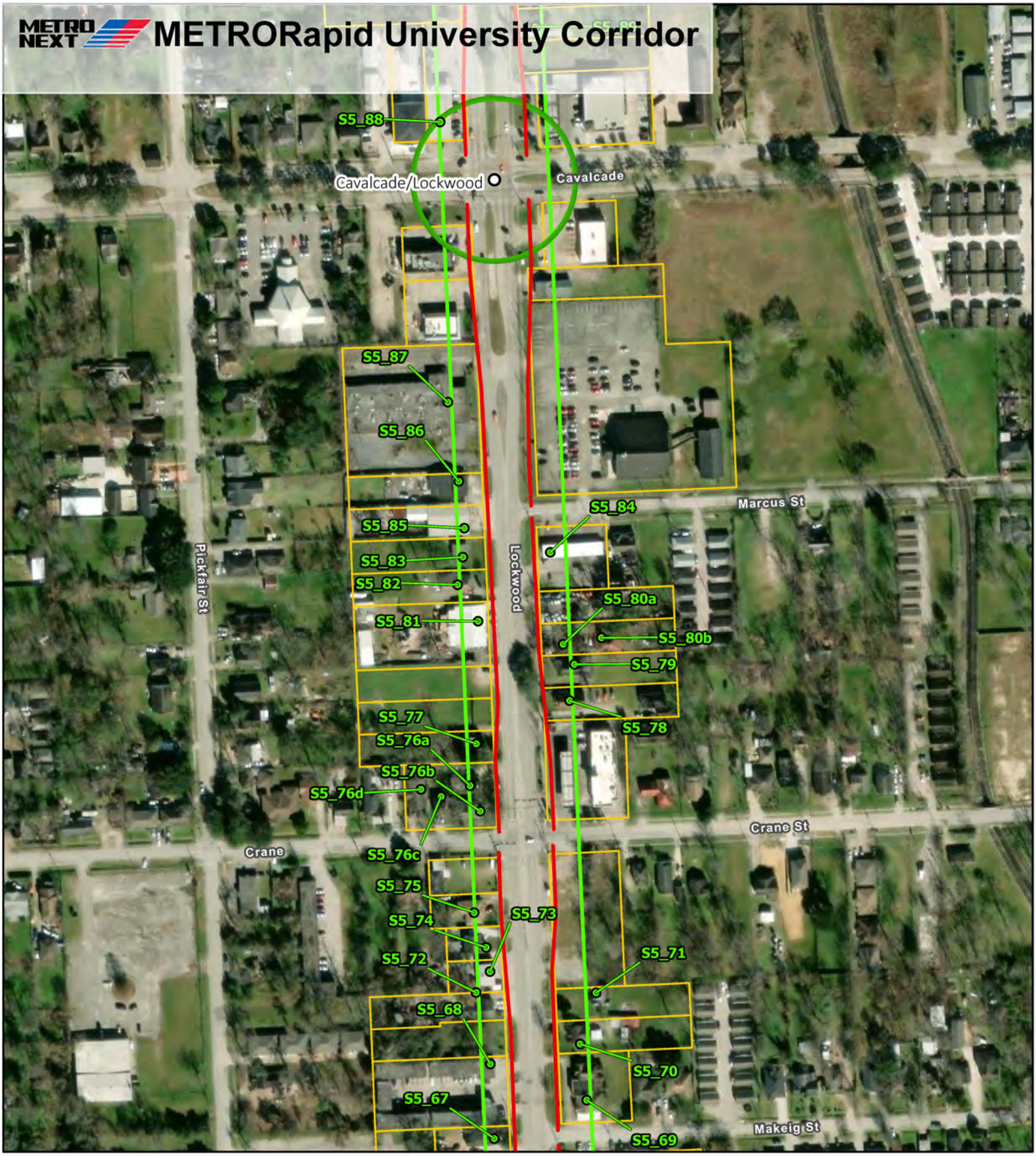
- Segment 5 Documented Resources
- Proposed BRT Station (Preliminary Design)
- Proposed ROW
- Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
- BRT Station Historic APE
- Parcels

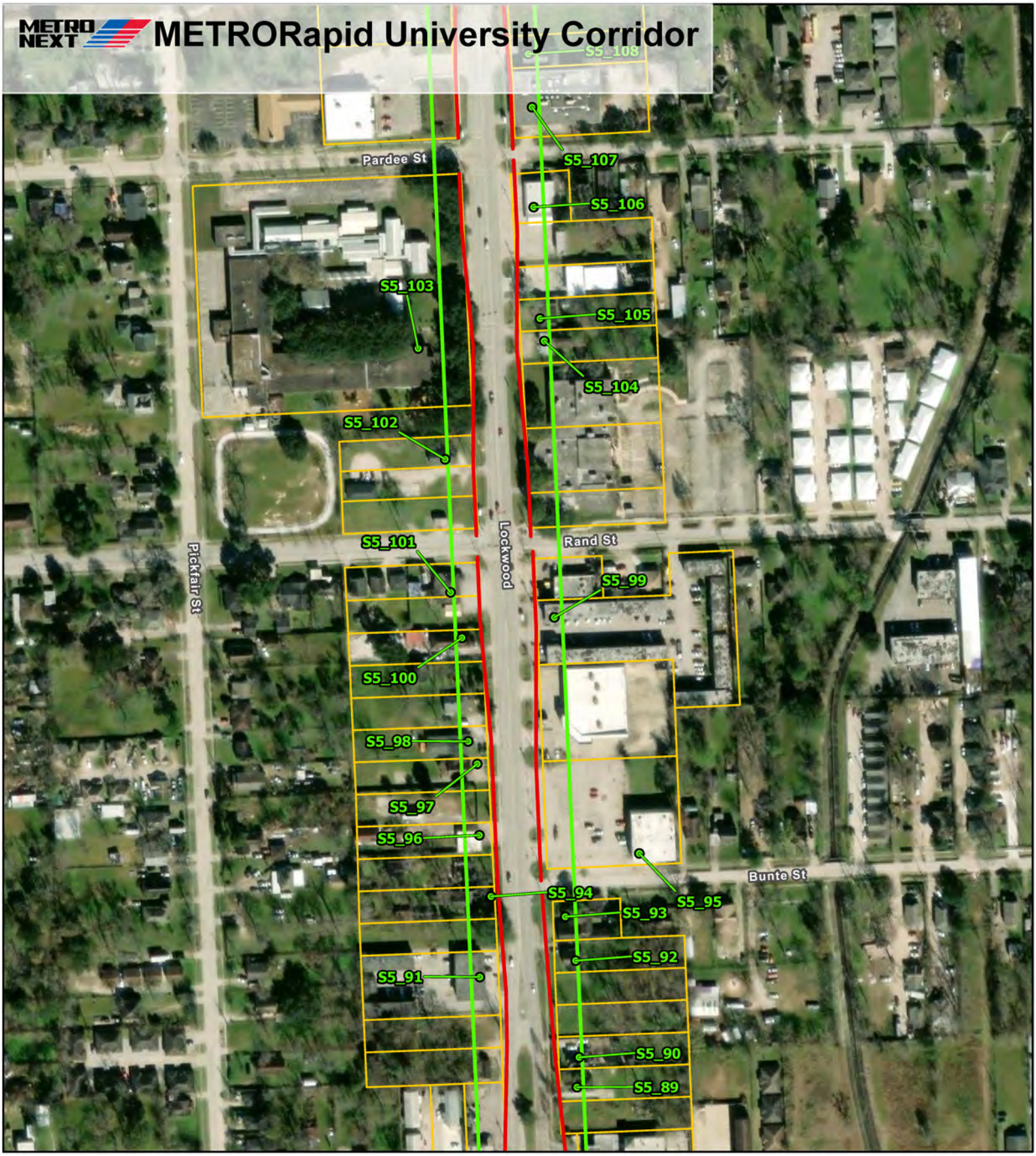


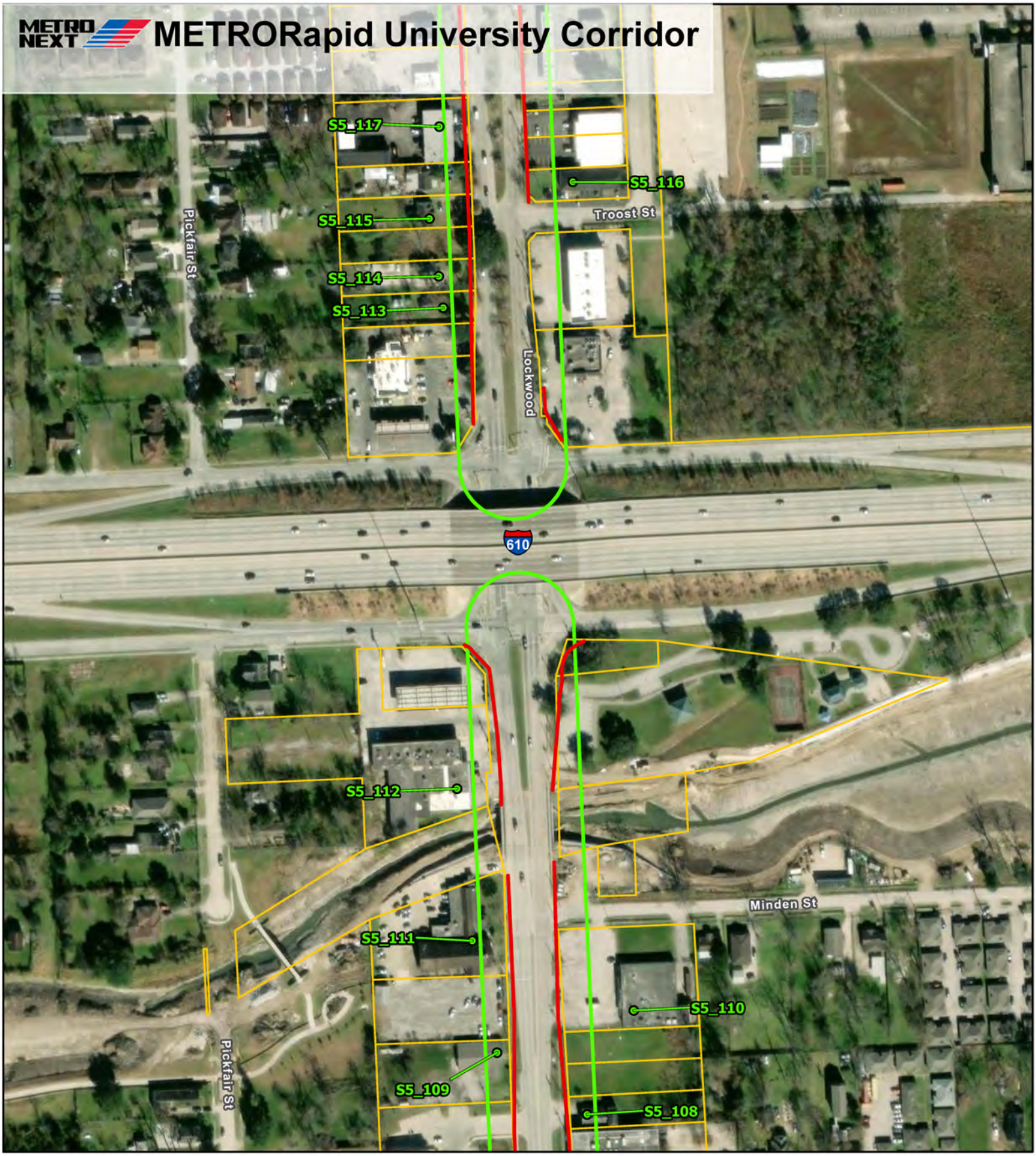
N

Segment 5, Map 4 of 19

0 100 200 300 ft


METRO NEXT
METRORapid University Corridor
S5_88
Cavalcade/Lockwood
Cavalcade
S5_87
S5_86
S5_85
S5_83
S5_82
S5_81
S5_84
Marcus St
Pickfair St
Lockwood
S5_80a
S5_80b
S5_79
S5_78
S5_77
S5_76a
S5_76b
S5_76d
S5_76c
Crane
Crane St
S5_75
S5_74
S5_73
S5_72
S5_71
S5_68
S5_70
S5_67
S5_69
Makeig St
Segment 5 Documented Resources
Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
BRT Station Historic APE
Parcels
N
Segment 5, Map 5 of 19
0
100
200
300 ft
Hawthorne Place
Scenic Woods
US-59 HOV Ln
N Main St
Liberty Rd
Bayou
Jacinto


METRO NEXT
METRORapid University Corridor
S5_108
S5_107
S5_106
S5_105
S5_104
S5_103
S5_102
S5_101
S5_100
S5_99
S5_98
S5_97
S5_96
S5_95
S5_94
S5_93
S5_92
S5_91
S5_90
S5_89
Pardee St
Lockwood
Rand St
Pickfair St
Bunte St
Segment 5 Documented Resources
Proposed ROW
Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
BRT Station Historic APE
Parcels
N
Segment 5, Map 6 of 19
0
100
200
300 ft
Hawthorne Place
Scenic Woods
US-59 HOV Ln
N Main St
Liberty Rd
Jacinto



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Proposed ROW

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BRT Station Historic APE

Parcels

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Segment 5, Map 7 of 19

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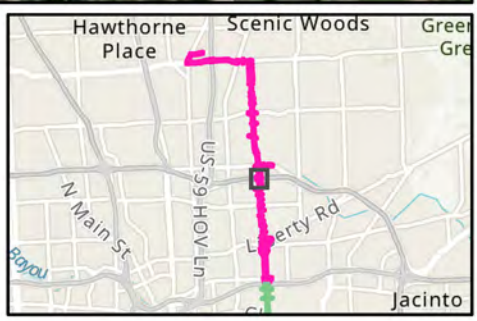

METRORapid University Corridor



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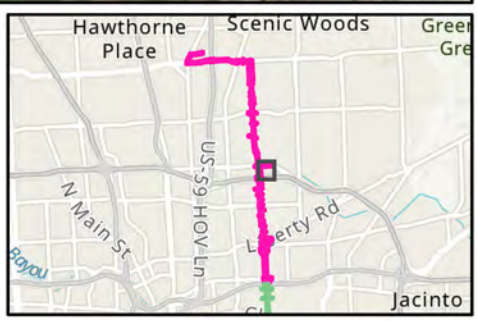
- BRT Station Historic APE
- Parcels



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BRT Station Historic APE

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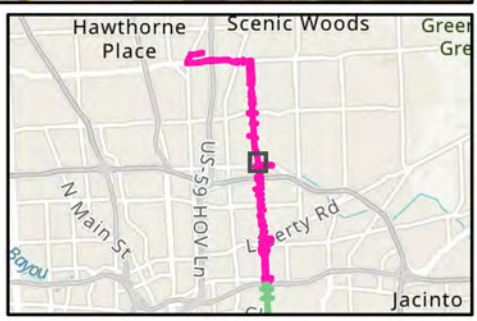

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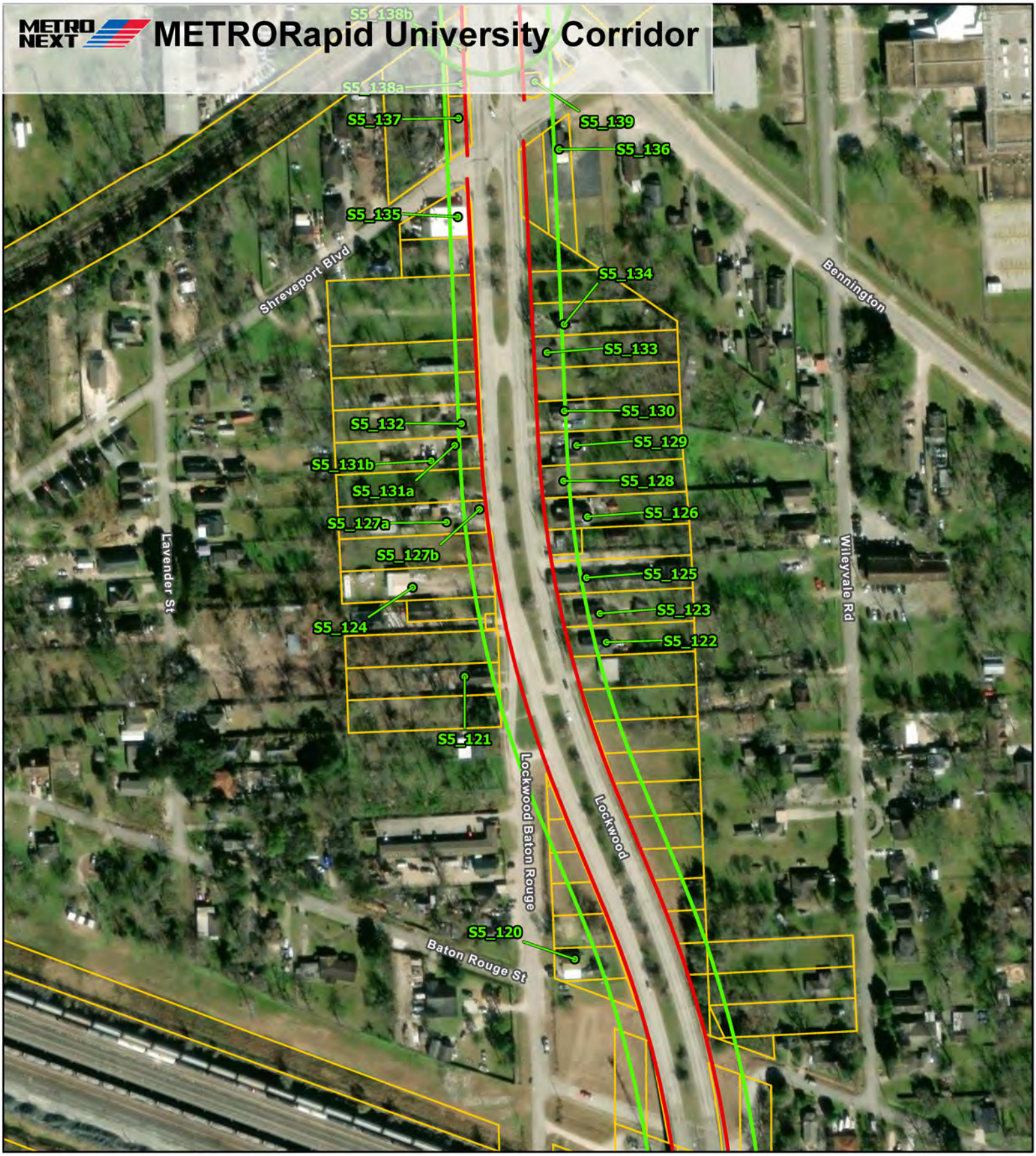

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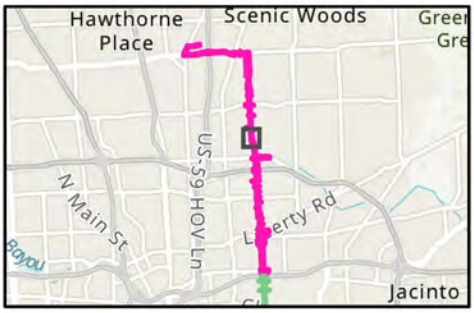

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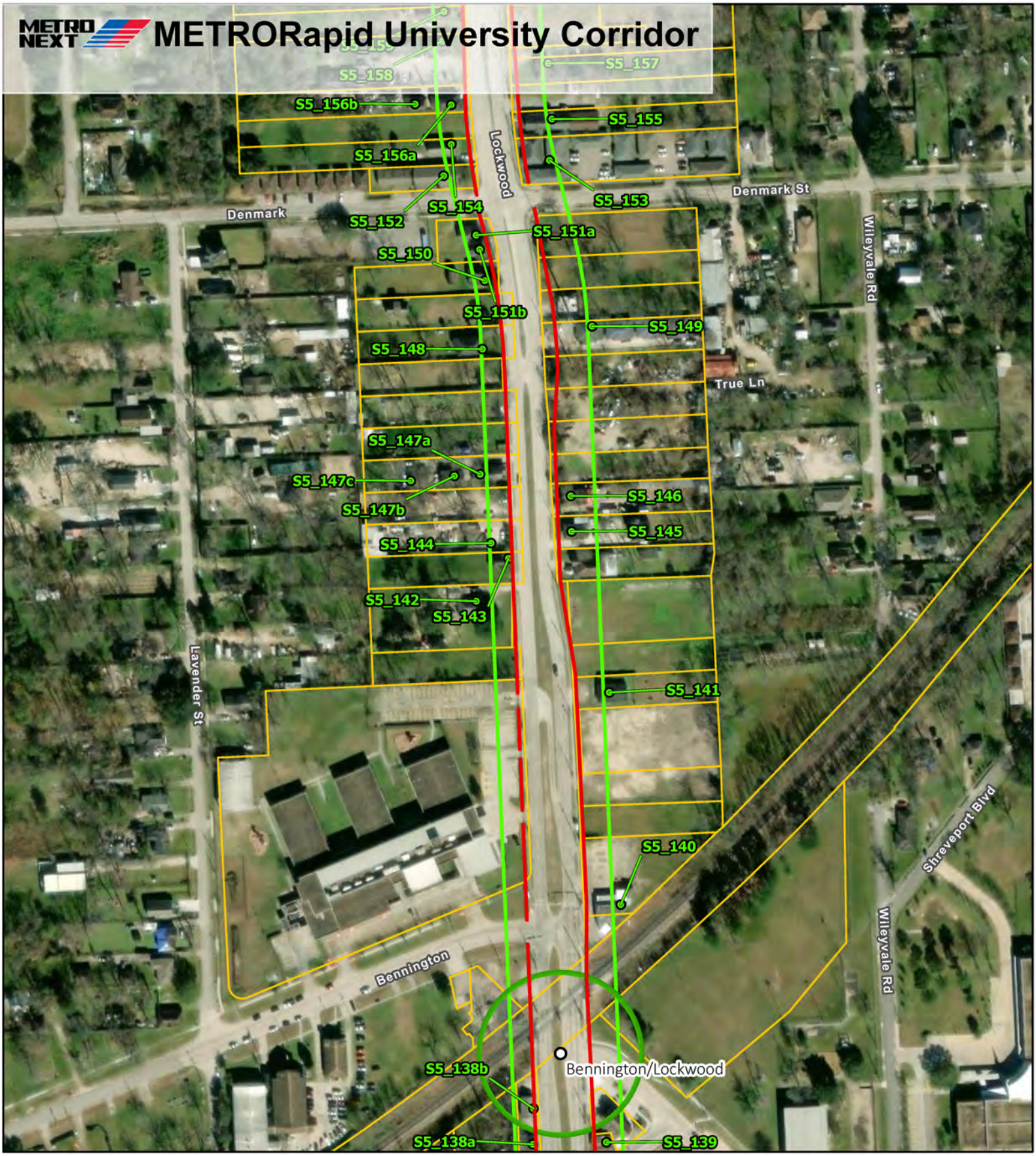

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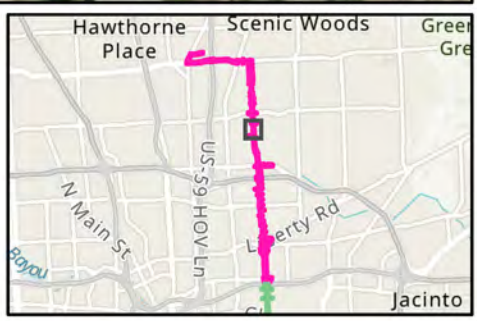
- Parcels



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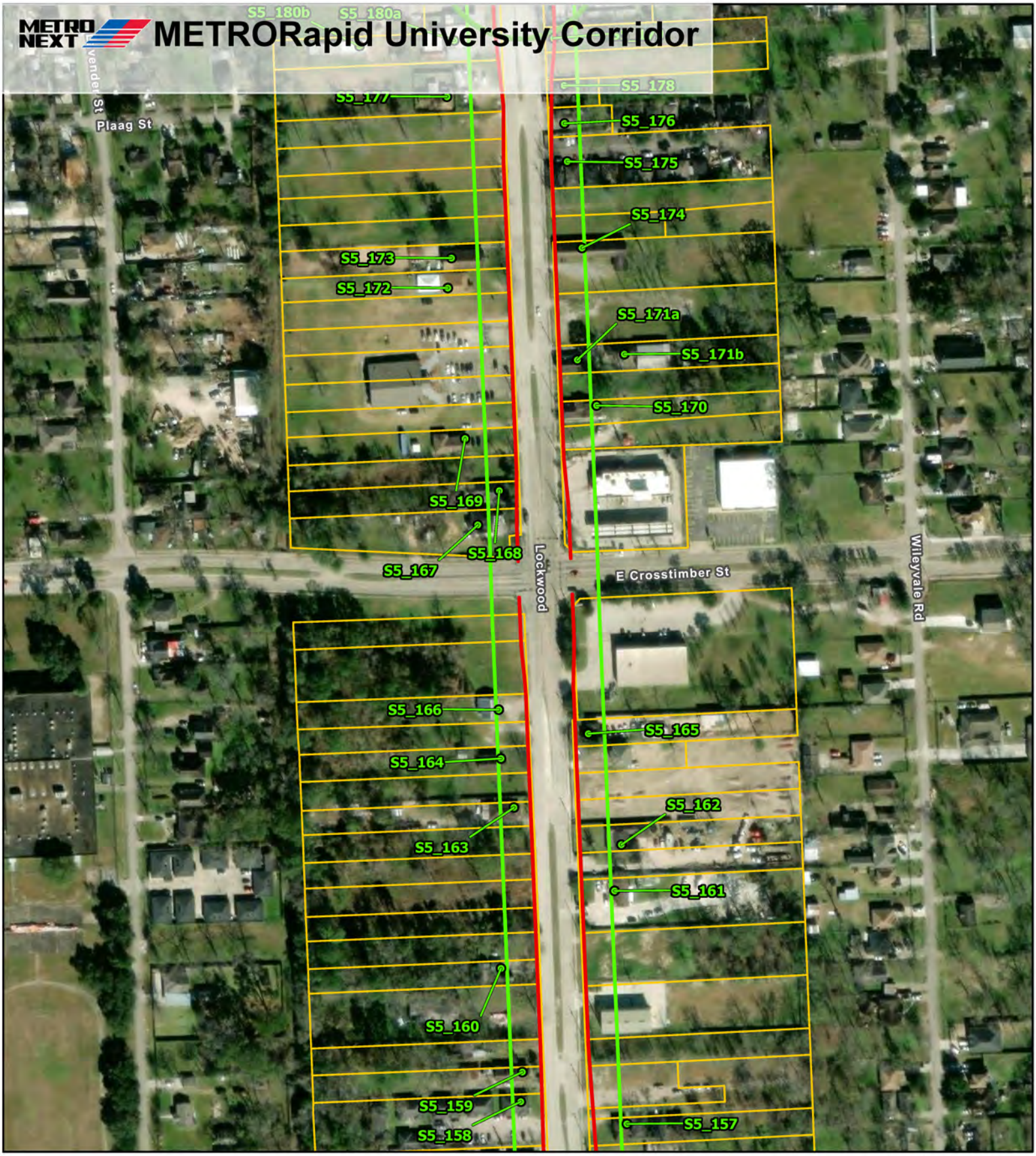
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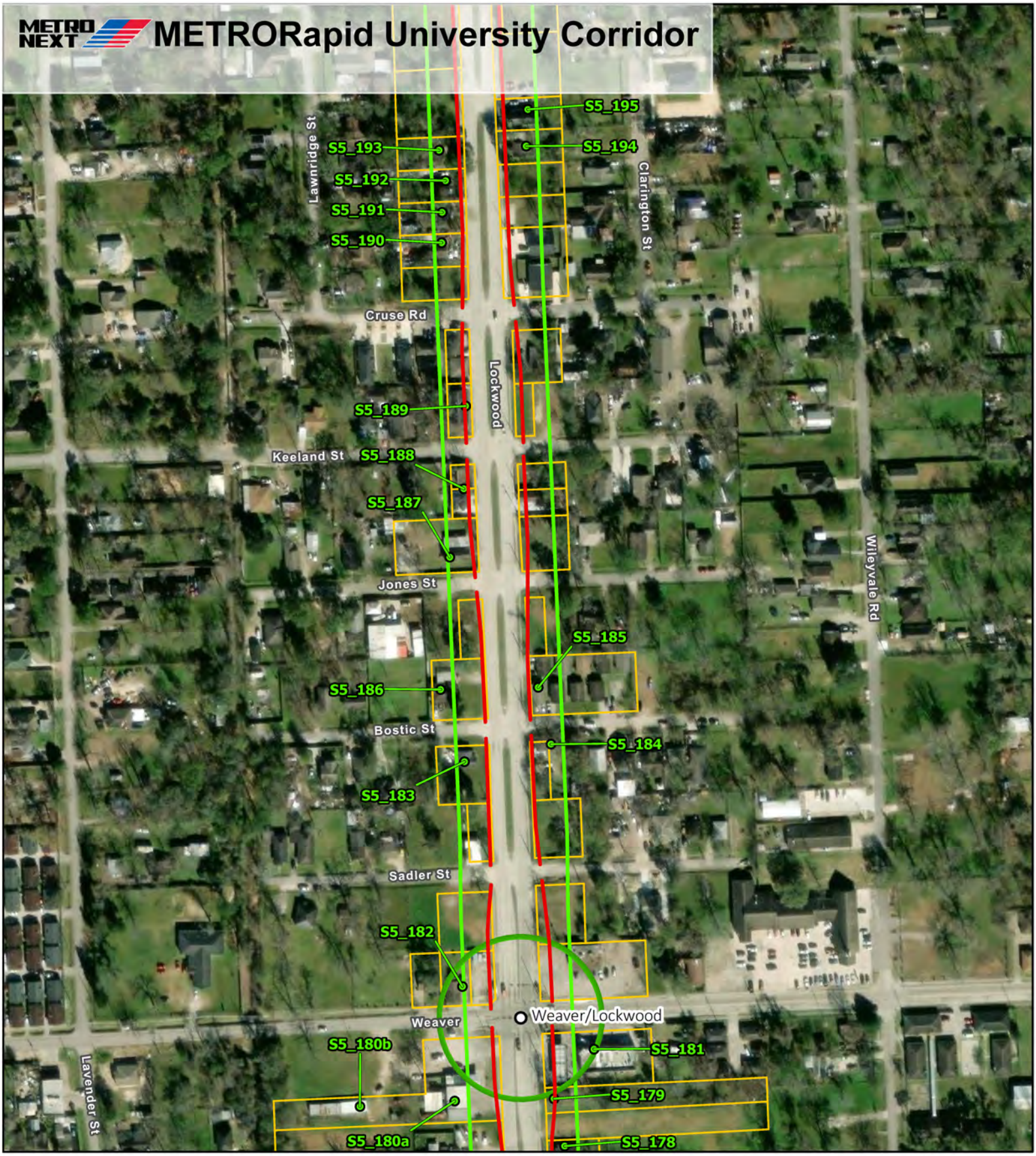

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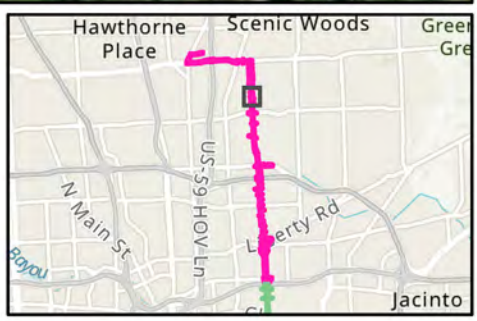

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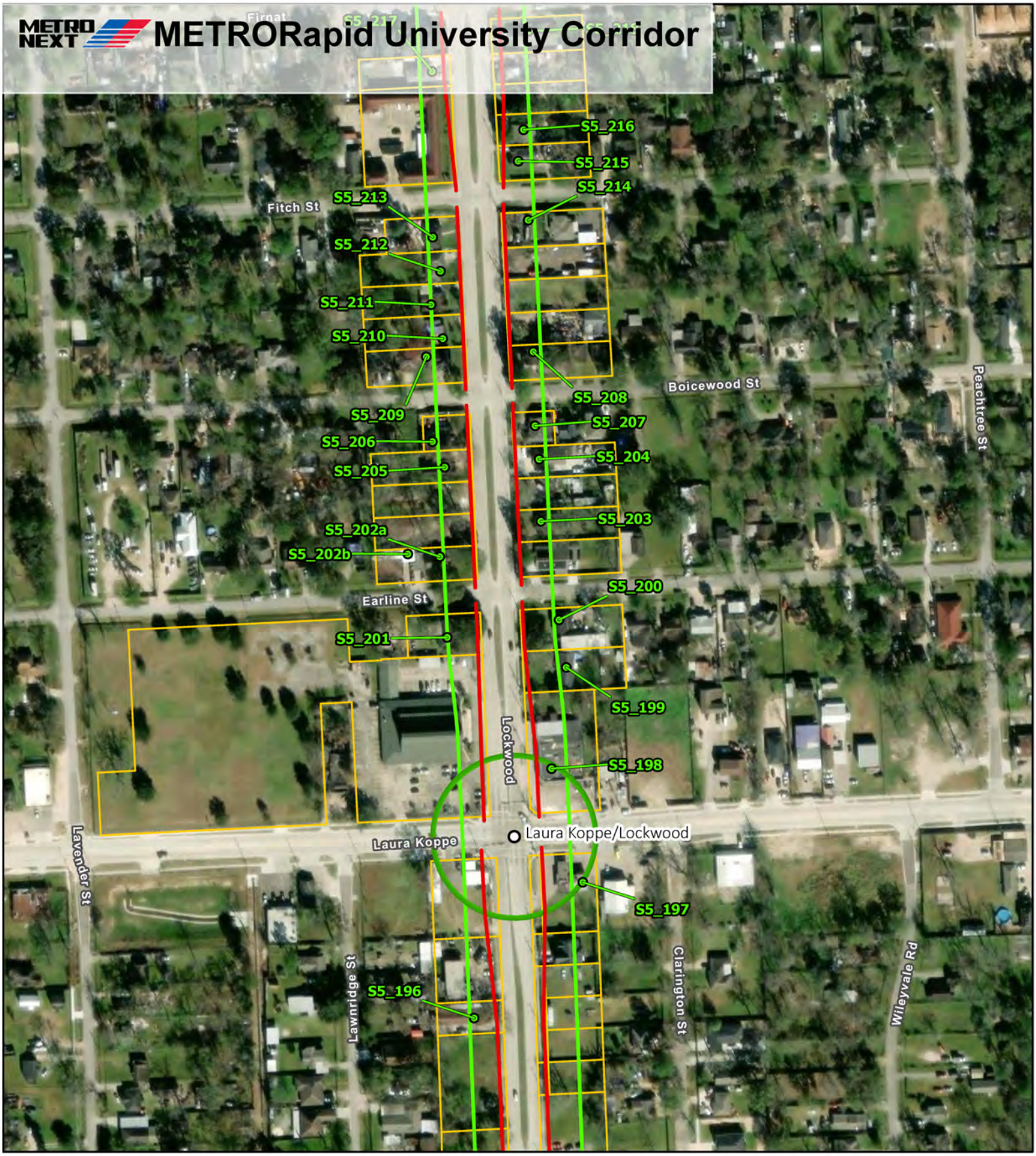
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Earline St
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Lavender St
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Segment 5 Documented Resources

Proposed ROW

Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

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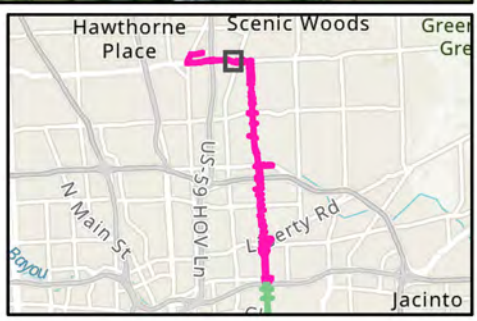

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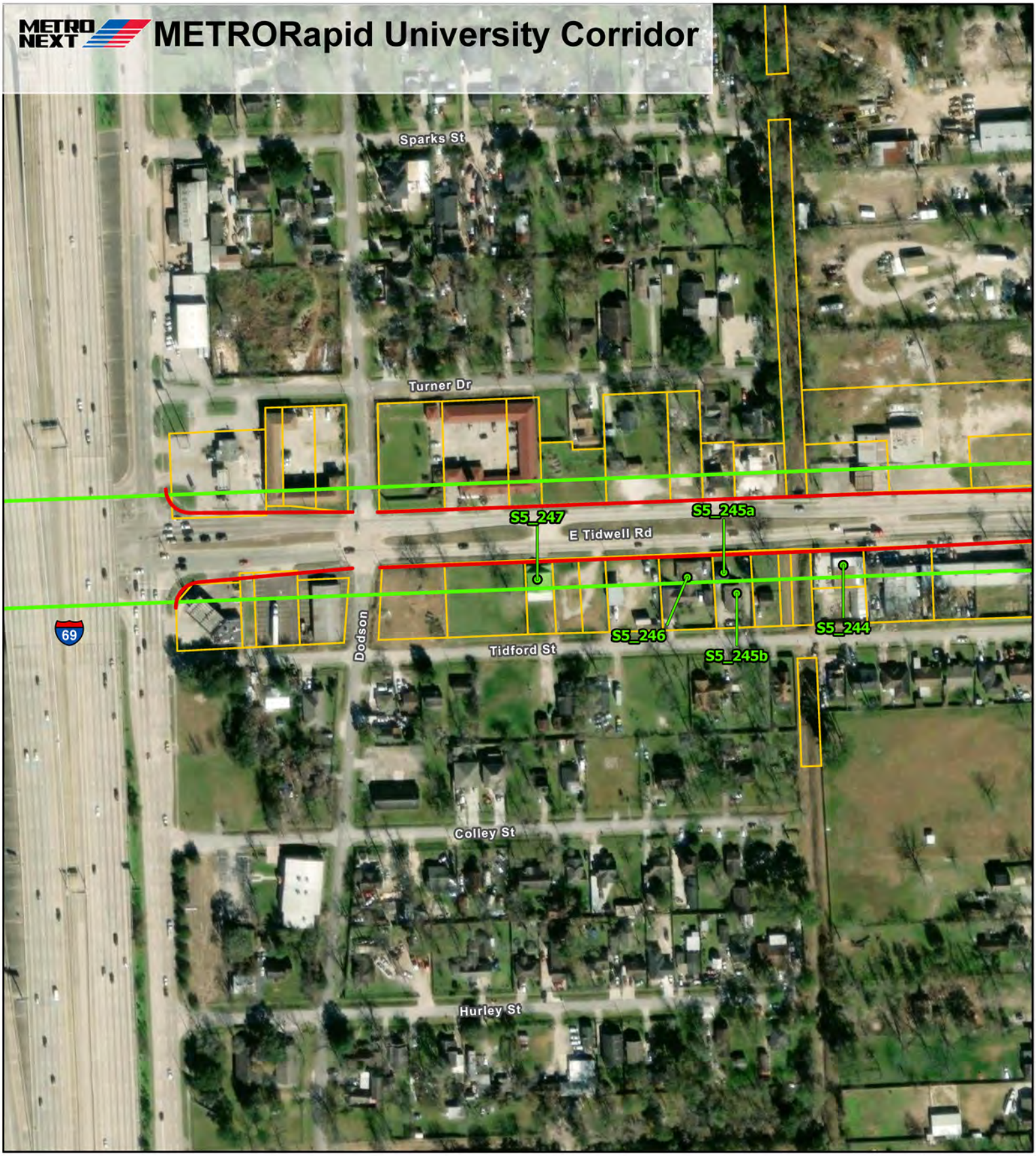

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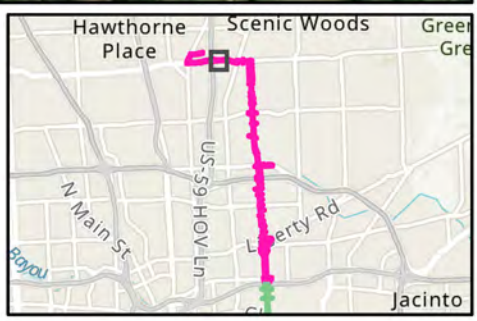
- Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
- BRT Station Historic APE
- Parcels



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Segment 5, Map 17 of 19

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Sparks St
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Turner Dr
Herben Rd
E Tidwell Rd
Tidford St
Weedy Ln
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S5_248
S5_250
S5_251
Hurlplan St
Colley St
Existing METRO Transit Center
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Proposed BRT Station (Preliminary Design)
Proposed ROW
Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)
BRT Station Historic APE
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Segment 5, Map 18 of 19
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Jacinto

METRONEXT METRORapid University Corridor



Segment 5 Documented Resources

Proposed ROW

Segment 5 Historic APE (100-ft from Centerline where ROW is Proposed + Existing ROW)

BRT Station Historic APE

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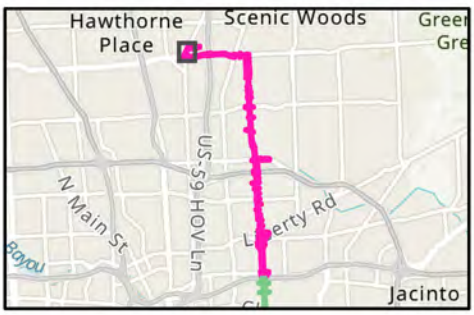

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Segment 5, Map 19 of 19

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METRORapid University BRT Corridor

Section 106 Historic Resources Survey Addendum

Technical Report
September 2023



METRO NEXT

Abstract

This report provides an Addendum to the *History Survey Report* (May 2023), circulated to consulting parties and the Texas Historical Commission (THC) on May 29, 2023, and responds to comments received from consulting parties, including those of THC. This Addendum has also been provided to consulting parties as the FTA determinations have been updated based on consulting party input.

In its review of the *History Survey Report*, (May 2023) THC made the following comments:

- Eastwood Subdivision is an eligible historic district under Criteria A in the area of Community Planning and Development as an intact streetcar suburban neighborhood and Criteria C for at the local level in the area of Architecture, given the subdivision's collection of early Craftsman and Bungalow style houses and other early twentieth century styles common in America, with boundaries generally corresponding to the original subdivision plat;
- Additional information regarding property acquisitions was needed to examine effects for the Third Ward Historic District; and,
- Evergreen Negro Cemetery should be treated as eligible for listing in the National Register.

This Addendum assumes eligibility for the Eastwood Subdivision Historic District, provides additional information regarding the historic context for the Eastwood Neighborhood to aid in applying the criteria of adverse effect, and the requested right-of-way (ROW) information for the Third Ward Historic District. This Addendum also provides details on design modifications to minimize effects within the historic districts and the Evergreen Negro Cemetery. The addendum identifies conditions by which the project design will be modified to support a No Adverse Effect.

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Acronyms and Abbreviations

ACRONYM	DEFINITION
ACT	Antiquities Code of Texas
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BBB&C	Buffalo Bayou, Brazos & Colorado
BRT	Bus Rapid Transit
CE	Categorical Exclusion
CFR	Code of Federal Regulations
COA	Certificate of Appropriateness
COH	City of Houston
FHA	Federal Housing Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
HAHC	Houston Archaeological and Historical Commission
HCAD	Harris County Appraisal District
HCC	Harris County Clerk
HD	Historic District
HISD	Houston Independent School District
HRSR	Historic Resources Survey Report
HTC	Historic Texas Cemetery
IH	Interstate Highway
IHC	International Harvester Company
LRT	Light Rail Transit
LULAC	League of United American Citizens
METRO	Metropolitan Transit Authority of Harris County
N/A	Not Applicable
N.D.	No Date
NEPA	National Environmental Policy Act
NHL	National Historic Landmarks
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
OTHM	Official Texas Historical Markers
ROW	Right-of-way
RTHL	Recorded Texas Historic Landmarks
SAL	State Antiquities Landmarks
sf	square feet
THC	Texas Historical Commission
TSU	Texas Southern University
TXDOT	Texas Department of Transportation
UPRR	Union Pacific Railroad
UH	University of Houston

ACRONYM	DEFINITION
US	United States
VA	Veterans Affairs
WE	Western Electric
WWII	World War II

1.0 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of this Addendum

The purpose of this Section 106 Historic Survey Report Addendum is to respond to consulting party and Texas Historical Commission (THC) comments dated June 29, 2023 (**Appendix A – Consulting Party Input**).

Specific THC comments addressed in this report include:

- Eastwood Subdivision is an eligible historic district under Criteria A in the area of Community Planning and Development as an intact streetcar suburban neighborhood and Criteria C for at the local level in the area of Architecture, given the subdivision's collection of early Craftsman and Bungalow style houses and other early twentieth century styles common in America, with boundaries generally corresponding to the original subdivision plat;
- Additional information regarding property acquisitions was needed to examine effects for the Third Ward Historic District; and,
- Evergreen Negro Cemetery should be treated as eligible for listing in the National Register.

This addendum focuses on the specific THC comments on the May 2023 *Historic Survey Report* and does not repeat information agreed upon and concurred with by the THC, including:

- Segment 1 - All resources surveyed are not eligible for the National Register.
- Segment 2 - Individually eligible resources are: 1836, 3336, 3334, 3323, 3322, 3311, 3121, and 3101 Richmond Avenue under Criterion C for architecture. Richmond Avenue Modern Commercial Historic District is no longer eligible due to a loss of historic integrity and that all other resources surveyed in the segment are not eligible.
- Segment 3 – The Houston Negro Hospital and the School of Nursing Building remain eligible and that the Former Albert Sidney Johnson Jr. High School and the Third Ward Historic District remain eligible. And that all other resources surveyed are not eligible for listing.
- Segment 4 – International Harvester Company Building and the Western Electric Company Building are eligible for listing under Criterion C for their architecture. And that all other resources surveyed are not eligible for listing.
- Segment 5 – Kashmere Gardens Elementary School is eligible for listing under Criterion A for Social History and that all other resources surveyed are not eligible for listing.

The addendum provides updates to the project based on input received throughout the Section 106 process as well as the general public outreach and in coordination with neighborhood residents and local stakeholders. A copy of the Eastwood neighborhood requests for design considerations and consulting party meeting notes and questions, with METRO's responses, are included in **Appendix A.**

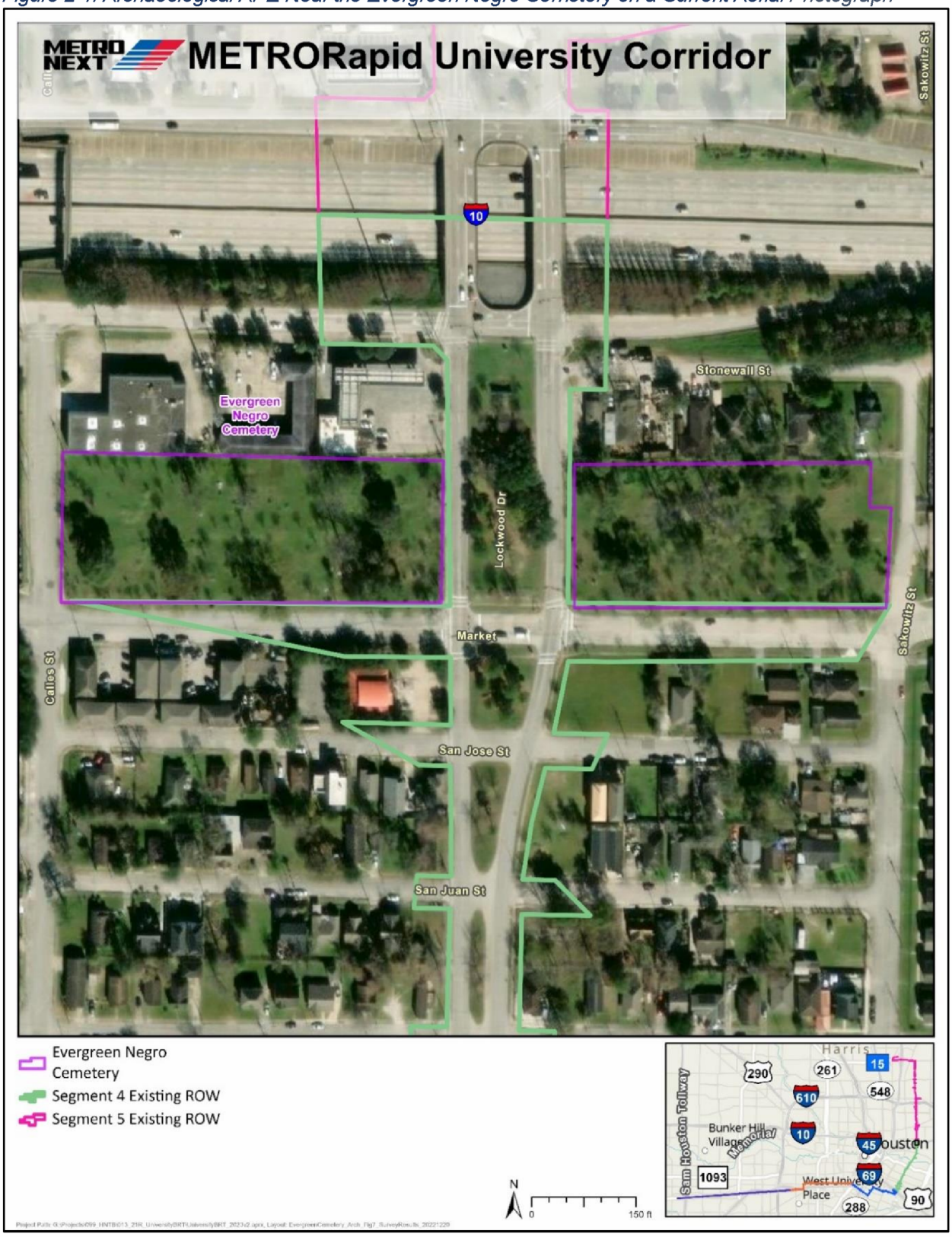
2.0 Historic Cultural Resource Survey Results

A full compilation of resources surveyed within the Area of Potential Effects (APE) are contained in the *Historic Survey Report*, May 2023, for which this report is an Addendum. THC commented that the Evergreen Negro Cemetery should be treated as eligible and that the Eastwood Subdivision is eligible "as the area contains a high concentration of pre-World War II houses with a high level of historic integrity and remarkably little recent construction for a neighborhood so close to downtown Houston. Based on the available information, THC recommends that Eastwood is eligible for listing in the National Register under Criterion A for community planning and development as an intact streetcar suburban neighborhood and under Criterion C for its architecture, with boundaries generally corresponding to the original subdivision plat." This addendum documents FTA and METRO's response in agreement with the THC comments and provide additional supporting documentation to support the agency's revisions to eligibility and determination of effects.

2.1 Evergreen Negro Cemetery

As suggested by the THC, the Evergreen Negro Cemetery will be treated as eligible for the National Register **(Figure 2-1)**. This treatment will provide the cemetery protection under the Section 106 regulations at 36 Code of Federal Regulations (CFR) 800 for construction activities within Lockwood Drive. In the unlikely event that the design changes and acquisitions are needed from the cemetery, consultation requirements will apply in the same manner as if the property were eligible for, or listed in the National Register. The Archeological Work Plan has been updated to reflect this change and to include the THC's direction to complete a 100 percent survey in the Bus Rapid Transit (BRT) lanes.

Figure 2-1: Archaeological APE Near the Evergreen Negro Cemetery on a Current Aerial Photograph



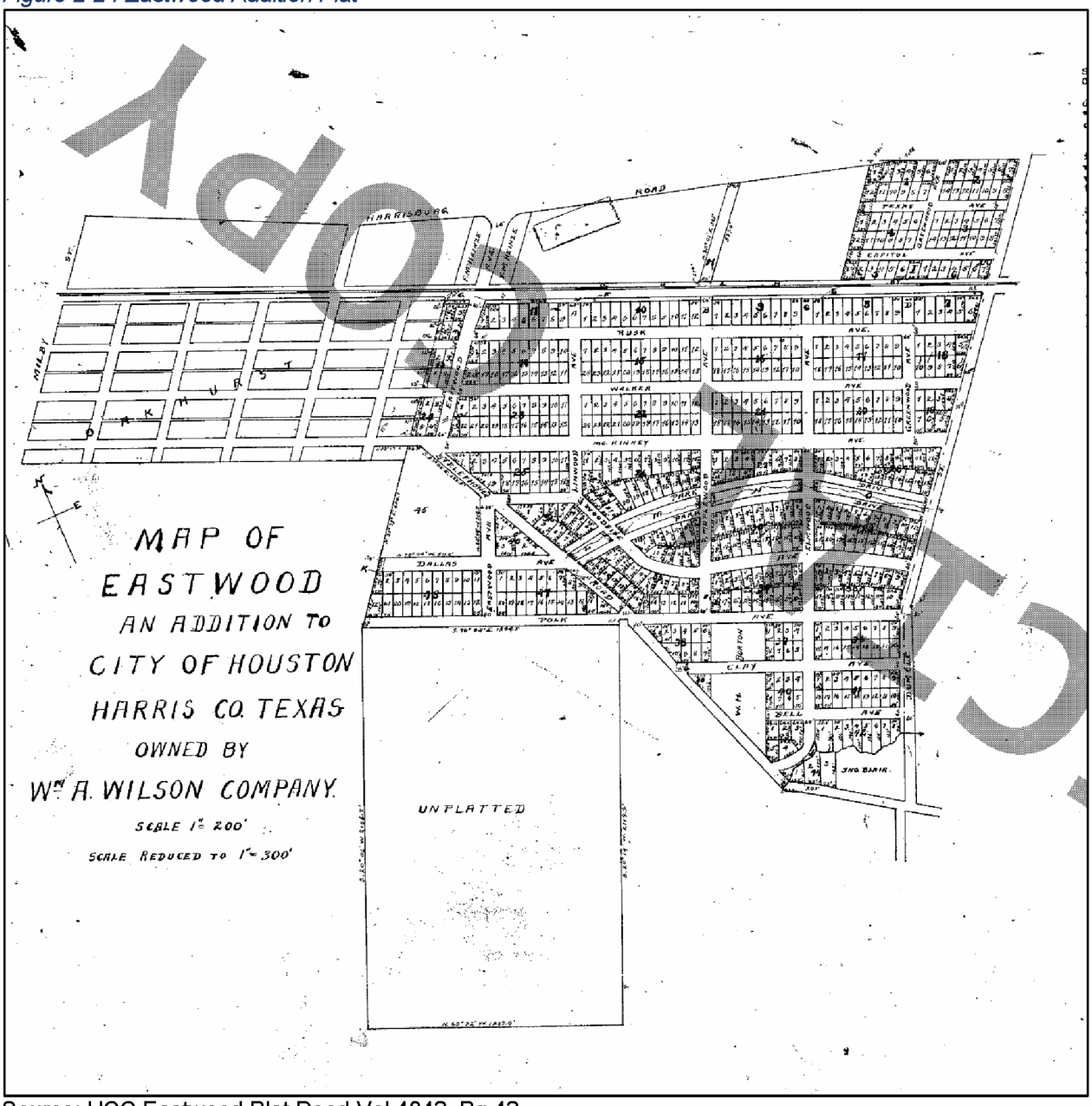
2.2 Eastwood Historic District

THC commented that the Eastwood Subdivision is eligible "as the area contains a high concentration of pre-World War II houses with a high level of historic integrity and remarkably little recent construction for a neighborhood so close to downtown Houston. Based on the available information, THC recommends that Eastwood is eligible for listing in the National Register under Criterion A for community planning and development as an intact streetcar suburban neighborhood and under Criterion C for its architecture, with boundaries generally corresponding to the original subdivision plat." FTA and METRO assume eligibility noting that the subdivision that does retain a high concentration of the pre-World War II houses and it remains intact as a streetcar neighborhood, withstanding subdivision plat changes when Maplewood Drive was widened from 2-lanes to 4-lanes altering the orientation of some homes toward the street. Appendix B of this Addendum provides an updated summary table of Surveyed properties in Segment 4.

Eastwood Residential Subdivision

The W.A. Wilson Company recorded the Eastwood Subdivision plat in 1913. The Eastwood plat, starting at the northwest corner, is roughly bounded by the Union Pacific Railroad (UPRR), Dumble, Leeland, Telephone, Polk, and Sidney streets (**Figure 2-2**). The northeast portion of the plat extended to Harrisburg Road, but the platted lots were not developed and by 1957 the land was a park, today called Eastwood Park (www.historicaerials.com). At Park Drive, the east/west roads are curved to follow a natural ravine. The plat was laid out to take advantage of the natural topography for drainage. The developer laid out the 60 to 80-ft streets with curbing and gutter. Sidewalks (4'-5' wide) were completed on the principal avenues with trees planted in the parkway (buffer area between the curb and sidewalk). Fire plugs were located at every corner, and electrical and telephone poles were placed between blocks at the rear of properties. Land was set aside for a school and social center. The plan did not include alleys as the developer felt they were prone to collect trash (Wilson Company 1912: 3, 4, 6).

Figure 2-2-: Eastwood Addition Plat



Source: HCC Eastwood Plat Deed Vol 4042, Pg 42.

Adopted

The Wilson Company had an architectural department and a law firm to assist with the closing transactions, and it offered financing with monthly payments. Their marketing booklet discusses the benefits of restrictions, citing setbacks, no sale of alcohol, the location of electrical poles regulated to the rear of the property, and the prohibition of constructing tall flats and apartment buildings (Wilson Company 1912: 3, 4, 6). Not stated in the marketing booklet but listed in the plat were the restrictions that no "negroes" could own property. The deed restrictions have been updated and the restriction that no "negroes" could own property has been removed. The deed restrictions continue to retain the residential nature of the neighborhood.

Streetcar Suburb (1888-1928)

The introduction of electrified streetcars in the US spurred development outside of downtowns as one could travel in 10 minutes the distance it took 30 minutes to walk (Ames and McClelland 2002: 17). Streetcar Suburbs were concentrated along radial streetcar lines platted with rectilinear blocks that formed continuous corridors with other platted subdivisions (Ames and McClelland 2002: 20). Eastwood has some rectilinear blocks, was adjacent to and accessible by streetcar, plus McKinney and Polk streets are examples of the continuous corridor. Eastwood Subdivision is an example of a Streetcar Suburb.

The Houston Daily Post declared Eastwood a "model suburb, one of the most convenient, attractive and beautiful homesite additions in the city of Houston" in 1913 (ECA 2022). An advertisement booklet advised prospective buyers the property was two miles east of the courthouse, within the city limits, and accessible by the Harrisburg streetcar line or automobile. The option of transportation modalities represents the transitory period between the eras of streetcar and automobile suburbs. The subdivision was also accessible by auto following Harrisburg Road, which was brick paved to the property at that time, or from McKinney Avenue, which was the principal avenue through the property (Wilson Company 1911: 10).

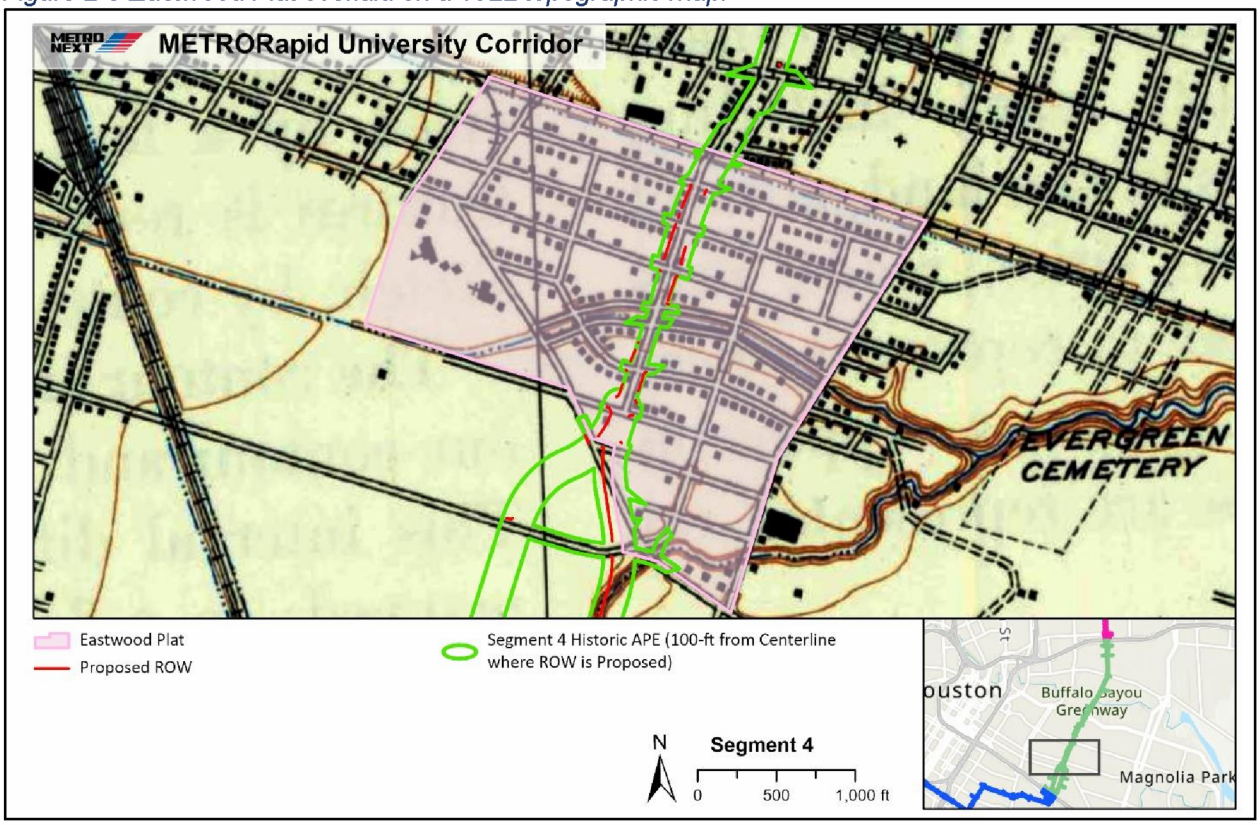
Eastwood Plat

The Eastwood plat shows lots in a grid pattern between the UPRR and McKinney Avenue. At Park Drive the east/west roads are curved to follow a natural ravine. Streets were 60-ft. wide except for McKinney Street at 80-ft. The subdivision was oriented to Harrisburg Road and to the Harrisburg Streetcar Line. Restrictions prohibited the "erection of tall flats and apartment buildings, which cut off air and sunshine from the adjoining home" (Wilson Company 1912: 7).

Plat Alterations

Two major changes impacted the original design and Wilson's vision of the Eastwood Plat. First, the ravine separating Park Drive was filled in between 1950 and 1953 removing the natural water feature. Historic aerial photographs show the area along Park Drive was retained as a greenspace and trees planted by 2002 (www.historicaerials.com). **(Figure 2-3)**.

Figure 2-3 Eastwood Plat overlaid on a 1922 topographic map.



Source: AmaTerra 2023

Second, the expansion of the automobile and the termination of the Harrisburg Streetcar in 1928 led to the alteration of the original subdivision plat and developer plans for Eastwood. Maplewood Avenue was widened from 60-ft to a four-lane divided road, roughly 100-ft, with a median **(Figures 2-4a-4c and Appendix C – Streetscape Photos)**. This changed the road use from a minor neighborhood collector street to a major thoroughfare resulting in a major alteration of the neighborhood traffic circulation. Maplewood was renamed to Lockwood Drive between 1973 and 1976.

Historians estimate about 24 houses were removed to make way for the road project. McKinney Road at 80-ft was designed by the Wilson Company to be the main thoroughfare. The widening of Lockwood Drive to 100-ft and four-lanes made Lockwood Drive the widest street and the main thoroughfare in the plat. Lockwood's esplanade and a modern neighborhood sign reinforce Lockwood Drive as the current main thoroughfare of the neighborhood. Modern intrusions of homes fronting Lockwood Drive have also been a physical change to the neighborhood that altered the original plat and plans.

Figure 2-4a: Aerial Comparison of Plat Alterations, 1953 and 1978



Figure 2-4b: Aerial Comparison of Plat Alterations, 1988 and 2002



Despite the loss of some original buildings, the deed restrictions in the neighborhood have allowed the subdivision to retain its single-family homes and orientation on the interior streets. The layout of the subdivision is still intact although the neighborhood's main thoroughfare changed from McKinney Road to Lockwood Drive. Based on a cursory drive through the neighborhood, historians estimated that more than 51 percent of the houses retain their architectural integrity. The original landscape elements along Maplewood Avenue were removed when Lockwood Drive was constructed in the early 1970s **(See Figures 2-4a-c)** and limited landscaping has been replanted.

Figure 2-4c: Aerial Comparison of Plat Alterations, 2005 and 2023



The original landscape elements of the neighborhood can be seen on interior streets where older trees are evident and are located in what the developer called as “parkways” between the edge of the curb and the sidewalk. (**Figure 2-5**).

Figure 2-5: Pictures of Interior Streetscape (McKinney), existing view of Lockwood Drive Median



Based on the THC comments, FTA assumes the Eastwood Subdivision is eligible under Criterion A, in the area of Community Planning and Development at the local level of significance as an example of a streetcar suburb and because it has a collection of early Craftsman and Bungalow style houses and other early twentieth century styles common in America, Eastwood Subdivision is recommended eligible under Criterion C at the local level in the area of Architecture. See **Figure 2-6** for the boundaries of the Historic District and **Table 2-1** for a list of eligible resources in the Eastwood Subdivision.

Table 2-1: Segment 4 Historic Resources in the NRHP Eligible Eastwood Subdivision Historic District in the APE

Resource	Address	Contributes to historic district	Individually Eligible	Circa Year Built	Style
S4 09	4501 Clay St	Contributing	No	1920	Craftsman
S4 10	4603 Clay St	Contributing	No	1935	Colonial Revival
S4 11	4602 Polk St	Contributing	No	1935	Colonial Revival
S4 12	4601 Polk St	Noncontributing	No	1935	Minimal Traditional
S4 13	4603 Polk St	Noncontributing	No	1920	Craftsman
S4 14	4602 Woodside	Noncontributing	No	1948	Ranch 6-plex

Resource	Address	Contributes to historic district	Individually Eligible	Circa Year Built	Style
S4 15	4550 Woodside	Contributing	No	1920	Craftsman
S4 16	4547 Woodside	Contributing	No	1920	Craftsman
S4 17a/b	4601 Woodside	Contributing	No	1920	Craftsman
S4 18	4539 Parkside	Contributing	No	1920	Craftsman
S4 19	4540 McKinney	Contributing	No	1935	4-plex Apartment
S4 20	4602 McKinney	Contributing	No	1923	4-square
S4 21	4601 McKinney	Contributing	No	1930	4-square
S4 22	4539 McKinney	Contributing	No	1920	Craftsman
S4 23	4602 Walker St	Noncontributing	No	1955	Apartment block
S4 24	4601 Walker St	Contributing	No	1920	Craftsman
S4 25	4604 Rusk St	Contributing	No	1920	Craftsman
S4 26	4542 Rusk St	Contributing	No	1920	Craftsman
S4 27	4545 Rusk St	Noncontributing	No	1950/2001	Ranch
S4 28	4609 Rusk St	Contributing	No	1920	Craftsman

Source: AmaTerra 2023.

Figure 2-6: Map of Eastwood Historic District



Houses

Styles documented in the survey APE included the Craftsman Bungalow, the Four Square and Colonial Revival (**Table 2-1**). Wilson's propaganda booklets specifically discuss the attributes of the Bungalow style (Wilson 1911: 9, 10). In addition to single-family buildings, several two-story apartment buildings were surveyed, Resources S4 10, S4 14, S4 19, and S4 23. Resources S4 14 and S4 23, are Ranch style apartments built later than the initial construction styles when the subdivision was platted. The modern apartment buildings are oriented to Lockwood Drive instead of Woodside and Walker streets, respectively. The orientation to Lockwood Drive, a north/south street, is a deviation from Wilson's original concept "to avoid throwing the rear of one home in the front or side of another home" (Wilson Company 2012: 7).

Historic topographic maps, aerial photographs, and Harris County Appraisal District (HCAD) records were reviewed to determine the number of houses constructed prior to 1945. Historians discovered there was no change to the number of buildings between topographic maps dated 1922, 1932, and 1949 (www.historicaerials.com). County Tax Assessor records had about 30 percent of the houses built prior to 1945 and based on visual desktop inspections the HCAD construction dates were inaccurate. Based on the reconnaissance level survey with the APE capturing only the lots adjacent to Lockwood Drive, historians are unable to determine the percentages of houses that retain architectural integrity. The buildings that were documented are recommended not eligible due to alterations such as replacement of original wood windows, loss of original columns, and additions. The buildings that did retain integrity did not rise to the level necessary for inclusion in the National Register Historic Places (NRHP).

3.0 Effects to Eligible or Listed NRHP Historic Resources

Following the May 2023 Historic Survey Report and input from consulting parties, METRO has refined the design within the Third Ward and Eastwood Historic Districts to avoid and minimize effects and will treat the Evergreen Negro Cemetery as Eligible. The total area of acquisitions data has been updated to reflect these refinements as of July 24, 2023, and maps at a larger scale are provided.

3.1 Segment 3 Effects on Evergreen Negro Cemetery

The Archaeological Work Plan for exhumation and reinternment of burials associated with the Evergreen Negro Cemetery will followed in accordance with the permit requirements from the THC. The Cemetery will be treated as an eligible historic resource and will be included in construction plans as an area that is off-limits for construction activities and workers. Any modifications to project design plans, or departure from the Archeological Work Plan will be coordinated with the THC and Project Respect consulting parties.

3.2 Segment 3 Effect on NRHP Eligible Third Ward Historic District

The following section describes property acquisitions within the Third Ward Historic District (district) as requested by the THC to comment on recommended effects determinations. Detail on property acquisitions is provided relative to the contributing resources listed in the THC letter, including 4311 Hutchins Street, 4311 Emancipation Avenue, 2918 Wheeler Avenue, 2917 Wheeler Avenue, 2918 Cleburne Street, 2900 Holman Street (Blackshear Elementary), 3005 Holman Street, 3204 Ennis

Street (Houston Negro Hospital and the School of Nursing Building). THC concurred that remaining surveyed resources within Segment 3 are not eligible for listing in the NRHP.

In 2008 and 2019, the THC determined the Third Ward Historic District eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development, and eligible under Criterion C in the area of Architecture. A NRHP nomination completed in 2008 describes the architecture as varied and following national architectural movements. (Randall and Korfmacher 2008: E 19). There was no discussion of landscape or setting in the NRHP nomination. The NRHP nomination has not gone through the designation process at the time this report was written. The houses abutting Wheeler Avenue are predominately Tudor style with front yards, a sidewalk and green space before the curb which is typical for this era.

Property Acquisitions

A substantial portion of Segment 3 travels through the NRHP eligible Third Ward Historic District. ROW acquisition is required on some properties to improve turning radii, safety sight distances at street intersections, to provide wider 10' sidewalks, and to provide handicap accessible ramps at street crossings per the American with Disability Act (ADA) (**Figures 3-1a, 3-1b, 3-1c** and **Table 3- 1**). These sidewalk expansions are required per the City of Houston Infrastructure Design Manual and will bring the existing sidewalks up to current design standards and improve pedestrian/bicycle and handicap access.

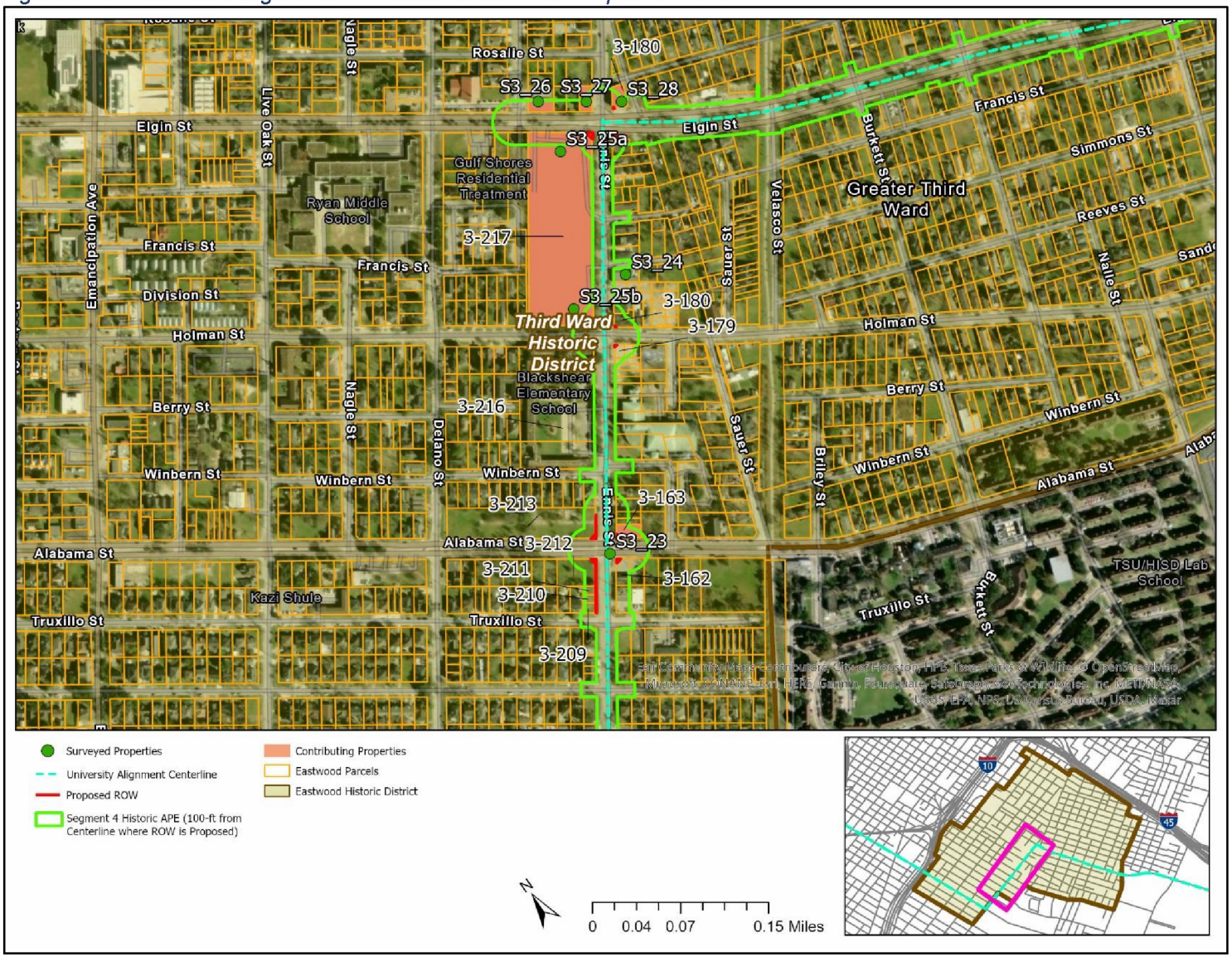
Acquisitions will primarily occur at street intersections of Ennis and the following cross streets: Wheeler, Cleburne, Alabama, Holman, and Elgin. In many cases, the acquisitions needed are "corner clips" that are to provide for a wheelchair ramp and bring the sidewalks to ADA compliance and City design standards. In other cases, strips of property acquisitions are needed along the front, back or side of a property to provide a wider sidewalk to meet the City design stations and to accommodate a safety buffer area between the curb and the sidewalk. These strips of property acquisitions include the need for corner clips at 3204 Ennis Street from the individually listed Houston Negro Hospital and School of Nursing Building.

Figure 3-1a: Third Ward Eligible NRHP Historic District with Proposed ROW



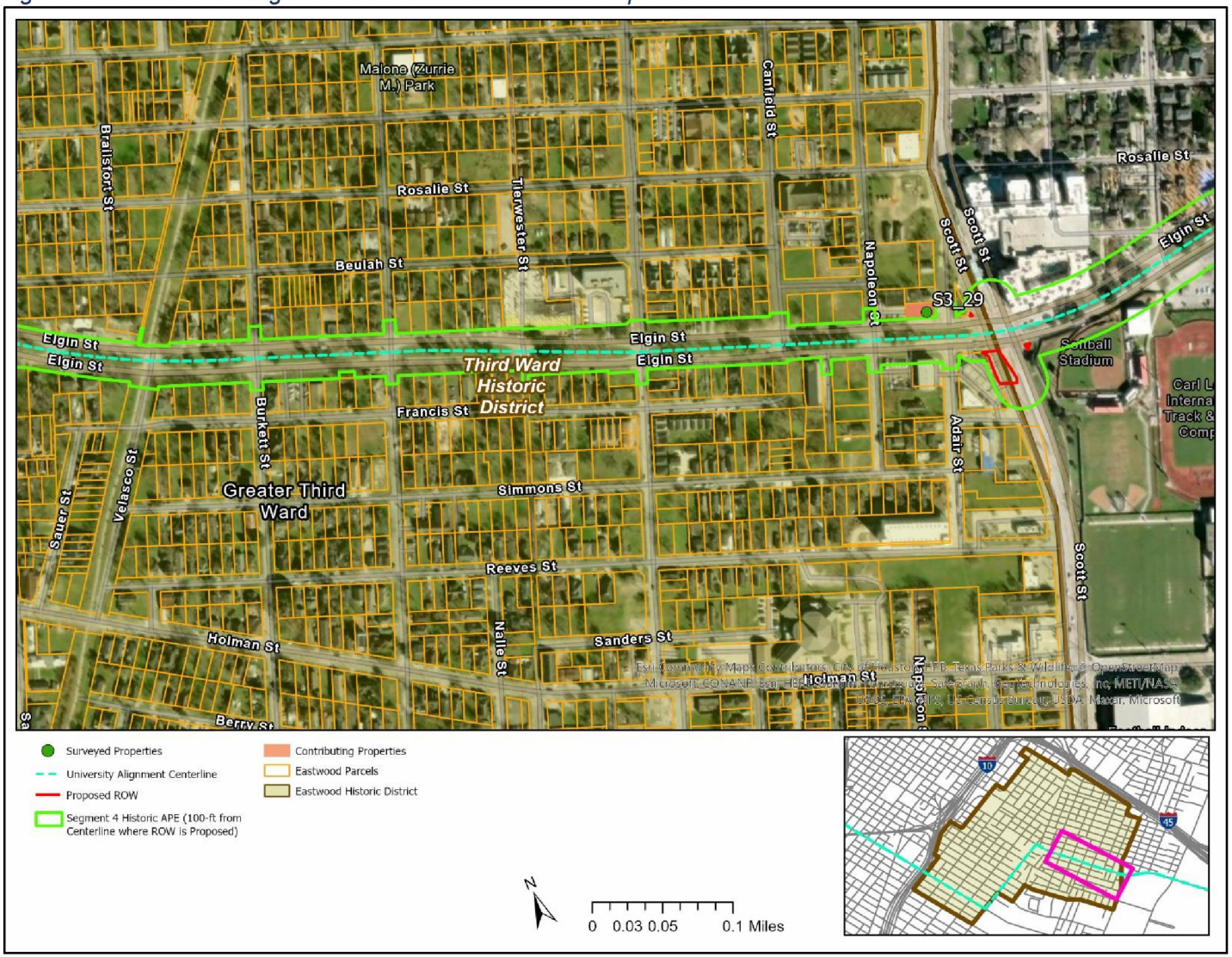
Source: HNTB 2023

Figure 3-1b: Third Ward Eligible NRHP Historic District with Proposed ROW



Source: HNTB 2023

Figure 3-1c: Third Ward Eligible NRHP Historic District with Proposed ROW



Source: HNTB 2023

Table 3-1: Acquisitions from property within the NRHP-Eligible Third Ward Historic District

Survey	Parcel	Address	Status	Parcel Sq ft	Acq. Sq ft	Corner Clip	Buffer
Vacant	3-046	2202 Wheeler Ave	Vacant no building	11,302	275.9		•
S3_18 *	3-055	4402 Emancipation Ave	Non-contributing	5,000	5.3	•	
S3_18	3-056	4405 Emancipation Ave	Contributing	5,775	23.1	•	
0251	3-111	2201 Wheeler Ave	Contributing	95	9.7		•
S3_18 *	3-120	4314 Emancipation Ave	Non-contributing	10,000	5.0		•
S3_18	3-121	4311 Emancipation Ave	Contributing	7,350	33.7		•
0261	3-122	2405 Wheeler Ave	Contributing	6,825	4.8		•
0262	3-123	2411 Wheeler Ave	Contributing	6,825	4.2		•
0135	3-162	3002 Alabama Str	Non-contributing	5,775	123.8	•	
0107	3-163	3003 Alabama Str	Contributing	4,750	210.5	•	
0100	3-179	3503 Ennis St	Non-contributing New construction	1,924	42.8	•	
Vacant	3-180	3005 Holman St	Vacant no building	4,330	14.4	•	
S3_21 0306	3-194	2918 Wheeler Ave	Contributing	5,250	31.7	•	
S3_21 0216	3-195	2917 Wheeler Ave	Contributing	5,250	82.9	•	
Vacant	3-209	3812 Ennis St	Vacant no building	1,950	226.2		•
Vacant	3-210	3808 Ennis St	Vacant no building	1,600	191.5		•
Vacant	3-211	3806 Ennis Str	Vacant no building	1,700	202.8		•
Vacant	3-212	2908 Alabama Str	Vacant no building	15,725	787.9	•	•
Vacant	3-213	2801 Alabama St	Vacant no building	72,500	493.7	•	•
Prior Survey	3-215 and 3-216	3224 Ennis St/2900 Holman St	Blackshear Elementary School	106,927	9.5 on parcel 3-216	•	
S3_25a b	3-217	3204 Ennis St	Listed	187,500	138.5	•	
S3_28	3-297	3115 Ennis St	Contributing	4087	24.8	•	
	TOTAL	**22 parcels**		**469,790**	**2,952.8**		

Source: METRO 2023, April 11, 2023 data file

* Noncontributing is based on Criterion C, architecture only.

2202 Wheeler Avenue (Parcel 3-046)
The property acquisition at the vacant property at the corner of Hutchins Street and Emancipation Avenue, 2201 and 2203 Wheeler Avenue would include a corner and a strip acquisition of 275.9 square feet behind the existing sidewalk **(Figure 3-2)**.

4402 Emancipation Avenue (Parcel 3-055)
The property acquisition at 4402 Emancipation Avenue would include a small triangle of 5.3 square feet behind the existing sidewalk **(Figure 3-3)**.

4405 Emancipation Avenue (Parcel 3-056)
The property acquisition at 4405 Emancipation Avenue would include a small triangle of 23.1 square feet behind the existing sidewalk **(Figure 3-3)**.

2201 Wheeler Avenue (Parcel 3-111)
The property at the corner of Hutchins and Wheeler is 2201 Wheeler Avenue and the 9.7 sq ft to be acquired is property owned by the State of Texas left from the construction of US-69. No acquisition of property would be made from the residential property **(Figure 3-2)** although the address is the same. The THC commented about 4311 Hutchins, which is located to the rear of 2201 Wheeler Avenue and is outside of the APE. There are no property acquisitions from 4311 Hutchins.

4314 Emancipation Avenue (Parcel 3-120)
The property acquisition at 4314 Emancipation Avenue would include a small triangle of 5.0 square feet behind the existing sidewalk **(Figure 3-3)** for a sidewalk and a wheelchair ramp.

4311 Emancipation Avenue (Parcel 3-121)
The property acquisition at 4311 Emancipation Avenue would include a small triangle of 33.7 square feet behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-3)**.

2405 Wheeler Avenue (Parcel 3-122)
The property acquisition at 2405 Wheeler Avenue would include a small triangle of 4.8 square feet behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-3)**.

2411 Wheeler Avenue (Parcel 3-123)
The property acquisition at 2411 Wheeler Avenue would include a small triangle of 4.2 square feet behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-3)**.

3002 Alabama Street (Parcel 3-162)
The property acquisition at the intersection of Ennis and Alabama Streets, 3002 Alabama Street, would include a corner clip of 123.8 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-6)**.

3003 Alabama Street (Parcel 3-163)
The property acquisition at the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 210.5 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-6)**.

3503 Ennis Street (Parcel 3-179)
The property acquisition at the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 42.8 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-4)**.

Figure 3-2: ROW acquisitions from 2201 and 2202 Wheeler Avenue

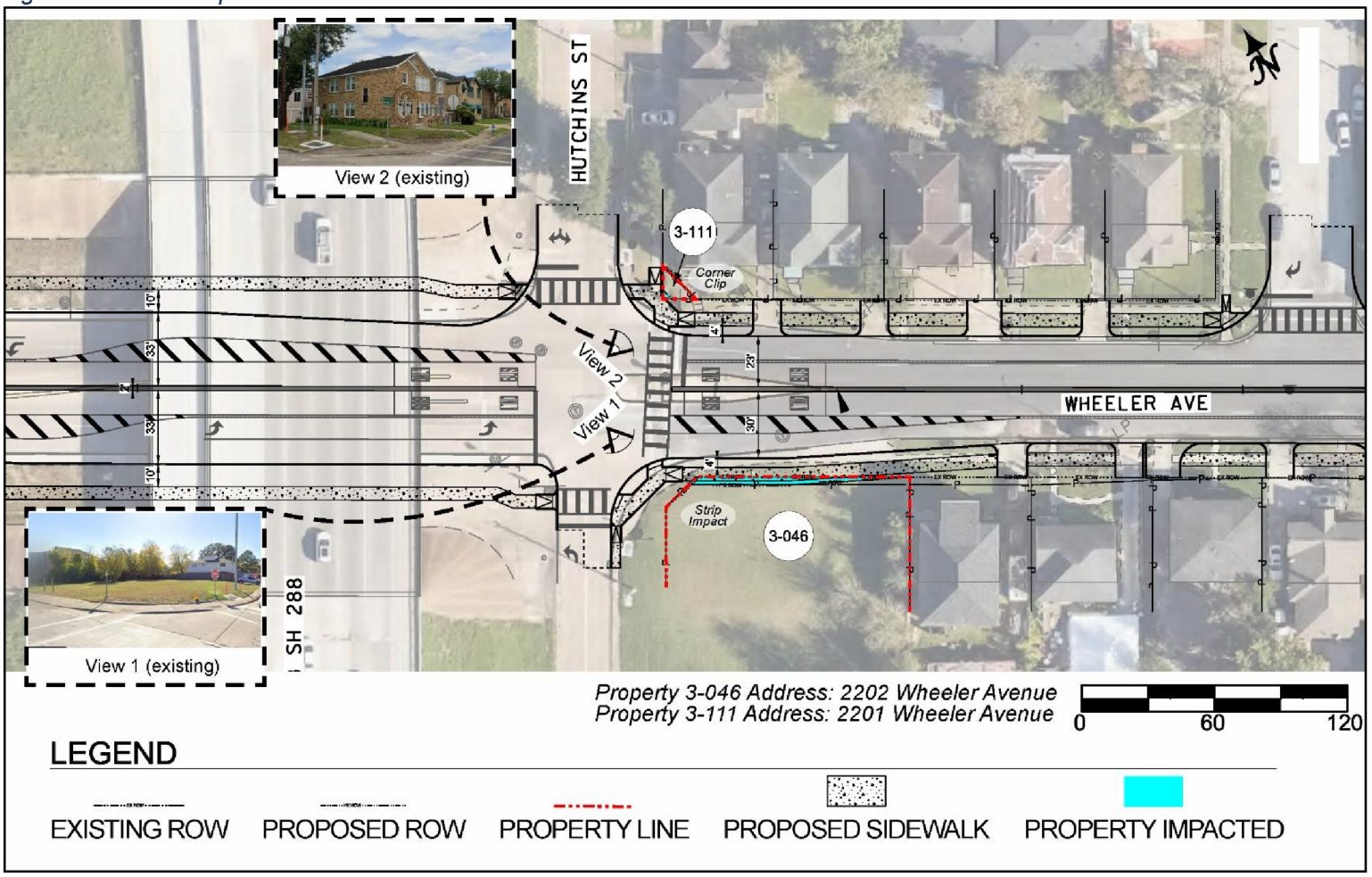


Figure 3-3: ROW acquisitions from 4402, 4405, 4314, and 4311 Emancipation Avenue and 2405 and 2411 Wheeler Avenue

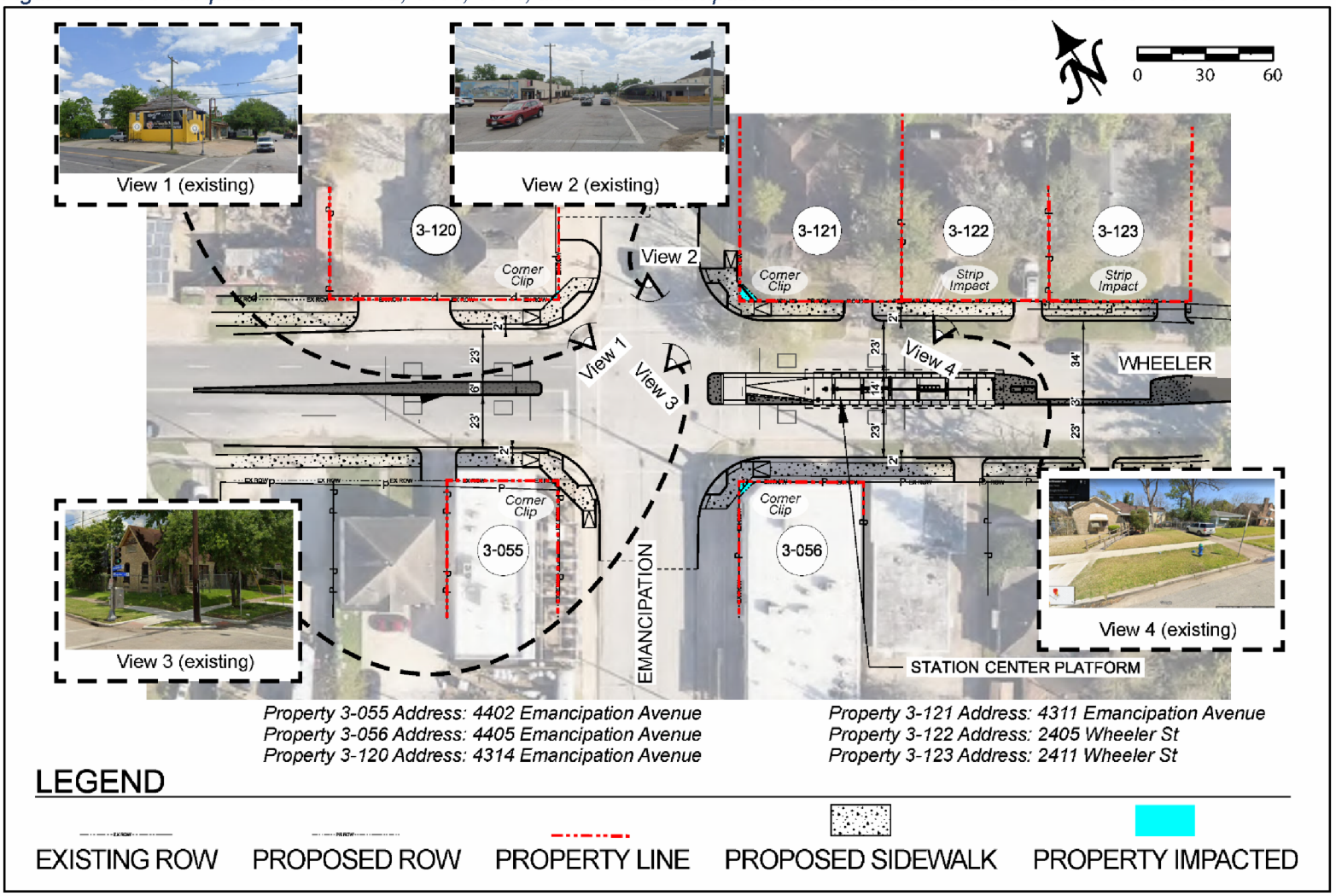
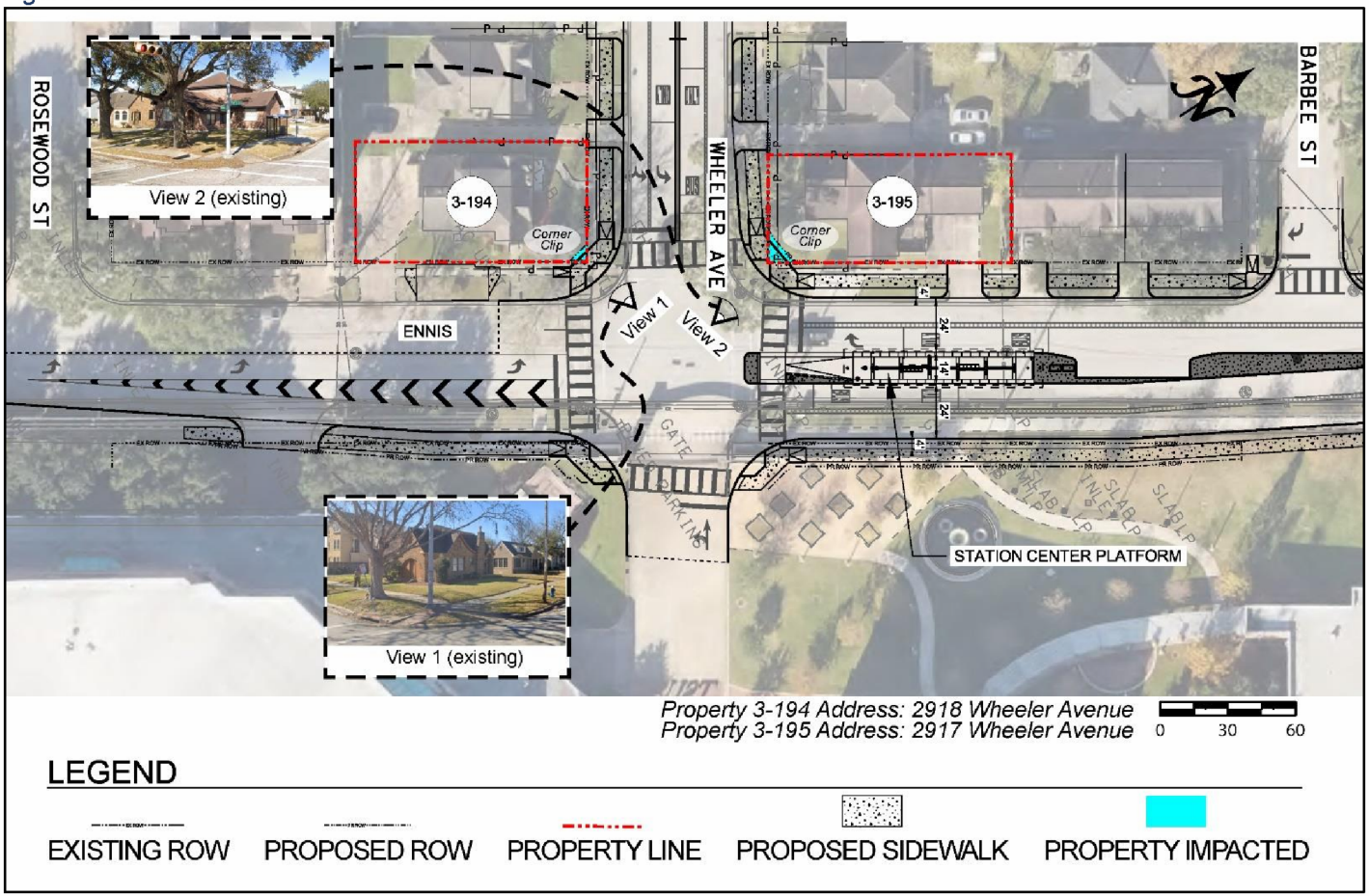


Figure 3-4: 3204 Ennis Street, NRHP-Listed Houston Negro Hospital and School of Nursing and 3503 Ennis Street and 3005 Holman Street



Figure 3-5: 2917 and 2918 Wheeler Avenue



3005 Holman Street (Parcel 3-180)
The property acquisition at the northeast corner of the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 14.4 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-4)**.

2918 Wheeler Avenue (Parcel 3-194)
The property acquisition at 2918 Wheeler would include a small triangle of 31.7 square feet behind the existing sidewalk **(Figure 3-5,** southeast corner of Ennis Street and Wheeler Avenue) for a sidewalk and a wheelchair ramp.

2917 Wheeler Avenue (Parcel 3-195)
The property acquisition at 2917 Wheeler would include a small triangle of 82.9 square feet behind the existing sidewalk (**Figure 3-5**, northeast corner of Ennis Street and Wheeler Avenue) for a sidewalk and a wheelchair ramp.

3812 Ennis Street (Parcel 3-209)
The property acquisition at the intersection of Truxillo and Ennis Streets, 3812 Alabama Street, would include a 226.2 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-6)**.

3808 Ennis Street (Parcel 3-210)
The property acquisition at 3808 Ennis Street, would include a 191.5 square feet behind the existing sidewalk for a widened sidewalk **(Figure 3-6)**.

3806 Ennis Street (Parcel 3-211)
The property acquisition at 3806 Ennis Street, would include a 202.8 square feet behind the existing sidewalk for a widened sidewalk **(Figure 3-6)**.

2908 Alabama Street (Parcel 3-212)
The property acquisition at the intersection of Alabama and Ennis Streets, 2908 Alabama Street, would include a 787.9 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-6)**.

2801 Alabama Street (Parcel 3-213)
The property acquisition at the intersection of Alabama and Ennis Streets, 2801 Alabama Street, would include a 493.7 square feet behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-6)**.

3224 Ennis Street/2900 Holman Street, Blackshear Elementary School (Parcel 3-215 and 3- 216)
The Blackshear Elementary School (addresses appear as 3224 Ennis Street and 2900 Holman Street), 2900 Holman Street, would have a corner clip acquisition at the corner of Ennis and Holman Streets, in the amount of 9.5 square feet for a wheelchair ramp **(Figure 3-7).** The existing wheelchair ramp has a utility pole in it and it would be relocated to public right-of-way as part of the BRT Project.

3204 Ennis Street, NRHP-Listed Houston Negro Hospital and the School of Nursing (Parcel 3-217)
The NRHP-Listed Houston Negro Hospital and School of Nursing occupy the block between Holman and Elgin Streets. The property acquisition is listed with the address of 3204 Ennis Street and would include corner clips at Holman Street and Ennis Street and at Ennis Street and Elgin Street. The total land area to provide for a wider sidewalk and wheelchair ramp would be 138.5 sq ft (**Figure 3-4**).

3115 Ennis Street (Parcel 3-297)
The property acquisition at the southwest corner of the intersection of Elgin and Ennis Streets, 3115 Ennis Street, would include a small triangle of 24.8 square feet behind the existing sidewalk (**Figure 3- 8**) for a sidewalk and a wheelchair ramp.

Figure 3-6: ROW Acquisitions from 3002 and 3003 Alabama Street, 3812, 3808, 3806 Ennis Street and 2908 and 2801 Alabama Street

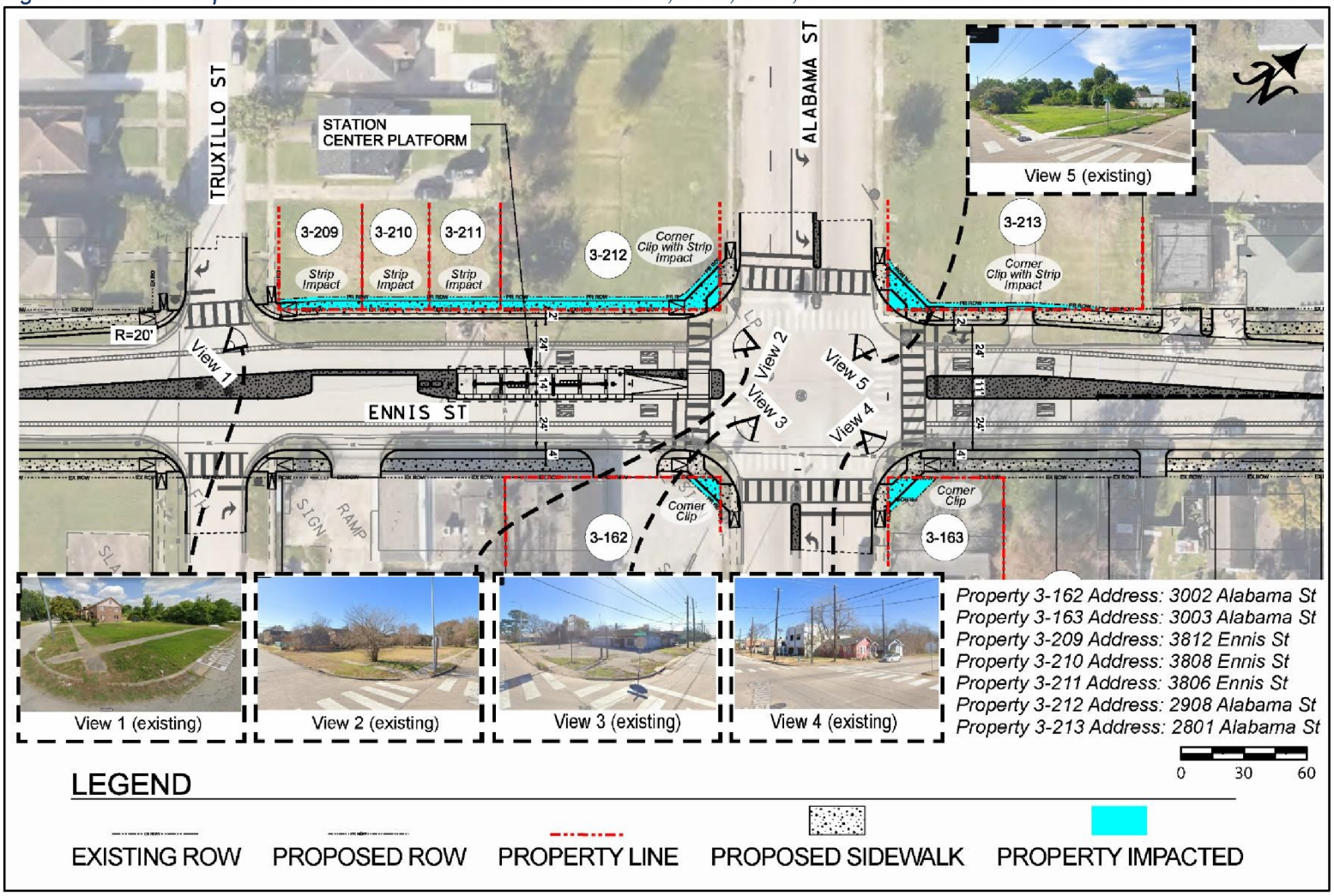


Figure 3-7: ROW Acquisitions for 3224 Ennis Street/2900 Holman Street, Blackshear Elementary School

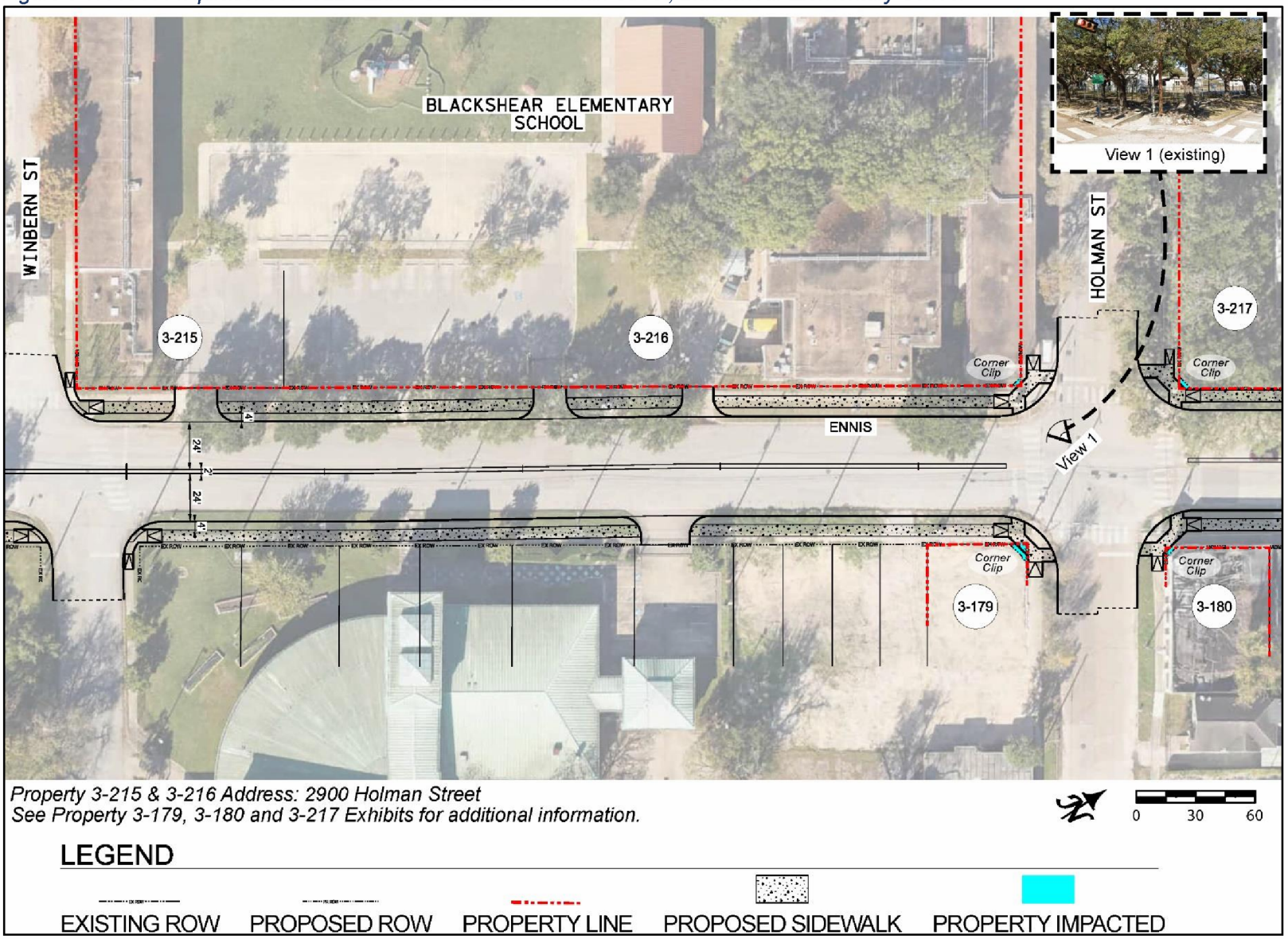
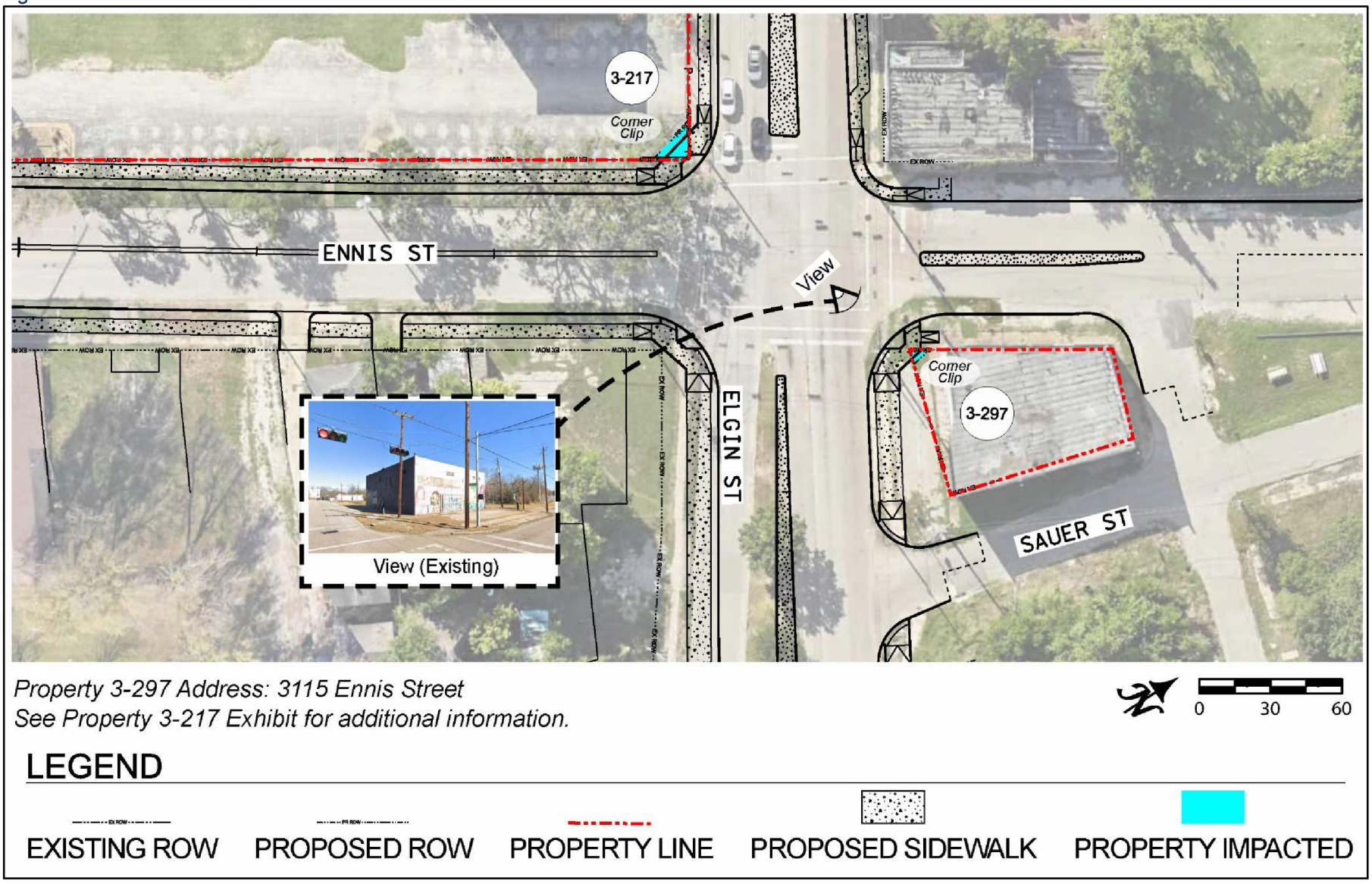


Figure 3-8: 3115 Ennis Street



Visual Effects
Stations would be introduced as a new visual element within the historic district. Three BRT Stations and platforms would be located along the BRT at Wheeler Avenue, Alabama Street, and Elgin Street. Stations are yet to be designed and METRO has committed to a contextual station design within the district in a manner that minimizes visual effects to the district's architecture and preserves the ethnic heritage. Specific station design will occur during preliminary engineering and a series of community workshops will be held following NEPA completion to inform community members of the design process. Public Opinion Surveys will be provided to property owners and residents within the historic district to obtain input on design elements and materials to be used in developing the 60 percent plans. The survey will provide samples of existing contributing properties within the district and seek input on the elements that should be emulated in the BRT Station design.

METRO will coordinate with the City of Houston's Planning & Development Historic Preservation Office and consulting parties will be invited to participate in the design workshops, the survey, and review and comment on 60 percent station design plans. Specific outreach will include meetings with the Greater Third Ward Super Neighborhood and the sub-neighborhoods specific to the Third Ward Historic District.

Third Ward Historic District Effects Determination
The historic district covers roughly 750 acres. The removal of less than 3,000 sq ft (.07 percent) of sidewalks for 22 parcels is nominal and would not be adverse. METRO will continue to reduce property acquisitions as it refines project design.

The introduction of bus-shelters like BRT Stations would introduce a new visual element within the district that is not already present; however, the BRT Station designs will be completed in a manner to minimize visual effects to the district and will mimic the district's existing character and reflect on its history. METRO's arts-in-transit program will integrate historic elements into the BRT Stations through community-chosen arts-in-transit selections, i.e., interpretive historic panels at stations and/or a cultural walk incorporated into sidewalks that symbolize the district's ethnic heritage. The BRT Project would not alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association; therefore, the Project would have no adverse effect to the historic district. METRO commits to the following conditions to minimize visual effects of the BRT lanes and underpass:

a) Station designs that mimic the neighborhood scale, architectural styles, and materials of the district (varied styles),
b) Historic interpretive panels that provide an educational opportunity on the history of the district's Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development to be identified with community input,
c) Replanting of trees in the buffer between the curb and the sidewalk at intervals recommended by the City of Houston Arborist and in accordance with the City's Tree Ordinance,

d) Public Outreach on station designs and METRO's arts-in-transit program to include a survey and a design workshop, and,
e) 30-day Consulting party design reviews of 60 percent plans.

Other Segment 3 Properties Information Request by THC
THC asked for clarification on resources on several properties in Segment 3 and that detail is provided above for properties where ROW acquisition would occur (4311 Emancipation Avenue, 2918 Wheeler Avenue, 2917 Wheeler Avenue, 3224 Ennis/2900 Holman Street, 3204 Ennis Street, and 3115 Ennis Street).

4311 Hutchins. This property is outside of the APE and was not surveyed. There would be no ROW acquisition for this property. (See description for adjacent property at 2201 Wheeler Avenue.).

2918 Cleburne Street (Parcel 3-202). There will be no property acquisition from this property. The GIS file shows an acquisition of two inches and METRO has eliminated those two inches from the design plans.

3.3 Segment 4 Effects on Eastwood Subdivision Historic District

The following section describes effects of the BRT Project within the Eastwood Subdivision Historic District (district). The BRT would enter the assumed NRHP eligible Eastwood Historic District (the district) at Leeland/Lockwood and would travel north through the district in dedicated BRT lanes. These lanes would be primarily constructed within the existing right-of-way of Lockwood Drive, however, minor property acquisitions are needed to bring the existing sidewalks up to City of Houston design standards (**Figure 3-9**). One BRT Station would be located within the District. ROW acquisition is required on some properties, per the City of Houston Infrastructure Design Manual, to improve turning radii, safety sight distances at street intersections, provide sidewalks, and/or to provide wheelchair ramps at pedestrian crossings designed for ADA Compliance and would require partial acquisitions for strips of property along Lockwood Drive and/or at corners of properties. One general purpose lane in each direction would remain on Lockwood Drive.

Property Acquisitions
Acquisitions within the district would primarily occur at street intersections of Lockwood Drive and the following cross streets: Clay, Polk, Woodside, Park, McKinney, Walker, and Rusk. In many cases, the acquisitions needed are "corner clips" that are to provide for a wheelchair ramp and bring the sidewalks to ADA compliance and City design standards. In other cases, strips of property acquisitions are needed along the front, back or side of a property to provide a wider sidewalk to meet the City design stations and to accommodate a safety buffer area between the curb and the sidewalk.

Partial strips of property acquisitions and/or corner clips would result in 0.12 acres being converted to transportation use out of approximately 135.8 total acres of the district. No buildings would be altered or demolished for these minor acquisitions and the acquisitions would not result in an adverse effect on the district or any individual contributing resources within the district. **Table 3-2** details the acquisitions within the district.

Figure 3-9: Acquisitions from property within the Eastwood Historic District



Table 3-2: Acquisitions from property within the Eastwood Historic District

Survey	Parcel	Address	Status	Total Sq ft	Acq. Sq ft	Frontage Buffer	Sidewalk
S4_11	4-018	4602 Polk St	Eligible	5,449	193	•	•
S4_12	4-019	4601 Polk St	Non-Contributing	4,803	146	•	•
S4_14	4-020	4602 Woodside St # 6	Non-Contributing	12,884	141	•	•
S4_21	4-026	4601 McKinney St	Eligible	8,025	206	•	•
S4_23	4-027	4602 Walker St #8	Non-Contributing	10,700	178	•	•
S4_24	4-028	4601 Walker St	Eligible	7,810	246	•	•
S4_25	4-029	4604 Rusk St	Eligible	7,162	276	•	•
S4_09	4-106	4501 Clay St	Eligible	7,645	20	•	•
Vacant	4-107	0 Polk St	N/A	8,792	1,694	•	•
Modern	4-108	4543 A Polk St	Non-Contributing	4,500	351	•	•
S4_15	4-109	4550 Woodside St	Eligible	4,500	11		
S4_16	4-110	4547 Woodside St	Eligible	5,544	203	•	•
S4_19	4-114	4540 McKinney St # 4	Eligible	5,350	139		
S4_22	4-115	4539 McKinney St	Eligible	9,095	827	•	•
S4_27	4-119	4545 Rusk St	Non-Contributing	8,898	422	•	•
			TOTAL	111,157	5,053		

July 2023, HNTB Updated Design – reduced footprint

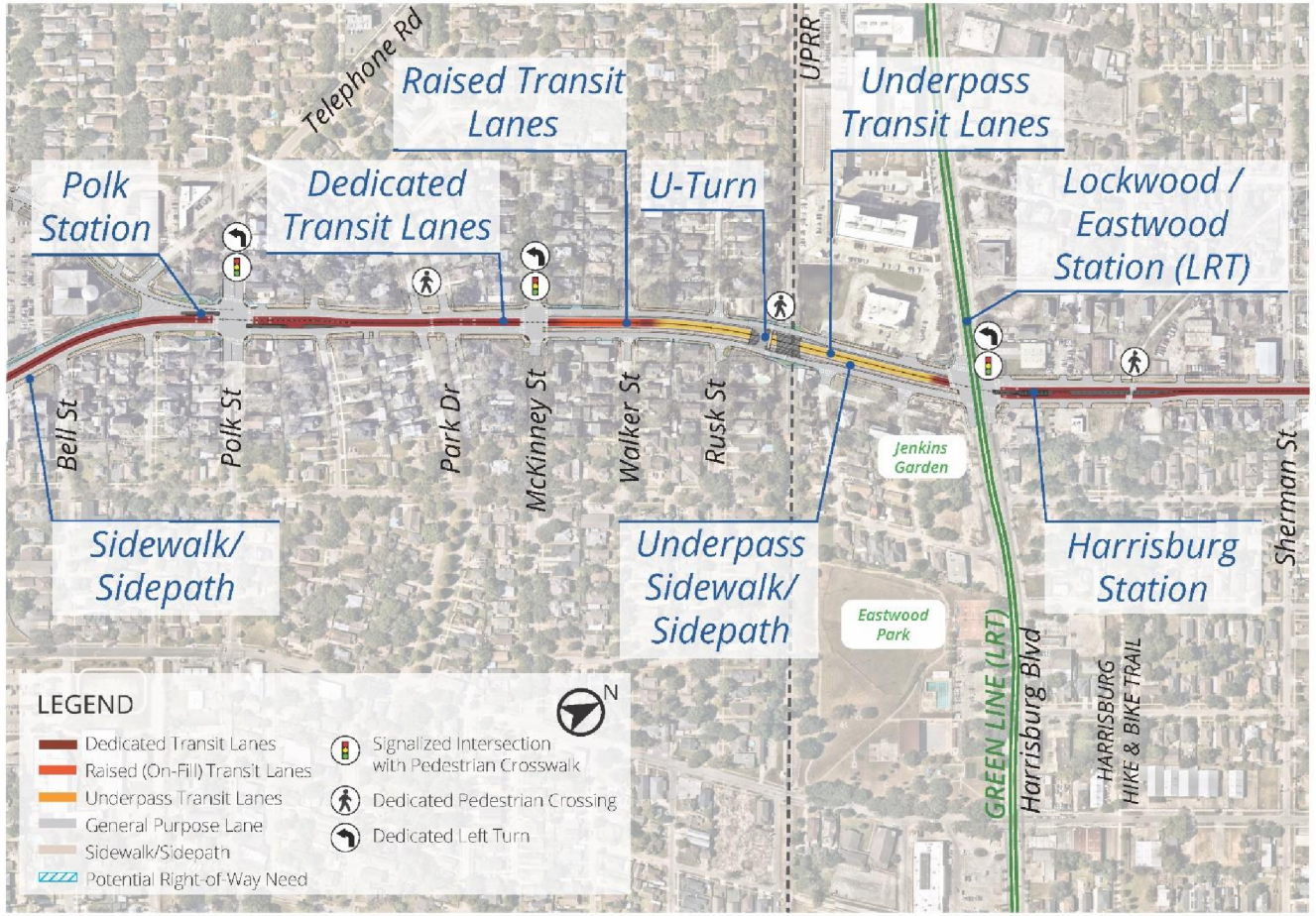
Roadway Alterations to the Historic Subdivision Plat

The historic subdivision plat was altered when Maplewood Avenue (renamed to Lockwood Drive) was widened from 60-ft to a four-lane divided road, roughly 100-ft, with a median (**Appendix C** – Streetscape Photos). The original plat was laid out with the primary access from Harrisburg Road and the Harrisburg Streetcar. The introduction of a major thoroughfare severely altered the subdivision's plat by providing a north-south transportation passage through the neighborhood. Despite these changes, the subdivision plat does retain its east-west grid pattern north of Park Avenue although bisected by Lockwood Drive. The introduction of Lockwood Drive also allowed for building orientations to change and face Lockwood Drive, instead of the east-west streets as originally laid out by the developer.

The BRT Project would be constructed in the median of Lockwood Drive that was not part of the original plat of the subdivision. The BRT's presence in the middle of Lockwood Drive, would prohibit left turns at Woodside Street, Walker Street, and Rusk Street. Right turns would still be allowable and circulation to and from the neighborhood streets would remain intact. No streets would be closed and the existing grid pattern of streets would remain. The Project will include pedestrian and bicycle crossings at Polk and McKinney Streets and will add pedestrian and bicycle only crossings at Park Drive and the new u-turn prior to the UPRR tracks.

Traffic analysis identified that freight trains block the road intersection of Lockwood Drive at the UPRR tracks for 200 days per year for a duration longer than 10 minutes. This impedance to the road increases vehicular traffic, hinders emergency services, and causes delays to existing bus traffic. The engineering team developed a solution of an overpass at the UPRR; however, concerns expressed by Eastwood residents and community stakeholders regarding the visual impact of the overpass led to the engineering team to modify the design to an underpass for the BRT, pedestrians/bicycles, and emergency service vehicles. (**Figures 3-10, 3-11, and 3-12**). Left turns across the BRT lanes would be prohibited but right turns would still be allowable. **(See Figure 3-10).** The general-purpose travel lanes will remain at the existing street grade and METRO will provide a vehicle turnaround giving passenger vehicles a choice to reroute in the event of a train blocking the intersection. (**Figure 3-13**).

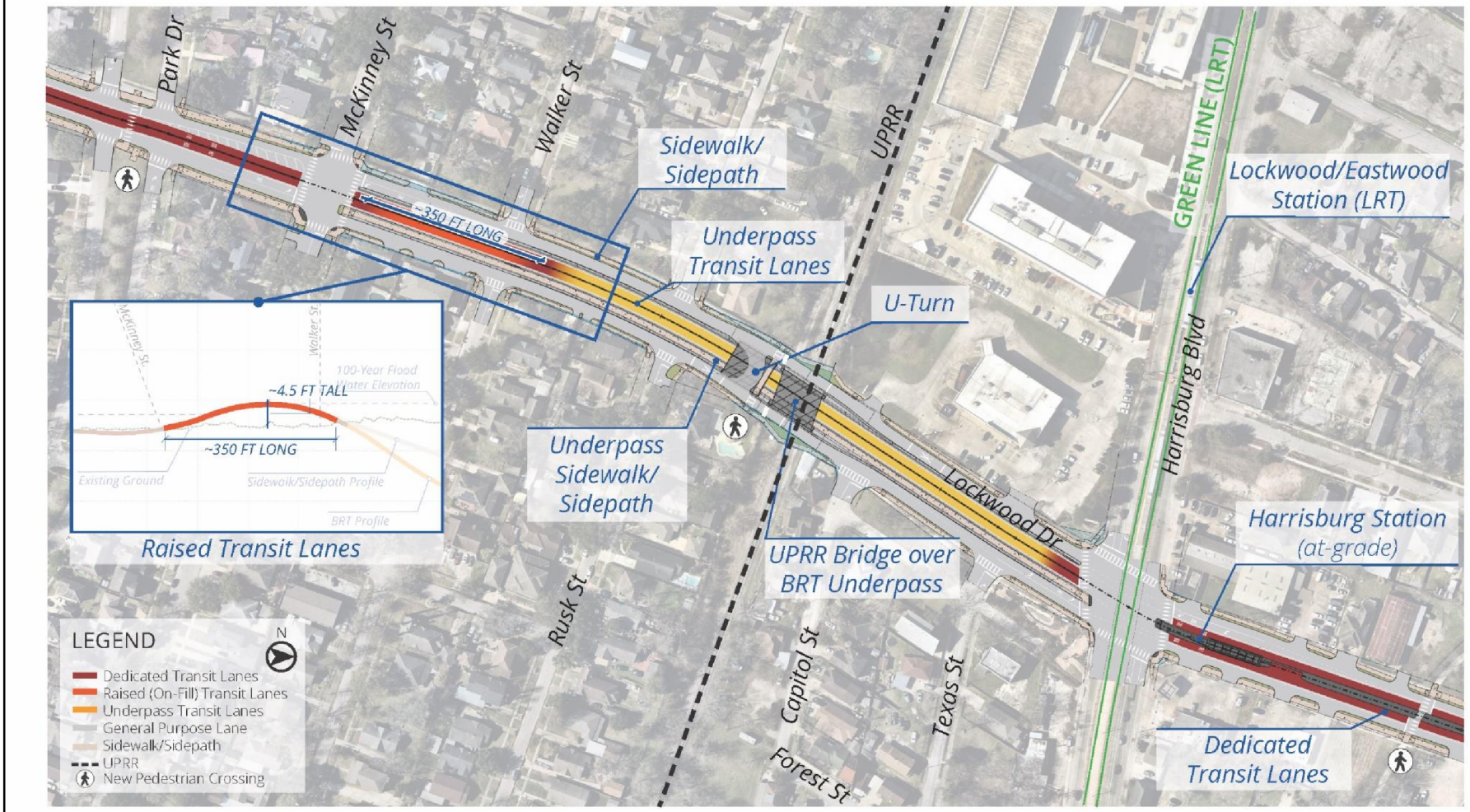
Figure 3-10 Traffic Condition with BRT Project



Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

NOT TO SCALE

Figure 3-11: University BRT Lockwood Drive Underpass



Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

NOT TO SCALE

Figure 3-12: University BRT Lockwood Drive Underpass

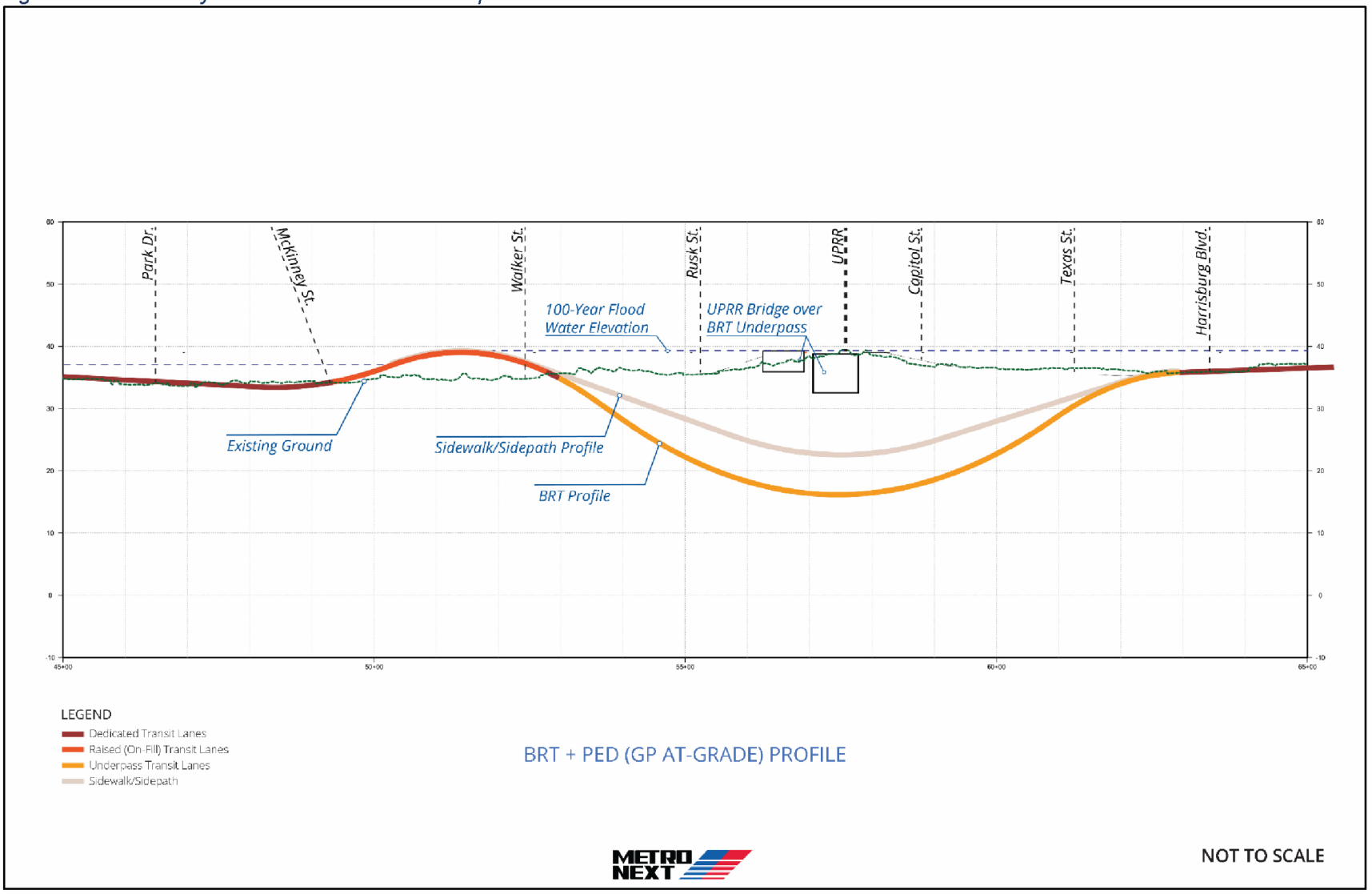
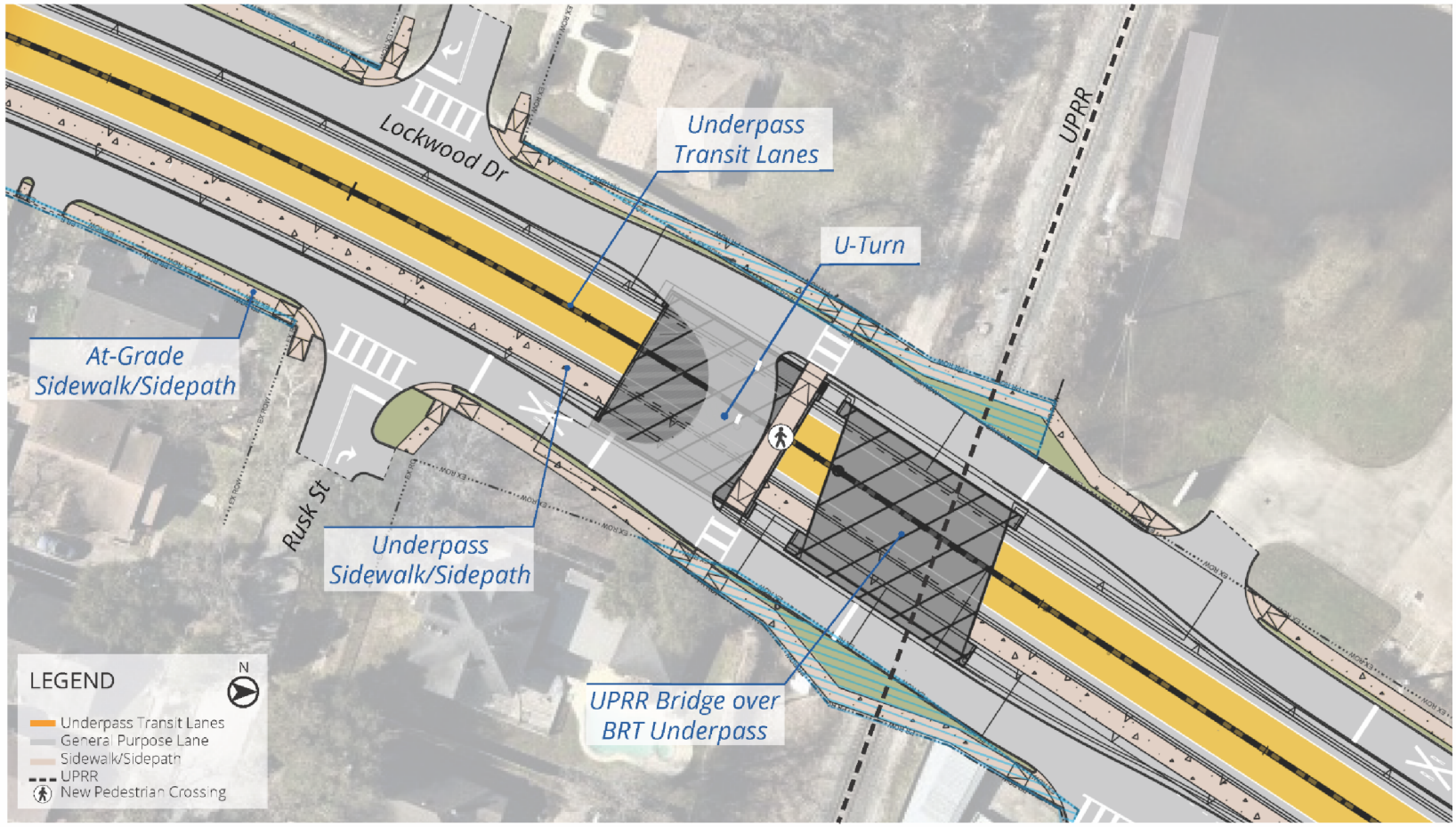


Figure 3-13: University BRT Lockwood Drive Underpass



Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

NOT TO SCALE

The BRT underpass would begin to descend under the UPRR freight tracks at Walker and transition to fully underground just after Rusk Street. The insertion of the underpass will require the median to be closed at Walker and Rusk to both pedestrians and vehicles. As the BRT lanes begin to descend into the underpass, a traffic barrier between the general-purpose lanes and the depressed BRT lanes is needed for safety. METRO is committed to complementary design treatments, with community input, in this area to reduce visual effects as long as safety requirements are met **(Figures 3-14).**

Visual - Stations

The Polk BRT Station Platform would be located along Lockwood Drive at Polk Street within the district boundaries. The station platforms are split to minimize the need for greater property acquisitions on adjacent properties.

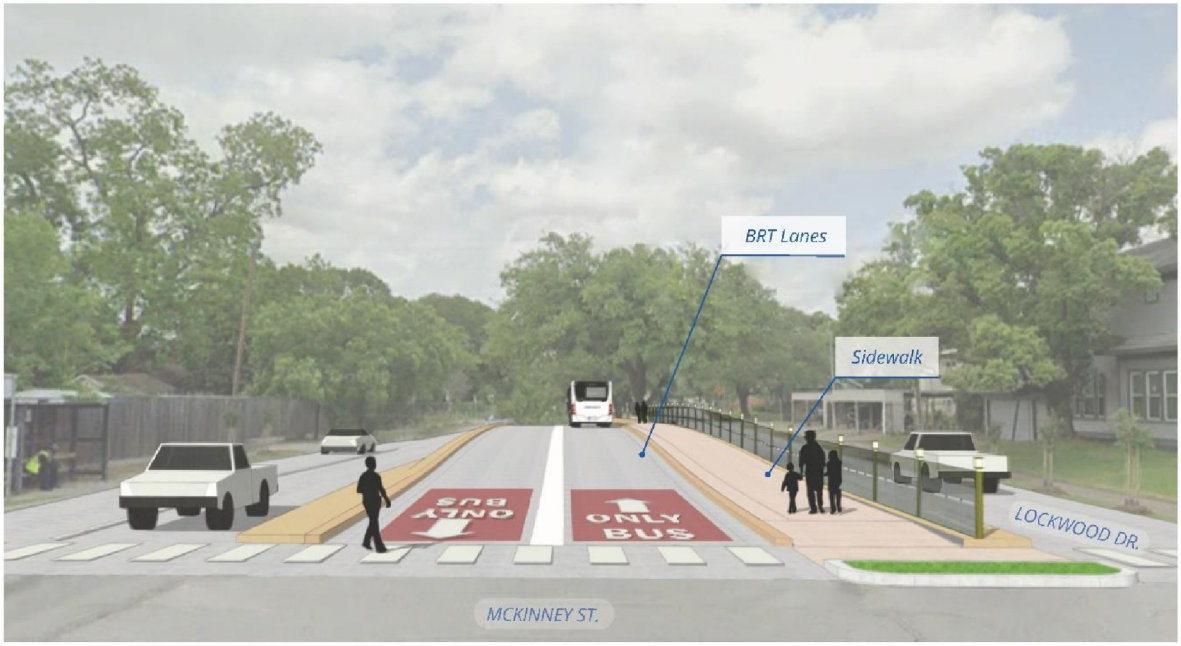
Like the Third Ward Historic District, stations are yet to be designed and METRO has committed to a station design that matches the scale of the existing homes adjacent to Lockwood Drive, the historic period, and mimics the architecture of the district to minimize visual effects. Specific station design will occur during preliminary engineering and a series of community workshops will be held following NEPA completion. METRO will conduct Public Opinion Surveys with property owners and residents within the historic district to obtain input on design elements and materials. The survey will provide samples of existing contributing properties and seek input on the elements that should be emulated in the BRT Station design. **Figure 3-15** shows home styles that design elements and materials that could be incorporated into the station design, including: brick and wood siding materials, iron fencing, exposed beams, tapered columns, and natural colors with white accents.

METRO will also utilize its arts-in-transit program to incorporate elements of the district's history and architecture. METRO will coordinate with the City of Houston's Planning & Development Historic Preservation Office and consulting parties will be invited to participate in the design workshops, the survey, arts-in-transit selections, and to review and comment on 60 percent station design plans. Specific outreach will include meetings with the Greater East End Super Neighborhood and the Eastwood Civic Association.

Figure 3-14: Existing and Proposed View Looking North at Lockwood Drive from McKinney Street



EXISTING VIEW LOOKING NORTH AT LOCKWOOD DR. AND MCKINNEY ST. INTERSECTION



PROPOSED VIEW LOOKING NORTH AT LOCKWOOD DR. AND MCKINNEY ST. INTERSECTION

Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

Figure 3-15: Existing Home Styles within the Eastwood Historic District



Visual - Neighborhood sign

While not historic, the neighborhood sign **(Figure 3-16)** in the median just south of Rusk, is of particular importance to the community and provides a sense of place. The sign mimics the bungalow style represented in the neighborhood with tapered columns, exposed beams and a pitched roof. This sign could be relocated to the station platform or replicated and placed at the stations and/or both entrances of the historic district.

Visual - Landscaping

The project's use of the median of Lockwood Drive removes an existing greenspace within the district. The existing median was not included in the original subdivision plat as it was created circa 1970 when Maplewood Drive was widened from two to four lanes, removing a row of housing in the center of the district, to become the four-lane principal roadway that it is today. The City's expansion of Maplewood Drive changed the characteristic and layout of the original subdivision plat and the landscaping along Lockwood Drive was not consistent with the developer's plans. Some trees exist in the median between Woodside and Harrisburg streets. There are a few medium size trees and small newly planted trees in the grass buffer, between the curb and sidewalk between Woodside and

Harrisburg streets mainly on the east side of Lockwood Drive. Landscaping will be included in the design plans and all trees will be replaced in accordance with the City of Houston's required Tree Preservation plan.

Figure 3-16: Existing Eastwood Neighborhood Sign (not historic)



Underpass Design and Flood control

The underpass design includes elements of flood control to prevent the water from entering the neighborhood from the Harrisburg-side of the underpass. At present, the UPRR tracks divide two watersheds and act as a levee; the design for an underpass must include flood gates to prevent stormwater from flowing through the underpass into Eastwood. A floodgate and a pumping station will be located outside of the historic district on the north side of the UPRR tracks. The flood gate would be closed during a 100-year flood event or greater.

Another important flood control element is a 350 -foot berm on fill that would be begin between McKinney Street and would gradually rise to an elevation of approximately 4.5' and then fall back down to existing street level at Walker Street before transitioning to below grade prior to the UPRR. This berm will provide a way to contain stormwater and avoid flooding into neighborhood streets. As the BRT begins to descend into the underpass, a wall would run alongside the BRT lanes to serve as a traffic barrier and as sides of the underpass. This will provide a separation between the general-purpose lanes and the BRT Underpass. The barrier would provide an opportunity for neighborhood signage, arts-in-transit, or interpretive historic panels into the project design. It will include

decorative railings that complements the surrounding architecture of the district and soft scaping with materials and landscaping **(Figure 3-17 and 3-18).**

Figure 3-17: University BRT Lockwood Drive BRT Lanes view from Walker Street



EXISTING VIEW LOOKING WEST AT LOCKWOOD DR. FROM WALKER ST.



PROPOSED VIEW LOOKING WEST AT LOCKWOOD DR. FROM WALKER ST.

Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

Figure 3-18: Berm/Wall rendering of the hump



EXISTING VIEW LOOKING WEST AT LOCKWOOD DR. FROM RUSK ST.



PROPOSED VIEW LOOKING WEST AT LOCKWOOD DR. FROM RUSK ST.

Illustrations for representational purposes only. Materials, fencing, colors and specific design treatments will change following additional consulting party input during station design workshops and the 60 percent engineering plan reviews.

Noise

Noise levels from the BRT will be lower than those of existing buses due to the commitment to use a battery powered electric vehicle. No noise impacts are projected to occur because of normal operations of the Project. Construction of the BRT would require a temporary shoofly of the UPRR to be constructed within the rail ROW. Noise mitigation will be provided during construction to offset noise increases to the adjacent homes in the first row closest to the UPRR. METRO contractors will comply with the City of Houston Noise Ordinance for time and sound level limits. Visual effects of the shoofly will be temporary.

No Adverse Effect

The BRT Project would not alter, directly or indirectly, any of the characteristics of a historic district that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. The BRT Stations, lanes, and underpass would be inserted into a streetscape that was previously altered by the expansion of Maplewood. These alterations modified the neighborhood by widening Maplewood from two to four lanes and making it a principal arterial and made permanent changes to the original plat in size, building orientations, and introducing new visual elements associated with a principal arterial. The intrusion of the new Lockwood Drive provided connections from the north and south, instead of the neighborhood's initial orientation to downtown to the west by streetcar.

The BRT Project would continue to provide transit service to the neighborhood, connect with the Greenline Light Rail on the north side of Harrisburg and provide an enhanced connection to a service that is similar to the Harrisburg Streetcar. The Project will provide enhanced transit resources and connections, reinforcing the neighborhood's preferred setting close to Downtown Houston. Therefore, the Project would have no adverse effect to the historic district. METRO commits to the following conditions to minimize visual effects of the BRT lanes and underpass:

a) Station designs that mimics and complements the neighborhood scale, architectural styles, and materials of the district (Craftsman Bungalow, the Four Square and Colonial Revival),
b) Historic interpretive panels that provide an educational opportunity on the history of the subdivision as a streetcar suburb, to be located with community input within the Project limits,
c) Incorporation of the community Eastwood neighborhood sign into either the station design or the two entrances of the district along Lockwood,
d) Minimizing the visual effects of the traffic barrier between the general-purpose lanes and the underpass, while maintaining safety requirements,
e) Minimizing the visual effects of the four-and-a-half-foot-tall flood berm by including decorative fencing and landscaping, and by including arts-in-transit designs based on community input,
f) Replanting of trees in the buffer between the curb and the sidewalk at intervals recommended by the City of Houston Arborist and in accordance with the City's Tree Ordinance,
g) Noise mitigation during construction,

h) Public Outreach on Polk Station designs and arts-in-transit program to include a survey and a design workshop, and,
i) 30-day Consulting party design reviews of 60 percent plans.

4.0 Summary

The BRT Project would not have an adverse effect on the eligible or listed resources within the APE. FTA and METRO commit to the conditions listed in this Addendum to minimize visual impacts to the Third Ward and Eastwood Historic Districts and the Revised Archaeological Work Plan for the Evergreen Negro Cemetery.

Table 3-3: Effects on Eligible or Listed NRHP Resources.

Segment	Eligible or Listed Resources	Effect Recommendation
Segment 3	Evergreen Negro Cemetery	No effect
Segment 3	Third Ward Historic District NRHP eligible under Criteria A and C	No adverse effect
Segment 4	Eastwood Neighborhood	No adverse effect

Source: AmaTerra2023.

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APPENDIX A

Consulting Party Input

Houston METRORapid University BRT Corridor Project



June 1, 2023

Section 106 Consulting Party Meeting Agenda

Welcome & Introductions

Project Overview

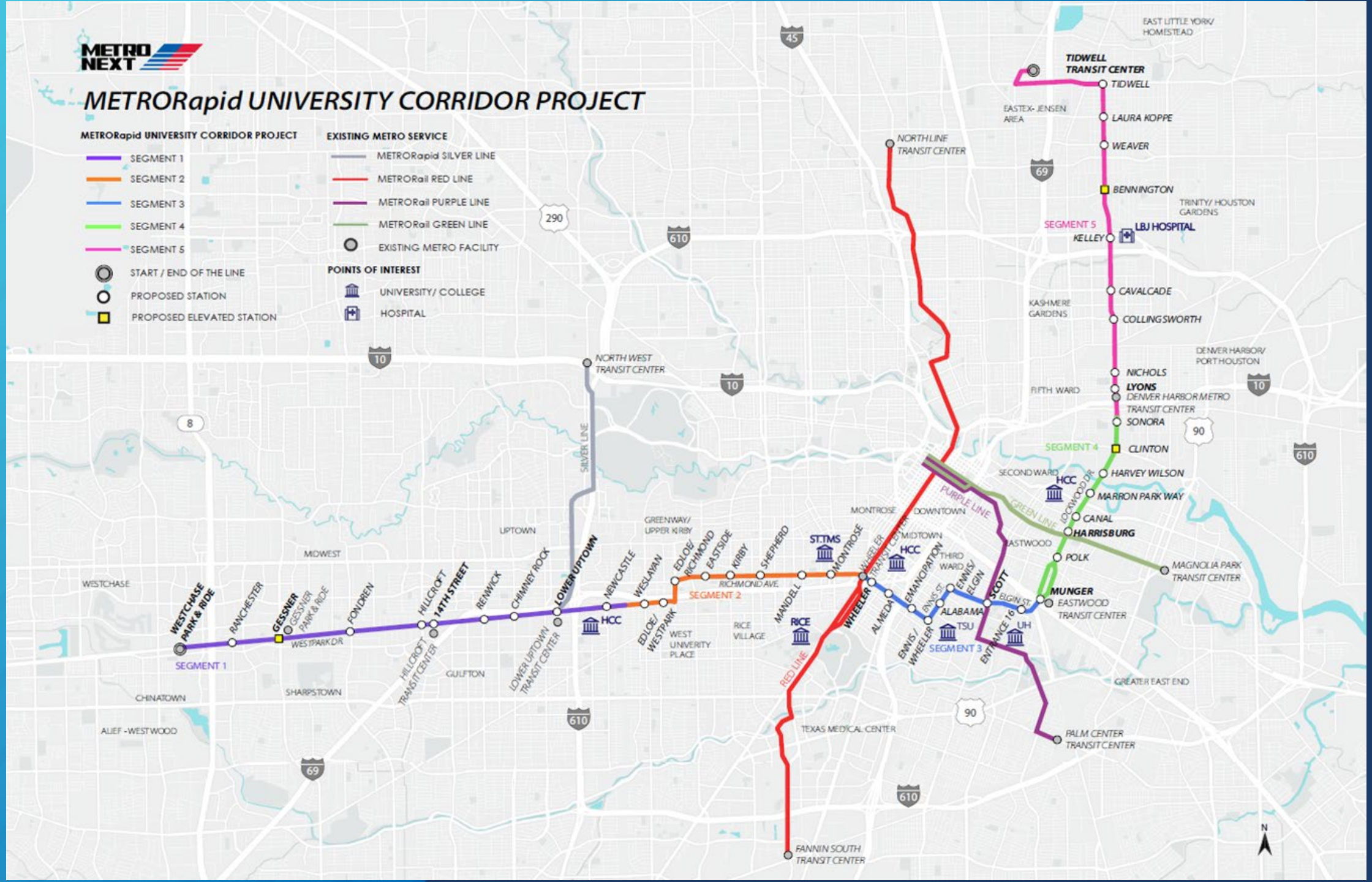
Purpose and Section 106 Overview

Historic Survey Report Summary

Archaeological Survey Report Summary

Questions & Answers

How to Provide Comments


METRO NEXT
METRORapid UNIVERSITY CORRIDOR PROJECT
METRORapid UNIVERSITY CORRIDOR PROJECT
SEGMENT 1
SEGMENT 2
SEGMENT 3
SEGMENT 4
SEGMENT 5
START / END OF THE LINE
PROPOSED STATION
PROPOSED ELEVATED STATION
EXISTING METRO SERVICE
METRORapid SILVER LINE
METRORail RED LINE
METRORail PURPLE LINE
METRORail GREEN LINE
EXISTING METRO FACILITY
POINTS OF INTEREST
UNIVERSITY/ COLLEGE
HOSPITAL
WESTCHASE PARK & RIDE
RANCHESTER
GESSNER
GESSNER PARK & RIDE
WESTPARK DR
FONDREN
HILLCROFT
14TH STREET
RENWICK
CHIMNEY ROCK
LOWER UPTOWN
HILLCROFT TRANSIT CENTER
LOWER UPTOWN TRANSIT CENTER
NEWCASTLE
WESLAYAN
EDLOE/ WESTPARK
HCC
EDLOE/ RICHMOND
EASTSIDE
KIRBY
SHEPHERD
RICHMOND AVE.
MANDELL
ST. TMS
MONTROSE
WHEELER TRANSIT CENTER
HCC
ALMEDA
EMANCIPATION
ENNIS ST.
ENNIS/ ELGIN
SCOTT
ELGIN ST.
ALABAMA
TSU
ENTRANCE 16
UH
ENNIS/ WHEELER
NORTH WEST TRANSIT CENTER
NORTH LINE TRANSIT CENTER
TIDWELL TRANSIT CENTER
TIDWELL
LAURA KOPPE
WEAVER
BENNINGTON
LBJ HOSPITAL
KELLEY
CAVALCADE
COLLINGSWORTH
NICHOLS
LYONS
DENVER HARBOR METRO TRANSIT CENTER
SONORA
CLINTON
HARVEY WILSON
MARRON PARK WAY
CANAL
HARRISBURG
POLK
MUNGER
EASTWOOD TRANSIT CENTER
MAGNOLIA PARK TRANSIT CENTER
PALM CENTER TRANSIT CENTER
FANNIN SOUTH TRANSIT CENTER
SILVER LINE
RED LINE
PURPLE LINE
GREEN LINE
EAST LITTLE YORK/ HOMESTEAD
EASTEX- JENSEN AREA
TRINITY/ HOUSTON GARDENS
KASHMERE GARDENS
FIFTH WARD
DENVER HARBOR/ PORT HOUSTON
SECOND WARD
HCC
LOCKWOOD DR.
MONTROSE
DOWNTOWN
MIDTOWN
EASTWOOD
THIRD WARD
GREENWAY/ UPPER KIRBY
UPTOWN
MIDWEST
WESTCHASE
CHINATOWN
ALIEF - WESTWOOD
SHARPSTOWN
GULFTON
WEST UNIVERITY PLACE
RICE VILLAGE
RICE
TEXAS MEDICAL CENTER
GREATER EAST END
45
290
610
10
8
69
90
N



University BRT Corridor Project

- 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north
- Will operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston.
- 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices.

University BRT Corridor Project

- Includes Traffic signal improvements and a shared use path with sidewalk and ADA accessibility improvements
- FTA/METRO are completing the required National Environmental Policy Act (NEPA) environmental review process and are a preparing documentation to support a Categorial Exclusion



City of Houston, *Complete Streets Transportation Report*, 2021

What is Section 106?



- National Historic Preservation Act of 1966, as amended
- Set the national policy that federal agencies must consider the effects of their action on historic and archaeological resources
- Created Advisory Council of Historic Preservation (ACHP) to develop regulations and oversee their implementation
- Provides a step-wise process for identifying resources, determining the effects of projects, and resolving any adverse impacts
- Specific to the federal review process for historic and archaeological resources

Useful Resources

- *36 Code of Federal Regulations Part 800*
- *A Citizen's Guide to Section 106 Handbook*
- *Advisory Council of Historic Preservation Web Page*
- *Texas Historic Commission's Website*



STEP 1



Initiating Section 106

FTA, the lead federal agency in the Section 106 process, identifies if there is a federal undertaking. During this initiation, FTA determines, who should be involved in the consultation, and develops a plan to involve consulting parties and the public.

STEP 2



Identify Historic Properties

FTA consults with consulting parties to define the Area of Potential Effects and completes the identification of historic properties (historic and archeological). FTA determines if properties may be affected by the project and if those resources are listed, or are eligible for listing, in the National Register of Historic Places through a Determination of Eligibility.

STEP 3



Assess Adverse Effects

FTA applies the criteria of adverse effects to the listed or eligible properties identified in Step 2 and consults with consulting parties on this assessment. FTA invites the Advisory Council on Historic Preservation (ACHP) to consult if adverse effects are determined.

STEP 4



Resolve Adverse Effects

FTA, with input from the Project Sponsor and consulting parties, explores alternatives to avoid, minimize, or mitigate adverse effects identified in Step 3. If an agreement is made on resolution measures, a Memorandum of Agreement (MOA) or a Programmatic Agreement (PA), is developed and executed before NEPA is considered complete.



Step 1 – Initiating Section 106

- ✓ FTA Determines that the Project is an Undertaking with the Potential to Cause Effects
- ✓ FTA/METRO invites consulting parties to participate in the process
- ✓ FTA conducts outreach to tribes
- ✓ Develops a plan to involve the public
- ✓ *Activities completed in 2022*

Who are the Participants?

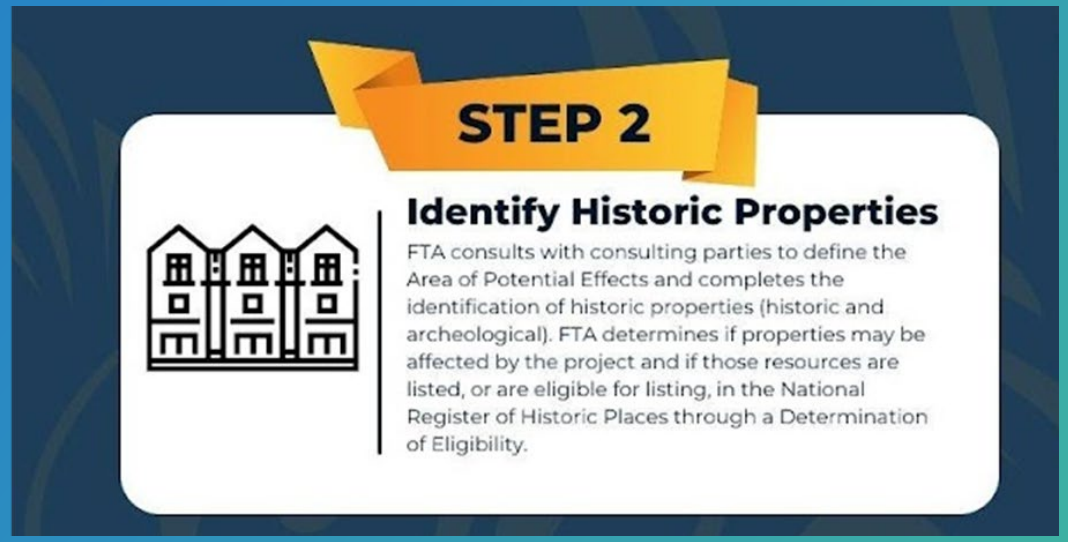
- Federal Agency – Leads the process
- Local Lead Agency – METRO provides technical assessments through a qualified professional
- Consulting Parties:
  - State Historic Preservation Officer (SHPO) acts as the state expert
  - Indian Tribes and Native Hawaiian Organizations
  - Representatives of Local Governments
  - Additional parties – those with a demonstrated interest
  - The public

U.S. Department of Transportation
Federal Transit Administration

METRO

TEXAS HISTORICAL COMMISSION
REAL PLACES TELLING REAL STORIES

- West Houston Association and Alief Super Neighborhood Council
- First Montrose Commons Civic Association
- East End District
- Second Ward Super Neighborhood/Houston Super Neighborhood Alliance
- Neartown/Montrose Super Neighborhood
- Eastwood Civic Association
- PROJECT RESPECT



Step 2 – Identify Historic Properties

- ✓ FTA defined an Area of Potential Effects
- ✓ METRO consultants prepared a survey of historic resources
- ✓ Resources were examined based on whether or not they are eligible for listing in the National Register of Historic Places or already listed
- ✓ Recommendations on eligibility and listing were provided to the FTA
- ✓ *Seeking Your Input on the Historic & Archaeological Survey Reports*

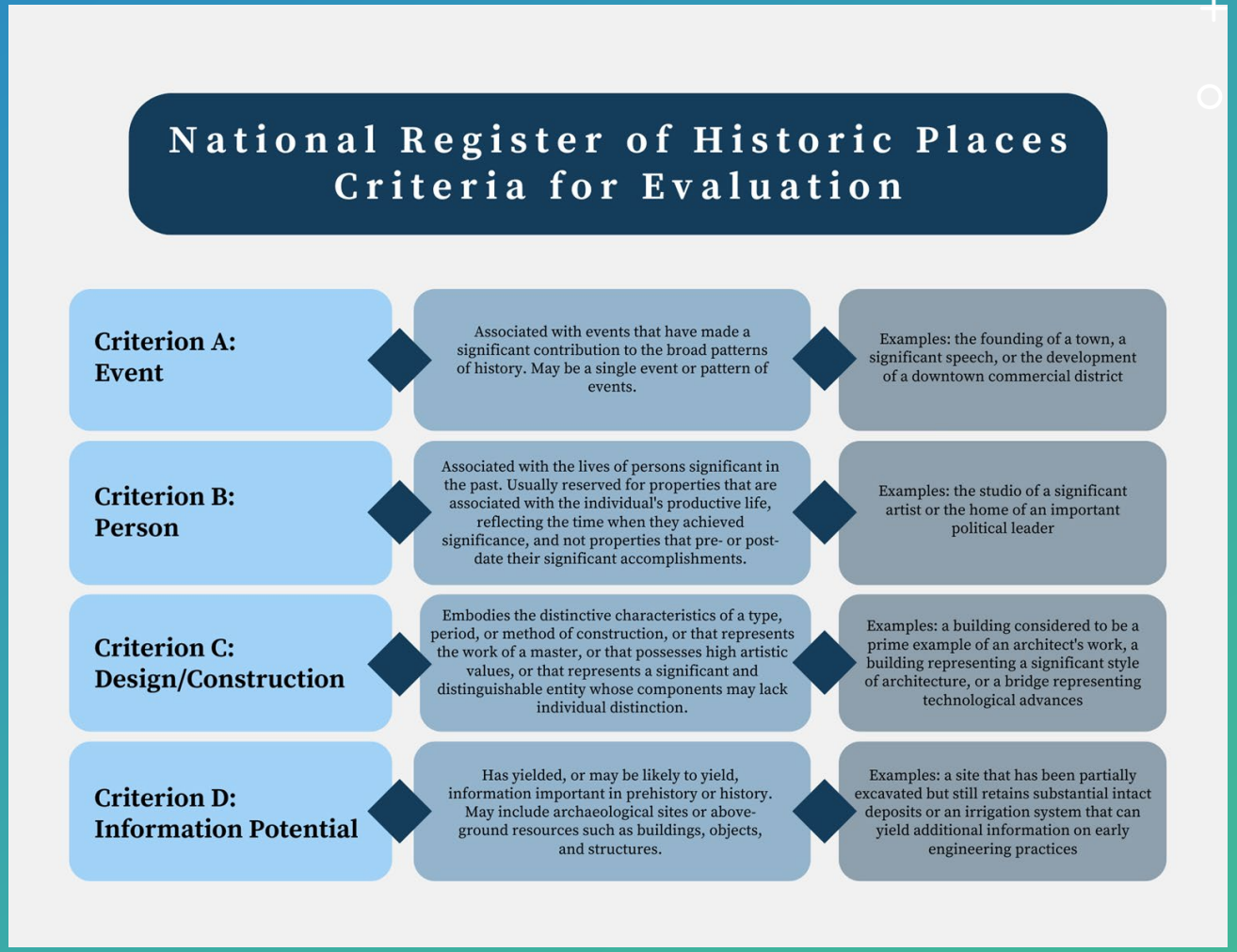
What is a Historic Property?

- Historic Property – Defined as “a prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places” (36 CFR 800)
- Must be eligible for or listed in the National Register of Historic Places - the nation’s official list of properties recognized for their significance in American history, architecture, archaeology, engineering, and culture. The property must be significant, be of a certain age, and have integrity.



NATIONAL REGISTER CRITERIA

Significance



NATIONAL REGISTER CRITERIA

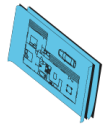
Age – Generally over 50 years

Integrity

SEVEN ASPECTS OF INTEGRITY



LOCATION
The place where the historic property was constructed or where the historic event occurred.



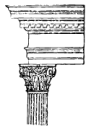
DESIGN
The combination of elements that create the form, plan, space, structure, and style of a property



SETTING
The physical environment of a historic property



MATERIALS
The physical elements that create the form, plan, space, structure, and style of a property



WORKMANSHIP
Physical evidence of the crafts of a particular culture or people during any given period in history or prehistory



FEELING
The property's expression of the aesthetic historic sense of a particular period of time



ASSOCIATION
The direct link between an important historic event or person and a historic property



Step 3 – Assess Adverse Effects

- ✓ Historic Survey Report provides recommended Effects
- ✓ Criteria of Adverse Effects applied
- ✓ Determinations of Effects documented
- ✓ *Seeking your input on the effects included in the Historic & Archaeological Survey Reports*

Adverse Effects are actions that diminish characteristics qualifying a property for inclusion in the National Register

Criteria for an Adverse Effect

- Destruction or damage of all or part of a historic property
- Alteration not consistent with Secretary of Interior Standards for a historic property
- Removal from its location
- Change in use or setting
- Addition of visual, audible or atmospheric elements out of character
- Neglect
- Transfer, sale or lease out of federal control

Source: 36 CFR § 800.5(a)(2)



Step 4 – Resolve Adverse Effects

- If the project results in adverse effects identified in Step 3, then consulting parties explore opportunities to avoid, minimize, or mitigate adverse effects.
- Because the project occurs primarily within publicly-owned right of way, no adverse effects will occur.

Summary of Reports for Review

- Historic Survey Report
  - Documents the Area of Potential Effects (APE)
  - Details the surveys completed
  - Identifies properties that are eligible or listed on the National Register
  - Applies the criteria of adverse effect
- Archaeological Survey Report
  - Documents the Area of Potential Effects (APE)
  - Details the research completed to identify previously-Identified properties and the potential to encounter properties during construction
  - Provide results of field work
  - Applies the criteria of adverse effect

Historic Property Identification

- 82 Resources surveyed
- 12 Eligible properties, 1 Eligible Historic District, and 2 Listed properties

Address	Status	Description	Criterion
1836 Richmond Avenue	Eligible	Mission Revival house	Criterion C in the area of Architecture local level.
3336 Richmond Avenue	Eligible	New Formalism building	Criterion C in the area of Architecture local level.
3334 Richmond Avenue	Eligible	New Formalism building	Criterion C in the area of Architecture local level.
3323 Richmond Avenue	Eligible	Expressionism building	Criterion C in the area of Architecture local level.
3322 Richmond Avenue	Eligible	International building	Criterion C in the area of Architecture local level.
3311 Richmond Avenue	Eligible	New Formalism building	Criterion C in the area of Architecture local level.
3121 Richmond Avenue	Eligible	New Formalism building	Criterion C in the area of Architecture local level.
3101 Richmond Avenue	Eligible	New Formalism building	Criterion C in the area of Architecture local level.
Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy) at 1906 Cleburne Street	Eligible	High School	Criterion C in the area of Architecture local level.
Third Ward Historic District	Eligible	District	Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development and under Criterion C in the area of Architecture local level.
Houston Negro Hospital at 3402 Ennis Street	Listed	Hospital	Listed under Criterion A in the area of Ethnic Heritage/Black.
Houston School of Nursing School at 3402 Ennis	Listed	Nursing School	Listed under Criterion A in the area of Ethnic Heritage/Black and Criterion C in the area of Architecture. The hospital and nursing school are on one parcel in the NRHP eligible Third Ward Historic District.
International Harvester Company (Texas Mattress Makers), 4901 Navigation Boulevard	Eligible	Industrial	Criterion A in the area of Commerce local level.
Western Electric Company (Harris County Sheriff Offices), 601 Lockwood	Eligible	Art Deco building	Criteria A in the area of Commerce at the local level of significance. Criterion C in the area of Architecture local level.
Kashmere Gardens Elementary School, 4901 Lockwood	Eligible	Elementary School	Criterion A in the area of Social History under the Civil Rights Movement at the local level.

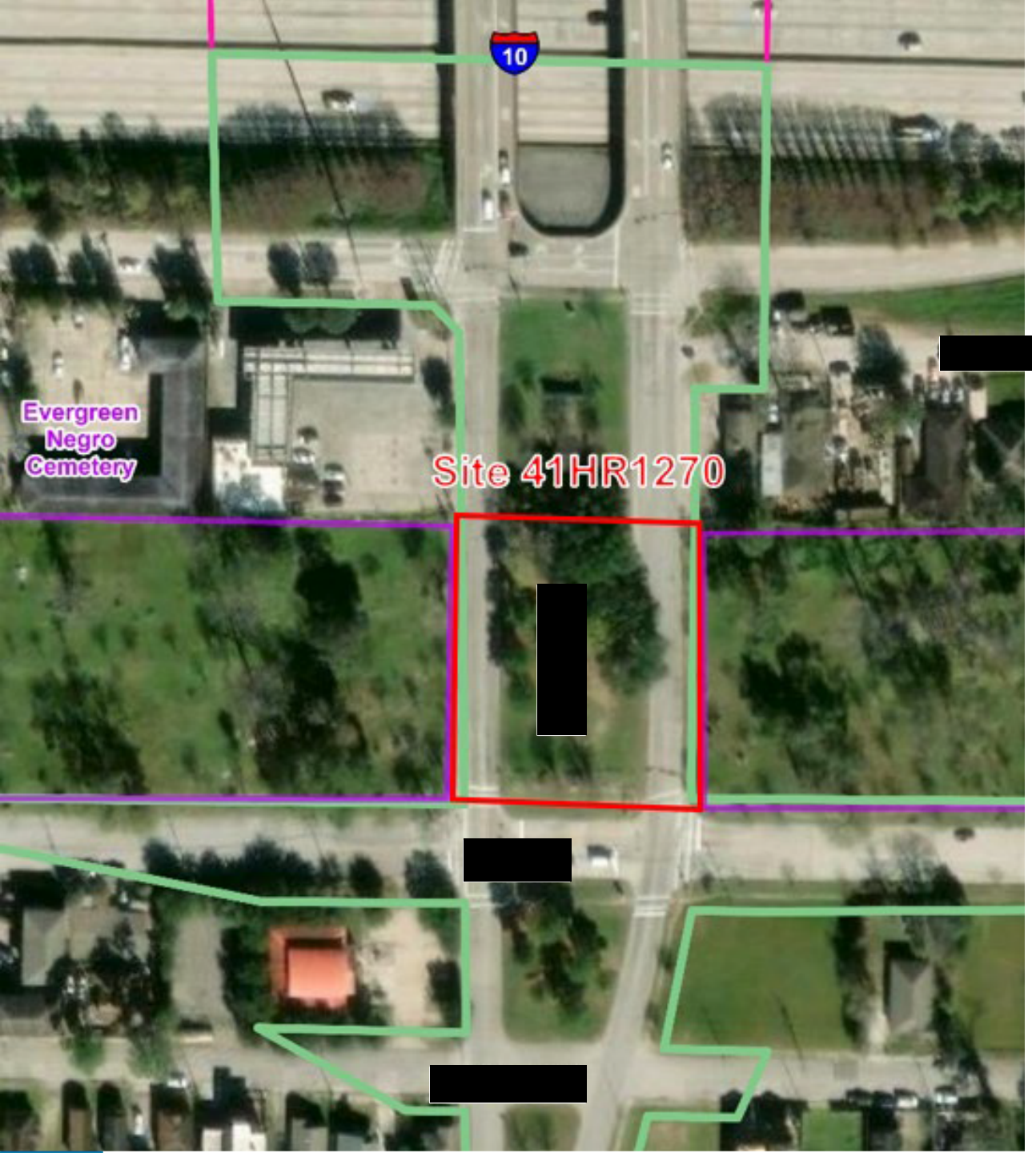
Historic Property Determination of Effects

- No Adverse Effect

Address	Status	Effect	Criterion
1836 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3336 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3334 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3323 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3322 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3311 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3121 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
3101 Richmond Avenue	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy) at 1906 Cleburne Street	Eligible	No Adverse Effect	Criterion C in the area of Architecture local level.
Third Ward Historic District	Eligible	No Adverse Effect	Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development and under Criterion C in the area of Architecture local level.
Houston Negro Hospital at 3402 Ennis Street	Listed	No Adverse Effect	Listed under Criterion A in the area of Ethnic Heritage/Black.
Houston School of Nursing School at 3402 Ennis	Listed	No Adverse Effect	Listed under Criterion A in the area of Ethnic Heritage/Black and Criterion C in the area of Architecture. The hospital and nursing school are on one parcel in the NRHP eligible Third Ward Historic District.
International Harvester Company (Texas Mattress Makers), 4901 Navigation Boulevard	Eligible	No Adverse Effect	Criterion A in the area of Commerce at the local level of significance.
Western Electric Company (Harris County Sheriff Offices), 601 Lockwood	Eligible	No Adverse Effect	Criteria A in the area of Commerce at the local level of significance. Criterion C in the area of Architecture at the local level of significance.
Kashmere Gardens Elementary School, 4901 Lockwood	Eligible	No Adverse Effect	Criterion A in the area of Social History under the Civil Rights Movement at the local level of significance.

Archaeological Survey

- Desktop and archival search for previously-identified resources
- Review of conditions – soil types, prior development and ground disturbance
- Review of project construction activities – what is being constructed, how deep the construction is, proximity to areas of high sensitivity for archaeological resources
- Field work that is needed if resources are anticipated



Archaeological Survey

- Archival research identified portions of Evergreen Negro Cemetery in the APE
- Coordination with THC was made to identify research methods
- FTA/THC agreed on surface scraping to look for evidence of graves
- Burials were identified [redacted]
  - 29 partial burials with scattered remains
  - 1 partial burial with intact remains
  - 3 intact burials

Archaeological Survey

- Graves, and associated burial goods, in Lockwood median have been identified as unmarked and abandoned
- METRO and archaeologists have consulted with PROJECT RESPECT
- Cemetery does not meet National Register Criteria – recommended not eligible
- Site is recommended as eligible for designation as a State Antiquities Landmark (SAL)
- Further coordination will be needed



Draft Archaeological Mitigation Work Plan – Evergreen Negro Cemetery

- Abandoned graves will need to be removed from the median and reinterred elsewhere within the Evergreen Negro Cemetery boundaries
- All work will be coordinated with THC and PROJECT RESPECT
- FTA/METRO are currently seeking comments on this draft mitigation work plan and no work will commence until the report is finalized
  - Texas Antiquities Permit
  - Burial Exhumation
  - Analysis of Recovered Materials
  - Additional Archival Investigations
  - Report of Findings
  - Reinternment of Identified Burials
  - Curation of Paperwork
  - Inadvertent Discovery Plan

Next steps



Consulting parties provide input

Deadline – June 30, 2023



THC Responds to FTA based on input on the Historic & Archaeological Reports



THC can concur, ask for additional Information, or provide additional Information for consideration



Once Section 106 and NEPA is concluded, the project will advance into engineering and final design



METRO will seek a THC Permit for abandoned graves removal

HOW TO SUBMIT COMMENTS

Federal Transit Administration
Terence Plaskon, Environmental Protection Specialist
819 Taylor Street, Room 14A02
Fort Worth, TX 76102

Terence.Plaskon@dot.gov

Submit by mail or electronically by
June 30, 2023

Reference in subject line – Houston MetroRapid University Corridor BRT

Questions?

www.ridemetro.org/University
Houston MetroRapid University Corridor BRT

Yuhayna Mahmud, AICP
System and Capital Planning
Planning, Engineering and Construction
(713) 739-4640
METRO//Metropolitan Transit Authority of Harris County
Email: yuhayna.mahmud@ridemetro.org

1900 Main Street
Houston, TX 77002

Telephone (713) 652-4397
Facsimile (713) 739-4699
https://www.ridemetro.org/

MEETING MINUTES

METRONext University Corridor Project					
Subject:	Consulting Parties Meeting				
Location:	METRO – 1900 Main	**Date:**	06/01/2023	**Time:**	2 – 4 p.m.
Facilitator:	Yuhayna Mahmud/ METRO		**Prepared by:**	Robyn Egbert/HillDay	
Platform:	In-Person & Virtual				

Participants/Company

Danielle Laperriere/Eastwood HCA	In-Person
Lisa Jedkins/Project Respect	In-Person
Steve Longmire/First Montrose Commons	In-Person
Greg Legrande/Neartown Association	In-Person
Kellie Clement/City of Houston	Virtual
Alan Steinberg/West Houston Association	Virtual
Jonathan Moseley/THC	Virtual
David Bush	Virtual
Ricky Cardenas/East End District	Virtual
Zanitra Wells	Virtual
Emily Dylla/THC	Virtual
Ronisha Hodge/FTA	Virtual
Chena Karega/METRO	Virtual
Yuhayna Mahmud/METRO	In-Person
Linda Trevino/METRO	In-Person
Sharyn LaCombe/HNTB	In-Person
Tina Rust/HNTB	Virtual
Theresa Rodriguez/HillDay	In-Person
Deborah Dobson-Brown/Amaterra	Virtual
Cherise Bell/Amaterra	Virtual
Mindy Bonine/Amaterra	Virtual

1.0	Introductions	Yuhayna Mahmud	

1900 Main Street
Houston, TX 77002

Telephone (713) 652-4397
Facsimile (713) 739-4699
https://www.ridemetro.org/

MEETING MINUTES

2.0	University BRT	Yuhayna Mahmud	• Introduces the University BRT project • Defined what BRT is • Reviewed corridor map and identified places of importance • Reviewed ADA and accessibility improvements that will be made along the project corridor • Identified that they are at 30% completion • Future public engagement will take place in the late summer/ early Fall as the design work starts to take place

3.0	Section 106	Sharon Lacombe	• Provided historical context as to what is Section 106, why it exists, and where it fits into the NEPA process
			• Identified the importance of Section 106
			• Currently focused on where does [the station] go, how can it fit into the street, and is there any additional right-of-way that needs to be purchased
			• Reviewed the criteria that qualifies a property as historic
			• Provided overview of the criteria to be part of the National Registry
			• Outlined the criteria that makes a project have an adverse effect
			• Currently the project does not have any adverse effects because it is using existing right-of-way, no buildings are being torn down, changing any buildings, and the atmospheric conditions will not become out of character
			• 82 properties were surveyed along the project corridor
			  ○ 12 were eligible properties
			  ○ 1 eligible historic district (Third Ward)
			  ○ 2 listed properties

4.0	Archaeological Report	Sharon Lacombe/	• Remains may exist to the left and right of the esplanade.
			  ○ Requesting METRO to pay for the cost of this
			• Question: Are we certain that there are no human remains underneath the road surfaces?
			  ○ No. Additional surveying will need to be done
			• Question: Does the City of Houston have a plan to address whether there are still human remains

MEETING MINUTES

			underneath the pavement of Lockwood? And if so, what to do about it? ○ No they have not. They are waiting to see what METRO does, and then will address as much as they can • Question: Is there, or will be, a high-impact cultural investigation? Because the history of the disregard for these sites have been well-documented since the late 1800's • The archaeological workplan sort-of addresses what happens if we find something, what steps will need to be taken, and how to work with the City of Houston • COMMENT: When they put Lockwood in, they made an effort to relocate, which is good, because often times, no effort is made • How does the community feel about leaving the graves if the gravesites are unidentified? • The cemetery currently does not qualify as historic because of its state and what has been done to it, but that does not mean that it is not important and that is why we developed the archaeological mitigation plan, and part of that plan will include additional research and additional archival research and that is where the national registry is important because it is a giant depository of information for any project that has ever needed federal funding • The site is a state antiquities landmark, so it is protected from a state perspective, and for any work to continue, we would have to have a permit through the state, and we applied for the first one which was to go out and investigate if anything was in the median, and in order to do anything, that would require the use of a permit. The archaeological work plan identifies the steps to obtain that permit. But we are still seeking comments from everyone here, the state, on any additional actions that are not included in the report that should be or need to be addressed.

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			• Sharon walked through the Draft Archaelogical Work Plan, and outlined that no work will commence until the report is finalized
			  ○ Includes contacting the families of those that were buried there.
			  ○ For those graves that were in tact, we also need to keep in mind of any religious ceremony that needs to take plan, and respect those religious beliefs. A ceremonial right must be available.
			• Sharon – they are looking for input. Accepting it verbally, or to the FTA,
			  ○ Also will make sure that the state (THC) receives these comments as well. They will respond on all the input that you provide, as well as their own thoughts and input. They will either confer with their findings, or may come back with extra insight
			  ○ The state wither agrees or lets us know what else needs to be looked at
			• Sharon informed consulting parties that when sending an email about this project, to include the project name in the subject line
			• Yuhayna – confirmed that the draft is ready to be viewed by the consulting parties

5.0	Comments & Questions about the Draft Document	ALL	• Disappointed at the conclusion. Respects that the National Historic Preservation is hard and rigid, but life is not hard and rigid, and Houston is not hard and rigid. It is assumed that Houston is like another city, but we are not. We don't have zoning laws, we don't have restrictions, we don't have things that would have protected that cemetery or two-thirds of my neighbor in the late 50's or early 60's. In our selection of things that we deem significant or important, we should take that into context because I was struck by just how few sites were included in this project corridor. • TXDOT chopped Montrose in half in 1959 and completely changed the cultural, economic, and social character of the neighborhood. This University BRT is set to do the same thing that TXDOT did, on a smaller scale, and leave an

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			orphan neighborhood. We need to take a closer look at that and the cultural impact ○ I want this project to work, but it requires a lot of out-of-the-box design to mitigate the impact • There are hot spots where access in and out of a neighborhood will become an issue • Yuhayna – as we plan our next set of public engagements, it will be about pedestrian access, streetscape, and getting to that level of detail • You have an opportunity, when speaking about the schools (i.e. Kashmere Gardens), to put up the history of the neighborhoods at these local stations ○ Yuhayna – this is the conversation that we need for station design • There is a building that is alleged to be the first Chinese consulate in Houston on Richmond Ave. Not sure that it makes any difference to this project, but when they try to sell it, they advertise that's that what it was • University of St. Thomas should be included as a socially important location • Sharon – there are some properties that were not included in this report. Example – Todd Tellepsen's house is a City of Houston landmark, but not a landmark at the federal level. Will have to comb over the list to ensure that City of Houston designated locations are included in the report ○ Need to check 4602 and 4601 park Drive. That is where the corridor is the widest and is encroaching within the 100ft, so it would be important for us to see how it is impacting the Tellepsen house to avoid questions from the public ○ 4518 park drive • If one of the properties were identified as eligible, what would that change in the process? ○ We would apply the section 106 adverse effect criteria, We would look to see if we were altering the building, destruction, or new audible changes.

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			• There is another regulation called Section 4F (in the US Department of Transportation Act), and it is based on property acquisition. It states that it will not fund any projects that require permanent acquisition unless it met identified conditions. If it was a property that had no adverse effect and requires minor acquisition, then it would be considered de minimis and considered under 4F
			• Part of the evaluation as to why the Eastwood plot is not considered a historic district is a comparison with the Woodland Heights. If the project was butting up against Woodlawn Heights because it already had a City of Houston local historical designation, would you have been expected to have included it in the list of properties considered eligible?
			  ○ They would have to take it through the survey process to make that determination
			  ○ If It was not historic, we would still look at the projects before, during, and after the same timeframe that the developer did to look at that comparison and see which one has more significance and rises to the higher level and the best example of that persons work, and/or is there more people of note or events that can be shown and which one does it better. So yes, it did not have to be historic to have that comparative analysis
			• Question, if Woodland Heights was butting against this project, would they have gotten designation of historical district, in the same way that Third Ward has
			  ○ Third Ward was already determined eligible from two different surveys with the boundaries set, so I just used that information. And for Woodlawn, it was not adjacent to the project. When I came up to Eastwood, I saw all these cute bungalows, and I had to take a close look at it to make sure that it was all in tact and met the regulations of the national register. And just because I determined

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			that it was not eligible for the national registry, does not mean that it could not meet local historical designation. So on Woodlawn, they would have to drive through and actually look at it to make a determination if it would be eligible, but going on the criteria that is a current district, it would have already been listed and I would not have gone further into it. I would have just treated it like Third Ward. Already determined that it was listed and moved on • Is it an either/ or when looking at East Heights? Looking for the best of the developer, not both? Is that fair to say? There is not a scenario where both end up classifying. ○ It could happen if you had enough buildings intact that are by the same developer, I could see a chance that both could be eligible for the national registry, but it would really have to be intact. Unfortunately, Eastwood was not intact enough for the national registry • This raises another question because the City of Houston only recently passed Heritage Districts Ordinance and specifically designated 5 long neglected, historically black, as heritage districts. We were one of the few big cities in Texas that did not have designated Heritage districts. And so they took in independence Heights, Sunnyside, and that was the big experiment for this Mayor's term. But then the question is if a historic district designated by the City of Houston sort of automatically gets you up the list, and a heritage district doesn't have to exactly conform to the same criteria as a historic district in that they could have lost more of their housing stock, but they represent an area in which there is a consistently defined social character, an unifying neighborhood over a period of time, some historical significance to the development of the city, so I am wondering if Eastwood would not qualify. It would have to apply (it is too late to apply now) (, but it was to, would it qualify as a

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			historic district then it would automatically follow the national guidelines that you were ○ No, Just because you are eligible as a local historical district, does not mean you will necessarily rise to the level of a national historic district. And then for the heritage district, you are really getting into more social history, and does the buildings remain, or are their character identifying features in that heritage district, in that built environment, not just buildings, but the way that it is laid out or used, that a historian can identify. Example, I did a city wide survey in San Antonio, we discovered on the west side of town, there were a bunch of houses that a front addition added to it with a store front window and door, so from a historic point of view, that addition made it not eligible, but from that social side, that represented during a certain time when the area was occupied by the Hispanic community, so there are instances where that would happen. So, if a neighborhood was deemed historical, I would take a deeper dive to see if I could see the physical built environment that reflected the national registry criteria. • Yuhayna – want to take some time to review the link that was provided so that everyone knows how to access the documents • The email that you used to receive the link, that is the one that you use to create an account number and password. Once that is set-up, go back to your email and you will have a "welcome" message, and you can use that link to navigate to the documents • Who is eligible to submit comments? Is it just us as consulting parties, or for example I represent a civic organization, so I represent a membership? What is the limitation? ○ Limitation is that it would be on these reports, on historical and cultural resources.

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			○ Can collect information from the property owners identified in the report • The most important thing is that the consulting parties get the correct information to provide feedback on it. If there are unresolved items that we need to reconvene on, we can do that. If during construction, we uncover some tribal beads (for example), we will meet then. It is dependent on the feedback at this moment. • In the fall, there will be workshops that will help us design the station, and what elements need to be considered. That will be a good opportunity for community members to provide community-specific information to • Arts in Transit Program will be also used in this project to display the history of the community • Any feedback that you have provided since the beginning of the project, we are integrating it into the design, or wherever it is appropriate for it to be integrated • We can see on the maps that there are small taking (i.e. eminent domain), are they as small as they appear? Or are they, a foot, 15ft? What is the scale ○ Yuhayna – in general, it is a few feet, not fifteen feet. There are a few properties that we have identified on the corner where stations are that may be more significant ○ There are some corners that need to be shaved in a bit ○ Yes, we are trying to keep it less than 5 ft, or even 4 ft. That is why we are having these conversations, so we can refine this and minimize that area needed more & reduce the footprint of the project even more • Those with the Menil Family, or those involved with St. Thomas, do they have any involvement? I know that you are coordinating with them, but are they aware of the historic aspects that we are discussing today? ○ Yuhayna – the Menil and St. Thomas did not get an invitation to this conversation

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			○ Both of them are in Montrose. The project along Richmond borders 8 different neighborhoods that are historic, or could become historic (if they sought after it) ○ The Menil were involved earlier on and wanted to make sure that they had access to their properties • The ones that are across the street from the Pit Room and Cadente, where this place in Houston could we allow developments to be built on the sidewalk. Townhomes that were acquired later, the city thought that less than 36" for a sidewalk, directly abutting the curb was an appropriate variance. So it's done, its built, and it's been there for at least 20 years, and now it is a part of the University of St. Thomas, so I do not think that, I mean it is a very tight spot on the road, but it is also a high pedestrian area. So, from a historic point of view, I don't think there is much that we can do. And for the Menil, most of their historical significance is in the bungalows and are several blocks away from that. They demolished the apartments on 1400 for green space. • Why was Wheatly High School and McReynolds Junior High left out of the list for Kashmere Gardens ○ I know one of the schools was modern and did not fit the time frame ○ Because they rebuilt the school ○ Not sure why the other one was left off. ○ Might not have any ABE taken from it, so I would not have surveyed it. No right away needed from it, so might have been left off ○ Will follow up to confirm the reasoning ○ I was looking at my maps to verify that. I do remember that it was on the list and I looked at it again. I believe it was just behind the APE, but we should have marked that on the map if it was listed. Will double check
6.0	Action Items/ Next Steps	ALL	• It is still considered a draft, and you can share it as feedback is being accepted. We are under a 30-

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			day review and want to be responsive to comments and questions. Once the 30-day closes, then they will integrate the comments. Then the state reviews with their comments, then the federal agency will review and provide guidance on how to finalize • Advised the consulting parties to not make this draft public as there is sensitive information included in the report • Danielle – can you confirm why the Tellepsen house was left off, please share that with me.

METRORapid University (BRT) Corridor Project
Cultural Resources Response to Consulting Party Questions
June 1, 2023, Meeting

1. Comment on no social history on buildings/neighborhood of Montrose HD and Greater Montrose.
    a. Montrose HD is in Segment 2. Segment 2 was previously surveyed and coordinated with THC in 2006.
    b. The current survey recorded only resources constructed between 1963 and 1977.
    c. The southern boundary of the Montrose HD was located outside the APE.
    d. The Montrose Historic District Period of Significance is 1900-1941 (www.houston.gov). Reassessing the developmental history and district boundaries was outside the scope of the BRT project.
2. No info regarding rumored Chinese Consulate (circa 1960s occupation) in 700 blk of Richmond.
    a. NRHP Criteria A is the association of events and trends and is difficult to identify in a Windshield or Reconnaissance Survey as the building's exterior usually does not provide a physical feature associated with its past association.
    b. Based on this comment, project historians researched the Chinese Consulate in Houston and identified that the consulate was not opened until 1979 when then Chinese leader Deng Xiaoping visited the city and was the first Chinese consulate in the USA (ABC 2020).
        i. The survey end date was 1977 and the Chinese Consulate did not open until 1979.
        ii. As of 2020, the Chinese Consulate was 3417 Montrose outside the APE. A quick internet search did not reveal a previous address.
        iii. Without the address on Richmond, the historian is unable to determine how long the Chinese Consulate was located at their first address and therefore if the that building would have significance based on its association with the Chinese Consulate.
3. St Thomas University grounds abut Richmond Avenue and no discussion provided regarding the University.
    a. Campus is located between Yupon, Richmond, Montrose, and Alabama streets. Per university campus interactive map, 4218 Yoakum, Sullivan Hall, is the only University building abutting Richmond Avenue. Using Google maps, Sullivan Hall was a house constructed in the 1920s and should have been assessed in the 2007 survey.
4. Greater Eastwood – 4518 Park Drive landmark shown on Study Area map, but not on survey map and not discussed.
    a. Per survey map, 4518 Park just outside APE. Results map does show APE touches rear of property lot. The base aerial map and the width of line can change from when a survey is conducted and the final map completed. Historians were aware of the house as evident in the Study Area map.
    b. Since the determination was for NRHP listed or eligible buildings, local landmarks and/or local historic districts were not shown on survey result maps.
5. Greater Eastwood – 4602 Park and 4601 Park not marked on map.

a. 4601 Park is a modern building, constructed circa 1995.
b. 4602 Park is a Craftsman bungalow and was just outside the APE according to the survey map.

6. Why were Wheatly High School and McReynolds school not discussed in the survey?
    a. Wheatly High School is two blocks west of Lockwood Avenue and therefore outside the APE.
    b. McReynolds Middle School is 1 ½ blocks east of Lockwood Avenue and therefore outside the APE.
7. Question was asked regarding additional future work for the Evergreen Negro Cemetery.
    a. Part of the additional work for the Evergreen Negro Cemetery includes supplementary archival investigations to identify the plot owners, if possible. The team will work with local historians and Project Respect to obtain and incorporate the information.
8. Edit to report submitted June 2, 2023: "The heading above the photo of the International Harvester Building lists the address as 4901 Navigation. The correct address is 4619 Navigation."

References:

ABC 13 Eyewitness News
2020 How a Houston-area tour stop helped heal US-China relations in 1979. https://abc13.com/fire-chinese-consulate-documents-being-burned-houston-us-and-china-tensions/6328863/

City of Houston Office of Historic Preservation
https://www.houstontx.gov/planning/HistoricPres/map.html



University of St. Thomas Houston
https://www.stthom.edu/About/Maps-and-Directions/Index-1.aqf



EASTWOOD
CIVIC ASSOCIATION

July 13, 2022

Jeanette De Los Santos
Public Affairs Representative
Metro Transit Authority of Harris County
1900 Main Street, 11th Floor
Houston, Texas 77002

RE: Eastwood Civic Association's conditions of support for METRORapid University Corridor

Ms. De Los Santos,

I write to you as President of the Eastwood Civic Association, which represents over 2,400 homes in 19 subdivisions, including the historic communities of Eastwood, Broadmoor and Jackson Court. Many of these subdivisions are in close proximity to Segment 4 of the MetroRapid University Corridor that is proposed to travel Lockwood Drive from the Eastwood Transit Center to Fifth Ward/Denver Harbor Transit Center.

We see the value that the planned MetroRapid University Corridor would provide to improve transit connectivity within our community, and we are grateful for the information Metro staff presented to us about this project. We look forward to collaborating on the detailed design of this project. As you move forward with preliminary design, we wish to share our conditions of support for this project:

1. **No overpass**. We recognize, that a BRT line cannot compete with train blockages at the Galveston Subdivision rail line operated by Union Pacific, and must find a way to bypass the train. However, the size and scale of an overpass would be devastating to the connectivity and character of the neighborhood. We respectfully request that METRO present alternative design options for grade-separation at the Union Pacific Rail Line between Harrisburg and Rusk. We are optimistic that an underpass — similar in size and scale to the one located on Polk at Milby — could be a reasonable alternative for the neighborhood. However, we would like more details on size and design before providing our support. We are also open to hearing alternative designs that more broadly address the issues the freight line poses to our neighborhood.

2. **Protect existing esplanade**. As you travel through Greater Eastwood on Lockwood Drive large old growth trees on a wide esplanade greet you, welcoming you to this place that we call home. It is a critical feature to the neighborhood's character and natural environment, and it must be maintained and enhanced by this project.

3. **Prioritize a road diet to accommodate BRT lanes.** A road diet that reduces Lockwood general traffic lanes by one in each direction can provide the necessary BRT lanes, while protecting and maintaining the old growth trees in the existing esplanade. Lockwood is a wide road, and rarely experiences traffic back-ups due to volume, we believe there is plenty of general lane capacity to accommodate this diet now and in the future.

4. **Complete project within existing Right of Way.** With the size of Lockwood, we believe this project can be completed within the existing City of Houston right of way. We urge Metro to complete this project without the acquisition of any additional land from property owners, especially through eminent domain.

5. **Addition of multi-use path.** As a part of the rebuild of Lockwood for this project, we urge Metro to consider the inclusion of two 10' wide multi-use paths for people who walk, bike or roll. The existing sidewalks along Lockwood are in poor condition and they do not offer an accessible experience for all. This will improve last-mile connection and access through the neighborhood to Metro's existing and new transit services.

6. **Maintain regular pedestrian access.** In reviewing other areas where Metro operates their Rapid Bus or Train systems, we've noticed areas where pedestrian crossing is severely limited. We urge Metro to protect pedestrian access across Lockwood at least every 500'.

7. **Softscape.** It is important that this project matches and enhances the existing character of the neighborhood. To do this we would encourage softscaping where existing City right of way allows (i.e. boulevard, micro-parks possible at Rusk and Walker) and that any structures (like underpasses and transit stops) are decorated with unique, visual components (like public art). Together this will help ensure this project fits with, and serves to improve, the natural characteristics of Eastwood as a historic, tree-filled, vibrant, residential neighborhood.

EASTWOOD
CIVIC ASSOCIATION

To support Metro in considering these conditions for support, we've taken some time to create a street design rendering that we feel meets these conditions. Attached you will find renderings of the portion of Segment 3 that runs through our Civic Association boundaries, starting from the Eastwood Transit Center and culminating at Harrisburg.

We hope these designs and this letter serves as an opportunity to continue conversation about this project, and make sure it improves and enhances the wonderful neighborhoods within Greater Eastwood.

Kind Regards,



Danielle Laperriere
President, Eastwood Civic Association



Historical Evergreen Negro Cemetery Vision & Reinternment Plans by

LISA JEDKINS AND THE FRIENDS OF PROJECT R.E.S.P.E.C.T



Pathway To Our Vision

"A morsel of genuine history is a thing so rare as to be always valuable."

Thomas Jefferson, 3rd President of the U.S.

Project R.E.S.P.E.C.T. Inc., (a.k.a. RESPECT) was formed in 1995 by a team of individuals that believe that old historic cemeteries provide a map of community history etched in the terrain and stone of monuments.

This organization has become a catalyst for promoting awareness of the need for preservation of historic abandoned and neglected cemeteries across the state of Texas. The Friends of Project Respect "Why Not Legacy and Heritage Inc" a shared collaborative group will keep the vision alive.

The Initial clean-up of Evergreen Negro Cemetery reveals a remarkable transformation of once known abandoned, neglected, overgrown eyesore to a beautiful peaceful green space.

We will transform this historic place from a blighted cultural icon into a serene green space of beauty, tranquility and community pride. A place rich in heritage, history with its own story to explore and enjoy. Evergreen Negro Cemetery will be a site of remembrance a memorial to the past.

EVERGREEN NEGRO CEMETERY REINTERMENT AND CEMETERY PLANS

- BOUNDARY SURVEY - MUST BE DONE BEFORE FENCING
  COMPLETION DATE - 07/15/2023
- PROTECTIVE FENCING – A RIGID FENCE WILL ADD TO THE SECURITY FOR VISITORS AND EXCLUDE THE INTERFERENCE AND INTRUSION OF UNWANTED VANDALISM AN THEFT
  In Process
- SECURITY LIGHTING – LIGHTING AND SECURITY IN AREA TO ENSURE THAT VISITORS ARE SAVE AND SECURE.
  In Process
- SPHERE BOLLARD – TO SECURE THE GROUNDS AND PROTECT THE MONUMENTS FROM VEHICLE TRAVELING DOWN LOCKWOOD AND MARKET.
  In Process
- AUGUR OR PLUG ON AND OFF GRAVE PROFILES – USING GROUND PENETRATING RADAR, SOIL PROBE OR CADAVER DOGS TO LOCATE UNKNOWN GRAVES
  In Process
- COLUMBARIUM – MEMORIAL FOR REINTERRED UNKNOWN SOULS
  In Process
- Research and find descendants of the people buried in the cemetery
  Ongoing Process

APPENDIX B

Segment 4 Surveyed Property Table

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 01	4445 Gulf Freeway	No	C. 1967	None	Commerce/business	Alterations include modern windows and siding, plus a change in the fenestration and a side addition.
S4 02a/b	2000 Ernestine Street	No	C. 1970	New Formalism influence	Commerce/warehouse	Alterations include an addition to south façade has no pilasters or pebbledash. Two skywalks connect warehouse S4 02a to warehouse S4 02b. The addition on S4 02a has no siding or pilasters.
S4 03	4443 Pease Street	No	C. 1935	Tudor influence	Domestic/single dwelling	Alterations include modern windows and an enclosed front porch. A ten-foot privacy wood fence abuts part of the front, and the side-yard changes the original setting.
S4 04	4442 Leeland Street	No	C. 1930	Tudor	Domestic/single dwelling	Alterations include a side patio with a half-wall of brick and a metal roof supported by metal columns.
S4 05	619 Telephone Road	No	1977	None	Government/fire station	Does not meet Criteria significance
S4 06	4443 Leeland Street	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include vinyl siding in the gable ends and eaves, modern windows, and extra columns.
S4 07a/b	4444 Bell Street	No	C. 1955	None	Domestic/multiple dwelling	Alterations include modern windows, changes to the central entrance, and a roof over the rear stairs.
S4 08	420 Telephone Road	No	C. 1947	None	Social/meeting hall	Alterations include several flat roof additions on the south façade and a flat roof addition on the west façade, plus additional bricked up windows.
S4 09	4501 Clay Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include the window in the front eaves which has been enclosed with plexiglass, and the one-car garage in the rear yard has modern pressboard siding.
S4 10	4603 Clay Street	Yes	C. 1935	Colonial Revival	Domestic/multiple dwelling	Eastwood Plat. Alterations include the brick has been painted.
S4 11	4602 Polk Street	Yes	C. 1935	Colonial Revival	Domestic/multiple dwelling	Eastwood Plat. Alterations include three dormer windows.
S4 12	4601 Polk Street	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Eastwood Plat. Alterations include modern siding, spindle columns, door, and windows, plus a side addition. There is a detached garage with carport in the rear yard.
S4 13	4603 Polk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows, front door, siding, and a new front porch. Based on exposed rafters on the east façade, an original side porch was enclosed.
S4 14	4602 Woodside Street	No	C. 1948	Ranch (6-plex)	Domestic/multiple dwelling	Eastwood Plat. Alterations include modern windows, doors, balcony railing, and front yard fencing. Apartment complex built after WWII.
S4 15	4550 Woodside Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include an enclosed rear porch.
S4 16	4547 Woodside Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern columns for the porte-cochere.
S4 17a/b	4601 Woodside Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern siding, painted brick, and a large, rear addition.
S4 18	4539 Park Drive	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. The building appears to be intact.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 19	4540 McKinney Street	Yes	C. 1935	Four-plex apt bldg	Domestic/multiple dwelling	Eastwood Plat. Alterations include painted brick, modern doors, a replacement awning, and modern windows. The side yard has a metal privacy fence that parallels S. Lockwood Drive.
S4 20	4602 McKinney Street	Yes	C. 1923	Four-Square	Domestic/multiple dwelling	Eastwood Plat. There were no obvious alterations.
S4 21	4601 McKinney Street	Yes	C. 1930	Four-Square	Domestic/single dwelling	Eastwood Plat. Alterations include a modern door, windows, porch columns, fenestration change on east façade, modern dormer windows, and an addition on the east facade.
S4 22	4539 McKinney Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include painted brick columns, a modern door, imbrication in the gable end, and a loss of railing.
S4 23	4602 Walker Street	No	C. 1955	Apt block	Domestic/multiple dwelling	Eastwood Plat. Alterations include modern windows and a six-foot metal fence. Apartment complex built after WWII.
S4 24	4601 Walker Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Noncontributing. Alterations include modern siding, some modern windows, and a chain-link fence in the front yard.
S4 25	4604 Rusk Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows and front door.
S4 26a	4542 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows and doors, plus a change in the fenestration.
S4 26b	4542 Rusk Street	No	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include modern windows, door, porch, and columns, plus a change in the fenestration.
S4 27	4545 Rusk Street	No	C. 1950/2001	Ranch	Domestic/single dwelling	Eastwood Plat. Alterations include a siding, windows, front porch railing, windows in gable end, and a horizontal wood fence in the front yard.
S4 28	4609 Rusk Street	Yes	C. 1920	Craftsman	Domestic/single dwelling	Eastwood Plat. Alterations include new siding, a modern door, a six-foot metal fence in the front yard, and modified gable ends.
S4 29	4619 Harrisburg Boulevard	No	C. 1930/1992/2009	Mission Revival	Commerce/specialty store	Gas station. Alterations include a change in the fenestration and two side additions on the west façade.
S4 30	311 Lockwood Drive	No	C. 1976	None	Commerce/specialty store	Alterations include modern materials on the canopy and eaves. Detached canopy over gas pumps added after 1985.
S4 31	304 Lockwood Drive	No	1935/2008	None	Commerce/specialty store	Alterations include loss of a front porch, modern windows and doors, and changes in the fenestration and siding.
S4 32	302 Lockwood Drive	No	C. 1970	None	Commerce/ warehouse	Alterations include an addition with a carport has been added to the north façade.
S4 33a/b	220 Lockwood Drive	No	C. 1955	None	Commerce/warehouse	Alterations include a one-story metal carport that has been added to the full-length of the east façade and a modern office building in the southwest corner of the lot (S4 33b).
S4 34	213 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern doors, windows, and a rear addition. There is a detached metal carport in the side yard.
S4 35	211 Lockwood Drive	No	1936/2012	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, columns, a door, windows, and a metal fence in the front yard. A metal carport is attached to the south façade.
S4 36	209 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, an enclosed front porch, and a change in the fenestration.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 37	207 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, windows, a change in the fenestration, the front door, columns, the railing, and a metal fence in the front yard. A large two-story building was added to the rear façade.
S4 38	205 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern columns and a new front porch railing.
S4 39	203 Lockwood Drive	No	C. 1920	Craftsman	Domestic/vacant-not in use	Alterations include modern columns, a side porch railing, windows, and brick wainscot. Remodeling of the house was occurring when the house was surveyed.
S4 40	202 Lockwood Drive	No	C. 1956	Contemporary influence	Commerce/vacant-not in use	Alterations include modern metal siding, a change in the fenestration, painted brick on the front façade, a modern door, and a rear addition.
S4 41	113 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern windows, new siding, an enclosed porch, missing columns and railings, south and rear additions, plus a change in the fenestration.
S4 42a/b	109 Lockwood Drive	No	1940/2018	Bungalow	Domestic/multiple dwelling	Alterations include modern siding, doors, windows, a front yard privacy fence, and change in the fenestration.
S4 43	110 Lockwood Drive	No	C. 1935	None	Commerce/warehouse	Alterations include modern windows, siding, doors, garage door, a metal roof, and the stepped parapet, plus a change in the fenestration. A metal carport is attached to the south façade.
S4 44	102 Lockwood Drive	No	1936/2011	Colonial Revival	Domestic/multiple dwelling	Alterations include modern siding, windows, and a front door, plus a rear addition and a change in the fenestration.
S4 45	4617 Brady Street	No	1915/2021	Folk Victorian influence	Domestic/single dwelling	Alterations include a new front façade and porch, modern windows, a change in the fenestration, and a metal fence in the front yard
S4 46a	4703 Brady Street	No	C. 1935	Gothic influence	Domestic/single dwelling	Alterations include a modern porch, door, and windows.
S4 46b	4703 Brady Street	No	C. 1935	Bungalow	Domestic/single dwelling	Alterations include a modern metal staircase, boarded up windows, and doors that change in the fenestration.
S4 47	99 Lockwood Drive	No	C. 1938	Minimal Traditional	Domestic/single dwelling	Alterations include modern siding, a door, windows, and front porch columns, plus a change in the fenestration.
S4 48	93-97 Lockwood Drive	No	C. 1973	None	Commerce/specialty store	Alterations include modern siding, a new canopy, and rooftop signs.
S4 49	94 Lockwood Drive	No	1925/1955	Bungalow	Domestic/single dwelling	Alterations include a new front façade that changes the look and feel of the house, and a detached garage in the rear yard.
S4 50	4616 Canal Street	No	1977/2018	None	Commerce/specialty store	Alterations include a modern façade, siding, roof, windows, and a change in the fenestration.
S4 51	91 Lockwood Drive	No	C. 1973	None	Commerce/specialty store	Alterations include modern siding, windows, and door, plus a change in the fenestration.
S4 52	4719 Canal Street	No	C. 1950/2000	None	Religion/religious facility	Alterations include modern siding, windows, architectural ornamentation on the frieze, a rooftop sculpture, and a metal fence with stone columns.
S4 53	215 Lockwood Drive	No	C. 1920	None	Commerce/warehouse	Alterations include metal siding on the north façade, a rear metal canopy addition, a bricked-up door and window, and a change in the fenestration.
S4 54	4707 Avenue I	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include modern siding, windows, and a door, a small rear addition, plus a change in the fenestration change.

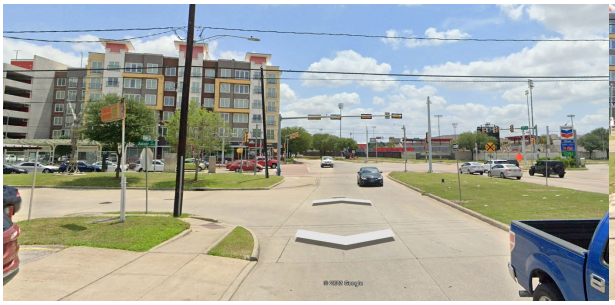
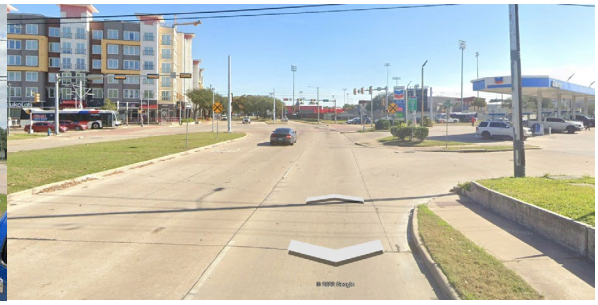
Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 55	301 Lockwood Drive	No	C. 1935	Minimal Traditional	Domestic/single dwelling	Alterations include a modern door, windows, and a column plus a change in the fenestration. There have been multiple rear additions and a carport has been added to the rear façade. The metal sheeting on the side yard and the metal and wood fence in the front yard changes the setting.
S4 56	303 Lockwood Drive	No	C. 1930	Minimal Traditional	Domestic/single dwelling	Alterations include modern: windows, a front door, and a new front porch.
S4 57	305 Lockwood Drive	No	C. 1910	Folk Victorian	Domestic/single dwelling	Alterations include modern siding, a front porch, windows, a door, and a change in the fenestration.
S4 58	307 Lockwood Drive	No	C. 1920	Craftsman	Domestic/multiple dwelling	Alterations include modern siding, windows, and a porch railing.
S4 59	335 N Burr Street	No	C. 1930	Bungalow	Domestic/single dwelling	Alterations include modern columns, railing, windows, siding, and an attached carport to the south façade.
S4 60	333 Lockwood Drive	No	C. 1978	New Formalism	Government/courthouse	Harris County Courthouse Annex 39. Alterations include bricked up openings thus changing the fenestration.
S4 61	4619 Navigation Boulevard	Yes	1939	Art Deco influence	Industry/manufacturing facility	Alterations include bricked-up windows on the first floor changing the fenestration and new windows on the second floor. Interior rooms and materials are mostly intact.
S4 62	601 Lockwood Drive	Yes	1948	Art Deco	Government/government offices	Alterations include the entrance door and sidelights and some modern windows.
S4 63	Lockwood @ Armour Dr	No	C. 1975	Water Treatment Plant	Government/vacant - not in use	Not Eligible: lacks integrity of materials, design, workmanship, and association.
S4 64	750 Lockwood Drive	No	1950	Quonset Hut	Industry/manufacturing facility	Per Mr. Zaveri, office manager, the flat roof warehouses indicate the portion of the building reconstructed after a fire.
S4 65a-f	865 Lockwood Drive	No	C. 1953/1973	None	Industry/manufacturing facility	Alterations include modern windows, awnings, a roof, and a door, plus a rear addition attaching the office to the warehouse.
S4 66a-d	900 Lockwood Drive	No	C. 1953/1970	None	Industry/manufacturing facility	Alterations to the office include modern windows. The warehouses have had multiple additions through the years thus changing design and setting.
S4 67	951 Lockwood Drive	No	C. 1953/1957	None	Commerce/vacant-not in use	Alterations include the front addition, a modern garage door, missing windows, and a change in the fenestration.
S4 68	5515 Clinton Drive	No	C. 1936/1965	None	Commerce/warehouse	Alterations include a two-story rear façade and multiple additions on the east façade.
S4 69	1010 Lockwood Drive	No	C. 1942	None	Commerce/warehouse	Alterations include a new side porch and modern windows.
S4 70	1020, 1040, and 1060 Lockwood Drive	No	C. 1975	None	Commerce/warehouse	Alterations some modern loading docks and windows, plus a change in the fenestration.
S4 71	1025 Lockwood Drive	No	1926/2014	None	Industry/manufacturing facility	Alterations to the office include modern siding, windows, and awnings. Alterations to the warehouses include covered windows and openings, a modern roof (c. 2014 and 2016), and a change in the fenestration.
S4 72a/b	1111 Lockwood Drive	No	1956/1968	None	Industry/manufacturing facility	Alterations include an addition to the south façade. A modern raised parapet covers the front facade of two gable-roof warehouses removing integrity of materials, and design. The addition of new buildings reduces integrity of setting.

Site ID#	Address	NRHP Eligible	Year Built	Style	Function/Use	Notes/Alterations
S4 73	1110 Lockwood Drive	No	1947/1978	None	Commerce/warehouse	Alterations include a modern roof to the office.
S4 74	1120 Lockwood Drive	No	1950/1990	None	Commerce/warehouse	Alterations include enclosed bays and modern windows.
S4 75	1140 Lockwood Drive	No	C. 1960	None	Commerce/warehouse	Alterations include a new roof and rear additions.
S4 76	5438 Margarita Street	No	C. 1930	Craftsman	Domestic/single dwelling	Alterations include modern siding, windows, and door.
S4 77	1203 Lockwood Drive	No	C. 1966	None	Commerce/vacant-not in use	Alterations include boarded up door and windows, and modern metal siding.
S4 78	1202 Lockwood Drive	No	1949/2007	None	Commerce/restaurant	Alterations include a side addition, a modern roof, painted brick, enclosed windows, plus a change in the fenestration.
S4 79	5507 Arapahoe Street	No	C. 1928	Bungalow	Domestic/single dwelling	Alterations include modern siding, door, windows, skirting, and columns.
S4 80	1217 Lockwood Drive	No	C. 1965	None	Commerce/vacant-not in use	Alterations include painted brick, bricked up windows, and a change in the fenestration.
S4 81	5438 San Jose Street	No	C. 1925	Craftsman	Domestic/single dwelling	Alterations include modern windows.
S4 82	Lockwood @ Market St	N/A	1893	Evergreen Cemetery	Funerary/cemetary	Per THC an Intensive Level Survey is needed to determine NRHP eligiblity. Because no additional right-of-way is proposed to be acquired from the cemetery, if the cemetery is treated as eligible for listing in the National Register and any potential effects on the cemetery are taken into account, no further evaluation would be required at this time (THC 202308803, June 2023)

APPENDIX C

Streetview Photos Lockwood and Eastwood

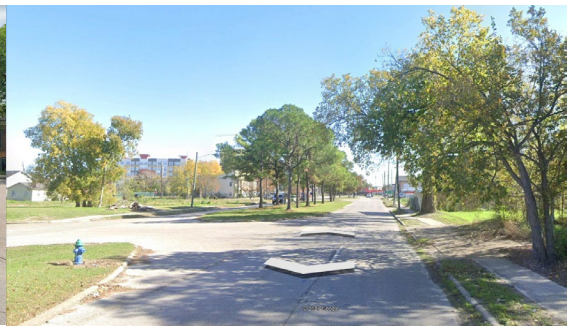
- Elgin St & Adair St Intersection

- Elgin St & Napoleon St Intersection
    - 11 trees located in the median




- Elgin St & Canfield St Intersection
    - 15 trees located in the median

- Elgin St & Sampson St Intersection
    - 22 trees located in the median




- S. Lockwood Dr Train Track




- S. Lockwood Dr & Rusk St Intersection
    - 4 trees located in the median




- S. Lockwood Dr & Walker St Intersection
    - 3 trees located in the median
    - Eastwood Neighborhood Sign




- S. Lockwood Dr & McKinney St Intersection
    - 3 trees located in the median




- S. Lockwood Dr & Park Dr Intersection
    - 2 trees located in the median




- S. Lockwood Dr & Woodside St Intersection
    - 28 trees located in the median




- S. Lockwood Dr & Polk St Intersection




- S. Lockwood Dr & Clay St Intersection
    - 3 trees located in the median




- Elgin St & Tierwester St Intersection
    - 16 trees located in the median



- Elgin St & Nettleton St Intersection
    - 21 trees located in the median



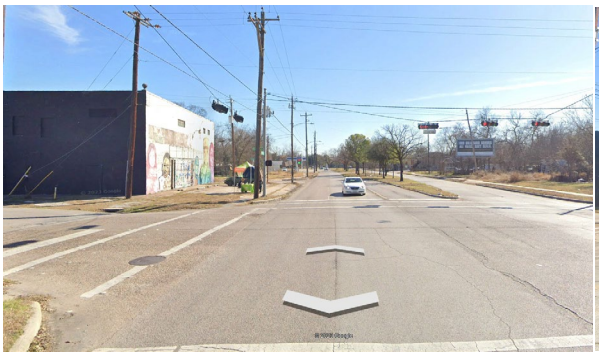
- Elgin St & Burkett St Intersection
    - 18 trees located in the median



- Elgin St & Columbia Tap Rail Trail
    - 17 trees located in the median




- Elgin St & Ennis St Intersection
    - 24 trees located in the median



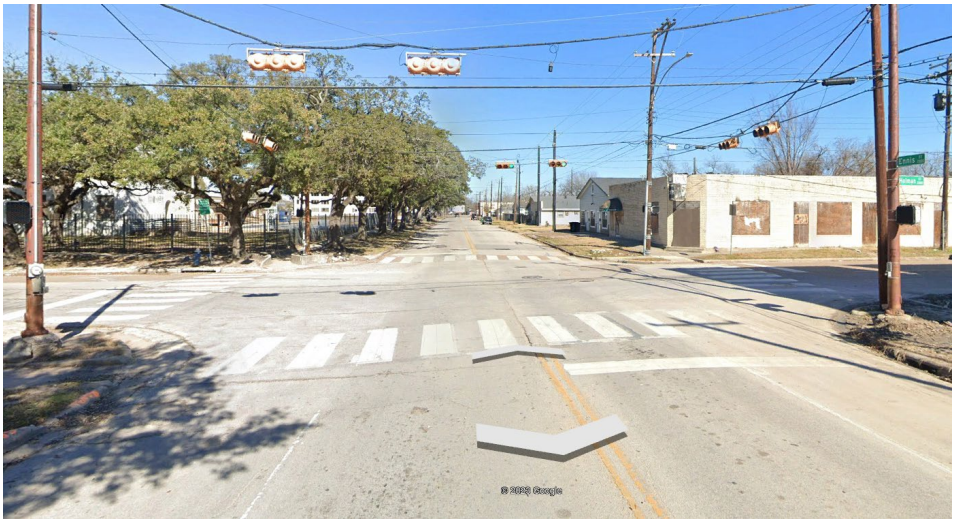

- Ennis St & Francis St



- Ennis St & Simmons St



Ennis St & Holman St Intersection



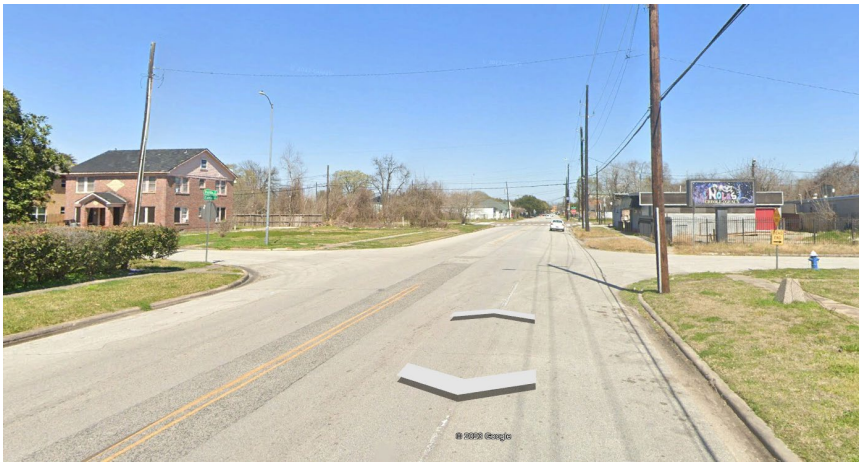
Ennis St & Winbern St Intersection



Ennis St & Alabama St Intersection



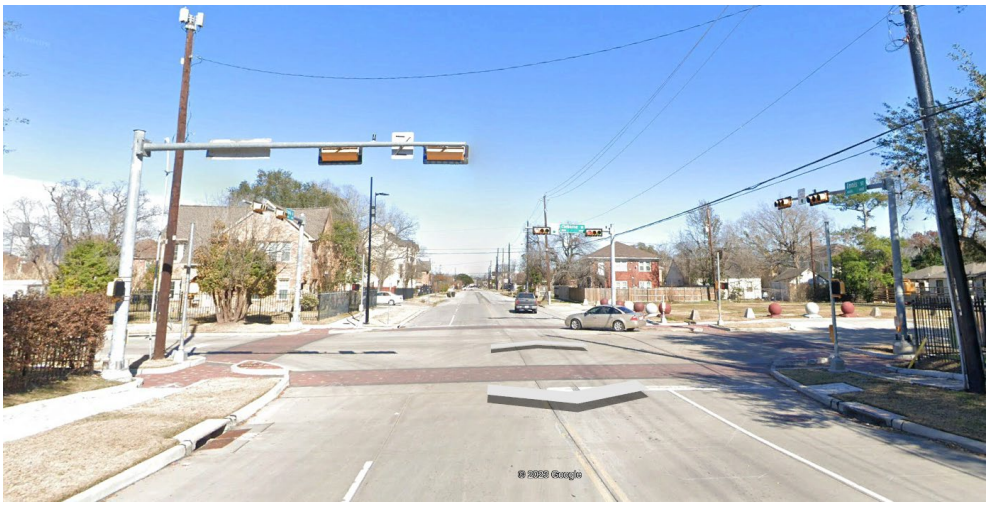
Ennis St & Truxillo St Intersection



Ennis St & Isabella St Intersection



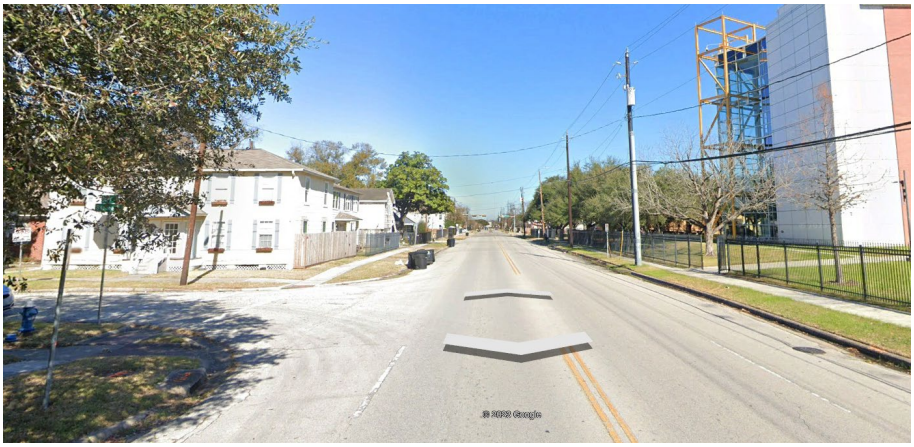
Ennis St & Cleburne St Intersection



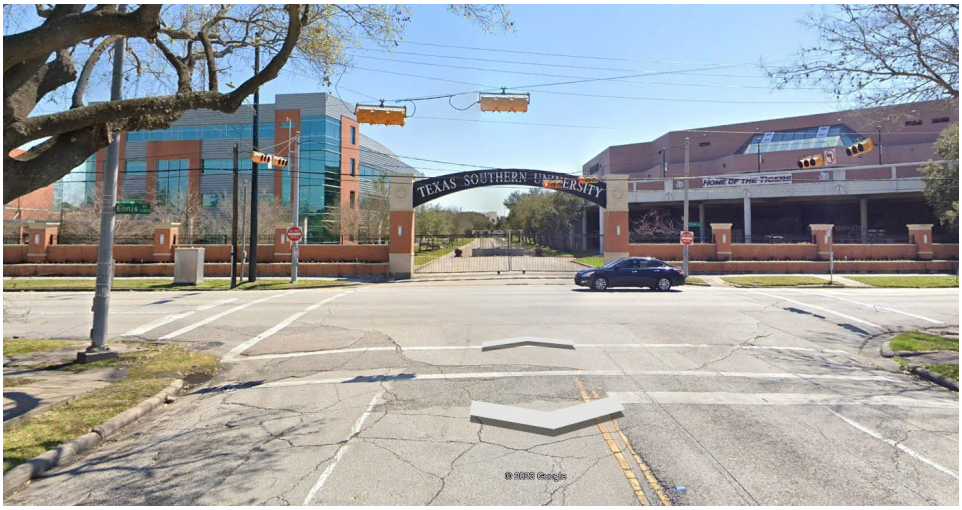
Ennis St & Eagle St Intersection



Ennis St & Barbee St



Wheeler St & Ennis St Intersection



Wheeler St & Delano St Intersection



Wheeler St & Live Oak St Intersection



Wheeler St & Emancipation Ave Intersection



Wheeler St & Bastrop St



Wheeler St & Hutchinson St



APPENDIX C-3 – Archaeological Survey and Archaeology Mitigation Work Plan

METRORapid University Corridor

ARCHAEOLOGICAL SURVEY

Texas Antiquities Permit 30784

Draft Technical Report
May 22, 2023

Abstract

The Federal Transit Administration (FTA) and METRO are conducting the environmental review process for the METRORapid University BRT Corridor Project (the "Project") in Harris County, Texas in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process, with the FTA as the Federal Lead Agency and the Metropolitan Transit Authority of Houston/Harris County (METRO) as the Local Project Sponsor.

FTA is providing federal financial assistance to METRO and has determined the undertaking has a potential to cause effects, as such Section 106 (36 Code of Federal Regulations [CFR] Part 800) of the National Historic Preservation Act (NHPA) of 1966, as amended, was initiated June 8, 2022. In addition, METRO is considered a political subdivision of the state of Texas; therefore, the Antiquities Code of Texas (ACT); Texas Natural Resources Code [TNRC], Title 9, Chapter 191) and its associated regulations (Texas Administrative Code [TAC] Title 13, Part 2, Chapter 26) also apply to the Project.

This report has been prepared by AmaTerra Environmental, Inc. (AmaTerra) with Mindy Bonine servicing as the Principal Investigator under contract to HNTB Corporation (HNTB) as the Program Manager for the Houston METRORapid Project. The Area of Potential Effect (APE) for archaeological cultural resources is defined as the existing METRO or City of Houston rights-of-way (ROW), with some sections acquiring new ROW to construct and/or expand sidewalks and/or to provide additional lane width or turn lanes. Project engineers expect the typical average depth of impacts to be between zero and five feet (0.0–1.5 meters), although much of the Project would be constructed at or above the existing ground surface and much of the existing roadway has been previously disturbed during prior roadway construction activities. One location, the underpass at Lockwood Drive, would reach a maximum depth of up to or beyond 80 feet (24.4 meters) where piers and foundations would be built. Proposed stations would typically be constructed at or above the existing grade.

On behalf of HNTB Corporation (HNTB) and METRO, AmaTerra Environmental, Inc. (AmaTerra) conducted a desktop survey of the Project APE. Through coordination with THC, AmaTerra determined most of the Project posed little risk of impacting intact significant archaeological deposits due to: 1) disturbances from previous urban development; 2) the proposed Project will be constructed primarily in existing ROW; and 3) proposed new ROW will primarily be for sidewalk improvements with shallow impacts. The Texas Historical Commission (THC) concurred with this analysis and recommendation in June 2022, and archaeological survey was not required for most of the archaeological Project APE (THC Tracking #202210364).

The BRT lanes are planned in the grass median between the north and south bound lanes of Lockwood Drive in proximity to the Evergreen Negro Cemetery identified by the THC in 2009 as a Historic Texas Cemetery (HTC). Historical documents indicate that the Evergreen Negro Cemetery formerly encompassed the area now covered by sections of Lockwood Drive and the median between the northbound and southbound lanes in one contiguous block. Subsequently, Lockwood Drive was constructed and then expanded into a boulevard in the early 1960s.

In December 2022, AmaTerra Environmental, Inc. archaeologists performed an investigation to determine the presence or absence of unmarked burials within the median of the northbound and southbound lanes of Lockwood Drive, located in the Fifth Ward, City of Houston, Texas. The work was conducted in advance of improvements to Lockwood Drive as part of the proposed Metropolitan Transit Authority of Harris County (METRO) University Bus Rapid Transit (BRT) Corridor, Houston Texas. The investigation was conducted to assess if the proposed METRO University Corridor Project (the "Project") would affect any intact burials or burial remnants associated with the Evergreen Negro Cemetery, a registered Texas Historic Cemetery, located on either side of a portion of the proposed Segment 4 route. The work was conducted under Texas Antiquities Permit 30784.

As this investigation documents a cemetery containing human remains, the provisions set forth in the Texas Health and Safety Code (HSC); Title 8, Subtitle C, Chapter 711) also applies.

The findings from the archaeological investigation of the Lockwood Drive median revealed 33 localities that contain evidence of a burial. Archival research indicates the burials could date between ca. 1890 and 1957. These localities included human bone, burial container wood and hardware, or personal items associated with a grave. Of these, three (3) localities contained sufficient human bone to be considered "intact" burials as well as one (1) locality that contained a "partial" burial. These finds were left in place at the conclusion of fieldwork pending registration as an abandoned cemetery and coordination for the removal of the skeletal remains. This location was given the archaeological site trinomial 41HR1270.

Cemeteries are not ordinarily considered eligible for inclusion in the NRHP unless they meet special requirements, and cemetery grounds that have been "substantially disinterred" do not meet standards of integrity. Site 41HR1270 does not meet these standards and is not recommended eligible for listing in the National Register of Historic Places (NRHP). However, site 41HR1270 is recommended eligible as a State Antiquities Landmark (SAL) as having state-level information potential and is a unique or rare resource. The site's dates of internment can be used to track African American mortuary practices over time through comparative analysis with other, older cemeteries in the Houston metropolitan area. In addition, there is a direct link between the cemetery and the history of the Fifth Ward community. Data pertaining to not only mortuary practices, but the interplay between historical racial segregation, social justice, and urban development would be informed by research on this cemetery. As the site has almost no associated records, archaeological investigations would be the only way important data could be obtained. The cemetery is also subject to the regulations stipulated in the Texas HSC. As this SAL-eligible resource will be impacted by the proposed Project, mitigation efforts are recommended to offset the proposed impacts as well as comply with the HSC.

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Acronyms and Abbreviations

ACRONYM	DEFINITION
ACT	Antiquities Code of Texas
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
BBB&C	Buffalo Bayou, Brazos &Colorado
BRT	Bus Rapid Transit
CAS	Center for Archaeological Studies
CFR	Code of Federal Regulations
CMBS	Centimeters Below Surface
DCE	Documented Categorical Exclusion
EO	Executive Order
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
GNSS	Global Navigation Satellite System
HISD	Houston Independent School District
HSC	Health and Safety Code
HTC	Historic Texas Cemetery
IH	Interstate Highway
LRT	Light Rail Transit
LULAC	League of United Latin American Citizens
METRO	Metropolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
ROW	Right-of-Way
RTHL	Registered Texas Historic Landmark
RTK	Real Time Kinematic
SAL	State Antiquities Landmark
TAC	Texas Administrative Code
THC	Texas Historical Commission
TNRC	Texas Natural Resources Code
TXDOT	Texas Department of Transportation
UPRR	Union Pacific Railroad
US	United States
USACE	US Army Corps of Engineers
USCG	US Coast Guard
USDA	US Department of Agriculture
USDOT	US Department of Transportation
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of this Archaeological Survey Report is to provide compliance with NEPA, Section 106 of the National Historic Preservation Act (NHPA), and the Antiquities Code of Texas (ACT) by identifying archaeological resources eligible for inclusion in the National Register of Historic Places (NRHP) or for listing as a State Antiquities Landmark (SAL) within the project area of potential effect (APE) and determining how the project may affect those resources. Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1. Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

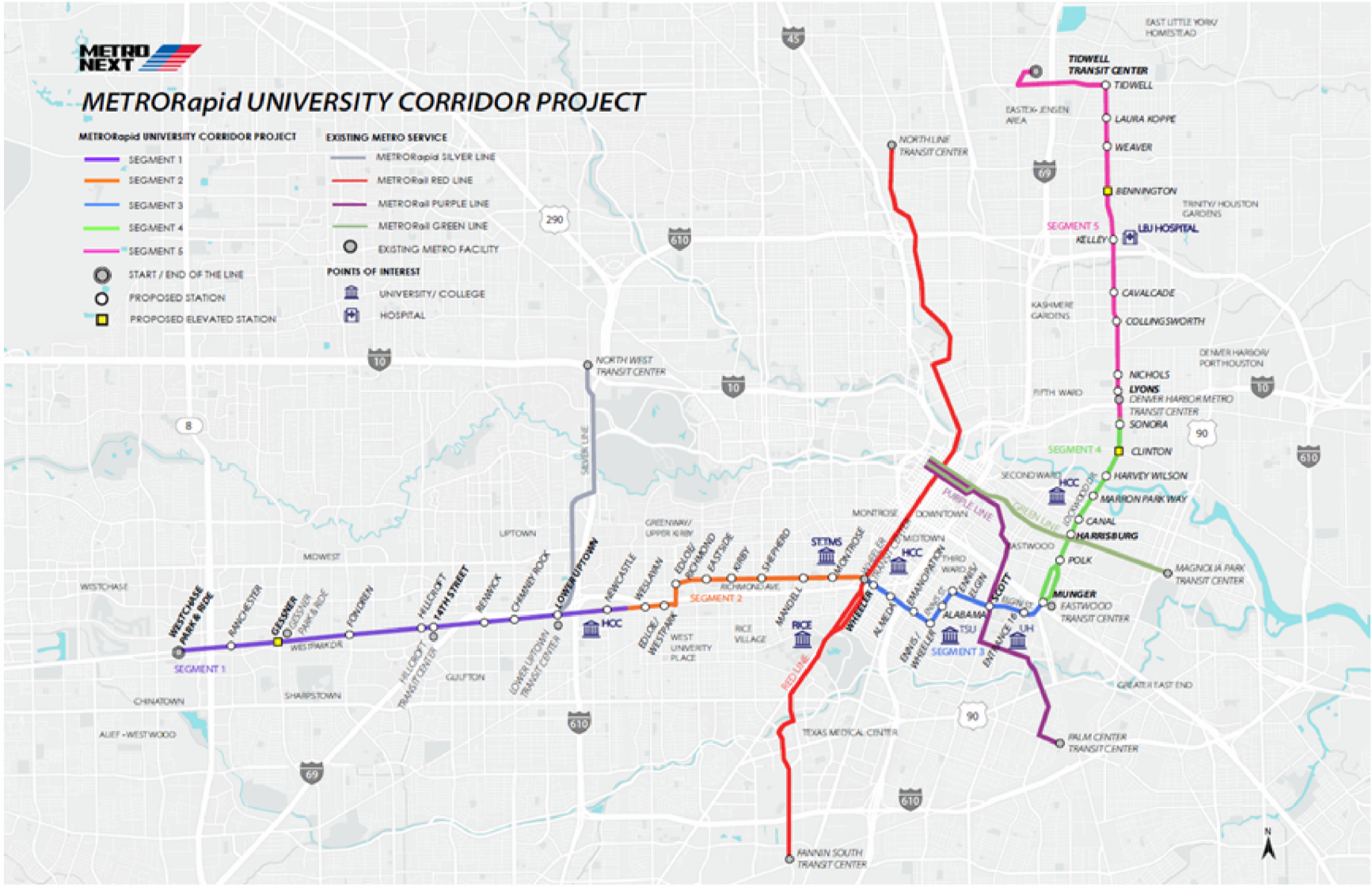
The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other METRORail, METRORapid, and local bus services. Some stations would be incorporated into existing METRO facilities. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 1-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr at Union Pacific Railroad (UPRR) tracks east of Newcastle Dr
2	Westpark Dr at UPRR tracks east of Newcastle Dr	Richmond Ave at Main St (Wheeler Transit Center)
3	Richmond Ave at Main Street (Wheeler Transit Center)	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit center)
5	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit center)	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



1.2 Archaeological Survey Overview

On behalf of HNTB Corporation (HNTB) and Houston METRO, AmaTerra Environmental, Inc. (AmaTerra) conducted a desktop survey of the Project APE. The APE for archaeological cultural resources is defined as the existing METRO or City of Houston ROW, with some sections acquiring new ROW to construct and/or expand sidewalks and to provide additional lane width or turn lanes. Project engineers expect the average depth of impacts to be between zero and five feet (0.0–1.5 meters), although much of the Project would be constructed at or above the existing ground surface. The maximum depths of impacts would be up to or beyond 80 feet (24.4 meters) where piers and foundations would be built. Proposed stations would typically be constructed at or above the existing grade.

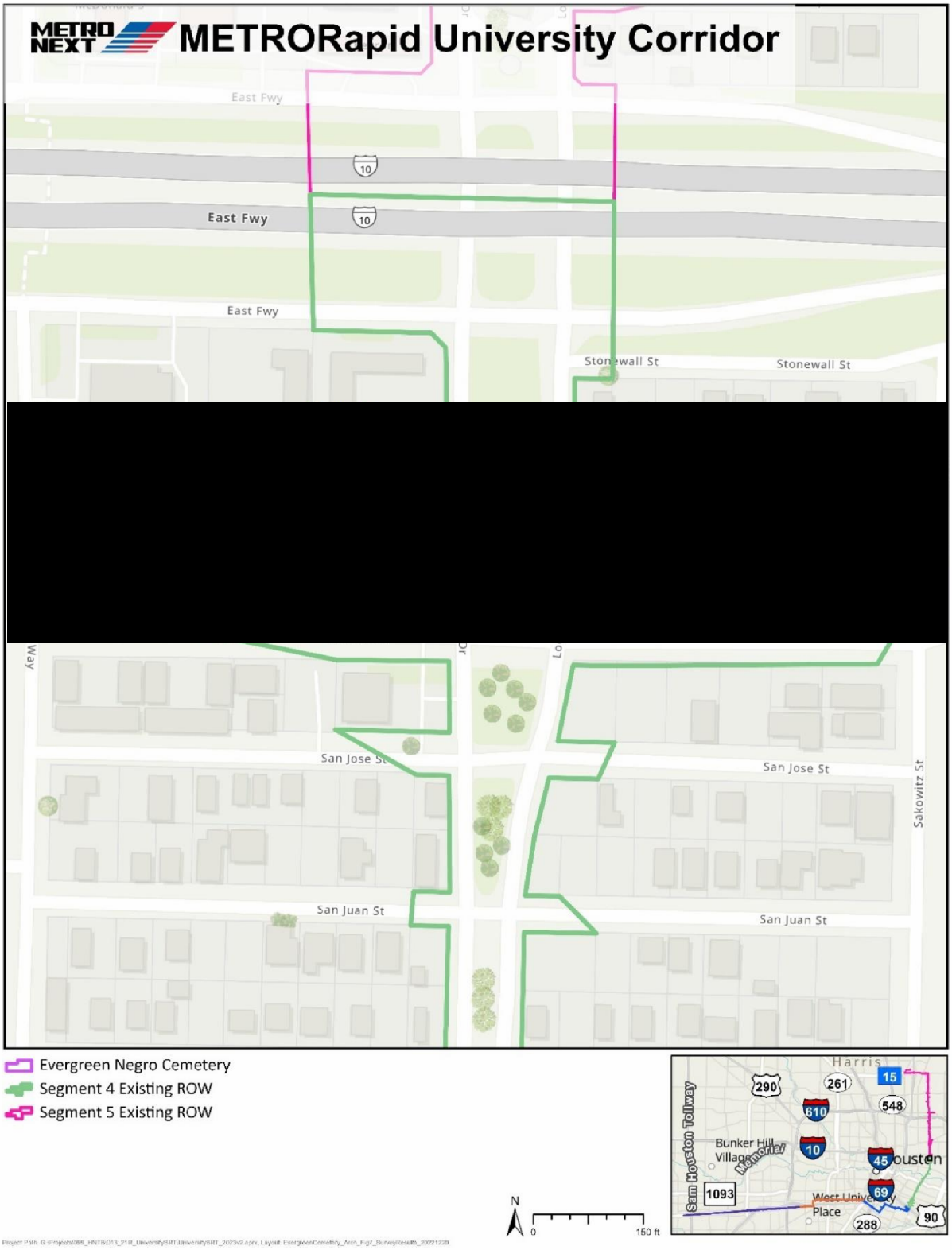
Through coordination with the Texas Historical Commission (THC), AmaTerra determined most of the Project posed little risk of impacting intact significant archaeological deposits due to: 1) disturbances from previous urban development; 2) the proposed Project will be constructed primarily in existing ROW; and 3) proposed new ROW will primarily be for sidewalk improvements with shallow impacts. The THC concurred with this analysis and recommendation in June 2022, and archaeological survey was not required for most of the archaeological Project APE (THC Tracking #202210364) but was required in the vicinity of the Evergreen Negro Cemetery, which had been identified in 2009 as a Historic Texas Cemetery (HTC) by the THC. Therefore, the survey results described in the remainder of this report pertain specifically to investigations conducted in this vicinity.

The BRT lanes are planned in the grass median between the north and south bound lanes of Lockwood Drive that bisect the Evergreen Negro Cemetery. Although no new ROW is planned



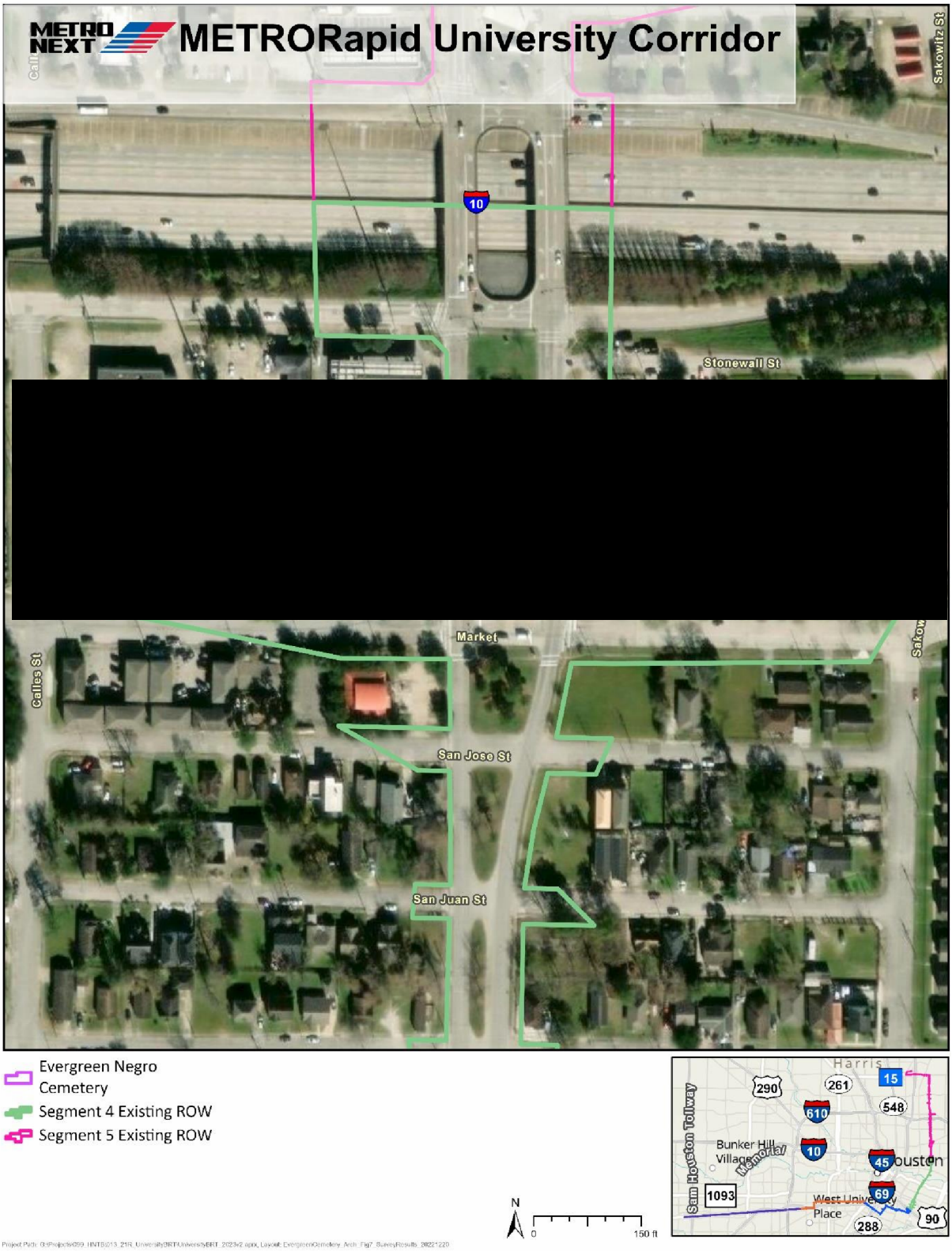
Lockwood drive was constructed, and then expanded into a boulevard in the early 1960s.

Figure 1-2: Archaeological APE for the University BRT Line Near the Evergreen Negro Cemetery on a United States Geological Survey (USGS) Topographic Map



Source: USGS 2023.

Figure 1-3: Archaeological APE for the University BRT Line Near the Evergreen Negro Cemetery on a Current Aerial Photograph



Source: USGS Earth Explorer 2023.

Prior to the expansion, the burials within the road ROW and the median were exhumed and reinterred elsewhere. Unfortunately, the records of the exhumation and reinterment have not been located. It is possible that burials may have been overlooked during the reburial efforts associated with the expansion of Lockwood Drive, and the current investigation attempted to determine if this was the case. Trench scraping to locate potential unmarked burials and an archival review of historical impacts to the cemetery was recommended prior to construction in the Project ROW within and adjacent to the Evergreen Negro Cemetery, and a specific scope of work appropriate to this investigation was devised and submitted to the THC for review and approval. Texas Antiquities Permit 30784 was issued by the THC, with Mindy Bonine serving as Principal Investigator.

Fieldwork was conducted December 5-9 and 14-16, 2022. Mindy Bonine led the first week of fieldwork, with Aaron Norment heading up the second week. Archaeologists Cameron Michael and Andrew Milam assisted the team leaders. Archival research was conducted by Mindy Bonine and Travis Trahan, in addition to the post-field analysis of the artifacts and remains.

1.3 Management Summary

Since this Project will occur within lands or easements controlled or managed by a political subdivision of the State of Texas (METRO and the City of Houston), state-level archaeological resource regulatory compliance outlined in the ACT must be followed (Texas Natural Resources Code [TNRC], Title 9, Chapter 191). In addition, the FTA is providing funding for the proposed Project, requiring federal-level cultural resource regulatory oversight outlined in Section 106 of the NHPA of 1966, as amended (36 Code of Federal Regulations [CFR] Part 800). The regulations documented in the Texas Health and Safety Code (HSC; Title 8, Subtitle C, Chapter 711) also apply for this Project as it documents a cemetery containing human remains.

A “Notice of Existence of Abandoned or Unknown Cemetery” form was completed for this portion of the Evergreen Negro Cemetery and submitted to the Harris County Clerk on February 10, 2023. This form identifies the location and disposition of the abandoned section of the cemetery. As improvements to the land cannot occur within a cemetery boundary (HSC §711.010), the City of Houston has elected to petition the district court for a removal of the cemetery designation for the area covered by Lockwood Drive and the road median. This action will involve the removal of the

[redacted]

1.4 Report Format

This report consists of five chapters. Chapter 2 includes the environmental and cultural setting for the Evergreen Negro Cemetery area, including ecoregion, geology, and soils; previous archaeological investigations in the area; and describes the cultural history of Houston and the Fifth Ward. Chapter 3 describes the methods for the field investigations, archival research, laboratory analysis, interview, and curation. Chapter 4 documents the results of the archival research and archaeological investigations. Chapter 5 provides a summary and recommendations for future work.

2 Environmental and Cultural Background

2.1 Ecoregion

The cemetery is in the Northern Humid Gulf Coastal Prairies level IV ecoregion, a subregion of the Western Gulf Coastal Plain level IV ecoregion. The region is characterized by its mostly flat, gently sloping coastal plains. Historically the vegetation has been made up of tallgrass grasslands with clusters of oaks and some post oak savannas present along its boundary with the East Central Texas Plains ecoregion. The northern area of the region is similar to the floodplain forests of the South-Central Plains which it borders, while the southern portion has fewer bottomland oaks and hickories and its overstory consists primarily of pecan, sugar hackberry, ash, southern live oak, and cedar elm. The soils are primarily Alfisols (clayey soils formed under forest cover) and Vertisols (clay-rich soils that shrink and swell during dry and wet periods; Griffith et al. 2007).

The region has been heavily altered by indigenous occupation as well as by wild cattle and horse grazing, domesticated livestock grazing, burning, drainage canals, stream channelization, invasive species, and most recently urban and industrial development Animal species historically present within the area include pronghorn, white-tailed deer, red wolves, prairie chickens, and bison (Griffith et al. 2007).

2.2 Geology and Soils

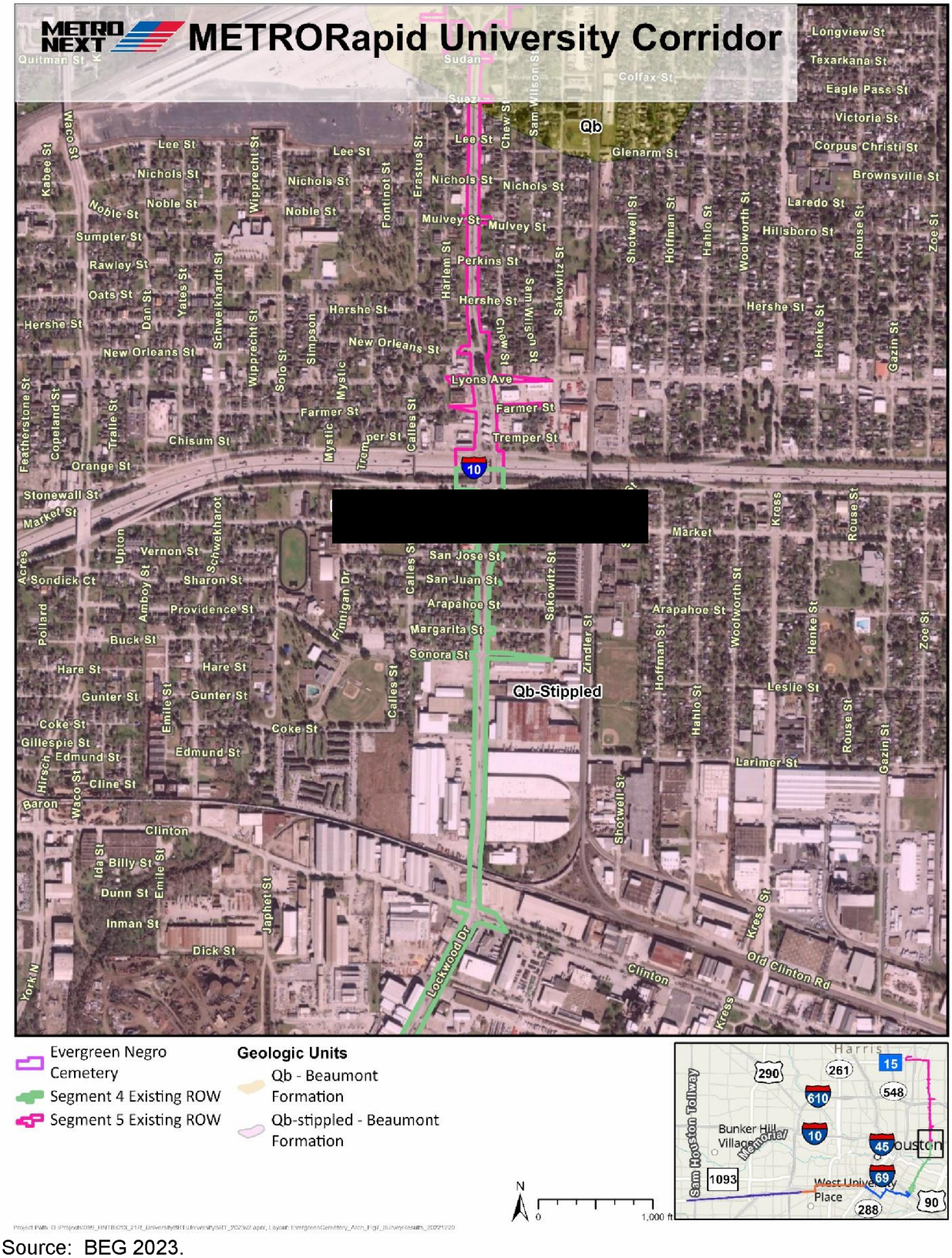
According to the Geologic Atlas of Texas (Bureau of Economic Geology [BEG] 2023), the cemetery overlies late Pleistocene aged Beaumont Formation deposit predominantly made up of clay and mud of low permeability with minor components of silt and fine sand (**Figure 2-1**; USGS 2023).

The only soil series present within the cemetery location is the Aris-Urban land complex (0-1 percent slopes; **Figure 2-2**). This series is made up of very deep and poorly drained soils formed in loamy fluviomarine deposits derived from the Beaumont Formation (U.S. Department of Agriculture-Natural Resources Conservation Commission [USDA NRCS] 2023).

2.3 Previous Archaeological Investigations

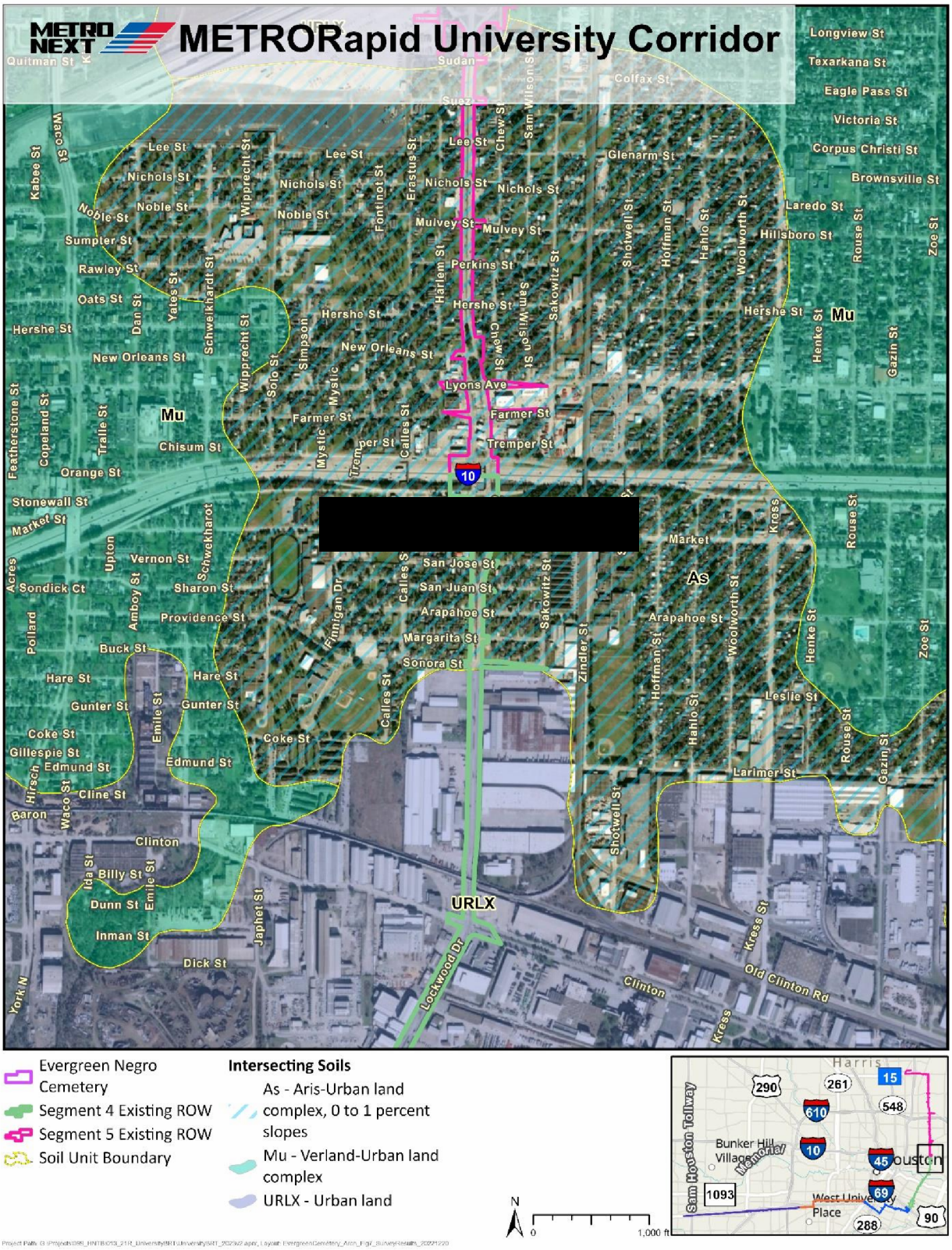
Background research for this investigation consisted of an online search through the THC's Archeological Sites Atlas (Atlas) and a review of historical period maps and aerial photographs. Researchers focused on the identification of previous surveys, archaeological sites, Registered Texas Historic Landmarks (RTHLs), sites listed in the NRHP, sites listed as SALs, cemeteries, and historical markers within 500 meters (0.31 mile) of the survey area (**Figure 2-3**). No surveys have been undertaken within 500 meters of the survey area. No archaeological sites, RTHLs, NRHP properties, SALs, or historical markers exist within 500 meters of the survey area. Evergreen Negro Cemetery itself is the only previously documented cultural resource within the 500-meter buffer.

Figure 2-1: Geology Underlying the Project Location



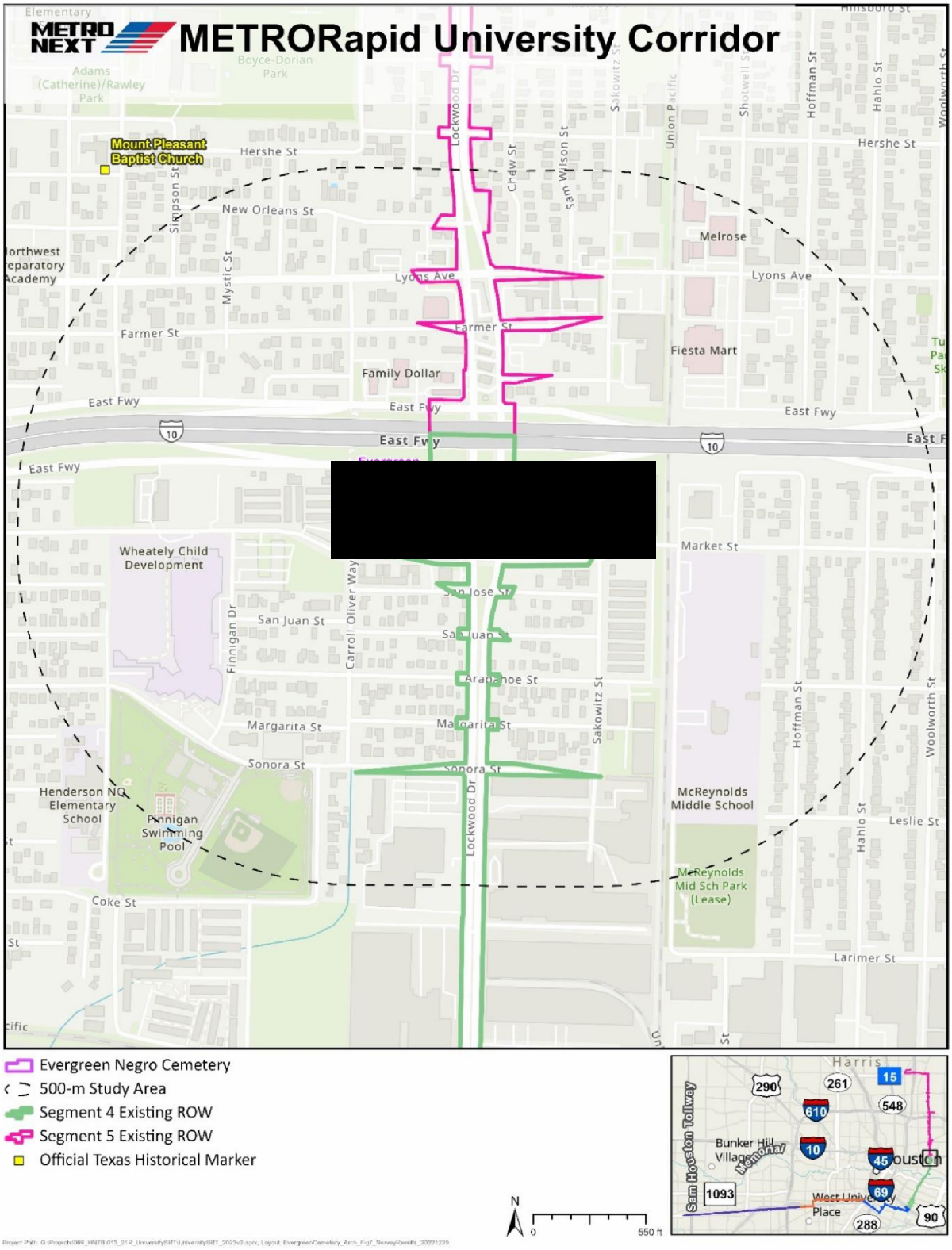
Source: BEG 2023.

Figure 2-2: Soils within the Project Location



Source: USDA-NRCS 2023.

Figure 2-3: Recorded Archaeological Investigations, RTHLs, NRHP Properties, SALs, Historical Markers, and Cemeteries within 500 Meters of the Evergreen Negro Cemetery



Source: THC Atlas 2023.

2.4 Cultural Historical Context

As this report addresses historical resources dating to the late nineteenth century and early twentieth century, the following historical context documents the time period from the founding of Houston in 1837 through the 1970s. The history of the Greater Fifth Ward and the Evergreen Negro Cemetery follows the narrative of the City of Houston.

2.4.1 City of Houston

The City of Houston was the brainchild of two brothers, Augustus Chapman Allen and John Kirby Allen, who named the townsite after Sam Houston. The town of Houston was surveyed, then mapped in a gridiron plan and incorporated in 1837 (McComb 2022). Houston established four wards, all centered from a central point in downtown. Community members were certain the town would become an excellent interior coastal commercial hub with access to both ships from Buffalo Bayou and land transport networks (McComb 2022). However, the city warred with Galveston for trade and transportation supremacy in the region until the 1900 hurricane leveled Galveston Island. Houston, with its sheltered seaport farther inland, took economic control of the region, eventually becoming Texas' major gulf port (Francaviglia 1998:263–267).

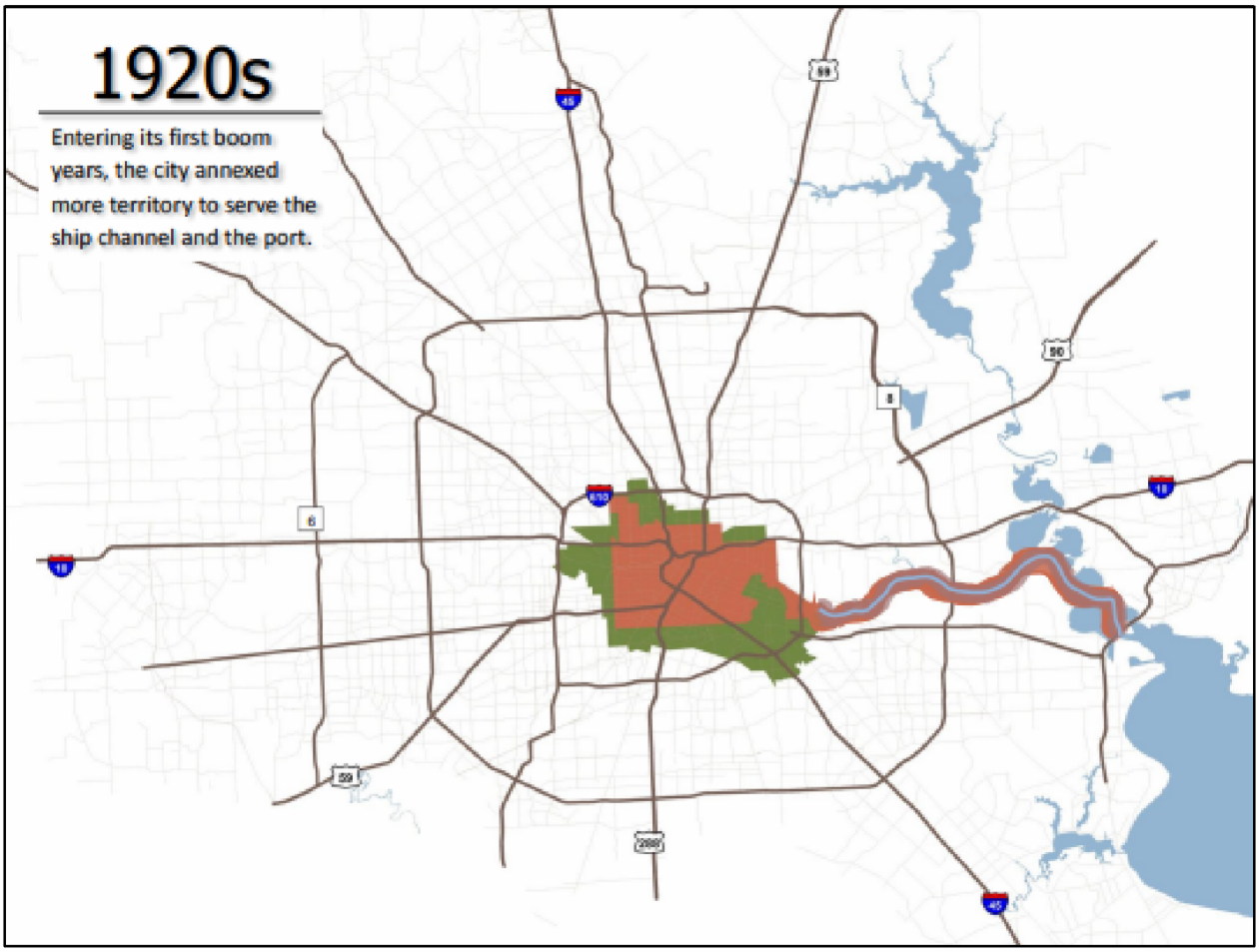
By 1900 Houston was nine square miles with a population of 40,000. Discovery of oil at Spindletop near Beaumont in 1901 in conjunction with the Buffalo Bayou Ship Channel's access to the Gulf of Mexico made Houston an obvious choice for oil companies to locate their business. A migration of Mexican citizens came to Houston in the early 1900s seeking work at the railroads and ship channel. The immigrants primarily settled in the Second Ward or El Segundo Barrio (Rosales 1981:224). In 1913 the city annexed land adjacent to the center core and along both sides of Buffalo Bayou (Houston Ship Channel) and the population almost doubled to 77,000 (City of Houston 2019). In 1920 the city covered 39 square miles (Kaplan 1981: 180). The demand for oil during World War I kept the economy growing. Annexation, economic growth, and an increase in population continued through the 1920s (**Figure 2-4**).

Houston recovered from the Great Depression by 1935 because of its industries and distribution capabilities setting several records that year in export tonnage, telephone connections, and building activities (Wolfe 2011:8-67). With improvements to the Houston Ship Channel, increasing depth and width the entire length, the Chamber of Commerce began an intensive campaign to draw new businesses to the city (Wolfe 2011:8-67). The concentration of oil-related companies in Houston and distribution capabilities via the Houston Ship Channel ensured that Houston and its citizens continued to prosper during World War II.

Between 1940 and 1960, the City of Houston doubled its size twice through land annexation reaching 350 square miles and almost one million residents (**Figure 2-5**). Many buildings, both commercial and residential, were constructed during this time. The lack of zoning allowed properties to develop the land for any use, creating a mix of commercial directly adjacent to residential properties. Houston's oil and shipping industries kept the city's overall economy strong. Growth and development were so rampant that the city placed a moratorium on many parts of Houston due to

insufficient sewage treatment capacity (Fox 1985:14). The growth lasted until oil prices started to fall in the early 1980s.

Figure 2-4: City of Houston Annexation Map Showing 1920s Land Annexation



Note: City limits of Houston ca. 1913 depicted in brown, newly annexed land shown in green.
Source: City of Houston Annexation 2019.

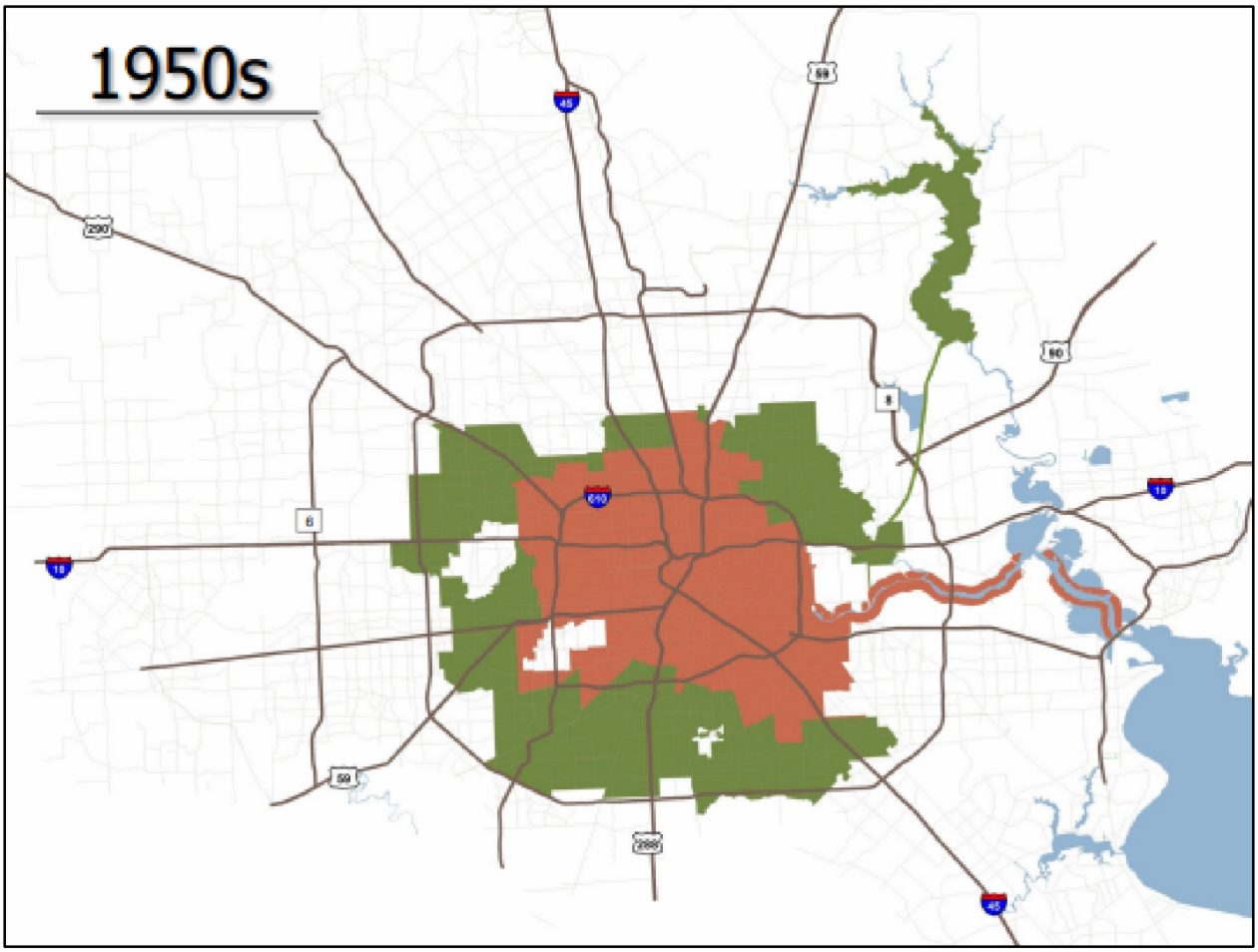
African American Settlement (1870–1945)

After the Civil War, Houston experienced population growth with former enslaved persons moving to the city for job opportunities, residing primarily in pockets in the Third and Fourth Wards. By 1872 influential African Americans raised funds and purchased four acres of land to establish the first-ever park for African Americans in Houston, Emancipation Park in the Third Ward (www.texashappens.com). The African American population tripled in 20 years, from 22,929 in 1910 to 66,357 in 1930. During this timeframe Dowling Street became the main commercial corridor owned and patroned by the African American community (www.texashappens.com). Dowling Street was renamed Emancipation Avenue and is in the Third Ward.

The population between Buffalo Bayou and White Oak Bayou became large enough to warrant government representation, thus the Fifth Ward was created from the First and Second Wards in

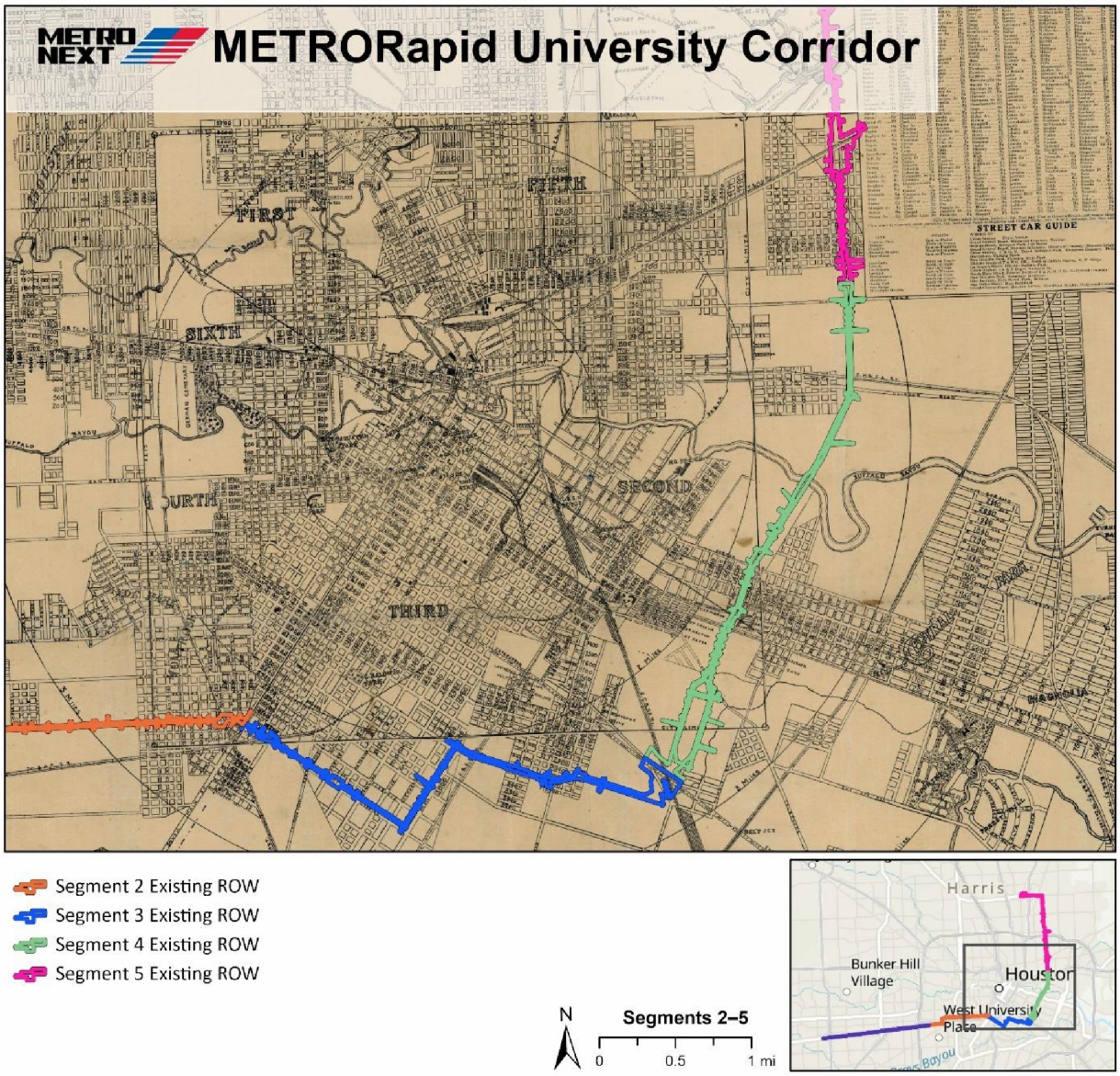
1866. The rail yard and abutting industries, dependent on rail transportation, were the economic center for jobs in this part of town. In 1870 the Fifth Ward was the only Ward with more African Americans than whites, albeit by a slim margin of 578 to 461 (Pando 2011:34). The Ward system was discontinued in the early 1900s but socio-economic associations with those areas are still recognizable and referenced today (**Figure 2-6**).

Figure 2-5: City of Houston Annexation Map Showing 1950s Land Annexation



Note: City limits of Houston ca. 1940 depicted in brown, newly annexed land shown in green.
Source: City of Houston Annexation 2019.

Figure 2-6: City of Houston Wards in 1913 with Project Overlay



Source: Wikipedia n.d. map 1913, AmaTerra Environmental, Inc. 2023.

After World War II there was a large shift of population moving from the downtown environs to the suburbs. A specific example of this occurred in the Third Ward. The Jewish population stayed within the inner-city area until the 1950s when suburban development promised larger lots to build upon and, once again, they relocated to be near new synagogues. As they began to move out, a large portion of the growing middle class African American population relocated from the Fourth Ward into the formerly Jewish neighborhoods of the Third Ward. This changed the Third Ward demographics from a mixture of ethnic groups to a predominance of African American residents (Third Ward MPS NRHP nomination E-16).

Civil Rights Movement (1948–1970)

Upon returning home from World War II, financial assistance from the GI Bill afforded African Americans and Mexican Americans new opportunities for education and home ownership. However, they continued to encounter discrimination and the League of United Latin American Citizens Council 60 of Houston (LULAC) became assertive in demanding equality (Rosales 1981:244). After World War II, three landmark court cases helped moved the nation towards desegregation. The 1948 Supreme Court (Shelley v. Kraemer) decision struck down restrictive covenants along racial/ethnic lines, allowing non-Caucasians to rent or purchase property previously denied to them. In 1950, Sweatt v. Painter helped establish a law department at historically black college at Texas Southern University, a Historically Black College, when Heman Sweatt was denied entrance to the University of Texas Law School. The landmark 1954 Brown v. Board of Education decision ruled segregated schools unconstitutional. In 1964 Congress passed the Civil Rights Act prohibiting discrimination based on race, color, religion, sex, or national origin.

These Supreme Court decisions and federal laws did not mean automatic integration. However, with the booming economy after World War II and through the 1970s, African Americans had more opportunities for education, work, and living options. This era also saw white flight to suburbs further from the city's downtown.

Transportation (1874–1978)

Ship Channel

The Allen Brothers chose the town site of Houston because of the water transportation potential of Buffalo Bayou (Sibley 2023). The bayou provided access for steamboats and smaller craft to travel from inland to the Gulf of Texas to transport people and agricultural goods. The Port of Houston was established in 1842 and officially took over maintenance and improvements of the channel. Houston merchants created the Buffalo Bayou Ship Channel Company to improve the channel and bypass Galveston Harbor. Success for the company did not occur until ship and railroad magnate Charles Morgan purchased it and dredged a channel from Clinton, Texas, to Galveston Bay in 1876 (Sibley 2023). Improvements continued in 1909 when Harris County created a navigation district to sell bonds and receive matching funds from the US government (Sibley 2023).

Railroads

With access to the Gulf of Mexico via Houston's ship channel, railroad companies established routes through Houston starting with the Buffalo Bayou, Brazos & Colorado (BBB&C) in 1851 (Willits 2007:2). With the shipping canal enlarged, the Houston Chamber of Commerce adopted the slogan of "Where 17 Railroads Meet the Sea" in the 1920s (Willits 2007:2). Industrial businesses located near the railroads flourished by taking advantage of this transportation option. Over time, rail companies consolidated routes and abandoned lines as vehicle ownership and air travel reduced the need for rail service. Only six railroad lines operated in Houston by 1980 (HSSHP n.d.). Today, Union Pacific Railroad (UPRR) active rail lines and spurs still serve industry in the project area as shown by the map below in portions of Segments 4 and 5 (**Figure 2-7**).

Figure 2-7: Map of Rail Lines and Rail Spurs in Segments 4 and 5



Note: The blue lines represent the rail line while the black dash line follows Lockwood Avenue
Source: TxDOT Texas Railroads 2022.

Streetcars

Houston City Street Railway company is credited with the successful use of streetcars in Houston in 1874 (Baron 2014:68). The initial four lines were longer than the first streetcar routes with one line extending to the old fairgrounds on the south end of town, a mile from downtown. Out-of-state investors purchased the rail system in 1890 and converted the mule drawn system into an electric operation (Baron 2014:70). Seven additional electric lines were added in the next two years spurring construction of buildings along the route (Baron 2014:70-71).

When the ship channel was deepened in 1908, the streetcar service to Harrisburg Boulevard commenced providing easy access to six miles of undeveloped land (Baron 2014:77). The William A. Wilson Company stated in their advertisement that the Eastwood subdivision (Segment 4) could easily be reached by the Harrisburg Line (Wilson 1911:9-10). Construction of new lines in 1913 and 1914 extended to the Third Ward and Fifth Ward including the Lyons Avenue line (Baron 2014:79-80). In 1927, there were 24 routes utilizing 90 miles of track (Baron 2014:86). Increased ownership

of vehicles, competition from jitneys (private vehicles used as taxis), and bus service added to the demise of the streetcar. The last streetcar discontinued service in 1940.

Roadways

As a railroad and sea hub, roadways have always been integral for the movement of goods through the city. Houston had 26 miles of pavement in 1903 and 196 miles of paved streets in 1915 (Papademetrieu 1983:115). Houston's Mayor Oscar Holcombe hired the firm of Hare and Hare in 1924 to prepare a major street and thoroughfare plan (Fox 1985:13), but the plan was not implemented. In 1940 the city created the Department of City Planning and hired Ralph S. Ellifirt, a landscape architect formerly employed by Hare and Hare (Fox 1985:14). During his time Ellifirt created a freeway network system, the Thoroughfare Plan of 1943, that became the building block of development in Houston. State funds financed Houston's first limited access highway, the Gulf Freeway, and construction was completed by the end of the 1950s. In 1956 the U.S. Interstate Highway Act was passed with the goal to connect major towns and ports for movement of troops and goods during times of war. Houston received $453 million in highway funds, over half of the entire Federal appropriation for Texas (Wolfe 2011:8-70).

Formal plans to construct a "defense loop" around Houston started in the 1940s and resulted in today's Loop 610 which crosses east/west over Lockwood Road in Segment 5. Construction of Interstate Highway (IH) 45 and US Highway (US) 59 in the mid-twentieth century divided established ethnic neighborhoods and demolished many buildings in the third, fourth, and fifth wards (Randall and Korfmacher 2008: Sec E Pg 11.

2.4.2 Greater Fifth Ward

The Greater Fifth Ward was one of Houston's original six wards and was settled in 1866 by former slaves. Prior to the Civil War the area was only sparsely populated. The population of the Fifth Ward around the time of its initial settlement was half African American and half Anglo. By 1870 the population was made up of 578 black inhabitants and 561 white inhabitants (City of Houston 2022). The white inhabitants of the area were largely immigrants, primarily from Ireland, with smaller numbers from Germany and Italy (Mitchell and Pettis 2019). The population of this area has historically been made up of primarily working-class citizens. The oldest institution within the Fifth Ward is Mount Vernon United Methodist Church, which was founded in 1865 by freedman Reverend Toby Gregg. There are five additional churches which are over a century old: Mount Pleasant Baptist, Payne Chapel Methodist, First Shiloh Baptist, Sloan Memorial United Methodist, and Pleasant Grove Baptist. By the 1880s the Fifth Ward's economy was booming due to the support of the railroad industry. A conflagration at a lumber mill in 1891 hindered growth, as did another one in 1912 which burned 119 houses, 116 boxcars, nine oil tanks, and a church and school, crippling various industries within the area (City of Houston 2022).

By the 1920s the Fifth Ward was predominantly made up of African- American residents. In 1925, the commercial center of the city, Lyons Avenue, contained 40 businesses owned by African Americans including a theater, multiple barbershops, and a funeral parlor. Many of the city's African American occupants worked for the Southern Pacific Railroad or in Houston Ship Channel industries. By 1927, the area contained one of the largest African American high schools in the country: Phillis

Wheatley High School, which had 2600 students and 60 teachers. New developments in the 1930s included photography studios, printing plants, and a night club called the Club Matinee, which would eventually host famous musical artists including Ray Charles, James Brown, and Aretha Franklin (City of Houston 2022; Sam 2021). There were also many Italian American owned small businesses in the Fifth Ward throughout the late nineteenth and early twentieth centuries, including a barbershop, a shoe store, and multiple groceries. By the mid-twentieth century most Italian-Americans had left the area (Mitchell and Pettis 2019).

Following World War II, Houston's second African American public housing project was constructed in the area, the Kelly Court Housing Project. A record company called Peacock Records opened in the Fifth Ward around this time, as did C.F. Smith Electric Company, a public park for African Americans, and a Black Community Center called the Julia C. Hester House. The Fifth Ward flourished during the 1950s with Lyons Avenue and Jensen Drive as primary commercial strips. "Over the next three decades the demographics of the neighborhood changed substantially. Specifically, in 1950, 83 percent of the population was white. Just ten years later, in 1960, the neighborhood had a majority Black population, at 71 percent. This history propelled Kashmere Gardens residents to lead the Houston fight to integrate public schools during the civil rights era" (City of Houston 2020:9).

Houston Independent School District (HISD) did not automatically integrate their schools after the 1954 US Supreme Court decision ruled segregated schools unconstitutional (Brown v. Board). It took local lawsuits for the first black student to attend an all-white school, Kashmere Garden Elementary, in 1960 (*Houston Chronicle* 1960). Subsequently, many residents left the area in the 1960s seeking other opportunities. As middle-class families left to integrate into the suburbs and shop at regional malls, the Fifth Ward business district slowly died leaving empty buildings and eventually leading to vacant lots (Pando 2011:37). The area declined economically well into the 1970s and 1980s and became known for a high degree of crime (Kleiner 2020). These struggles were, in part, due to the construction of IH 10 and US 59, as residences and businesses were demolished, families were displaced by construction, and residential areas became disconnected from the business hub of the ward (Mitchell and Pettis 2019).

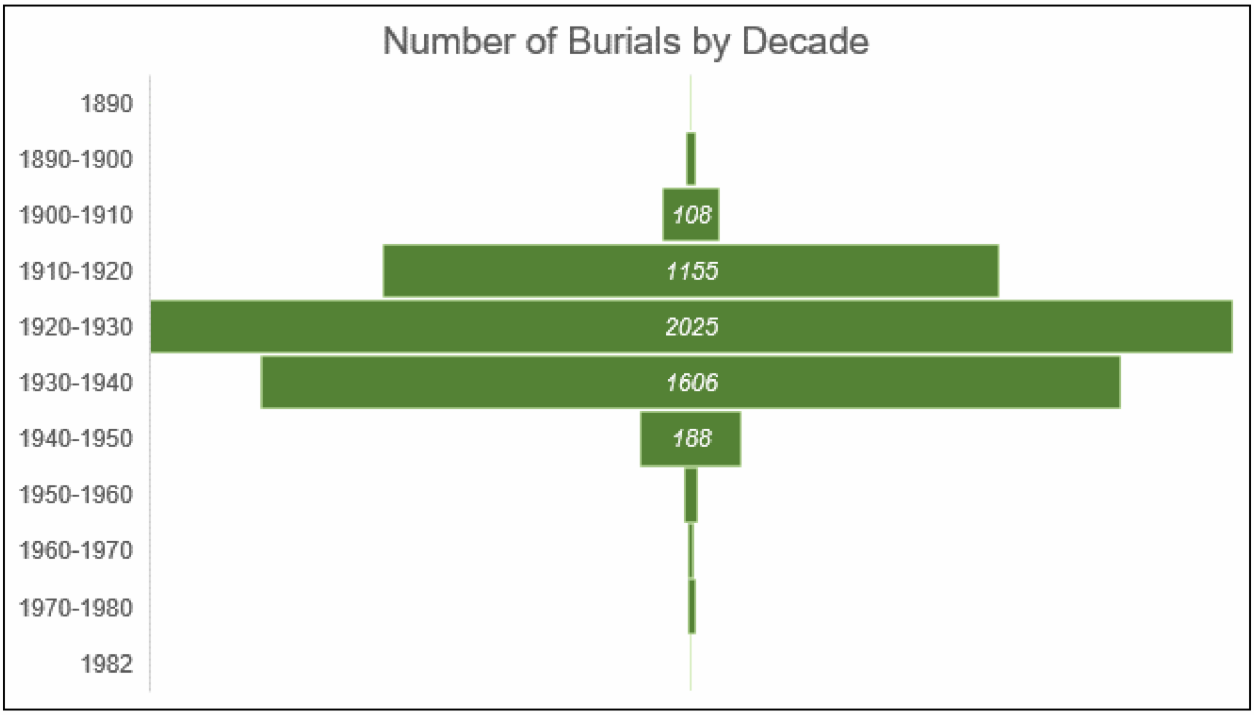
In the 1990s and 2000s the area grew significantly due to the formation of the Fifth Ward Community Redevelopment Corporation, which sought to reinvigorate the area with the construction of new homes and an increase in job training opportunities as well as access to technology and the arts. By 2008 the population of the area had reached 22,000 (Kleiner 2020).

2.4.3 Evergreen Negro Cemetery

Evergreen Negro Cemetery is located in Houston's Fifth Ward on the east and west side of Lockwood Drive south of IH 10 on Market Street. The cemetery, divided by Lockwood Drive into two sections, contains approximately 5.58 acres and is believed to be the third oldest African American cemetery in Houston. At one time, the site was owned by one of the founders, Fifth Ward resident, businessman, and former enslaved person A. K. Kelley. Kelley established the cemetery with two others: Reverend Edward Lee and W. B. Zinkey. After Kelley's death on November 26, 1928, he was buried in the family plot in Evergreen Negro Cemetery (Beverly 2005; Johnson 2017).

Although some documentation suggests the cemetery was active as early as 1887, the known cemetery burials date from approximately 1890 to 1970. The cemetery was most active from the 1910s through the 1940s (**Figure 2-8**). Those interred in the cemetery include former enslaved people, members of all-Black cavalry regiments (aka Buffalo Soldiers), twenty-four World War I veterans, police officers, and other residents of the Fifth Ward (Johnson 2017). Notable people buried at the cemetery include A. K. Kelley (founder), Dr. E. A. Durham (physician), George H. Lofton (Buffalo Soldier), Deputy Arthur Taylor (deputy sheriff), and Detective Isaac "Ike" Parsons (Houston police detective). Many who were interred at the cemetery did not have grave markers, and death records were used to trace the identity of those buried there (findagrave.com).

Figure 2-8: Number of Burials by Decade at the Evergreen Negro Cemetery



Source: findagrave.com 2023.

By 1944, the City of Houston had extended Lockwood Drive through the middle of the cemetery grounds as a two-lane road. In the late 1950s the city of Houston sought to expand Lockwood Drive from Sonora to Liberty Road. Lockwood Drive was expanded into a boulevard with two travel lanes and a center median. This widened the road considerably and encroached on many burials at the cemetery. In the late 1950s, the City of Houston contacted as many descendants as could be identified to obtain their permission to quitclaim the burial plots in the proposed median and have the remains moved to another cemetery. Removal of those burials was conducted before the road was expanded, and at least 188 bodies were exhumed, according to local news sources (*Houston Chronicle* 1957). However, several unmarked burials associated with "Stranger's Rest" and "Potter's Field" areas of the cemetery could not be identified. Later newspaper accounts indicate that at least 490 burials were removed and relocated to other cemeteries, including Eternity Park, Oak Grove (or Park), and Paradise cemeteries in Houston (Beverly 2005; *Houston Chronicle* 1969, 1979).

By the 1970s dense vegetation had overtaken the entire cemetery. Two decades later, the African American community began to reclaim and preserve the historic graveyard. In 1995, a nonprofit organization called Project RESPECT, along with area universities and students, began work to clean up and restore the cemetery. Fifth Ward community efforts to raise awareness for the cemetery continued into the 2000s (Boney 2016). On July 31, 2009, the THC declared the site a "Historic Texas Cemetery." The cemetery is maintained and operated by Project RESPECT, a nonprofit cemetery corporation.

3 Investigation Methodology

Texas Antiquities Permit No. 30784 was issued in August 2022 for the field investigations, with Mindy Bonine serving as Principal Investigator. Fieldwork was conducted December 5–9 and 14–16, 2022. Mindy Bonine led the first week of fieldwork, with Aaron Norment heading up the second week. Archaeologists Cameron Michael and Andrew Milam assisted the team leaders. Mindy Bonine and Travis Trahan conducted archival research, in addition to the post-field analysis of the artifacts and remains.

3.1 Field Methods

As the archaeological investigation was conducted well in advance of any finalized construction plans, the as-built environment was taken under consideration when planning the fieldwork. The [redacted]

AmaTerra archaeologists arrived on-site and set up the real time kinematic (RTK) global navigation satellite system (GNSS), which was set to 1.4-centimeter (cm) accuracy. The field team then measured 10-foot (3.048 meters) diameter [redacted] These areas were to be avoided by the backhoe. They then conducted a 100 percent pedestrian survey and visual inspection of the survey area. Archaeologists looked for any disturbed areas, surface evidence of graves and/or burial markers. No markers or grave depressions were observed, but a drainage basin, storm drain, and drainpipe were observed near the center of the survey area. Archaeologists mapped these features using the RTK system.

Preliminary background research indicated that the survey area was not likely to be favorable for non-invasive investigations (e.g., remote sensing) due to extensive disturbance from past work along Lockwood Drive. Thus, mechanical excavation was used to evaluate the survey area. A standard rubber-tire backhoe was used for the scraping. It was fitted with a flat-bladed, toothless excavation bucket 4-feet (1.21 meters) wide. The backhoe worked in all areas outside of the tree buffer and the existing roadway, sidewalk, etc.

[redacted] archaeologists employed a 40 to 50 percent sampling method. This strategy included a backhoe trench scrape a few centimeters of soil at a time to expose the intact subsoil, then a move over about 1-1.5 meters (3.28-4.92 feet) to excavate a trench parallel to the first. Trench locations were slightly modified to avoid the obstacles in the survey area. The parallel scrapes continued until the entire area had been sampled. The trenches were oriented roughly north-south so that they would crosscut the direction of any burial shafts, which were oriented east-west. The narrow spacing of the trenches and the orientation would be sufficient to encounter any unmarked burial shafts yet leaving enough intact soil for the backhoe to work safely.

Archaeologists dug the trenches to a depth sufficient to confirm the presence or absence of likely human burials. They watched for soil discolorations and other features consistent with previously excavated burial shafts, including burial-related artifacts, hardware, and human remains. The centerline of all trench scrapes was mapped with the RTK system. The field team documented each trench on a standardized form and through photographs, recording the location and depth of any features within. Open trenches were backfilled at the end of each day.

If at any time, evidence of human burials (e.g., burial shafts, hardware, skeletal remains) were identified in the trench scrape, those locations were investigated by hand to: 1) uncover the cultural material; 2) plot the remains with the RTK system; and 3) record the finds on field forms. They were evaluated for evidence that suggested the remains had been removed ca. 1960 or if the body remained intact and *in situ*.

Locations where only burial container wood, container hardware, and/or small bone fragments remained indicated the body had been moved. These areas were recorded, the material was collected for laboratory analysis and future reinterment, and the field team continued the investigation. In these cases, only bone fragments, non-ferrous metal coffin or casket hardware, and associated burial goods were collected. The burial container wood was left in place, as it remained quite friable and was unable to be removed without its decomposition. Likewise, any marine shell fragments found with the burials were not recovered for the same reason.

Alternatively, for those locations with sufficient human bone to indicate a body that had not been recovered ca. 1960, all work in the immediate vicinity ceased until such time as HNTB, METRO, and the THC could be notified. Work continued away from the find location if the team was confident that the find would not be impacted as a result. Once all were notified and work could proceed, the field team covered the burial location with several sheets of plastic and the trench scrape was refilled.

Periodically, Dr. Woody Jones, Ms. Lisa Jedkins, and Ms. Zanitra Wells from Project RESPECT, the nonprofit cemetery corporation in change of the maintenance and preservation of the Evergreen Negro Cemetery, visited the survey area during the field investigations. Archaeologists on site reviewed the investigation methods with the visitors and presented preliminary results. Discussions were initiated in regard to the final disposition of the remains, which was tentatively identified as an alternate location within the Evergreen Negro Cemetery.

At the conclusion of the field investigations, [redacted] was returned to its original condition as much as possible. The field team returned to the AmaTerra office to secure the collected material in a temperature-controlled and locked facility, with limited personnel access. The bone fragments were placed in paper bags with their associated provenience information and separated from the heavier coffin or casket hardware and burial goods, which were placed in plastic bags after air drying. All recovered items were logged on inventory forms.

3.2 Laboratory Analysis

During the field investigations, only bone fragments, burial container hardware, and burial goods were collected. The material was collected with the intention of a brief analysis and subsequent reburial at the Evergreen Negro Cemetery. The intent was to secure the remains from future disturbances, recognize the presence of those who had been buried in the median, and provide suitable and respectful reinterment in a dedicated burial ground.

Bone fragments were analyzed by a senior archaeologist with experience in bioarchaeology to determine if they could be anatomically identified. As the fragments were very small and less than 0.1 percent of the complete body, attributes such as height, age, sex, racial ancestry, pathology, or cause of death could not be determined. What attributes that could be determined were noted by the analyst and included with the field data.

Burial container hardware was photographed and typed. The type of coffin or casket component was identified for each item, but stylistic attributes were only broadly identified. The collection was compared with hardware that had patents to determine their date of earliest manufacture, as well as with collections from other nineteenth and twentieth century cemeteries such as the New Home Cemetery in Fort Bend County (Hill and Pye 2012), Freedman's Cemetery in Dallas (Davidson 1999, 2004), the Third New Cemetery in Houston (Foster and Nance 2002), the Oscar Abstein Cemetery in Harris County (Broehm et al. 2004), The Phillips Memorial Cemetery in Galveston (Dockall et al. 1996), and the Pioneer Cemetery in Brazoria County (Tiné and Boyd 2003, Norment et al. 2016). Only one trade catalog was easily located for comparative research, and while many other trade catalogs have been found through other cemetery investigations, time constraints prevented an in-depth investigation of these resources. However, the design of the burial container hardware was linked to a date range of manufacture and popularity as closely as possible.

Burial goods were identified, photographed, and, where possible, researched as to date of manufacture. Where feasible, interpretations as to the overall social significance of the burial goods were made.

3.3 Archival and Map Research

The archival research portion of the project was conducted to obtain information on specific topics: establishing a timeline for the construction and improvement of Lockwood Drive, and information concerning the disinterment of human remains in advance of the expansion project. A project archaeologist visited the Family History Research Center at the Clayton Library Campus and the African American History Research Center to check their archives for material related to the Evergreen Negro Cemetery. Local newspapers including the *Houston Informer*, *Houston Forward Times*,

the *Houston Chronicle*, *Houston Metropolitan*, and *Houston Newspages* were consulted as well as a vertical file assembled by the African American History Research Center. Find a Grave (www.findagrave.com) was consulted for a record of people known to be buried in the cemetery. The Texas State Historical Association's Handbook of Texas (https://www.tshaonline.org/handbook) was utilized to garner information regarding the general history of the cemetery and the Fifth Ward. The City of Houston and the *Houston History Magazine* were also consulted regarding the history of the area. A preliminary property records search was conducted using the Harris County Appraisal District online records search (www.hcad.org).

Historical maps were also reviewed to determine the progression of the built environment surrounding the Evergreen Negro Cemetery. Two topics were of particular interest: when Lockwood Drive was first constructed through the cemetery grounds, and when the road was expanded into a boulevard. Historical USGS topographic maps through the USGS Historical Topographic Map Explorer (https://livingatlas.arcgis.com/topoexplorer/index.html), historical city street maps, and City of Houston Planning Commission maps were all reviewed to answer these questions. The historical major thoroughfare and freeway plan maps from 1942-2022 were all available online (https://www.houstontx.gov/planning/transportation/MTFP_HistoricalMap.html). Historical aerial photographs were obtained from USGS Earth Explorer (https://earthexplorer.usgs.gov/).

3.4 Historian Interview

On Wednesday, February 15, 2023, the Principal Investigator conducted an informal interview with Ms. Lisa Jedkins and Ms. Zanitra Wells of Project RESPECT, and Historian Dr. Donald Williams, via Zoom. Dr. Williams was a resident of the Fifth Ward and an active participant in the restoration of the Evergreen Negro Cemetery, as well as a descendent of individuals interred at the cemetery. The interviewees provided much needed knowledge of the history of the cemetery as well as possible avenues for future research. Topics ranged from the location of possible documentation concerning the cemetery and the disinterment of remains ca. 1960, an overview of the appearance of the cemetery in the 1930s and 1940s, and the efforts the City of Houston employed to contact family members concerning the removal of their relatives at that time. Information obtained from this interview has been added to the results of investigations as needed.

3.5 Curation

No artifacts will be curated. All collected material will be reinterred at the Evergreen Negro Cemetery. AmaTerra will submit all Project-related documents, including photographs, notes, and forms, to the Center for Archaeological Studies in San Marcos (CAS).

4 Results of Investigations

This section documents the results of the archival research and archaeological survey investigations. The historical map review and archival search focused on the installation and subsequent expansion of Lockwood Drive through the Evergreen Negro Cemetery, as well as the removal and reinterment of the human remains ca. 1960. Unfortunately, primary source material concerning the disinterment was not located in this initial search, and only secondary source material was used in the cemetery's narrative history. Several questions remain, including exactly how many bodies were disinterred, the

names of those removed, and where they were relocated. More indirect lines of inquiry may provide information that answers these questions about the cemetery's history. The results of the historical map review, aerial photograph review, and preliminary property records search is presented below.

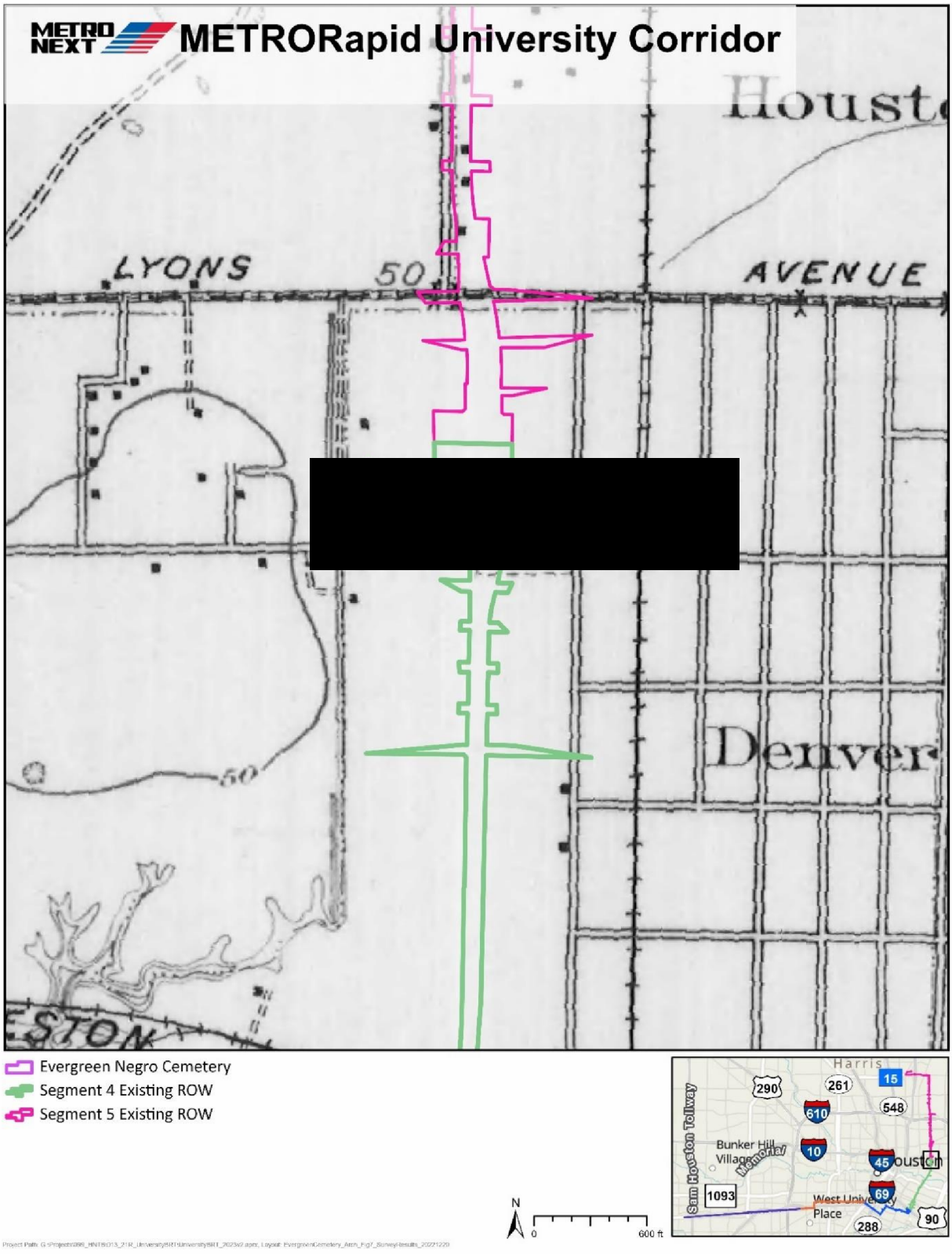
The archaeologists excavated 20 north-south-oriented trench scrapes [redacted] of the median (approximately 4 feet below the surface), one storm drain near the center of the median, and one storm drainpipe connecting the storm drain to the storm sewer system to the west. A sculpted drainage basin was identified and mapped. The investigations identified 33 localities that contain evidence of a burial. These localities included human bone, burial container wood and hardware, or personal items associated with a grave. Of these, three localities contained sufficient skeletal material to be considered "probably intact" burials and one locality that contained a "partial" burial. These four locations were left in place at the conclusion of fieldwork. The entire survey area was given the archaeological site trinomial 41HR1270.

4.1 Historical Map Research

The first set of maps researched to determine the historical built environment were USGS topographic maps, through the USGS Historical Topographic Map Explorer. The earliest topographic map, 1916 (Settegast 1:24,000) did not contain the city streets within the city limits of Houston. The 1922 topographic map (Settegast (1:31,680), depicts the development around the cemetery as well as the cemetery itself. However, the disposition is different than its current configuration. The maps depict Market Street running east-west through the cemetery, which is located west of Sakowitz Street. Both streets are depicted as paved, but Dr. Williams indicated that they were one-lane unpaved roads at that time (**Figure 4-1**). This may be the area where the earliest graves are located. Structures are present along the unpaved road that would become Carroll Oliver Way and the western half of the cemetery in later years. The rest of the land surrounding the cemetery was vacant.

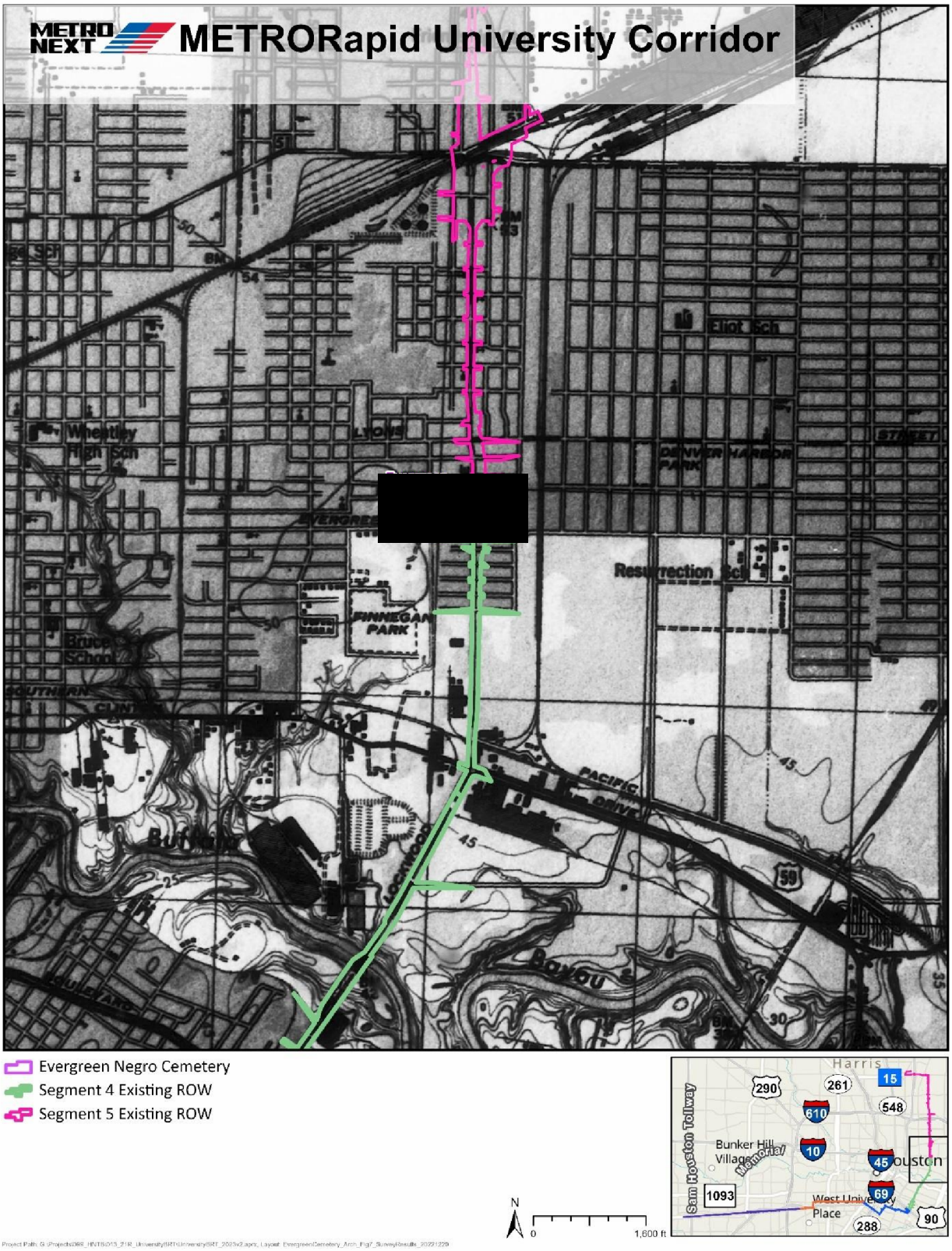
A 24-year gap separated an update to the Settegast (1:31,680) topographic map (dated 1946), during which time several changes were recorded (**Figure 4-2**). Market Street exhibited a slight dip to the south at the location of the cemetery, which was marked entirely on the north side of the road, and the cemetery itself was depicted as extending all the way from Carroll Oliver Way to Sakowitz St. It appears that Market Street had been moved approximately 100 feet to the south to border the southern edge of the cemetery. This in turn jointed the two halves into one block. Lockwood Drive, only one roadway at the time, split the cemetery into two halves. Thus, the road was developed sometime between the 1920s and the 1940s. Neighborhood blocks had been formalized by this point, with only a few areas of still undeveloped land depicted.

Figure 4-1: 1922 Settegast USGS Topographic Map (1:31,680)



Source: USGS 2023.

Figure 4-2: 1946 Settegast USGS Topographic Map (1:31,680)



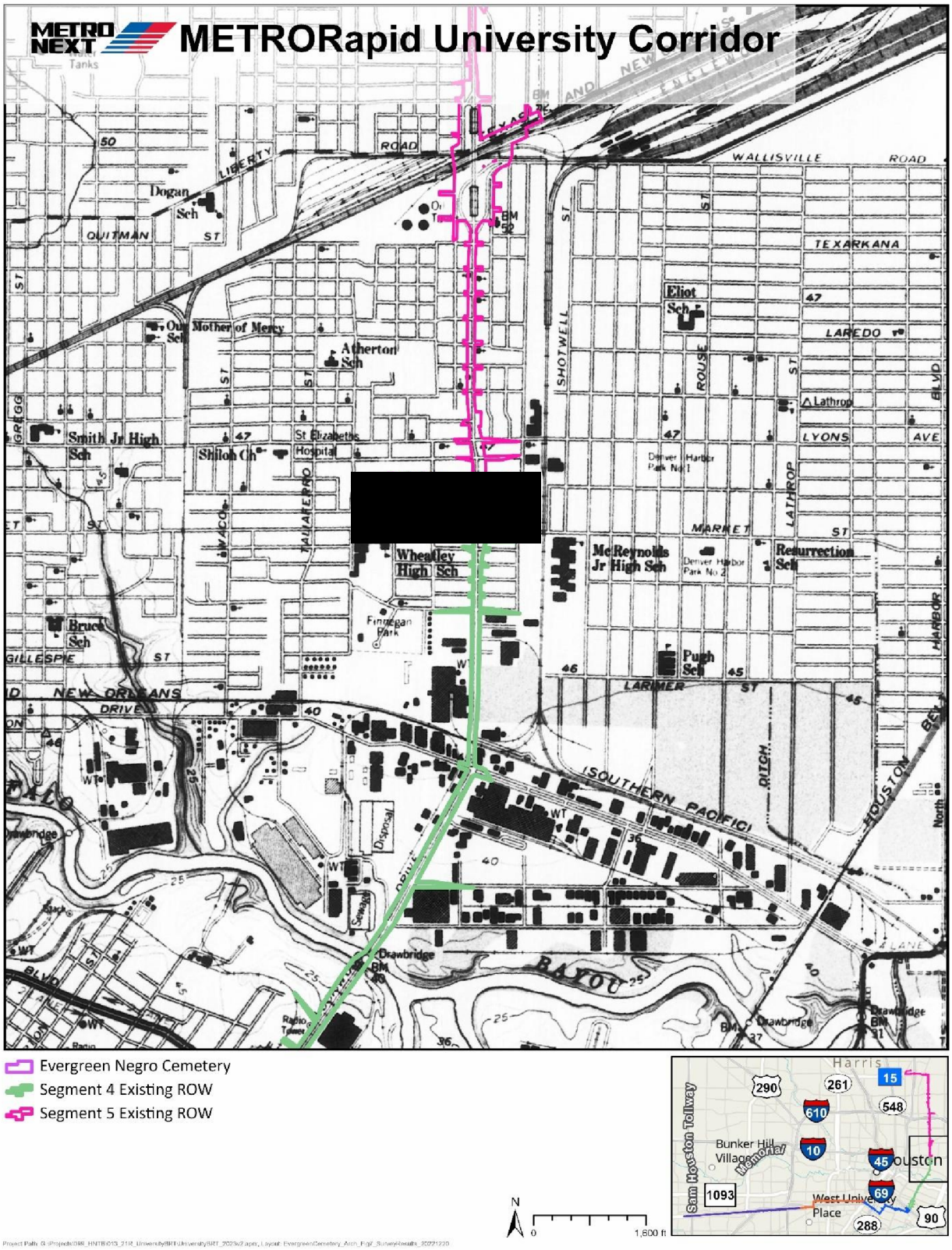
Source: USGS 2023.

The area remained largely unchanged in the 1955 update to the Settegast topographic map, which had been updated to 1:24,000 scale (**Figure 4-3**). The undeveloped land to the southwest had been developed into the Wheatley High School, and all the street locations remained the same. However, the 1966 Settegast USGS topographic map (11 years later), depicted several significant changes. IH 10 had been completed to the north of the cemetery location, and the beginnings of a divided Lockwood Drive appeared at the intersection with IH 10, most likely a result of the interstate's construction (**Figure 4-4**). The division did not extend through the cemetery itself though, according to the map. Two buildings were marked on the north side of the cemetery grounds. Fifteen years later, the 1982 Settegast USGS topographic map had reduced the footprint of the east half of the cemetery to its current size, while leaving the west half a little larger on the north side (**Figure 4-5**). The divided road through the cemetery is shown for the first time on the USGS maps. If accurate, then the division of Lockwood Drive as a boulevard through the Evergreen Negro Cemetery was constructed between 1966 and 1982. The 1995 Settegast USGS topographic map depicted the same orientation as the 1982 map for the area around the cemetery. It has remained largely unchanged through 2020 apart from a few changes in building footprints to the north.

With this rough timeline in place, additional maps of Houston streets were viewed to supplement or refine the timeline of road development around the cemetery. Two 1928 maps of the area, drafted by real estate developers or land appraisers in the area, depict slightly different street configurations around Market Street at the cemetery location (**Figure 4-6**). The neighborhood to the east of the cemetery, edged by Sakowitz Street, are present on both maps. In addition, Market Street is depicted in the same configuration, and two lots surrounded by streets are also depicted just north of the cemetery. The major difference between the maps is a new neighborhood on the south side of Market Street, consisting of 10 blocks in a 2 x 5 grid surrounded by streets. The center street in this new set of blocks appears to be Lockwood Drive, albeit unnamed on the map. This set of streets is still present as a Houston neighborhood just south of the cemetery.

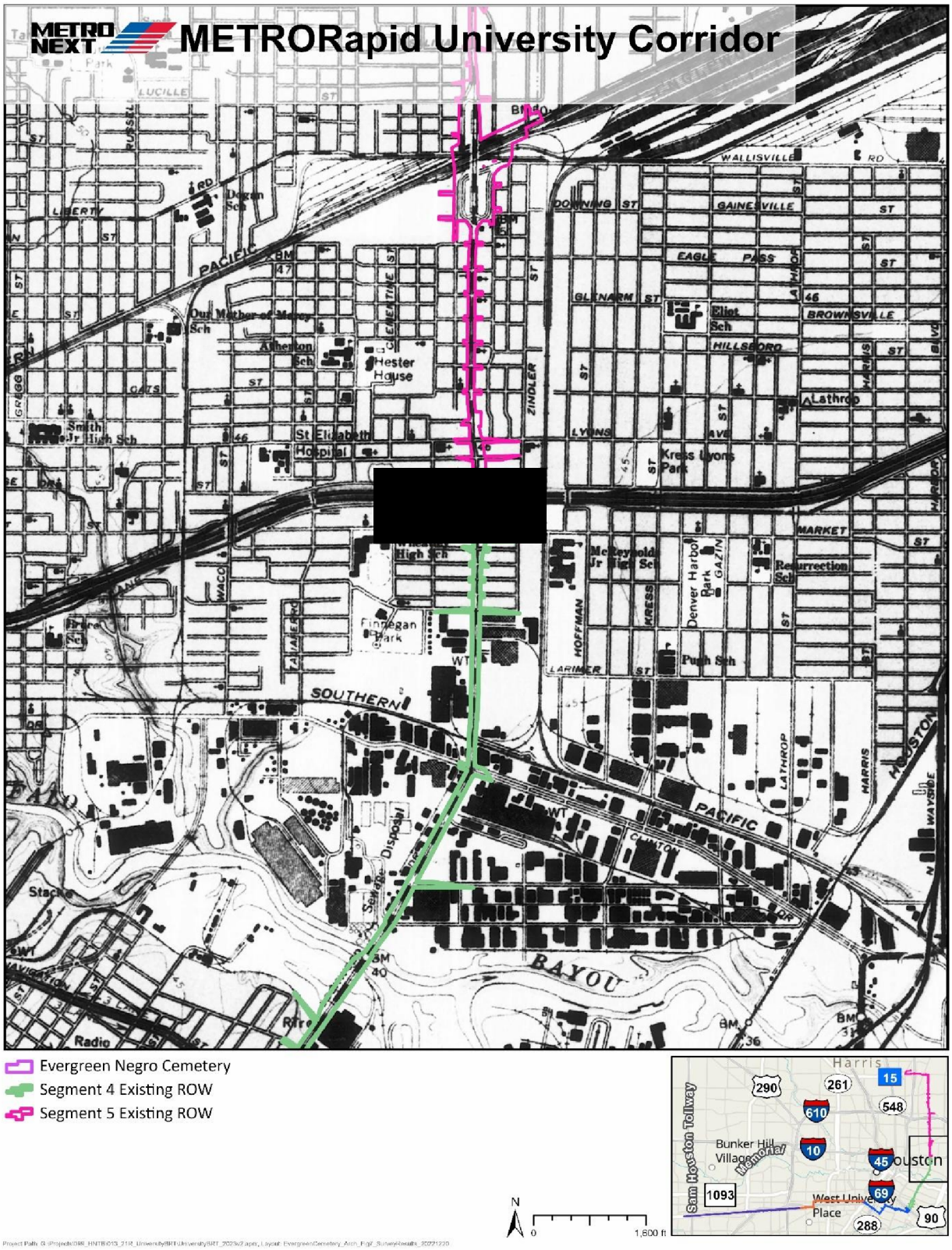
A 1939 map of the city streets of Houston depicts Lockwood Drive extending through Market Street and connecting with a Cushing Street north of Lyons Street (**Figure 4-7**). This is the first map depicting the full path of Lockwood Drive through the Evergreen Negro Cemetery. Thus, it appears that Lockwood Drive bisected the cemetery between 1929 and 1939. Of note, this is within the period when burials at the cemetery were most active.

Figure 4-3: 1955 Settegast USGS Topographic Map (1:24,000)



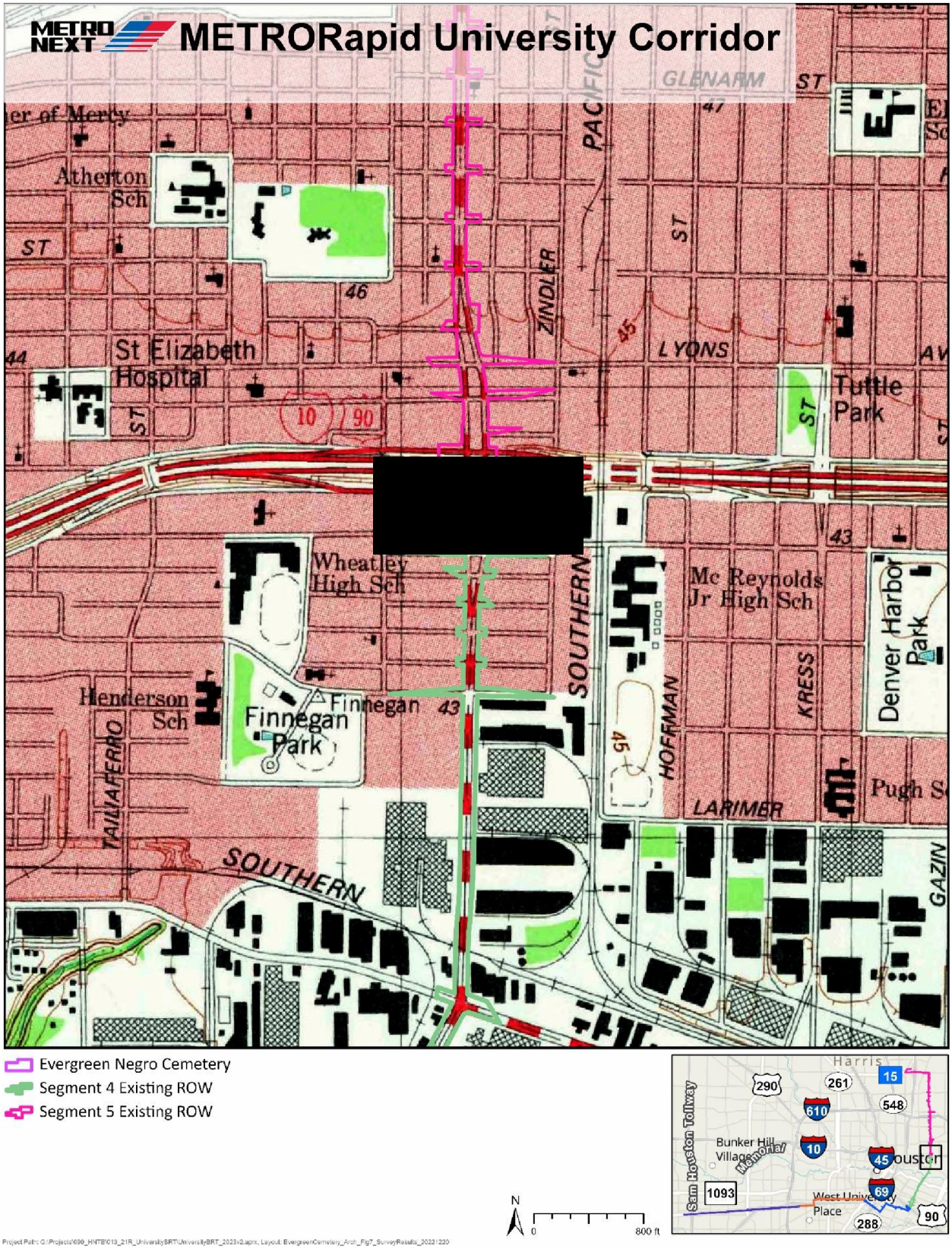
Source: USGS 2023.

Figure 4-4: 1966 Settegast USGS Topographic Map (1:24,000)



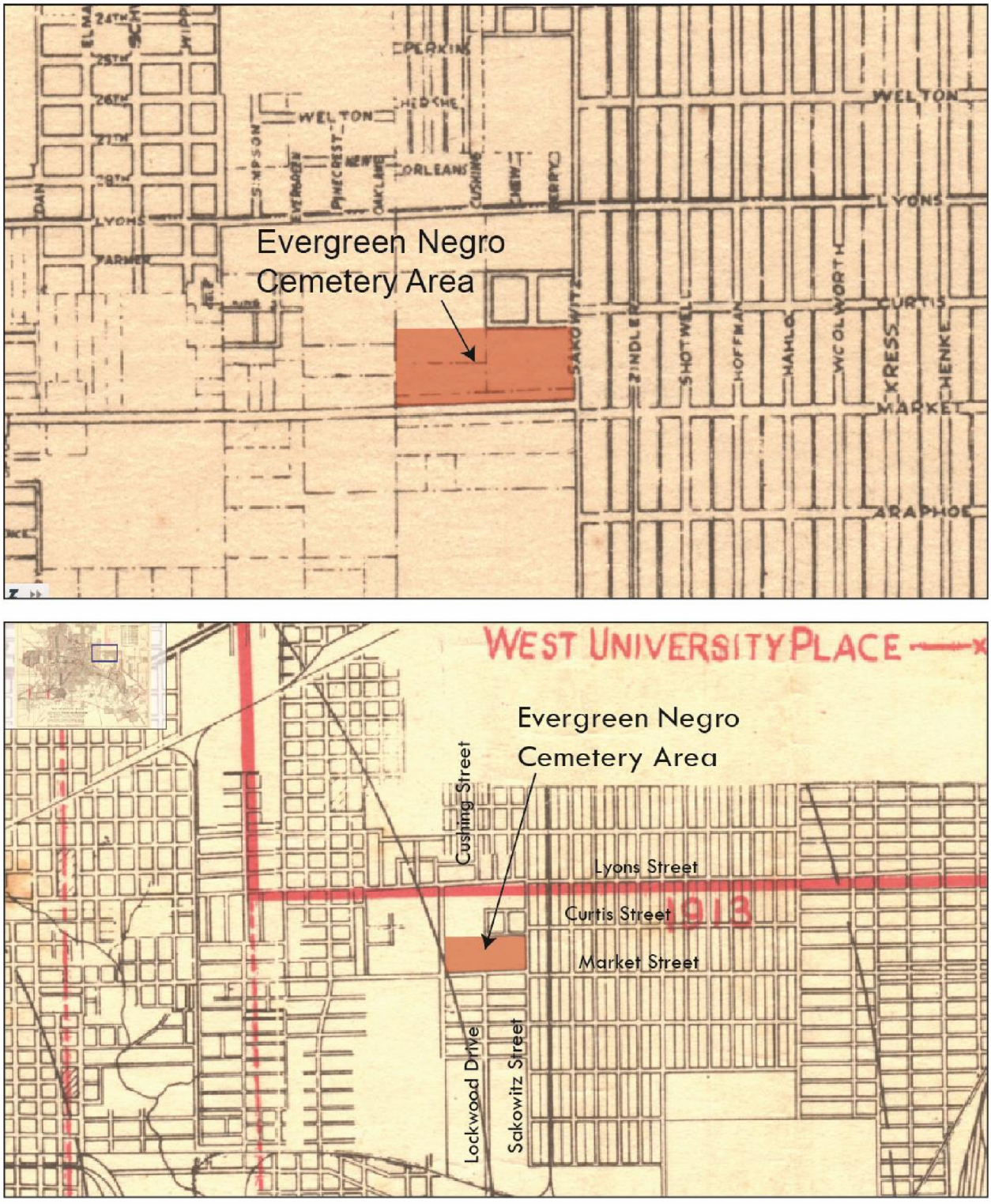
Source: USGS 2023.

Figure 4-5: 1982 Settegast USGS Topographic Map (1:24,000)



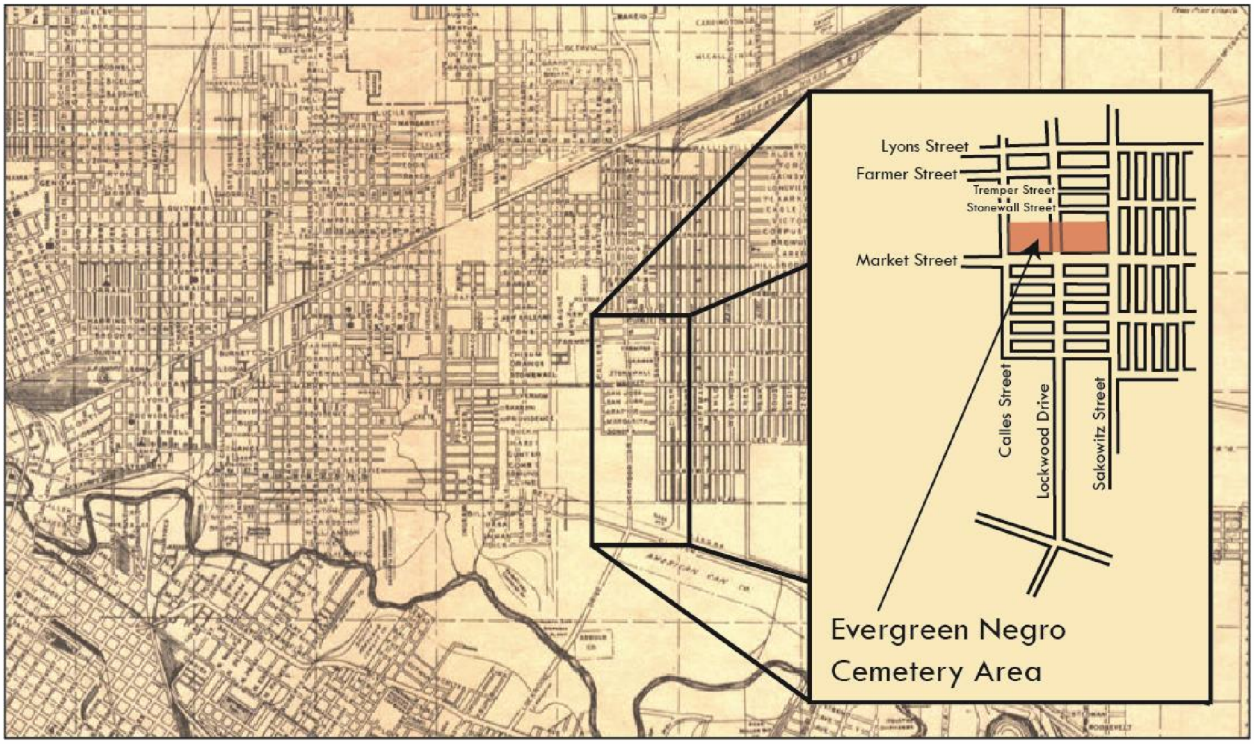
Source: USGS 2023.

Figure 4-6: Two 1928 Maps of Houston's Streets



Note: (top) Bracy's Block Book of Houston 1928 (index map); (bottom) Fantham and Fantham Map of Houston drafted by Neil Geisenhoff 1928.
Source: Harris County Archives 2023.

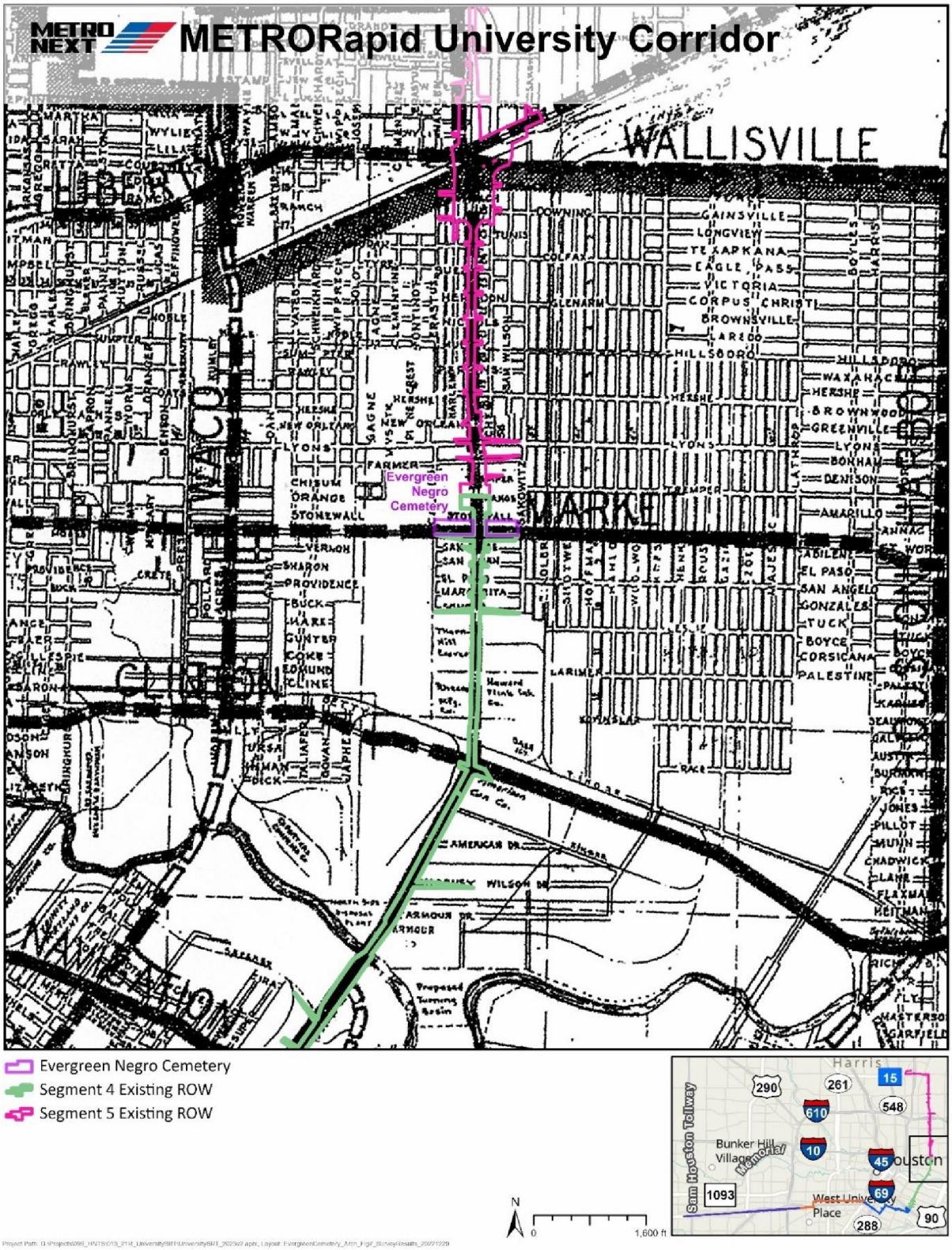
Figure 4-7: Welborn's 1939 Map of Houston for sale by L. L. Ridgeway Company



Source: Harris County Archives 2023.

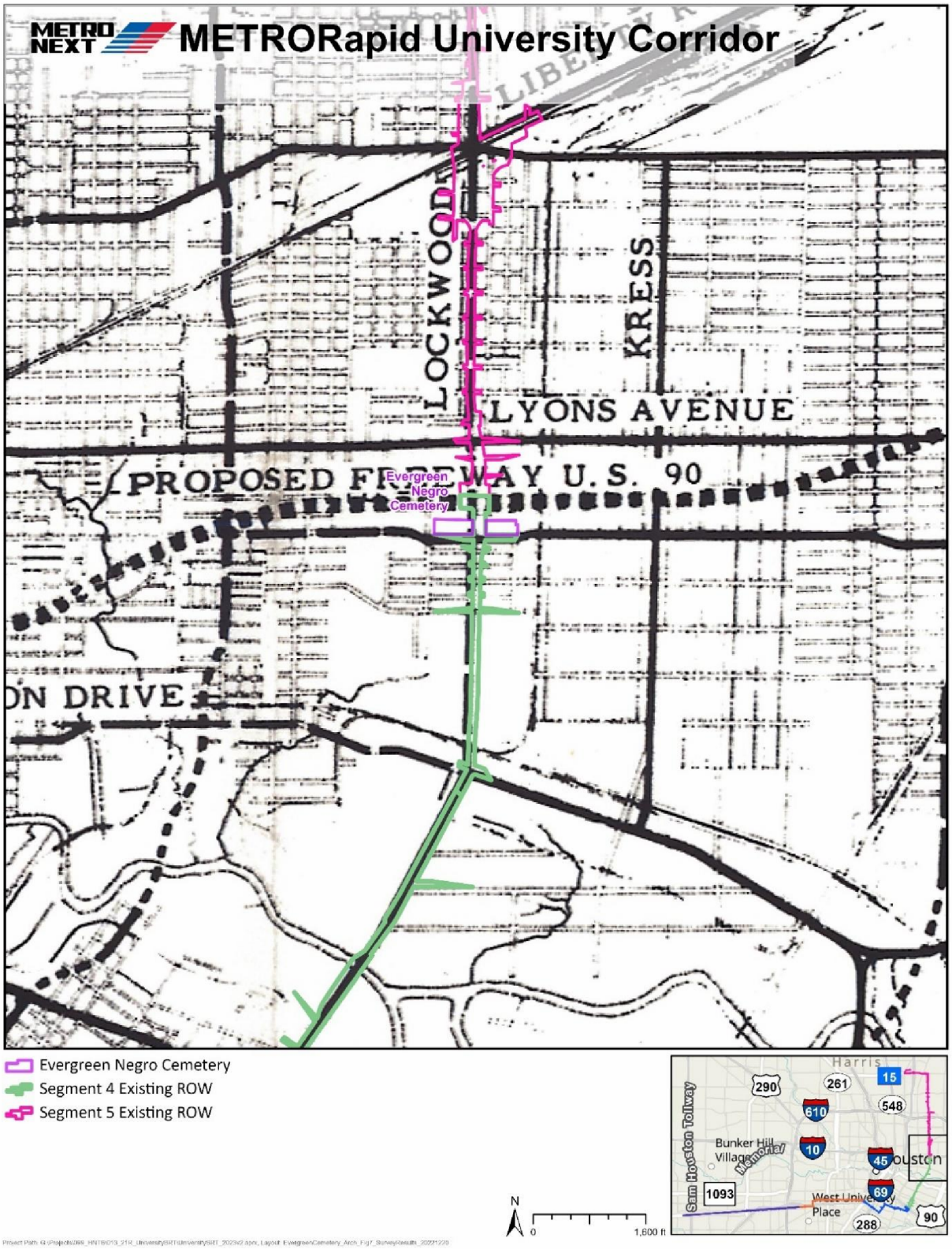
To further refine the timeline for the expansion of Lockwood Drive into a boulevard, the Major Street Plan Maps developed by the City of Houston Planning Commission were consulted. The 1942 map of Houston depicted the intersection of Lockwood Drive and Market Street as requiring improvements along Lockwood Drive as part of city-wide improvements to city streets (**Figure 4-8**). In 1955, while the proposed route for U.S. Freeway 90 (which would become IH 10) was under development, Lockwood Drive was slated for widening from Clinton Drive to Collingsworth Road, through the Evergreen Negro Cemetery (**Figure 4-9**). The 1957 map depicted the same section of Lockwood Drive as "To Be Acquired," indicating that the widening of the road would require additional ROW (**Figure 4-10**). The 1959 map, however, depicts Lockwood Drive at Market Street as having adequate width. As this map was finalized in 1959, it would indicate that either the construction of the boulevard had moved beyond the planning stage and had either been completed or was underway (**Figure 4-11**). By 1960, IH 10 along this section of the city was listed as either underway or completed, as it had been hand-lined as having "adequate width" (**Figure 4-12**). The subsequent maps indicated no changes to the area.

Figure 4-8: 1942 Major Street Map, Houston and Vicinity



Source: City of Houston Planning and Development Department 1942.

Figure 4-9: 1955 Plan for Major Thoroughfares and Freeways Map



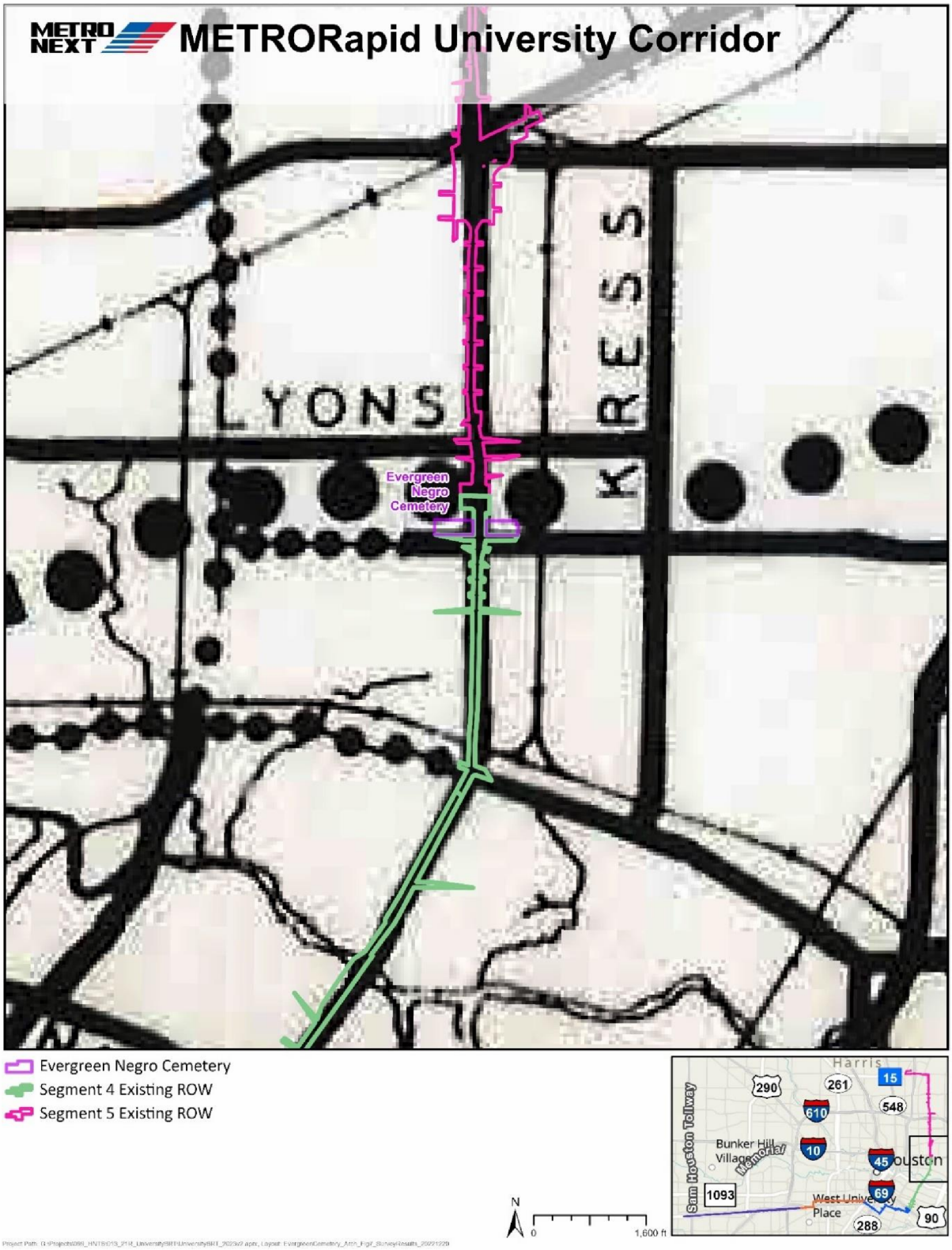
Source: City of Houston Planning and Development Department 1955.

Figure 4-10: 1957 Plan for Major Thoroughfares and Freeways Map



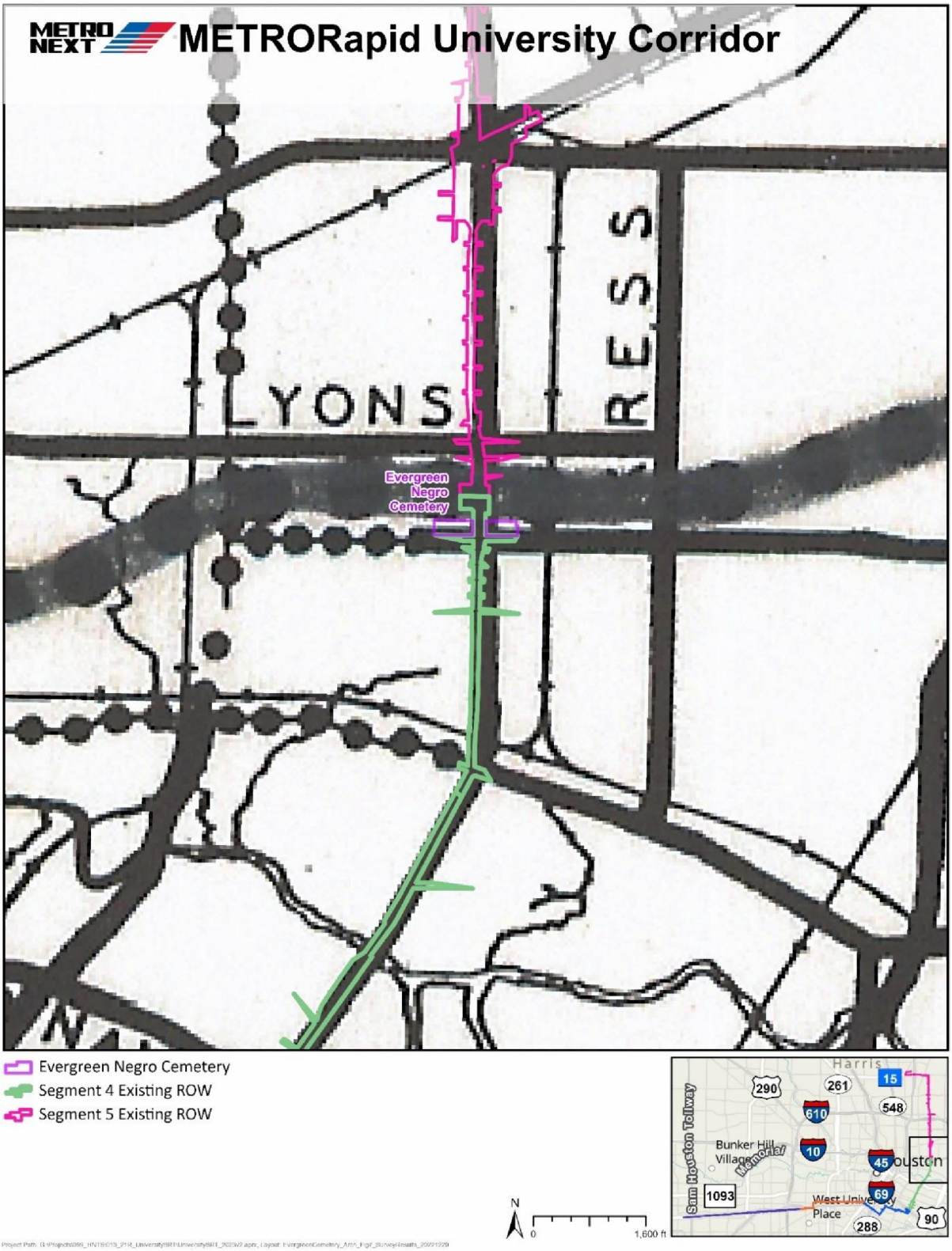
Source: City of Houston Planning and Development Department 1957.

Figure 4-11: 1959 Plan for Major Thoroughfares and Freeways Map



Source: City of Houston Planning and Development Department 1959.

Figure 4-12: 1960 Plan for Major Thoroughfares and Freeways Map



Source: City of Houston Planning and Development Department 1960.

These plan maps tell a slightly different story than the USGS topographic maps. The topographic maps indicate two stages of development for Lockwood Drive, one ca. 1955-1966 and the other ca. 1966-1982. The plan maps indicate one construction project ca. 1960. Although both are "official" maps drafted by government agencies, the City of Houston plan maps are more likely to be accurate, both in terms of local knowledge of the infrastructure development and the overall expense of two construction projects in the same area within a few years of one another. Thus, this report will presume that ca. 1960 is an accurate date for the expansion of Lockwood Drive.

4.2 Aerial Photograph Research

Researchers found four aerial photographs of the survey area dating between 1943 and 1969 (**Figures 4-13–4-16**). The 1943 aerial photograph depicts both the current path of Market Street as well as the two-land Lockwood Drive (see Figure 4-13). This matches the results of the historical map research. Close examination of this photograph reveals the trace of Market Street that formerly bisected the cemetery into a north section and south section. These two halves had been joined with the realignment of Market Street. Several ground level monuments are visible on the photograph, including two or three areas in what would become the median of Lockwood Drive. A sidewalk or footpath is visible between the cemetery boundary and the ROW of Market Street.

The 1953 aerial photograph (see Figure 4-14) depicts a similar cemetery landscape, with the same complement of trees and roads. The old trace and sidewalk appear to be overgrown. New residences had been built on the lots bordering the northeast side of the cemetery, but the area remains largely unchanged. By 1962 (see Figure 4-15), the cemetery grounds had been untended sufficiently long for dense vegetation to cover the property, although the footpath on the south side remained open. The most notable attribute is the cleared section just east of Lockwood Drive, matching the proposed ROW for the road expansion. It appears that the disinterment had been completed and all the trees removed in anticipation of road construction. Interestingly, evidence of land clearing for IH 10 is not visible on this photograph. The 1969 photograph (see Figure 4-16) was taken at a much lower resolution, but the vegetation covering the cemetery and the construction of Lockwood Drive and IH 10 are visible. Combined, the aerial photographs and the historical map research indicate that the burial disinterment and expansion of Lockwood Drive took place a few years on either side of 1960.

4.3 Property Records Search

A search of the Harris County property records returned a plat map of the "Extension to Evergreen Cemetery" dated May 5, 1930. This map detailed an extension to the cemetery that had been the location of east-west Market Street that bisected the cemetery at its founding. The plat shows Market Street's realignment along the southern border of the cemetery grounds, and the old road had been laid out into 96 lots 15-x-20-feet in size with a 10-foot driveway through the center and 5-foot walkways separating every two lots. Of note, an 80-foot section had been removed from the layout with the notation "Reserved by City of Houston for Lockwood Extension." The property was owned by W. B. Zinky (one of the cemetery founders) who had the property conveyed to him by the City of Houston in December 1929 (see Figure 4-17). It is unclear if this new arrangement of lots matched what already existed at the cemetery. The date of the map correlates with the earliest possible date of the construction of Lockwood Drive through the cemetery, based on the map research.

Figure 4-13: 1943 Aerial Photograph of the Evergreen Negro Cemetery



Source: USGS Earth Explorer 2023.

Figure 4-14: 1953 Aerial Photograph of the Evergreen Negro Cemetery



Source: USGS Earth Explorer 2023.

Figure 4-15: 1962 Aerial Photograph of the Evergreen Negro Cemetery



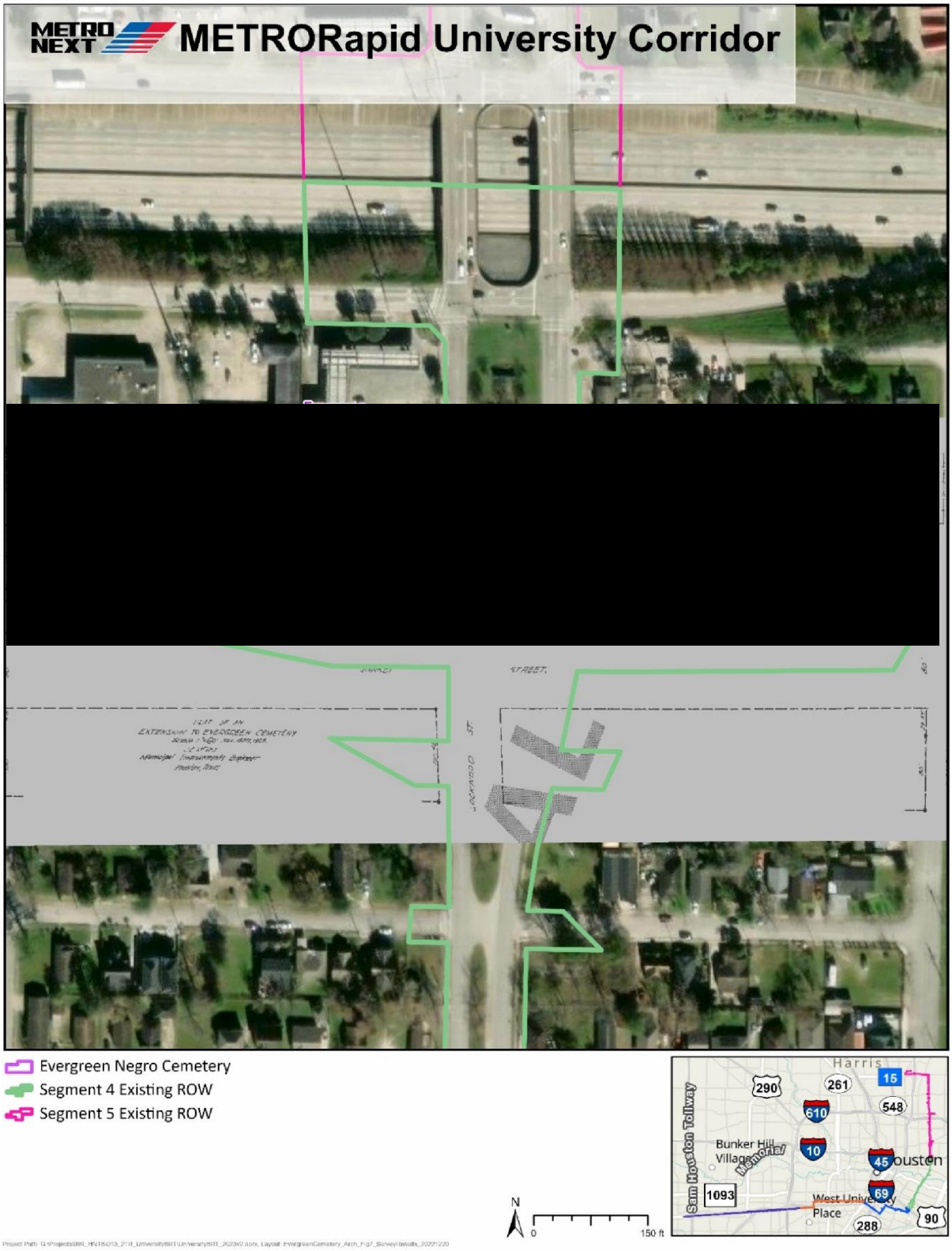
Source: USGS Earth Explorer 2023.

Figure 4-16: 1969 Aerial Photograph of the Evergreen Negro Cemetery



Source: USGS Earth Explorer 2023.

Figure 4-17: 1930 Plat Map of the Evergreen Negro Cemetery "Extension" Overlaid on a Current Aerial



Source: Harris County Appraisal District Property Records 2023.

4.4 Mortuary Terminology Overview

The following is a brief primer on the history and nomenclature surrounding burial containers intended to give the reader an overview of mortuary terminology and stylistic context, as some specific terms have specific meanings. The late nineteenth century and early twentieth century saw a transition from coffins to caskets (Davidson 1999; Hill and Pye 2012; Hacker-Norton and Trinkley 1984). Coffins had been the ubiquitous burial container throughout the eighteenth and nineteenth centuries, but a change in consumer behavior with the trend towards the "beautification of death" slowly altered the perception of the coffin as an acceptable burial container. The casket design, more closely imitating a couch with interior padding, roomier interior, and more decorative elements, was first patented in 1859 (Davidson 1999:152). However, this design change took some time to catch on, and coffins were still in use by the early 1900s.

Late nineteenth century coffins typically were made from wood, with either straight or tapered sides, four to six matching handles, and thumbscrews to hold down the lid. Some coffins had a viewing window for the upper part of the body, which had its own wooden lid. More expensive coffins were constructed of finer wood species like walnut or mahogany, while less expensive cases were constructed of pine, oak, or other local wood species. The flat bodied thumbscrew, used to attach coffin lids, was first patented in 1874 and became the industry standard closure (Davidson 1999:190).

Some early caskets mimicked the coffin design with thumbscrew closures, viewing windows, and clipped corners, but by the 1910s casket designs formalized into a rectangular box with a hinged lid and latch closure and more ornate decorative elements (**Figure 4-18**). The long bar handle, with either single or double lugs, appears at this time, although short bars continued to be used (**Figure 4-19**). Caskets continued to be made of wood, but metal caskets also became a popular, if expensive, option, dominating the industry by the 1950s (Hill and Pye 2012:97).

Coffins and caskets have a unique nomenclature associated with their construction and decorative elements, and these terms will be used in the location descriptions. As such, a quick explanation of terms is provided below:

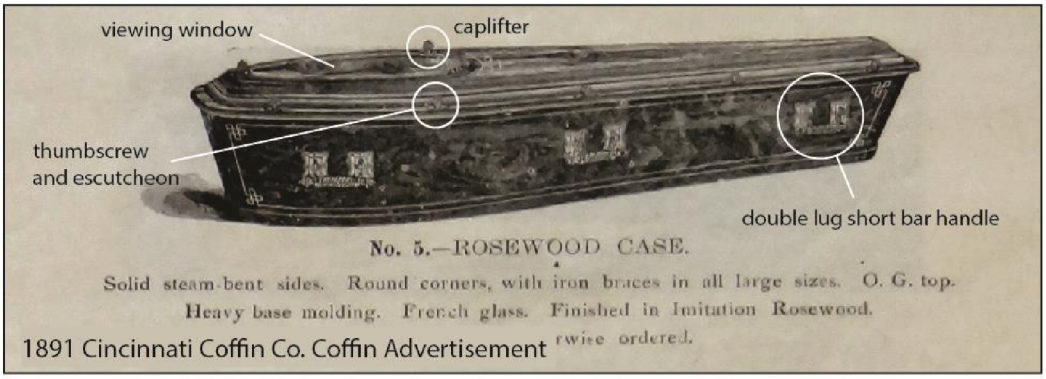
- Coffin: six-sided burial container with the widest point at the shoulders and tapers toward the head and feet.
- Casket: rectangular burial container with a hinged lid; some early caskets had clipped corners.
- Handle: hardware used for lifting and carrying the coffin or casket; in five forms:
    - Single lug swing bail: one mounting plate (called a lug) and U-shaped or oval grip (1850s+ for children).
    - Double lug swing bail: two mounting plates and U-shaped grip (ca. 1700s to 1910s).
    - Single lug short bar: (1890s+).
    - Double lug short bar: (1900s+).
    - Long bar (either single or double lug) with the bar extending the full length of the casket (1910s+).
- Caplifter: a knob-type handle for lifting the coffin lid (ca. 1870s to 1920s).

- Thumbscrew: screw closures to attach the coffin lid to the body, often decorative (1870s to 1920s).
- Escutcheon: a decorative plate attached to the coffin or casket with a center hole for a tack, thumbscrew, or other hardware (ca. 1850s to after 1920).
- Ornamental Tack: tack attached to the edge of a coffin lid, often decorative (1850s to 1910s).
- Name Plate: decorative plate with engraved message or design.
- Ornament: decorative addition to the coffin or casket with no additional operation.
- Viewing Window: clear glass pane for viewing the body during funeral, covered by the coffin/casket lid.
- Casket Hinge: hinge used to swing up the lid of the casket.
- Lid Support Bar: folding support bar to lock casket lid open.
- Latch: locking mechanism for the casket lid.
- Nails, Screws, Tacks: fasteners used to attach the wooden structure of the coffin or casket as well as the fabric lining.

4.5 Results of Archaeological Investigations

The location of the trench scrapes, burial locations, and obstacles are presented in **Figure 4-20**. The archaeological site boundary of 41HR1270 is included on this map. Of note, the yellow trench scrape lines indicate the centerline of the trenches, which measured 4 feet wide (1.2 meters). The red burial locations are removed burials, the blue locations indicate likely intact burials, and the purple burial location was found to be only partially intact. The green circles on the map are the 10-foot diameter buffers around the tree trunks. Descriptions of all 33 burial locations are presented below.

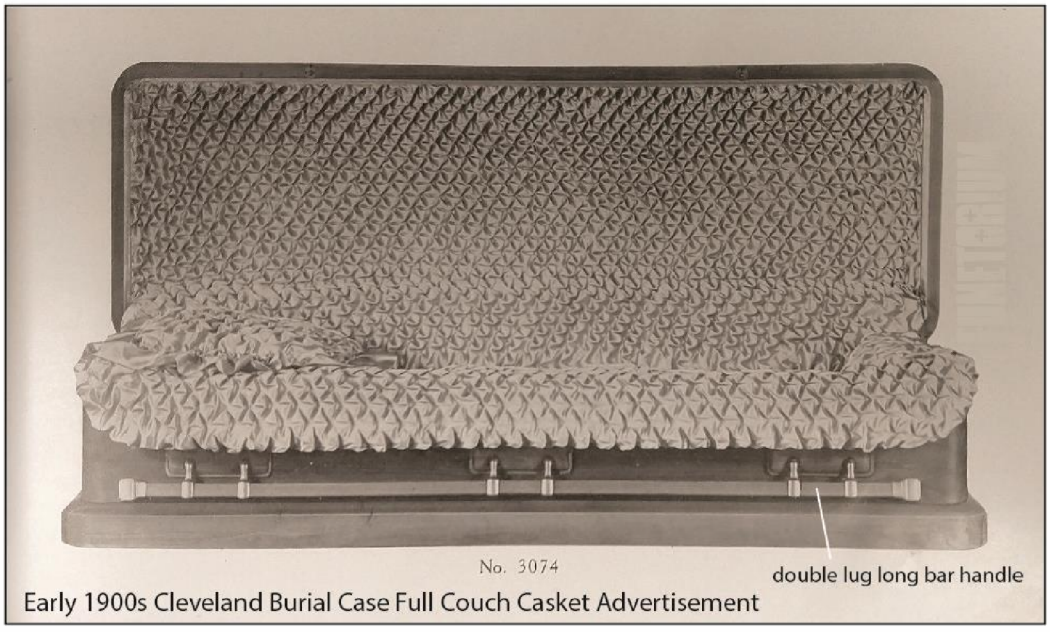
Figure 4-18: Examples of Coffin and Casket Advertisements ca. 1880s to 1900s



1891 Cincinnati Coffin Co. Coffin Advertisement



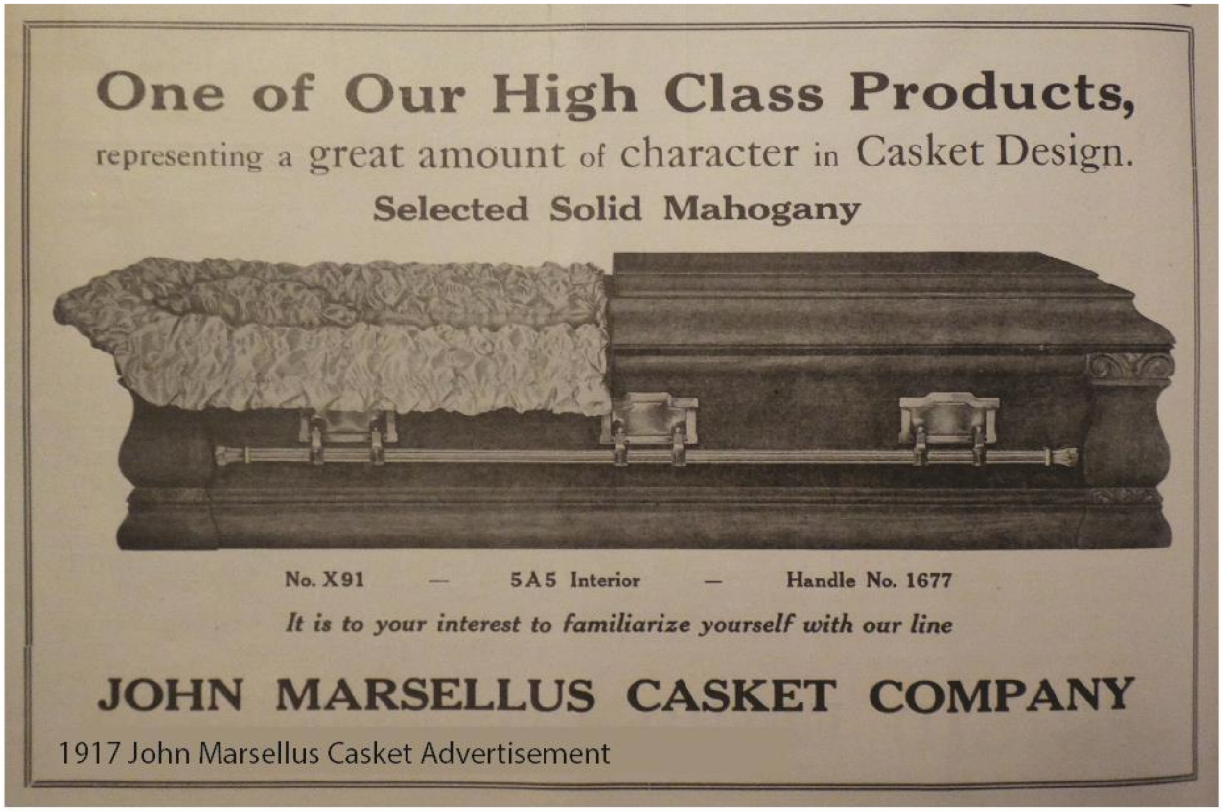
1887 Warfield and Rohr Octagon Casket Advertisement



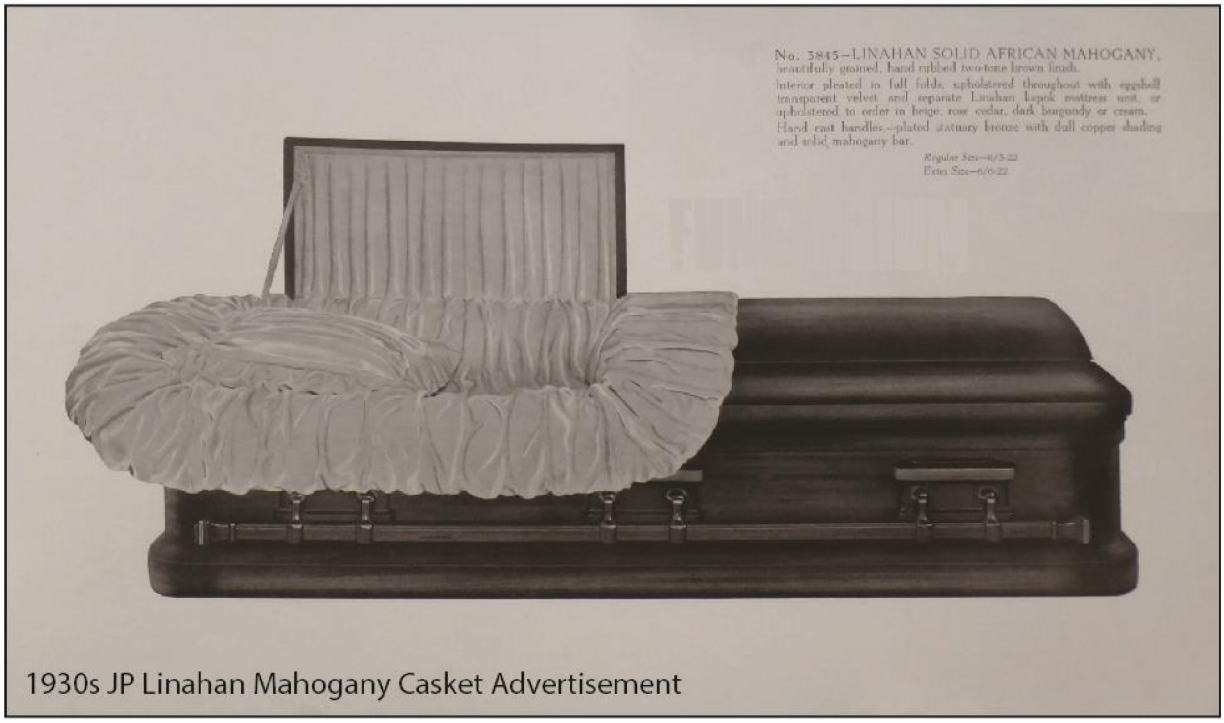
Early 1900s Cleveland Burial Case Full Couch Casket Advertisement

Note: These would be the luxury models, but simpler containers would have the same design elements.
Source: Funetorium Burial Container Ads 2023.

Figure 4-19: Examples of Coffin and Casket Advertisements ca. 1910s to 1930s



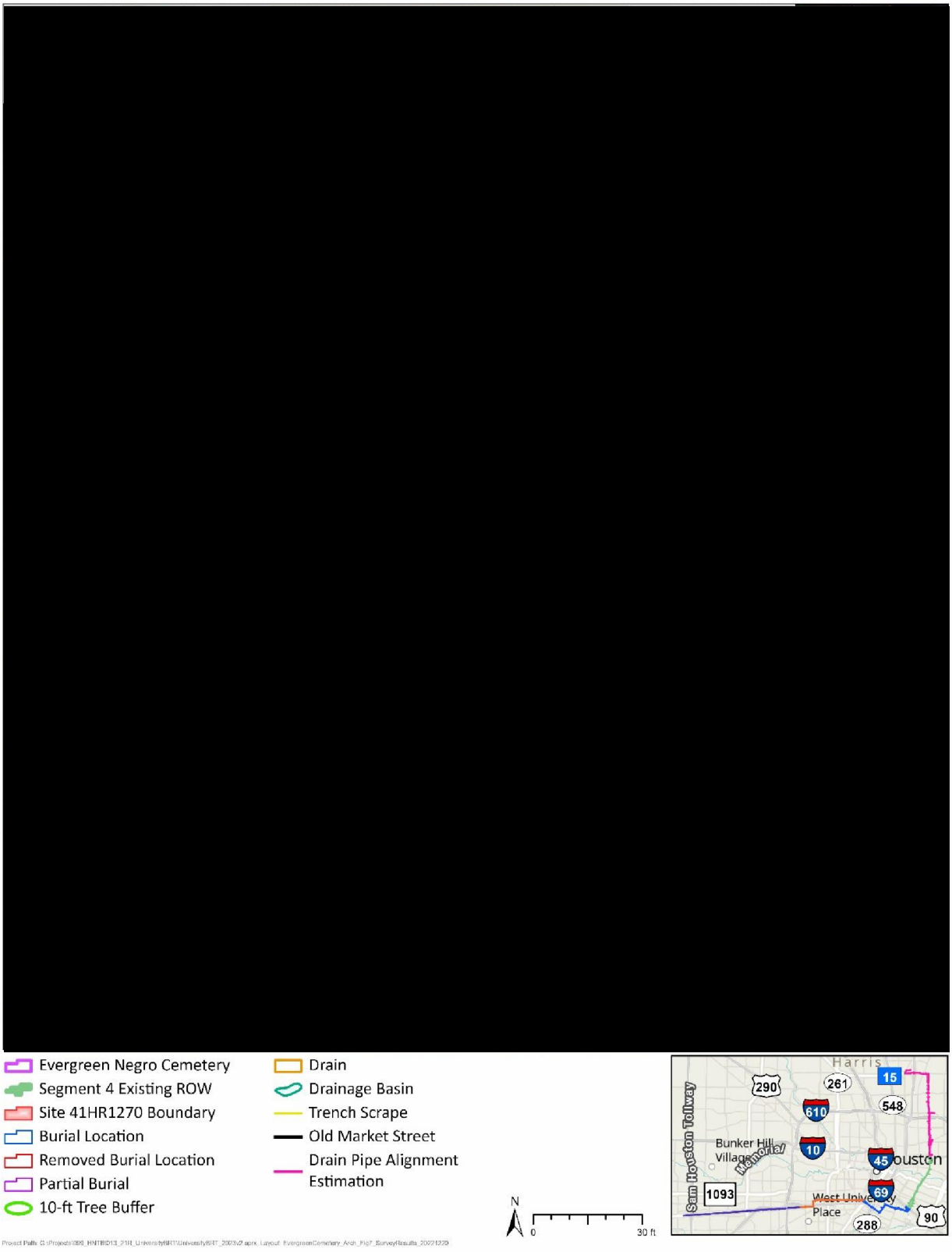
1917 John Marsellus Casket Advertisement



1930s JP Linahan Mahogany Casket Advertisement

Note: These would be the luxury models, but simpler containers would have the same design elements.
Source: Funetorium Burial Container Ads 2023.

Figure 4-20: Results of Field Investigations and Burial Locations



Source: AmaTerra Environmental, Inc. 2023.

4.5.1 Burial Location 1 (Removed Burial ca. 1960)

Provenience Information: Burial Location 1 was found in Backhoe Trench 3 at 95 centimeters below surface (cmbs; 37.4 inches), in the northeast quadrant of survey area [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, gray granite marker fragments, and human bone fragments in a 0.25 square meter area (0.47 by 0.65 meters). Four gray granite marker fragments, none of which contained inscriptions, were found in the trench wall. Two small fragments were observed in the west wall about 40 cm (15.7 inches) apart and 65 cmbs (25.6 inches), and the two others were found in the east wall stacked together at a 45-degree angle beginning at about 55 cmbs (21.7 inches). The marker appeared to be approximately 3.5 inches thick. Below the marker, fragments of dark-colored wood and bone were recovered. None appeared to be intact. The soil around the artifacts appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Fifty-eight fragments were recovered. At least seven of these fragments appear to be cranial fragments, with one exhibiting part of an eye orbit. One tooth (a molar) was also recovered.

Associated Hardware: One white metal caplifter or decorative knob was recovered (**Figure 4-22**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1870s to the 1920s based on the caplifter.

Figure 4-21: Burial Location 1



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-22: Caplifter from Burial Location 1



Source: AmaTerra Environmental, Inc. 2023.

4.5.2 Burial Location 2 (Removed Burial ca. 1960)

Provenience Information: Burial Location 2 was found in Backhoe Trench 3 at 60-84 cmbs (23.6-33.1 inches), in the northeast quadrant of the survey area [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and casket hardware. Fragments of a dark-colored wooden casket bottom was observed in a 0.36 square meter area (0.93 by 0.72 meters). One clear edge, likely the eastern end of the casket, could be seen. Several tree roots appeared to have grown parallel to the casket edge. The wood was highly friable, and disappeared to the north, west, and east. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: Four white metal short bar tips from either a single lug or double lug handle were recovered. Three tips matched, while the fourth had a different design. Several had embedded wood dowels. The fourth example (the single different style) is the same design as the tip found at Location 9 (**Figure 4-24**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-23: Burial Location 2



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-24: Handle bar tips from Burial Location 2



Source: AmaTerra Environmental, Inc. 2023.

4.5.3 Burial Location 3 (Removed Burial ca. 1960)

Provenience Information: Burial Location 3 was found in Backhoe Trench 3 at 80-86 cmbs (31.5-33.9 inches), in the northeast quadrant of the survey area, [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and casket hardware. Dark-colored wood fragments were found in a 0.14 square meter area (0.49 by 0.33 meters) along with brick fragments and hardware. No casket shape was discernable, and the area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: A total of nine burial container artifacts were observed and collected. One white metal lug in a decorated shield pattern with one attached white metal lug arm was recovered. The lug arm socket was square in shape for a square bar. Another other white metal lug arm in the same design was found nearby. In addition, two white metal bar tips of two different styles were recovered in the same area. One ferrous sheet metal fragment with fused nails, one semi- circular ferrous fragment, one white metal fragment, one ferrous finishing nail (possibly machine cut), and one ferrous clip or closure fragment were also recovered (**Figure 4-26**).

Associated Burial Goods: One tan and brown swirl marble was found with the casket hardware.

Proposed Burial Date: The burial dates from about 1900 to the 1950s based on the ornamentation type and the end of the burial period in this section of the cemetery.

Figure 4-25: Burial Location 3



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-26: Hardware from Burial Location 3



Source: AmaTerra Environmental, Inc. 2023.

4.5.4 Burial Location 4 (Removed Burial ca. 1960)

Provenience Information: Burial Location 4 was found in Backhoe Trench 3 at 80 cmbs (31.5 inches), in the northeast quadrant of the survey area, [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and coffin or casket hardware. Dark-colored wood fragments were found in a 0.41 square meter area (0.78 by 0.60 meters) along with burial container hardware. No shape was discernable. The wood fragments were mixed with the surrounding soil in a roughly oval stain approximately 50 x 90 cm (19.7 x 35.4 inches) in size. The area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay.

Skeletal Remains: Nineteen skeletal fragments were recovered from Burial Location 4.

Associated Hardware: One white metal handle tip from a short bar style handle was recovered along with a wooden dowel. In addition, two ferrous finishing nail fragments (possibly machine cut), and one ferrous metal fragment were recovered. The ferrous artifact appears to be a latch or clasp fragment (**Figure 4-28**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from about 1890 to the 1950s based on the nail fragments and the end of the burial period in this section of the cemetery.

Figure 4-27: Burial Location 4



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-28: Hardware from Burial Location 4



Source: AmaTerra Environmental, Inc. 2023.

4.5.5 Burial Location 5 (Removed Burial ca. 1960)

Provenience Information: Burial Location 5 was found in Backhoe Trench 4 at 68 cmbs (26.8 inches), in the survey area's northeast quadrant, of the survey [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container. Fragments of a dark-colored wooden casket bottom was observed in a 0.47 square meter area (0.76 by 0.65 meters). One clear edge, likely the eastern end of the casket, could be seen. The wood was highly friable, and disappeared to the north, west, and east. The soil around the remnant appeared as mottled pale brown (10YR 6/3) and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: One fragment of a porcelain figurine, part of a dress or robe, was recovered. They figurine could not be identified (**Figure 4-30**).

Proposed Burial Date: The burial dates anytime from the late nineteenth century though the mid twentieth century, based on the of burial period of the cemetery.

Figure 4-29: Burial Location 5



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-30: Porcelain Figurine Fragment from Burial Location 5



Source: AmaTerra Environmental, Inc. 2023.

4.5.6 Burial Location 6 (Removed Burial ca. 1960)

Provenience Information: Burial Location 6 was found in Backhoe Trench 4 at 98 cmbs (38.6 inches), in the northeast quadrant of the survey [redacted] A sheet steel grave marker stake was found at 40-50 cmbs (15.7-19.7 inches), above the casket (**Figure 4-31**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and skeletal remains. The western half of a dark-colored wooden rectangular casket bottom was observed in a 0.43 square meter area (0.83 by 0.66 meters). Three clear edges, the western edge, northern edge, and southern edge, could be seen in the trench floor. The wooden bottom turned into tiny fragments and dust when touched with a trowel, and only a trace of the burial container remained after exposure. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: A total of 28 bone fragments were recovered from the soil above the casket bottom. Two fragments appear to be long bone.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: One silverplate long handled teaspoon was recovered. The handle tip appeared teardrop shaped with no decoration (**Figure 4-32**).

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the shape of the burial container and the end of the burial period in this section of the cemetery.

Figure 4-31: Burial Location 6



Source: v AmaTerra Environmental, Inc. 2023.

Figure 4-32: Silverplate Spoon from Burial Location 6



Source: AmaTerra Environmental, Inc. 2023.

4.5.7 Burial Location 7 (Burial Marker Dump)

Provenience Information: Burial Location 7 was found in Backhoe Trench 5 at 70 cmbs (27.6 inches), in the northeast quadrant of the survey [redacted] Three sheet steel grave marker stakes were found at 55-65 cmbs (21.7-25.6 inches).

Mortuary Characteristics: This burial location contained no wooden burial container. Only the ferrous grave marker stakes and skeletal remains were observed in a 0.62 square meter area (0.92 by 0.90 meters; **Figure 4-33**). As there were three recovered markers in a small area, it appears this location may be a small dump for near-surface features during the ca. 1960 exhumation. The bone fragments are also scattered and likely not directly associated with an intact burial place. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: A total of eight bone fragments were recovered from the soil in the same vicinity as the grave markers.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

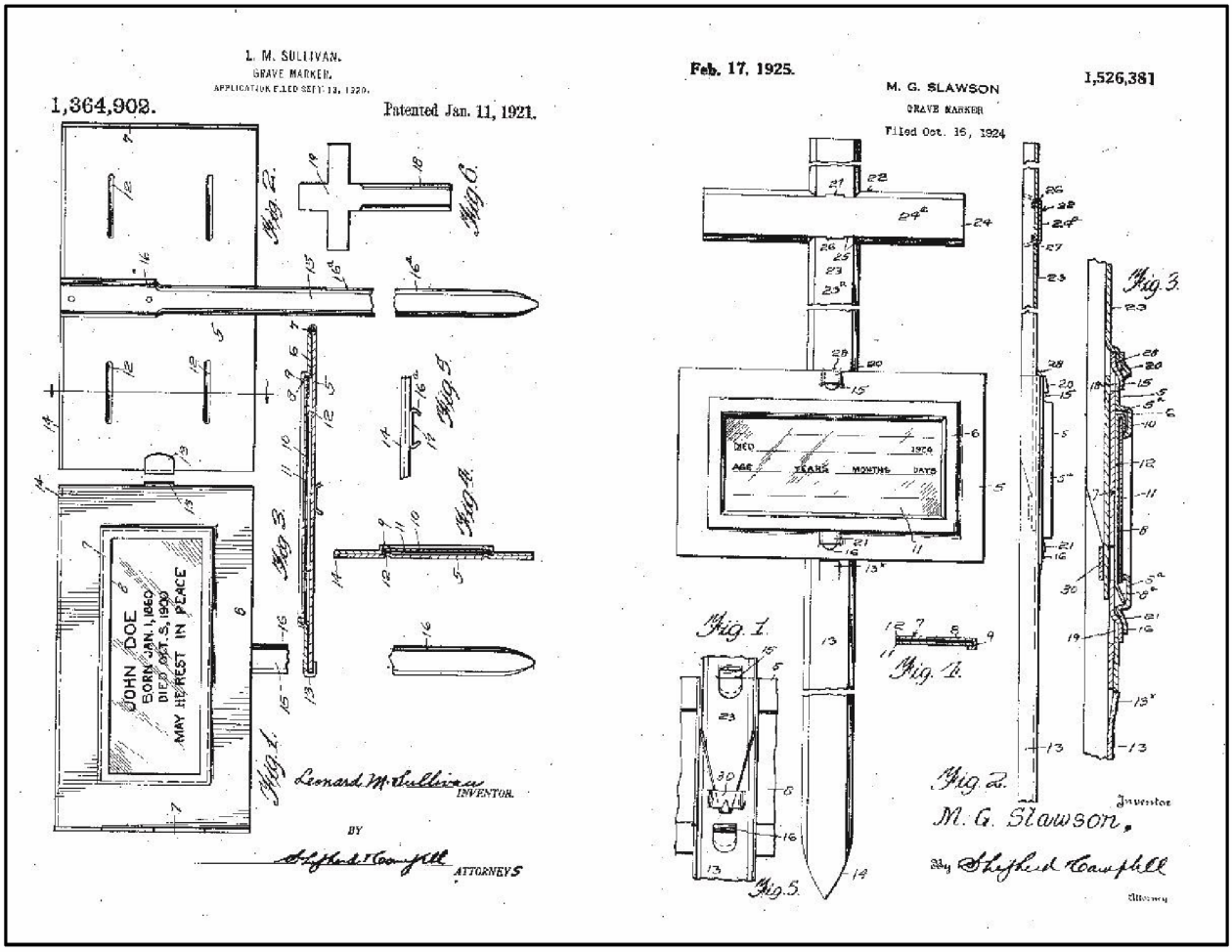
Proposed Burial Date: The burials associated with the grave markers date from the 1920s to the 1950s. Patents for grave markers with a similar type of stake (with beveled edges) were issued as early as 1921 (Patent 1,364,902; issued January 11, 1921, and Patent 1,526,381; issued February 17, 1925; **Figure 4-34**).

Figure 4-33: Grave Marker Stakes from Burial Location 7



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-34: Patents for Metal Grave Marker Stakes



Source: United States Patent and Trademark Office 2023.

4.5.8 Burial Location 8 (Removed Burial ca. 1960)

Provenience Information: Burial Location 8 was found in Backhoe Trench 6 at 86 cmbs (33.9 inches), in the survey area's northeast quadrant, [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container. The western half of a dark-colored wooden rectangular casket bottom was observed in a 0.71 square meter area (0.98 by 0.90 meters). Three clear edges, the western edge, northern edge, and southern edge, could be seen in the trench floor. The wooden bottom was comprised of fragments of wood in a vertical alignment, but the feature was heavily decayed. Only a trace of the burial container remained after exposure. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the shape of the burial container and the end of the burial period in this section of the cemetery.

Figure 4-35: Burial Location 8



Source: AmaTerra Environmental, Inc. 2023.

4.5.9 Burial Location 9 (Removed Burial ca. 1960)

Provenience Information: Burial Location 9 was found in Backhoe Trench 6 at 86 cmbs (33.9 inches), in the northeast quadrant of the survey [redacted]

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and hardware. Fragments of a dark-colored wooden casket bottom was observed in a 0.52 square meter area (1.49 by 0.44 meters). One clear edge, likely the western end of the casket, could be seen. The wood was highly friable, and disappeared to the north, west, and east. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: One white metal bar tip for a short bar style handle was recovered. Only the distal end was recovered, the proximal end was broken. This example is the same design as the tip found at Location 2 (**Figure 4-37**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-36: Burial Location 9



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-37: Handle Bar Tip from Burial Location 9



Source: AmaTerra Environmental, Inc. 2023.

4.5.10 Burial Location 10 (Disarticulated Remains)

Provenience Information: Burial Location 10 was found in Backhoe Trench 7 at 23-25 cmbs (9.1-9.8 inches), in the southeast quadrant of the survey [redacted] Within the same area, heavy disturbances were observed to 100 cmbs (39.4 inches), with bricks, bottle glass, a horseshoe, amethyst tinted pressed glass, milk glass fragments, and a sheet steel grave marker stake found in the soil matrix.

Mortuary Characteristics: This burial location contained no wooden burial container or casket hardware. Only skeletal remains were observed in a 0.88 square meter area (XX by XX meters). The depth at which these remains were recovered, as well as their attributes, indicate this is not an intact burial. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Six bone fragments were recovered, at least three of which are long bones split down the center.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

4.5.11 Burial Location 11 (Removed Burial ca. 1960)

Provenience Information: Burial Location 11 was found in Backhoe Trench 8 at 90-100 cmbs (35.4-39.4 inches), in the southeast quadrant of the survey area (**Figure 4-38**).

Mortuary Characteristics: This burial location contained the remains of a wooden burial container observed in a 0.53 square meter area (1.07 by 0.70 meters). The side wall of the western edge of the burial container was found in the trench floor, and hand excavation revealed the bottom of the burial container. The side walls were not found, and the container shape was not discernable. The container wood appeared to be cedar, approximately ½-inch thick, and at least 25 cm (9.8 inches) of the container wall was intact. Both light tan and dark brown wood was visible in the side wall, and at least 70 cm (27.5 inches) of the wall remained intact. The container floor appeared as both light and dark wood as well, and the same thickness as the walls. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-38: Burial Location 11



Source: AmaTerra Environmental, Inc. 2023.

4.5.12 Burial Location 12 (Removed Burial ca. 1960)

Provenience Information: Burial Location 12 was found in Backhoe Trench 8 at 110-132 cmbs (43.3-52.0 inches), in the southeast quadrant of the survey area (**Figure 4-39**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and casket hardware. Fragments of a dark-colored wooden casket bottom was observed in a 0.83 square meter area (1.01 by 0.79 meters). The center portion of the burial container was visible, and the edges were not discernable. The wood was highly friable, and disappeared to the north, east, and south. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: One white metal short bar tip from either a single lug or double lug handle was recovered. The shaft appeared square. A ferrous wire fragment, possibly a nail, was observed nearby (**Figure 4-40**). The handle fragments appear very similar to a style from the New Home Cemetery: Handle Type 14—a full extension handle with three lugs, each with two lug arms (Hill and Pye 2012:175-177). Called the Square Reeded Bar, this style of handle has a possible origin in the 1890s (**Figure 4-41**).

Associated Burial Goods: A marine shell fragment was collected within the burial area.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-39: Burial Location 12



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-40: Hardware and Marine Shell from Burial Location 12



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-41: Handle Type 14, Square Reeded Bar, from New Home Cemetery



Note: This type of hardware is a full extension handle with three lugs, each with two lug arms.

Source: Hill and Pye 2012:175-177.

4.5.13 Burial Location 13 (Removed Burial ca. 1960)

Provenience Information: Burial Location 13 was found in Backhoe Trench 8 at 127 cmbs (50 inches), in the southeast quadrant of the survey area (**Figure 4-42**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and casket hardware in a 0.86 square meter area (1.04 by 0.82 meters). Fragments of a dark-colored wooden casket side panel was observed crossing the trench, with what appears to be four *in situ* short bar tips. The casket wood was highly friable, mixing in with the surrounding soil. The short bar tips were found lying on top and adjacent to the wooden fragments. One plank of the casket bottom was found to the south, indicating the side panel was the northern section of the burial container. The two tips were separated by about 25 cm (9.8 inches). The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: Four white metal bar tips for a short bar style handle were recovered. All matched in design, and each contained a fragment of wood dowel (**Figure 4-43**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-42: Burial Location 13 with in situ Short Bar Handle Tips



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-43: Handle Bar Tips from Burial Location 13



Source: AmaTerra Environmental, Inc. 2023.

4.5.14 Burial Location 14 (Possible Burial Shaft)

Provenience Information: Burial Location 14 was found in Backhoe Trench 8 at 130-168 cmbs (51.2-66.1 inches), in the southeast quadrant of the survey area (**Figure 4-44**).

Mortuary Characteristics: This burial location appeared as one of the few circumstances where a possible burial shaft was observed in the survey area. Located directly adjacent to Burial Location 13, an outline of dark gray (7.5YR 4/1) clay surrounding the more mottled pale brown (10YR 6/3) in a rectangular shape was observed in a 1.79 square meter area (1.63 by 1.10 meters). As this outline appeared at the same depth as the casket bottom of Burial Location 13, it was presumed that either the burial container was located lower in the ground, or it was removed and only an imprint remained. A shovel test was dug in the center of the possible burial shaft. The dark gray clay continued to a depth of 168 cmbs (66.1 inches), with no evidence of a burial container, skeletal remains, or hardware observed. The soil around the outline appeared as mottled pale brown (10YR 6/3) and strong brown (7.5YR 5/6) clay.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-44: Burial Location 14 with Shovel Test



Source: AmaTerra Environmental, Inc. 2023.

4.5.15 Burial Location 15 (Removed Burial ca. 1960)

Provenience Information: Burial Location 15 was found in Backhoe Trench 10 at 118-122 cmbs (46.5-48.0 inches), in the southeast quadrant of the survey area (**Figure 4-45**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container. The western half of a dark-colored wooden rectangular casket bottom was observed in a 0.56 square meter area (1.03 by 0.63 meters). The northwestern corner and parts of the southern edge could be seen in the trench floor. The wooden bottom was comprised of fragments of wood in a vertical alignment but was found heavily decayed. Only a trace of the burial container remained after exposure. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Eleven skeletal fragments were recovered, at least five of which are cranial fragments.

Associated Hardware: Four ferrous sheet metal fragments were recovered, all of which appear to be either parts of a latch mechanism or a lid support bar (**Figure 4-46**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the shape of the burial container and the end of the burial period in this section of the cemetery.

Figure 4-45: Burial Location 15



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-46: Hardware from Burial Location 15



Source: AmaTerra Environmental, Inc. 2023.

4.5.16 Burial Location 16 (Probable Intact Burial)

Provenience Information: Burial Location 16 was found in Backhoe Trench 9 at 104-130 cmbs (40.9-51.2 inches), in the southeast quadrant of the survey area.

Mortuary Characteristics: This burial location contained the remains of a wooden burial container, skeletal remains, and casket hardware. It was classified as a "probable intact burial." The eastern edge of the burial container was observed during the shallow scraping, and hand excavation revealed fragments of a dark-colored wooden casket sides and bottom in a 0.76 square meter area (1.07 by 0.74 meters). It was readily apparent that skeletal remains laid on top of the casket bottom. The body appeared to orient east-west, with the head to the west. The lower legs, from the os coxae to the tibia, were observed in the trench. In addition, the left hand's phalanges and metacarpals were also uncovered. Two rings (see below) were found with the phalanges. Archaeologists cleaned the area, partially exposed the bones, and mapped and photographed the area. Since these remains were more substantial and appeared at least partly intact, the location was covered with a piece of clear plastic tarp and backfilled. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: A total of 91 skeletal fragments were recovered. The identified remains include a femur head, femur fragment, at least two metacarpals (hand bones), at least two proximal phalanges (finger bones), at least two distal phalanges (fingertips), at least three long bone fragments, and at least two metatarsals (foot bones). The remaining observed remains were left in place.

Associated Hardware: Twenty-nine artifacts associated with the casket were recovered (**Figure 4-47**). The identified remains include one ferrous lug arm, one white metal lug arm, one decorative white metal lug plate, four ferrous mounting plate fragments, one possible ferrous corner brace, and two hollow ferrous decorative handle or bar fragments. The hollow bar fragments appear similar to Handle Type 7, a single lug short bar handle from New Home Cemetery (Hill and Pye 2012:165-166). This handle type is called the Clover Leaf Bar, with a possible origin in the 1920s (**Figure 4-48**). The others remain unidentified ferrous fragments.

Associated Burial Goods: Two white metal rings were recovered: one a simple circular band and the other an intertwined snake design with green glass gemstones mounted on three snake heads. Both rings have blackened with oxidation (**Figure 4-49**).

Proposed Burial Date: The burial dates from the 1920s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-47: Hardware from Burial Location 16



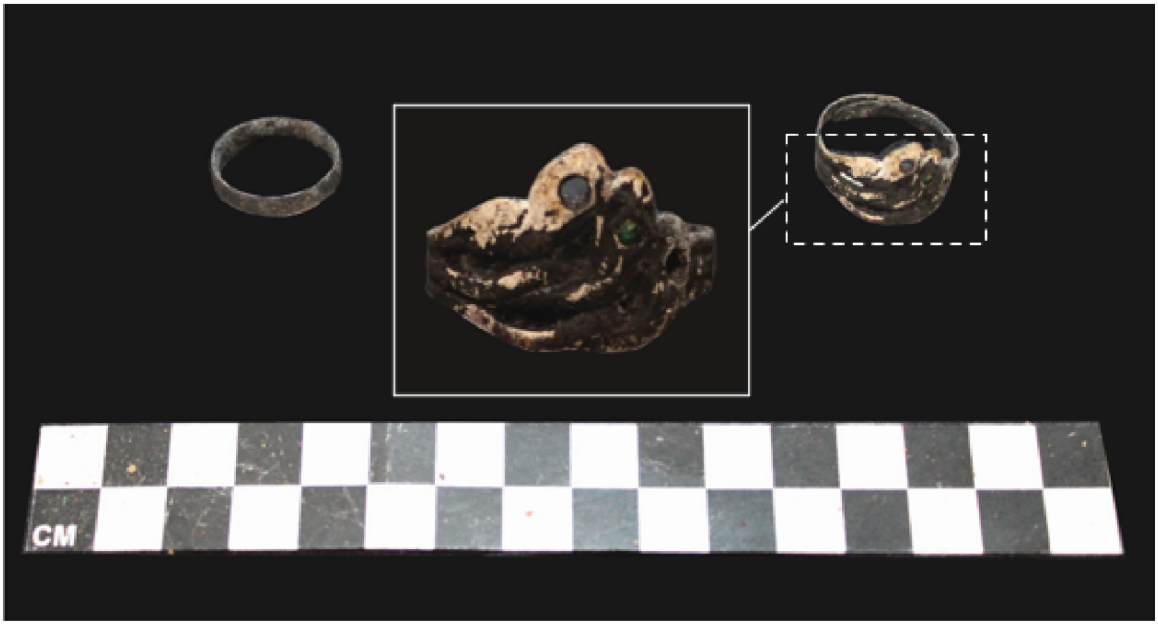
Source: AmaTerra Environmental, Inc. 2023.

Figure 4-48: Handle Type 7 from New Home Cemetery



Note: Similar to the Hollow Bar Fragments found at Burial Location 16
Source: Hill and Pye 2012:165-166.

Figure 4-49: Rings Found at Burial Location 16



Source: AmaTerra Environmental, Inc. 2023.

4.5.17 Burial Location 17 (Removed Burial ca. 1960)

Provenience Information: Burial Location 17 was found in Backhoe Trench 9 at 116-132 cmbs (46.7-52.0 inches), in the southeast quadrant of the survey area (**Figure 4-50**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and casket hardware observed in a 0.28 square meter area (0.93 by 0.31 meters). The bone fragments were found along the trench wall at Burial Location 17, and hand exploration revealed a collection of bone on top of dark brown casket wood fragments. Although mixed slightly, remnants of the western edge of the casket as well as the bottom were visible surrounding the skeletal remains. The wood was highly friable, and disappeared to the north, south, and east. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Approximately 109 small fragments were recovered from the burial, including at least three ribs and one vertebra, and at least 12 cranial fragments.

Associated Hardware: One ferrous sheet metal decorative lug fragment was recovered, likely part of a double lug short bar handle. Two nails had fused to the lug. The shape matches the lug from Patent 964,562, approved on July 19, 1910, for a casket handle design (**Figure 4-51**).

Associated Burial Goods: No burial goods were found.

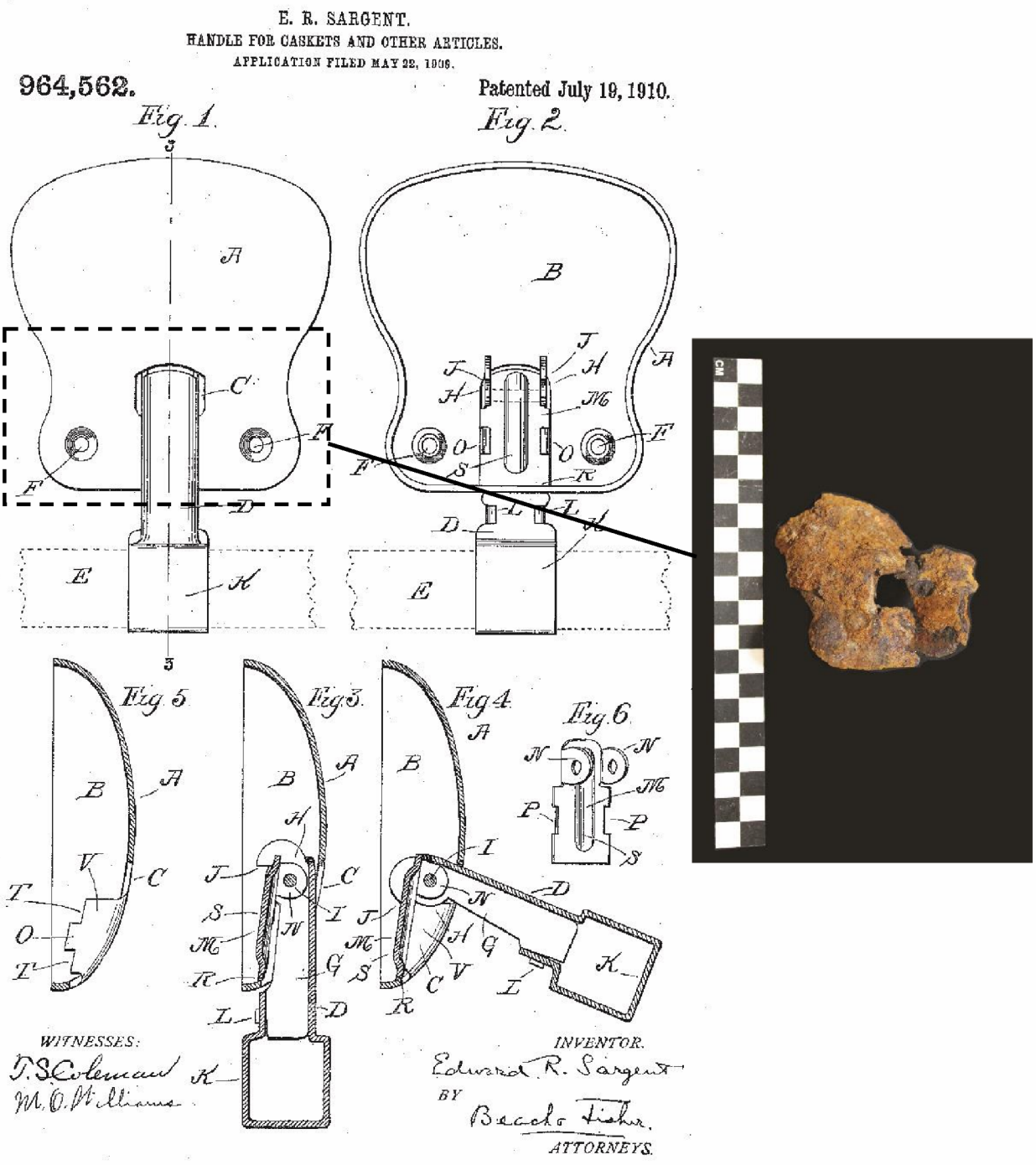
Proposed Burial Date: The burial dates from the 1910s to the 1950s based on the handle type and the end of the burial period in this section of the cemetery.

Figure 4-50: Burial Location 17



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-51: Hardware from Burial Location 17 and Similar Design Patent 964,564



Source: United States Patent and Trademark Office 2023.

4.5.18 Burial Location 18 (Removed Burial ca. 1960)

Provenience Information: Burial Location 18 was found in Backhoe Trench 9 at 94-109 cmbs (37.0-42.9 inches), in the southeast quadrant of the survey area (**Figure 4-52**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and skeletal remains. Fragments of a dark-colored wooden casket side panel were observed in a 0.29 square meter area (0.58 by 0.51 meters). One clear edge, likely the northern side of the container, could be seen. The wood was highly friable and disappeared in all directions apart from this small section about 20 cm (7.87 inches) long. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: One small fragment of bone was recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-52: Burial Location 18



Source: AmaTerra Environmental, Inc. 2023.

4.5.19 Burial Location 19 (Removed Burial ca. 1960)

Provenience Information: Burial Location 19 was found in Backhoe Trench 9 at 87 cmbs (34.3 inches), in the southeast quadrant of the survey area (**Figure 4-53**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and skeletal remains. Dark colored wood fragments were found in a 0.31 square meter area (0.64 by 0.54 meters), most likely the bottom of a burial container. No shape was discernable. The wood fragments were mixed with the surrounding soil in a roughly oval stain approximately 20 x 50 cm (7.9-19.7 inches) in size. The area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

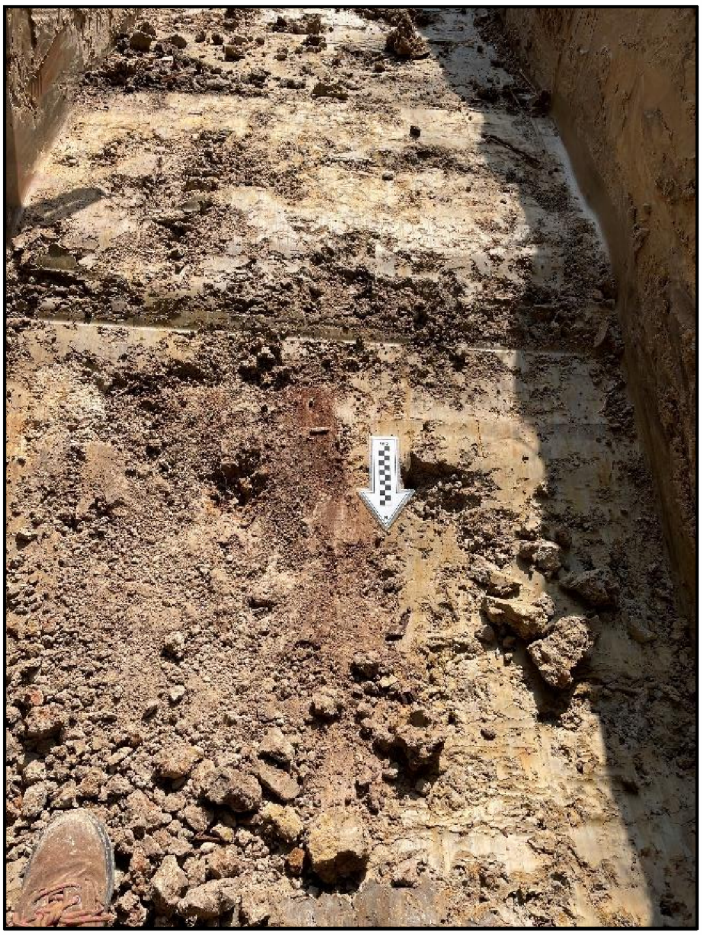
Skeletal Remains: One fragmented bone, a possible rib, was recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-53: Burial Location 19



Source: AmaTerra Environmental, Inc. 2023.

4.5.20 Burial Location 20 (Removed Burial ca. 1960)

Provenience Information: Burial Location 20 was found in Backhoe Trench 9 at 90-92 cmbs (35.4-36.2 inches), in the southeast quadrant of the survey area (**Figure 4-54**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and skeletal remains. Dark colored wood fragments were found in a 0.45 square meter area (XX by XX meters), most likely the bottom of a burial container. No shape was discernable. The wood fragments were mixed with the surrounding soil in a roughly oval stain approximately 50 x 60 cm (19.7-23.6 inches) in size. The area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Four pieces of fragmented bone were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-54: Burial Location 20



Source: AmaTerra Environmental, Inc. 2023.

4.5.21 Burial Location 21 (Removed Burial ca. 1960)

Provenience Information: Burial Location 21 was found in Backhoe Trench 11 at 90-92 cmbs (35.4-36.2 inches), in the southeast quadrant of the survey area. The location was situated within the contoured drainage basin near the center of the median, a few meters away from the edge of the contour (**Figure 4-55**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and casket hardware. Fragments of a dark-colored wooden casket bottom was observed in a 0.37 square meter area (0.63 by 0.61 meters). One clear edge, likely the eastern end of the casket, could be seen. The wood was highly friable, and disappeared to the north, west, and east. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Five small pieces of skeletal remains were recovered above the casket.

Associated Hardware: Seven ferrous hardware fragments were recovered as well as two ferrous wire nails. The hardware may be casket latch fragments or decorative ornaments (**Figure 4-56**).

Associated Burial Goods: One pressed glass bowl rim and three fragments of an ironstone plate were recovered in association with the burial container. One cobalt blue ceramic dish fragment was observed about 20 cm (7.9 inches) above the casket bottom, but it was not collected as it retained an unclear association with the burial (possibly debris in the removed burial backdirt ca. 1960.).

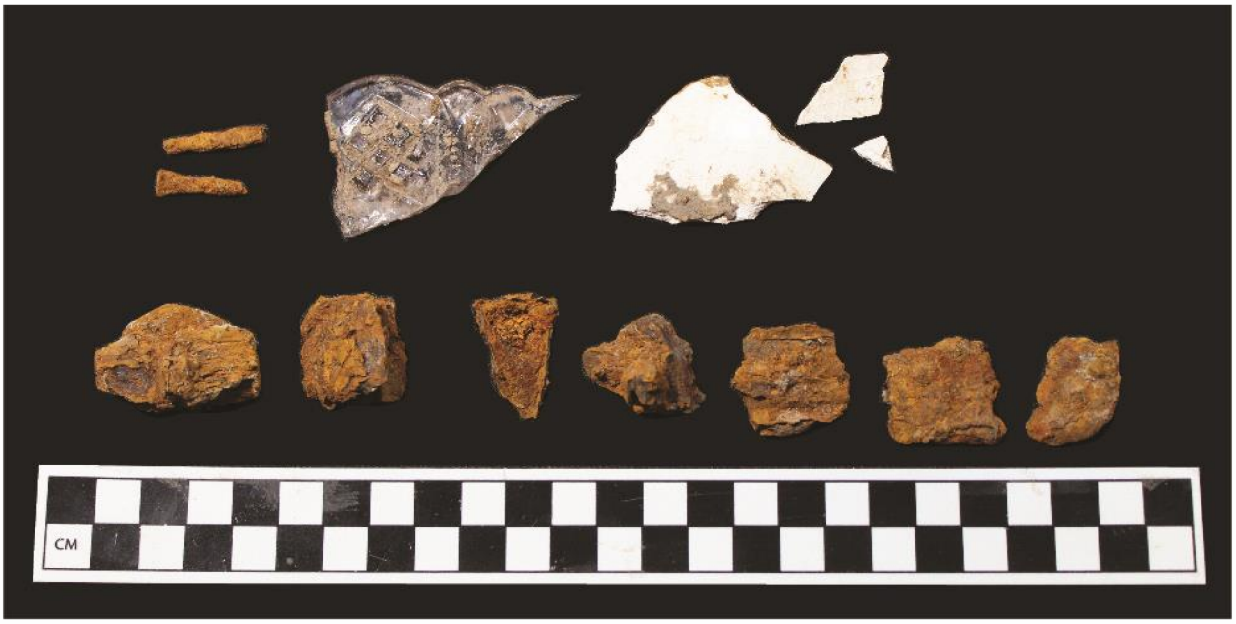
Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the hardware and the end of the burial period in this section of the cemetery.

Figure 4-55: Burial Location 21



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-56: Hardware and Associated Artifacts from Burial Location 21



Source: AmaTerra Environmental, Inc. 2023

4.5.22 Burial Location 22 (Removed Burial ca. 1960)

Provenience Information: Burial Location 22 was found in Backhoe Trench 13 at 70-75 cmbs (27.6-29.5 inches), in the northern half of the of the survey area near the center of the median. The location was situated within the contoured drainage basin near the center of the median, a few meters away from the edge of the contour (**Figure 4-57**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and coffin or casket hardware. Dark colored wood fragments were found in a 0.34 square meter area (0.66 by 0.59 meters) along with the hardware. No container shape was discernable, and the area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Twenty-three skeletal fragments were recovered. At least two appear to be rib fragments.

Figure 4-57: Burial Location 22



Source: AmaTerra Environmental, Inc. 2023.

Associated Hardware: One white metal caplifter, one white metal decorative flat bodied thumbscrew, one ferrous escutcheon, one possible ferrous grave marker stake fragment, and three ferrous round nails were recovered in the same areas as the coffin or casket wood (**Figure 4-58**). The caplifter is the same type as the example from Burial Location 28. The thumbscrew matches the Type 2 thumbscrew style of the Late Period (1900-1907) hardware from the Freedman's Cemetery (Davidson 1999:487) also Type 1 from New Home Cemetery (**Figure 4-59**). According to Hill and Pye (2012:200-201; slightly edited):

Thumbscrew Type 1 is associated with Escutcheon Type 1 and is represented by seven artifacts in Burial 16 in New Home Cemetery. The white metal finial of this thumbscrew is shaped like a broad fan with a tapered shoulder. The rays of the fan converge at the center, which features an embossed rectangle, before they fan back out to a lesser extend below the center. Two vine-like tendrils flank the bottom of this fan bundle and extend upward toward the center. The cylindrical base appears to be the sepal of a flower, from which the finial emerges. No matches to this thumbscrew have been located in patent records, but it has been matched to nine period catalogs and artifacts from four archaeological cemetery excavations. The catalogs range in date from ca. 1900 to 1912, and the cemeteries, which were located in Tennessee, Alabama, Arkansas, and Texas, range in date from 1893 until 1933.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from about 1900 to the 1950s based on the ornamentation type and the end of the burial period in this section of the cemetery.

Figure 4-58: Hardware from Burial Location 22



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-59: Thumbscrew Type 1 from New Home Cemetery



Source: Hill and Pye 2012:200-201.

4.5.23 Burial Location 23 (Partial Burial)

Provenience Information: Burial Location 23 was found in Backhoe Trench 13 at 70-75 cmbs (27.6-29.5 inches), in the northern half of the of the survey area near the center of the median. The location was situated within the contoured drainage basin near the center of the median, a few meters away from the edge of the contour.

Mortuary Characteristics: This burial location contained the remains of a wooden burial container, skeletal remains, and casket hardware. It was classified as a "partial burial." Fragments of the northern edge of a rectangular burial container, in a light-colored wood, and a medium brown wooden casket bottom were observed in a 0.59 square meter area (1.16 by 0.53 meters). The wood was highly friable. Within the casket perimeter, two long bones, likely tibias, were found in place. The body appeared to orient east-west, with the head to the west. The ends to the long bones extended into the trench wall. The area was cleaned, bones exposed, and the area mapped and photographed. Since these remains were more substantial and fragile, the long bones were left in place, covered with a piece of blue tarp, and backfilled. The feet are likely intact beyond the trench walls. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Fifty-four skeletal remains were recovered, all of which were very small and degraded. The remaining observed remains were left in place.

Associated Hardware: Eleven ferrous sheet metal casket fragments, one ferrous screw (slot head), one ferrous nail fragment, five pieces of casket wood, and one fragment of plate glass were recovered. The sheet metal fragments are likely lug pieces or ornaments. The plate glass indicates the coffin or casket had a viewing window (**Figure 4-60**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1920s based on the container type.

Figure 4-60: Hardware from Burial Location 23



Source: AmaTerra Environmental, Inc. 2023.

4.5.24 Burial Location 24 (Removed Burial ca. 1960)

Provenience Information: Burial Location 24 was found in Backhoe Trench 13 at 70-75 cmbs (27.6-29.5 inches), in the northern half of the of the survey area near the center of the median. The corresponds with the edge of the contoured drainage basin in the median (**Figure 4-61**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and skeletal remains. Fragments of a rectangular wooden casket side panel, most likely the northern side, was observed in a 1.28 square meter area (1.19 by 1.13 meters). This plank appeared only about ½-inch thick and was made from a soft light-colored wood with a knot (likely pine) that had been stained a dark brown color. No other parts of the casket were observed. Two sections of concrete curb, in a disjointed alignment, were found just north of the plank. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Fifteen small pieces of skeletal remains were recovered with the casket plank.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the burial container and the end of the burial period in this section of the cemetery.

Figure 4-61: Burial Location 24 with Disjointed Concrete Curbing to the North



Source: AmaTerra Environmental, Inc. 2023.

4.5.25 Burial Location 25 (Removed Burial ca. 1960)

Provenience Information: Burial Location 25 was found in Backhoe Trench 13 at 80-85 cmbs (31.5-33.5 inches), in the northern half of the of the survey area near the center of the median (**Figure 4-62**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and casket hardware. A dark-colored wooden container bottom was observed in a 1.47 square meter area (1.31 by 1.13 meters). No coffin or casket shape was discernable, and the area was quite disturbed. The wooden bottom turned into tiny fragments and dust when touched with a trowel, and only a trace of the burial container remained after exposure. However, the disarticulated remains of the container contents were recovered in the soils surrounding the wood. Notably, skull fragments and a wooden comb were all found together in the same 20 x 20 cm (7.9-7.9 inch) area near the west side of the trench. This burial seems to follow the typical orientation of the head to the west, and the remaining skeletal elements are absent from the container. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: A total of 116 bone fragments were recovered from the soil above the container bottom. Roughly 25 skeletal remains are skull fragments, including a mandible with embedded molar and premolar. Five bones are teeth, which have been identified as three molars and two incisors. In addition, ten bone fragments were found in the soil about 50 cm away from the container bottom,

consisting of at least two ribs and one vertebra. Given the proximity of the skeletal remains to the container, they were joined with the Burial Location 25's other remains.

Figure 4-62: Burial Location 25



Source: AmaTerra Environmental, Inc. 2023.

Associated Hardware: Twenty-eight artifacts associated with the burial container were observed and collected. Three white metal bar tips from either a single lug or double lug handle were recovered. Two of the tips had the same design, while the third appeared different (**Figure 4-63**). The two matching fragments were similar to the Handle Type 10, a single lug short bar handle from New Home Cemetery (Hill and Pye 2012:168-169). Called the Square Reeded Bar, this design has a possible origin in the 1890s. In addition, one caplifter with the same design as Burial Location 22, one possible ferrous casket lid support bar, five ferrous escutcheons or decorative plates, nine ferrous sheet metal fragments, four ferrous wire nails, and five miscellaneous ferrous fragments were collected.

Associated Burial Goods: One wooden comb was found alongside the cranial fragments (**Figure 4-64**).

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the types of burial hardware and the end of the burial period in this section of the cemetery.

Figure 4-63: Hardware from Burial Location 25



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-64: Comb from Burial Location 25



Source: AmaTerra Environmental, Inc. 2023.

4.5.26 Burial Location 26 (Removed Burial ca. 1960)

Provenience Information: Burial Location 26 was found in Backhoe Trench 16 at 120 cmbs (47.2 inches), in the northwest quadrant of the of the survey area (**Figure 4-65**).

Mortuary Characteristics: This burial location contained the fragmentary remains of two side-by-side wooden burial containers, with a possible third to the north, in a 1.54 square meter area (1.66 by 1.24 meters). Two linear stains of dark-colored wood fragments were found in a 40 x 60 cm (15.7 x 23.6 inch) area. The stains exhibited two parallel edges a few inches apart, possibly indicating two burial containers side-by-side (east-west). In addition, another stain was observed 30 cm (11.8 inches) to the north, in a 25 x 35 cm (9.8 x 13.7 inch) area. No clear shape was discernable with this more northern stain. The area was quite disturbed, and other than the parallel edges, no container outline could be discerned. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown.

Figure 4-65: Burial Location 26



Source: AmaTerra Environmental, Inc. 2023.

4.5.27 Burial Location 27 (Removed Burial ca. 1960)

Provenience Information: Burial Location 27 was found in Backhoe Trench 15 at 90-100 cmbs (35.4-39.4 inches), in the southwest quadrant of the survey area.

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and coffin or casket hardware. Dark colored wood fragments were found in a 0.67 square meter area (1.11 by 0.62 meters) along with an array of burial container hardware. No shape was discernable. The wood fragments were mixed with the surrounding soil. The area was quite disturbed. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: Sixteen artifacts associated with the burial container were observed and collected. One single lug with a short bar was recovered, with one of the lug arms still attached. In addition, fragments of another single lug short bar lug, one separate lug arm with square handle hole that matches the attached lug arm, and three white metal short bar tips, were collected from this location. Two of the tips had wooden dowels attached. In addition, three ferrous sheet metal

fragments, possibly ornaments or latch hardware, one thick wire lid support, and four wire nails were recovered (**Figure 4-66**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from about 1890 to the 1950s based on the hardware and the end of the burial period in this section of the cemetery.

Figure 4-66: Hardware from Burial Location 27



Source: AmaTerra Environmental, Inc. 2023.

4.5.28 Burial Location 28 (Probable Intact Burial)

Provenience Information: Burial Location 28 was found in Backhoe Trench 15 at 120 cmbs (47.2 inches), in the southwest quadrant of the survey area.

Mortuary Characteristics: This burial location contained the remains of a wooden burial container, skeletal remains, and casket hardware. It was classified as a "probable intact burial." The edges of the burial container were observed during the shallow scraping, and hand excavation revealed fragments of a dark-colored wooden casket bottom in a 0.87 square meter area (1.11 by 0.80 meters). It was readily apparent that skeletal remains, casket hardware, and a broken bottle laid on top of the casket bottom. The area was cleaned, bones partly exposed, and archaeologists mapped and photographed the area. Since these remains were more substantial and appeared at least partly intact, the location was covered with a piece of blue tarp and backfilled. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Forty-five skeletal fragments were recovered. At least half of these fragments are from the cranium. The remaining observed remains were left in place.

Associated Hardware: One white metal short bar tip from either a single lug or double lug handle was recovered. The tip is similar to the Type B casket handle at Burial 50 (dating to 1906-1923) at the Phillips Memorial Cemetery (Dockall et al 1996:81-82). In addition, one white metal caplifter and seven ferrous sheet metal fragments were collected (**Figure 4-67**). The caplifter exhibited the same design as the example found at Burial Location 22. The sheet metal fragments were difficult to identify but may be possible lug arm or lug fragments.

Figure 4-67: Hardware from Burial Location 28



Source: AmaTerra Environmental, Inc. 2023.

Associated Burial Goods: Seven colorless rectangular bottle glass fragments were recovered: two plain fragments, one bottle body embossed with graduated lines and numbers, one body shard embossed with "…Frigid Fluid C…" "..Chicago," one colorless bottle neck with screw threads, one colorless bottle neck with a broken lip, and one bottle base (**Figure 4-68**). The embossed body fragments matched the logo of the Frigid Fluid Company, a manufacturer of embalming fluid from ca. 1892 to the present (https://frigidfluid.com/pages/about). The bottle style is similar to others made in the early 1900s. The bottle base contained a maker's mark of an "I in a diamond" indicative of the Illinois Glass Company. The Illinois Glass Company made utilitarian machine-made bottles from ca. 1915 to 1929 (Lockhart at al. 2005).

Proposed Burial Date: The burial dates from the 1900s to the 1950s based on the handle type, bottle manufacture dates, and the end of the burial period in this section of the cemetery.

Figure 4-68: Embalming Fluid Bottle from Burial Location 28



Source: AmaTerra Environmental, Inc. 2023.

4.5.29 Burial Location 29 (Probable Intact Burial)

Provenience Information: Burial Location 29 was found in Backhoe Trench 15 at 100-110 cmbs (39.4-43.3 inches), in the southwest quadrant of the survey area. The location was positioned along edge of the contoured drainage basin in the median.

Mortuary Characteristics: This burial location contained the remains of a wooden burial container, skeletal remains, and casket hardware. It was classified as a "probable intact burial." The southern side of the rectangular burial container were observed during the shallow scraping, and hand excavation revealed fragments of a dark-colored wooden casket bottom in a 0.61 square meter area (1.14 by 0.55 meters). Exploration of the southern side of the casket exposed a decayed wood section, but parts of a double lug swing bail was observed *in situ*.

It was readily apparent that skeletal remains and casket hardware laid on top of the casket bottom. The area was cleaned, bones partly exposed, and the area mapped and photographed. Since these remains were more substantial and appeared at least partly intact, the location was covered with a piece of plastic tarp and backfilled. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Only six small skeletal fragments were recovered at this time, the remaining observed remains were left in place.

Associated Hardware: One decorative white metal flat bodied thumbscrew was recovered (**Figure 4-69**).

Associated Burial Goods: Two black four-hole prosser buttons and one brass snap cover were recovered (**Figure 4-70**). These are associated with clothing remains.

Proposed Burial Date: The burial dates from about 1890 to the 1920s based on the ornamentation type of the casket hardware.

Figure 4-69: Thumbscrew from Burial Location 29



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-70: Buttons from Burial Location 29



Source: AmaTerra Environmental, Inc. 2023.

4.5.30 Burial Location 30 (Removed Burial ca. 1960)

Provenience Information: Burial Location 30 was found in Backhoe Trench 15 at 100-110 cmbs (39.4-43.3 inches), in the southwest quadrant of the survey area. This corresponds with the contoured drainage basin near the center of the median, a few meters away from its edge (**Figure 4-71**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container, skeletal remains, and casket hardware. The west section of a dark-colored wooden rectangular casket bottom was observed in a 0.97 square meter area (1.08 by 1.08 meters). The southern edge could be seen clearly in the trench floor. The wooden bottom contained thin planks and decayed sections of wood, with a few roots running through the area. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: Three small pieces were collected, likely cranial fragments.

Associated Hardware: Twenty artifacts associated with the burial container were observed and collected. Two ornamental tacks, one ferrous fragment that had been part of a latching mechanism, one possible ferrous decorative ornament, nine ferrous wire nails and tacks, and seven ferrous sheet metal fragments were recovered (**Figure 4-72**). No designs could be discerned.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the shape of the burial container and the end of the burial period in this section of the cemetery.

Figure 4-71: Burial Location 30



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-72: Hardware from Burial Location 30



Source: AmaTerra Environmental, Inc. 2023.

4.5.31 Burial Location 31 (Removed Burial ca. 1960)

Provenience Information: Burial Location 31 was found in Backhoe Trench 15 at 130-138 cmbs (51.2-54.3 inches), in the southwest quadrant of the survey area. The location was situated within the contoured drainage basin near the center of the median, a few meters away from its edge (**Figure 4-73**).

Mortuary Characteristics: This burial location contained the fragmentary remains of a wooden burial container and casket hardware. The southeastern section of a dark-colored wooden rectangular casket bottom was observed in a 0.88 square meter area (1.22 by 0.76 meters). One clear edge to the south could be seen in the trench floor. The wooden bottom contained thin planks and decayed sections of wood, with a few roots running through the area. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: Three matching white metal bar tips from a single or double lug short bar were recovered. The ends of these tips were square. One ferrous sheet metal fragment, a possible corner bracket, was also collected (**Figure 4-74**).

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial dates from the 1890s to the 1950s based on the shape of the burial container and the end of the burial period in this section of the cemetery.

Figure 4-73: Burial Location 31



Source: AmaTerra Environmental, Inc. 2023.

Figure 4-74: Hardware from Burial Location 31



Source: AmaTerra Environmental, Inc. 2023.

4.5.32 Burial Location 32 (Removed Burial ca. 1960)

Provenience Information: Burial Location 32 was found in Backhoe Trench 19 at 100-130 cmbs (39.4-51.2 inches), in the southwest quadrant of the survey area and about 3 m east of the underground water line [redacted]

Mortuary Characteristics: This burial location contained the remains of a rectangular wooden burial casket observed in a 0.49 square meter area (1.09 by 0.52 meters). The north and west walls of the burial container were found in the trench floor, and hand excavation revealed the bottom of the burial container. The container wood appeared to be cedar or pine, approximately ½-inch thick. At least 120 cm (47.2 inches) of the south wall and 61 cm (24.0 inches) of the west wall remained intact. The casket appeared largely undecorated, and no lid was observed. The container floor appeared to be the same thickness as the walls. All the wood had been stained a medium brown. The northwest section of the casket was explored to locate any of its contents, but it remained empty of any skeletal remains, burial goods, or casket hardware. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown, although the preservation of the burial container indicates it may have been interred in the 1940s or 1950s.

Figure 4-75: Burial Location 32



Source: AmaTerra Environmental, Inc. 2023.

4.5.33 Burial Location 33 (Removed Burial ca. 1960)

Provenience Information: Burial Location 33 was found in Backhoe Trench 19 at 100-130 cmbs (39.4-51.2 inches), in the southwest quadrant of the survey area and about three meters east of the underground water line [redacted]

Mortuary Characteristics: This burial location contained the remains of a rectangular wooden burial casket observed in a 0.44 square meter area (1.04 by 0.50 meters). The south and west walls of the burial container were found in the trench floor, and hand excavation revealed the bottom of the burial container. The container wood appeared to be cedar or pine, approximately ½-inch thick, and at least 110 cm (43.3 inches) of the south wall and 61 cm (24.0 inches) of the west wall remained intact. The casket appeared largely undecorated, and no lid was observed. The container floor appeared to be the same thickness as the walls. All the wood had been stained a medium brown. The southeast section of the casket was explored to locate any of its contents, but it remained empty of any skeletal remains, burial goods, or casket hardware. The soil around the remnant appeared as mottled pale brown (10YR 6/3), strong brown (7.5YR 5/6), and dark gray (7.5YR 4/1) clay. No grave shaft was observed.

Skeletal Remains: No skeletal remains were recovered.

Associated Hardware: No coffin or casket hardware was recovered.

Associated Burial Goods: No burial goods were found.

Proposed Burial Date: The burial date is unknown, although the preservation of the burial container indicates it may have been interred in the 1940s or 1950s.

Figure 4-76: Burial Location 33



Source: AmaTerra Environmental, Inc. 2023.

5 Conclusions and Recommendations

In December 2022, AmaTerra Environmental, Inc. archaeologists conducted field investigations to determine if the proposed METRO University Corridor Project would affect any intact burials or burial remnants associated with the Evergreen Negro Cemetery, a registered Texas Historic Cemetery. The work was conducted under Texas Antiquities Permit 30784, with Mindy Bonine serving as Principal Investigator. The investigation was conducted [redacted] located in the Fifth Ward, City of Houston, Texas. Conducted in two parts, the investigation included fieldwork consisting of trench scrapes through all accessible quadrants of the survey area to locate physical evidence of burials, and archival research to determine the timeline of the construction and improvement of Lockwood Drive and the historical impacts to the cemetery grounds.

The historical map review and archival search found very little primary source documentation that expanded upon the known history of the Evergreen Negro Cemetery. However, research into the installation and subsequent expansion of Lockwood Drive through the Evergreen Negro Cemetery did return results. According to archival research, Lockwood Drive bisected the cemetery sometime between 1929 and 1939. Afterwards, plans for the Lockwood Drive expansion appeared to correlate with the anticipated construction of IH 10 to the north of the cemetery. These plans were in place by 1955. The dates when the disinterment and road construction took place appeared to occur on either side of 1960 (from about 1957 to 1963). According to Dr. Williams (personal communication, February 15, 2023), some descendants did not receive a notice from the City of Houston until 1963, after the road construction was completed. As part of the research into the Lockwood Drive expansion, one plat map associated with the Evergreen Negro Cemetery was located, consisting of only a small subsection of the property. Unfortunately, no complete formal cemetery plat was located, nor was a historical list of interments located. A listing of the 4,605 individuals buried at the cemetery was compiled though a survey of remaining burial markers and a search of Harris County death certificates in the early 2000s (www.findagrave.com).

The archaeological investigation [redacted] in alignment with the existing boundaries of the Evergreen Negro Cemetery revealed 33 localities containing evidence of a burial (**Table 5-1**). These localities included human bone, coffin or casket wood, hardware, or personal items associated with a grave. Of these, three (3) localities contained sufficient human bone to be considered “predominantly intact” burials as well as one (1) locality that contained a “partial” burial, comprised of the tibias (lower leg) that extended into the trench wall but no other skeletal remains. These four localities were left in place at the conclusion of fieldwork pending registration as an abandoned cemetery and coordination for the removal of the remains. This location was given the archaeological site trinomial 41HR1270.

Table 5-1: Summary of Burial Locations found During the Archaeological Investigations

Burial Location	Burial Composition	Associated Trench Scrape	Top Depth (cmbs)	Area (square meters)	Skeletal Material	Coffin/Casket Material	Coffin/Casket Hardware	Burial Goods	Burial Date Range	Identified Hardware Description	Burial Goods Description
1	Removed	3	95	0.25	58	●	1		1870s-1920s	White metal caplifter/decorative knob (n=1))	
2	Removed	3	60	0.36		●	4		1890-1950s	White metal short bar tips (n=4)	
3	Removed	3	80	0.14		●	9	1	1900-1950s	White metal lug (n=1), white metal lug arm (n=1); white matal bar tips (n=2); ferrous sheet metal (n=1); ferrous fragment (n=1); white metal fragment (n=1); ferrous finishing nail (n=1); ferrous clip/closure fragment (n=1))	Tan and brown swirl glass marble (n=1)
4	Removed	3	80	0.41	19	●	5		1890-1950s	White metal handle tip with wooden dowel (n=1); ferrous nail fragments (n=2); ferrous fragment (n=1); ferrous latch/clasp fragment (n=1)	
5	Removed	3	68	0.47		●		1	1890s-1950s		Porcelain figurine fragment (n=1)
6	Removed	3	98	0.43	28	●		1	1890s-1950s		Silver-plate, long-handled spoon (n=1)
7	Dump	5	70	0.62	8				1920s-1950s		
8	Removed	6	86	0.71		●			1890s-1950s		
9	Removed	6	86	0.52		●	1		1890s-1950s	White metal bar tip (n=1)	
10	Removed	7	23	0.88	6				Unknown		
11	Removed	8	90	0.53		●			Unknown		

Burial Location	Burial Composition	Associated Trench Scrape	Top Depth (cmbs)	Area (square meters)	Skeletal Material	Coffin/Casket Material	Coffin/Casket Hardware	Burial Goods	Burial Date Range	Identified Hardware Description	Burial Goods Description
12	Removed	8	110	0.83		●	2	1	1890s-1950s	White metal bar tip (n=1; possible Square Reeded Bar style); ferrous wire/nail (n=1)	Marine shell (n=1)
13	Removed	8	127	0.86		●	4		1890s-1950s	White metal bar tips (n=4)	
14	Grave shaft	8	130	1.79					Unknown		
15	Removed	10	118	0.56	11	●	4		1890s-1950s	Ferrous sheet metal fragments (n=4; latch mechanism/lid support bar)	
16	Intact	9	104	0.76	91	●	29	2	1920s-1950s	White metal lug arm (n=1); white metal lug plate (n=1); ferrous lug arm (n=1); ferrous mounting plat fragments (n=4); ferrous corner brace (n=1); ferrous hollow bar fragments (n=2); ferrous fragments (n=19)	White metal rings (n=2; one simple band; one with intertwined snake motif and green glass gemstones)
17	Removed	9	116	0.28	109	●	1		1910s-1950s	Ferrous sheet metal lug fragment with nails (n=1)	
18	Removed	9	94	0.29	1	●			Unknown		
19	Removed	9	87	0.31	1	●			Unknown		
20	Removed	9	90	0.45	4	●			Unknown		
21	Removed	11	90	0.37	5	●	9	4	1890s-1950s	Ferrous sheet metal fragments (n=7; possible casket latch or decorative ornament fragments); ferrous wire nails (n=2)	Colorless pressed glass bowl rim shard (n=1); Ironstone plate sherds (n=3)
22	Removed	13	70	0.34	23	●	6		1900s-1950s	White metal caplifter (n=1); white metal thumbscrew (n=1); ferrous escutcheon (n=1); ferrous wire nails (n=3)	

Burial Location	Burial Composition	Associated Trench Scrape	Top Depth (cmbs)	Area (square meters)	Skeletal Material	Coffin/Casket Material	Coffin/Casket Hardware	Burial Goods	Burial Date Range	Identified Hardware Description	Burial Goods Description
23	Partial	13	70	0.59	54	●	14		1890s-1920s	Ferrous metal casket fragments (n=11); ferrous screw (n=1); ferrous wire nail (n=1); plate glass shard (n=1)	
24	Removed	13	70	1.28	15	●			1890s-1950s		
25	Removed	13	80	1.47	116	●	28	●	1890s-1950s	White metal bar tips (n=3); white metal caplifter (n=1); ferrous casket lid support bar (n=1), ferrous escutcheons/decorative plates (n=5); ferrous wire nails (n=4); ferrous sheet metal/miscellaneous fragments (n=14)	Wooden comb (n=1)
26	Removed	16	120	1.54		●			Unknown		
27	Removed	15	90	0.67		●	16		1890s-1950s	Ferrous lug and arm (n=1); ferrous lug fragment (n=1); white metal bar tips (n=3); ferrous lug arm (n=3); ferrous sheet metal ornaments/latch hardware (n=3); ferrous wire lid support (n=1); ferrous wire nails (n=4)	
28	Intact	15	120	0.87	45	●	9	7	1900s-1950s	White metal bar tip (n=1); white metal caplifter (n=1); ferrous sheet metal fragments (n=7; possible lug arm/lug fragments)	Plain colorless bottle glass shards (n=2); colorless bottle glass shards with embossed graduated lines/numbers (n=1); colorless embossed body shard "Frigid Fluid Co." (n=1); colorless screw-thread bottle neck (n=1); colorless glass bottle neck with broken tip (n=1);

Burial Location	Burial Composition	Associated Trench Scrape	Top Depth (cmbs)	Area (square meters)	Skeletal Material	Coffin/Casket Material	Coffin/Casket Hardware	Burial Goods	Burial Date Range	Identified Hardware Description	Burial Goods Description
											colorless Illinois Glass Company bottle base (n=1)
29	Intact	15	100	0.61	6	●	1	3	1890-1920s	White metal decorative thumbscrew (n=1)	Black, four-hole prosser buttons (n=2); brass snap cover (n=1)
30	Removed	15	100	0.97	3	●	20		1890s-1950s	Ferrous ornamental tacks (n=2); ferrous latch (n=1); ferrous decorative element (n=1); ferrous sheet metal fragments (n=7); ferrous wire nails/tacks (n=9)	
31	Removed	15	130	0.88		●	4		1890s-1950s	White metal bar tips (n=3); ferrous sheet metal fragment (n=1; possible corner brace)	
32	Removed	19	100	0.49		●			1940s 1950s		
33	Removed	19	100	0.44		●			1940s-1950s		

Source: AmaTerra Environmental, Inc. 2023.

5.1 NRHP Evaluation

Cemeteries have profound personal and cultural significance to the communities they serve. Thus, these resources have been addressed specifically as they relate to their eligibility for listing in the NRHP. Cemeteries are present in every community in the United States, and although they have significance on an individual level (the descendants of those buried at the cemetery, for example), their local, regional, and national significance must be assessed using stricter metrics. According to the National Park Service's bulletin for evaluating cemeteries:

"Individual and collective burial places can reflect and represent in important ways the cultural values and practices of the past that help instruct us about who we are as a people. Yet for profoundly personal reasons, familial and cultural descendants of the interred often view graves and cemeteries with a sense of reverence and devout sentiment that can overshadow objective evaluation. Therefore, cemeteries and graves are among those properties that ordinarily are not considered eligible for inclusion in the NRHP unless they meet special requirements. The National Register Criteria for Evaluation include considerations by which burial places may be eligible for inclusion in the National Register." (National Register Bulletin 41; Potter and Boland 1992:1).

In general, cemetery historic properties must meet one or more of the seven criteria considerations (A-G) in addition to one or more of the four core criteria (A-D) to be considered eligible for listing. Archaeological sites, however, may be evaluated under Criterion D without the additional considerations.

The Evergreen Negro Cemetery, including all the burial grounds from Carroll Oliver Way to southbound Lockwood Drive, and northbound Lockwood Drive to Sakowitz Street, fall within the APE for historic resources investigations for the Project, as it is adjacent to at-grade Project activities. This assessment has been documented in the NEPA historic resources survey for the METRORapid University BRT Corridor Project (METRONext 2023). The NRHP eligibility recommendations for the Evergreen Negro Cemetery, based on the historic resources review, are as follows:

1. Although the cemetery is the first African American cemetery in the Fifth Ward, it does not appear to have a direct association with a specific event important to the broader African American experience in Houston. Therefore, the Evergreen Negro Cemetery is recommended not eligible under Criterion A.
2. The persons of note buried in the cemetery do not rise to the level of outstanding importance and therefore is recommending not eligible under Criterion B.
3. The Evergreen Negro Cemetery was not designed by a master, nor possess high artistic values or distinctive characteristics and therefore is recommended not eligible under Criterion C.
4. The cemetery itself follows the nationwide "rural" or "garden" cemetery movement which establishes park-like settings surrounding monuments low to the ground (Potter and Boland 1992). Therefore, the cemetery is not likely to yield unique information on twentieth century

burial practices of African American communities in urban environments, and is not eligible under Criterion D.

In addition, the abandoned portion of the Evergreen Negro Cemetery, which is in the archaeological APE, must be evaluated for its eligibility for listing in the NRHP as an archaeological site. This site is not within the current boundaries of the Evergreen Negro Cemetery at all but consists of the area that was forsaken as a burial ground and reclassified as a road ROW. The National Register defines an archaeological site as a "place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains" (National Register Bulletin 36; Little et al. 2000). [redacted] As this section of the cemetery had been abandoned ca. 1960, it just exceeds the minimum date requirement of 50 years of age or older. If the probable dates of internment are taken into consideration, a few additional decades can be added to the abandonment date.

As an archaeological site, the area must have the potential to yield important information to the study of prehistory or history to be eligible under Criterion D. Unless archaeological sites contain standing above-ground elements, they are not generally evaluated under Criteria A-C. In addition, the site must have sufficient integrity to produce important information to be considered eligible. Generally, cemetery grounds that have been "substantially disinterred" do not meet these standards of integrity, unless other considerations apply (Potter and Boland 1992:19).

The cultural material documenting the 33 grave locations [redacted] comprise the archaeological evidence of a cemetery in this area. Most of these locations contained burial remnants indicative of a disinterment of the body. Three of these locations contained evidence of intact burials. Artifactual evidence recovered during the survey investigations indicates these burials were conducted after 1900, likely no earlier than 1890 and up to 1950. The burials appear to follow twentieth century practices with the remains housed in a casket style wooden burial container and the body in a supine east-west alignment with the head facing west. When the disinterment took place, all associated monuments, grave decorations, and landscaping were removed as well, substantially and permanently altering the appearance of this portion of the cemetery. The most direct way to correctly identify the individuals previously buried there was also lost. In terms of overall information potential of the remaining dataset, the sample size of burials is small and largely incomplete, with little intact provenience data. Therefore, the site does not have sufficient integrity to yield unique information on twentieth century burial practices of African American communities in urban environments. ***The site is not recommended as eligible for NRHP listing under Criterion D. As the archaeological site does not have any above-ground elements, it is not considered eligible under NRHP Criteria A-C.***

5.2 SAL Evaluation

Cultural resources, including archaeological sites, historical properties, and cemeteries, can be nominated as an SAL if the resource resides on land owned by the State of Texas or a political subdivision thereof (TAC §191.092). The abandoned section of the Evergreen Negro Cemetery, within

[redacted] the current cemetery, is owned by the City of Houston, a political subdivision of the State of Texas. This area is also within the archaeological APE for the Project and must be evaluated for its eligibility as a SAL.

The TAC contains provisions for evaluating archaeological sites for SAL nomination in addition to verifying the existence of a cemetery (TAC §26.10a, b). The archaeological investigations have documented and confirmed interments [redacted] that are associated with the Evergreen Negro Cemetery. Human remains, burial containers, and associated burial goods were all located in subsurface contexts the median. Thus, the median, as well as the area covered by Lockwood Drive, are part of an abandoned cemetery, as defined by the Texas HSC (§711.001) and the TAC (§25.1).

In addition, the abandoned portion of the cemetery falls within the definition of an archaeological site as "any land or marine-based place that contains material remains of past human life or activities in their original or historical context that are at least 50 years of age" (TAC §25.1). An archaeological site is eligible for official SAL designation if the site contains unique and culturally significant information in a preserved context. The criterion for evaluating a SAL is slightly different than the criteria for evaluating a cultural resource for the NRHP. In addition to overall information potential and integrity, eligible SALs may include unique or rare resources, resources that can contribute data for research theories or methods of preservation, and resources that are at risk for vandalism or relic collecting. The five criteria used for evaluation as an SAL are as follows (from TAC Title 13, Part 2, Chapter 26, Subchapter C, Rule §26.10a). One or more of these criteria can be used for evaluation:

1. the site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;
2. the site's archeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;
3. the site possesses unique or rare attributes concerning Texas prehistory and/or history;
4. the study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge; and
5. there is a high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to ensure maximum legal protection, or alternatively, further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected.

Previous investigations of historical African American cemeteries have been conducted in Harris and surrounding counties, including the Pioneer Cemetery, New Home Cemetery, Third New Cemetery, and Phillips Memorial Cemetery (**Table 5-2**). In addition, work at the Freedman's Cemetery in Dallas has been the vanguard of historical African American cemetery research in the state (and elsewhere), providing a wealth of information. Investigations into the five cemeteries listed above have produced excellent analyses, including African American mortuary trends and changes over time, socioeconomic indicators of the community served by the cemetery, the overall health and potential occupations of the interred, demographic data collection and analysis, and African American

resistance strategies to the dominant Eurocentric culture over the past 160 years. The potential dataset at the abandoned portion of the Evergreen Negro Cemetery is smaller compared to these resources, both in terms of the number of burials that can be used in skeletal comparative analysis as well as their overall preservation and integrity, but the potential dataset is no less capable of providing new and important information.

Table 5-2 Summary of Neighboring Cemetery Investigations

Cemetery	African American?	No. of Burials Investigated	Burial Dates
Freedman's Cemetery, Dallas, Dallas County	Yes	1,157	1869-1907
Pioneer Cemetery, Brazoria County	Yes	23	Late 19th-early 20th century
Oscar Abstein Cemetery, Harris County	No	4	Late 19th century
New Home Cemetery, Sugar Land, Fort Bend County	Yes	24	1895-1960s
Third New Cemetery, Houston, Harris County	Yes	435+	Late 19th century
Phillips Memorial Cemetery, Galveston County	Yes	53	Late 19th-early 20th century
Evergreen Negro Cemetery, Harris County	Yes	33	1890-1970

Sources: Davidson 1999; Foster and Nance 2002; Broehm et al. 2004); Dockall et al. 1996; Tiné and Boyd 2003; Norment et al. 2016.

Although the overall potential dataset of the site is less robust compared to other resources in the same class, this resource is still part of a very small subset of historical cultural resources, both in terms of being a place to honor and remember the dead as well as one that served a disenfranchised minority group. As such, the site possesses rare attributes concerning Texas history, and a study of the site can contribute important scientific knowledge to burial practices of the African American community in Houston. In addition, preliminary information indicates that the internments within this section of the Evergreen Negro Cemetery span a slightly later time period than those previously investigated (with some possible overlap), and the information obtained could potentially track the changes in burial practices by Houston's Black community from the late nineteenth century (such as those in the Third New Cemetery) through the mid twentieth century (such as those at site 41HR1270, the abandoned section of the Evergreen Negro Cemetery). Research into the history of the site can also speak to the process of forced abandonment of minority public spaces in advance of major changes to the urban landscape from the development of the federal highway system. The fact that very little documentary evidence has been found concerning the history of the Evergreen Negro Cemetery indicates that archaeological data would provide the best available dataset for future research.

The abandoned portion of the Evergreen Negro Cemetery, site 41HR1270, is recommended eligible as a SAL. Site 41HR1270 is evaluated as having state-level information potential and is a unique or rare resource. Archaeological and historical investigations at the site can provide new information on several topics. For example, African American mortuary practices from the mid nineteenth century to the mid twentieth century could be traced through comparative analysis with other cemeteries. In addition, the Evergreen Negro Cemetery was a segregated burial ground separate from other radical and ethnic groups, rather than a subsection of a larger municipal cemetery. It was managed by the community it served, and more authentic African American burial customs and cemetery management may be expressed at the cemetery without oversight outside the community. Also, study of the cemetery and its history can be linked to the general history of the Fifth Ward and used to track its economic and social changes over time.

The requirements of the Texas HSC that pertain to cemeteries dictate that before any improvements to the Lockwood Drive ROW can take place, all the remaining burials must be removed and reinterred in a dedicated burial ground. Once complete, the cemetery's dedication will be removed, and the site will not be preserved for further research. The construction of Project components would then proceed within the APE. As such, this SAL-eligible resource will be affected by the proposed Project, and consideration must be given to the information potential of this resource. It is recommended that mitigation investigations are employed to disinter the identified burials and recover the most information possible prior to the removal of the cemetery dedication.

5.3 Texas Health and Safety Code

Several regulations under the Texas HSC apply to the portion of the Evergreen Negro Cemetery that is within the archaeological APE for the Project. In particular, the owner of a property, in this case the City of Houston, cannot make improvements that disturb the cemetery until the human remains are removed (HSC §711.010 a). To remove a cemetery dedication in order to use the land for improvements, the City of Houston must petition the district court for the removal of the dedication, and the court must agree that it is in the "public interest" to do so. All human remains must be removed either before or after the ruling and reinterred in a dedicated burial ground (HSC §711.010 b). Normally, a written order from the state registrar and district court is required, unless the graves are unmarked or if written consent is given by the cemetery organization, plot owners, and the individual's descendants. As these are unmarked graves, an archaeologist can remove them without a written order (HSC §711.0105 (a) and HSC §711.004 (f-1)).

Following these regulations as well as the regulations outlined in the TAC, the following actions have either been proposed or executed as of this writing:

- Notice of a newly discovered unknown or abandoned cemetery was filed with the Harris County Clerk on February 10, 2023. The county clerk will in turn notify the THC.
- A Draft work plan : 1) application for and issuing of a new Texas Antiquities Permit, 2) burial exhumation, 3) analysis of recovered material including human skeletal remains and associated burial artifacts, 4) additional archival investigations to determine the possible identity of the individuals removed from the median ca. 1960, 5) production of a full report

of findings, 6) reinternment of identified burials at the Evergreen Negro Cemetery, 7) curation of paperwork associated with the project and 8) inadvertently discovery plan. This work plan.has been prepared for review with this report for consideration of and consultation with the THC.

- Upon concurrence by the THC, the work plan will serve as the scope of work for anticipated conditions to be included in a new Texas Antiquities Permit that is required to be obtained prior to relocation of a SAL-eligible resource.
- The work plan will be approved by the project stakeholders before enacted, including the cemetery organization (Project RESPECT), the landowner (City of Houston), the project sponsors (Metro and FTA), the Harris County Historical Commission, and the THC.
- Reinterment of all remains, casket hardware, and burial goods will be conducted within the boundary of the Evergreen Negro Cemetery, at the direction of the cemetery organization.
- Documentation of the removal of remains will be provided in the petition to the district court.
- No construction activities will be conducted within the abandoned portion of the Evergreen Negro Cemetery prior to the THC Permit Approval and agreement on the approved work plan and ruling from the district court.

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METRORapid University Corridor

ARCHAEOLOGY MITIGATION WORK PLAN

Unmarked Burial Removal and Analysis at the Evergreen Negro Cemetery, Houston, Texas

Technical Report

September 2023

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Acronyms and Abbreviations

ACRONYM	DEFINITION
ACT	Antiquities Code of Texas
ADA	Americans with Disabilities Act
ADNA	Ancient DNA
AMWP	Archaeology Mitigation Work Plan
APE	Area of Potential Effect
BRT	Bus Rapid Transit
CAS	Center for Archaeological Studies
CMBS	Centimeters Below Surface
FTA	Federal Transit Administration
HSC	Health and Safety Code
LRT	Light Rail Transit
METRO	Metropolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
ROW	Right of Way
SAL	State Antiquities Landmark
SHPO	State Historic Preservation Office
SOW	Scope of Work
TAC	Texas Administrative Code
THC	Texas Historical Commission
TNRC	Texas Natural Resources Code

1 Statement of Purpose

The purpose of this Archaeology Mitigation Work Plan (AMWP) is to identify the primary parties involved and the roles they serve in the archaeological work for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, provide guidance on the process of coordination and review, and to discuss anticipated methods and procedures to mitigate effects to a portion of the Evergreen Negro Cemetery, designated as site 41HR1270, a State Antiquities Landmark (SAL)-eligible resource. This AMWP will guide future archaeological work prior to Project construction.

2 Management Summary

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are continuing the environmental review process for the Project in the City of Houston, Harris County, Texas. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

The purpose of this AMWP is to provide compliance with the Antiquities Code of Texas (ACT; Texas Natural Resources Code [TNRC], Title 9, Chapter 191) and its associated regulations (Texas Administrative Code [TAC] Title 13, Part 2, Chapter 26) by documenting mitigation measures to the Evergreen Negro Cemetery, a historic African American cemetery located in the Fifth Ward of Houston, an archaeological resource eligible for designation as a SAL. The resource is located within the Area of Potential Effect (APE) for the proposed Project, [redacted] Additionally, the provisions of the Texas Health and Safety Code (HSC; Title 8, Subtitle C, Chapter 711) relating to abandoned cemetery properties will be addressed with this AMWP.

3 Roles and Responsibilities

This section defines the roles and responsibilities of the parties involved in the coordination and implementation of the archaeological mitigation work for the Project.

- FTA—Providing funding in support of the Project. As the Lead Federal Agency for the project, the FTA is responsible for compliance pursuant to the National Environmental Protection Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA), as amended.
- METRO—Main project proponent and sponsor of the METRORapid University Corridor Project in the City of Houston. As a political subdivision of the State of Texas, METRO is responsible for compliance with the ACT.
- Texas Historical Commission (THC)/State Historic Preservation Office (SHPO)—The THC serves as the SHPO for Texas and will be referred to as SHPO throughout this document. The SHPO will be responsible for reviewing all project related reports and coordination documentation submitted in compliance with Section 106 of the NHPA and the ACT. Additionally, the SHPO will provide guidance to other parties involved in the archaeological work on the Project, where required and/or requested.

- Contractor—The Contractor is responsible for managing and/or overseeing archaeological studies associated with pre-construction and construction activities of the Project, as well as NEPA compliance. The Archaeological Firm will be a sub-consultant to the Contractor. METRO will initiate a procurement to hire a contractor in 2024.
- Archaeological Firm—Responsibilities include coordination of planned archaeological work, as well as conducting all archaeological work in compliance with standards and guidelines within the AMWP. Duties will include draft scopes of work, obtaining the necessary antiquities permits, producing reports and documentation of the findings of the archaeological work to be read and reviewed by the Contractor, FTA, METRO, and the SHPO, and to provide guidance and advice to the Contractor, FTA, and METRO regarding best practices and standards for all matters associated with the archaeological work. The selected archaeological firm will work closely with SHPO throughout the Project.
- City of Houston—As the landowner of the abandoned portion of the Evergreen Negro Cemetery, the City of Houston will serve as a consulting party in all negotiations between the Project sponsors and the regulatory agencies and will have the authority to propose, alter, or dismiss any aspect of the proposed mitigation plan that affects their property.
- Project RESPECT (Nonprofit Cemetery Management Organization)—Authorized by the Texas HSC to serve as the cemetery manager, this organization will serve as a consulting party in all negotiations between the project sponsors and the regulatory agencies and will have authority to adopt and enforce rules concerning the use, care, control, management, restriction, and protection of the cemetery.

4 Project Description

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate battery electric vehicles in dedicated, METRO-owned right of way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 4-1. Figure 4-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other METRORail, METRORapid, and local bus services. Some stations would be incorporated into existing METRO

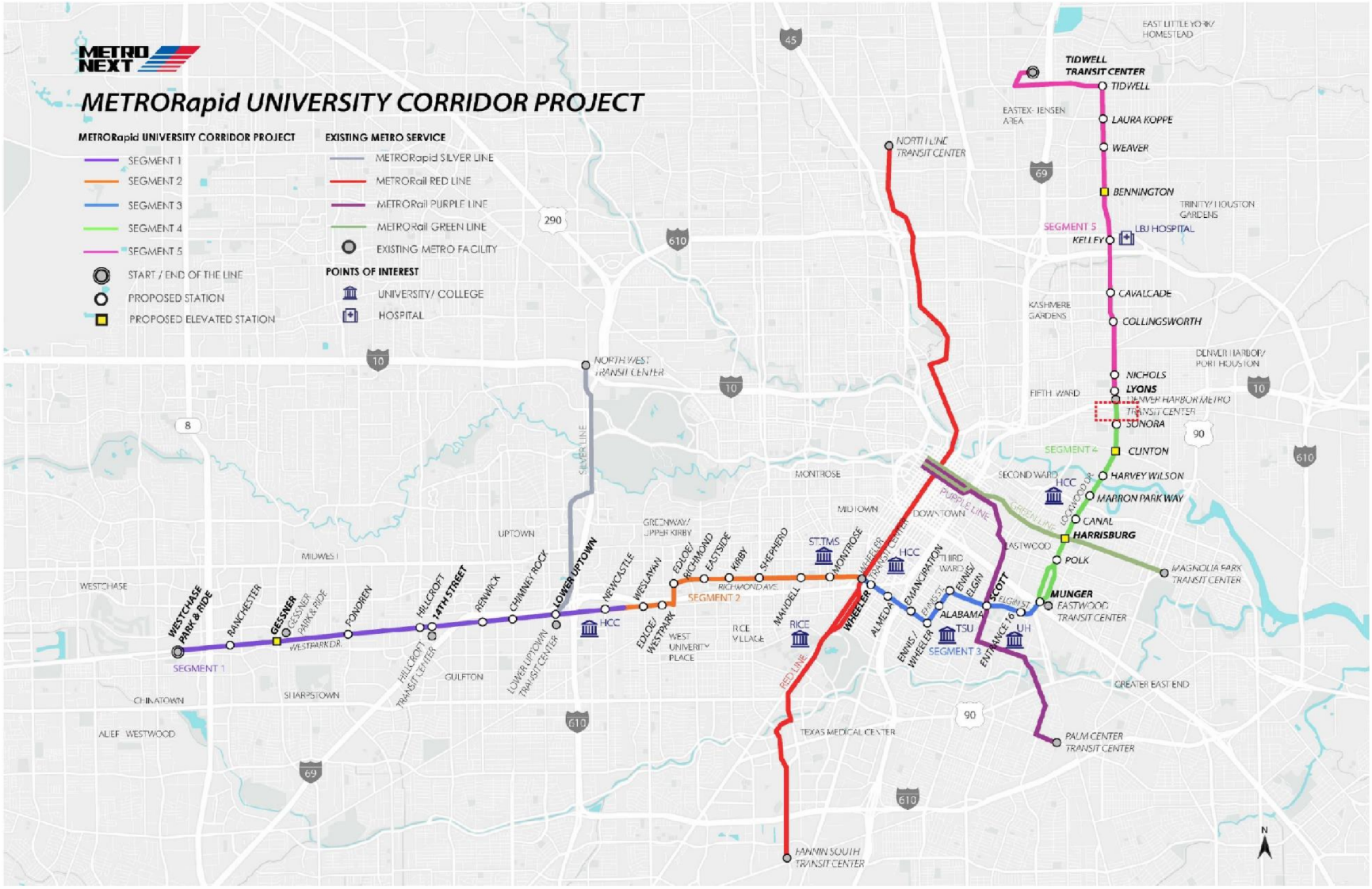
facilities. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

Project engineers expect the average depth of impacts to be between zero and five feet (0.0–1.5 meters), although much of the Project would be constructed at or above the existing ground surface. The maximum depths of impacts would be up to or beyond 80 feet (24.4 meters) where bridge piers and foundations would be built. Proposed stations would typically be constructed at or above the existing grade.

Table 4-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr at Union Pacific Railroad (UPRR) tracks east of Newcastle Dr
2	Westpark Dr at UPRR tracks east of Newcastle Dr	Richmond Ave at Main St (Wheeler Transit Center)
3	Richmond Ave at Main St (Wheeler Transit Center)	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit Center)
5	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit Center)	Tidwell Transit Center

Figure 4-1: University Corridor Proposed BRT Alignment



Note: Site 41HR1270 (Evergreen Negro Cemetery) is located at the northern edge of Segment 4 (in green) between Lyons and Sonora Stations

5 Archaeological Survey Investigations

[redacted]

Prior to the expansion, the burials within the road ROW and the median were exhumed and reinterred elsewhere. Unfortunately, the records of the exhumation and reinterment have not been located. Archaeological investigations were conducted to determine if burials had been overlooked during the reburial efforts. Trench scraping to locate potential unmarked burials and an archival review of historical impacts to the cemetery were conducted. Texas Antiquities Permit 30784 was issued for the work, with Mindy Bonine serving as Principal Investigator (METRONext 2023).

Fieldwork was conducted December 5–9 and 14–16, 2022. Archaeologists excavated 20 north-south-oriented trench scrapes throughout [redacted] system to the west. Representatives from Project RESPECT participated in a site visit during fieldwork. The investigations identified 33 localities that contain evidence of a burial. These localities included skeletal remains, burial container wood, hardware, or personal items associated with a grave. Of these, three localities contained sufficient skeletal material to be considered "probably intact" burials and one locality that contained a "partial" burial (**Figure 5-3**). These four localities were left in place at the conclusion of fieldwork. The entire survey area was given the archaeological site trinomial 41HR1270. Analysis of burial container hardware determined that the burials were conducted from about 1890 to the 1950s.

A historical map review and archival research was conducted in January and February 2023. The research focused on the installation and subsequent expansion of Lockwood Drive through the Evergreen Negro Cemetery, as well as the removal and reinterment of the human remains ca. 1960. Unfortunately, primary source material concerning the disinterment was not located, and only secondary source material was used in the cemetery's narrative history. According to the map review, Lockwood Drive bisected the cemetery sometime between 1929 and 1939. Afterwards, plans for the Lockwood Drive expansion appeared to correlate with the anticipated construction of I-10 to the north of the cemetery. These plans were in place by 1955. The dates when the disinterment and road construction took place appeared to occur on either side of 1960 (from about 1957 to 1963). No complete formal cemetery plat was found in the archival search, nor was a historical list of interments located. A listing of the individuals buried at the cemetery was compiled though a survey of remaining burial markers and a search of Harris County death certificates. It is unknown if any of these individuals were buried within the APE.

Figure 5-1: APE for the University BRT Line (in green and pink) Near the Evergreen Negro Cemetery on a USGS Topographic Map

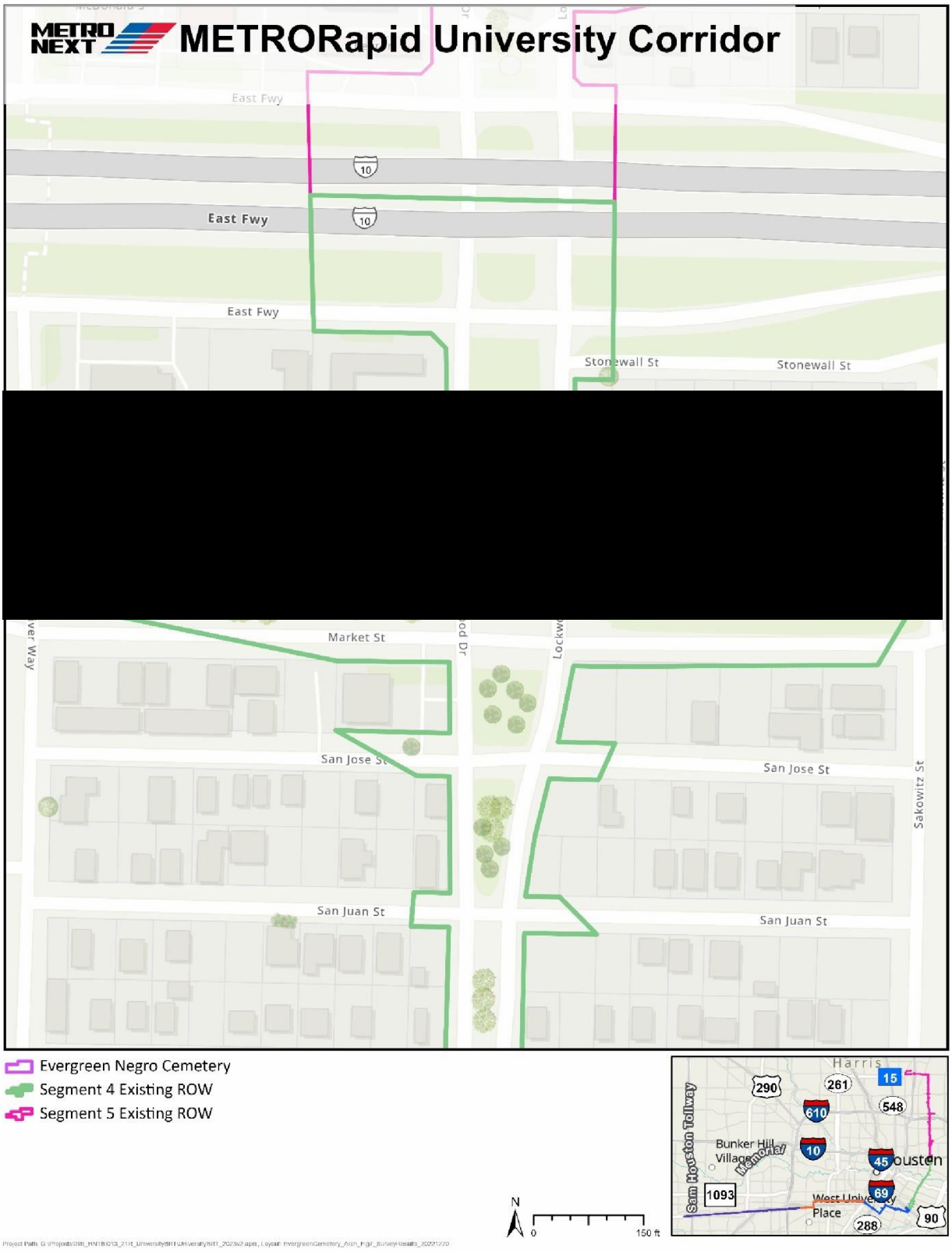


Figure 5-2: APE for the University BRT Line (in green and pink) Near the Evergreen Negro Cemetery on a Current Aerial Photograph

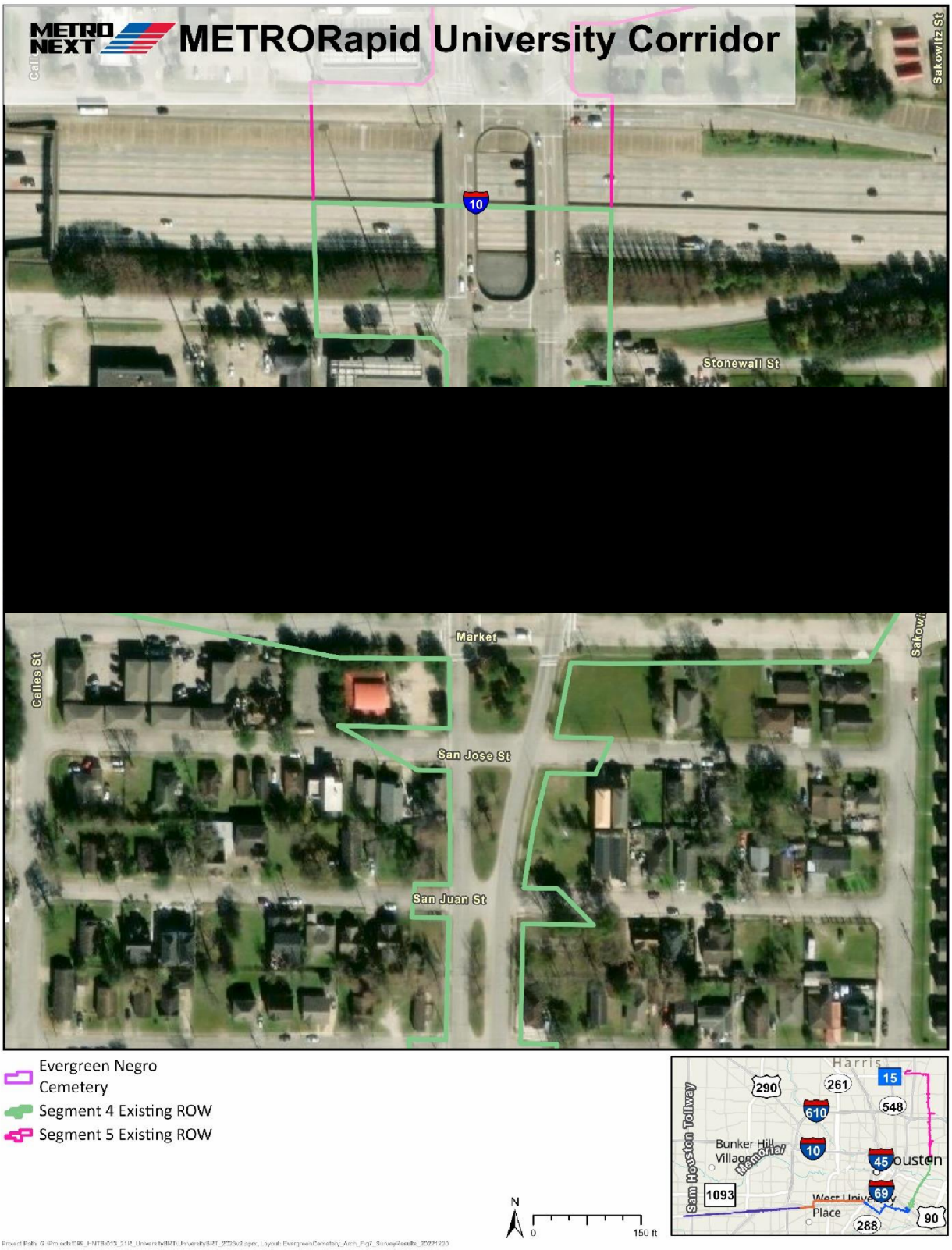
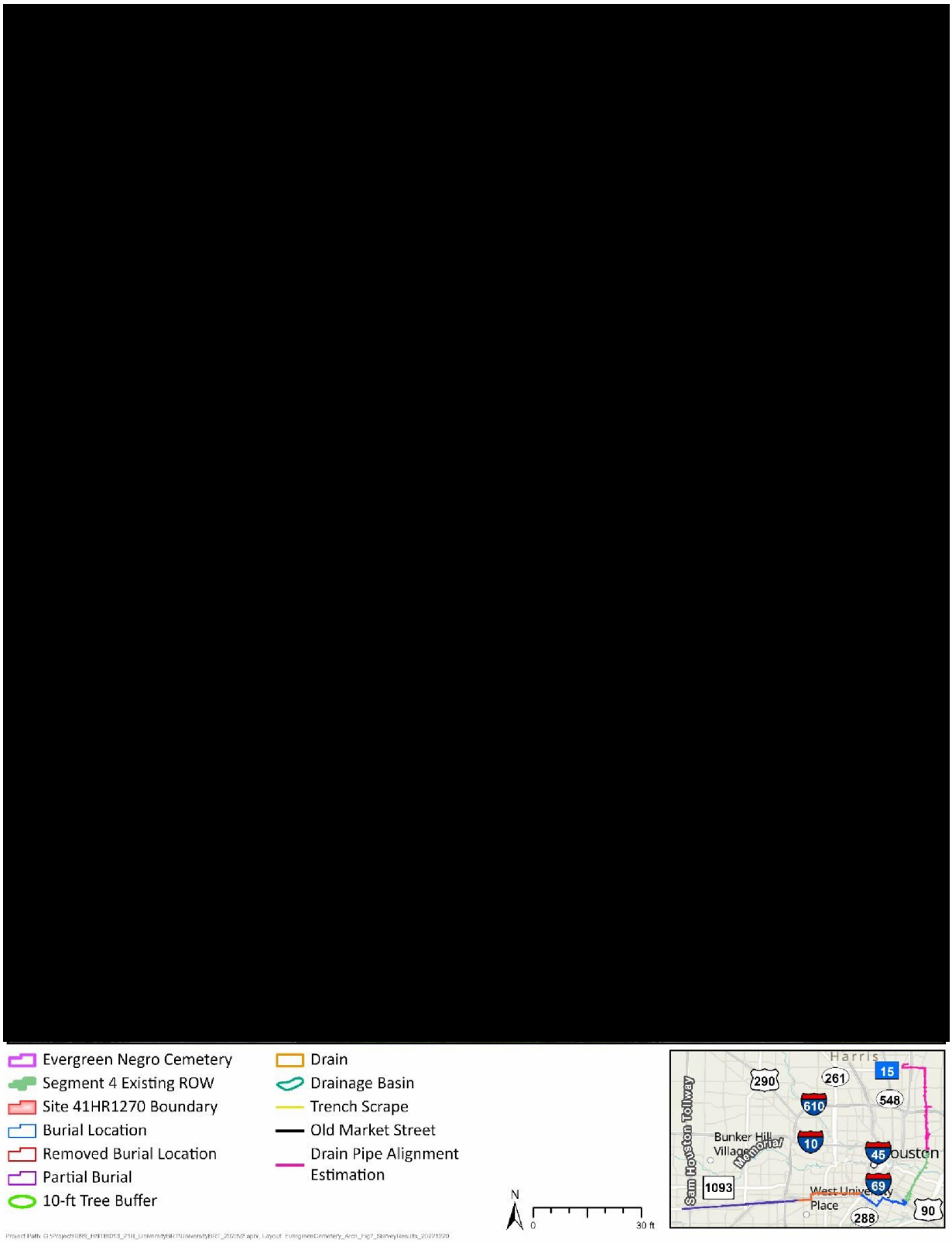


Figure 5-3: Results of the Archaeological Survey Investigations



6 Outcome of Investigations

The archaeological investigations documented and confirmed human interments [redacted] that are associated with the Evergreen Negro Cemetery. Human skeletal remains, burial containers, and associated burial goods were all located in subsurface contexts in the APE. Thus, [redacted], are part of an abandoned cemetery, as defined by the Texas HSC (§711.001) and the ACT (§25.1). In addition, the abandoned portion of the cemetery falls within the definition of an archaeological site and given the trinomial 41HR1270. The archaeological site has been recommended as eligible for designation as a SAL (see METRONext 2023) and the Project will affect the resource. As improvements to the land cannot occur within a cemetery boundary (HSC §711.010), the City of Houston has elected to petition the district court for a removal of the cemetery designation for the area. This action will involve the removal of the identified remains [redacted] and subsequent reinternment elsewhere at the Evergreen Negro Cemetery. Mitigation measures will be required to provide a respectful and permanent burial place for the individuals found in the APE and secure important information about African American burial practices in the late nineteenth and early twentieth centuries.

A "Notice of Existence of Abandoned or Unknown Cemetery" form was completed for this portion of the Evergreen Negro Cemetery and submitted to the Harris County Clerk on February 10, 2023. This form identifies the location and disposition of the abandoned section of the cemetery. The record was officially filed on February 15, 2023.

7 Archaeology Mitigation Work Plan

The following AMWP is designed to mitigate the effects to the abandoned portion of the Evergreen Negro Cemetery. Once approved, this AMWP will serve as the scope of work (SOW) that will be submitted along with a Texas Antiquities Permit application to the SHPO. The AMWP includes eight phases: 1) application for and issuing of a new Texas Antiquities Permit, 2) 100 percent investigation of the proposed new bus lanes within the ROW, 3) burial exhumation, 4) analysis of recovered material including human skeletal remains and associated burial artifacts, 5) additional archival investigations to determine the possible identity of the individuals removed from the median ca. 1960, 6) production of a full report of findings, 7) reinternment of identified burials at the Evergreen Negro Cemetery, and 8) curation of paperwork associated with the project.

7.1 Texas Antiquities Permit Application

Because the project will take place on land owned by a political subdivision of the State of Texas: City of Houston, and it is subject to the ACT, all fieldwork must be conducted under a Texas Antiquities Permit issued through the THC. The Archaeological Firm will prepare an Antiquities Permit application package that includes a permit application form and a proposed scope of work for the field investigations. The Archaeological Firm will provide draft/revised permit application packages to the Contractor, FTA, and METRO, based on the provisions of this AMWP. METRO and the City of Houston will be signatories on the permit application form as Project Sponsor and Landowner (respectively). Once the approved permit application package has the needed signatures, the Archaeological Firm will send the materials to the THC for review and presumed permit issuance.

7.2 100 Percent Survey

Archaeologists from the Archaeological Firm, experienced with bioarchaeology and/or human osteology and the identification, documentation, and treatment of human remains, will conduct an archaeological survey of the proposed bus lanes [redacted] This survey will remove 100 percent of the soil from the proposed bus lanes as defined by the 60 percent design plans. The investigations will be conducted with a backhoe or mini excavator to identify potential unmarked graves, including burial containers, human remains, and grave goods. Any evidence of a grave will be fully explored to determine the extent and content of the interment. The excavations will continue to the depth at which the investigators can determine that no burials are present, generally 80-120 centimeters below surface (cmbs). All objects associated with a burial will be documented, assessed, and collected. Collection will conform to the following rules: 1) burials that are found to contain non-trivial quantities of human remains will be treated as partly intact or intact burials—any such graves will be investigated with the same level of effort as outlined in Section 7.3 below, and 2) burial objects (with the exception of coffin/casket wood) found outside of an intact burial will be collected separately—any such burial objects will be assessed and possibly linked with the material previously collected. All collected burial objects will be reinterred along with the previously recovered material as outlined in Section 7.7 below.

This 100 percent survey may necessitate removal of existing trees or damage to the root systems of existing trees. In addition, this survey may also be conducted within areas that contain underground utilities. METRO will coordinate with the City of Houston departments responsible for the maintenance of heritage trees and underground utilities to receive appropriate approval for potential impacts to these resources from the survey team. Known underground utilities will be left in place, but the soil surrounding any utilities in the proposed bus lanes may be removed in the search for unmarked graves. Root systems and trees will be removed entirely within the investigation area.

7.3 Burial Relocation and Exhumation

Archaeologists from the Archaeological Firm, experienced with bioarchaeology and/or human osteology and the identification, documentation, and treatment of human remains, will travel to the project area to document the predominantly intact (n=3) and partly intact (n=1) burials uncovered during survey investigations. Any partly intact or intact burial uncovered in the 100 percent survey will also be documented using the same methods. All work will adhere to the Protocol for Protection and Treatment of Human Burial Remains (in Section 8 below). It is important to note that temporary privacy construction fencing with opaque sheeting will surround all field investigations for the duration of fieldwork until the trench and any associated excavations are backfilled. Temporary fencing will not include any below-ground impacts and will rest on grade. Any contact with the public and news media will be coordinated with the Public Information Officer representing METRO. The Archaeological Firm will record their field activities through notes, photographs, and with hand-held and/or GNSS/RTK GPS units.

The topsoil above the recorded burials will be removed via mechanical excavation. The mechanical removal of soil will terminate approximately 20 centimeters (cm) above the known burial depths, and the remaining material will be removed by hand. Once the burial container or any other burial

materials or human remains are revealed, the four burials will be archeologically investigated to fully delineate their location, maximum extent, and their composition, including biological profile estimation. All human remains and funerary objects shall be carefully delineated using manual archaeological techniques and shall be recorded in the field and laboratory in accordance with professional standards for archaeological documentation and shall include photographs, drawings, and notes. The human remains will be documented with sketch maps in plan view, and their vertical and horizontal position will be captured with a GNSS/RTK GPS unit. Location data will be tied into permanent datum points. Archaeologists will use soft brushes and tools to expose any skeletal elements for appropriate documentation.

All *in situ* burial-related materials that the archaeologists encounter during field investigations will be field-recorded in a respectful manner and to the extent necessary for sufficient field-level documentation. Analysis of remains will include a biological profile estimation, skeletal and burial pit measurements, burial arrangements, and macroscopic examination of the skeletal elements. Notes will be taken to document identifying attributes of each burial on specifically designed field forms. Photography of encountered burials will be permitted to assist in post-field documentation only. The information from photographic data will be converted to hand-drawn depictions. At no time will photographs of the human remains be presented in any published material. Digital files and prints will be destroyed after they have been converted to hand-drawn depictions.

The Archaeological Firm will water screen 100 percent of the backdirt from the hand excavations to locate artifacts and evidence of human burials (e.g., wood fragments, nails, bone, clothing, etc.). The soil within a given burial will be screened through 1/8-inch hardware mesh. Screening stations will be set up near the trench backdirt and the hand excavated soil will be manually loaded onto the screens for processing. Any finds associated with burials, including bone, coffin wood, coffin hardware, and associated artifacts, will be air dried on trays and collected in muslin bags that will be marked with their associated segment. At the discretion of the Principal Investigator, soil from the torso will be collected for flotation in the laboratory.

Once recorded, each burial's contents will be given provenience codes, spatially identified on maps, and removed in an order that will best preserve the fragile material. Unless the Principal Investigator determines it is necessary for subsequent skeletal analysis, no in-field preservation techniques (plaster casts, resin casts, or wholesale removal of dirt blocks) will be conducted. The skeletal remains will be separated from the more robust burial container hardware and grave goods to protect the integrity of the bone. The burial assemblage will be stored in muslin bags in a dedicated hard-side bin. The Archaeological Firm will temporarily store all the recovered material in a temperature- and humidity-controlled and secure location. Only the Principal Investigator and Senior Analyst will have direct access to the material.

Once removed, all burial locations will be mechanically backfilled, and the median will be returned to its pre-field state as closely as possible. The locations of the burials will not be marked in any way on the ground surface.

7.4 Analysis of Recovered Material

Archaeologists from the Archaeological Firm, who are specialists in human osteology, will conduct the analysis of the human remains recovered from both the survey investigations, the burial exhumation, and the 100 percent survey described above. The analysis will meet or exceed professional standards for osteological analysis in accordance with Texas Administrative Code, Chapter 22.5 and Section 711.0105 (a, b, and c) of the Texas HSC and following the guidelines set forth by Buikstra and Ubelaker (1994). All remains will be inspected with a boom microscope under at least 10x magnification. If preservation is sufficient for analysis, the osteological analysis will document the following:

- Presence and preservation of skeletal element, including proximal, medial, and distal components,
- Sex estimation,
- Age estimation,
- Stature estimation,
- Ancestry estimation,
- Cranial and post cranial measurements,
- Non-metric traits,
- Dental inventory, morphology, pathology, cultural modifications, and measurements,
- Pathology, spinal osteophytosis, degenerative joint disease,
- Evidence of trauma, and
- Entheseal changes.

These metrics will be used to determine the age, sex, stature, ancestry, trauma/disease, potential occupation, and possible diet of the individuals. The remains will be photographed for documentation and curation purposes. Radiographs and/or CT scans will be taken if needed for documentation and differential diagnosis of pathology, trauma, diet, etc.

The Senior Osteological Analyst with the Archaeological Firm will select skeletal samples with the greatest potential to return a viable ancient DNA (aDNA) sequence. Samples will be submitted, extracted, and tested for the presence of aDNA. One round of sequencing may be required to insure sufficient aDNA is present for use in comparative analysis. A reputable DNA laboratory will be contracted to process the samples. The analysis will include a classification of age, sex, ancestry, and disease characteristics. Once obtained, the aDNA sequence will be curated with the field documentation and provided to Project RESPECT (or other designated nonprofit cemetery management organization) for their use. A program of comparative analysis with living individuals will not be included in this AMWP.

Any soil collected from the torso area will be sent through floatation machine to collect light fraction and heavy fraction organic material. These samples will be analyzed for small bone fragments, surviving soft tissue, and potential fetal material. In addition, evidence of parasites will be investigated, which will provide a clue to overall body health. In addition to the osteological analysis, the bioarchaeologist shall collect data and make observations pertaining to historical mortuary practices.

The analysis of the associated burial container hardware and any grave goods will be conducted by a senior archaeologist with experience in historical cemetery archaeology. Burial container hardware will be identified as to type, material, design, period of manufacture, and possible cost through comparison with coffin and casket trade catalogs and other archaeological assemblages. Burial container wood species, which may indicate the price-ranking of the container, will be identified by a macrobotanical expert analyst. Associated burial goods will be researched as to type, material, design, period of manufacture, and association with known African American burial practices in the late nineteenth to early twentieth century.

7.5 Archival Research

At this time, the burials are considered unmarked. No evidence of above-ground monuments or identification markers have been found around the graves. However, it is possible that the identity of the individual may be revealed through the process of delineating the burial and subsequent skeletal analysis. If such an identification is possible, the Archaeological Firm staff will conduct archival and genealogical research to find descendants or family members of the individual. If found, these individuals will be contacted by either the Archaeological Firm or the nonprofit cemetery management organization (Project RESPECT) for their input as to the eventual disposition of the human remains along with the City and State agencies, per HSC regulations (Sec. 711.002).

In addition, the survey investigations revealed additional avenues of research to determine the possible family names of those interred at the Evergreen Negro Cemetery but were removed prior to the cemetery expansion. Specifically, preliminary deed research identified the names of some of the families that signed over their claim to plots in the median, but additional property records research is necessary to follow the chain of title. In addition, descriptions of the Evergreen Negro Cemetery include references to Ordinance #60-1760 of the City's Real Estate Development notes, and the identity of the funeral home (Johnson Funeral Home) that received the city contract to do the exhumation (Beverly 2005). An archival researcher will conduct the property records search of the names identified, attempt to locate the ordinance in question, and contact the funeral home to determine if they have retained any records of the exhumation. The results of this research will be included in the reporting phase.

7.6 Report of Findings

Once all earth-disturbing activities are complete and backfilled, and the analysis of the skeletal material and associated artifacts are completed, the Archaeological Firm will prepare a full report to document the results following the State's published reporting standards. The draft report will be reviewed and approved by the FTA, METRO, the City of Houston, and Project RESPECT. The approved report will then be sent in electronic format to the SHPO for review and regulatory approval. Upon report acceptance, the Archaeological Firm will send electronic copies of the final report to the SHPO following permitting requirements.

7.7 Reinterment of Burial Material

After the Archaeological Firm has fully documented all exhumed burials and analyzed the skeletal remains and associated artifacts, they will collect all the burial material from secure, temporary storage for reburial at the Evergreen Negro Cemetery. The reburial process will be coordinated with

Project RESPECT, the City of Houston, and METRO, to ensure a meaningful and respectful treatment of the remains. Burial boxes with an approved design will be constructed for each burial, and all reburials will take place in one ceremony. The skeletal material, burial container hardware, wood fragments, and grave goods for each grave will be combined in the same burial box. New graves will be excavated mechanically and backfilled after the ceremony. Burial markers will be placed on the ground surface at the new grave location(s).

7.8 Curation

The Archaeological Firm will curate all field photographs, field documents, analysis sheets, illustrations, and the final report at Texas State University's Center for Archaeological Studies (CAS) following the requirements of the issued antiquities permit. All photographs of human remains will be deleted from the collection before curation. No artifacts or skeletal material will be curated, all such material will be reburied as part of the reburial phase of the project.

8 Protocol for Protection and Treatment of Human Burial Remains

Historical human burials and cemeteries shall be treated according to provisions of the Texas HSC (Title 8, Subchapter C, Chapter 711) in addition to the requirements of the ACT. These laws require that any and all exhumation, handling, treatment, and reburial of human burial remains be done with dignity and respect for the individual.

All fully exposed human remains will immediately be covered with light-weight plastic sheeting and reburied under a shallow blanket of soil to prevent unnecessary exposure until fieldwork is completed. Locked temporary privacy construction fencing with opaque sheeting will be erected around the project area to secure the site. The City of Houston and METRO will ensure that the discovery site is secured and protected from damage or vandalism 24 hours per day, every day until the burial remains have been disinterred and secured in locked storage. Individuals or groups not directly involved with the archaeological investigations should not be allowed to view, handle, or photograph human remains, unless authorized by the SHPO, in consultation with the City of Houston and Project RESPECT.

Human remains not associated with the known four burials marked for burial relocation and exhumation may be identified during fieldwork. If confirmed human remains or funerary objects are discovered *outside of the grave delineation area*, all ground-disturbing work at that location will stop and the SHPO will be notified. Upon this notification, the Principal Investigator will notify appropriate METRO and City of Houston officials of the discovery and request assistance in developing a plan for the appropriate and respectful identification, analysis, and treatment of these human remains.

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APPENDIX C-4 – Section 4(f) Evaluation Report

METRORapid University Corridor

Section 4(f) Evaluation Report

Final Technical Memorandum

October 2023



HNTB

METRO NEXT

Version History

Date	Ver. No.	Section(s) Affected	Description of Changes
6/23/23	1.0	All	Initial submission to FTA
9/21/23	2.0	All	Resubmittal to FTA Responding to PMOC Comments
10/10/23	3.0	All	Resubmittal to FTA Responding to FTA Comments
10/20/23	4.0	All	Resubmittal to FTA Responding to FTA Comments
11/22/23	5.0	All	Resubmittal to FTA Responding to FTA Comments

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Acronyms and Abbreviations

ACRONYM	DEFINITION
AC	Acres
ACEP	Agricultural Conservation Easement Program
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BRT	Bus Rapid Transit
CE	Categorical Exclusion
COH	City of Houston
CFR	Code of Federal Regulations
DHHS	Department of Health and Human Services
EO	Executive Order
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GIS	Geographic Information Systems
H-GAC	Houston-Galveston Area Council
HISD	Houston Independent School District
HPARD	City of Houston Parks and Recreation Department
LPA	Locally Preferred Alternative
LWCA	Land and Water Conservation Fund
METRO	METROpolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OWJ	Official(s) with Jurisdiction
ROW	Right of Way
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
TPWD	Texas Parks and Wildlife Department
TSU	Texas Southern University
TXDOT	Texas Department of Transportation
US	United States
U OF H	University of Houston
USDOT	US Department of Transportation
USGS	US Geological Survey

1 Introduction

The Federal Transit Administration (FTA) and the METROpolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in Harris County, Texas in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

This report summarizes documentation that METRO prepared to support determinations required to comply with the provisions of Section 4(f) of the Department of Transportation Act of 1966 (codified at 23 United States Code [USC] 138 and 49 USC 303, with implementing regulations at 23 Code of Federal Regulations [CFR] 774, and generally referred to as "Section 4(f)"); and Chapter 26 of the Texas Parks and Wildlife Code.

1.1 Section 4(f)

This Section 4(f) evaluation has been prepared in accordance with Federal Highway Administration (FHWA)/FTA regulations for Section 4(f) (23 CFR Part 774), FTA Standard Operating Procedure #18 for Section 4(f) Evaluations (2016), and the Section 4(f) Policy Paper (FHWA, 2012 adopted by FTA).

1.1.1 What is Section 4(f)?

Section 4(f) is a federal law that protects the following properties of national, state, or local significance:

- Parks and recreational areas of national, state, or local significance that are both publicly owned and open to the public,
- publicly owned wildlife and waterfowl refuges of national, state, or local significance that are open to the public to the extent that public access does not interfere with the primary purpose of the refuge, and,
- historic sites of national, state, or local significance in public or private ownership regardless of whether they are open to the public. See 23 U.S.C. § 138(a) and 49 U.S.C. § 303(a). If parks, recreational areas, or refuges are determined not to be properties of national, state, or local significance by the Official(s) with Jurisdiction (OWJ), and after review by FTA for reasonableness, then Section 4(f) does not apply. Historic sites listed on, or eligible for listing on, the National Register of Historic Places (NRHP) are significant properties for Section 4(f) purposes.

Section 4(f) specifies that FTA may only approve a transportation project that requires the use land from applicable properties as described above if:

- There is no prudent and feasible alternative to the use of that land and all possible planning to minimize harm due to the use has been included as part of the proposed project, or

- The FTA determines that the use of the property, including any measure(s) to minimize harm, will have a *de minimis* impact on the property, as defined in 23 CFR 774.17.

1.1.2 Section 4(f) Use Definitions

As defined in 23 CFR 774.17, the "use" of a protected Section 4(f) property occurs when any of the following conditions are met:

Permanent Use – A permanent use of a Section 4(f) property occurs when property is permanently incorporated into a proposed transportation project. This may occur as a result of partial or full acquisition of a fee simple interest, permanent easement, or temporary easement that exceeds regulatory limits.

Temporary Use – A temporary use of a Section 4(f) property occurs when there is a temporary use of property that is considered adverse in terms of the preservation purposes of the Section 4(f) statute.

Constructive Use – A constructive use of a Section 4(f) property occurs when a transportation project does not incorporate land from the resource, but the proximity of the project results in impacts so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (23 CFR 774.15).

1.1.3 *De Minimis*

The requirements of Section 4(f) are satisfied with respect to a Section 4(f) resource if it is determined by FTA that a transportation project would have only a "*de minimis* impact" on the Section 4(f) resource. The provision allows avoidance, minimization, mitigation, and enhancement measures to be considered in making the *de minimis* determination. The OWJ over the resource must be notified of the agency's determination. 23 CFR 774.17 defines a *de minimis* impact as follows:

- For parks, recreation areas, and wildlife/waterfowl refuges, a *de minimis* impact is one that would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f), and the OWJ has concurred with this determination after there has been a chance for public review and comment.
- For historic sites, *de minimis* impact means that FTA has determined, in accordance with 36 CFR 800, that either no historic property is affected by the project, or the project would have "no adverse effect" on the property in question. The OWJ must be notified that FTA intends to make a *de minimis* finding based on their concurrence with the "no adverse effect" determination under 36 CFR 800. This is usually done in the effect determination letter sent to the OWJ for their concurrence.

1.2 Chapter 26 of the Texas Parks and Wildlife Code

Chapter 26 of the Texas Parks and Wildlife Code limits a municipality's authority to approve programs or projects that require the use or taking of public land previously designated and used as a park or recreation area. Before taking or changing the use of park land or a recreation area, the municipality must first determine that:

(1) there is no feasible and prudent alternative to the use or taking of such land; and,

(2) the program or project includes all reasonable planning to minimize harm to the land, as a park, recreation area, scientific area, wildlife refuge, or historic site, resulting from the use or taking.

When a use is determined, a public hearing with a 30-day prior notification is required. Once comments are received the OWJ makes a determination under Chapter 26 that the requirements of the statute have been fulfilled.

1.3 Project Description

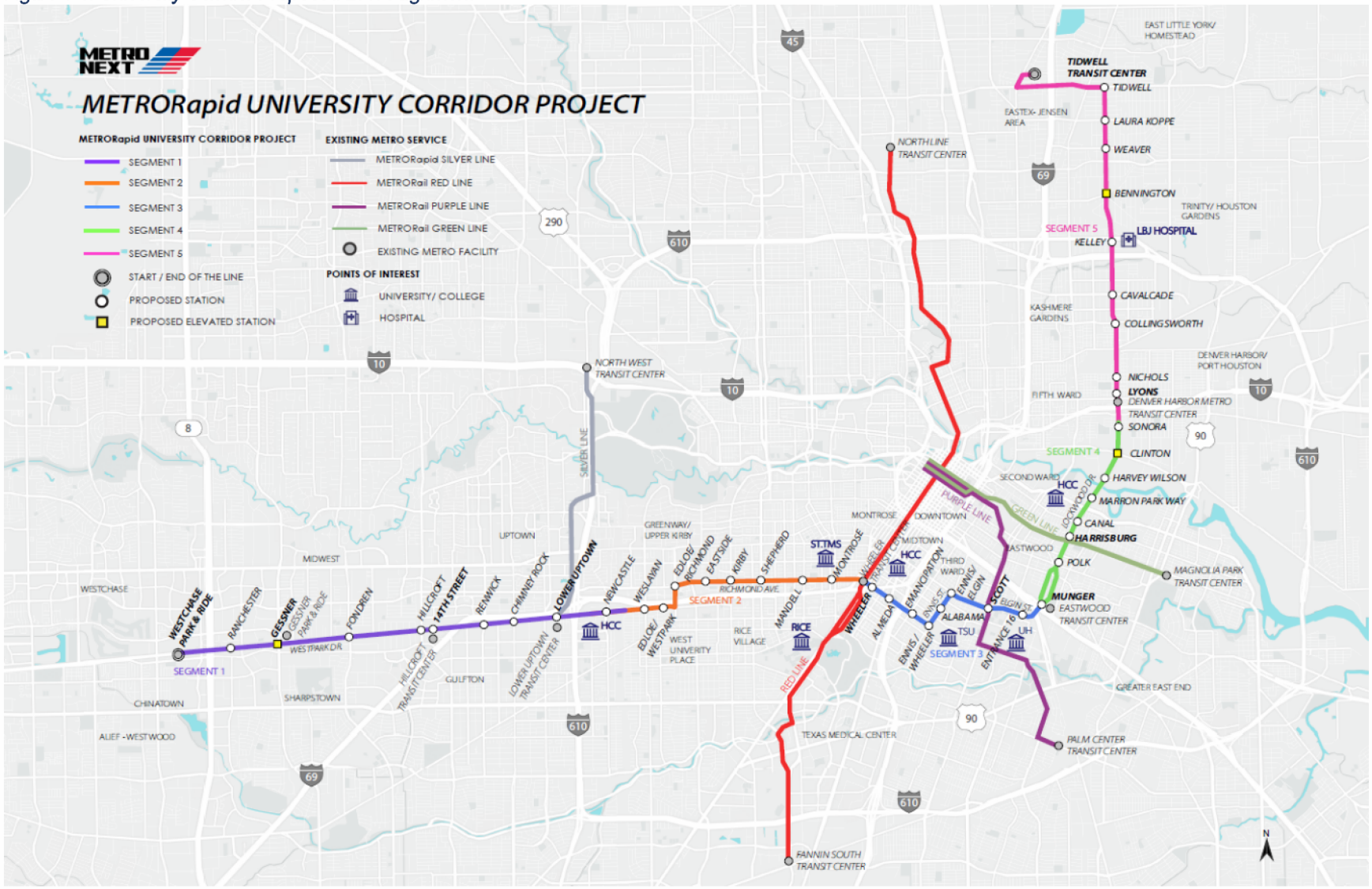
The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston (COH). The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in Table **1-1**. Figure 1-1 shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

Table 1-1: University Corridor Segments

Segment	Alignment	From	To
1A	Westpark	Westchase Park & Ride	West of I-69/US 59 south Frontage Road
1B	Westpark	West of I-69/US 59 south Frontage Road	Westpark Drive and Edloe Street Intersection
2	Edloe, Richmond	Westpark Drive and Edloe Street Intersection	Richmond Avenue, west of Spur 527
3	Richmond, Wheeler, Ennis, Elgin	Richmond Avenue, west of Spur 527	S Lockwood at I-45 NB (Eastwood Transit Center)
4	Lockwood	S Lockwood at I-45 NB (Eastwood Transit Center)	South of I-10 EB Frontage Road
5A	Lockwood	South of I-10 EB Frontage Road	North of Kelley Street
5B	Lockwood, Tidwell, Jensen	North of Kelley Street	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



Source: METRO 2021

2 Description of Section 4(f) Properties

METRO identified potential Section 4(f) properties within a ½-mile study area throughout the corridor. For protected parks and recreational areas, and wildlife/waterfowl refuges, METRO reviewed City of Houston Parks and Recreation Department (HPARD), Harris County, Houston Parks Board, and the Houston-Galveston Area Council (H-GAC) park inventory geo-database. For historic properties, METRO historians, meeting Secretary of Interior Professional qualifications, identified buildings, structures, objects, sites, or districts listed in or eligible for listing in the NRHP that possess historic significance and integrity per guidelines set by the National Park Service (NPS 1991: 1).

2.1 Consultation with Officials with Jurisdiction

FTA and METRO consulted with the City of Houston Parks & Recreation Department as the OWJ for parks and recreation areas, and the Texas Historical Commission (THC) as the OWJ for historic properties. Coordination with the OWJ included a review of Section 4(f) properties, the project's potential effects and/or proposed "use" of these resources, a review of planned sidewalk and ADA improvements, and conceptual engineering design plans.

2.2 Parks and Recreation Areas

Existing public park and recreational areas within ½-mile of the project alignment are shown in Figures 2-1a to 2-1e and are listed in Appendix A, Table A-1. This study area was used to examine all parks where a permanent, temporary, or constructive use could possibly occur. METRO identified 51 parks and recreation areas, including recreational trails, facilities, and publicly accessible school recreational sites. Their presence and condition were noted during field visits. No wildlife or waterfowl refuges were identified.

Parks eliminated from further evaluation included those that did not meet the definition of a Section 4(f) resource because they were either 1) not open to the general public[1] or 2) not considered of local, state, or national significance. One property, Danny Jackson Family and Dog Park, is not protected by Section 4(f) because the property is land owned by METRO for future transportation use and is leased to Harris County on a temporary basis for the park[2]. A copy of the deed that details the agreement between METRO and Harris County is contained in Appendix B. Another resource, Peggy's Point Plaza Park has been partially fenced off and is not available for use by the public. The HPARD has determined that the park is not a significant[3] park. A copy of correspondence with the HPARD regarding this determination is contained in Appendix B. The FHWA Policy Paper, adopted by FTA November 2012, Section 4(f), Section 3.1, states:

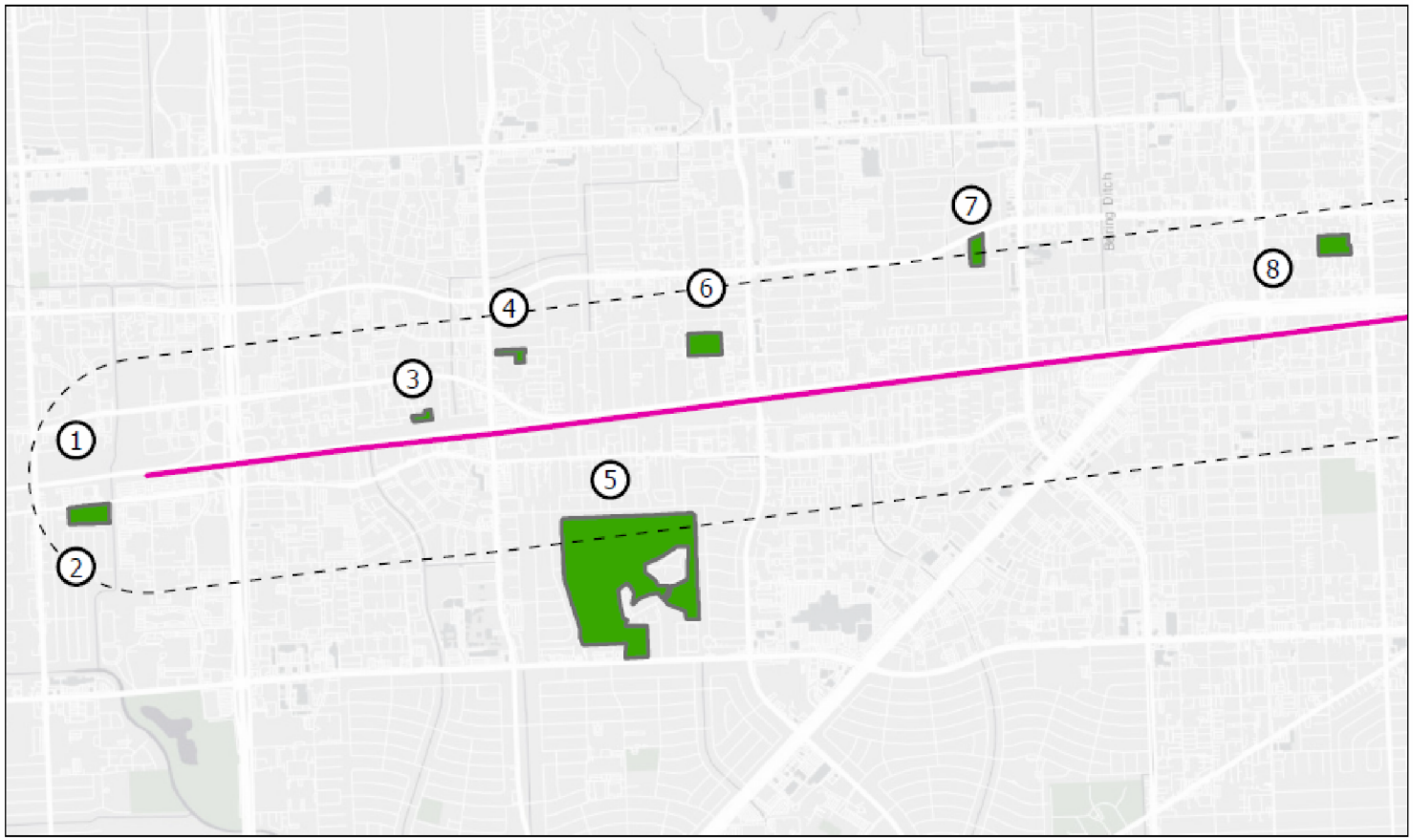
"A publicly owned park, recreational area or wildlife or waterfowl refuge must be a significant resource for Section 4(f) to apply (See 23 CFR 774.11(c) and Question 1A). Resources which meet

[1] FHWA Policy Paper on Section 4(f) (adopted by FTA November 2012) Question 1D

[2] FHWA Policy Paper on Section 4(f) (adopted by FTA November 2012) Question 27

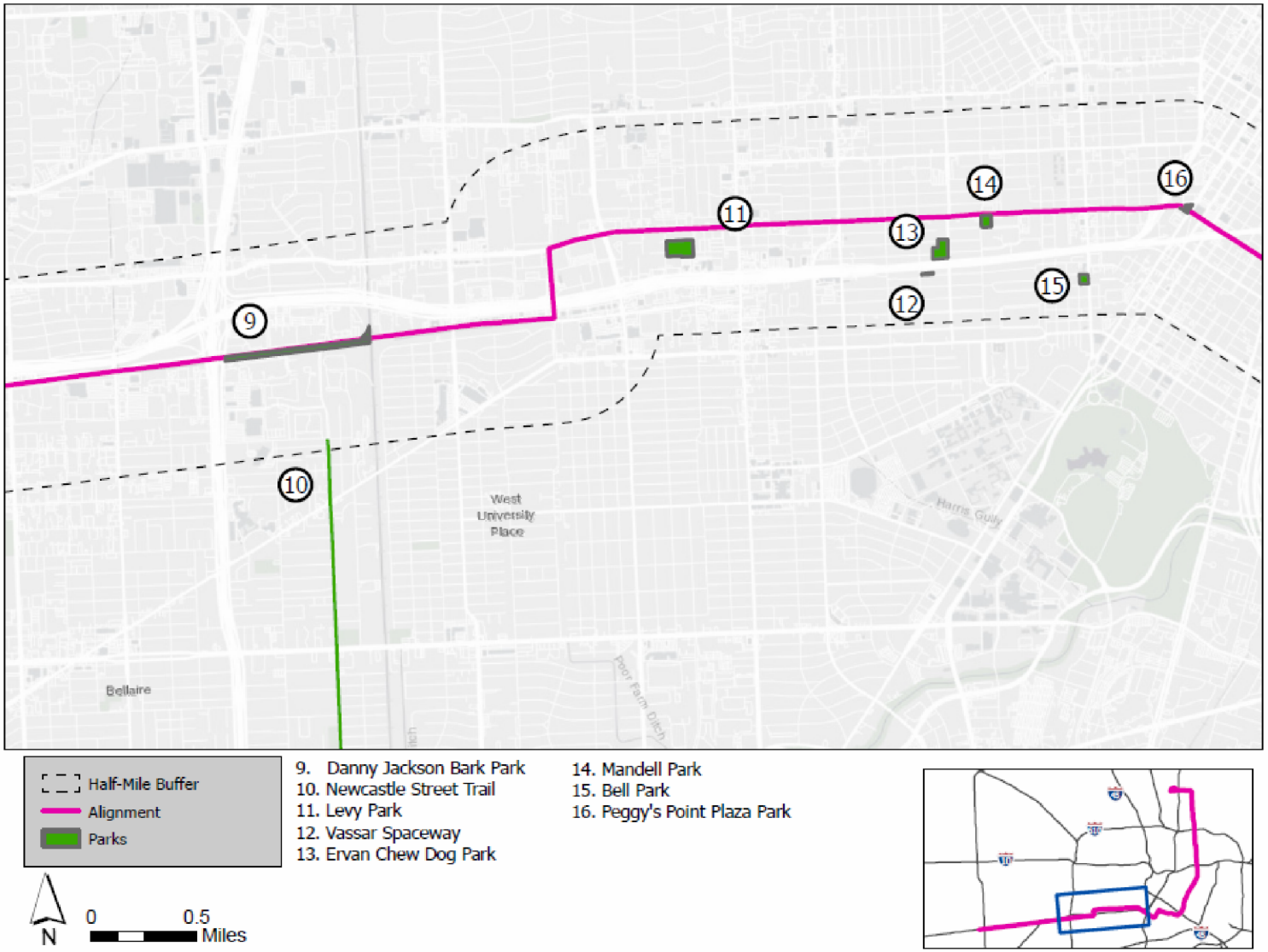
[3] FHWA Policy Paper on Section 4(f), Section 3.1 identification of Section 4(f) properties.

Figure 2-1a: Parks and Recreation areas in the Study Area



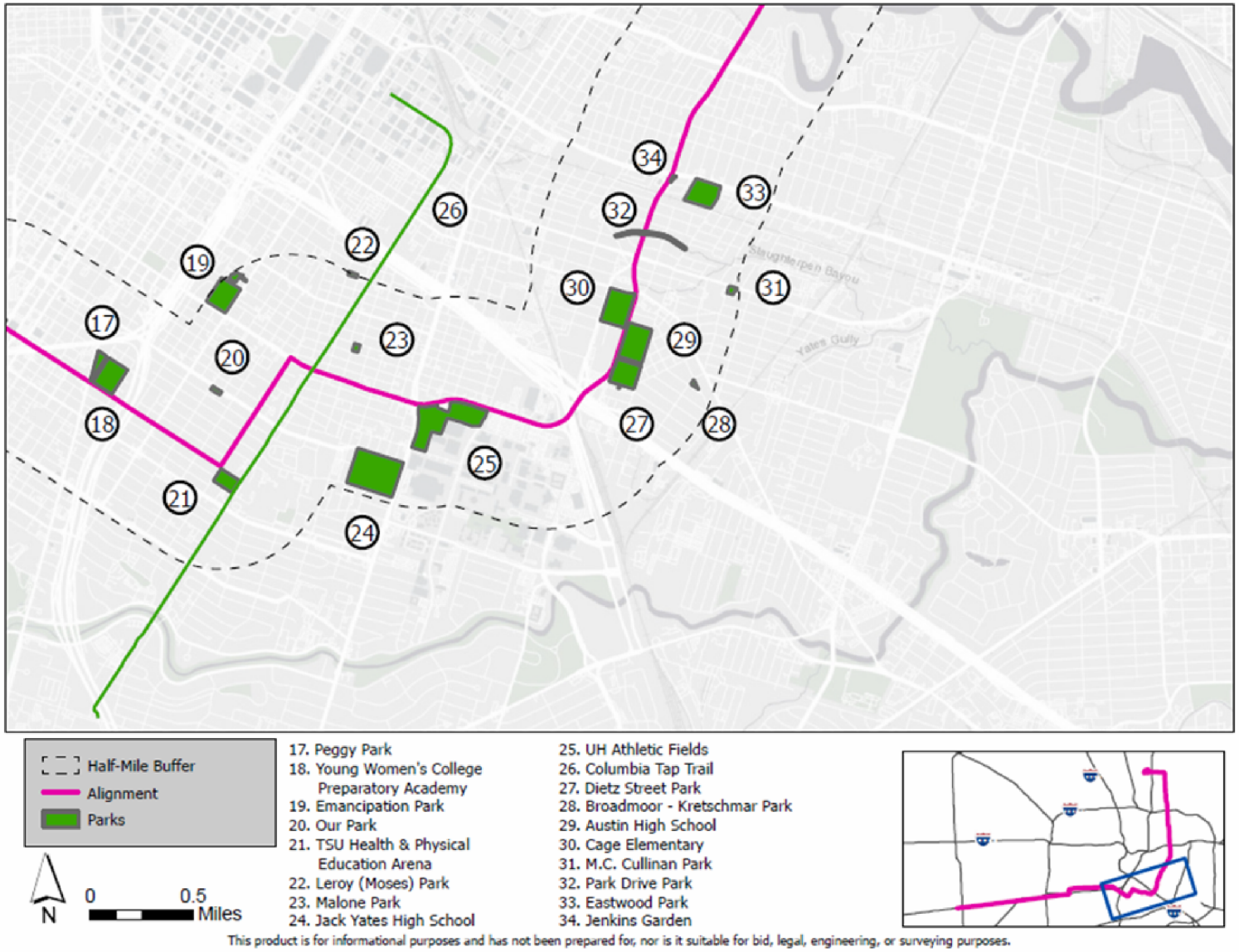
Source: City of Houston 2022; Harris County 2022; Houston Parks Board 2022; and H-GAC 2021.

Figure 2-1b: Parks and Recreation areas in the Study Area



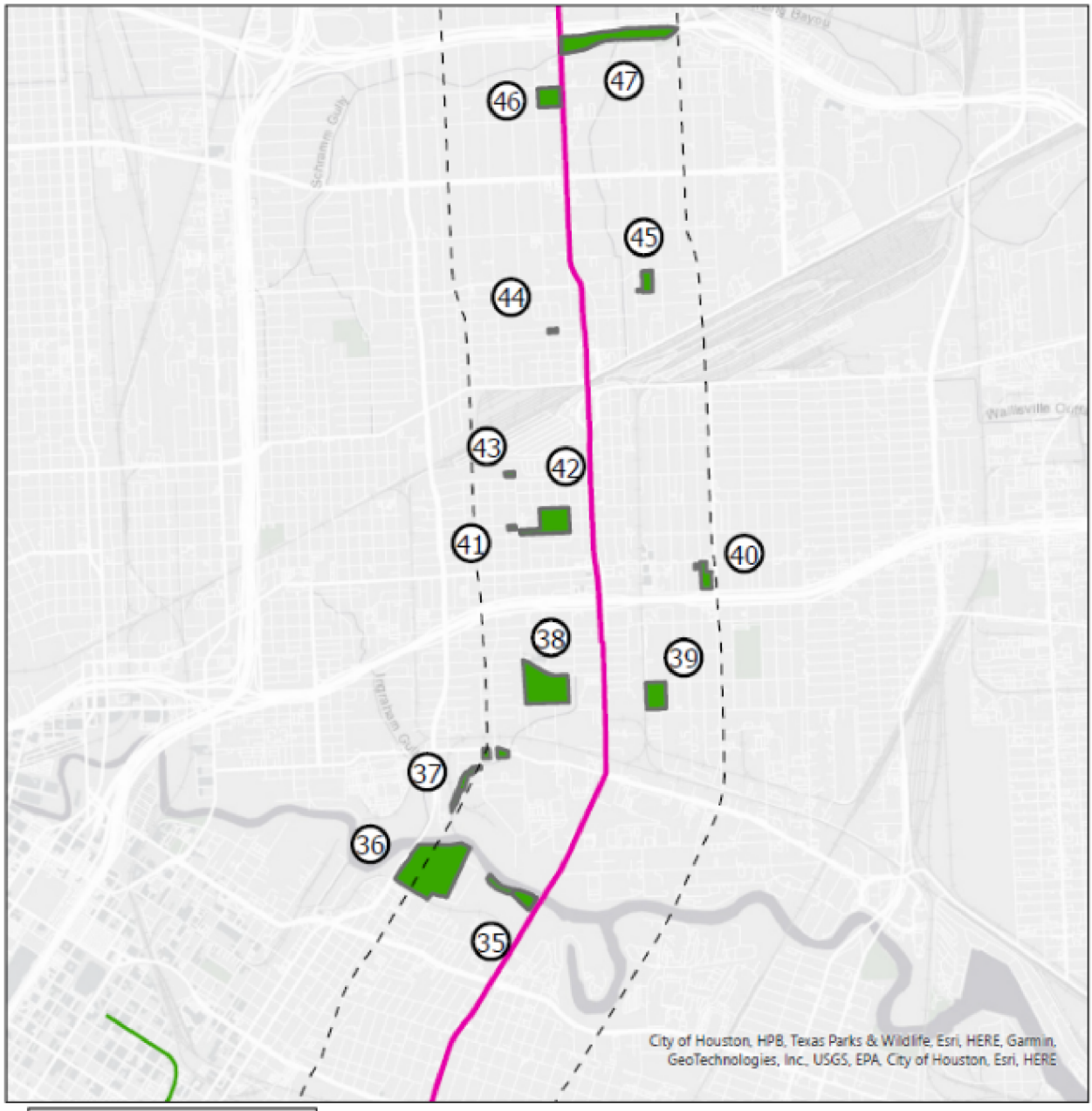
Source: City of Houston 2022; Harris County 2022; Houston Parks Board 2022; and H-GAC 2021.

Figure 2-1c: Parks and Recreation areas in the Study Area



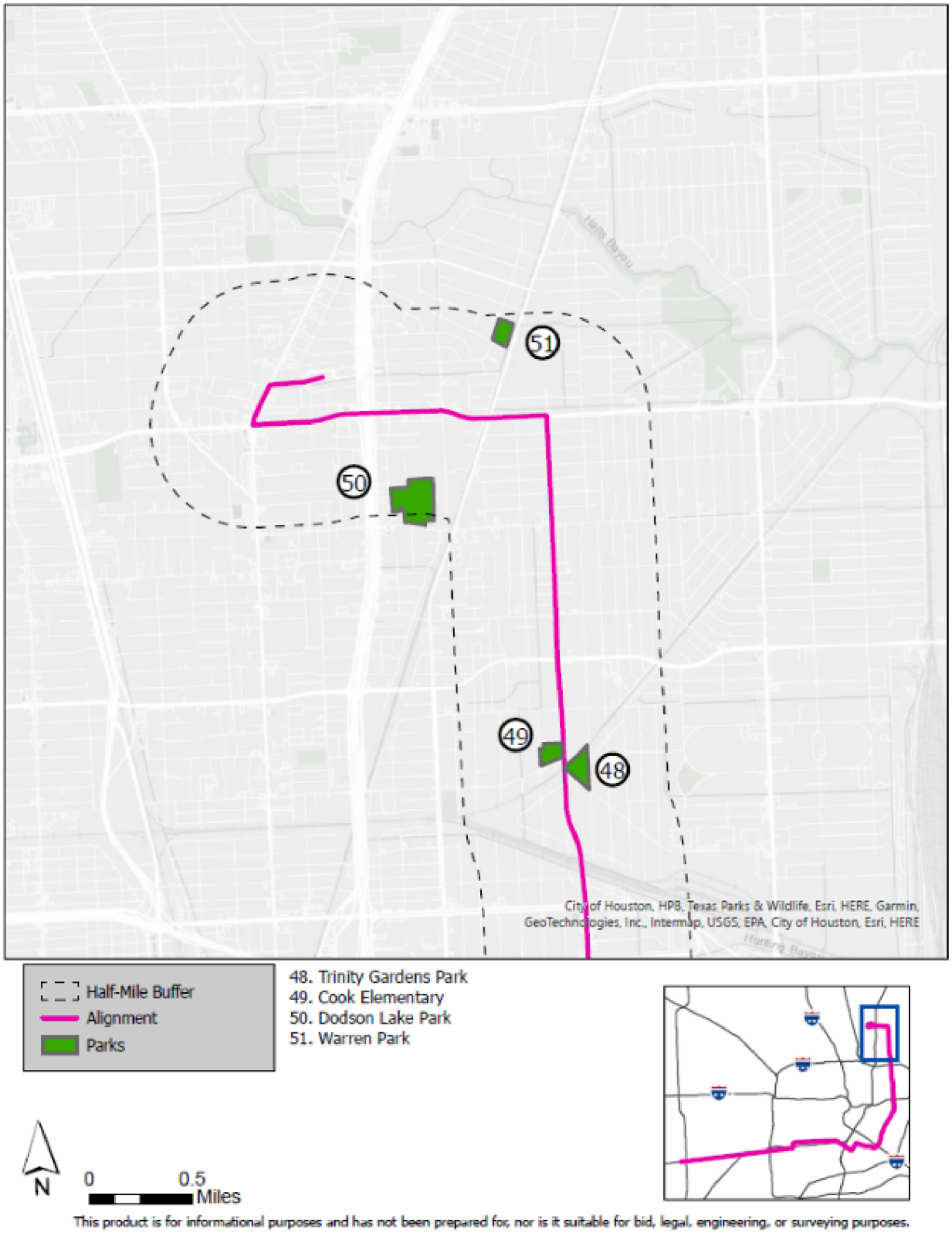
Source: City of Houston 2022; Harris County 2022; Houston Parks Board 2022; and H-GAC 2021

Figure 2-1d: Parks and Recreation areas in the Study Area



Source: City of Houston 2022; Harris County 2022; Houston Parks Board 2022; and H-GAC 2021.

Figure 2-1e: Parks and Recreation areas in the Study Area



Source: City of Houston 2022; Harris County 2022; Houston Parks Board 2022; and H-GAC 2021.

the definitions above are presumed to be significant unless the official with jurisdiction over the site concludes that the entire site is not significant."

The City has decided to sell the property. To sell the property, the HPARD must decommission the park so that it is no longer a park. The park is in the process of being decommissioned and, therefore, does not meet the definition of a significant resource and is not a protected Section 4(f) property.[4]

2.3 Historic Properties

FTA and METRO in coordination with the THC determined the area of potential effect (APE) of the Project as 100 to 150-ft., either side of the center line of the proposed alignment, 150-ft. around a point for bus stations, and 600-ft. around a point for transit centers. The APE is the extent where potential impacts would occur and captures potential constructive uses of Section 4(f) properties.

FTA and METRO, in consultation with the THC, identified two NRHP-listed resources and recommended 12 resources and two historic districts as eligible for listing in the NRHP. The THC concurred with the identification of historic properties and the potential effects of the undertaking on these properties based on the Historic Survey Report (June 2023) and Historic Survey Report Addendum (August 2023) in letters dated June 29 and September 9, 2023 contained in **Appendix B.**

The Evergreen Negro Cemetery is not eligible for the NRHP, but as suggested by the THC, the Evergreen Negro Cemetery will be treated as eligible. This treatment will provide the cemetery protection under the Section 106 regulations, 36 CFR 800, for construction activities within Lockwood Drive. No use, temporary or permanent, will occur and no acquisitions or easements are required from the cemetery. No construction activities will occur within the cemetery boundaries. Any sidewalk improvements will be made within existing public right-of-way. In the unlikely event that the design changes, and acquisitions are needed from the cemetery, consultation requirements will apply in the same manner as if the property were eligible for, or listed, in the National Register.

Table 2-1: National Register Eligible or Listed Historic Properties

Segment	Historic Resources
Segment 1	No resources are listed or recommended eligible.

[4] FHWA Policy Paper on Section 4(f) (adopted by FTA November 2012) Question 1A

Segment	Historic Resources
Segment 2	1836 Richmond Avenue is a Mission Revival style house eligible under Criterion C in the area of Architecture (TxDOT n.d.).
	3336 Richmond Avenue, is a New Formalism style building, designed by Neuhaus and Taylor, recommended eligible under Criterion C in the area of Architecture at the local level.
	3334 Richmond Avenue, is a New Formalism style building recommended eligible under Criterion C in the area of Architecture at the local level.
	3323 Richmond Avenue, is an Expressionism style building, designed by Neuhaus and Taylor, recommended eligible under Criterion C in the area of Architecture at the local level.
	3322 Richmond Avenue, is an International style building recommended eligible under Criterion C in the area of Architecture at the local level.
	3311 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
	3121 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
	3101 Richmond Avenue, is a New Formalism style building, recommended eligible under Criterion C in the area of Architecture at the local level.
Segment 3	Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy) at 1906 Cleburne Street was determined eligible for the NRHP under Criterion C in the area of Architecture (Mitchell and Pettis 2019).
	Third Ward Historic District. In 2019 the THC determined the district eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development and under Criterion C in the area of Architecture.
	Houston Negro Hospital at 3402 Ennis Street, S3 25a, is listed in the NRHP under Criterion A in the area of Ethnic Heritage/Black. The hospital and nursing school are on one parcel in the NRHP-eligible Third Ward Historic District.
	Houston School of Nursing School at 3402 Ennis Street, S3 25b, is listed under Criterion A in the area of Ethnic Heritage/Black and Criterion C in the area of Architecture. The hospital and nursing school are on one parcel in the NRHP-eligible Third Ward Historic District.
Segment 4	Eastwood Historic District. The THC determined the Eastwood subdivision is NRHP eligible under Criterion A for community planning and development as an intact streetcar suburban neighborhood and under Criterion C for its architecture, with boundaries generally corresponding to the original subdivision plat.
	Evergreen Negro Cemetery. This cemetery is not eligible for the National Register. Through consultation with THC, it has been determined that this cemetery will be treated as if it were eligible. This cemetery was the first African American cemetery in Fifth Ward, with the first recorded burial in 1887. However, the built environment surrounding the cemetery has changed over time, and no persons of note are buried in the cemetery.
	International Harvester Company (Texas Mattress Makers), 4901 Navigation Boulevard, Resource S4 61. International Harvester Houston Branch House represents the thriving economy of Houston and the investment of international firms into the economy during the Great Depression Era (1929-1941). Houston Branch House is recommended eligible under Criterion A in the area of Commerce at the local level of significance.

Segment	Historic Resources
	Western Electric Company (Harris County Sheriff Offices), 601 Lockwood Drive, Resource S4 62. The building at 601 Lockwood Drive was constructed circa 1948 and was occupied by Southwestern Bell Telephone Company, Western Electric Company, and Whole Electric Supplies. The Southwestern Bell Telephone Company building represents the thriving economy of Houston after World War II and is recommended eligible under Criteria A, in the area of Commerce at the local level of significance. The building is intact and a good example of the Art Deco style. The building is recommended eligible under Criterion C in the area of Architecture at the local level of significance.
Segment 5	Kashmere Gardens Elementary School, 4901 Lockwood, Resource S5 103, was an all-white school when it opened in 1949. Following a lawsuit by several Black families in 1960, the school became the first integrated school in Houston. It is recommended eligible under Criterion A in the area of Social History under the Civil Rights Movement at the local level of significance.

3 Use of Section 4(f) Properties

Tables 3-1 and 3-2 provide a summary of the assessment completed to confirm that, other than three *de minimis* impacts, no permanent or temporary use of a park, recreation area or historic property would occur, and that the proximity of the Project would not cause any effects (such as access disruption, noise, vibration, or aesthetic) that would substantially impair the features or attributes that qualify the resource for protection under Section 4(f) and, therefore, constitute a constructive use.

The only activities that would occur within the boundaries of Section 4(f) properties, would include the improvement of existing sidewalks to the City's current design standards included in the City of Houston Infrastructure Design Manual. These improvements will provide improved accessibility for disabled persons, as required by the ADA and for a sidewalks/shared use path to be constructed at the same time as the BRT to improve pedestrian safety, bicycle connectivity, and vehicular buffer distances.

3.1 Use of Parks and Recreation Areas

The 51 parks within the study area were evaluated for "use" as defined by Section 4(f). FTA determined three parks would have minor uses of park property to construct wider 6'-10' sidewalks within the boundaries of Mandell Park, Peggy Park, and Diez Street Park. These sidewalk improvements will bring the existing sidewalks up to the City's current design standards and improve pedestrian/bicycle and handicap access.

No property would be acquired from a park or recreation area for permanent incorporation into the Project, other than the *de minimis* impacts of the three parks for ADA improvements for sidewalks. Effects would be minimal and would not substantially impair the features or attributes that qualify any of the parks and recreation areas afforded protection; therefore, no constructive use would occur.

A construction activity right of entry will be granted by the HPARD for Mandell Park, Peggy Park, and Diez Street Park. The construction activities will be temporary and the OWJ has provided agreement that these activities would result in a *de minimis* impact (See Appendix B).

Table 3-1: De Minimis Impacts of Park and Recreation Areas

Segment	Name	Property Size (acres)	Location	Potential Impact Area (acres)	Total Property Impacted (%)
2	Mandell Park	1.71	1500 Richmond Ave, 77006	0.01	0.36%
3	Peggy Park	2.23	Almeda Rd, 77004	0.0065	0.29%
4	Diez Street Park	9.09	5825 Dumble St, 77023	0.03	0.38%

Source: METRO 2023

3.2 Coordination with City of Houston Parks and Recreation Department

FTA and METRO coordinated with the HPARD over the city-owned Section 4(f) properties described in this report during development and evaluation of the preliminary alternatives and refinement of the Locally Preferred Alternative. METRO and HPARD reviewed the proposed design and potential Section 4(f) park and recreational area uses to minimize impacts on these resources and provide for increased accessibility to the parks. HPARD supports the sidewalk improvements and have provided a letter concurring with FTA's *de minimis* impact determination for Mandell, Peggy, and Diez Parks. HPARD also confirmed that Peggy's Point Plaza is no longer significant and is being sold and transferred from park ownership.

3.3 Public Notification and Opportunity to Comment on Section 4(f) *De Minimis* Use of Parks

Section 4(f) regulations at 23 CFR 774.5 states that "public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document."

Approximately 20 in-person public meetings and two virtual ones have been held for the general public and interested citizens throughout the NEPA process to receive community input on the effects of the project. The public meetings have been accompanied by meetings with local organizations, neighborhoods, universities, and various stakeholders. METRO sought public involvement on property acquisitions and impacts in a series of public workshops in February and March 2023. During these meetings, maps showed the locations of sidewalk expansions and ADA improvements and included the three parks with minor *de minimis* impacts for sidewalk improvements. METRO posted the materials from these meetings on their website for further review and comment. Community coordination is ongoing, and METRO considers all public and stakeholder input as it refines the design of the Project to maximize transportation and community benefits. These efforts will continue during the engineering phase to further avoid and minimize impacts to Section 4(f) resources and private property.

Specific to the three parks with minor park METRO has posted HPARD's concurrence letter and figures 3-1a, 3-1b and 3-1c of this report illustrating the *de minimis* impacts to park resources on the project website. No comments have been received from the website posting. METRO has also included a presentation reviewing the sidewalk expansions and a public display board at design workshops held in 6 locations along the corridor between September 13th and the 20th. METRO received six comments pertaining to parks during the workshops. These comments included providing parking, needing improved sidewalks, access, including access for strollers, connectivity, road lanes and power lines. See below for comments received and their associated segment.

- "Need to ensure there is enough parking along Wheeler near Peggy. Lots of homes and I don't see parking for homeowners" Segment 3
- "Need improved sidewalks & access as this is a busy intersection (Almeda at Wheeler)" Segment 3
- "I want to wait for the BRT "in the park". How can Mandell Park connect more to the BRT station" Segment 3
- "Can you bury power lines as part of this project? Can the TIRZ or MMD help?" Segment 2
- "Please don't take away lanes at Mandell or Richmond" Segment 2
- "Don't forget about families with strollers" Segment 2

The Section 4(f) *de minimis* public notification was completed throughout the project, posted on the Project website, and the public was provided the opportunity for review and comment at the design workshops. These activities satisfy the federal requirement for a *de minimis* impact public notification for review and comment.

3.4 *De Minimis* Impact Determinations – Parks

The following three parks will have a minor amount of property permanently incorporated into existing sidewalks when the Project is constructed to provide for ADA improvements. Right-of-Entry to METRO contractors will be granted for construction but no acquisitions or easements will be granted.

3.4.1 Mandell Park

Mandell Park is a 1.24-acre park surrounded by Bonnie Brae, Mandell and Richmond Avenue in Houston's Museum District. The property was originally half residential (Bonnie Brae side) and half commercial (Richmond side). Amenities include a community garden, with a mixture of native plants, trees and grasses to attract birds and butterflies and a host of special features to attract visitors. It is used by the area residents and people from all over the city for events, picnics and a nice place to visit.

METRO contractors will obtain a right-of-entry to construct a proposed wider sidewalk and accessible ADA ramp to replace the existing sidewalk on approximately 0.01 acres (less than 1 percent of the total park area) along the sidewalk of the northern edge of the property (**See Figures 3-1a and 3-1b**). The Project will enhance the existing sidewalk and retain the use of the existing sidewalk, resulting in an enhancement providing improved pedestrian and bicycle access.

Consultation with the OWJ has confirmed that these temporary construction activities would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

Figure 3-1a: Mandell Park

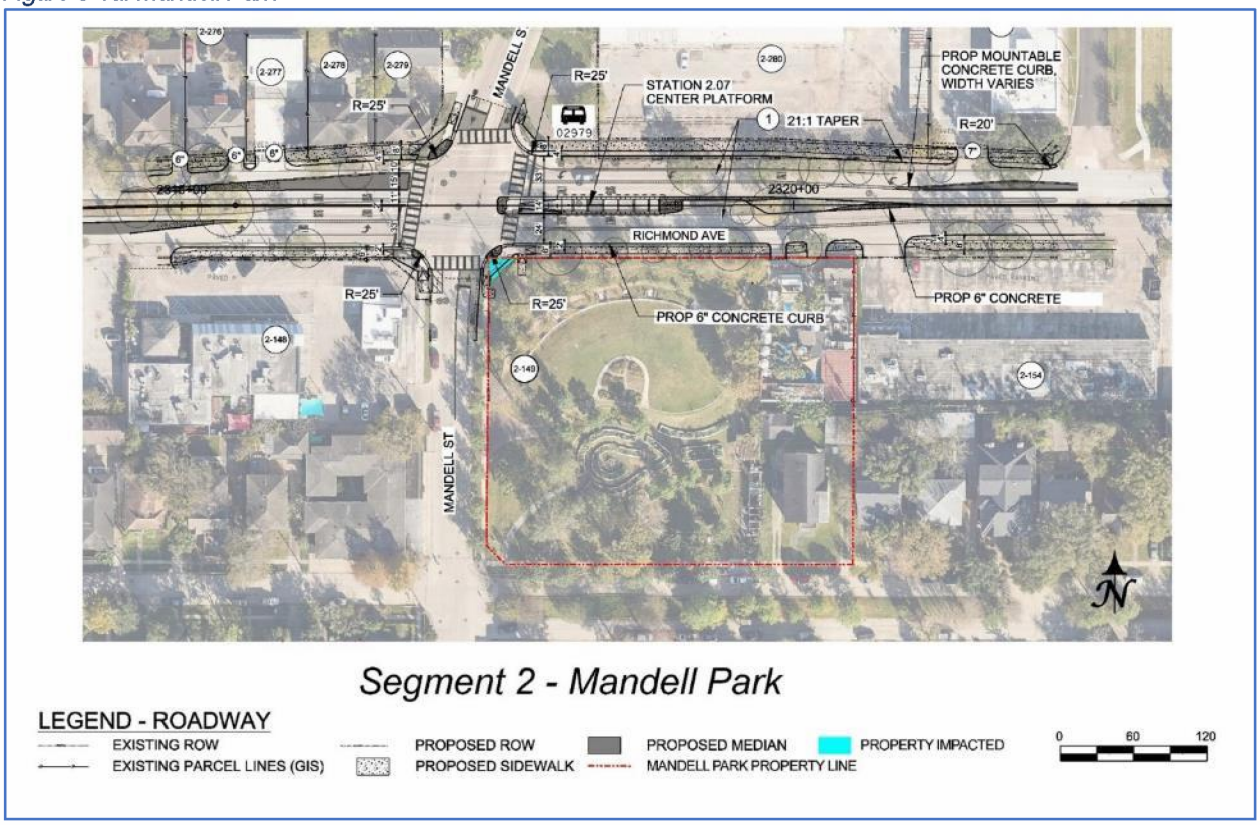
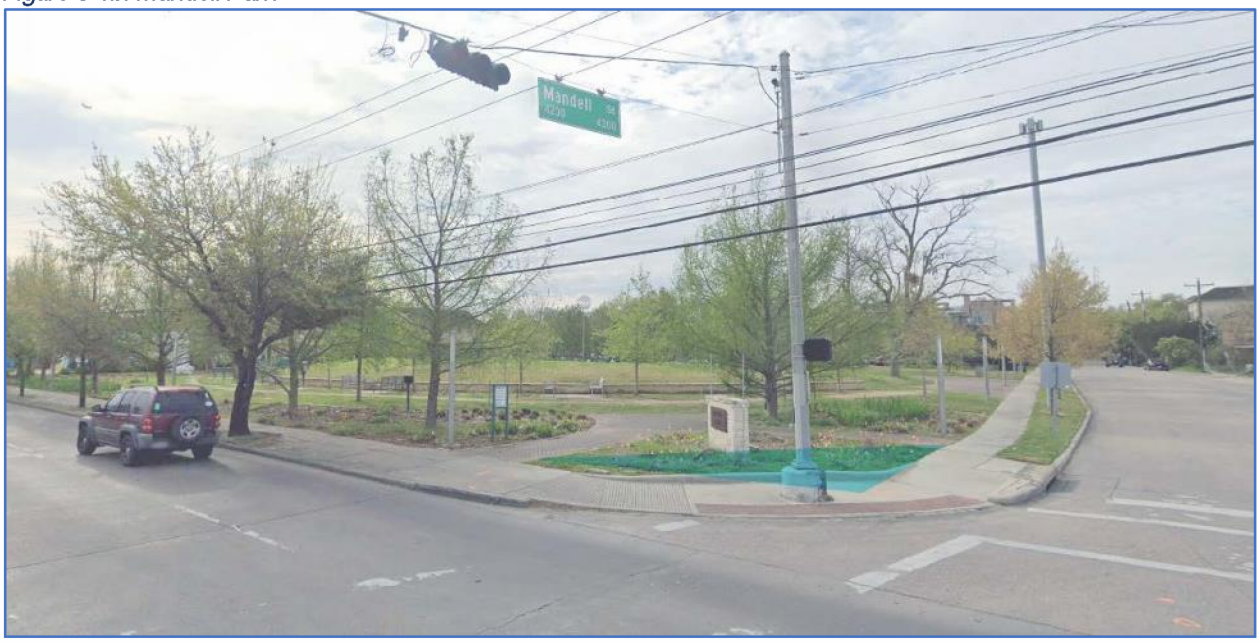


Figure 3-1b: Mandell Park



3.4.2 Peggy Park

Peggy Park is a 2.26-acre triangle shaped neighborhood park located at 4208 Chenevert Street, adjacent to the Project corridor. The park, which is just west of the Young Women's Preparatory Academy, features a children's playground, covered basketball court and picnic tables.

The Project would provide a proposed wider ADA-compliant sidewalk, which would replace the existing sidewalk affecting approximately 0.01 acres (less than 1 percent of total park area) along the northern edge of the property (**Figures 3-2a and 3-2b**). The new wider sidewalk would maintain pedestrian connectivity to the property. Consultation with the OWJ has confirmed that these temporary construction activities would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

Figure 3-2a: Peggy Park

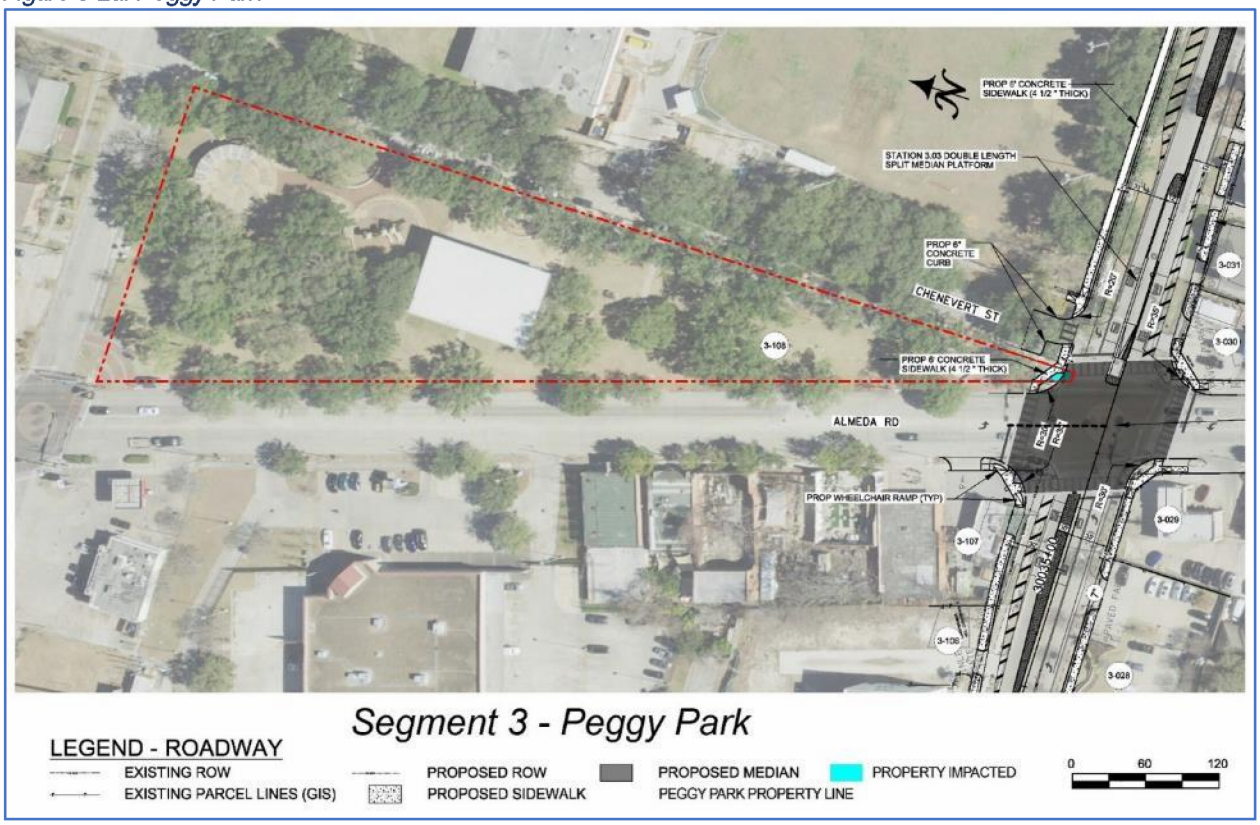


Figure 3-2b: Peggy Park



3.4.3 Diez Street Park

Austin High Baseball Stadium/Diez Street Park is a school recreational area located at 5825 Dumble Street/4700 Diez Street, south of the Stephen F. Austin High School main campus, adjacent to the corridor. The property is comprised of approximately 9 acres and contains several baseball fields, concession stands, and tables.

The Project would provide a new proposed shared-use path, which would replace the existing sidewalk. This larger sidewalk would be constructed on approximately 0.12 acres (1.31 percent of total park area) along the western edge of the property. **See Figure 3-3a and 3-3b**. Consultation with the OWJ has confirmed that these temporary construction activities would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

Figure 3-3a: Austin High Baseball Fields/Diez Street Park

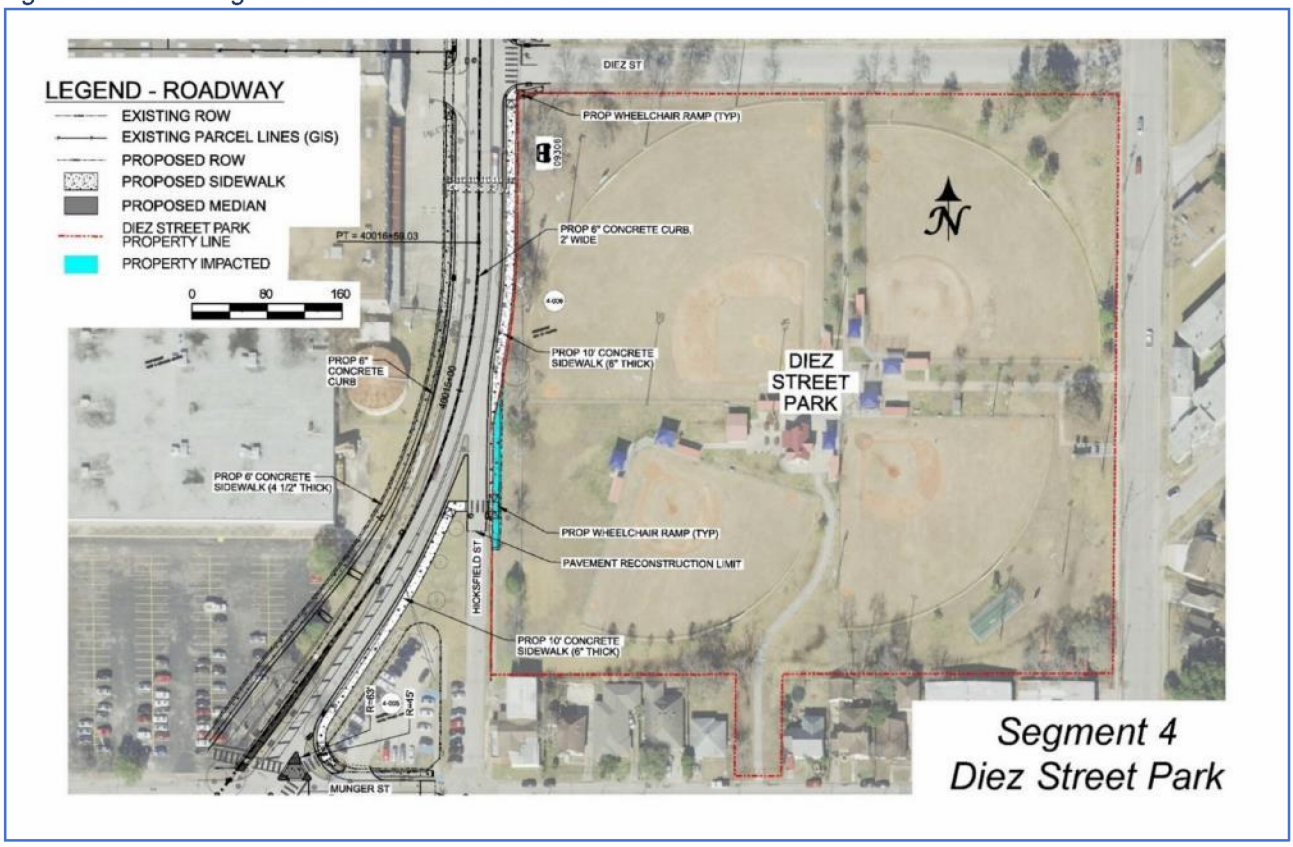


Figure 3-3b: Austin High Baseball Fields/Diez Street Park



3.4 4 Chapter 26 of the Texas Parks and Wildlife Code

Chapter 26 of the Texas Parks and Wildlife Code limits a municipality's authority to approve programs or projects that require the use or taking of public land previously designated and used as a park or recreation area. Before taking or changing the use of park land or a recreation area, the municipality must first determine that:

- "there is no feasible and prudent alternative to the use or taking of such land; and,
- the program or project includes all reasonable planning to minimize harm to the land, as a park, recreation area, scientific area, wildlife refuge, or historic site, resulting from the use or taking."

The HPARD has determined that the sidewalk expansions at Mandell Park, Peggy Park, and Diez Street Park will not require a use or taking of public land and therefore Chapter 26 requirements do not apply. METRO's contractors will receive a temporary right of entry to conduct the expansion of the perimeter sidewalks as shown in Figures 3-1a through 3-3c. The alternative to not widening the sidewalks is that the sidewalks would remain as they are and would not provide the benefit of more space for bicycles and wheelchairs and would not be ADA compliant. METRO coordinated with the HPARD in order to conduct all reasonable planning to minimize harm and reduced the impacts to parks to the greatest extent. All vegetation will be replaced within the parks to mitigate any vegetation loss that could occur during construction. HPARD coordination letters are included in Appendix B.

3.5 Use of Historic Properties

For historic properties, minor property acquisitions would be needed along sidewalks and the corners of streets to meet the City's current design standards. These acquisitions will require the purchase of minor amounts of right-of-way near existing sidewalks and streets. These improvements will provide improved accessibility for disabled persons, as required by the ADA and expanded sidewalks for a shared use path to be constructed alongside of the BRT on existing sidewalks to improve pedestrian safety, bicycle connectivity, and vehicular buffer distances. These minor acquisitions would not alter the characteristics that qualify each of the properties and/or districts for the NRHP. Effects are limited to minor acquisitions. No other direct or indirect impacts would result to historic properties.

Under Section 106 of the National Historic Preservation Act, FTA determined there would be No Adverse Effect to historic properties. THC concurred with this determination. FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions (See Appendix B and Table 3-2). The following section describes the acquisitions and effects for each historic property and METROs minimization of effects specific to each historic property.

Table 3-2: Section 4(f) Evaluation by Resource –Historic Properties

Segment	Name	Property Size (acres)	Location	Potential Impact Area (acres)	Total Property Impacted (%)	Determination
2	1836 Richmond Avenue	n/a	1836 Richmond Avenue	0	0	*No Use*
2	3336 Richmond Avenue	1.93	3336 Richmond Avenue	0.02	0.0087%	*De Minimis*
2	3334 Richmond Avenue	n/a	3334 Richmond Avenue	0	0	*No Use*
2	3323 Richmond Avenue	n/a	3323 Richmond Avenue	0	0	*No Use*
2	3322 Richmond Avenue	n/a	3322 Richmond Avenue	0	0	*No Use*
2	3121 Richmond Avenue	n/a	3121 Richmond Avenue	0	0	*No Use*
2	3311 Richmond Avenue	n/a	3311 Richmond Avenue	0	0	*No Use*
2	3101 Richmond Avenue	0.93	3101 Richmond Avenue	112	0.27%	*De Minimis*
3	Albert Sidney Johnston Jr. High School (Young Women's Preparatory Academy)	9.99	1906 Cleburne Street	.11	1.09%	*De Minimis*
3	Third Ward Historic District	5.66	Third Ward Historic District	.07	1.27%	*De Minimis*
3	Houston Negro Hospital	4.30	3204 Ennis Street	.06	1.46%	*De Minimis*
3	Houston Negro Hospital School of Nursing	Same as hospital	NW corner of Holman and Ennis Streets	Same as hospital	Same as hospital	*De Minimis*
4	Eastwood Historic District	2.55	Eastwood Subdivision Plat	.12	4.75%	*De Minimis*
4	Evergreen Negro Cemetery	4.80	5499 Market St	0	0	*No Use*
4	International Harvester Company (Texas Mattress Makers)	n/a	4901 Navigation Boulevard	0	0	*No Use*
4	Western Electric Company (Harris County Sheriff's Office)	n/a	601 Lockwood Drive	0	0	*No Use*
5	Kashmere Gardens Elementary School	5.0	4901 Lockwood	0	0	*No Use*

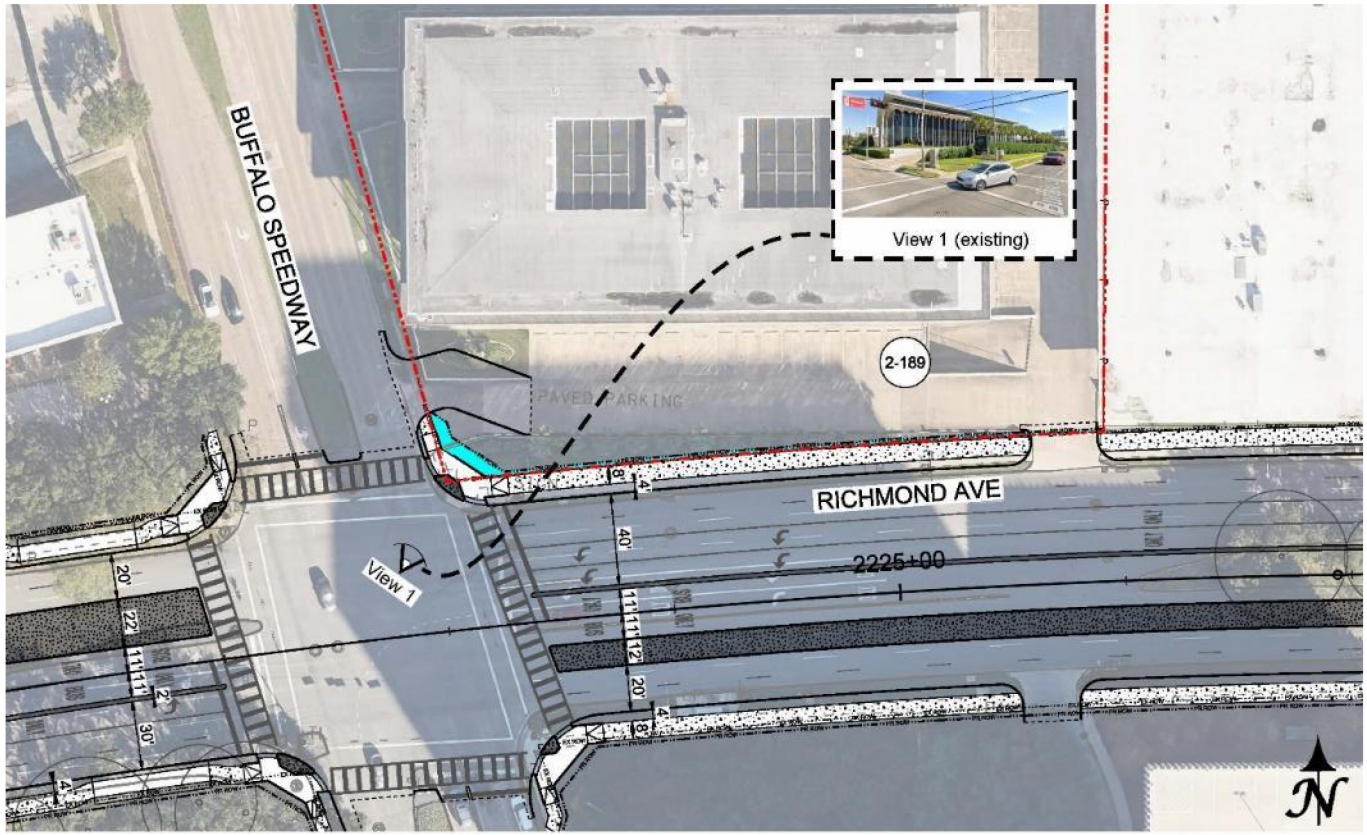
3.5.1 *De Minimis* Impact Determinations – Historic

3.5.1.1 3336 Richmond Avenue

3336 Richmond Avenue is eligible under Criterion C, Architecture. The parcel is located at the northeast corner of Richmond Avenue and Buffalo Speedway. The ROW acquisition is 730 square feet (sf.) for a total percentage of 0.0087 of land. The building is sited at an angle to Richmond Avenue approximately 73 to 90-ft. north of the existing curb. A parking lot, green space, a 3.5-ft. sidewalk, green space, and a curb occupy the space between the building's front façade and Richmond Avenue. The land acquisition for the parcel is along Richmond Avenue, reducing the green space to 2 to 4-ft. in width and increasing the sidewalk to 8-ft. Landscaping will still be included in the same location and would not alter the characteristics that qualify the resource under Criterion C. **(See Figure 3-4).**

FTA determined there would be No Adverse Effect to this historic property. THC concurred with this determination. FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions.

Figure 3-4: ROW acquisitions from 3336 Richmond

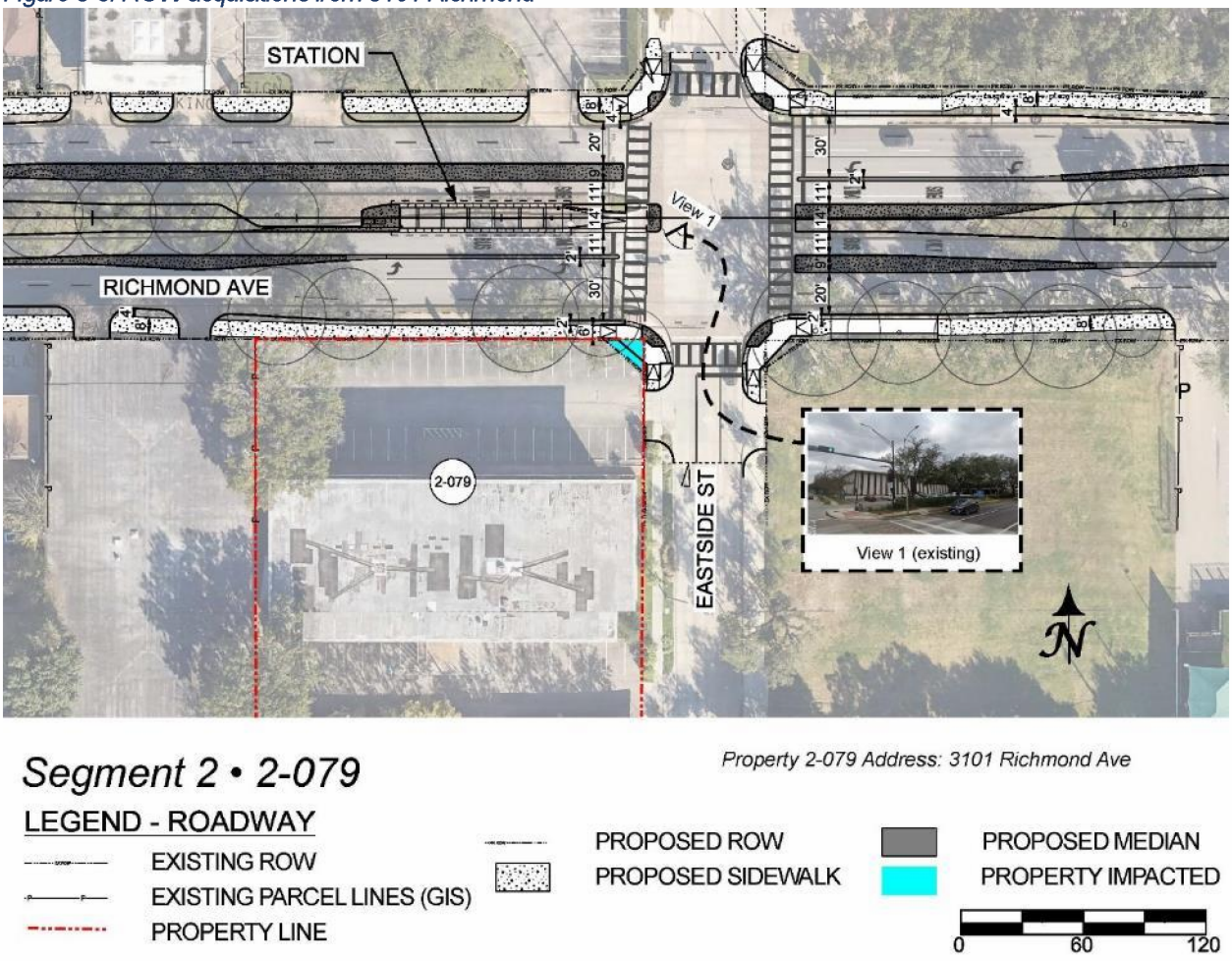


3.5.1.2 3101 Richmond Avenue

The historic property at 3101 Richmond Avenue is a 40,482-sf. parcel at the southwest corner of Richmond and Eastside streets. The ROW acquisition is 112-sf. for a total percentage of 0.0027 of land. The building is sited parallel to Richmond Avenue and approximately 78-ft. south of the existing curb. A parking lot, green space, a sidewalk, green space, and a curb occupy the space between the building's front façade and Richmond Avenue. The proposed new ROW is a corner clip at Richmond and Eastside Streets. It would not impact the building's integrity of location, design, setting, materials, workmanship, feeling, or association. **(See Figure 3-5).**

FTA determined there would be No Adverse Effect to this historic property. THC concurred with this determination. FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions.

Figure 3-5: ROW acquisitions from 3101 Richmond

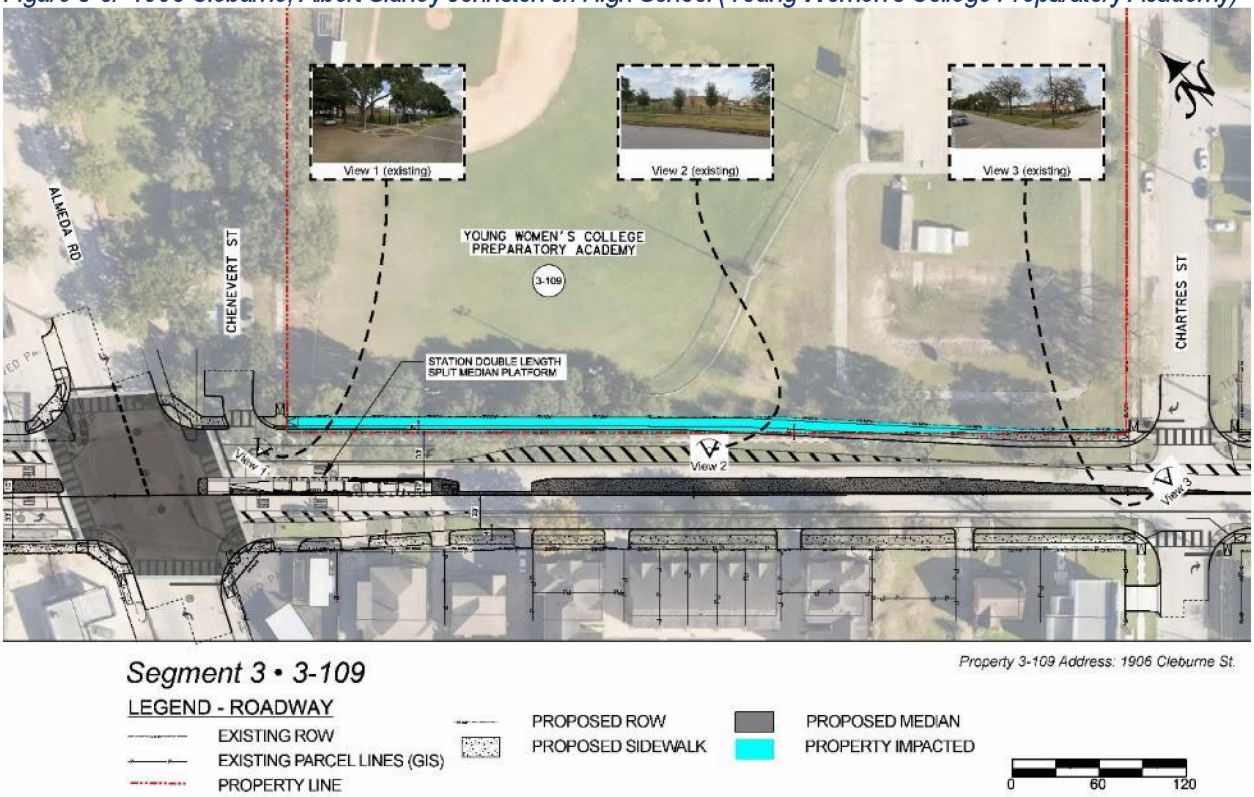


3.5.1.3 1906 Cleburne Street: Albert Sidney Johnston Jr. High School (Young Women's College Preparatory Academy)

The Albert Sidney Johnston Jr. High School (Young Women's College Preparatory Academy) school building, (NRHP eligible) is located within a 434,999-sf. parcel, which also contains the baseball field (not recommended NRHP eligible). The campus is bounded by the streets of Cleburne, Chartres, Chenevert, and Wheeler, with the NRHP eligible building oriented to Cleburne Street. A service road, parallel to Wheeler Avenue connects Chenevert and Chartres Streets and bifurcates the campus, separating the NRHP eligible building from a baseball field and parking lot. The proposed ROW acquisition would include 4,744-sf. along Wheeler Avenue, roughly 400-ft. southwest of the service road at the rear façade of the school. The baseball field is modern, built circa 1990, and is not part of the recommended boundary for the NRHP eligible school. The ROW acquisition would not impact the NRHP eligible property's integrity of location, setting, design, materials, workmanship, feeling, or association, nor its ability to convey its architectural significance under Criterion C. **(See Figure 3-6).**

FTA determined there would be No Adverse Effect to this historic property. THC concurred with this determination. FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions.

Figure 3-6: 1906 Cleburne, Albert Sidney Johnston Jr. High School (Young Women's College Preparatory Academy)



3.5.1.4 Third Ward Historic District

Segment 3 of the Project would travel through the NRHP-eligible Third Ward Historic District. Within the historic district are two individually NRHP listed resources, The Houston Negro Hospital and Nursing School both have proposed ROW acquisition. New corner clips are proposed throughout the district (**See Table 3-3 and Figures 3-7a, 3-7b, and 3-7c**).

Table 3-3. Acquisitions from property within the NRHP-Eligible Third Ward Historic District.

Parcel	Address	Status	Parcel Sq ft	Acq. Sq ft	Acq area (acres)	Corner Clip	Buffer
3-046	2202 Wheeler Ave	Vacant no building	11,302	275.9			•
3-055	4402 Emancipation Ave	Non-contributing	5,000	5.3		•	
3-056	4405 Emancipation Ave	Contributing	5,775	23.1		•	
3-111	2201 Wheeler Ave	Contributing	95	9.7			•
3-120	4314 Emancipation Ave	Non-contributing	10,000	5.0			•
3-121	4311 Emancipation Ave	Contributing	7,350	33.7			•
3-122	2405 Wheeler Ave	Contributing	6,825	4.8			•
3-123	2411 Wheeler Ave	Contributing	6,825	4.2			•
3-162	3002 Alabama Str	Non-contributing	5,775	123.8		•	
3-163	3003 Alabama Str	Contributing	4,750	210.5		•	
3-179	3503 Ennis St	Non-contributing New construction	1,924	42.8		•	
3-180	3005 Holman St	Vacant no building	4,330	14.4		•	
3-194	2918 Wheeler Ave	Contributing	5,250	31.7		•	
3-195	2917 Wheeler Ave	Contributing	5,250	82.9		•	
3-209	3812 Ennis St	Vacant no building	1,950	226.2			•
3-210	3808 Ennis St	Vacant no building	1,600	191.5			•
3-211	3806 Ennis Str	Vacant no building	1,700	202.8			•
3-212	2908 Alabama Str	Vacant no building	15,725	787.9		•	•
3-213	2801 Alabama St	Vacant no building	72,500	493.7		•	•
3-215 and 3-216	3224 Ennis St/2900 Holman St	Blackshear Elementary School	106,927	9.5 on parcel 3-216		•	
3-217	3204 Ennis St	Listed	187,500	138.5		•	
3-297	3115 Ennis St	Contributing	4087	24.8		•	
TOTAL	**22 parcels**		**469,790**	**2,952.8**			

Source: METRO 2023, Historic Survey Report Addendum

In 2008 and 2019, the THC determined the Third Ward Historic District eligible under Criterion A in the areas of Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development, and eligible under Criterion C in the area of Architecture. A NRHP nomination

completed in 2008 describes the architecture as varied and following national architectural movements. (Randall and Korfmacher 2008: E 19). There was no discussion of landscape or setting in the NRHP nomination. The NRHP nomination has not gone through the designation process at the time this report was written. The houses abutting Wheeler Avenue are predominately Tudor style with front yards, a sidewalk and green space before the curb which is typical for this era. The historic district covers roughly 750 acres. The removal of 3,125 sf. of landscaping for eleven parcels is nominal and would not alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

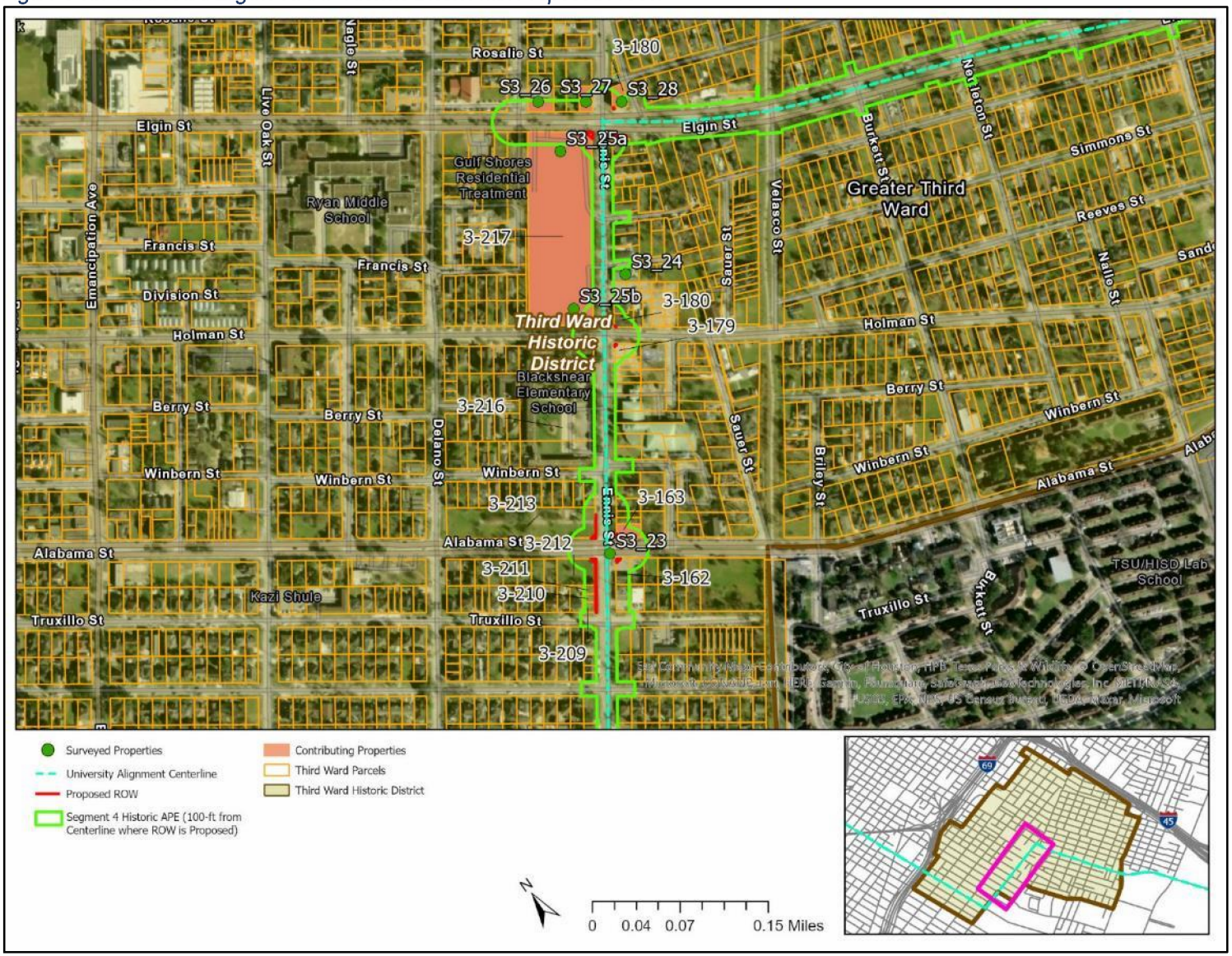
FTA determined there would be No Adverse Effect to all of the historic properties located within the Third Ward Historic District (listed in the following section). THC concurred with this determination. FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions.

Figure 3-7a: Third Ward Eligible NRHP Historic District with Proposed ROW.



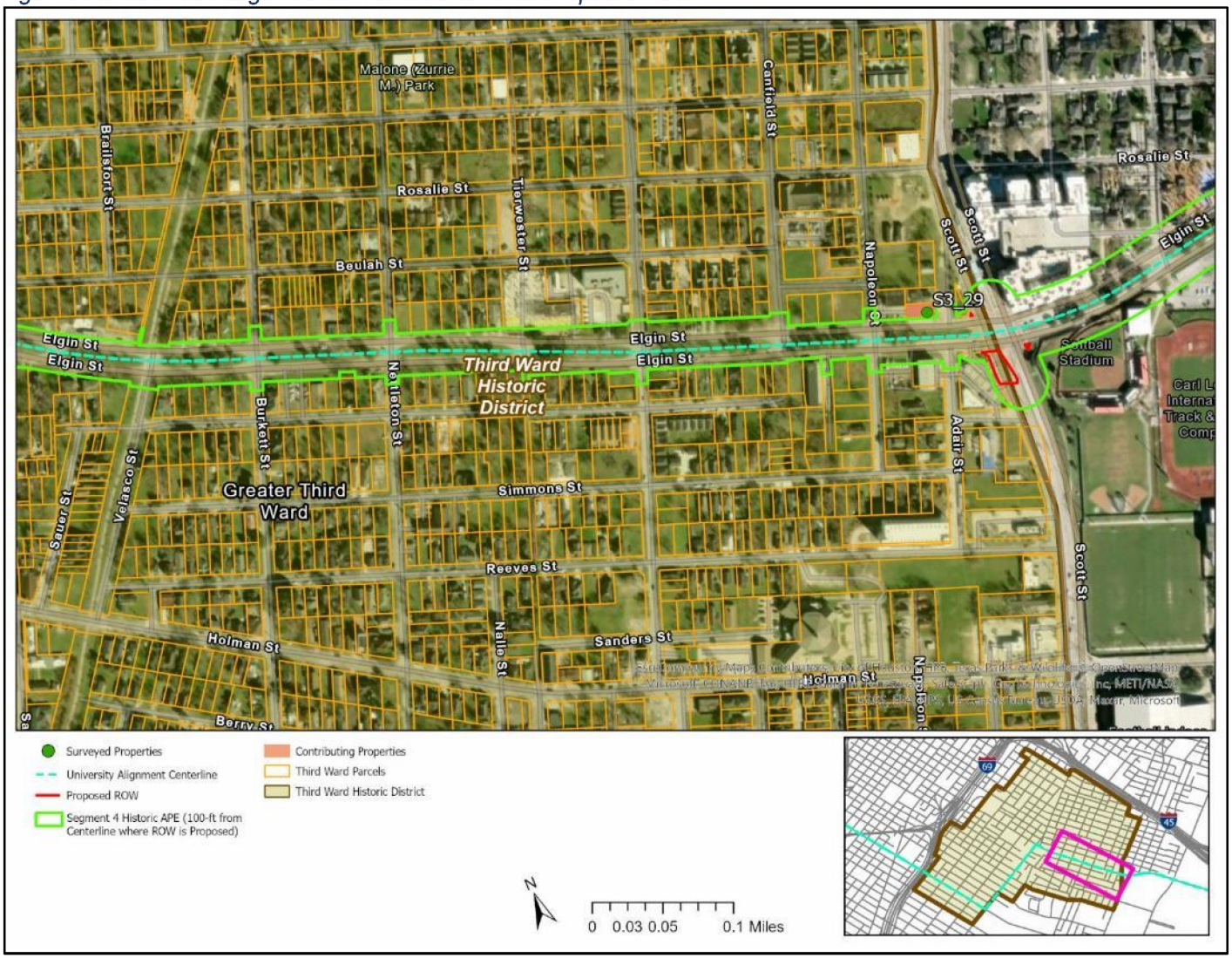
Source: AmaTerra 2023

Figure 3-7b: Third Ward Eligible NRHP Historic District with Proposed ROW.



Source: AmaTerra 2023

Figure 3-7c: Third Ward Eligible NRHP Historic District with Proposed ROW.



Source: AmaTerra 2023

2201 Wheeler Avenue (Parcel 3-111)
The property at the corner of Hutchins and Wheeler is 2201 Wheeler Avenue and the 9.7 sf. to be acquired is property owned by the State of Texas left from the construction of US-69. No acquisition of property would be made from the residential property **(Figure 3-8)** although the address is the same.

2202 Wheeler Avenue (Parcel 3-046)
The property acquisition at the vacant property at the corner of Hutchins Street and Emancipation Avenue, 2201 and 2203 Wheeler Avenue would include a corner and a strip acquisition of 275.9 sf. behind the existing sidewalk **(Figure 3-8)**.

4402 Emancipation Avenue (Parcel 3-055)
The property acquisition at 4402 Emancipation Avenue would include a small triangle of 5.3 sf. behind the existing sidewalk **(Figure 3-9)**.

4405 Emancipation Avenue (Parcel 3-056)
The property acquisition at 4405 Emancipation Avenue would include a small triangle of 23.1 sf. behind the existing sidewalk **(Figure 3-9)**.

4314 Emancipation Avenue (Parcel 3-120)
The property acquisition at 4314 Emancipation Avenue would include a small triangle of 5.0 sf. behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-9)**.

4311 Emancipation Avenue (Parcel 3-121)
The property acquisition at 4311 Emancipation Avenue would include a small triangle of 33.7 sf. behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-9)**.

2405 Wheeler Avenue (Parcel 3-122)
The property acquisition at 2405 Wheeler Avenue would include a small triangle of 4.8 sf. behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-9)**.

2411 Wheeler Avenue (Parcel 3-123)
The property acquisition at 2411 Wheeler Avenue would include a small triangle of 4.2 sf. behind the existing sidewalk for a sidewalk and a wheelchair ramp **(Figure 3-9)**.

3002 Alabama Street (Parcel 3-162)
The property acquisition at the intersection of Ennis and Alabama Streets, 3002 Alabama Street, would include a corner clip of 123.8 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-9)**.

3003 Alabama Street (Parcel 3-163)
The property acquisition at the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 210.5 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-9)**.

Figure 3-8: ROW acquisitions from 2201 and 2202 Wheeler Avenue

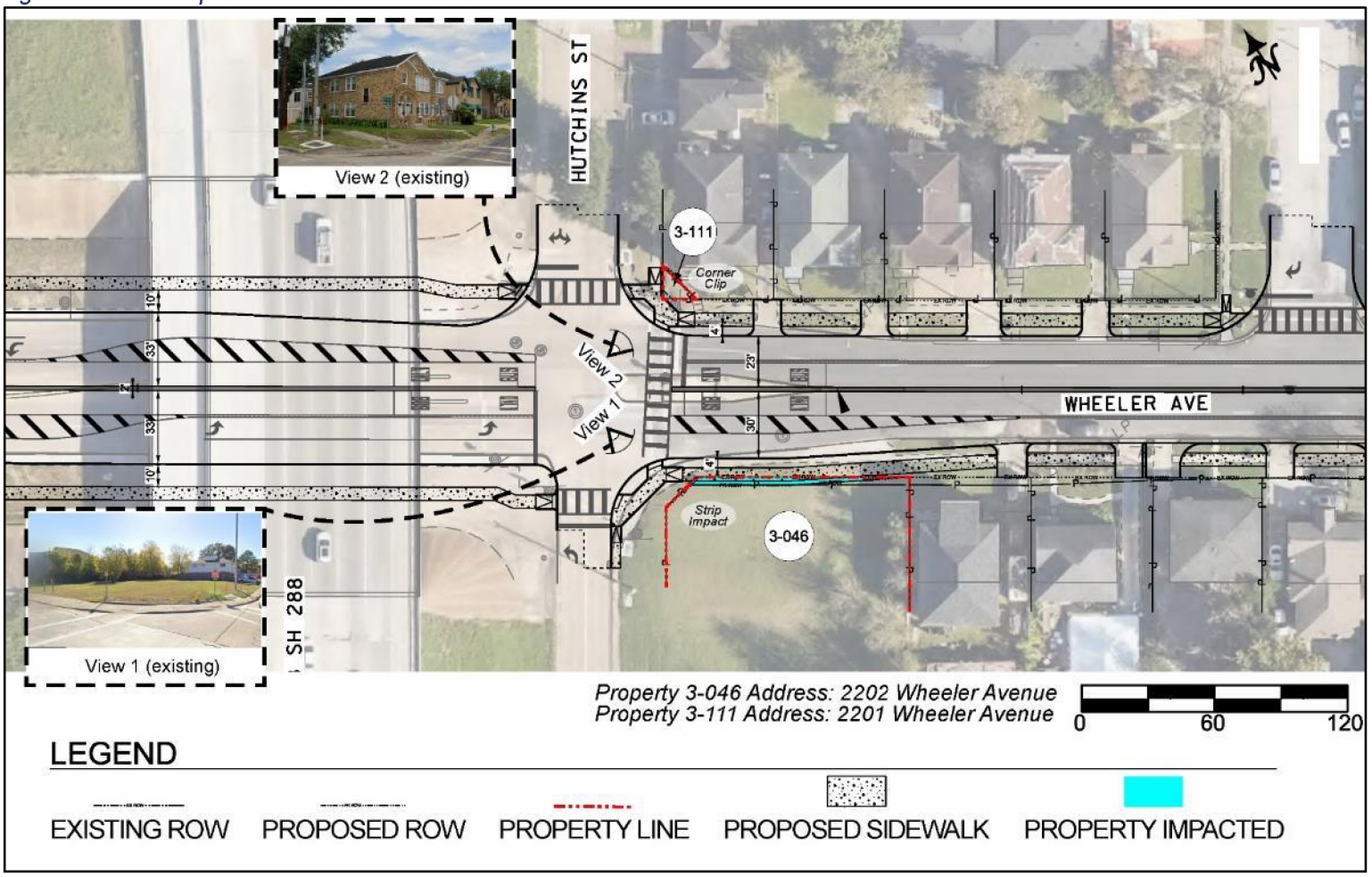
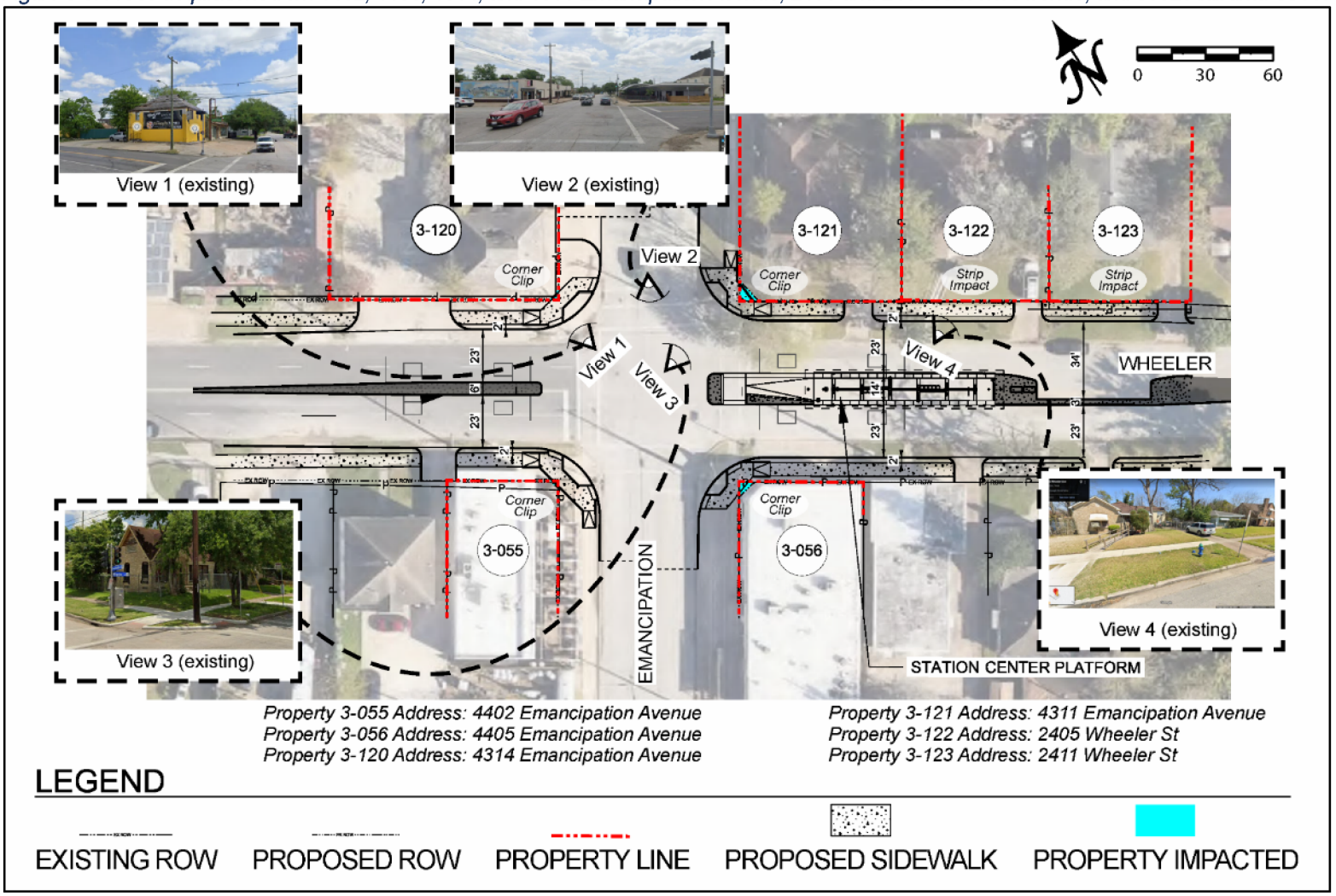


Figure 3-9: ROW acquisitions from 4402, 4405, 4314, and 4311 Emancipation Avenue; 2405 and 2411 Wheeler Avenue; and 3002 Alabama Street



3503 Ennis Street (Parcel 3-179)
The property acquisition at the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 42.8 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-10)**.

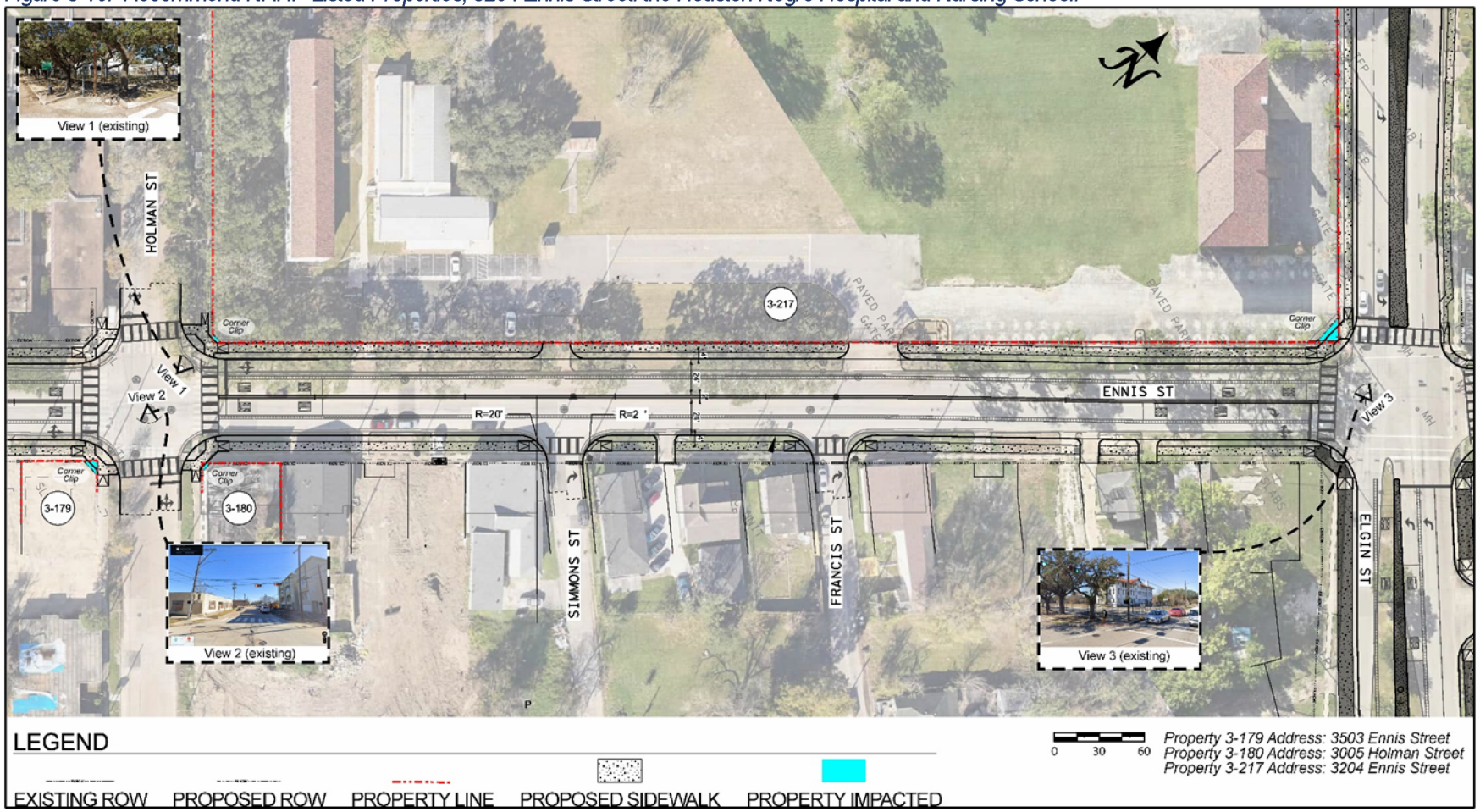
3.5.1.5 The Houston Negro Hospital and Nursing School

3204 Ennis Street (Parcel 3-217) – The Houston Negro Hospital and Nursing School
The Houston Negro Hospital and Nursing School, at 3204 Ennis, are listed on the NRHP as individual resources. Both buildings are located on the same parcel and contribute to the NRHP eligible Third Ward Historic District. The parcel is the length of one city block bounded by Ennis, Elgin, and Holman streets. The parcel is 187,000-sf. with a parcel length of 251-ft. adjacent to Elgin Street. The Project would require the ROW acquisition of 2,729-sf. along Elgin Street (**See Figure 3-10).** The building is parallel to Elgin Street at the northern portion of the parcel where the new ROW is proposed. An asphalt parking lot, vegetation, and sidewalk occupy the space between the hospital and the road. The ROW would remove the sidewalk and grass; however, a new sidewalk be added. The hospital building is designated for its association with ethnic and social history, and the land proposed for ROW acquisition does not play a role in the resources' ethnic and social history. Based on the small percentage of land proposed for the ROW acquisition to the overall parcel and the hospital building's historic relationship to the road, the proposed ROW would not impact the property's integrity of location, setting, design, materials, workmanship, feeling, or association, or impact the property's ability to convey its historic significance under Criterion A.

The Nursing School is located at the northwest corner of Holman and Ennis streets. ROW acquisition consists of a corner clip at an existing sidewalk for compliance with ADA. The corner clip would not impact the property's ability to convey its significance under Criterion A or Criterion C or diminish its integrity of location, setting, design, materials, workmanship, feeling, or association.

3005 Holman Street (Parcel 3-180)
The property acquisition at the northeast corner of the intersection of Ennis and Alabama Streets, 3003 Alabama Street, would include a small triangle of 14.4 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-10)**.

Figure 3-10: Recommend NRHP-Listed Properties, 3204 Ennis Street: the Houston Negro Hospital and Nursing School.



2918 Wheeler Avenue (Parcel 3-194)
The property acquisition at 2918 Wheeler would include a small triangle of 31.7 sf. behind the existing sidewalk at the southeast corner of Ennis Street and Wheeler Avenue for a sidewalk and a wheelchair ramp **(Figure 3-11)**.

2917 Wheeler Avenue (Parcel 3-195)
The property acquisition at 2917 Wheeler would include a small triangle of 82.9 sf. behind the existing sidewalk at the northeast corner of Ennis Street and Wheeler Avenue for a sidewalk and a wheelchair ramp **(Figure 3-11)**.

3812 Ennis Street (Parcel 3-209)
The property acquisition at the intersection of Truxillo and Ennis Streets, 3812 Alabama Street, would include 226.2 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-12)**.

3808 Ennis Street (Parcel 3-210)
The property acquisition at 3808 Ennis Street, would include 191.5 sf. behind the existing sidewalk for a widened sidewalk **(Figure 3-12)**.

3806 Ennis Street (Parcel 3-211)
The property acquisition at 3806 Ennis Street, would include 202.8 sf. behind the existing sidewalk for a widened sidewalk **(Figure 3-12)**.

2908 Alabama Street (Parcel 3-212)
The property acquisition at the intersection of Alabama and Ennis Streets, 2908 Alabama Street, would include 787.9 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-12)**.

2801 Alabama Street (Parcel 3-213)
The property acquisition at the intersection of Alabama and Ennis Streets, 2801 Alabama Street, would include 493.7 sf. behind the existing sidewalk for a widened sidewalk and a wheelchair ramp **(Figure 3-12)**.

3224 Ennis Street/2900 Holman Street, Blackshear Elementary School (Parcel 3-215 and 3- 216)
The Blackshear Elementary School (addresses appear as 3224 Ennis Street and 2900 Holman Street), 2900 Holman Street, would have a corner clip acquisition at the corner of Ennis and Holman Streets, in the amount of 9.5 sf. for a wheelchair ramp **(Figure 3-13).** The existing wheelchair ramp has a utility pole in it, and it would be relocated to public right-of-way as part of the BRT Project.

3115 Ennis Street (Parcel 3-297)
The property acquisition at the southwest corner of the intersection of Elgin and Ennis Streets, 3115 Ennis Street, would include a small triangle of 24.8 sf. behind the existing sidewalk (**Figure 3- 14**) for a sidewalk and a wheelchair ramp.

Figure 3-11: 2917 and 2918 Wheeler Avenue

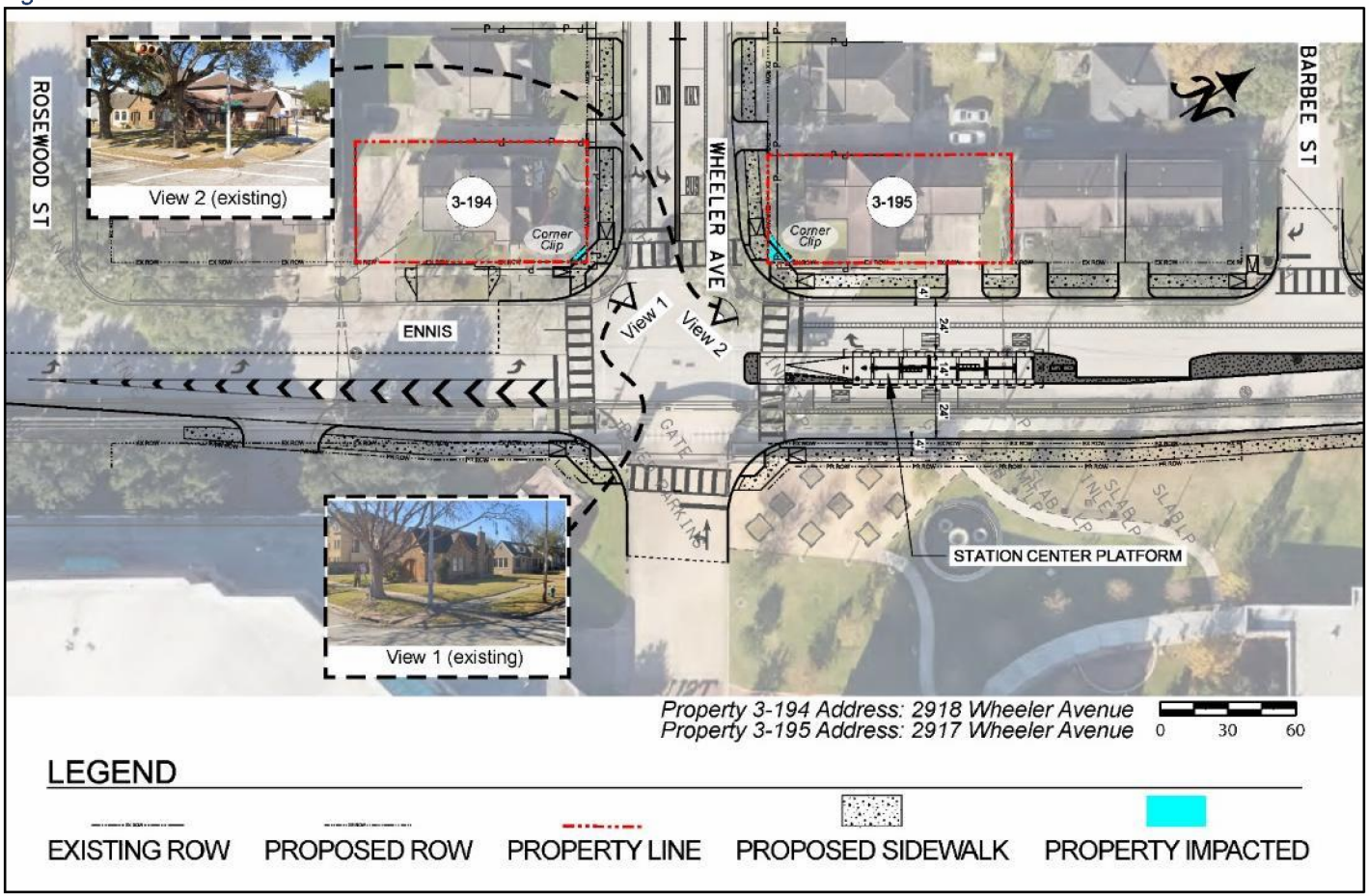


Figure 3-12: ROW Acquisitions from 3002 and 3003 Alabama Street, 3812, 3808, 3806 Ennis Street and 2908 and 2801 Alabama Street

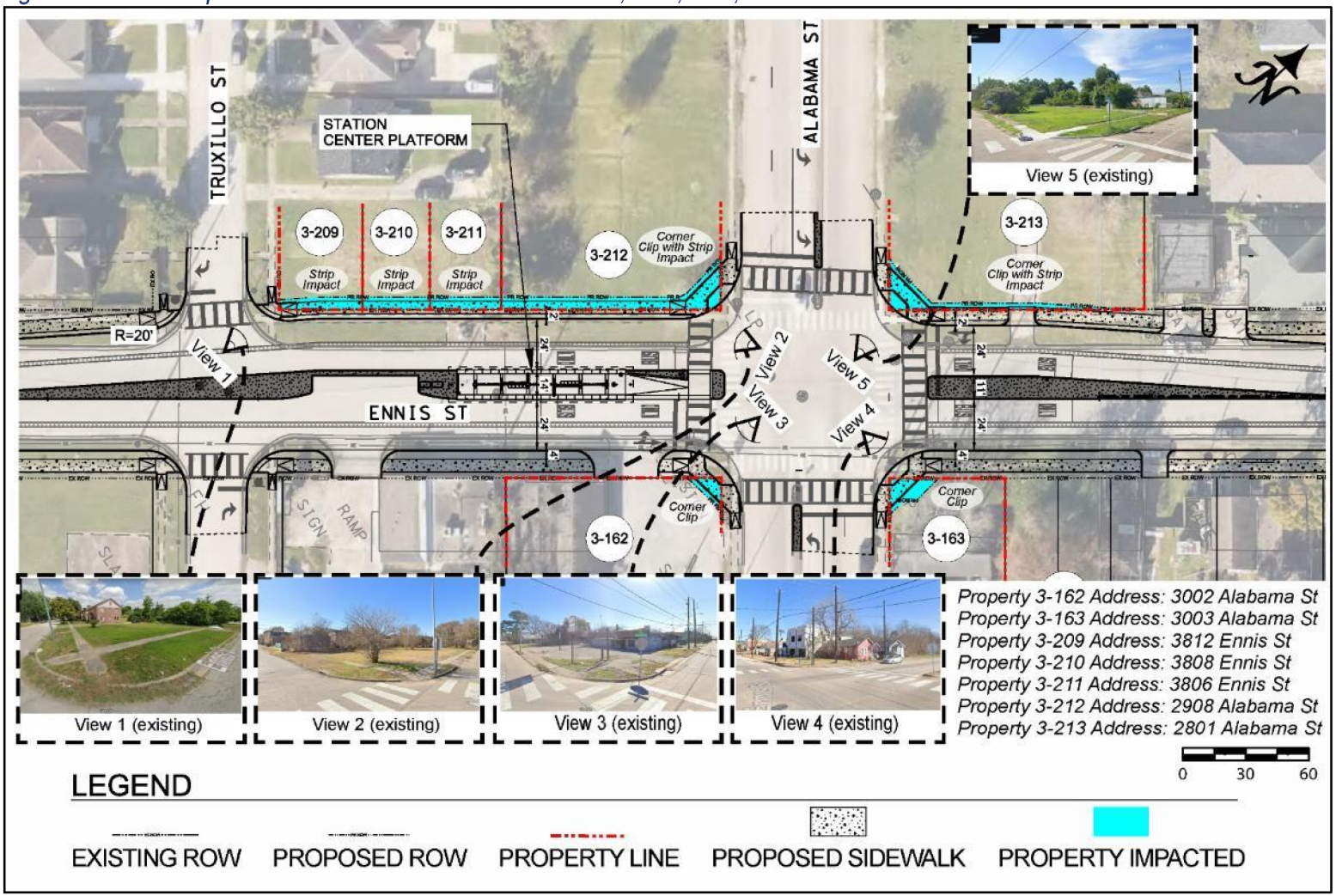


Figure 3-13: ROW Acquisitions for 3224 Ennis Street/2900 Holman Street, Blackshear Elementary School

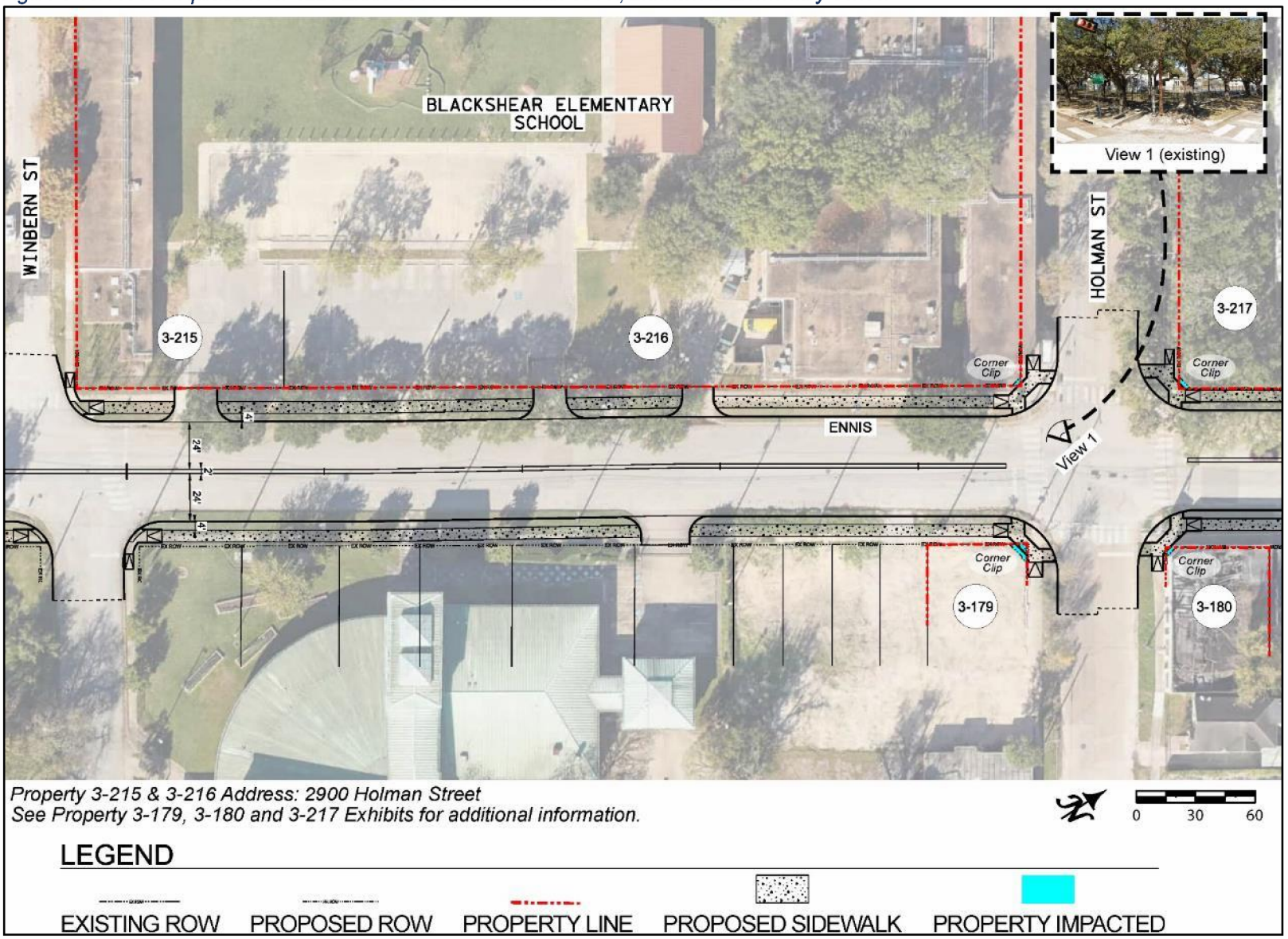
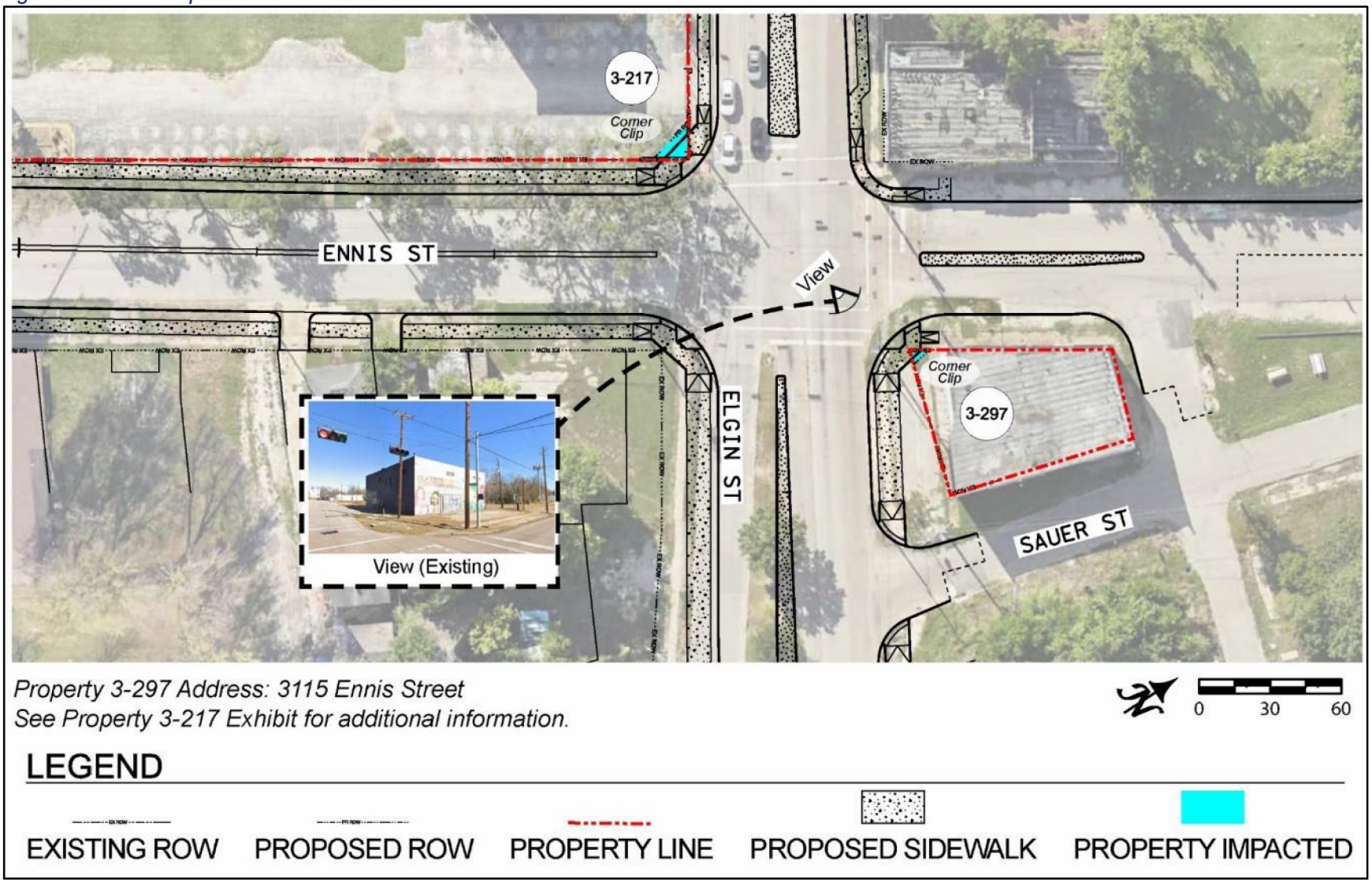


Figure 3-14: ROW Acquisitions for 3115 Ennis Street



3.5.1.6 Eastwood Subdivision Historic District

The following section describes effects of the BRT Project within the Eastwood Subdivision Historic District (district). The BRT would enter the assumed NRHP-eligible Eastwood Historic District (the district) at Leeland/Lockwood and would travel north through the district in dedicated BRT lanes. These lanes would be primarily constructed within the existing right-of-way of Lockwood Drive, however, minor property acquisitions are needed to bring the existing sidewalks up to City of Houston design standards (**Figure 3-15**). One BRT Station would be located within the District. ROW acquisition is required on some properties, per the City of Houston Infrastructure Design Manual, to improve turning radii, safety sight distances at street intersections, provide sidewalks, and/or to provide wheelchair ramps at pedestrian crossings designed for ADA Compliance and would require partial acquisitions for strips of property along Lockwood Drive and/or at corners of properties. One general purpose lane in each direction would remain on Lockwood Drive.

Acquisitions within the district would primarily occur at street intersections of Lockwood Drive and the following cross streets: Clay, Polk, Woodside, Park, McKinney, Walker, and Rusk. In many cases, the acquisitions needed are "corner clips" that are to provide for a wheelchair ramp and bring the sidewalks to ADA compliance and City design standards. In other cases, strips of property acquisitions are needed along the front, back or side of a property to provide a wider sidewalk to meet the City design stations and to accommodate a safety buffer area between the curb and the sidewalk.

Partial strips of property acquisitions and/or corner clips would result in 0.12 acres being converted to transportation use out of approximately 135.8 total acres of the district. No buildings would be altered or demolished for these minor acquisitions and the acquisitions would not result in an adverse effect on the district or any individual contributing resources within the district. **Table 3-4** details the acquisitions within the district.

FTA determined there would be No Adverse Effect to the historic properties located within the Eastwood Historic District (listed in the following section). THC concurred with this determination. Based on THC's concurrence, FTA informed the THC of the agency's decision to make a *de minimis* impact determination under Section 4(f) for these acquisitions.

Table 3-4. Acquisitions from property within the NRHP-Eligible Eastwood Historic District

Figure	Parcel	Address	Status	Total Sq ft	Acq. Sq ft	Frontage Buffer	Sidewalk
3-16	4-106	4501 Clay St	Eligible	7,645	20	•	•
3-16	4-107	4540 Polk St	Vacant	8,792	1,694	•	•
3-16	4-018	4602 Polk St	Eligible	5,449	193	•	•
3-16	4-108	4543 A Polk St	Non-Contributing	4,500	351	•	•
3-16	4-019	4601 Polk St	Non-Contributing	4,803	146	•	•

3-17	4-020	4602 Woodside St # 6	Non-Contributing	12,884	141	•	•
3-17	4-109	4550 Woodside St	Eligible	4,500	11		
3-17	4-110	4547 Woodside St	Eligible	5,544	203	•	•
3-18	4-026	4601 McKinney St	Eligible	8,025	206	•	•
3-18	4-027	4602 Walker St #8	Non-Contributing	10,700	178	•	•
3-18	4-114	4540 McKinney St # 4	Eligible	5,350	139		
3-18	4-115	4539 McKinney St	Eligible	9,095	827	•	•
3-19	4-028	4601 Walker St	Eligible	7,810	246	•	•
3-19	4-029	4604 Rusk St	Eligible	7,162	276	•	•
3-19	4-119	4545 Rusk St	Non-Contributing	8,898	422	•	•
			TOTAL	111,157	5,053		

Figure 3-15: Acquisitions from property within the Eastwood Historic District



4501 Clay Street (Parcel 4-106)
The property acquisition to the eligible property at the at the intersection of Clay Street and Lockwood Drive, would include a small corner clip of 20 sf. for the sidewalk installation. **See Figure 3-16.**

4540 Polk Street (Parcel 4-107)
The property acquisition at the intersection of Polk Street and Lockwood Drive would include an acquisition of 1,694 sf. for a widened sidewalk and a wheelchair ramp. This property is currently vacant. **See Figure 3-16.**

4602 Polk Street (Parcel 4-018)
The property acquisition at the southeast intersection of Polk Street and Lockwood Drive to an eligible property, would include a small corner clip of 193 sf. for a wheelchair ramp. See **Figure 3-16.**

4543 A Polk Street (Parcel 4-108)
The property acquisition to the non-contributing resource at the northwest intersection of Polk Street and Lockwood Drive would include an acquisition of 351 sf. for a wheelchair ramp installation. **See Figure 3-16.**

4602 Woodside Street #6 (4-020)
The property acquisition at the southeast corner of Woodside Street and Lockwood Drive is to a non-contributing resource within the Eastwood Historic District. This property would require the acquisition of 141 sf. of a corner clip and strip impact for sidewalk improvements. **See Figure 3-17.**

4550 Woodside Street (4-109)
The property acquisition at southwest corner of Woodside Street and Lockwood Drive to an eligible resource would 11 sf. for the installation of a wheelchair ramp. **See Figure 3-17.**

4547 Woodside Street (4-110)
The property acquisition at the northwest corner of Woodside Street and Lockwood Drive to an eligible resource would include the acquisition of 203 sf. for sidewalk improvements. **See Figure 3-17.**

4601 McKinney Street (4-026)
The property acquisition to the eligible property at the northeast corner of McKinney Street and Lockwood Drive intersection would include the acquisition of 206 sf. for a corner clip with a strip impact. **See Figure 3-18.**

4602 Walker Street #8 (4-027)
The property acquisition to the non-contributing property at the southeast corner of the intersection of Walker Street and Lockwood Drive would include a strip impact of 178 sf.. **See Figure 3-18.**

4540 McKinney Street #4 (4-114)
The property acquisition to the eligible property at the southwest intersection of McKinney Street and Lockwood Street would include the acquisition of 139 sf. for a corner clip with strip impact. **See Figure 3-18.**

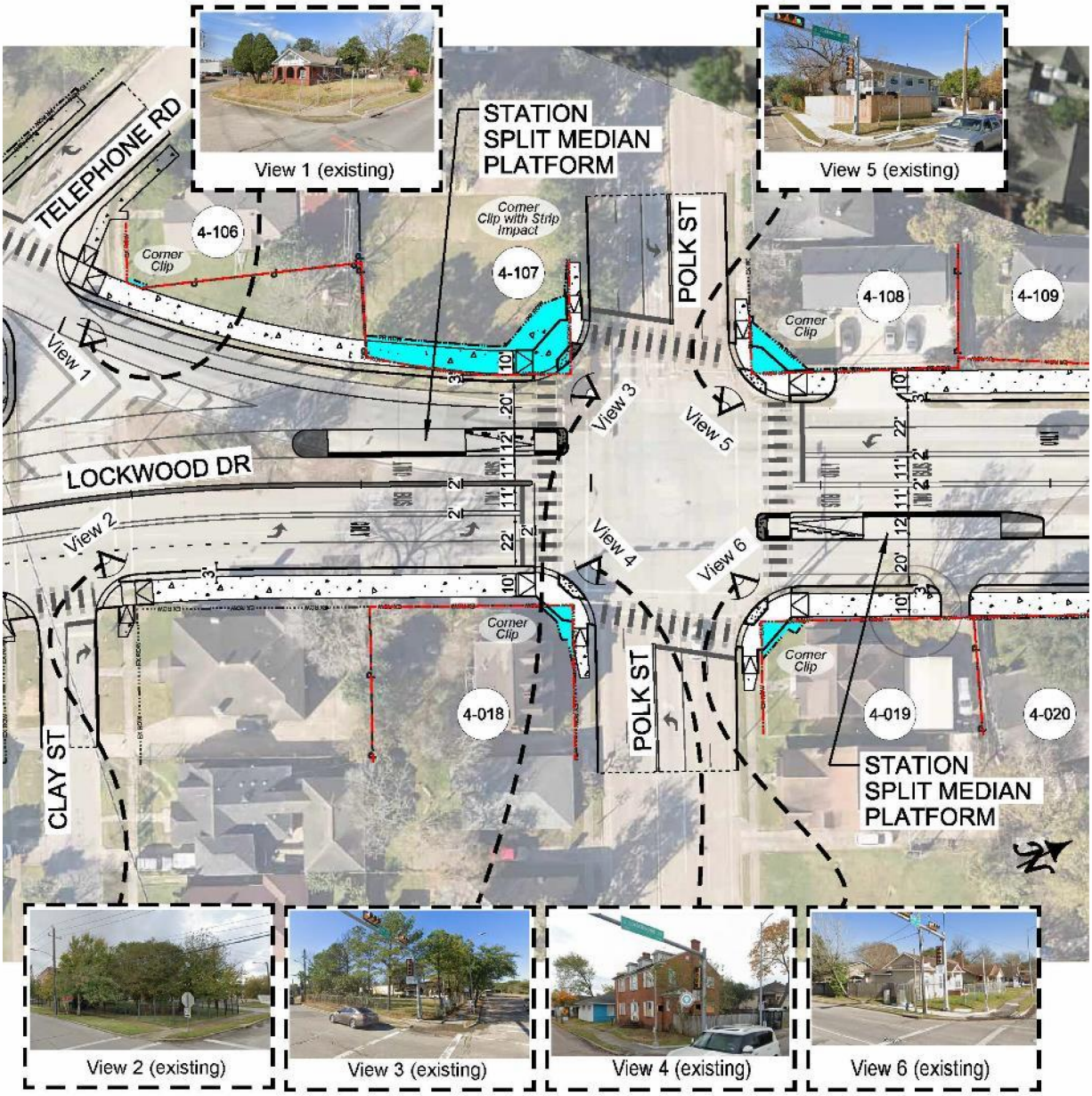
4539 McKinney Street (4-115)
The property acquisition to the eligible property at the northeast corner at the intersection of McKinney Street and Lockwood Drive would require 827 sf. for a corner clip with strip impact for sidewalk and wheelchair ramp installation. **See Figure 3-18.**

4601 Walker Street (4-028)
The property acquisition to the eligible property at the southeast corner of Walker Street and Lockwood Drive would require a 246 sf. strip impact for sidewalk installation. **See Figure 3-19.**

4604 Rusk Street (4-029)
The property acquisition to the eligible property at the southeast corner of the intersection of Rusk Street and Lockwood Drive would require the acquisition of 276 sf. for the installation of a sidewalk. **See Figure 3-19.**

4545 Rusk Street (4-199)
The property acquisition to the non-contributing property at the northwest corner of Rusk Street and Lockwood Drive would include 422 sf. for installation of a sidewalk. **See Figure 3-19.**

Figure 3-16: 4602, 4601, 4540 and 4543 A Polk Street, 4501 Clay Street



Property 4-018 Address: 4602 Polk St
Property 4-019 Address: 4601 Polk St

For properties 4-020 & 4-109 see additional Exhibit.

Property 4-106 Address: 4501 Clay St
Property 4-107 Address: 4540 Polk St
Property 4-108 Address: 4543 A Polk St

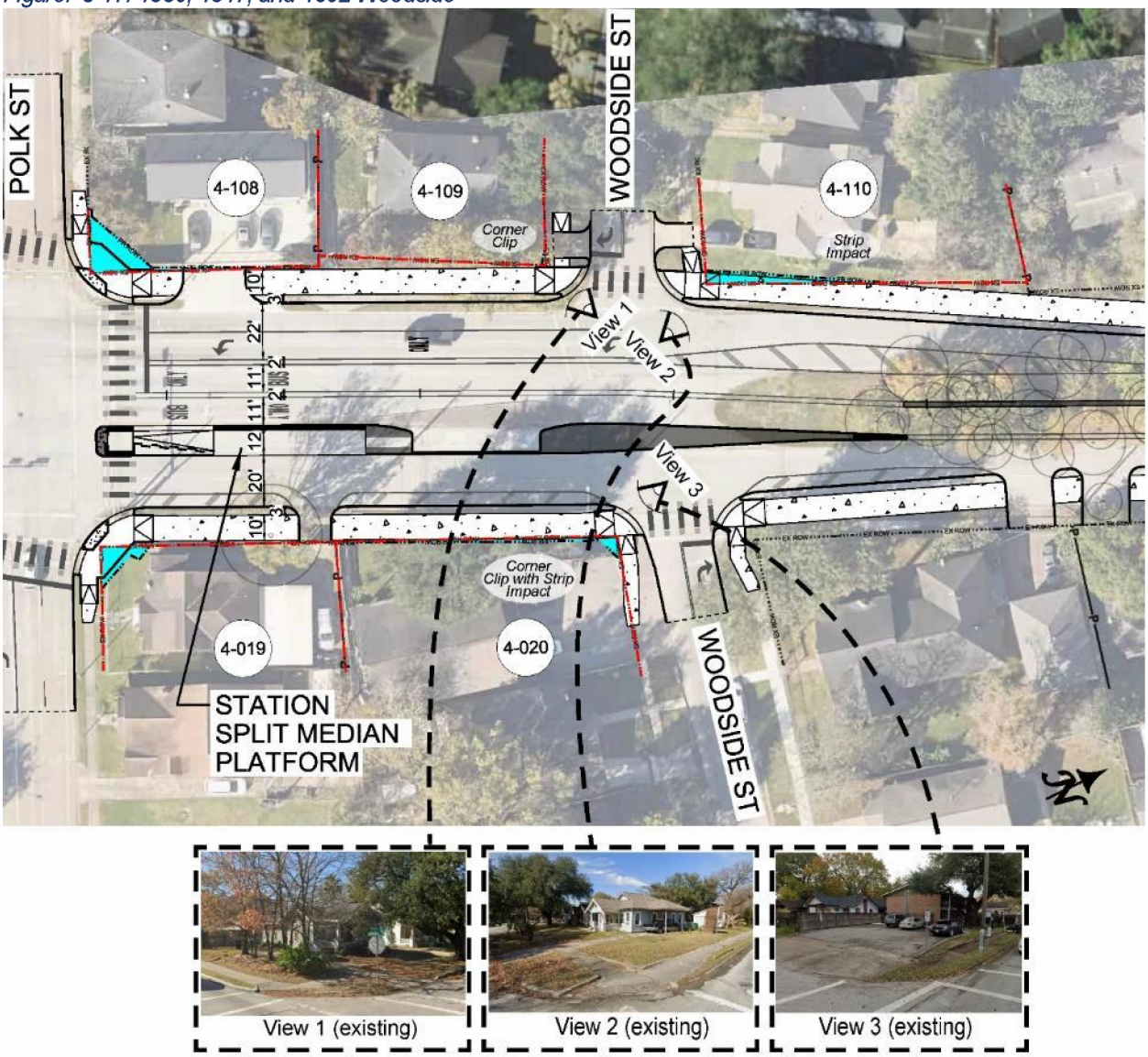
LEGEND

EXISTING ROW | PROPOSED ROW | PROPERTY LINE | PROPOSED SIDEWALK

PROPERTY IMPACTED

0 30 60

Figure: 3-17: 4550, 4547, and 4602 Woodside



Property 4-020 Address: 4602 Woodside St *Property 4-110 Address: 4547 Woodside St*
Property 4-109 Address: 4550 Woodside St
See Exhibits for 4-019 & 4-108 for additional information.

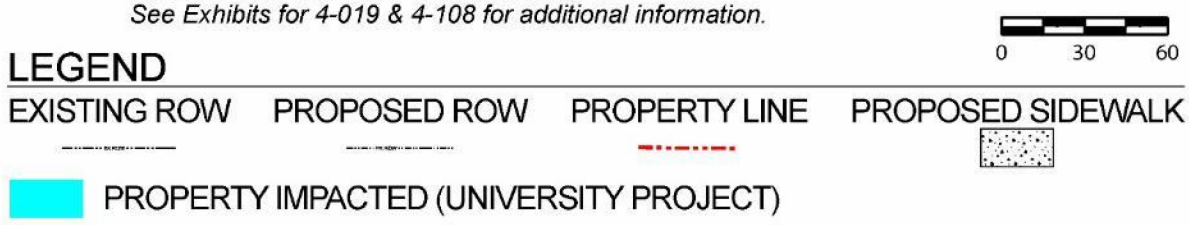
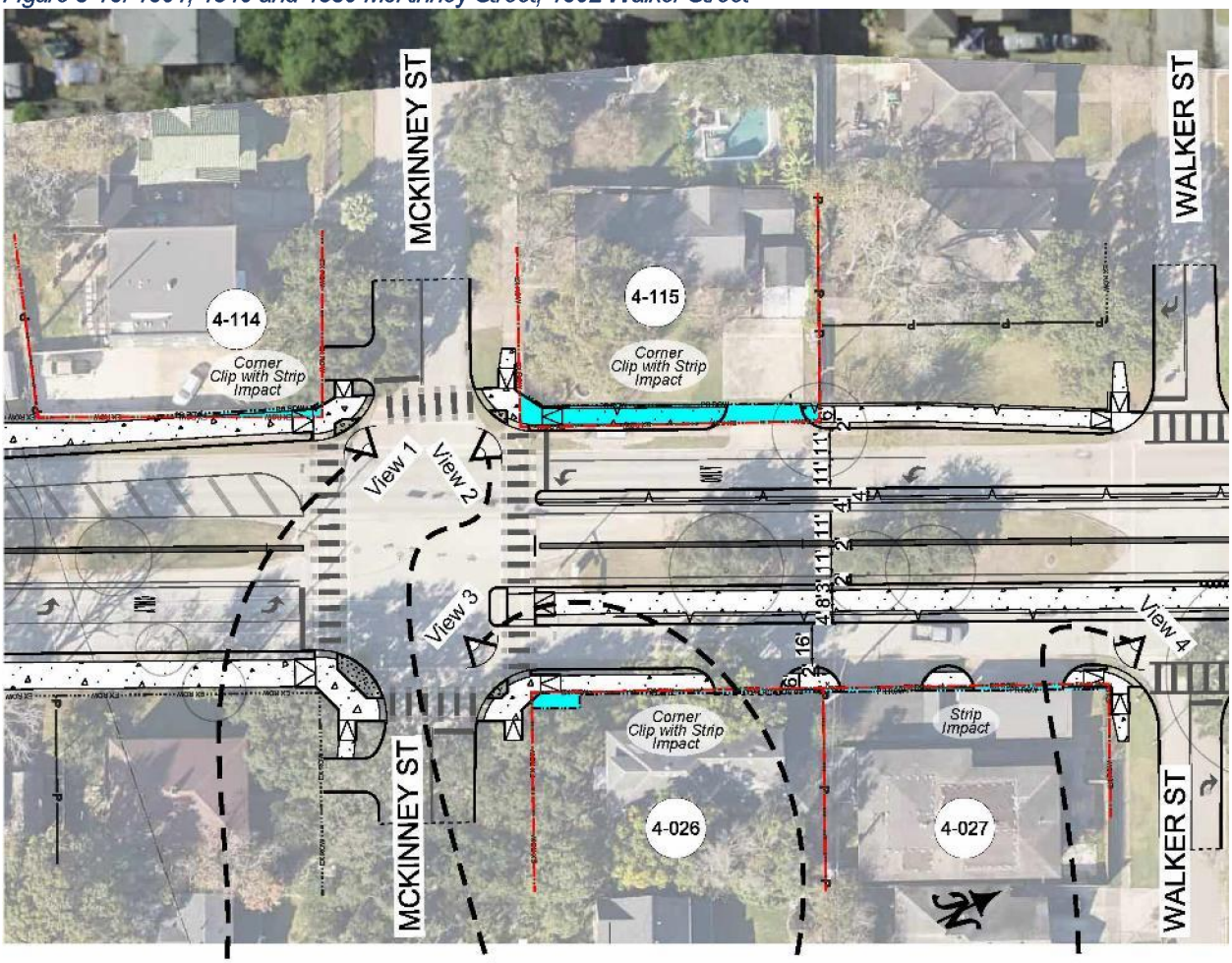


Figure 3-18: 4601, 4540 and 4539 McKinney Street, 4602 Walker Street



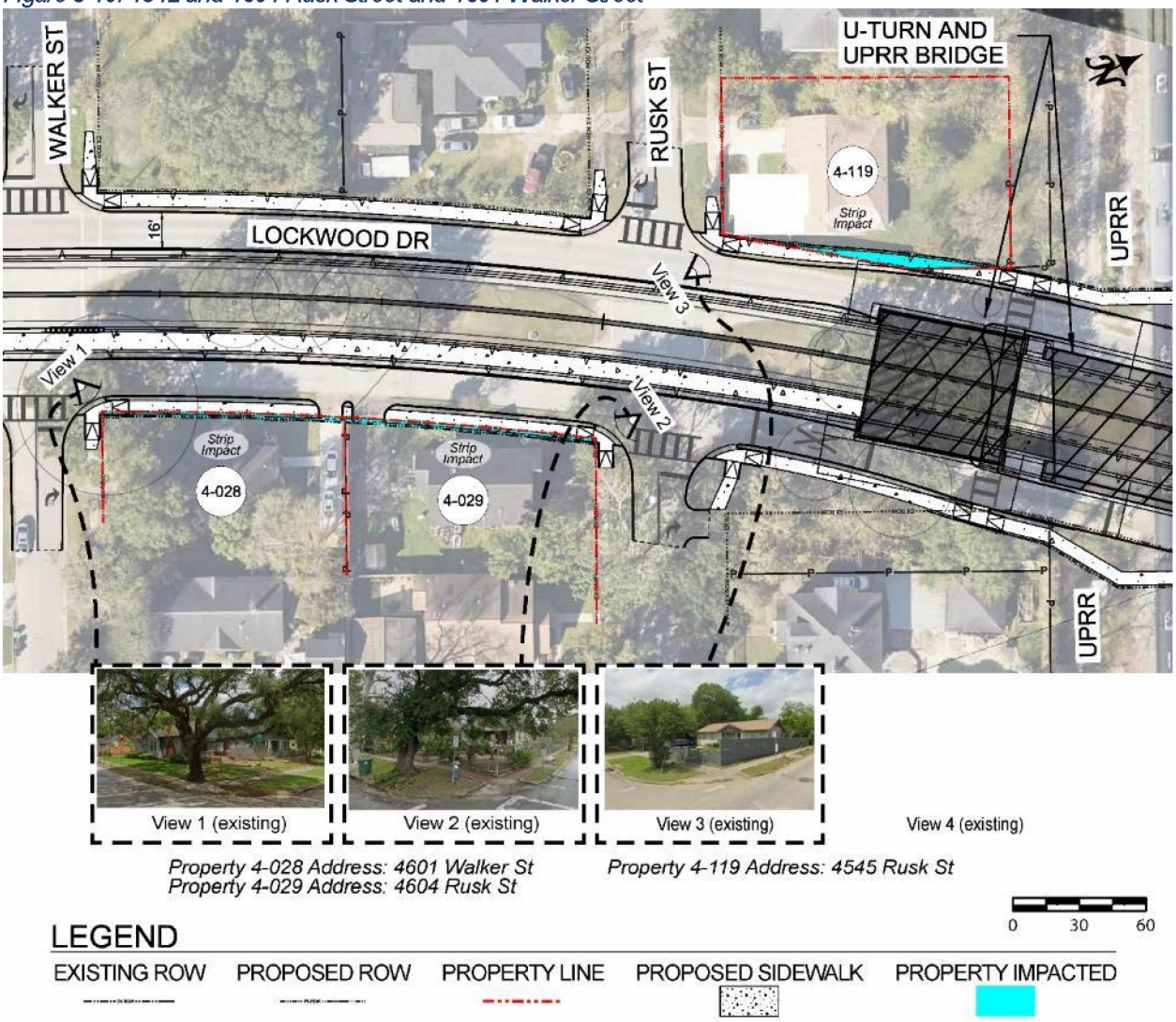


Property 4-026 Address: 4601 McKinney St
Property 4-027 Address: 4602 Walker St

Property 4-114 Address: 4540 McKinney St
Property 4-115 Address: 4539 McKinney St



Figure 3-19: 4542 and 4604 Rusk Street and 4601 Walker Street



4 Planning to Minimize Harm to Historic Districts

The Project would travel through two NRHP-eligible Historic Districts – the Third Ward Historic District and the Eastwood Historic District. FTA determined the minor acquisitions within the districts would represent a *de minimis* impact to these districts as acquisitions would be limited to small buffer strips and corner clips. In consultation with the THC, METRO committed to measures that would reduce effects on the districts. These measures are described in Sections 4.1 and 4.2.

4.1 Third Ward Historic District

The historic district covers roughly 750 acres. The removal of less than 3,000 sf. (.07 percent) of sidewalks for 22 parcels is nominal and would not be adverse. METRO has reviewed project designs to avoid effects within the Historic District. Reducing the project right-of-way will be further examined as the project design is refined.

The introduction of bus-shelters like BRT Stations would introduce a new visual element within the district that is not already present; however, the BRT Station designs will be completed in a manner to minimize visual effects to the district and will mimic the district's existing character and reflect on its history. METRO's arts-in-transit program and further design would integrate historic elements into the BRT Stations through community-chosen arts-in-transit selections, i.e., interpretive historic panels at stations and/or a cultural walk incorporated into sidewalks that symbolize the district's ethnic heritage. The BRT Project would not alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association; therefore, the Project would have no adverse effect to the historic district. METRO commits to the following conditions to minimize visual effects of the BRT lanes and underpass:

a) Station designs that mimic the neighborhood scale, architectural styles, and materials of the district (varied styles),
b) Historic interpretive panels that provide an educational opportunity on the history of the district's Ethnic Heritage/Jewish, Ethnic Heritage/Black, and Community Planning and Development to be identified with community input,
c) Replanting of trees in the buffer between the curb and the sidewalk at intervals recommended by the City of Houston Arborist and in accordance with the City's Tree Ordinance,
d) Public Outreach on station designs and METRO's arts-in-transit program to include a survey and a design workshop, and,
e) 30-day Consulting party design reviews of 60 percent plans.

4.2 Eastwood Historic District

Acquisitions within the district would primarily occur at street intersections of Lockwood Drive and the following cross streets: Clay, Polk, Woodside, Park, McKinney, Walker, and Rusk. In many cases, the acquisitions needed are "corner clips" that are to provide for a wheelchair ramp and bring the sidewalks to ADA compliance and City design standards. In other cases, strips of property acquisitions

are needed along the front, back or side of a property to provide a wider sidewalk to meet the City design stations and to accommodate a safety buffer area between the curb and the sidewalk.

Partial strips of property acquisitions and/or corner clips would result in 0.12 acres being converted to transportation use out of approximately 135.8 total acres of the district. No buildings would be altered or demolished for these minor acquisitions and the acquisitions would not result in an adverse effect on the district or any individual contributing resources within the district.

The BRT Project would not alter, directly or indirectly, any of the characteristics of a historic district that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. The BRT Stations, lanes, and underpass would be inserted into a streetscape that was previously altered by the expansion of Maplewood. These alterations modified the neighborhood by widening Maplewood from two to four lanes and making it a principal arterial and made permanent changes to the original plat in size, building orientations, and introducing new visual elements associated with a principal arterial. The intrusion of the new Lockwood Drive provided connections from the north and south, instead of the neighborhood's initial orientation to downtown to the west by streetcar.

The BRT Project would continue to provide transit service to the neighborhood, connect with the Greenline Light Rail on the north side of Harrisburg and provide an enhanced connection to a service that is similar to the Harrisburg Streetcar. The Project would provide enhanced transit resources and connections, reinforcing the neighborhood's preferred setting close to Downtown Houston. Therefore, the Project would have no adverse effect to the historic district. METRO commits to the following conditions to minimize visual effects of the BRT lanes and underpass:

a) Station designs that mimic and complement the neighborhood scale, architectural styles, and materials of the district (Craftsman Bungalow, the Four Square and Colonial Revival),
b) Historic interpretive panels that provide an educational opportunity on the history of the subdivision as a streetcar suburb, to be located with community input within the Project limits,
c) Incorporation of the community Eastwood neighborhood sign into either the station design or the two entrances of the district along Lockwood,
d) Minimizing the visual effects of the traffic barrier between the general-purpose lanes and the underpass, while maintaining safety requirements,
e) Minimizing the visual effects of the four-and-a-half-foot-tall flood berm by including decorative fencing and landscaping, and by including arts-in-transit designs based on community input,
f) Replanting of trees in the buffer between the curb and the sidewalk at intervals recommended by the City of Houston Arborist and in accordance with the City's Tree Ordinance,
g) Noise mitigation during construction,
h) Public Outreach on Polk Station designs and arts-in-transit program to include a survey and a design workshop, and,
i) 30-day Consulting party design reviews of 60 percent plans.

5 Coordination Activities with Officials with Jurisdiction

Correspondence with the OWJ for parks and historic resources is included in Appendix B. The following sections describe the coordination with HPARD for parks and recreation areas and with the THC for historic properties.

5.1 City of Houston Parks & Recreation Department

FTA and METRO coordinated with the HPARD over the city-owned Section 4(f) properties described in this report during development and evaluation of the preliminary alternatives and refinement of the Locally Preferred Alternative. METRO and HPARD reviewed the proposed design and potential Section 4(f) park and recreational area uses to minimize impacts on these resources and provide for increased accessibility to the parks. HPARD supports the sidewalk improvements and have provided a letter concurring with FTA's *de minimis* impact determination for Mandell, Peggy, and Diez Parks. HPARD also confirmed that Peggy's Point Plaza is no longer significant and is being sold and transferred from park ownership.

5.2 Texas Historical Commission

FTA and METRO consulted with the THC to complete the identification and effects determinations of the project on historic properties within the APE. Consulting parties and tribes were invited to consult throughout the process. The *Historic Survey Report* and *Historic Survey Report Addendum* were provided to consulting parties and comments were solicited in writing and during a consulting party meeting held on June 1, 2023 and throughout the review and comment period (June 1 - July 1 and August 14 – September 14). The THC concurred with FTA's Determinations on Eligibility and that there would be No Adverse Effects to the historic properties and/or districts. FTA thereby informed the THC of the agency's intent to issue a *de minimis* impact determination under Section 4(f).

FTA and METRO also coordinated with the THC and Project RESPECT (a non-profit cemetery management organization), relative to the Evergreen Cemetery. This coordination is described in detail in the Archaeological Survey Report and the Work Plan. As the THC asked FTA to treat the Evergreen Negro Cemetery as an NRHP eligible resource, the THC serves as the OWJ. Representatives of Project RESPECT attended the June 1st, consulting party meeting and the September urban design workshops. THC concurred with FTA's Determinations of Eligibility and that there would be No Adverse Effects to historic properties. FTA thereby informed the THC of the agency's intent to issue a *de minimis* impact determination under Section 4(f).

6 References

City of Houston Parks and Recreation Department. 2022. HPARD Public Inventory. January 18, 2022. (Internet website: https://houstontx.gov/parks/pdfs/HPARDInventory.pdf).

Federal Highway Administration (FHWA). 2012. Section 4(f) Policy Paper. Office of Planning, Environment and Realty. Washington, DC. July 20, 2012. (Internet website: https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.aspx).

Federal Transit Administration (FTA). 2016. *Section 4(f) Evaluations*. Standard Operating Procedure Number 18. August 11, 2016. USDOT, Washington, D.C. (Internet website: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/SOP%2018.pdf).

Harris County, Precinct One. 2022. Danny Jackson Family Bark Park. (Internet website: https://www.hcp1.net/DannyJacksonDogPark).

Harris County, Precinct One. 2022. Hutcheson Park. (Internet website: https://www.hcp1.net/maps/location/HutchesonPark).

Houston-Galveston Area Council (H-GAC). 2021.

Houston Parks Board. 2022. Hunting Bayou. (Internet website: https://houstonparksboard.org/about/hunting-bayou).

Levy Park Conservancy. 2022. “About” (Internet website: https://www.levyparkhouston.org/about/).

Mandel Park. 2022, (Internet website: https://www.mandellpark.org/html/about.html).

APPENDIX A:

Parks and Recreation Areas in the Study Area

Table A-1: Parks and Recreation Areas in the Study Area

Map ID#	Segment	Property Name	Classification	Features	Location*	Overall Property Size Acres (Ac)
10	1	NEWCASTLE STREET TRAIL	Trail	Trail		3.03 (2 miles)
8	1	ANDERSON PARK	Neighborhood Park	Playground, tennis courts, baseball field	5701 Beverly Hills	7.09
7	1	BRIARMEADOW PARK	Neighborhood Park	Playground, tennis courts, picnic tables, pavilion, trail	7703 Richmond	4.61
9	1	DANNY JACKSON FAMILY BARK PARK[5]	Neighborhood Park	Dog park	4828 1/2 Loop Central Dr	5.06
2	1	HARWIN PARK	Neighborhood Park	Trails, playground, picnic tables	11305 Harwin Dr, 77072	8.79
6	1	RASMUS (WALTER J., SR.) PARK	Neighborhood Park	Playground, baseball field, pavilion, walking path	3721 Jeanetta Street, 77063	8.68
5	1	SHARPSTOWN PARK & GOLF COURSE	Community Park	Golf course, swimming pools, playground, picnic tables, basketball, benches	8200 Bellaire Blvd, 77036	148.71
4	1	TANGLEWILDE PARK	Neighborhood Park	Playground, pavilion, picnic tables, walking path	9631 Windswept Lane, 77063	2.54
3	1	WOODCHASE GREENSPACE	Greenspace	Greenspace	3951 Woodchase Drive, 77042	1.75
15	2	BELL PARK	Neighborhood Park	Walking path, sculptures, benches	4800 Montrose Blvd, 77006	1.15
13	2	CHEW (ERVAN) PARK	Neighborhood Park	Playground, splashpad, basketball court, baseball field, picnic tables, dog park	4502 Dunlavy	3.64
11	2	LEVY PARK	Neighborhood Park	Dog park, community garden, playground, playscapes, dog park	3801 Eastside St, 77098	5.98

[5] Land is owned by METRO and occupied under a temporary lease.

Map ID#	Segment	Property Name	Classification	Features	Location*	Overall Property Size Acres (Ac)
14	2	MANDELL PARK	Neighborhood Park	Garden, greenspace, benches	1501 Richmond Avenue, 77006	1.71
16	3	PEGGY'S POINT PLAZA PARK[6]	Pocket Park	Fountain, benches	4240 Main St, 77002	0.34
12	2	VASSAR SPACEWAY	Greenspace	Greenspace	1720 Vassar Street, 77098	0.22
26	2	COLUMBIA TAP TRAIL	Trail	Trail		Unknown
27/29	4	AUSTIN HIGH BASEBALL STADIUM/DIEZ STREET PARK	Neighborhood Park	Baseball field	4700 Diez	9.09
27	4	AUSTIN HIGH TRACK	School Recreation	Running track	1700 Dumble St, 77023	13.14
28	3	BROADMOOR-KRETSCHMAR PARK	Pocket Park	Playground, swings, benches,	1500 Elliott	0.47
30	4	CAGE ELEMENTARY SCHOOL/PROJECT CHRYSALIS MIDDLE SCHOOL	School Park (not public)	School playground, baseball field, and tennis court	4528 Leeland St, 77023	13.25
18	3	YOUNG WOMEN'S PREPARATORY ACADEMY (FORMER CONTEMPORARY LEARNING CENTER HIGH SCHOOL)	School Recreation (not public)	Recreational fields	1906 Cleburne St, 77004	9.99
19	3	EMANCIPATION PARK	Community Park	Community center, basketball pavilion, sports fields, tennis courts, swimming pool, playground, picnic areas	3018 Dowling	10.87
22	3	LEROY (MOSES) PARK	Neighborhood Park	Basketball court, pavilion, picnic tables, playground, benches	3100 Trulley St, 77004	0.58
23	3	MALONE (ZURRIE M.) PARK	Pocket Park	Pavilion, playscape, tables, benches	2901 Nettleton/Anita, 77004	0.69
20	3	OUR PARK	Pocket Park	Playground, pavilion, picnic tables	2604 Alabama Street, 77004	0.66

[6] Park is being decommissioned by the City of Houston.

Map ID#	Segment	Property Name	Classification	Features	Location*	Overall Property Size Acres (Ac)
17	3	PEGGY PARK	Neighborhood Park	Playground, pavilion, basketball court, picnic tables	4208 Chenevert Street, 77004	2.23
21	3	TEXAS SOUTHERN UNIVERSITY HEALTH AND PHYSICAL EDUCATION ARENA	School recreation (not public)	Physical education arena	3100 Cleburne St, 77004	4.92
25	3	UNIVERSITY OF HOUSTON ATHLETIC FIELDS	School recreation (not public)	Softball stadium, baseball field, tennis court, batting cage, running track	3100 Cullen Blvd, 77204	35.42
24	3	YATES HIGH SCHOOL	School Recreation	Baseball field, football field, running track	3703 Sampson St, 77004	Unknown
1	4	BRAY'S BAYOU CONNECTOR TRAIL	Trail	Green space, hike and bike trail		Unknown
31	4	CULLINAN (M.C.) PARK (PB 2)	Neighborhood Park	Playground	5120 Polk	0.86
33	4	EASTWOOD PARK	Neighborhood Park	Swimming pool, playground, skateboarding, trails, community center	5000 Harrisburg	10.25
38	4	FINNIGAN PARK	County Park	Swimming pool, trails, tennis courts, baseball field	4900 Providence St, 7720	16.50
37	4	JAPHET CREEK PARK	Neighborhood Park	Hike and bike trails, community gardens, outdoor classroom, creek	4700 Clinton Drive	4.75
36	4	MARRON (TONY) PARK	Community Park	Soccer field, baseball field, playground, walking trails	808 N York St, 77003	31.22
39	4	MCREYNOLDS MID SCH PARK (LEASE)	Neighborhood Park	Playscape, walking path, baseball field, benches	5905 Larimer St, 77020	6.15
32	4	PARK DRIVE PARK	CST/Spaceway	Open space median	4600 Park Drive, 77023	2.34
41	5	ADAMS (CATHERINE)/RAWLEY PARK	Pocket Park	Group picnic sites, trails	4800 Rawley	0.41
42	5	BOYCE DORIAN PARK	County Park	Jogging trail, basketball court, pavilion, picnic tables, playground	2000 Erastus St, 77020	Unknown

Map ID#	Segment	Property Name	Classification	Features	Location*	Overall Property Size Acres (Ac)
45	5	DELCE (CATHERINE) PARK	Neighborhood Park	Playground, pavilion, basketball court	5902 Collingsworth	2.62
50	5	DODSON LAKE PARK	Community Park	Trails, pavilion, tennis court, benches, picnic tables, community center	9010 Dodson	23.84
44	5	EVELLA PARK	Neighborhood Park	Playground, basketball court, community center, benches, picnic tables	5210 Evella	0.23
49	5	FELIX COOK ELEMENTARY	School Park	School playground and recreation areas	7115 Lockwood Dr, 77016	Unknown
47	5	HUTCHESON PARK AND TRAILS	County Park	Tennis court, exercise stations, jogging trails, playground, picnic areas	5400 Lockwood Dr, 77026	15.26
43	5	JORDAN (BARBARA) FAMILY PARK	County Park	Playground, benches, picnic tables	4807 Lee Street, 77020	0.57
46	5	KASHMERE GARDENS ELEMENTARY SPARK PARK	School Park	Playground and trail	4901 Lockwood Dr, 77026	4.99
35	5	TAUB GREENSPACE	Neighborhood Park	Greenspace	7537 Lockwood Drive, 77016	2.94
48	5	TRINITY GARDENS PARK	Neighborhood Park	Playground, Pavilion, baseball field	4903 Wileyvale Road, 77016	5.39
40	5	TUTTLE (CLIFF) PARK (PADILLA SKATE PARK)	Neighborhood Park	Playground, picnic tables, pavilion	6200 Lyons Ave, 77020	2.91
51	5	WARREN PARK	Neighborhood Park	Playground, basketball court, baseball field, picnic courts	4301 Topping Street, 77093	5.45

APPENDIX B:

Correspondence with Officials with Jurisdiction

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CITY OF HOUSTON
Parks and Recreation Department
A CAPRA Accredited Agency

Sylvester Turner
Mayor

Kenneth Allen
Director
Parks and Recreation Department
2999 S. Wayside Dr.
Houston, TX 77023

T. 832.395.7000
F. 832.395.9452
www.houstonparks.org

August 8, 2023

Clint B. Harbert
Houston Metropolitan Transit Authority
1900 Main Street
Houston, TX 77002

RE: METRORapid University Corridor Project – Official with Jurisdiction Consultation

Dear Mr. Harbert:

This letter is in response to our coordination and your request regarding the concurrence regarding following four park properties, Mandell Park, Peggy's Point Plaza Park, Peggy Park, and Diez Street Park and the METRORapid University project.

Coordination

METRO coordinated with HPARD staff in a meeting on May 22, 2023, regarding four park properties: Mandell Park, Peggy's Point Plaza Park, Peggy Park, and Diez Street Park where sidewalk and Americans with Disabilities Act (ADA) improvements are needed to meet COH sidewalk design requirements. During this meeting, METRO presented illustrations of improvements planned at Mandell Park, Peggy's Point Plaza Park, Diez Park and Peggy Park.

HPARD explained that the improvements could be made with a Right of Entry for METRO's Contractor as part of the construction activities for the Project for three parks: Mandell Park, Peggy Park, and Diez Street Park. METRO coordinated with HPARD attorneys and HPARD attorneys concluded that because no change in property ownership occurs; the proposed improvements will be minor to comply with the City sidewalk requirements; and will result in overall access improvement to the parks, Texas Chapter 26 requirement are not applicable to the proposed enhancement to the park properties. The parks will continue to function for its intended purposes and the COH will retain ownership of the property. METRO will also coordinate with COH Forestry Department for any tree removals and/or relocations that may occur with respect to these three parks.

The remaining park resource, Peggy's Point Plaza Park, is in the process of being decommissioned by HPARD and the City is preparing to host a Chapter 26 public hearing providing the state-required notification. The decommission of the park is expected to occur prior to 60 percent engineering plans (2024). Given that the park is scheduled to be decommissioned, the park is not considered a significant resource by the OWJ and is, therefore, not considered a resource afforded protection under Section 4(f).

Council Members: Amy Peck Tarsha Jackson Abbie Kamin Carolyn Evans-Shabazz Dave Martin Tiffany D. Thomas Mary Nan Huffman
Karla Cisneros Robert Gallegos Edward Pollard Martha Castex-Tatum Mike Knox David W. Robinson Michael Kubosh Letitia Plummer Sallie Alcorn
Controller: Chris Brown

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Federal Regulations - Section 4(f) Regulation

Section 4(f) is a federal regulation (23 CFR 774) that applies to any U.S. Department of Transportation (DOT)- funded projects where a "use" of a Section 4(f) property[1], is planned. Section 4(f) only applies to "significant" publicly-owned parks and recreation areas that are open to the public. Significance for parks, recreation areas, and wildlife/waterfowl refuges is determined by the OWJ, in this case the HPARD, and must apply for the entirety of the resource to be considered significant.

A permanent, temporary, or constructive use can only be approved if there is no feasible and prudent avoidance alternative and that the action has included all possible planning to minimize harm to the Section 4(f) property. FTA can make a *de minimis* determination if an impact is so minor as to not adversely affect the features, attributes or activities that qualify the property protection under Section 4(f).

The construction activities that would occur to make sidewalk and ADA improvements at Mandell Park, Peggy Park, and Diez Street Park will be minor and will be a *de minimus*. The METTRORapid University project will not adversely affect the activities, features or attributes that make the property eligible for Section 4(f) protection. In addition, the COH has determined that Peggy's Point Plaza Park is no longer considered significant.

As the Official with Jurisdiction over Mandell Park, Peggy's Point Plaza Park, Peggy Park, and Diez Street Park, I understand and concur that:

- Houston METRO's Construction Contractor will be provided Right of Entry to complete the temporary construction activities associated with the University BRT Project to accommodate a shared use path/sidewalk and ADA improvements at Mandell Park, Peggy's Point Plaza Park, and Diez Street Park. Construction impacts will be *de minimis* as defined herein and will result in improved sidewalks and pedestrian/bicycle access to the parks; and,
- Peggy's Point Plaza Park is not a significant park resources for the Houston Parks and Recreation Department and the City intends to decommission the park prior to final design plan completion.
-

Sincerely,

DocuSigned by:

059DCC946690471...

Kenneth Allen

Director, Houston Parks and Recreation Department

cc:

Jeatawn Degelia, City of Houston
Lisa Johnson, City of Houston
Brian Crimmins, City of Houston
Clint B. Harbert, Vice President, System & Capital Planning
Yuhayna Mahmud, Principal Planning Program Manager, METRO

[1] defined as a publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of nation, State, or local significance, or land of a historic site of national, State, or local significance.

Mission Statement

"Provide safe, clean, reliable, accessible and friendly public transportation services to our region."

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August 8, 2023

Kenneth Allen, Director
Houston Parks and Recreation Department
2999 South Wayside
Houston, Texas 77023

Re: METRORapid University Corridor Project – Official with Jurisdiction Consultation

Dear Mr. Allen:

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in Harris County, Texas in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion (CE) is being prepared as part of this process. FTA is the Federal Lead Agency and METRO is the Local Project Sponsor responsible for implementing the Project. METRO has prepared this correspondence to seek concurrence from City of Houston Parks and Recreation Department (HPARD) as the Official with Jurisdiction (OWJ) over parks and recreation resources within the City.

Proposed METRORapid University Corridor Project

The Project is a proposed 25.3-mile bus rapid transit (BRT) line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston (COH). The project also proposes to provide a shared use pedestrian and bicycle path adjacent to the BRT and generally within COH street ROW as required by City of Houston. The Project is divided into five segments as shown in **Table 1. Figure 1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects and major activity centers along its path.

Table 1 University Corridor Segments		
Segment	From	To
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Dr
2	Westpark Dr 1,500 feet east of UPRR tracks, east of Newcastle Dr	Richmond Ave at US-59
3	Richmond Ave at US-59	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at Margarita St.
5	Lockwood Dr at Margarita St.	Tidwell Transit Center

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Coordination and Concurrence Request

METRO coordinated with HPARD staff in a meeting on May 22, 2023, regarding four park properties: Mandell Park, Peggy's Point Plaza Park, Peggy Park, and Diez Street Park where sidewalk and Americans with Disabilities Act (ADA) improvements are needed to meet COH sidewalk design requirements. During this meeting, METRO presented illustrations of improvements planned at Mandell Park, Peggy's Point Plaza Park, Diez Park and Peggy Park (see **Attached**).

METRO is seeking written concurrence from HPARD/COH that the construction activities that would occur to make sidewalk and ADA improvements at Mandell Park, Peggy Park, and Diez Street Park will not adversely affect the activities, features or attributes that make the property eligible for Section 4(f) protection and that these will be minor and will be a *de minimus*.

In addition, METRO would like to confirm in writing the COH has determined that Peggy's Point Plaza Park is no longer considered significant.

METRO will make your signed letter part of the Section 4(f) record for the Project and your concurrence will be presented to FTA as part of our CE submission. Your prompt response is appreciated. We look forward to continuing to work with HPARD as the Project moves forward.

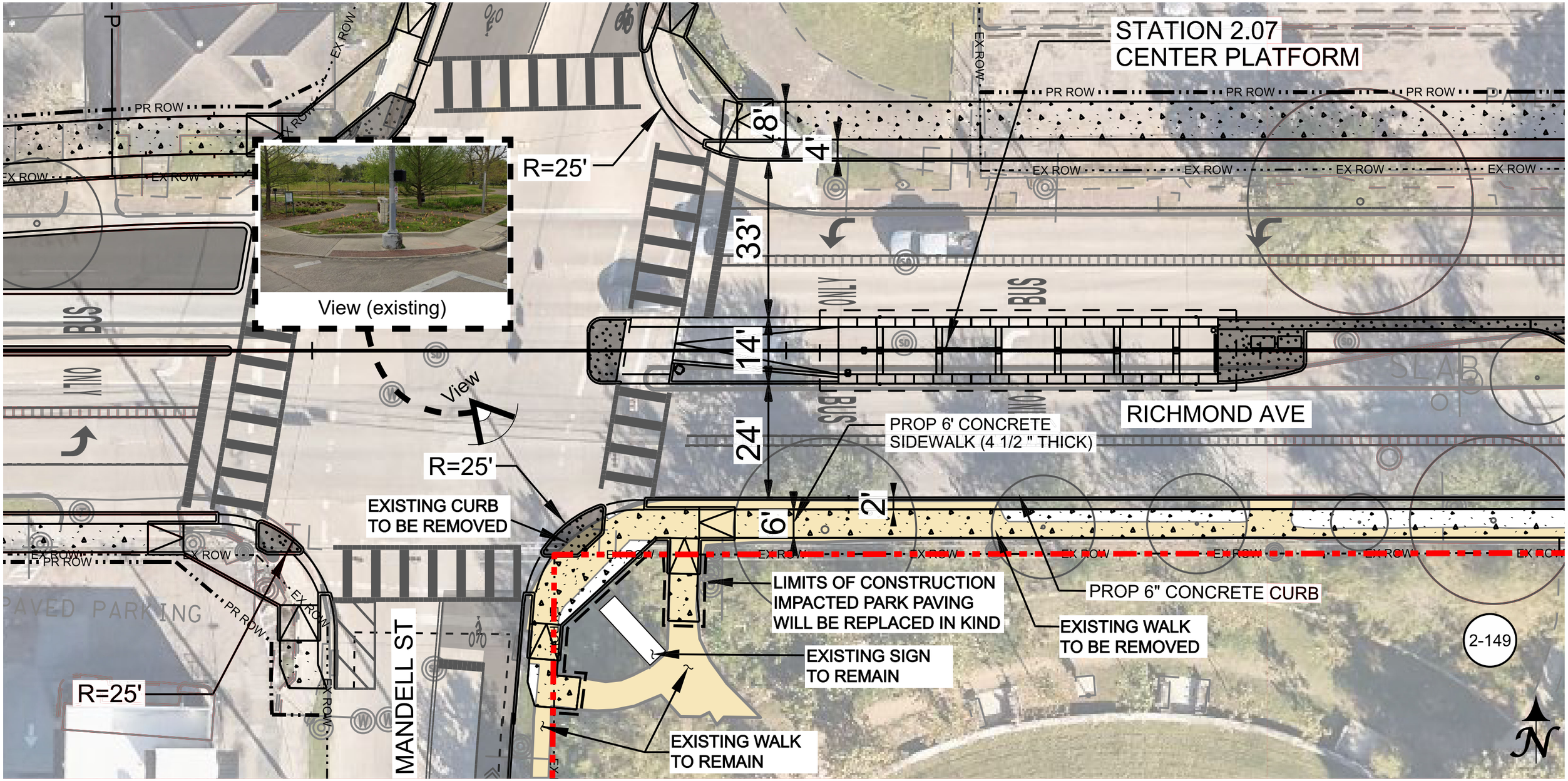
Sincerely,

Clint B. Harbert, AICP
Vice President, System & Capital Planning, METRO

cc: Jeatawn Degelia, City of Houston
Lisa Johnson, City of Houston
Shri Reddy, P.E., Executive Vice President, Planning, Engineering & Construction, METRO
Yuhayna Mahmud, Principal Planning Program Manager, METRO

Attachment

Mandell Park
Peggy's Park
Diez Park
Peggy's Point Plaza Park

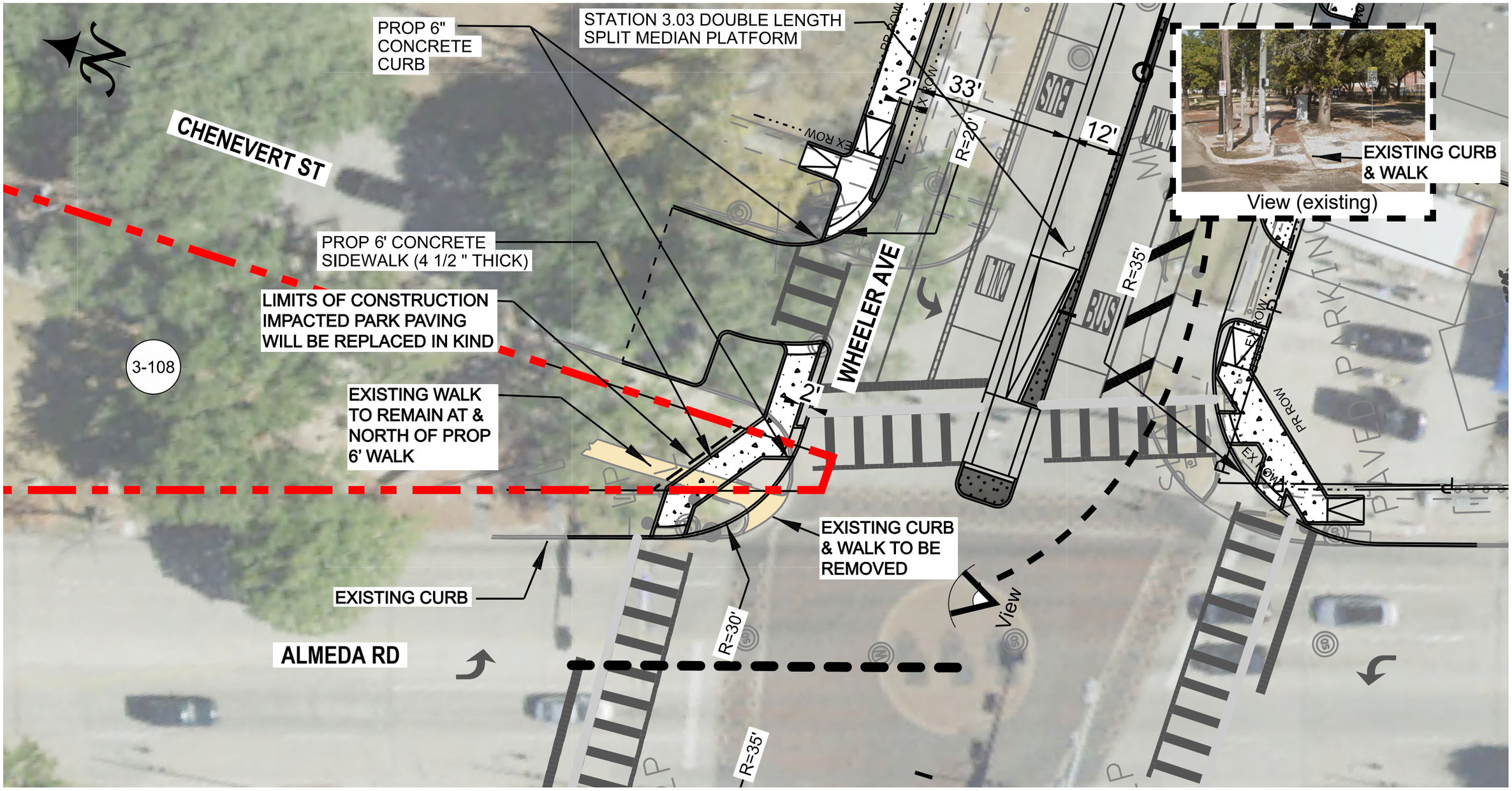


Segment 2 - Mandell Park

LEGEND - ROADWAY

- MANDELL PARK PROPERTY LINE
- LIMITS OF CONSTRUCTION
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- EXISTING WALK

0 20 40



Segment 3 - Peggy Park

LEGEND ROADWAY

- MANDELL PARK PROPERTY LINE
- LIMITS OF CONSTRUCTION
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- EXISTING WALK

0 20 40

LOCKWOOD DR

40015+00

HICKSFIELD ST

10'

3'

4'

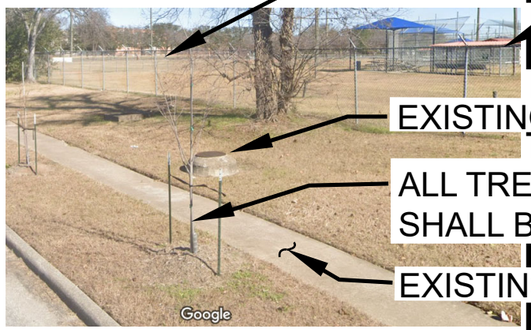
EXISTING FENCE

EXISTING DUGOUT

EXISTING MANHOLE

ALL TREES IMPACTED BY CONSTRUCTION SHALL BE REPLACED PER COH RQMTS.

EXISTING 4' WALK



View (existing)

EXISTING FENCE

LIMITS OF CONSTRUCTION

REMOVE EXISTING 4' WALK & REPLACE WITH 10' SIDE PATH

EXISTING MANHOLE TO REMAIN

PROP WHEELCHAIR RAMP (TYP)

PAVEMENT RECONSTRUCTION LIMIT

EXISTING 4' WALK TO REMAIN

PROP 10' CONCRETE SIDEWALK (6" THICK)

EXISTING DUGOUT

View

LEGEND - ROADWAY

- DIEZ STREET PARK PROPERTY LINE
- LIMITS OF CONSTRUCTION
- PROPOSED SIDEWALK
- EXISTING WALK

0 20 40

4-006

N

Segment 4
Diez Street Park

Segment 3 - Peggy's Point Plaza Park

LEGEND - ROADWAY

- EXISTING ROW
- EXISTING PARCEL LINES (GIS)
- PROPOSED ROW
- PROPOSED SIDEWALK
- PROPOSED MEDIAN
- PEGGY POINT PARK PROPERTY LINE
- PROPERTY IMPACTED
- PARK IMPACTED

0 60 120

LICENSE AGREEMENT
(GOVERNMENTAL LICENSEE)

License No. 2500130

This License Agreement (the "**Agreement**") is entered into effective as of June 10, 2005 (the "**Effective Date**"), by and between **METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS**, a public body corporate and politic organized and existing under Ch. 451 TEX. TRANSPORTATION CODE ("**Licensor**"), and **HARRIS COUNTY, TEXAS**, a body corporate and politic under the laws of the State of Texas ("**Licensee**"), upon the following terms and conditions:

1. Beginning on the Effective Date of this License Agreement and continuing from day to day until terminated by either party as provided below, Licensor hereby consents to and permits Licensee to use, at Licensee's sole expense and risk, that certain tract of real property (the "**Property**") more particularly described on **Exhibit A** attached hereto and made a part hereof for all purposes, solely for the following purpose: **temporary public dog park operated by Licensee**. Licensee, and any employee, contractor, licensee or invitee of Licensee or other member of the general public entering the Property by, through or under Licensee's rights hereunder, shall be considered a trespasser on the Property for any use of the Property other than the foregoing.

2. Without limiting anything contained in this Agreement, **Licensee knowingly and voluntarily assumes any and all risks, known and unknown, which may arise from the use of the Property pursuant to this Agreement, and its right to use the Property is AS IS, WITH ALL FAULTS. Licensee specifically agrees that it will not seek reimbursement, damages or any other kind of compensation from Licensor, nor make any claims whatsoever against Licensor, and that Licensor shall have no liability to Licensee for any loss, cost, damages, bodily injuries or death.**

3. Consideration for this Agreement and the license granted hereunder (collectively, the "**License**") to use the Property for the purposes indicated above consists of Licensee's undertaking and performing all obligations of Licensee under the terms, provisions, covenants and conditions set forth herein at no cost to Licensor. This License is granted by Licensor to Licensee on such terms, provisions, covenants and conditions in the interest of interlocal governmental cooperation between the parties hereto, and Licensor acknowledges that Licensee's operation and maintenance of the Property in accordance herewith assists Licensor's governmental function of preserving the Property on an interim basis as part of a transit corridor for future development of Licensee's transit project referred to in Exhibit C attached hereto. Accordingly, Licensor's customary User Fees and all cash consideration are hereby expressly waived by Licensor.

4. The License may be terminated by either party hereto at will, at any time and for any reason or for no reason, upon ninety (90) days prior written notice to the other party. Unless Licensor gives Licensee its prior written consent to abandon in place any of

Licensee's personalty, fixtures, equipment, pavement, piping, lighting, excavations, fences and other buildings, structures or facilities on the Property (collectively, the "**Personalty**"), no later than the date of such termination of the License, Licensee will, at no cost to Licensor, remove the Personalty and restore the Property to the condition in which it existed prior to the Effective Date hereof, including but not limited to removal of subsurface foundations and refilling of excavations. No termination of the License shall release Licensee from any liability which may have attached or accrued, nor from any obligation contained in this Agreement, prior to the date of such termination.

5. Licensee shall have no right:

(a) to own, operate, maintain, or allow to exist any Personalty of Licensee on the Property in an unsafe, unsightly, or dysfunctional condition nor in any other manner causing any material interference with the Licensor's use and enjoyment of the Property;

(b) to maintain any of its Personalty on the Property in a manner that does not comply with all applicable requirements of federal, state or municipal laws, regulations, codes, ordinances and governmental rules or judicial orders applicable thereto;

(c) to cause or permit any spill, release, emission or discharge of Hazardous Materials, as defined herein, on or from the Property caused by Licensee or its contractors, subcontractors, agents, or employees while in the course and scope of business or employment of or for Licensee, to remain on any of Licensor's lands in such a manner as to cause the said Licensor's lands to be in a condition other than the condition in which they existed immediately prior to such spill, release, emission or discharge of Hazardous Materials. As used herein, "**Hazardous Material**" means any waste, chemicals, materials or substances defined as hazardous materials, hazardous wastes, hazardous substances, contaminants, pollutants or toxic substances under any applicable health, safety or environmental law; or

(d) to cause or permit any public or private, temporary or permanent, nuisance to occur on the Property. .

6. **Licensee hereby releases Licensor from and against and hereby waives all claims against Licensor for all claims, suits, liabilities, damages, penalties, losses, costs and expenses (including reasonable attorneys' fees incurred by Licensee in connection therewith) for any bodily injury or death or damage or destruction of any property of Licensee arising directly or indirectly out of the use of the Property pursuant to this License, or any violation or breach of this License, by Licensee.**

7. Intentionally deleted.

8. This License is personal to Licensee and the consideration provided for herein is accepted by Licensor solely in recognition of intergovernmental cooperation with Licensee

specifically, and no other public or private person or entity. Accordingly, this License shall not be assigned or transferred, in whole or in part, by Licensee. Licensee will not grant or permit encumbrances or mechanics' liens to be placed upon the Property or the License. Any attempted assignment, pledge, or transfer in violation of this paragraph shall be void. Licensor shall continue to possess and enjoy all ownership rights in and to the Property, and Licensee acknowledges that Licensee has no leasehold, easement or other interest in real property as to the Property. Licensor shall have the right to enter upon the Property at all times, and for any reason. The License granted herein is non-exclusive.

9. **This Agreement contains the special provisions set forth in Exhibit C attached hereto, all of which are incorporated herein and made a part hereof for all purposes by reference thereto.**

10. Any notice, consent or other communication required or permitted by this Agreement shall be in writing and shall be deemed sufficiently given if delivered personally or sent by certified mail, return receipt requested, postage prepaid, to the address provided below for each party, or to any other address as either party may hereafter advise the other party in accordance with this paragraph. Any such notice, consent or communication shall be deemed to have been given as of the date so delivered, if delivered personally, or two (2) business days after the date the same is deposited in the United States mail.

11. No waiver by Licensor of any provision of this Agreement shall be effective unless in a written document duly signed by both parties hereto, and no such waiver shall constitute a waiver of any other provision or a subsequent breach of the same provision. No amendment to this License shall be effective unless and until set forth in a written document and duly signed by both parties. This License is not intended nor shall it be construed as creating any rights in or for the benefit of the general public, nor shall it create or grant any rights regarding any real property outside of the Property.

[Remainder of this page intentionally left blank; signature page follows.]

EXECUTED in multiple counterpart originals effective as of the Effective Date.

"METRO"

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: _____
Name: Frank J. Wilson
As Its: President and CEO

Address: 1900 Main Street, 9th Floor
Houston, TX 77002
Attn: Vice President, Real Estate

"COUNTY"

HARRIS COUNTY, TEXAS

By: _____
Robert Eckels, County Judge

Address: 1001 Preston Street
Suite 911
Houston, Texas 77002

With a copy to
1001 Preston Street
Suite 924
Houston, Texas 77002
Attn: Commissioner, Pct. 3

Approved as to form:

Mike Stafford
County Attorney

By: _____
Assistant County Attorney

EXECUTED in multiple counterpart originals effective as of the Effective Date.

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Houston, Texas 77002
Attn: Commissioner, Pct. 3

Approved as to form:

Mike Stafford
County Attorney

By: _____
Assistant County Attorney

EXHIBIT A

LEGAL DESCRIPTION OF PROPERTY

That certain parcel of land, containing approximately 5.5 acres of land, more or less, located in Harris County, Texas, and being out of that certain tract of land commonly known as the Westpark Corridor, described in instrument filed for record under County Clerk's File No. P023668, Real Property Records, Harris County, Texas, and said out-parcel being more particularly described as follows:

A tract of land, 100 ft. wide and approx. 2,400 ft. long, beginning at the Westerly right of way line of Newcastle Drive and extending westward to the Easterly right of way line of West Loop South (including the northbound frontage road thereof).

EXHIBIT B

Intentionally deleted.

EXHIBIT C

SPECIAL PROVISIONS TO LICENSE AGREEMENT

The following special provisions are hereby made a part of the foregoing License Agreement. All capitalized terms used herein shall have the definitions set forth in the foregoing License Agreement for such terms.

1. Licensee hereby acknowledges, stipulates and agrees that (i) the Property is a portion of Licensor's transit corridor, (ii) as of the Effective Date hereof Licensor is planning to develop a transit project in the Westpark Corridor (as referred to in **Exhibit A** attached to this Agreement), including but not limited to the Property, within the next two (2) to five (5) years after the Effective Date, (iii) **the License will be terminated by Licensor within the next two (2) to five (5) years after the Effective Date in connection with commencement of work by or on behalf of Licensor relating to the development of such transit project**, (iv) any excavations, pavement, fences, structures (including subsurface foundations and structures) and other Personalty installed or constructed on the Property will interfere with Licensor's transit project and transit facilities and shall be removed by Licensee no later than the 90th day following notice of termination, and (v) Licensee's right to use the Property as a type of public park is temporary in nature and is expressly made subject to Licensor's right to terminate this License.

2. No later than thirty (30) days after either party hereto gives (or is deemed to have given) its 90-day notice of termination to the other party hereto, Licensee shall close the Property to the public and prohibit any further use of the Property for the purpose permitted in Section 1 of this Agreement; and no later than the termination date specified in such 90-day termination notice, Licensee shall complete the removal of all Personalty (including but not limited to any subsurface foundations installed by Licensee) from the Property and the restoration of the Property (including but not limited to the removal of any pavement and refilling, compacting and resurfacing any excavations therein installed by Licensee) to the condition in which it existed prior to the Effective Date.

3. This License is granted subject to all easements, leases, licenses, agreements and other matters in existence in or on the Property as of the Effective Date, appearing of record in Harris County, Texas, visible on the ground, or of which Licensor has given Licensee notice, including but not limited to the unrecorded licenses and agreements affecting the Property listed in Exhibit D attached hereto. Licensee shall not damage or interfere with, or permit any employee, contractor, licensee or invitee of Licensee or any other members of the general public entering the Property pursuant to the License to damage or interfere with, the rights and facilities of such pre-existing easements, licenses and other matters.

4. Licensee shall at all times keep the entire Property enclosed by fences with double-gated entries; provided, however, that where at-grade public or private streets or driveways cross the Property, no fences or gates shall be permitted to cross such streets, and the portion of the Property on each side of any such street or driveway shall be enclosed by such fences. All Personalty, including but not limited to all gates, fences and pavement,

shall be wheelchair accessible and otherwise compliant with all requirements of the Americans with Disabilities Act.

5. Licensee shall have exclusive responsibility for operating and maintaining the Property in a safe and prudent manner, at no cost to Licensor, in furtherance of which obligation, Licensee shall adopt, post and publicize, and consistently enforce reasonable rules relating to the use of the Property as a temporary public dog park, including but not limited to rules protecting the health, safety and property of the persons and animals using the Property, the health, safety and property of the owners of land abutting the Property, and the sanitation and environmental compliance of the Property.

6. Notwithstanding the last sentence of Section 5 of the foregoing License Agreement, Licensor and Licensee each hereby expressly stipulates, acknowledges and agrees that the Property will be used as a temporary public dog park and that it is expected that animal wastes will be deposited and temporarily stored on the Property; provided, however, that Licensor's agreement to allow the foregoing is conditioned upon Licensee's express obligation, at its sole cost and expense, to (i) install and stock on a daily basis dispensers of bags or other means for human users of the Property to collect animal waste, (ii) install and thereafter clean out on a daily basis receptacles for the disposal of animal waste, (iii) police the grounds of the Property on a daily basis and otherwise take all measures reasonably necessary to avoid the accumulation of animal waste on the Property, to avoid the release of animal waste into any ditches or other watercourses or onto any property adjacent to the Property and to avoid offensive odors developing on or emanating from the Property.

7. Licensor shall install signage on the Property that shall (i) recognize Licensor and Licensee's joint cooperation in providing and developing the Property as a public dog park, (ii) post Licensee's rules relating to the use of the Property, as described in Section 5 of this Exhibit C, and (iii) provide that any complaints, questions or other comments relating to the maintenance, repair, operation or use of the Property, and any notice of emergencies occurring on or around the Property, shall be directed to Licensee or third persons but not to Licensor.

8. Licensee shall be permitted to plant trees and other landscaping on the Property provided that all such trees and landscaping (including root balls) are removed from the Property as required by Section 2 of this Exhibit C.

9. In any fiscal year of Licensee after the Effective Date, if Licensee fails to appropriate adequate funding for its full and timely performance of all of its obligations hereunder, Licensor shall have the right to deem such failure to appropriate funds to be a 90-day notice of termination hereunder by Licensee.

EXHIBIT D

UNRECORDED LICENSES AND AGREEMENTS

License Number	Milepost (approx.)	Licensee	Type Lic.
Newcastle Drive, West ROW Line, Milepost 6.4702 (approx.)			
180547N	6.49	City of Houston	18" San. Sewer
160661N	6.57	City of Houston	Sewer Lift Stat. Easement
200001R	6.59	MCI	Buried Cable
980009O	6.63	Reliant HL&P	Aerial Crossings
157635N	6.647	Reliant HL&P	Aerial Crossings 12.5Kv
135003N	6.65	Loop Central	Roadway Lease
185442N	6.66	Loop Central	Sewer & Water Lease
186551N	6.66	Loop Central	Storm Sewer Lease
204480N	6.66	Loop Central	Marquee Lease
146952N	6.71	Reliant HL&P	Aerial Crossing
200002R	6.86	MCI	Buried Cable
960008R	6.933	Phonoscope	Aerial Cable
950022R	7.000	SW Bell	Buried Cable
West Loop South, East ROW Line, Milepost 7.0005 (approx.)			

THE STATE OF TEXAS §
§
COUNTY OF HARRIS §

The Commissioners Court of Harris County, Texas, convened at a meeting of said Court at the Harris County Administration Building in the City of Houston, Texas, on the ____ day of JUN 07 2005 2005, with the following members present, to-wit:

Robert Eckels	County Judge
El Franco Lee	Commissioner, Precinct No. 1
Sylvia R. Garcia	Commissioner, Precinct No. 2
Steve Radack	Commissioner, Precinct No. 3
Jerry Eversole	Commissioner, Precinct No. 4

and the following members absent, to-wit: None, constituting a quorum, when among other business, the following was transacted:

ORDER AUTHORIZING THE COUNTY JUDGE TO EXECUTE A LICENSE AGREEMENT BETWEEN METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS AND HARRIS COUNTY, FOR A DOG PARK LOCATED IN HARRIS COUNTY, TEXAS

Commissioner Radack introduced an order and made a motion that the same be adopted. Commissioner Eversole seconded the motion for adoption of the order. The motion, carrying with it the adoption of the order, prevailed by the following vote:

	Yes	No	Abstain
Judge Robert Eckels	☑	☐	☐
Comm. El Franco Lee	☑	☐	☐
Comm. Sylvia R. Garcia	☑	☐	☐
Comm. Steve Radack	☑	☐	☐
Comm. Jerry Eversole	☑	☐	☐

The County Judge thereupon announced that the motion had duly and lawfully carried and that the order had been duly and lawfully adopted. The order thus adopted follows:

WHEREAS, Harris County is desirous of operating the premises located in the vicinity of Westpark in Harris County, Texas as a dog park; and

WHEREAS, Metropolitan Transit Authority of Harris County, Texas, is desirous of licensing the premises to Harris County for use as a dog park;

NOW, THEREFORE, BE IT ORDERED BY THE COMMISSIONERS COURT OF HARRIS COUNTY, TEXAS, THAT:

Section 1: The recitals set forth in this Order are true and correct.

Section 2: The Harris County Judge is hereby authorized to execute for and on behalf of Harris County a License Agreement by and between Metropolitan Transit Authority of Harris County, Texas, and Harris County, said License Agreement being incorporated herein by reference and made a part hereof for all intents and purposes as though fully set forth herein word for word.

Section 3: All Harris County officials and employees are authorized to do any and all things necessary or convenient to accomplish the purpose of this Order.

Section 4. The prior order of the Court dated May 10, 2005 authorizing a lease of the property by Harris County is superseded by this order and such prior order is declared null and void.

From: noreply@thc.state.tx.us
To: Sharyn LaCombe; reviews@thc.state.tx.us
Subject: MetroRapid University BRT Corridor Project
Date: Friday, September 8, 2023 2:27:45 PM

Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas
THC Tracking #202312315
Date: 09/08/2023
MetroRapid University BRT Corridor Project (Permit 30784)
1301 Fannin Street

Description: Response to THC Comments from 6/29/2023

Dear Sharyn LaCombe:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act and the Antiquities Code of Texas.

The review staff, led by Justin Kockritz, Emily Dylla and Jonathan Moseley, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- Property/properties are eligible for listing or already listed in the National Register of Historic Places.
- THC/SHPO concurs with information provided.

Archeology Comments

- THC/SHPO concurs with information provided.

We have the following comments: The THC History Programs Division, led by Justin Kockritz has completed its review of the Historic Resources Survey Addendum and concurs that the Eastwood Historic District is eligible for listing in the National Register of Historic Places at the local level of significance under Criterion A for its historic associations with community planning and development and Criterion C for it architecture, and that the proposed National Register boundaries appear to be appropriate. We also concur that Lockwood Drive (formerly Maplewood Avenue) was widened and the medians were added after the historic district's period of significance; thus, the existing medians would be considered non-contributing resources to the historic district.The THC Division of Architecture, led by Jonathan Moseley, has completed its review of the Historic Resources Survey Addendum and also concurs that the Eastwood Historic District is eligible for listing in

the National Register of Historic Places at the local level of significance under Criterion A for its historic associations with community planning and development and Criterion C for its architecture. We also concur that Lockwood Drive's (formerly Maplewood Avenue) widening, and medians were constructed post period of significance. As such they would be considered non-contributing elements to the districts.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: justin.kockritz@thc.texas.gov, emily.dylla@thc.texas.gov, Jonathan.Moseley@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,



for Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

Community Design Workshops

WELCOME

METRO

INTRODUCTION

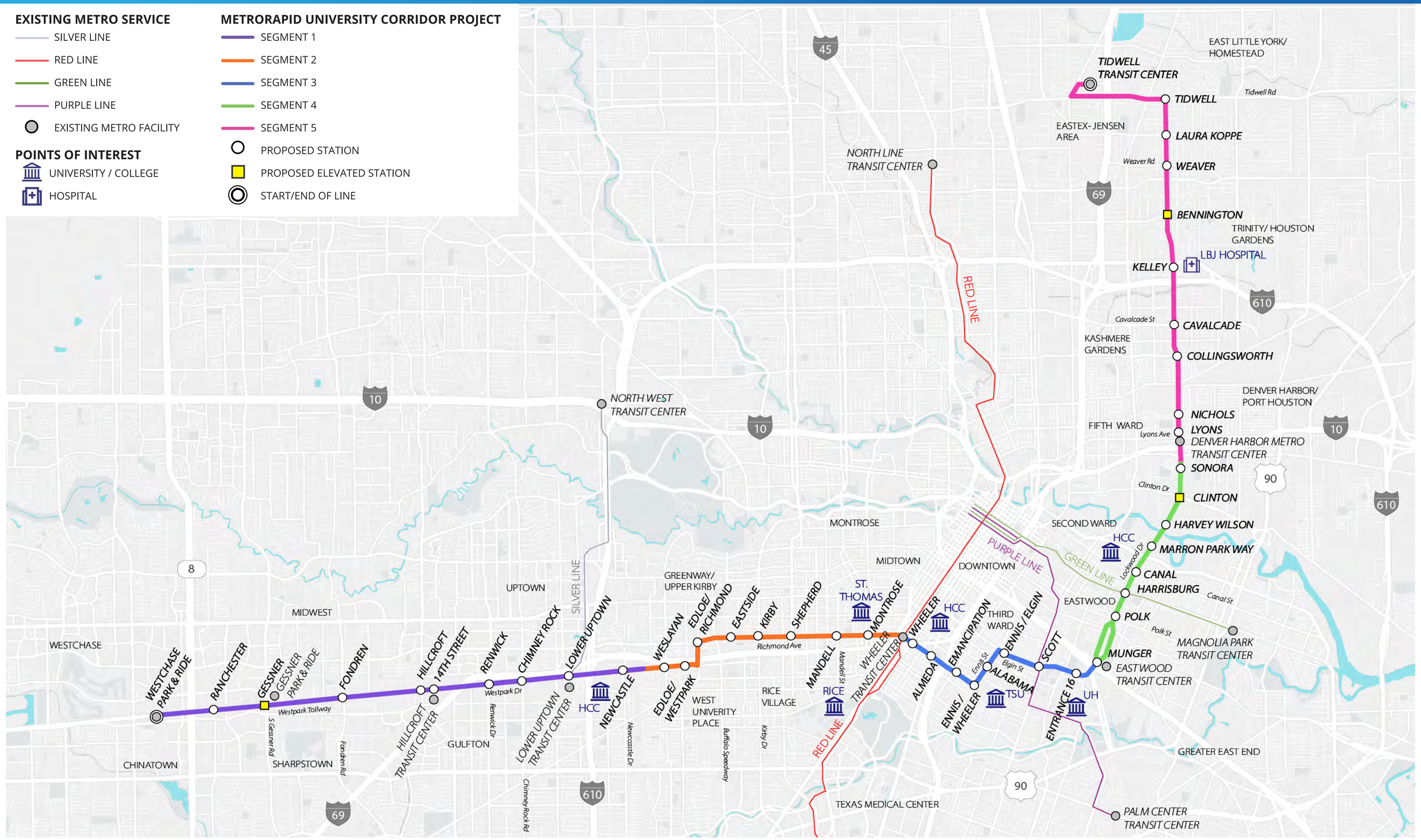
STATION 1

METRORAPID UNIVERSITY CORRIDOR MAP

EXISTING METRO SERVICE
- SILVER LINE
- RED LINE
- GREEN LINE
- PURPLE LINE
- EXISTING METRO FACILITY

POINTS OF INTEREST
- UNIVERSITY / COLLEGE
- HOSPITAL

METRORAPID UNIVERSITY CORRIDOR PROJECT
- SEGMENT 1
- SEGMENT 2
- SEGMENT 3
- SEGMENT 4
- SEGMENT 5
- PROPOSED STATION
- PROPOSED ELEVATED STATION
- START/END OF LINE



Illustrations for representational purposes only. Preliminary and subject to change based on public input and technical review.

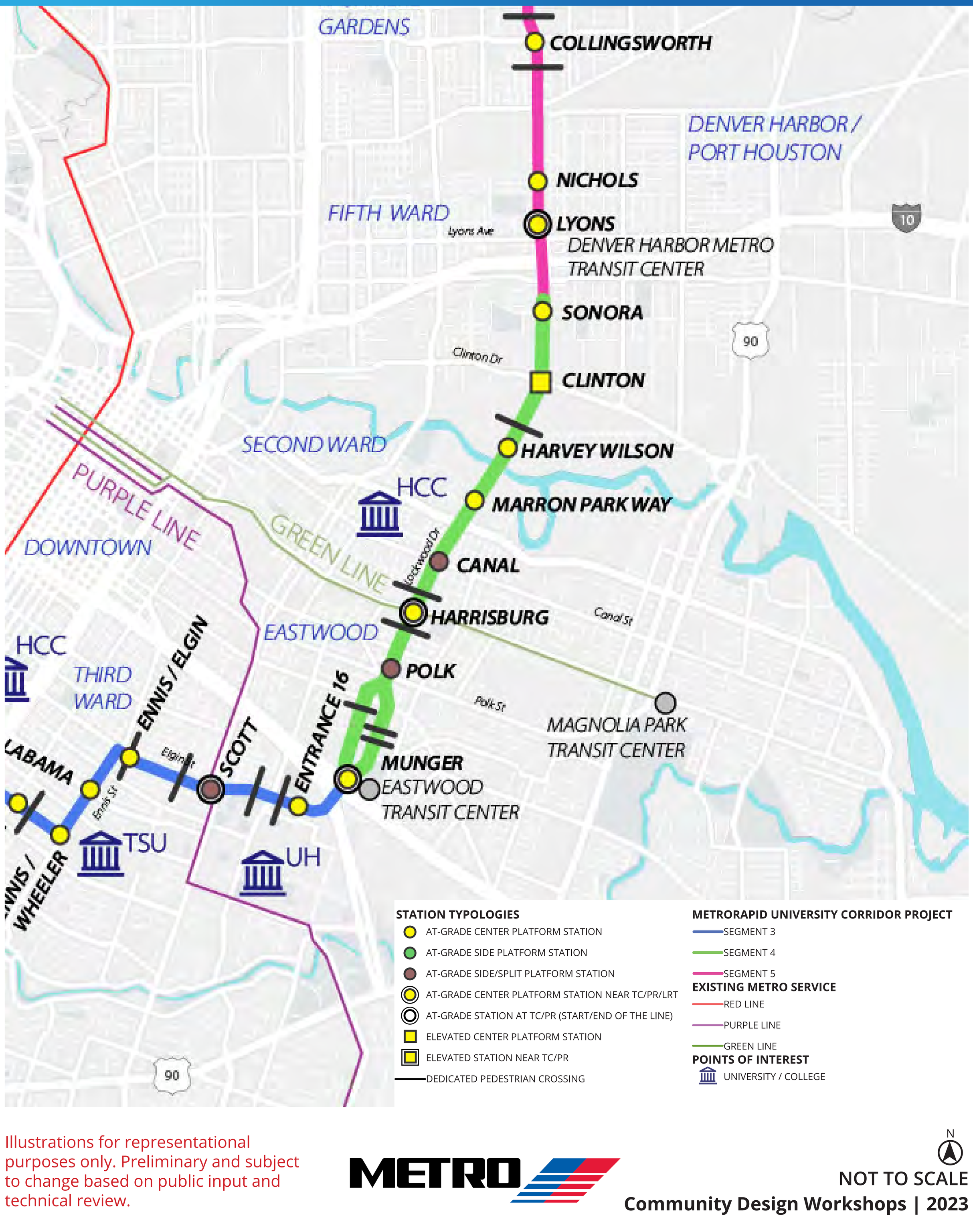
METRO

N

NOT TO SCALE

Community Design Workshops | 2023

SEGMENT 4



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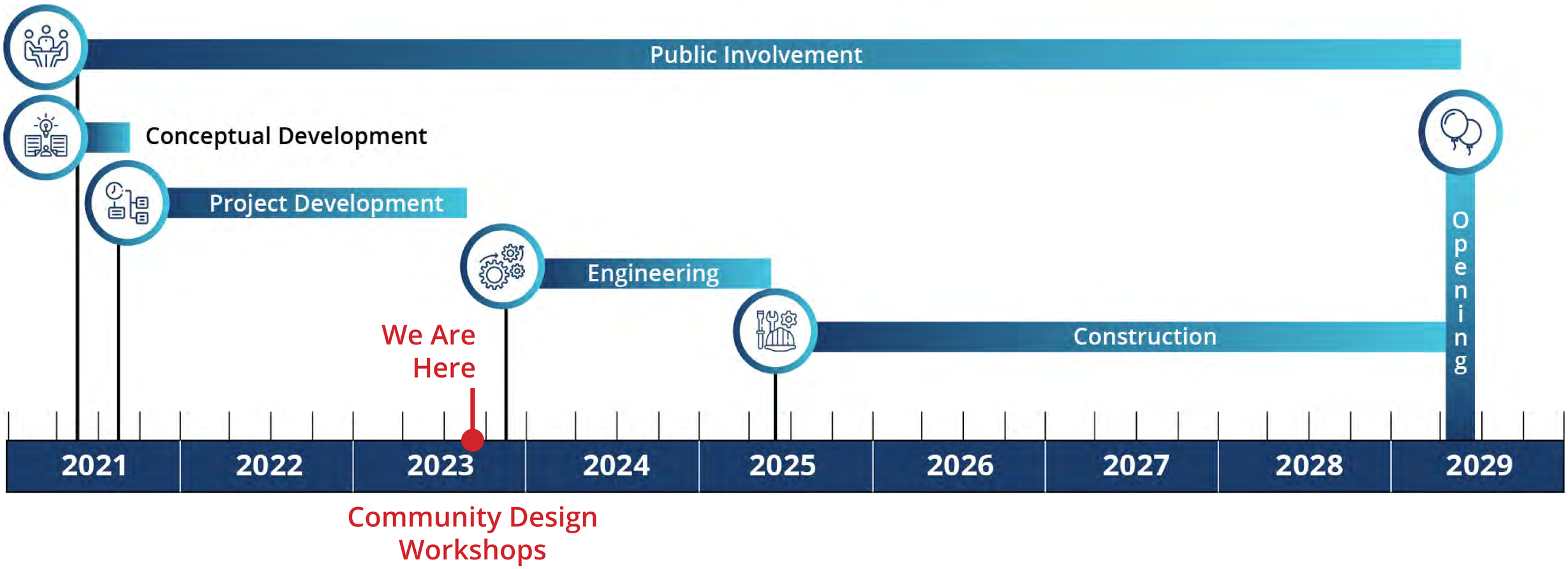
TIMELINE



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WHAT IS URBAN DESIGN?

With collaboration, **Urban Design** creates the look, the feel and the function of public spaces.

METRO Urban Design Manual directs places to be:



Accessible



Safe



Comfortable



Convenient



Enjoyable



Scan here to read the
Urban Design Manual

Illustrations for representational purposes only. Preliminary and subject to change based on public input and technical review.

METRO

Community Design Workshops | 2023

PURPOSE OF THIS WORKSHOP

Collaborate with you to **envision your public right-of-way** for:



A comfortable pedestrian corridor



Landscaped and shaded corridor



Corridor amenities

Design the pedestrian corridor with your preferred neighborhood amenities.

Illustrations for representational purposes only. Preliminary and subject to change based on public input and technical review.

METRO

COLLABORATING TO CREATE A VISION

Four Lenses for Urban Design from the METRO Urban Design Manual

ENVIRONMENTAL RESILIENCE



Integrate elements that consider:

- Stormwater management
- Energy consumption
- Light pollution reduction
- Design elements to mitigate the impacts of heat island effect through green infrastructure, shelters and shade canopy
- Preserve trees

DIVERSE COMMUNITIES



Celebrate community identity with:

- Art opportunities
- Language diversity
- Accessible communication

SUSTAINABLE DEVELOPMENT



Support

- Multi-modal connections
- Bicycle and other micro-mobility choices
- Transit oriented spaces

CUSTOMER EXPERIENCE



Promote

- A positive travel experience
- Position transit as a preferred mode of travel with a strong focus on safe, clean and reliable services

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METRO

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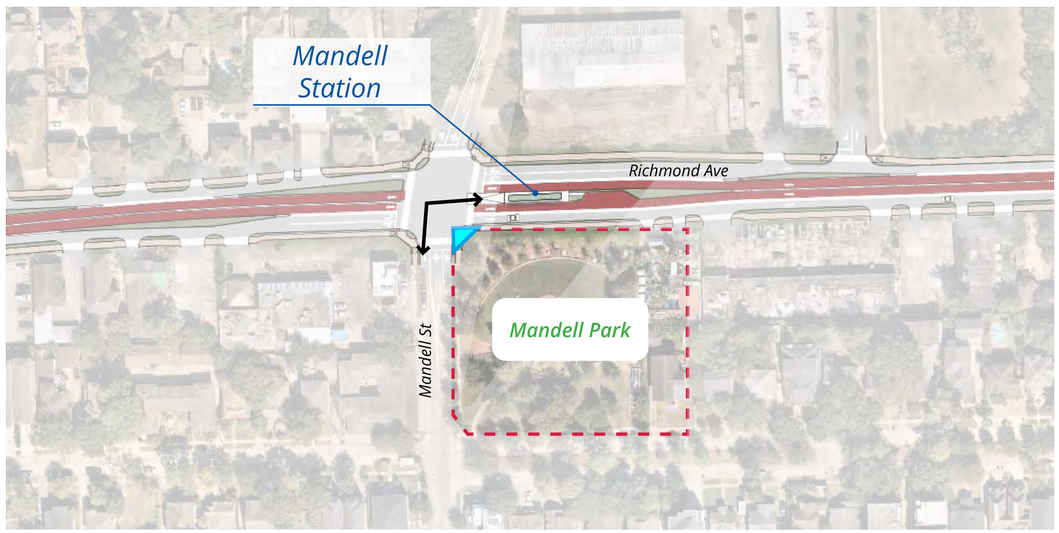
ACCESSIBILITY IMPROVEMENTS AT PARKS

As part of the METRORapid University Corridor Project, METRO will be building sidewalks and ADA improvements at three City of Houston parks where the project passes: Mandell Park, Peggy Park, and Diez Street Park.

The City of Houston Parks and Recreation Department's (HPARD) acknowledges the overall benefit of the project results in "improved sidewalks and pedestrian / bicycle access to the parks". It is part of the federal process to notify the public of any changes to Park Property.

Mandell Park





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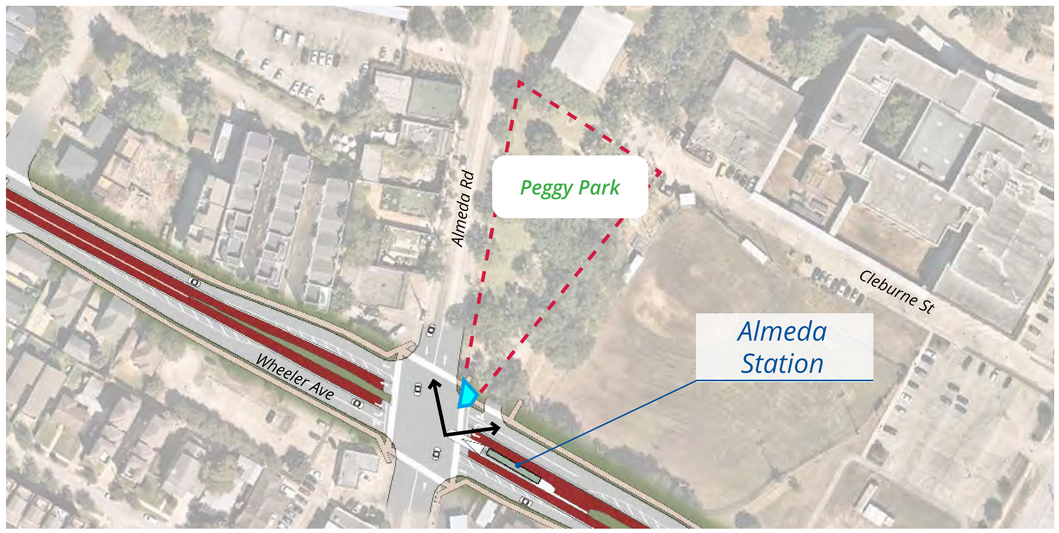
ACCESSIBILITY IMPROVEMENTS AT PARKS

Peggy Park





Diez Street Park





LEGEND

Existing Park Property Line

Limits of Proposed Improvement at Park

N

Illustrations for representational purposes only. Preliminary and subject to change based on public input and technical review.

METRO

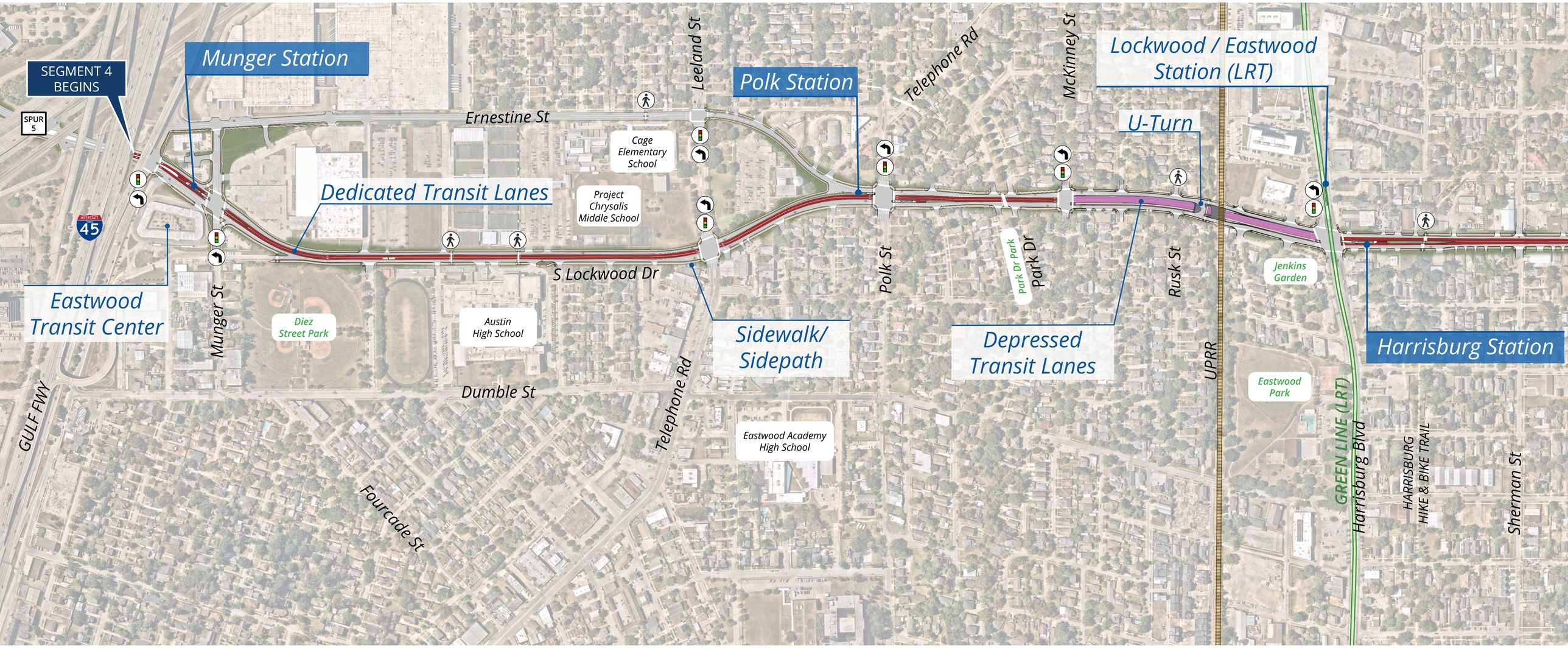
NOT TO SCALE

Community Design Workshops | 2023

SEGMENT MAP

STATION 2

SEGMENT 4



LEGEND

- Dedicated Transit Lanes
- Depressed Transit Lanes
- Platform
- General Purpose Lane
- Sidewalk/Sidepath
- Signalized Intersection with Pedestrian Crosswalk
- Dedicated Pedestrian Crossing
- Dedicated Left Turn

N

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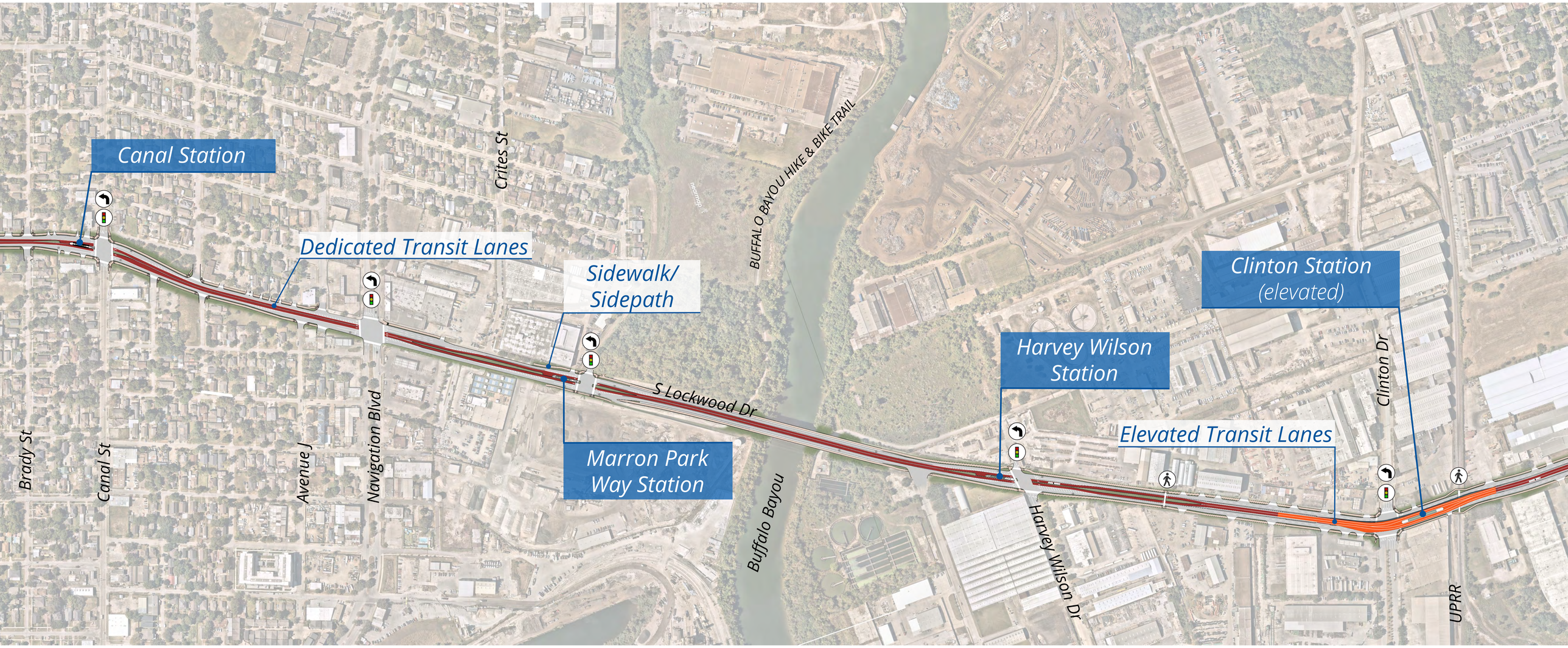
METRO

NOT TO SCALE

Community Design Workshops | 2023

SEGMENT 4



LEGEND

- Dedicated Transit Lanes
- Elevated Transit Lanes
- Platform
- General Purpose Lane
- Sidewalk/Sidepath
- Signalized Intersection with Pedestrian Crosswalk
- Dedicated Pedestrian Crossing
- Dedicated Left Turn

N

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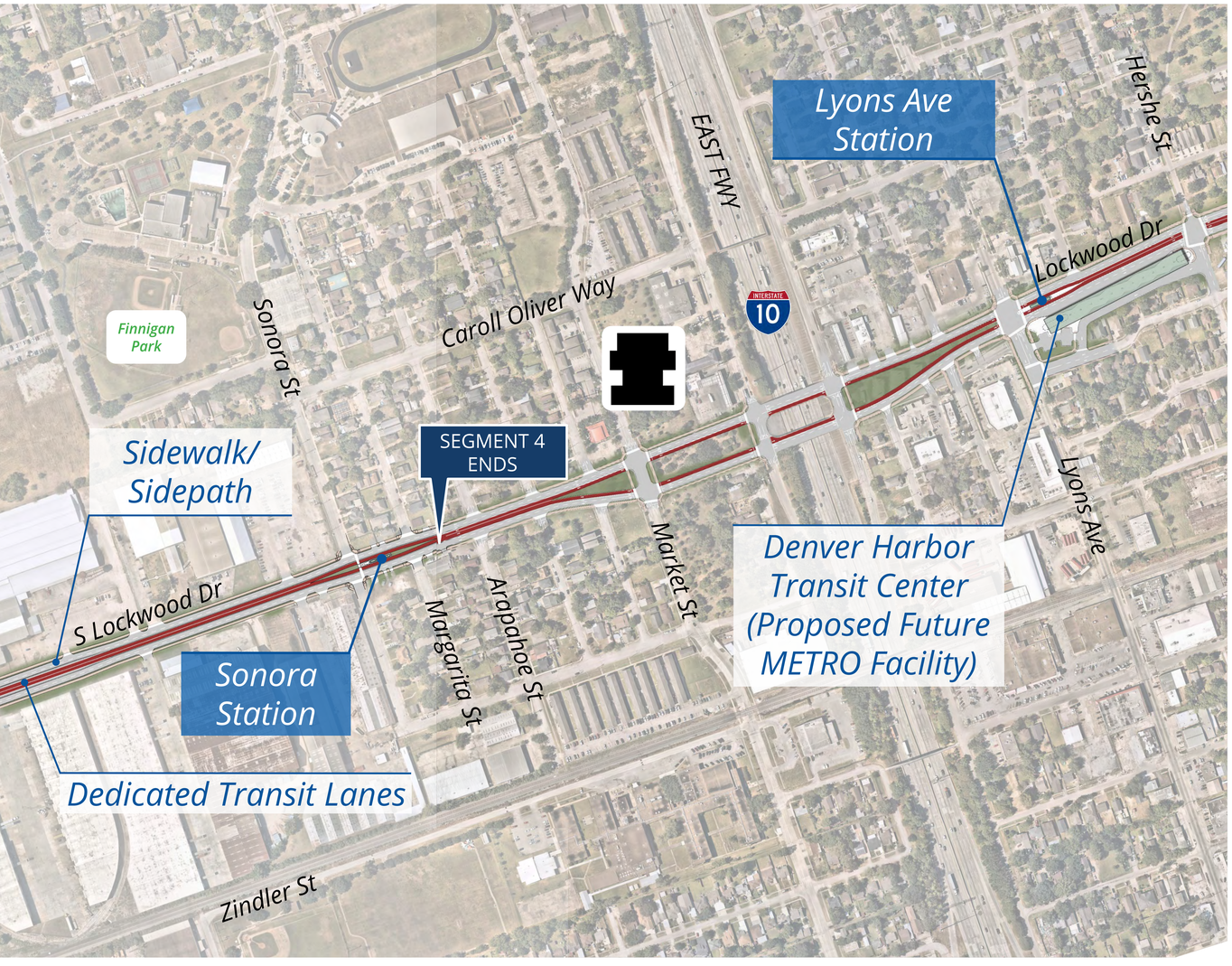
Community Design Workshops | 2023

SEGMENT 4



LEGEND

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N

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METRO

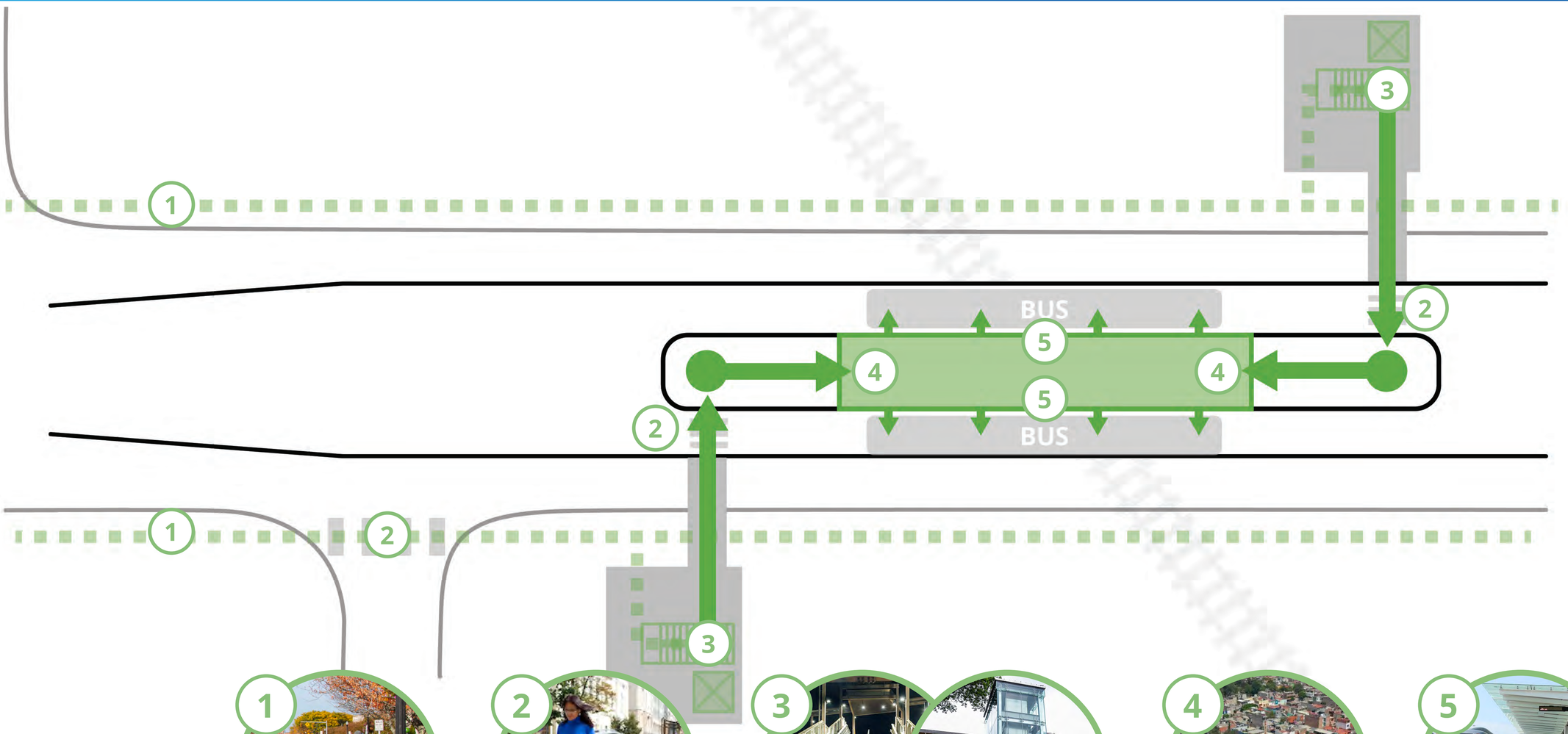
NOT TO SCALE

Community Design Workshops | 2023

TYPICAL AREAS

STATION 3

ELEVATED PLATFORM STATION
(PERIMETER VERTICAL ACCESS)





Sidewalk / Sidepath

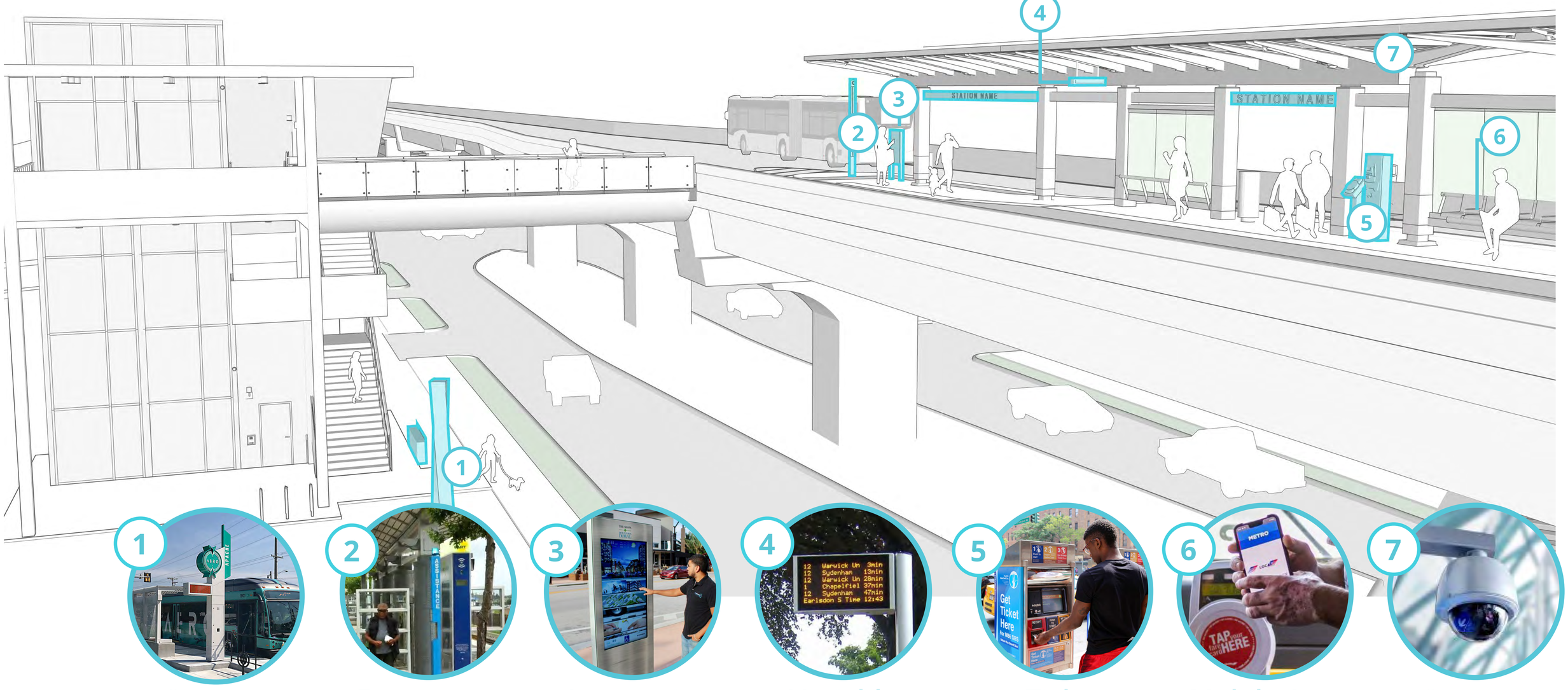
Pedestrian Crossing

Vertical Circulation

Platform Access

Level Boarding

CIRCULATION



Signage

Emergency Assistance

Interactive Map

Variable Message Sign

Ticket Machine

Mobile App

Security Camera

INFORMATION

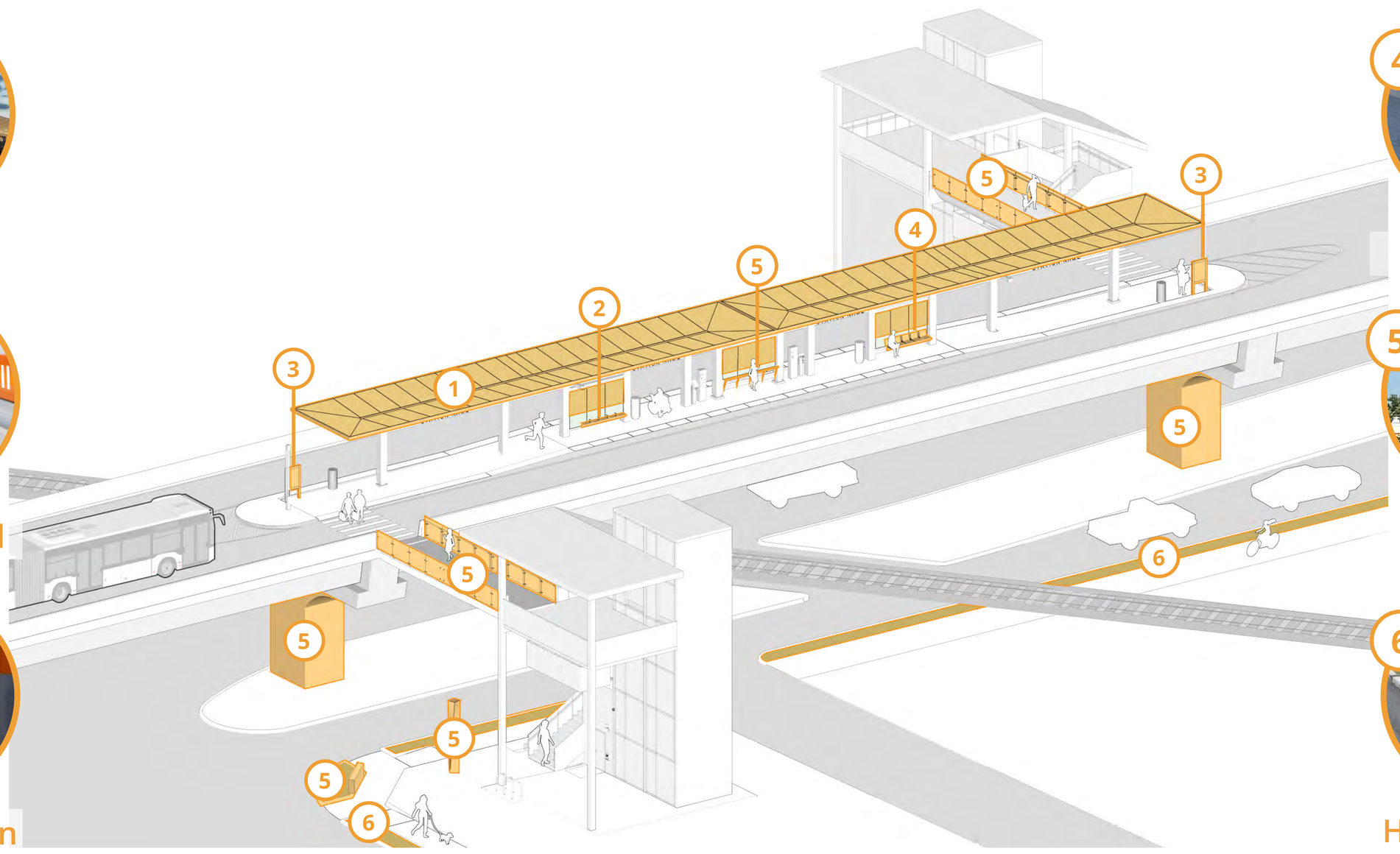


Canopy



Leaning Rail

Digital Screen





Seating



Art

Hardscape & Landscape

WAITING AMENITIES

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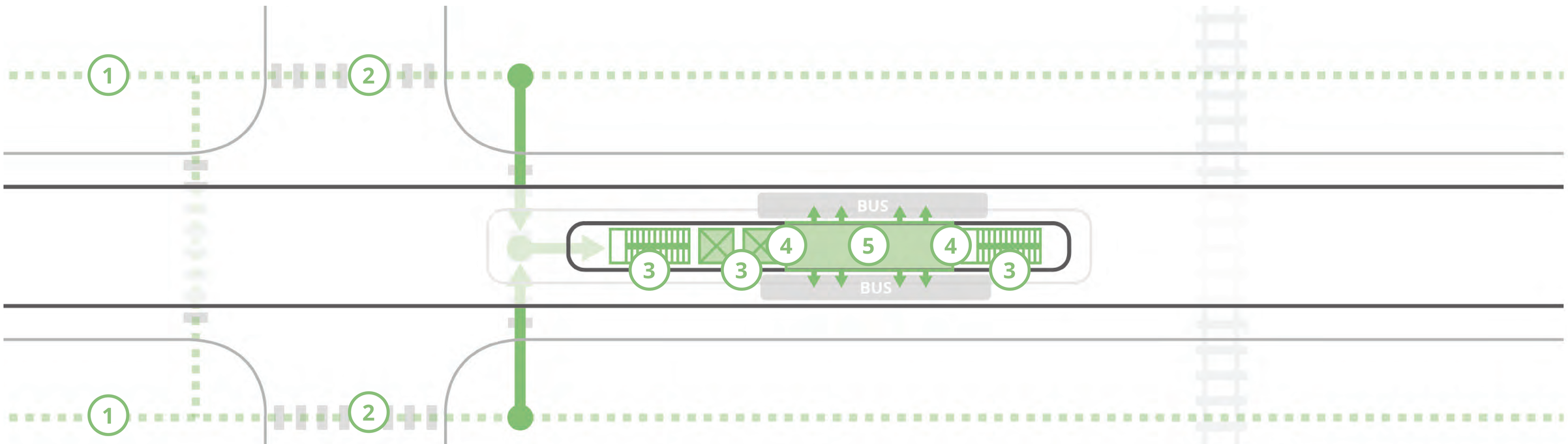
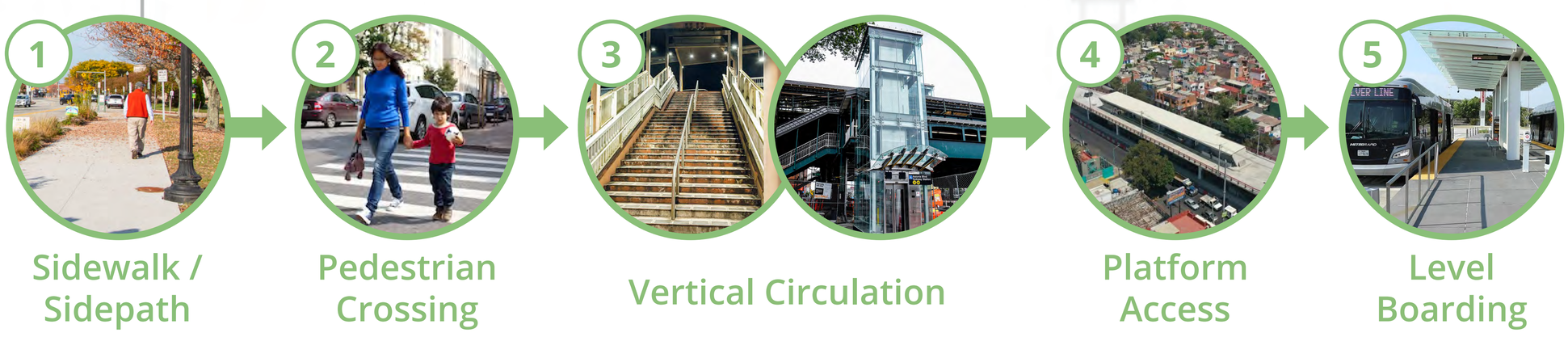
METRO

NOT TO SCALE

Urban Design Guideline | Community Meeting

ELEVATED PLATFORM STATION (CENTRAL VERTICAL ACCESS)





Sidewalk / Sidepath

Pedestrian Crossing

Vertical Circulation

Platform Access

Level Boarding

CIRCULATION



Signage



Interactive Map



Variable Message Sign



Security Camera



Ticket Machine

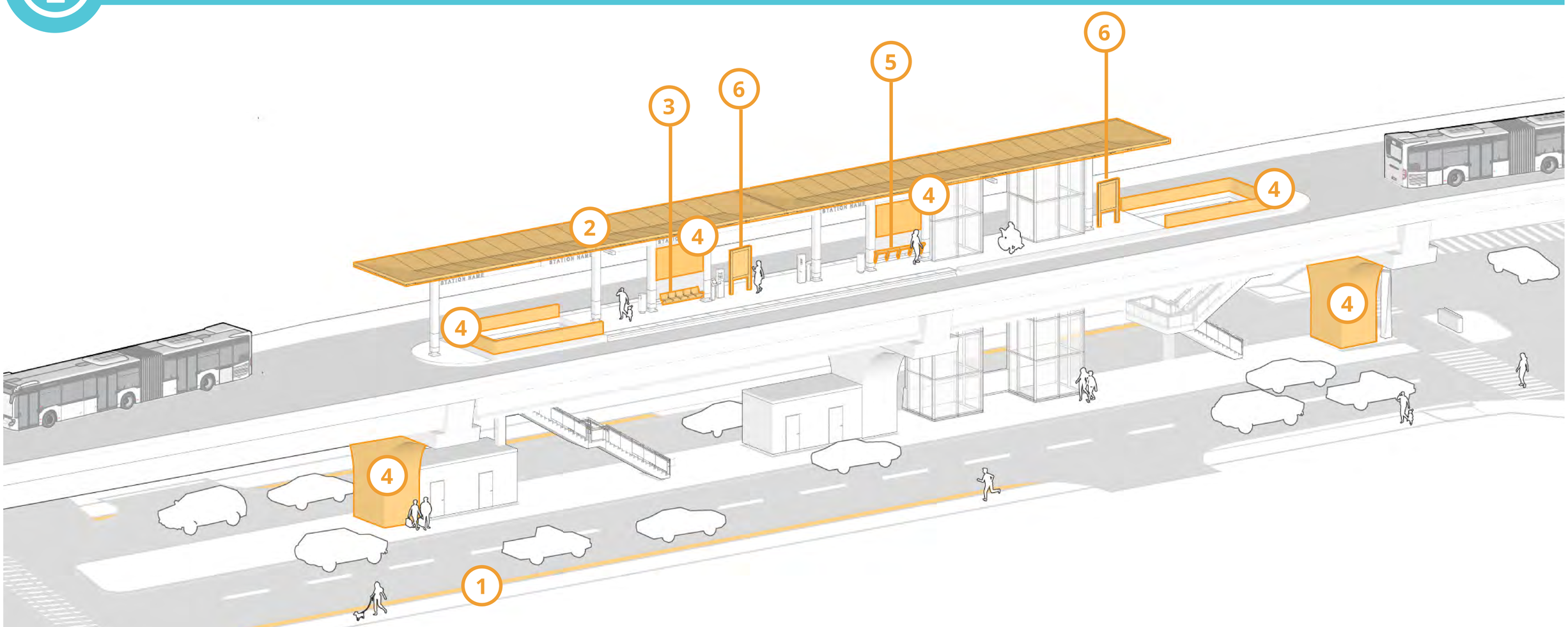


Emergency Assistance



Mobile App

INFORMATION





Hardscape & Landscape

Canopy

Seating

Art

Leaning Rail

Digital Screen

WAITING AMENITIES

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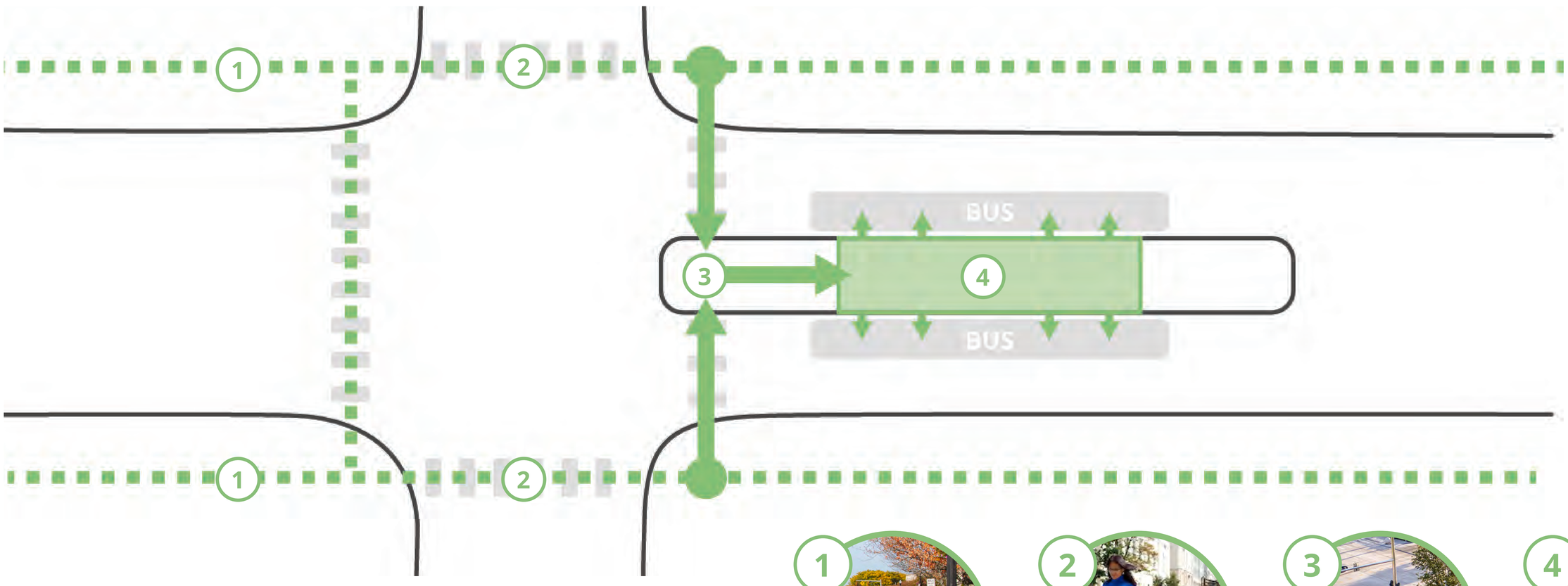
METRO

NOT TO SCALE

Urban Design Guideline | Community Meeting

CENTER PLATFORM STATION





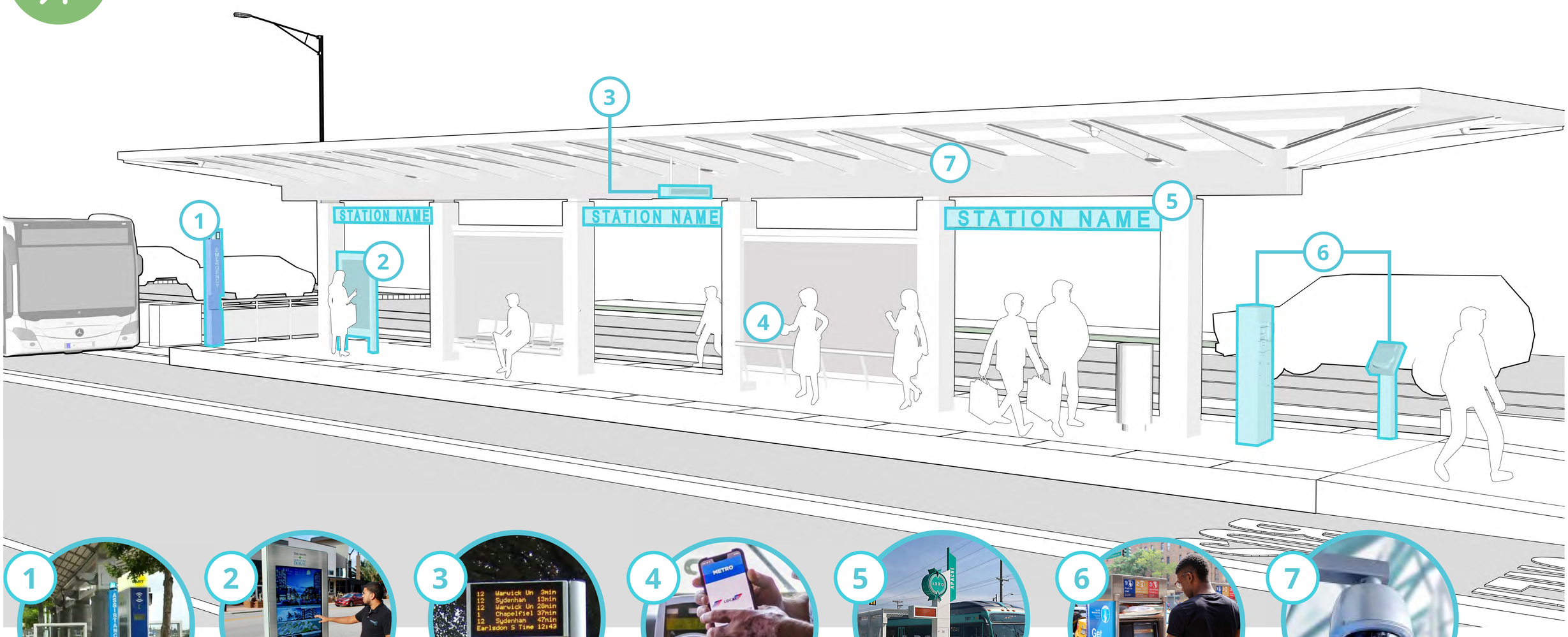
Sidewalk / Sidepath

Pedestrian Crossing

Platform Access

Level Boarding

CIRCULATION



Emergency Assistance

Interactive Map

Variable Message Sign

Mobile App

Signage

Ticket Machine

Security Camera

INFORMATION

Hardscape & Landscape

Art

Seating

Canopy

Leaning Rail

Digital Screen

WAITING AMENITIES

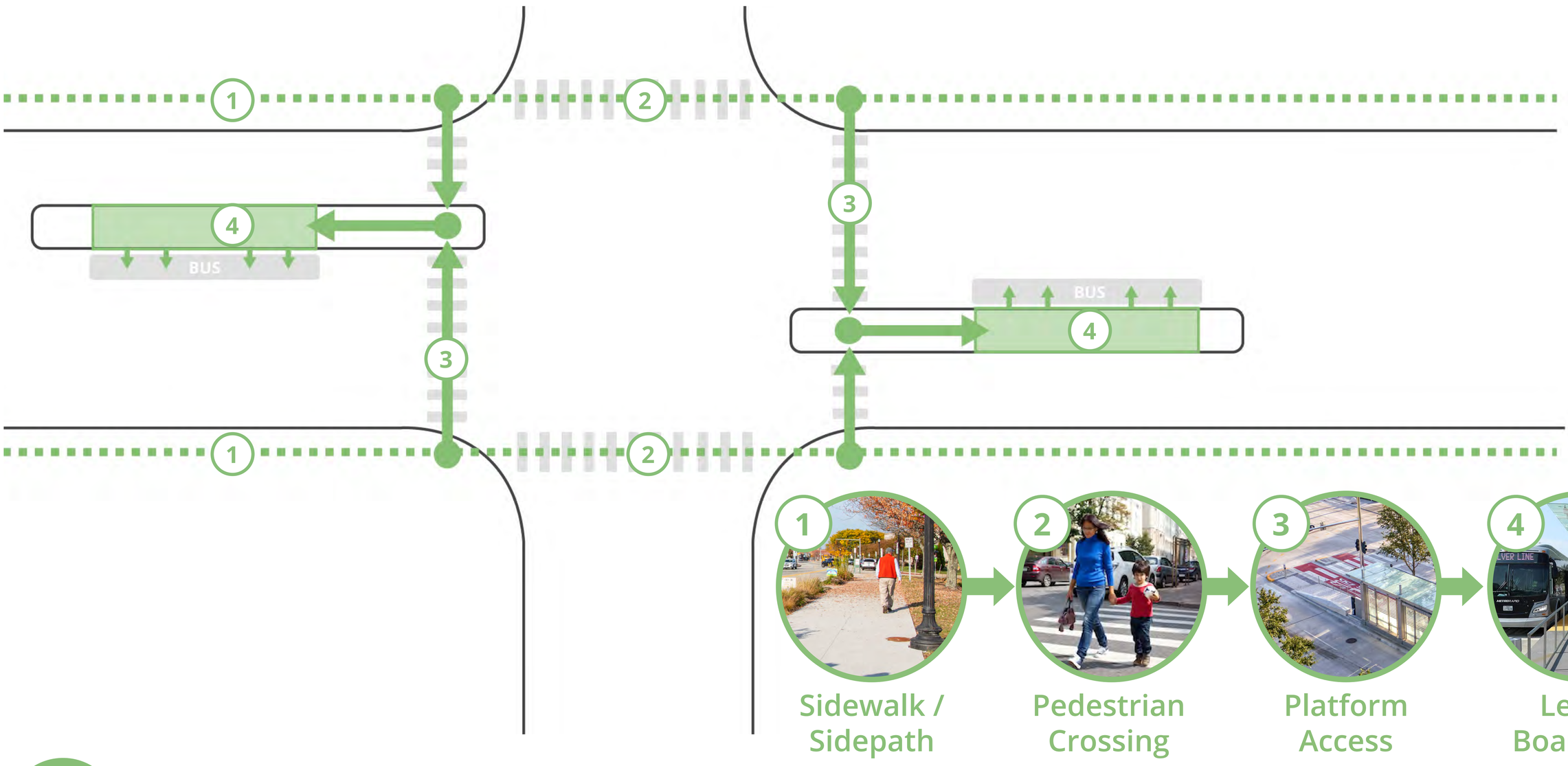
Illustrations for representational purposes only. Preliminary and subject to change based on public input and technical review.

METRO

NOT TO SCALE

Urban Design Guideline | Community Meeting

SIDE SPLIT PLATFORM STATION



1 Sidewalk / Sidepath

2 Pedestrian Crossing

3 Platform Access

4 Level Boarding

CIRCULATION



1 Interactive Map

2 Variable Message Sign



3 Mobile App



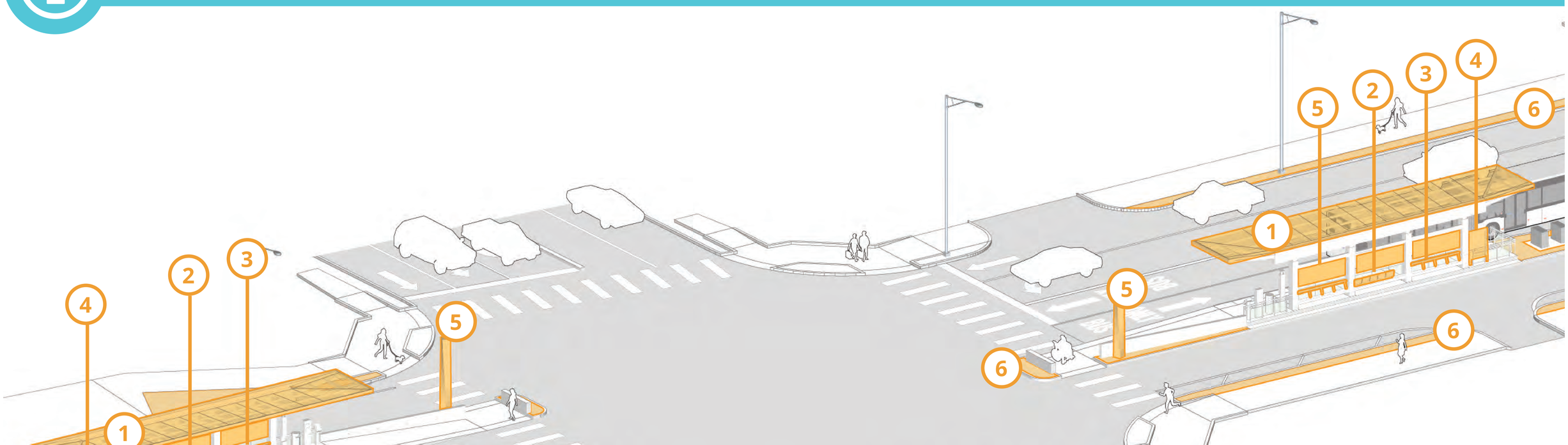
4 Signage

5 Emergency Assistance

6 Ticket Machine

7 Security Camera

INFORMATION



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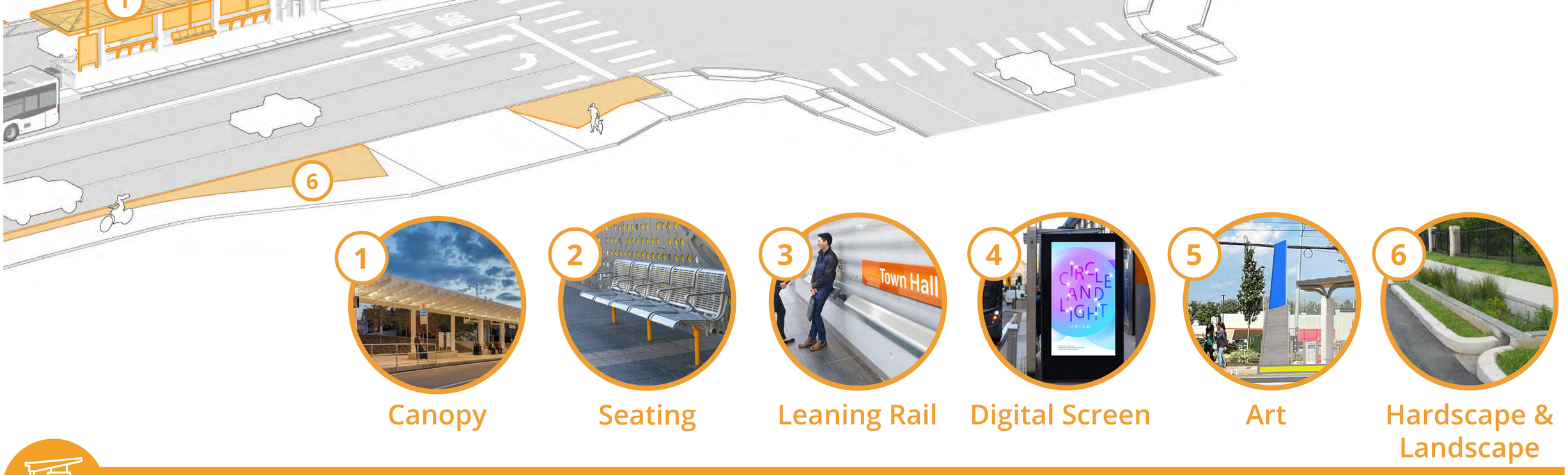



1 Canopy



2 Seating



3 Leaning Rail



4 Digital Screen



5 Art



6 Hardscape & Landscape

WAITING AMENITIES

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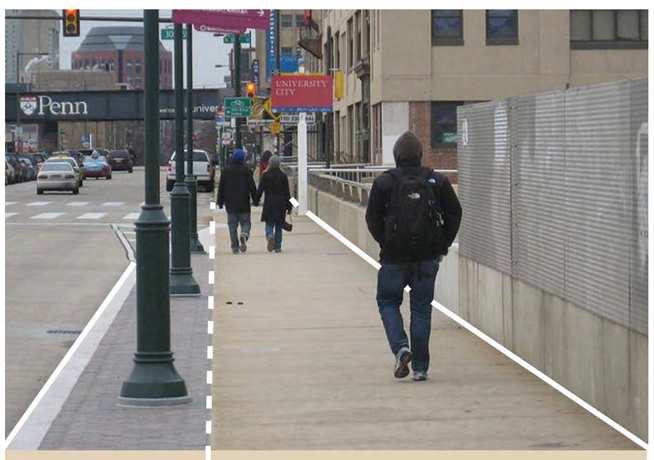
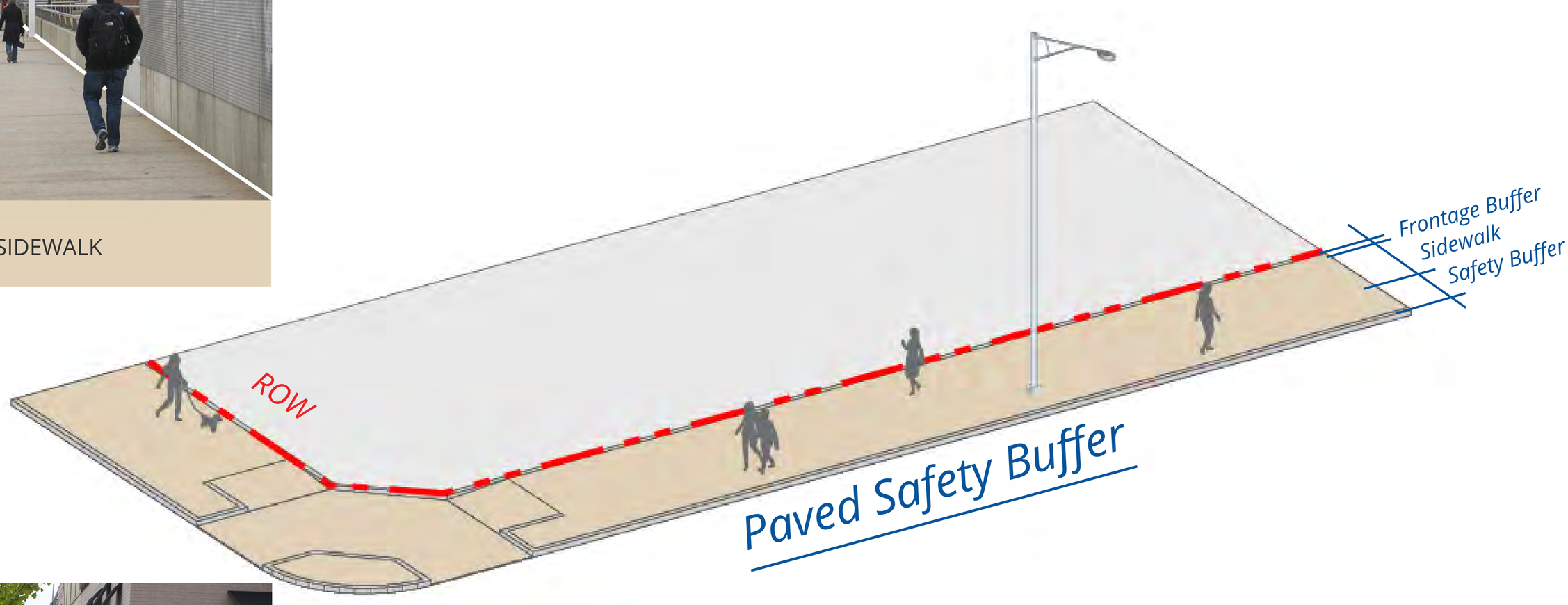
PEDESTRIAN ENVIRONMENT

PEDESTRIAN REALM



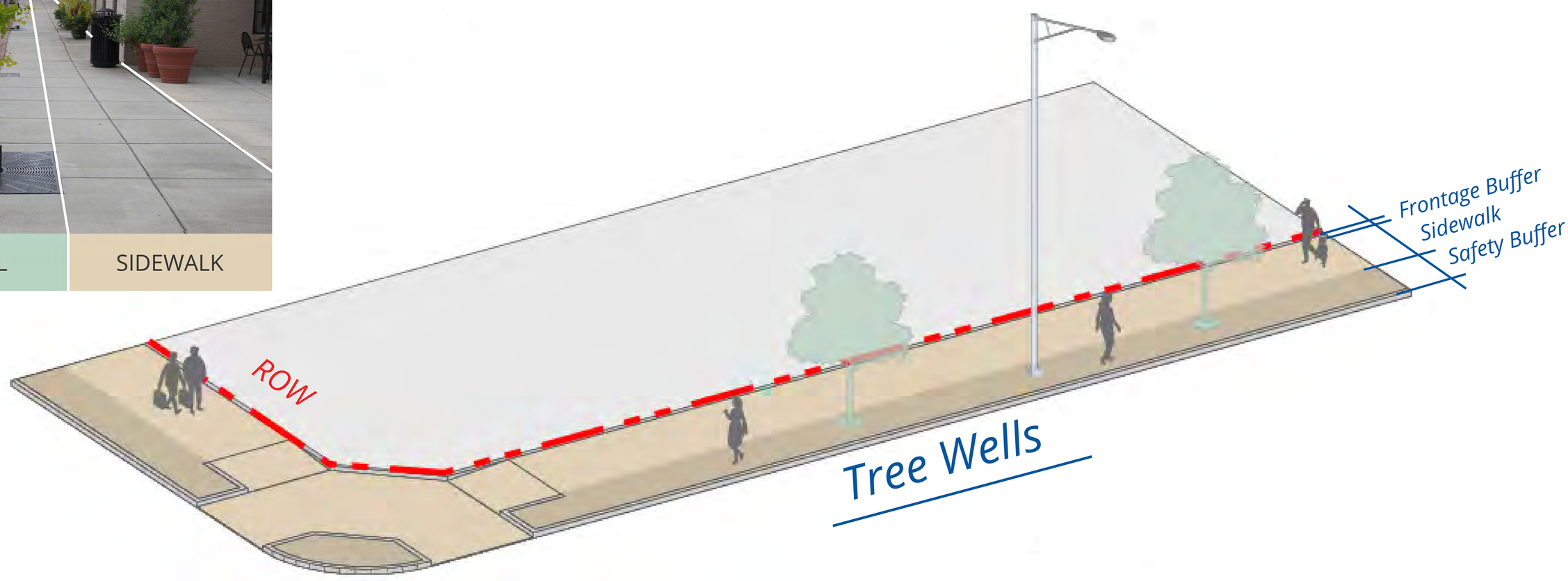
SIDEWALK



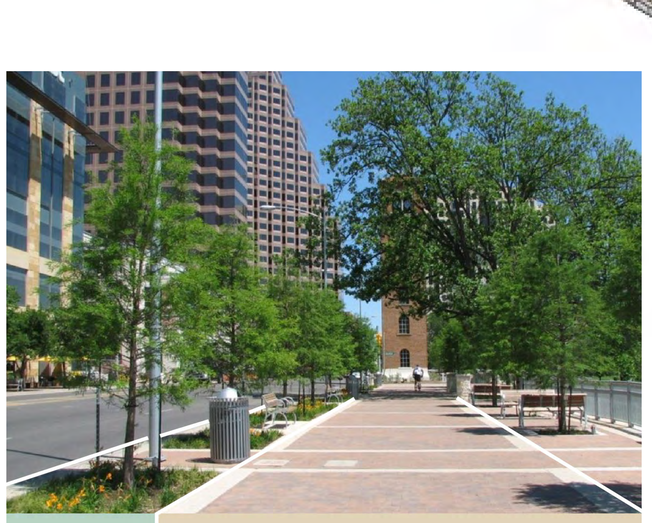
Paved Safety Buffer



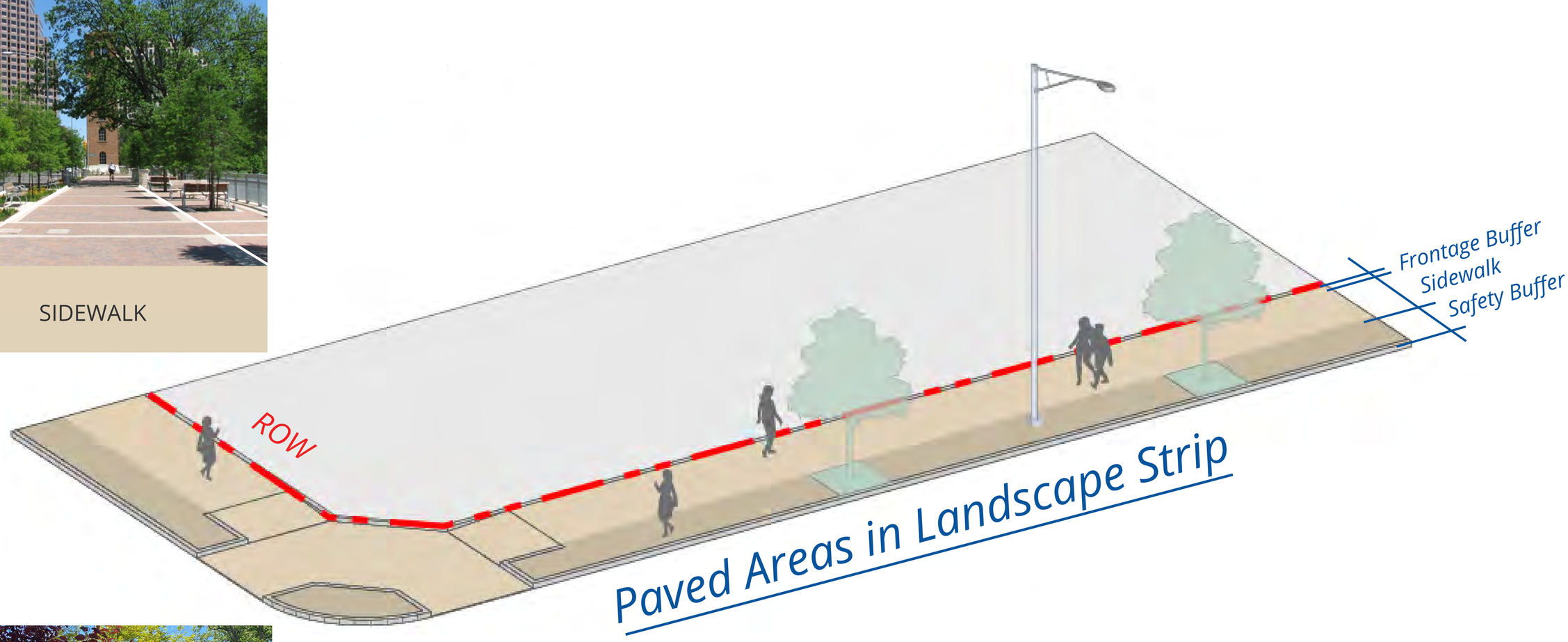
TREE WELL | SIDEWALK



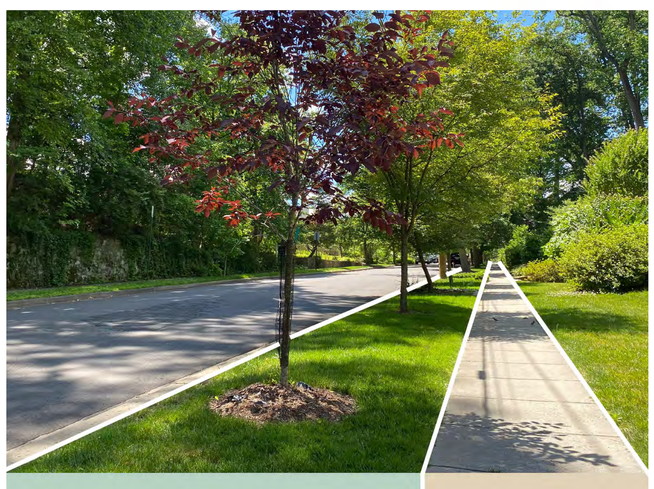
Tree Wells



PAVED AREAS IN LANDSCAPE STRIP | SIDEWALK



Paved Areas in Landscape Strip



LANDSCAPE STRIP | SIDEWALK



Landscape Strip

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PEDESTRIAN ENVIRONMENT

PEDESTRIAN REALM

City of Houston *Users' Guide for Walkable Places* and *Transit-Oriented Development (Walkable Places)* - September 2020, indicates Pedestrian Realm as a Key Element and defines it as the area between the back-of-curb (BOC), or the edge of a streets pavement, and the ground floor building facade. It includes and unobstructed sidewalk for walking and a safety buffer area.

RIGHT-OF-WAY (ROW)

The City of Houston defines ROW as any public thoroughfare such as a street or road that typically includes travel lanes, median, utilities (poles, lighting), and may also include a safety buffer, sidewalk, other hardscape and landscape.

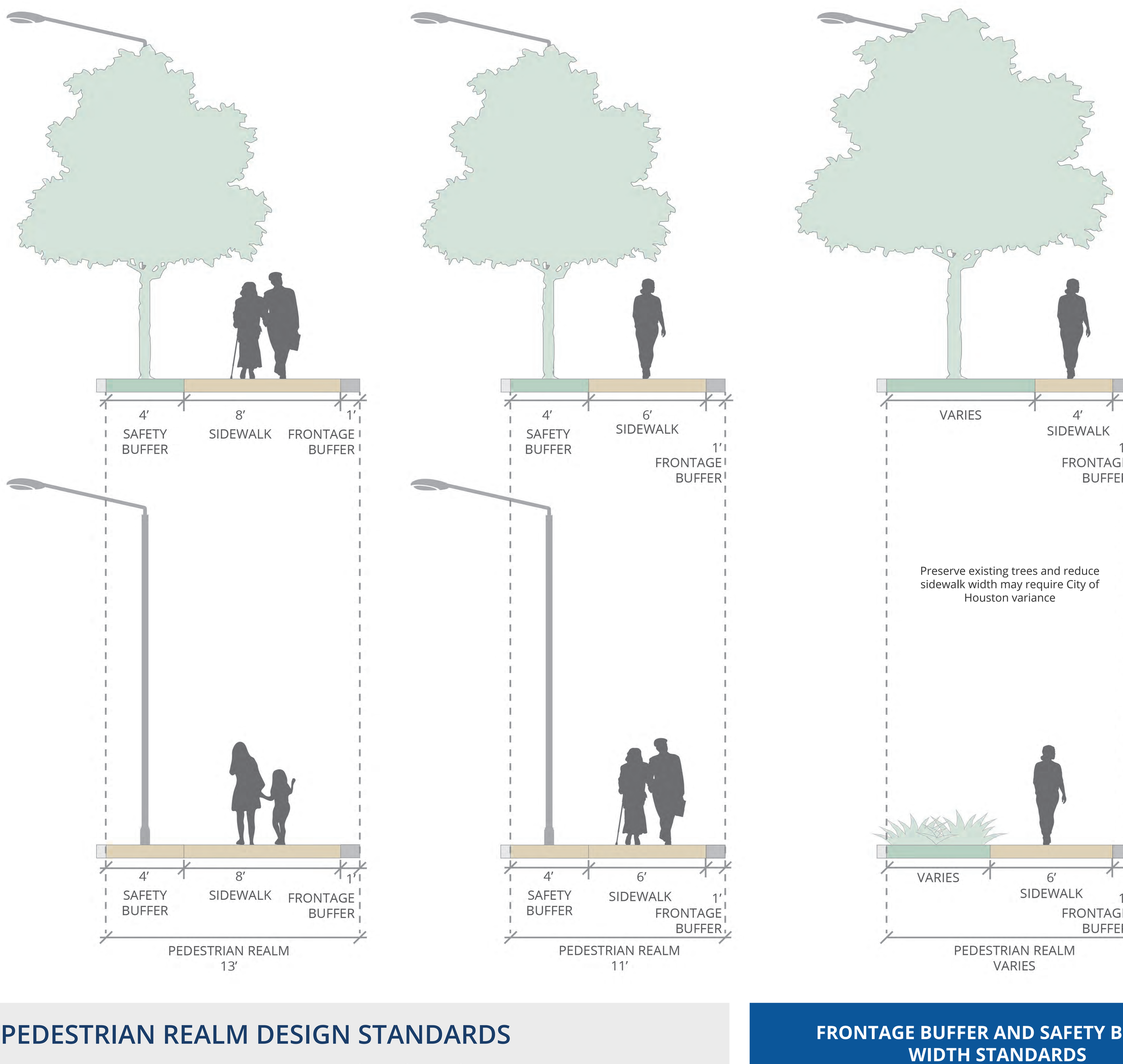
SAFETY BUFFER

Also indicated as a Key Element, Walkable Places defines the safety buffer as the area that shields the sidewalk from the street, and can contain a combination of landscaping, utilities and sidewalk amenities such as street furniture and decorative plantings.

LANDSCAPING

Landscape is an important element within the pedestrian realm, especially in the safety buffer. It provides important shade, storm water management and protection from automobiles. Installed street trees within the Pedestrian Realm must be chosen from an approved list provided by the City of Houston.

The illustrations below show the various ways to accommodate sidewalks and landscape within the ROW for the METRORapid University Corridor inside the pedestrian realm. The images on the opposite board provide a true depiction of these conditions.



PEDESTRIAN REALM DESIGN STANDARDS

The sidewalk must be a continuous surface, free of obstructions or encroachments. Sidewalks must comply with Agency standard details, *Public Right of Way Accessibility Standards (PROWAG)*, *Texas Accessibility Standards, City of Houston Infrastructure Design Manual and American Association of Highway and Transportation Officials (AASHTO).*

Alternative methods of Sidewalk construction may be used in places where tree preservation is of concern. Alternative materials may be, but are not limited to, decomposed granite and checkered plates. All alternatives shall be coordinated with the City's Urban Forester, as applicable, and approved by the City Engineer.

To minimize right-of-way impacts to adjoining properties, a modification to the pedestrian realm standards is required. Any modification to the pedestrian realm standards will require METRO to seek a variance from the City of Houston.

FRONTAGE BUFFER AND SAFETY BUFFER WIDTH STANDARDS

CLASSIFICATION	OPTIMAL	MINIMUM
Safety Buffer	6’ or More	4’
Frontage Buffer	3’ or More	1’

MINIMUM SIDEWALK WIDTH STANDARDS

MAJOR THOROUGHFARE	
TOD Street	8’
All Other Streets	6’
ALL OTHER PUBLIC STREETS	
TOD Street	6’
All Others	5’

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LANDSCAPE CONSIDERATIONS

TREE PROTECTION

City of Houston Required Tree Protection Plan Process includes:

ISA certified arborist, landscape architect and City of Houston Urban Forestry

We Are Here

1 → 2 → 3 → 4 → 5 → 6 → 7

Step 1 – Tree Survey
- Identify species and size (caliper and spread)
- Condition analysis (disease, structural defects, severely pruned)

Step 2 – Tree Protection Analysis
- Identify trees that warrant removal (because of tree condition)
- Identify trees that can be protected during construction
- Identify protection measures (root pruning, fencing, etc)
- Consider design plan changes
- Sidewalk width variance with City of Houston
- Utility relocation
- Identify trees that cannot be protected
- Determine required mitigation requirement
- Maximize replacement planting

Step 3 – Coordinate BRT Plan Changes
- Update construction plans to maximize tree protection

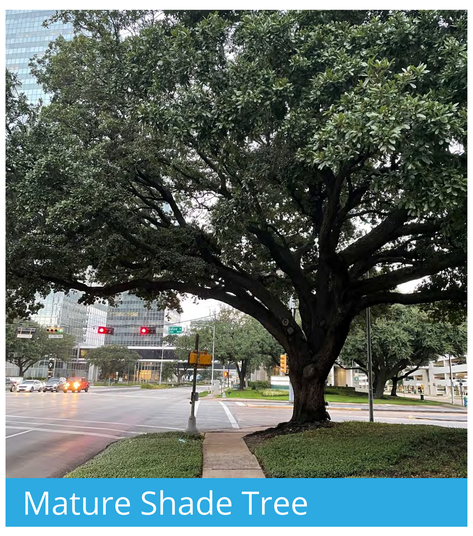
Step 4 – Tree Mitigation Plans
- Quantity, species, and size of new trees included in the plans
- Additional possible mitigation requirements: planting trees on METRO owned property for future use, planting trees in adjacent open space, and contributing to a designed tree fund

Step 5 – Pre-Construction Activities
- Root and canopy pruning
- Injected with mycorrhizal fungi at least one growing season prior to construction to improve survivability
- Additional watering of trees, as required, with construction activities that disturb the soil

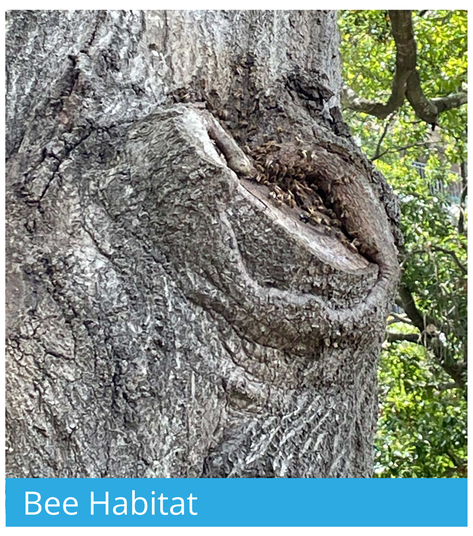
Step 6 – During Construction
- All construction staff must attend a mandatory METRO educational class on tree protection
- Strict compliance to the Tree Protection Plans and Specifications
- Continuous site inspections through construction
- Remove contaminated soil and aerate compacted soil

Step 7 – After Construction
- Maintain the same grade as before construction
- Water stressed trees to help them recover from construction stress

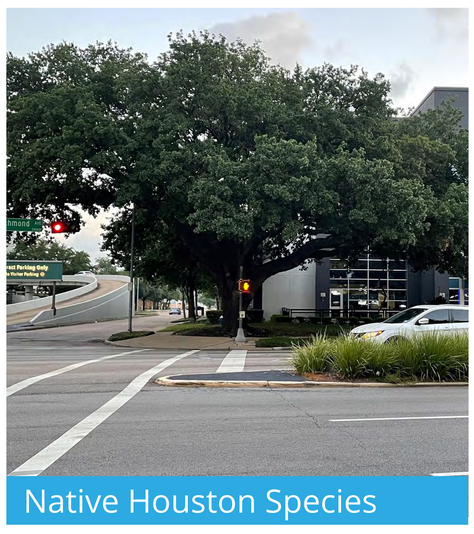
Trees to Preserve



Mature Shade Tree

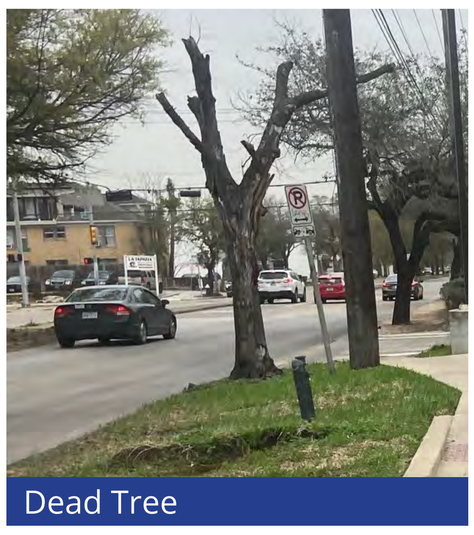


Bee Habitat

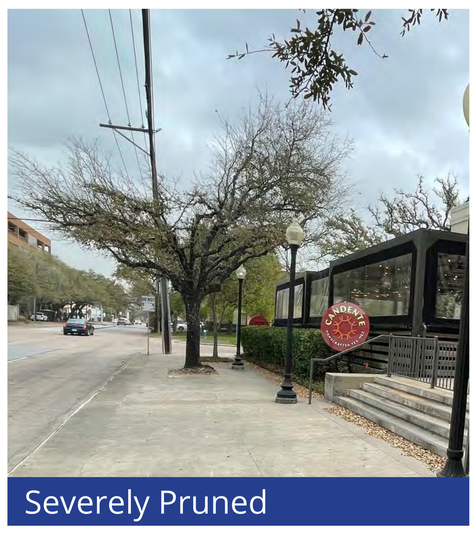


Native Houston Species

Trees to Remove



Dead Tree



Severely Pruned

LANDSCAPE PLANTING PLANS

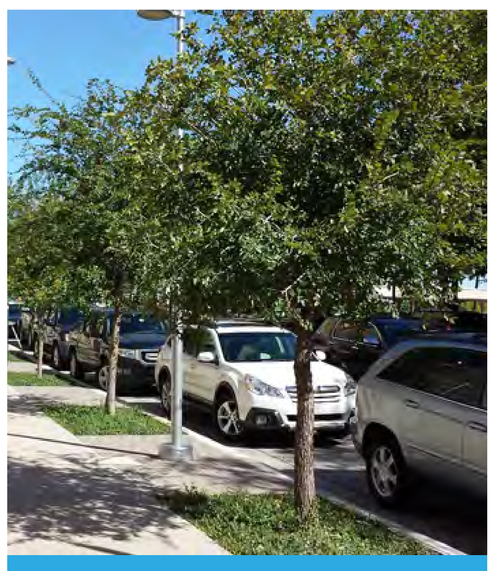
Goal - Work with the community to create a plan that takes into account the unique locations and best tree varieties suited to each location.

City of Houston Tree and Shrub Ordinance

Street Tree Requirements
- 1 tree per 30 linear feet of frontage
- 3″ caliper size for transit corridor street
- Credit for trees 4″ caliper or more
- Credit for preserving existing trees

Street Tree Planting
- Spacing no closer than 20 feet
- At least 3 feet from back of curb to center line of tree trunk

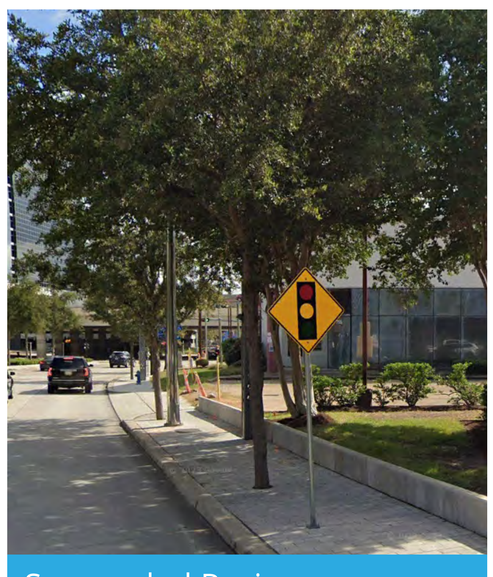
Street Tree Planting in Esplanade (Median)
- Not closer than 75 feet to the end of the esplanade
- Not closer than 50 feet from any mid-block opening in the esplanade.
- At least 5 feet from back of curb to center line of tree trunk
- Tree spacing not less than 30 feet



Street Trees



Median Trees



Suspended Paving



Island Trees in Transit Center

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VISUAL PREFERENCE SURVEY

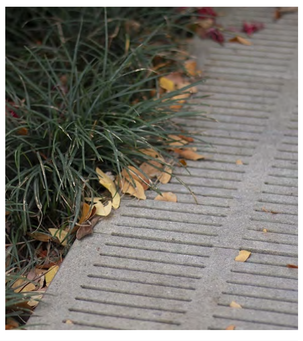
STATION 4

HOW SHOULD WE CELEBRATE HISTORY & CULTURE?

Color and Texture



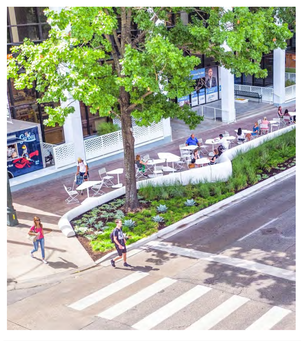


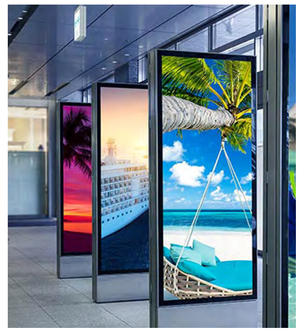
Community Spaces








Information Displays

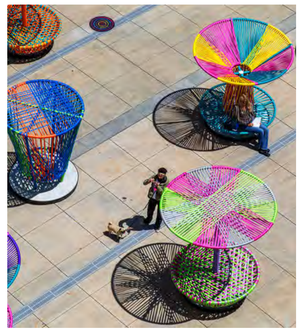
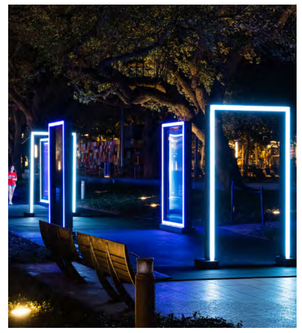
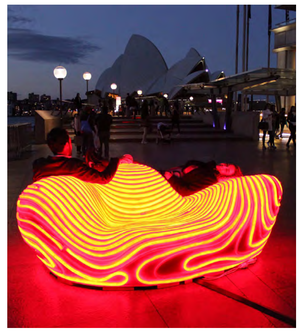









Interactive Art

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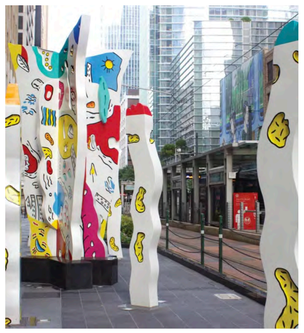
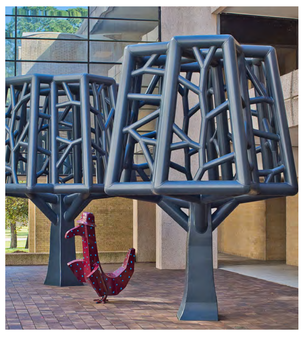
HOW SHOULD WE CELEBRATE HISTORY & CULTURE?

Public Art





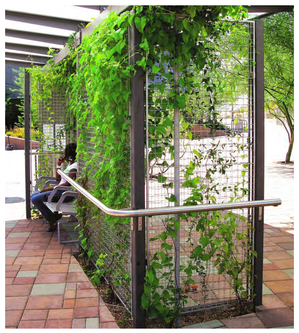
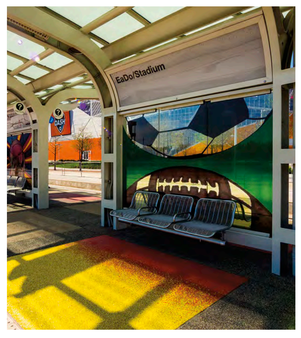




Architectural Elements







Plaques

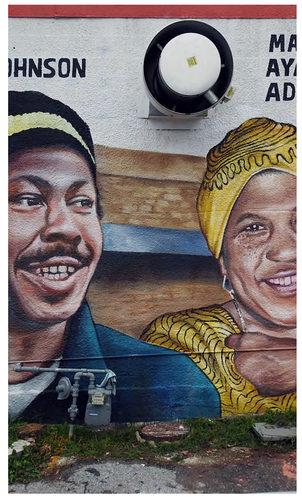







Community History



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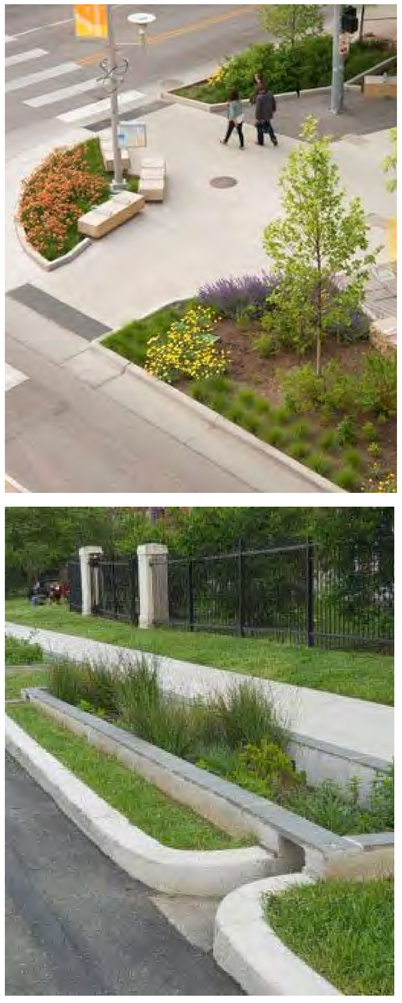
HOW SHOULD WE INTEGRATE LANDSCAPE?

Street Trees




Biofiltration Planter Boxes




Green Screens and Walls

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HOW SHOULD WE INTEGRATE LANDSCAPE?

Native Planting





Drought Resistance



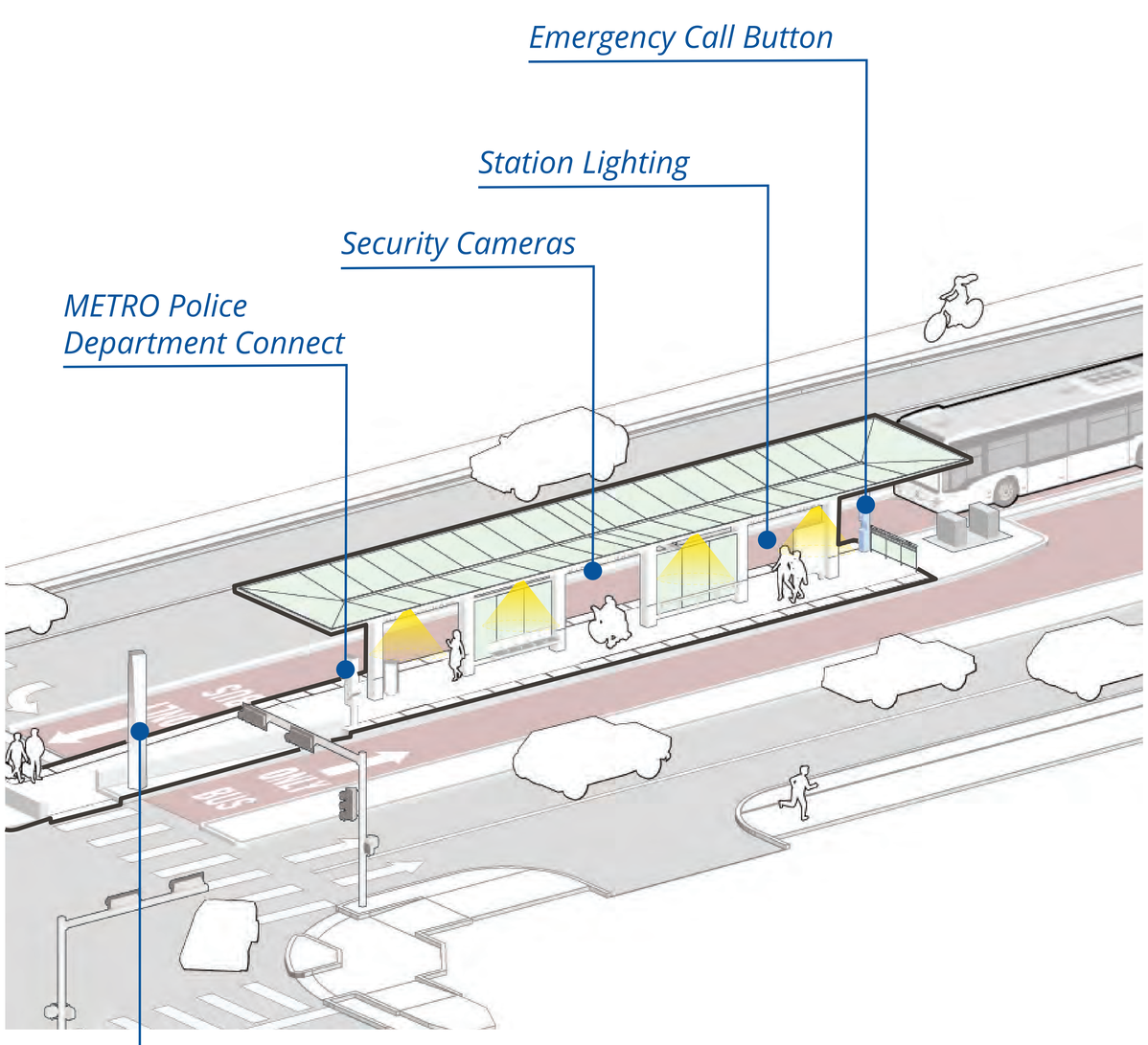


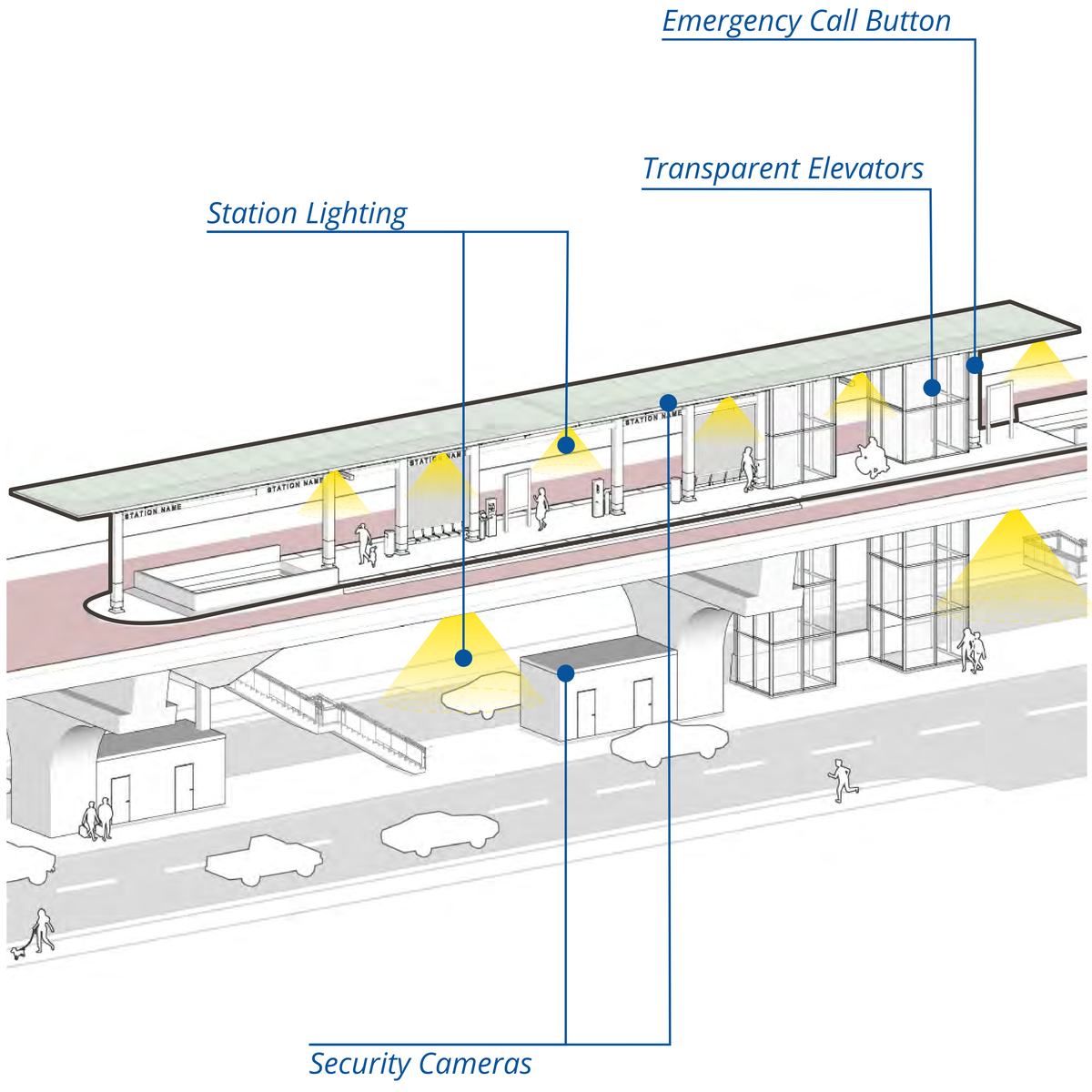
Xeriscape





SAFETY & SECURITY





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HOW SHOULD WE INTEGRATE ADDITIONAL LIGHTING?

Architectural

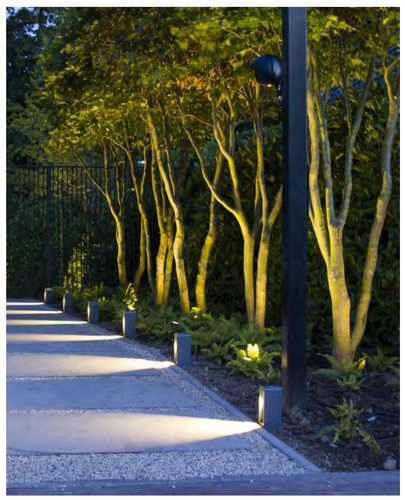




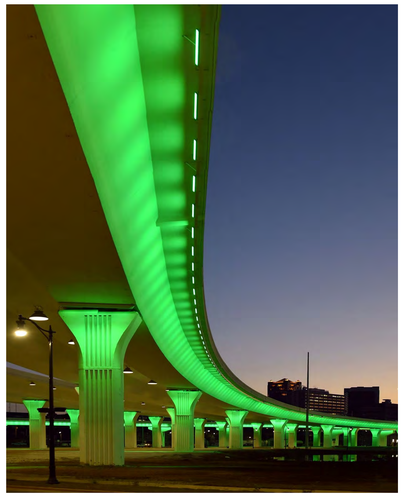




Accent Lighting









Urban / Pedestrian





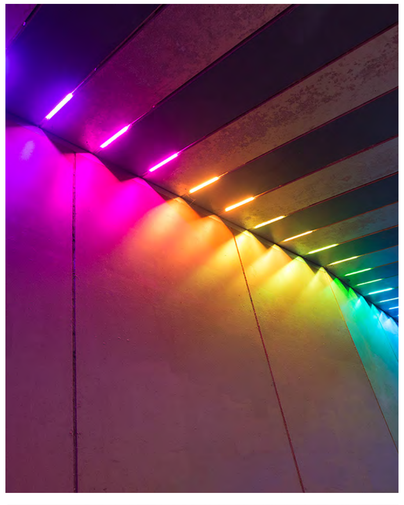
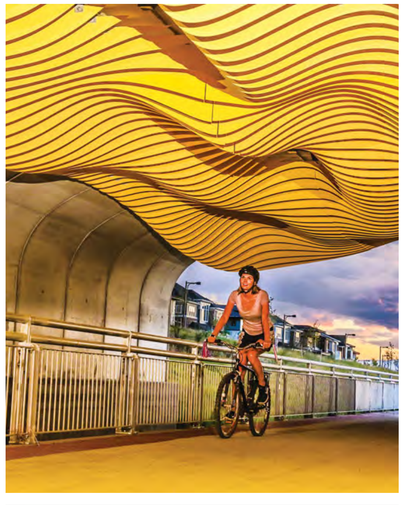
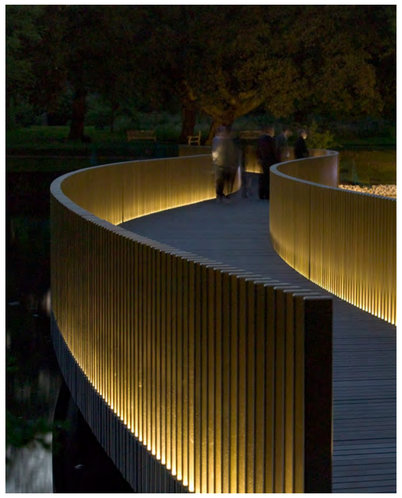




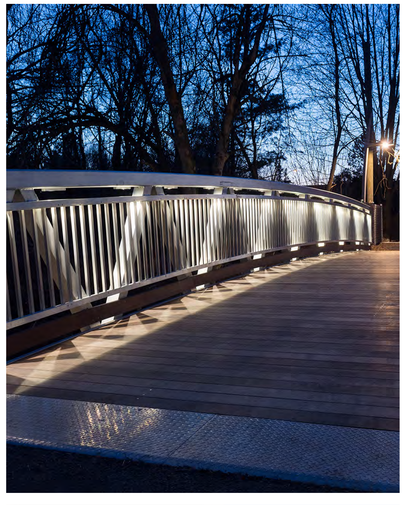
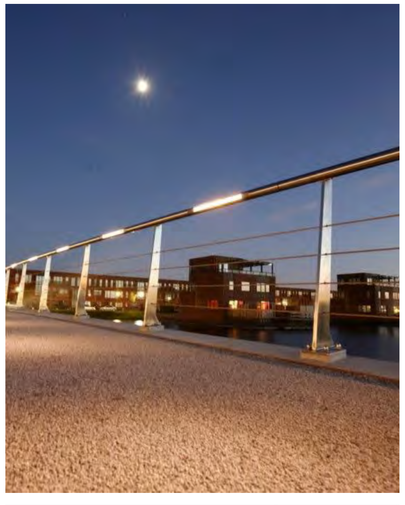
METRO

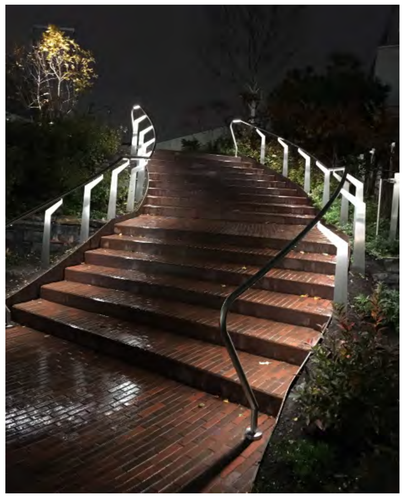
HOW SHOULD WE INTEGRATE ADDITIONAL LIGHTING?

Artistic


Railing



Wayfinding








METRO

HOW SHOULD WE ENHANCE PEDESTRIAN CROSSINGS?

Standard







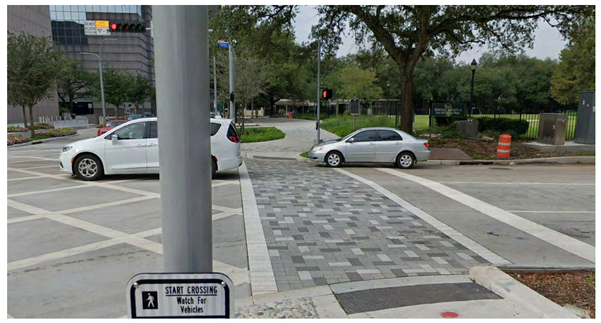
High-Visibility







Colored Paving







Mid-Block Crossing







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CUSTOMER EXPERIENCE JOURNEY

STATION 5

STATION 5 INSTRUCTIONS:
ACTIVITY 1

Each participant will receive 2 stickers for each happiness level. Place a sticker on the parts of Customer Experience Journey you feel particularly satisfied, neutral, or unsatisfied.

Participants do not need to use all the mood stickers

SATISFIED



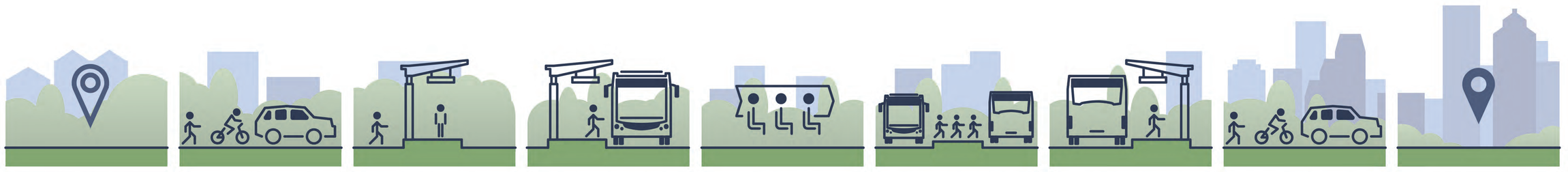
NEUTRAL



UNSATISFIED



HOW DO YOU FEEL ABOUT YOUR JOURNEY?



ORIGIN	FIRST MILE	AT STATION	BOARDING	RIDING	TRANSFERRING	DEPARTING	LAST MILE	DESTINATION
1	2	3	4	5	6	7	8	9

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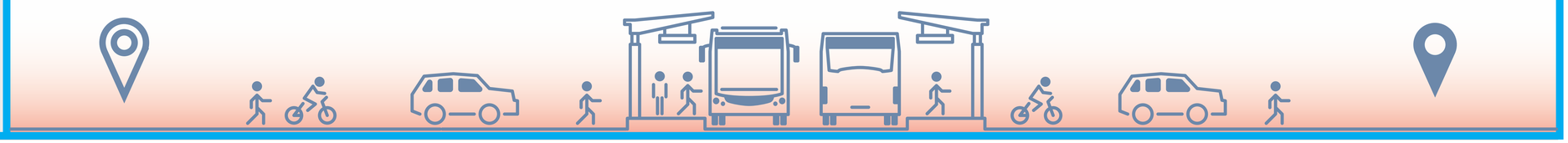
HOW DO YOU FEEL ABOUT YOUR JOURNEY?

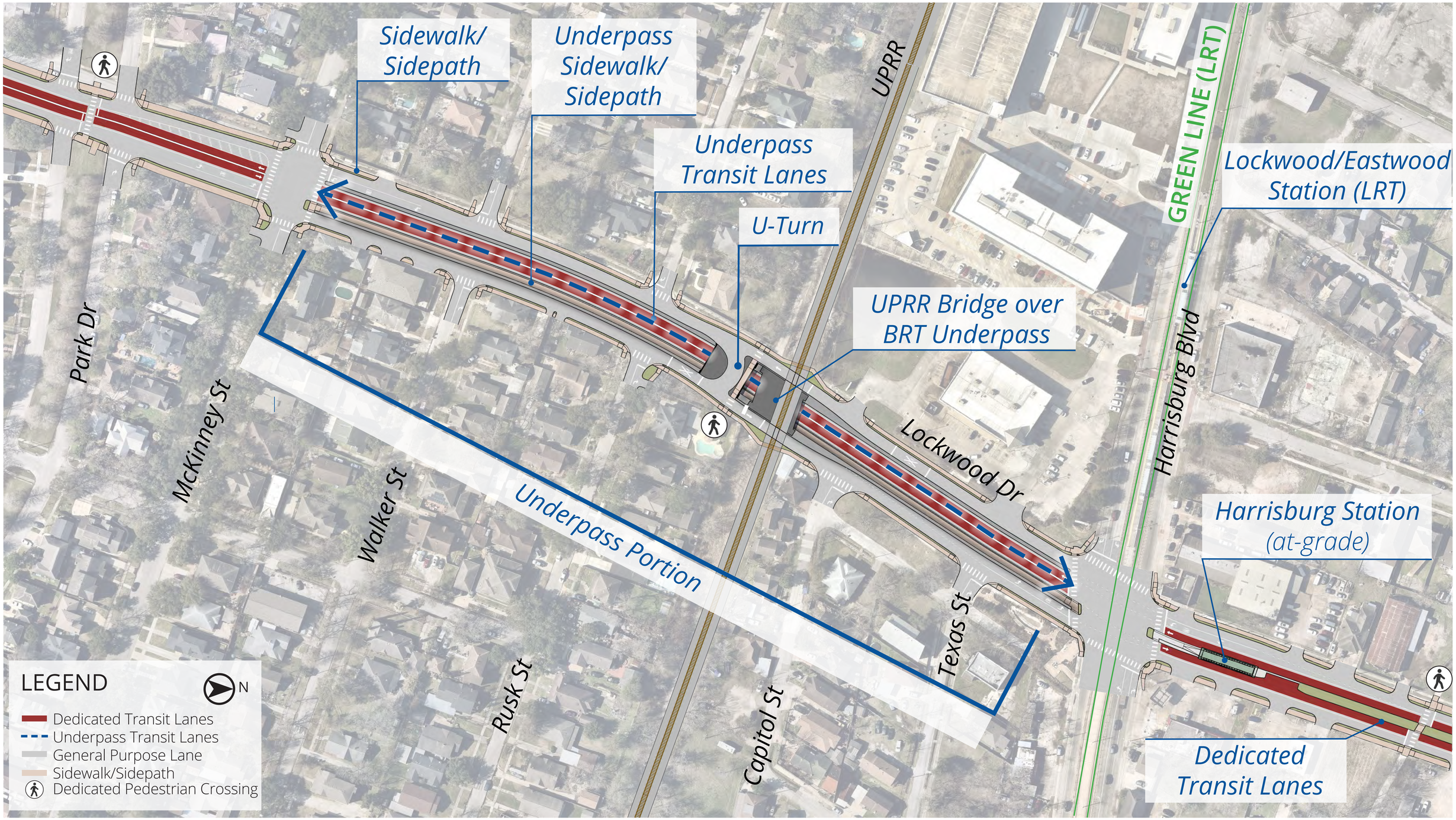
What part of the journey do you experience positive emotion?	Tell us why: 
What part of the journey do you experience negative emotion?	Tell us why: 

METRO

SEGMENT SPECIFIC INFORMATION

STATION 6

EASTWOOD (SEGMENT 4)



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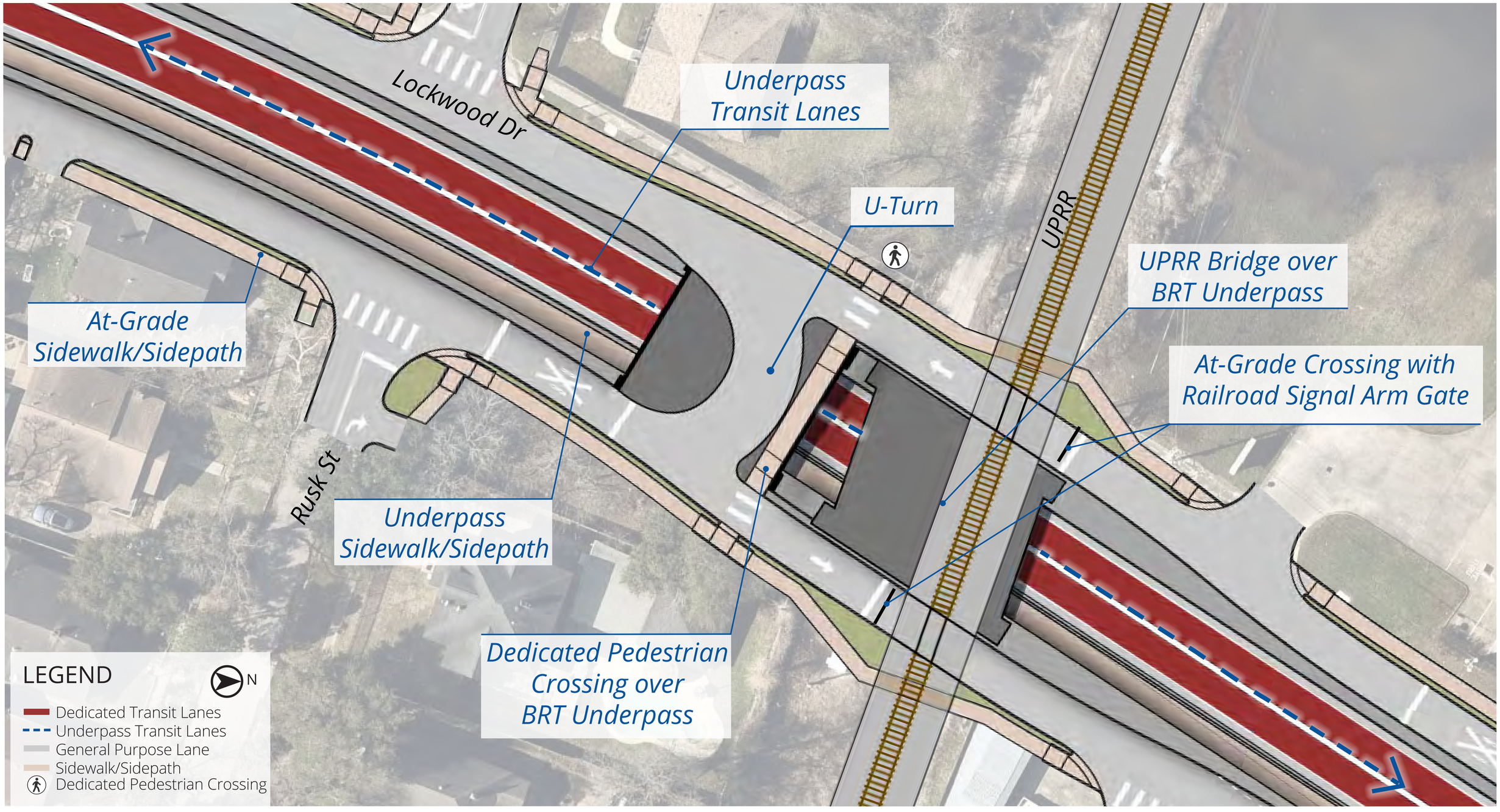
EASTWOOD (SEGMENT 4)



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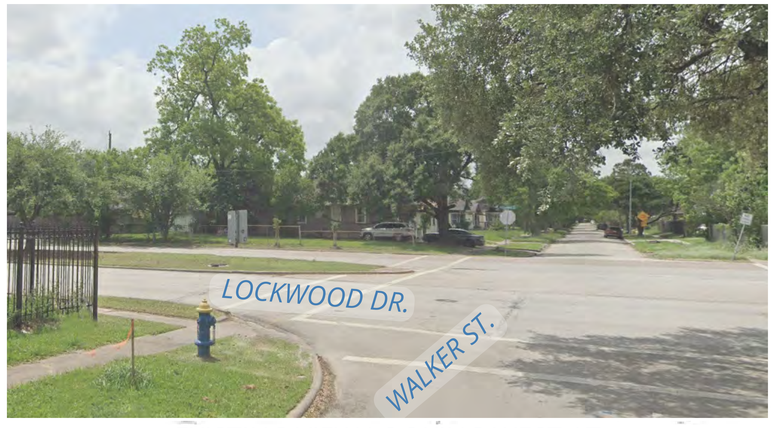
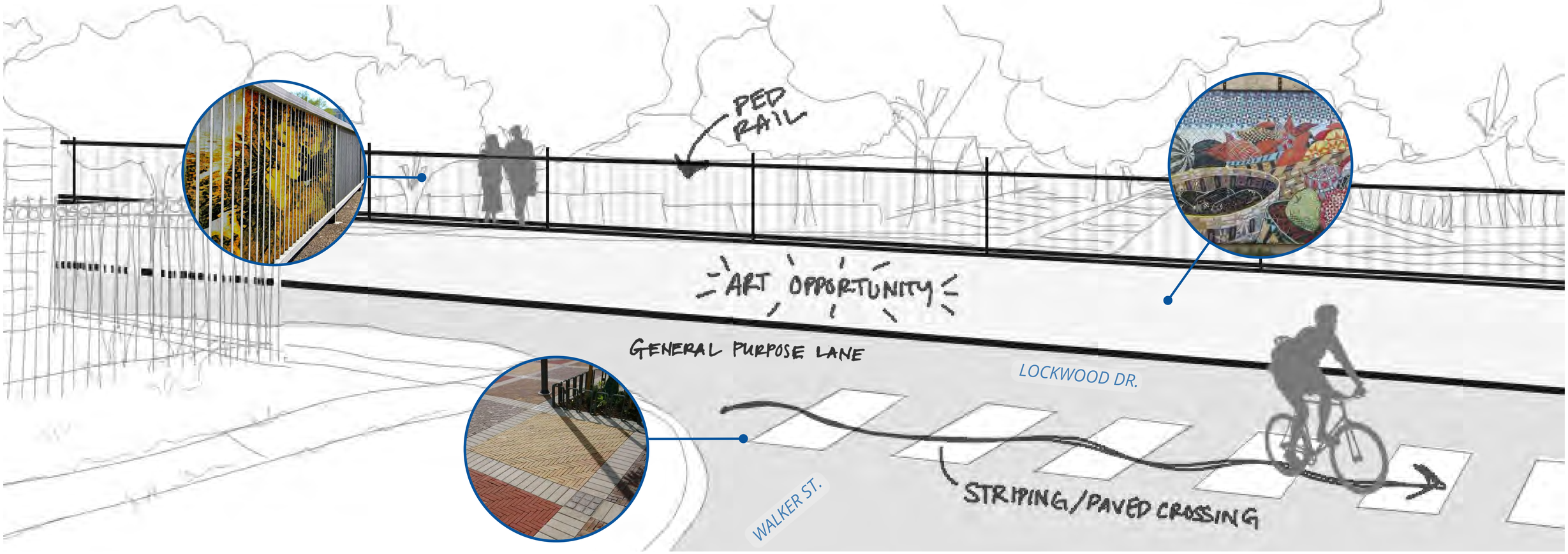
EASTWOOD (SEGMENT 4)



KEY MAP
FROM PARK DR. TO UPRR



EXISTING VIEW LOOKING WEST AT
LOCKWOOD DR. FROM WALKER ST.



PROPOSED VIEW LOOKING WEST AT LOCKWOOD DR. FROM WALKER ST.

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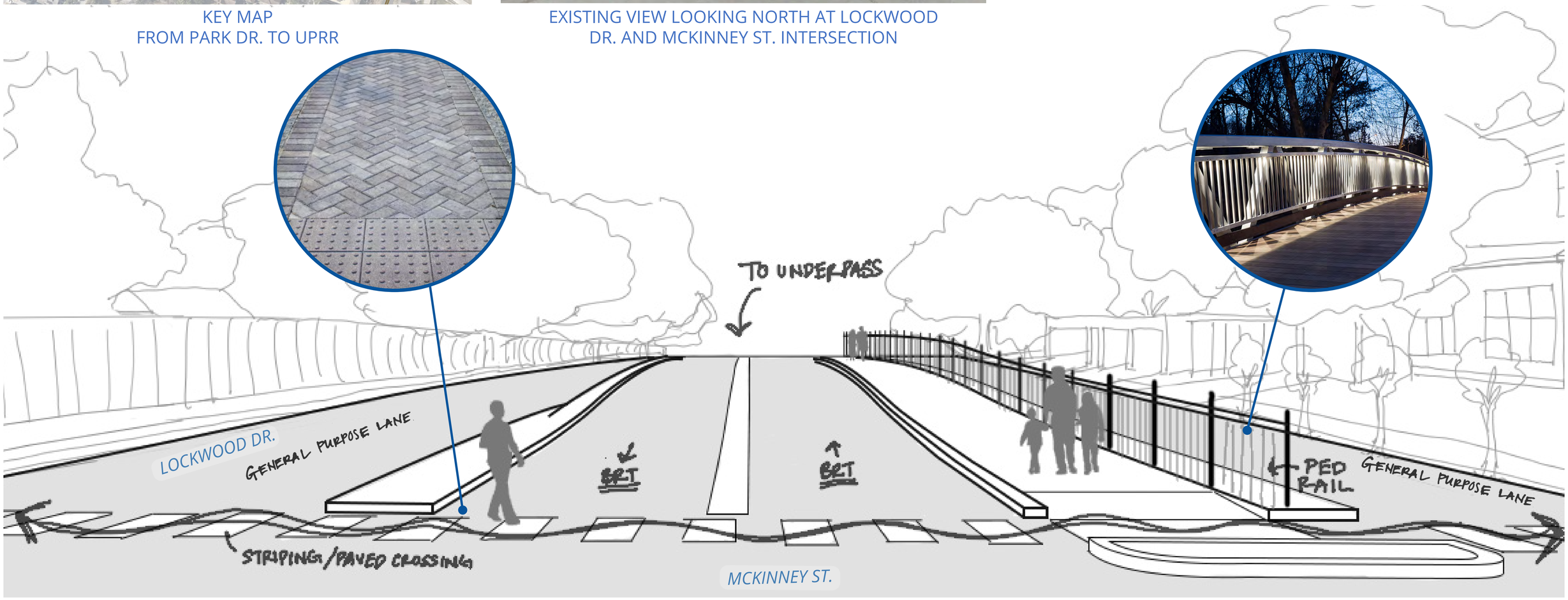
EASTWOOD (SEGMENT 4)



KEY MAP
FROM PARK DR. TO UPRR



EXISTING VIEW LOOKING NORTH AT LOCKWOOD
DR. AND MCKINNEY ST. INTERSECTION



PROPOSED VIEW LOOKING NORTH ON LOCKWOOD DR. AT MCKINNEY ST. INTERSECTION

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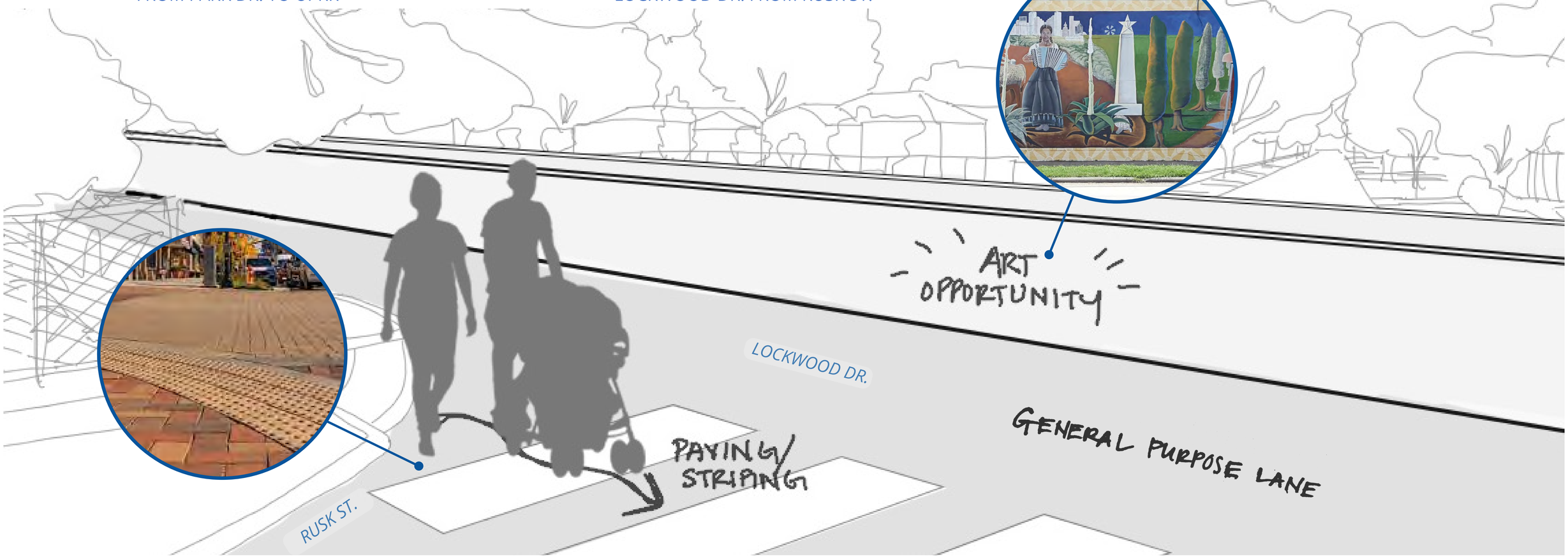
EASTWOOD (SEGMENT 4)



KEY MAP
FROM PARK DR. TO UPRR



EXISTING VIEW LOOKING WEST AT
LOCKWOOD DR. FROM RUSK ST.



PROPOSED VIEW LOOKING WEST AT LOCKWOOD DR. FROM RUSK ST.

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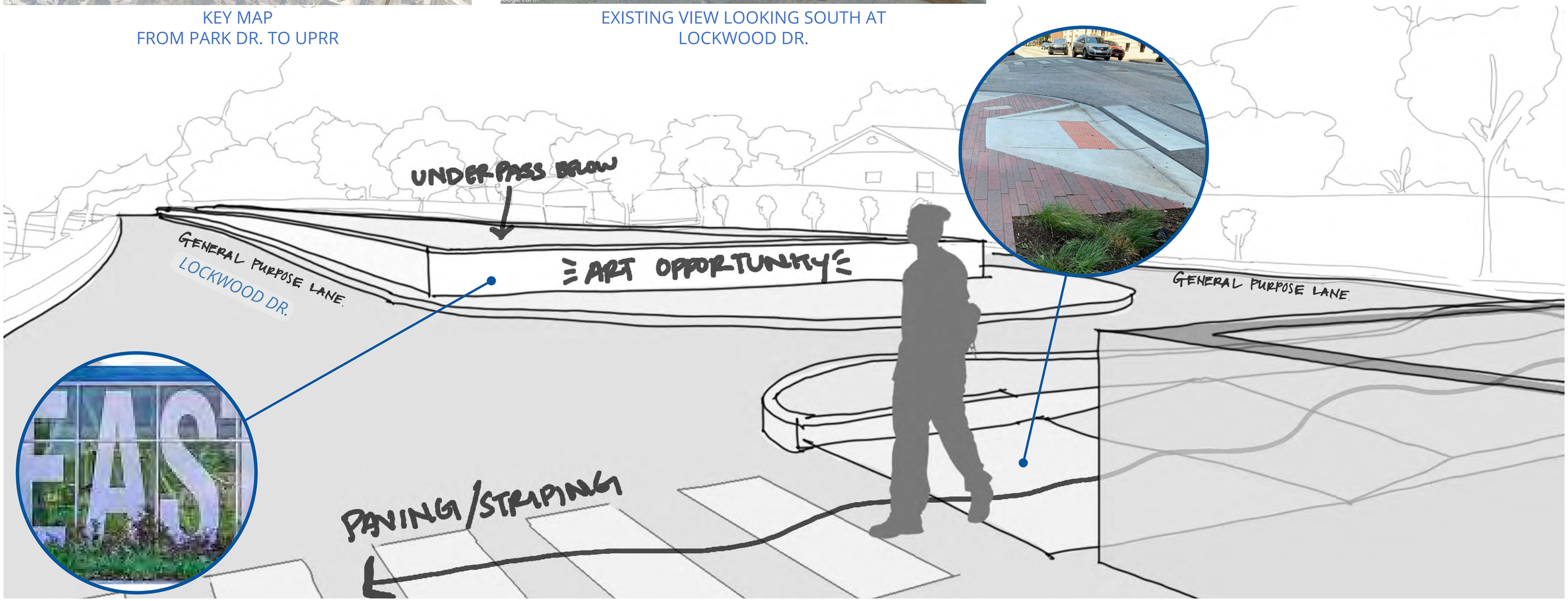
EASTWOOD (SEGMENT 4)



KEY MAP
FROM PARK DR. TO UPRR



EXISTING VIEW LOOKING SOUTH AT
LOCKWOOD DR.



PROPOSED VIEW LOOKING SOUTH AT LOCKWOOD DR. (AT-GRADE)

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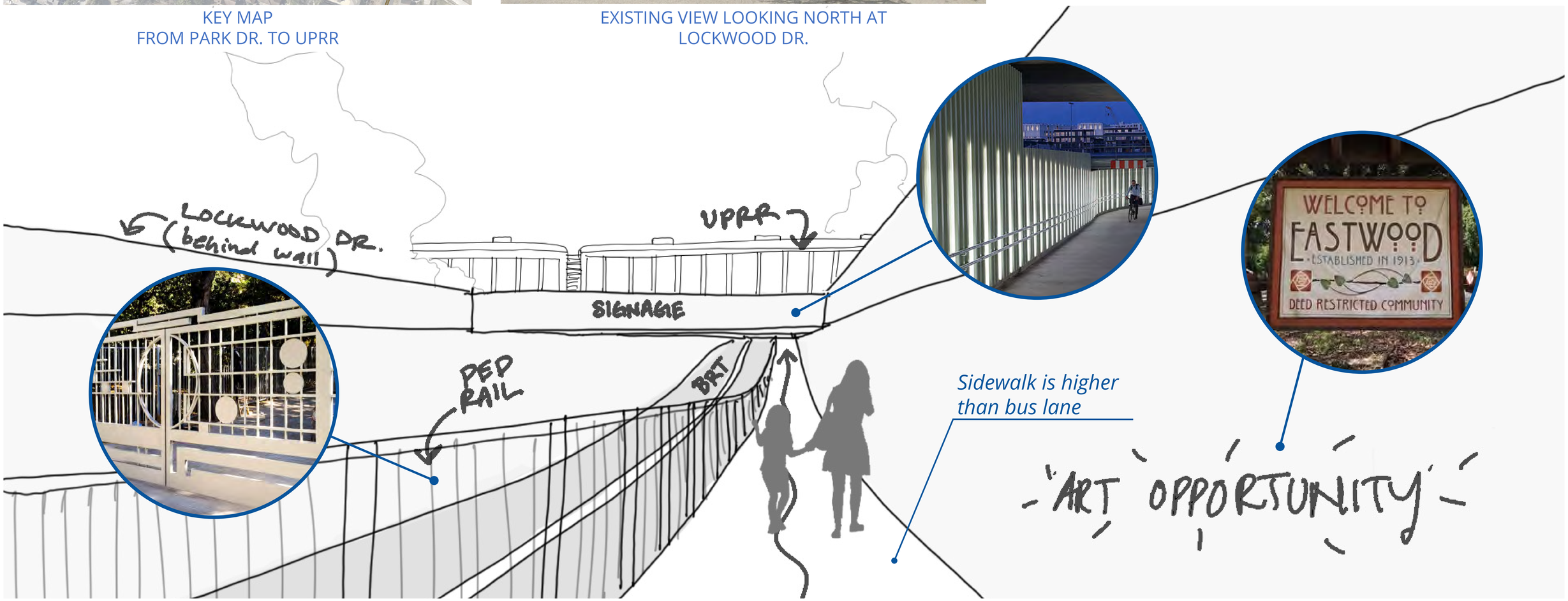
EASTWOOD (SEGMENT 4)



KEY MAP
FROM PARK DR. TO UPRR



EXISTING VIEW LOOKING NORTH AT
LOCKWOOD DR.



PROPOSED VIEW LOOKING NORTH AT LOCKWOOD DR. (UNDERPASS)

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EASTWOOD (SEGMENT 4)

Wall Design













Fences







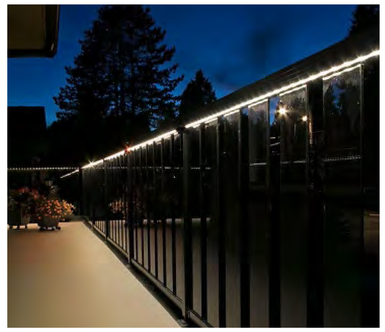


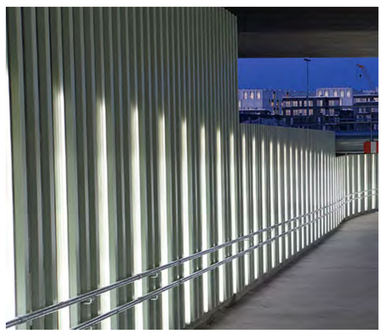




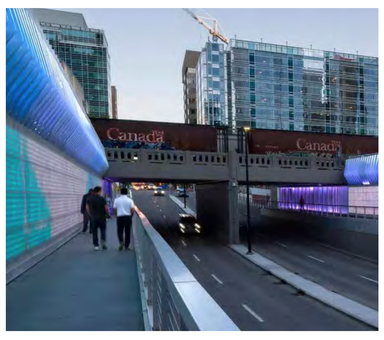
Lighting

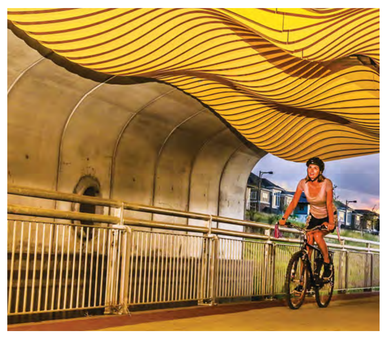












METRO

EASTWOOD (SEGMENT 4)

Signage - Existing





Signage - Potential





Paving





METRO

EASTWOOD (SEGMENT 4)

Existing Architectural Reference









METRO

APPENDIX C:

Site Photographs



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Photograph 2: Sidewalks along Diez Street Park looking south at transit center.



Photograph 3: Corner of Peggy Park at the intersection of Wheeler and Almeda Road.



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Photograph 5: Intersection of Richmond and Mandell, showing sidewalks at corner of Mandell Park.



Photograph 6: Showing sidewalks of Mandell Park at corner of Richmond and Mandell Street.

APPENDIX C-5 – Environmental Justice

METRORapid University Corridor

Environmental Justice

Technical Memorandum
September 2023



METRO NEXT

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Appendix D Public Involvement Information

Table D-1: Public Involvement Conducted to Date

Acronyms and Abbreviations

ACRONYM	DEFINITION
ACS	American Community Survey
ADA	Americans with Disabilities Act
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
COH	City of Houston
DHHS	Department of Health and Human Services
EO	Executive Order
EJ	Environmental Justice
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
LEP	Limited English Proficiency
LRT	Light Rail Transit
METRO	Metropolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
ROW	Right-of-Way
TOD	Transit-Oriented Development
TXDOT	Texas Department of Transportation
US	United States
USDOT	U.S. Department of Transportation

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston (COH), Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of this Environmental Justice (EJ) report is to present a profile of the community surrounding the Project and analyze the potential effects of the Project on that community. This report describes the demographics of the surrounding communities and documents METRO's coordination efforts with EJ communities. It presents the potential effects of the Project on EJ communities and includes an assessment of whether the surrounding low-income and minority populations would experience any disproportionately high or adverse impacts due to the proposed Project. This report also discusses avoidance and minimization strategies that METRO has taken to eliminate or reduce impacts, benefits to EJ populations due to the proposed Project, and any mitigation measures METRO would undertake to offset potential adverse effects.

1.2 Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park and Ride in the west to the Tidwell Transit Center in the northeast. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park and Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the COH. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1. Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

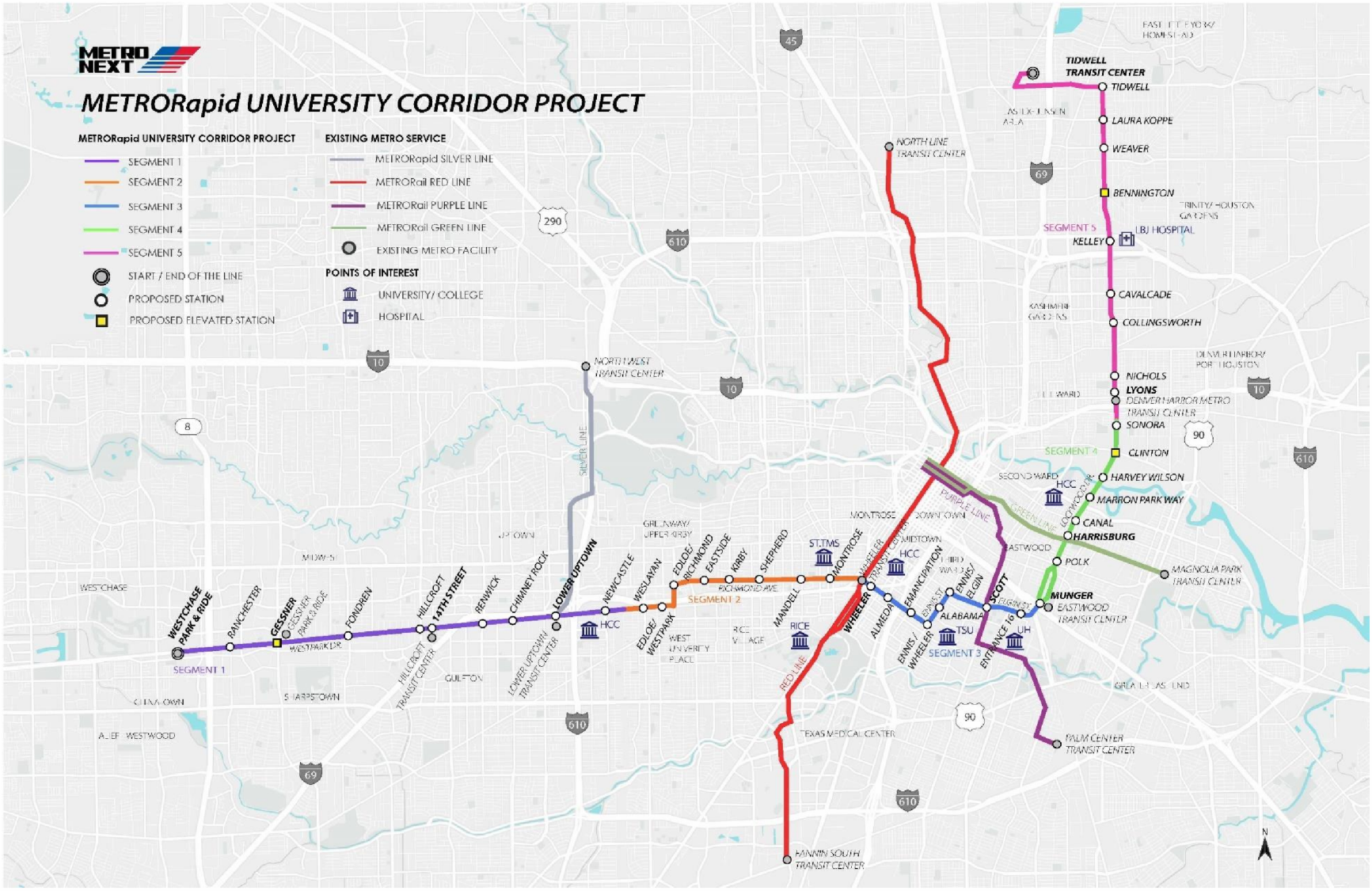
The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other service like METRORail, METRORapid, and local bus services. Two stations would be incorporated into existing METRO service like. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 1-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Dr
2	Westpark Dr 1,500 feet east of UPRR tracks, east of Newcastle Dr	Richmond Ave at US-59
3	Richmond Ave at US-59	Elgin Street at I-45 (Eastwood Transit Center)
4	Elgin Street at I-45 (Eastwood Transit Center)	Lockwood Drive at Margarita Street
5	Lockwood Dr at Margarita St.	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



2 Methodology

The general methodology for addressing Executive Order (EO) 12898 involves the following:

- Identifying the EJ populations within the study area;
- Assessing whether the Project would result in disproportionately high and adverse effects on environmental justice populations, taking into consideration mitigation and enhancement measures and Project benefits, as appropriate; and
- Providing information on the efforts that METRO has made to involve minority, low-income, and LEP populations in the project development process.

The United States Department of Transportation (USDOT) Order 5610.2(c) and FTA Circular 4703.1 define a minority population as any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy, or activity. Minority populations include persons who are American Indian and Alaska Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian and other Pacific Islander.

A low-income population is defined as any individual or household with income at or below the U.S. Census poverty thresholds. The U.S. Census poverty threshold for 2023 is $30,000 for a family of four. For comparison, the poverty threshold for a family of four in 2020 was $26,200.

U.S. Census data and American Community Survey (ACS) 5-year average data (2016-2020) were used to identify minority and low-income populations. The EJ analysis includes all Census block groups that fall fully or partially within a ½-mile (the study area) of the proposed alignment. Community resource data was obtained from City of Houston and Texas Education Agency GIS files to determine the location of community resources. This data was verified through Google Earth. The assessment of the potential for disproportionately high and adverse effects is based upon the environmental impact information developed for the overall project.

3 Existing Conditions

This section identifies EJ populations in the study area.

3.1 Minority Populations

Minority populations account for approximately 75 percent of the total population in the 199 populated census block groups within the study area (See **Table 3-1**). Hispanic/Latino communities comprise the highest percentage of the study area minority population.

Minority populations in the 199 individual populated census block groups in the study area range from 17 to 100 percent. All of the Segments with the exception of Segment 2, have a higher percentage of minority populations than the city and county averages. Segment 1 and Segment 5 have the highest minority populations with 97 percent total minority. Minority population data is

displayed by census block group in **Appendix A**, **Tables A-1** through **A-5** and shown visually in **Appendix B, Figure B-1**.

Table 3-1: Race and Ethnicity Summary

Geography	% White*	% Black*	% American Indian*	% Asian *	% Pacific Islander	% Some Other Race*	% Two or More Races *	% Hispanic or Latino**	% Total Minority
Study Area	24.8%	22.2%	0.1%	7.9%	~0.0%	0.4%	2.1%	42.3%	75.2%
City of Houston	24.2%	22.0%	0.1%	7.0%	0.1%	0.3%	2.4%	44.0%	75.8%
Harris County	28.9%	18.5%	0.2%	6.9%	~0.0%	0.2%	1.9%	43.3%	71.1%

*The complete Census race descriptions are as follows: White alone; Black or African American alone; American Indian and Alaska Native alone; Asian alone; Native Hawaiian and Other Pacific Islander alone; Some Other Race alone; and Two or More Races. Only non-Hispanic races are displayed.

**The concept of race is separate from the concept of Hispanic origin. Hispanic origin can be viewed as the heritage, nationality, lineage, or country of birth of the person or the person's parents or ancestors before arriving in the United States. People who identify as Hispanic, Latino, or Spanish may be of any race.

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

3.2 Limited English Proficiency Populations

Limited English Proficiency (LEP) populations are included in this analysis to ensure that the current communication strategy is tailored appropriately. This information can also be used to inform any future public engagement campaigns to help ensure that non-English speaking populations are given meaningful access to participate in the public engagement process. Approximately 23 percent of the total population aged five and older in the study area speaks English less than "very-well". A majority of the LEP population in the study area speaks Spanish, with smaller percentages speaking Indo-European Languages, Asian and Pacific Islander Languages, and Other languages (See **Table 3-2**).

The LEP populations in the individual census block groups within the study area range from 0 to approximately 79 percent of the total populations ages five and older. These populations that speak English less than "very-well" according to the 2016-2020 ACS are presented in **Appendix A**, **Tables A-5** through **A-10** and shown visually in **Appendix B, Figure B-2**.

Table 3-2: LEP Summary

Geography	Total Percent LEP Population	Percent Spanish	Percent Indo-European Languages	Percent Asian & Pacific Islander Languages	Percent Other Languages
Study Area	23.1%	20.0%	1.1%	2.0%	~0.0%
City of Houston	22.1%	19.0%	0.8%	2.0%	0.3%
Harris County	19.7%	16.2%	0.7%	2.2%	0.6%

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

3.3 Low-Income Populations

Low-income populations account for approximately 25 percent of the total population in the populated census block groups within the study area (See **Table-3-3**). In 2023, the Department of Health and Human Services (DHHS) Federal Poverty Guidelines for a family of four is $30,000. The poverty threshold for a family of four in 2020 was $26,200.

Table 3-3: Poverty and Low-Income Summary

Geography	Percent Individuals Below Poverty	Median Household Income (in 2019 inflation adjusted dollars)
Study Area	24.7%	$53,482*
City of Houston	19.4%	$55,499
Harris County	15.6%	$63,498

*Average of median household incomes in the populated census block groups in the study area.

Note: The ACS 2016-2020 5-year estimates excluded three populated block groups in the study area from the median household income calculations. See **Table C-2** in **Appendix C** for more details.

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B17021 and B19013.

The median household income ranges between segments. Segment 1 ranges from $19,157 to $137,530. Segment 2 has the highest median income of the segments, ranging from $55,000 to $238,935. Segment 3 has some of the lowest median income census tracts ranging from $11,662.00 to $121,950. Segment 4 ranges from $15,268 to $72,833. Segment 5 has the lowest median income, ranging from $10, 467 to $61,089.

3.4 Transit-Dependent Populations

This analysis also recognizes transit-dependent populations. Zero-car households, children (under 18), seniors (65 and older), and people with disabilities are traditionally transit-dependent populations and can benefit from improved access to transit to meet their mobility needs. **Table 3- 5** reports the percentage of households without a vehicle, children, seniors, and people with disabilities data available for the census block groups within the study area.

Zero-car households account for approximately 11 percent of the total households in the census block groups within the study area (see **Table 3-5**). As **Figure B-4** in **Appendix B** illustrates, zero-car households in the individual census block groups in the study area range from 0 to approximately 61 percent. Additionally, 108 census block groups were estimated to have higher percentages of zero-car households than the city and county averages. The segment with the highest average of zero-car households is Segment 3 with approximately 20.45 percent of households without cars. Residents in Segment 5 have also been historically underserved with transit service.

Children account for approximately 22 percent of the total population within the study area (see **Table 3-5**). As **Figure B-5** in **Appendix B** illustrates, populations under the age of 18 in the individual census block groups in the study area range from 0 to approximately 22 percent. Additionally, 65

populated census block groups were estimated to have higher percentages of populations under the age of 18 than the city and county averages. The segment with the highest average of population under the age of 18 is Segment 1 at approximately 24.96 percent.

Seniors account for approximately 10 percent of the total population in the census block groups within the study area (see **Table 3-5**). As **Figure B-6** in **Appendix B** illustrates, populations 65 years and older in the individual census block groups in the study area range 0 to approximately 57 percent. Additionally, 85 populated census block groups were estimated to have higher percentages of populations 65 years and older than the city and county averages. the segment with the highest average of population 65 years and older is Segment 2 at approximately 14.20 percent.

People with disabilities account for approximately 11 percent of the total population 18 years and older in the census block groups within the study area (see **Table 3-5**). As **Figure B-7** in **Appendix B** illustrates, people with disabilities in the individual census block groups in the study area range from approximately 0 to approximately 55 percent. Additionally, 84 populated census block groups were estimated to have higher percentages of populations with disabilities than the city and county averages. The segment with the highest average of people with a disability is segment 5 at approximately 22.74 percent. Transit-dependent population data is displayed by census block group in **Appendix A**, **Tables A-16 through A-20** and shown visually in **Appendix B, Figures B-4 through B- 5**.

Table 3-5: Transit-Dependent Populations Summary

Geography	Percent Zero-Car Households	Percent Children (Under 18)	Percent Seniors (65 and older)	Percent People with a Disability
Study Area	11.23%	22.05%	9.72%	11.19%
City of Houston	7.20%	25.93%	10.63%	11.50%
Harris County	6.11%	26.68%	10.50%	11.53%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B25044, B01001, and C21007.

4 Public Involvement

Public involvement is a continuous component throughout the development process and includes efforts to involve the public in the decision-making process related to scoping, design, and potential impacts. METRO has used and will continue to use a variety of methods to gather meaningful input from the community, including LEP populations. Public and stakeholders meetings will continue to be held throughout the design of the Project.

4.1 Meetings

Approximately 20 in-person public meetings and two virtual ones have been held to date for the general public and interested citizens. The public meetings have been accompanied by multiple meetings with local organizations, neighborhoods, universities and various stakeholders. See **Table D-1** in **Appendix D** for a list of public involvement conducted to date.

Due to the presence of LEP populations along the study area, METRO advertised the meetings in Spanish, and translated the meeting presentation content and recordings. METRO also sent area residents direct mailers that advertised the meetings in four languages - English, Spanish, Vietnamese, and Chinese. METRO also ensured that interpreters were present at meetings located in predominately Spanish-speaking neighborhoods.

4.2 Summary of EJ Related Comments Received

EJ related issues raised during the public involvement process are described below.

- Questions about the Project service areas and why the Project does not extend to other areas and universities.
    - These comments were mostly raised at the meetings held in Segments 1 and 5. METRO identified the proposed alignment and station locations identified based on public input and its ability to connect to other transit modes (METRORail, local bus, METRORapid), facilities (Transit Centers and Park and Rides) and activity centers (universities, employment centers, etc.) to ensure the line would be readily accessible. Station locations are still being finalized and are subject to change during final design.

- Comments about not sufficiently reaching out to the Spanish speaking community.
    - Direct mailers were sent to in Spanish to all communities. Public meeting materials were created in Spanish as well as translated presentations. Interpreters and headsets for translating meetings were provided.

- Comments about homelessness and gentrification.
    - METRO is committed to making its service accessible and affordable to all. The University Line intent is to allow for better access to jobs and education for communities which have had limited transit options in the past.
    - The Project design will incorporate Crime Prevention Through Environmental Design techniques to enhance safety for the University Line. As METRO expands services, there is also planned to be an expanding police presence on new lines.
    - METRO is committed to making its service accessible and affordable to all. Projects like the METRORapid University Rapid's intent is to allow for better access to jobs and education for communities that have had limited transit options in the past.

- Questions regarding safety and ADA accessibility at stations.
    - METRO has proposed several safety features at each station such as:
        - Accessible sidewalks and ADA ramps along the entire corridor.
        - Bike and pedestrian crossings be designed for safer crossings along the corridor.
        - Roadway modifications to improve safety.

- Many of the stakeholders have concerns about quality of life.

- METRO is aware of these concerns and is designing the Project to be located primarily within existing ROW in order to avoid impacting adjacent property where possible.
- Care would be taken to provide access, for pedestrians and vehicles, during construction and minimize noise impacts.

- Concerns over the Lockwood and Harrisburg Overpasses dividing the communities that are primarily non-English speaking and minority populations.
  - After extensive public involvement with the Eastwood neighborhood and adjacent communities, METRO reevaluated the proposed design to include an underpass instead of an overpass. The proposed design also includes continuous shared-use paths in these areas to further connect the communities on either side of Lockwood.

Community coordination is ongoing and the information in this section represents general topics related to EJ that were communicated by the public and collected through public involvement channels to date. METRO will continue to consider all public and stakeholder input as it refines the design of the Project to maximize transportation and community benefits while avoiding and minimizing impacts to communities and the environment as well as providing mitigation where warranted and reasonably feasible.

5 Environmental Commitments

5.1 Short-Term Construction Impacts

The communities adjacent to the footprint of the Project would experience temporary impacts during construction, such as traffic detours, closing off access to certain properties, increasing noise levels, vibration, dust, and the presence of construction equipment. Construction of the Project could result in potential changes to access and travel patterns to residences, businesses, and community facilities in the areas adjacent to the Project footprint. Construction is planned to start as early as 2028, though construction sequencing plans that would determine where and when construction would start and how it would be phased have not yet been developed. Initial phases of construction are anticipated to focus on major utility relocations. The street reconstruction would then be sequenced in segments to minimize the need for disruptions and construction impacts for the full duration of construction to any one area. Final design and construction plans would address maintenance of access for vehicles and pedestrians during construction.

Additionally, temporary construction easements would be needed for staging and parking areas as well as construction access. METRO anticipates that multiple staging areas would be used, some of which may only be used for part of the construction period. METRO will determine the locations of the temporary construction easements during final design. Temporary construction activity in staging areas and construction easements would convert the existing land on which they occur to temporary construction use. The owner of such lands would temporarily lose the use of that land until construction activity ends.

Additionally, short-term construction impacts would generate jobs, which would be directly supported by construction activities related to constructing the Project. Outside of the construction

impacts characterized above, the Project would not cause short-term construction-related impacts to socioeconomic resources. Construction impacts would be a benefit to the study area in terms of employment, labor income, and sales. METRO will coordinate with local businesses to maintain access during construction.

5.2 Long-Term Operational Impacts

Overall, the Project would keep community cohesion and not separate or isolate any distinct neighborhoods, ethnic groups or other special groups as existing access is being maintained as much as possible through design of the project. Areas across Houston would experience enhanced connection between communities with more efficient travel through Houston and the study area, along with additional bicycle and pedestrian elements.

Transit Benefits and Impacts

Communities in the study area would experience improved access to high-capacity transit as a benefit from the Project. Approximately 18 percent of the study area is transit dependent and would benefit from faster, convenient modes of travel.

Overall, there would be an improvement in pedestrian and bicycle connections and access. Throughout the corridor the Project includes additional sidewalks or crosswalks in station areas, where needed to support safe station access and shared-use paths along both sides of the corridor where feasible. To improve vehicular safety and reduce crash points, left turns from the University Corridor were converted to protected only phasing and separated to control movements across the BRT lanes. Existing left turn access was kept throughout the project as much as safely feasible.

The Project would not result in a major change in community cohesion or neighborhood quality as it would operate in existing roadways. It would improve transit accessibility and mobility, which in turn would encourage more pedestrian and bicycle travel The Project would further encourage pedestrian and bicycle connectivity with its improvements to intersections, crosswalks and other bicycle pedestrian facilities. Elevated sections of the alignment would be designed to avoid negative visual impacts as possible, and where safely feasible avoid removing any existing access to neighborhoods.

As part of the Project, a Transit-Oriented Development (TOD) study is ongoing to encourage redevelopment around station areas in an effort to create a sense of place in local neighborhoods. METRO is also committed to Arts in Transit which supports local, national, and international artists by celebrating the city's diversity through art and would cater to each segment's distinct character.

Air Quality

METRO is committed to using zero-emission vehicles and when funding is feasible, METRO plans to transition the buses to fully electric. This would benefit air quality along the corridor. The Project would comply with air conformity requirements.

Noise and Vibration

No noise and vibration impacts are anticipated. METRO is proposing to use electric buses, which would result in less noise and vibration than currently experienced along the corridor. See the *University Corridor Noise and Vibration Report* (METRO 2023) for more information.

Land Acquisitions and Displacements

METRO sought to use existing linear transportation and utility ROW in developing the Project to minimize the need to acquire private property. By using this approach, most land area that METRO would need for the Project can be accommodated within the existing ROW. However, some acquisitions and relocation of existing users of the affected properties will also be required to provide adequate ROW and accommodate station locations and other equipment along existing corridors. In this assessment, a full property acquisition is assumed to also be a displacement of the occupant(s). For partial acquisitions, only the portion of the parcel falling within the proposed ROW footprints is assumed to be acquired. Final determinations regarding property needs and acquisitions will be made by METRO during the final design phase of the Project. For detailed figures see **Appendix C**.

Table 5-1 summarizes METRO's preliminary determination of the potential full and partial property acquisitions that would be needed for the Project based on the 30 percent level of planning and schematic design. Overall, based on the preliminary design, the Project would result in 23 full acquisitions, 110 corner clips, and 448 partial acquisitions, affecting roughly 18 acres. **Table 5-2** provides a list of the full acquisitions. METRO is constantly finetuning the number of acquisitions planned and will make the final determinations regarding property needs and acquisitions during the final design phase of the Project. The Project would not displace any of the community facilities identified in the study area.

Table 5-1: Acreage and Acquisition Count by Type and Land Use by Segment

Acquisition Type	Segment					Total Corridor
	1	2	3	4	5	
Corner Clips						
Corner Clip Area (Acres)	0.00	0.03	0.06	0.01	0.25	**0.35**
Residential Parcels	0	0	6	2	15	**23**
Commercial Parcels	0	7	5	4	27	**43**
Vacant Parcels	0	1	0	1	21	**23**
Community Facilities	0	1	6	0	14	**21**
Industrial	0	0	0	0	0	**0**
Utilities	0	0	0	0	0	**0**
Total Number of Corner Clips*	**0**	**9**	**17**	**7**	**77**	**110**
Partial Acquisitions						
Partial Acquisition Area (Acres)	2.80	3.10	0.65	1.76	3.73	**12.04**
Residential Parcels	5	23	19	19	38	**104**
Commercial Parcels	21	61	12	17	71	**182**
Vacant Parcels	3	14	7	14	64	**102**
Community Facilities	2	7	15	11	14	**49**
Industrial	1	0	0	0	0	**1**
Utilities	7	2	0	0	0	**9**
Railroad	0	0	0	1	0	**1**
Total Number of Partial Acquisitions*	**39**	**107**	**53**	**62**	**187**	**448**
Full Acquisitions						
Full Acquisition Area (Acres)	0.01	2.74	0.83	1.09	1.28	**5.95**
Residential Parcels	0	2	3	1	5	**11**
Commercial Parcels	0	6	2	1	2	**11**
Vacant Parcels	1	0	0	0	0	**1**
Community Facilities	0	0	0	0	0	**0**
Industrial	0	0	0	0	0	**0**
Utilities	0	0	0	0	0	**0**
Total Number of Full Acquisitions*	**1**	**8**	**5**	**2**	**7**	**23**
Displacements						
Residential	0	3*	6**	1	5	**13**
Commercial	0	6	2	1	2	**11**
Community Facilities	0	0	0	0	0	**0**
Industrial	0	0	0	0	0	**0**
Total Number of Displacements	**0**	**9**	**8**	**2**	**7**	**23**

Sources: METRO, 2023; Harris Central Appraisal District, 2023.
*One single-family residence and one 2-family residence.
**Two single-family residence and one 4-unit multi-family residence.

Table 5-2: Full Acquisitions by Segment

Segment/Address	Property Type	Census Track*	Block Group*
Segment 1			
0 Newcastle Dr	Vacant - Commercial	4117	Block Group 1
Segment 2			
Diamond Shamrock, 2540 Richmond Ave	Commercial	4110.03	Block Group 1
Little Pappasito's Cantina, 2536 Richmond Ave	Commercial	4110.03	Block Group 1
Cigar Emporium, 3514 S Shepherd Dr	Commercial	4110.03	Block Group 1
Valero, 3519 S Shepherd Dr	Commercial	4108.01	Block Group 1
Lane Equipment, Co., 2054 Richmond Ave	Commercial	4108.01	Block Group 1
Lane Equipment, Co., 2030 Richmond Ave	Commercial	4108.01	Block Group 1
1610 Richmond Ave	Residential - Single Family	4108.01	Block Group 2
1604 Richmond Ave	Residential Two-Family	4108.01	Block Group 2
Segment 3			
Jack in the Box, 4403 Fannin St	Commercial	3125.02	Block Group 1
Green Seed Vegan, 4320 Almeda Rd	Commercial	3126.03	Block Group 2
1409 Wheeler St	Residential - Single Family	3126.03	Block Group 2
1411 Wheeler St	Residential - Single Family	3126.03	Block Group 2
1419 Wheeler St	Residential Multi-Family	3126.03	Block Group 2
Segment 4			
94 S Lockwood Dr	Residential - Single Family	3104	Block Group 3
0 Munger Ave	Vacant - Commercial	3103	Block Group 3
Segment 5			
6902 Lockwood Dr	Commercial	2302	Block Group 2
Buffalo Quick Stop Food Store, 8503 Lockwood Dr	Commercial	2304	Block Group 1
8507 Lockwood Dr	Residential - Single Family	2304	Block Group 1
2209 Lockwood Dr	Residential - Single Family	2113.02	Block Group 3
7302 Lockwood Dr	Residential - Single Family	2303	Block Group 2
7306 Lockwood Dr	Residential - Single Family	2303	Block Group 2
8410 Lockwood Dr	Residential - Single Family	2303	Block Group 1

*See Appendix B for maps showing the census tracts and block groups.

Source: METRO, 2023.

Segment 1 Potential Displacements: The one potential displacement in Segment 1 is currently vacant commercial property. This block group is 54 percent minority and has a 11 percent LEP population. The median household is $63,169. This block group is below the city and county averages for minority and LEP populations. The average income is slightly lower than the Harris County average.

Segment 2 Potential Displacements: The property listed as Diamond Shamrock is no longer operating as a gas station and is serving as covered parking for Little Pappasito's Cantina. Little Pappasito's tex-mex restaurant located at the intersection of Kirby Drive and Richmond Avenue. Cigar Emporium, located at 3514 South Shepherd Drive is located within a small shopping center also containing Honey Art Café, Howdy's Hot Chicken Restaurant, a subway, 1-0-2 Lash by Tracy and Accents by Phillipe Upholstery Shop. These commercial properties are all located within the same census tract 4110.03, block group 1, which has a median household income of $91,591 and does not contain a minority percentage or a LEP percentage higher than the city or county averages.

The Valero located at 3519 S Shepherd at the intersection of Richmond Avenue and Kirby Drive is currently in use as a gas station. Lane Equipment Co. is next to the Valero and is a distributor and rental company specializing in frozen beverages and soft-serve ice cream machines. These properties are located within the 4108.01 census tract, block group 1 that has a median household income of $59,966 and does not contain a minority percentage or a LEP percentage higher than the city or county averages.

Along Richmond Avenue, two residential properties have the potential to be displaced. These parcels are located within census tract 4108.01, block group 2, which has a median household income of $64,792 and does not contain a minority percentage or a LEP percentage higher than the city or county averages.

Segment 3 Potential Displacements: Potential displacements in Segment 3 include two commercial properties, two single family residential properties, and one multi-family property containing 4 housing units. The Jack in the Box located at 4403 Fannin Street is in census tract 3125.01, block group 1 which has a median income of $52,297 and does not contain a minority percentage higher or a LEP percentage below the city or county averages. Green Seed Vegan, 1409 Wheeler Street, 1411 Wheeler Street, and 1419 Wheeler Street are located in census tract 3126.03, block group 2. This block group has a median income of $54,571, just below the city and county averages. It does not contain a minority percentage or a LEP percentage higher than the city or county averages.

Segment 4 Potential Displacements: Segment 4 has one vacant commercial property and one residential potential displacement located at 94 Lockwood Drive. The residential property appears to be vacant and is located in census tract 3104, block group 3, which has a median income of $45,556 below the city and county averages. The minority population is 90 percent and above the city and county averages and the LEP population is 22 percent, above the city and county averages.

Segment 5 Potential Displacements: Segment 5 has two potential commercial displacements and five potential single-family residential displacements. Located at 6902 Lockwood Drive, is a commercial property that appears to be a snow cone establishment that operates in the summer months. It is located in census tract 2302, block group 1. The parcel currently does not have median income information available, however, it is located within a LEP and predominately minority community.

One commercial property, the Buffalo Quick Stop Food Store and one residential property located at 8507 Lockwood Drive are within census tract 2304, block group 1. The Buffalo Quick Stop Food Store

does not appear to currently operate as a food store and does not have any signage indicating as such. The census tract has a median income of $24,375 and the minority population is 97 percent and above the city and county averages and the LEP population is 39 percent, above the city and county averages.

One residential property located at 2209 Lockwood Drive is in census tract 2113.02, block group 2. This block group has a median income of $72,075 and contains a minority population of 93 percent. The LEP percentage is below the city and county averages

Three residential properties are located in census tract 2302, block group 1 and block group 2. Block group 1 has a median income of $44,135 and block group 2 had a median income of $32,159. The two block groups have minority populations of 99 percent and 97 percent respectively, higher than the city and county averages. Both block groups have a LEP population lower than the city and county averages.

Socioeconomics

The Project would benefit transit-dependent populations by providing increased mobility and improved access and connectivity to high-capacity transit. Residents of the study area would particularly benefit from improvements in travel time, safety, and new bicycle and pedestrian accommodations. The Project would serve as a link to the residential growth and employment centers. No disproportionate adverse impacts to demographics, employment, or economic development are anticipated although land use and development patterns may change incrementally over time.

Totality of Effects

Based on this information long-term operational adverse impacts due to the Project include residential and commercial displacements and relocations. EJ populations exist in these areas to varying degrees, although higher concentrations are present in Segment 1, Segment 3 and Segment 5. The long-term benefits associated with the Project would include increased access to transit, enhanced efficiency of travel, and improved air quality. Over the long term, the EJ populations would benefit from the Project as a result of the increased access to transit, enhanced efficiency of travel, and improved air quality in the area. In the case of the proposed Project and considering the limited adverse effects, EJ populations would benefit overall from improved transit accessibility and mobility.

6 Environmental Commitments

Impacts from potential displacements resulting from the Project could occur; however, the extent to which displacements result in an adverse impact to the community would be determined by the extent to which those residents and businesses could relocate within the local area and local taxing jurisdiction. Displacees would receive assistance through compliance with the Uniform Relocation Assistance and Real Property Acquisition Act. METRO would coordinate with individual property owners and tenants regarding means to minimize and mitigate property acquisitions and displacements.

With regard to changes in travel and access patterns, METRO would continuously coordinate with local transit users to ensure access to transit on existing bus routes. Access to businesses would be maintained during construction for customers, deliveries and parking lots. METRO would continue communication with local businesses during construction to monitor effects and modify construction plans, if possible, to further reduce impacts.

During the design process, efforts were made to reduce impacts wherever possible. After design refinements, additional fieldwork and data analysis, 23 total displacements and 13 residential displacements would be required. Design is still ongoing to reduce the total number of impacts where feasible. No community facilities would be displaced. The locations of the displacements would be balanced across areas with high and low concentrations of EJ populations.

Severe and moderate noise impacts could occur during construction, but METRO would appropriately mitigate these impacts. At the severe impact level, impacts should be mitigated unless there are no practical means to do so.

7 Potential for Disproportionately High and Adverse Effects on EJ Populations

There does not appear to be a disproportionately high and adverse direct impact on minority and low-income populations associated with the Project due to limited adverse effects. the Project would result in a net benefit to the community including EJ populations and transit-dependent populations. This determination considers the significant individual effects of the Project, along with existing regulations and future planned actions by the City of Houston.

8 References

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Appendix A

Demographic Tables

Table A-1: Race and Ethnicity in the Study Area Segment 1

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	4327.05	Block Group 3	1018	95%	3%	1%	0%	1%	0%	0%	1%	97%
Census Tract	4327.05	Block Group 2	1191	93%	2%	3%	0%	1%	0%	0%	1%	98%
Census Tract	4330.04	Block Group 2	1729	93%	1%	4%	0%	2%	0%	0%	0%	99%
Census Tract	4211.04	Block Group 2	1678	93%	2%	4%	0%	0%	0%	0%	0%	98%
Census Tract	4327.06	Block Group 1	457	93%	2%	4%	0%	0%	0%	0%	0%	98%
Census Tract	4329.03	Block Group 1	1171	92%	2%	4%	0%	1%	0%	0%	0%	98%
Census Tract	4211.04	Block Group 1	1695	91%	3%	5%	0%	0%	0%	0%	1%	97%
Census Tract	4212.06	Block Group 1	2054	90%	3%	4%	0%	1%	0%	0%	1%	97%
Census Tract	4327.05	Block Group 1	2062	90%	4%	5%	0%	1%	0%	0%	0%	96%
Census Tract	4214.02	Block Group 1	1721	88%	1%	7%	0%	2%	0%	1%	1%	99%
Census Tract	4212.04	Block Group 2	1742	84%	2%	12%	0%	0%	0%	0%	1%	98%
Census Tract	4212.05	Block Group 1	2315	81%	4%	11%	0%	1%	0%	0%	1%	96%
Census Tract	4329.01	Block Group 2	994	79%	1%	19%	0%	1%	0%	0%	0%	99%
Census Tract	4329.01	Block Group 3	1278	79%	5%	12%	0%	2%	0%	0%	2%	95%
Census Tract	4330.04	Block Group 1	1661	78%	4%	10%	0%	8%	0%	0%	0%	96%
Census Tract	4211.04	Block Group 3	1003	78%	5%	13%	0%	1%	0%	1%	2%	95%
Census Tract	4214.01	Block Group 1	1450	76%	2%	13%	1%	4%	0%	2%	1%	98%
Census Tract	4328.03	Block Group 2	1179	74%	8%	12%	0%	4%	0%	1%	1%	92%
Census Tract	4328.03	Block Group 1	1235	73%	6%	15%	0%	4%	0%	1%	1%	94%
Census Tract	4330.06	Block Group 1	922	69%	2%	21%	0%	6%	0%	2%	1%	98%
Census Tract	4329.03	Block Group 2	1025	69%	9%	6%	0%	10%	0%	3%	2%	91%
Census Tract	4330.03	Block Group 2	1296	68%	3%	7%	0%	16%	0%	5%	0%	97%
Census Tract	4327.04	Block Group 1	1724	68%	15%	10%	0%	4%	0%	1%	3%	85%
Census Tract	4327.06	Block Group 2	1505	61%	23%	9%	1%	4%	0%	1%	2%	77%
Census Tract	4212.03	Block Group 2	870	60%	7%	19%	0%	9%	0%	1%	3%	93%
Census Tract	4330.06	Block Group 2	862	60%	3%	34%	0%	2%	0%	1%	0%	97%
Census Tract	4328.04	Block Group 1	724	59%	14%	20%	0%	6%	0%	1%	2%	86%

Table A-1: Race and Ethnicity in the Study Area Segment 1

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	4211.01	Block Group 3	562	58%	6%	30%	0%	1%	0%	1%	4%	94%
Census Tract	4330.07	Block Group 1	767	57%	0%	2%	0%	40%	0%	0%	0%	100%
Census Tract	4328.04	Block Group 2	1231	57%	12%	10%	0%	17%	0%	1%	2%	88%
Census Tract	4212.03	Block Group 1	935	57%	9%	24%	1%	8%	0%	0%	1%	91%
Census Tract	4329.01	Block Group 1	889	55%	21%	6%	0%	12%	0%	3%	3%	79%
Census Tract	4325.02	Block Group 1	886	54%	12%	21%	0%	7%	0%	1%	4%	88%
Census Tract	4325.02	Block Group 2	879	54%	23%	17%	0%	5%	0%	0%	1%	77%
Census Tract	4212.04	Block Group 1	686	52%	11%	29%	0%	6%	0%	1%	1%	89%
Census Tract	4523	Block Group 1	2226	51%	5%	12%	0%	32%	0%	0%	1%	95%
Census Tract	4324.02	Block Group 1	1428	48%	9%	39%	0%	3%	0%	1%	1%	91%
Census Tract	4324.01	Block Group 3	893	47%	8%	35%	0%	6%	0%	0%	3%	92%
Census Tract	4524.01	Block Group 3	1076	45%	4%	25%	0%	22%	0%	1%	2%	96%
Census Tract	4325.01	Block Group 3	912	45%	19%	23%	0%	11%	0%	1%	1%	81%
Census Tract	4325.01	Block Group 2	1820	45%	23%	18%	0%	9%	0%	0%	5%	77%
Census Tract	4330.05	Block Group 2	1160	44%	1%	5%	0%	49%	0%	0%	1%	99%
Census Tract	4328.03	Block Group 3	760	43%	8%	34%	0%	11%	0%	3%	2%	92%
Census Tract	4214.01	Block Group 2	2067	41%	4%	16%	0%	34%	0%	0%	4%	96%
Census Tract	4211.01	Block Group 2	1801	40%	15%	22%	0%	21%	0%	0%	2%	85%
Census Tract	4324.01	Block Group 1	1564	39%	14%	29%	0%	13%	0%	1%	3%	86%
Census Tract	4325.01	Block Group 1	1069	39%	16%	13%	0%	20%	0%	0%	12%	84%
Census Tract	4324.01	Block Group 2	1175	37%	23%	24%	0%	10%	0%	2%	3%	77%
Census Tract	4326	Block Group 2	1123	36%	23%	33%	0%	5%	0%	0%	3%	77%
Census Tract	4330.05	Block Group 1	1249	32%	3%	8%	0%	55%	0%	0%	2%	97%
Census Tract	4211.01	Block Group 1	894	32%	30%	24%	0%	11%	0%	0%	3%	70%
Census Tract	4117	Block Group 1	823	31%	46%	11%	0%	9%	0%	0%	4%	54%
Census Tract	4324.02	Block Group 2	1054	30%	16%	31%	0%	18%	0%	1%	3%	84%
Census Tract	4329.04	Block Group 2	1378	29%	19%	12%	0%	37%	0%	1%	2%	81%

Table A-1: Race and Ethnicity in the Study Area Segment 1

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	4330.03	Block Group 1	2224	28%	1%	17%	0%	52%	0%	0%	1%	99%
Census Tract	4522.02	Block Group 2	1042	28%	13%	50%	0%	6%	0%	0%	3%	87%
Census Tract	4522.02	Block Group 3	1317	27%	10%	49%	0%	10%	0%	0%	3%	90%
Census Tract	4522.02	Block Group 1	1092	26%	18%	41%	0%	10%	0%	1%	3%	82%
Census Tract	4327.03	Block Group 1	2057	26%	45%	13%	0%	11%	0%	0%	5%	55%
Census Tract	4319.01	Block Group 1	435	23%	42%	14%	0%	12%	0%	2%	8%	58%
Census Tract	4211.03	Block Group 1	1473	22%	8%	54%	0%	13%	0%	1%	2%	92%
Census Tract	4117	Block Group 2	905	21%	42%	14%	0%	17%	0%	1%	4%	58%
Census Tract	4320.04	Block Group 2	980	19%	49%	10%	0%	19%	0%	0%	3%	51%
Census Tract	4319.01	Block Group 3	1324	18%	45%	16%	0%	17%	0%	1%	3%	55%
Census Tract	4319.01	Block Group 2	631	18%	37%	15%	0%	23%	0%	3%	4%	63%
Census Tract	4320.04	Block Group 1	1293	17%	44%	6%	0%	26%	0%	1%	5%	56%
Census Tract	4319.02	Block Group 2	1693	17%	41%	13%	0%	23%	0%	2%	4%	59%
Census Tract	4521.01	Block Group 2	2672	17%	42%	23%	0%	15%	0%	1%	2%	58%
Census Tract	4117	Block Group 3	2065	15%	41%	12%	0%	27%	0%	1%	4%	59%
Census Tract	4116	Block Group 2	1643	14%	58%	10%	0%	14%	0%	0%	4%	42%
Census Tract	4213.02	Block Group 1	2659	14%	11%	19%	0%	53%	0%	0%	2%	89%
Census Tract	4210	Block Group 1	1071	14%	54%	4%	1%	21%	0%	1%	5%	46%
Census Tract	4127	Block Group 1	1253	13%	54%	1%	0%	26%	0%	0%	5%	46%
Census Tract	4326	Block Group 1	744	11%	78%	2%	0%	4%	0%	1%	3%	22%
Census Tract	4116	Block Group 1	1290	9%	82%	2%	0%	4%	0%	0%	3%	18%
Study Area (Total BGs)			**97731**	**50%**	**17%**	**16%**	**0%**	**14%**	**0%**	**1%**	**2%**	**97%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Table A-2: Race and Ethnicity in the Study Area Segment 2

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	4106.01	Block Group 1	3444	20%	52%	11%	0%	12%	0%	1%	4%	48%
Census Tract	4107.03	Block Group 1	1288	15%	63%	7%	0%	11%	0%	0%	4%	37%
Census Tract	4107.03	Block Group 2	891	15%	70%	3%	0%	7%	0%	0%	5%	30%
Census Tract	4107.04	Block Group 1	1073	16%	67%	7%	0%	6%	0%	0%	4%	33%
Census Tract	4107.04	Block Group 2	822	16%	68%	4%	0%	7%	0%	0%	5%	32%
Census Tract	4107.05	Block Group 1	66	23%	65%	2%	0%	3%	0%	2%	6%	35%
Census Tract	4107.05	Block Group 2	850	30%	51%	5%	0%	9%	0%	0%	5%	49%
Census Tract	4107.06	Block Group 1	1738	17%	50%	19%	0%	8%	0%	1%	5%	50%
Census Tract	4108.01	Block Group 1	1047	25%	50%	4%	0%	13%	0%	1%	6%	50%
Census Tract	4108.01	Block Group 2	1531	17%	63%	4%	0%	11%	0%	0%	4%	37%
Census Tract	4108.02	Block Group 1	1100	22%	66%	2%	0%	5%	0%	0%	5%	34%
Census Tract	4108.02	Block Group 2	531	22%	54%	9%	0%	11%	0%	1%	3%	46%
Census Tract	4109	Block Group 1	1989	18%	62%	4%	0%	10%	0%	0%	5%	38%
Census Tract	4109	Block Group 2	1546	17%	60%	6%	0%	12%	0%	1%	4%	40%
Census Tract	4110.01	Block Group 1	1223	13%	61%	9%	0%	13%	0%	1%	3%	39%
Census Tract	4110.01	Block Group 2	763	12%	75%	4%	0%	4%	0%	0%	5%	25%
Census Tract	4110.02	Block Group 1	931	15%	59%	5%	0%	18%	0%	0%	4%	41%
Census Tract	4110.02	Block Group 2	1255	14%	67%	3%	0%	10%	0%	1%	5%	33%
Census Tract	4110.03	Block Group 1	1614	16%	62%	5%	0%	12%	0%	1%	4%	38%
Census Tract	4115.03	Block Group 1	1763	19%	53%	6%	0%	17%	0%	1%	4%	47%
Census Tract	4115.03	Block Group 2	1715	17%	62%	5%	0%	11%	0%	1%	5%	38%
Census Tract	4115.04	Block Group 1	904	18%	55%	11%	1%	11%	0%	0%	5%	45%
Census Tract	4115.04	Block Group 2	1425	18%	56%	7%	0%	14%	0%	0%	5%	44%
Census Tract	4115.05	Block Group 2	1072	17%	55%	8%	0%	13%	0%	1%	7%	45%
Census Tract	4115.06	Block Group 1	1305	17%	52%	11%	0%	16%	0%	0%	4%	48%
Census Tract	4115.06	Block Group 2	968	12%	67%	4%	0%	13%	0%	1%	3%	33%
Census Tract	4115.07	Block Group 1	2093	21%	54%	9%	0%	13%	0%	0%	3%	46%

Table A-2: Race and Ethnicity in the Study Area Segment 2

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	4118.01	Block Group 1	1390	12%	56%	7%	0%	20%	0%	0%	5%	44%
Census Tract	4118.01	Block Group 2	1867	15%	52%	4%	0%	25%	0%	1%	4%	48%
Census Tract	4118.02	Block Group 1	1243	13%	62%	3%	0%	16%	0%	0%	5%	38%
Census Tract	4118.02	Block Group 2	1515	17%	55%	7%	0%	15%	0%	1%	5%	45%
Census Tract	4119.01	Block Group 1	676	15%	72%	2%	1%	6%	0%	0%	4%	28%
Census Tract	4119.01	Block Group 2	1403	11%	76%	2%	0%	5%	0%	0%	5%	24%
Census Tract	4119.02	Block Group 1	2135	13%	66%	7%	0%	10%	0%	0%	3%	34%
Census Tract	4123	Block Group 5	1392	11%	72%	1%	0%	10%	0%	1%	5%	28%
Census Tract	4124	Block Group 1	666	8%	83%	1%	0%	5%	0%	0%	3%	17%
Census Tract	4124	Block Group 2	1340	7%	78%	0%	0%	10%	0%	0%	4%	22%
Census Tract	4126	Block Group 2	1598	11%	66%	1%	0%	16%	0%	1%	5%	34%
Study Area (Total BGs)			**50172**	**16%**	**61%**	**6%**	**0%**	**12%**	**0%**	**1%**	**4%**	**39%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Table A-3: Race and Ethnicity in the Study Area Segment 3

Geographic Area Name			Total Pop.	Percent Hispanic or Latino	Percent White	Percent Black	Percent American Indian	Percent Asian	Percent Pacific Islander	Percent Some other Race	Percent two or more races	Total Minority
Census Tract	3119	Block Group 2	1218	16%	6%	5%	0%	1%	0%	0%	1%	94%
Census Tract	3120	Block Group 1	1196	20%	32%	33%	0%	12%	0%	0%	2%	68%
Census Tract	3122	Block Group 1	727	16%	2%	75%	1%	3%	0%	1%	3%	98%
Census Tract	3122	Block Group 2	866	16%	14%	65%	0%	3%	0%	0%	2%	86%
Census Tract	3122	Block Group 3	758	21%	4%	72%	1%	1%	0%	0%	2%	96%
Census Tract	3123	Block Group 1	1320	18%	25%	42%	0%	11%	0%	1%	3%	75%
Census Tract	3123	Block Group 2	1090	20%	5%	70%	0%	2%	0%	0%	3%	95%
Census Tract	3124	Block Group 1	777	20%	13%	62%	0%	2%	0%	0%	3%	87%
Census Tract	3124	Block Group 2	526	13%	7%	76%	0%	2%	0%	0%	3%	93%
Census Tract	3124	Block Group 3	678	9%	3%	82%	0%	2%	0%	0%	3%	97%
Census Tract	3125.02	Block Group 1	1384	19%	40%	33%	1%	4%	0%	0%	3%	60%
Census Tract	3125.02	Block Group 2	1000	18%	35%	33%	1%	8%	0%	1%	4%	65%
Census Tract	3126.02	Block Group 1	974	21%	45%	11%	0%	15%	0%	1%	6%	55%
Census Tract	3126.02	Block Group 2	1479	13%	52%	19%	0%	12%	0%	1%	3%	48%
Census Tract	3126.03	Block Group 1	1697	20%	37%	22%	0%	18%	0%	0%	4%	63%
Census Tract	3126.03	Block Group 2	1385	24%	34%	22%	0%	13%	0%	1%	6%	66%
Census Tract	3127	Block Group 1	817	15%	13%	66%	1%	2%	0%	0%	3%	87%
Census Tract	3127	Block Group 2	1042	13%	17%	63%	0%	3%	0%	1%	3%	83%
Census Tract	3128	Block Group 1	942	7%	1%	88%	0%	1%	0%	0%	2%	99%
Census Tract	3128	Block Group 2	4534	15%	26%	29%	0%	27%	0%	0%	2%	74%
Census Tract	3129.02	Block Group 1	676	10%	10%	74%	1%	3%	0%	1%	3%	90%
Census Tract	3129.02	Block Group 2	1125	7%	12%	76%	0%	1%	0%	0%	3%	88%
Census Tract	3130	Block Group 1	786	9%	18%	66%	0%	2%	0%	0%	4%	82%
Census Tract	3130	Block Group 3	809	12%	13%	66%	0%	4%	0%	1%	4%	87%
Census Tract	9804	Block Group 1	3751	18%	35%	10%	0%	36%	0%	0%	2%	65%
Study Area (Total BGs)			**31557**	**19%**	**24%**	**41%**	**0%**	**13%**	**0%**	**0%**	**3%**	**76%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Table A-4: Race and Ethnicity in the Study Area Segment 4												
Geographic Area Name			**Total Pop.**	**Percent Hispanic or Latino**	**Percent White**	**Percent Black**	**Percent American Indian**	**Percent Asian**	**Percent Pacific Islander**	**Percent Some other Race**	**Percent two or more races**	**Total Minority**
Census Tract	2114	Block Group 1	1059	36%	4%	56%	0%	0%	0%	1%	3%	96%
Census Tract	2114	Block Group 2	1343	25%	3%	70%	0%	0%	0%	0%	1%	97%
Census Tract	2115.02	Block Group 1	1938	84%	2%	13%	1%	0%	0%	0%	0%	98%
Census Tract	2115.02	Block Group 2	861	93%	4%	1%	0%	0%	0%	1%	0%	96%
Census Tract	2125	Block Group 3	996	28%	2%	68%	0%	0%	0%	0%	2%	98%
Census Tract	3102	Block Group 1	1109	24%	29%	31%	1%	10%	0%	1%	4%	71%
Census Tract	3103	Block Group 1	781	59%	31%	4%	0%	2%	0%	0%	4%	69%
Census Tract	3103	Block Group 2	631	63%	25%	7%	0%	2%	0%	0%	2%	75%
Census Tract	3103	Block Group 3	1431	50%	20%	24%	1%	3%	0%	0%	2%	80%
Census Tract	3103	Block Group 4	993	56%	32%	5%	0%	4%	0%	1%	3%	68%
Census Tract	3103	Block Group 5	604	73%	18%	2%	0%	3%	0%	0%	3%	82%
Census Tract	3103	Block Group 6	586	67%	17%	9%	0%	5%	0%	1%	2%	83%
Census Tract	3104	Block Group 1	1405	88%	9%	1%	0%	1%	0%	0%	1%	91%
Census Tract	3104	Block Group 2	701	76%	14%	6%	0%	2%	0%	0%	1%	86%
Census Tract	3104	Block Group 3	1210	84%	10%	3%	0%	1%	0%	0%	1%	90%
Census Tract	3105	Block Group 1	781	81%	11%	5%	0%	2%	0%	0%	1%	89%
Census Tract	3105	Block Group 2	1386	85%	10%	3%	0%	1%	0%	0%	1%	90%
Census Tract	3105	Block Group 3	875	84%	8%	6%	0%	1%	0%	0%	1%	92%
Census Tract	3105	Block Group 4	713	88%	5%	4%	0%	0%	0%	0%	2%	95%
Census Tract	3106	Block Group 1	863	74%	19%	5%	0%	2%	0%	0%	1%	81%
Census Tract	3106	Block Group 2	1630	82%	12%	3%	0%	1%	0%	0%	1%	88%
Census Tract	3106	Block Group 3	641	85%	8%	3%	0%	1%	0%	1%	2%	92%
Census Tract	3106	Block Group 4	858	82%	15%	2%	0%	1%	0%	0%	0%	85%
Census Tract	3106	Block Group 5	969	73%	17%	2%	0%	5%	0%	0%	2%	83%
Study Area (Total BGs)			**24364**	**68%**	**13%**	**15%**	**0%**	**2%**	**0%**	**0%**	**2%**	**87%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Table A-5: Race and Ethnicity in the Study Area Segment 5												
Geographic Area Name			**Total Pop.**	**Percent Hispanic or Latino**	**Percent White**	**Percent Black**	**Percent American Indian**	**Percent Asian**	**Percent Pacific Islander**	**Percent Some other Race**	**Percent two or more races**	**Total Minority**
Census Tract	2109	Block Group 1	1616	33%	2%	60%	0%	1%	0%	0%	2%	98%
Census Tract	2110	Block Group 1	1973	45%	2%	51%	0%	1%	0%	0%	2%	98%
Census Tract	2111.02	Block Group 3	968	52%	2%	43%	0%	0%	0%	0%	2%	98%
Census Tract	2112	Block Group 1	1468	34%	2%	61%	0%	0%	0%	0%	3%	98%
Census Tract	2112	Block Group 2	1520	57%	2%	39%	0%	0%	0%	0%	2%	98%
Census Tract	2113.02	Block Group 2	977	39%	3%	54%	1%	0%	0%	0%	2%	97%
Census Tract	2113.02	Block Group 3	865	35%	7%	54%	0%	0%	0%	0%	4%	93%
Census Tract	2116	Block Group 1	1240	76%	6%	16%	0%	0%	0%	0%	1%	94%
Census Tract	2116	Block Group 2	1605	79%	3%	16%	0%	1%	0%	0%	1%	97%
Census Tract	2117	Block Group 1	1403	31%	1%	65%	0%	0%	0%	0%	2%	99%
Census Tract	2117	Block Group 2	979	61%	2%	35%	0%	0%	0%	1%	1%	98%
Census Tract	2117	Block Group 3	1350	41%	2%	54%	0%	0%	0%	1%	2%	98%
Census Tract	2124	Block Group 2	878	82%	3%	12%	2%	0%	0%	0%	0%	97%
Census Tract	2124	Block Group 3	703	95%	2%	1%	1%	0%	0%	0%	1%	98%
Census Tract	2207.01	Block Group 1	1133	58%	5%	36%	0%	0%	0%	0%	0%	95%
Census Tract	2207.01	Block Group 3	1125	55%	4%	40%	0%	0%	0%	0%	0%	96%
Census Tract	2209	Block Group 1	1907	76%	6%	15%	0%	1%	0%	0%	2%	94%
Census Tract	2210	Block Group 2	2271	89%	4%	7%	0%	0%	0%	0%	0%	96%
Census Tract	2211	Block Group 3	977	92%	6%	1%	0%	0%	0%	0%	1%	94%
Census Tract	2301	Block Group 1	1824	30%	1%	68%	0%	0%	0%	0%	1%	99%
Census Tract	2302	Block Group 1	803	26%	7%	64%	0%	0%	0%	0%	2%	93%
Census Tract	2302	Block Group 2	719	38%	3%	56%	0%	0%	0%	0%	3%	97%
Census Tract	2302	Block Group 3	1631	17%	1%	80%	0%	0%	0%	0%	1%	99%
Census Tract	2303	Block Group 1	1441	42%	3%	54%	0%	0%	0%	0%	2%	97%

Table A-5: Race and Ethnicity in the Study Area Segment 5												
Geographic Area Name			**Total Pop.**	**Percent Hispanic or Latino**	**Percent White**	**Percent Black**	**Percent American Indian**	**Percent Asian**	**Percent Pacific Islander**	**Percent Some other Race**	**Percent two or more races**	**Total Minority**
Census Tract	2303	Block Group 2	857	45%	1%	52%	0%	0%	0%	0%	1%	99%
Census Tract	2304	Block Group 1	835	42%	3%	53%	0%	0%	0%	1%	2%	97%
Census Tract	2304	Block Group 2	1608	51%	2%	45%	0%	0%	0%	0%	1%	98%
Census Tract	2304	Block Group 3	1381	68%	3%	28%	0%	0%	0%	0%	1%	97%
Census Tract	2305	Block Group 1	1165	90%	4%	5%	0%	0%	0%	0%	1%	96%
Census Tract	2305	Block Group 2	1331	88%	4%	6%	0%	1%	0%	0%	1%	96%
Census Tract	2305	Block Group 3	1603	74%	1%	22%	0%	1%	0%	1%	2%	99%
Census Tract	2306	Block Group 2	1451	47%	1%	48%	0%	1%	0%	1%	2%	99%
Census Tract	2307	Block Group 1	875	61%	2%	33%	0%	1%	0%	0%	2%	98%
Census Tract	2307	Block Group 2	2088	26%	1%	71%	0%	0%	0%	0%	1%	99%
Study Area (Total BGs)			**44570**	**55%**	**3%**	**40%**	**0%**	**0%**	**0%**	**0%**	**1%**	**97%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Table A-6: LEP Populations in Segment 1									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	4116	Block Group 1	1155	1%	2%	0%	0%	37	3%
Census Tract	4116	Block Group 2	1497	0%	0%	0%	0%	0	0%
Census Tract	4117	Block Group 1	972	11%	0%	0%	0%	103	11%
Census Tract	4117	Block Group 2	998	1%	0%	0%	0%	11	1%
Census Tract	4117	Block Group 3	1064	0%	0%	4%	0%	44	4%
Census Tract	4127	Block Group 1	1128	3%	1%	6%	0%	109	10%
Census Tract	4210	Block Group 1	1182	0%	0%	2%	0%	20	2%
Census Tract	4211.01	Block Group 1	457	0%	0%	2%	0%	9	2%
Census Tract	4211.01	Block Group 2	1470	7%	2%	0%	0%	133	9%
Census Tract	4211.01	Block Group 3	508	42%	0%	0%	0%	213	42%
Census Tract	4211.03	Block Group 1	917	1%	0%	0%	4%	50	5%
Census Tract	4211.04	Block Group 1	1496	61%	0%	0%	0%	910	61%
Census Tract	4211.04	Block Group 2	1651	69%	0%	0%	1%	1154	70%
Census Tract	4211.04	Block Group 3	612	44%	0%	0%	0%	271	44%
Census Tract	4212.03	Block Group 1	770	35%	1%	7%	3%	357	46%
Census Tract	4212.03	Block Group 2	1242	36%	0%	1%	8%	552	44%
Census Tract	4212.04	Block Group 1	1412	32%	1%	0%	0%	461	33%
Census Tract	4212.04	Block Group 2	2223	58%	2%	0%	7%	1482	67%
Census Tract	4212.05	Block Group 1	2470	55%	1%	0%	1%	1421	58%
Census Tract	4212.06	Block Group 1	2246	71%	0%	0%	1%	1605	71%
Census Tract	4213.02	Block Group 1	3868	6%	7%	1%	17%	1213	31%
Census Tract	4214.01	Block Group 1	1348	44%	0%	0%	4%	644	48%
Census Tract	4214.01	Block Group 2	1905	40%	13%	0%	9%	1187	62%
Census Tract	4214.02	Block Group 1	1753	58%	0%	0%	3%	1071	61%
Census Tract	4319.01	Block Group 1	305	0%	0%	34%	0%	105	34%
Census Tract	4319.01	Block Group 2	534	0%	0%	0%	0%	0	0%

Table A-6: LEP Populations in Segment 1									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	4319.01	Block Group 3	1402	0%	0%	3%	7%	146	10%
Census Tract	4320.04	Block Group 1	1161	9%	1%	1%	0%	131	11%
Census Tract	4320.04	Block Group 2	746	3%	3%	2%	0%	61	8%
Census Tract	4324.01	Block Group 1	1569	7%	9%	14%	0%	466	30%
Census Tract	4324.01	Block Group 2	1138	5%	2%	0%	1%	97	9%
Census Tract	4324.01	Block Group 3	647	24%	0%	0%	21%	288	45%
Census Tract	4324.02	Block Group 1	1423	10%	4%	2%	3%	261	18%
Census Tract	4324.02	Block Group 2	911	75%	0%	4%	0%	712	78%
Census Tract	4325.01	Block Group 1	829	41%	11%	0%	2%	442	53%
Census Tract	4325.01	Block Group 2	1763	22%	15%	2%	12%	895	51%
Census Tract	4325.01	Block Group 3	549	3%	0%	2%	0%	29	5%
Census Tract	4325.02	Block Group 1	608	46%	7%	3%	5%	367	60%
Census Tract	4325.02	Block Group 2	1041	26%	0%	3%	5%	360	35%
Census Tract	4326	Block Group 1	806	2%	2%	4%	0%	57	7%
Census Tract	4326	Block Group 2	1456	24%	3%	0%	0%	389	27%
Census Tract	4327.03	Block Group 1	2059	2%	2%	0%	2%	119	6%
Census Tract	4327.04	Block Group 1	1840	32%	0%	2%	1%	652	35%
Census Tract	4327.05	Block Group 1	3099	72%	0%	0%	0%	2219	72%
Census Tract	4327.05	Block Group 2	885	73%	0%	0%	0%	647	73%
Census Tract	4327.05	Block Group 3	1120	58%	0%	0%	0%	653	58%
Census Tract	4327.06	Block Group 1	541	44%	0%	0%	9%	287	53%
Census Tract	4327.06	Block Group 2	636	49%	0%	0%	0%	311	49%
Census Tract	4328.03	Block Group 1	1001	41%	1%	0%	1%	438	44%
Census Tract	4328.03	Block Group 2	807	51%	0%	2%	2%	449	56%
Census Tract	4328.03	Block Group 3	875	19%	7%	2%	10%	343	39%
Census Tract	4328.04	Block Group 1	548	17%	0%	0%	7%	134	24%
Census Tract	4328.04	Block Group 2	821	35%	0%	1%	0%	295	36%
Census Tract	4329.01	Block Group 1	941	34%	0%	1%	4%	374	40%

Table A-6: LEP Populations in Segment 1									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	4329.01	Block Group 2	1088	55%	0%	0%	5%	650	60%
Census Tract	4329.01	Block Group 3	815	49%	0%	0%	0%	403	49%
Census Tract	4329.03	Block Group 1	1001	56%	0%	0%	4%	605	60%
Census Tract	4329.03	Block Group 2	764	58%	0%	8%	0%	502	66%
Census Tract	4329.04	Block Group 2	1505	13%	3%	18%	0%	505	34%
Census Tract	4330.03	Block Group 1	1402	11%	8%	42%	3%	889	63%
Census Tract	4330.03	Block Group 3	1661	62%	0%	10%	1%	1221	74%
Census Tract	4330.04	Block Group 1	1531	61%	1%	4%	0%	1001	65%
Census Tract	4330.04	Block Group 2	1186	86%	0%	0%	2%	1039	88%
Census Tract	4330.05	Block Group 1	927	41%	6%	19%	0%	608	66%
Census Tract	4330.05	Block Group 2	1425	31%	16%	13%	2%	894	63%
Census Tract	4330.06	Block Group 1	770	72%	0%	1%	5%	607	79%
Census Tract	4330.06	Block Group 2	668	67%	10%	0%	0%	511	76%
Census Tract	4330.07	Block Group 1	608	36%	0%	23%	0%	363	60%
Census Tract	4521.01	Block Group 2	3187	3%	3%	9%	0%	457	14%
Census Tract	4522.02	Block Group 1	1369	3%	2%	0%	3%	111	8%
Census Tract	4522.02	Block Group 2	1151	4%	3%	2%	0%	104	9%
Census Tract	4522.02	Block Group 3	906	15%	1%	0%	0%	141	16%
Census Tract	4523	Block Group 1	2570	15%	0%	15%	1%	789	31%
Census Tract	4524.01	Block Group 3	1015	27%	0%	14%	0%	419	41%
Study Area (Total BGs)			**91954**	**31%**	**2%**	**4%**	**3%**	**36603**	**40%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Table A-7: LEP Populations in Segment 2									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	4106.01	Block Group 1	3064	2%	1%	1%	0%	95	3%
Census Tract	4107.03	Block Group 1	1481	1%	0%	0%	0%	15	1%
Census Tract	4107.03	Block Group 2	899	0%	16%	0%	0%	143	16%
Census Tract	4107.04	Block Group 1	1383	0%	0%	0%	0%	0	0%
Census Tract	4107.04	Block Group 2	454	0%	0%	0%	0%	0	0%
Census Tract	4107.05	Block Group 1	159	0%	0%	0%	0%	0	0%
Census Tract	4107.05	Block Group 2	866	6%	0%	2%	0%	69	8%
Census Tract	4107.06	Block Group 1	1501	0%	0%	0%	0%	0	0%
Census Tract	4108.01	Block Group 1	1056	4%	2%	0%	0%	63	6%
Census Tract	4108.01	Block Group 2	1108	0%	0%	0%	0%	0	0%
Census Tract	4108.02	Block Group 1	1142	0%	0%	0%	0%	0	0%
Census Tract	4108.02	Block Group 2	496	7%	0%	0%	0%	33	7%
Census Tract	4109	Block Group 1	2511	0%	0%	1%	0%	19	1%
Census Tract	4109	Block Group 2	779	0%	0%	0%	0%	0	0%
Census Tract	4110.01	Block Group 1	1392	0%	2%	2%	0%	50	4%
Census Tract	4110.01	Block Group 2	858	0%	0%	0%	0%	0	0%
Census Tract	4110.02	Block Group 1	883	0%	0%	1%	0%	13	1%
Census Tract	4110.02	Block Group 2	1186	1%	2%	17%	0%	228	19%
Census Tract	4110.03	Block Group 1	1472	0%	0%	0%	0%	7	0%
Census Tract	4115.03	Block Group 1	1521	2%	1%	2%	2%	104	7%
Census Tract	4115.03	Block Group 2	1002	0%	0%	4%	0%	42	4%
Census Tract	4115.04	Block Group 1	725	0%	0%	0%	0%	0	0%
Census Tract	4115.04	Block Group 2	1016	0%	1%	0%	0%	10	1%
Census Tract	4115.05	Block Group 2	989	0%	4%	0%	0%	43	4%
Census Tract	4115.06	Block Group 1	1695	0%	0%	10%	0%	177	10%
Census Tract	4115.06	Block Group 2	769	0%	0%	0%	0%	0	0%
Census Tract	4115.07	Block Group 1	1855	1%	0%	2%	0%	44	2%

Table A-7: LEP Populations in Segment 2									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	4118.01	Block Group 1	1590	2%	2%	0%	0%	49	3%
Census Tract	4118.01	Block Group 2	1595	0%	1%	2%	0%	43	3%
Census Tract	4118.02	Block Group 1	906	2%	0%	2%	0%	31	3%
Census Tract	4118.02	Block Group 2	1282	10%	2%	0%	0%	161	13%
Census Tract	4119.01	Block Group 1	687	1%	0%	0%	0%	9	1%
Census Tract	4119.01	Block Group 2	1349	3%	1%	0%	0%	50	4%
Census Tract	4119.02	Block Group 1	1426	4%	1%	3%	0%	126	9%
Census Tract	4123	Block Group 5	1588	0%	1%	0%	0%	16	1%
Census Tract	4124	Block Group 1	742	0%	0%	0%	0%	0	0%
Census Tract	4124	Block Group 2	1126	0%	0%	2%	0%	20	2%
Census Tract	4126	Block Group 2	1159	0%	1%	1%	0%	26	2%
Study Area (Total BGs)			**45712**	**1%**	**1%**	**2%**	**0%**	**1686**	**4%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Table A-8: LEP Populations in Segment 3									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	3119	Block Group 2	1124	32%	0%	2%	0%	377	34%
Census Tract	3120	Block Group 1	1312	0%	0%	3%	0%	33	3%
Census Tract	3120	Block Group 3	1027	0%	0%	7%	0%	78	8%
Census Tract	3122	Block Group 1	373	8%	0%	0%	0%	28	8%
Census Tract	3122	Block Group 2	519	0%	0%	0%	0%	0	0%
Census Tract	3122	Block Group 3	489	0%	0%	0%	0%	0	0%
Census Tract	3123	Block Group 1	1066	8%	0%	0%	0%	89	8%
Census Tract	3123	Block Group 2	858	0%	0%	0%	0%	0	0%
Census Tract	3124	Block Group 1	724	0%	0%	0%	0%	0	0%
Census Tract	3124	Block Group 2	874	0%	0%	0%	0%	0	0%
Census Tract	3124	Block Group 3	551	0%	0%	0%	0%	0	0%
Census Tract	3125.01	Block Group 1	1111	0%	0%	1%	0%	11	1%
Census Tract	3125.02	Block Group 1	1245	2%	0%	0%	0%	24	2%
Census Tract	3125.02	Block Group 2	620	7%	0%	5%	0%	78	13%
Census Tract	3126.02	Block Group 1	624	0%	0%	2%	0%	10	2%
Census Tract	3126.02	Block Group 2	875	0%	0%	0%	0%	0	0%
Census Tract	3126.03	Block Group 1	2127	27%	2%	1%	0%	630	30%
Census Tract	3126.03	Block Group 2	1242	13%	0%	0%	0%	163	13%
Census Tract	3127	Block Group 1	979	1%	0%	1%	0%	13	1%
Census Tract	3127	Block Group 2	1105	1%	0%	0%	0%	10	1%
Census Tract	3128	Block Group 1	751	3%	0%	0%	2%	41	5%
Census Tract	3128	Block Group 2	1686	0%	0%	0%	0%	22	1%
Census Tract	3129.01	Block Group 1	557	0%	0%	0%	0%	0	0%
Census Tract	3129.02	Block Group 1	856	0%	0%	0%	0%	0	0%
Census Tract	3129.02	Block Group 2	1350	0%	0%	2%	0%	32	2%
Census Tract	3130	Block Group 1	1262	1%	0%	0%	0%	9	1%
Census Tract	3130	Block Group 3	587	0%	0%	0%	0%	0	0%

Table A-8: LEP Populations in Segment 3									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	9804	Block Group 1	4154	0%	0%	2%	0%	115	3%
Study Area (Total BGs)			**30048**	**4%**	**0%**	**1%**	**0%**	**1763**	**6%**

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Table A-9: LEP Populations in Segment 4									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	2114	Block Group 1	1115	18%	0%	0%	0%	206	18%
Census Tract	2114	Block Group 2	626	12%	0%	0%	0%	73	12%
Census Tract	2115.02	Block Group 1	1834	42%	0%	0%	0%	777	42%
Census Tract	2115.02	Block Group 2	1187	43%	0%	0%	0%	513	43%
Census Tract	2125	Block Group 3	704	10%	0%	0%	0%	72	10%
Census Tract	3102	Block Group 1	844	1%	0%	1%	0%	15	2%
Census Tract	3103	Block Group 1	616	10%	0%	0%	0%	63	10%
Census Tract	3103	Block Group 2	783	28%	0%	0%	0%	221	28%
Census Tract	3103	Block Group 3	789	22%	0%	0%	0%	170	22%
Census Tract	3103	Block Group 4	620	5%	0%	0%	0%	30	5%
Census Tract	3103	Block Group 5	489	31%	0%	0%	0%	153	31%
Census Tract	3103	Block Group 6	664	26%	0%	0%	0%	175	26%
Census Tract	3104	Block Group 1	1862	38%	0%	0%	0%	712	38%
Census Tract	3104	Block Group 2	504	36%	0%	0%	0%	182	36%
Census Tract	3104	Block Group 3	904	22%	0%	0%	0%	202	22%
Census Tract	3105	Block Group 1	1079	33%	0%	1%	0%	375	35%
Census Tract	3105	Block Group 2	1127	30%	0%	1%	0%	345	31%
Census Tract	3105	Block Group 3	922	33%	0%	0%	0%	303	33%
Census Tract	3105	Block Group 4	655	18%	0%	0%	0%	121	18%
Census Tract	3106	Block Group 1	1068	23%	0%	0%	0%	247	23%
Census Tract	3106	Block Group 2	1595	23%	0%	0%	0%	364	23%
Census Tract	3106	Block Group 3	664	38%	0%	2%	0%	262	39%
Census Tract	3106	Block Group 4	356	21%	0%	0%	0%	75	21%
Census Tract	3106	Block Group 5	1334	21%	0%	0%	0%	283	21%
Study Area (Total BGs)			22341	26%	0%	0%	0%	5939	27%

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Table A-10: LEP Populations in Segment 5									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	2307	Block Group 1	895	34%	0%	0%	0%	34%	34%
Census Tract	2307	Block Group 2	1621	10%	0%	0%	0%	10%	10%
Census Tract	2301	Block Group 1	1347	19%	0%	0%	0%	19%	19%
Census Tract	2207.01	Block Group 3	516	14%	0%	0%	0%	14%	14%
Census Tract	2110	Block Group 1	1902	19%	0%	0%	0%	19%	19%
Census Tract	2109	Block Group 1	1371	12%	0%	0%	0%	12%	12%
Census Tract	2113.02	Block Group 2	1191	15%	0%	0%	0%	15%	15%
Census Tract	2111.02	Block Group 3	986	21%	0%	1%	0%	21%	21%
Census Tract	2112	Block Group 1	991	4%	0%	0%	0%	4%	4%
Census Tract	2112	Block Group 2	1139	14%	0%	1%	0%	15%	15%
Census Tract	2113.02	Block Group 3	428	7%	0%	0%	0%	7%	7%
Census Tract	2116	Block Group 1	1638	26%	0%	0%	0%	26%	26%
Census Tract	2116	Block Group 2	1225	28%	0%	0%	0%	28%	28%
Census Tract	2117	Block Group 1	1394	8%	0%	0%	0%	8%	8%
Census Tract	2117	Block Group 2	896	29%	0%	0%	0%	29%	29%
Census Tract	2117	Block Group 3	1402	16%	0%	2%	0%	18%	18%
Census Tract	2124	Block Group 2	1048	41%	0%	0%	0%	41%	41%
Census Tract	2124	Block Group 3	696	31%	0%	0%	0%	31%	31%
Census Tract	2207.01	Block Group 1	862	36%	0%	0%	0%	36%	36%
Census Tract	2209	Block Group 1	1645	47%	1%	0%	0%	47%	47%
Census Tract	2210	Block Group 2	1721	58%	0%	0%	0%	58%	58%
Census Tract	2211	Block Group 3	984	63%	0%	0%	0%	63%	63%
Census Tract	2302	Block Group 1	434	0%	0%	0%	0%	0%	0%
Census Tract	2303	Block Group 2	713	17%	0%	1%	0%	18%	18%
Census Tract	2304	Block Group 2	1628	14%	0%	3%	0%	17%	17%
Census Tract	2304	Block Group 3	946	17%	0%	0%	0%	17%	17%

Table A-10: LEP Populations in Segment 5									
Geographic Area Name			Total Population 5 Years and Older	Languages Spoken at Home				Individuals who Speak English less than "very well"	Percent LEP
				Spanish	Other Indo-European Language	Asian and Pacific Island Language	Other Languages		
Census Tract	2305	Block Group 1	447	47%	0%	0%	0%	47%	47%
Census Tract	2302	Block Group 2	226	27%	0%	0%	0%	27%	27%
Census Tract	2302	Block Group 3	1757	6%	0%	0%	0%	6%	6%
Census Tract	2303	Block Group 1	1577	11%	0%	0%	0%	11%	11%
Census Tract	2306	Block Group 2	1596	18%	0%	0%	0%	18%	18%
Census Tract	2304	Block Group 1	663	39%	0%	0%	0%	39%	39%
Census Tract	2305	Block Group 2	1741	50%	0%	4%	0%	54%	54%
Census Tract	2305	Block Group 3	1154	30%	0%	0%	0%	30%	30%
Study Area (Total BGs)			38780	24%	0%	0%	0%	9651	25%

Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Table A-11: Segment 1 Median Household Income		
Census Tract	**Block Group**	**Median Household Income**
4324	Block Group 3	$33,030.00
4320.01	Block Group 2	$110,417.00
4328.01	Block Group 2	$36,384.00
4329.02	Block Group 3	$43,875.00
4212.01	Block Group 3	$25,139.00
4330.03	Block Group 2	$26,098.00
4522.02	Block Group 2	$37,011.00
4325	Block Group 3	$42,411.00
4325	Block Group 2	$24,336.00
4325	Block Group 1	$31,217.00
4324	Block Group 2	$30,941.00
4213	Block Group 1	$41,771.00
4212.02	Block Group 1	$31,580.00
4212.02	Block Group 2	$25,765.00
4524	Block Group 4	
4523	Block Group 1	$47,778.00
4329.01	Block Group 2	
4329.02	Block Group 1	$ 27,377.00
4328.01	Block Group 1	$48,370.00
4117	Block Group 1	$63,169.00
4211.01	Block Group 1	$76,042.00
4327.01	Block Group 1	$24,681.00
4117	Block Group 2	$83,297.00
4327.01	Block Group 2	$23,929.00
4327.01	Block Group 3	$21,146.00
4327.02	Block Group 2	$51,199.00
4327.02	Block Group 1	$70,805.00
4326	Block Group 2	$38,333.00
4326	Block Group 1	$110,188.00
4211.01	Block Group 2	$36,582.00
4211.02	Block Group 3	$ 47,955.00
4211.02	Block Group 1	$ 25,765.00
4212.01	Block Group 1	$43,533.00
4212.01	Block Group 2	$33,937.00
4214.02	Block Group 1	$26,716.00
4214.01	Block Group 1	$26,393.00
4319	Block Group 2	$ 96,149.00
4319	Block Group 1	$90,870.00

Table A-11: Segment 1 Median Household Income		
Census Tract	**Block Group**	**Median Household Income**
4212.03	Block Group 2	$48,313.00
4212.04	Block Group 1	$37,294.00
4212.04	Block Group 2	$35,691.00
4212.05	Block Group 1	$36,382.00
4212.06	Block Group 1	$26,137.00
4214.01	Block Group 1	$27,804.00
4214.01	Block Group 2	$33,528.00
4214.02	Block Group 1	$25,131.00
4116	Block Group 1	
4116	Block Group 2	$132,863.00
4210	Block Group 1	$126,875.00
4211.01	Block Group 1	$81,250.00
4211.01	Block Group 2	$41,875.00
4211.04	Block Group 1	
4211.04	Block Group 3	$51,250.00
4213.02	Block Group 1	
4319.01	Block Group 1	
4319.01	Block Group 3	$136,507.00
4319.02	Block Group 2	$105,682.00
4320.04	Block Group 1	$109,766.00
4320.04	Block Group 2	$88,750.00
4319.01	Block Group 2	$72,250.00
4324.01	Block Group 1	$43,281.00
4324.01	Block Group 3	$25,442.00
4324.02	Block Group 1	$33,311.00
4324.02	Block Group 2	
4325.01	Block Group 3	$49,931.00
4325.02	Block Group 1	$30,195.00
4325.02	Block Group 2	$34,402.00
4326	Block Group 1	$112,813.00
4327.03	Block Group 1	$71,716.00
4327.04	Block Group 1	$46,023.00
4327.05	Block Group 1	$26,266.00
4327.05	Block Group 2	$19,394.00
4327.05	Block Group 3	$41,071.00
4327.06	Block Group 1	
4327.06	Block Group 2	$25,347.00
4328.03	Block Group 1	$44,022.00

Table A-11: Segment 1 Median Household Income		
Census Tract	**Block Group**	**Median Household Income**
4328.03	Block Group 2	$32,658.00
4328.04	Block Group 1	$50,464.00
4328.04	Block Group 2	$47,011.00
4329.01	Block Group 1	
4329.01	Block Group 2	$34,044.00
4329.01	Block Group 3	$28,139.00
4329.03	Block Group 1	$26,417.00
4329.03	Block Group 2	$35,478.00
4330.03	Block Group 3	$21,288.00
4330.04	Block Group 1	$24,350.00
4330.04	Block Group 2	$32,300.00
4330.05	Block Group 2	$31,974.00
4330.06	Block Group 1	$33,064.00
4330.06	Block Group 2	$41,086.00
4330.07	Block Group 1	$43,750.00
4521.01	Block Group 2	$111,038.00
4522.02	Block Group 2	$32,346.00
4522.02	Block Group 3	
4324.01	Block Group 2	$50,194.00
4325.01	Block Group 1	$19,157.00
4325.01	Block Group 2	$36,680.00
4330.05	Block Group 1	$28,241.00
4326	Block Group 2	$39,519.00
4328.03	Block Group 3	$41,894.00
4329.04	Block Group 2	$54,402.00
4330.03	Block Group 1	$23,750.00
4522.02	Block Group 1	$57,958.00
4523	Block Group 1	$50,982.00
4524.01	Block Group 3	$50,800.00
Total Median Household Income		**$45,242.53**

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Table A-12: Segment 2 Median Household Income		
Census Tract	**Block Group**	**Median Household Income**
4107.01	Block Group 1	$109,412.00
4107.02	Block Group 2	$62,000.00
4119	Block Group 2	$191,071.00
4115.01	Block Group 1	$73,656.00
4126	Block Group 2	$238,935.00
4119	Block Group 1	$81,797.00
4109	Block Group 2	$135,867.00
4109	Block Group 1	$71,498.00
4107.02	Block Group 1	$57,147.00
4107.01	Block Group 2	$95,139.00
4107.01	Block Group 3	$62,941.00
4115.02	Block Group 1	$91,419.00
4115.02	Block Group 2	$76,927.00
4115.01	Block Group 2	$108,101.00
4115.01	Block Group 3	$88,869.00
4118	Block Group 2	$80,533.00
4107.01	Block Group 4	$ 104,615.00
4106	Block Group 1	$80,094.00
4108	Block Group 3	$81,579.00
4108	Block Group 1	$130,086.00
4124	Block Group 2	
4124	Block Group 1	$162,500.00
4110	Block Group 3	$68,580.00
4110	Block Group 2	$78,162.00
4110	Block Group 1	$173,032.00
4109	Block Group 3	
4108	Block Group 2	$ 59,512.00
4119	Block Group 3	$55,227.00
4118	Block Group 4	$183,563.00
4118	Block Group 3	$134,929.00
4115.02	Block Group 3	$60,536.00
4115.02	Block Group 4	$91,464.00
4118	Block Group 1	$55,923.00
Total Median Household Income		**$95,306.48**

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Table A-13: Segment 3 Median Household Income		
Census Tract	**Block Group**	**Median Household Income**
3124	Block Group 3	
3122	Block Group 3	$24,886.00
3130	Block Group 3	$38,889.00
3130	Block Group 1	$95,238.00
3129	Block Group 2	$64,970.00
3129	Block Group 1	$22,243.00
3128	Block Group 2	$33,224.00
3128	Block Group 1	$11,662.00
3127	Block Group 3	$47,196.00
3127	Block Group 2	$59,890.00
3127	Block Group 1	$71,667.00
3126	Block Group 4	$111,050.00
3126	Block Group 2	$87,656.00
3125	Block Group 2	$77,188.00
3124	Block Group 1	$19,512.00
3124	Block Group 2	$15,962.00
3123	Block Group 2	$26,250.00
3123	Block Group 1	$ 53,750.00
3122	Block Group 2	$ 22,122.00
3122	Block Group 1	$41,705.00
3121	Block Group 1	
3120	Block Group 2	$95,972.00
3120	Block Group 1	$39,694.00
3119	Block Group 2	$61,818.00
3125	Block Group 1	$121,950.00
3126	Block Group 3	
Total Median Household Income		**$47,865.15**

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Table A-14: Segment 4 Median Household Income		
Census Track	**Block Group**	**Median Household Income**
2114	Block Group 1	$31,014.00
2114	Block Group 2	$15,268.00
2115.02	Block Group 1	$28,902.00
2115.02	Block Group	$30,353.00
2125	Block Group 3	
3103	Block Group 5	$46,875.00
3103	Block Group 6	$36,250.00
3104	Block Group 1	$36,797.00
3105	Block Group 2	$49,167.00
3105	Block Group 3	$37,625.00
3105	Block Group 4	
3103	Block Group 1	$49,975.00
3103	Block Group 2	$30,819.00
3103	Block Group 3	$22,824.00
3103	Block Group 4	$41,929.00
3104	Block Group 2	
3104	Block Group 3	$45,556.00
3105	Block Group 1	$50,793.00
3106	Block Group 1	$26,881.00
3106	Block Group 2	$38,672.00
3106	Block Group 3	$19,425.00
3106	Block Group 4	$72,833.00
3106	Block Group 5	$37,000.00
Total Median Household Income		**$32,563.39**

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Table A-15: Segment 5 Median Income		
Census Tract	**Block Group**	**Median Household Income**
2112	Block Group 1	$34,306.00
2124	Block Group 2	$45,417.00
2301	Block Group 1	$35,234.00
2210	Block Group 2	$28,835.00
2303	Block Group 1	$32,128.00
2304	Block Group 1	$22,274.00
2306	Block Group 2	$33,828.00
2110	Block Group 2	$36,250.00
2109	Block Group 2	$22,857.00
2307	Block Group 2	$28,021.00
2307	Block Group 1	
2305	Block Group 3	$38,393.00
2305	Block Group 2	$61,089.00
2305	Block Group 1	
2124	Block Group 3	$31,083.00
2117	Block Group 3	$31,667.00
2117	Block Group 2	$30,625.00
2117	Block Group 1	$29,565.00
2116	Block Group 2	$34,917.00
2116	Block Group 1	$30,823.00
2304	Block Group 3	$42,550.00
2304	Block Group 2	$25,647.00
2303	Block Group 2	$39,250.00
2302	Block Group 1	
2302	Block Group 3	$39,963.00
2302	Block Group 2	
2211	Block Group 3	$28,257.00
2209	Block Group 2	$38,000.00
2209	Block Group 1	$42,727.00
2207	Block Group 5	$24,325.00
2207	Block Group 1	$23,910.00
2113	Block Group 3	$31,438.00
2113	Block Group 5	$34,875.00
2112	Block Group 3	$54,906.00
2112	Block Group 2	$10,467.00
2111	Block Group 3	
Total Median Household Income		**$28,989.64**

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Table A-16: Segment 1 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
4117	Block Group 1	0.00%	17.20%	4.86%	7.04%
4117	Block Group 2	0.00%	19.89%	1.85%	3.58%
4117	Block Group 3	0.00%	11.59%	0.97%	0.00%
4127	Block Group 1	5.23%	19.90%	27.63%	8.03%
4211.01	Block Group 3	29.84%	36.66%	7.23%	8.15%
4211.03	Block Group 1	6.22%	26.76%	2.79%	4.92%
4211.04	Block Group 2	11.34%	40.71%	0.00%	3.19%
4212.03	Block Group 1	2.17%	20.40%	0.00%	10.52%
4212.03	Block Group 2	2.47%	27.84%	0.57%	2.55%
4212.04	Block Group 1	10.32%	27.32%	3.14%	7.91%
4212.04	Block Group 2	6.05%	37.09%	1.43%	2.64%
4212.05	Block Group 1	15.30%	36.89%	0.77%	4.59%
4212.06	Block Group 1	11.18%	32.73%	1.03%	5.22%
4214.01	Block Group 1	5.03%	33.82%	2.07%	3.13%
4214.01	Block Group 2	18.88%	39.89%	2.67%	4.37%
4214.02	Block Group 1	6.34%	37.91%	0.40%	4.36%
4116	Block Group 1	2.35%	6.03%	57.24%	9.26%
4116	Block Group 2	0.00%	17.50%	14.64%	10.26%
4210	Block Group 1	0.00%	23.00%	19.94%	10.59%
4211.01	Block Group 1	7.22%	0.00%	4.38%	2.84%
4211.01	Block Group 2	5.01%	18.73%	1.89%	4.96%
4211.04	Block Group 1	12.48%	34.38%	3.69%	4.08%
4211.04	Block Group 3	0.00%	26.58%	0.00%	0.00%
4213.02	Block Group 1	10.12%	38.98%	1.38%	4.71%
4319.01	Block Group 1	18.91%	5.86%	49.38%	4.47%
4319.01	Block Group 3	1.66%	20.43%	5.18%	2.61%
4319.02	Block Group 2	4.86%	11.46%	2.93%	1.66%
4320.04	Block Group 1	0.00%	24.65%	15.07%	4.31%
4320.04	Block Group 2	8.02%	24.06%	13.91%	11.34%

Table A-16: Segment 1 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
4319.01	Block Group 2	0.00%	0.00%	0.00%	10.11%
4324.01	Block Group 1	5.90%	13.81%	7.09%	9.35%
4324.01	Block Group 3	17.24%	25.55%	0.00%	0.00%
4324.02	Block Group 1	2.94%	12.52%	0.00%	13.56%
4324.02	Block Group 2	22.32%	18.76%	0.00%	2.23%
4325.01	Block Group 3	0.00%	12.69%	6.86%	12.57%
4325.02	Block Group 1	0.00%	13.07%	5.47%	3.15%
4325.02	Block Group 2	9.98%	24.74%	4.56%	0.00%
4326	Block Group 1	3.96%	27.63%	24.91%	9.95%
4327.03	Block Group 1	8.13%	13.40%	4.58%	8.04%
4327.04	Block Group 1	14.14%	29.47%	5.63%	2.58%
4327.05	Block Group 1	34.18%	37.41%	0.00%	5.24%
4327.05	Block Group 2	40.94%	44.06%	9.39%	0.00%
4327.05	Block Group 3	16.98%	40.21%	0.00%	0.00%
4327.06	Block Group 1	52.90%	33.28%	0.00%	9.23%
4327.06	Block Group 2	31.94%	22.28%	6.88%	14.69%
4328.03	Block Group 1	4.46%	19.43%	0.93%	3.67%
4328.03	Block Group 2	18.75%	30.83%	3.28%	4.24%
4328.04	Block Group 1	11.82%	5.49%	14.87%	7.49%
4328.04	Block Group 2	4.76%	31.59%	1.90%	14.19%
4329.01	Block Group 1	0.00%	23.01%	20.76%	8.76%
4329.01	Block Group 2	15.76%	33.14%	5.18%	6.03%
4329.01	Block Group 3	25.41%	28.25%	6.21%	11.76%
4329.03	Block Group 1	18.94%	34.32%	0.00%	13.13%
4329.03	Block Group 2	0.00%	13.09%	10.18%	7.95%
4330.03	Block Group 3	23.31%	28.45%	3.05%	9.91%
4330.04	Block Group 1	11.31%	31.56%	9.80%	0.00%
4330.04	Block Group 2	13.07%	33.15%	0.00%	1.18%
4330.05	Block Group 2	26.08%	27.66%	3.89%	19.64%

Table A-16: Segment 1 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
4330.06	Block Group 1	31.90%	21.78%	0.00%	10.27%
4330.06	Block Group 2	0.29%	20.03%	6.98%	1.98%
4330.07	Block Group 1	14.75%	34.48%	7.65%	7.78%
4521.01	Block Group 2	0.00%	26.58%	5.29%	0.00%
4522.02	Block Group 2	9.92%	30.53%	4.08%	4.97%
4522.02	Block Group 3	26.65%	20.89%	5.82%	12.61%
4324.01	Block Group 2	20.81%	24.50%	3.83%	9.34%
4325.01	Block Group 1	0.00%	35.85%	0.00%	4.64%
4325.01	Block Group 2	7.82%	29.11%	11.79%	15.84%
4330.05	Block Group 1	26.36%	13.00%	12.68%	6.32%
4326	Block Group 2	17.21%	23.58%	2.08%	11.03%
4328.03	Block Group 3	8.16%	26.67%	2.20%	4.04%
4329.04	Block Group 2	11.60%	19.47%	11.74%	9.52%
4330.03	Block Group 1	34.90%	26.72%	14.74%	19.74%
4522.02	Block Group 1	7.31%	18.77%	10.30%	6.83%
4523	Block Group 1	4.98%	20.46%	21.93%	16.35%
4524.01	Block Group 3	0.00%	32.47%	8.72%	3.23%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B01001, C21007, and B25044.

Table A-17: Segment 2 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
4106.01	Block Group 1	6.32%	2.35%	1.40%	2.57%
4107.03	Block Group 1	1.87%	3.87%	5.95%	10.56%
4107.03	Block Group 2	12.42%	9.73%	10.15%	9.15%
4107.04	Block Group 2	3.11%	0.00%	35.02%	3.08%
4107.06	Block Group 1	23.56%	8.42%	0.71%	17.15%
4108.02	Block Group 1	0.00%	15.25%	14.91%	6.37%
4109	Block Group 2	4.22%	3.11%	19.78%	8.34%
4110.03	Block Group 1	2.90%	10.58%	17.41%	2.03%
4115.05	Block Group 2	0.00%	12.83%	8.24%	6.66%
4108.01	Block Group 1	17.15%	11.86%	7.60%	8.62%
4115.04	Block Group 1	0.54%	1.49%	24.46%	0.41%
4115.04	Block Group 2	0.00%	5.83%	1.79%	10.28%
4107.04	Block Group 1	22.70%	2.14%	17.92%	15.97%
4109	Block Group 1	0.00%	16.91%	8.88%	3.84%
4107.05	Block Group 1	0.00%	0.00%	0.00%	0.00%
4107.05	Block Group 2	0.00%	3.91%	10.73%	7.43%
4108.01	Block Group 2	14.17%	10.92%	20.85%	6.79%
4108.02	Block Group 2	0.00%	6.45%	8.87%	10.99%
4110.01	Block Group 1	0.00%	1.08%	13.07%	5.15%
4110.01	Block Group 2	0.00%	0.00%	42.31%	22.84%
4110.02	Block Group 1	0.00%	9.00%	14.15%	1.65%
4110.02	Block Group 2	12.02%	5.78%	13.04%	4.55%
4115.03	Block Group 1	9.43%	16.52%	3.60%	6.08%
4115.03	Block Group 2	15.96%	7.40%	14.70%	7.78%
4115.06	Block Group 1	0.00%	0.00%	1.59%	1.59%
4115.06	Block Group 2	14.61%	0.00%	41.09%	15.60%
4115.07	Block Group 1	0.00%	7.01%	1.27%	1.47%
4118.01	Block Group 1	1.46%	27.66%	12.45%	2.85%

Table A-17: Segment 2 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
4118.01	Block Group 2	6.46%	21.78%	15.80%	13.29%
4118.02	Block Group 1	0.00%	20.65%	6.82%	2.18%
4118.02	Block Group 2	14.73%	3.98%	30.11%	23.15%
4119.01	Block Group 1	0.00%	15.18%	28.59%	15.81%
4119.01	Block Group 2	0.00%	23.51%	16.93%	0.83%
4119.02	Block Group 1	1.97%	15.02%	24.71%	4.55%
4126	Block Group 2	0.00%	32.63%	13.39%	7.82%
4123	Block Group 5	0.00%	36.32%	9.71%	1.89%
4124	Block Group 2	0.00%	32.60%	13.88%	3.92%
4124	Block Group 1	3.00%	30.83%	7.77%	5.79%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B01001, C21007, and B25044.

Table A-18: Segment 3 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
3102	Block Group 1	7.33%	9.13%	2.74%	3.39%
3124	Block Group 1	41.35%	31.40%	11.40%	19.28%
3126.03	Block Group 1	2.90%	21.95%	3.28%	2.60%
3129.02	Block Group 1	0.00%	2.22%	21.61%	13.26%
3129.02	Block Group 2	5.83%	9.76%	13.25%	20.17%
3124	Block Group 3	18.22%	24.69%	14.31%	19.95%
3122	Block Group 3	38.50%	19.69%	16.57%	18.69%
3123	Block Group 1	19.29%	18.64%	3.87%	16.58%
3123	Block Group 2	41.88%	27.93%	17.28%	32.58%
3124	Block Group 2	60.92%	52.03%	8.23%	52.63%
3119	Block Group 2	6.58%	21.43%	15.70%	13.53%
3120	Block Group 1	19.13%	14.99%	16.14%	18.61%
3122	Block Group 1	34.81%	16.87%	17.11%	25.59%
3122	Block Group 2	44.21%	32.66%	8.59%	27.75%
3127	Block Group 1	7.67%	18.16%	14.19%	15.03%
3126.02	Block Group 1	5.63%	15.10%	3.40%	2.72%
3126.02	Block Group 2	0.00%	2.99%	17.96%	7.43%
3126.03	Block Group 2	12.50%	17.91%	19.13%	1.58%
3125.02	Block Group 2	5.31%	6.38%	2.33%	3.16%
3127	Block Group 2	9.29%	18.89%	5.41%	3.15%
3128	Block Group 1	54.62%	35.53%	8.68%	28.73%
3128	Block Group 2	44.84%	17.71%	3.04%	29.18%
3130	Block Group 1	0.00%	10.95%	12.40%	4.04%
3130	Block Group 2	32.70%	26.06%	18.36%	35.39%
3130	Block Group 3	18.25%	9.97%	26.96%	19.78%
9804	Block Group 1	0.00%	0.00%	0.00%	0.00%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B01001, C21007, and B25044.

Table A-19: Segment 4 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
2114	Block Group 1	4.73%	29.18%	7.67%	24.32%
2114	Block Group 2	35.31%	36.02%	5.54%	26.37%
2115.02	Block Group 1	6.81%	27.51%	11.83%	17.39%
2115.02	Block Group 2	2.94%	37.84%	4.68%	4.20%
2125	Block Group 3	24.53%	19.73%	28.73%	38.40%
3103	Block Group 5	0.00%	15.13%	21.06%	14.94%
3103	Block Group 6	0.00%	28.67%	10.70%	13.08%
3104	Block Group 1	9.69%	29.52%	5.55%	17.92%
3105	Block Group 2	5.66%	20.74%	17.63%	16.95%
3105	Block Group 3	24.67%	17.40%	16.88%	26.27%
3105	Block Group 4	0.00%	20.46%	8.55%	13.82%
3103	Block Group 1	7.52%	18.63%	18.63%	13.96%
3103	Block Group 2	3.72%	20.73%	13.07%	13.47%
3103	Block Group 3	53.40%	16.17%	5.22%	8.31%
3103	Block Group 4	6.00%	19.65%	14.88%	10.97%
3104	Block Group 2	11.74%	7.34%	31.94%	18.42%
3104	Block Group 3	13.55%	17.02%	19.79%	13.59%
3105	Block Group 1	18.76%	22.81%	4.41%	6.04%
3106	Block Group 1	61.49%	15.46%	14.26%	15.23%
3106	Block Group 2	23.35%	23.57%	16.50%	14.10%
3106	Block Group 3	46.11%	21.17%	9.19%	15.90%
3106	Block Group 4	13.07%	0.00%	8.15%	13.20%
3106	Block Group 5	5.38%	26.67%	7.58%	21.15%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B01001, C21007, and B25044.

Table A-20: Segment 5 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
2307	Block Group 1	6.64%	26.47%	12.04%	22.33%
2307	Block Group 2	22.49%	35.59%	9.61%	18.62%
2301	Block Group 1	7.87%	20.08%	15.19%	18.83%
2207.01	Block Group 3	9.43%	45.64%	4.44%	19.50%
2110	Block Group 1	30.59%	26.31%	19.07%	26.91%
2109	Block Group 1	12.33%	24.28%	15.56%	26.54%
2113.02	Block Group 2	13.50%	24.83%	15.79%	15.49%
2111.02	Block Group 3	3.57%	20.30%	9.07%	18.84%
2112	Block Group 1	19.49%	10.29%	15.14%	34.08%
2112	Block Group 2	24.31%	18.68%	17.66%	55.32%
2113.02	Block Group 3	22.09%	5.37%	13.55%	23.70%
2116	Block Group 1	29.20%	28.39%	8.16%	32.79%
2116	Block Group 2	7.36%	16.12%	14.78%	19.59%
2117	Block Group 1	18.68%	30.71%	11.72%	16.73%
2117	Block Group 2	15.67%	15.51%	16.07%	14.27%
2117	Block Group 3	6.06%	29.20%	9.78%	15.38%
2124	Block Group 2	8.16%	17.43%	12.23%	24.75%
2124	Block Group 3	0.00%	30.91%	7.38%	22.46%
2207.01	Block Group 1	40.46%	31.69%	17.97%	20.52%
2209	Block Group 1	16.83%	22.33%	17.80%	23.95%
2210	Block Group 2	2.01%	35.92%	10.61%	12.32%
2211	Block Group 3	7.19%	32.85%	12.49%	8.73%
2302	Block Group 1	36.71%	8.48%	25.45%	35.88%
2303	Block Group 2	17.54%	26.94%	8.03%	21.45%
2304	Block Group 2	12.85%	10.36%	9.29%	20.86%
2304	Block Group 3	8.95%	17.97%	9.30%	3.74%
2305	Block Group 1	27.13%	17.27%	22.17%	25.26%
2302	Block Group 2	42.42%	7.08%	10.18%	49.05%

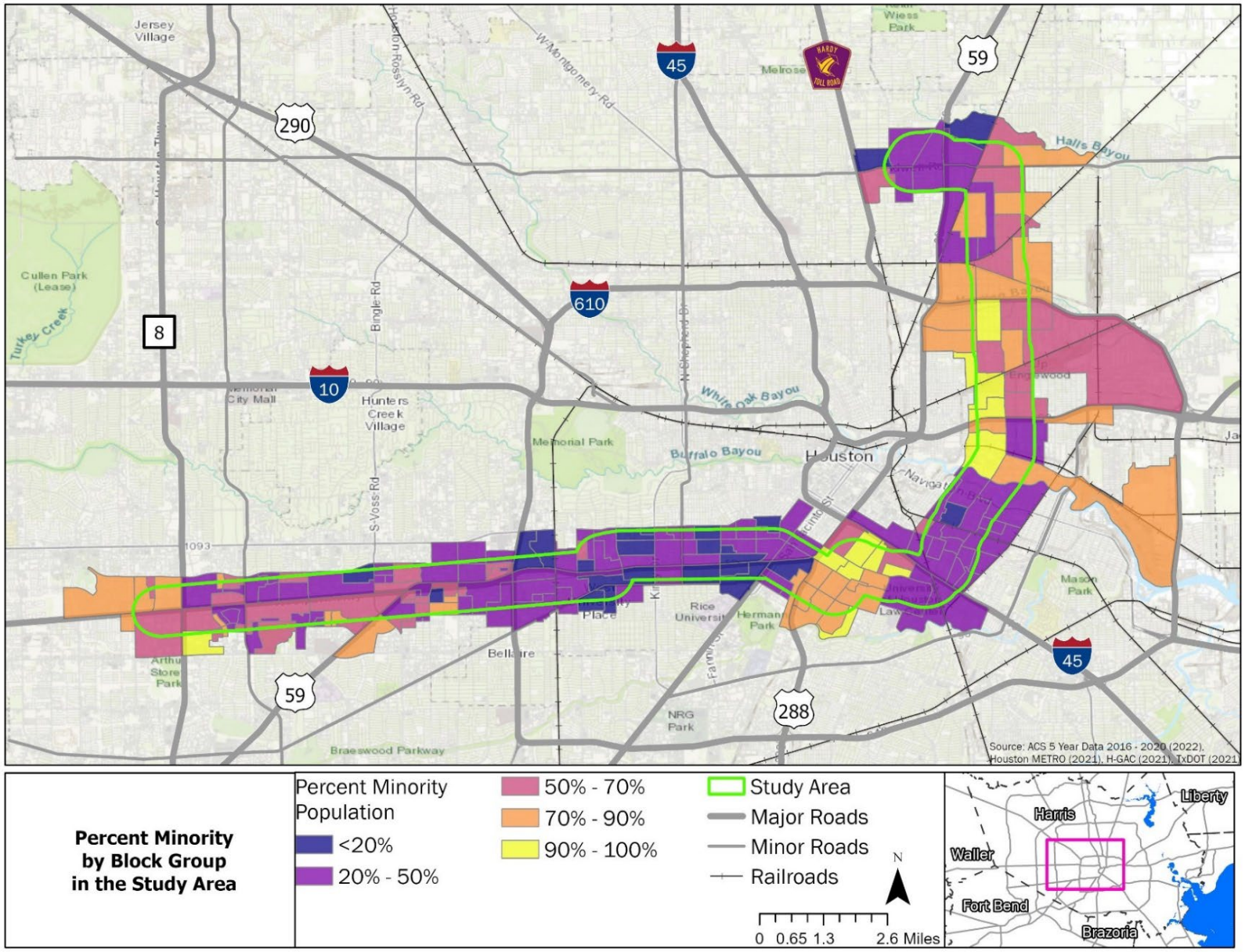
Table A-20: Segment 5 Transit Dependent Populations					
Census Tract	**Block Group**	**Percent Zero-Car Households**	**Percent Children (Under 18)**	**Percent Seniors (65 and Older)**	**Percent People with Disability**
2302	Block Group 3	13.91%	31.88%	16.10%	23.88%
2303	Block Group 1	11.04%	29.94%	11.65%	20.28%
2306	Block Group 2	10.58%	27.80%	15.03%	33.28%
2304	Block Group 1	0.00%	41.45%	8.26%	5.84%
2305	Block Group 2	1.54%	27.14%	9.42%	10.66%
2305	Block Group 3	14.04%	12.03%	38.13%	31.16%

Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Tables B01001, C21007, and B25044.

Appendix B

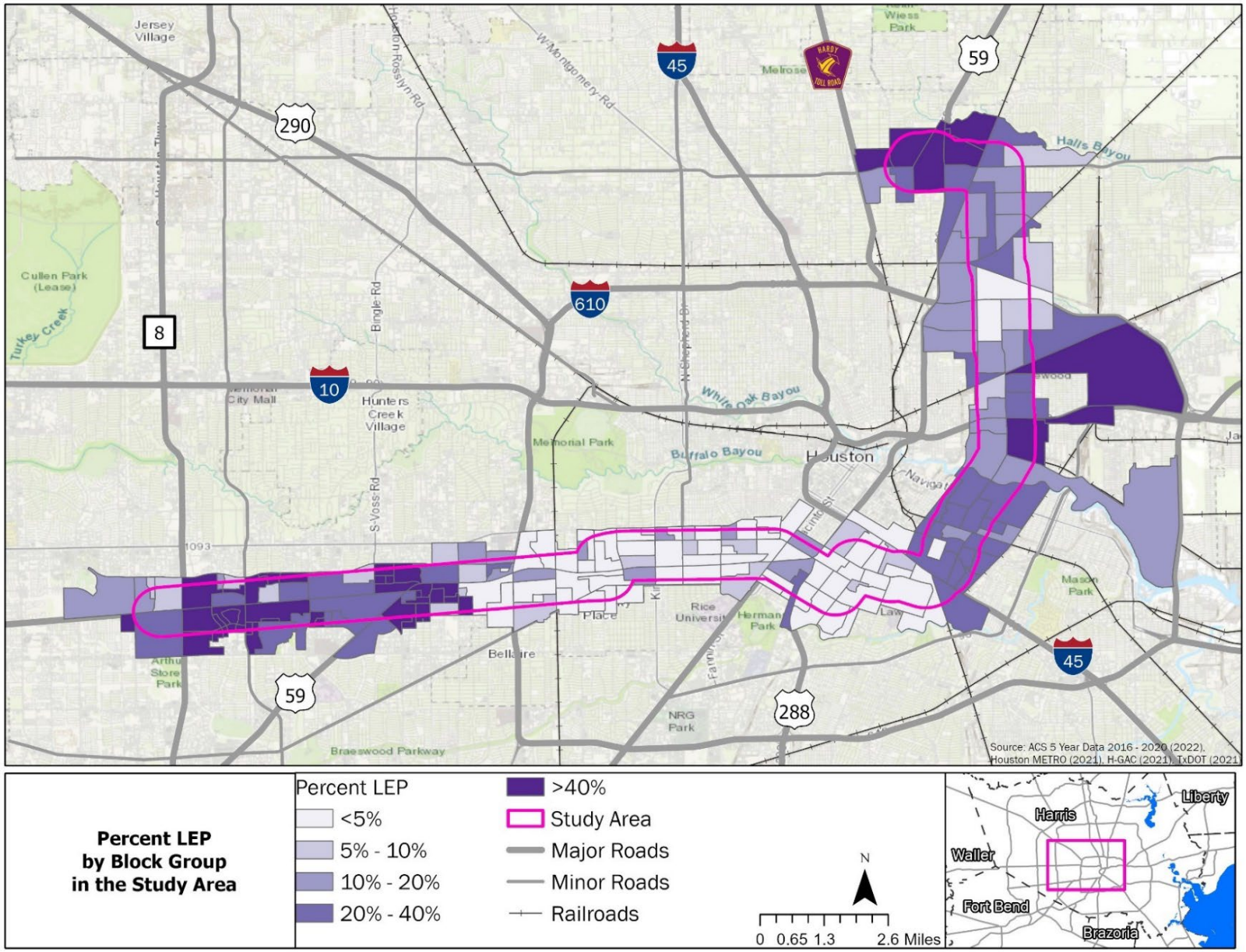
Demographic Figures

Figure B-1: Percent Minority by Block Group in the Study Area



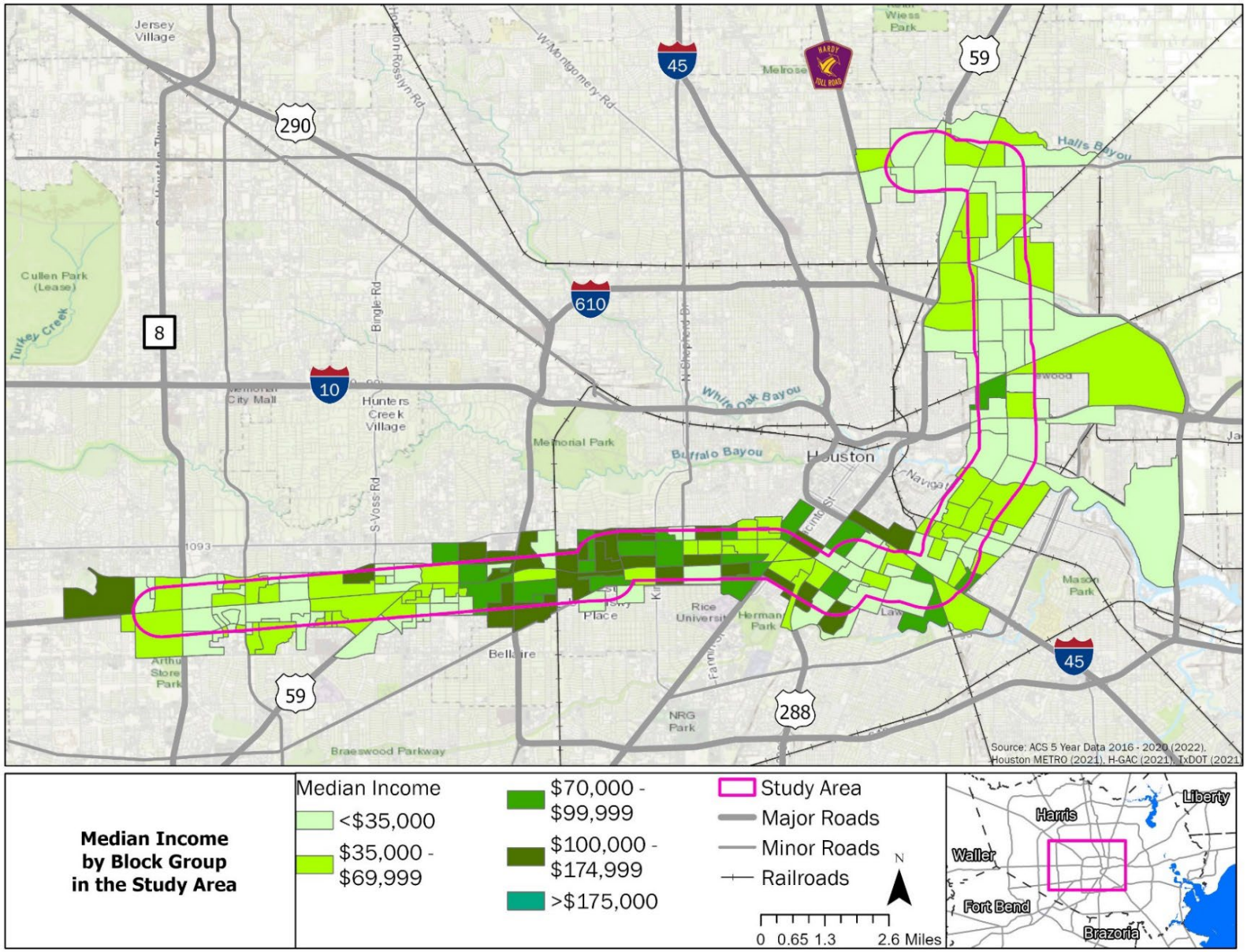
Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B03002.

Figure B-2: Percent LEP by Block Group in the Study Area



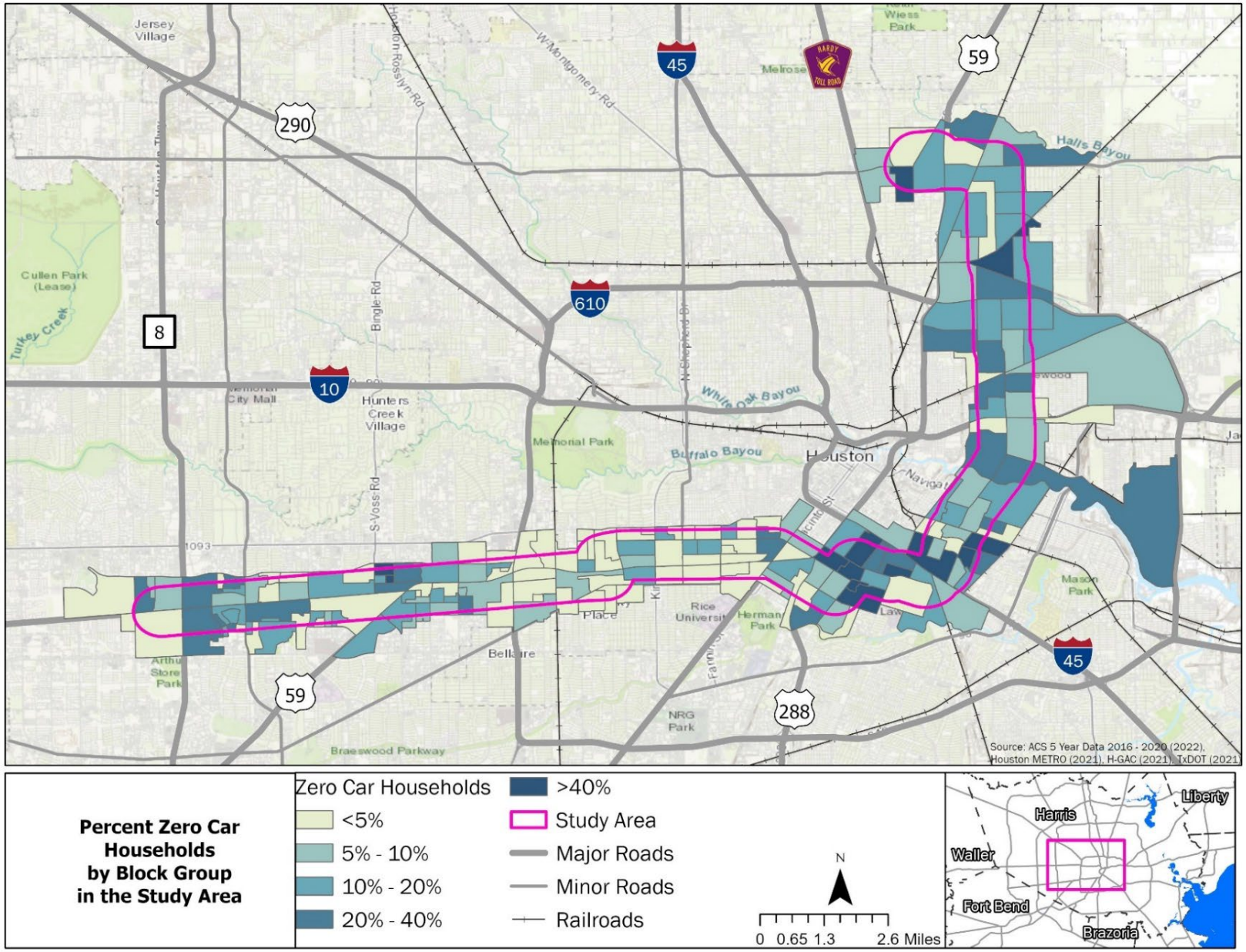
Source: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B16004.

Figure B-3: Median Income by Block Group in the Study Area



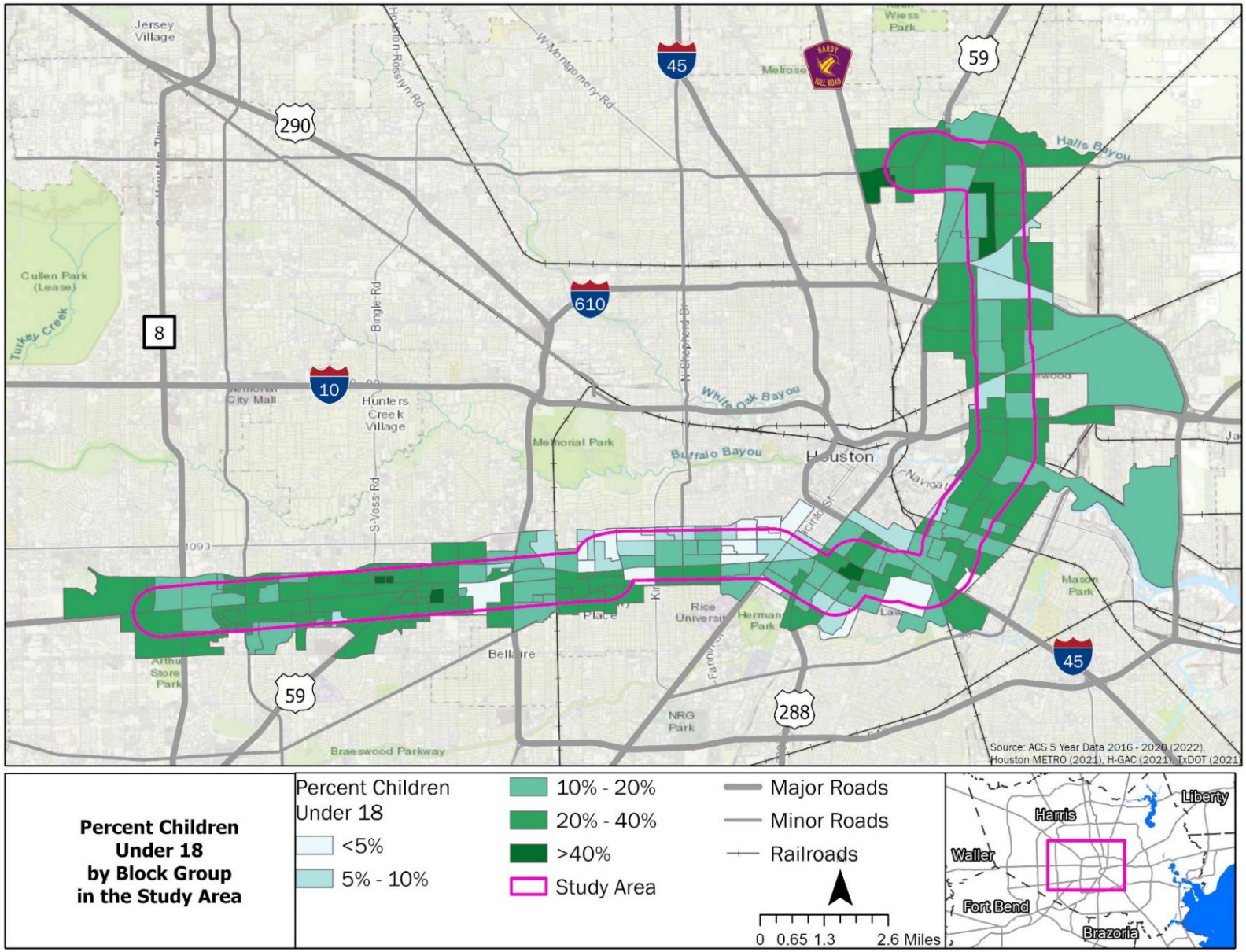
Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B19013.

Figure B-4: Percent Zero Car Households by Block Group in the Study Area



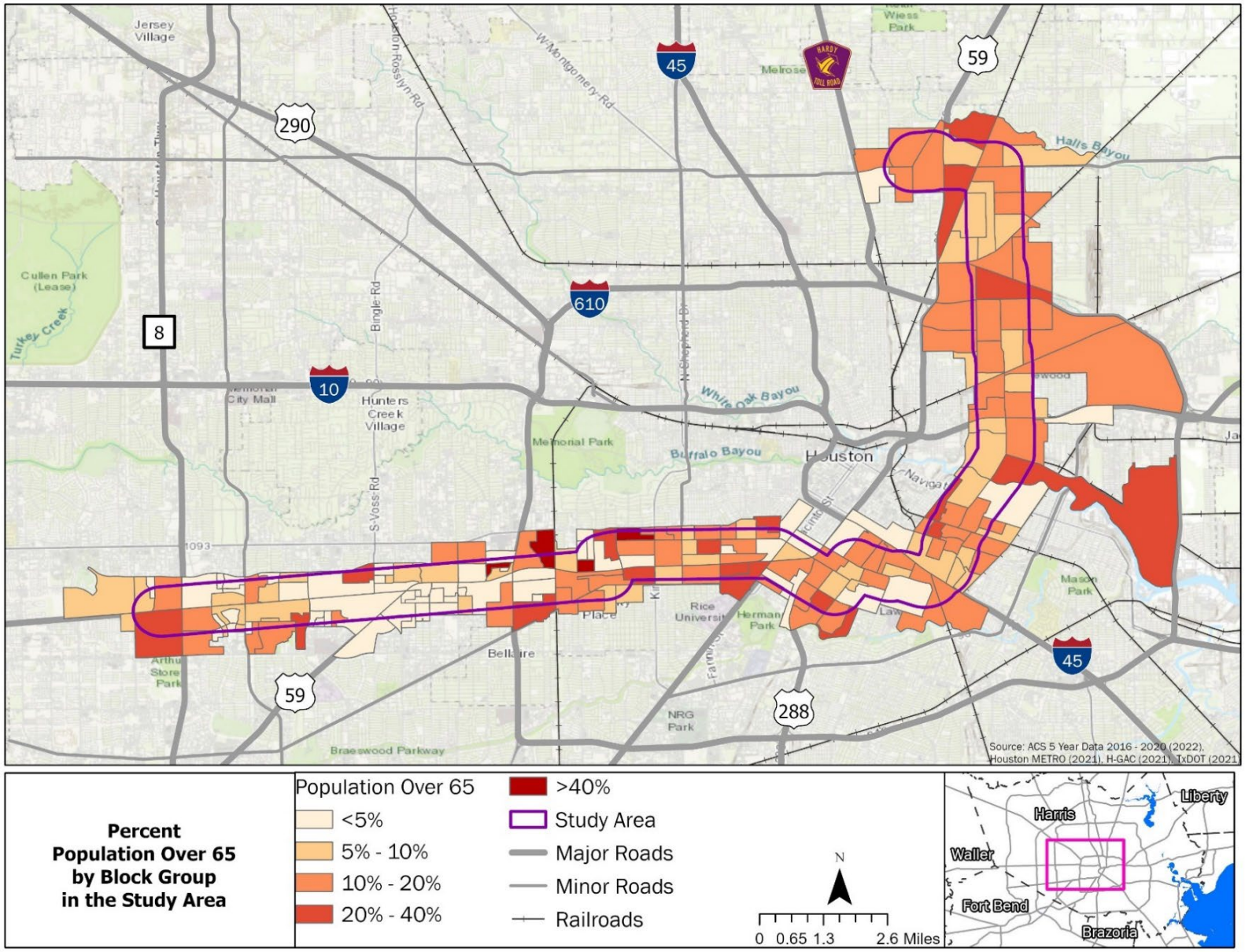
Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B01001

Figure B-5: Percent Children Under 18 by Block Group in the Study Area



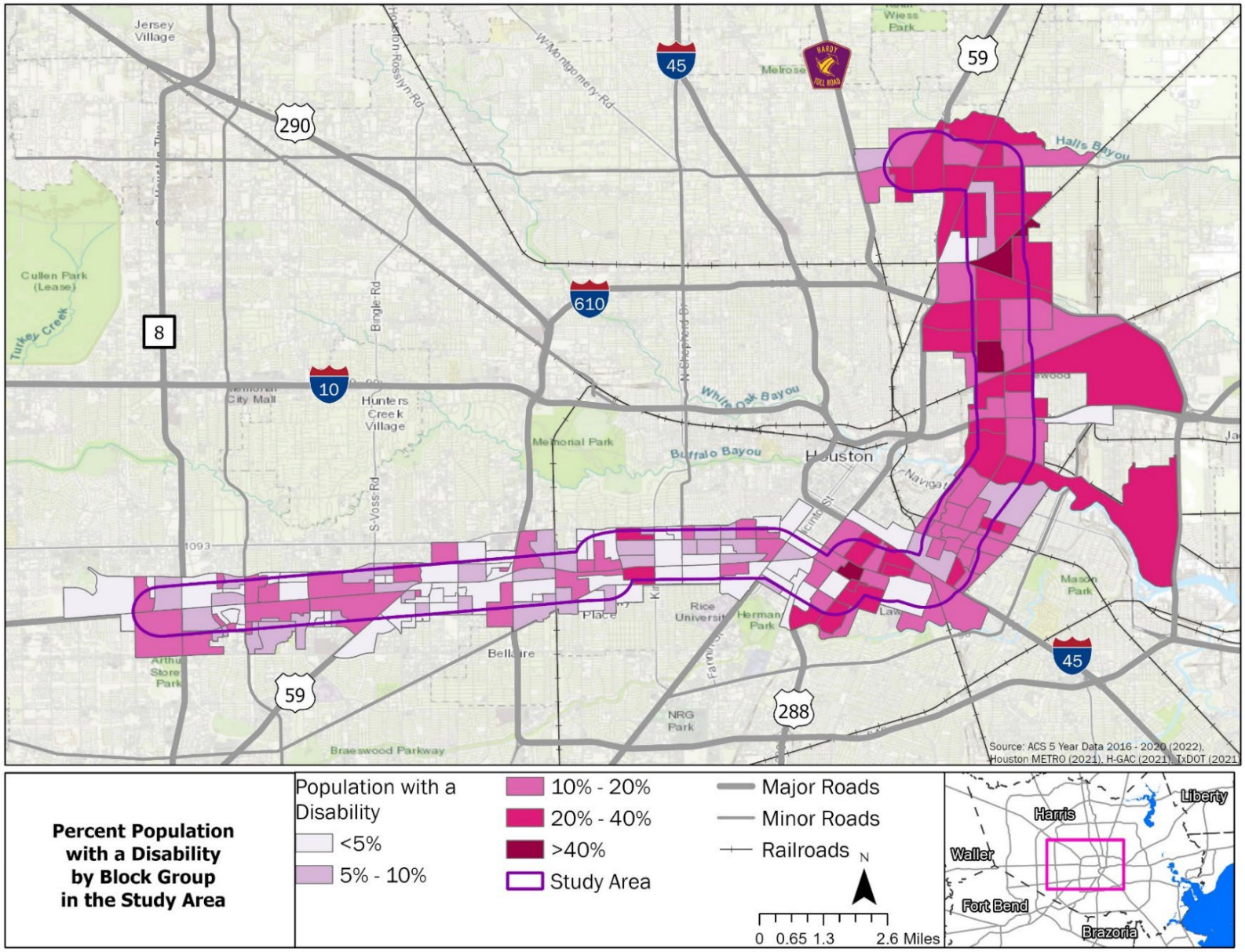
Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table C21007

Figure B-6: Percent Population over 65 by Block Group in the Study Area



Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table C21007

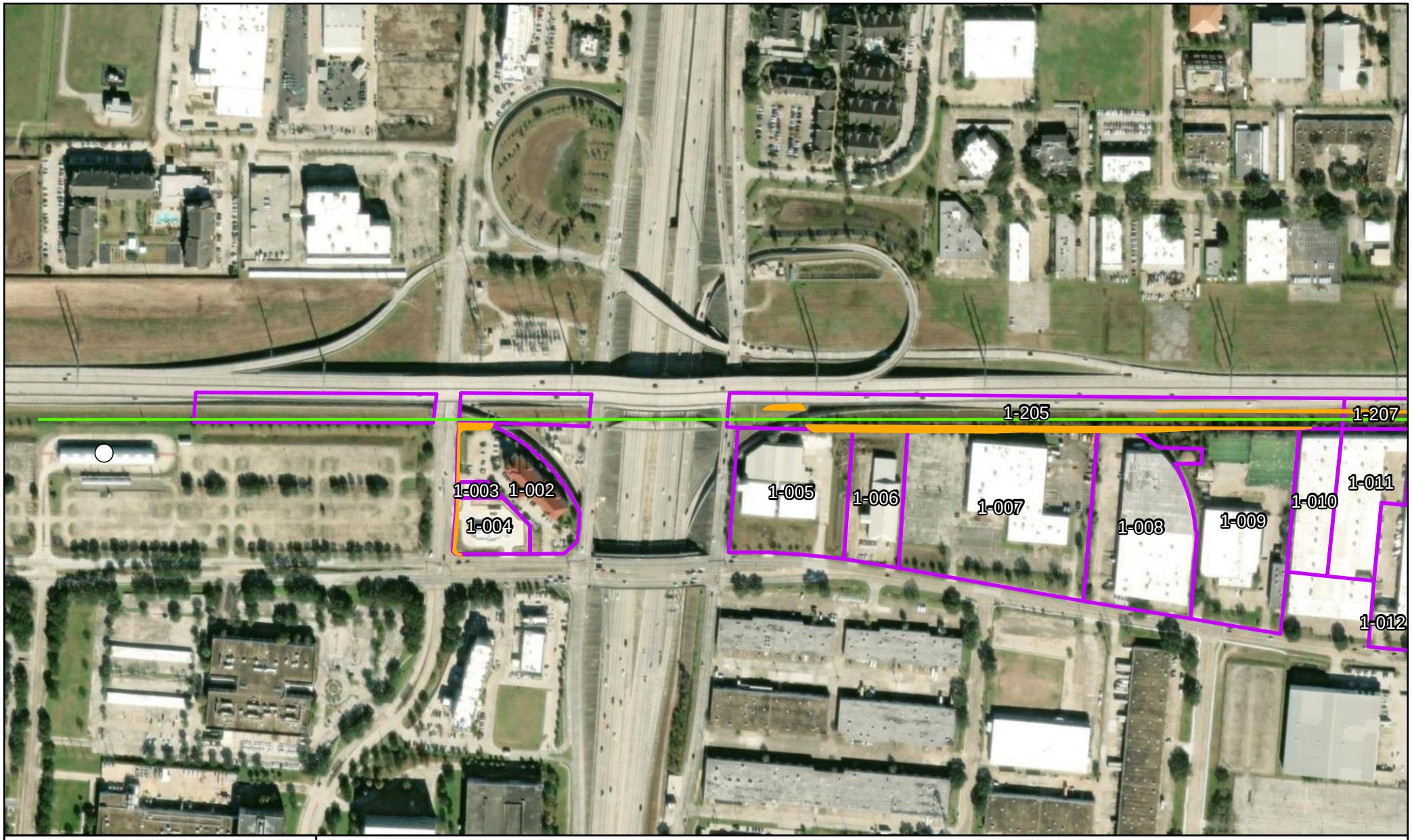
Figure B-7: Percent Population with a Disability by Block Group in the Study Area



Sources: U.S. Census Bureau, 2016-2020 ACS 5-Year Estimates. Table B25044

Appendix C

Potential Acquisitions and Displacements Maps



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Potential Acquisitions
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April 2023

- Proposed Stations
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- Properties with Potential Partial Acquisitions
- Potential Full Acquisitions

N

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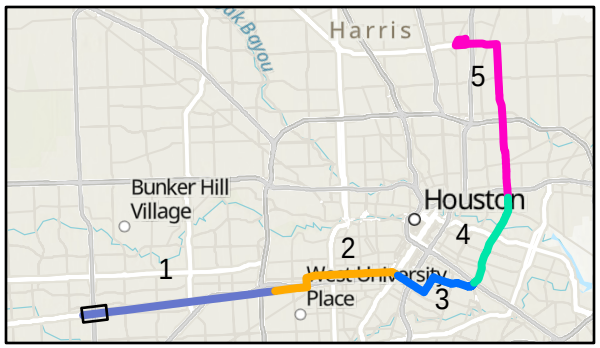



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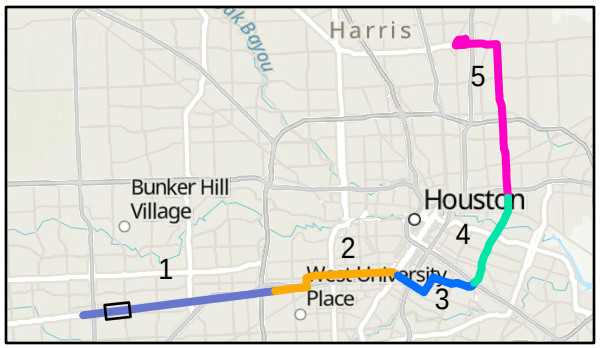



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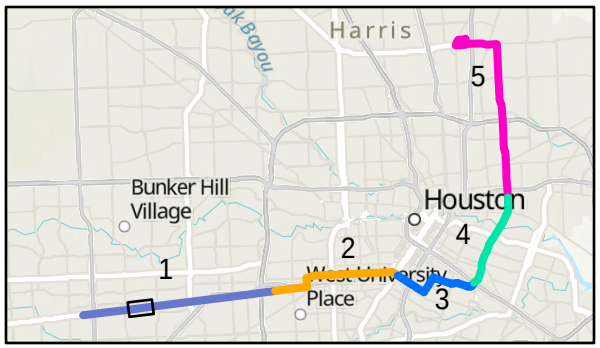

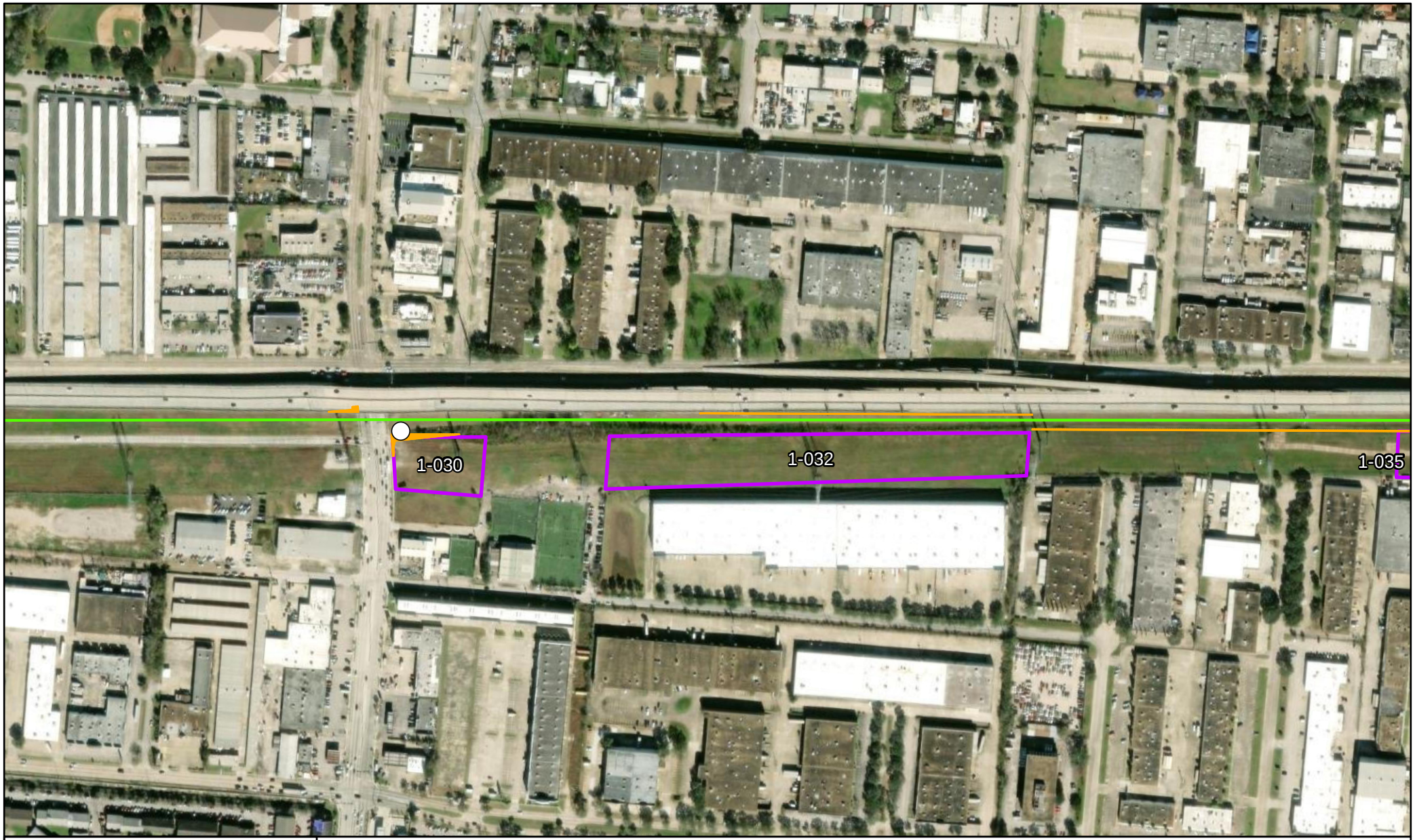

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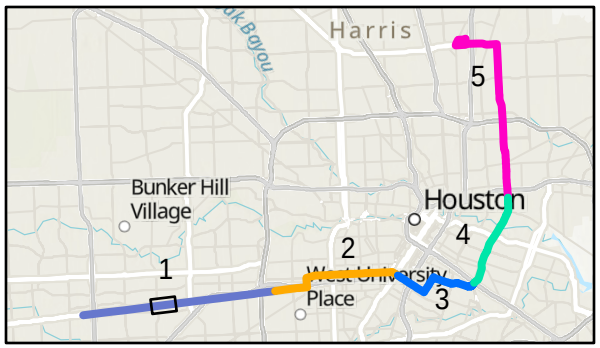



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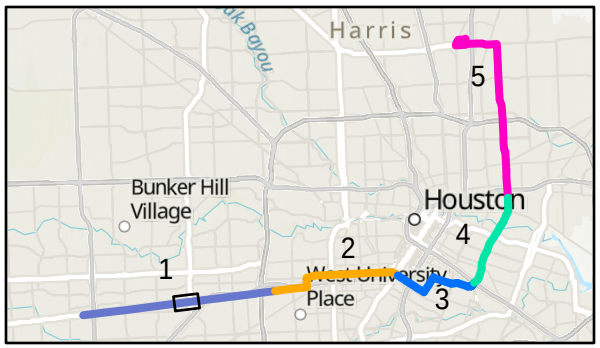



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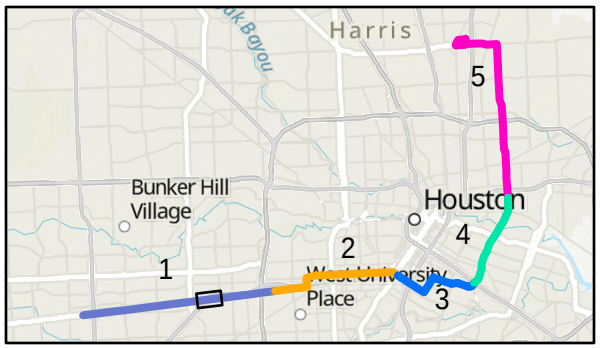

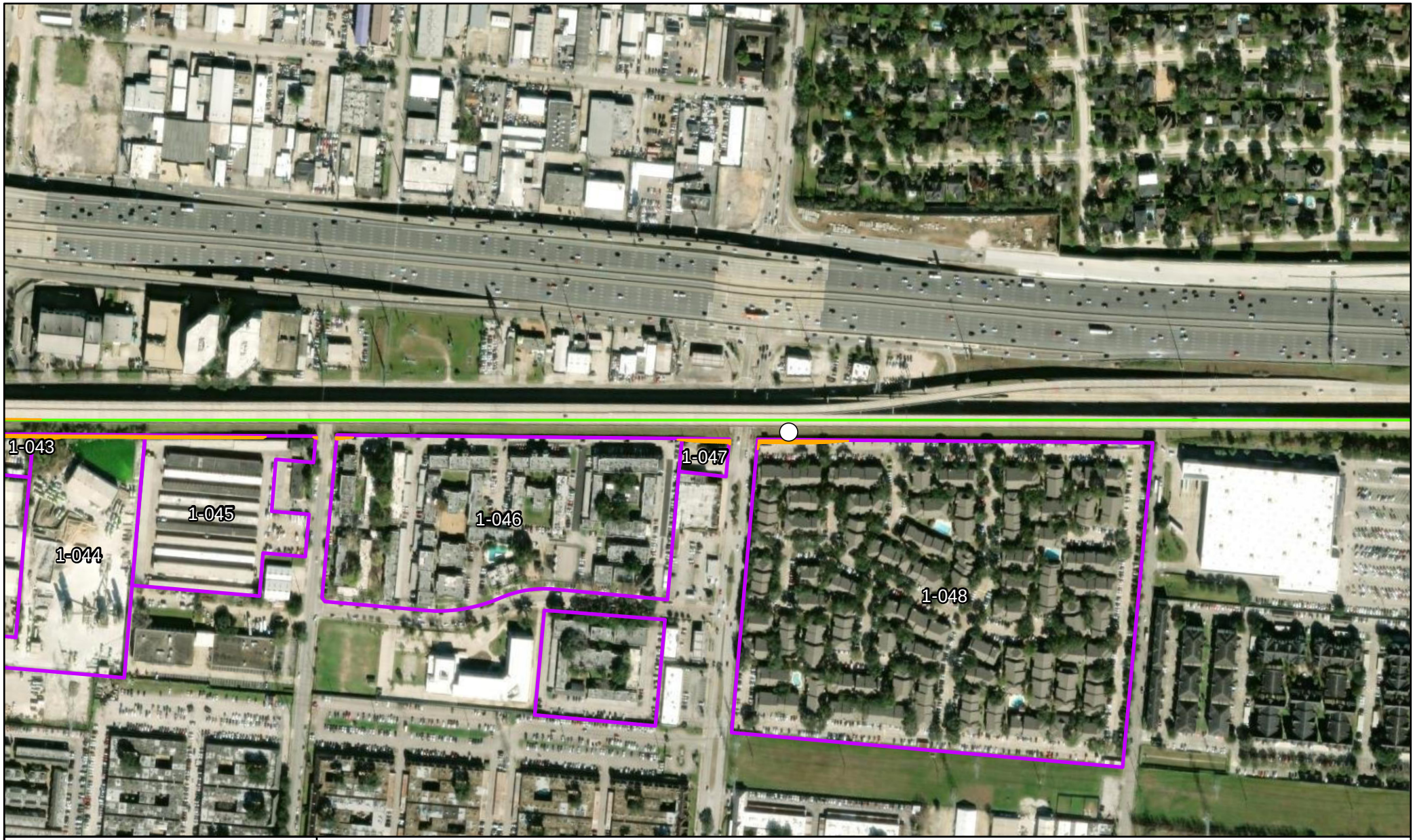

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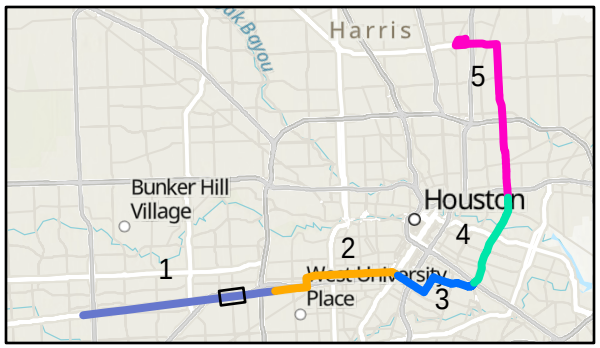

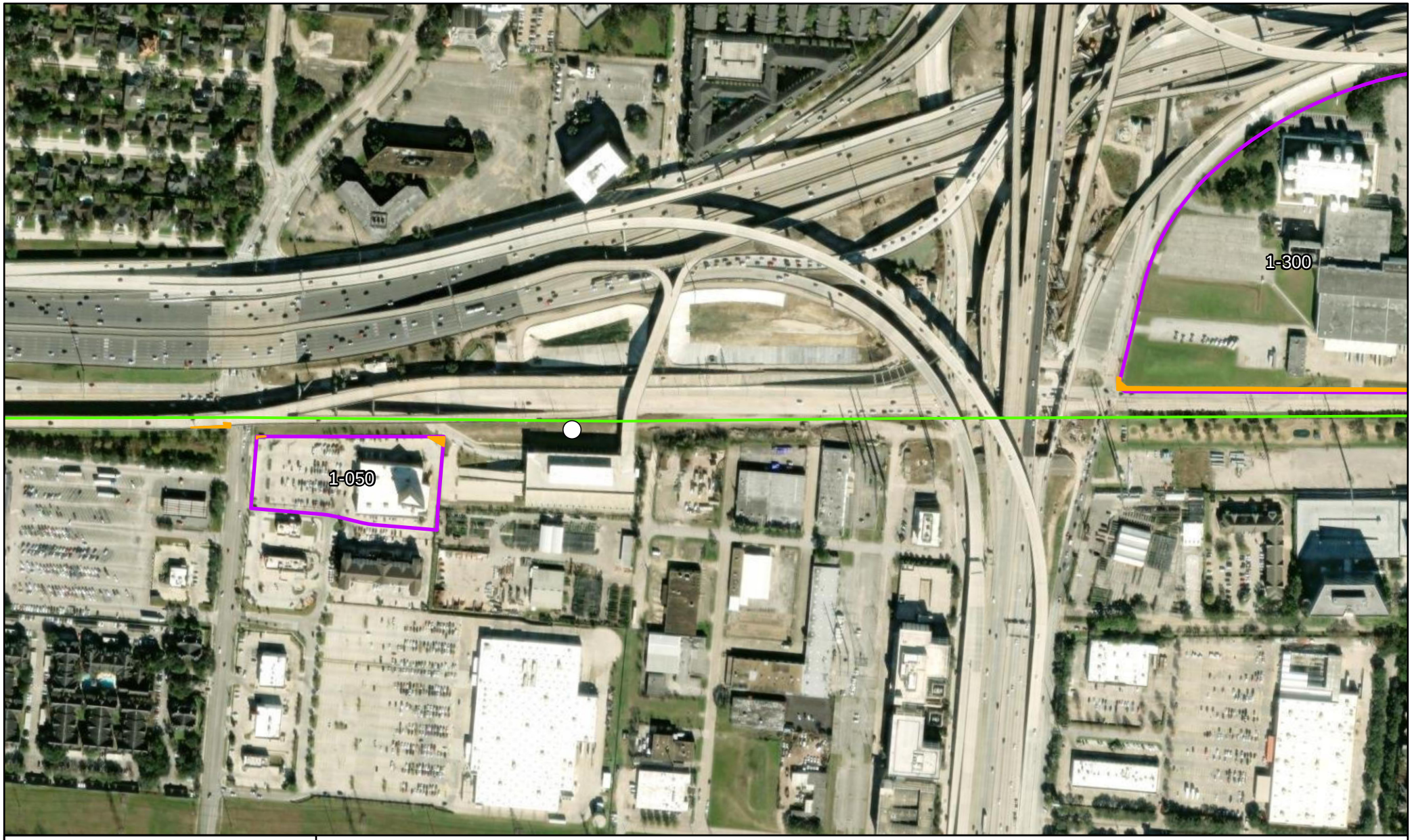

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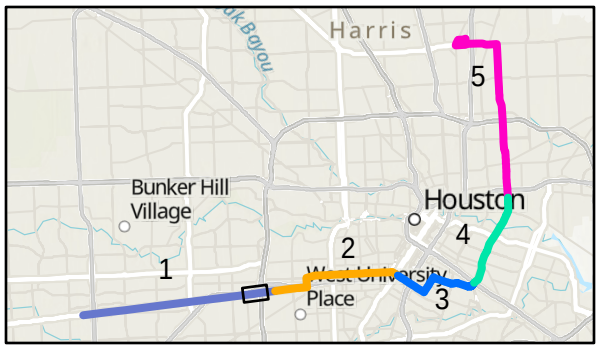



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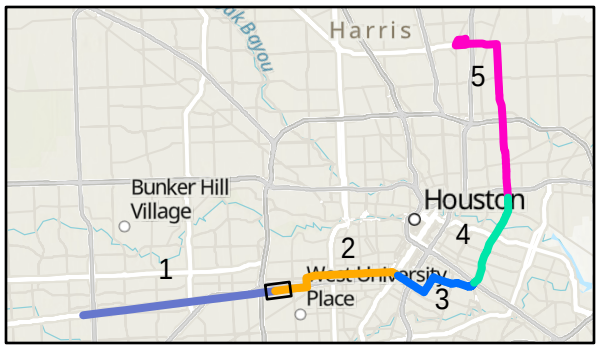

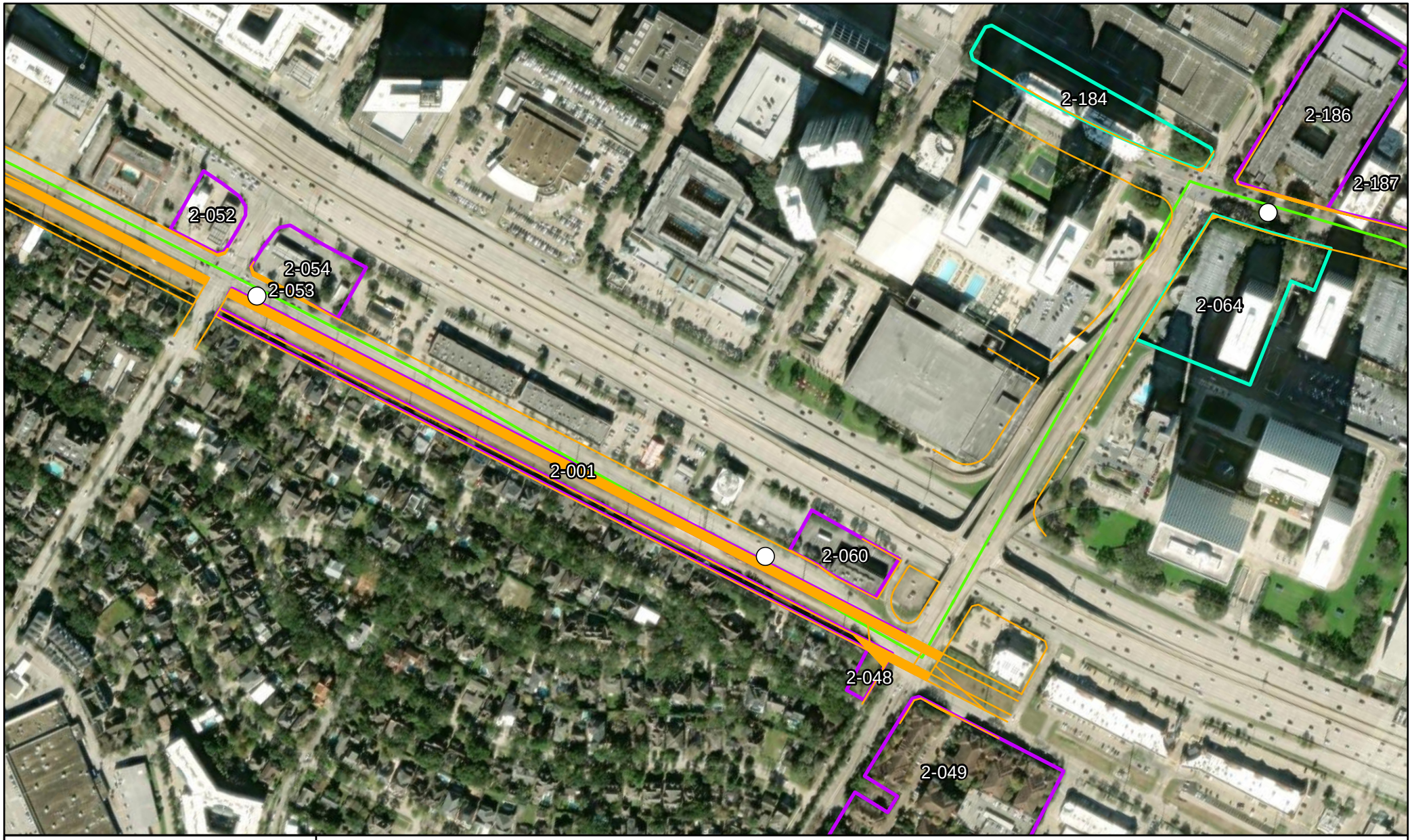

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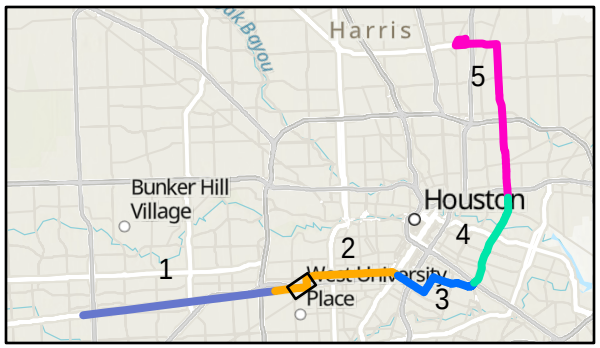



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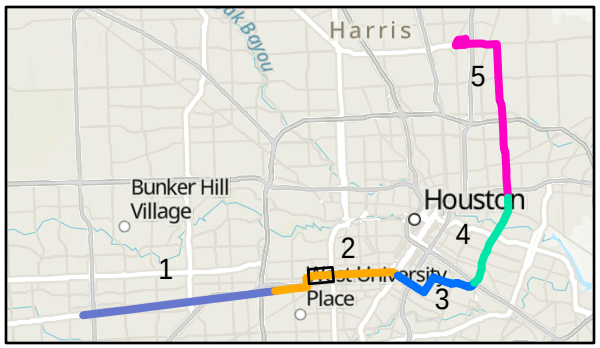

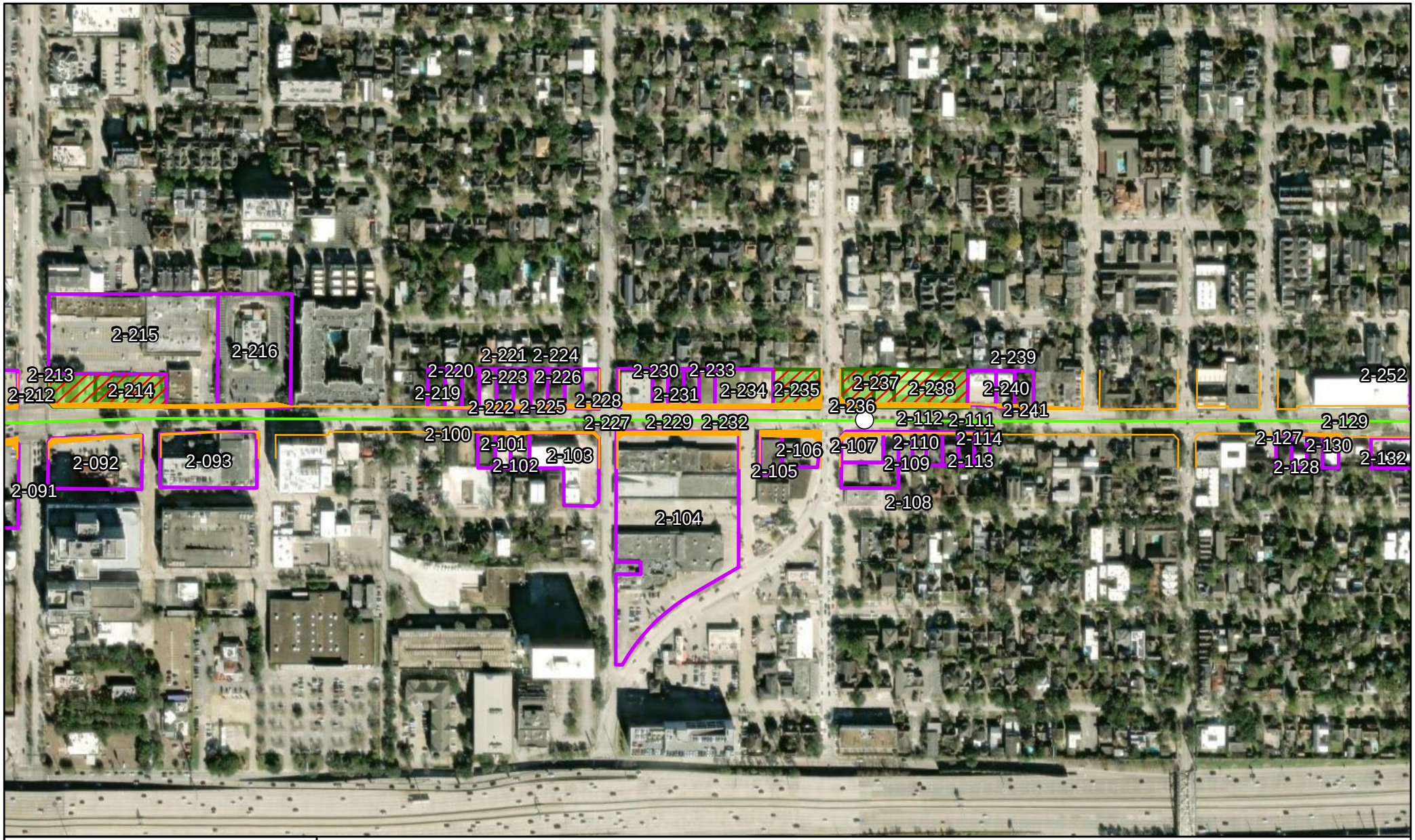

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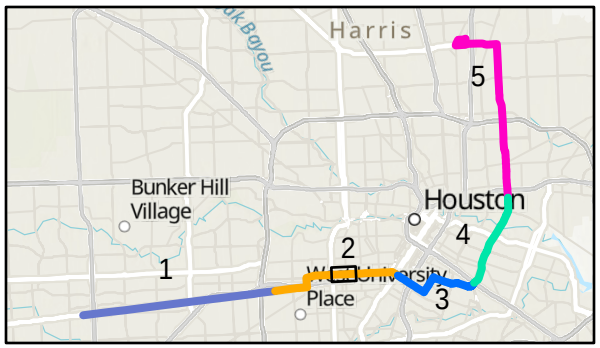

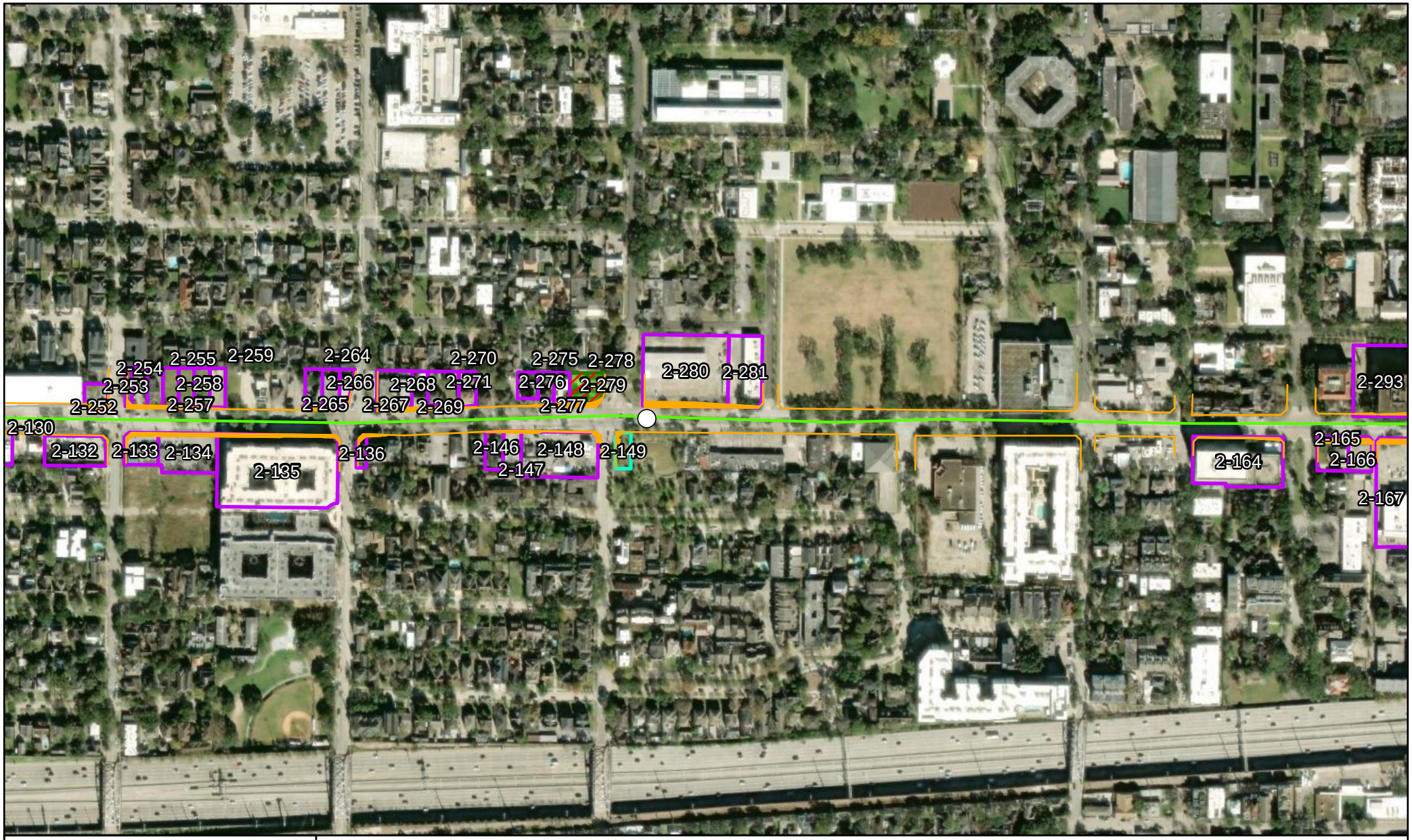

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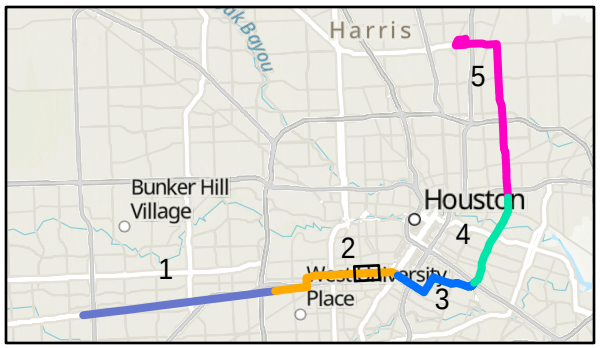



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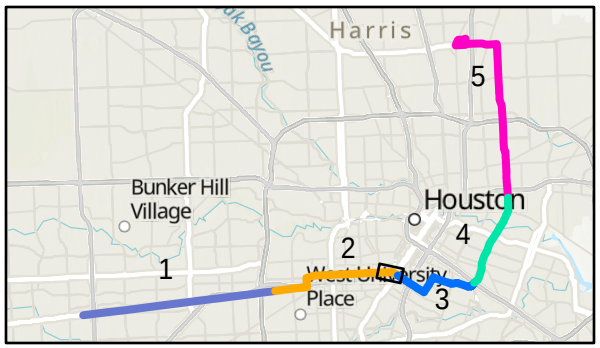

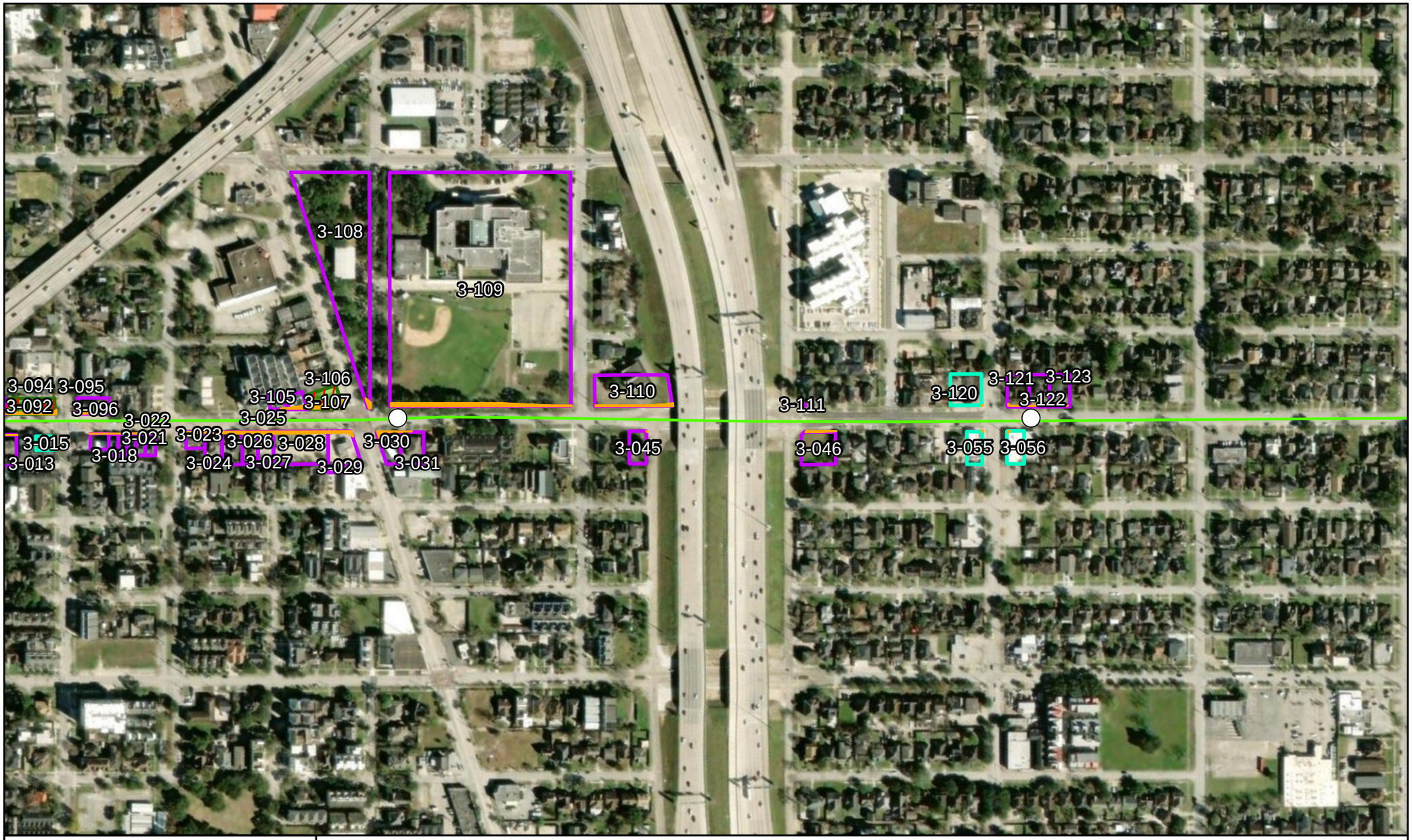

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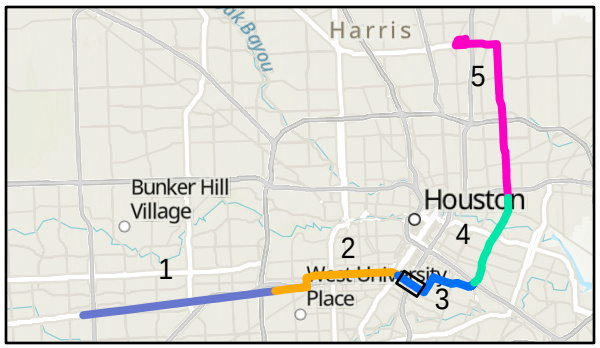



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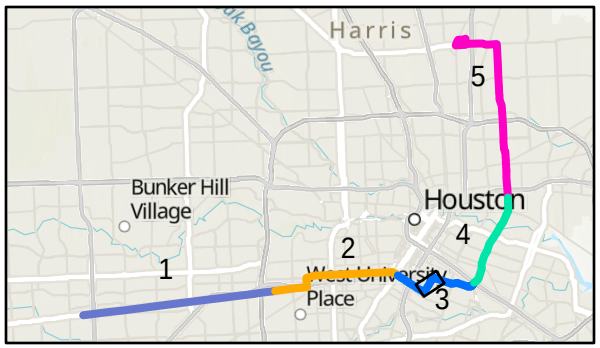



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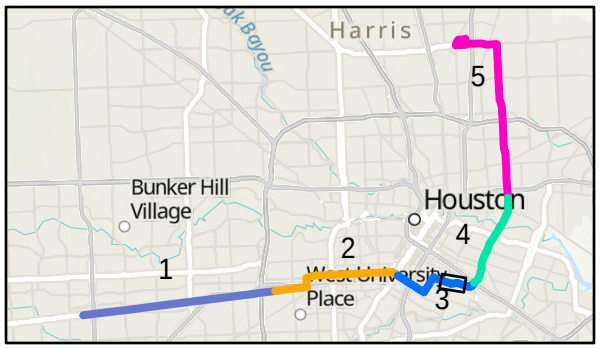

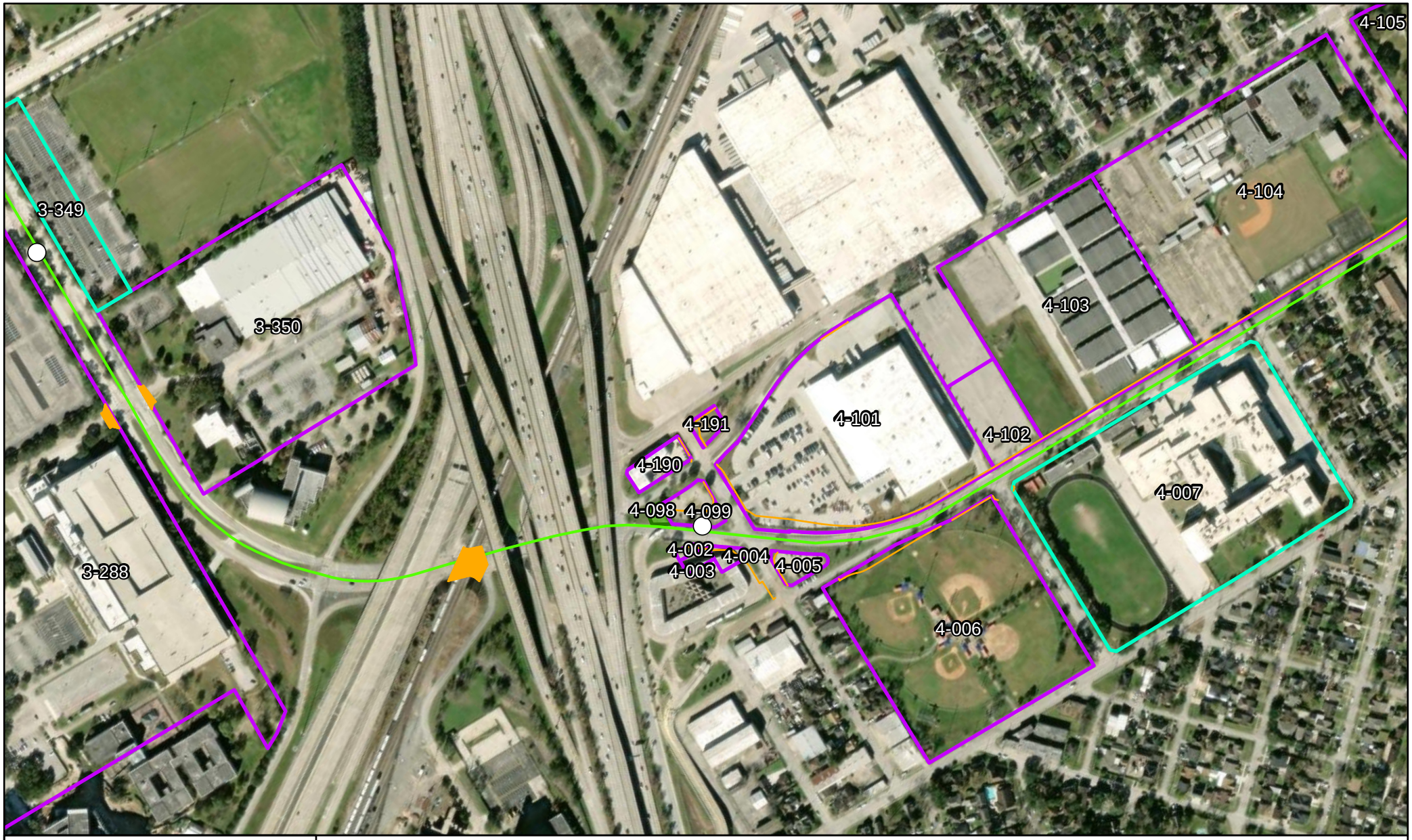

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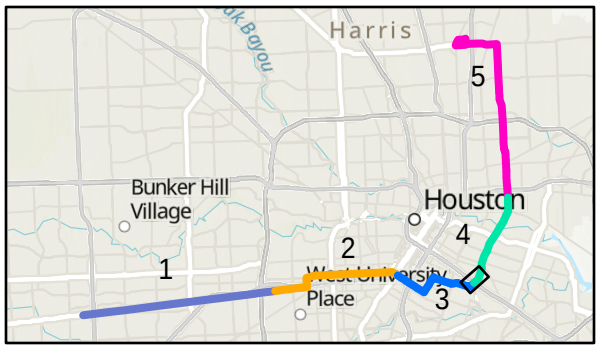

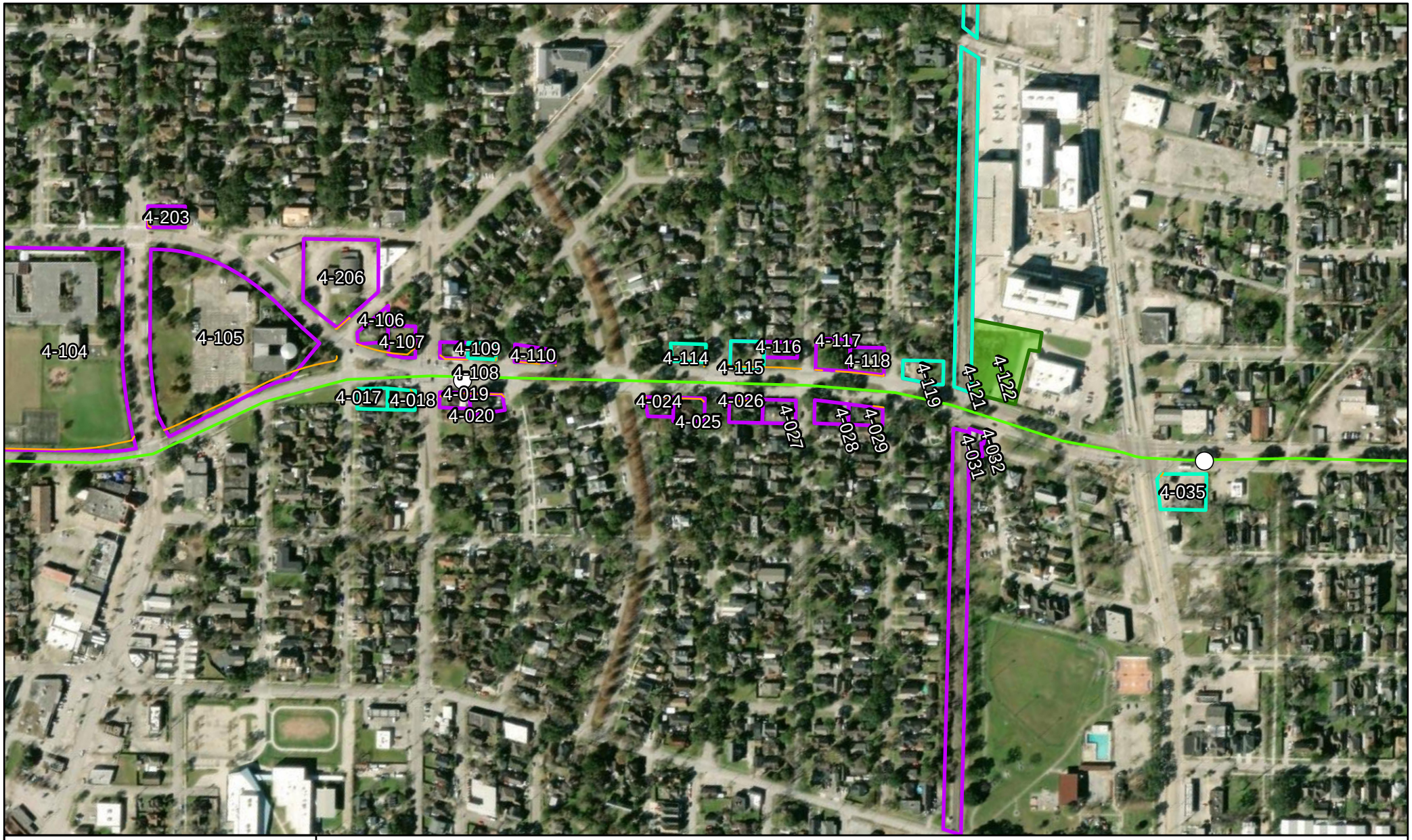

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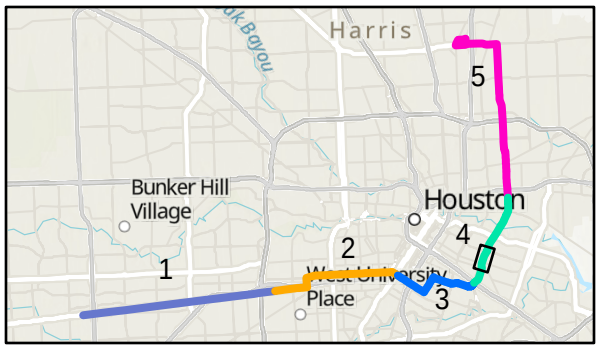

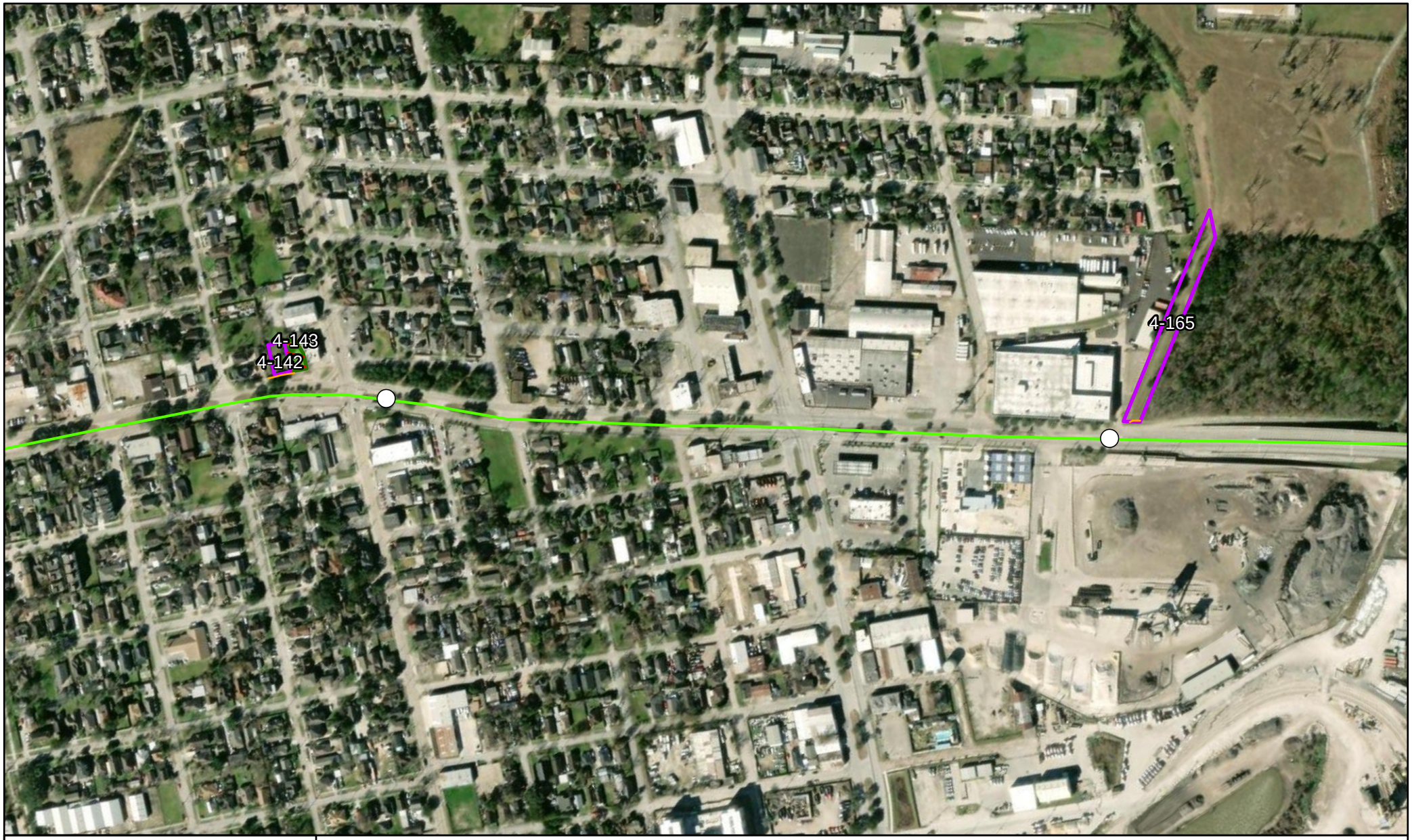

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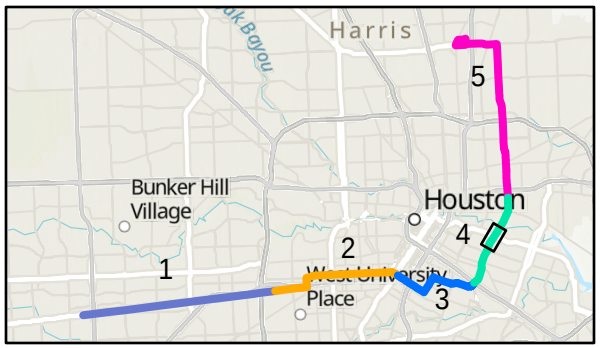



METRORapid University Corridor
Houston, Texas

Potential Acquisitions
and Displacements

April 2023

- Proposed Stations
- Proposed Alignment
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- Properties with Potential Partial Acquisitions
- Potential Full Acquisitions

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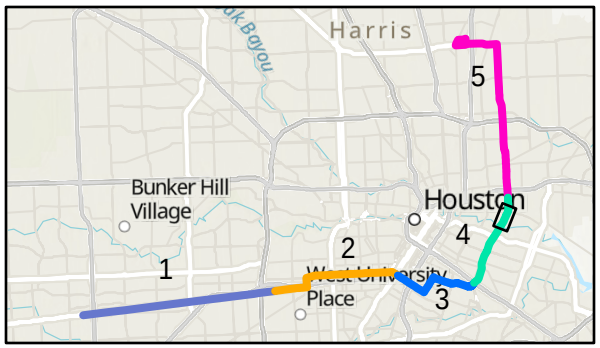

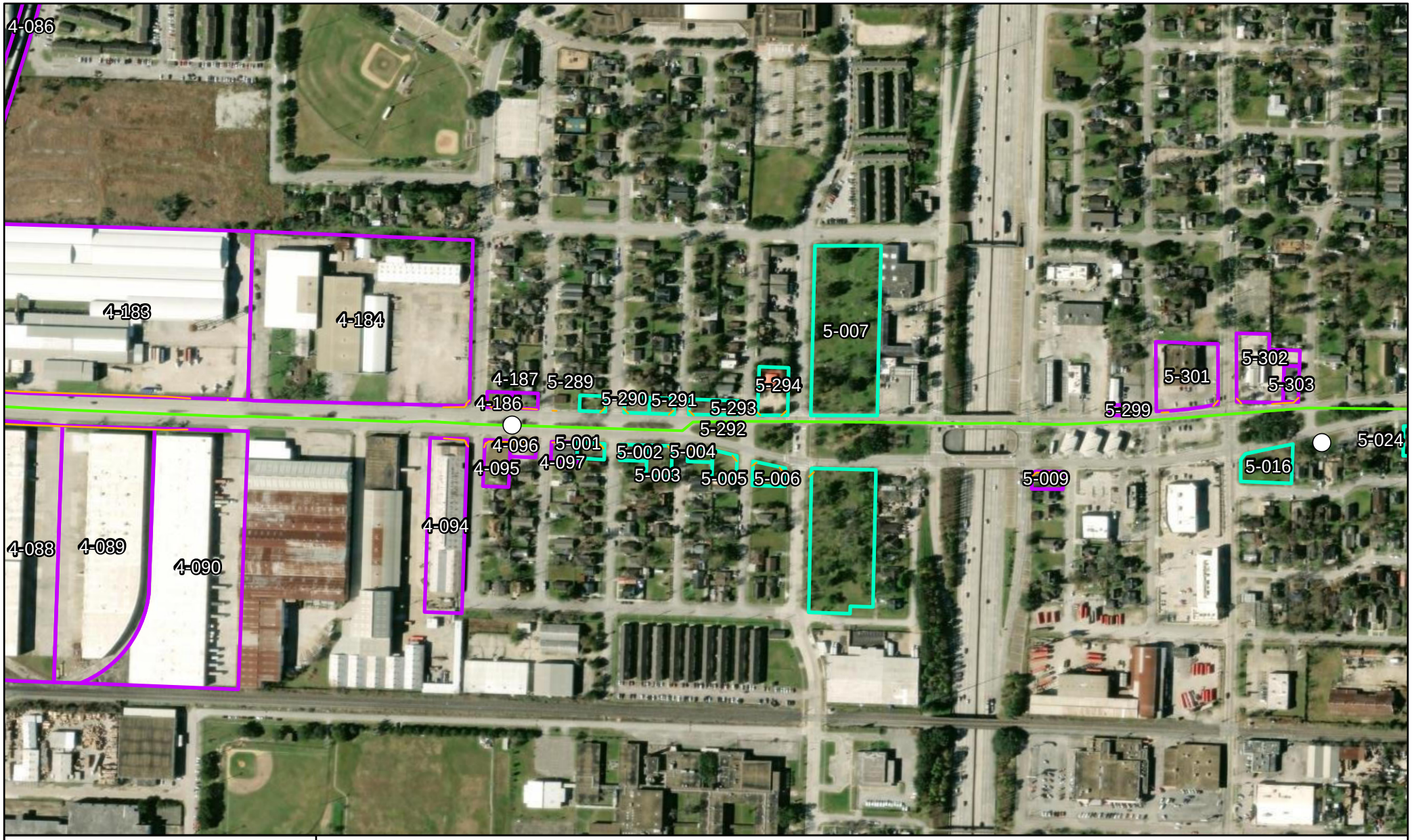

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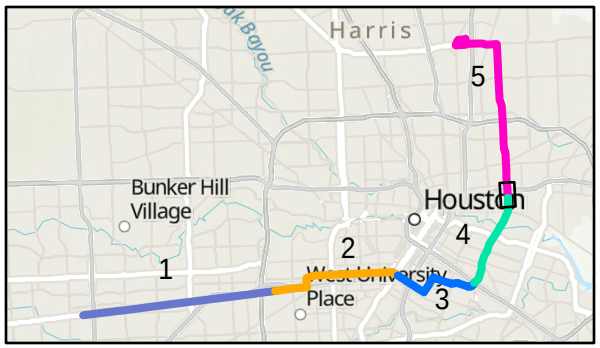



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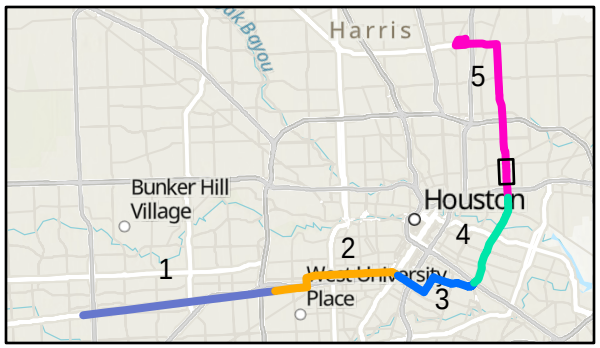

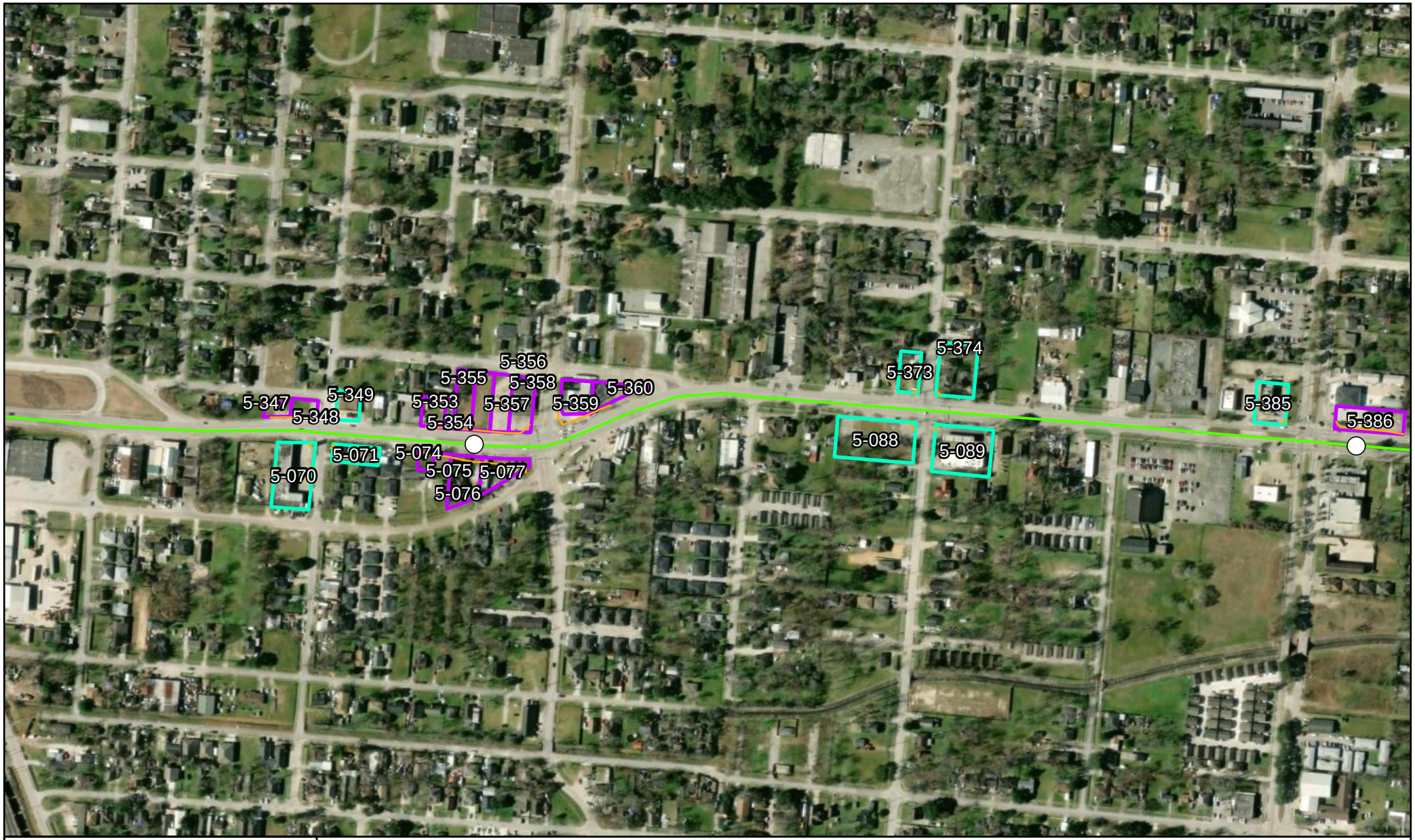

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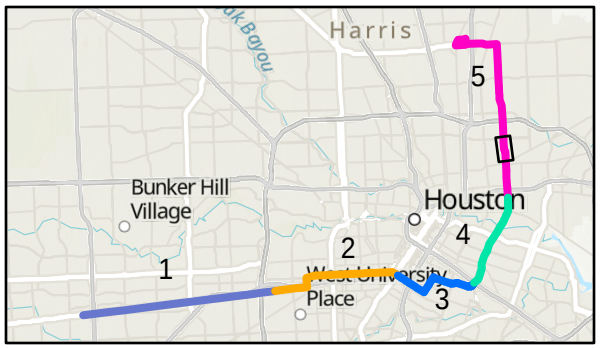

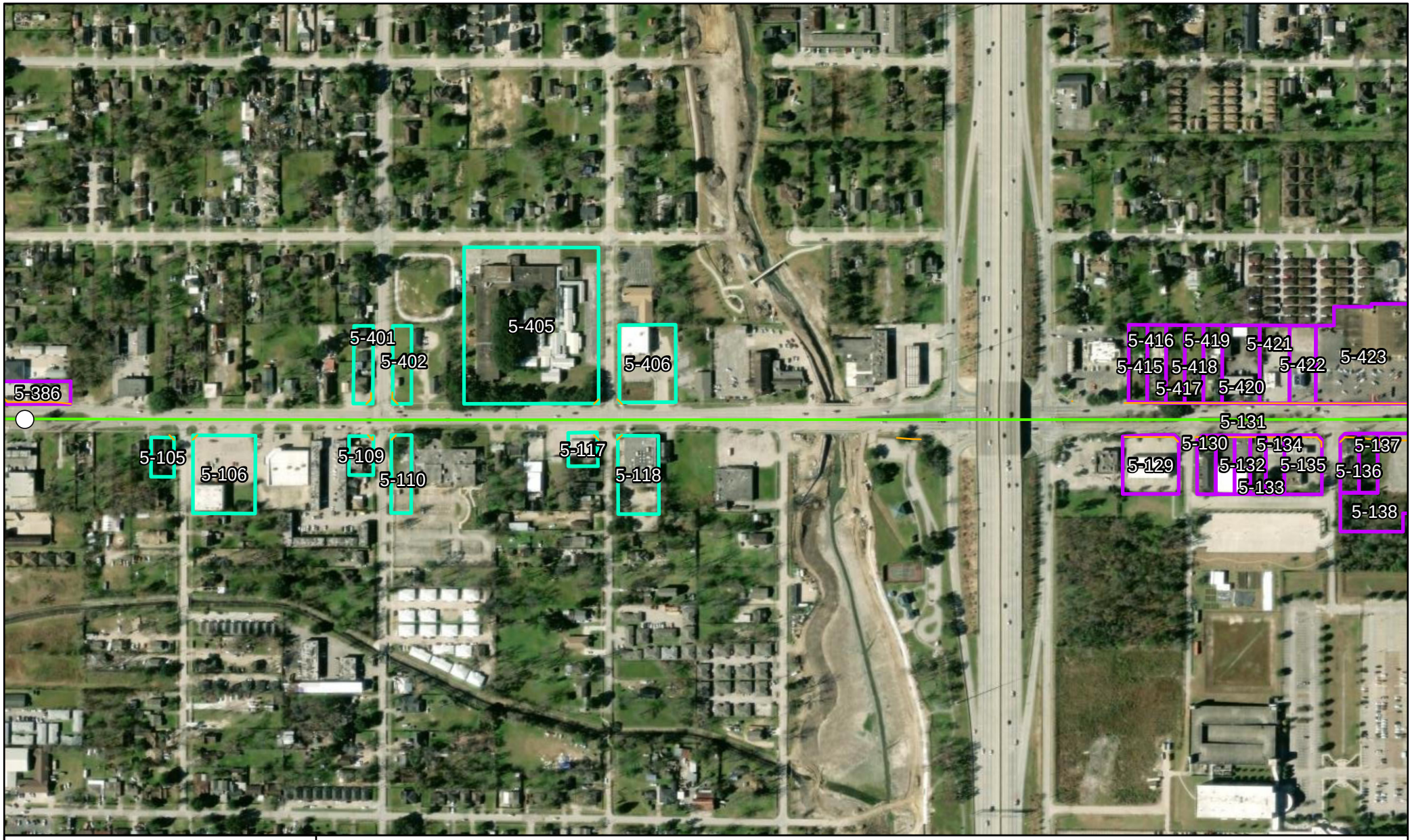

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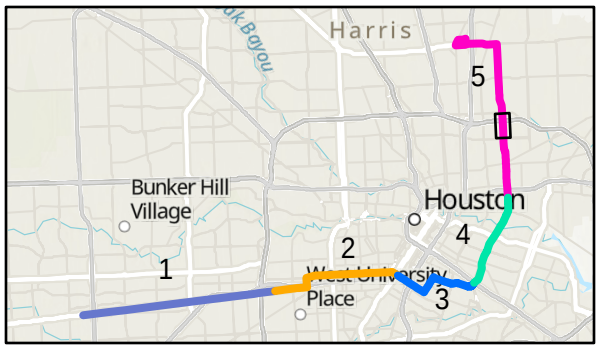



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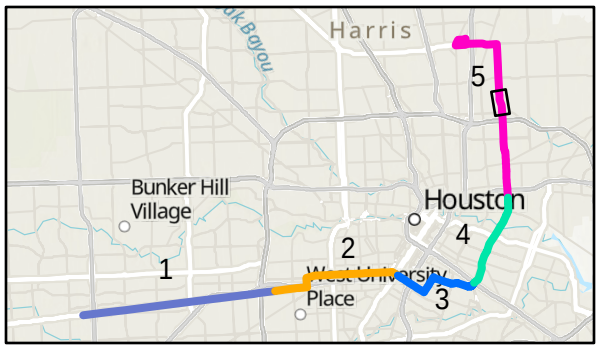

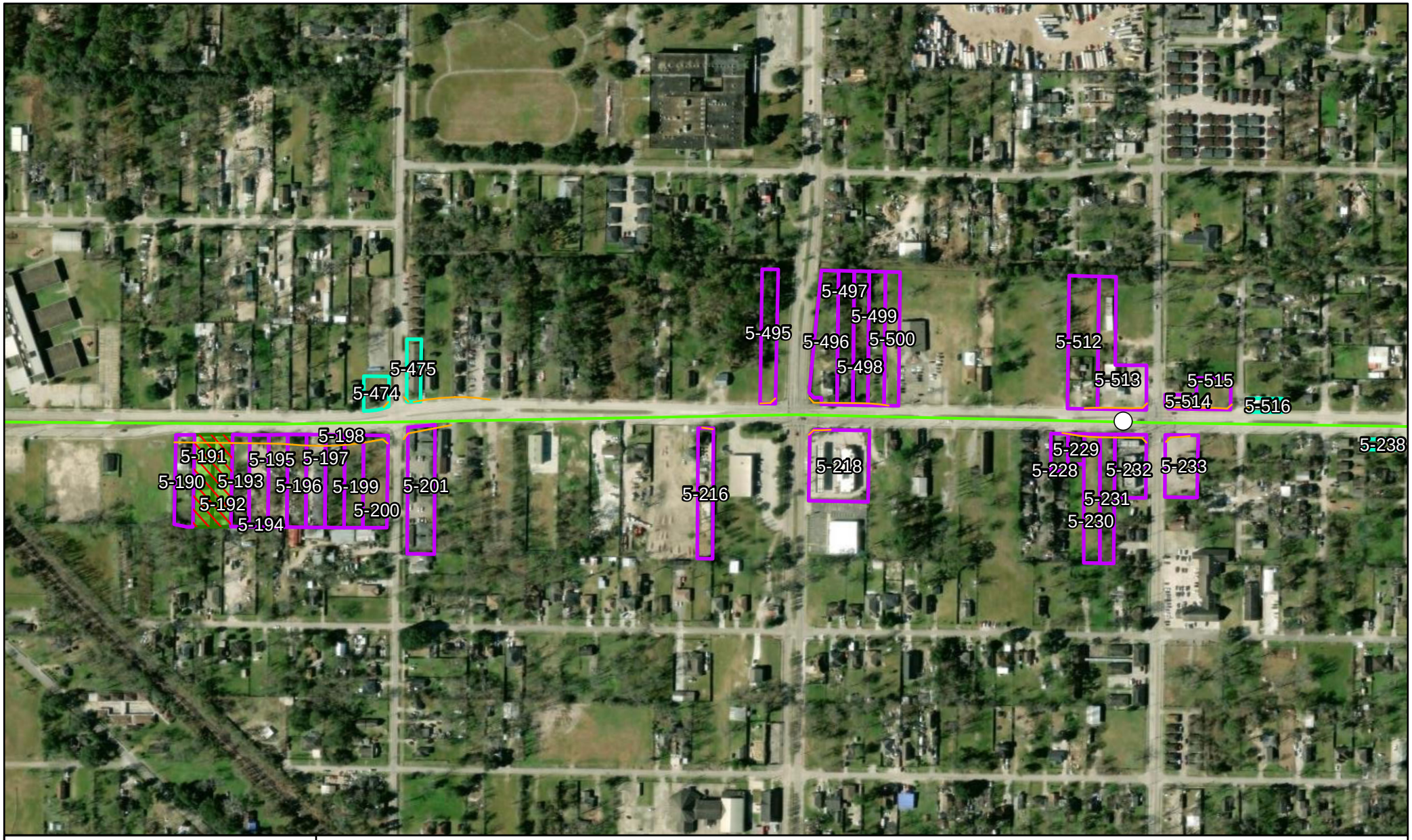

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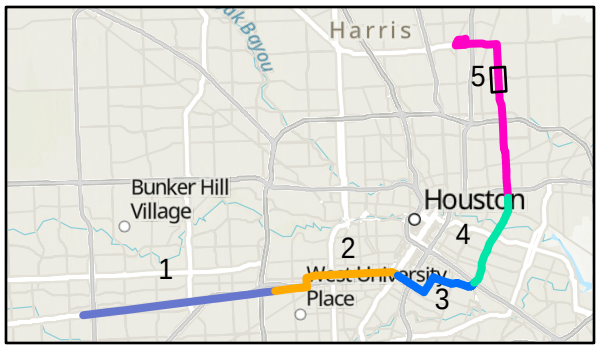

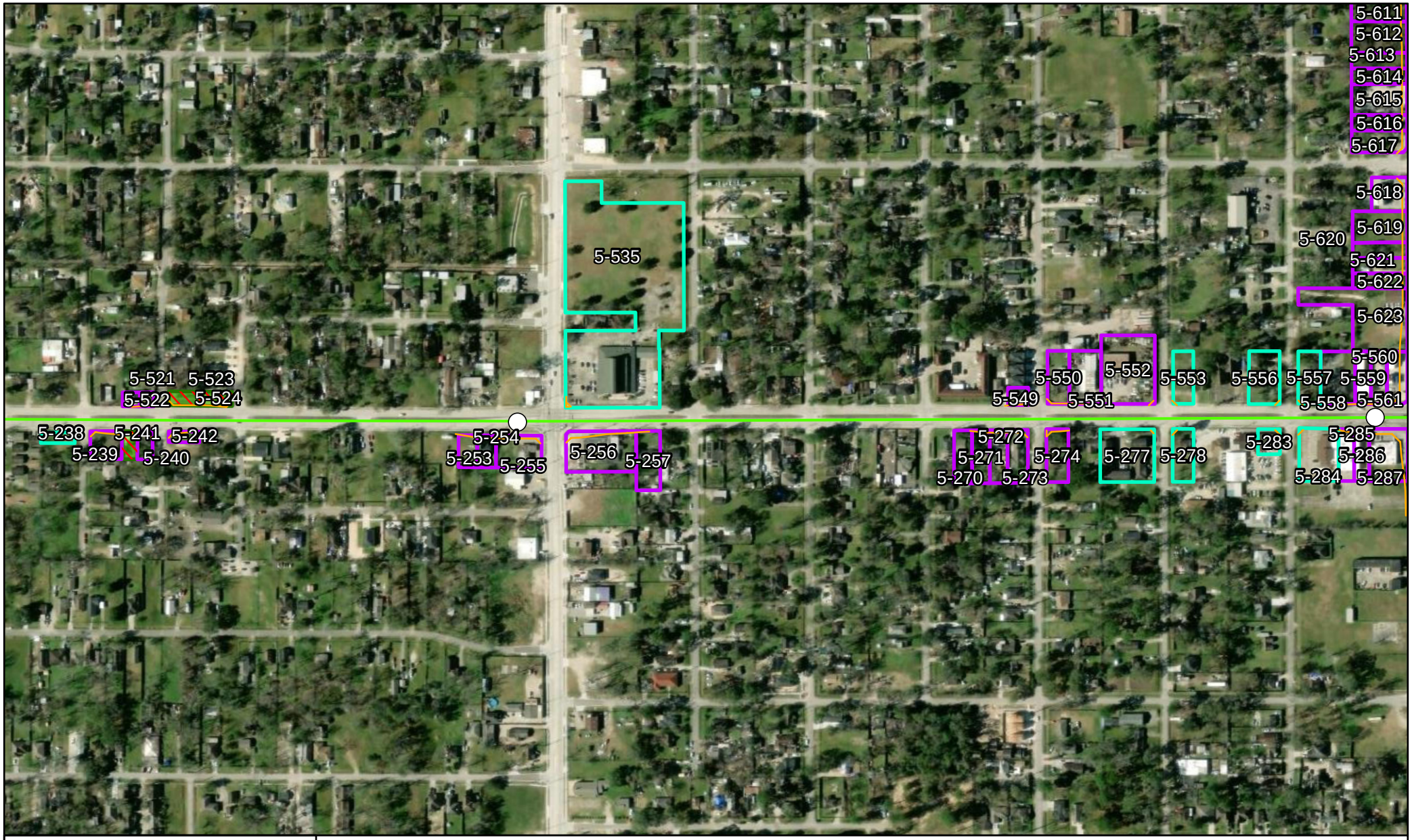

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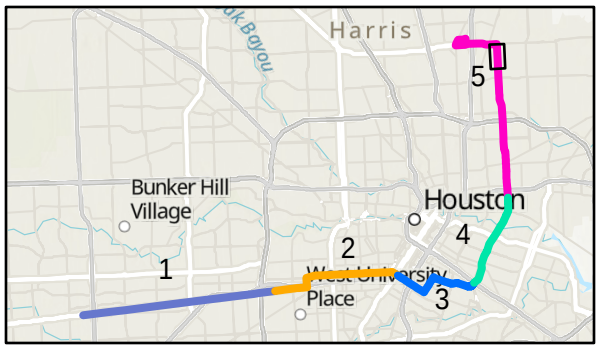



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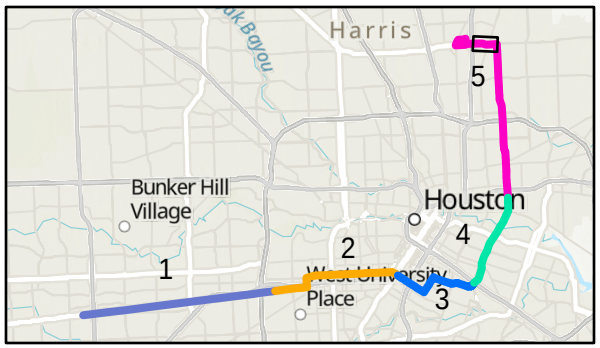

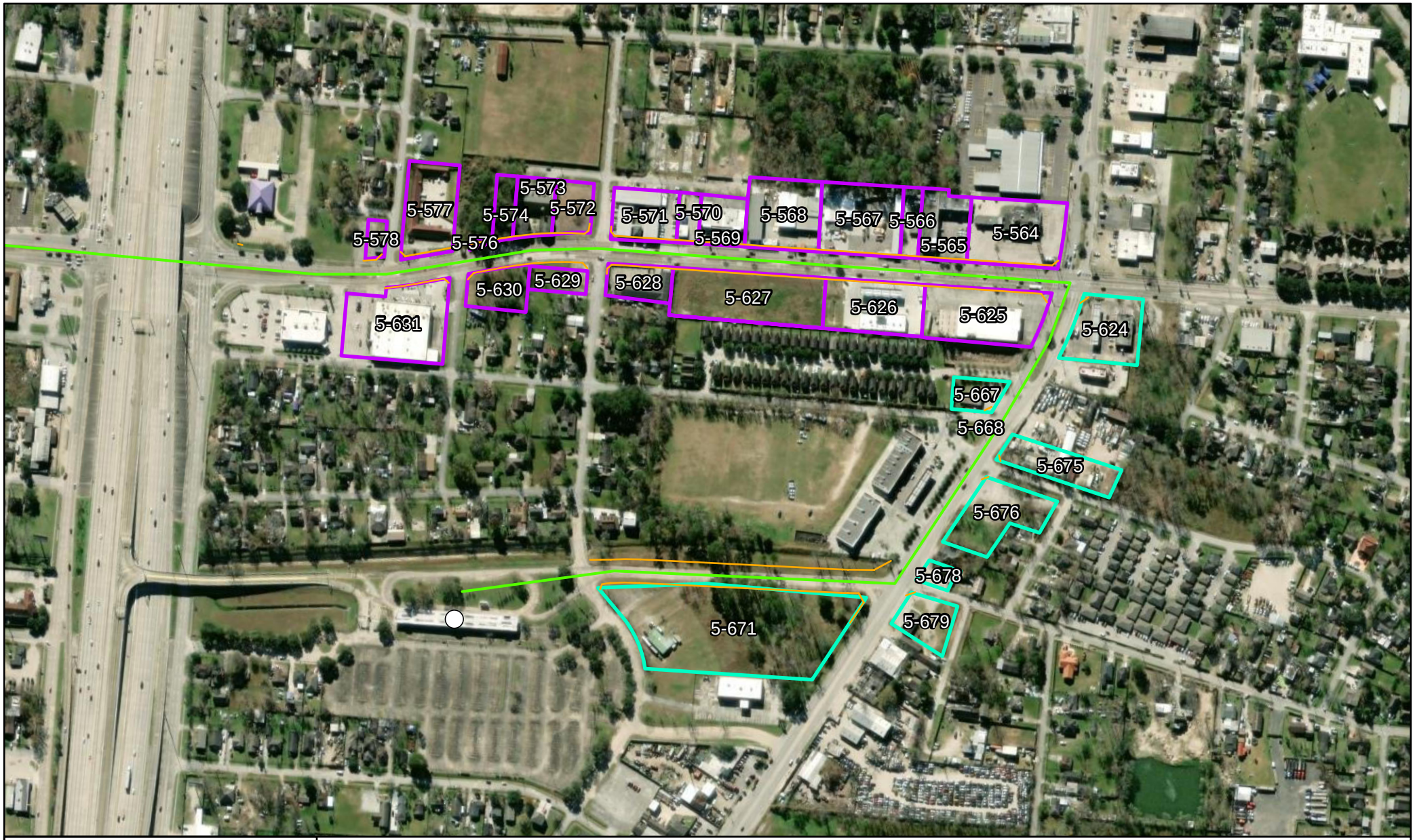

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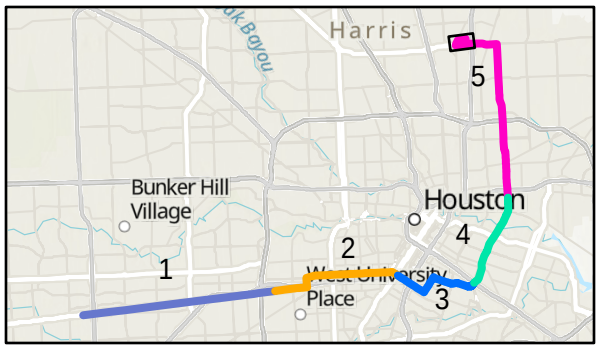

Appendix D

Public Involvement Information

Table D-1: Public Involvement Conducted to Date

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
1	6/1/2021	TIRZ 27	METRORapid University Corridor Project Introduction	Virtual	Project Briefing	
2	6/1/2021	South Main Alliance	METRORapid University Corridor Project Introduction	Virtual	Project Briefing	
3	6/2/2021	Midtown Management District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	
4	6/3/2021	Uptown District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77056
5	6/4/2021	Emancipation Economic Development Council	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77003
6	6/7/2021	Southwest and St. George Place Management Districts	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77257
7	6/8/2021	Upper Kirby District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	
8	6/8/2021	St. George Place Management District	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77257
9	6/9/2021	Eldridge/West Oaks Super Neighborhood Council	Super Neighborhood Council Meeting	Virtual	Project Briefing / Update	77077
10	6/10/2021	Southwest Houston TIRZ 20	Southwest Houston TIRZ 20 Board Meeting	Virtual	Project Briefing / Update	77227
11	6/11/2021	University of Houston	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77204
12	6/14/2021	Fifth Ward Community Redevelopment Corporation	Fifth Ward Community Redevelopment Corporation	Virtual	Project Briefing / Update	77020
13	6/23/2021	Houston First	Houston First	Virtual	Project Briefing / Update	77010
14	6/23/2021	University of St. Thomas	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77006
15	6/23/2021	OST/South Union GO Neighborhood	Strollin' and Rollin' Committee Meeting	Virtual	Project Briefing / Update	77007

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
16	6/24/2021	Houston West Chamber of Commerce	Government Affairs Committee Meeting-Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
17	6/24/2021	Texas Southern University	METRORapid University Corridor Project Introduction	Virtual	Project Briefing / Update	77004
18	7/7/2021	5th Ward Super Neighborhood #55	5th Ward Super Neighborhood #55 Monthly Meeting	Virtual	Project Briefing / Update	77020
19	7/8/2021	Spring Branch Super Neighborhood Council - Central	Super Neighborhood Council 85 Meeting	VFW Post 8790	Project Update / Distributed project fact sheets/brochures	77055
20	7/12/2021	East Aldine Management District	East Aldine Mobility & Environmental Design Committee Meeting	Virtual	Project Briefing / Update	77039
21	7/19/2021	Gulfton Super Neighborhood Council	Gulfton Super Neighborhood Council Meeting	Virtual	Project Briefing / Update	77081
22	7/20/2021	Complete Streets Coalition	Monthly Steering Committee Meeting	Virtual	Project Briefing / Update	
23	7/26/2021	Little York/Homestead Super Neighborhood #47	Monthly Meeting	Virtual	Project Briefing / Update	77016
24	7/29/2021	Young Professionals in Transportation	METRORapid Tour and Membership Happy Hour		Project Briefing / Update	77054
25	7/29/2021	Eastex/Jensen Super Neighborhood #46	Monthly Meeting	Virtual	Project Briefing / Update	77093
26	8/6/2021	East End Chamber of Commerce	Staff Leadership Meeting	Virtual	Project Briefing / Update	77020
27	8/6/2021	Greater Northeast Coalition of Civic Clubs	Monthly Meeting	Virtual	Project Briefing / Update	77047
28	8/10/2021	St. George Place TIRZ #1	TIRZ Board Monthly Meeting	Virtual	Project Briefing / Update	77027
29	8/14/2021	Willow Fork Drainage District	Central Green Park - Back to School Glow Party Event	Central Green at La Centerra	Table / Tent Display	77494

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
30	8/23/2021	Southwest Management District	Southwest Management District Board Meeting	Virtual	Project Briefing / Update	77036
31	8/26/2021	Houston West Chamber of Commerce	Government Affairs Committee Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
32	9/1/2021	Katy Chamber of Commerce	B2B Business Expo	Embassy Suites by Hilton Houston West - Katy	Table / Tent Display	77094
33	9/13/2021	Southwest Management District	Business and Economic Development Committee Meeting	Virtual	Project Briefing / Update	77036
34	9/14/2021	Greenway Plaza	Greenway Plaza Tenants Meeting	Virtual	Project Briefing / Update	77046
35	9/15/2021	LGBT Chamber of Commerce	Fireside Chat with METRO	Virtual	Project Briefing / Update	77004
36	9/16/2021	Southeast Management District	Southeast Management District Monthly Meeting	Virtual	Project Briefing / Update	77004
37	9/16/2021	Houston Southeast	METRORapid University Project Update Meeting	Virtual	Project Briefing / Update	77004
38	9/18/2021	Willow Fork Drainage District	Hispanic Heritage Festival	Central Green at La Centerra	Table / Tent Display	77494
39	9/22/2021	Greater Northeast Coalition of Civic Clubs	Monthly Meeting	Youth Development Center	Project Briefing / Update	77016
40	10/5/2021	5th Ward SN # 55	5th Ward National Night Out	5th Ward Multi-Service Center	Table / Tent Display	77020
41	10/6/2021	Houston Bikeways Program	Cavalcade-Homestead Healthy Connections Corridor Public Meeting	Virtual	Table / Tent Display	77002
42	10/8/2021	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
43	10/13/2021	Southwest Management District	Southwest Management District Environmental and Urban Design Committee Meeting	Virtual	Project Briefing / Update	77036
44	10/14/2021	Southwest Houston TIRZ 20	Southwest Houston TIRZ 20 Board Meeting	Virtual	Project Briefing / Update	77227
45	10/29/2021	Young Professionals in Transportation	Annual Light Rail Pub Crawl	Downtown Area	Project Briefing / Update	77002
46	10/31/2021	Houston Texans	Rams @ Texans Home Game	NRG Stadium	Table / Tent Display	77054
47	11/5/2021	University of Houston	UH BRT Task Force Follow Up Meeting	Virtual	Project Briefing / Update	77204
48	11/30/2021	Houston Area Management Districts / TIRZs	METRORapid University Corridor Project Introduction	Virtual	Public Meeting	
49	12/5/2021	Houston Texans	Colts @ Texans Home Game	NRG Stadium	Table / Tent Display / Bus	77054
50	12/12/2021	Houston Texans	Seahawks @ Texans Home Game	NRG Stadium	Table / Tent Display / Bus	77054
51	12/12/2021	City of Houston	Sunday Streets Festival	Levy Park	Table / Tent Display	77098
52	2/5/2022	Chinese Community Center	Chinese Community Center 2022 Lunar New Year	Chinese Community Center	Table / Tent Display	77036
53	2/5/2022	Lunar New Year Houston	Viet Hoa 2022 Lunar New Year	Viet Hoa International Center	Table / Tent Display	77072
54	2/8/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
55	2/24/2022	Houston West Chamber of Commerce	Government Affairs Committee Luncheon	The Capital Grille	Presentation	77024
56	2/28/2022	Tech Rodeo	Panel Presentation	WeWork	Table / Tent Display	77002
57	2/28/2022-3/20/2022	Houston Livestock Show & Rodeo	METRO-Rodeo Information Booth	NRG Stadium	Table / Tent Display	77054
58	3/7/2022	Third Ward on Tap	Third Ward on Tap Community Meeting	Virtual	Table / Tent Display	77004
59	3/21/2022	City of Houston	Kashmere Gardens Multi-Service Center Senior Club	Kashmere Gardens	Project Briefing / Update	77026

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Multi-Service Center		
60	3/29/2022	Wheeler Transit Center Area Stakeholders	Wheeler Transit Center Stakeholder Meeting	Virtual	Project Briefing / Update	77002
61	3/29/2022	Trinity/Houston Gardens Super Neighborhood # 48	Monthly Meeting	Virtual	Project Briefing / Update	77028
62	4/4/2022	Eastwood Civic Association	Eastwood Civic Association Meeting	Virtual	Project Briefing / Update	77011
63	4/8/2022	The Ion	Wheeler Transit Center Meeting	The Ion	Project Briefing / Update	77002
64	4/9/2022	Fifth Ward Community Redevelopment Corporation	Lyons Avenue Renaissance Festival	Lyons Avenue	Table / Tent Display	77020
65	4/10/2022	Citizens' Environmental Coalition	Green Mountain Energy presents Earth Day at Discovery Green	Discovery Green	Table / Tent Display	77010
66	4/11/2022	Verde Forest Section II Civic Club	Civic Club Meeting	Grace Cathedral Church	Table / Tent Display	77078
67	4/21/2022	Raindrop Foundation	Neighborhood Iftar Dinner Event	Turquoise Center	Distributed project fact sheets/brochures	77031
68	4/23/2022	Spring Branch ISD & Spring Branch Foundation	Super Saturday-Unity in the Community	Darrell Tully Stadium Complex	Table / Tent Display	77079
69	4/25/2022	Indo-America Chamber of Commerce Greater Houston	Shell USA Distinguished Lecture Series - METRONext	Hilton America	Table / Tent Display	77010
70	4/25/2022	Memorial Super Neighborhood Council 16	Super Neighborhood Council 16 Monthly Meeting	Republic Square Building	Distributed project fact sheets/brochures	77079
71	4/26/2022	District A - Council Member Amy Peck	District CIP/Redistricting Public Meeting	Trini Mendenhall Community Center	Table / Tent Display	77055

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
72	4/28/2022	Houston Texans	Houston Texans Draft Day Party	Miller Outdoor Theater	Table / Tent Display	77030
73	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Judson Robinson Sr. Community Center	Table / Tent Display	77029
74	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Northside High School	Table / Tent Display	77009
75	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	Acres Homes Multi Service Center	Table / Tent Display	77091
76	5/3/2022	METRO	METRO Universal Accessibility 2,500 Bus Stop Completion Media and Community Event	The Alliance for Multicultural Community Services	Table / Tent Display	77081
77	5/3/2022	Indo-American Chamber of Commerce Greater Houston	Women Mean Business Chamber Event	Junior League of Houston	Distributed project fact sheets/brochures	77027
78	5/20/2022	Houston Astros	Rangers @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
79	5/21/2022	Houston Parks Board	Houston Parks Board Art Bike Parade	MacGregor Park	Table / Tent Display	77004
80	5/21/2022	Grace Cathedral Church	Rebuilding the Bridge Between Church and Community	Grace Cathedral Church	Project Briefing / Update	77028
81	5/22/2022	Houston Astros	Rangers @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
82	5/24/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
83	6/1/2022	Emancipation Park Conservancy	Emancipation Park Back to School Fair	Emancipation Park Conservancy Community Center	Distributed project fact sheets/brochures	77004
84	6/6/2022	Eastwood Civic Association	Eastwood Civic Association Meeting	Virtual	Public Meeting / Presentation	77261
85	6/6/2022	Second Ward Super Neighborhood #63	Second Ward Super Neighborhood #63 Meeting	Virtual	Public Meeting / Presentation	77011
86	6/7/2022	East Lawndale Civic Club	East Lawndale Civic Club Meeting	Magnolia Multi-Service Center	Public Meeting / Presentation	77011
87	6/7/2022	Park Place Civic Club	Park Place Civic Club Meeting	Charlton Park Community Center	Public Meeting / Presentation	77017
88	6/8/2022	Greater Southeast Management District	Southeast Management District Board Meeting	Virtual	Project Briefing / Update	77004
89	6/9/2022	Katy Chamber of Commerce	Katy Area Infrastructure Summit	Embassy Suites by Hilton Houston West - Katy	Table / Tent Display	77094
90	6/9/2022	Northern Third Ward Implementation Project	Northern Third Ward Steering Committee Meeting	Virtual	Presentation	77004
91	6/11/2022	HISD Wraparound Services	East End Community Resource Fair	Evangelical Lutheran Church of the Redeemer	Table / Tent Display	77023
92	6/13/2022	Westchase Management District	Board of Directors Meeting	Westchase Hilton	Project Briefing / Update	77042

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93	6/18/2022	Emancipation Park Conservancy	Emancipation Park 150th Juneteenth Celebration	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
94	6/21/2022	Katy Area Economic Development Council	Katy Area Economic Development Council General Assembly Meeting	Embassy Suites by Hilton Houston West - Katy	Distributed project fact sheets/brochures	77094
95	6/21/2022	Houston Astros	Mets @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
96	6/25/2022	PRIDE Houston	PRIDE Festival	City Hall	Table / Tent Display / Discover Bus	77002
97	6/27/2022	Greater Southeast Management District	1:1 Stakeholder Meeting	Virtual	Project Briefing / Update	77004
98	6/28/2022	Upper Kirby Management District	Stakeholder Meeting	Virtual	Project Briefing / Update	
99	6/30/2022	Houston Astros	Yankees @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
100	7/1/2022	Houston Astros	Angels @ Astros Home Game	Minute Maid Park	Table / Tent Display	77002
101	7/3/2022	Southwest Management District	Liberty Fest	PlazAmericas Mall	Table / Tent Display	77036
102	7/4/2022	City of Houston	Shell Freedom Over Texas 4th of July Celebration	Eleanor Tinsley Park	Table / Tent Display	77019
103	7/7/2022	University of Houston	1:1 Stakeholder Meeting	Virtual	Project Briefing / Update	
104	7/7/2022	Houston Management Districts/TIRZs	METRORapid University Project Update	Virtual	Project Briefing / Update	77227
105	7/8/2022	University of Houston	METRO / UH Task Force Stakeholder Meeting	Virtual	Project Briefing / Update	77204

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106	7/12/2022	METRO	METRORapid University Public Meeting	Chinese Community Center	Public Meeting	77036
107	7/12/2022	METRO	METRORapid University Public Meeting	Emancipation Park Conservancy Community Center	Public Meeting	77004
108	7/13/2022	METRO	METRORapid University Public Meeting	BakerRipley - Ripley House	Public Meeting	77011
109	7/13/2022	METRO	METRORapid University Public Meeting	DoubleTree by Hilton Houston - Greenway Plaza	Public Meeting	77046
110	7/14/2022	West Houston Association	Regional Mobility - Future of Transit	Embassy Suites by Hilton Houston Energy Corridor	Distributed project fact sheets/brochures	77079
111	7/14/2022	METRO	METRORapid University Public Meeting	Wisdom High School Auditorium	Public Meeting	77057
112	7/14/2022	METRO	METRORapid University Public Meeting (Spanish)	Houston Community College - Felix Fraga Campus	Public Meeting	77011

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113	7/16/2022	METRO	METRORapid University Public Meeting	Julia C. Hester House	Public Meeting	77020
114	7/18/2022	METRO	METRORapid University Public Meeting	Third Ward Multi-Service Center	Public Meeting	77004
115	7/18/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Briefing / Update	77011
116	7/19/2022	Complete Street Coalition	Complete Street Coalition Steering Committee Meeting	Virtual	Project Briefing / Update	
117	7/19/2022	Idylwood Civic Club	Idylwood Civic Club Meeting	Harris County Raul C Martinez Courthouse Annex	Project Briefing / Update	77011
118	7/20/2022	CMAA - Houston Chapter	Future of City Transit Changing Trends - Innovative Strategies	La Griglia	Table / Tent Display	77019
119	7/20/2022	University of Houston	METRO / UH Task Force Planning Meeting	Virtual	Project Briefing / Update	77204
120	7/20/2022	Settegast/East Houston Super Neighborhood #49/50	Super Neighborhood Council 49/50 Monthly Meeting	Virtual	Project Briefing / Update	77028
121	7/20/2022	METRO	METRORapid University Public Meeting	Houston Community College – Central Campus	Public Meeting	77004
122	7/21/2022	METRO	METRORapid University Public Meeting	Northeast Multi-Service Center	Public Meeting	77016
123	7/25/2022	METRO	METRORapid University Public Meeting (Virtual)	Virtual	Public Meeting	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
124	7/26/2022	Neartown Association	Neartown Association Meeting	Virtual	Project Briefing / Update	77266
125	7/27/2022	METRO	METROLift Community Leaders Quarterly Update	Virtual	Project Briefing / Update	
126	8/1/2022	Second Ward Super Neighborhood #64	Community Stakeholder Meeting	BakerRipley - Ripley House	Project Briefing / Update	77011
127	8/2/2022	Harris County Constable Pct. 6 Sylvia Trevino	National Night Out Event	Harris County Constable Precinct 6	Table / Tent Display / Bus	77011
128	8/3/2022	Harris Health	LBJ Hospital Advisory Council Meeting	Virtual	Project Briefing / Update	77026
129	8/5/2022	Harris County Precinct One	Bright Futures Fair	NRG Stadium	Table / Tent Display	77054
130	8/8/2022		METRORapid University Public Meeting		Public Meeting	77020
131	8/8/2022	University of Houston	UH/METRO Traffic Data Coordination	Virtual	Stakeholder Coordination	77204
132	8/8/2022	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
133	8/9/2022	Oaklawn/Fullerton Civic Club	Meeting Notification Distribution	Segment 4 Area	Distributed meeting notices	77011
134	8/9/2022	West I-10 Chamber of Commerce	Chamber of Commerce General Membership Luncheon	The Hangar Unity Center	Table / Tent Display	77423
135	8/10/2022	South Main Alliance	South Main Alliance	Museum of Fine Arts	Project Briefing / Update	77004
136	8/10/2022	Eastwood Civic Club	Community Stakeholder Meeting	METRO Headquarters	Project Briefing / Update	77002
137	8/10/2022	Greater Eastwood/Lawndale/Wayside Super Neighborhood	Greater Eastwood/Lawndale/Wayside Super Neighborhood Meeting	Virtual	Project Briefing / Update	77011
138	8/11/2022	Houston Womens Chamber of Commerce	CDC Integrated Services - Anticipating Mitigating Conflict in the Workplace	Harold's Restaurant	Distributed project fact sheets/brochures	77008
139	8/13/2022	Holland Middle School	Back to School Fair	Holland Middle School	Table / Tent Display	77029

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
140	8/15/2022	Oaklawn/Fullerton Civic Club	METRORapid University Corridor Project Update	La Voz del Salvador Church	Project Briefing / Update	77011
141	8/16/2022	Settegast/East Houston Super Neighborhood #49/50	Super Neighborhood Council 49/50 Monthly Meeting	Virtual	Project Briefing / Update	77028
142	8/16/2022	Idylwood Civic Club	METRORapid University Corridor Project Update	Harris County Raul C Martinez Courthouse Annex	Project Briefing / Update	77011
143	8/19/2022	Houston Police Department	South Central Division Back to School Fest	Jack Yates High School	Table / Tent Display	77004
144	8/20/2022	City of Houston Parks Department	Emancipation Park Back to School Fair	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
145	9/1/2022	University of Houston	UH / METRO Traffic Signal Coordination Meeting	Virtual	Stakeholder Coordination	77204
146	9/8/2022	South Main Alliance	South Main Alliance Meeting	TMC Board Room	Project Briefing / Update	77098
147	9/14/2022	East End District	East End District Rail Safety and Mobility Taskforce Meeting	Virtual	Project Briefing / Update	77003
148	9/15/2022	QUE ONDA! Magazine-Houston	Que Onda Hispanic Heritage Event	The Ion	Table / Tent Display	77002
149	9/15/2022	Greater Third Ward Super Neighborhood Council #67	Greater Third Ward Super Neighborhood #67 Meeting	Virtual	Project Briefing / Update	77004
150	9/19/2022	Houston Police Department	Houston Police Department Positive Interaction Program Meeting	Eastside Police Station	Project Briefing / Update	77012

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
151	9/19/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Briefing / Update	77011
	9/20/2022	Harris County Commissioner Rodney Ellis Staff	Elected Official Office		Project Briefing / Update	
152	9/20/2022	Greater Houston Complete Street Coalition	Complete Street Coalition Monthly Meeting	Virtual	Project Briefing / Update	
153	9/20/2022	Clinton Park/Tri-Community Super Neighborhood Council	Clinton Park/Tri-Community Super Neighborhood Council Meeting	Clinton Park	Project Briefing / Update	77029
154	9/21/2022	Council Member Edward Pollard	Elected Official Office		Project Briefing / Update	
155	9/21/2022	Southeast Management District	Strategic Partnership Discussion	Virtual	Project Briefing / Update	77004
156	9/22/2022	Houston West Chamber of Commerce	Transportation Infrastructure - Electric vs Gas Vehicles - Luncheon	Truluck's Seafood Restaurant	Distributed project fact sheets/brochures	77056
157	9/24/2022	Katy Economic Development Council - METRO PE	Katy Area Networking Night	METRO Grand Parkway P&R	Project Briefing / Update	77449
158	9/26/2022	Asiatown Community/Business Leaders	METRORapid Segment 1 Briefing	1900 Main	Project Briefing / Update	77002
159	9/27/2022	Emancipation Economic Development Council	General Body Meeting	Virtual	Project Briefing / Update	77004
160	9/27/2022	Houston Country Club Estates Civic Club	Houston Country Club Estates Civic Club Meeting	Evangelical Lutheran Church Of The Redeemer	Project Update / Distributed project fact sheets/brochures	77023
161	10/1/2022	Nigeran Cultural Parade and Festival	Nigerian Cultural Parade and Festival	Root Square	Table / Tent Display	77002

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
162	10/3/2022	Second Ward Super Neighborhood Association	Second Ward Super Neighborhood Association Meeting	BakerRipley - Ripley House	Project Briefing / Update	77011
163	10/4/2022	Park Place Civic Club	Park Place Civic Club National Night Out	Charlton Park Community Center	Distributed project fact sheets/brochures	77017
164	10/4/2022	Magnolia Park Civic Club	Magnolia Park Civic Club National Night Out	Community Family Centers	Distributed project fact sheets/brochures	77012
165	10/4/2022	Eastwood Civic Club	Eastwood Civic Association National Night Out	Esplanade at intersection of Park Drive & Woodside St.	Distributed project fact sheets/brochures	77023
166	10/4/2022	Houston Country Club Place Civic Club	Houston Country Club Place Civic Club National Night Out	Neighborhood Resident	Distributed project fact sheets/brochures	77023
167	10/6/2022	University of Houston	UH / METRO BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
168	10/8/2022	Greens Bayou Coalition	Greens Bayou Regatta	Thomas Bell Foster Park	Table / Tent Display	77015
169	10/9/2022	Greens Bayou Coalition	Greens Bayou Regatta	Brock Park	Table / Tent Display	77044
170	10/11/2022	Third Ward is Our Home	Third Ward is Home Civic Club	Virtual	Project Briefing / Update	77004
171	10/11/2022	Briarmeadow HOA	Civic Association / HOA Meeting	Briarmeadow Club House	Project Briefing / Update	77063
172	10/12/2022	East End District	Rail Safety Taskforce Committee Meeting	Virtual	Project Briefing / Update	77003
173	10/15/2022	New Bethlehem Missionary Baptist Church	Jensen Jubilee	Shady Lane Park	Table / Tent Display / Bus Display	77093
174	10/15/2022	Emancipation Park Conservancy	Emancipation Park Conservancy presents Healthy Communities: Senior Day	Emancipation Park Conservancy	Table / Tent Display	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Community Center		
175	10/16/2022	Our Lady of Guadalupe Catholic Church	Our Lady of Guadalupe Catholic Church Fall Festival	Our Lady of Guadalupe Catholic Church	Table / Tent Display	77003
176	10/17/2022	State Representative Gene Wu	Elected Official Office		Project Briefing / Update	
177	10/17/2022	Council Member Abbie Kamin	Elected Official Office		Project Briefing / Update	
178	10/17/2022	Brookdale Memorial City Management	Brookdale Memorial City Senior Community Lunch & Tour	Memorial City Resident Center	Project Update / Distributed project fact sheets/brochures	77024
179	10/17/2022	St. George Place Civic Association	St. George Place Civic Association Monthly Meeting	St. George Place School	Table / Tent Display	77056
180	10/17/2022	Oaklawn/Fullerton Civic Club	Oaklawn/Fullerton Civic Club Meeting	La Voz del Salvador Church	Project Update / Distributed project fact sheets/brochures	77011
181	10/18/2022	Emerson Pines Senior Community	Emerson Pines Seniors - How to Ride Event	Emerson Pines Senior Community Center	Table / Tent Display	77080
182	10/18/2022	American Society of Civil Engineers - Houston Branch	Membership Luncheon	Marriott Westchase	Table / Tent Display	77042
183	10/19/2022	Harris County Commissioner Jack Cagle Staff	Elected Official Office		Project Briefing / Update	
184	10/20/2022	East End Chamber of Commerce	Port of Houston Appreciation Business Expo & Luncheon	Marriott South at Hobby Airport	Table / Tent Display	77017
185	10/20/2022	Greater Third Ward Super Neighborhood 67	Greater Third Ward Super Neighborhood 67 Meeting	Virtual	Project Briefing / Update	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
186	10/21/2022	Houston Police Department South Central Division	HPD South Central Division Spooktacular Event	HPD South Central Station	Table / Tent Display	77003
187	10/22/2022	Buffalo Bayou Partnership	Buffalo Bayou Partnership 15th Annual KBR Kids Day	Tony Marron Park	Table / Tent Display	77003
188	10/24/2022	Westchase Management District	Management District Board Meeting	Millennium Towers	Project Briefing / Update	77042
189	10/24/2022	Memorial SNC #16	Super Neighborhood Council Meeting	Nottingham Forest Club	Project Update / Distributed project fact sheets/brochures	77079
190	10/25/2022	Council Member Mary Nan Huffman Staff	Elected Official Office		Project Briefing / Update	
191	10/25/2022	State Representative Armando Walle	Elected Official Office		Project Briefing / Update	
192	10/25/2022	Council Member Tiffany Thomas	Elected Official Office		Project Briefing / Update	
193	10/26/2022	State Representative Mary Ann Perez	Elected Official Office		Project Briefing / Update	
194	10/29/2022	Magnolia Park Dia de los Muertos	Magnolia Park Dia de los Muertos Parade & Festival	Hidalgo Park	Table / Tent Display	77011
195	10/29/2022	Second Mt. Olive Baptist Church	Fall Harvest Festival	Second Mt. Olive Baptist Church	Table / Tent Display	77026
196	11/1/2022	Third Ward Community Cloth	Third Ward Community Cloth Cooperative General Meeting	Virtual	Project Briefing / Update	77004
197	11/4/2022	Houston West Chamber of Commerce	Salute to Veterans Luncheon	West Houston Institute	Table / Tent Display	77082
198	11/5/2022	Tech Fest Live	Tech Fest Live	The Ion	Table / Tent Display	77002
199	11/8/2022	State Senator John Whitmire Staff	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
200	11/8/2022	West I-10 Chamber of Commerce	West I10 Monthly Membership Luncheon	Midway BBQ	Table / Tent Display	77423
201	11/9/2022	Greater Southeast Management District	Greater Southeast Management District Meeting	Virtual	Project Briefing / Update	77004
202	11/10/2022	University of Houston	METRO / UH BRT Task Force	Virtual	Project Briefing / Update	77204
203	11/12/2022	Harris County Pct. 1	From Boys to Men Health Expo	Finnigan Park	Table / Tent Display	77020
204	11/19/2022	Second Mt. Olive Baptist Church	Second Mt. Olive Missionary Baptist Church Senior Luncheon	Mt. Olive Missionary Baptist Church	Project Briefing / Update	77026
205	11/24/2022	Uptown Management District	34th Annual Uptown Holiday Lighting	Post Oak Blvd.-btwn Westheimer & San Felipe	Table / Tent Display	77056
206	12/2/2022	Greater Houston Coalition of Complete Streets	2nd Annual Energy Corridor	Virtual	Project Briefing / Update	77079
207	12/6/2022	Third Ward Community Cloth Collaborative	Third Ward Community Cloth General Meeting	Virtual	Project Briefing / Update	77004
208	12/8/2022	METRO	Segment 3 Neighborhood Walk with City of Houston	Third Ward Area-Emancipation and Blodgett	Project Briefing / Update	77004
209	12/8/2022	City of Houston Council District D	District D Community Townhall - Bike Lanes	Pilgrim Congressional United Church	Project Briefing / Update	77004
210	12/9/2022	City of Houston Office of Complete Communities	Stakeholder Coordination Meeting (Segment 3)	Virtual	Project Briefing / Update	77004

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
211	12/10/2022	Emancipation Park Conservancy	Holiday in the TRE	Emancipation Park Conservancy Community Center	Table / Tent Display	77004
212	12/12/2022	State Representative Christina Morales	Elected Official Office		Project Briefing / Update	
213	12/12/2022	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
214	12/14/2022	State Senator Carol Alvarado	Elected Official Office		Project Briefing / Update	
215	12/14/2022	Houston-Galveston Area Council	H-GAC Freight and Technology Peer Exchange	E.B. Cape Center	Project Briefing / Update	77023
216	12/14/2022	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
217	12/14/2022	Greenway Plaza	Greenway Plaza Tenants Meeting	Virtual	Project Update / Distributed project fact sheets/brochures	77046
218	12/14/2022	East End District	Rail Safety Task Force Meeting	Virtual	Project Briefing / Update	77003
219	12/19/2022	Greater Houston Coalition of Complete Streets	Steering Committee Sidewalk Audit Meeting	Virtual	Project Briefing / Update	77002
220	12/20/2022	Council Member Dr. Carolyn Evans-Shabazz	Elected Official Office		Project Briefing / Update	
221	1/4/2023	5th Ward Super Neighborhood #55	5th Ward Super Neighborhood #55 Meeting	Virtual	Project Briefing / Update	77020
222	1/9/2023	Greater Houston Coalition of Complete Streets	Steering Committee Sidewalk Audit Meeting (UH)	Virtual	Project Briefing / Update	77002
223	1/10/2023	Third Ward Community Cloth Cooperative	Third Ward Community Cloth General Meeting	Virtual	Project Briefing / Update	77004
224	1/11/2023	North Houston Association	NHA Regional Transportation Panel Discussion	CityPlace Marriott at	Project Briefing / Update	77014

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
				Springwood Village		
225	1/11/2023	Eldridge/West Oaks SNC 17	Monthly Meeting	Eagle's Trace Senior Living Community	Project Update / Distributed project fact sheets/brochures	77077
226	1/16/2023	Black Heritage Society	MLK Day Parade and Festival	Tranquility Park	Table / Tent Display	77060
227	1/19/2023	Third Ward Super Neighborhood	Third Ward Super Neighborhood General Council Meeting	Third Ward Multi-Service Center	Project Briefing / Update	77004
228	1/19/2023	Houston Police Department	Westside Divisional PIP Meeting	HPD Westside Station	Distributed project fact sheets/brochures	77082
229	1/21/2023	Chinese Community Center	Lunar New Year	Chinese Community Center	Table / Tent Display	77036
230	1/23/2023	Harris County Commissioner Lesley Briones	Elected Official Office		Project Briefing / Update	
231	1/26/2023	Heatherbrook Apartments	Start Here Succeed Here Residents Event	Heatherbrook Apartments	Table / Tent Display	77093
232	1/28/2023	Lunar New Year Houston	Lunar New Year at Viet Hoa	Viet Hoa International Center	Table / Tent Display	77072
233	1/29/2023	Lunar New Year Houston	Lunar New Year at Viet Hoa	Viet Hoa International Center	Table / Tent Display	77072
234	1/31/2023	Greater Houston Coalition of Complete Streets	Sidewalk Audit Planning Committee Meeting	Virtual	Project Briefing / Update	77002
235	2/1/2023	Uptown District	University / Gulfton BRT Briefing	Virtual	Project Briefing / Update	77056

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
236	2/2/2023	University of Houston	UH Student Fare Discussion	Virtual	Stakeholder Coordination	77204
237	2/2/2023	Spring Branch Central Super Neighborhood Council	Monthly Meeting	VFW Post 8790	Project Update / Distributed project fact sheets/brochures	77055
238	2/3/2023	Houston West Chamber of Commerce	West Houston Business Summit	Norris Conference Center	Project Briefing / Update	77024
239	2/8/2023	Harris County Commissioner Adrian Garcia	Elected Official Office		Project Briefing / Update	
240	2/8/2023	South Main Alliance	South Main Alliance Meeting	Virtual	Project Briefing / Update	77277
241	2/8/2023	Eldridge/West Oaks SNC 17	SNC 17 Monthly Meeting	Eagle's Trace Senior Living Community	Project Update / Distributed project fact sheets/brochures	77077
242	2/9/2023	METRO	METRORapid Gulfton Corridor Public Meeting	BakerRipley - Gulfton Sharpstown Campus	Table / Tent Display	77074
243	2/13/2023	State Representative Senfronia Thompson	Elected Official Office		Project Briefing / Update	
244	2/13/2023	State Representative Harrold Dutton	Elected Official Office		Project Briefing / Update	
245	2/13/2023	State Representative Jolanda Jones	Elected Official Office		Project Briefing / Update	
246	2/15/2023	Council Member Dr. Carolyn Evans-Shabazz	Elected Official Office		Project Briefing / Update	
247	2/15/2023	Kashmere High School	Kashmere High School Parent Meeting	Kashmere High School	Project Briefing / Update	77028
248	2/20/2023	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
249	2/20/2023	State Senator Carol Alvarado	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
250	2/21/2023	Harris County Commissioner Rodney Ellis Staff	Elected Official Office		Project Briefing / Update	
251	2/23/2023	METRO	METRORapid University Corridor Public Meeting	Kashmere Gardens Multi-Service Center	Public Meeting	77026
252	2/25/2023	METRO	METRORapid University Corridor Public Meeting	BakerRipley - Ripley House	Public Meeting	77011
253	2/27/2023	METRO	METRORapid University Corridor Public Meeting	Holiday Inn Crowne Plaza Hotel	Public Meeting	77098
254	2/28/2023	Greater Houston Coalition for Complete Streets	Sidewalk Audit Plan Coordination Meeting	Virtual	Project Briefing / Update	77002
255	3/1/2023	Museum District	Stakeholder Coordination Meeting	1900 Main	Project Briefing / Update	77002
256	3/1/2023	University of Houston	METRO/UH BRT Task Force Meeting	Virtual	Project Briefing / Update	77204
257	3/2/2023	Congresswoman Sylvia Garcia's Staff	Elected Official Office		Project Briefing / Update	
258	3/2/2023	Houston West Chamber of Commerce	Government Affairs Committee Meeting	Virtual	Project Briefing / Update	77042
259	3/3/2023	State Senator Borris Miles	Elected Official Office		Project Briefing / Update	
260	3/3/2023	State Representative Ana Hernandez	Elected Official Office		Project Briefing / Update	
261	3/3/2023		Meeting Notification Distribution	Lockwood between Eastwood Transit Center & 5th Ward/Denver Harbor Transit Center	Distributed meeting notices	77023

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
262	3/4/2023	METRO	METRORapid University Public Meeting	Third Ward Multi-Service Center	Public Meeting	77026
263	3/7/2023	METRO	METRORapid University Public Meeting	Emancipation Park Conservancy Community Center	Public Meeting	77002
264	3/8/2023	METRO	METRORapid University Public Meeting	Houston Community College - Felix Fraga Campus	Public Meeting	77011
265	3/9/2023	METRO	METRORapid University Public Meeting	Chinese Community Center	Public Meeting	77036
266	3/9/2023	Houston Police Department	Northeast Houston Police Department Positive Interaction Program (PIP) Meeting	Northeast Police Station	Project Briefing / Update	77028
267	3/10/2023	State Representative Ann Johnson	Elected Official Office		Project Briefing / Update	
268	3/15/2023	South Main Baptist Church	South Main Baptist/The ION Meeting	South Main Baptist Church	Project Briefing / Update	77002
269	3/21/2023	City of Houston Parks and Recreation Department	Settegast Seniors Group Meeting	Settegast Community Center	Project Briefing / Update	77003
270	3/21/2023	City of Houston CM Gallegos, District I	METRORapid University Community Meeting hosted by CM Gallegos & Eastwood Civic Association	E.B. Cape Center	Project Briefing / Update	77023

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
271	3/21/2023	Greater Houston Complete Streets Coalition	Steering Committee Meeting	Virtual	Project Briefing / Update	
272	3/21/2023	Fontaine/Scenic Woods Civic Club	METRORapid University Public Meeting	Houston Community College - North Forest Campus	Public Meeting	77016
273	3/22/2023	Council Member David Robinson	Elected Official Office		Project Briefing / Update	
274	3/27/2023	Eastwood Civic Association	Community Stakeholder Meeting	METRORail Service & Inspection Facility	Project Briefing / Update	77011
275	3/28/2023	Houston Country Club Place Civic Club	Houston Country Club Place Civic Club Meeting	Evangelical Lutheran Church of the Redeemer	Project Briefing / Update	77023
276	3/30/2023	Eastwood Civic Association	Community Stakeholder Meeting	METRORail Service & Inspection Facility	Project Briefing / Update	77011
277	3/30/2023	Houston Rotary Club	Membership Luncheon	Tonys Restaurant	Project Briefing / Update	77098
278	4/1/2023	Fifth Ward Community Redevelopment Corporation	Lyons Avenue Renaissance Festival	Lyons Avenue	Table / Tent Display / Discover Bus	77020
279	4/3/2023	State Representative Christina Morales	Elected Official Office		Project Briefing / Update	
280	4/3/2023	Congresswoman Sylvia Garcia	Elected Official Office		Project Briefing / Update	
281	4/4/2023	Council Member Mary Nan Huffman	Elected Official Office		Project Briefing / Update	

	Event Date	Host Organization	Event Name	Event Location	Engagement Activity	Event Zip
282	4/4/2023	U.S. Representative Sylvia Garcia, District 29	METRORapid University Community Meeting hosted by U.S. Representative Sylvia Garcia	E.B. Cape Center	Project Briefing / Update	77023
283	4/6/2023	Brays Oaks Management District	Infrastructure Committee Meeting	Virtual	Project Briefing / Update	77096
284	4/6/2023	Leadership Houston	Leadership Houston Annual Luncheon	Junior League of Houston	Brochures	
285	4/7/2023	Houston Hispanic Chamber of Commerce	Annual Luncheon and Business Expo	Hilton Americas Hotel	Table / Booth Display	
286	4/10/2023	South Main Baptist Church	Wheeler Transit Center / City of Houston Meeting	Virtual	Project Briefing / Update	77002
287	4/12/2023	South Main Alliance	Community Stakeholder Meeting	Museum of Natural Science	Project Briefing / Update	77277
288	4/27/2023	Eastex/Jensen Super Neighborhood #46	Monthly Meeting	HTX ART	Project Briefing / Update	77093

APPENDIX C-6 – Hazardous and Contaminated Materials Technical Report

METRORapid University Corridor

Hazardous and Contaminated Materials Technical Report

Technical Memorandum
September 2023

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Acronyms and Abbreviations

ACRONYM	DEFINITION
ADA	Americans with Disabilities Act
ASTM	American Society of Testing and Materials
BRT	Bus Rapid Transit
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Certificate of Completion
DCRP	Drycleaner Remediation Program
ERIS	Environmental Risk Information Services
ESA	Environmental Site Assessment
IOP	Innocent Owner/Operator Program
LPST	Leaking Petroleum Storage Tank
NEPA	National Environmental Policy Act
PCE	Perchloroethylene
REC	Recognized Environmental Condition
ROW	Right-of-way
TCEQ	Texas Commission on Environmental Quality
UPRR	Union Pacific Railroad
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program

1 Introduction

The Metropolitan Transit Authority of Harris County (METRO) has proposed to construct a Bus Rapid Transit (BRT) line along the University Corridor, which extends approximately 26 miles from the Westchase Park & Ride facility in southwest Houston to the Tidwell Transit Center in the northeastern part of the city. Numerous facilities that maintain bulk quantities of hazardous materials on site or generate hazardous waste, or have done so in the past, are located along and in close proximity to the corridor. METRO aims to minimize potential legal liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) associated with owning, and human health and safety risks associated with constructing and operating transit facilities on, property that may have been impacted by hazardous materials released by activities on adjacent properties. To aid METRO in its decision-making process as the Project develops, HNTB, Inc., has contracted with AmaTerra Environmental, Inc. (AmaTerra) to evaluate risks to the Project posed by the presence of hazardous materials sites. The purpose of these studies is address potential impacts of the Project related to hazardous materials, as part of the Categorical Exclusion addressing over Project impacts performed pursuant to the National Environmental Policy Act (NEPA).

In July 2021, AmaTerra submitted a Hazardous Materials Report that evaluated registered hazardous materials sites adjacent to the Project corridor. At the time, the design phase was incomplete, so it was unknown from which hazardous materials sites new right-of-way (ROW) might be acquired or on or adjacent to which construction might be required. The sites were found through a database search obtained from a commercial vendor and found 275 adjacent properties listed in the various databases searched. Of these sites, however, 150 were eliminated from further consideration due to the database(s) in which they were listed or specific information in their listings. Such site listings included the following:

- Listings related to air permits or releases
- Listings unrelated to hazardous materials (e.g., stormwater permits or similar)
- Listings whose registered addresses and locations were found to be corporate offices rather than locations at which hazardous materials were managed
- Notices of Violations, Corrective Actions, or enforcement actions taken in response to violations unrelated to hazardous materials releases, such as recordkeeping, testing, maintenance, training, etc.
- Listings from the Facility Index System (also known as the Facility Registration System) database unless the listing relates to a potential release of hazardous materials and the facility is not otherwise listed in a relevant database. This database only identifies facilities listed in other databases, and as such serves essentially as a "list of listings." It provides little detail about any specific facility apart from the type of activity that resulted in its listing.
- Drycleaners that serve(d) only as a drop station, with no actual drycleaning operations at the listed facility
- Spills or other emergency response incidents that did not involve soil or groundwater contamination, e.g., incidents in which hazardous materials were only released in a building

or vehicle, onto a paved ground surface, or to storm sewers or flowing water that would have conveyed the material off the property

- Facilities that only maintain(ed) aboveground storage tanks, unless a release is associated with the facility
- Facilities that merely store(d) hazardous materials or generate(d) hazardous waste, with no indication of either any documented releases or the use of underground storage tanks (USTs).

The nature of such databases or listing-specific information implied at the outset that METRO would not risk potential CERCLA liability or safety concerns should it acquire ROW from, or construct bus stations on, any of these sites.

The remaining 125 sites were found to have been locations of known past releases to soil or groundwater, to maintain or have maintained USTs on the property, or otherwise suggest the potential for unknown releases that could impact the property in areas that METRO might consider for ROW acquisition and/or construction. Based on information in their respective database listings and site-specific factors for each, the 125 sites were rated as being of no, low, or moderate risk for CERCLA liability or construction safety.

In February 2022, HNTB provided AmaTerra with conceptual designs and roll plots of each of the five segments. These design documents provided detail on sites of proposed construction and new ROW acquisition. AmaTerra then systematically evaluated each of the previously identified sites to determine which might require more detailed study and evaluation through Phase I Environmental Site Assessments (ESAs). The results of this analysis are presented in this report, with copies of Phase I ESA's attached as Appendices.

2 Project Description

The METRORapid University Corridor Project (the "Project") is a proposed 25.3-mile BRT line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned ROW from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 2-1** and **Figure 2-1.**

The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other service like

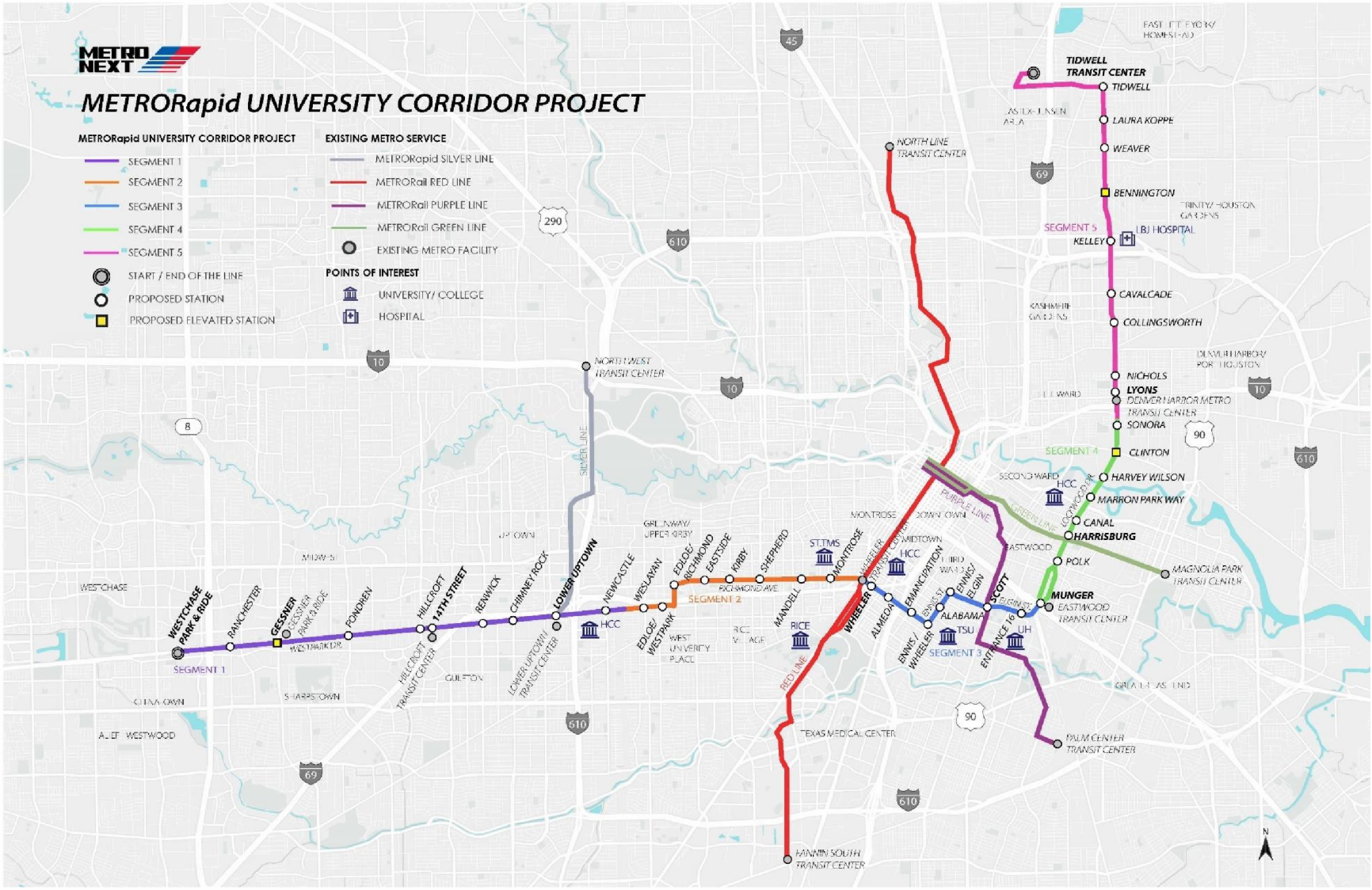
METRORail, METRORapid, and local bus services. Two stations would be incorporated into existing METRO facilities, Westchase Park and Ride and Tidwell Transit Center. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 2--1: METRO University Corridor BRT Line Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Dr
2	Westpark Dr 1,500 feet east of UPRR tracks, east of Newcastle Dr	Richmond Ave at US-59
3	Richmond Ave at US-59	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at Margarita St.
5	Lockwood Dr at Margarita St.	Tidwell Transit Center

Figure 2-1: University Corridor Proposed BRT Alignment



3 Methodology

3.1 2021 Hazardous Materials Evaluation

The July 2021 Hazardous Materials Evaluation was conducted to identify hazardous materials sites adjacent to the proposed BRT route. It was a desktop study that essentially functioned as an enhanced constraints analysis, in which AmaTerra not only identified potential sites of concern but provided broad estimates of the risk each site might pose to the Project. As part of its study, AmaTerra obtained a search of federal and state hazardous material databases from Environmental Risk Information Services (ERIS) in order to identify registered facilities at which releases of hazardous materials have been documented or which might pose a risk of contamination by hazardous materials. The databases were searched to various distances, based on the search radii specified in *American Society for Testing and Materials (ASTM) E1527-21 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The risk evaluation at the time was based on documentation of past releases, the status of remediation or other responses to such releases, the current presence of active USTs, distance to/from the BRT footprint, and the topographic relationship of the property to the corridor. It did not, and was not intended to, provide Phase I ESA's of any property, and as such did not include such typical Phase I elements as review of historical topographic maps, aerial photographs, and Sanborn Fire Insurance Maps, interviews, or site visits.

AmaTerra considered several factors in estimating overall risks of each adjacent property during the 2021 survey. As previously noted, risks include both the risk of liability for future remediation under CERCLA associated with acquiring or owning a contaminated property as well as the safety risk for workers during construction, were any proposed, and, depending on the nature of the constructed facility, users or occupants of the facility. Factors that were considered included the following:

- Known releases on the property. Properties with known releases would generally be considered of higher risk than those without.
- Status of releases. Properties at which releases are still being addressed would be of greater risk than those at which they have been resolved. For properties at which the contamination issue has been resolved, this risk primarily applies to safety associated with exposure to residual contamination rather than legal liability under CERCLA, as it is very unlikely that TCEQ would issue final concurrence for Leaking Petroleum Storage Tank (LPST) or a Voluntary Cleanup Program (VCP) Certificate of Completion for a release that still requires remediation.
- The current presence of underground storage tanks on the property. While most modern tank systems include leak detection systems and other counter-spill features, previously undetected leaks are still possible. Aboveground tanks are considered to be of lower risk, as releases are readily apparent; UST releases, by contrast, may persist and migrate for an extended period of time before being detected.

- Topographic relationship of the property to the Project footprint. The surface topographic gradient often serves as a rough approximation of the water table gradient. Most portions of the Project area have a generally eastward natural topographic gradient, frequently influenced by a southerly component as well. Properties at higher/upgradient elevations- often those on the north or west side of a proposed segment- are considered to pose a greater risk to the Project than those at the same/cross-gradient or lower/downgradient elevations.

3.2 2023 Hazardous and Contaminated Materials Technical Report

Upon receipt of design details in February 2022, AmaTerra was contracted to prepare this Hazardous and Contaminated Materials Technical Report to build on the 2021 study. Based on conceptual plans available at the time, an evaluation of a site's need for a Phase I ESA was conducted, based on several factors: whether the previous study found at least some risk based on the factors above, plans (or lack thereof) for subsurface excavation or disturbance, plans (or lack thereof) for acquisition of new ROW, documentation (or lack thereof) of previous releases, the nature of contamination, if any (with soil contamination not generally being more localized and groundwater contamination implying greater mobility of contaminants), and the estimated hydrogeologic relationship of the property relative to proposed construction (up-, cross-, or downgradient, presumed from topographic relationship unless otherwise known). Other site-specific factors at some properties were also considered. Phase I ESA's were then conducted on properties deemed to require one, in compliance with the updated ASTM standard E-1527-21.

An additional database search was obtained from ERIS in January 2023 based on the realigned portion of Segment 3. Sites mapped as being adjacent to this new alignment were subject to the same analysis as above. Three sites were identified at locations adjacent to the realigned portion, one of which (The Texas Southern University Pharmacy at 3100 Cleburne Street) was found to be mapped inaccurately and eliminated from further consideration; its listed address is actually that of the university itself and does not reflect the actual location of the facility. A second facility, Riverside General Hospital, was correctly mapped at the southwest corner of Ennis Street and Elgin Street. This facility, however, is similar to the 150 facilities immediately eliminated from further consideration in the 2021 study, as its database listings suggest that it only generated small quantities of hazardous waste, did not ever have a release, and never stored bulk quantities of hazardous material or maintained storage tanks. It is included in this analysis only because it was not previously evaluated in 2021, prior to the realignment of Segment 3. The final newly identified site, Sunmart 317, is an active service station at 3033 Elgin Street. It was evaluated in the same manner as other sites in this study.

The realignment of Segment 3 also resulted in the deletion of one 2021 identified property, Map ID #179 (identified only as Former Gas Station at 3432 Scott Street) from this analysis, as it no longer adjacent to Segment 3. In total, the original 125 sites from the 2021 study, two additions of adjacent sites, and deletion of one 2021 site resulted in a total of 126 sites evaluated for the need for Phase I ESAs.

4 Determination of Need for Further Action

With the exception of one property eliminated from evaluation due to the realignment of Segment 3, the remaining 124 properties identified in the original Hazardous Materials Report, as well as two additional properties adjacent to the new alignment of Segment 3, were initially evaluated for the need for further study through a Phase I ESA. This evaluation was based on conceptual plans available to AmaTerra at the time of Project initiation. Three Phase I ESA's addressing four properties (two of which were adjacent to one another and were thus addressed in a single Phase I) were conducted.

Following further development of the proposed design, METRO provided AmaTerra with utility maps based on 30 percent design. AmaTerra located the 126 properties on these maps to determine the extent to which any might impact subsurface soils in adjacent excavations for relocation of utility poles or installation or lowering of electrical and cable duct banks and water, storm, and sanitary sewer lines. While the utility maps pinpointed the lateral locations and extents of the various utilities, they did not generally specify depths, typically either stating a minimum depth or indicating no depth measurements at all, only "lower in place" or similar statements.

Tables 4-1 through **4-5** present the results of this evaluation, as well as future actions that might be required, of the respective properties adjacent to Segments 1 through 5. Locations of each site are shown in the figures in **Appendix A**.

Table 4--1: Results of Evaluation of HazMat Sites for Phase I Environmental Site Assessment, Segment 1

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
3802 Rogerdale Rd	23	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), Certificate of Completion (COC) issued by TCEQ, no new ROW, construction cross-gradient
10400 Harwin Dr	425	Low	No	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, soil contamination only, no new ROW, construction cross-gradient
5712 S Gessner Rd	144	None	No	Previously judged to be of no risk
9952 Harwin Dr	426	None	No	Previously judged to be of no risk
9802 Westpark Dr (at Ace)	227, 231	Low	No	No known releases, no new ROW, property is across Westpark Tollway
9430 Westpark Dr	245	Low	No	No known releases, no new ROW, property is across Westpark Tollway
9455 Westpark Dr	225	None	No	Previously judged to be of no risk
3940 Fondren Rd	308	Low	No	Final concurrence issued by TCEQ, and case closed, construction is cross-gradient and across Westpark Tollway
3941 Fondren Rd	293	Low	No	Final concurrence issued by TCEQ, and case closed, construction is cross-gradient and across Westpark Tollway
6220 Southwest Fwy	269	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, soil contamination only, no new ROW
6220 Westpark Dr	203	None	No	Previously judged to be of no risk
6155 Southwest Fwy	238	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW, property is across Westpark Dr.
6115 Southwest Fwy	255	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW, property is across Westpark Dr.
6000/6002 Westpark Dr	183, 185	None	No	Previously judged to be of no risk
5815 Westpark Dr	174	None	No	Previously judged to be of no risk

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
5601 Southwest Fwy	235	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW, property is across Westpark Dr.
5555 Southwest Fwy	252	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW, property is across Westpark Dr.
5321 Westpark Dr	149	Low	No	Final concurrence issued by TCEQ, and case closed, no new ROW, potential deep excavation for Centerpoint Energy gas lines but property is sufficiently remediated for residential use (implying BRT use is acceptable as well)
5310 S Rice (At Westpark)	166, 251	Low	Soil management plan	Subsurface electrical/cable installation, no known releases, construction and new ROW cross-gradient to existing tank battery
5205 S Rice Ave	219	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed
5010 Terminal St	311	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, no new ROW, construction and new ROW cross-gradient
4747 Southwest Fwy	597	Low	No	No known releases, construction and new ROW upgradient, property is across Westpark Dr.
3811 Newcastle Dr	230	Low	No	Final concurrence issued by TCEQ, and case closed, soil contamination only, construction is cross-gradient and across Westpark Dr.
4410 Westpark Dr	146	Low	No	No known releases, construction is cross-gradient and across Westpark Dr.

Sources: ERIS 2021, HNTB 20230217 UNC Proposed Utility Segment 1

Table 4--2: Results of Evaluation of HazMat Sites for Phase I Environmental Site Assessment, Segment 2

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
4910 Weslayan St	228	Low	Soil management plan	Relocated pole(s), final concurrence issued by TCEQ, and case closed
3939 Southwest Fwy	217	Low	No	Final concurrence issued by TCEQ, and case closed, property is across Westpark Dr. from construction
3302 Richmond Ave	128	Low	Soil management plan	Potential deeper excavation for sanitary sewer, relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only, USTs previously removed, no new ROW
3131 Richmond Ave	30	None	No	Previously judged to be of no risk
2720 Richmond Ave	202	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, USTs previously removed, no new ROW
2602 Richmond Ave	91, 190	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed
2540 Richmond Ave	90	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed, USTs previously removed
2405 Richmond Ave	164	Low	Soil management plan	Potential deeper excavation for lowered water line, no known releases, no new ROW, USTs on property are small capacity for hydraulic lifts, downgradient from construction
2109 Richmond Ave	50	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only, USTs previously removed, downgradient from construction
3520 S Shepherd Dr, 2100 Richmond Ave	100, 158	Moderate	Addressed by Phase I ESA	Active groundwater contamination case, new ROW to be acquired from property

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
3519 S Shepherd Dr	180	Low	Soil management plan	Potential deeper excavation for new water line Subsurface electrical/cable installation, no known releases, downgradient from construction and new ROW
3603 S Shepherd Dr	211	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, USTs previously removed, former onsite tank battery downgradient from construction and new ROW
2030 Richmond Ave	69	Low	No	Final concurrence issued by TCEQ, and case closed, USTs previously removed
1801 Richmond Ave	96	Low	Soil management plan	Potential deeper excavation for new water line and sanitary sewer line, final concurrence issued by TCEQ, and case closed, soil contamination only, downgradient from construction and new ROW
1810 Richmond Ave	160	Low	Soil management plan	Potential deeper excavation for new water line and sanitary sewer line, final concurrence issued by TCEQ, and case closed, soil contamination only
1700 Richmond Ave	89	Low	No	Final concurrence issued by TCEQ, and case closed, USTs previously removed
1521 - 1569 Richmond Ave	150, 197	Low	Soil management plan	Potential deeper excavation for new water line, final concurrence issued by TCEQ, and case closed for LPST, COC issued for VCP, soil contamination only, USTs previously removed
4215 Mandell St	234	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for new water line, final concurrence issued by TCEQ, and case closed, USTs previously removed
1411 Richmond Ave	104	None	No	Previously judged to be of no risk
1310 Richmond Ave	27	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed, soil contamination only, USTs previously removed, no new ROW

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
1003 Richmond Ave, 4200/4220 Montrose Blvd	147, 151, 232, 248	Low	Soil management plan	Relocated pole(s), final concurrence issued by TCEQ, and case closed, USTs previously removed Subsurface electrical/cable installation,
920 Richmond Ave	168	Low	Soil management plan	Relocated pole(s), final concurrence issued by TCEQ, and case closed Subsurface electrical/cable installation,
919 Richmond Ave	139	Low	Soil management plan	Relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only, USTs previously removed Subsurface electrical/cable installation, downgradient from construction and new ROW
811 Richmond Ave	120	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only, downgradient from construction and new ROW
604 Richmond Ave	92	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for new water line, no known releases, USTs previously removed
411 Richmond Ave	80	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for new water line, final concurrence issued by TCEQ, and case closed, USTs previously removed, downgradient from construction

Sources: ERIS 2021, HNTB 20230217 UNC Proposed Utility Segment 2

Table 4-3: Results of Evaluation of HazMat Sites for Phase I Environmental Site Assessment, Segment 3

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
4201 Main St	254	Low	No	Subsurface electrical/cable installation, potential deeper excavation for new water line, final concurrence issued by TCEQ, and case closed for LPST, COC issued for VCP, construction cross-gradient, no new ROW
4401 La Branch	123	Moderate	No	No known release (although historical tank may have predated PST requirements)
4400 Almeda Rd	162	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed, construction and new ROW cross-gradient relative to former tank battery
2202 Wheeler St	9	Low	No	Final concurrence issued by TCEQ, and case closed
3204 Ennis St.*	1*	None	No	No known releases, databases in which found do not suggest use or storage of bulk quantities of hazardous materials, construction and new ROW upgradient
3033 Elgin St*	3*	Low	No	No known releases, no new ROW
3506 Elgin St	218	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, construction and new ROW cross-gradient relative to former tank battery
3708 Elgin St	156	Low	Soil management plan	Potential deeper excavation for new sanitary sewer line, final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW
4211 Elgin St	140, 142	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW
4343 Elgin St	143	Low	No	No known releases, tank is aboveground, construction cross-gradient, no new ROW

* Sites adjacent to the newly realigned portion of Segment 3, not evaluated during the 2021 study. ID #'s refer to the 2023 corridor database search of the realigned portion.

Sources: ERIS 2021, HNTB 20230217 UNC Proposed Utility Segment 3

Table 4-4: Results of Evaluation of HazMat Sites for Phase I Environmental Site Assessment, Segment 4

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
619 Telephone Rd	199	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), No known releases, construction upgradient, no new ROW
4516 Harrisburg Blvd	489	Low	Addressed by Phase I ESA	Known previous releases resolved and USTs previously removed, but extensive excavation for underpass beneath nearby UPRR line is planned. It is possible that residual contamination could be encountered in soils excavated during construction.
4619/4623 Harrisburg Blvd	177, 200	None	No	Previously judged to be of no risk
315 Lockwood Dr	62, 68	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), potential deeper excavation for relocated gas line, no known releases, no new ROW
220 S Lockwood Dr	169	Low	No	No known releases, no new ROW
215 Lockwood Dr	82	Low	No	Final concurrence issued by TCEQ, and case closed, USTs previously removed, no new ROW
4624 Navigation Blvd	192	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, no new ROW
4700 Navigation Blvd	172	Low	No	No known releases, no new ROW
511 Lockwood Dr, 4705 Navigation Blvd	105, 186	Low	No	Final concurrence issued by TCEQ, and case closed, soil contamination only
601 Lockwood Dr	222	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, soil contamination only, USTs previously removed, construction cross-gradient, no new ROW
600 Lockwood Dr	276	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, USTs previously removed, construction cross-gradient

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
738 Lockwood Dr	48	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, USTs previously removed, no new ROW
735/749/751 Lockwood Dr	99, 116, 119	Low	No	Geotechnical boring in Lockwood ROW in front of 735 Lockwood (southernmost portion of property) exhibited hydrocarbon odor; potential deeper excavation for relocated gas line
750 Lockwood Dr	25	None	No	Previously judged to be of no risk
865 Lockwood Dr	72	Low	Soil management plan	Subsurface electrical/cable installation, no known releases, USTs previously removed, construction upgradient
875 Lockwood Dr	22	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), Corrective Action completed, USTs previously removed, no new ROW, construction upgradient
900 Lockwood Dr	73, 95	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), potential deeper excavation for relocated gas line Final concurrence issued by TCEQ and case closed, USTs previously removed, no new ROW
990 Lockwood Dr	173	Low	Soil management plan	Potential deeper excavation for relocated gas line, relocated pole(s), case (surface spill only, 60 gallons of diesel in 2007) resolved, construction and new ROW upgradient
999 Lockwood Dr	57, 195	Low	Soil management plan	Potential deeper excavation for new sanitary sewer line relocated pole(s), Final concurrence issued by TCEQ, and case closed
5311 Clinton Dr	433	Low	Addressed by Phase I ESA of 1025 Lockwood (adjacent)	Final concurrence issued by TCEQ, and case closed, and USTs previously removed for LPST, and COC issued for VCP, but deep excavation for adjacent bridge supports planned at a downgradient location. It is possible that residual contamination could be encountered in soils excavated during construction.

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
1010 Lockwood Dr	21	Low	Soil management plan	Potential deeper excavation for relocated gas line relocated pole(s), Corrective Action completed, construction and new ROW upgradient
1020 Lockwood Dr	98	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), potential deeper excavation for relocated gas line Corrective Action completed, no record of USTs on property, construction and new ROW upgradient of property
1025 Lockwood Dr	295	Low	Addressed by Phase I ESA	USTs previously removed, but no documentation of resolution of case could be found and deep excavation for adjacent bridge supports planned at a downgradient location. It is possible that residual contamination could be encountered in soils excavated during construction.
1040 Lockwood Dr	39, 76	Low	No	No Further Remedial Action Planned, construction and new ROW upgradient of property
1060 Lockwood Dr	65	Low	Soil management plan	Potential deeper excavation for relocated gas line, relocated pole(s), no known releases, USTs previously removed, construction and new ROW upgradient of property
1110 Lockwood Dr	56	Low	No	Relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only, construction and new ROW upgradient
1111 Lockwood Dr	110, 125	Low	Soil management plan	Potential deeper excavation for relocated gas line, no Further Remedial Action Planned, Corrective Action completed
1120 Lockwood Dr	63	None	No	Previously judged to be of no risk

Sources: ERIS 2021, HNTB 20230217 UNC Proposed Utility Segment 4

Table 4-5: Results of Evaluation of HazMat Sites for Phase I Environmental Site Assessment, Segment 5

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
5440 IH 10 E	161	Low	Soil management plan	Potential deeper excavation for relocated water line, final concurrence issued by TCEQ, and case closed
1401 Lockwood Dr, 5445 East Fwy	176, 193	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed
5518 Farmer St	266	None	No	Previously judged to be of no risk
2301 Lockwood Dr	106	Low	Soil management plan	Subsurface electrical/cable installation, relocated pole(s), final concurrence issued by TCEQ, and case closed, soil contamination only
3717 E Lockwood Dr	241	None	No	Previously judged to be of no risk
3719 Lockwood Dr	220	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed
3920 Lockwood Dr	165	Low	No	Final concurrence issued by TCEQ, and case closed, construction upgradient of property
4002 Lockwood Dr	175	Low	Soil management plan	Potential deeper excavation for relocated sanitary sewer line, final concurrence issued by TCEQ, and case closed, construction upgradient of property, no new ROW Subsurface contamination only,
4317 Lockwood Dr	66	Low	Soil management plan	Potential deeper excavation for relocated water line, lowered water line, and relocated gas line Final concurrence issued by TCEQ and case closed Subsurface electrical/cable installation,
4400 Lockwood Dr	239	Moderate	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for relocated gas line, active groundwater contamination case, geotechnical boring in Lockwood ROW in front of property exhibited hydrocarbon odor

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
4403 Lockwood Dr	45	Low	Soil management plan	Geotechnical boring in Lockwood ROW in front of property exhibited hydrocarbon odor, subsurface electrical/cable installation, no known releases
4718 Lockwood Dr	6	None	No	Previously judged to be of no risk
4922 Lockwood Dr	188	None	No	Previously judged to be of no risk
5118 Lockwood Dr	20	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed, USTs previously removed, construction cross-gradient
5205/5207 Lockwood Dr	3, 194	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, construction cross-gradient
5505 Lockwood Dr	181	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, construction and new ROW cross-gradient
5502 Lockwood Dr	130, 133	Low	Soil management plan	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, construction cross-gradient, no new ROW
5722 Lockwood Dr	198	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed, construction cross-gradient
5902 Lockwood Dr	78	Low	No	Final concurrence issued by TCEQ, and case closed, construction cross-gradient
7019 Lockwood Dr	75	None	No	Previously judged to be of no risk
5001 E Crosstimbers St	236	Low	Soil management plan	Relocated pole(s), no known releases, construction and new ROW cross-gradient
8033 Lockwood Dr	12	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for relocated sanitary sewer line, relocated pole(s), no known releases, USTs previously removed

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
8020 Lockwood Dr	212	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered gas line relocated pole(s), no known releases, construction and new ROW downgradient
8102 Lockwood Dr	5	None	No	Previously judged to be of no risk
4825 Laura Koppe Rd	243	Low	Soil management plan	Potential deeper excavation for lowered water and gas lines, no known releases, USTs previously removed, no new ROW
4902 Laura Koppe Rd (approximate)	n/a	Moderate	Soil management plan	Obvious former service station with no information on releases or UST removal, but plan calls for subsurface electrical/cable installation, potential deeper excavation for lowered water and gas lines, new ROW
9402 Lockwood Dr	58	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water and gas lines, final concurrence issued by TCEQ, and case closed, USTs previously removed, soil contamination only, construction and new ROW upgradient of property
4701 Tidwell Rd	49	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water line, relocated pole(s), no known releases, service station in existence less than two years
4590 Tidwell Rd, 9514 Hirsch Rd	77, 189	Low	No	Subsurface electrical/cable installation, final concurrence issued by TCEQ, and case closed, USTs previously removed, construction and new ROW upgradient of property
4202 Tidwell Rd	52	None	No	Previously judged to be of no risk
4017 Tidwell Rd	138, 141	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered gas line, no known releases

Address	2021 ERIS Map ID#	Risk Level per Previous Study	Further Action?	Factors Considered
3615 Tidwell Rd	152, 153	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed
9278 Eastex Fwy	201	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed, construction and new ROW upgradient of property
9279 Eastex Fwy	215	Low	Soil management plan	Potential deeper excavation for lowered water line, final concurrence issued by TCEQ, and case closed, construction and new ROW upgradient of property
3055 Tidwell Rd	85	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water line, no known releases, service station in existence less than two years
9501 Jensen Dr	87	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered water line Final concurrence issued by TCEQ and case closed, soil contamination only, construction cross-gradient, no new ROW
9602 Jensen Dr	10	Low	Soil management plan	Subsurface electrical/cable installation, potential deeper excavation for lowered gas line, no known releases, no new ROW, construction upgradient
9701 Jensen Dr	182	Low	No	No known releases, no new ROW

Sources: ERIS 2021, HNTB 20230217 UNC Proposed Utility Segment 5

One-hundred twenty-four of 126 properties had previously judged to have been of no risk or had had their contamination cases resolved, meaning that cleanup levels for soil and/or groundwater had been achieved and TCEQ had closed the case. As shown in **Tables 4-1** to **4-5**, four of the 126 adjacent properties were judged to require Phase I ESA's, based on AmaTerra's initial evaluation of conceptual plans.

- A property at 3520 S. Shepherd Drive/2100 Richmond Avenue, the northwest corner of Richmond Street and S. Shepherd Drive on Segment 2. The property is the former location of a drycleaners at which investigation of groundwater contamination is ongoing and from which ROW would be acquired.

- A property at 4516 Harrisburg Boulevard, the southwest corner of Harrisburg Boulevard and Lockwood Drive on Segment 4. Documented releases at the property have been resolved, but it is unknown where on the property these releases may have occurred. It is possible that residual contamination could be present in soils in the ROW to be excavated for the proposed underpass beneath the UPRR line if contaminants were found to have migrated offsite.

- Two adjacent properties at 5311 Clinton Drive and 1025 Lockwood Drive, the respective northwest corner of Clinton Drive and Lockwood Drive and the west side of Lockwood Drive to its north on Segment 4. Documented releases affecting groundwater at the former have been resolved. The VCP listing for the latter indicated that the facility was ultimately withdrawn from the program, while the status of the LPST listing indicates only that site characterization was incomplete as of its last update. Neither listing for the 1025 Lockwood property shows any activity since 1998, and it is likely that progress on its releases, and possibly successful remediation, has been made in the intervening time. Nevertheless, the properties are hydrogeologically upgradient of the locations of deep excavations for bridge supports in the ROW of Lockwood Drive, suggested the need for additional consideration through the Phase I ESA process. Because Phase I ESA's of adjacent properties such as these would show extensive overlap, one ESA focused on 1025 Lockwood Drive due to the lack of formal documentation of its resolution was deemed to be appropriate. The Phase I ESA considered impacts from, and risks related to, the adjacent property at 5311 Clinton Drive and other nearby listed properties as well.

In the subsequent evaluation of the properties using utility maps, it was found that some combination of electrical/cable duct bank installation or lowering, water lines, sanitary and storm sewer lines, and/or relocated utility poles were planned at 70 properties. At a minimum, it is recommended that METRO have a soil management plan in place as excavations are carried out at these sites. A soil management plan would detail procedures to be followed in the event that contaminated soils were excavated. These sites may require additional further action at some time in the future, as the design is refined.

5 Results of Phase I ESA's

Phase I ESA's of properties at 3520 S. Shepherd Drive/2100 Richmond Avenue, 4615 Harrisburg Boulevard., and 1025 Lockwood Drive were conducted. Copies are attached as **Appendices B-D**. The purpose of the ESA's was to identify actual or potential Recognized Environmental Conditions (RECs) that could result in possible environmental liability under CERCLA arising from METRO's planned acquisition of a portion of the property for new ROW and concerns over worker safety during removal of subsurface soils from ROW adjacent to the latter two properties. The evaluations included a search of various hazardous materials databases, review of historical aerial photographs and topographic maps, review of Sanborn Fire Insurance Maps, requests for information from the Houston Fire Department, and an on-site visual assessment of the properties. AmaTerra personnel conducted on-site inspections on May 11, 2022. Interviews with property owners were not conducted, as no response to AmaTerra's requests were received.

5.1 3520 S. Shepherd Drive/2100 Richmond Avenue

AmaTerra found 12 aerial photographs from 1938 through 2016. The photographs confirmed that the property has been cleared and paved since sometime prior to 1938 and featured a building other than the present structure as of 1953. By 1966, the present-day commercial building occupied by several businesses had been constructed. The surrounding area was completely urbanized by this time as well.

Eleven topographic maps depicting the subject property from 1915 to 2019 were obtained. None of the maps provided useful information, as there were no structures or other possible industrial features on or near the subject property from 1915 through 1929, and subsequent maps show no individual structures due to urban density.

Sanborn Fire Insurance Maps from 1950, 1951, 1955, and 1969 were obtained. The combined 1950 and 1951 maps show the subject property to be occupied by a building labeled "Sewing Machine Repair" and the other three corners of the intersection to be occupied by service stations. The 1955 map does not show the property but does depict a building on the south side of Richmond Avenue approximately 200 feet west of the subject property as containing a solvent tank. The 1969 map shows the subject property and includes a label identifying a drycleaning solvent tank, as well as the filling stations on all three other corners of the intersection. As such, there is a REC at the subject property due to the presence of a drycleaner operation on the property in the 1969 Sanborn map.

The database search results showed the property to have been occupied by drycleaners of various names from, at a minimum, 1968 through 2004. Various state hazardous materials database listings document groundwater contamination by chlorinated solvents resulted from these drycleaning operations. Remediation of the groundwater contamination is being managed through the state Drycleaner Remediation Program (DCRP) but is as yet unresolved.

At the time of the site visit, the subject property was in active use as a strip shopping center. It was occupied by several food service and retail businesses. Monitor wells were visible at various locations

on the property. These wells corroborate the presence of the groundwater contamination documented by the hazardous materials database search, and are thus indicative of the same REC.

METRO intends to acquire the southern and southwestern portions of the property as additional ROW. As previously noted, CERCLA exempts municipalities from liability for contaminated properties acquired through eminent domain, so if ROW is acquired in this manner, METRO is exempt from liability. If ROW is acquired through some other means, it is still unlikely that TCEQ would assign METRO as a responsible party for the existing groundwater contamination at the property, and subsequently transfer lead responsibility for remediation to METRO. As a safeguard against legal technicalities that might arise during the acquisition, however, AmaTerra recommended one or both of two possible options for METRO in the process of its acquisition of new ROW from the property:

- METRO's legal counsel should coordinate with TCEQ's legal counsel and DCRP representatives to secure formal agreement that METRO will not be named as a responsible party.
- METRO may enter its acquired portion of the property into the state Innocent Owner/Operator Program (IOP).

5.2 4516 Harrisburg Boulevard

AmaTerra found 12 aerial photographs from 1938 through 2016. The photographs confirmed that the property has been entirely developed since sometime prior to 1938 and included a mix of residential and industrial uses until sometime between 1953 and 1966. By 1966, almost all of the property was devoted to a Stewart & Stevenson industrial complex and remained so through the 2005 photograph. As of 2012, the industrial complex had been demolished and the present-day CVS pharmacy constructed in the easternmost portion of the property, adjacent to S. Lockwood Drive and the proposed elevated section on Segment 4 of the BRT.

A topographic map from 1922 showed what appeared to be a commercial or industrial building on the subject property, indicating that such activity has taken place on the property for at least 100 years. There is nothing on the map to suggest the presence of a REC, however. No individual features of the property are visible on any topographic map before or since.

Sanborn Fire Insurance Maps from 1925, 1951, and 1969 were obtained. The maps confirmed the industrial use of the property visible in aerial photographs and document specific ownership by S&S. The only features in the S&S complex that suggested use of hazardous materials was a room in a central building identified on the 1951 map as being used for grease and oil storage and a paint spraying booth identified on the 1969 map; neither of these uses represents a REC. All three maps indicate the presence of a filling station at the northwest corner of the property; based on its distance (over 1,000 feet) from the proposed BRT underpass, it is not considered a REC.

All three maps indicate a service station at the northwestern corner of Harrisburg Boulevard and S. Lockwood Drive, while the first two maps indicate a dry cleaner at the southeastern corner. As such, there is a REC at the intersection of Lockwood Drive and Harrisburg Boulevard, the northern end of

the proposed underpass, due to potential contamination from either the service station or drycleaner. The former drycleaner is of particular concern for multiple reasons:

- It is directly adjacent to proposed excavations for the underpass
- Chlorinated solvents used in drycleaning tend to be very persistent in the environment
- A study by the State Coalition for Remediation of Drycleaners found that up to 75 percent of historical drycleaners may have contaminated the surrounding environment (Schmidt et al 2001).

These factors suggest a reasonable likelihood that excavations in the northern portion of the underpass will encounter contaminated soils.

The subject property was identified in numerous federal, state, and local databases of properties that use or store hazardous materials and/or generate hazardous waste, including some that indicated that uncontrolled releases had occurred on the property. Further online research of supporting documentation, however, found that documented releases all occurred in the central and western portions of the property, away from the proposed underpass, and that all had been successfully remediated. There was no evidence in database listings or supporting documentation to suggest that any hazardous materials had been released to subsurface media underlying S. Lockwood Drive, in which the underpass would be constructed. There was similarly no direct evidence of such releases from other adjacent or nearby properties identified in various databases. A listing for the service station at the northwest corner of Lockwood and Harrisburg Boulevard, however, indicates that former storage tanks were replaced in 1976, before reporting of leaks was required; as a result, it is possible that the service station could have had releases that went undetected for any part of the 50 years of its existence prior to this time. A listing of historical drycleaners also corroborated the existence of the drycleaners at the southeast corner of the intersection. The combination of these two facilities and the potential for either to have contaminated subsurface soil within the footprint of the proposed underpass thus is considered a REC, independent of the same conclusion based on Sanborn maps.

At the time of the site visit, the subject property was occupied by a CVS pharmacy in its easternmost portion, adjacent to the proposed BRT line, two office buildings, and a parking garage. There are no RECs associated with the subject property itself in its current condition.

The combined presence of a former service station and a former drycleaner at the respective northwest and southeast corners of the intersection of Lockwood Drive and Harrisburg Boulevard, as documented in Sanborn maps and database listings, constitutes a REC, as it implies the possibility of contaminated soils being encountered during excavations for the proposed underpass. To mitigate against hazards associated with potential contamination, AmaTerra recommends that the northern portion of the footprint of the proposed underpass excavation (e.g., the portion between the UPRR line and Harrisburg Boulevard) be assessed through installation of soil borings and collection of soil and groundwater samples. If contamination is found, AmaTerra further recommends that METRO

prepare a plan for contaminated soil and/or groundwater (as appropriate) management and treatment/disposal during construction.

5.3 1025 Lockwood Drive

AmaTerra found 12 aerial photographs from 1938 through 2016. The photographs confirmed that the property has been at least partially developed since even the earliest 1938 photograph and has remained relatively unchanged since at least 1953. For most of its history, it was a manufacturing complex owned by Rheem Manufacturing, although it is presently occupied by Pioneer Freight Group, LLC and Painted Metal Products. The industrial nature of the property is clear; however, there are no specific features in the photographs to suggest the presence of a REC at the subject property. Similarly, the remainder of the area adjacent to the proposed elevated BRT segment shows heavy urbanization and industrialization, but the only clear suggestions of a potential REC are a tank battery at the former Flint Ink facility across Lockwood Drive at 1010 Lockwood and the two adjacent service stations at the intersection of Lockwood Drive and Clinton Drive Records reviews subsequently found that none of these facilities is likely to have resulted in a REC at the location of the elevated BRT segment.

Historical topographic maps show development of the subject property, as well as portions of the surrounding area, starting by 1946/47. Subsequent maps show steady infilling of undeveloped land with commercial/industrial facilities up through 1982, by which time the area has been completely urbanized. There is nothing on the maps to suggest the presence of a REC at the subject property or in the footprint of the proposed elevated segment of the BRT, however.

Sanborn Fire Insurance Maps from 1950 and 1970 were obtained. The maps confirm the industrial use of the property visible in aerial photographs and document specific ownership by Rheem. The only features in the Rheem complex that suggested use of hazardous materials are notations on the 1950 map indicating spray paint booths, a paint storage yard, chemical carts, and vats, and an additional notation on the 1970 map of a small, enclosed area as “Flammables Storage and Mixing.” While records reviews found documentation of releases on the property, all were attributed to underground storage tanks that are not evident on the Sanborn maps. The hazardous material usages implied by the Sanborn maps are thus not considered to be a REC.

Listings for the subject property under three names were found in thirteen federal, state, and local databases of properties that use or store hazardous materials and/or generate hazardous waste. Some indicated that uncontrolled releases had occurred on the property. Further online research of supporting documentation found that groundwater contamination had been addressed through three different state programs over the course of 20 years. Although various files presented confusing and conflicting information concerning groundwater flow directions and the source of contamination by chlorinated solvents, maps of contamination plumes showed no evidence that contaminant concentrations ever exceeded state standards in areas east of the facility, where the elevated segment of the BRT is proposed. AmaTerra was also unable to obtain actual documents stating that investigation or remediation was complete in TCEQ’s online records. It did, however, find that TCEQ’s online Central Registry listing for the facility’s Industrial and Hazardous Waste-Corrective Action

registration references (but does not link to) a technical report on the subject of "Final Site Closeout" from late 2011 and two subsequent outgoing approvals from early 2012; these imply that remediation meeting state cleanup standards had been achieved. As such, the former groundwater contamination at the Rheem complex would be considered a Historical REC on the subject property itself but does not represent a REC at the proposed location of the elevated segment of the BRT.

The facility at 3511 Clinton Drive was found in five databases implying the release of hazardous materials. Online records obtained from TCEQ, however, found no evidence that contamination had been transported offsite to the ROW of Lockwood Drive In addition, all contamination cases had been resolved. As such, the contamination at this facility, while qualifying as a Controlled REC at the property itself, is not considered a REC for the BRT route.

Other facilities adjacent to the proposed elevated BRT segment were also found, through both the database search and records obtained from the Houston Fire Department, to have had releases of hazardous materials. None showed any evidence of having impacted subsurface soils or groundwater beneath Lockwood Drive where the elevated segment of the BRT is proposed.

No RECs are associated with the property or with other properties adjacent to the proposed elevated segment of the BRT line. No Phase I ESA could, and thus AmaTerra does not, however, guarantee that the soil in which supports for the elevated segment of the BRT line would be installed is free of contamination from the subject property, nearby properties identified during the database search, or another unknown source. Based on distances to known releases and the lack of evidence of releases that might have affected soils beneath Lockwood Drive, AmaTerra believes that contamination in the area of the proposed bridge supports is sufficiently unlikely that no further investigation is warranted. As a best practice, however, AmaTerra recommends that construction crews be advised that subsurface contamination is known historically in the area and that the contractor have a contingency plan for soil management in place in the event that excavated soil exhibits staining or a hydrocarbon odor.

6 Summary, Conclusions, and Recommendations

One hundred twenty-five sites adjacent to the original footprint of the proposed BRT line were identified by a 2021 Hazardous Materials Evaluation as having documented releases or storage of bulk quantities of hazardous materials. With conceptual design detail available in 2022 and utility plans made available in 2023, AmaTerra considered sites previously judged to be of low or moderate risk to the Project to determine whether a Phase I ESA would be required to more fully evaluate the legal risk to METRO of acquiring contaminated property and/or the risk of encountering contaminated soil during construction and thus posing a safety risk to construction workers. In addition to the properties previously evaluated, a realignment of a portion of Segment 3 resulted in consideration of two additional properties adjacent to the updated alignment and deletion of one property adjacent to only the former alignment.

Three Phase I ESA's addressing four properties (two of which are adjacent to one another) were undertaken. The first focused on a small shopping center at the northwest corner of Richmond Avenue and S. Shepherd Drive on Segment 2, found in the 2021 evaluation listed as both 3520 S. Shepherd Drive and 2100 Richmond Avenue in various databases. The property is an active groundwater contamination case, currently being remediated through the TCEQ's Drycleaner Remediation Program. Conceptual design drawings showed that ROW would be acquired from the property in the form of a corner clip; as such, concern over legal liability related to the acquisition of ROW from a resolved contamination case suggested the need for a Phase I ESA. The Phase I ESA confirmed the ongoing groundwater investigation and remediation process at the property through records searches and documentation of numerous monitoring wells in the shopping center parking lot observed during the field investigation. The ESA concluded that the property poses low risk to the BRT Project; it did, however, recommend as a precautionary measure that METRO's legal counsel coordinate with its TCEQ counterparts to secure assurance that METRO would not be held liable for remediation costs following its acquisition of new ROW, in case the ROW was acquired through some means other than eminent domain or there was another legal loophole to the CERCLA exemption. As an alternative recommended precautionary measure, the ESA also noted that METRO could enroll its ROW acquired from the property in the TCEQ Innocent Owner/Operator Program.

The former S&S property at 4516 Harrisburg Boulevard was the site of historical releases that contaminated soil and groundwater. The locations of these releases on the property, however, are sufficiently distant that they are unlikely to have impacted soils affected by excavation for the underpass. The property is thus not considered a REC itself. Sanborn maps and database listings for two nearby properties, however, present a REC in the area of the intersection of Lockwood Drive and Harrisburg Boulevard and suggest the possibility that excavations in the northern portion of the underpass footprint, between the UPRR line and Harrisburg Boulevard, may encounter contamination. AmaTerra recommends that METRO conduct an assessment of subsurface soils between the UPRR line and Harrisburg Boulevard through installation of soil borings and collection of soil and groundwater samples and develop a plan for management of contaminated soil and/or groundwater during construction should the assessment identify contamination.

The remaining properties- the adjacent 5311 Clinton Drive and 1025 Lockwood Drive (northwest corner of Clinton Drive and Lockwood Drive and west side of Lockwood Dr)., also on Segment 4- were locations of documented groundwater releases at which deep excavation for bridge supports is planned for the Lockwood Drive ROW, downgradient of the properties. As such, it appeared possible that construction crews could encounter contaminated soils during construction at either location; therefore, Phase I ESA's were undertaken at both locations. Records were obtained during the Phase I ESA's identifying locations of groundwater plumes and other contamination. There was no evidence that contamination had migrated off-site from either property into the ROW of Lockwood Drive. It thus appears that the likelihood of construction crews encountering contaminated soils during installation of bridge supports is low. Nevertheless, the ESA recommended, as a precautionary measure, that construction crews be made of aware of historical subsurface contamination of adjacent properties and that METRO have a soil management plan in

place in case hydrocarbon odors, oily sheens, or other evidence of residual contamination is observed in excavated soils.

Consideration of the regulatory status of each listed property, the absence or nature of documented contamination, the probable hydrogeologic relationship of a hazardous materials property to the proposed BRT route, and other site-specific factors a variety of other site-specific factors during the initial evaluation based on conceptual designs resulted in the determination that Phase I ESA's were not required for 122 of the 126 properties evaluated.

The extent to which METRO will acquire ROW through eminent domain or other mechanisms has not been determined. CERCLA exempts municipalities from liability for hazardous materials contamination of property acquired through eminent domain, so the legal risk to METRO for acquisition of any property in this manner is eliminated. It is very unlikely that CERCLA liability would accrue to METRO for any ROW acquired by other means, considering that TCEQ has granted closure to all but two known hazardous materials cases studied (implying that TCEQ-mandated cleanup criteria have been met and no further action is required) and the fact that METRO is only acquiring strips of ROW rather than entire parcels and associated sources of contamination at any of these properties. Even so, the same precautionary recommendation made in the Phase I ESA of the property at 3520 S. Shepherd applies to the entire BRT Project as well: it is advised that METRO legal counsel coordinate with TCEQ legal counsel to secure agreement that METRO will not be liable for costs of hazardous materials remediation in ROW that it acquires.

Based on utility maps provided in 2023, it appears that excavation of subsurface soils at approximately 70 locations adjacent to hazardous materials sites is planned. At present, the specific depth of excavations at any particular location has not been determined. As such, the likelihood of encountering residual contamination from known past releases at these properties, or undiscovered contamination at any property, cannot be assessed. For this reason, the same recommendation made in the Phase I ESA of 1025 Lockwood Drive/5311 Clinton Drive is recommended for the sites of excavations as well: AmaTerra recommends that METRO develop a soil management plan in advance of construction to be implemented in the event that evidence of contamination is discovered. The plan should address soil handling procedures to be followed, health and safety measures to be instituted, sampling frequency, laboratory analyses to be performed, disposal procedures, City of Houston requirements for compatible materials, and other measures to be taken. As the Project design is further refined, the need for Phase II investigations or environmental monitoring during construction can be assessed. For the purposes of NEPA, such a plan is sufficient to address mitigation of potential impacts of hazardous materials on the BRT Project.

7 References

American Society of Testing and Materials

2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. American Society for Testing and Materials Publication E1527-21.

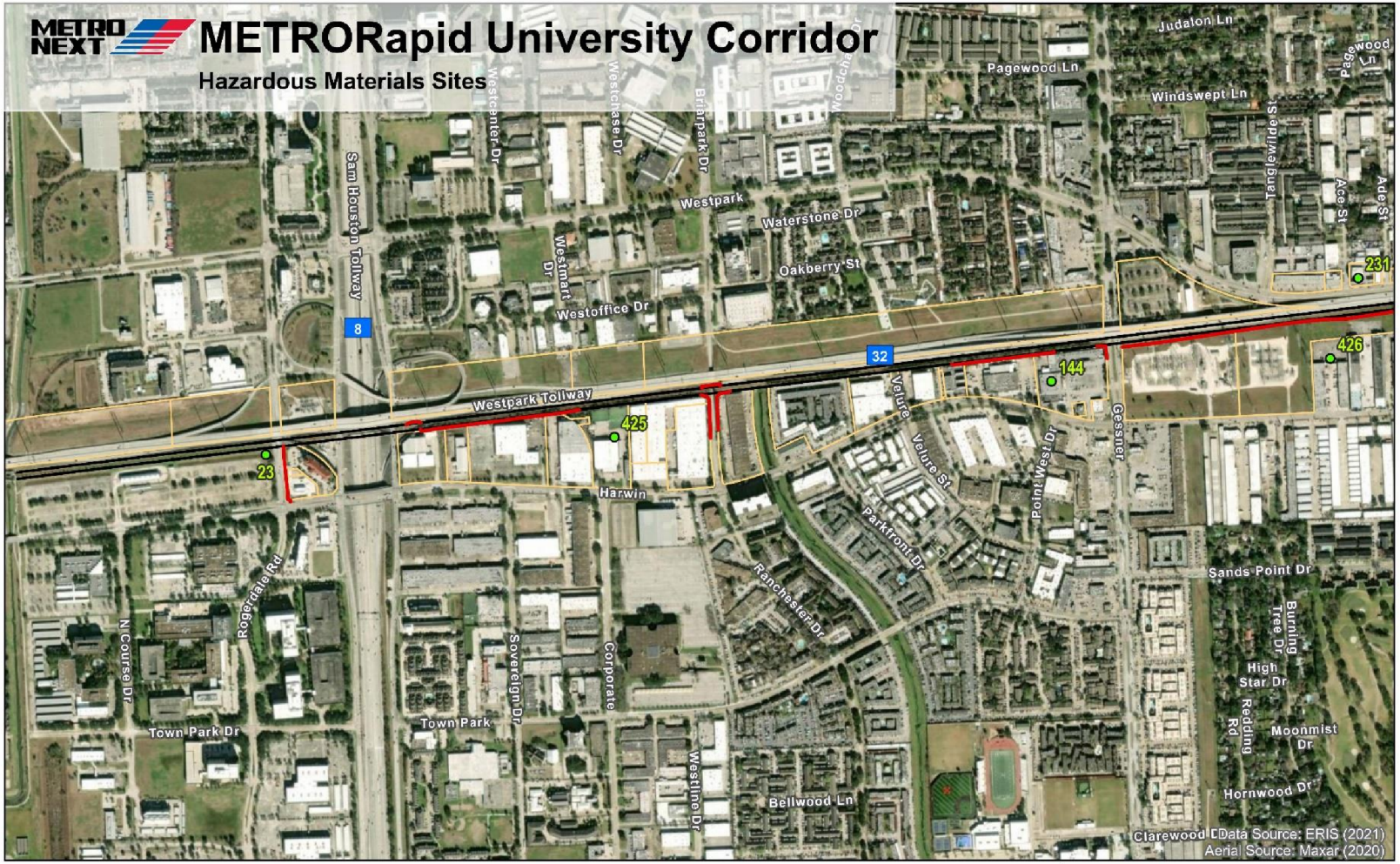
ERIS

2021. ERIS Database Report. Houston METRO University Line. Environmental Risk Information Service, June 23, 2021.

Schmidt et al.

2001. State Programs to Clean Up Drycleaners. Schmidt, Robin, R. DeZeeuw, L. Henning, and D. Trippler. State Coalition for the Remediation of Drycleaners. www.drycleancoalition.org/survey/.

Appendix A: Figures


METRORapid University Corridor
Hazardous Materials Sites
Judalon Ln
Pagewood Ln
Windswept Ln
Tanglewilde St
Ace St
Ader St
Westcenter Dr
Westchase Dr
Briarpark Dr
Woodcham Dr
Sam Houston Tollway
Westpark
Waterstone Dr
Oakberry St
Westmart Dr
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Westpark Tollway
Velure
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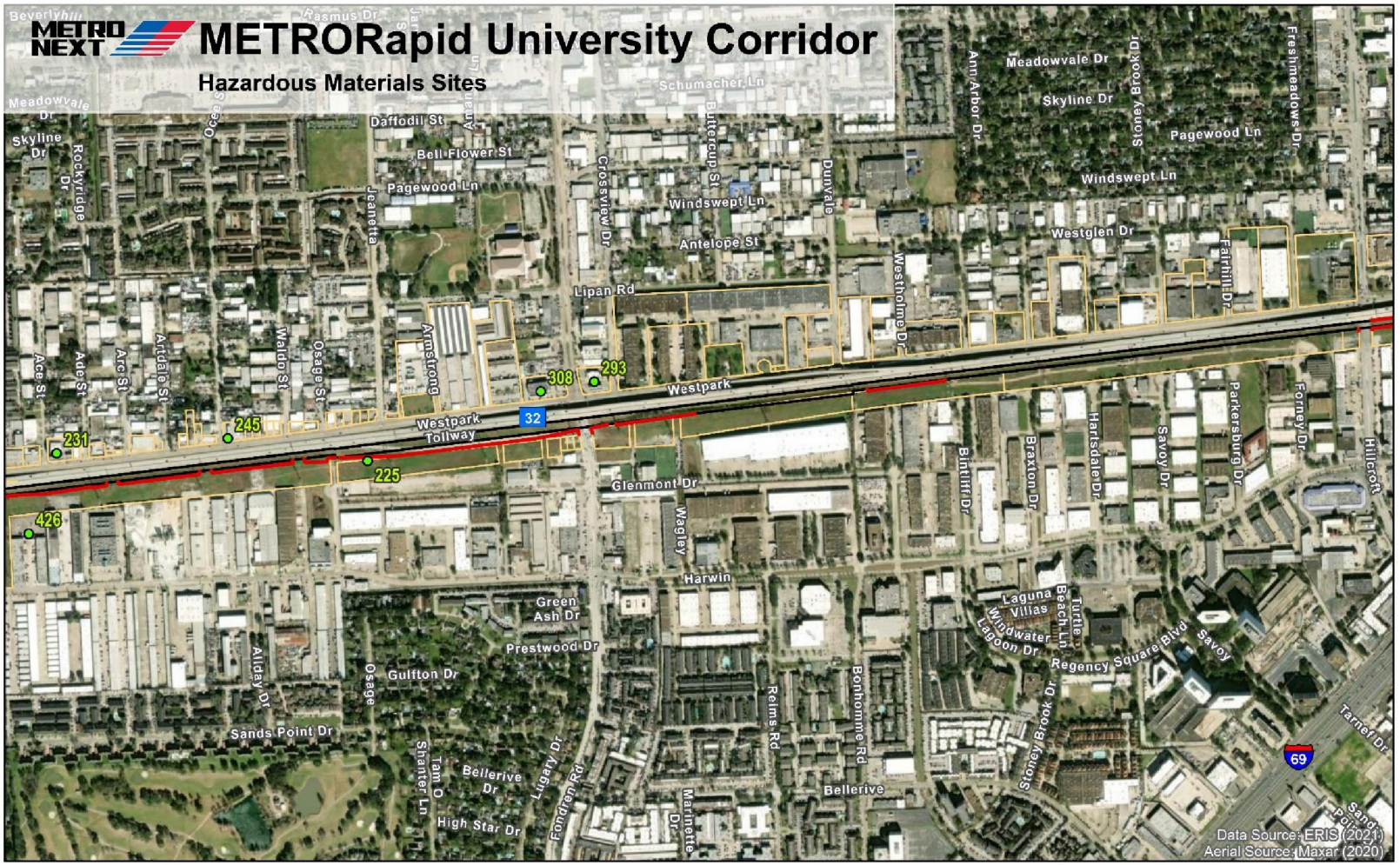
Point West Dr
Gessner
Harwin
Parkfront Dr
Ranchester Dr
Rogerdale Rd
N Course Dr
Sovereign Dr
Corporate
Town Park
Town Park Dr
Westline Dr
Bellwood Ln
Sands Point Dr
Burning Tree Dr
High Star Dr
Redding Rd
Moonmist Dr
Hornwood Dr
Clarewood Dr
Data Source: ERIS (2021)
Aerial Source: Maxar (2020)
Hazardous Materials Site
Proposed ROW
Proposed Bus Stop (Segment 3)
Existing ROW line
Parcels
N
Segment 1
0 500 1,000 Feet
Spring Valley
Houston
West University Place
Buffalo Bayou

Sheet 1 of 14



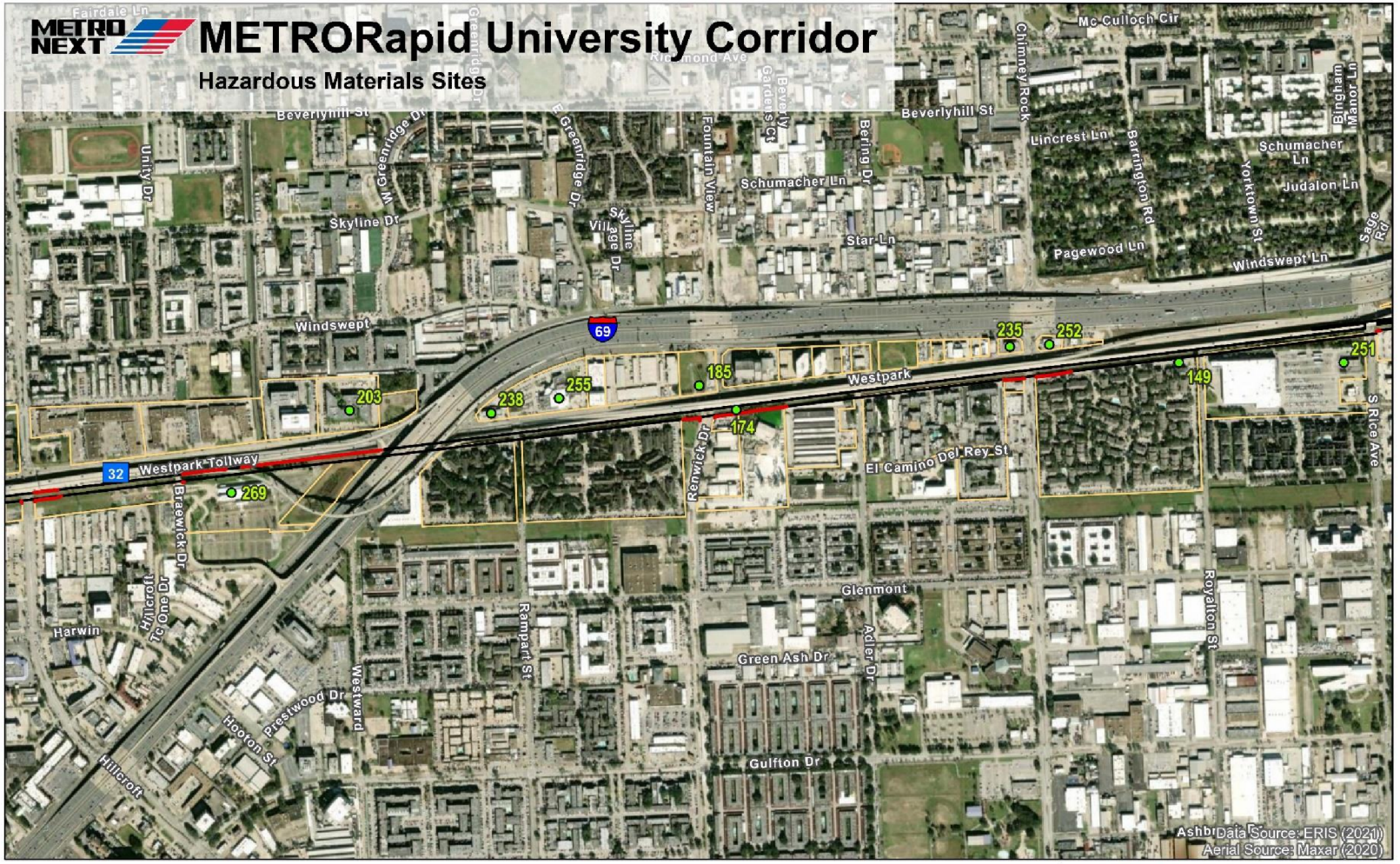
- Hazardous Materials Site
- Proposed ROW
- Proposed Bus Stop (Segment 3)
- Existing ROW line
- Parcels

N

Segment 1

0 500 1,000 Feet





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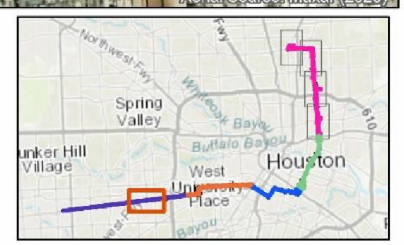
- Proposed ROW
- Proposed Bus Stop (Segment 3)
- Existing ROW line
- Parcels

N

Segment 1

0 500 1,000 Feet



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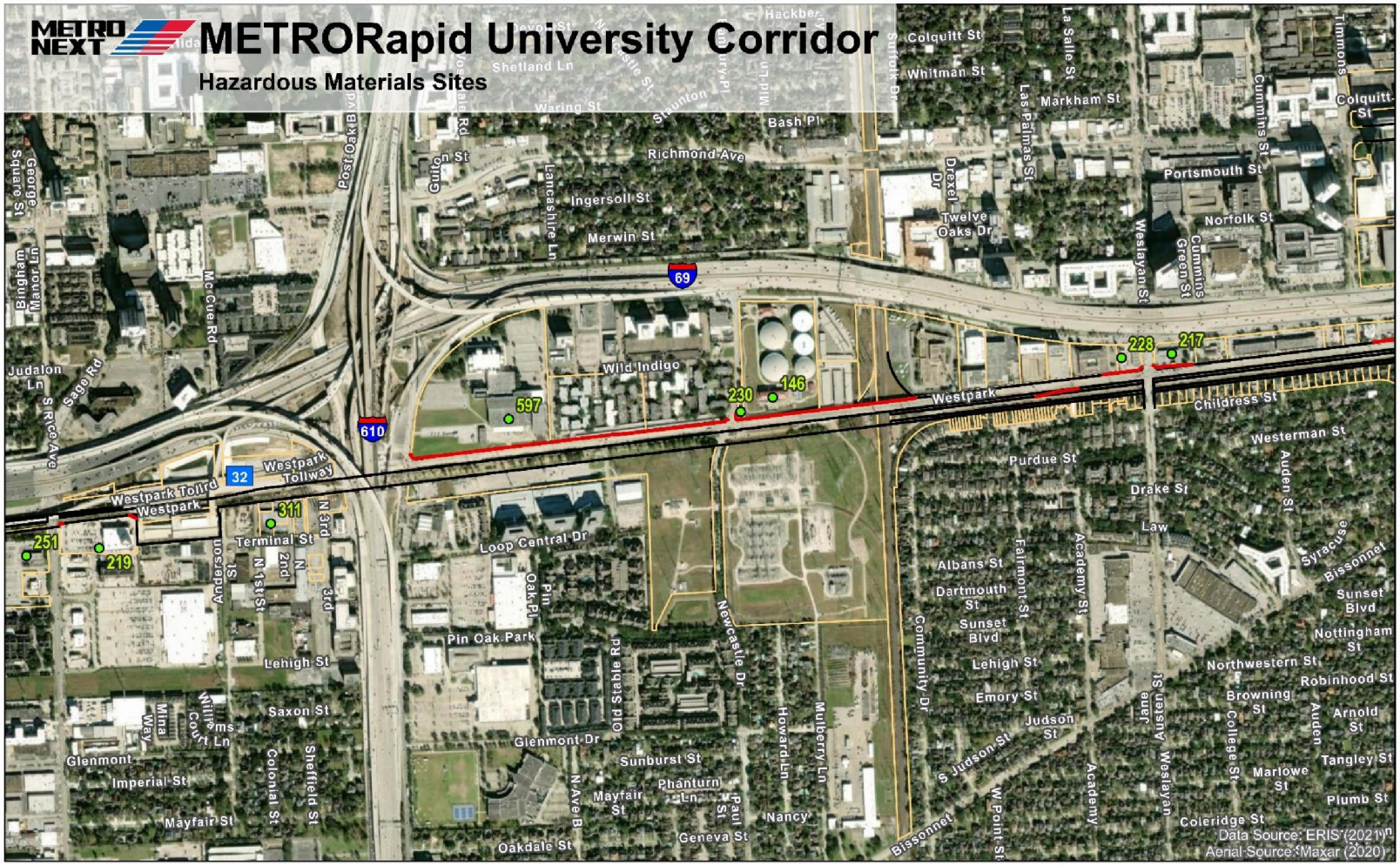
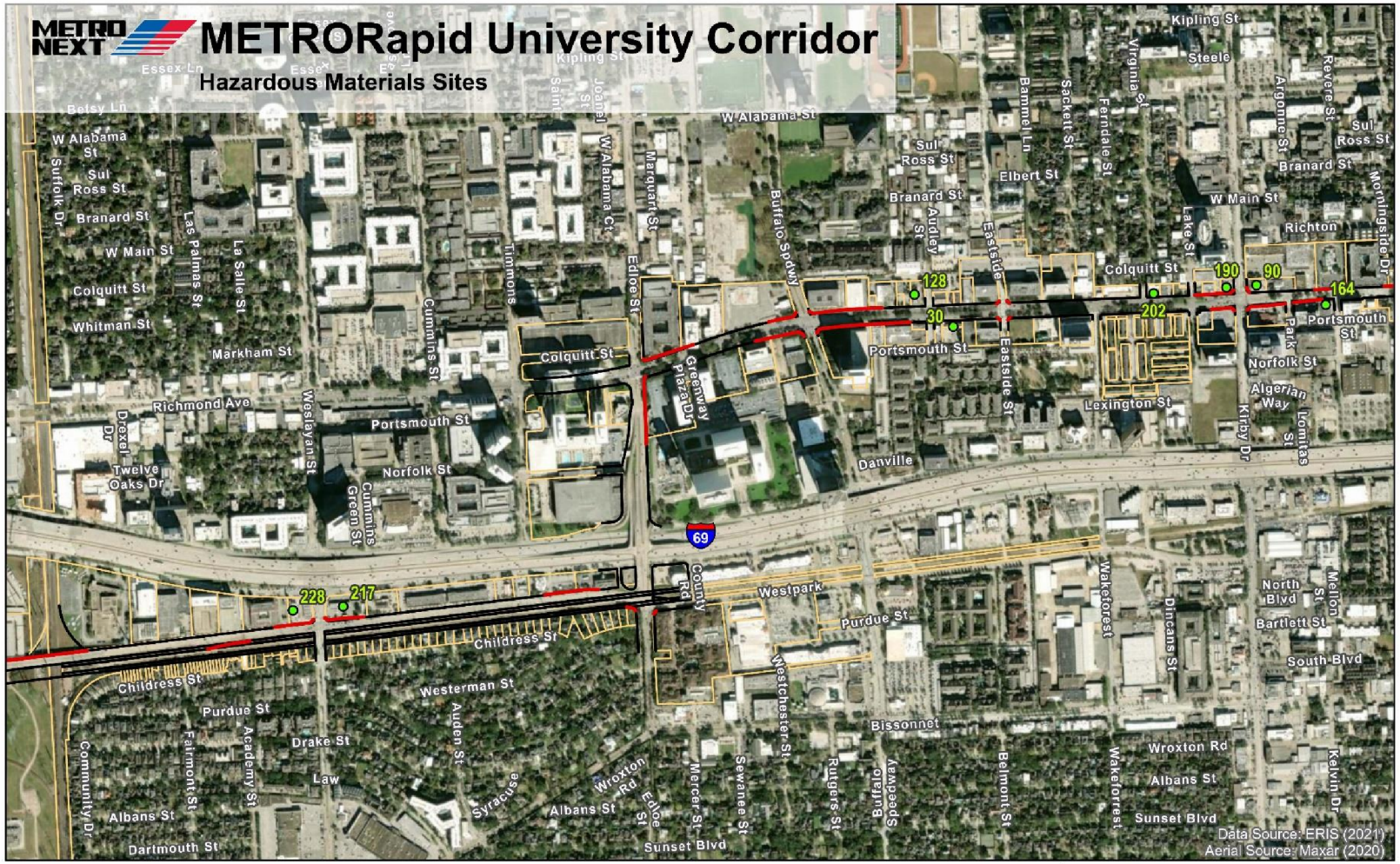
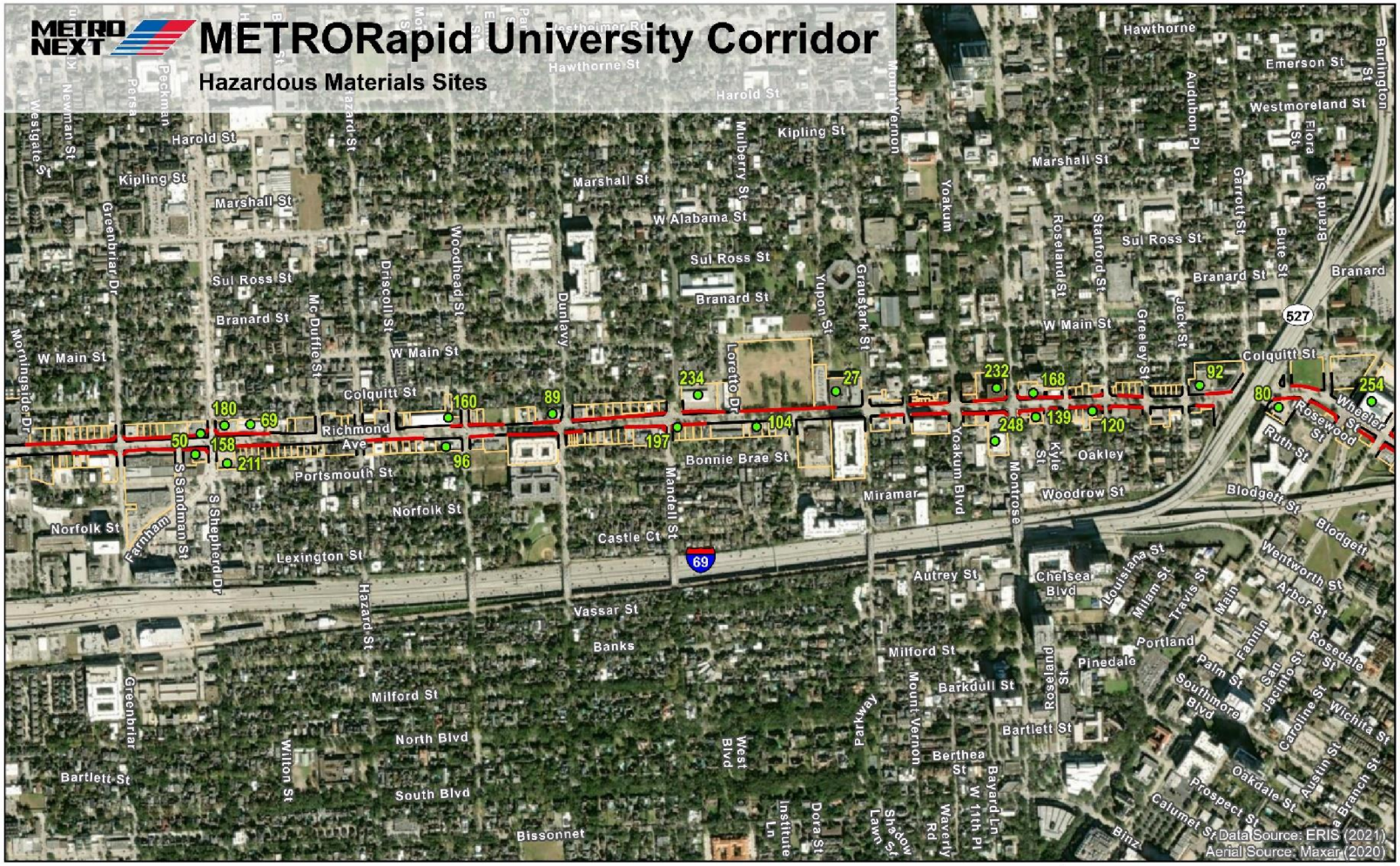

METRORapid University Corridor
Hazardous Materials Sites
Hazardous Materials Site
Proposed ROW
Proposed Bus Stop (Segment 3)
Existing ROW line
Parcels
N
Segment 1
0 500 1,000 Feet
Data Source: ERIS (2021)
Aerial Source: Maxar (2020)


METRORapid University Corridor
Hazardous Materials Sites
Data Source: ERIS (2021)
Aerial Source: Maxar (2020)
128
30
202
190
90
164
228
217
69
W Alabama St
Colquitt St
Portsmouth St
Norfolk St
Richmond Ave
Westpark
Purdue St
Childress St
Westerman St
Drake St
Law
Albans St
Dartmouth St
Sunset Blvd
Bissonnet
Wroxton Rd
Danville
Lexington St
Colquitt St
Kipling St
Steele
Branard St
W Main St
Richton
Elbert St
Sul Ross St
Hazardous Materials Site
Proposed ROW
Proposed Bus Stop (Segment 3)
Existing ROW line
Parcels
N
Segment 2
0
500
1,000 Feet
Spring Valley
Houston

Sheet 5 of 14

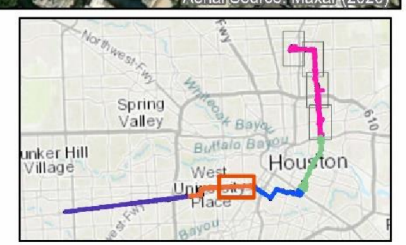


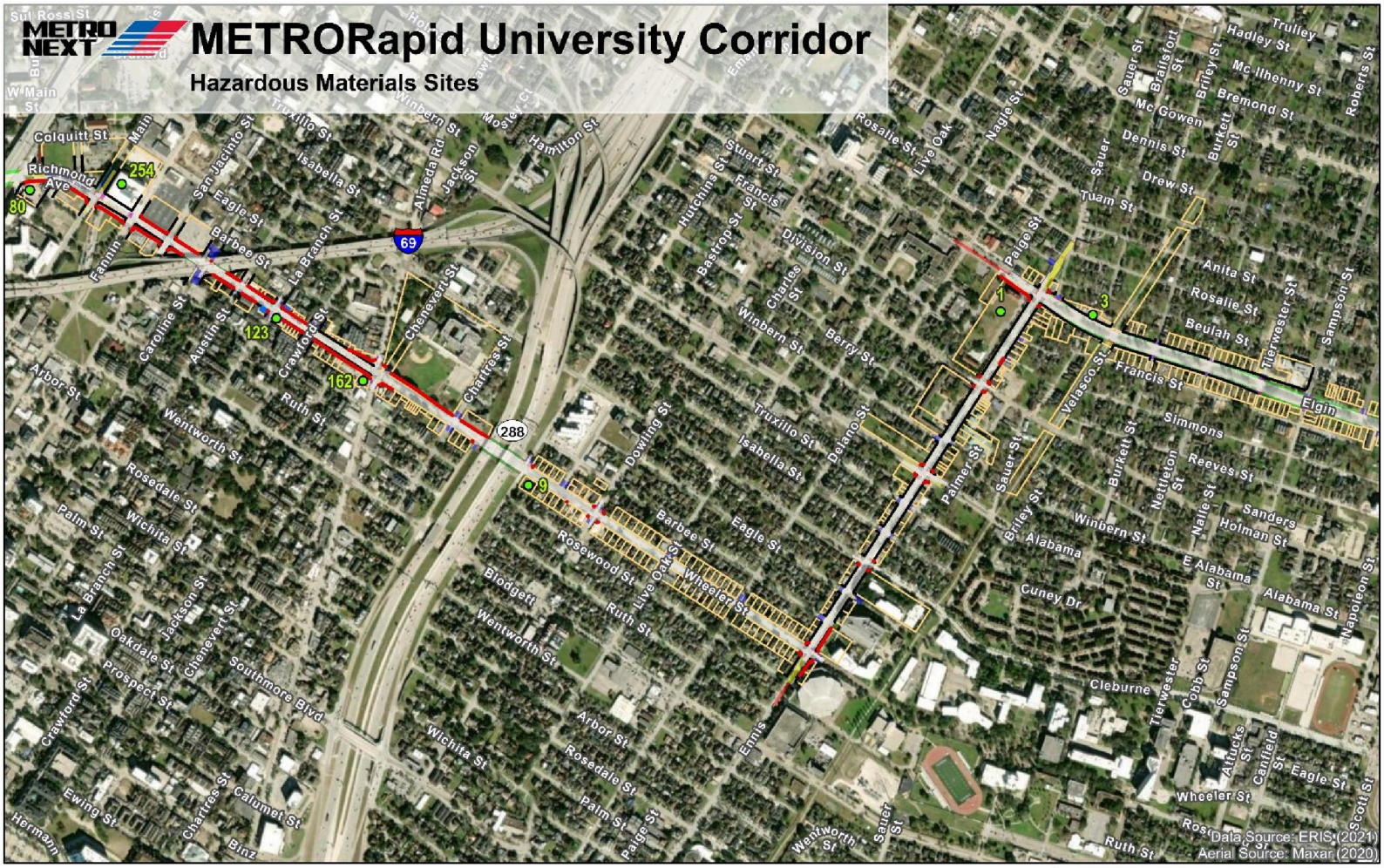
- Hazardous Materials Site
- Proposed ROW
- Proposed Bus Stop (Segment 3)
- Existing ROW line
- Parcels

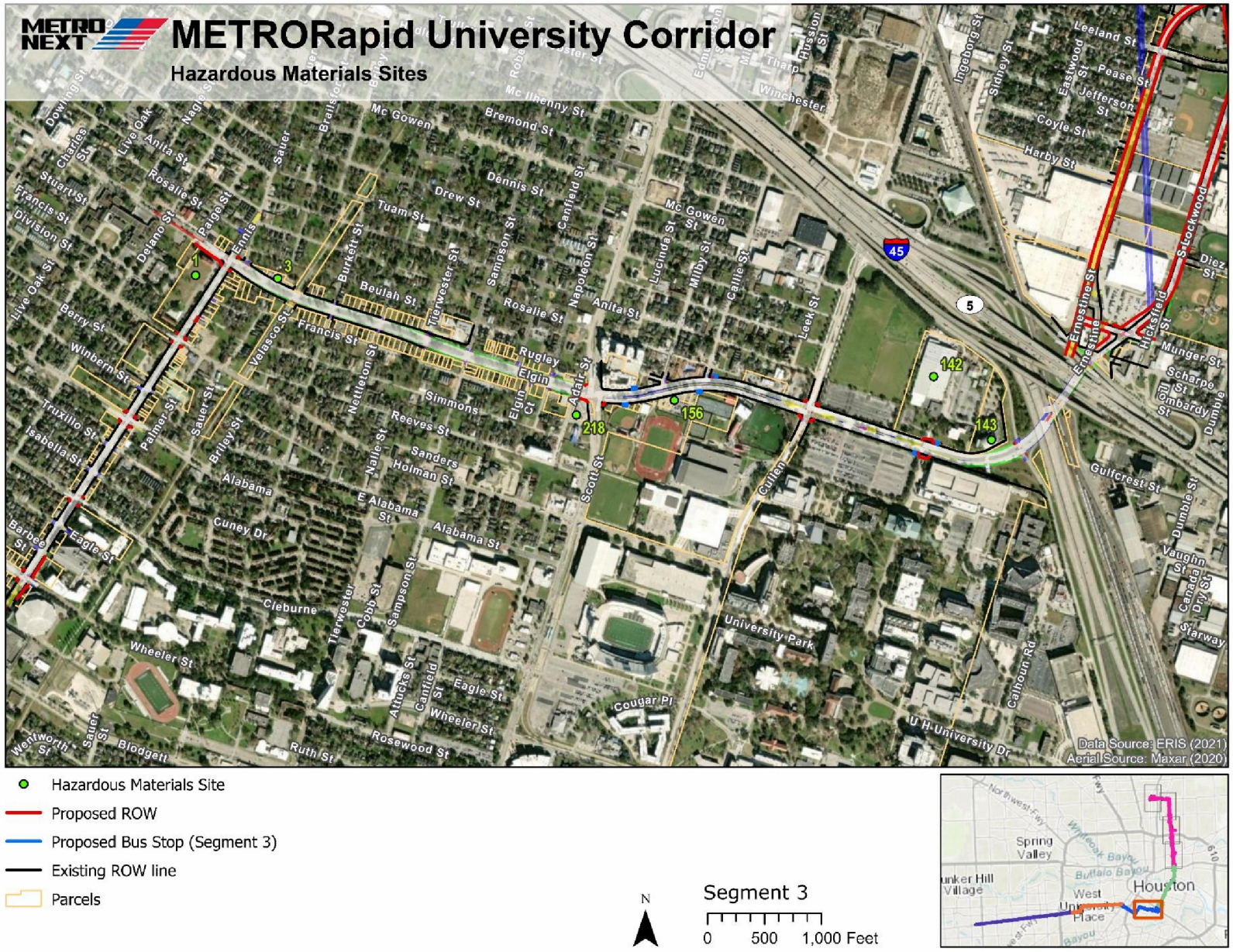
N

Segment 2

0 500 1,000 Feet




METRORapid University Corridor
Hazardous Materials Sites
Hazardous Materials Site
Proposed ROW
Proposed Bus Stop (Segment 3)
Existing ROW line
Parcels
N
Segment 3
0 500 1,000 Feet
Data Source: ERIS (2021)
Aerial Source: Maxar (2020)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METRORapid University Corridor
Hazardous Materials Sites
Hazardous Materials Site
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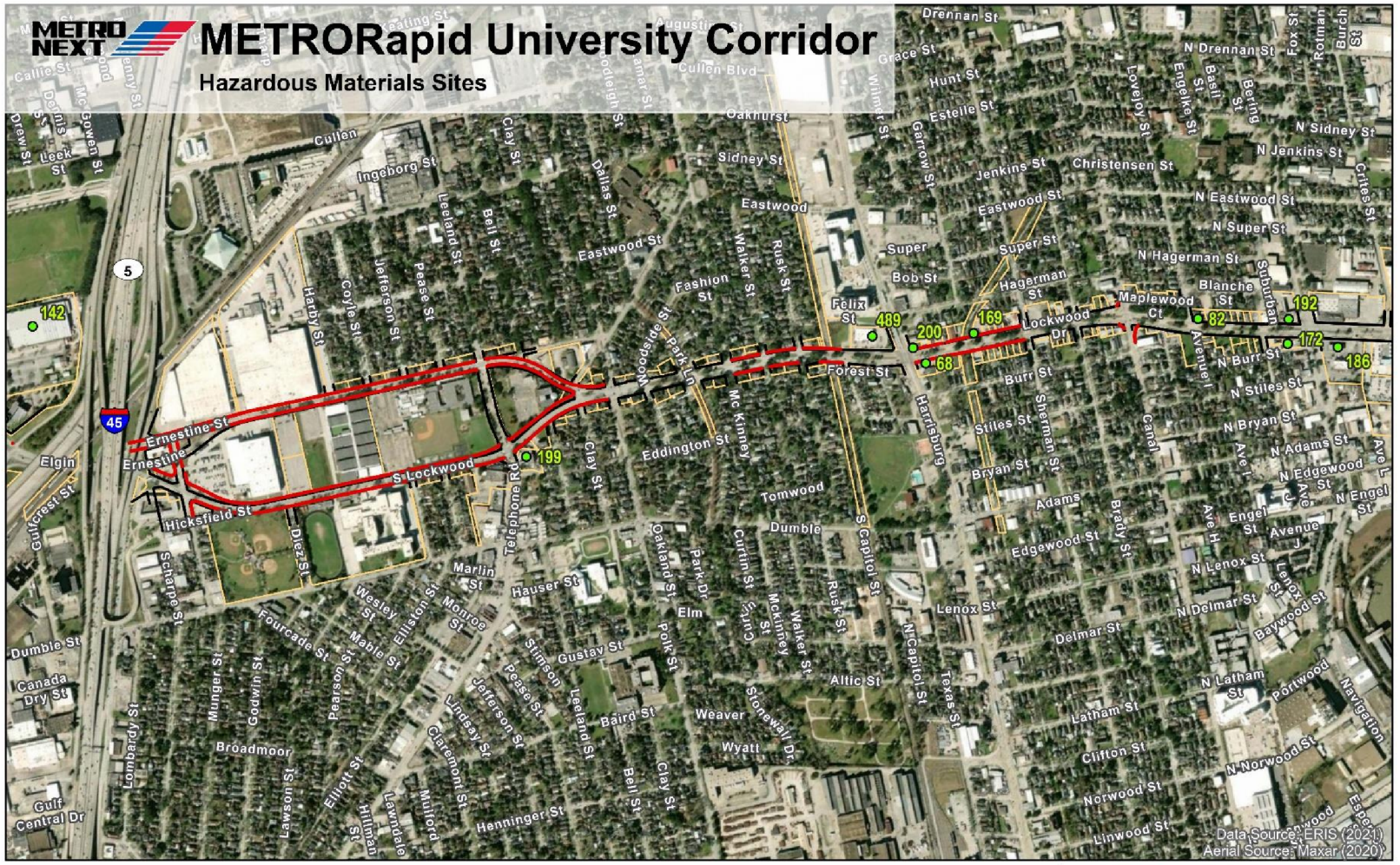
Spring Valley
West University Place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Ingeborg St
Cullen
Clay St
Dallas St
Leeland St
Bell St
Pease St
Jefferson St
Coyle St
Hardy St
Walker St
Rusk St
Fashion St
Woodside St
Park Ln
Forest St
Ernestine St
S Lockwood
Hicksfield St
Elgin
Gulfcrest St
Diez St
Telephone Rd
Eddington St
Mc Kinney
Tomwood
Dumble
Marlin St
Hauser St
Oakland St
Park Dr
Curtin St
Elm
Gustav St
Polk St
Mckinney
Altic St
Weaver
Wyatt
Stonewall Dr
Baird St
Broadmoor
Lombardy St
Munger St
Godwin St
Pearson St
Mable St
Fourcade St
Scharpe St
Dumble St
Canada Dry St
Gulf Central Dr
Elliott St
Lawson St
Hillman St
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Mulford
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N Super St
N Hagerman St
Jenkins St
Garrow St
Super
Super St
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Felix St
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Blanche St
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Baywood St
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Aerial Source: Maxar (2020)
Hazardous Materials Site
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Proposed Bus Stop (Segment 3)
Existing ROW line
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Buffalo Bayou
West University Place
Houston
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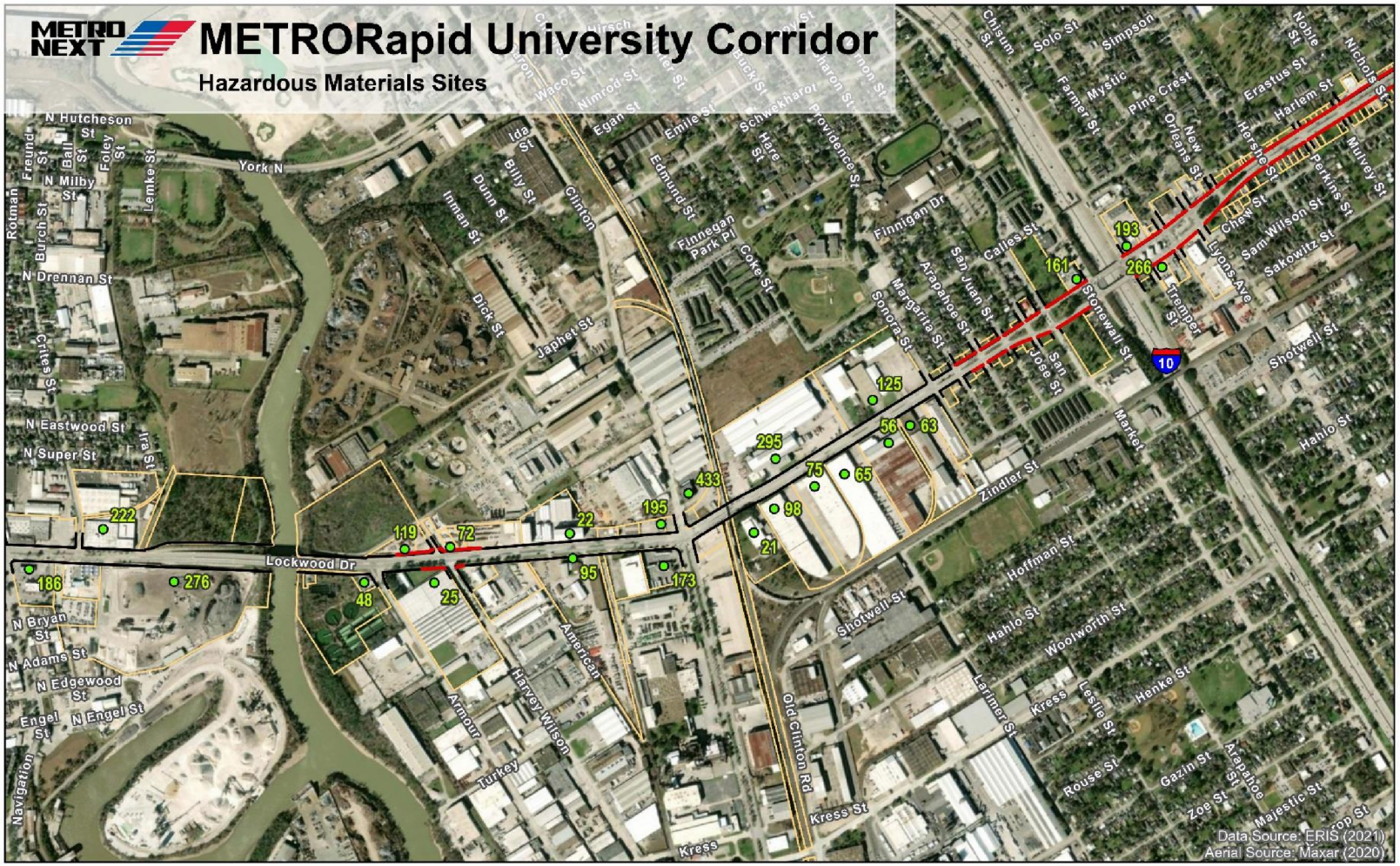

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- Existing ROW line
- Parcels

Segment 4

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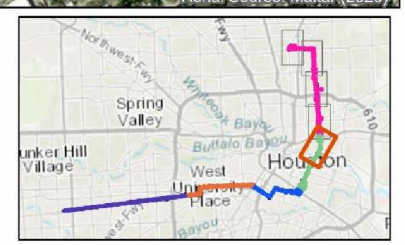

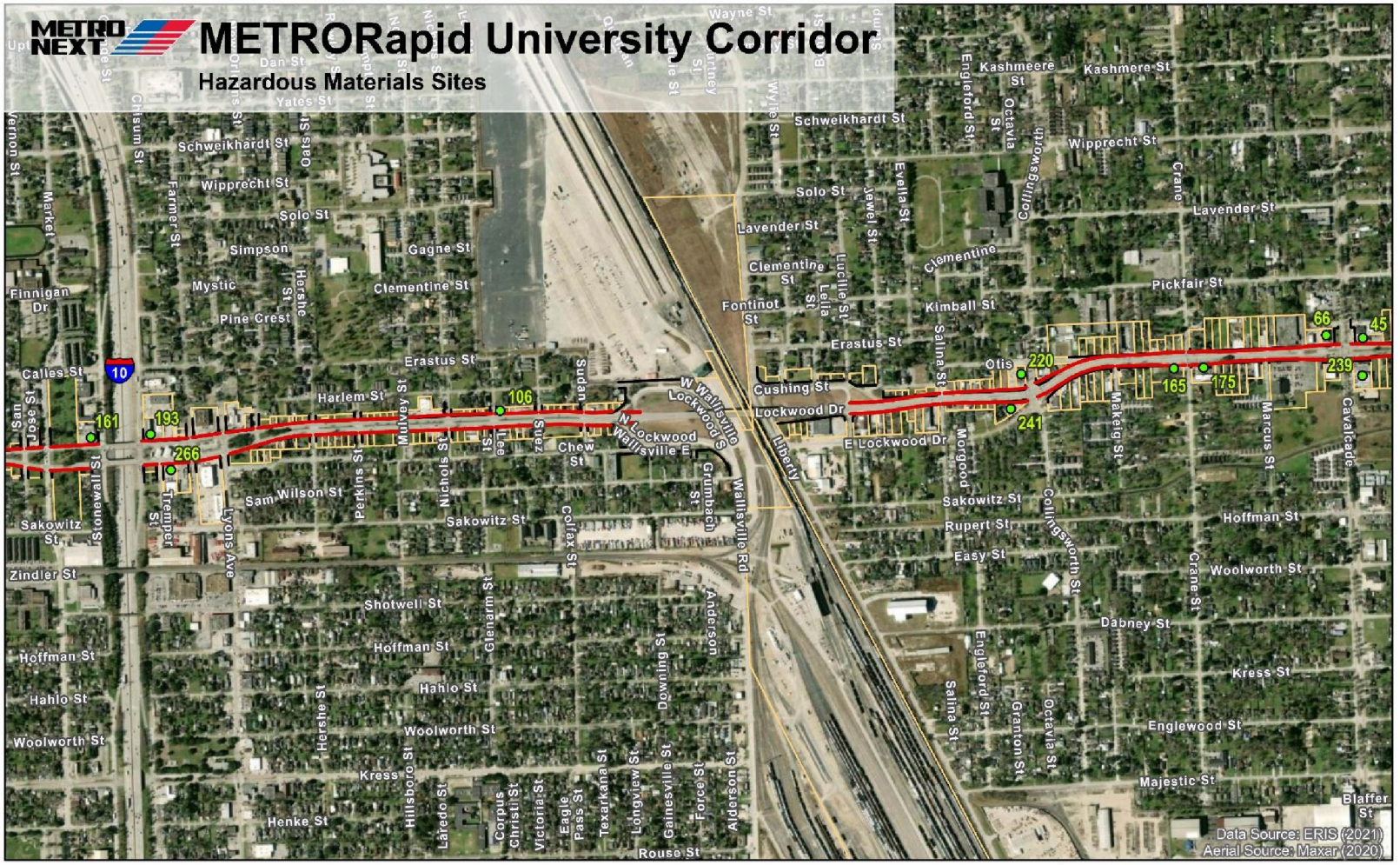
METRORapid University Corridor
Hazardous Materials Sites
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Hazardous Materials Site
Proposed ROW
Proposed Bus Stop (Segment 3)
Existing ROW line
Parcels
Segment 5
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500
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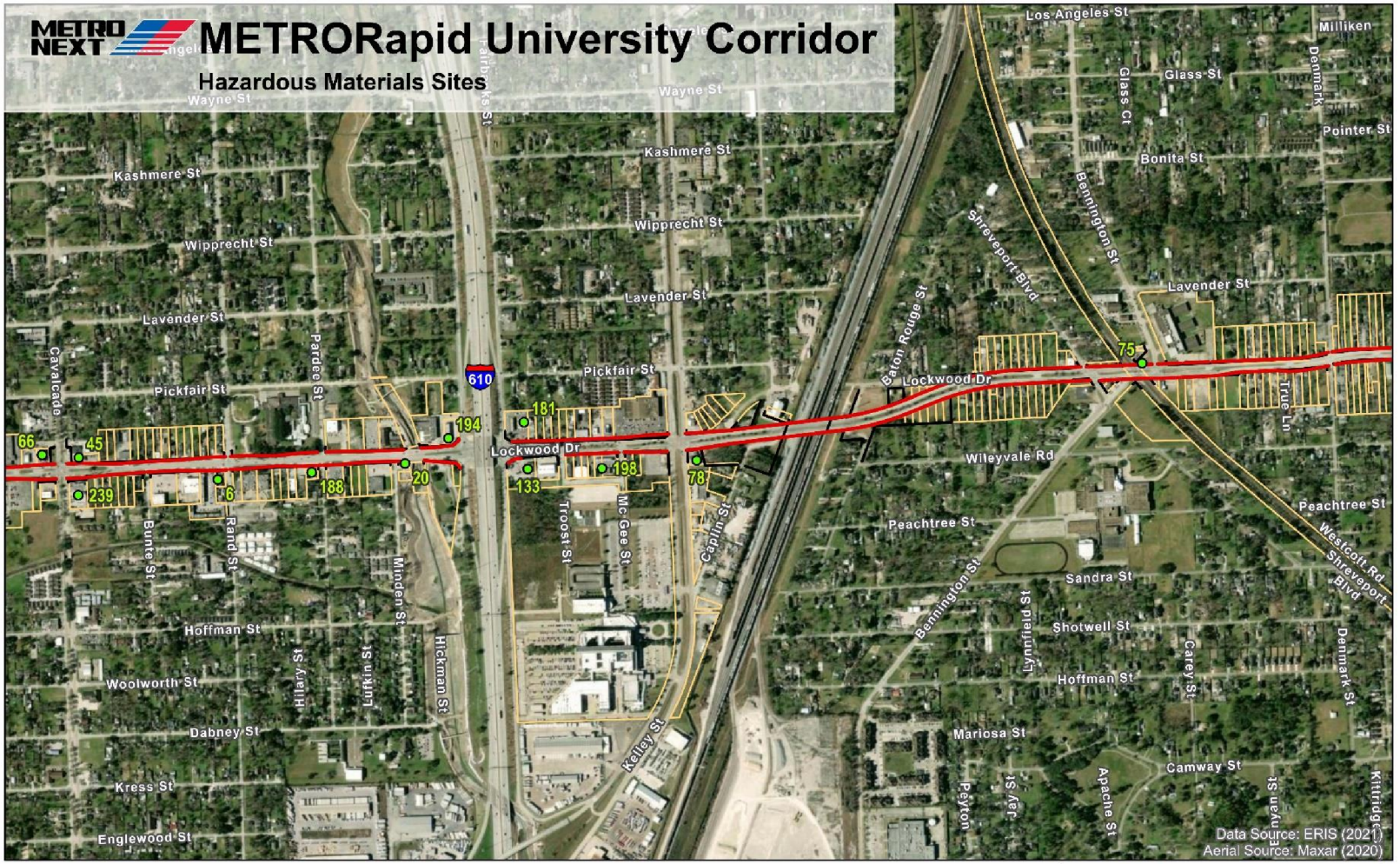
Spring Valley
Houston
West University Place
Bunker Hill Village



- Hazardous Materials Site
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- Proposed Bus Stop (Segment 3)
- Existing ROW line
- Parcels

Segment 5

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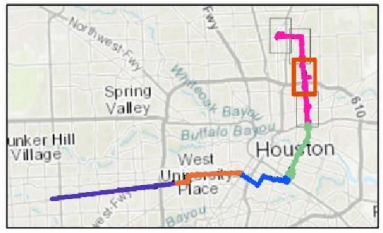
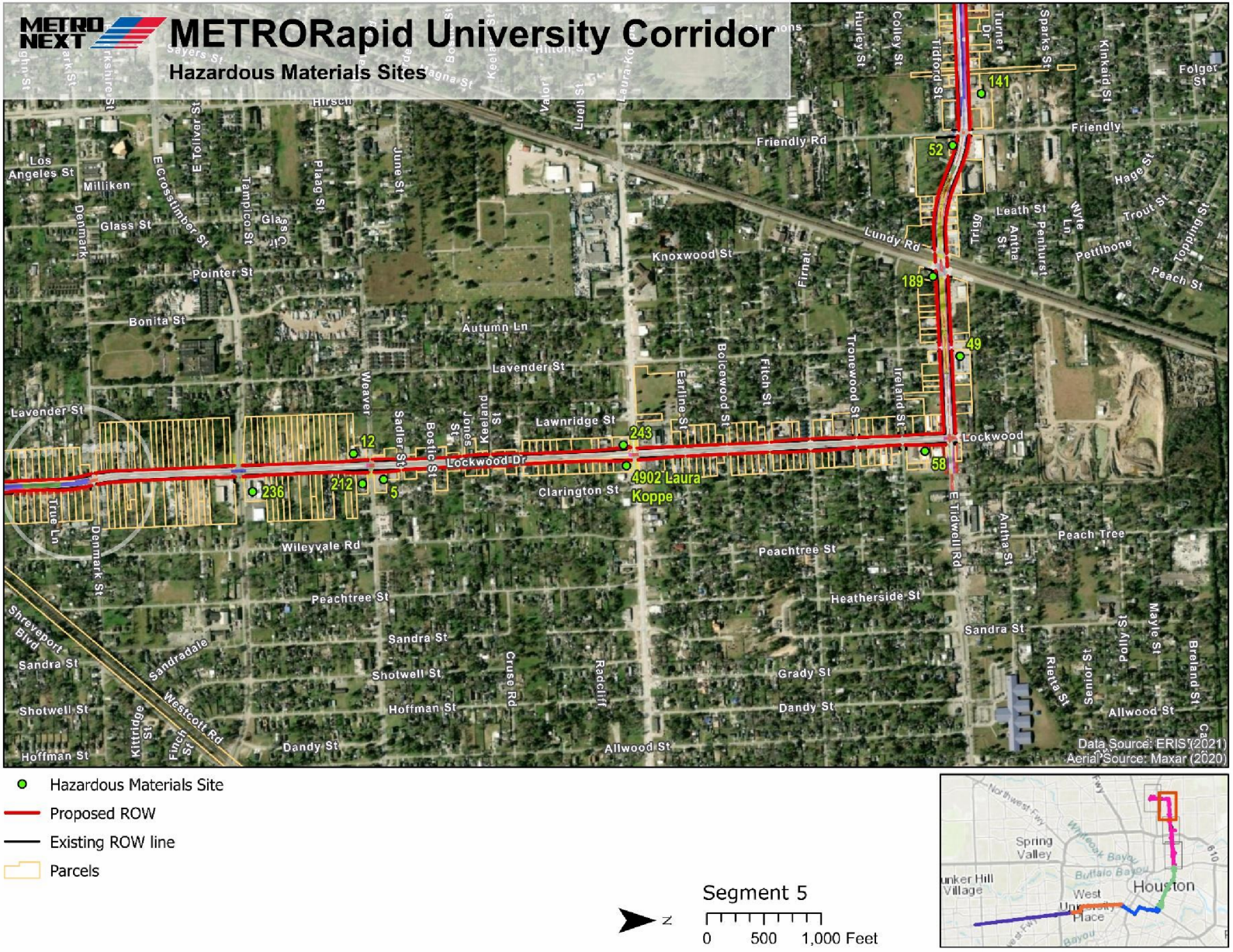




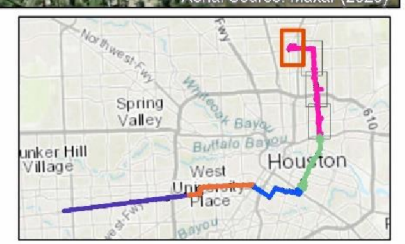
Sheet 13 of 14



- Hazardous Materials Site
- Proposed ROW
- Proposed Bus Stop (Segment 3)
- Existing ROW line
- Parcels

Segment 5

0 500 1,000 Feet



Appendix B: Phase I ESA, 3520 S. Shepherd Drive

Appendix C: Phase I ESA, 4516 Harrisburg Boulevard

Appendix D: Phase I ESA, 1025 Lockwood Drive

APPENDIX C-7 – Noise and Vibration

METRORapid University Corridor

Noise and Vibration

Technical Memorandum
September 2023

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Appendices

Appendix A University BRT Noise Model

Maps Appendix B University BRT Noise

Survey Plots

Acronyms and Abbreviations

ACRONYM	DEFINITION
ADA	Americans with Disabilities Act
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
DBA	Decibels A-weighted
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
ft	feet
FTA	Federal Transit Administration
GBV	Ground-Borne Vibration
GBN	Ground-Borne Noise
GIS	Geographic Information Systems
HZ	Hertz
LDN	Day-Night Sound Level
LEQ	Equivalent Continuous Sound Level
LRT	Light Rail Transit
LPA	Locally Preferred Alternative
LV	Vibration Velocity Level
METRO	Metropolitan Transit Authority of Harris County
mph	miles per hour
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PPV	Peak Particle Velocity
ROW	Right-of-Way
RCNM	Roadway Construction Noise Model
SEL	Sound Exposure Level
TCEQ	Texas Commission on Environmental Quality
TOD	Transit Oriented Development
TXDOT	Texas Department of Transportation
UPRR	Union Pacific Railroad
US	United States
USDOT	US Department of Transportation
USGS	US Geological Survey
VDB	Vibration Decibels

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of this technical report is to present the results of a noise and vibration assessment prepared for the University Corridor Bus Rapid Transit (University BRT) project in Houston, Texas. As the project will result in a change to noise and vibration sources, an assessment adhering to FTA's "Transit Noise and Vibration Impact Assessment" methodology was prepared in support of the Categorical Exclusion.

1.2 Project Overview

The Project is a proposed 25.3-mile BRT line from Westchase Park & Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit- dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park & Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1. Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other METRORail, METRORapid, and local bus services. Some stations would be incorporated into existing METRO facilities. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

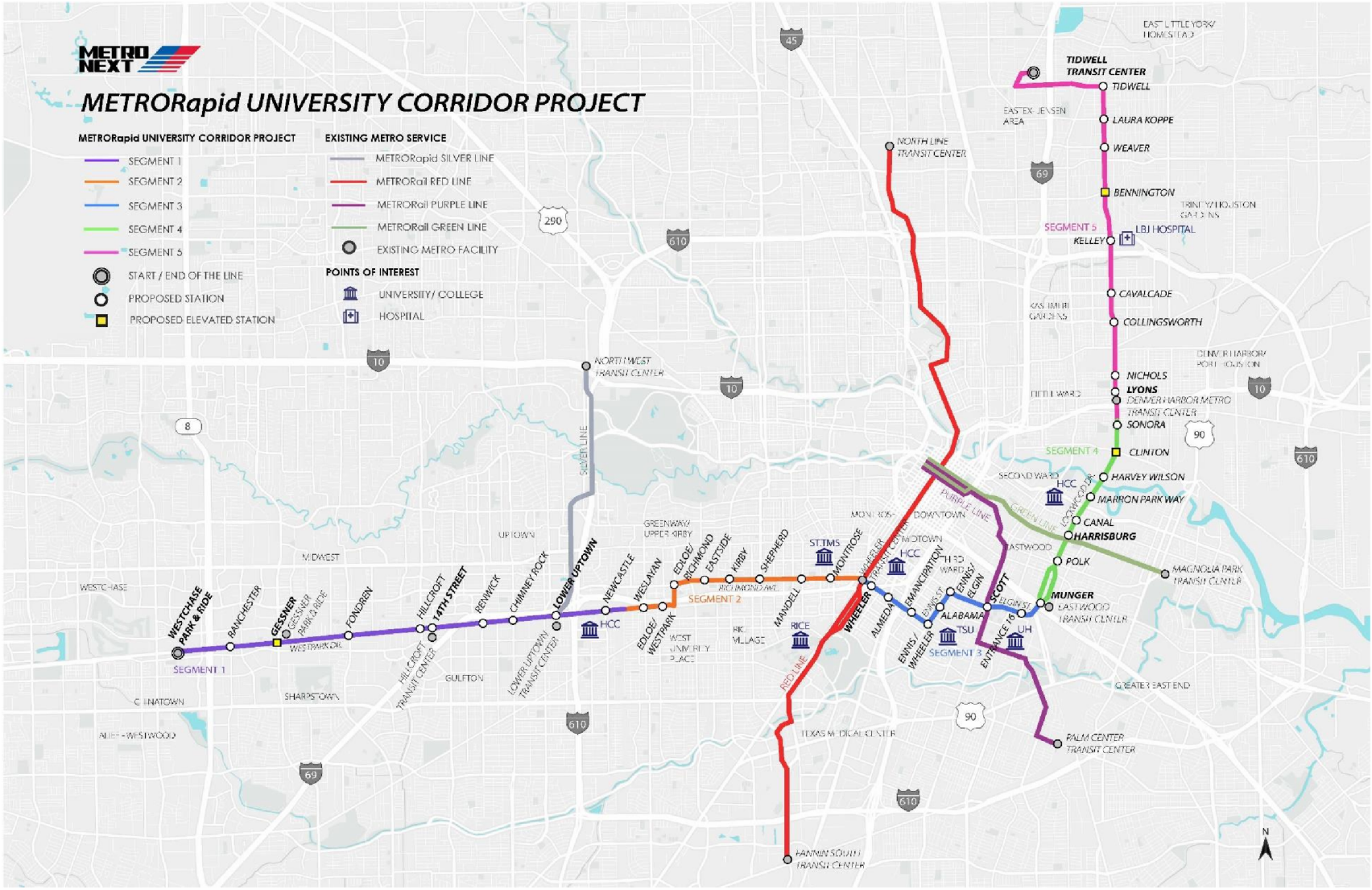
METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 9:30 PM to 12:30 AM. Weekend service

would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 1-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr at Union Pacific Railroad (UPRR) tracks east of Newcastle Dr
2	Westpark Dr at UPRR tracks east of Newcastle Dr	Richmond Ave at Main St (Wheeler Transit Center)
3	Richmond Ave at Main St (Wheeler Transit Center)	Elgin St at I-45 (Eastwood Transit Center)
4	Elgin St at I-45 (Eastwood Transit Center)	Lockwood Dr at Margarita St
5	Lockwood Dr at I-10 (Fifth Ward/Denver Harbor Transit Center)	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



2 Fundamentals of Noise and Vibration

2.1 Noise Fundamentals

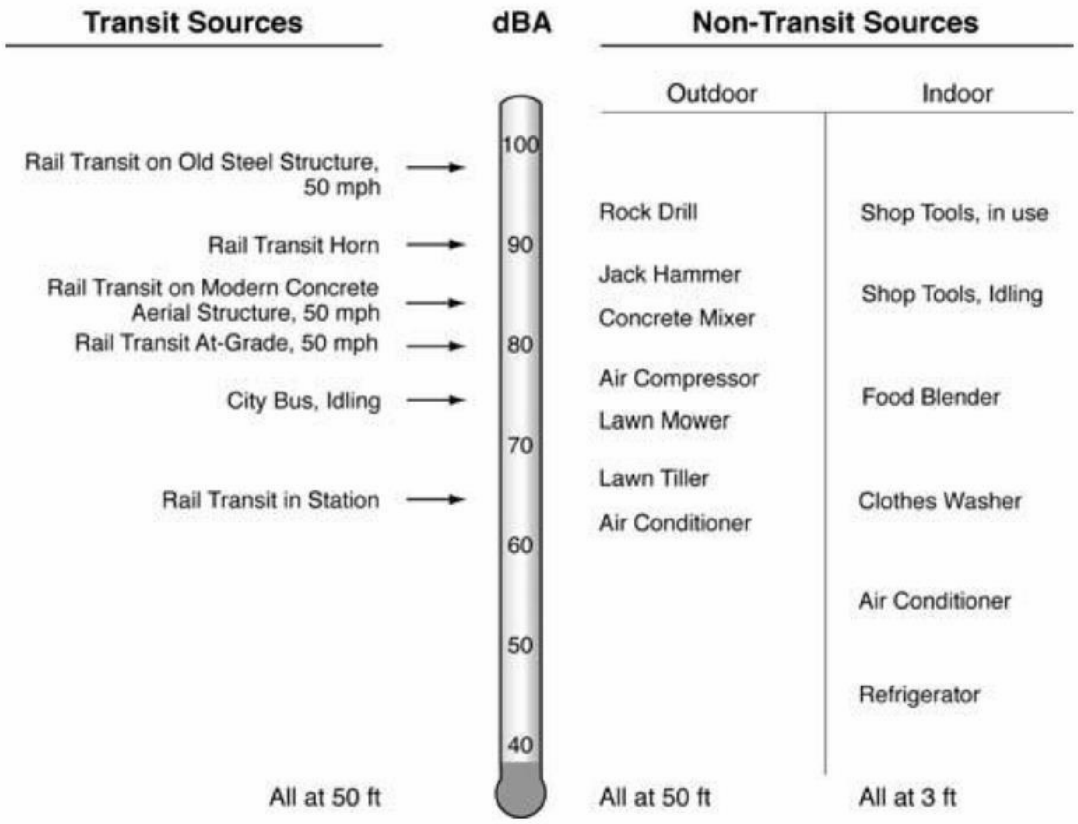
Sound is created when a disturbance or vibration induces pressure waves in the air. Sound is characterized by various parameters: the pressure level of a given sound (amplitude), the rate of oscillation (frequency or pitch), and time pattern (variability). When sound is unwanted, it is categorized as noise. Typical sound levels of transit and non-transit sources are provided in **Figure 2-1**.

The frequency of a sound is the rate of physical oscillation, measured in oscillations per second, or Hertz (Hz). To humans, this manifests as pitch, or the lowness (rumble) or highness (hiss) of a sound. Sound pressure level can vary by over one million times within the range of human hearing. The decibel (dB) scale is a logarithmic loudness scale used to reflect this wide range. Environmental noise is a combination of all outdoor noise sources. When combined, sources such as distant traffic, wind in trees, and distant industrial or farming activities often create a low-level background noise in which no particular individual source is identifiable (FTA 2018).

Because the human auditory system does not respond equally to all frequencies of sound, human response to noise uses A-weighted sound levels, where the sound has been filtered to reduce the strength of very low and very high-frequency sounds to emulate the human response to sound levels. The A-weighted sound level correlates well with human response, and the overall A-weighted sound level is denoted in decibels expressed as “dBA.” On the dBA scale, the normal range of human hearing extends from 0 dBA to about 140 dBA. Under real-world conditions changing a sound by 1 dBA cannot be perceived; a 3-dBA change is considered a perceptible difference, while a 5-dBA change is readily noticeable. A 10-dBA increase in the level of continuous noise represents a perceived doubling of loudness (FTA 2018).

Noise exposure over time is typically expressed in terms of an equivalent steady-state energy level, referred to as Leq, or equivalent noise level, that represents the average acoustical energy of a given measurement over a specified time period. Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, a 24-hour noise descriptor called the day- night noise level (Ldn) is often used for environmental studies; this level adds a 10 dBA penalty to nighttime noise levels to account for the increased sensitivity. The 10 dBA penalty applies from 10 PM to 7 AM.

Figure 2-1: Typical Sound Levels of Transit and Non-Transit Noise Sources



Source: FTA 2018.

A receptor's distance from a noise source affects how noise levels attenuate (decrease). Transportation noise sources tend to be arranged in a line, and continuous roadway traffic attenuates at a rate of 3.0 dBA to 4.5 dBA per doubling of distance from the source, depending on the ground conditions which can absorb sound. Point sources of noise, such as stationary equipment or construction equipment, typically attenuate at a rate of 6.0 dBA per doubling of distance from the source. For example, a sound level of 80 dBA at 50 feet from a point noise source will be reduced to 74 dBA at 100 feet and 68 dBA at 200 feet. Noise levels can also be attenuated by "shielding" or providing a barrier between the source and the receptor. With respect to interior noise levels, the noise reduction provided by the exterior shell of the building depends on whether windows are closed or open. Based on the United States Environmental Protection Agency (U.S. EPA) national average, closed windows reduce noise levels by approximately 25 dBA, while open windows reduce noise levels by about 15 dBA (U.S. EPA, 1974).

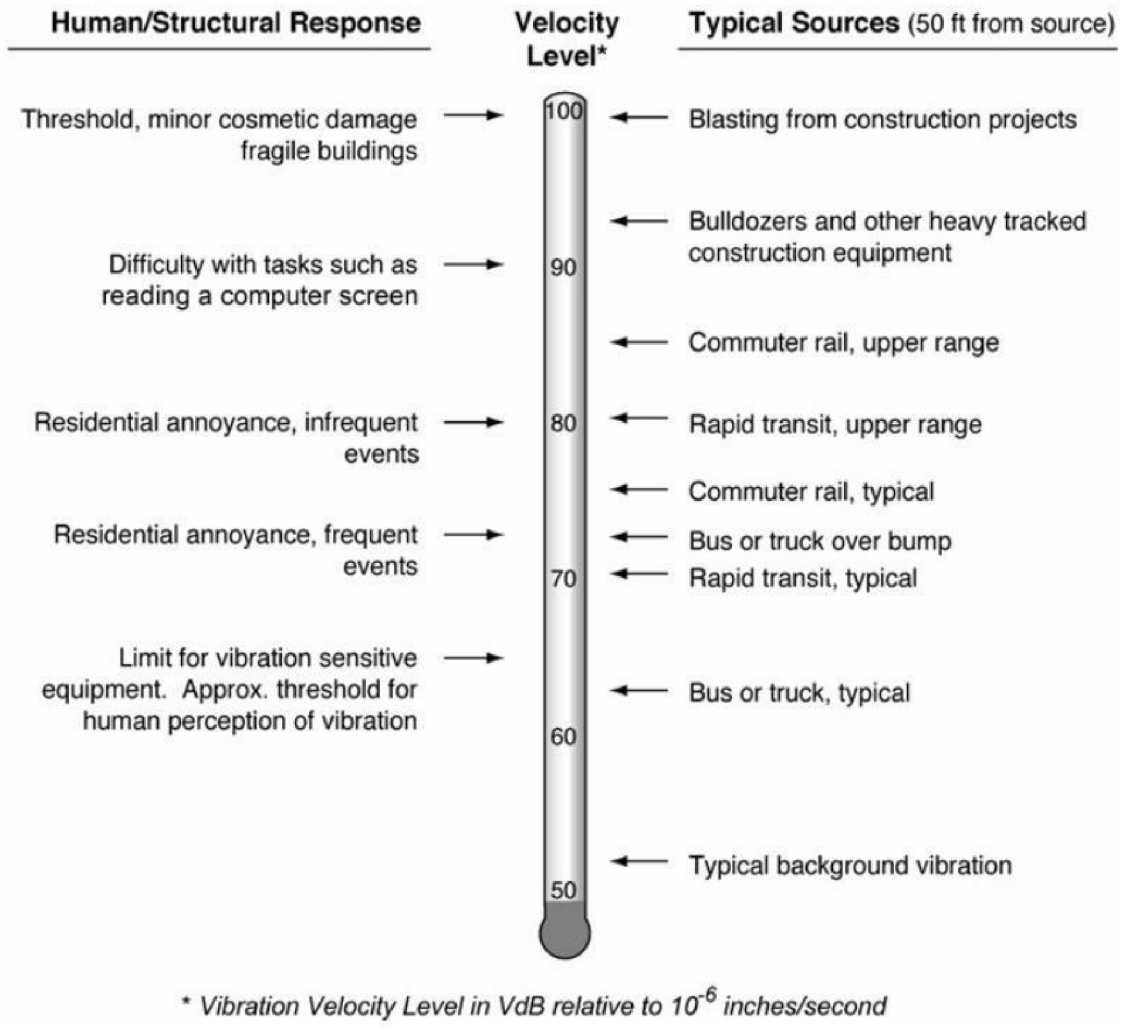
2.2 Vibration Fundamentals

Vibration can be interpreted as energy transmitted in waves through the ground. Vibration generally dissipates with distance from the vibration source (e.g., pile driving) due to geometric spreading and inherent damping in the intervening ground. The vibration transmitted to a receiving person or building is influenced by soil type and distance between source and receptor, building construction

(if applicable), and duration. For humans, the response to vibration is also influenced by the number of perceived events. A scale of typical source levels and response levels are provided in **Figure 2-2.**

If the amplitude is high enough, ground vibration can cause structural damage. To assess the potential for structural damage associated with vibration, the vibratory ground motion in the vicinity of the affected structure is measured in terms of peak particle velocity (PPV) in the vertical and horizontal directions (vector sum), typically in units of inches per second (in/sec). Minor cosmetic damage to fragile buildings can occur at vibration levels as low as 0.12 in/sec PPV depending on building condition and construction (FTA, 2018).

Figure 2-2: Typical Levels of Ground-Borne Vibration



Source: FTA 2018.

3 Regulatory Setting

Because this project is funded by the FTA, the impact assessment is based on guidance from the FTA's *Transit Noise and Vibration Impact Assessment Manual* (2018), hereinafter denoted FTA Manual, as well as the City of Houston Noise Ordinance (Chapter 30).

The FTA Manual establishes procedures, criteria, and modeling tools for predicting and assessing noise and vibration impacts of transit projects. Assessing potential noise and vibration impacts in relation to established criteria and methods such as the FTA methodology is consistent with NEPA.

3.1 FTA Guidance

3.1.1 Operations Noise

FTA operational noise impact criteria are outlined in Section 4.1 of the FTA Manual.

Two tables from Section 4.1 of the FTA Manual are presented below. **Table 3-1** provides detailed land use category descriptions as well as the impact assessment metric for each category. **Figure 3-1** defines the *moderate* and *severe* impact threshold for each category, based on existing noise exposure. In the context of the NEPA process, either a *moderate* or *severe* impact would be considered a significant adverse effect. These criteria are also applicable to evaluate potential noise impacts from temporary relocation of the UPRR tracks for the UPRR undercrossing.

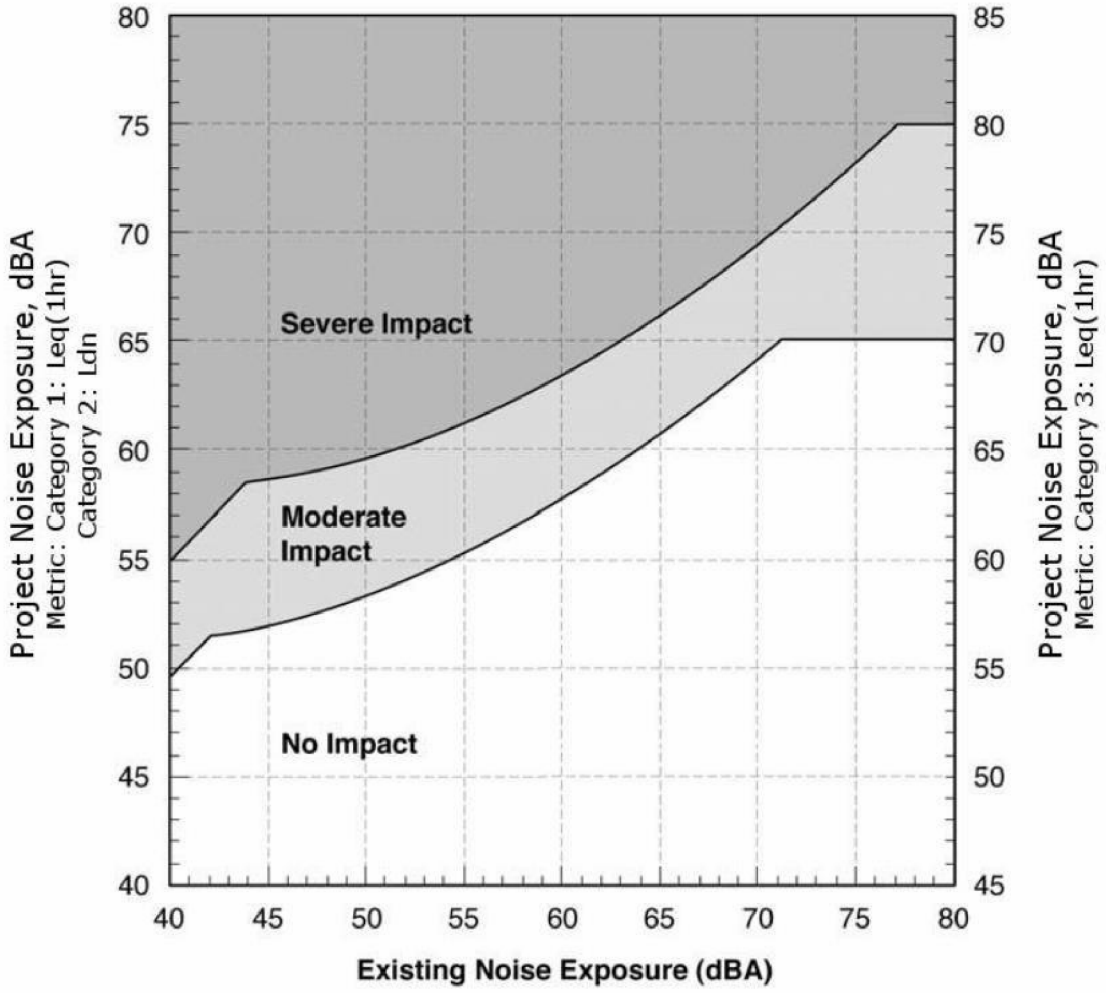
Table 3-1: FTA Land Use Categories

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
1	High Sensitivity	Outdoor $L_{eq(1hr)}$*	Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Recording studios and concert halls are also included in this category.
2	Residential	Outdoor L_{dn}	This category is applicable all residential land use and buildings where people normally sleep, such as hotels and hospitals.
3	Institutional	Outdoor $L_{eq(1hr)}$*	This category is applicable to institutional land uses with primarily daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category.

* $L_{eq(1hr)}$ for the loudest hour of project-related activity during hours of noise sensitivity.

Source: FTA 2018.

Figure 3-1: FTA Noise Impact Criteria



Source: FTA 2018.

3.1.2 Construction Noise

FTA construction noise impact criteria are outlined in Section 7.1 of the FTA Manual.

As the City of Houston construction noise regulations are more conservative than FTA, a lower criterion of 85 dBA is used as the primary impact level for residential receivers, as opposed to the 90 dBA suggested by FTA. The City of Houston noise ordinance is discussed in **Section 3.2**.

3.1.3 Operations Vibration

FTA operational vibration impact criteria are outlined in Section 6.2 of the FTA Manual.

The FTA ground-borne vibration criteria are outlined in **Table 3-2**. In addition to these criteria, FTA also identifies a ground-borne vibration criterion for TV studios of 65 VdB and ground-borne noise criterion of 25 dBA. These criteria are also applicable to evaluate potential vibration impacts from temporary relocation of the UPRR tracks for the UPRR undercrossing.

Table 3-2: FTA Vibration Impact Criteria

Land Use Category	GBV Impact Levels (VdB re 1 micro-inch /sec)			GBN Impact Levels (dBA re 20 micro Pascals)		
	Frequent Events	Occasional Events	Infrequent Events	Frequent Events	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB*	65 VdB*	65 VdB*	N/A**	N/A**	N/A**
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB	35 dBA	38 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB	40 dBA	43 dBA	48 dBA

* This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. For equipment that is more sensitive, a Detailed Vibration Analysis must be performed.
** Vibration-sensitive equipment is generally not sensitive to ground-borne noise; however, the manufacturer's specifications should be reviewed for acoustic and vibration sensitivity.

Source: FTA 2018.

3.1.4 Construction Vibration

FTA construction noise impact criteria are outlined in Section 7.2 of the FTA Manual.

The FTA vibration damage impact level for each building category is shown in **Table**

3-3. *Table 3-3: FTA Construction Damage Criteria*

Building/ Structural Category	PPV, in/sec	Approximate L_v*
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

*RMS velocity in decibels, VdB re 1 micro-in/sec

The FTA's vibration annoyance criteria are based on the same land use categories as the noise impact criteria, in addition to considering the frequency of the vibration events. The most conservative vibration annoyance criteria for frequent events are utilized in the construction vibration impact assessment.

3.2 City of Houston Noise Ordinance

The City of Houston's noise ordinance is defined in Chapter 30 – Noise and Sound Level Regulation in the Code of Ordinances. The ordinance defines maximum permissible sound levels which apply at the property line of the residential or non-residential receiver. For construction noise, the ordinance also defines a higher permissible noise limit of 85 dBA between the hours of 7 AM to 8 PM. Construction noise outside those defined hours would still be subject to the standard maximum permissible sound levels listed in **Table 3-4** and **Table 3-5**.

Table 3-4: City of Houston Maximum Permissible Sound Levels

City of Houston Maximum Permissible Sound Levels		
Time Periods	Daytime	Nighttime
Receiving Property	8 AM – 10 PM	10 PM – 8 AM
Residential	65 dBA	58 dBA
Non-residential	68 dBA	68 dBA

Source: City of Houston 2023

Table 3-5: City of Houston Maximum Permissible Construction Sound Levels

City of Houston Maximum Permissible Construction Sound Levels			
Time Periods	Daytime	Evening	Nighttime
	7 AM – 8 PM	8 PM – 10 PM	10 PM – 7 AM
Residential	85 dBA	65 dBA	58 dBA

Source: City of Houston 2023

4 Methodology

The potential for noise and vibration impacts from the project were evaluated using procedures described in the FTA Manual.

4.1 Noise Analysis Procedure

The FTA Manual has three levels of analysis that may be used, depending on the type and scale of the project, the stage of project development, and the environmental setting. The three levels of analysis are:

- Noise Screening Procedure
- General Noise Assessment
- Detailed Noise Analysis

The screening procedure is used to identify noise-sensitive land uses in the vicinity of a project and whether there is likely to be an impact. For BRT projects, the screening distances are 500 feet from the proposed alignment in unobstructed areas and 250 feet in areas where there are intervening buildings.

The Project is located along an existing roadway corridor, in an urban setting, and would not considerably increase the number of vehicles on the roadway. The Project would add up to 10 vehicles per hour in each direction on a given section of roadway. Because noise-sensitive receptors were determined to be present based on the screening procedure, the next level of analysis for the noise-sensitive receptors is a general or detailed noise assessment.

For the Project, the screening procedure and detailed noise assessment were conducted. A detailed assessment was chosen over a general assessment because all the necessary inputs required for a detailed assessment have been established in the Project design, including the specific lane alignment, the operations schedule, speed profile, and vehicle type. A general assessment is normally conducted in the early stages of project development and when specific details are not available. The detailed noise assessment was completed using models based on the FTA's noise exposure computation equations. The models determine the level of impact that noise may have on a receptor ranging from "none" to "severe." The model calculates the level of impact by using existing noise readings, distance of the receptor to the noise source, bus noise reference levels, the operations schedule, intervening rows of buildings, FTA land use categories, and the FTA noise impact criteria curves. The following assumptions were used in the detailed noise assessment.

- Operations schedule
    - Weekday: 6-minute headways from 6:30 AM to 7:00 PM. 12-miniute headways from 4:00 AM to 6:30 AM and from 9:30 PM to 12:30 AM.
    - Weekend: As the number of buses run on the weekend is lower, only the more conservative weekday schedule was modeled.
- Speed
    - 55 miles per hour (mph) along the dedicated Metro-owned ROW
    - 35 mph on Houston city streets.
- Bus reference noise level: 82 dBA sound exposure level (SEL) at 50 feet and 50 mph.
    - 82 dBA SEL is the FTA refence level for diesel buses. The New Flyer XE60 articulated battery-electric buses proposed for the Project are expected to generate lower noise levels, and thus this assessment would be conservative (higher than expected).
- Noise-sensitive receptors were grouped into "clusters" following the FTA Manual guidelines with each cluster represented by a single existing noise measurement. The clusters were selected based on proximity to the Project as well as other major noise sources, such as highways. This information was used to determine the noise impact thresholds for moderate and severe impacts.

4.2 Vibration Analysis Procedure

Per the FTA Manual, projects that involve rubber-tire vehicles and do **not** meet the conditions listed below, vibration impacts are unlikely, and no further analysis is needed. Because the rubber tires and suspension systems of buses provide vibration isolation, it is unusual for buses to cause ground- borne vibration problems.

- **Roadway irregularity** – Expansion joints, speed bumps, or other design features that result in unevenness in the road surface can result in perceptible ground-borne vibration at distances up to 75 feet away.
- **Operation close to vibration-sensitive buildings** – Buses, trucks, or other heavy vehicles operating close to a vibration-sensitive building (within approximately 100 feet from the

property line) may impact vibration-sensitive activities, such as research that uses electron microscopes or manufacturing of computer chips.

- **Vehicles operating within buildings** – Special considerations are often required for shared- use facilities where vehicles operate inside or directly underneath buildings such as bus stations located inside an office building complex.

Because the Project alignment would run entirely on new or re-paved roadway without speed bumps, it is assumed that roadway irregularities would not be present. The alignment also does not go through or underneath any buildings. Therefore, a vibration screening procedure was used to identify the potential for vibration impacts at highly sensitive FTA Category 1 receivers or Special Building only. If no highly vibration-sensitive land uses are located within the defined screening distance of 100 feet, then no further vibration assessment is necessary. If highly vibration-sensitive land uses are identified, a vibration assessment is conducted individually for each Category 1 or special building receiver based on the FTA's generalized ground surface vibration equations for rubber-tired transit vehicles and the vibration criteria outlined in **Section 3.1.3**.

For special use buildings where ground-borne noise from vibration sources would also be of concern, the ground-borne vibration level was converted to ground-borne noise by applying a conversion factor of -50 to -20 dB. The FTA procedure for converting ground-borne vibration to ground-borne noise is shown in **Figure 4-1**. If necessary, the specific conversion factor can be identified via further analysis of the ground vibration and site-specific measurements of the existing condition.

Figure 4-1: Conversion to ground-borne noise

Conversion to Ground-borne Noise			
Noise Level in dBA	Peak frequency of ground vibration:		Use these adjustments to estimate the A-weighted sound level given the average vibration velocity level of the room surfaces. See text for guidelines for selecting low-, mid-, or high-frequency characteristics. Use the high-frequency adjustment for subway tunnels in rock or if the dominant frequencies of the vibration spectrum are known to be 60 Hz or greater.
	Low frequency (<30 Hz)	-50 dB	
	Mid Frequency (peak 30 to 60 Hz)	-35 dB	
	High frequency (>60 Hz)	-20 dB	

Source: FTA 2018.

4.3 Noise and Vibration Analysis during Construction

For purposes of this analysis the effects from high level sources such as pile driving are addressed, but specific construction methods have not yet been determined in the Project description.

4.3.1 Construction Noise Analysis Procedure

Noise impacts from construction may vary greatly depending on the duration and complexity of the project. The FTA Manual has two levels of construction noise analysis that may be used, either a Qualitative Construction Noise Assessment or a Quantitative Construction Noise Assessment. The

Quantitative Assessment is further divided into a General Assessment or a Detailed Analysis. For the University Project, a General Quantitative Construction Noise Assessment has been conducted in this report. The construction noise analysis has been completed utilizing models developed from the FTA's construction noise propagation equations.

In a General Quantitative Assessment, a separate assessment is made for each phase of construction. For the University BRT Project, the assessment is split into demolition, paving, bridgework, and underpass construction phases. For the General Quantitative Assessment, a conservative estimate of the noise for each phase is achieved assuming the two noisiest pieces of equipment are operating continuously. An hourly equivalent noise level (Leq) is then calculated from the selected equipment for each phase. The estimated construction noise levels are then compared against the relevant criterion and appropriate noise reduction measures are selected.

Table 4-1 shows typical equipment that could potentially be used for each phase of construction, along with reference noise levels at 50 feet. This equipment is likely to be both stationary and mobile.

Table 4-1: Noise Levels of Typical Equipment used in Construction

Phase	Equipment	Equipment Leq @ 50 ft
Demolition	**Concrete saw**	90 dBA
	Jackhammer	88 dBA
	Mounted impact hammer (hoe ram)	90 dBA
	Excavator or Dozer	85 dBA
	Dump truck	84 dBA
	Air compressor	80 dBA
Paving	Paver	85 dBA
	Roller	85 dBA
	Compactor	82 dBA
	Grader	85 dBA
	Dump truck	84 dBA
	Air compressor	80 dBA
Bridges	**Impact Pile Driver**	101 dBA
	Crane	83 dBA
	Concrete Pump truck	82 dBA
	Concrete Mixer truck	85 dBA
	Dump truck	84 dBA
	Front End Loader	80 dBA
	Auger Drill Rig	85 dBA
Underpasses	**Impact Pile Driver**	101 dBA
	Concrete Pump truck	82 dBA
	Concrete Mixer truck	85 dBA
	Dump Truck	84 dBA
	Excavator or Dozer	85 dBA
	Auger Drill Rig	85 dBA
	Roller	85 dBA
	Rail Saw	90 dBA
BOLD text indicates the two noisiest pieces of equipment in each analysis phase		

Source: FTA 2018.

The City of Houston Maximum Permissible Construction Sound Levels are shown in **Table 3-5**. Construction noise impacts would be identified for any sensitive receiver that falls within the calculated impact distance. The most straightforward way to reduce community impact is to avoid construction at high-annoyance times. The analysis assumes that no construction would be done at

night when the residential receivers, which make up most receivers along the alignment, have a lower impact threshold.

4.3.2 Construction Vibration Analysis Procedure

As with the construction noise assessment, the FTA outlines two levels of construction vibration assessment. Either a Qualitative Construction Vibration Assessment or a Quantitative Construction Vibration Assessment can be used to determine impact distances. For the University Project, a Quantitative Construction Vibration Assessment was performed. The construction vibration analysis was completed utilizing models developed from the FTA's construction vibration propagation equations.

In a Quantitative Construction Vibration Assessment, the estimated vibration level is calculated by selecting vibration reference levels, defined by the FTA, of appropriate construction equipment. Unlike the construction noise assessment which assesses cumulative noise by phase, vibration impact is assessed for each piece of construction equipment separately. The Peak Particle Velocity (PPV) metric is utilized when assessing construction vibration damage potential and is reported in inches per second (in/sec). The RMS velocity level (Lv) is utilized when assessing vibration annoyance impact and is reported in vibration decibels (VdB). Vibration damage and annoyance criteria are outlined in **Table 3-3** and **Table 3-2** respectively. Estimated construction vibration levels are compared against both damage and annoyance criteria, and appropriate vibration reduction measures are selected. Buildings along the alignment are assumed to be non-engineered timber and masonry construction (Type 3).

While the exact methods to construct the project have yet to be determined, **Table 4-2** shows typical equipment that could be used for each phase of construction, along with reference vibration levels at 25 feet.

Table 4-2: Vibration Levels of Typical Equipment Used in Construction

Phase	Equipment	Equipment PPV @ 25 ft	Equipment Lv @ 25 ft
Demolition	Jackhammer	0.035 in/sec	79 VdB
	Mounted impact hammer (hoe ram)	0.089 in/sec	87 VdB
	Large bulldozer	0.089 in/sec	87 VdB
	Loaded trucks	0.076 in/sec	86 VdB
Paving	Vibratory roller	0.210 in/sec	94 VdB
	Large bulldozer	0.089 in/sec	87 VdB
	Loaded trucks	0.076 in/sec	86 VdB
Bridges	Pile driver (impact) - typical	0.644 in/sec	104 VdB
	Pile driver (impact) - upper range	1.518 in/sec	112 VdB

	Pile driver (sonic) - typical	0.17 in/sec	93 VdB
	Pile driver (sonic) – upper range	0.734 in/sec	105 VdB
	Caisson drilling	0.089 in/sec	87 VdB
	Loaded trucks	0.076 in/sec	86 VdB
Underpass	Pile driver (impact) - typical	0.644 in/sec	104 VdB
	Pile driver (impact) - upper range	1.518 in/sec	112 VdB
	Pile driver (sonic) - typical	0.170 in/sec	93 VdB
	Pile driver (sonic) – upper range	0.734 in/sec	105 VdB
	Caisson drilling	0.089 in/sec	87 VdB
	Vibratory roller	0.210 in/sec	94 VdB
	Loaded trucks	0.076 in/sec	86 VdB

Source: FTA 2018

The buffer distances to determine vibration annoyance impacts are calculated based on FTA Equation 7-2, shown in **Figure 4-2**. Damage impact distances are based on FTA Equation 7-3, shown in **Figure 4-3**. Construction vibration impacts would be identified for any sensitive receiver that falls within the calculated damage or annoyance impact distances.

Figure 4-2: FTA Equation 7-2 – Construction Vibration PPV

$$PPV_{equip} = PPV_{ref} \times (\frac{25}{D})^{1.5} \qquad \textbf{Eq. 7-2}$$

where:

PPV_{equip} = the peak particle velocity of the equipment adjusted for distance, in/sec

PPV_{ref} = the source reference vibration level at 25 ft, in/sec

D = distance from the equipment to the receiver, ft

Source: FTA 2018.

Figure 4-3: FTA Equation 7-3 - Construction Vibration Velocity Level

$$L_{v.distance} = L_{vref} - 30log(\frac{D}{25}) \quad \textbf{Eq. 7-3}$$

where:

$L_{v.distance}$ = the rms velocity level adjusted for distance, VdB
L_{vref} = the source reference vibration level at 25 ft, VdB
D = distance from the equipment to the receiver, ft

Source: FTA 2018.

Ground-borne noise for Special Buildings can be calculated by using the same procedure described in **Section 4.2**.

4.3.3 UPRR Operations on Temporary Shoofly

During construction of the UPRR underpass, the UPRR tracks would be temporarily relocated up to 15 feet to the south to facilitate reconstruction of the UPRR bridge. The incremental effect of freight trains in this temporary configuration has been evaluated by determining the expected change in the noise using the Detailed Noise Assessment described in the FTA Manual for rail analysis and criteria presented in **Figure 3-1** and the change in vibration using the General Vibration Assessment procedures provided by FTA and the criteria presented in **Table 3-2**.

The freight train speed is assumed to be 25 mph for current and future operations with the single- track grade crossing and with the shoofly. The FTA train horn noise model assumes that trains are uniformly distributed over daytime and nighttime hours (62.5% and 37.5%, respectively) and was adjusted to match the existing noise measurements conducted at LT-9. Adjustments for the vibration analysis include jointed tracks and wood-framed buildings with raised-floor resonance.

5 Existing Conditions

5.1 Existing Noise Environment

Existing noise measurements were made at 22 locations along the proposed alignment. The measurements were made in July of 2022 over a period of at least two days at each location. The sound level meters were hung on utility poles approximately 10 feet above the ground near the addresses listed in **Table 5-1** below. The locations for the measurements were selected to represent clusters of sensitive receivers based on their proximity to major noise sources, such as highways, arterial roads, or rail lines. The measured Ldn and peak hour Leq levels are used to assess the estimated increase in the ambient noise level due to the project. Maps of the existing noise measurement locations are presented in Appendix A.

It should be noted that the LT14 and LT13 locations were selected in 2022 based on the then-current Segment 3 alignment which has since shifted. As the updated alignment maintains a similar offset to Highway 288, which is the dominant noise source in the area, it is assumed the that ambient noise levels measured at LT14 and LT13 are still representative of the ambient noise levels along the

reconfigured section of Segment 3. **Figure A-5** of **Appendix A** illustrates the location of LT14 and LT13 in relation to the current alignment.

The average Ldn and peak hour Leq for each existing noise measurement is presented in Table 5-1. The average Ldn was calculated by averaging the 24-hour Ldn for each day of the measurement period. The average peak hour Leq was calculated by averaging both the morning and evening peak hour Leq for each day of the measurement period. Both weekday and weekend measurements were included. As ambient noise is generally lower on the weekends, including weekend ambient noise results in a conservative (lower) existing noise level compared to a typical weekday. Thunderstorm noise was also excluded from the LT1, LT4, LT5, and LT6 measurements by replacing data points during the storm with the mean of the hour before and after the storm period. Rain directly impacting the microphone housing generates increased noise levels. Excluding rain and thunder noise results in a conservative (lower) existing noise level.

Table 5-1: Existing Noise Measurements Summary

Number	LT Number	Approximate Address	City	Avg Ldn (dBA)	Avg Pk Hr Leq (dBA)
1	LT1	9678 Edell St	Houston, TX	64.9	63.3
2	LT2	3811 Tidwell Rd		78.5	77.4
3	LT3	9009 Lockwood Dr		75.5	74.8
4	LT4	7719 Lockwood Dr		74.3	77.7
5	LT5	6406 Lockwood Dr		63.1	68.7
6	LT6	4000 Lockwood Dr		71.6	72.6
7	LT7	1412 Lockwood Dr		76.9	73.1
8	LT8	Park near 131 Lockwood Dr		66.6	68.3
9	LT9	633 Lockwood Dr		79.9	81.9
10	LT10	1632 S Lockwood Dr		70.5	70.7
11	LT11	3561 Elgin St		69.1	71.7
12	LT12	3210 Elgin St		68.5	74.2
13	LT13	4401 Ennis St		68.2	69.0
14	LT14	2303 Blodgett		71.2	68.7
15	LT15	1412 Wheeler Ave		82.5	82.0
16	LT16	515 Richmond Ave		74.2	74.4
17	LT17	1901 Richmond Ave		71.6	73.2
18	LT18	2800 Richmond Ave		69.6	71.0
19	LT19	5102 Weslayan St		70.0	69.6
20	LT20	4653 Wild Indigo St		65.5	69.8
21	LT21	5400 Alder Dr		70.1	70.5
22	LT22	11050 Harwin Dr		71.6	71.8

Source: Wilson Ihrig 2023.

6 Environmental Consequences

Temporary construction impacts are identified for sensitive receivers that would fall within the buffer distances discussed in **Section 6.1**. No noise or vibration impacts have been identified for Project bus operations as discussed in **Section 6.2**.

6.1 Short-Term Construction Impacts

6.1.1 Noise

During the construction phase of the project, there would be temporary increases in the ambient noise level near active construction sites. The estimated construction noise level at 50 feet is 93 dBA during the demolition phase, 88 dBA during paving, and up to 101 dBA during bridge and underpass phases if impact pile drivers are utilized. All four modeled phases could exceed the daytime City of Houston Maximum Permissible Construction Sound Level of 85 dBA for residential receivers. Construction noise impacts have been identified for residential receivers at distances of up to 126 feet during demolition, 71 feet during paving, and 320 feet during impact pile driving. Utilizing drilled piles instead of impact driven piles would reduce the noise impact buffer distance for residential receivers to 71 feet for the bridge and underpass phases. Construction outside of the hours of 7 AM to 8 PM would be done according to City of Houston ordinance requirements.

6.1.2 Vibration

During the construction phase of the project, there would be temporary increases in ground-borne vibration levels near active construction sites. Estimated vibration levels at 25 feet and the distances within which damage and annoyance criteria would be exceeded are summarized in **Table 6-1**, with building damage impact distances for Type III buildings shown. As shown in **Table 3-3**, FTA Type I (reinforced-concrete, steel, or timber) and Type II (engineered concrete, and masonry) buildings have higher impact criteria for building damage than Type III buildings (non-engineered timber & masonry), thus the information shown in **Table 6-1** are conservative. No Type IV (extremely susceptible to vibration damage) buildings were identified during the screening procedure.

Phase	Equipment	Vibration level @ 25 ft	Distance to damage impact for Type III buildings	Distance to annoyance impact for residential receivers	Distance to annoyance impact for institutional receivers
Demolition	Jackhammer	79 VdB	8 ft	43 ft	34 ft
	Mounted impact	87 VdB	15 ft	79 ft	63 ft

	hammer (hoe ram)				
	Large bulldozer	87 VdB	15 ft	79 ft	63 ft
	Loaded trucks	86 VdB	13 ft	73 ft	58 ft
Paving					
	Large bulldozer	87 VdB	15 ft	79 ft	63 ft
	Loaded trucks	86 VdB	13 ft	73 ft	58 ft
Bridges	Pile driver (impact) - typical	104 VdB	55 ft	291 ft	232 ft
	Pile driver (impact) – upper range	112 VdB	97 ft	539 ft	428 ft
	Pile driver (sonic) - typical	93 VdB	22 ft	125 ft	100 ft
	Pile driver (sonic) – upper range	105 VdB	59 ft	315 ft	250 ft
	Caisson drilling	87 VdB	15 ft	79 ft	63 ft
	Loaded trucks	86 VdB	13 ft	73 ft	58 ft
Underpass	Pile driver (impact) - typical – **Not anticipated**	104 VdB	55 ft	291 ft	232 ft
	Pile driver (impact) – upper range - **Not anticipated**	112 VdB	97 ft	539 ft	428 ft
	Pile driver (sonic) - typical	93 VdB	22 ft	125 ft	100 ft
	Pile driver (sonic) – upper range[1]	105 VdB	59 ft	315 ft	250 ft
	Caisson drilling	87 VdB	15 ft	79 ft	63 ft

	Vibratory roller	94 VdB	26 ft	135 ft	107 ft
	Loaded trucks	86 VdB	13 ft	73 ft	58 ft
Note: If subsurface obstacles such as large boulders are encountered during vibratory driving, vibration could reach the upper range.					

Table 6-1: Estimated Construction Vibration Levels and Distance Within Which Impacts Could Occur

Source: Wilson Ihrig 2023.

Vibration Damage

The construction vibration damage impact threshold for Type III buildings could be exceeded within 55 feet of typical impact pile driving and 22 feet of typical vibratory (sonic) pile driving. The need for impact pile driving and the specific locations where impact pile driving would occur are still undetermined at this stage of the Project.

Without impact pile driving, construction damage impacts are unlikely to occur for any phase of roadway construction, except for a vibratory roller operating near a single building. Use of a vibratory roller within 26 feet of any Type III building could exceed the Type III building damage criteria. One building in Segment 2, located on parcel HR26719, is 25 feet from the alignment. This building is closer than the 26 feet buffer distance corresponding to the damage threshold for vibratory rolling near Type III buildings.

Vibration Annoyance

The construction of the Project has the potential to exceed the FTA vibration annoyance criteria, on a temporary basis. These temporary vibration impacts would be minimized by using the best management practices discussed in **Section 7.2.2**.

Construction vibration has the potential to cause annoyance impacts at residential receivers within 79 feet during hoe ram demolition operations, 135 feet during vibratory roller operations, 125 feet during typical vibratory (sonic) pile driving, and up to 539 feet if impact pile drivers are utilized. Utilizing drilled piles would reduce the distance at which the impact threshold would be exceeded to 79 feet, from 539 feet.

Pile driving is not anticipated near the highly sensitive Houston Public Media recording (and broadcast) studio, however, the operation of a vibratory roller within 235 feet of the building has the potential to exceed the 65 VdB impact criteria for Category 1 receivers and special buildings. The ground-borne noise would also range from 10 to 40 dBA, which could exceed the 25 dBA impact criteria.

6.1.3 UPRR Operations

During construction of the UPRR undercrossing, freight trains will operate on tracks relocated up to 15 feet to the south (shoofly) for a period up to 8 months. The temporary change in noise levels

has been estimated, and the results are summarized in **Table 6-2**. The noise would increase slightly at homes on the south side of the railroad and decrease slightly for homes on the north side of the railroad. The temporary noise at two homes would increase by 1.5 to 1.6 dBA and exceed the severe noise thresholds of 1.1 and 1.0, respectively.

Table 6-2: Shoofly Horn Noise General Noise Assessment Summary

Segment	Land Use Category	Building Distance to Center Existing Railroad (ft.)	Railroad Speed (mph)	Existing Noise Ldn** (dBA)	Estimated Temporary Shoofly Noise Ldn* (dBA)	Noise Impact Criteria (dBA)		Number of Impacts	
						Moderate	Severe	Moderate	Severe
4	1	-	-	-	-	-	-	-	-
	2	25 – 130	25	74 – 85	75 – 82	65	75	0	2
	3	-	-	-	-	-	-	-	-
*Shoofly would move the single track to the south, with the resulting range of 40 to 124 ft. **Modeled existing noise based on results measured at LT-9 and extrapolated for distance									

The temporary change in vibration levels has also been estimated, and the results are summarized in **Table 6-3**. The vibration would increase slightly at homes on the south side of the railroad and decrease slightly for homes on the north side of the railroad. The estimated existing condition currently exceeds the FTA criterion at 6 residences, and the temporary shoofly would have the same impacts at the same residences. In no case would the vibration increase by 5 decibels or more.

Table 6-3: Shoofly Generalized Vibration Assessment Summary

Segment	Land Use Category	Building Distance to Center Existing Track* (ft.)	Railroad Speed (mph)	Existing Vibration (VdB)	Estimated Temporary Shoofly Vibration (VdB)	Vibration Impact Criteria (VdB)	Number of Impacts	
						Infrequent	Existing	Shoofly
4	1	-	-	-	-	-	-	-
	2	25 – 130	25	76 – 90	76 – 86	80	6	6
	3	-	-	-	-	-	-	-
*Shoofly would move the single track up to 15 ft. to the south, with the resulting range of 40 to 124 ft. distances								

6.1.4 Construction Impacts Significance Conclusions

While the construction of the Project has the potential to exceed the City of Houston construction noise criteria, construction noise impacts would only occur when there is active construction within the impact distance of a given receiver. Based on the progressive nature of roadway construction work it is anticipated that the duration of active construction within the impact distances would be

a week or less at any single receiver for each phase. Therefore, the construction noise impacts for roadway construction could be considered less than significant due to the inherently limited duration and would not require mitigation. These temporary noise impacts could be minimized by using the best management practices discussed in **Section 7.2.1.**

The duration of construction for the UPRR underpass along Lockwood Drive may be longer than the other roadwork phases. However, of the equipment modeled for underpass construction, only a pile driver and rail saw have the potential to exceed the City of Houston construction noise criteria at 50 ft or greater. It is anticipated that these pieces of equipment will only be utilized during a small portion of the construction process and that most of the work will be related to earth and concrete work, which is not predicted to exceed the daytime construction noise criteria. The noise impacts for underpass construction could be considered less than significant due to the limited duration and would not require mitigation. These temporary noise impacts could be minimized by using the best management practices discussed in **Section 7.2.1.**

The construction of the Project has the potential to exceed the FTA building damage criteria for Type III buildings at a single building if a vibratory roller capable of generating vibration levels consistent with the suggested FTA source level operates within 26 feet. This impact could potentially be significant. Realistically, the weight of different vibratory rollers can vary by an order of magnitude. Alternative compacting methods such as plate compactors could also be utilized in place of a vibratory roller. As the type of compactor, the amplitude settings, and the extents of construction are undetermined at this stage of the Project, a final determination of significance is not made for compaction operations.

The construction of the Project has the potential to exceed the FTA vibration annoyance criteria, on a temporary basis, at residential receivers if equipment such as hoe ram, vibratory roller, or impact pile drivers would be used. As with the construction noise impacts, construction vibration annoyance impacts would only occur when there is active construction within the impact distance to a given receiver. Based on the progressive nature of roadway construction work it is anticipated that the duration of active construction within the impact distances would be a week or less at any single receiver for each phase. Therefore, the construction vibration annoyance impacts could be considered less than significant due to the inherently limited duration and would not require mitigation. These temporary vibration impacts could be minimized by using the best management practices discussed in **Section 7.2.2**.

The construction of the Project UPRR underpass has the potential to exceed the FTA vibration annoyance criteria on a temporary basis at residential receivers if equipment such as vibratory roller or sheet pile drivers would be used. As with the construction noise impacts, construction vibration annoyance impacts would only occur when there is active construction within the impact distance to a given receiver. The UPRR underpass construction phases (UPRR bridge reconstruction, UPRR shoofly, drilled secant shaft wall, sheet piles, excavation, and concrete panel installation), would each occur over several weeks up to approximately 3 months. Based on the progressive nature of the UPRR underpass and related construction work it is anticipated that the duration of active

construction within the impact distances would be a week or less at any single receiver for each phase. Therefore, the construction vibration annoyance impacts could be considered less than significant due to the inherently limited duration and would not require mitigation. These temporary vibration impacts could be minimized by using the best management practices discussed in **Section**
7.2.2.The construction of the Project has the potential to exceed the FTA vibration annoyance criteria and interfere with operations at recording studios for Houston Public Media if a vibratory roller is operated within 235 feet of the building. This impact would be potentially significant. These temporary vibration impacts could be minimized by using the best management practices discussed in **Section 7.2.2**.

The temporary change in UPRR operations on the shoofly during construction of the UPRR undercrossing on Lockwood Drive has the potential to increase freight train noise and vibration on the south side of the existing tracks where the UPRR tracks would be relocated by up to 15 feet. This noise increase would exceed the severe noise increase threshold at two residences, which would be potentially significant. It is estimated that the vibration from freight trains on the UPRR tracks currently exceed the 80 VdB criterion at six residences; with the shoofly the vibration would increase but there would be no change in the number of impacted residences. These temporary noise and vibration impacts could be considered less than significant due to the limited duration of these effects and would not require mitigation. These temporary noise and vibration impacts could be minimized by using the best management practices discussed in **Section 7.2.2**.

6.2 Long-Term Operational Impacts

6.2.1 Noise

BRT

The detailed noise assessment conducted for BRT operations did not identify any conditions where the project would exceed the noise criteria; there would be no noise impacts at any sensitive receivers along the proposed alignment. The operation of water pumps associated with the UPRR underpass are not predicted to result in an exceedance of FTA or City of Houston noise criteria at nearby residences. The pumps will be located 30+ feet underground and will not be directly exposed to the environment. Additionally, the pumps will only be operated for a limited duration on an as- needed basis. A summary of the detailed noise assessment is provided in **Table 6-4**.

Table 6-4: Detailed Noise Assessment Summary

Segment	Land Use Category	Building Distance to Near Lane (ft.)	Speed (mph)	Existing Noise Ldn/Pk Hr Leq* (dBA)	Estimated Project Noise Ldn/Pk Hr Leq* (dBA)	Noise Impact Criteria (dBA)		Number of Impacts	
						Moderate	Severe	Moderate	Severe
1	1	-	-	-	-	-	-	-	-
	2	52 – 522	55	66 – 72	48 – 62	61 – 65	67 – 71	0	0
	3	98 – 455	55	70 – 72	46 – 52	66 – 70	72 – 76	0	0

2	1	-	-	-	-	-	-	-	-
	2	26 – 526	35 – 55	70 – 74	45 – 57	64 – 65	69 – 73	0	0
	3	27 – 346	35 – 55	71 – 73	44 – 55	69 – 70	74 – 78	0	0
3	1	77	35	71	54	63 – 65	68 – 75	0	0
	2	25 – 1651	35	68 – 83	40 – 61	63 – 65	68 – 75	0	0
	3	37 – 931	35	69 – 82	40 – 53	68 – 70	73 – 80	0	0
4	1	-	-	-	-	-	-	-	-
	2	39 – 1196	35	67 – 80	44 – 60	62 – 65	67 – 75	0	0
	3	31 – 749	35	68 – 73	45 – 58	67 – 70	72 – 80	0	0
5	1	-	-	-	-	-	-	-	-
	2	33 – 741	35	63 – 79	47 – 59	60 – 65	65 – 75	0	0
	3	41 – 461	35	63 – 78	46 – 56	65 – 70	70 – 80	0	0
*Ldn reported for Land use category 2. Peak Hour Leq reported for Land use categories 1 and 3									

Source: Wilson Ihrig 2023.

UPRR

The UPRR undercrossing would provide a grade-separation which could reduce horn soundings as trains approach and travel on the new Lockwood Drive UPRR bridge. This would dramatically reduce the noise levels in this area by at least 10 dBA depending on train schedule and number of cars per train.

6.2.2 Vibration

The vibration assessment did not identify any conditions where the Project would exceed the vibration criteria at sensitive receivers. Only a single highly vibration sensitive (FTA Category 1) receiver, the Houston Public Media recording studio, located at 4343 Elgin Street, Houston, TX 77004, was identified along the alignment. The estimated BRT vibration level at the interior of the Houston Public Media building is 60 VdB, which would be below the 65 VdB impact criteria for highly sensitive receivers. The corresponding ground-borne noise level inside Houston Public Media without accounting for building isolation features would be 10 to 40 dBA and could potentially exceed the impact criterion of 25 dBA. As noted above, a site review of the facilities would be instructive to determine if the building already includes vibration reduction measures to isolate the noise sensitive facilities from the existing bus traffic.

6.2.3 Operations Impacts Significance Conclusions

There would be no significant operational impacts as no noise and vibration impacts would occur from the operation of the Project, except for the possibility of ground borne noise impacts at the Houston Public Media studios. This impact would be potentially significant, as the Houston Public Media building may already include isolation features. It should also be noted that existing bus lines operate along Elgin Street. Thus, while the Project has the potential to exceed the FTA ground-borne noise criteria at the Houston Public Media building, an increase over the existing levels of ground- borne noise is not anticipated.

7 Noise and Vibration Minimization Measures & Best Management Practices

7.1 Operations

Except as noted for Houston Public Media, the University BRT project would not result in operational noise or vibration impacts. To confirm whether the project would impact Houston Public Media, conduct a site-specific assessment of the existing noise to determine if the existing facilities incorporate reduction measures to isolate the studios from traffic and other noise sources.

To minimize the effects of BRT operations on adjacent receivers, it is recommended that Metro keep the roadway in a good state of repair and minimize discontinuities in the pavement, such as potholes and uneven expansion joints as a best management practice. Large discontinuities would increase noise and vibration generated by the buses and may cause localized annoyance impacts.

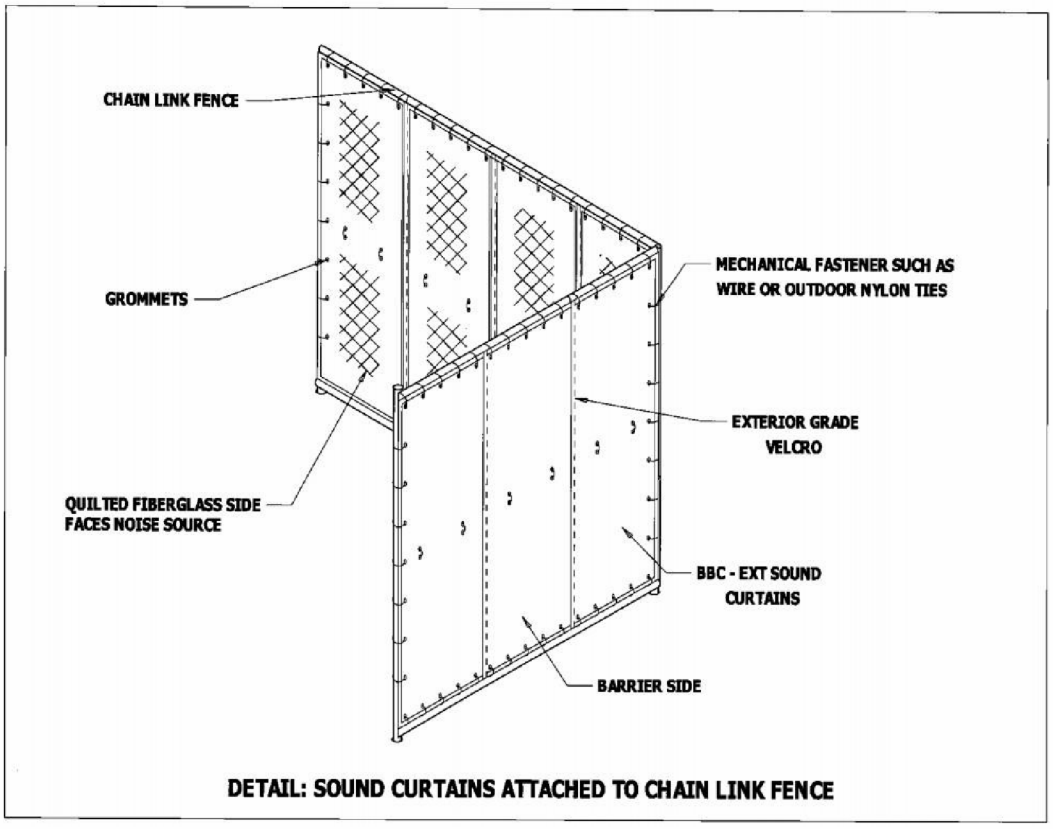
7.2 Construction

While the means and methods for constructing the Project have yet to be established, the following are recommended best management practices for minimizing temporary construction impacts.

7.2.1 Noise

- Erect temporary construction noise barriers around work zones, where feasible. Construction noise barriers normally consist of acoustic blankets installed on chain link fencing. See **Figure 7-1.** Where feasible, the height of the noise barriers shall be determined so that the line of sight between the noise sources and the residential windows are blocked; this would provide at least 5 dBA noise reduction.
    - Place the barriers close to the noise source (hoe rams, jackhammers, saws, compressors, pile drivers, etc.) to increase their effectiveness.
    - At the UPRR undercrossing, noise barriers should be installed along the underpass excavation area along Lockwood Drive, similar to the layout plan shown in **Figure 7-2**.

Figure 7-1: Example of Temporary Construction Noise Barrier



Source: Acoustical Surfaces 2023.

Figure 7-2 Example of Noise Barrier Plan for UPRR Underpass at Lockwood Drive



- Avoid the use of impact pile drivers.
    - If foundation piles are required for the construction of new bridges, drilled piles generate noise levels approximately 10 dBA lower than vibratory pile driving, and up to 16 dBA lower than impact pile driving.
- Construction equipment should be in good condition with applicable noise suppressing devices properly installed and operating.
    - Newer equipment is generally quieter.
- The sound rating on backup and motion alarms should be site appropriate; alarms which adjust the alarm sound level based on the ambient noise are preferred (e.g., "smart" alarms).
- Whenever possible, position stationary noise sources such as generators and compressors as far away as possible from noise sensitive areas.

7.2.2 Vibration

- As noted in **Section 7.1**, conduct a site-specific assessment of the existing vibration at the Houston Public Media building to determine if the existing facilities incorporate reduction measures to isolate the studios from traffic vibration.
- Use buffer distances to limit vibration impacts.
    - Manage vibration-generating equipment to operate them beyond the buffer distances.
- Avoid the use of impact pile drivers.
    - If foundation piles are required for the construction of new bridges, drilled piles generate vibration levels 6 VdB lower than vibratory pile driving, and up to 25 VdB lower than impact pile driving.
- Low impact demolition.
    - Consider these or similar methods: expanding mortar, concrete saws and similar techniques that break the existing roadway into smaller parts and which minimize the use of traditional demolition equipment (e.g., hoe-rams and jackhammers) to reduce vibration.
- Use lower-impact compaction methods.
    - Plate compactors or jumping jack compactors are not capable of causing building damage impacts at Type III buildings at any distance.
    - Utilize smaller, lighter weight models of vibratory rollers.
- Coordinate vibration-intensive construction with Houston Public Media.

- Schedule compaction activities when the recording studio is not in use to eliminate the potential for impact.

7.2.3 UPRR Shoofly

- To reduce noise from UPRR operations on the shoofly, the height of the noise barrier should also block line of sight between the locomotive horn and the windows of the residences. Construction noise barriers could be placed as noted above in **Figure 7-2**.
- If it is feasible to do so, reducing UPRR train speed from 25 mph to 15 mph would reduce vibration by 4 decibels. While six receptors currently experience vibration that exceeds the 80 VdB FTA criterion, reducing the speed would also reduce the number of impacts from six to three.

8 References

Acoustical Surfaces. 2023. Sound Curtains Attached to a Chain Link Fence. Accessed on March 28, 2023, online at: https://www.acousticalsurfaces.com/wp-content/uploads/Sound_Curtains_Attached_to_Chain_Linked_Fence-1.pdf

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Houston, Texas - Code of Ordinances, Chapter 30, Noise and Sound Level Regulation. January 24, 2023. Accessed on March 22, 2023, online at: https://library.municode.com/tx/houston/codes/code_of_ordinances?nodeId=COOR_CH30NOSOLERE

U.S. Environmental Protection Agency (U.S. EPA). 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Condensed Version), Appendix B, Table B-4, p. B-6. Washington D.C. (EPA/ONAC 550/9-74-004). Accessed on March 22, 2023, online at: https://www.nonoise.org/library/levels74/levels74.htm. March 1974.

Appendix A

University BRT Noise Model Maps

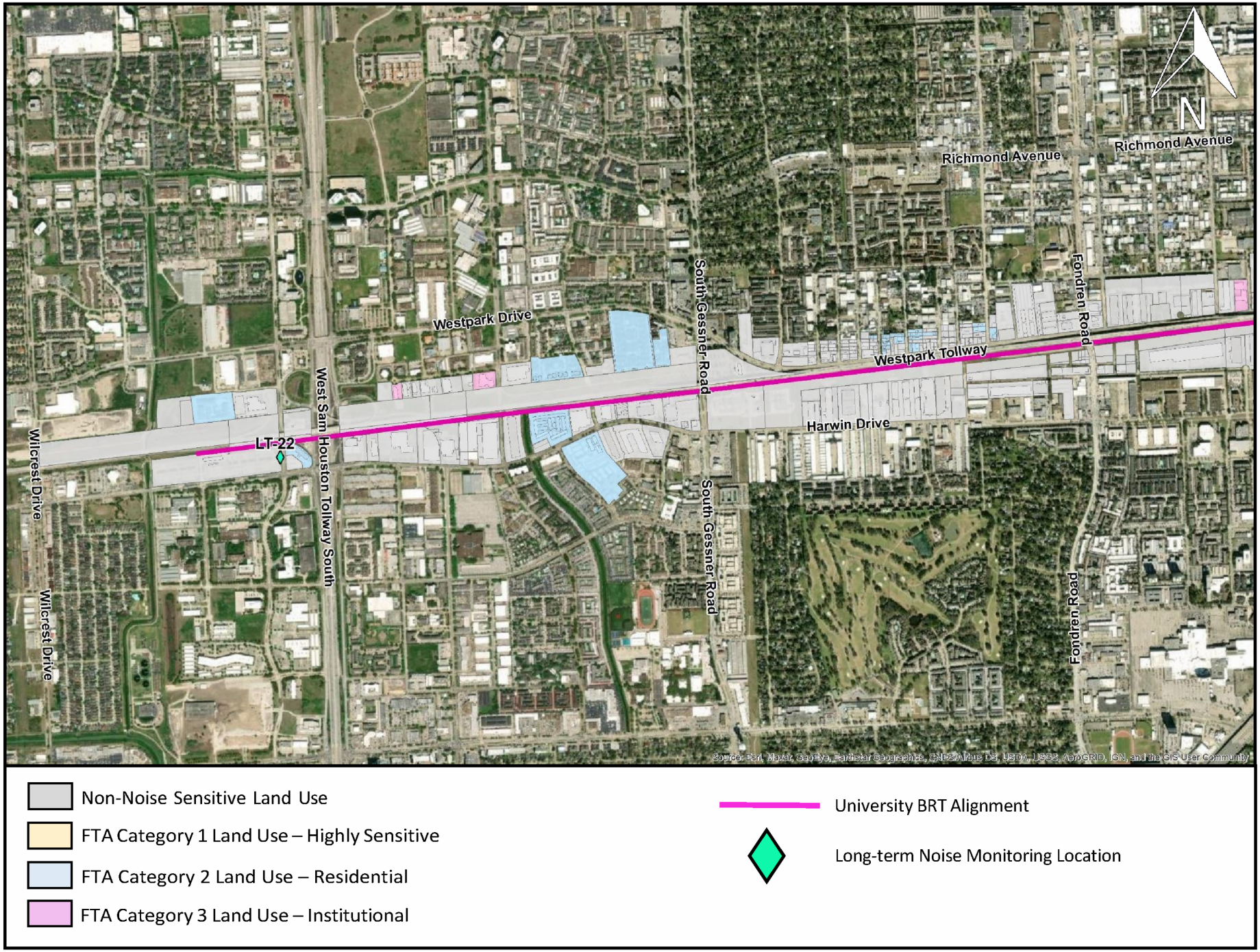

Figure A-0-1: Segment 1 - Part 1 - GIS

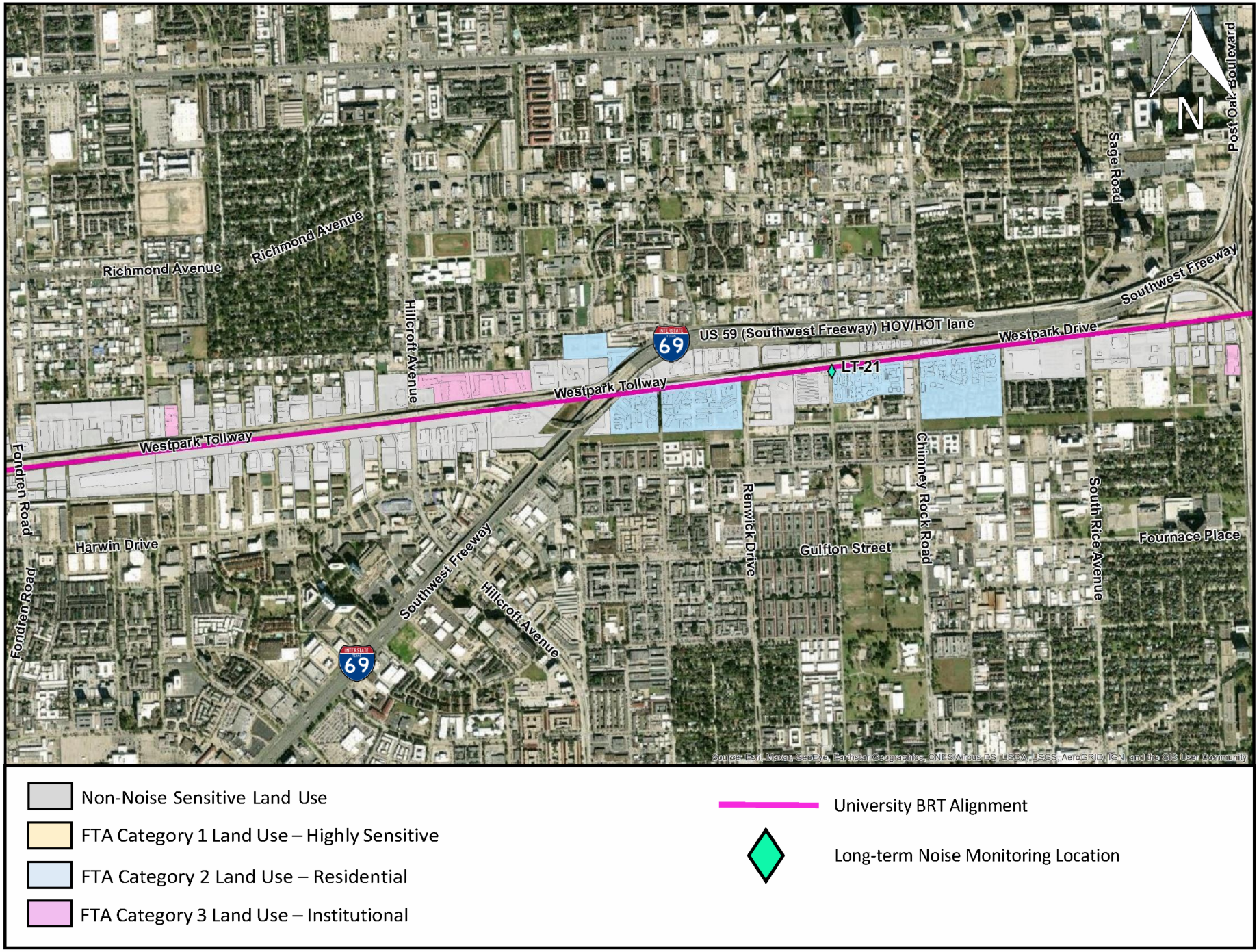

Figure A-0-2: Segment 1 - Part 2 - GIS

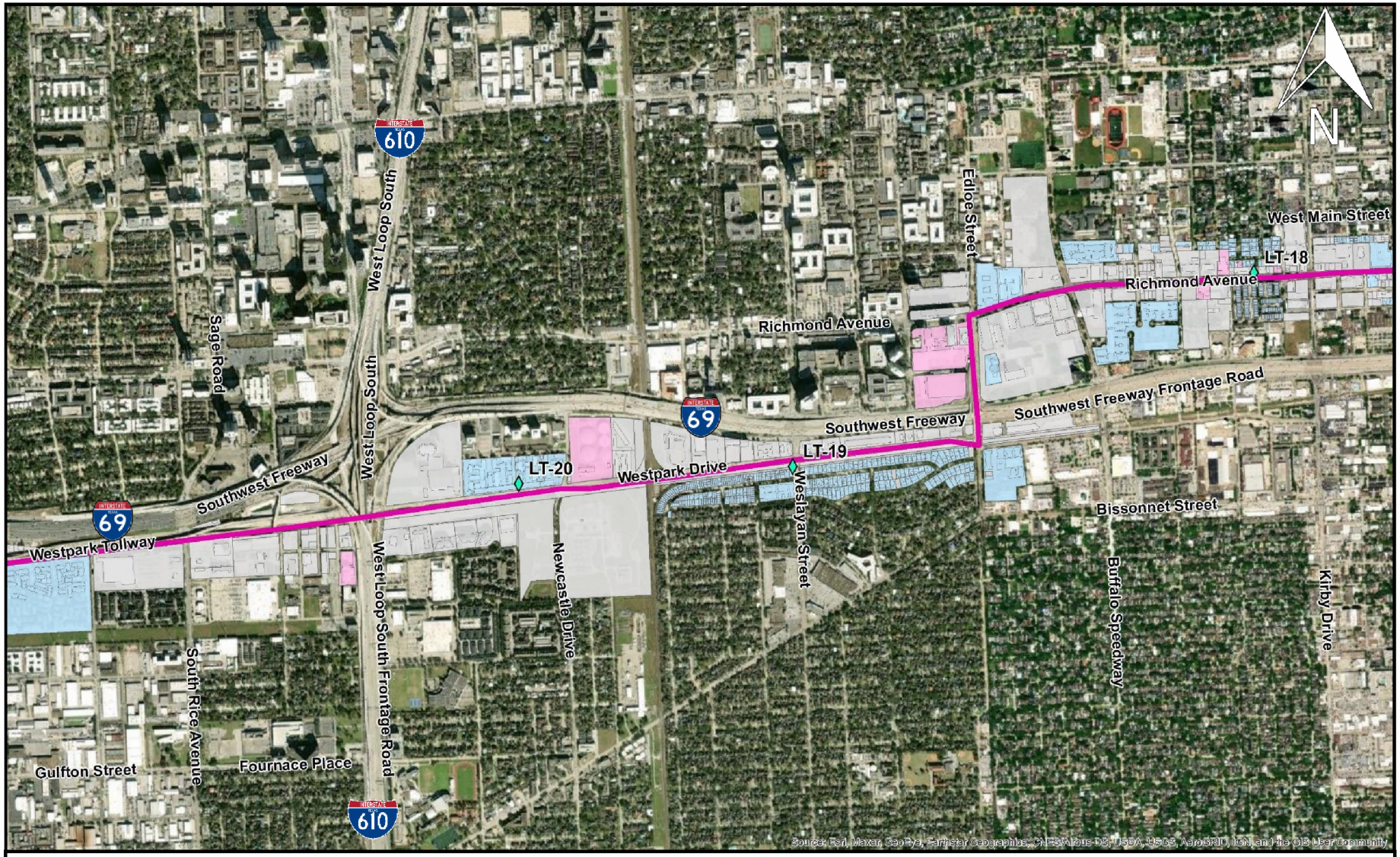

Figure A-0-3: Segment 1 - Part 3 - GIS

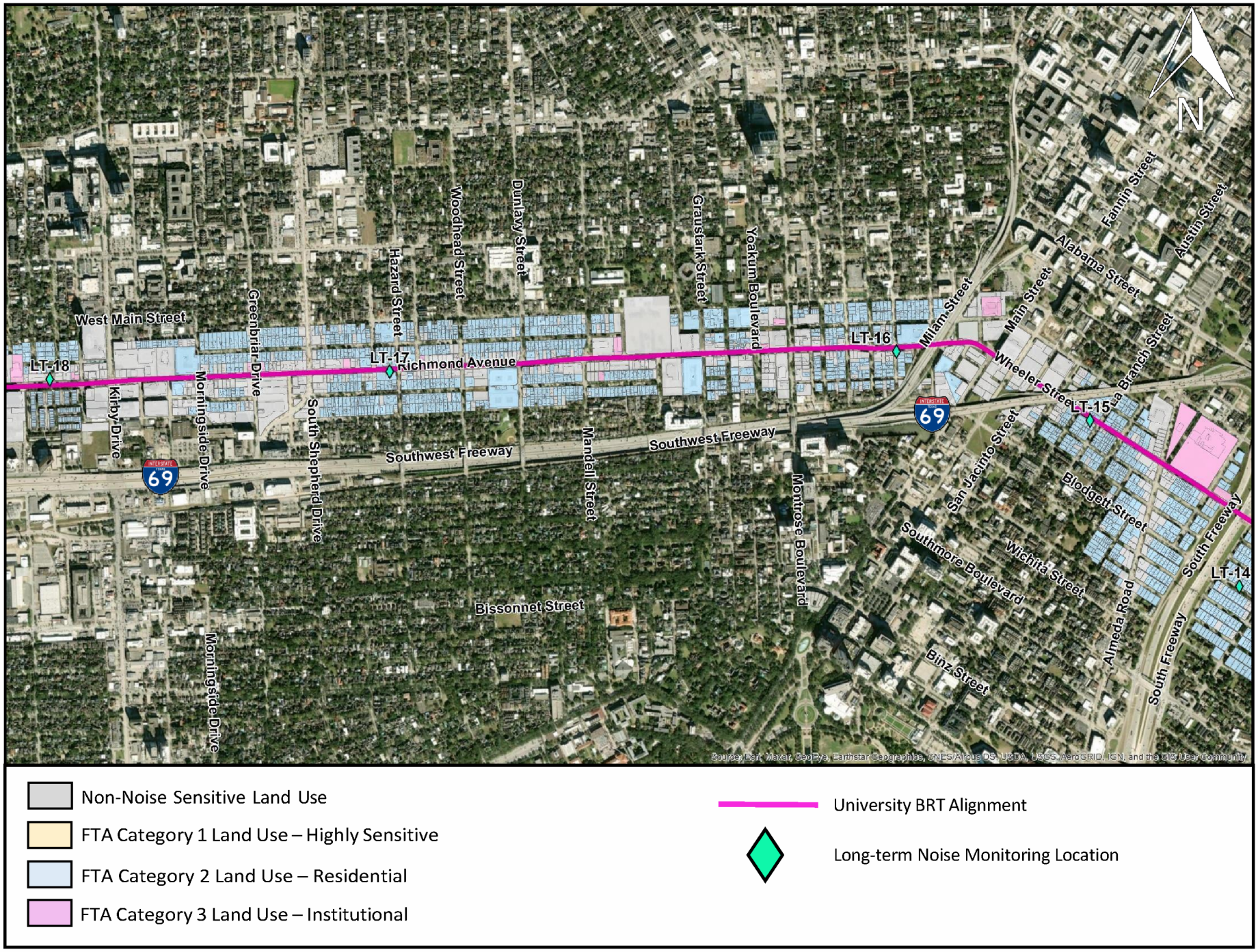

Figure A-0-4: Segment 2- GIS

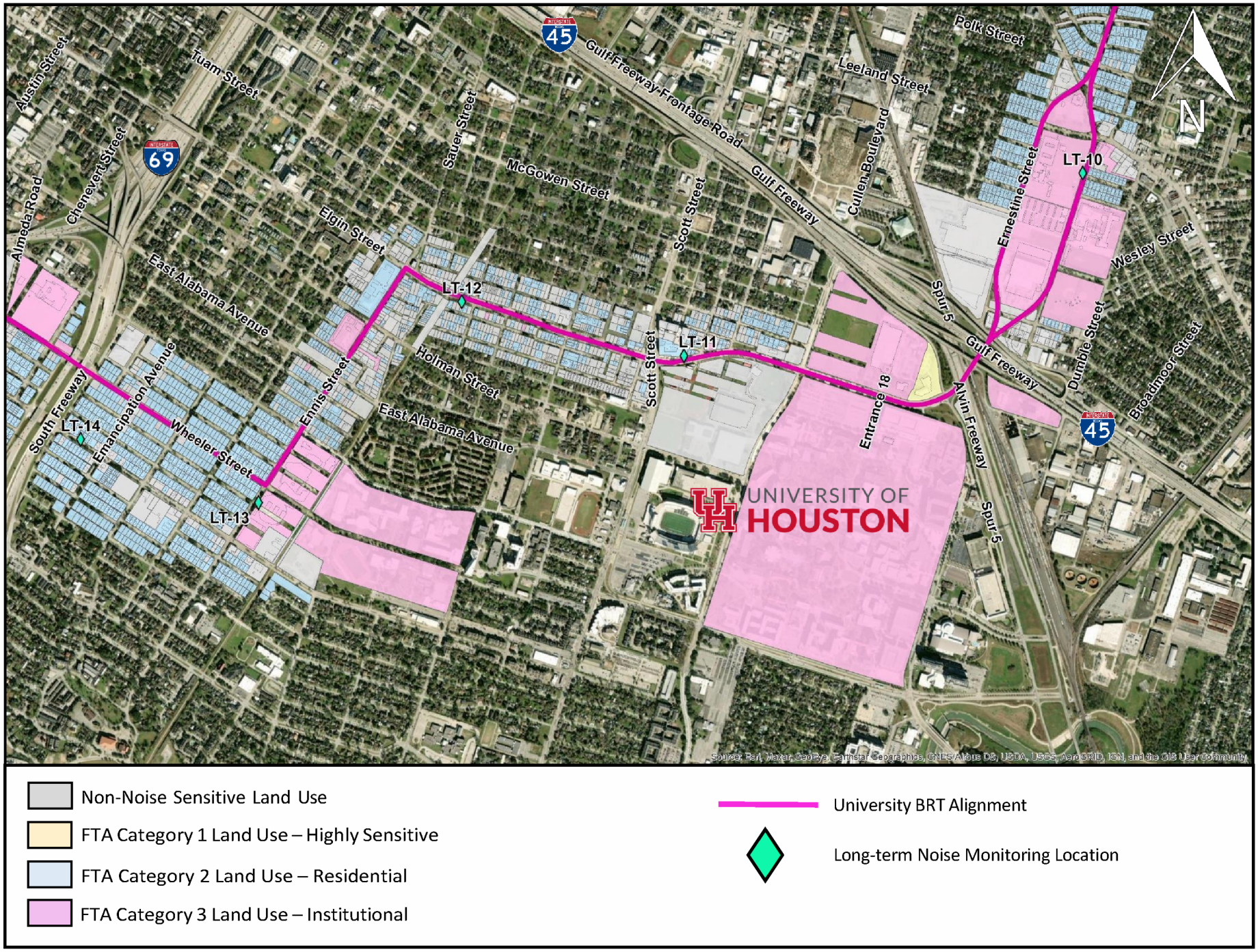

Figure A-0-5: Segment 3 - GIS Map. *Note LT14 and LT13 locations in relation to current

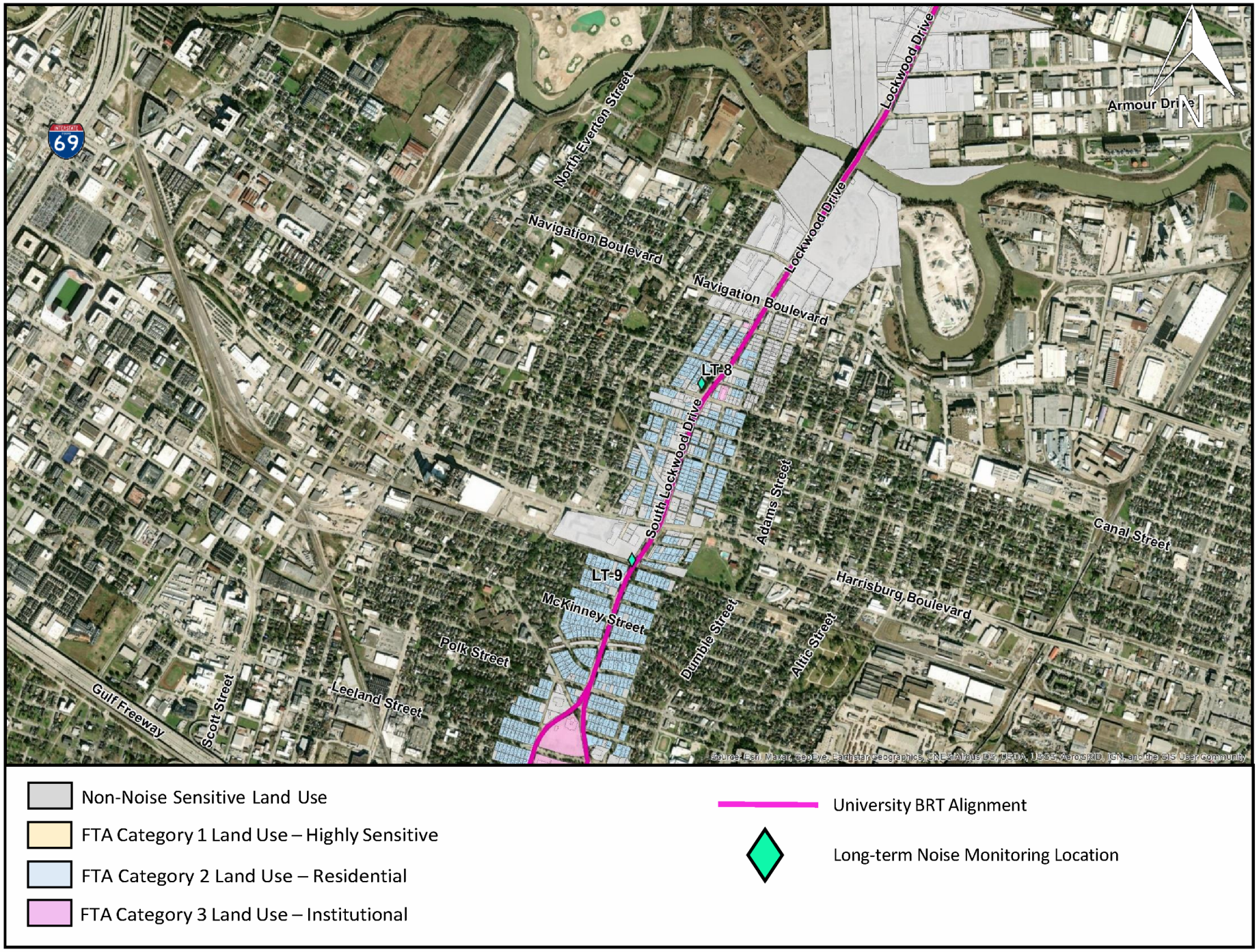

Figure A-0-6: Segment 4 - Part 1 - GIS

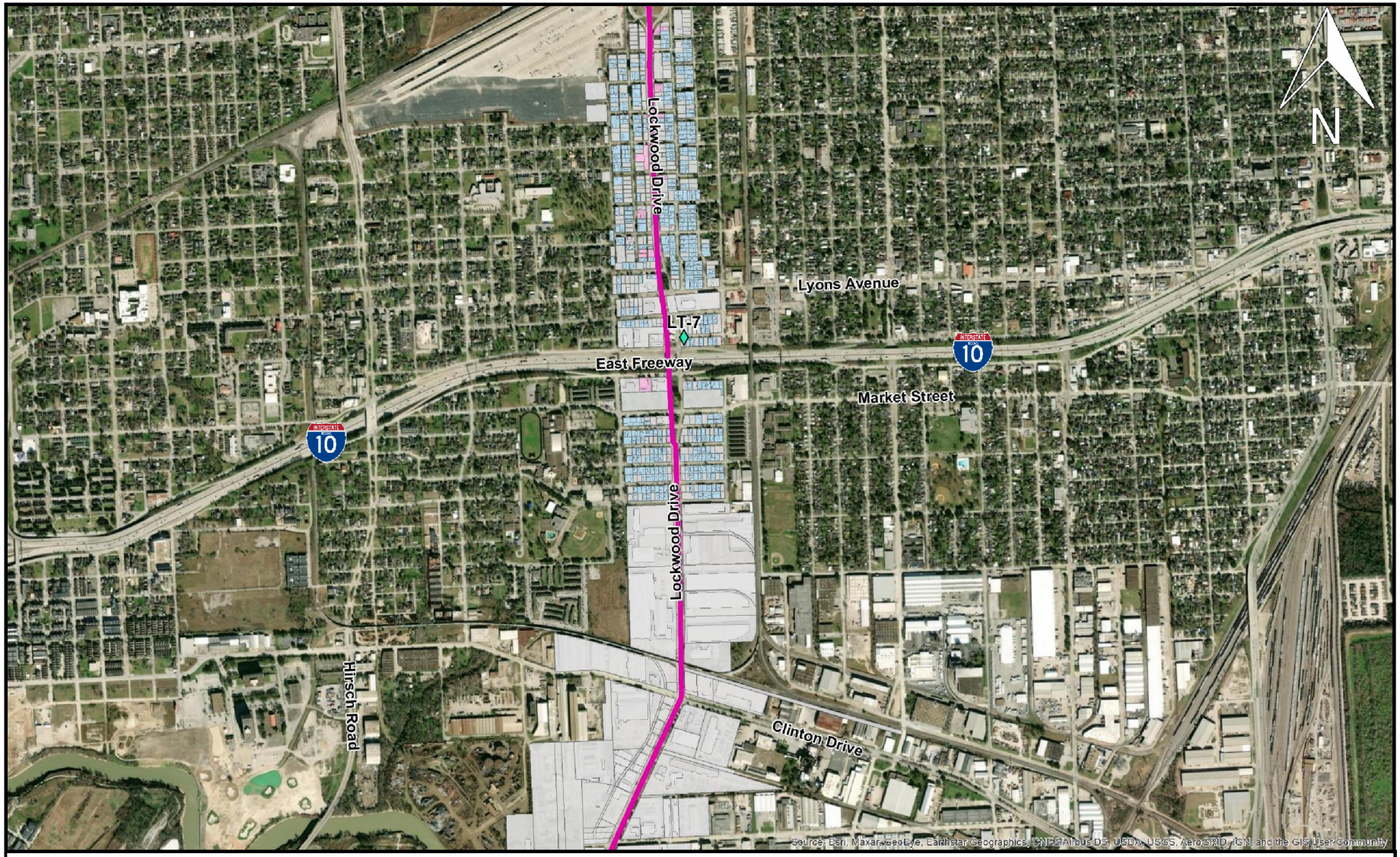

Figure A-0-7: Segment 4 - Part 2 - GIS

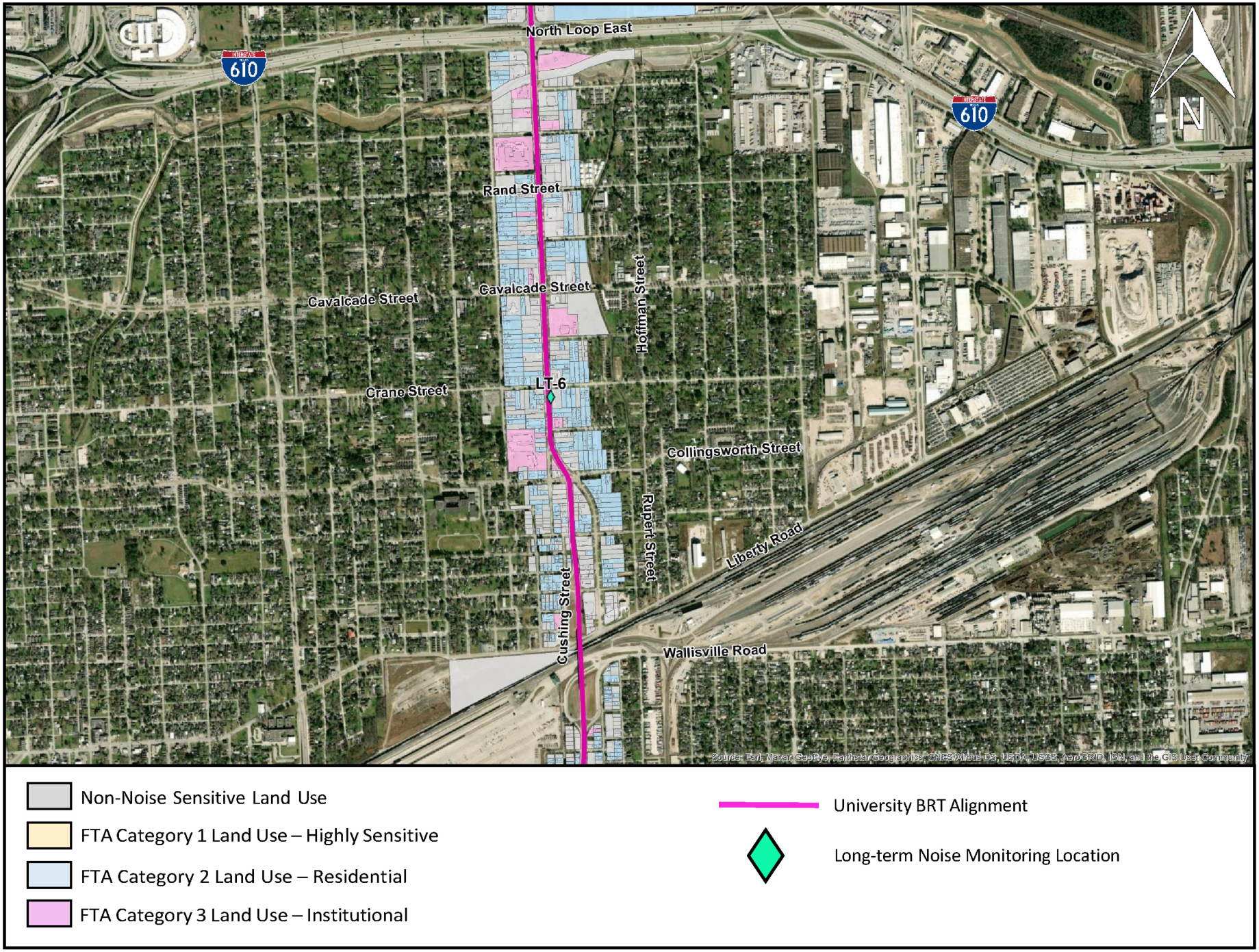

Figure A-0-8: Segment 5 - Part 1 - GIS

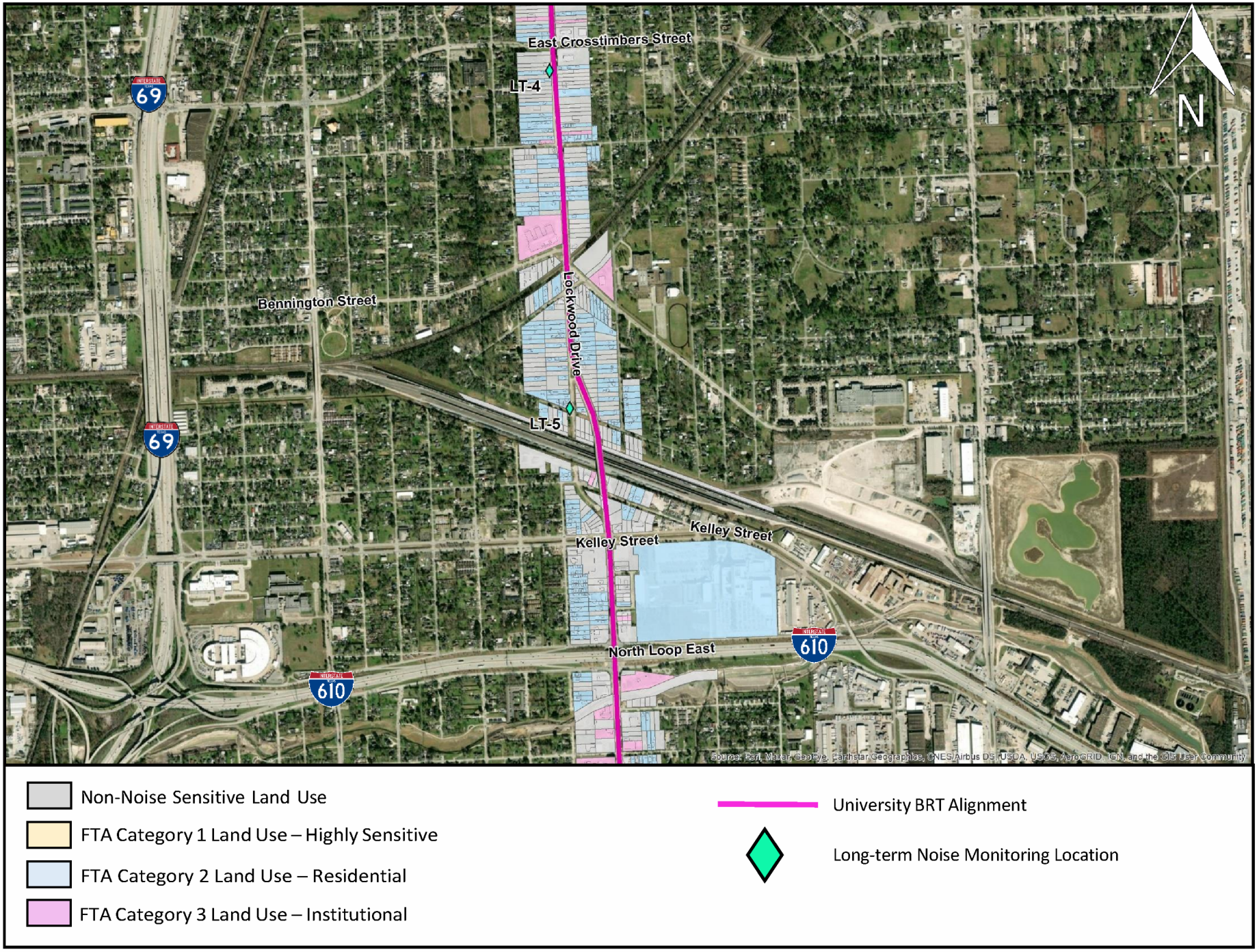

Figure A-0-9: Segment 5 - Part 2 - GIS

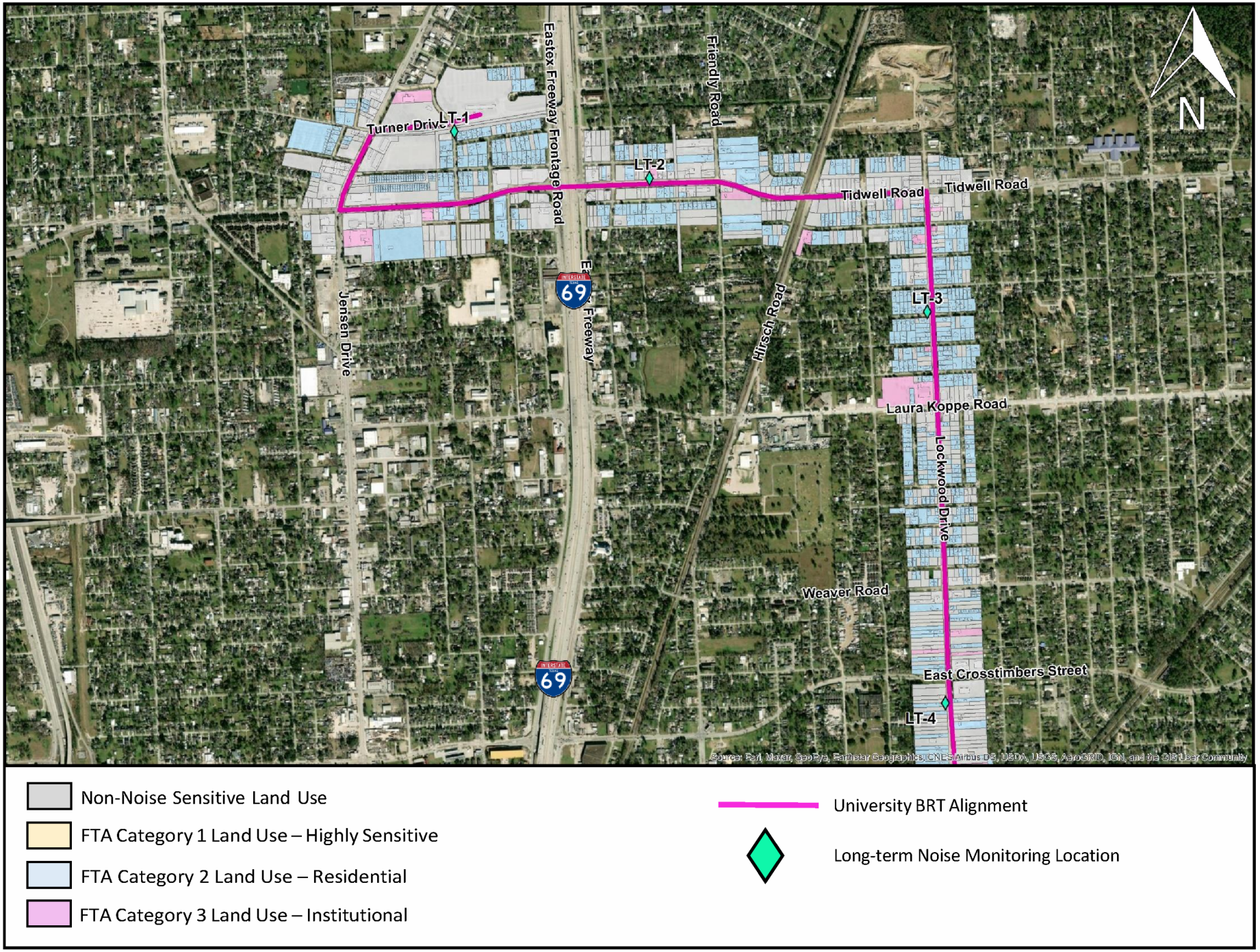

Figure A-0-10: Segment 5 - Part 3 - GIS

Appendix B

University BRT Noise Survey

Plots

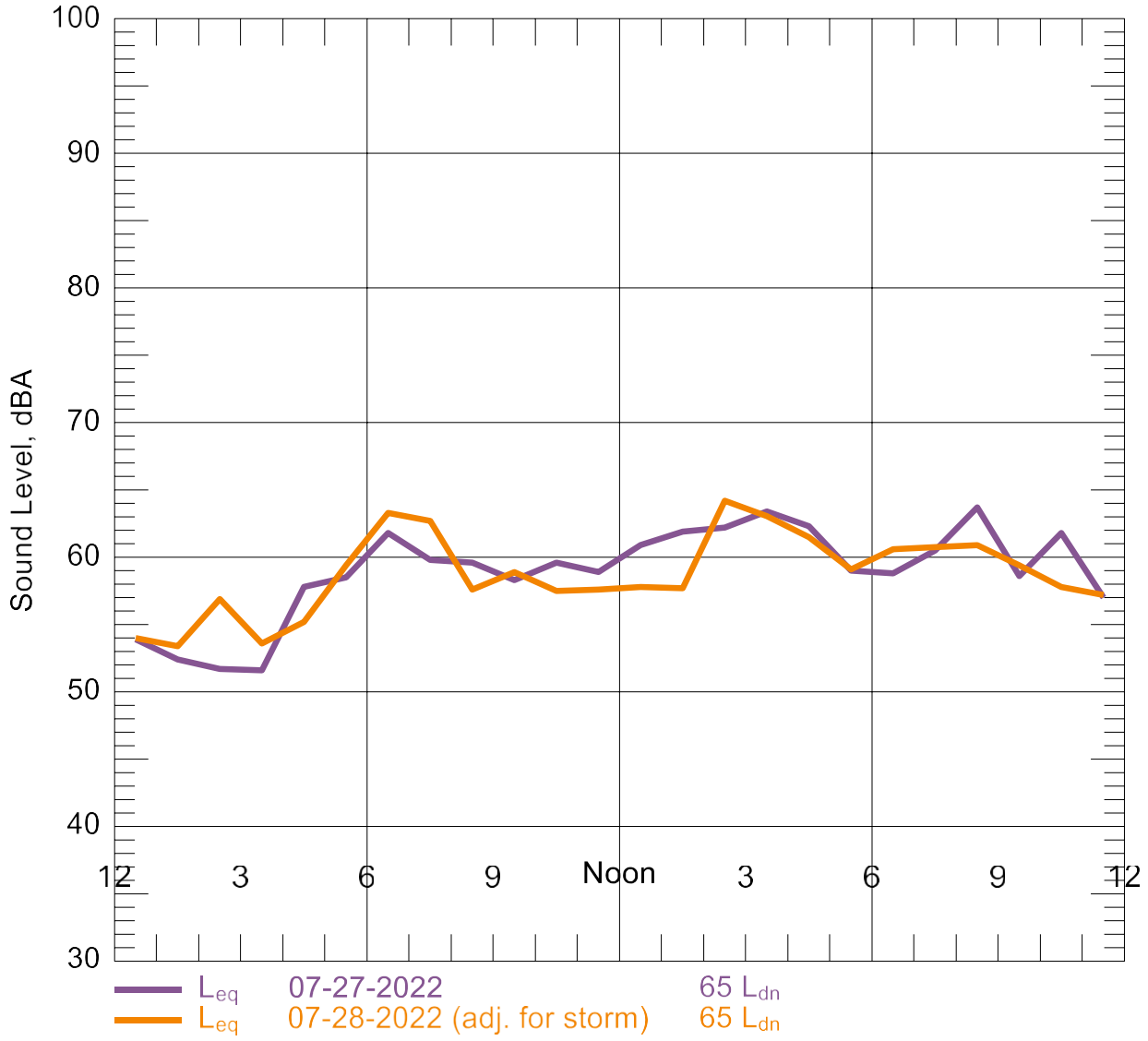

Figure B-0-1: LT1 (near 9678 Edell St) - Hourly statistical Summary of Noise Levels and Daily Average Descriptors

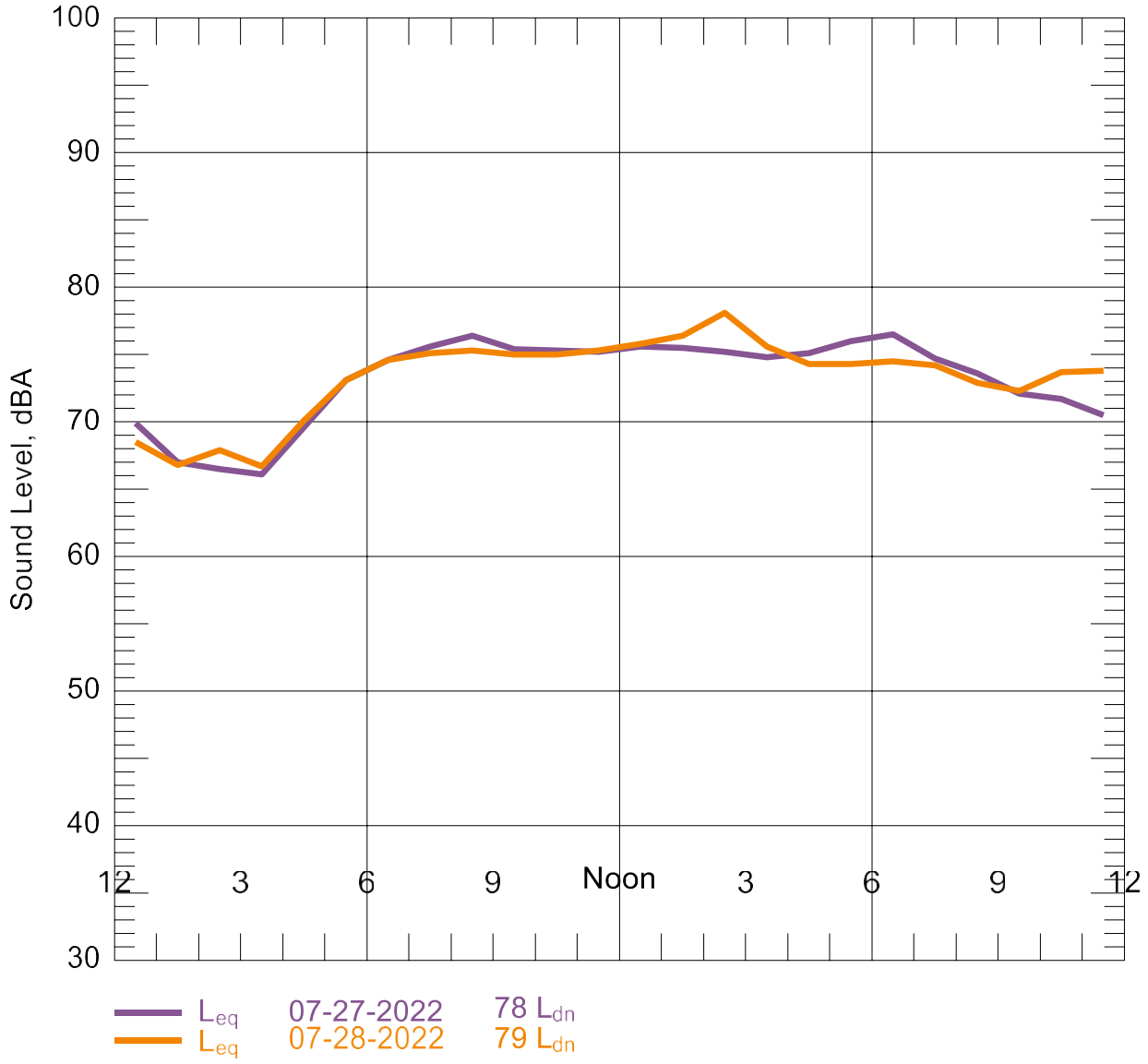

Figure B-0-2: LT2 (near 3807 Tidwell Rd) - Hourly statistical summary of noise levels and daily-average descriptors

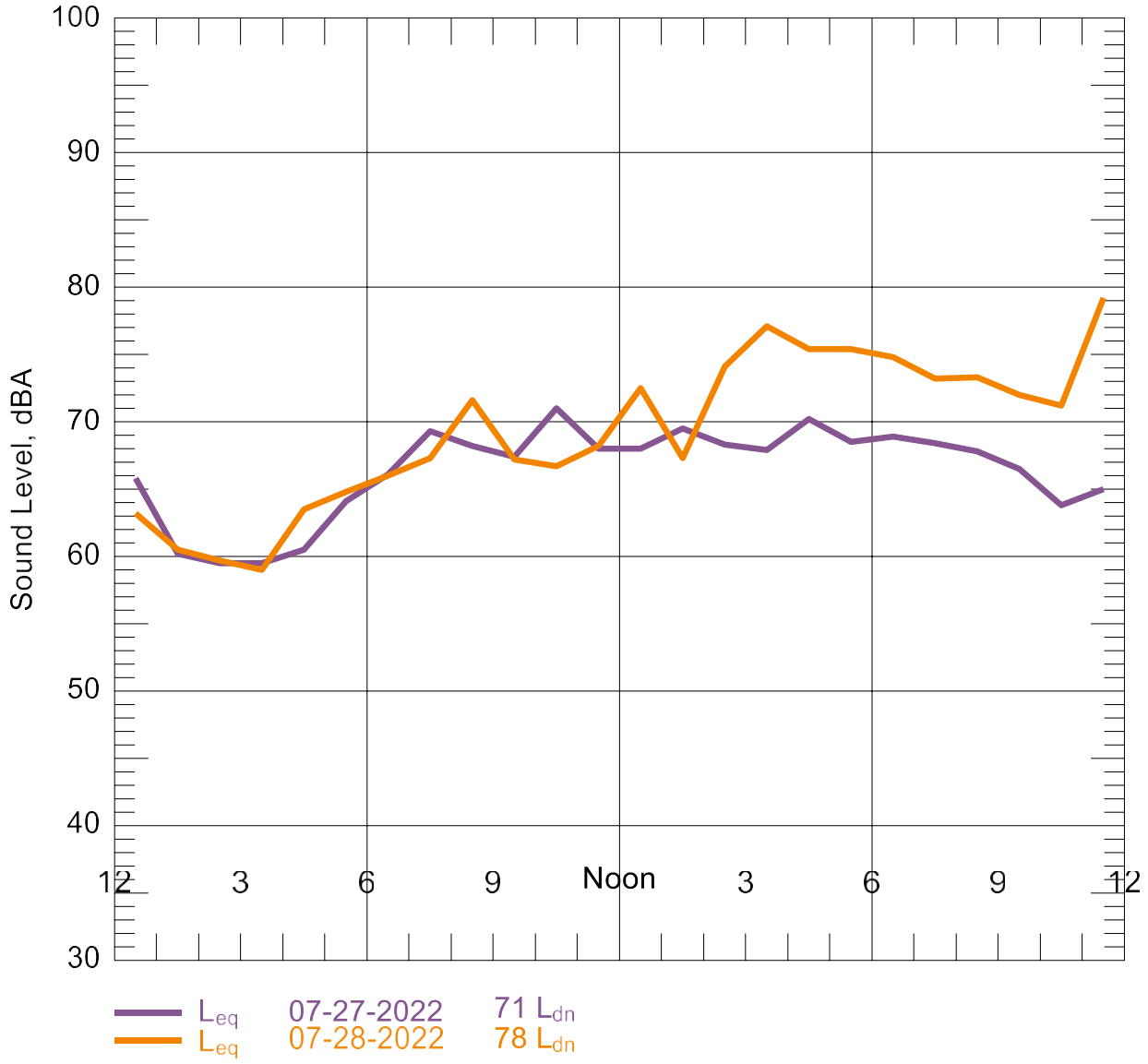

Figure B-0-3: LT3 (near 9009 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

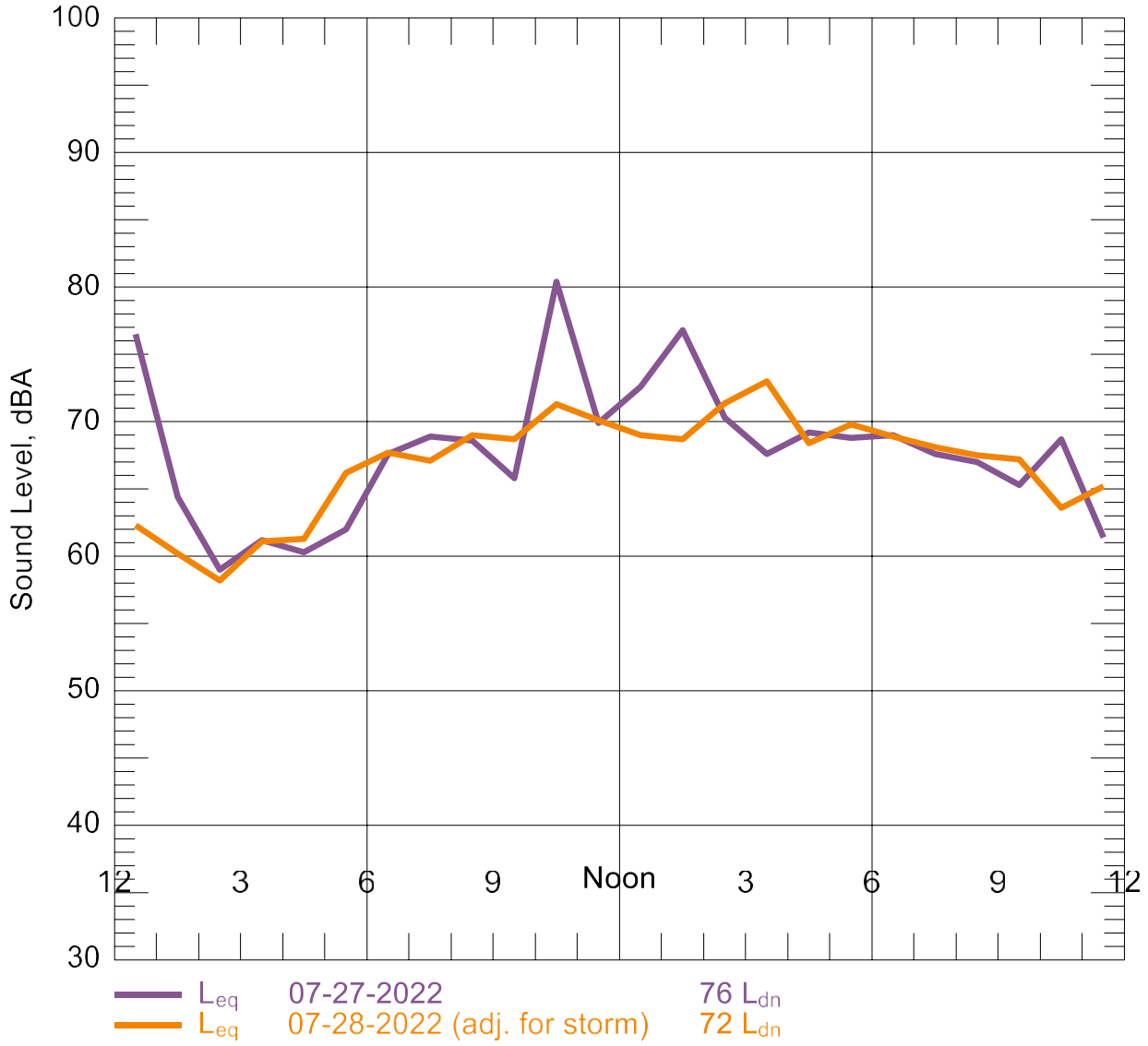

Figure B-0-4: LT4 (near 7719 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors, Adjusted for Thunderstorm on 8-28-2022

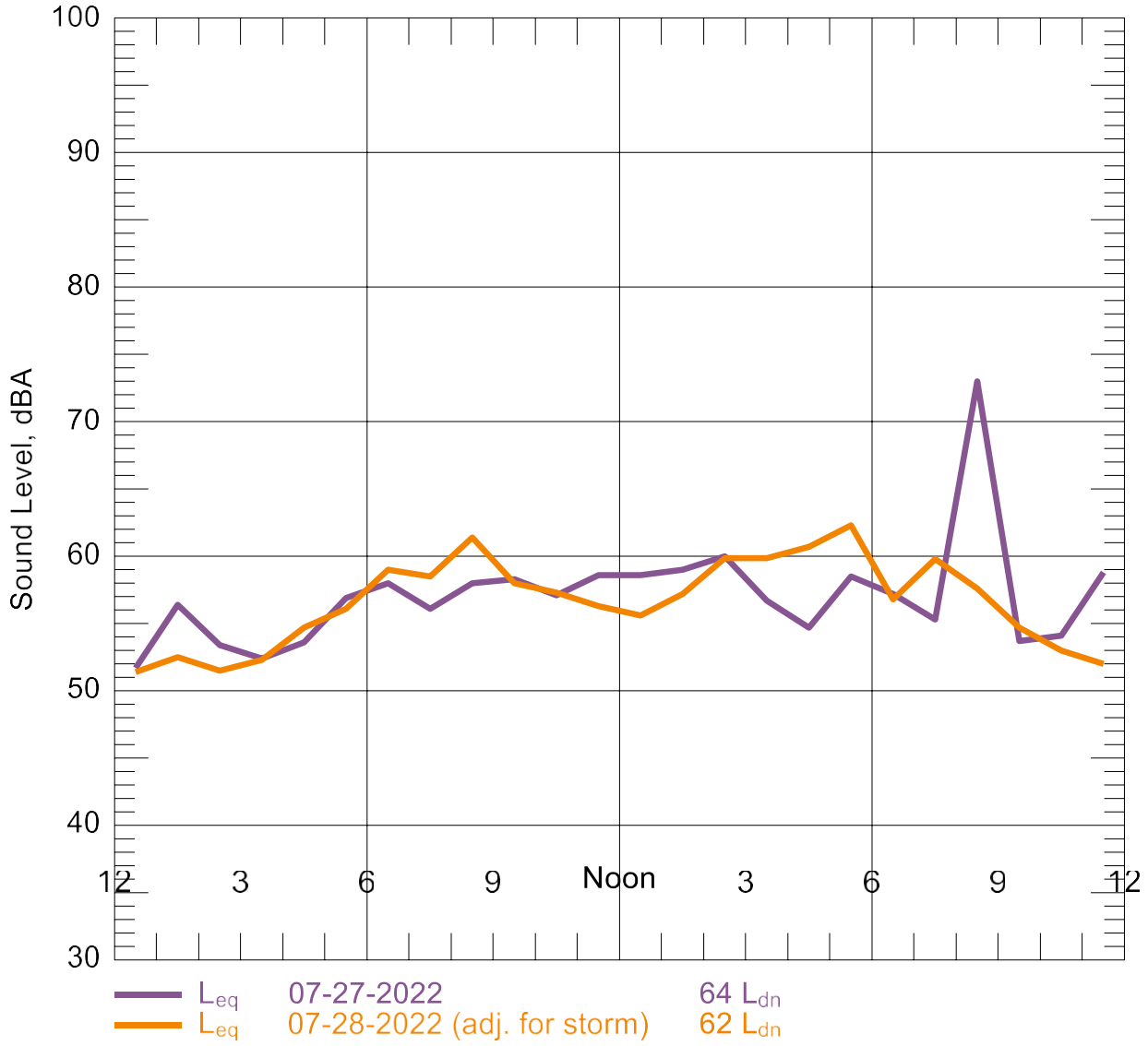

Figure B-0-5: LT5 (near 6406 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

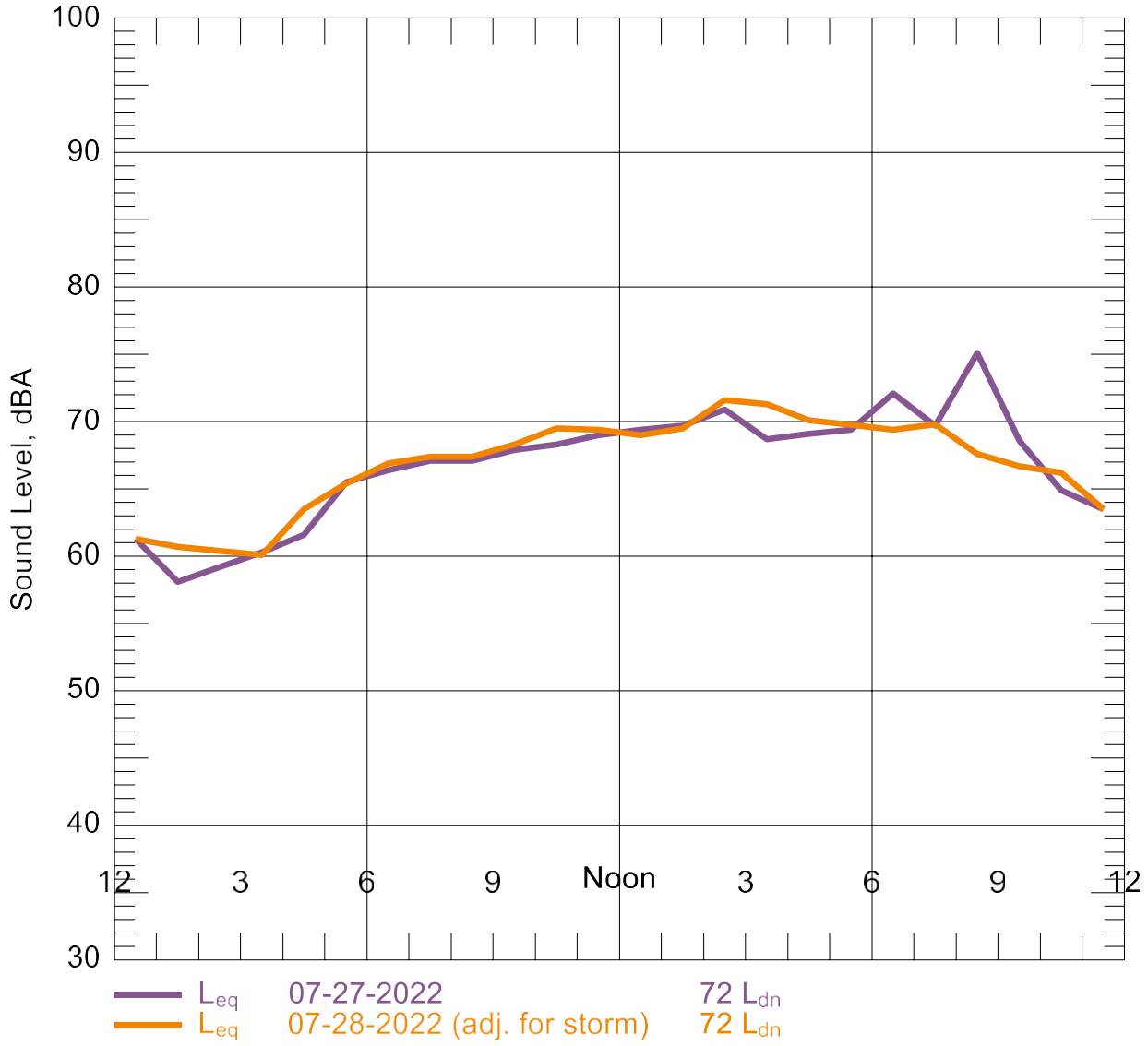

Figure B-0-6: LT6 (near 4000 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

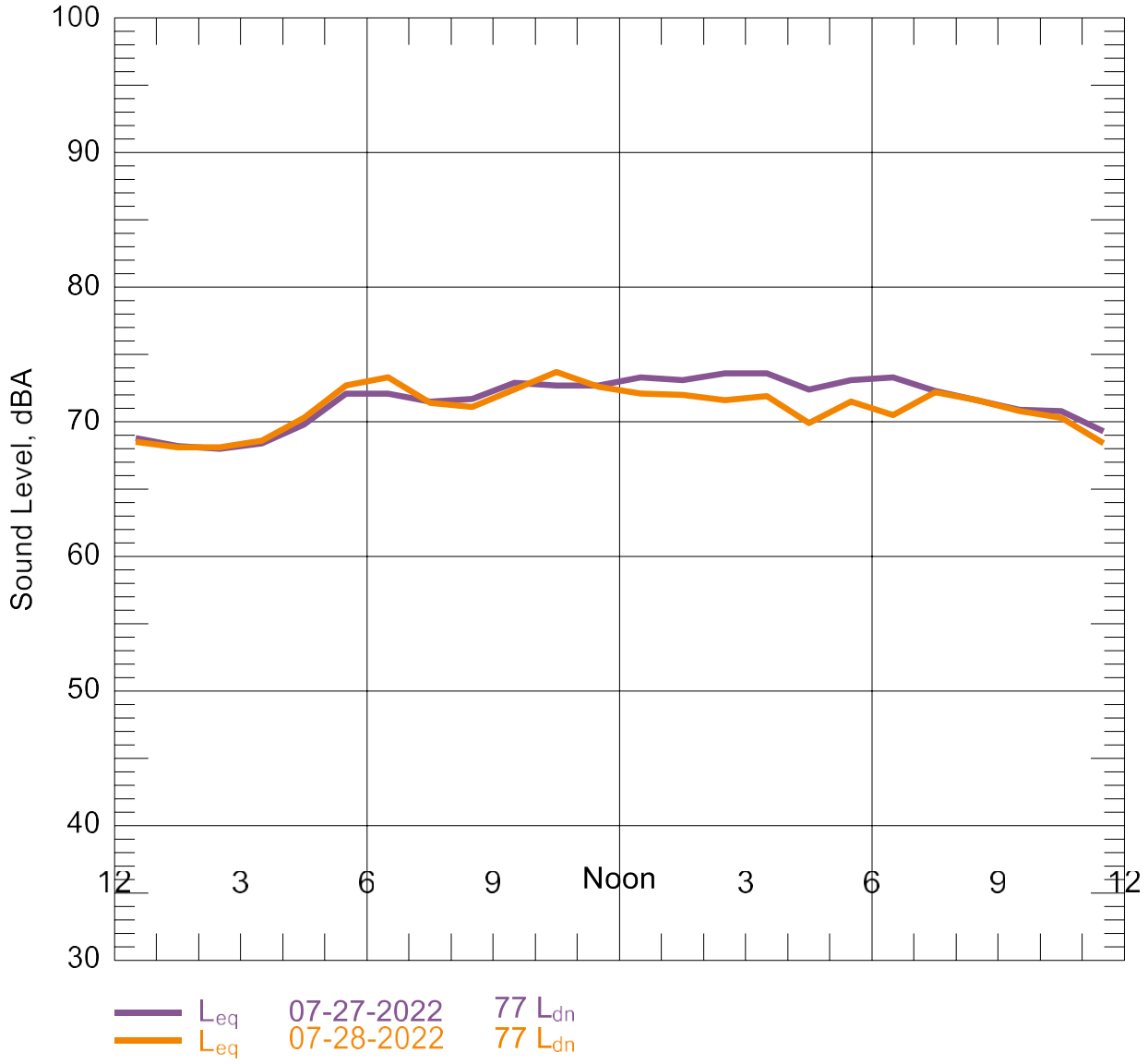

Figure B-0-7: LT7 (near 1412 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

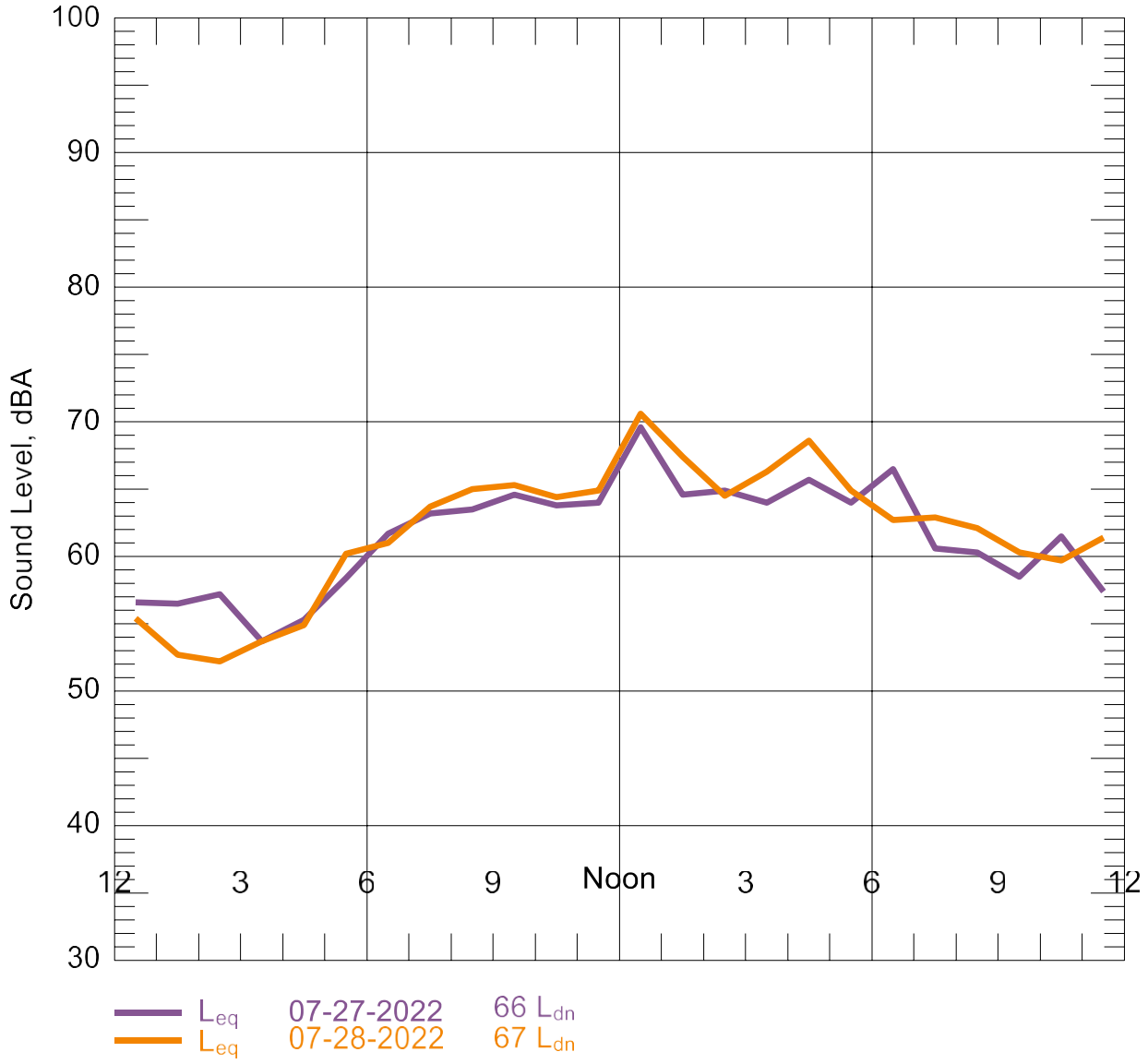

Figure B-0-8: LT8 (near 131 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

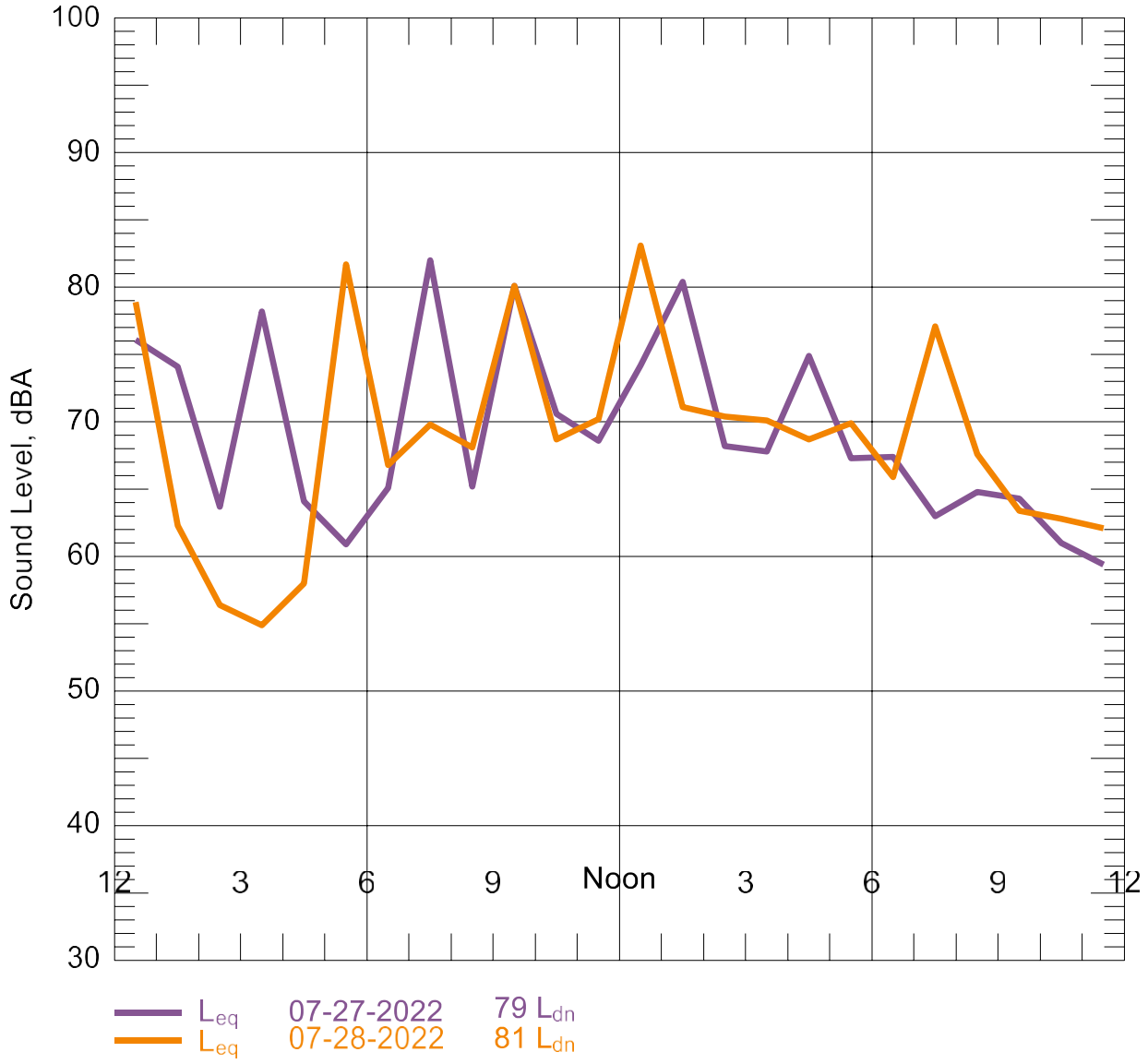

Figure B-0-9: LT9 (near 633 Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

Note: LT9 is located near an active railway.

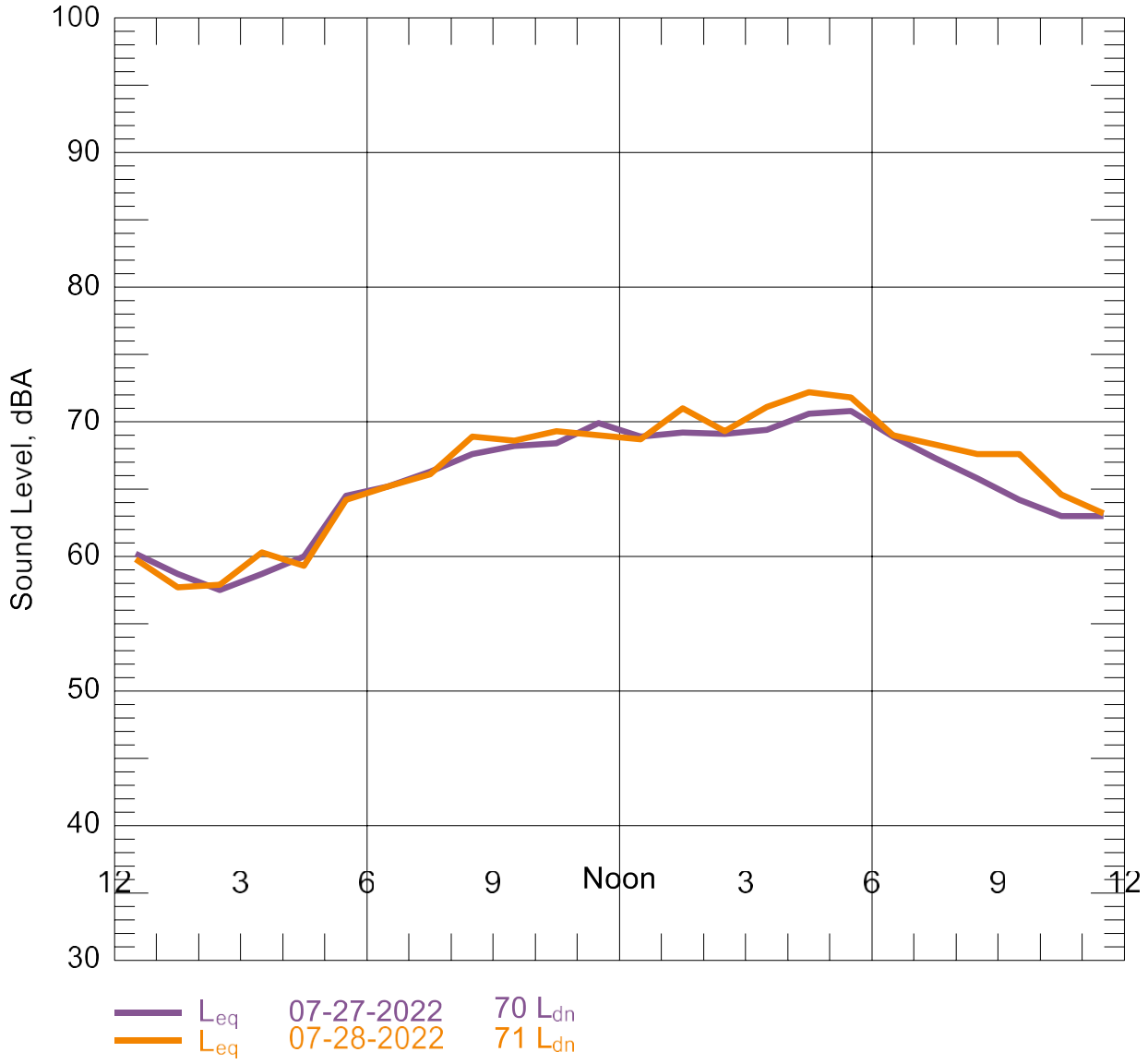

Figure B-0-10: LT10 (near 1632 S Lockwood Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

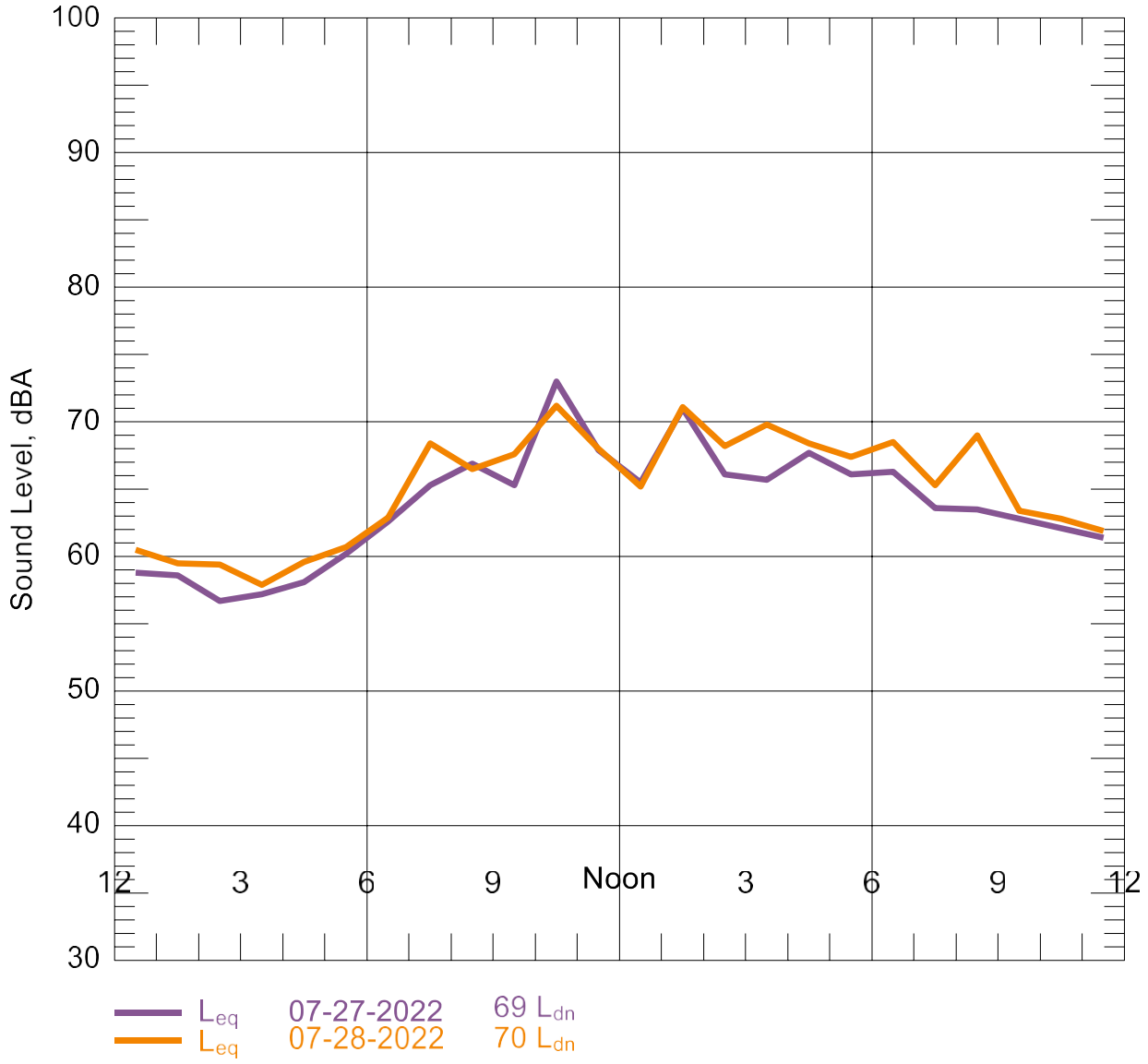

Figure B-0-11: LT11 (near 3651 Elgin St) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

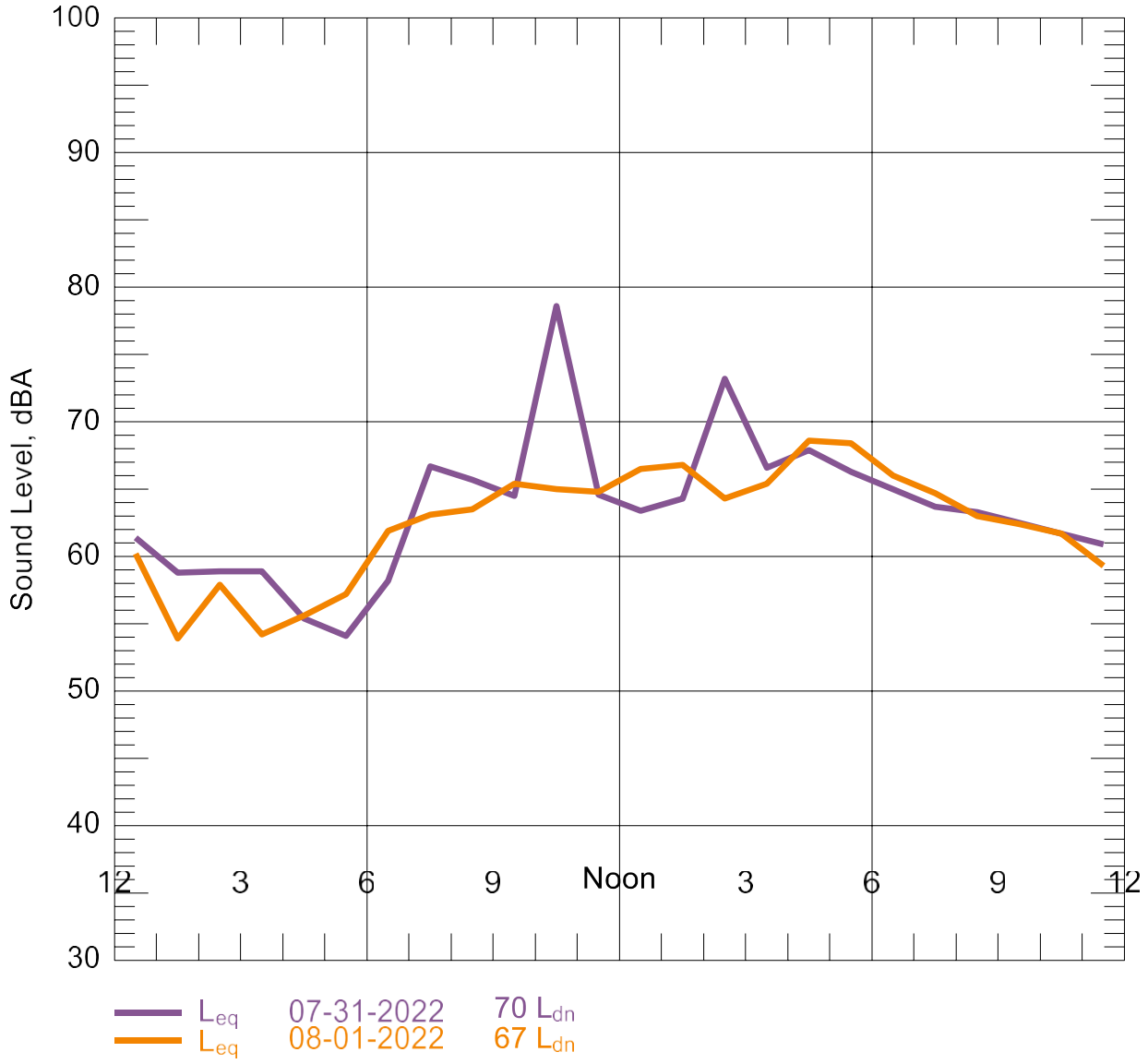

Figure B-0-12: LT12 (near 3210 Elgin St) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

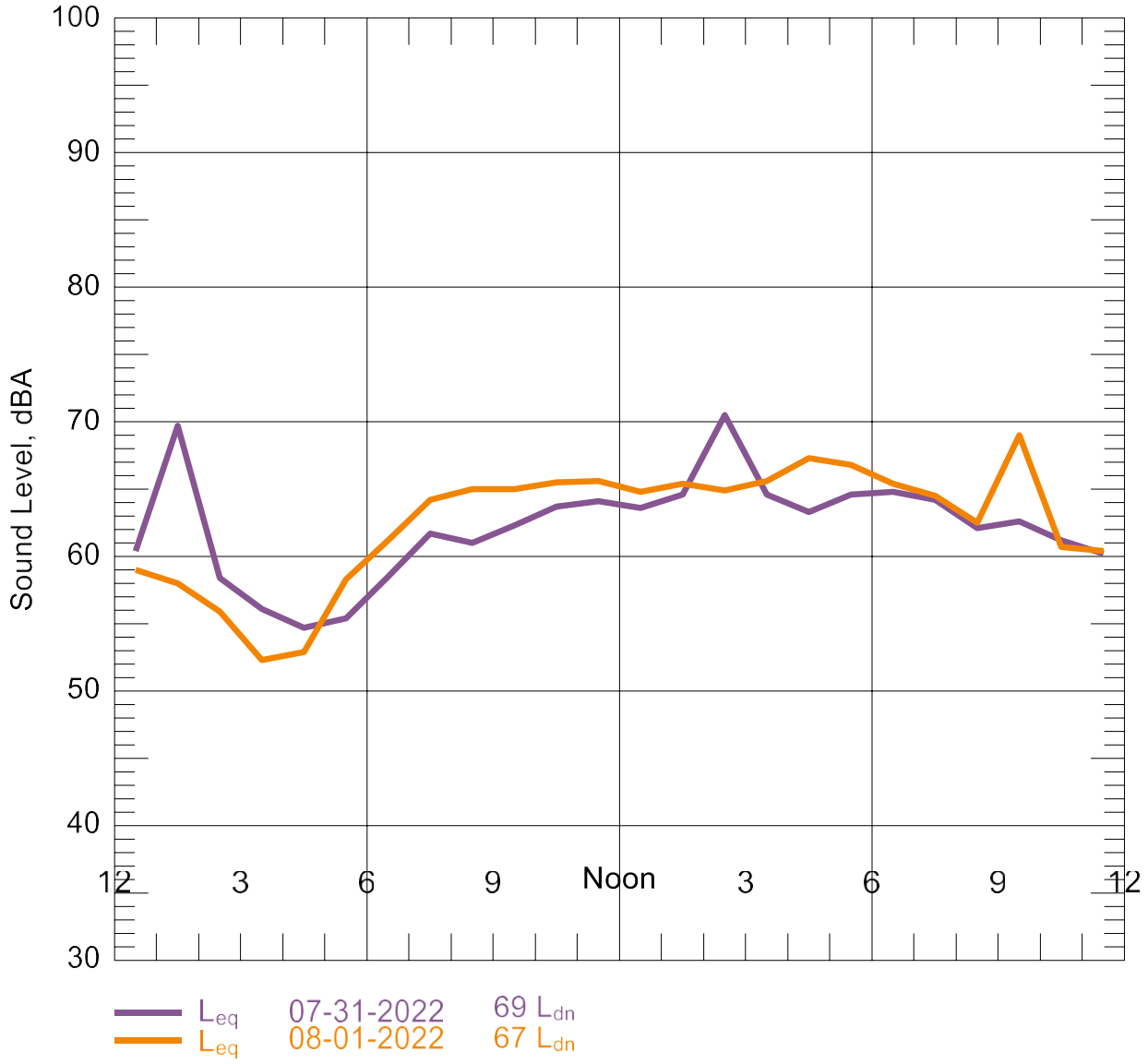

Figure B-0-13: LT13 (near 4401 Ennis St) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

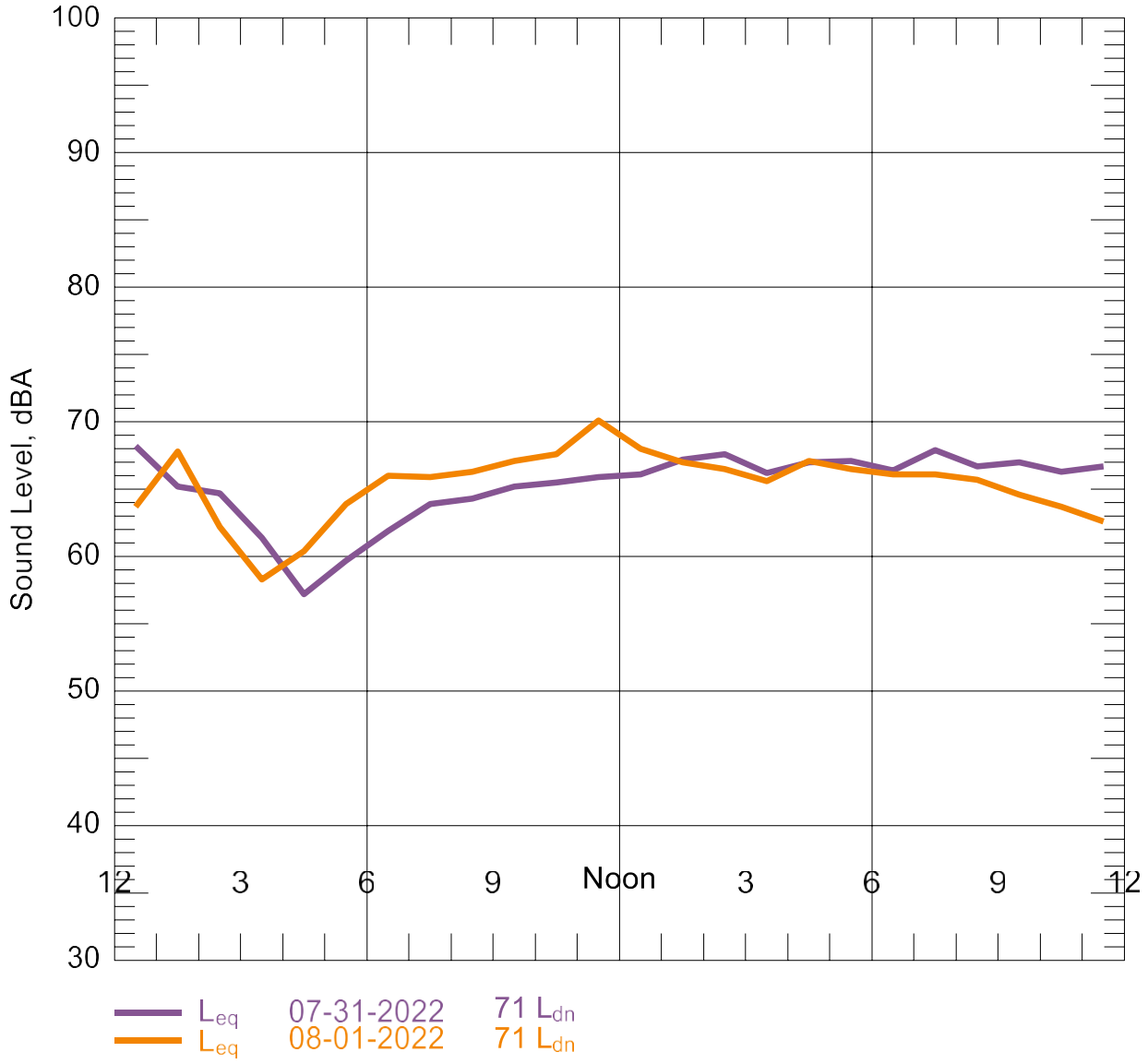

Figure B-0-14: LT14 (near 2303 Blodgett) - Hourly Statistical Summary of Noise Levels and Daily-Average Descriptors

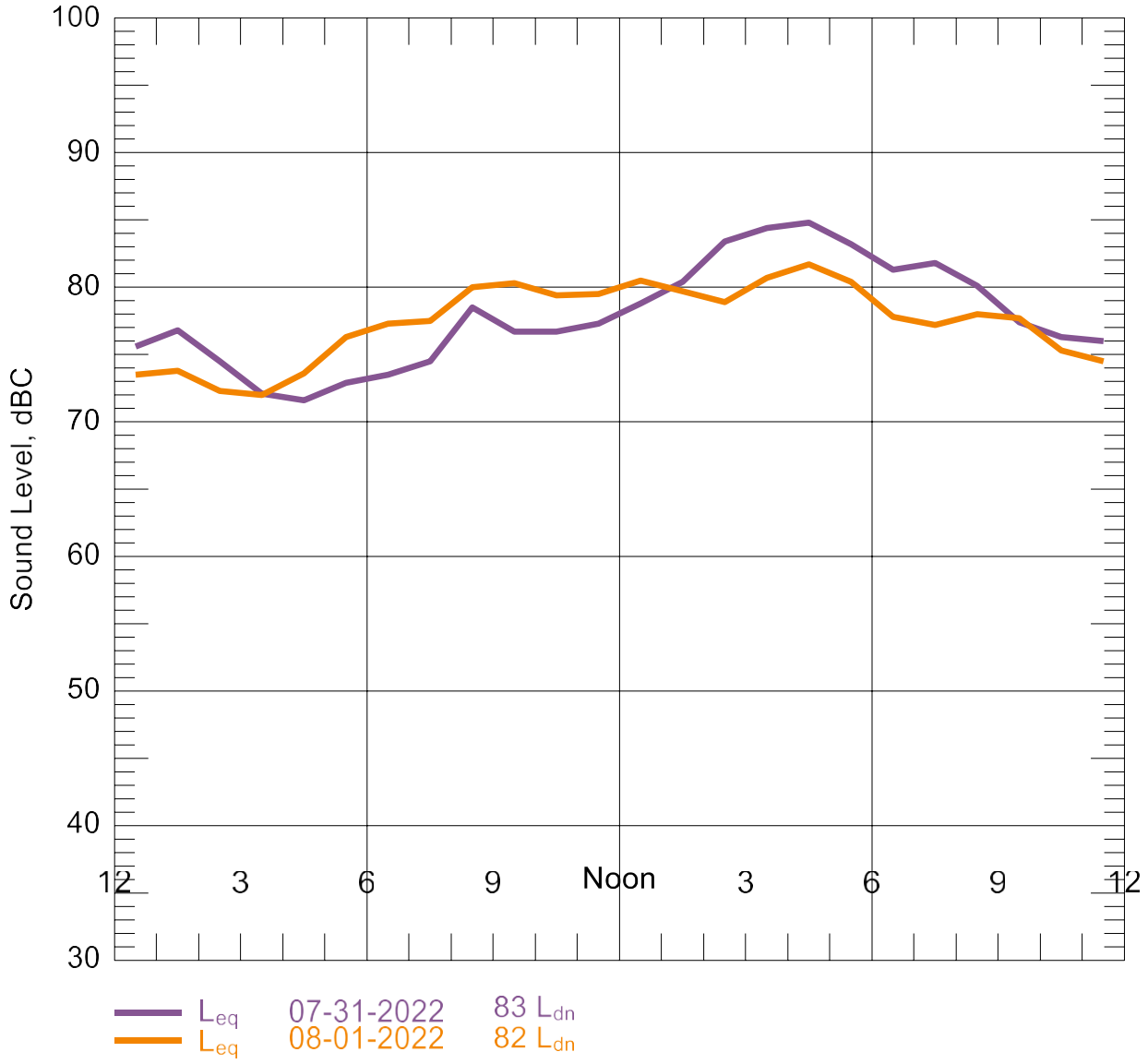

Figure B-0-15: LT15 (near 1412Wheeler Ave) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

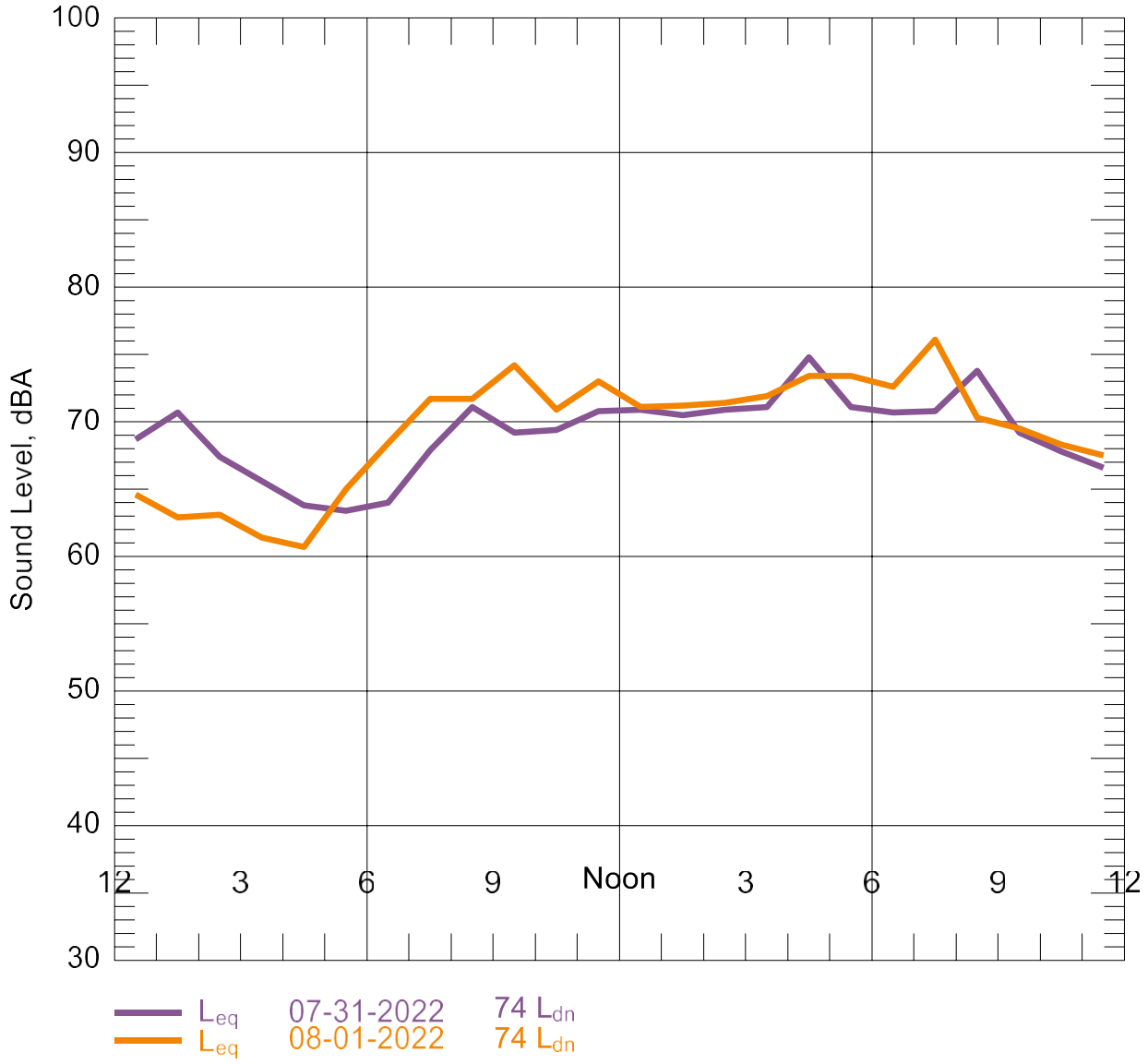

Figure B-0-16: LT16 (near 515 Richmond Ave) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

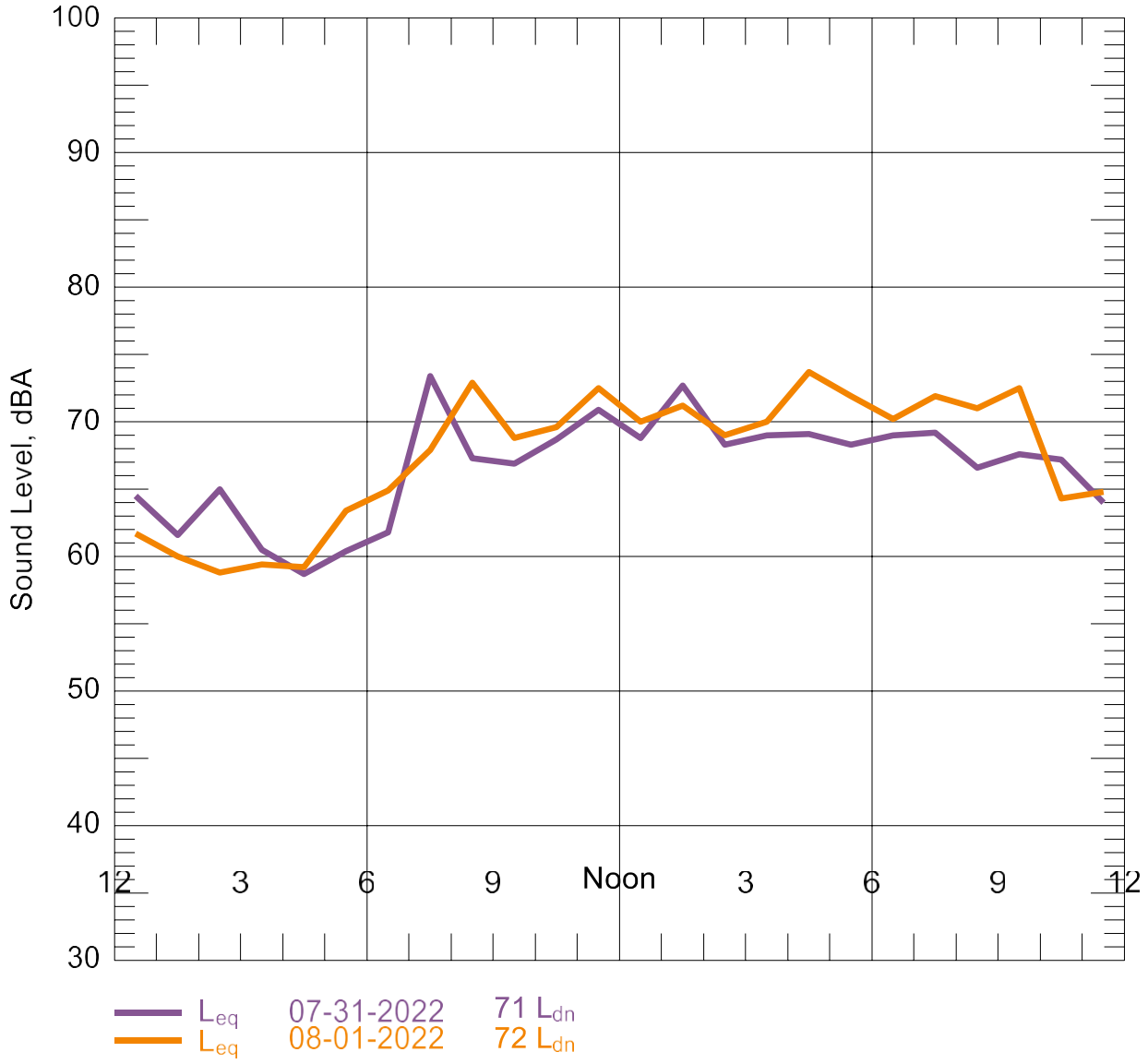

Figure B-0-17: LT17 (near 1901 Richmond Ave) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

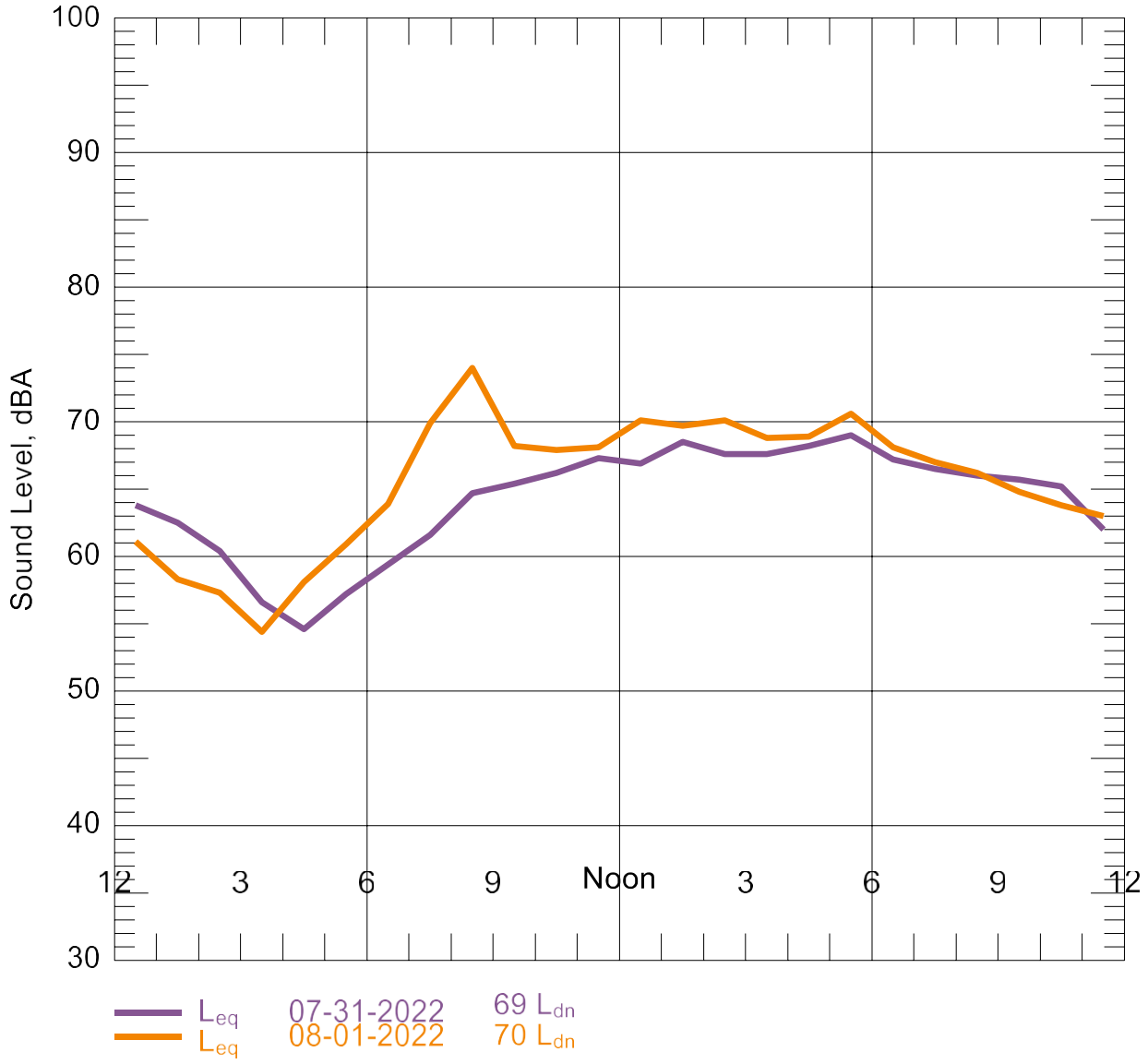

Figure B-0-18: LT18 (near 2800 Richmond Ave) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

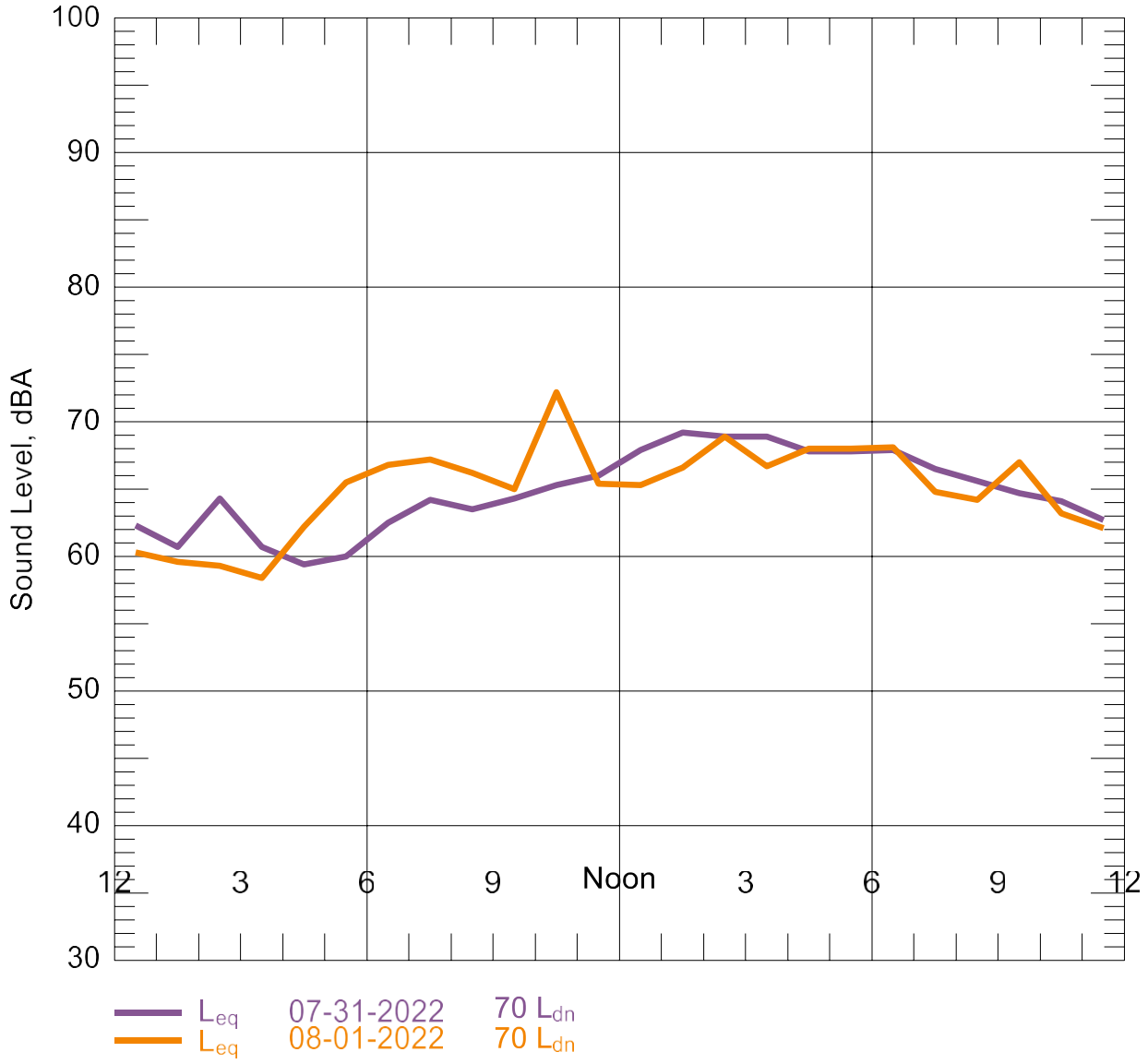

Figure B-0-19: LT19 (near 5102 Weslayan St) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

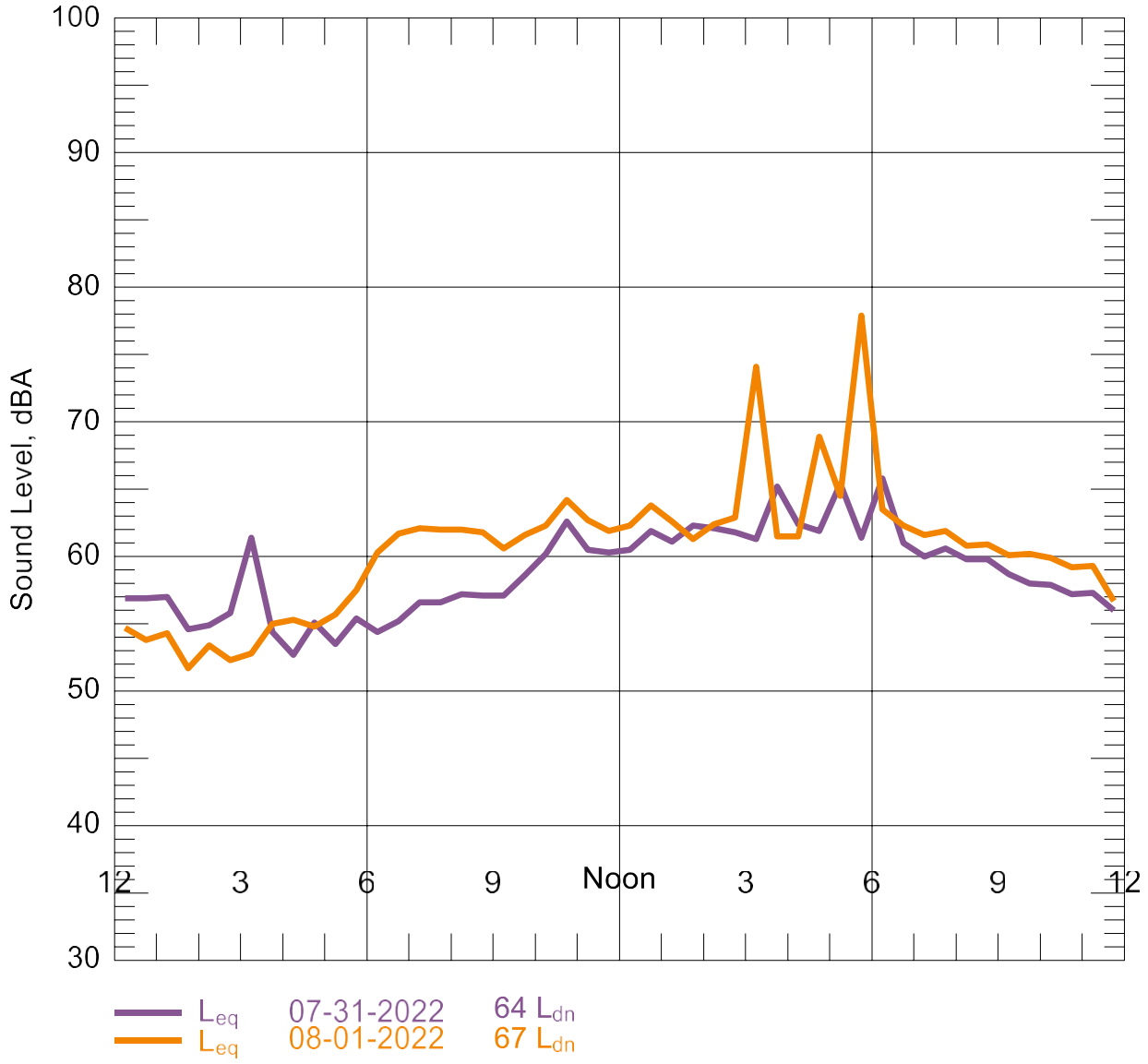

Figure B-0-20: LT20 (near 4653 Wild Indigo St) - 30-minute Statistical Summary of Noise Levels and Daily Average Descriptors

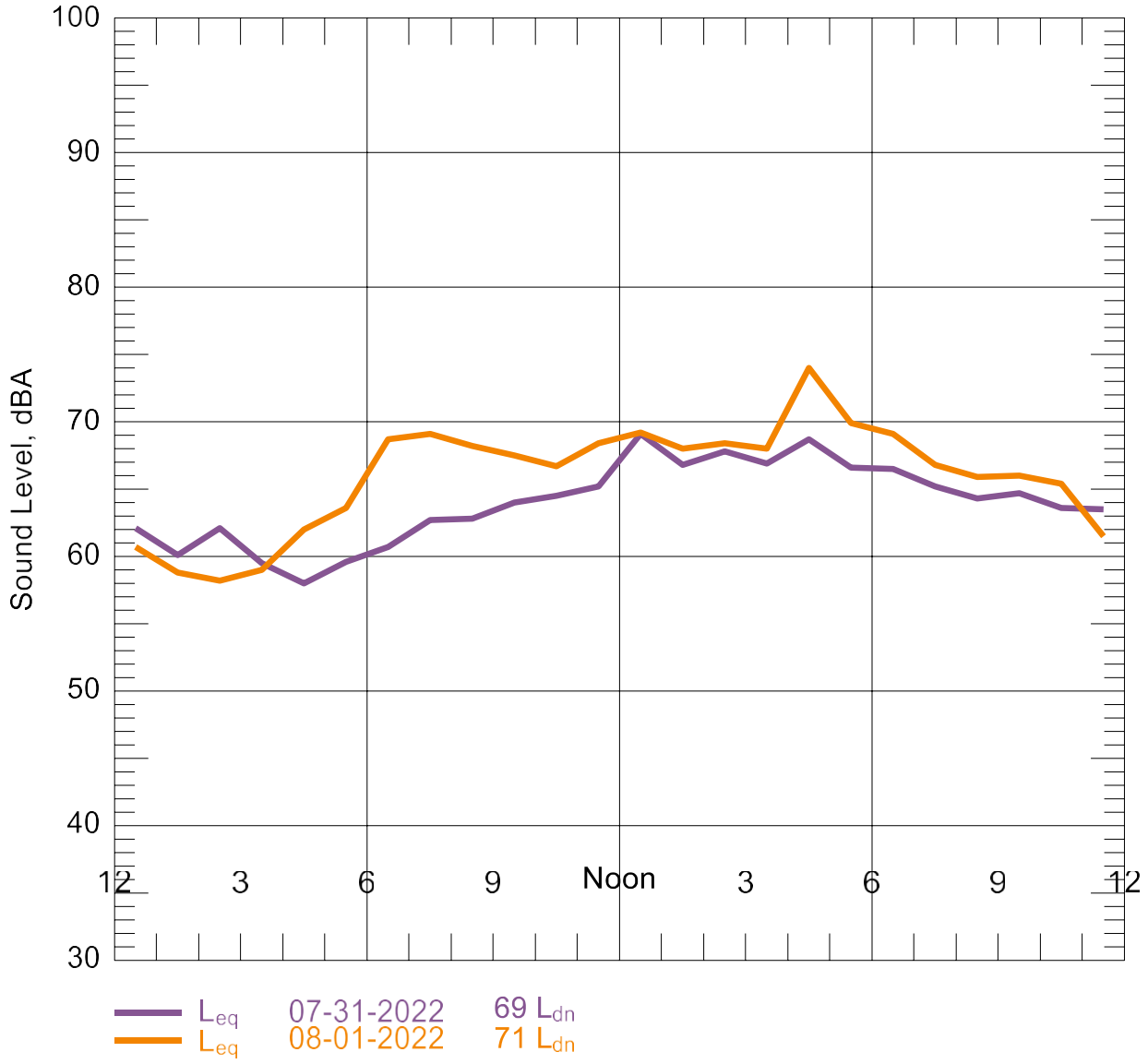

Figure B-0-21: LT21 (near 5400 Alder Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

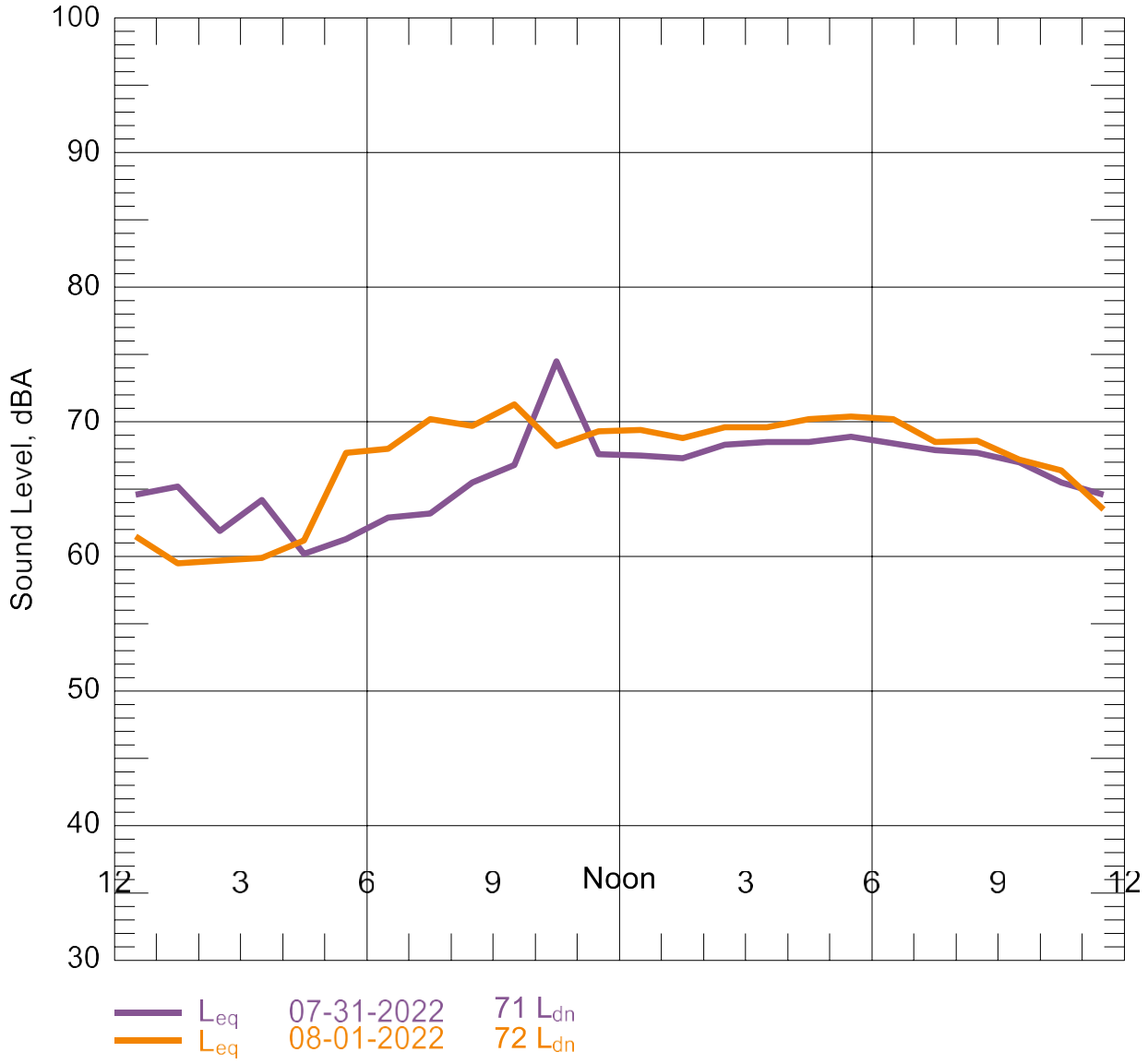

Figure B-0-22: LT22 (near 11050 Harwin Dr) - Hourly Statistical Summary of Noise Levels and Daily Average Descriptors

APPENDIX C-8 – Biological Resources

METRORapid University Corridor

Biological Resources

Technical Memorandum
September 2023



METRO NEXT

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Acronyms and Abbreviations

ACRONYM	DEFINITION
COH	City of Houston
ADA	Americans with Disabilities Act
BMP	Best Management Practices
BRT	Bus Rapid Transit
DBH	Diameter at Breast Height
DOI	Department of the Interior
EMST	Ecological Mapping System of Texas
FTA	Federal Transit Administration
GIS	Geographic Information Systems
GPS	Global Positioning System
IPAC	Information for Planning and Consultation
LRT	Light Rail Transit
MBTA	Migratory Bird Treaty Act
METRO	Metropolitan Transit Authority of Harris County
NEPA	National Environmental Policy Act
PSLS	Project Specific Locations
ROW	Right-of-Way
SGCN	Species of Greatest Conservation Need
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TXNDD	Texas National Diversity Database
US	United States
USFWS	US Fish and Wildlife Service

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston (COH), Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of this Biological Resources Report is to identify existing conditions and evaluate the potential effects of the Project on biological resources such as threatened and endangered species, critical habitat, and vegetation. This report is based on the 30 percent preliminary engineering design. This design will be refined to further reduce real estate impacts as the Project design advances.

1.2 Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park and Ride in the west to the Tidwell Transit Center in the northeast. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way (ROW) from Westchase Park and Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the COH. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1. Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other services like METRORail, METRORapid, and local bus services. Two stations would be incorporated into existing METRO service like, Westchase Park and Ride and Tidwell Transit Center. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

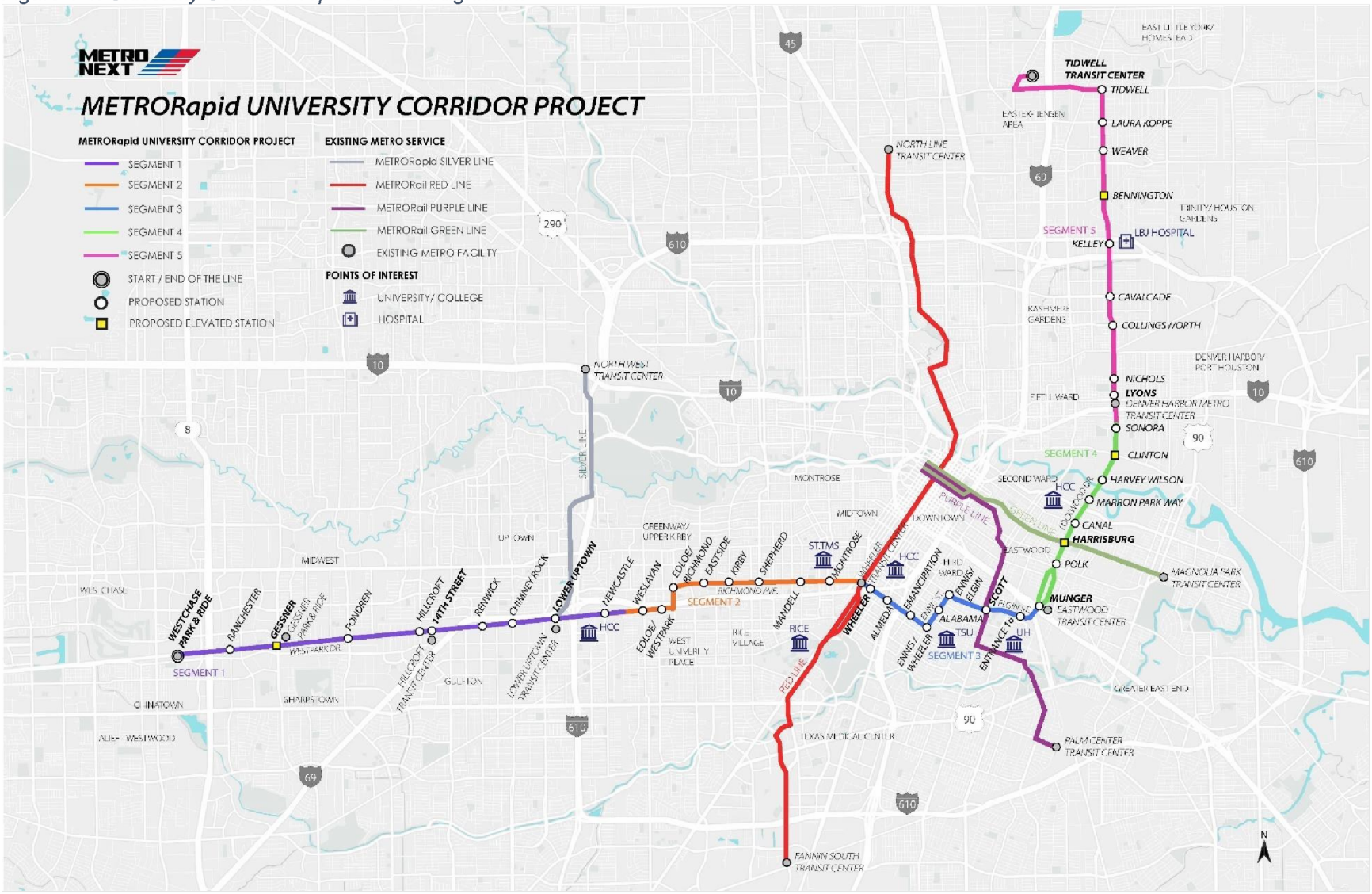
METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 7:00 PM to 12:30 AM. Weekend service

would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 1-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Dr
2	Westpark Dr 1,500 feet east of UPRR tracks, east of Newcastle Dr	Richmond Ave at US-59
3	Richmond Ave at US-59	Elgin Street at I-45 (Eastwood Transit Center)
4	Elgin Street at I-45 (Eastwood Transit Center)	Lockwood Drive at Margarita Street
5	Lockwood Dr at Margarita St.	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



2 Methodology

The study area is defined as a ½-mile buffer surrounding the proposed alignment and stations for the Project.

A review of the study area was conducted using United States Fish and Wildlife Service (USFWS) Information for Planning and Consideration (IPaC), a planning tool that helps determine potential threatened and endangered species presence within a project area. IPaC also provides information on designated critical habitats, National Wildlife Refuges, and wetland resources in or near a project area. The Texas Parks and Wildlife Division's (TPWD) National Diversity Database (TXNDD) was used for analysis of potential impacts to threatened and endangered species.

Geographic Information Systems (GIS) shapefiles were obtained from the TPWD Ecological Mapping Systems of Texas (EMST); and the Texas Commission on Environmental Quality's (TCEQ's) *Ecoregions of Texas* (2007). This assessment was built upon detailed field investigations conducted by project biologists in 2022 to verify vegetative communities, wildlife habitat, migratory bird use, and potential habitat for rare threatened and endangered species within the study area.

A tree survey was conducted by qualified biologists in May through July 2022. Trimble R2 and EOS Arrow Global Positioning (GPS) units with sub-meter accuracy were utilized to determine the boundaries of the survey and record the location of trees within the boundary. Trees identified on the COH Street Tree List within the survey boundary that exhibited Diameter at Breast Height (DBH) values equal to or greater than 1.5 inches were analyzed and recorded. Any tree species not identified on the COH Street Tree List that exhibited Diameter at Breast Height (DBH) values greater than 20 inches were also analyzed. Trees' conditions were assessed based on overall form, signs of stress, wounds, decay, damage, and diseases. Based on those factors, trees were given condition classifications as poor, fair, good, and excellent. See **Figure 3-1** for Tree Species within the University study area.

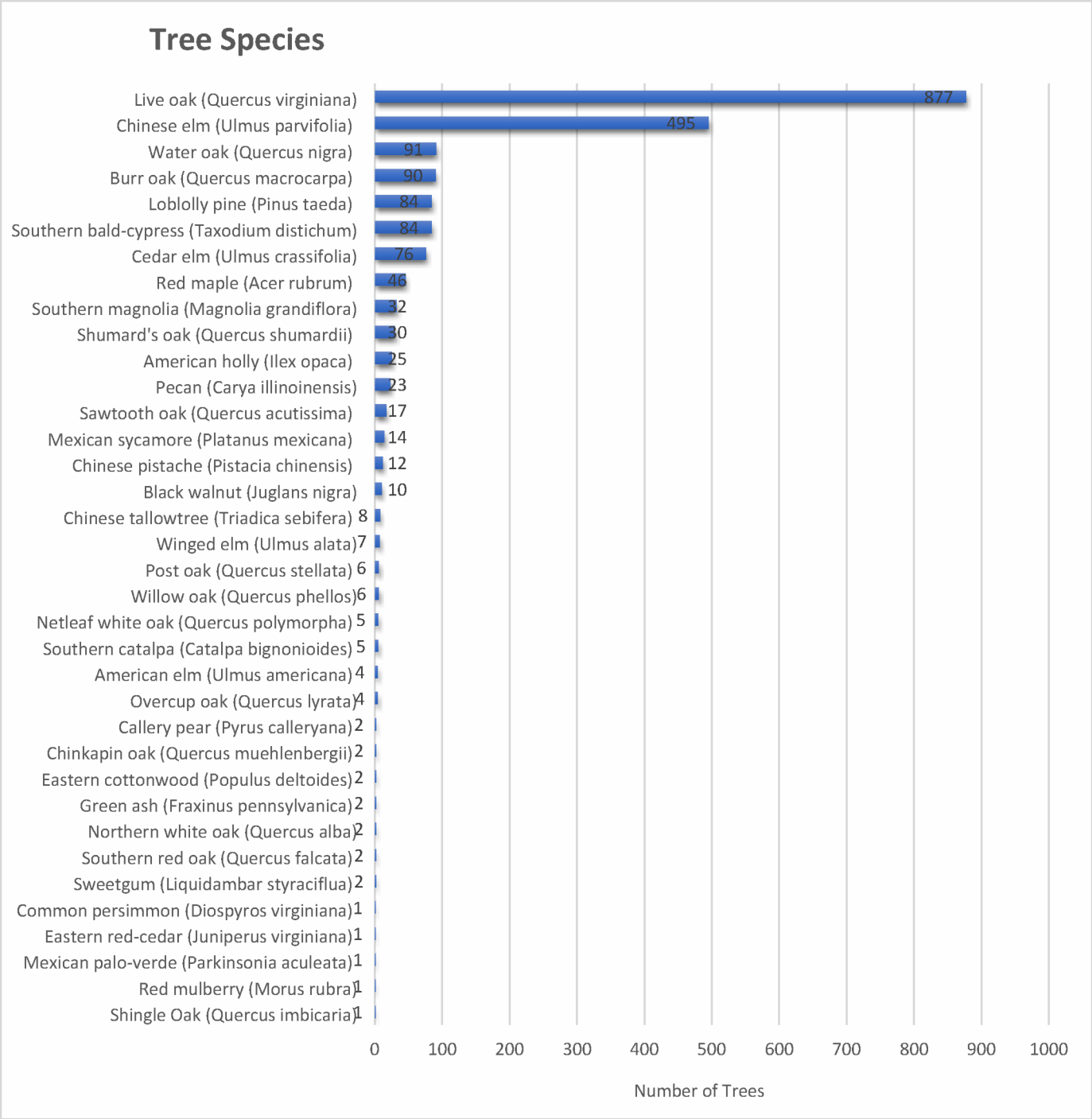
3 Existing Conditions

The study area is within the Texas Gulf Coast Prairies and Marshes ecoregion. This region is characterized by low elevation and low relief that is slowly drained. It is dissected by streams and rivers flowing into the Gulf of Mexico. The region includes salt grass marshes, tallgrass prairies, tall woodlands, among others.

3.1 Vegetation/Habitat

METRO determined that the majority of vegetation within the current ROW consists of typical maintained grasses, and landscaped assemblages of trees and shrubs. Therefore, the majority of the existing ROW fits the description of the "Urban Low Intensity" and "Urban High Intensity" EMST) vegetation type. TPWD defines Urban High Intensity as built-up areas with wide transportation corridors, which is predominately covered by impervious cover. Urban Low Intensity is defined as built-up areas, but not entirely covered by impervious surfaces, it includes most of the non-industrial areas within cities and towns (TPWD, 2014, 2022a).

Figure 3-1: Tree Species within the Study Area



Source: Holloway Environmental Tree Inventory Report, 2022

METRO mapped 20 EMST habitat types within the study area. A review of the TPWD EMST revealed that 96 percent of the study area is considered Urban, with 59 percent of the study area defined as Urban High Intensity and 37 percent Urban Low Intensity.

The remaining 4 percent consists mostly of coastal prairie, deciduous woodland, barren, grass farm, disturbed or tame grassland, and other smaller habitats. Coastal prairie habitat makes up approximately 1 percent of the study area. It consists of species such as Bermudagrass (*Cynodon dactylon*), bahia grass (*Paspalum notatum*), deep-rooted sedge (*Cyperus entrerianus*), broom sedge (*Andropogon virginicus*), little bluestem (*Schizachyrium scoparium*) and others. The following habitats are less than 1 percent of the total study area:

- Barren
- Grass Farm
- Gulf Coast: Coastal Prairie Pondshore
- Marsh
- Native Invasive: Deciduous Shrubland
- Native Invasive: Deciduous Woodland
- Native Invasive: Huisache Woodland or Shrubland
- Native Invasive: Juniper Woodland
- Open Water
- Pine Plantation greater than 3 meters tall
- Pineywoods: Disturbance or Tame Grassland
- Pineywoods: Hardwood Flatwoods
- Pineywoods: Longleaf or Loblolly Pine Flatwoods or Plantation
- Pineywoods: Wet Hardwood Flatwoods
- Post Oak Savanna: Live Oak Motte and Woodland

See **Table 3-1** for EMST Vegetation Types within the study area.

3.2 Threatened and Endangered Species

The majority of the study area consists of typical maintained roadside grasses, which appear to be mowed regularly, and landscape assemblages of trees and shrubs along the roadway medians.

3.2.1 Federally Listed Threatened and Endangered Species

IPaC data shows that there are five federally listed threatened and endangered species that have the potential to occur within the study area:

- West Indian Manatee (*Trichechus manatus*)
- Eastern Black Rail (*Laterallus jamaicensis*)
- Piping Plover (*Charadrius melodus*)
- Red Knot (*Calidris canutus rufa*)
- Texas Prairie Dawn-flower (*Hymenoxys texana*)

The West Indian Manatee (*Trichechus manatus*) occurs in marine habitats. While habitat for the West Indian Manatee exists within Texas, there is no designated critical habitat nor suitable habitat for the West Indian Manatee within the University study area.

Table 3-1 EMST Vegetation Types by Acres

Vegetation	Area				
	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
Barren	85.67	6.94	8.40	25.92	105.96
Grass Farm	136.76	1.93	16.88	11.96	9.07
Gulf Coast: Coastal Prairie	275.89	28.96	21.86	118.46	271.42
Gulf Coast: Coastal Prairie Pondshore	8.77	3.93	0.00	0.00	0.00
Marsh	4.62	10.58	0.00	0.00	3.93
Native Invasive: Deciduous Shrubland	0.00	0.00	1.33	0.00	0.00
Native Invasive: Deciduous Woodland	17.12	0.00	9.34	59.99	241.32
Native Invasive: Huisache Woodland or Shrubland	0.00	0.00	2.74	0.00	1.53
Native Invasive: Juniper Woodland	0.00	0.00	0.00	0.00	5.07
Open Water	0.00	0.00	0.00	38.23	7.36
Pine Plantation > 3 meters tall	0.00	0.00	0.00	0.00	41.55
Pineywoods: Disturbance or Tame Grassland	0.00	3.29	0.00	177.28	32.32
Pineywoods: Hardwood Flatwoods	0.00	0.00	0.00	0.00	7.02
Pineywoods: Longleaf or Loblolly Pine - Hardwood Flatwoods or Plantation	0.00	0.00	0.00	0.00	6.73
Pineywoods: Longleaf or Loblolly Pine Flatwoods or Plantation	0.00	0.00	0.00	0.00	6.06
Pineywoods: Wet Hardwood Flatwoods	0.00	0.00	0.00	0.00	0.94
Post Oak Savanna: Live Oak Motte and Woodland	0.00	0.00	0.00	0.00	2.47
Post Oak Savanna: Post Oak - Redcedar Motte and Woodland	2.08	0.00	0.00	0.00	3.90
Urban High Intensity	6,699.56	6,057.60	4,714.78	7,662.54	3,831.34
Urban Low Intensity	4,116.66	2,250.22	3,585.09	1,607.89	6,299.27
TOTAL	**11,347.13**	**8,363.45**	**8,360.42**	**9,702.27**	**10,877.26**

Source: Texas Parks and Wildlife (TPWD) 2022. Ecological Mapping Systems of Texas.

The Eastern Black Rail (*Laterallus jamaicensis*) prefers woodland forests, riparian, and developed urban areas. While the Eastern Black Rail has potential suitable habitat within the study area, it has not been observed within the study area (ebird, 2022) and there are no designated critical habitats. Although the Eastern Black Rail has not been observed, preferred habitat is located within the study area. The Red Knot (*Calidris canutus rufa*) and Piping Plover (*Charadrius melodus*) prefer muddy tidal flats and beach shorelines. The Red Knot and Piping Plover have not been observed within the study area (ebird, 2022) and only need to be considered for wind-related projects. No suitable habitat for these species occurs within the study area.

The Texas Prairie Dawn-flower (*Hymenoxys texana*) prefers naturally barren or sparsely vegetated slick spots or pimple mounds on coastal prairies. A desktop review of vegetation types and aerial imagery shows that the study area is predominantly urbanized, with less than 2 percent of vegetation being coastal prairie. The Texas Prairie Dawn-flower has not been observed within the study area, but Segments 1 and 5 may contain limited suitable habitat for the species.

3.2.2 Candidate Species

According to the IPaC, the Monarch Butterfly (*Danaus plexippus*) is listed as a candidate species, but is not yet listed as threatened or endangered or proposed for listing. Monarch butterflies prefer open fields and meadows with milkweed. Suitable habitat is unlikely to occur within the study area, as it is predominantly urbanized, and minimal habitat supports open fields and meadows.

3.2.3 State-Listed Species

Three state-listed species - the Eastern Black Rail (*Laterallus jamaicensis*), Texas Prairie Dawn-flower (*Hymenoxys texana*), and Houston Toad (*Anaxyrus houstonensis)* - were identified that may occur within the study area. Both the Eastern Black Rail and Texas Prairie Dawn-flower are listed federally and by the state. **Table 3-** and **Table 3-** list the species that could occur in the study area, as well as suitable habitat information for each. No designated critical habitat for these species occurs within the study area.

3.2.4 Species of Greatest Conservation Need

TPWD designates native plants or animals as a Species of Greatest Conservation Need (SGCN) as part of the *Texas Conservation Action Plan* (TPWD, 2012). These species are declining or rare and need attention if they are to recover and avoid being listed as threatened or endangered under state regulations. The TxNDD shows that two SGCNs, the Oklahoma Grass, Pink (*Calopogon oklahomesis*) and the Southern Crawfish Frog (*Lithobates Areolatus Areolatus*), have been observed in and around the study area. There is potentially suitable habitat within the study area for both species. A summary of these species is included in **Table 3-2** and **Table 3-3** and the area's these species may occur are seen in **Figure 3-2** and **Figure 3-3**.

Table 3-2: Likelihood of Occurrence for Threatened, Endangered, and Candidate Species within the Study Area.

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
Amphibians						
Houston Toad	*Anaxyrus (Bufo) houstonensis*	*E*	*E*	The species inhabits areas with deep, friable, sandy soils that contain varying degrees of overstory vegetation.	No	The Houston toad has been extirpated from Harris County.
Mollusks						
Louisiana Pigtoe	*Pleurobema riddellii*		*T*	Freshwater mussel currently found in the Sabine, Neches and Trinity River basins in Texas. This species occurs in streams to medium-sized rivers with moderate flow. In Texas, the species has only been documented occurring in relatively shallow lotic waters with preferable substrate being sand and sand with gravel and silt. It is not generally known to tolerate impoundments.	No	No suitable habitat was observed in the waterways in the study area.
Sandbank Pocketbook	*Lampsillis satura*		*T*	A freshwater mussel that is currently limited to the upper Trinity, Neches, Sabine, and San Jacinto River basins in Texas. The species occurs in flowing small to large rivers with gravel, gravel-sand, and sand substrates. It has been observed in littoral areas with snags, gravel, or sand substrate with slow to moderate currents, as well as lotic waters in substrates of sand, silty sand, and sand and clay mixture.	No	No suitable habitat was observed in the waterways in the study area.
Insects						
Monarch Butterfly	*Danaus plexippus*	*C*		Found statewide. Adults are found in a variety of habitats including native prairies, pastures, open woodlands and savannas, desert scrub, roadsides and other habitats with abundant nectar plants, including urbanized areas. Although adults may be present year round, they are primarily encountered between March and November, and are most commonly observed in the summer and fall during breeding and migration. Caterpillars are found on various species of the family Asclepiadaceae. Common host plants include milkweeds (*Asciepias spp.*), milkweed vines (*Matelea spp.*), climbing milkweed (*Funastrum spp.*), swalloworts (*Cynanchum spp.*) and Anglepod	Yes	Monarchs are frequent in the area during migration. Monarch BMPs would be followed during construction.

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
				(*Gonolobus suberousus*). Caterpillars are most frequently observed between April and September.		
Birds						
Black Rail	*Laterallus jamaicensis*	*T*	*T*	Black rails are year-round residents of the central and upper coast and migrants in the eastern part of the state. The species nests in salt, brackish, and freshwater marshes, pond borders, wet meadows and wetlands with hydrophytic grass species. Water depth is an important part and key habitat component, as the species typically is found where water is less than two to four centimeters deep. Other significant habitat factors may include vegetation density, distance to open water, and water regime stability. Nesting typically occurs in the highest sections of the marsh, which have mesic to hydric soils and are flooded by only the highest tides. Nests are built in areas with saturated or shallowly flooded soils and dense vegetation on damp ground on mat of previous year's dead grasses, or over shallow water. In salt or brackish marshes, typical habitat includes dense stands of cordgrasses (*Spartina sp.*). spikegrasses (*Distichlis sp.*) and needlerush (*Juncus sp.*). or, in more upland saltbush communities along marsh edge. Typical freshwater habitat includes species such as cattail (Typha) and bulrush (*Scirpus sp.*). Non-breeding habitat is thought to be similar to breeding habitat.	Yes	The occurrence of the Black Rail might occur within the study area during migration and foraging; however, any use would be temporary, and no impacts are expected to occur. Bird BMP's would be put into place during construction.
Reddish Egret	*Egretta rufescens*		*T*	A year-round resident of the Texas Gulf Coast, the species inhabits saline, hypersaline, or brackish coastal habitats include barren sand or mud tidal flats, salt ponds, lagoons, and open mangrove communities. It occurs less frequently in other habitats such as coastal beaches, sparsely-vegetation freshwater marshes, and the sores of lakes and reservoirs. It nests on the ground or low in mangroves or other terrestrial vegetation (i.e., mesquite [*Prosopis glandulosa*], yucca [*Yucca sp.*] or prickly pear [*Opuntia sp.*]) on natural islands or man-made dredge spoil islands, but it also occasionally nests on the coastal mainland. It forages in shallow water usually less than 15 centimeters deep.	No	No suitable habitat was found in the study area for the Reddish Egret.

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
Swallow-tailed Kite	*Elanoides forficatus*		*T*	This migratory species breeds in the South Central Plains of east Texas and throughout the southeastern United States (U.S.) In Texas, breeding habitat occurs between sea level and 230 meters in elevation in bottomland forests, cypress swamps, pine glades, and freshwater marshes skirting large lakes. It nests near the tops of trees that are higher than the surrounding stand, often near a clearing or the edge of a forest or woodland. It prefers to nest in pines, but occasionally uses species such as bald cypress (*Taxodium distichum*), water oak (*Quercus nigra*) or cottonwood (*Populus deltoides*).	Yes	The occurrence of the Swallow-tailed Kite might occur within the study area during migration and hunting; however, any use would be temporary, and no impacts are expected to occur. Bird and vegetation BMPs would be put into place during construction.
White-tailed Hawk	*Buteo albicausatus*		*T*	This year-round resident species occurs throughout the Western Gulf Coastal Plain ecoregion of Texas and less frequently farther inland in the East Central Texas Plains and South Texas Plains regions. Near the coast, preferred habitat includes prairies, cordgrass flats, and live oak scrub. Further inland in inhabits prairies, mesquite and oak savannas, and mixed savanna-chaparral. Breeding occurs within open savannas with short trees and shrubs, such a mesquite (*Prosopis giandulosa*), hackberry (*Celtis laevigata*), and oak (*Quercus sp.*). with an average height of 12 feet and canopy diameter of 18 feet. Suitable coastal prairie habitat is similar to desirable range condition for cattle grazing.	Yes	The occurrence of the White-tailed hawk might occur within the study area during migration and hunting; however, any use would be temporary, and no impacts are expected to occur. Bird and vegetation BMPs would be put into place during construction.
Whooping Crane	*Grus americana*	*E*	*E*	The species breeds in Canada and winters on the Texas coast at Aransas National Wildlife Refuge. During migration it typically stops to ret and feed in open bottomlands of large rivers and marshes but, like other waterbirds, it may also utilize flooded croplands, playas, large wetlands associated with lakes, small ponds, and various other aquatic features. Typical migration habitat includes sites with good horizontal visibility, water depth of 30 centimeters or less, and minimum wetland size of 0.04 hectare for roosting.	No	No suitable habitat was found for the Whooping Crane in the study area.
Wood Stork	*Mycteria americana*		*T*	The species breeds in Mexico, and nesting sites have not been recording in Texas since 1960. However post-breeding migrants disperse into Texas in the summer. Foraging habitat includes freshwater prairie ponds, flooded pastures or fields, ditches, and other	No	No suitable habitat was found for the wood stork in the study area.

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
				shallow standing water with an open canopy, occasionally including brackish wetlands. The species typically roosts communally in tall snags, sometimes in association with other wading birds (i.e., active heronries).		
Mammals						
Louisiana Black Bear	*Ursus americanus luteolus*		*T*	Historically, Louisiana black bear occurred in east Texas throughout the Western Gulf Coastal Plans ecoregion and as far west as the San Antonio River drainage basin. Habitat includes bottomland hardwood forests, brackish and freshwater marshes, salt domes, wooded spoil levees along canals, bayous, and agricultural fields. It generally requires areas with large tracts of inaccessible forest.	No	No suitable habitat was found for the Louisiana Black Bear within the study area.
Rafinesque's Big-eared Bat	*Corynorhinus rafinesquill*		*T*	This species occurs in bottomland pine and hardwood forests of east Texas. This species is known to roost in hollow trunks of bottomland hardwoods such as black gum (*Nyssa Sylvatica*), southern magnolia (*Magnolia grandiflora*), and water tupelo (*Nyssa aquatica*). It also roosts in caves, and man-made structures such as bridges, culverts, and abandoned buildings.	No	While black gum and southern magnolia trees are located within the study area, no bottomland pine nor hardwood forests are present in the study area.
West Indian Manatee	*Trichechus manatus*	*T*	*T*	The West Indian Manatee is found throughout the Gulf of Mexico, Caribbean Sea, and Western Atlantic Ocean. The species utilized marine, brackish, and freshwater systems in subtropical and tropical coastal areas throughout its range. Preferred habitat is near shore features with sea grass and eel grass beds and access to deep water channels. In the U.S., the species is rarely documented off the Louisiana and Texas Gulf Coast during warm winter months, however, the winter range, due to low tolerances for cold water, is restricted to the southern Florida peninsula. Manatees are often attracted to accessible areas where industrial plants discharge large volumes of heated wastewater. During the summer, their range expands along the Atlantic Coast and Gulf Coast, traveling by shoreline and along channels.	No	In rare occurrences, Manatees have been found traveling along bayous in the Houston area, however, it is unlikely for this event to occur within the study area.
Reptiles						

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
Alligator Snapping Turtle	*Macrochelys temminckii*	*PT*	*T*	Occurs in East Texas where it inhabits perennial water bodies such as the deep water of rivers, canals, lakes, and oxbows, along with swamps, bayous, and ponds near deep running water. Preferred habitat is usually in water with a mud bottom and abundant aquatic vegetation, but the species may use sand-bottomed creeks.	Yes	Potential habitat is present within the bayous in the study area. No work is currently proposed within the bayous, therefore no impact is expected to occur. Reptile BMPs will be put into place during construction to project habitat within the bayous.
Texas Horned Lizard	*Phrynosoma cornutum*		*T*	The species is found in semi-arid open areas with scattered vegetation comprised of bunchgrass, cacti, yucca, mesquite, acacia, juniper, or other woody shrubs and small trees commonly found in loose sandy or loamy soils.	No	No suitable habitat is present within the study area.
Plants						
Houston Daisy	*Rayjacksonia aurea*		*T*	The species is endemic to the Gulf Coastal Plain of Texas. The plant occurs on and around naturally barren or sparsely vegetated saline slick spots or pimple mounds on coastal prairies, usually on sandy to sandy loam soils, occasionally in pastures and on roadsides in	No	No suitable habitat was found for the Houston Daisy during the field visit.
Texas Prairie Dawn-Flower	*Hymenoxys texana*	*E*	*E*	This annual herb is endemic to the upper Texas Gulf Coastal Plain. It occurs in grasslands with sparsely vegetated areas (slick spots) at the base of pimple mounds in association with poorly drained saline soils that are sticky when wet and powdery when dry.	No	No suitable habitat for the Texas Prairie Dawn was found during the field visit.
Fishes						

Common Name	Scientific Name	Listing Status		Habitat Description	Suitable Habitat Within Study Area?	Determination
		USFWS	TPWD			
Western Creek Chubsucker	*Erimyzon claviformis*		*T*	The species is widespread in east Texas from the Red to the San Jacinto Rivers. The species occurs in pools of clear headwaters, creeks, and small rivers with silt, sand, and gravel substrates, and occasionally in lakes. It is frequently found near submergent vegetation. Spawning occurs in river mouths or pools, riffles, lake outlets, or upstream creeks.	No	No suitable habitat was found during the field visit for the Western Creek Chubsucker. Any work done near or around bridges would have water best management practices put into place.

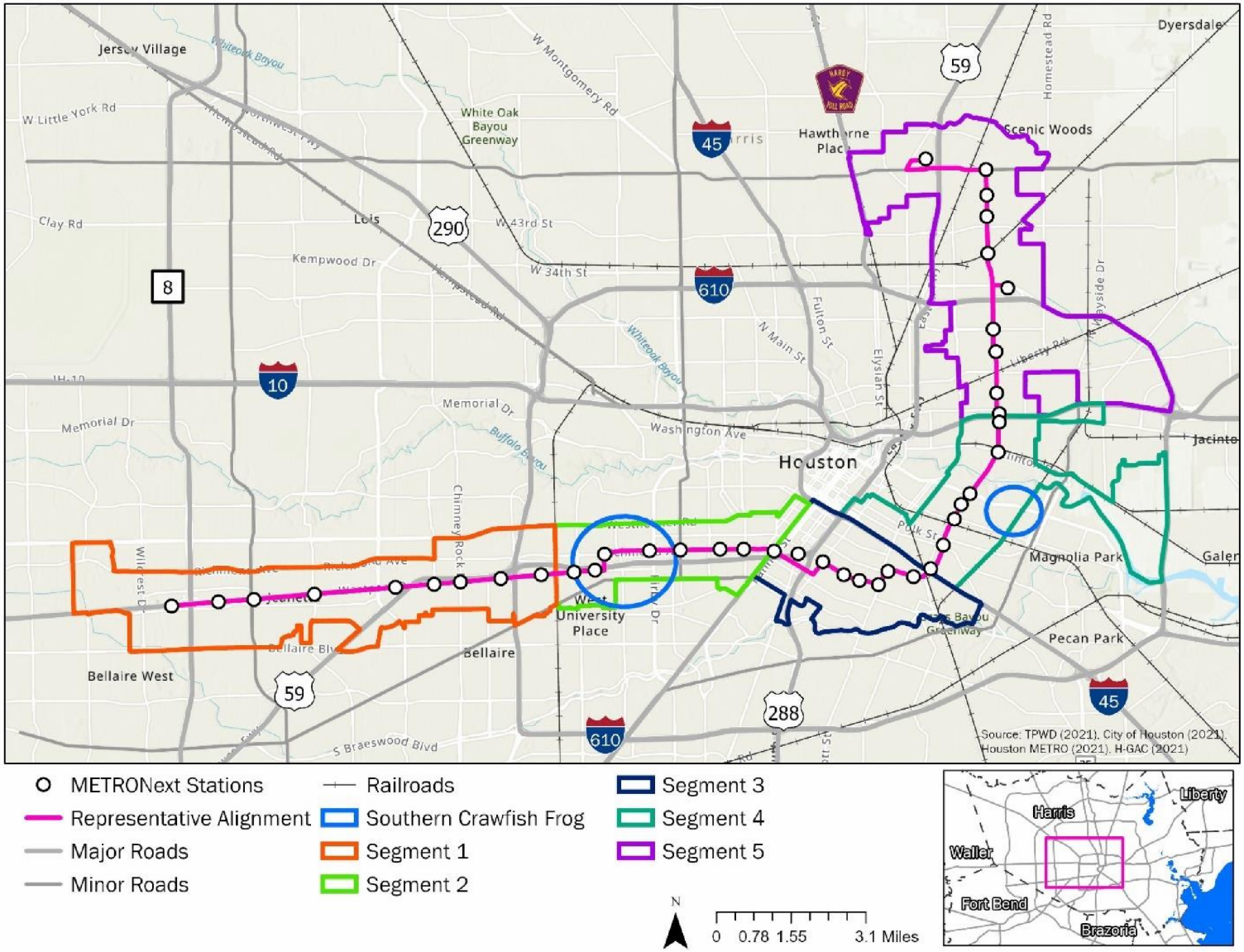
Notes: T – Threatened; E – Endangered, C- Candidate
Sources: TPWD 2020, 2021a, USFWS 2021

Table 3-3: Species of Greatest Conservation Need in the Study Area

Common Name	Scientific Name	Distance from Study Area (miles)	Habitat Description	Potentially suitable habitat within Study Area
Oklahoma Grass Pink	*Calopogon oklahomesis*	*0.0*	Mesic, acidic, sandy to loamy prairies, pine savannas, oak woodlands, edges of bogs, and frequently mowed meadows, flowers from March to July.	No suitable habitat was found for Oklahoma Grass Pink in the study area.
Southern Crawfish Frog	*Lithobates Areolatus*	*0.0*	Terrestrial and aquatic: The terrestrial habitat is primarily grassland and can vary from pasture to intact prairie; it can also include small prairies in the middle of large, forested areas. Aquatic habitat is any body of water, but preferred habitat is ephemeral wetlands.	No ephemeral wetlands are present within the study area, and no habitat was observed during the field visit.

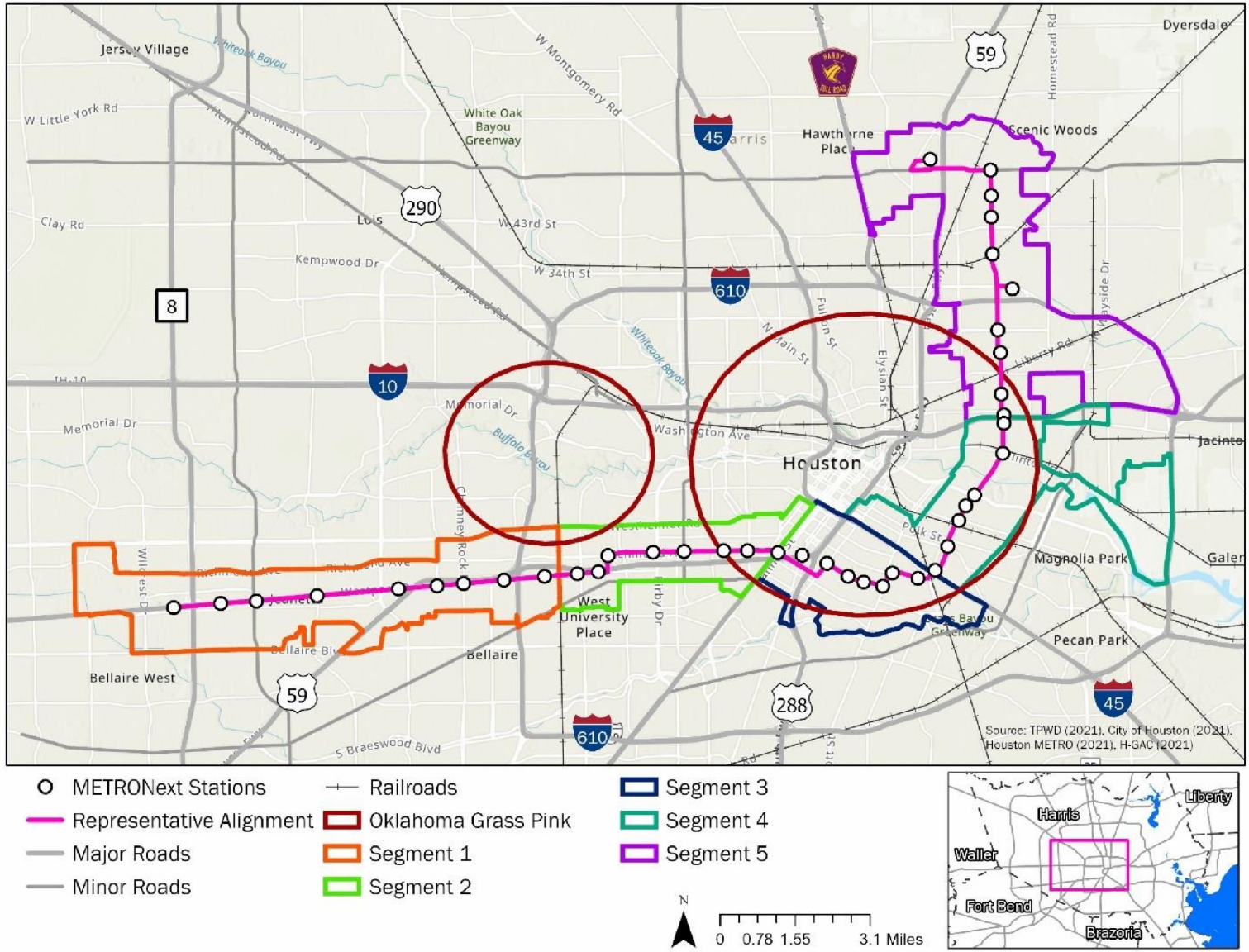
Sources: TPWD, Wildlife Division, Diversity and Habitat Assessment Programs, TPWD County Lists of Protected Species and Species of Greatest Conservation Need, Harris County, Accessed 11/22/2022.

Figure 3-2: Fauna TXNDD Species with the Study Area



Source: TPWD TXNDD. 2022. *Circles represent TXNDD data species range.

Figure 3-3: Flora TXNDD Species within the Study Area



Source: TPWD TXNDD 2022 *Circles represent TXNDD data species range.

The Project may affect the monarch butterfly; however, the monarch is currently a candidate species and no consultation with USFWS is required at this time. As construction activities for this Project are not anticipated to be completed prior to Fiscal Year 2024, when a listing decision for the species is anticipated, additional coordination may be required. The Project should be reevaluated at that time to determine if further action is required if the species becomes proposed for federal listing.

3.3 Protected Trees

A total of 2,070 trees were recorded during the survey and consisted of 36 different species, the most recorded species was Live Oak (*Quercus virginiana*). See **Figure 3-1** for the trees within the study area.

4 Environmental Commitments

4.1 Short-Term Construction Impacts

Potential short-term impacts would occur as the Project is constructed. Potential short-term impacts to federally and state-listed species and SGCNs could be attributed to mobile species interacting with or avoiding construction machinery and vehicles.

The Eastern Black Rail, the White-Tailed Hawk, and the Swallow-Tailed Hawk have not been observed within the study area., There is potential foraging and hunting habitat located within the study area; however, any use would be temporary and there is no suitable breeding habitat, therefore no effects are expected to occur to these species. Other common bird species may be directly affected by displacement due to habitat conversion within the proposed ROW. Birds may also experience harassment effects (in the form of disturbance of normal behavior or activities) as a result of construction; these effects would be temporary, occurring only during the duration of construction. Because of their mobility, direct mortality of bird species from the Project construction activity is unlikely to occur. However, the loss of nesting, foraging, and cover habitats could impact the fecundity and survival of bird species. Birds occupying the proposed ROW would be pushed into adjacent habitats where they would be forced to compete with existing populations for food and cover resources.

Mammal or reptile species may be directly affected by displacement due to habitat conversion within the proposed ROW. Animals in the study area may also experience harassment effects (in the form of disturbance of normal behavior or activities) as a result of construction. These effects would be temporary, occurring only during the duration of construction. Because of the mobility of most mammals, direct mortality from the Project construction activity is unlikely to occur. Fossorial species, which live primarily underground, such as armadillos and rabbits would be susceptible to mortality due to ROW and earth-moving construction activities. The loss of nesting, foraging, and cover habitats could impact the fecundity and survival of the mammal species. Individuals occupying the proposed ROW would be pushed into adjacent habitats where they would be forced to compete with existing populations for food and cover resources. Mammal species with relatively large home ranges or species that migrate between habitats would be impacted by the fragmentation of migration corridors and the increased risk of wildlife/vehicle collisions.

4.2 Long-Term Operational Impacts

Long-term impacts to federally and state-listed species and SGCNs could include the loss of wildlife habitat, habitat fragmentation, and the direct removal/disturbance of plant populations. Long-term impacts on wildlife species could include wildlife/vehicle collisions that might occur, following the construction of the Project.

Permanent impacts to vegetation would include vegetation removal, ground clearing, placement of fill material, and construction of culverts and bridges. Trees considered protected by the COH would not be removed during any clearing activities. The Project is being designed to avoid removing or impacting protected trees where feasible and as the design progresses, each tree will be evaluated to determine the potential for avoidance. The tree survey conducted in 2022 no longer reflects current design and a new survey would be completed once project design is at the 60 percent level.

5 Mitigation Measures

METRO would implement the following Best Management Practices (BMPs) during construction in order to avoid, minimize, and mitigate potential impacts to the species within the study area.

Bird Species:

Depending on the migration patterns of various species, the potential may exist for breeding colonies of migratory birds to be present during construction activities. However, due to past landscape alterations that removed most trees and native ground cover, most vegetative cover within the ROW consists of maintained grasses, so Project-related vegetation-clearing activities would be minimal. It is not anticipated that migratory birds would be impacted as a result of the construction of the Project due to the lack of remaining reproductive and foraging habitat. METRO will take all appropriate actions to prevent the take of migratory birds, their active nests, eggs, or young by the use of proper phasing of the Project or other appropriate actions. Migratory Bird Treaty Act (MBTA) appropriate commitments would be included in the Project file, which would include:

- No active migratory bird nests (nests containing eggs and/or young) will be removed or destroyed at any time of the year.
- No colonial nests (swallows, for example) on or in structures will be removed until all nests in the colony become inactive.
- Measures, to the extent practicable, will be used to prevent or discourage migratory birds from building nests within portions of the Project area planned for construction.
- Inactive nests will be removed from the Project area to minimize the potential for reuse by migratory birds.
- Construction or demolition activities will be scheduled outside the typical nesting season (February 15 to October 1) and will comply with the previously listed prohibitive provisions of the MBTA, which apply year-round.

Vegetation:

METRO would implement the following BMPs in order to avoid, minimize, and mitigate potential impacts to habitat within the study area.

- The amount of vegetation cleared would be minimized. Removal of native vegetation, particularly mature native trees and shrubs would be avoided to the greatest extent practicable. Wherever practicable, impacted vegetation would be replaced with in-kind on-site replacement/restoration of native vegetation;
- To minimize potential effects, activities would be planned to preserve mature trees and COH protected and heritage trees, particularly acorn, nut, or berry-producing varieties. These types of vegetation have high value to wildlife;
- Replacement trees would be of equal or better wildlife quality than those removed and be regionally adapted native species;
- When trees are planted, a maintenance plan, including seasonal root trimming, that ensures at least an 85 percent survival rate after three years would be developed;
- The use of locally adapted native species would be used in landscaping and seed mixes;
- Avoidance of vegetation clearing activities during the general bird nesting season, March through August, to minimize adverse impacts to birds; and
- The COH's Tree Ordinance would be adhered to for tree removal. METRO would make all feasible efforts to avoid impacts to protected and heritage trees.

Aquatic Amphibians and Reptiles:

- Minimize impacts to wetlands, temporary and permanent open water features, including depressions, and riverine habitats.
- Maintain the existing hydrologic regime and any connections between wetlands and other aquatic features.
- Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species.
- Apply hydro mulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas around wetlands and in riparian areas. If erosion control blankets or mats will be used, the product should not contain netting, but should only contain loosely woven natural fiber netting in which the mesh design allows the threads to move, therefore allowing expansion of the mesh openings. Plastic netting should be avoided.
- Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features.

- When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and refugia/overwinter sites (e.g., brush and debris piles, crayfish burrows, aquatic logjams, and leaf packs).
- If gutters and curbs are part of the roadway design, install gutters that do not include the side box inlet and include sloped (i.e., mountable) curbs to allow small animals to leave the roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the stormwater drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.

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Appendix A: City of Houston Tree List

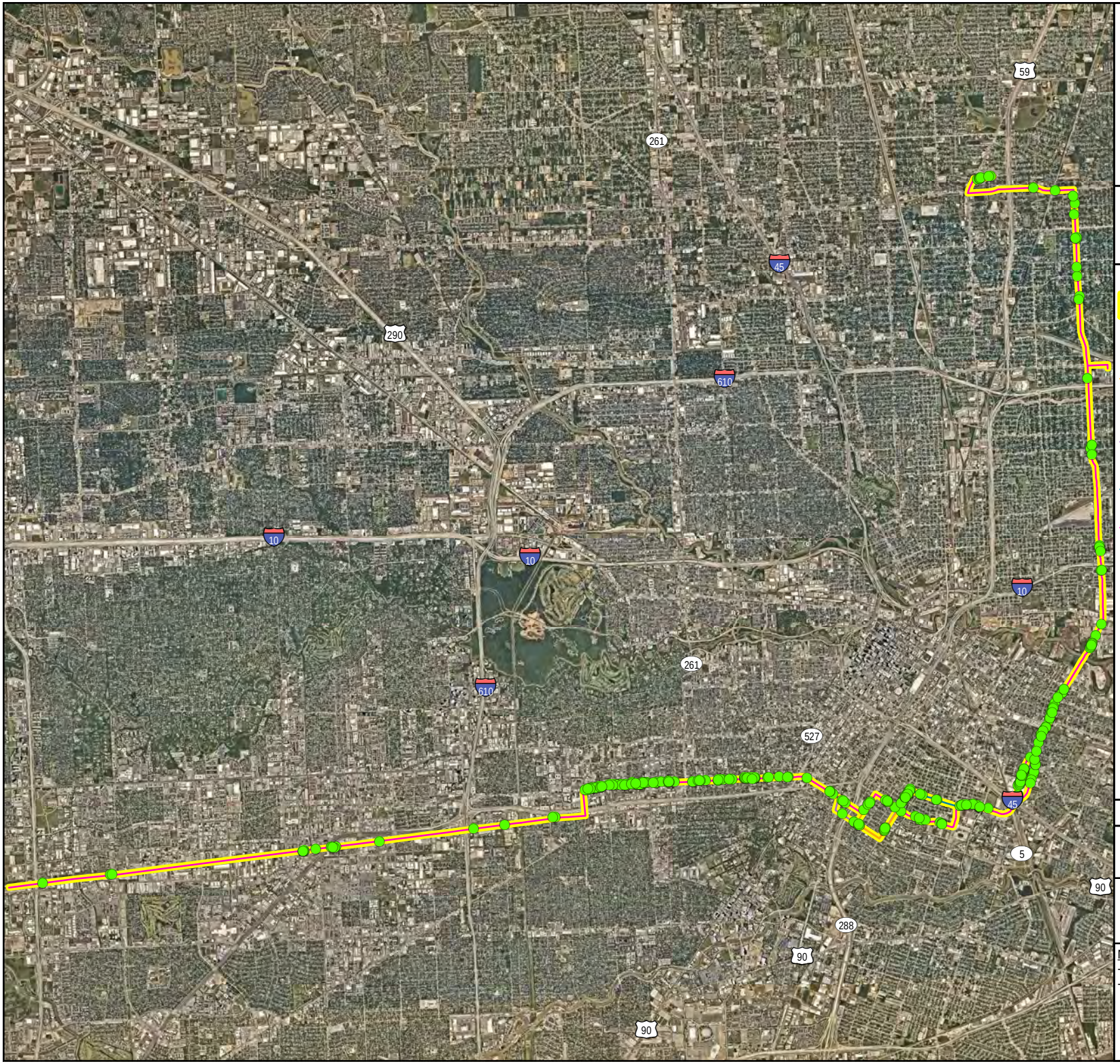
Street Tree List

Street Tree List

Scientific Name	Common Name	Height	Spread	Growth Rate	Comments
Large Trees					
Acer barbatum	Texas sugar maple	Large	30	Medium	Fall color
Acer rubrum	Red maple	Large	30	Medium	Fall color
Carya illinoensis	Pecan	Large	50	Slow	Fruit
Carya texana	Black hickory	Large	20	Slow	Fall color
Fraxinus americana	White ash	Large	40	Fast	Fall color
Ginko biloba	Ginko	Large	40	Slow	Fall color/male only
Juglans nigra	Black walnut	Large	40	Slow	Fall color
Liquidambar stryaciflua	Sweetgum	Large	40	Fast	Fall color
Magnolia grandiflora	Southern magnolia	Large	45	Slow	Evergreen
Nyssa sylvatica	Black gum	Large	30	Medium	Fall color
Pinus taeda	Loblolly pine	Large	30	Fast	Evergreen
Platanus mexicana	Mexican sycamore	Large	50	Fast	Unique leaf
Quercus acutissima	Sawtooth oak	Large	40	Fast	Drought tolerant
Quercus alba	White oak	Large	50	Slow	Sandy soils
Quercus falcata	Southern red oak	Large	40	Slow	Fall color
Quercus laurifolia	Laurel oak	Large	40	Slow	Semi-evergreen
Quercus lyrata	Overcup oak	Large	40	Slow	Large acorn
Quercus macrocarpa	Bur oak	Large	50	Slow	Large acorn
Quercus michauxii	Swamp chestnut oak	Large	40	Slow	Fall color
Quercus muehlenbergii	Chinkapin oak	Large	40	Slow	Fall color
Quercus nigra	Water oak	Large	40	Medium	Decidious
Quercus nutallii	Nuttall oak	Large	40	Medium	Fall color
Quercus phellos	Willow oak	Large	40	Medium	Decidious
Quercus polymorpha	Monterray oak	Large	40	Fast	Drought tolerant
Quercus rizophyllia	Loquat leaf oak	Large	40	Fast	Drought tolerant
Quercus shumardii	Shumard oak	Large	40	Slow	Fall color
Quercus stellata	Post oak	Large	40	Slow	Decidious
Quercus virginiana	Live oak	Large	50	Slow	Semi-evergreen
Taxodium distichum	Bald cypress	Large	30	Fast	Decidious
Taxodium mucronatum	Montezuma cypress	Large	40	Fast	Semi-evergreen
Ulmus alata	Winged elm	Large	30	Medium	Drought tolerant
Ulmus crassifolia	Cedar elm	Large	30	Medium	Drought tolerant
Ulmus parvifolia	Chinese elm	Large	30	Fast	Unique bark
Ulmus parvifolia var Drakii	Drake elm	Large	30	Fast	Unique bark
Ulmus parvifolia var Emer II	Allee elm	Large	30	Fast	Drought tolerant
Small Trees					
*Bumelia lanuginosa**	Wholly bucket	Small	30	Slow	Unique leaf
*Diospyros virginiana**	Texas persimmon	Small	20	Medium	Drought tolerant
*Ehretia anacua**	Anacua	Small	20	Slow	Unique leaf
*Fraxinus texensis**	Texas ash	Small	25	Fast	Decidious
*Ilex opaca**	American holly	Small	15	Slow	Evergreen
*Ilex x attenuata var East palatka**	East palatka holly	Small	15	Slow	Evergreen
*Ilex x attenuata var Savannah**	Savannah holly	Small	15	Slow	Evergreen
*Magnolia virginiana**	Sweetbay magnolia	Small	20	Slow	Evergreen
*Pistacia chinensis**	Chinese pistache	Small	25	Slow	Fall color
*Prunus serotina**	Black cherry	Small	20	Medium	Unique leaf
*Quercus cambii**	Camby oak	Small	20	Medium	Drought tolerant
*Tilia carolinana**	Basswood	Small	15	Slow	Large leaf

*Street trees recommended for use under power lines, also considered as small parking lot trees

Appendix B: Surveyed Tree Maps



HOLLAWAY
ENVIRONMENTAL + COMMUNICATIONS

METRONext
University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Alternative 1:
Emancipation-Blodgett-Ennis
(1.01 miles)

Alternative 2:
Almeda-Blodgett-Ennis
(1.35 miles)

Ennis-Elgin (0.99 mile)

Representative Alignment
(26.44 miles)

DBH Value (count)

>20 inches (297)

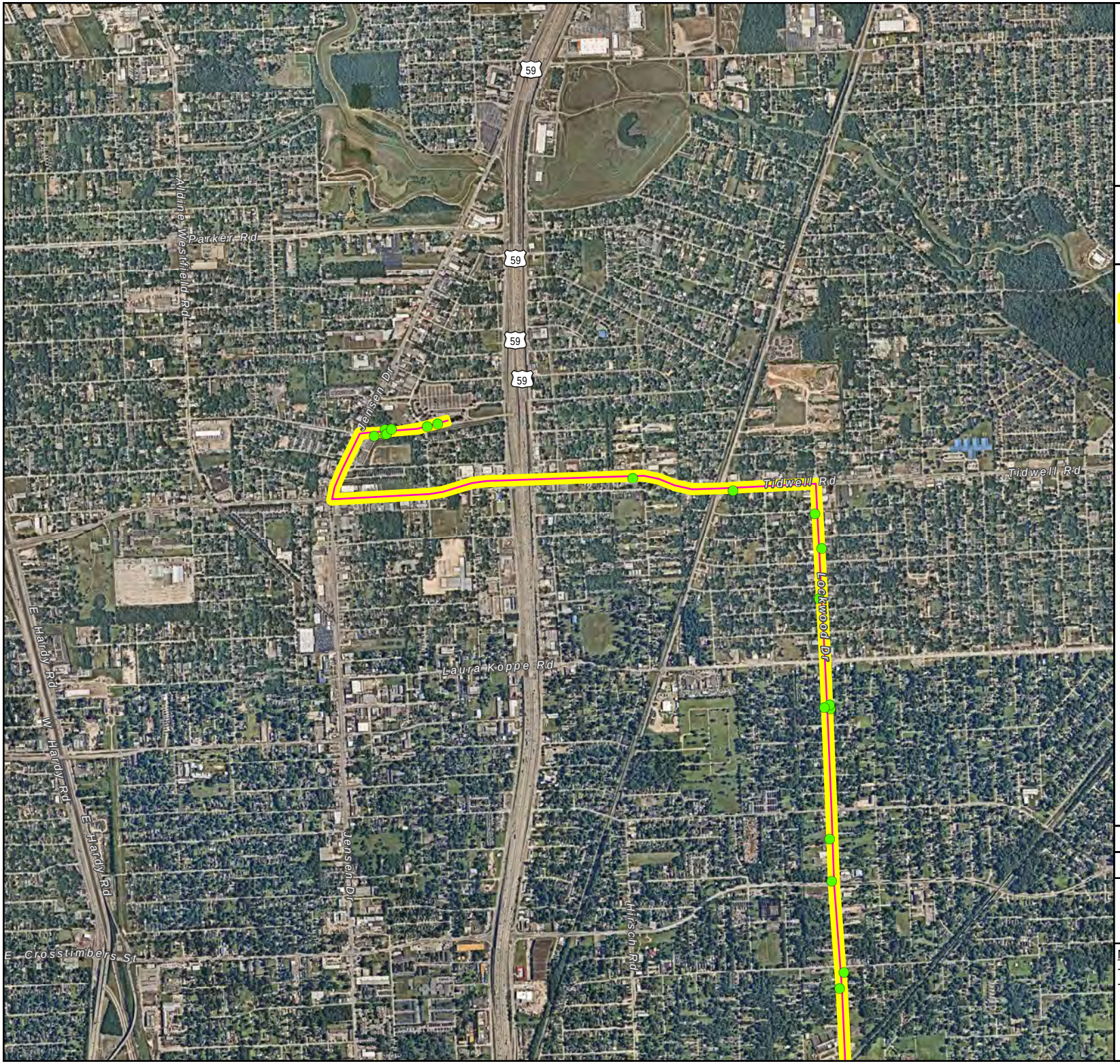
Exhibit 9a

Protected Trees
Overview Map

N

0 1 2
Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



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Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (19)

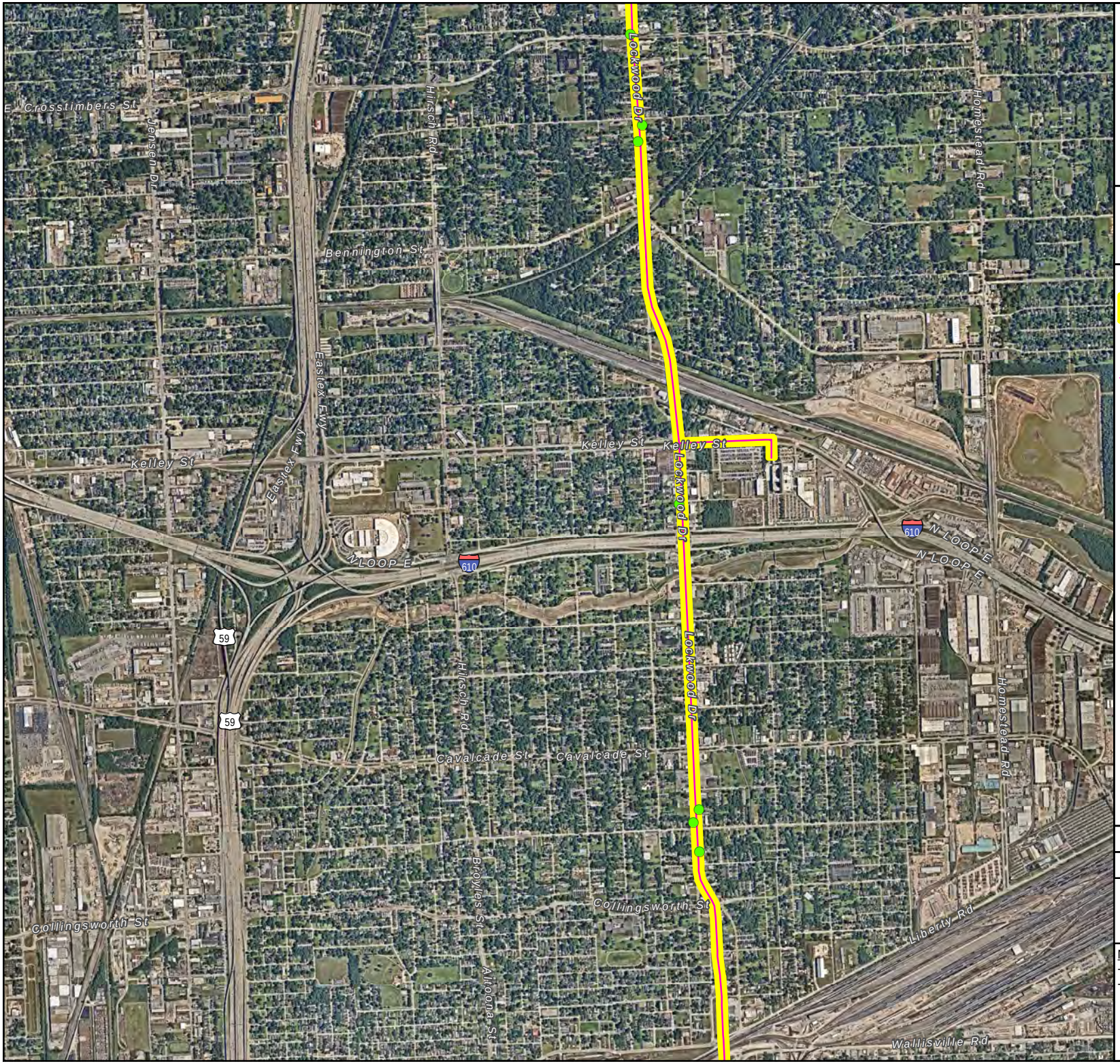
Exhibit 9b

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



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LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (7)

Exhibit 9c

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



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LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (16)

Exhibit 9d

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
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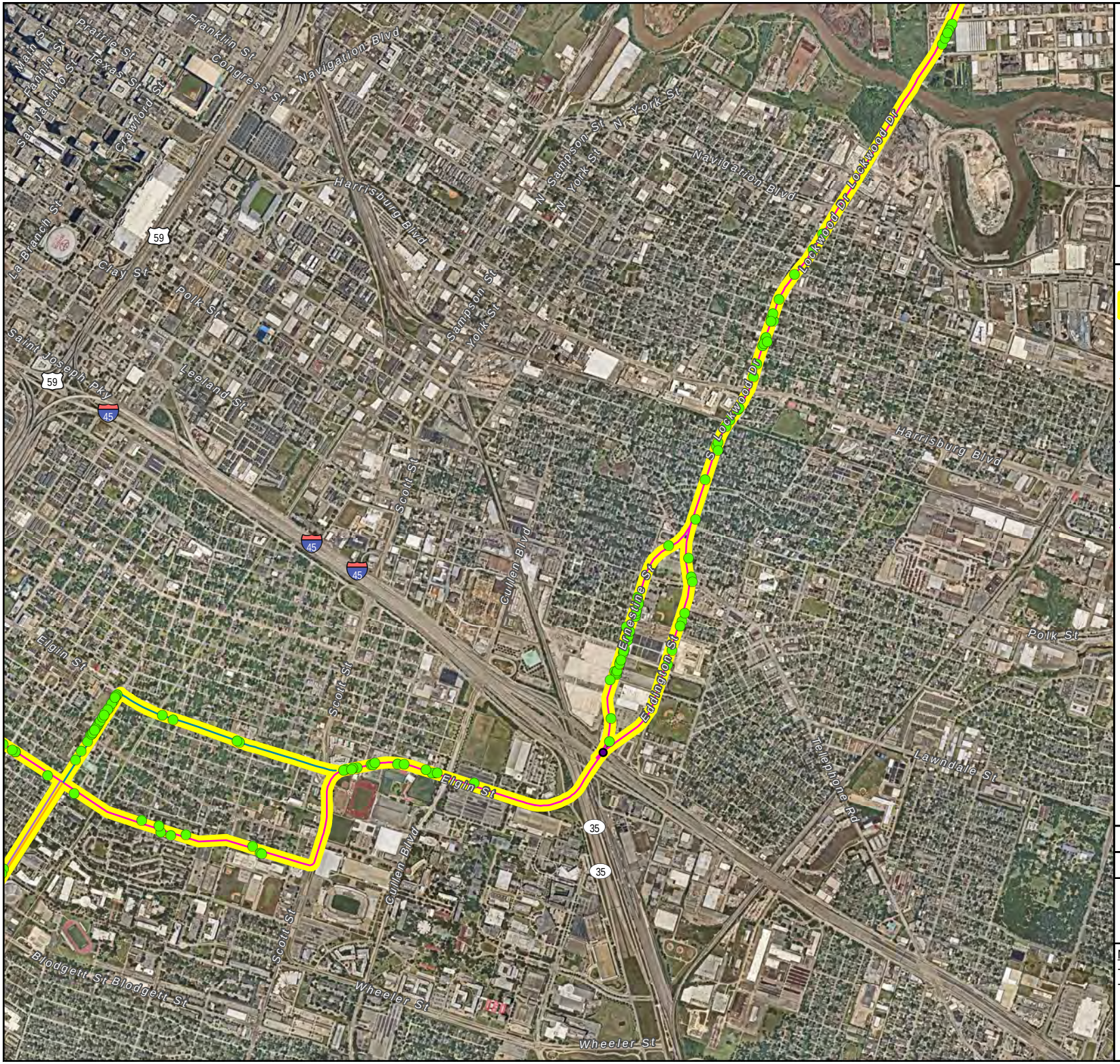
- NearMap Aerial Date: 05/18/2022



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University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

- Alternative 1: Emancipation-Blodgett-Ennis (1.01 miles)
- Alternative 2: Almeda-Blodgett-Ennis (1.35 miles)
- Ennis-Elgin (0.99 mile)
- Representative Alignment (26.44 miles)

DBH Value (count)

- >20 inches (123)

Exhibit 9e

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



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LEGEND

100-foot Survey Corridor

Proposed Project Alignment

- Alternative 1: Emancipation-Blodgett-Ennis (1.01 miles)
- Alternative 2: Almeda-Blodgett-Ennis (1.35 miles)
- Ennis-Elgin (0.99 mile)
- Representative Alignment (26.44 miles)

DBH Value (count)

- >20 inches (94)

Exhibit 9f

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
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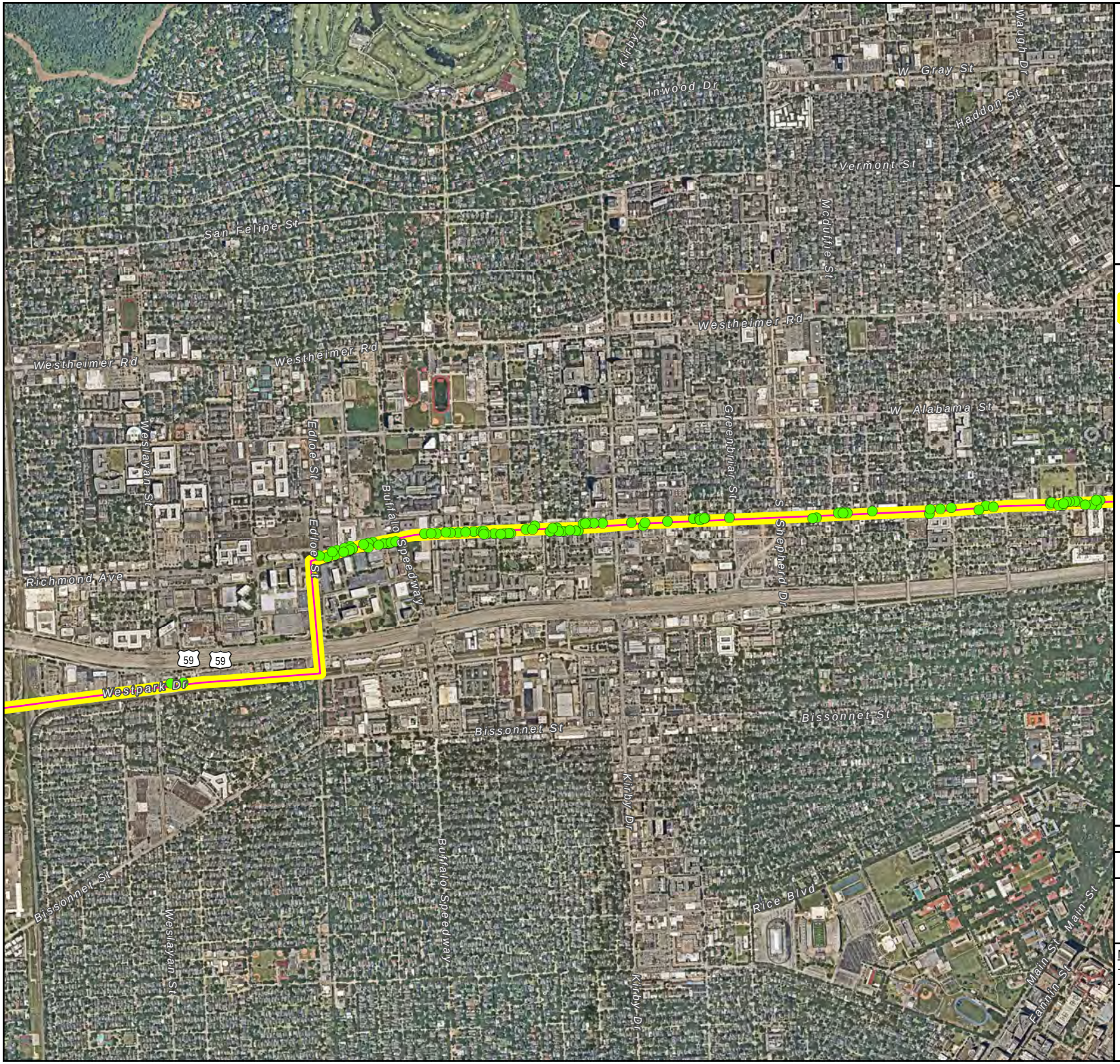
- NearMap Aerial Date: 05/18/2022



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University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (102)

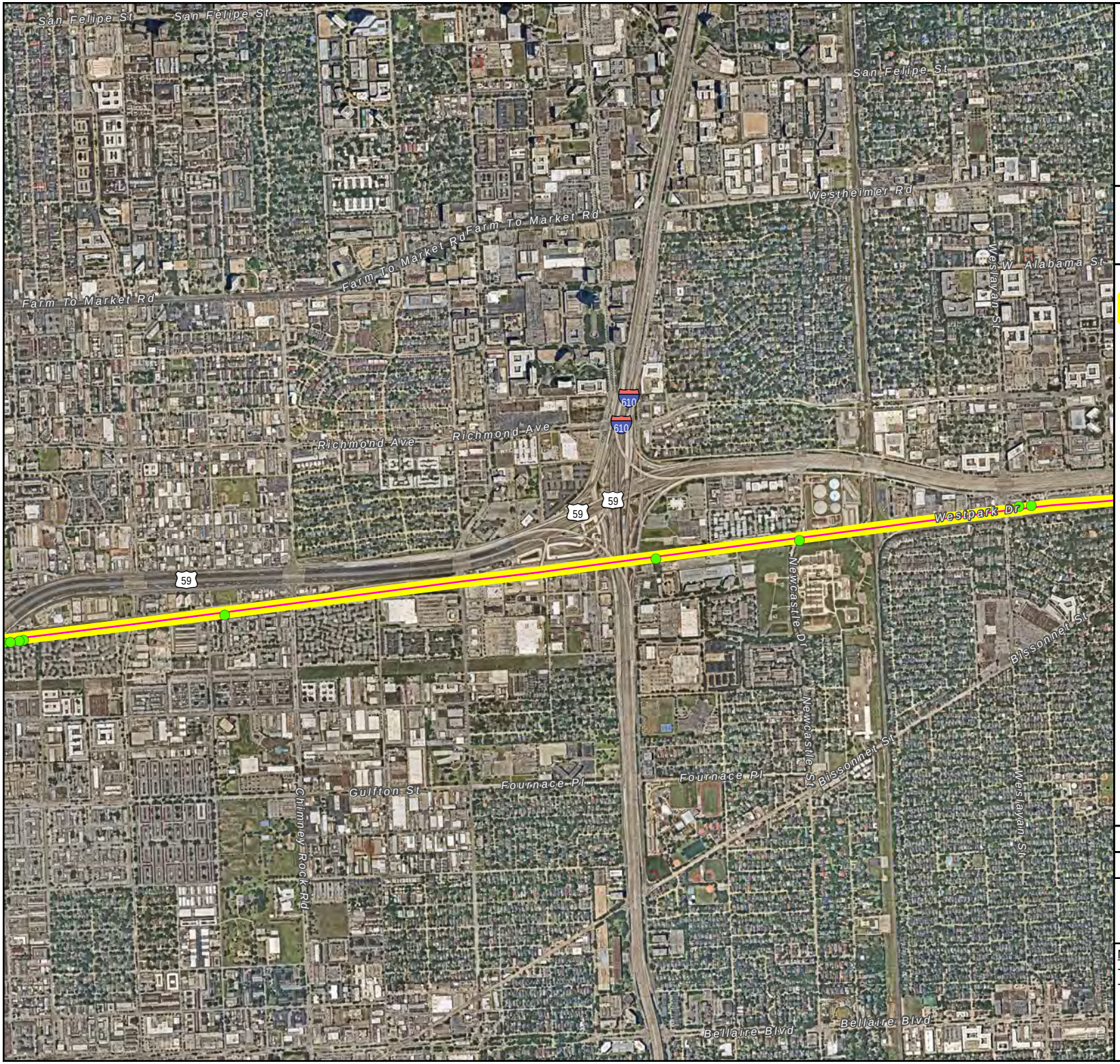
Exhibit 9g

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



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University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (10)

Exhibit 9h

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
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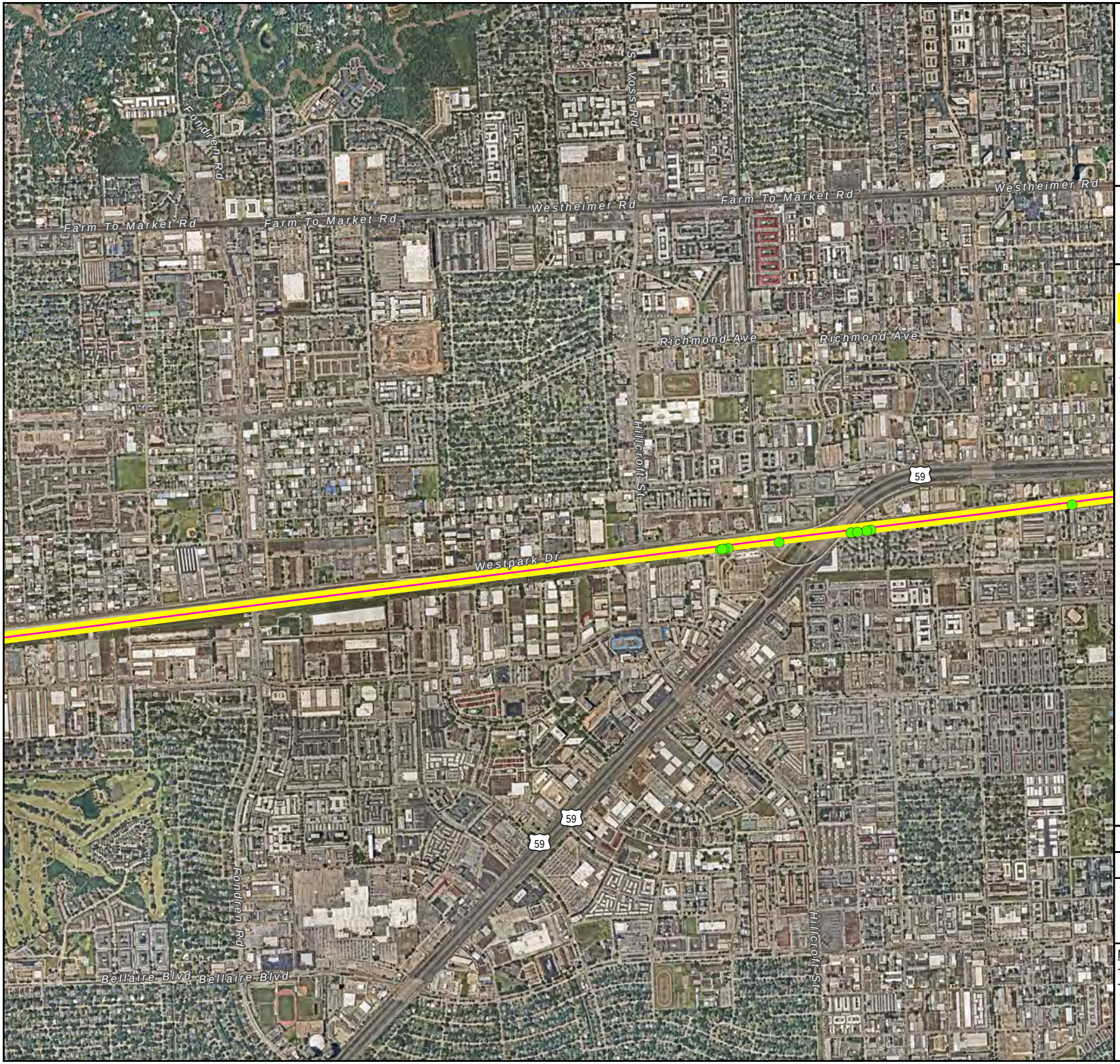
- NearMap Aerial Date: 05/18/2022



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ENVIRONMENTAL + COMMUNICATIONS

METRONext
University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (12)

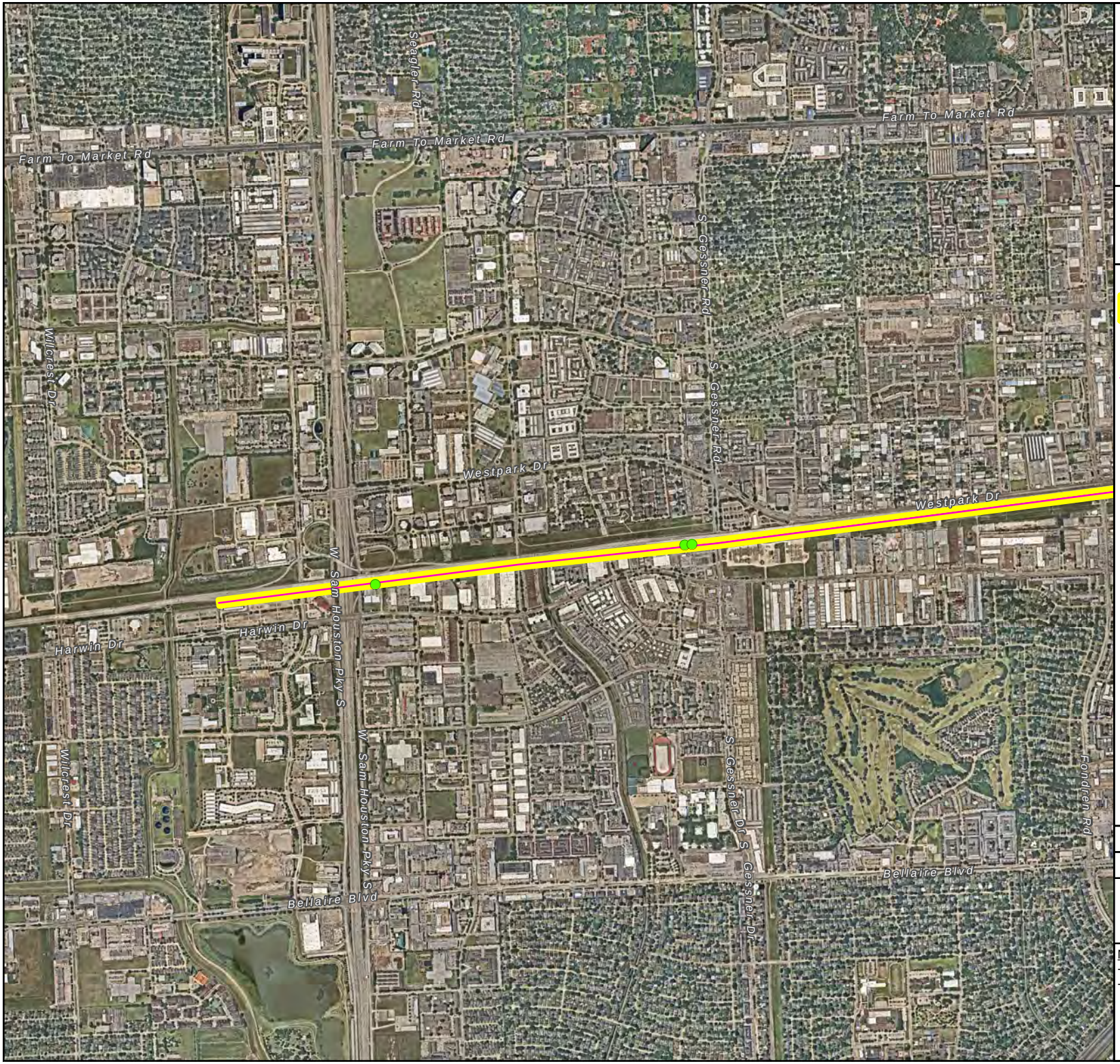
Exhibit 9i

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022



HOLLAWAY
ENVIRONMENTAL + COMMUNICATIONS

METRONext
University Corridor
Houston, Harris County, Texas

LEGEND

100-foot Survey Corridor

Proposed Project Alignment

Representative Alignment (26.44 miles)

DBH Value (count)

>20 inches (3)

Exhibit 9j

Protected Trees Map

N

0 0.25 0.5 Miles

NOTES
- Centroid Coordinates: 29.728170, -95.336311
- NearMap Aerial Date: 05/18/2022

Appendix C: Site Photographs



Photograph 1: Representative photograph of Segment 5, looking south down Lockwood near Tidwell.



Photograph 2: Representative photograph of Segment 4, looking north on Lockwood towards Navigation Boulevard.



Photograph 3: Representative photograph of neighborhood in Segment 3. Looking west on Alabama St. towards Bastrop Street.



Photograph 4: Representative photograph of Segment 2, looking west on Richmond Ave.



Photograph 5: Representative photograph of Segment 1, looking east on Westpark towards Chimney Rock Road.

APPENDIX C-9 – Water Resources Technical Report

METRORapid University Corridor

WATER RESOURCES TECHNICAL REPORT

Technical Memorandum
September 2023



METRO NEXT

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Acronyms and Abbreviations

ACRONYM	DEFINITION
ADA	Americans with Disabilities Act
BMP	Best Management Practices
BRT	Bus Rapid Transit
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GIS	Geographic Information Systems
HEC	Hydrologic Engineering Center
LRT	Light Rail Transit
METRO	Metropolitan Transit Authority of Harris County
MS4	Municipal Storm Sewer Systems
NEPA	National Environmental Policy Act
NHD	National Hydrography Database
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit
PCB	Polychlorinated Biphenyls
PCN	Pre-construction Notification
SWPPP	Storm Water Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
TNW	Traditional Navigable Waters
TPWD	Texas Parks and Wildlife Department
TXDOT	Texas Department of Transportation
TWDB	Texas Water Development Board
US	United States
USACE	US Army Corps of Engineers
USCG	US Coast Guard
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WOTUS	Waters of the US

1 Introduction

The Federal Transit Administration (FTA) and Metropolitan Transit Authority of Harris County (METRO) are conducting the environmental review process for the METRORapid University Corridor Project (the "Project") in the City of Houston, Harris County, Texas, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project.

1.1 Purpose of Report

The purpose of this Water Resources Technical Report is to identify existing conditions and assess the potential effects of the No Build Alternative and Build Alternative on Waters of the United States (WOTUS), pursuant to the Clean Water Act (CWA). According to the CWA, WOTUS include intrastate rivers, streams, (including intermittent streams), floodplains, wetlands, natural ponds, and Traditionally Navigable Waters (TNW). The U.S. Army Corps of Engineers (USACE) regulates WOTUS. (EPA, 2021a).

1.2 Project Overview

The Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park and Ride in the west to the Tidwell Transit Center in the north. The Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas, with high proportions of minority, low-income, and transit-dependent populations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, creating a more equitable transportation system and supporting the development of a high-frequency, high-capacity transit network across Houston, the fourth-largest city in the United States.

The Project would operate in dedicated, METRO-owned right-of-way from Westchase Park and Ride to Interstate-610 (I-610) (West Loop), after which it would transition to the center of streets owned and maintained by the City of Houston. The Project would include signalization improvements at intersections to provide transit signal priority, improving travel times and reliability along the corridor. The Project is divided into five segments as shown in **Table 1-1.** **Figure 1-1** shows the proposed BRT alignment, existing LRT and BRT services to which it connects, and major activity centers along its path.

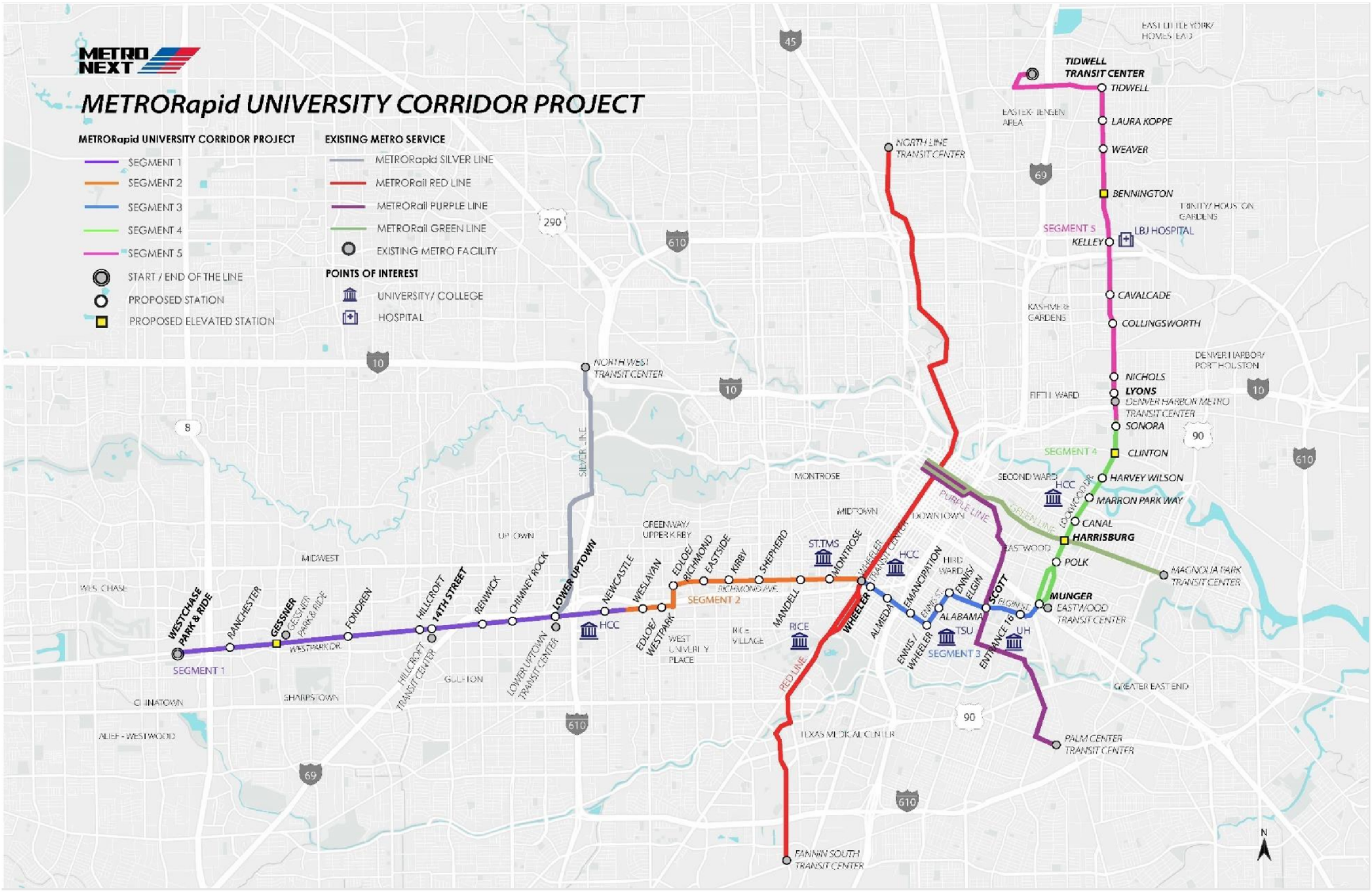
The Project would include 44 stations with accessible platforms, level boarding, next-bus arrival signs, security cameras, lighting, and offboard fare payment via ticket vending machines, electronic fare cards, or mobile devices. The Project would have the same fare structure as other services like METRORail, METRORapid, and local bus services. Two stations would be incorporated into existing METRO service like, Westchase Park and Ride and Tidwell Transit Center. Sidewalk improvements would provide pedestrian and Americans with Disabilities Act (ADA) access to the transit stations.

METRO plans to procure articulated battery-electric buses as part of the Project. Weekday service would be provided from 4:00 AM to 12:30 AM, with buses operating every 6 minutes from 6:30 AM to 7:00 PM, and every 12 minutes from 4:00 AM to 6:30 AM and 7:00 PM to 12:30 AM. Weekend service would be provided from 5:00 AM to 12:30 AM, with buses operating every 12 minutes all day on weekends.

Table 1-1: University Corridor Segments

Segment	From	To
1	Westchase Park & Ride	Westpark Dr 1,500 feet east of Union Pacific Railroad (UPRR) tracks, east of Newcastle Drive
2	Westpark Drive 1,500 feet east of UPRR tracks, east of Newcastle Drive	Richmond Avenue at US-59
3	Richmond Avenue at US-59	Elgin Street at I-45 (Eastwood Transit Center)
4	Elgin Street at I-45 (Eastwood Transit Center)	Lockwood Drive at Margarita Street
5	Lockwood Drive at Margarita Street	Tidwell Transit Center

Figure 1-1: University Corridor Proposed BRT Alignment



2 Methodology

The study area used for analysis includes the area within ½-mile on either side of the proposed alignment and stations for the University Corridor (see **Figure 1-1**). The analysis contained in this report is based on 30 percent design. METRO will work to further minimize impacts as the design progresses.

2.1 Surface Waters

METRO identified surface waters within the study area using USGS National Hydrography Database (NHD) maps via geographic information system (GIS) data and field observations. METRO assessed the potential effects that the Build Alternative would have on WOTUS by estimating potential water crossing impacts with the current available design.

METRO identified impaired waters in the study area using data from the Texas Commission on Environmental Quality (TCEQ) 303(d) List (TCEQ, 2014). **Section 5.0** describes proposed stormwater management techniques for Build Alternative.

2.2 Groundwater

METRO identified groundwater resources, water wells, recharge areas, and designated sole source aquifers in the study area using available information from the Texas Water Development Board (TWDB). METRO identified the potential effects of the Build Alternative on groundwater by reviewing current available design and groundwater locations.

Potential impacts to public water supply wells were assessed using data gathered from the TCEQ and TWDB databases to determine their locations in relation to Build Alternative and potential impacts to groundwater quality due to runoff (TWDB, 2021). **Section 5.0** describes the proposed erosion and sedimentation control measures in accordance with Section 401 of the CWA Best Management Practices (BMPs) for construction.

2.3 Wetlands

METRO identified WOTUS, including wetlands, through the National Wetlands Inventory (NWI) and other GIS data relative to soils, water resources, natural vegetation, etc. The NWI is a tool that includes all natural and man-made water features (e.g., streams/rivers/ponds) and is used along with field verification.

METRO recorded the boundaries of the WOTUS and verified the boundaries in the field in accordance with the *Field Guide for Wetland Delineation – 1987 Corps of Engineers Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain* (Version 2.0) (USACE, 2010).

2.4 Floodplains

METRO identified floodplains in the study area through the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for Harris County. METRO identified and described the potential effects from the Build Alternative on floodplains utilizing the proposed 30 percent design. METRO mapped and evaluated changes to the base flood elevations, risks to human life and damage

to property based upon loss of flood storage, the potential to support future development, and impacts to beneficial floodplain values.

2.5 Rivers and Harbors Act of 1899

METRO reviewed the list of navigable WOTUS for the Galveston District within the State of Texas to determine if the Rivers and Harbors Act of 1899 applies (USACE, 2011).

3 Existing Conditions

Existing water resources within the study area consist of a mix of natural channels, concrete lined opened channels, and under the road culverts or storm drains. The following subsections describe the water resources in the study area.

3.1 Surface Waters

Surface waters within the study area are located within six local watersheds, which include the City of Houston-Buffalo Bayou, Keegans Bayou-Brays Bayou, Country Club Bayou-Brays Bayou, Halls Bayou, Hunting Bayou, and Vince Bayou-Buffalo Bayou (See **Figures 3-1** through **3-1**). The Build Alternative includes a proposed alignment crossing over the Buffalo Bayou, which is considered a TNW. In general, the watersheds are characterized by disturbances associated with roadways, commercial, industrial, and residential development.

Tables 3-1 and **3-2** show the flowlines and waterbodies identified in the study area. Flowlines represent surface waters like streams and rivers, while waterbodies identify surface waters like lakes and ponds. These flowlines and waterbodies represent surface waters that fall under CWA regulations. There are five named waterways, including the Bering Ditch, Brays Bayou, Buffalo Bayou, Halls Bayou, and Hunting Bayou, and 3 unnamed tributaries within the study area. There are also a number of culverts under the road that convey drainage. Existing stormwater runoff within the local watersheds is managed by mowed turf and green areas adjacent to the existing road.

Buffalo Bayou and an unnamed tributary to Buffalo Bayou, located in Segment 4, were identified as impaired. Causes of impairment in Buffalo Bayou are due to bacteria, dioxin in edible tissue, polychlorinated biphenyls (PCBs) in edible tissue, and toxicity in sediment. Impairments to the unnamed tributary of Buffalo Bayou are due to depressed dissolved oxygen levels (TCEQ, 2020). Hunting Bayou, located in Segment 5, impairments are due to depressed dissolved oxygen (TCEQ, 2020). Potential impact to these waters could occur where the proposed alignment crosses over them.

Table 3-1: University Corridor NHD Flowlines and Waterbodies

Segment	Flowlines	Waterbodies	Major Waterbodies
Segment 1	32	24	Brays Bayou
			Bintliff Ditch
Segment 2	2	1	Poor Farm Ditch
Segment 3	1	2	Brays Bayou
			Buffalo Bayou
Segment 4	10	5	Unnamed tributary
			Buffalo Bayou
Segment 5	31	15	Halls Bayou
			Hunting Bayou
			Unnamed tributary of Halls Bayou
			Unnamed tributary of Hunting Bayou

Source: USGS National Hydrography, National Hydrography Products, 2021

Table 3-2: University Corridor NHD Flowlines and Waterbodies

Segment	Impaired Water	Impairment
Segment 4	Buffalo Bayou	Bacteria, dioxin in edible tissue, PCBs in edible tissue and toxicity in sediment
	Unnamed tributary of Buffalo Bayou	Depressed dissolved oxygen
Segment 5	Hunting Bayou	Depressed dissolved oxygen

Source: TCEQ Texas Integrated Report of Surface Water Quality for Clean Water Act Sections 305(b) and 303(d), 2020 Index of All Impaired Waters, 2020

3.2 Groundwater

The major aquifer in the Houston area is known as the Gulf Coast Aquifer and consists of complexly interbedded clays, silts, sands, and gravels of Cenozoic age, which are hydrologically connected to form a large, leaky artesian aquifer system. The Gulf Coast Aquifer parallels the coastline and increases in the direction of the Gulf of Mexico. This aquifer system is comprised of four major components, and several recognized water producing formations. The Chicot Aquifer, which is the upper component of the Gulf Coast Aquifer system, consists of the Willis Sand, the Bentley and Montgomery Formations, the Beaumont Clay, and overlying alluvial deposits. The Lissie formation is considered by some to be equivalent in age to the Montgomery and Bentley Formations. The Burkeville Clay lies beneath the Evangeline Aquifer and separates it from the Jasper Aquifer. The Gulf Coast Aquifer is not designated as a sole-source aquifer by the state, and the study area is not located in a protected aquifer recharge or discharge zone One hundred and forty-six water wells have been drilled within the study area (TWDB, 2022).

3.3 Wetlands

The NWI maps the following 21 types of wetlands within the study area (United States Fish and Wildlife Service [USFWS], 2022):

- E1UBLx (Estuarine and Marine Deepwater)
- PEM1A (Freshwater Emergent Wetland)
- PEM1Ax (Freshwater Emergent Wetland)
- PEM1Cx (Freshwater Emergent Wetland)
- PEM1F (Freshwater Emergent Wetland)
- PEM1K (Freshwater Emergent Wetland)
- PEM1Kx (Freshwater Emergent Wetland)
- PFO1A (Freshwater Forested/Shrub Wetland)
- PFO1C (Freshwater Forested/Shrub Wetland)
- PSS1C (Freshwater Forested/Shrub Wetland)
- PAB4F (Freshwater Pond)
- PAB4Fx (Freshwater Pond)
- PUBFx (Freshwater Pond)
- PUBHx (Freshwater Pond)
- PUBKx (Freshwater Pond)
- R2UBH (Riverine)
- R2UBHx (Riverine)
- R4SBC (Riverine)
- R4SBCx (Riverine)
- R5UBFx (Riverine)
- R2UBH (Riverine)

The NWI data identified 108 features covering approximately 640 acres (see **Table 3-3**). Segment 4 contains the most mapped wetlands by the NWI; however, it does not necessarily mean they are USACE jurisdictional wetlands. General categories of jurisdictional wetlands include wetlands adjacent to TNWs, wetlands that directly abut non-navigable tributaries with relatively permanent flow, and wetlands that have a significant nexus or connection to a TNW. METRO identified 1 potentially jurisdictional wetland feature within the study area (Segment 5), using the protocol described in **Section 2.0**. **Figures 3-1** to **3-6** show the NWI wetlands, and the wetland feature that METRO identified within the study area. The wetland feature is shown in more detail in **Figure 3-6, wetland data sheets can be found in Appendix B**.

Table 3-3: Acres of NWI Wetlands in the Study Area

Wetland Type	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	All Segments
Estuarine and Marine Deepwater	0.00	0.00	0.00	116.03	0.00	116.03
Freshwater Emergent Wetland	8.25	0.00	0.00	212.82	2.83	223.90
Freshwater Forested/Shrub Wetland	48.65	0.00	0.34	8.26	11.20	68.45
Freshwater Pond	16.59	0.00	1.80	22.39	4.04	44.83
Riverine	29.21	7.48	16.50	86.95	52.94	193.09
Total	**102.70**	**7.48**	**18.64**	**446.46**	**71.01**	**646.30**

Source: USFWS NWI Mapper, 2022

3.4 Floodplains

There are 6,183.44 acres of the 100-year floodplains and 3,108.07 acres of 500-year floodplains within the study area (see **Figures 3-1** through **3-5**). Segment 5 is the largest segment by area, so it is logical that it has the most acreage of floodplain. It has proportionally more floodplains as well because it contains Hunting Bayou and Halls Bayou, which are major surface waters and therefore, floodways. Segments 1 through 4 have fewer floodways and floodplains than Segment 5, and they cover an average of 16 percent of the total land area. A summary of the floodplain and floodway acreages is included in **Tables 3-4** and **3-5** and the floodplain and floodway boundaries area shown in **Figures 3-1** through **3-5.** No floodways have been designated by FEMA for drainages within the study area. A proposed underpass that would be located on Lockwood Drive underneath Harrisburg Boulevard would not be located within the 100-year floodplain, and would be designed to include a detention pond and pump stations. See **Appendix C** for information on the proposed underpass.

Table 3-4: Floodplains within the Study Area

Floodplain Type	Segment 1		Segment 2		Segment 3		Segment 4		Segment 5		All Segments	
	Area (Acres)	Percent Cover	Area (Acres)	Percent Cover	Area (Acres)	Percent Cover	Area (Acres)	Percent Cover	Area (acres)	Percent Cover	Total Area (Acres)	Total Percent Cover
100-year Floodplain	999.66		13.51		215.78		304.22		3,651.27			
500-year Floodplain	1,342.51	29.16	189.65	5.78	208.04	13.54	135.89	13.00	1,231.98	52.74	9,160.62	29.17
Floodway	119.69		2.76		96.92		291.52		357.22			

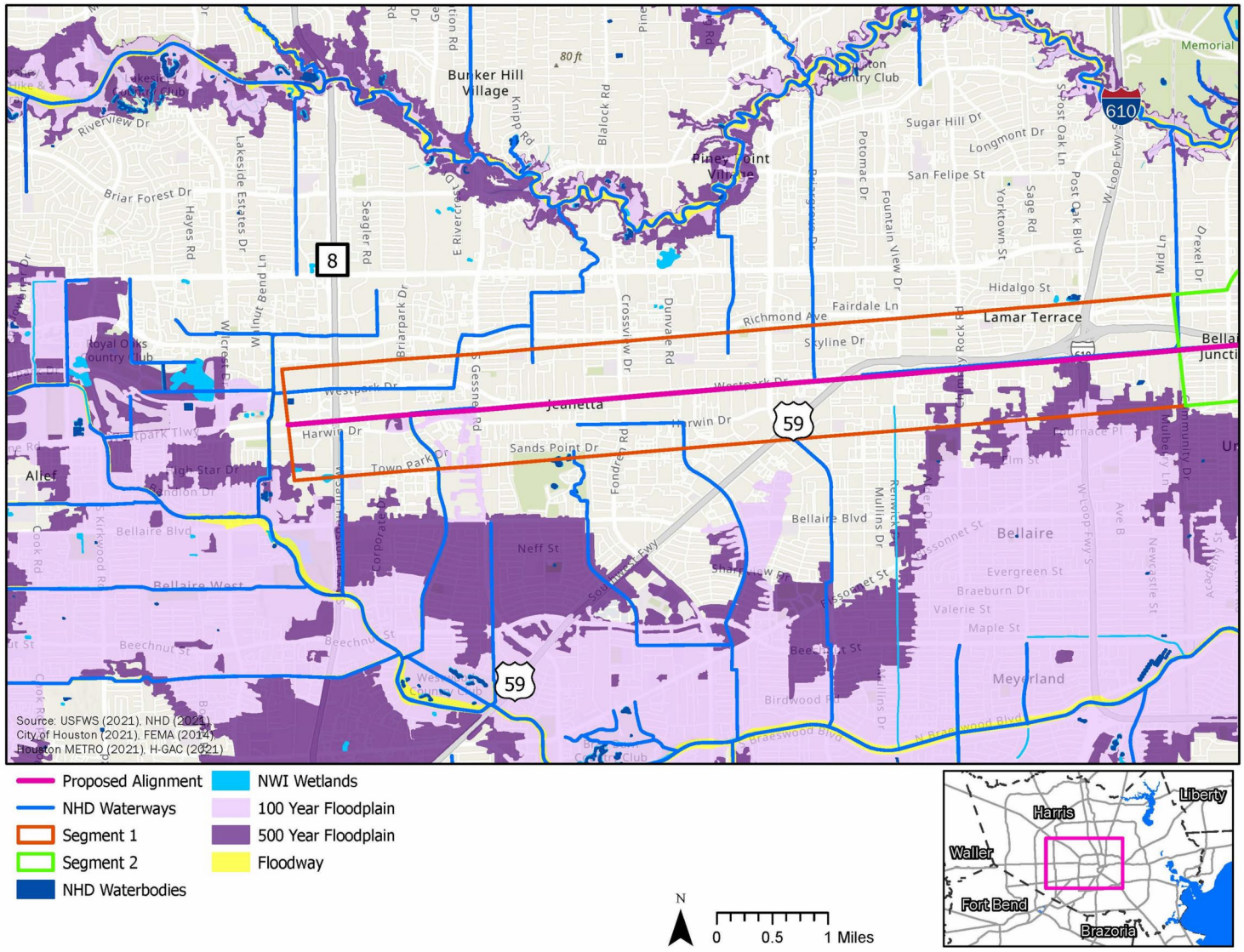
Source: FEMA, 2022

Table 3-5: Floodplain Crossings within the Study Area

Floodplain Type	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	All Segments
	Crossings (ft)	Crossings (ft)	Crossings (ft)	Crossings (ft)	Crossings (ft)	Crossings (ft) Total
100-year Floodplain	0	0	0	67.64	7,322.92	
500-year Floodplain	1,245.61	0	0	79.11	2,263.01	12,208.84
Floodway	0	0	0	354.96	875.59	

Source: FEMA, 2022

Figure 3-1: Water Resources within Segment 1



Sources: USGS NHD, 2022, USFWS NWI Mapper, 2022; FEMA, 2022

Figure 3-2: Water Resources within Segment 2

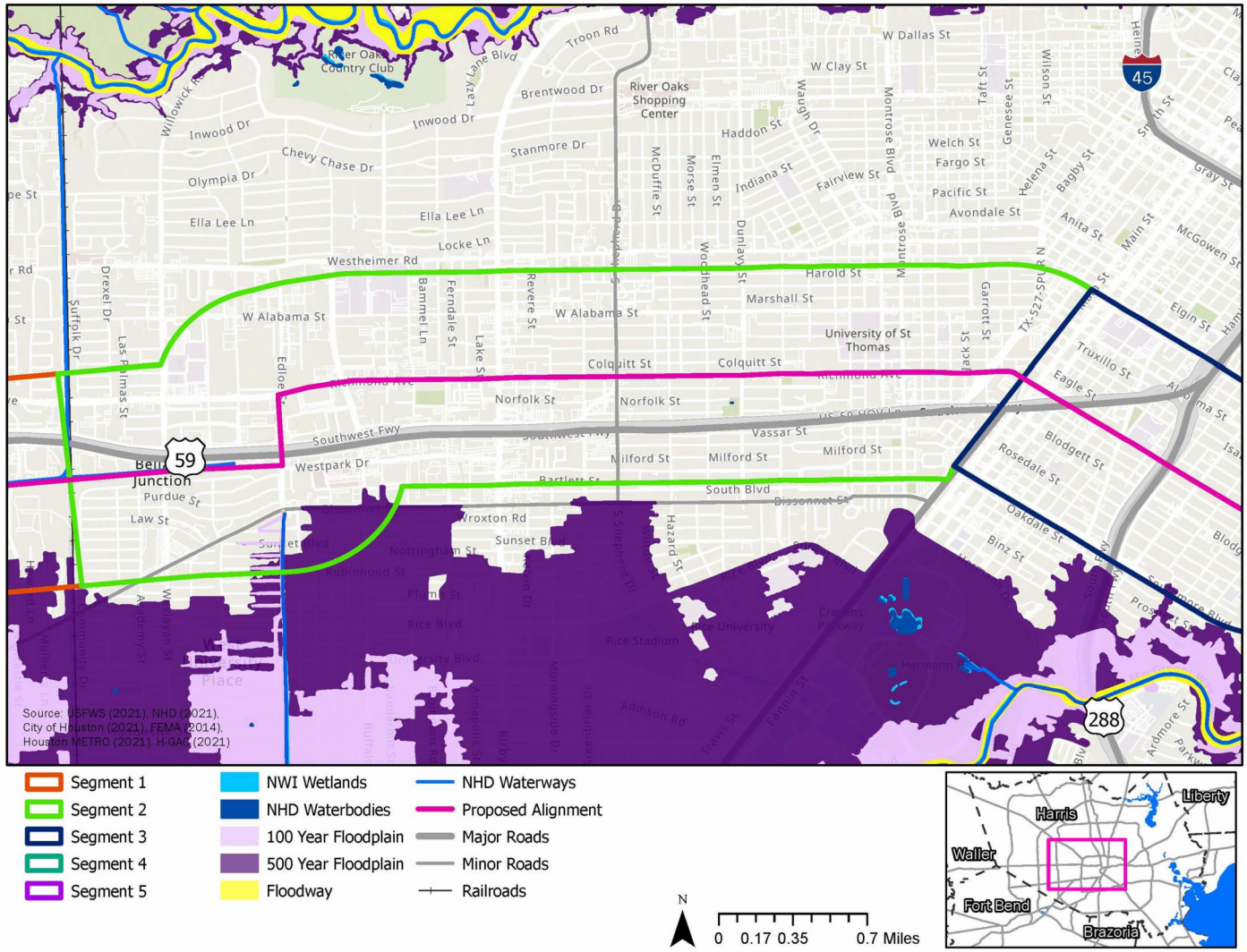


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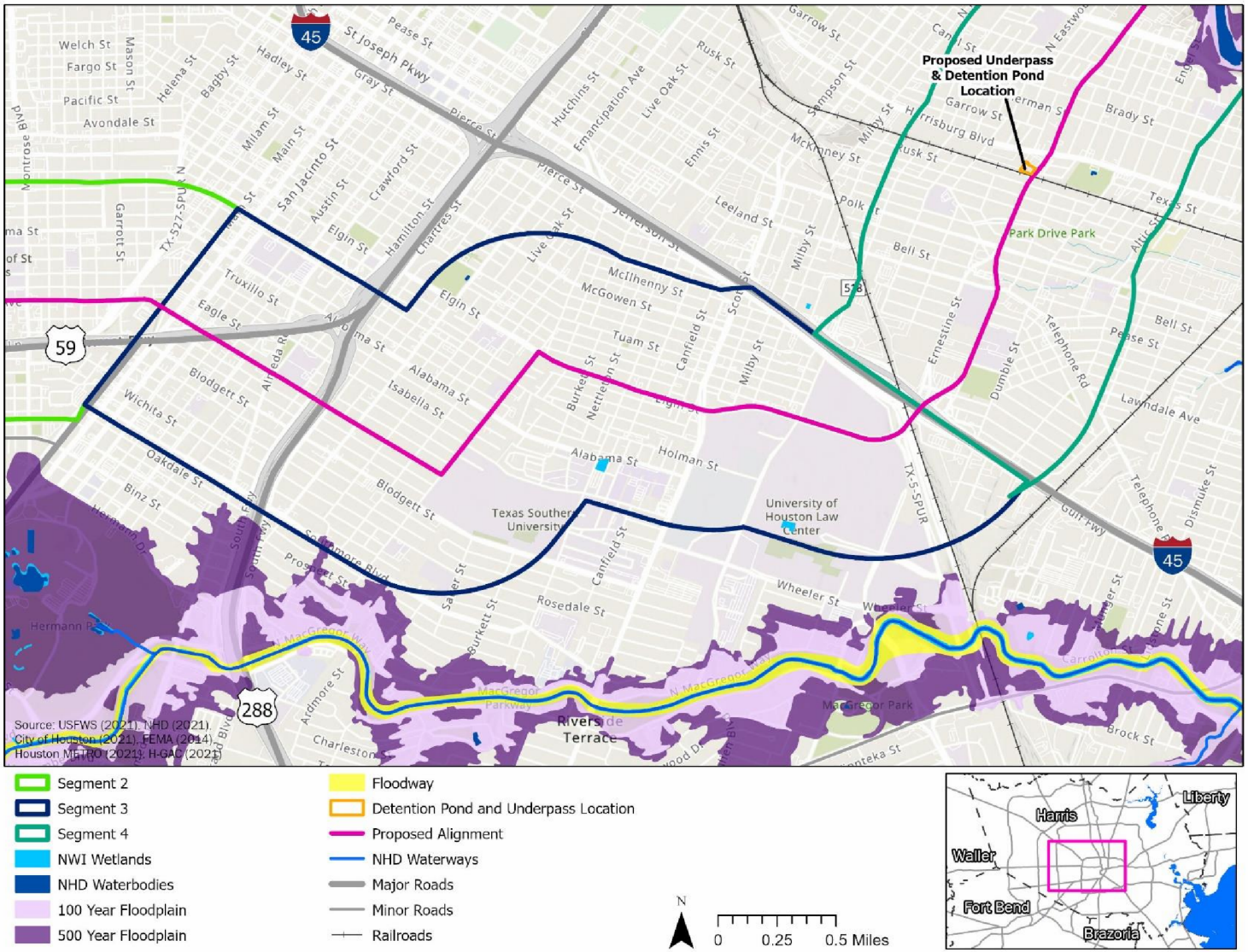
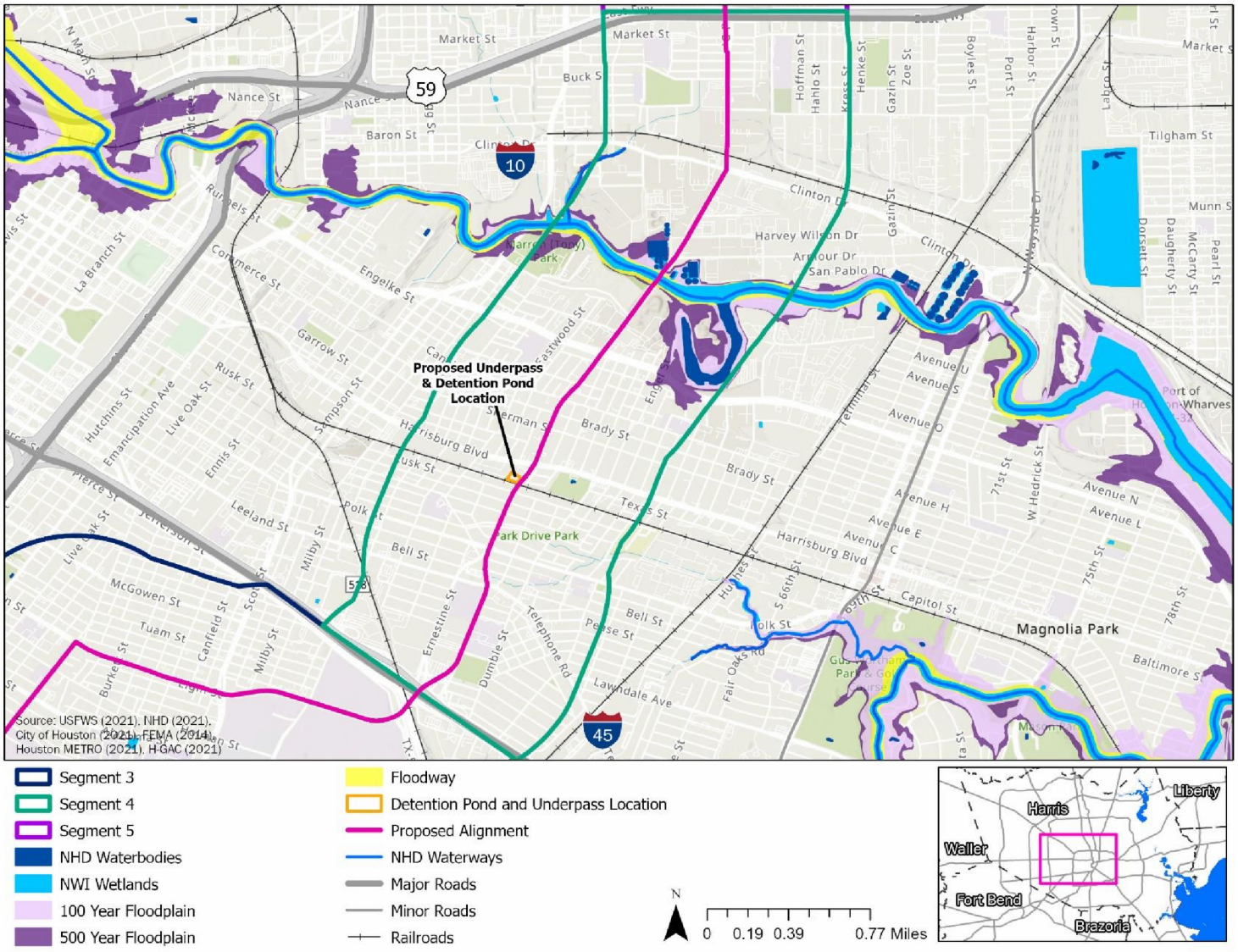
Figure 3-3: Water Resources within Segment 3



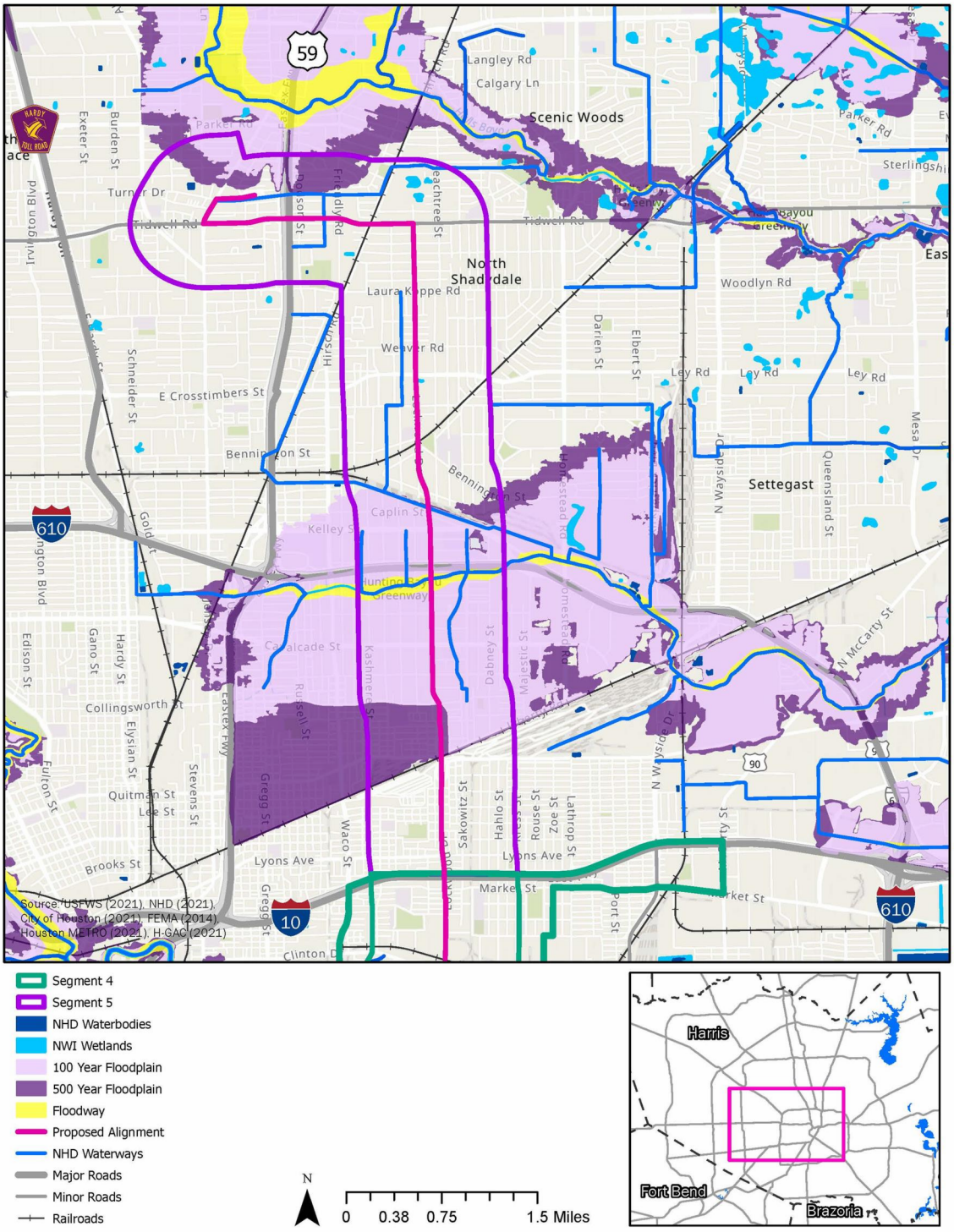
Sources: USGS NHD, 2022, USFWS NWI Mapper, 2022; FEMA, 2022

Figure 3-4: Water Resources within Segment 4



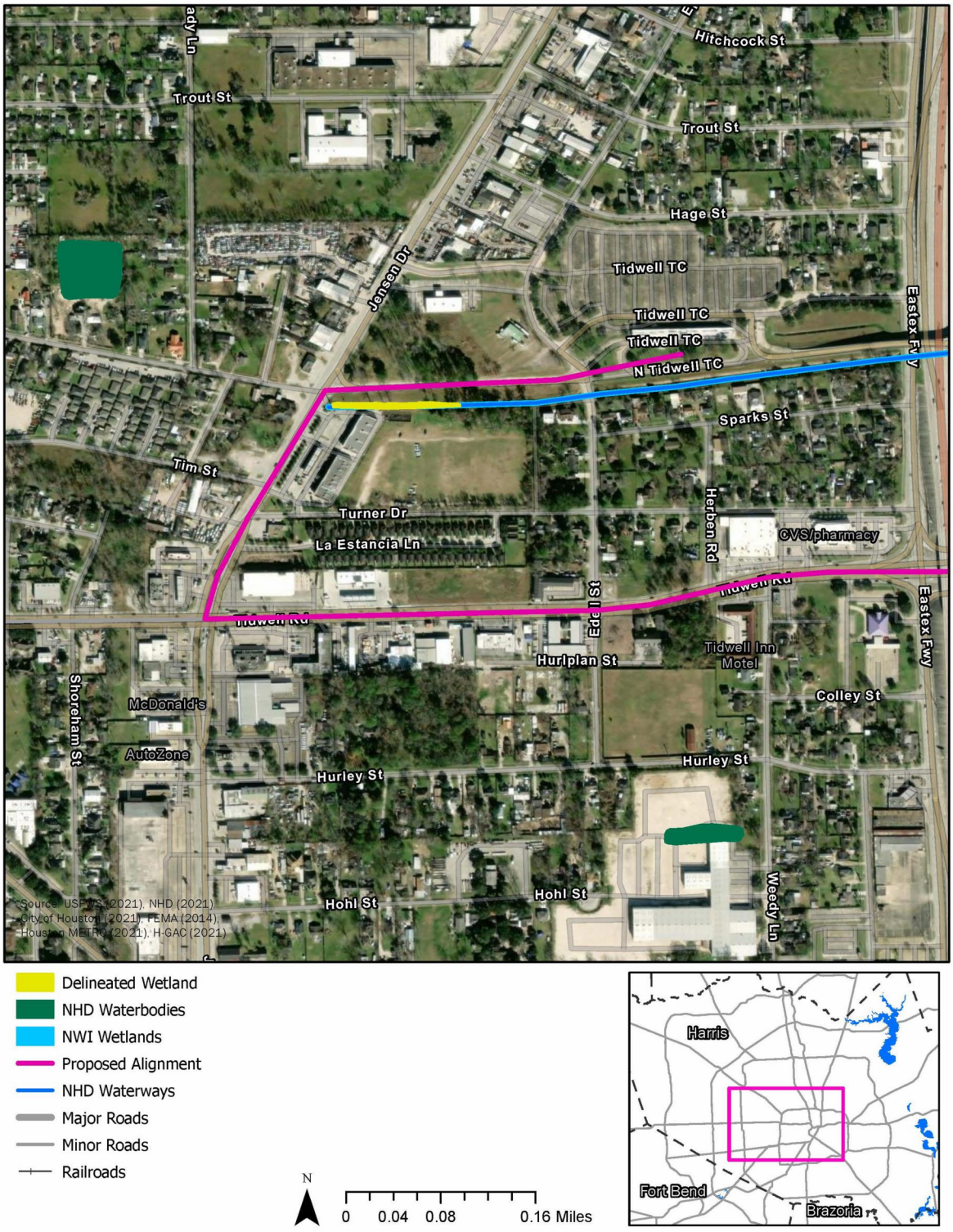
Sources: USGS NHD, 2022, USFWS NWI Mapper, 2022; FEMA, 2022

Figure 3-5: Water Resources within Segment 5



Sources: USGS NHD, 2022, USFWS NWI Mapper, 2022; FEMA, 2022

Figure 3-6: Delineated Wetland in Segment 5



Sources: USFWS NWI Mapper, 2022

3.5 Rivers and Harbors Act of 1899

According to the USACE list of navigable WOTUS, Buffalo Bayou is considered a Traditionally Navigable Water (TNW). Currently no impacts to the bridge are anticipated besides minor modifications such as striping and lighting changes. Coordination would be conducted with the United States Coast Guard (USCG) for these modifications.

4 Environmental Commitments

4.1 Short-Term Construction Impacts

Potential short-term impacts would occur as the Build Alternative is constructed. Construction activities could include clearing vegetation, removing soil, importing fill material, and the changes associated with grading and soil compaction. These activities can alter a site's ability to absorb and retain water, which can cause erosion and sediment loading to surface waters. Increased sediment loading could increase nutrient concentrations, harm benthic biota, reduce fish habitat, and, depending on the organic content of suspended sediment, decrease dissolved oxygen levels in receiving waters. In addition, construction runoff could include debris from demolition. Accidental spills of construction chemicals could also occur.

In-water construction activities, such as placement of piers, would have short-term impacts on water quality. Installation of bridge pilings within water crossings such as Buffalo Bayou, would require in-water construction. Bridge pier installation would release sediments into the water column. These sediments would temporarily increase turbidity and would decrease light transmission in the water near active construction.

The Build Alternative could increase infiltration rates and potentially increase pollution from roadway runoff; however, it is anticipated to be minimal. Any construction below the ground surface would locally disturb the uppermost soil layer into which rainwater infiltration occurs. The addition of impervious cover, both temporary and permanent, would alter the infiltration rate in the subsurface within the Project ROW. Construction could also encounter groundwater. If groundwater is encountered, it is typically removed and disposed of, to avoid contaminating or polluting groundwater. Well records indicate that 146 public water supply wells are located within the study area. Sixty are unused or plugged and 85 are currently used for public supply and industrial use.

4.2 Long-Term Operational Impacts

Long-term impacts of the Build Alternative would include the permanent loss to potential WOTUS by constructing new structures and widening existing structures, including bridges and culverts. At crossings where existing culverts are present, impacts within the footprint of the current existing road structure are assumed to be temporary since the feature is considered previously impacted within those limits. Impacts associated with proposed fill outside of the existing structure for widening the culvert or riprap placement are assumed to be permanent. **Table 3-1** lists the potentially affected surface waters, their respective watershed, stream type, and potential impact acreage.

5 Mitigation Measures

This report is based on the current progress of the 30 percent preliminary engineering design. This design may be refined as the Project design advances. Further, minimization and mitigation measures are subject to change based on advances to the proposed Build Alternative.

5.1 Surface Waters

During construction of the Build Alternative, potential impacts to surface waters would be minimized by adhering to compliance measures and permitting described in the following sections. Metro included design features to avoid and minimize potential impacts to surface waters and constructing or widening bridges, including primarily utilizing existing roadway structures over water features. Metro would acquire necessary permits as described below before initiating construction, including:

- USACE Section 404 NWP 14 with Pre-Construction Notification (PCN) for impacts to WOTUS and the delineated wetland.
- TCEQ Texas Pollution Discharge Elimination System (CWA Section 402) Construction General Permit
- TCEQ Section 401 Water Quality Permit
- FEMA and Local Floodplain Administrator approvals for impacts to floodplains.

The detailed drainage study for the Build Alternative would be used to determine the appropriate locations and sizes of water quality ponds, rain gardens, bridges, culverts, or other drainage structures that would be required to mitigate risks incurred by the construction of the Build Alternative. Federal, state, and local authorities would have the opportunity to review the drainage study to verify that appropriate measures have been proposed such that the Build Alternative would not increase the flood risk to adjacent properties.

Avoidance and Minimization: In accordance with Section 404 (b)(1) guidelines and pursuant to the Final Mitigation Rule (40 Code of Federal Regulations [CFR] 230.91), Metro would take appropriate and practicable steps to avoid and minimize adverse impacts to WOTUS during construction. Measures to avoid and minimize impacts could include:

- Temporary fills would consist of materials that could not be eroded by expected high flows.
- Temporary fills would be removed in their entirety and the affected areas returned to pre-construction elevations as soon as practicable after construction.
- No activity would be permitted to use unsuitable material (trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts.
- The areas affected by temporary fills would be revegetated as soon as practicable after construction.
- The placement of drainage swales in WOTUS would be avoided and, if unavoidable, minimized and constructed to not drain WOTUS.
- In wetland areas disturbed by construction, a minimum of 12 inches of topsoil material from the wetland would be stockpiled and used as backfill material to restore preconstruction contours.
- Open bottom culverts would be used in place of closed culverts where practicable.
- Construction detention basins would be off channel.

Maintain Low Flow: In compliance with the CWA and under USACE general conditions, Metro would design and construct all crossings of WOTUS to maintain low flows and avoid stream relocations during construction and operation of the Build Alternative.

Pre-construction Conditions: In compliance with the CWA and under USACE general permit conditions, Metro would require the construction contractor to restore and document preconstruction contours and remove temporary fills from all temporarily impacted WOTUS (e.g., temporary equipment crossings or temporary disturbances in construction areas around and beneath the Build Alternative) to pre-construction conditions.

CWA Section 404 Permit: Where avoidance of impacts to WOTUS is not practicable, Metro would utilize a Section 404 Permit from the USACE Galveston district prior to initiating construction. The decision to issue a permit rests with the USACE District Engineer and is based on a number of considerations, including conservation, economics, aesthetics and several other factors. Metro, under the oversight of the USACE, would comply with all the conditions required in the Section 404 permit during construction and operation of the Build Alternative. Permanent impacts would be updated as design progresses. The USACE Section 404 NWP 14, Linear Transportation Projects, with a PCN would be anticipated for impacts to the delineated wetland.

The environmental analysis does not reflect details that may be developed during the bridge design competition that include structural type, footprint in the water for bridge supports, or the configuration of the bike/ ped elements. However, minimum design criteria will be specified in the design competition that includes vertical clearance to maintain recreational use and remain above required floodplain elevations as well as maximum surface area for structural supports within the lake to remain within the USACE NWP 14 requirements.

Waters of the U.S. Mitigation Plan: Compensatory mitigation is not considered until after all steps have been taken to first avoid and minimize adverse impacts to the aquatic ecosystem (USACE 2008). If compensatory mitigation is determined to be required by USACE METRO would develop a mitigation plan as part of CWA Section 404 Permit to provide compensatory mitigation for unavoidable permanent impacts in accordance with the requirements of the CWA and as agreed upon by the USACE District, including specific mitigation guidelines. The mitigation plan would include sufficient detail to demonstrate measures taken to avoid, minimize and mitigate the aquatic functions that would be lost or impaired as a result of the Build Alternative.

5.2 Groundwater

During construction of the Build Alternative, potential impacts to groundwater would be minimized by adhering to compliance measures and permitting described below. METRO would require that the Build Alternative contractor plug any unavoidable and unregistered wells discovered during construction, according to TCEQ regulations, to eliminate the potential for impacts to groundwater resources. Compliance measures with COH land ordinance codes, City of Houston Infrastructure Design Manual (COH) and Stormwater Control Measurers, where feasible, would be adhered to and incorporated during final design. The following compliance measures are anticipated to be required for water quality, stormwater, safe drinking water, and groundwater as a result of the Build Alternative (subject to changed based on further design.).

Section 401 Water Quality Certification. Prior to construction and concurrent with the Section 404 process, METRO would complete a Tier II Certification Questionnaire and Alternatives Analysis Checklist for review by TCEQ to obtain a Section 401 Water Quality Certification. TCEQ could request additional information from METRO.

Texas Pollutant Discharge Elimination System (TPDES) General Construction Permit (TXR150000) Prior to construction, METRO would prepare a Stormwater Pollution Prevention Plan (SWPPP) for the Build Alternative or for each construction segment and submit a NOI to TCEQ (with the appropriate fees) to obtain coverage under the General Construction Permit. Before starting construction, METRO would ensure a copy of the Site Notice is posted at the construction site and the notice would remain posted until construction is completed. Activities conducted during construction must adhere to General Construction permit requirements.

Stormwater Management/Stormwater Pollution Prevention Plan. Prior to construction, Metro would prepare an SWPPP and submit an NOI to TCEQ to address authorized discharges that would reach WOTUS, including discharges to MS4s that drain to WOTUS, to identify and address potential sources of pollution that are reasonably expected to affect the quality of discharges from the construction site. Metro would be responsible for implementing the SWPPP throughout the construction period. During construction, Metro would restrict construction activities to permanent and temporary workspaces and easements.

To address Section 401 Water Quality Certification requirements, Metro would identify and implement temporary stormwater controls. METRO would implement sediment control measures prior to the start of and during construction and isolate the construction area from waterbodies and wetlands. METRO would store dredged and fill material in a way that prevents sedimentation runoff to waterbodies. Control measures could include the following:

- Sandbag berm
- Silt fence
- Triangular filter dike
- Rock berm
- Hay bale dike
- Erosion control compost
- Compost filter socks
- Mulch filter socks

METRO would stabilize disturbed areas during construction to prevent sediment from entering adjacent waterbodies and wetlands. Stabilization measures could include the following:

- Temporary vegetation
- Blankets/matting
- Mulch
- Sod
- Interceptor swale
- Diversion dike
- Erosion control compost
- Mulch filter socks
- Compost filter socks

As part of compliance with TPDES and any MS4 requirements, prior to construction, METRO would provide MS4 operators (including the COH) a copy of the SWPPP and/or Notice of Intent (NOI), where required by local ordinance. During the construction phase, the MS4 operators could inspect the construction site as regularly as every 14 calendar days. METRO would conduct regular inspections, maintenance, and recordkeeping to determine whether appropriate control measures have been installed and implemented in accordance with the SWPPP and General Construction Permit.

5.3 Wetlands

METRO recommends appropriate avoidance, minimization and/or mitigation measures in accordance with the type of wetland (e.g., forested, emergent, scrub-shrub, etc.). Compensatory mitigation for unavoidable impacts to wetlands would be determined as design plans are developed. The Build Alternative would affect one emergent wetland. Compensatory mitigation can include the restoration, creation, and/or enhancement of wetlands.

As design progresses, METRO will take all measures feasible to avoid the existing wetland. If avoidance is not possible, METRO would request a Jurisdictional Determination from the USACE after design is complete to determine if the existing wetland is jurisdictional and is regulated under the CWA. If USACE determines the wetland is jurisdictional and impacts could not be avoided, it would be included in the Section 404 NWP 14 with PCN.

5.4 Floodplains

METRO designed the Build Alternative to avoid impacts to floodplains to the maximum extent feasible and practicable. Encroachments to floodplains were analyzed to determine any effects caused by the proposed facility should a 100-year flood occur. The hydraulic design practices of the Build Alternative would be in accordance with current FTA design policies and standards. The floodplain analysis Build Alternative does not indicate a significant encroachment to any area of the floodplains as defined in 23 CFR 650. Drainage impact analysis based on 30 percent design currently indicates no-rise to the 100-year floodplain, all rises in the floodplain would be reevaluated once the proposed roadway and bridge design has been finalized.

Further avoidance and minimization of floodplain encroachments would be considered during design of the Build Alternative. If METRO determines during design, that the Build Alternative would result in an increase of more than one foot of the base flood elevation, a conditional letter of map revision and coordination with the FEMA, USACE and the COH would be required.

METRO would design bridges, culverts, and cross-drainage structures to Federal Highway Administration (FHWA) standards for design events up to the 100-year storm event. METRO would also confirm that the Build Alternative would not adversely impact existing floodplain conditions within the vicinity of the study area for extreme events, (i.e., storm events in excess of a 100-year storm event) as design progresses. The following compliance measures could be anticipated to be required as a result of the Build Alternative (subject to change based on further design).

Floodplain Development Permit. During final design, METRO would obtain floodplain development permits from the local floodplain administrators/directors and comply with local floodplain regulations, as required by the floodplain development permits.

Construction Floodplain BMPs. During construction within floodplains, METRO would implement erosion and sedimentation controls in accordance with TPDES Permit No. TXR150000. METRO would conduct periodic site inspections and maintenance when BMPs are in place to identify and address areas requiring maintenance. METRO would maintain records of all inspections as part of the SWPPP. Local regulatory entities would have the authority to conduct additional inspections as they deem necessary. Compliance and measures, including temporary detention, would be used to offset potential significant encroachment (or effects) on floodplains from piers and construction within the floodplains.

At the conclusion of construction, site restoration, including vegetation replanting, would be performed by METRO in accordance with TCEQ CWA Section 401 water quality certification standards (refer to Section 401 Water Quality Certification).

For all stream crossings temporarily impacted during construction, METRO would implement BMPs in accordance with local regulating authorities, any local site development permits, and any USACE 404 permits. Typical BMPs could include:

- Passage of normal or high downstream flows would be maintained to the maximum extent practicable.
- Temporary fills would consist of materials that would not be eroded by expected high flows.
- Temporary fills would be removed in their entirety and the affected area returned to pre-construction elevation as soon as practicable after construction.
- The areas affected by temporary fill would be revegetated as soon as practicable after construction.

Operational Floodplain BMPs. During final design, METRO would incorporate permanent floodplain controls that could include swales, vegetative strips, and soil stabilization measures to reduce peak flow rates in compliance with current applicable floodplain permit requirements.

Channel Stability. During final design, METRO would follow the latest FHWA Hydrologic Engineering Center (HEC)-20 and HEC-18 procedures to maintain stable stream channels and protect existing and planned infrastructure. These procedures would apply to hydraulic structures, outfalls, intakes, bridges, rail crossings of roads regulated by FHWA and the Texas Department of Transportation (TxDOT), and rail crossings over waterbodies.

6 References:

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Appendix A: Site Photographs



Photograph 1: Upland site for wetland delineation at Turner and Jenson Drive.



Photograph 2: Wet site for wetland delineation at Turner and Jenson Drive.



Photograph 3: Looking west at delineated wetland, located at Turner and Jenson Drive.



Photograph 4: Looking west at delineated wetland at Turner and Jenson Drive.



Photograph 5: Representative photograph of Segment 5, looking south down Lockwood near Tidwell.



Photograph 6: Representative photograph of Segment 4, looking north on Lockwood towards Navigation Boulevard.



Photograph 7: Representative photograph of neighborhood in Segment 3. Looking west on Alabama St. towards Bastrop Street.



Photograph 8: Representative photograph of Segment 2, looking west on Richmond Ave.



Photograph 9: Representative photograph of Segment 1, looking east on Westpark towards Chimney Rock Road.

Appendix B: Wetland Determination Forms

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: MetroNext University Line City/County: Houston, Harris County Sampling Date: 4/14/22

Applicant/Owner: Metro State: Tx Sampling Point: Upland

Investigator(s): Dani Courtney, Courtney Blechle, Will Merrell Section, Township, Range: Settegast

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): None Slope (%): _____

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: NAD83

Soil Map Unit Name: Ce NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. Allium canodense	5%	N	FACU
2. Oenothera speciosa	10%	N	UPL
3. Sorghum halepense	45%	Y	FACU
4. Phyla nodiflura	5%	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	
FACW species	0	x 2 =	
FAC species	5	x 3 =	15
FACU species	50	x 4 =	200
UPL species	10	x 5 =	50
Column Totals:	65 (A)		265 (B)

Prevalence Index = B/A = 4.07

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: MetroNext University Line City/County: Houston, Harris County Sampling Date: 4/14/22

Applicant/Owner: Metro State: Tx Sampling Point: Upland

Investigator(s): Dani Courtney, Courtney Blechle, Will Merrell Section, Township, Range: Settegast

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): None Slope (%): _____

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: NAD83

Soil Map Unit Name: Ce NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: _____)			
1. Allium canodense	5%	N	FACU
2. Oenothera speciosa	10%	N	UPL
3. Sorghum halepense	45%	Y	FACU
4. Phyla nodiflura	5%	N	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

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Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	
FACW species	0	x 2 =	
FAC species	5	x 3 =	15
FACU species	50	x 4 =	200
UPL species	10	x 5 =	50
Column Totals:	65 (A)		265 (B)

Prevalence Index = B/A = 4.07

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

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___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

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Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** X

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: METRONext University Line City/County: Houston, Harris County1 Sampling Date: 4/14/22

Applicant/Owner: METRO State: Tx Sampling Point: Wetland

Investigator(s): Dani Courtney, Courtney Blechle, Will Merrell Section, Township, Range: Settegast

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Concave Slope (%): _____

Subregion (LRR or MLRA): _____ Lat: _____ Long: _____ Datum: NAD83

Soil Map Unit Name: Ce NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15) **(LRR U)**
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☑ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☑ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 2 inches
Saturation Present? (includes capillary fringe)	Yes _____	No _____	Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: _____

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Sapling/Shrub Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Herb Stratum (Plot size: 5 feet)			
1. Typha angustifolia	30	Y	OBL
2. Eleocharis acicularis	20	Y	OBL
3. Phyla nodiflora	10	N	FAC
4. Alternanthera philoxeroides	10	N	OBL
5. Hydrocotyle prolifera kellogg	5	N	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	75% = Total Cover		
50% of total cover: _____	20% of total cover: _____		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
50% of total cover: _____	20% of total cover: _____		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
D-12	10yr 3/1						Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☑ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**
- ☐ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ☐ Thin Dark Surface (S9) **(LRR S, T, U)**
- ☐ Loamy Mucky Mineral (F1) **(LRR O)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) **(LRR U)**
- ☐ Depleted Ochric (F11) **(MLRA 151)**
- ☐ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ☐ Umbric Surface (F13) **(LRR P, T, U)**
- ☐ Delta Ochric (F17) **(MLRA 151)**
- ☐ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) **(LRR O)**
- ☐ 2 cm Muck (A10) **(LRR S)**
- ☐ Reduced Vertic (F18) **(outside MLRA 150A,B)**
- ☐ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ☐ Anomalous Bright Loamy Soils (F20) **(MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

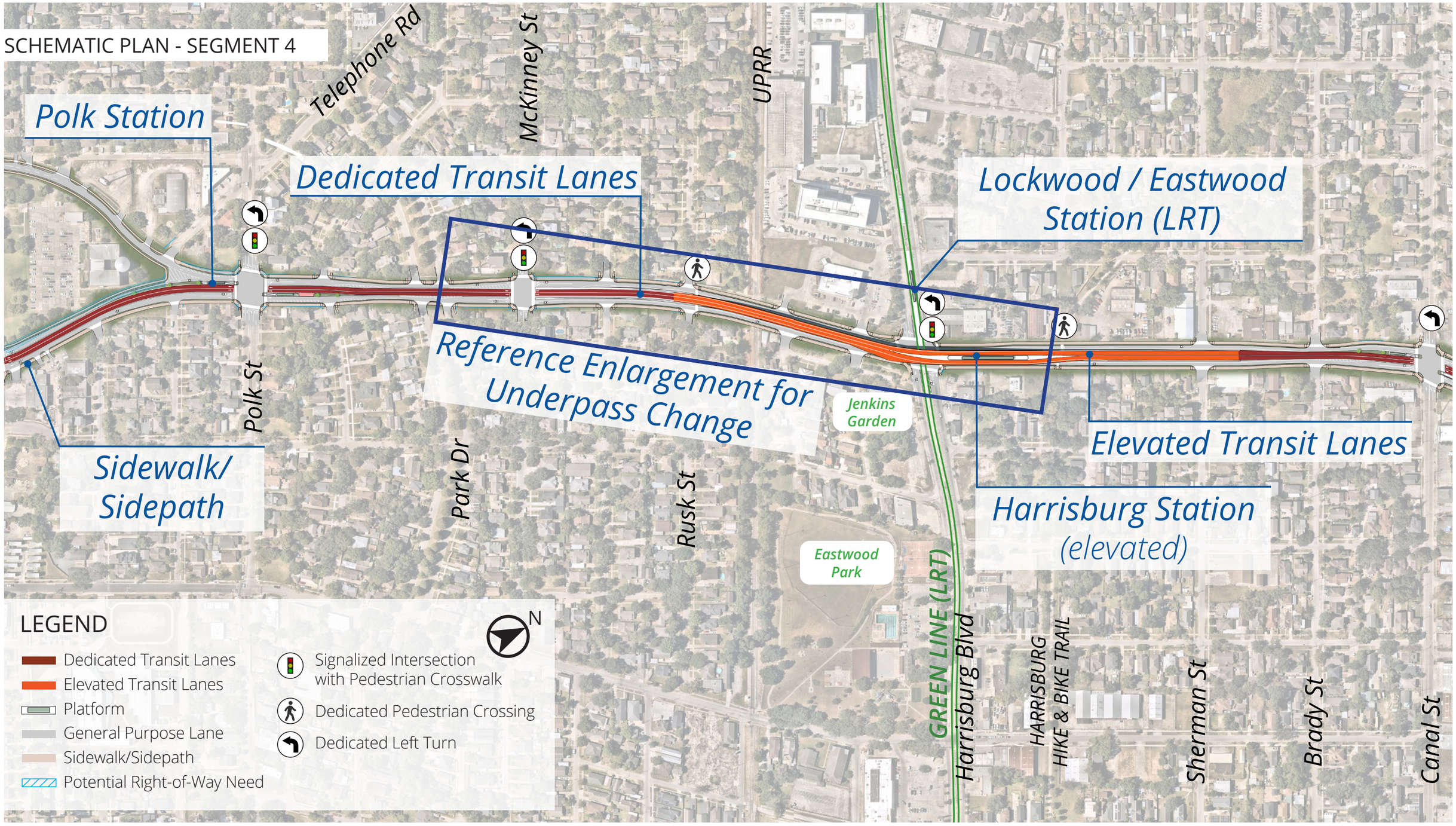
Remarks:

Soil saturated at surface, no redox features visible.

Appendix C: Proposed Underpass Information

UNDERPASS ALTERNATIVE ANALYSIS

SEGMENT 4 - PUBLIC MEETING 2023 (QUARTER1)



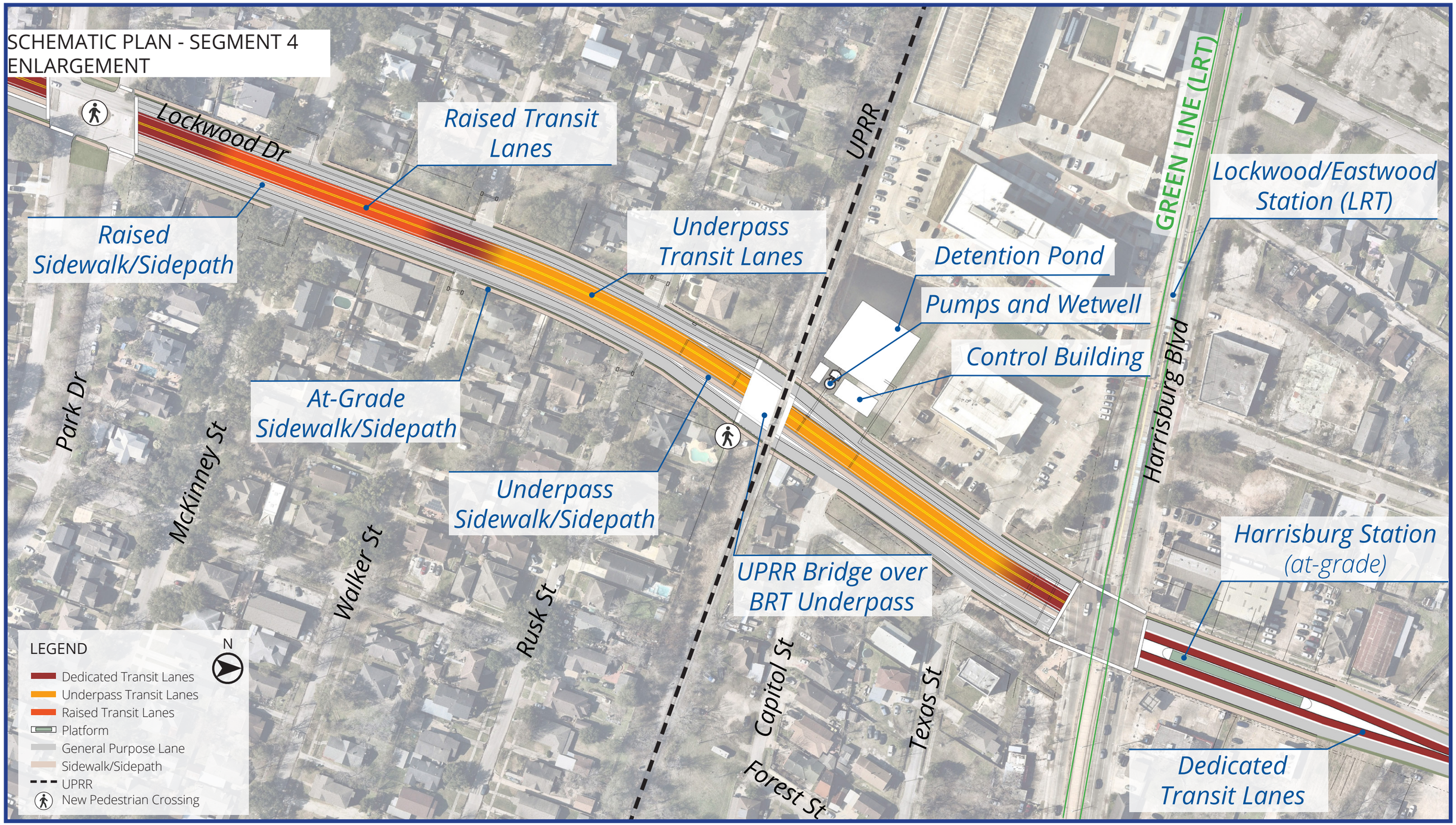
Illustrations for representational purposes only.
Preliminary and subject to change based on public input and technical review.

METRO NEXT

NOT TO SCALE

UNDERPASS ALTERNATIVE ANALYSIS

LOCKWOOD DR. BETWEEN PARK DR. AND HARRISBURG BLVD.



Illustrations for representational purposes only.
Preliminary and subject to change based on public input and technical review.

METRO NEXT

NOT TO SCALE

METRORapid University Corridor

Preface to Design Documents

DATE: May 31, 2023

PREFACE

The intent of this Preface is to provide context to the various design documents received as part of the 30% submittal and to highlight previous efforts that helped establish the current design.

The paradigm of the METRORapid University Corridor Bus Rapid Transit (BRT) project (the "University Corridor" or the "Project") is **to repurpose the use of the existing Right-of-Way (ROW) to provide maximum mobility benefit for all travel modes while minimizing impacts**. The additional mobility benefits include the use of high-capacity, low-no emission transit buses, which carry more people than vehicles in the same space; wider pedestrian spaces with buffer zones; shared use pathways to accommodate bicycle travel; and an overall safer roadway design that aligns with Houston's Vision Zero principles. The impacts considered for the Project include minimizing additional ROW needs, maintaining acceptable vehicle traffic conditions on a transit-priority street, preserving existing trees, avoiding conflicts with major utilities, utilizing existing bridge structures with minimal modifications and reducing the amount of additional impervious area within the ROW in order to minimize potential flooding along the corridor.

To maximize the mobility benefits and minimize overall impacts, the Project design approach is to utilize the existing roadway footprint to service both the BRT and general purpose lanes. In general, one of the existing general purpose lanes in each direction would be converted to a dedicated BRT lane where the alignment is within the City of Houston (COH) ROW. This approach would introduce high-capacity transit buses onto existing streets within an exclusive BRT guideway, while minimizing impacts to the existing features within the COH ROW. With the removal of a general purpose lane in each direction, it is anticipated that vehicle traffic capacity will be reduced and impact traffic conditions. However, METRO and COH share the goal of prioritizing person throughput over vehicle throughput: simply stated, **the vision is to move more people in less space**. This shared goal is documented in a *Memorandum of Understanding* (MOU) approved by both entities on August 22, 2022, which is included as an appendix in the *Traffic Analysis,* dated May 31, 2023.

As the majority of the University Corridor will operate within COH ROW and along COH streets, continuous and constant coordination with COH during conceptual and preliminary design phases was paramount. Initial discussions of the person-throughput prioritization occurred early in the project to ensure all parties agreed with the approach. With input from COH, METRO developed a throughput methodology and provided some initial findings. This was documented in a *Throughput Methodology and Findings* memorandum prepared and updated by METRO on March 9, 2022, which is included as an appendix in the *Traffic Analysis*, dated May 31, 2023. Additional discussions with and input from COH continued as the traffic analysis and design progressed incorporating the conversion of general purpose lanes to BRT lanes and towards the 30% design milestone.

The traffic modeling and design efforts were performed in parallel with constant coordination to ensure that the lane configurations in both the traffic model and the design plans coincided with each other. As the traffic analysis focused on the impacts to vehicle traffic conditions, the design considered impacts resulting from ROW limitations, locations of existing trees and major utility facilities, existing roadway and bridge sections and the results of drainage analyses. At certain intersections within COH ROW with a projected vehicle Level of Service (LOS) that was less than desirable, several mitigation scenarios were analyzed to improve the LOS while considering the above referenced impacts with ROW needs being the most influential. These intersection locations and mitigation scenarios were discussed with COH during several coordination meetings. A summary of these meetings and the tables and exhibits prepared are included in the *Traffic Analysis*, dated May 31, 2023. These documents show the lane configurations considered for each mitigation scenario as well as demonstrate the trade-offs required to implement each scenario. As a result of these meetings, the preferred lane configurations were selected and included in the traffic model and in the design documents.

As part of the multi-modal approach for the Project, improved pedestrian mobility is also being considered. A pedestrian realm that is located between the back of curb or edge of pavement and the edge of ROW is included along the corridor that provides an unobstructed sidewalk or sidepath and a safety buffer area that separates the sidewalk from the roadway. Ideally, the pedestrian realm would be wide enough to accommodate both people walking and biking. However, the University Corridor extends along existing ROW of various widths and through different area types, including neighborhoods, businesses and schools. Considering these factors, the pedestrian realm dimensions will vary to remain sensitive to the area's local context and to minimize impacts to ROW. Where dimensions are less than desirable, discussions with COH have occurred to receive feedback and input. In a limited number of locations, design exceptions will be required to justify smaller pedestrian realm dimensions than COH standards and will need to be approved by COH as designs are progressed. Pedestrian design and exceptions are noted in the *Basis of Design* (BOD) documents for each Segment.

To further enhance pedestrian mobility, additional pedestrian crossings are being proposed along the University Corridor. In general, pedestrian crossings are provided at all of the signalized intersections along the alignment. However, this results in sections along the corridor with relatively long distances between proposed crossing points. With feedback and general guidance from COH, additional crossing locations are proposed that consider, among other factors: key destinations, local bus stops, distances between crossings and safety. These proposed pedestrian crossings will significantly enhance the ability of people to cross the BRT alignment by walking or biking at regular well-space intervals. These additional pedestrian crossings are reflected in the 30% design submittal.

APPENDIX C-10 – Traffic Analysis Technical Memorandum

METRORapid University Corridor

Traffic Analysis

Technical Memorandum

May 31, 2023

This traffic report was prepared under the direction of Jack E. Shick Jr., P.E.

Texas Professional Engineer # 105254



5-31-2023

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Acronyms and Abbreviations

ACRONYM	DEFINITION
BRT	Bus Rapid Transit
COH	City of Houston
EB	Eastbound
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
H-GAC	Houston-Galveston Area Council
LOS	Level of Service
LRT	Light Rail Transit
METRO	Metropolitan Transit Authority of Harris County
MOE	Measure of Effectiveness
NB	Northbound
NEPA	National Environmental Policy Act
NHHIP	North Houston Highway Improvement Project
O-D	Origin-Destination
P&R	Park & Ride
ROW	Right-of-way
SB	Southbound
TMC	Turning Movement Count
TSP	Transit Signal Priority
TXDOT	Texas Department of Transportation
V/C	Volume to Capacity Ratio
VMT	Vehicle miles traveled
WB	Westbound

List of References

2045 Regional Transportation Plan Update, Houston-Galveston Area Council, 2021
Highway Capacity Manual, 7th Edition, Transportation Research Board, 2022

1 Executive Summary

A traffic analysis was performed for the proposed University Line Bus Rapid Transit (BRT) Project (BRT Project) being planned by the Metropolitan Transit Authority of Harris County (METRO) and in accordance with standard traffic engineering practices using TransModeler software. This report describes the methodology of the traffic analysis performed, estimates the impact that the proposed BRT project would have on traffic conditions along the proposed route, outlines the traffic related coordination performed with other public agencies, including the City of Houston (COH) and the Texas Department of Transportation (TxDOT), and summarizes the safety enhancements provided as part of the Project.

The METRORapid University Corridor Project is a proposed 25.3-mile BRT line from Westchase Park & Ride to the Tidwell Transit Center featuring dedicated bus lanes and over 40 stations as shown in **Figure 1** of the report. The Project corridor is divided into five (5) separate segments as noted in **Table 1** of the report. The traffic model analyzes 102 intersections within the five segments. The Project's paradigm is to repurpose the use of existing Right-of-Way (ROW) to provide the maximum mobility benefit for all travel modes while minimizing impacts. Additional mobility benefits include the use of high-capacity transit buses, wider pedestrian spaces with buffer zones, shared use pathways and an overall safer roadway design. The impacts considered for the Project include minimizing additional ROW needs, maintaining acceptable vehicle traffic conditions, preserving existing trees, avoiding conflicts with major utilities, utilizing existing bridge structures with minimal modifications and reducing the amount of additional impervious area within the ROW to minimize drainage capacity issues along the corridor. METRO and COH share the goal of prioritizing person throughput over vehicle throughput to offset any impacts to vehicle traffic conditions. This shared goal is documented in a Memorandum of Understanding (MOU) approved by both entities on August 22, 2022. A copy of this MOU is included in **Appendix K**.

Traffic data were collected at all signalized intersections (existing and proposed) along the proposed BRT route in September of 2021 with supplemental counts being performed in February and March of 2022. Peak hour traffic at each intersection was determined for the corridor peaks, which varied from segment to segment. Field observations were also conducted to establish the existing geometrics at each intersection, while existing traffic signal timings were obtained from the COH for input into the existing models. The existing conditions models were developed in TransModeler software for both the AM and PM peak periods. These models were then calibrated to ensure the traffic volumes at each intersection, as well as the travel times and speeds of vehicles, matched existing condition field data and to confirm that they were an accurate representation of the real-world conditions. These models serve as the basis for all future year modeling.

The METRO version of the Houston-Galveston Area Council (H-GAC) model demographic and network inputs from H-GAC's official scenarios were used to develop traffic growth rates for the study area. Three scenarios were run including the 2020, 2045 No-Build, and 2045 Build. The difference between 2045 No-Build and 2045 Build is the exclusion of the BRT Project in the 2045 No-Build Scenario. This modeling effort was used to develop traffic growth rates for both the 2030 No-Build and 2030 Build scenarios, which were studied using TransModeler. The growth rates for

the Build scenarios are slightly lower than those for the No-Build scenarios accounting for the modal shift of person trips from vehicular traffic to the proposed BRT. Separate growth rates were developed for each segment of the project as the adjacent land uses, and development patterns vary between them. Additionally, in Segments 4 and 5 of the corridor, traffic volumes along Lockwood Drive were reduced by 10 percent from the calculated future 2030 Build traffic volumes to account for traffic shifting to adjacent parallel routes following the construction of the BRT Project. Refer to section 3.2.1 for further discussion on the calculated future traffic volumes in Segments 1, 2, and 3, which were not reduced since there were no parallel routes with excess capacity based on the projected volumes in the H-GAC model.

TransModeler was used to develop traffic models of the 2030 No-Build and 2030 Build scenarios. The results from these models were compared to determine the impact of the proposed BRT Project. The primary Measure of Effectiveness (MOE) used for this comparison was the Level of Service (LOS) at the signalized intersections during AM and PM peak periods throughout the proposed BRT corridor. LOS is a measure of how much delay occurs at an intersection during a peak hour. The criterion for LOS is outlined in the Highway Capacity Manual, 7th Edition (Transportation Research Board, 2022). Depending on the amount of delay at an intersection, a LOS between A and F is applied to the intersection. A LOS of A through D is generally considered to be an acceptable amount of delay, while a LOS of E or F is generally considered to be unacceptable. As the analyses are performed for the AM and PM peak periods, it is noted that the LOS determined for each intersection should be considered as the worst condition anticipated for that intersection.

Adjustments to the proposed roadway geometrics were made in the 2030 Build Conditions Models based on the 30% design developed by METRO and submitted to the FTA. In general, one of the existing general-purpose lanes in each direction will be converted to a dedicated BRT lane throughout the majority of the corridor and within COH ROW. With the removal of a general-purpose lane in each direction, it is anticipated that traffic capacity will be reduced with resulting impacts to traffic conditions as reflected in the LOS for each intersection. However, when these traffic impacts are considered in the context of the multi-modal approach of the Project, the desire to move a higher number of people through the corridor and the negative impacts to adjacent properties that would be required to bring the LOS to within acceptable limits, the traffic impacts are more justifiable. **Appendix L** contains a copy of the throughput methodology and findings which were conducted within the study area.

Appropriate adjustments were also made in the 2030 Build traffic models to simulate the interaction of the proposed BRT vehicles with the traffic signals. Within Segment 1 from the intersection of Westpark Drive with Fondren Road to the intersection of Westpark Drive with the IH-610 Frontage Roads, the proposed BRT was modeled in a parallel guideway south of Westpark Drive. In this area, traffic signal pre-emption was used to stop traffic across the BRT guideway as the buses approach and then travel through the intersection. After the BRT vehicle travels through these intersections, the traffic signal reverted back to normal operations. To the east of IH-610 and for the remainder of the corridor, the BRT guideway was located in the center of existing streets. At those intersections where the BRT vehicles travel straight through the intersection, they were provided a green signal along with the adjacent through movements on the street. Transit signal priority (TSP) was implemented at these locations to extend green time for the bus through

movements up to 10 seconds should a BRT vehicle be approaching the intersection as the green time was ending. Left turns from the BRT corridor were converted to protected only phasing and separated from the through movements to control movements across the BRT guideway. Where the BRT vehicle was to turn from one street to another, a separate BRT phase was added to the intersection to stop other traffic while the bus made this movement. Separate BRT phases were also used at all interchanges with freeway frontage roads. Pedestrian phases are provided where they currently exist in the signal timing plans developed by the City of Houston. The existing crossing times are adequate to provide time for pedestrians to cross to the center stations throughout the project.

Results of the 2030 build conditions traffic models were used to further refine the proposed geometric design of the University Line BRT Project. For example, queue information from the models were used to develop the length of proposed left turn lanes along the route.

The below sections summarize the intersections that have vehicular traffic impacts and are projected to perform at LOS E or F by segment. Further discussion of these intersections and associated impacts is presented later in this report.

1.1 Segment 1 – Potential Traffic Impacts

Multiple intersections operated at an overall LOS of E or F under the 2030 No-Build scenario and continued to do so under the 2030 Build Scenario in Segment 1 including:

- Eastbound Westpark Tollway Exit Ramp at Fondren Road
- Westpark Drive at Fondren Road
- Westpark Drive at Hillcroft Avenue
- Westpark Drive at Chimney Rock Road (AM Peak)
- Westpark Drive at S Rice Avenue
- Westpark Drive at IH-610 southbound (SB) Frontage Road (AM Peak)
- Westpark Drive at Newcastle Drive (AM Peak)

Three intersections operated at an overall LOS of D or better under the 2030 No-Build Scenario but are projected to operate at an overall LOS of E or F under the 2030 Build Scenario including:

- Westpark Drive at Renwick Drive (AM Peak)
- Westpark Drive at Alder Drive (AM Peak) – No Build operates as an unsignalized intersection
- Westpark Drive at Chimney Rock Road (PM Peak)

There were also two intersections at which the LOS was improved with the proposed BRT project from the 2030 No-Build Scenario to the 2030 Build Scenario including:

- Westpark Drive at Royalton Street – Improved since intersection is signalized under the Build Scenario.
- Westpark Drive at IH-610 northbound (NB) Frontage Road – Improved with new phasing pattern implemented which reduced delays.

1.2 Segment 2 – Potential Traffic Impacts

Multiple intersections operated at an overall LOS of E or F under the 2030 No-Build scenario and continued to do so under the 2030 Build Scenario in Segment 2 including:

- Richmond Avenue at Buffalo Speedway (PM Peak)
- Richmond Avenue at Kirby Drive (PM Peak)
- Richmond Avenue at Dunlavy Street
- Richmond Avenue at Mandell Street (PM Peak)
- Richmond Avenue at Montrose Boulevard
- Richmond Avenue at US 59 / Spur 527 SB Frontage Road (PM Peak)

Several intersections operated at an overall LOS of D or better under the 2030 No-Build Scenario but are projected to operate at an overall LOS of E or F under the 2030 Build Scenario including:

- Westpark Drive at Weslayan Street (AM Peak)
- Westpark Drive at Edloe Street (AM Peak)
- IH-69 Express Lanes at Edloe Street (PM Peak)
- Richmond Avenue at Edloe Street (PM Peak)
- Richmond Avenue at Eastside Street (AM Peak)
- Richmond Avenue at Kirby Drive (AM Peak)
- Richmond Avenue at Woodhead Street
- Richmond Avenue at Mandell Street (PM Peak)
- Richmond Avenue at US 59 / Spur 527 SB Frontage Road (AM Peak)
- Richmond Avenue at US 59 / Spur 527 NB Frontage Road

1.3 Segment 3 – Potential Traffic Impacts

Several intersections operated at an overall LOS of D or better under the 2030 No-Build Scenario but are projected to operate at an overall LOS of E or F under the 2030 Build Scenario including:

- Richmond Avenue at Main Street
- Wheeler Avenue at San Jacinto Street
- Wheeler Avenue at La Branch Street
- Wheeler Avenue at Almeda Street

There were also two intersections at which the LOS was improved with the proposed BRT project from the 2030 No-Build Scenario to the 2030 Build Scenario including:

- Wheeler Avenue at Hutchins Street - Improved since the intersection is signalized under the Build Scenario.
- Ennis Street at Alabama Street - Improved since the intersection is signalized under the Build Scenario.

1.4 Segment 4 – Potential Traffic Impacts

Several intersections operated at an overall LOS of D or better under the 2030 No-Build Scenario but were projected to operate at an overall LOS of E or F under the 2030 Build Scenario including:

- Lockwood Drive at Leeland Street (AM Peak)
- Lockwood Drive at Canal Street (PM Peak)
- Lockwood Drive at Marron Park Way (AM Peak) – Future signalized intersection by others

1.5 Segment 5 - Potential Traffic Impacts

One intersection operated at an overall LOS of D or better under the 2030 No-Build Scenario but was projected to operate at an overall LOS of E or F under the 2030 Build Scenario including:

- Tidwell Road at Jensen Drive (PM Peak)

1.6 Safety Analysis

Reported crashes within the proposed BRT corridor in 2017, 2018, and 2019 were analyzed and the crash rate per 100 Million Vehicle Miles Traveled (VMT) was calculated for both the overall corridor and each individual segment. A total of 2,044 crashes were reported over the three-year period. Crash rates for the overall corridor and all segments exceeded the statewide average for similar facilities. The highest crash rates were observed in Segment 3.

The proposed BRT Project will improve safety throughout the proposed corridor by reducing conflict points due to the center running BRT. Approximately 114 unsignalized median openings throughout the corridor will be closed to control access to and from the BRT route. In addition, permitted left turns will be eliminated throughout the BRT route to control left turns across the BRT guideway. Other safety enhancements within the corridor include improvements to the pedestrian realm to provide sidewalks or sidepaths for pedestrian and bicyclists areas to travel along the corridors reducing conflicts with vehicles.

1.7 Traffic Summary

Considering the Project's paradigm to repurpose the existing ROW to provide maximum benefit to all travel modes and the shared goal between METRO and COH of prioritizing person throughput over vehicular throughput, the Project does not have significant traffic impacts. While vehicular traffic delays are projected at some intersections during certain peak periods along the corridor, the vast majority of the corridor is projected to have acceptable, if not improved, vehicular traffic conditions. Additionally, the safety enhancements provided and the improved facilities offered for transit, pedestrian and bicycle travel modes will result in a better multi-modal experience along the University Corridor.

2 Introduction

The Federal Transit Administration (FTA) and METRO are conducting the environmental review process for the MetroRapid University Corridor Project (the "Project") in Harris County, Texas in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. A Categorical Exclusion is being prepared as part of this process. FTA is the Federal Lead Agency, and METRO is the Local Project Sponsor responsible for implementing the Project. This traffic analysis report will be included with the NEPA documents.

2.1 Purpose of Report

This report describes the methodology of the traffic analysis performed for the BRT Project and outlines the results of the traffic analysis. The traffic analysis estimates the impact that the proposed BRT operations would have on traffic flow along the proposed route. The report also outlines some of the coordination performed with other public agencies, including COH and TxDOT, and summarizes the safety enhancements provided as part of the Project.

2.2 Project Overview

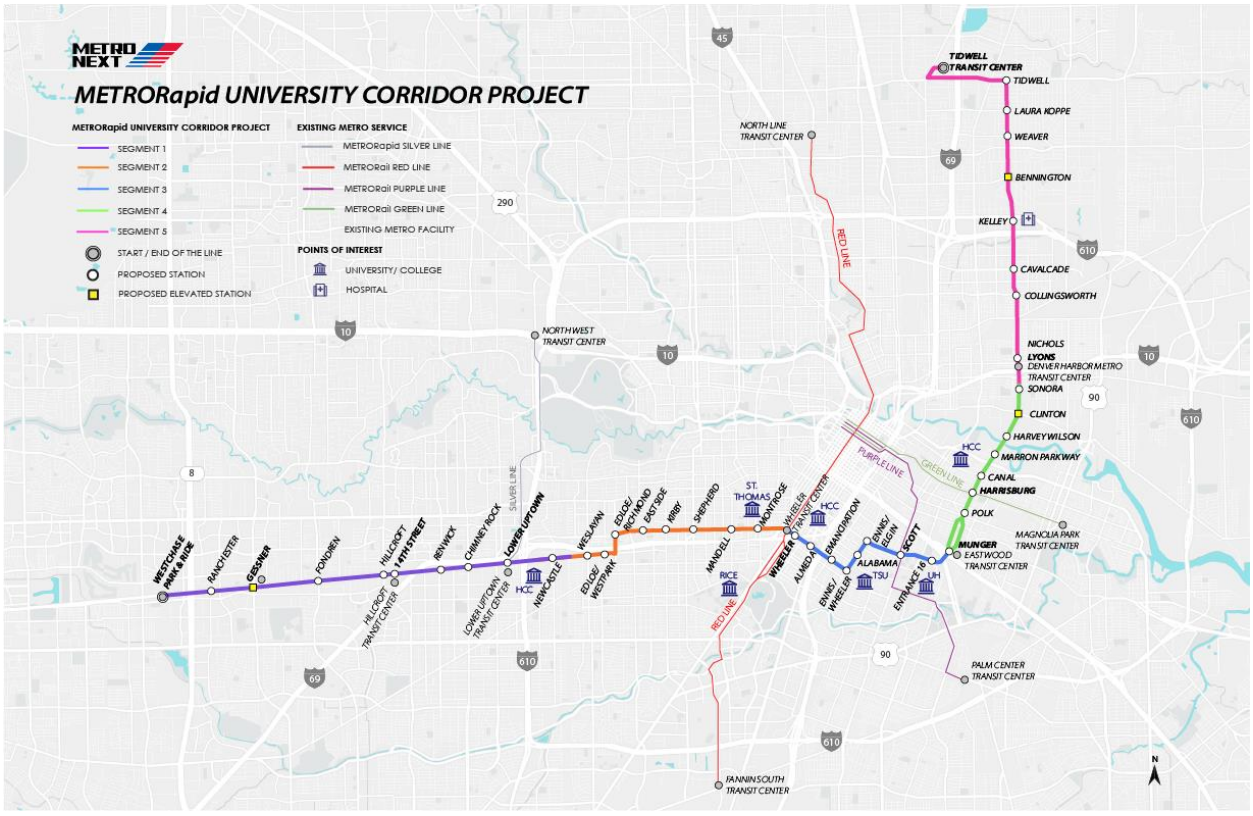
The BRT Project is a proposed 25.3-mile Bus Rapid Transit (BRT) line from Westchase Park & Ride to Tidwell Transit Center planned by METRO. Featuring dedicated bus lanes throughout and over 40 stations, the Project would bring fast, reliable transit to some of Houston's busiest and most densely populated areas. In addition, the Project would include upgrades to Westpark Park & Ride, Wheeler Transit Center, and Tidwell Transit Center; at least one new bus operating facility; and first-and-last mile solutions for transportation to stations. When complete, the Project would connect to all of METRO's existing light rail transit (LRT) and BRT lines, thereby supporting the development of a high-frequency, high-capacity transit network across Houston. The Project is a major component of METRO's METRONext: Moving Forward Plan (METRONext), and it represents METRO's largest planned investment in the busy west-southwest travel corridor.

From its origin at Westchase Park & Ride, the BRT line would travel east with METRO-owned right-of-way (ROW) parallel to Westpark Tollway and Westpark Drive and partially within COH ROW on Westpark Drive until the interchange with IH-610 where it would move to a center running BRT. Between the interchange of Westpark Drive and IH-610 and the Lower Uptown Transit Center the existing Silver Line will also run on the proposed guideway. This service currently is running on Westpark Drive and will be relocated to the new guideway following construction of the University Line project. From Edloe Street, the alignment turns east on Richmond Avenue to reach Wheeler Transit Center. At Main Street, where Richmond Avenue becomes Wheeler Avenue, the line would continue east on Wheeler Avenue to Ennis Street. The alignment turns north on Ennis Steet and then continues east on Elgin Street, which curves north underneath IH-45 and becomes Lockwood Drive. It would continue north on Lockwood Drive until turning west on Tidwell Road, north on Jensen Drive, and east on Turner Drive to reach its terminus at Tidwell Transit Center. The proposed BRT alignment for the Project is divided into five segments as noted in **Table 1**. The BRT layout along with connections to other METRO facilities, regional corridors, and points of interest is presented in **Figure 1**.

Table 1: University Corridor Segments

SEGMENT	FROM	TO
1	Westchase Park & Ride	Westpark Drive 1,500 feet east of UPRR tracks (Between Newcastle St and Weslayan St)
2	Westpark Drive 1,500 feet east of UPRR tracks (Between Newcastle St and Weslayan St)	Richmond Avenue 535 feet west of Main Street
3	Richmond Avenue 535 feet west of Main Street	Elgin Street at I-45 (Eastwood Transit Center)
4	Elgin Street at I-45 (Eastwood Transit Center)	Lockwood Drive at Margarita Street
5	Lockwood Drive at Margarita Street	Tidwell Transit Center

Figure 1: University Corridor Proposed BRT Alignment



2.2.1 Connectivity to Other Transportation Facilities and Modes

The proposed University Line BRT will connect to ten (10) existing METRO facilities where transit users will be able to connect to other modes of transportation. A description of each of these facilities, including the modes of transportation transit users will be able to access is presented below.

Westchase Park & Ride

The Westchase Park & Ride (P&R) is the western terminus of the proposed BRT Project. Transit users will be able to park their private vehicles in the parking lot at this location and transfer to the proposed University Line BRT service.

Transit users will also be able to transfer to other METRO bus routes including:

- Route 151 – Westpark Express

Gessner Park & Ride

The Gessner P&R is in the southeast quadrant of the intersection of Westpark Drive and South Gessner Road. Transit users will be able to park their private vehicles in the parking lot at this location and transfer to the proposed University Line BRT service.

Transit users will also be able to transfer to other METRO bus routes including:

- Route 046 - Gessner
- Route 151 – Westpark Express

Hillcroft Park & Ride

The Hillcroft P&R is located in the southeast corner of the intersection of Westpark Tollway and 14th Street. Transit users will be able to park their private vehicles in the parking lot at this location and transfer to the proposed University Line BRT service.

Transit users will also be able to transfer to multiple other METRO bus routes including the following:

- Route 151 – Westpark Express
- Route 152 – Harwin Express
- Route 153 – Harwin Express
- Route 269 – West Bellfort / Westwood P&R
- Route 309 – Gulfton Circulator
- Route 310 – Gulfton Circulator

Westpark / Lower Uptown Transit Center

The Westpark / Lower Uptown Transit Center is located on the south side of Westpark Drive between South Rice Avenue and the interchange with IH-610. Transit users will be able to transfer between the proposed University Line BRT and other METRO services. Other services at this location include the Silver Line BRT which runs between this location and the Northwest Transit Center.

Transit users will also be able to transfer to multiple other METRO bus routes including the following:

- Route 020 – Canal / Memorial
- Route 292 – Southwest Freeway / TMC
- Route 309 – Gulfton Circulator
- Route 310 – Gulfton Circulator

Wheeler Transit Center

The Wheeler Transit Center is located in the southeast quadrant of the intersection of Wheeler Avenue and Main Street. This transit center is a transfer location between modes of transit. Users of the proposed University Line BRT will be able to transfer to the exiting METRO light rail Red Line at this stop. The Red Line connects the Northline Transit Center to the Fannin South Transit Center with stops in Downtown Houston, the Texas Medical Center, University of Houston (UH) Downtown, and NRG stadium.

Transit users will also be able to transfer to multiple other METRO bus routes including the following:

- Route 005 – Southmore
- Route 025 - Richmond
- Route 065 – Bissonnet
- Route 152 – Harwin Express
- Route 153 – Harwin Express

Eastwood Transit Center

The Eastwood Transit Center is located adjacent to the intersection of Lockwood Drive and the IH-45 NB Frontage Road. Users of the proposed University Line BRT will be able to transfer to local bus service at this location.

Transit users will be able to transfer to multiple other METRO bus routes including the following:

- Route 004 – Beechnut
- Route 009 – Gulfton / Holman
- Route 025 – Richmond
- Route 040 – Telephone / Heights
- Route 041 – Kirby / Polk
- Route 050 – Broadway
- Route 080 – MLK / Lockwood
- Route 244 – Monroe / El Dorado P&R

Fifth Ward / Denver Harbor Transit Center

The Fifth Ward / Denver Harbor Transit Center is located along Lockwood Drive just north of the interchange with IH-10. Users of the proposed University Line BRT will be able to transfer to local bus that serve this location.

Transit users will be able to transfer to multiple other METRO bus routes including the following:

- Route 011 – Almeda / Lyons
- Route 028 – OST / Wayside
- Route 048 – Market
- Route 066 – Quitman
- Route 077 – Homestead
- Route 078 – Wayside
- Route 080 – MLK / Lockwood
- Route 137 – Northshore Express

Tidwell Transit Center

The Tidwell Transit Center is the northern terminus of the proposed BRT Project and is located near the interchange of Tidwell Road and IH-69 (US 59). Transit users will be able to park their private vehicles in the parking lot at this location and transfer to the proposed University Line BRT service. This transit center also provides direct access to the existing IH-69 HOV lanes via a T-Ramp which connects from the transit center to these lanes.

Transit users will be able to transfer to multiple other METRO bus routes including the following:

- Route 006 – Jensen / Greens
- Route 080 – MLK / Lockwood
- Route 083 – Lee Road / JFK

METRO Light Rail Purple Line Connection

A proposed station for the University Line BRT will be located on the east side of the intersection of Elgin Street and Scott Street. Transit users will be able to transfer from the proposed University Line BRT here to the existing METRO Light Rail Red Line via the Elgin / Third Ward station located on the north side of the intersection of Elgin Street and Scott Street. The existing Purple Line connects destinations in Downtown Houston to the Palm Center Transit Center in southeast Houston.

METRO Light Rail Green Line Connection

A proposed station for the University Line BRT will be located on the north side of the intersection of Lockwood Drive and Harrisburg Boulevard. Transit users will be able to transfer from the proposed University Line BRT at this location to the existing METRO Light Rail Green Line via the Lockwood Eastbound or Westbound stations located just to the west of the intersection of Lockwood Drive and Harrisburg Boulevard. The existing Green Line connects destinations in Downtown Houston to the Magnolia Park Transit Center.

METRO Light Rail Red Line Connection

Proposed stations for the University Line BRT will be located on the east side of the intersection of Wheeler Avenue and Main Street. Transit users will be able to transfer from the proposed University Line BRT at this location to the existing METRO Light Rail Red Line via the Wheeler Transit Center located at the southeast quadrant of the intersection of Wheeler Avenue and Main Street. The exiting Red Line connects destinations in Downtown Houston, the Texas Medical

Center and NRG Stadium between the Northline Transit Center and the Fannin South Transit Center.

METRO Bus Rapid Transit Silver Line Operations and Connection

The existing METRO BRT Silver Line will operate within the University Corridor's guideway from IH-610 to the Westpark/Lower Uptown Transit Center, which is located on the south side of Westpark Drive between South Rice Avenue and the interchange with IH-610. Transit users will be able to use the Westpark/Lower Uptown Transit Center to transfer between the proposed University Line BRT and the Silver Line, which runs between this location and the Northwest Transit Center.

The majority of the stations throughout the corridor will be center platforms with a few side stations throughout the corridor where necessary (primarily in Segment 1). The design of the stations are included in other documents developed for the proposed Project. The proposed stations as designed in the schematic drawings are included in the traffic models.

3 Methodology

The BRT Project's paradigm is to repurpose the use of existing ROW to provide the maximum mobility benefit for all travel modes while minimizing impacts. Additional mobility benefits include the use of high-capacity transit buses, wider pedestrian spaces with buffer zones, shared use pathways and an overall safer roadway design. The impacts considered for the Project include minimizing additional ROW needs, maintaining acceptable traffic conditions, preserving existing trees, avoiding conflicts with major utilities, utilizing existing bridge structures with minimal modifications and reducing the amount of additional impervious area within the ROW to minimize drainage capacity issues along the corridor.

Existing and projected traffic conditions were determined through traffic modeling while the roadway and BRT lane configurations were designed with input from the traffic analysis while also considering ROW limitations, locations of existing trees and major utility facilities, existing bridge sections and the results of the drainage analyses. The traffic modeling and design efforts were performed in parallel with continuous coordination to ensure that the designed lane configurations were adequately represented in the modeled lane configurations. At certain major intersections within COH ROW with poor LOS, several mitigation scenarios were analyzed to improve the LOS while also tracking the associated ROW impacts. These scenarios were discussed with COH and are included as Appendix I for reference.

Traffic modeling was performed for the existing conditions, the future year (2030) No-Build conditions, and the future year (2030) Build conditions. TransModeler software was selected to develop the traffic models for the Existing, 2030 No-Build, and 2030 Build conditions. This software was chosen over other traffic modeling tools based on the public transit features which are built into the software including the simulation of BRT operations, exclusive bus lanes, traffic signal priority, and queue jumping. Many of these features are not included in other software packages that were considered for use on this Project.

3.1 Existing Traffic Conditions

The existing conditions throughout the study area were documented and used to construct the existing conditions traffic models. These models were then used as the basis for the future year No-Build and Build conditions models. This section of the report details those actions that were taken during the analysis to fully document the existing conditions.

3.1.1 Existing Traffic Volumes

Traffic data were collected along the corridor in September of 2021, with additional supplemental counts being taken in February and March of 2022. Counts were taken during the AM and PM peak hours under typical weekday traffic. AM peak traffic counts were collected between 7:00 AM and 9:00 AM and PM peak traffic counts were collected between 4:00 PM and 6:00 PM.

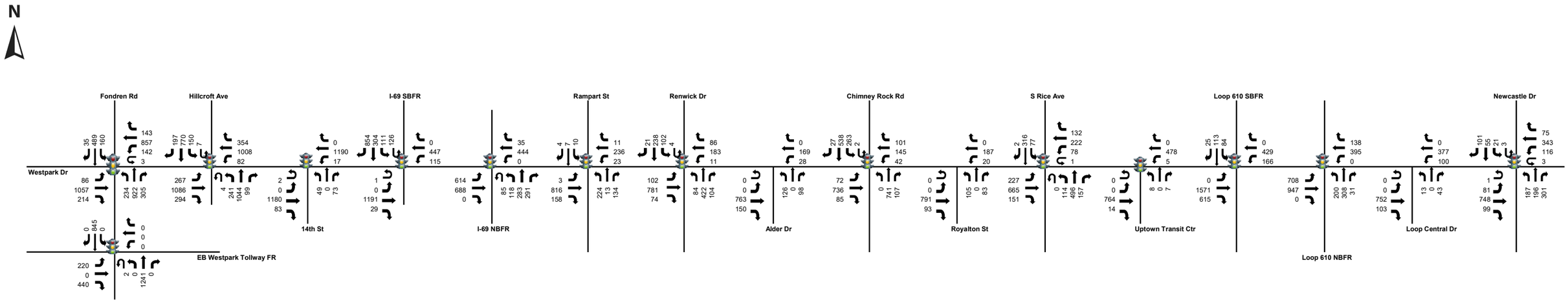
Existing condition traffic volumes were developed for both the AM and PM peak hours based on corridor wide peaks in each segment. Volumes between intersections were balanced and adjusted as necessary based on land uses and the presence of traffic source/sinks between traffic signals.

The AM and PM peak hour traffic volumes for each segment were based on the peak hour of traffic for each segment as indicated in **Table 2**.

Table 2: University Corridor Peak Hours by Segment

SEGMENT	AM PEAK HOUR	PM PEAK HOUR
1	7:30 AM to 8:30 AM	4:00 PM to 5:00 PM
2	7:45 AM to 8:45 AM	4:15 PM to 5:15 PM
3	7:45 AM to 8:45 AM	4:45 PM to 5:45 PM
4	7:15 AM to 8:15 AM	4:00 PM to 5:00 PM
5	7:15 AM to 8:15 AM	4:15 PM to 5:15 PM

Figures 2 through 11 show the existing AM and PM peak hour volumes at each of the intersections included in the study area. Origin-Destination (O-D) matrices were developed for the AM and PM peak scenarios from the regional Travel Demand Model from H-GAC. The O-D matrices were based on demographics and network inputs from the H-GAC official scenarios. The O-D matrices for the existing conditions were grown to 2030 No-Build and Build conditions and were used as inputs into the TransModeler models to load traffic demand onto the network. TransModeler software determined the actual vehicle paths between the origins and destinations for each scenario.


N
Fondren Rd
Hillcroft Ave
I-69 SBFR
Rampart St
Renwick Dr
Chimney Rock Rd
S Rice Ave
Loop 610 SBFR
Newcastle Dr
Westpark Dr
14th St
I-69 NBFR
Alder Dr
Royalton St
Uptown Transit Ctr
Loop Central Dr
EB Westpark Tollway FR
Loop 610 NBFR
35 489 160
143 857 142 3
197 770 150 7
354 1008 82
267 1086 294
4 241 1044 99
2 0 1180 83
0 1190 17
49 0 73
854 304 111 126
1 0 1191 29
0 447 115
614 688 0
35 444 0
85 118 283 291
4 7 10
3 816 158
11 236 23
224 13 134
21 238 102 4
102 781 74
86 183 11
84 422 104
0 0 763 150
0 169 28
126 0 98
27 538 263 2
72 736 85
101 145 42
0 741 107
0 0 791 93
0 187 20
105 0 83
2 316 77
132 222 78 1
227 665 151
0 114 496 157
0 0 764 14
0 478 5
8 0 7
25 13 84
0 1571 615
0 429 166
708 947 0
138 395 0
200 308 31
0 0 752 103
0 377 100
13 0 43
101 55 21 3
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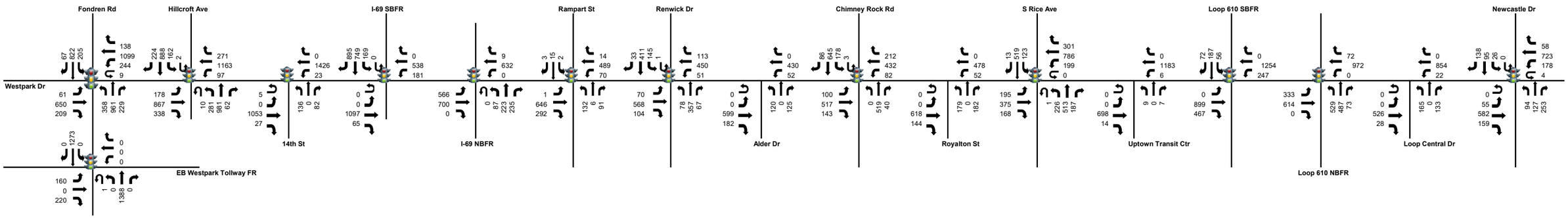
75 343 116 3
187 196 301
0 845 0
0 0 0
220 0 440
2 0 1241 0
KEY:
Signalized Intersection

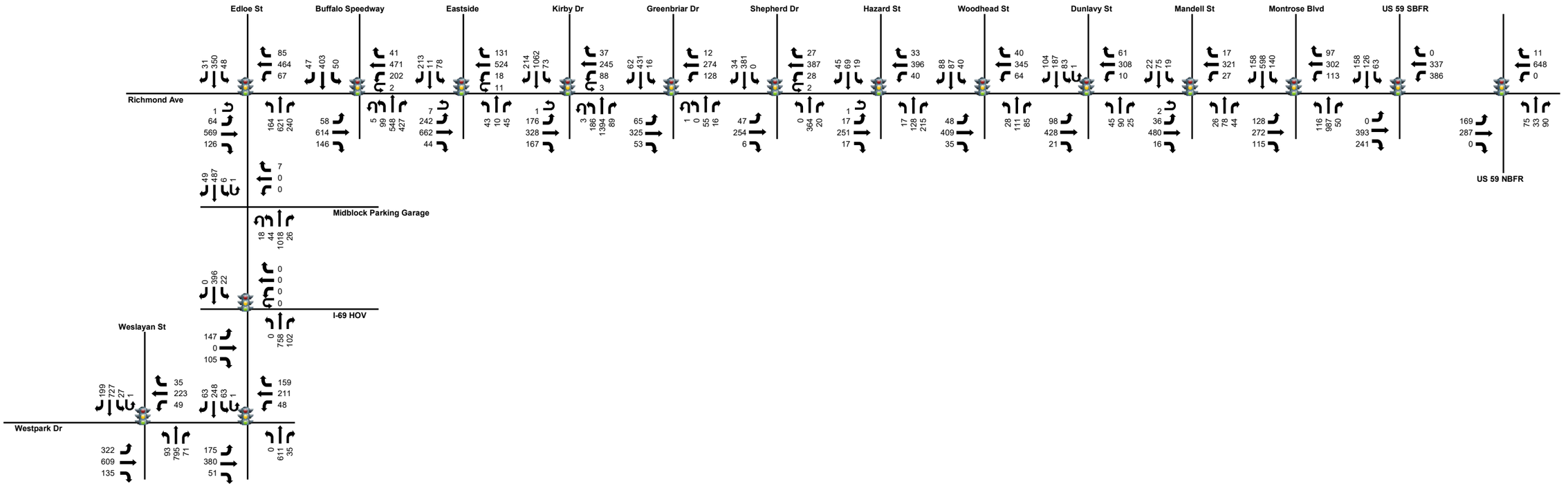
N



KEY:

Signalized Intersection

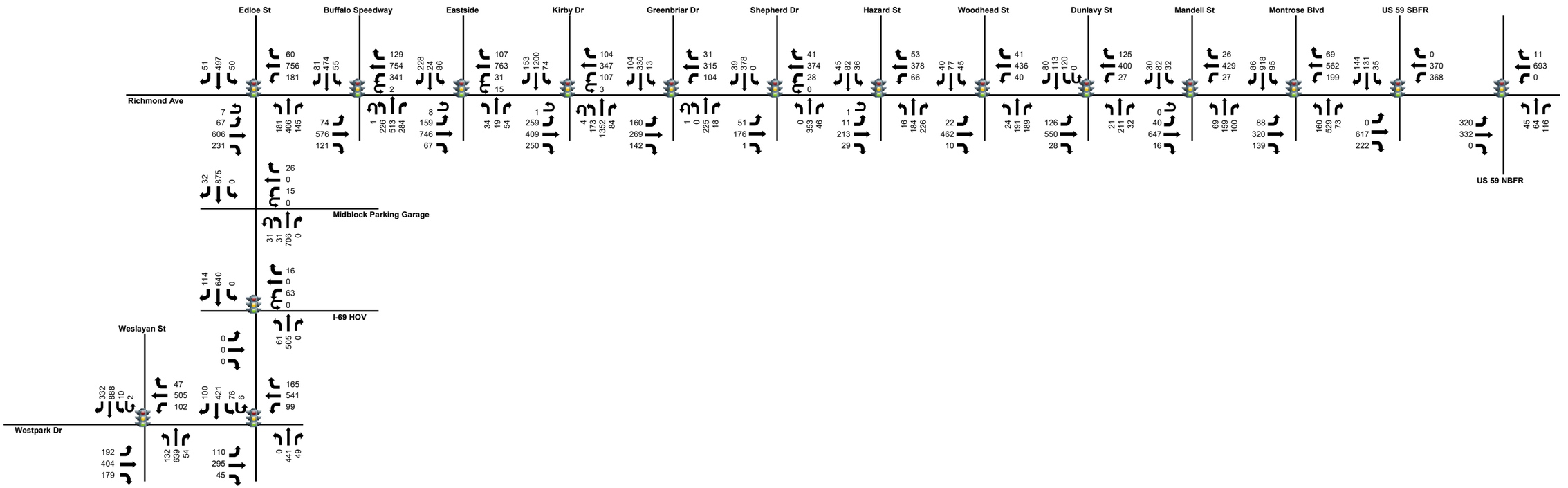
N



KEY:

Signalized Intersection

N



KEY:

Signalized Intersection

N
Lockwood Dr
I-45 NBFR
Spur 5 NBFR
Scott St
Cullen Blvd
UH Entrance
Spur 5 SBFR
Elgin St
Holman St
Alabama St
Cleburne St
Main St
Fannin St
San Jacinto St
LaBranch St
Almeda Rd
Chartres St
Hutchins St
Richmond Ave
Wheeler Ave
St Emanuel St
Emancipation Ave
Ennis St
KEY:
Signalized Intersection

N
Lockwood Dr
I-45 NBFR
Spur 5 NBFR
Scott St
Cullen Blvd
UH Entrance
Spur 5 SBFR
Elgin St
Holman St
Alabama St
Cleburne St
Main St
Fannin St
San Jacinto St
LaBranch St
Almeda Rd
Chartres St
Hutchins St
Richmond Ave
Wheeler Ave
St Emanuel St
Emancipation Ave
Ennis St
KEY:
Signalized Intersection

N
Lockwood Dr
Sonora St
Clinton Dr
Amour Dr
Navigation Blvd
Canal St
Harrisburg Blvd
McKinney St
Polk St
Leeland St/Telephone Rd
Munger St
Ernestine St
Hickfield St
KEY:
Signalized Intersection

N
Lockwood Dr
Sonora St
Clinton Dr
Amour Dr
Navigation Blvd
Canal St
Harrisburg Blvd
McKinney St
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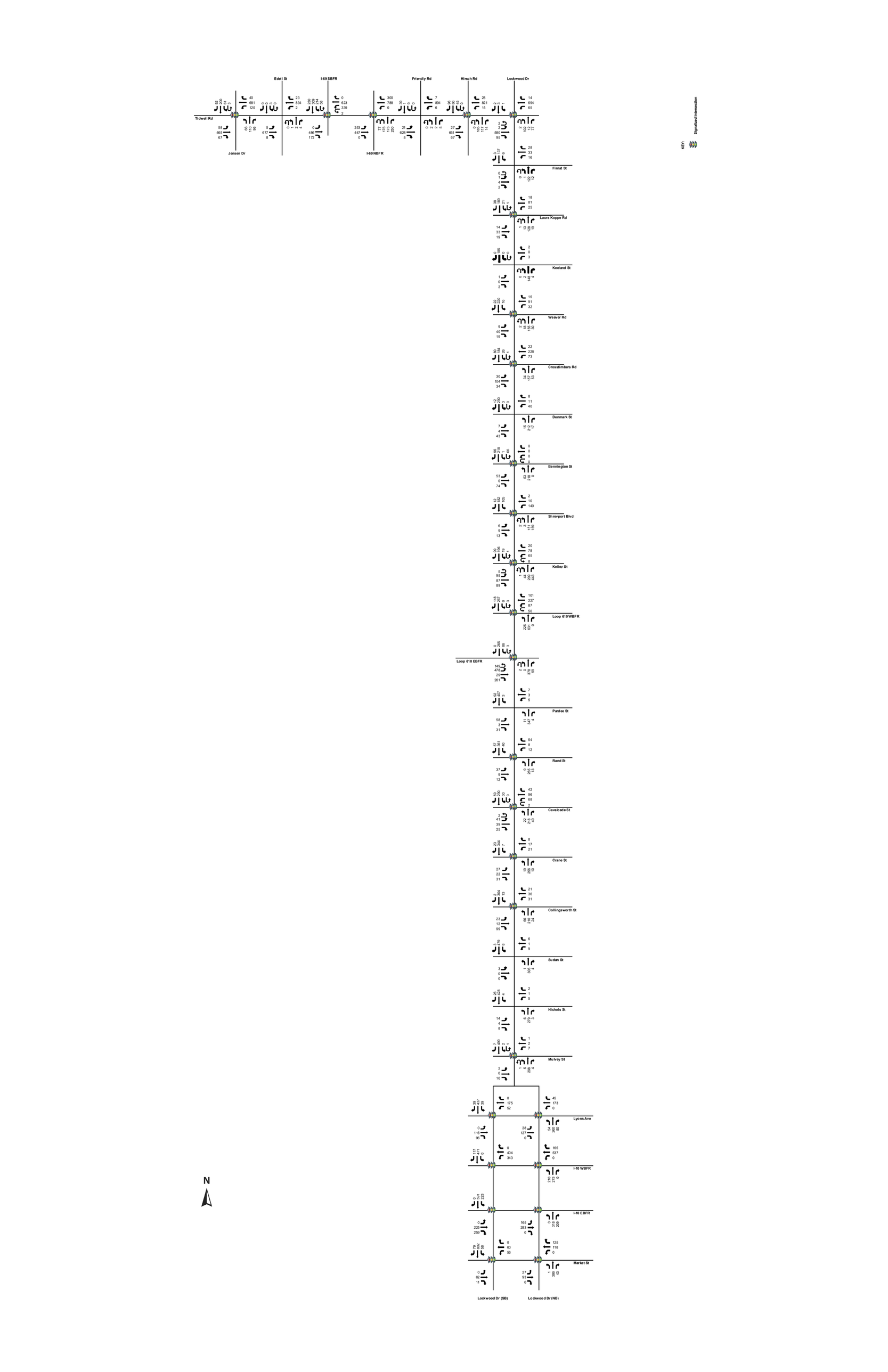
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Weaver Rd
Crosstimbers Rd
Denmark St
Bennington St
Shreveport Blvd
Kelley St
Loop 610 WBFR
Loop 610 EBFR
Pardee St
Rand St
Cavalcade St
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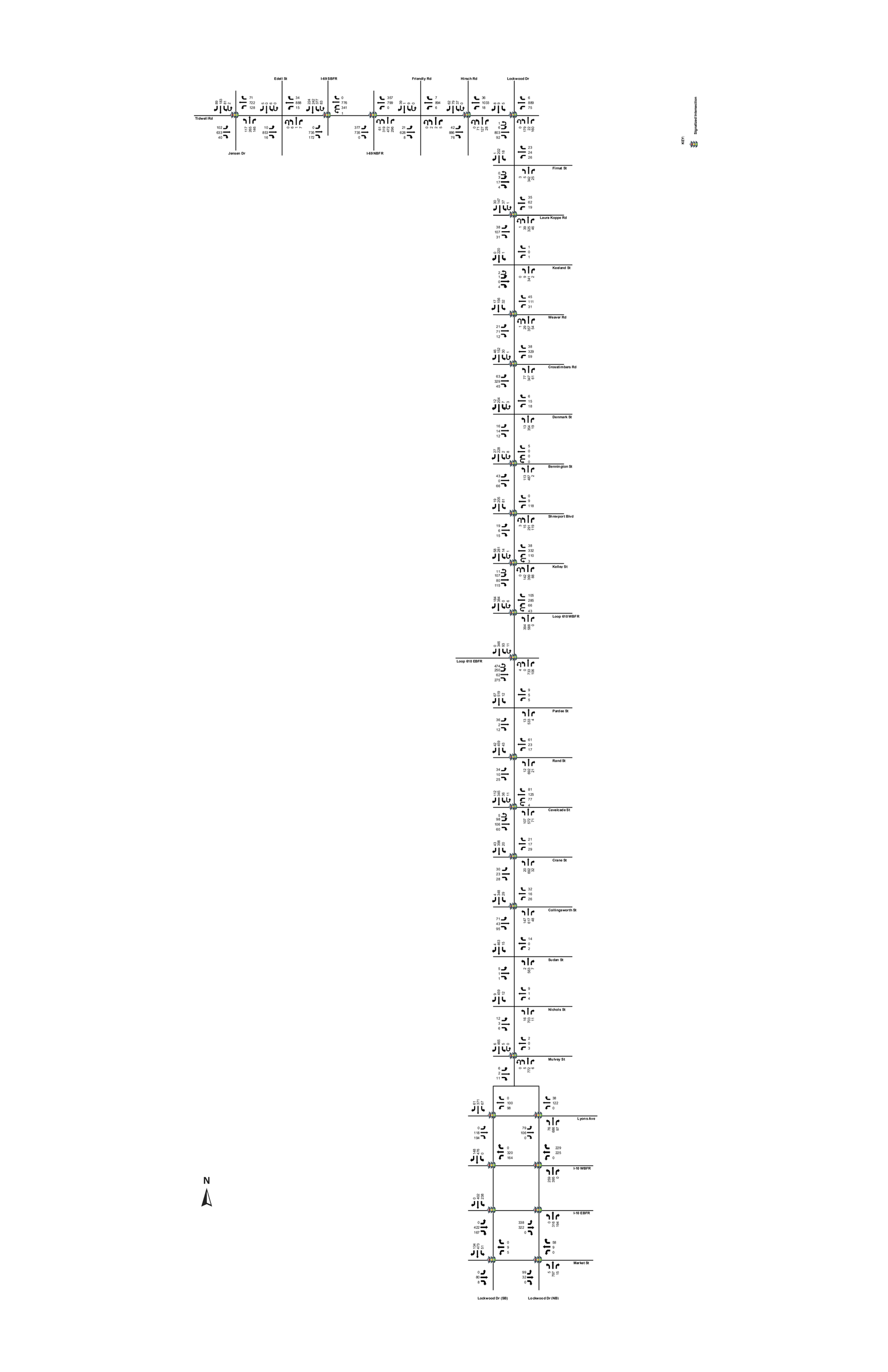
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I-10 WBFR
I-10 EBFR
Market St
Lockwood Dr (SB)
Lockwood Dr (NB)
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KEY:
Signalized Intersection

3.1.2 Field Observations

Field visits were performed by the Project team during the AM and PM peak hours to observe traffic operations, areas of congestion, and safety issues that occur along the proposed alignment and at study intersections. Travel time runs were performed in both directions along all segments of the study area. Video was collected along the proposed BRT route in the segments to document the travel times, areas of congestion, existing lane configurations and phasing at the signalized intersections.

3.1.3 Traffic Signal Operations

Timing plans for all signalized intersections included in the model were obtained from COH, who operates and maintains the signals along the University Corridor. The intersection phasing and timing plans for the AM and PM peak hours were included in both the existing conditions and the 2030 No-Build conditions traffic models.

3.2 Future Traffic Conditions

Growth rates for the future year traffic conditions were determined and used to develop future year traffic volume forecasts. This section details how these growth rates were developed.

3.2.1 Growth Rate

The METRO version of the H-GAC model demographic and network inputs from H-GAC's official scenarios were used to develop traffic growth rates in the Travel Demand Model. The official H-GAC scenario transit network includes all METRONext projects and highway networks included in the regional long range transportation plan developed by H-GAC. Considering that H-GAC's latest model validation base year is 2016, a conformity base year of 2020 and conformity forecast year of 2030 were used. ATG reviewed the H-GAC official 2045 model network and confirmed that the METRONext Moving Forward Plan was already included in the network. Additional review of the H-GAC network confirmed that the 2020 transit network is consistent with the Inner Katy Project team's assumption on the 2027 and 2045 No-Build transit network, a transit project planned to begin before the University Line Project. Therefore, the same set of assumptions are used to define the No-Build transit network as the Inner Katy Project.

Three scenarios were run: 2020, 2045 No-Build and 2045 Build. The difference between 2045 No-Build and 2045 Build is the exclusion of the University Line in the 2045 No-Build Scenario. **Table 3** lists the planned transit and highway projects included in the model that were used to run the 2020, 2045 No-Build, and 2045 Build scenarios.

Table 3: Planned Transit and Highway Projects used in the TDM Model Runs

2020 Network	2045 No-Build Network	2045 Build Network

• METRORapid Silver Line
• Northline Transit Center
• West Bellfort P&R
• Boost:
  ○ 82 Westheimer
  ○ 54 Scott
  ○ 56 Airline/Montrose
  ○ 80 MLK/Lockwood
  ○ 4 Beechnut
  ○ 73 Bellfort
  ○ 2 Bellaire
  ○ 402 Bellaire/Palm Center Quickline Eastern Extension
	• METRORapid Silver Line
	• Northline TC
	• West Bellfort P&R
	• METRONext Projects:
	  ○ MetroRail
	  ▪ Green/Purple Extension to Hobby Airport
	  ▪ Red Line Extension to N. Shepherd
	  ▪ Green/Purple Line Extension to Courthouse
	  ▪ Potential Red Line Extension to Missouri City & Sugar Land
	  ○ MetroRapid
	  ▪ IH-45 North to IAH & Greenspoint
	  ▪ Silver Line Extension to Gulfton
	  ▪ West Houston Corridor
	  ▪ Inner Katy Corridor
	  ○ Regional Express Network:
	  ▪ US 90A Two-Way HOV
	  ▪ IH 10 West Two-Way HOV
	  ▪ IH 45 North Two-Way HOV
	  ▪ IH 69/US 59 Two-Way HOV (Downtown to Edloe)
	  ▪ SH 249 Corridor & Facilities to Boudreaux
	  ▪ 4 Off-Peak Direction Diamond Lane Corridors
	  ○ BOOST & Signature Service
	  ▪ 17 Corridors
	  ▪ Westheimer Signature Bus Service
	• Reconstruction of IH-69/IH-610 Interchange
	• NHHIP: IH 69 (SH 288 to Spur 527)
	• NHHIP: IH 69 (IH-45 to SH 288)
	• IH-10 East HOV Lanes
		• METRORapid Silver Line
		• Northline TC
		• West Bellfort P&R
		• METRONext Projects:
		  ○ MetroRail
		  ▪ Green/Purple Extension to Hobby Airport
		  ▪ Red Line Extension to N. Shepherd
		  ▪ Green/Purple Line Extension to Courthouse
		  ▪ Potential Red Line Extension to Missouri City & Sugar Land
		  ○ MetroRapid
		  ▪ IH-45 North to IAH & Greenspoint
		  ▪ **University Corridor**
		  ▪ Silver Line Extension to Gulfton
		  ▪ West Houston Corridor
		  ▪ Inner Katy Corridor
		  ○ Regional Express Network:
		  ▪ US 90A Two-Way HOV
		  ▪ IH 10 West Two-Way HOV
		  ▪ IH 45 North Two-Way HOV
		  ▪ IH 69/US 59 Two-Way HOV (Downtown to Edloe)
		  ▪ SH 249 Corridor & Facilities to Boudreaux
		  ▪ 4 Off-Peak Direction Diamond Lane Corridors
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		• Reconstruction of IH-69/IH-610 Interchange
		• NHHIP: IH 69 (SH 288 to Spur 527)
		• NHHIP: IH 69 (IH-45 to SH 288)
		• IH-10 East HOV Lanes

NHHIP: North Houston Highway Improvement Project
Source: H-GAC Regional Transportation Plan Model

From the 2020 and 2045 model results, growth rates were estimated for each segment of the corridor. The analysis indicated the westernmost region of the corridor experiences the highest growth rates and the northernmost region experienced the lowest growth rates. The recommended annual growth rates and applied growth factors for vehicular traffic in each segment are shown in

Table 4. The growth rates for the Build conditions were lower than for the No-Build conditions to account for modal shift of trips from vehicular traffic to the proposed BRT Project.

Table 4: Recommended Growth Rates and Growth Factors for University Line Traffic Projections

Segment	Annual Growth Rates (No-Build)	Growth Factors (No-Build)	Annual Growth Rates (Build)	Growth Factors (Build)
	2021 to 2040	2021 to 2030	2021 to 2040	2021 to 2030
1	1.9%	1.17	1.8%	1.16
2	1.1%	1.10	1.0%	1.09
3	0.9%	1.08	0.8%	1.07
4	0.9%	1.08	0.8%	1.07
5	0.4%	1.04	0.3%	1.03

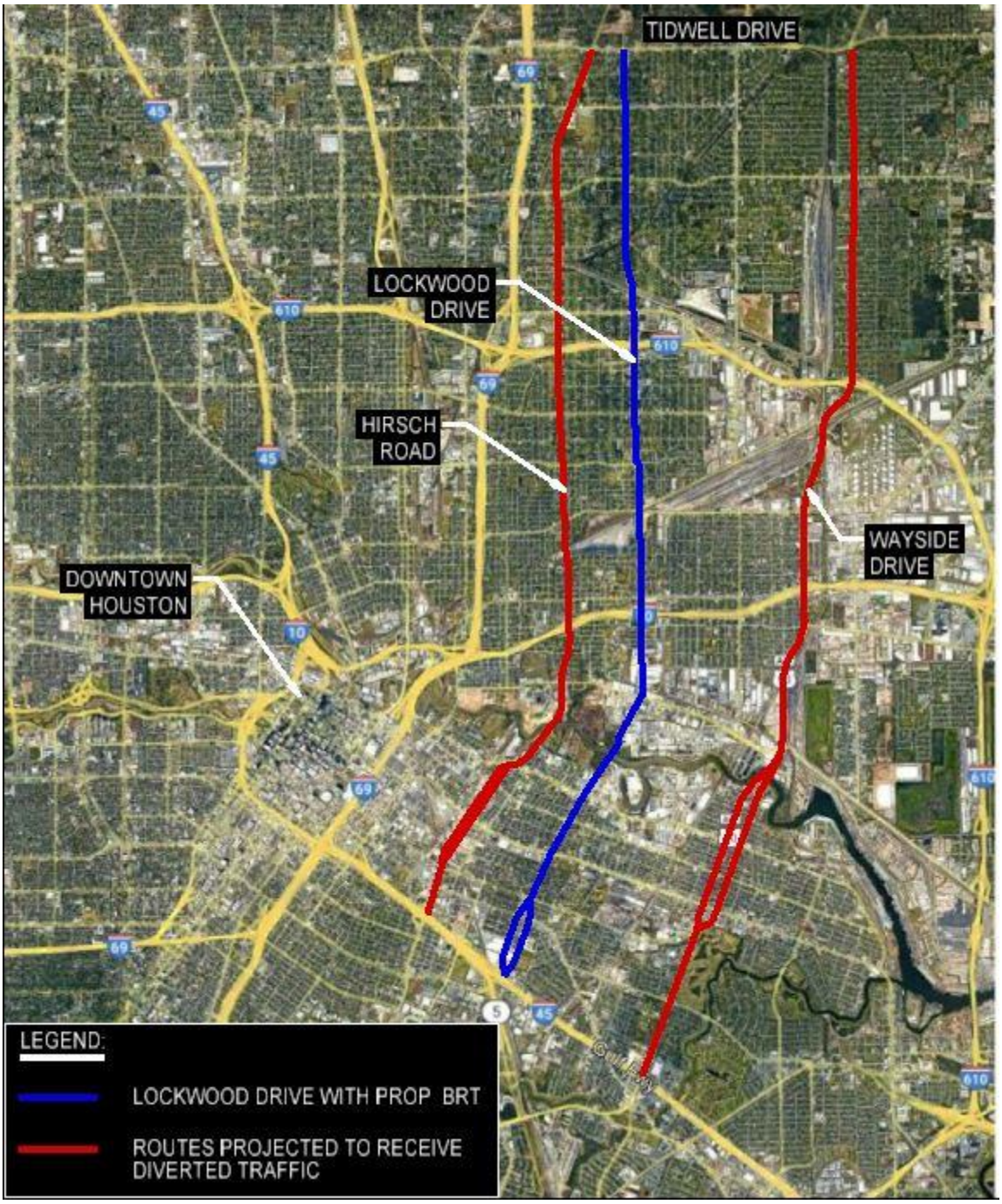
Due to the nature of the proposed improvements, it was anticipated that some of the traffic currently on the roadways with the proposed BRT would divert their route due to the nature of the improvements (removing one general purpose lane). The 2045 H-GAC model was used to evaluate the change in volume-to-capacity (v/c) ratios for alternative routes in both the AM and PM peak hours for both Richmond Avenue in Segment 2 and Lockwood Drive in Segments 4 and 5. A v/c ratio is a comparison of the traffic volume on a roadway to the amount of traffic that the roadway is able to carry in peak hours. A low v/c ratio indicates low levels of congestion and a v/c ratio over 1.0 indicates that the traffic demand on the roadway exceeds the capacity to carry that traffic. As the BRT in Segment 1 operates mostly outside of COH ROW and the traffic volumes in Segment 3 are relatively low when compared to other Segments, alternative routes were not evaluated in these segments.

The results of the analysis indicated that there are currently no parallel routes with excess capacity in Segment 2. Therefore, no reductions in traffic demand were made to the proposed Build volumes on Richmond Avenue. However, there are two parallel routes with excess capacity for Lockwood Drive between IH-45 and Tidwell Road including Hirsch Road and Wayside Street. **Table 5** shows the average v/c ratios that were calculated on Lockwood Drive, Hirsch Road, and Wayside Street both with and without the proposed BRT Project in place. As noted in the table There is projected to be excess capacity on both Hirsch Road and Wayside Street between IH-45 and Tidwell. The v/c ratios on these streets are low enough to handle the diverted traffic and the results of the H-GAC model runs indicate that with the proposed University Line BRT in place traffic would divert to these alternative routes as the v/c ratios on these streets are projected to increase. **Figure 12** shows Lockwood Drive in Purple and Hirsch Road and Wayside Street in Red.

Table 5: Lockwood Drive and Parallel Routes Projected v/c Ratios

Roadway	From	To	2045 AM Peak v/c			2045 PM Peak v/c		
			No-Build	Build	Change	No-Build	Build	Change
Lockwood Drive	IH-45	Harrisburg	0.968	1.312	0.344	1.036	1.272	0.236
	Harrisburg	Navigation	0.414	0.692	0.278	0.534	0.750	0.216
	Navigation	Clinton	0.367	0.659	0.292	0.520	0.907	0.388
	Clinton	Lyons	0.483	0.869	0.386	0.600	0.902	0.302
	Lyons	Liberty	0.252	0.357	0.106	0.325	0.440	0.115
	Liberty	Cavalcade	0.315	0.595	0.281	0.439	0.777	0.338
	Cavalcade	Kelley	0.550	0.857	0.307	0.758	1.314	0.555
	Kelley	Crosstimbers	0.219	0.457	0.238	0.623	0.792	0.169
	Crosstimbers	Tidwell	0.164	0.348	0.184	0.439	0.574	0.136
Hirsch Road	IH-45	Harrisburg	1.044	1.000	-0.044	1.144	1.143	-0.001
	Harrisburg	Navigation	0.653	0.687	0.034	0.832	0.841	0.009
	Navigation	Clinton	0.561	0.576	0.015	0.623	0.652	0.029
	Clinton	Lyons	0.615	0.621	0.006	0.680	0.802	0.121
	Lyons	Liberty	0.220	0.229	0.009	0.320	0.366	0.046
	Liberty	Cavalcade	0.220	0.229	0.009	0.278	0.327	0.049
	Cavalcade	Kelley	0.154	0.165	0.010	0.268	0.353	0.085
	Kelley	Crosstimbers	0.129	0.129	0.001	0.126	0.224	0.098
	Crosstimbers	Tidwell	0.474	0.479	0.005	0.849	0.861	0.012
Wayside Street	IH-45	Harrisburg	0.508	0.509	0.001	0.799	0.811	0.012
	Harrisburg	Navigation	0.202	0.202	0.000	0.302	0.307	0.005
	Navigation	Clinton	0.272	0.273	0.002	0.328	0.335	0.008
	Clinton	IH-10	0.198	0.197	-0.001	0.224	0.226	0.002
	IH-10	Wallisville	0.299	0.298	-0.001	0.326	0.333	0.008
	Wallisville	IH-610	0.209	0.209	0.000	0.352	0.367	0.014
	IH-610	Ley	0.508	0.508	0.000	0.532	0.532	0.000
	Ley	Tidwell	0.322	0.326	0.004	0.373	0.375	0.002

Figure 12: Lockwood Drive and Parallel Routes



Source: Google Earth

The regional travel demand model shows that once the proposed University Line BRT Project has been constructed some of the traffic currently on Lockwood Drive will transition to Hirsch Road and Wayside Street. Since Hirsch Road is located on average two-thirds of a mile to the west of Lockwood Drive and Wayside Street is located on average two miles to the east of Lockwood Drive, a majority of the diverted traffic will route to Hirsch Road. The v/c ratios on Hirsch Road are projected to increase an average of about one-half percent in the AM peak and about 5 percent in the PM peak. The v/c ratios on Wayside Street are projected to increase about one-half percent for both the AM and PM peaks.

Based on the results of the travel demand modeling, it was assumed that 10 percent of the through traffic on Lockwood Drive would divert to parallel routes due to the reduction in capacity on this corridor. Therefore, in Segments 4 and 5, the through volumes on Lockwood Drive were reduced by 10 percent from what was calculated by the growth rates.

Figures 13 through 22 show the projected traffic volumes that were used for the 2030 No-Build conditions traffic analysis. **Figures 23 through 32** show the projected traffic volumes which were used for the 2030 Build conditions traffic analysis.

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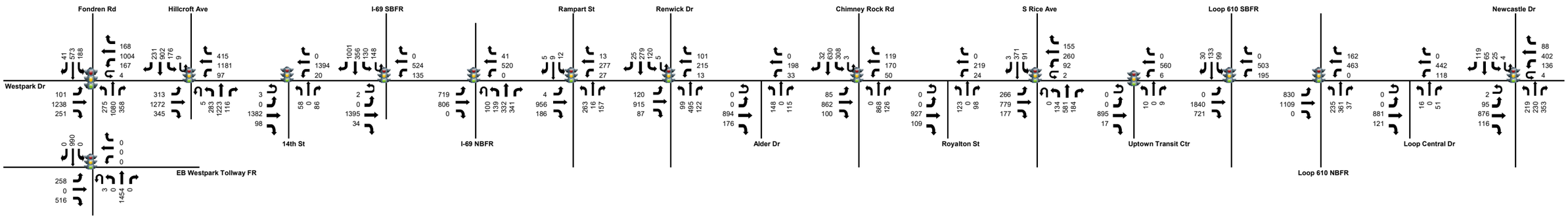

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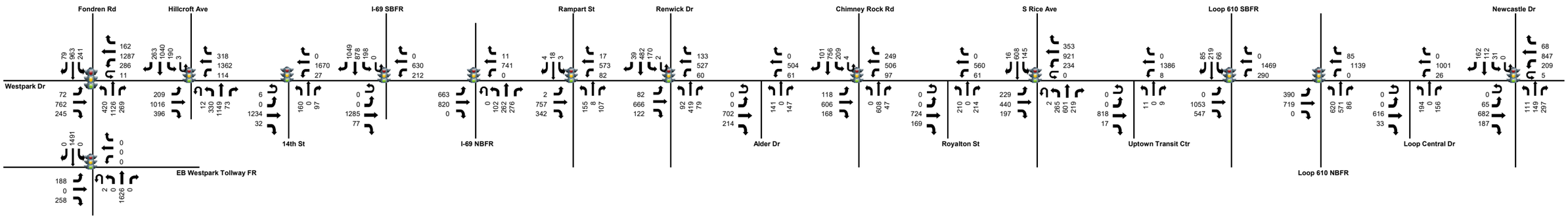

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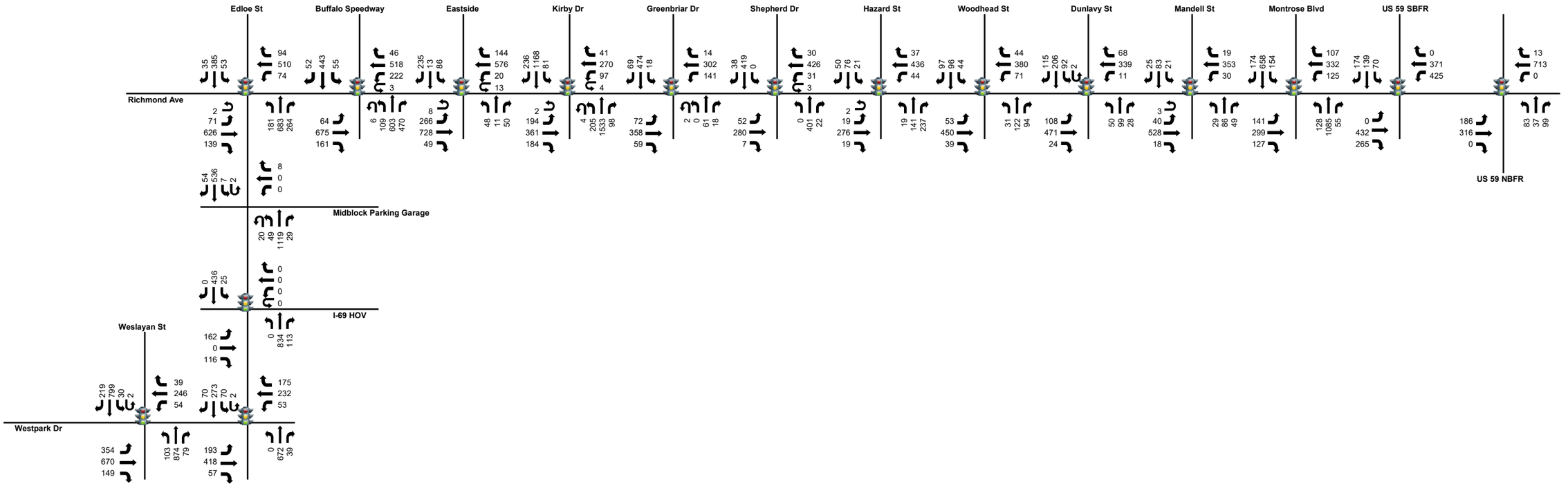

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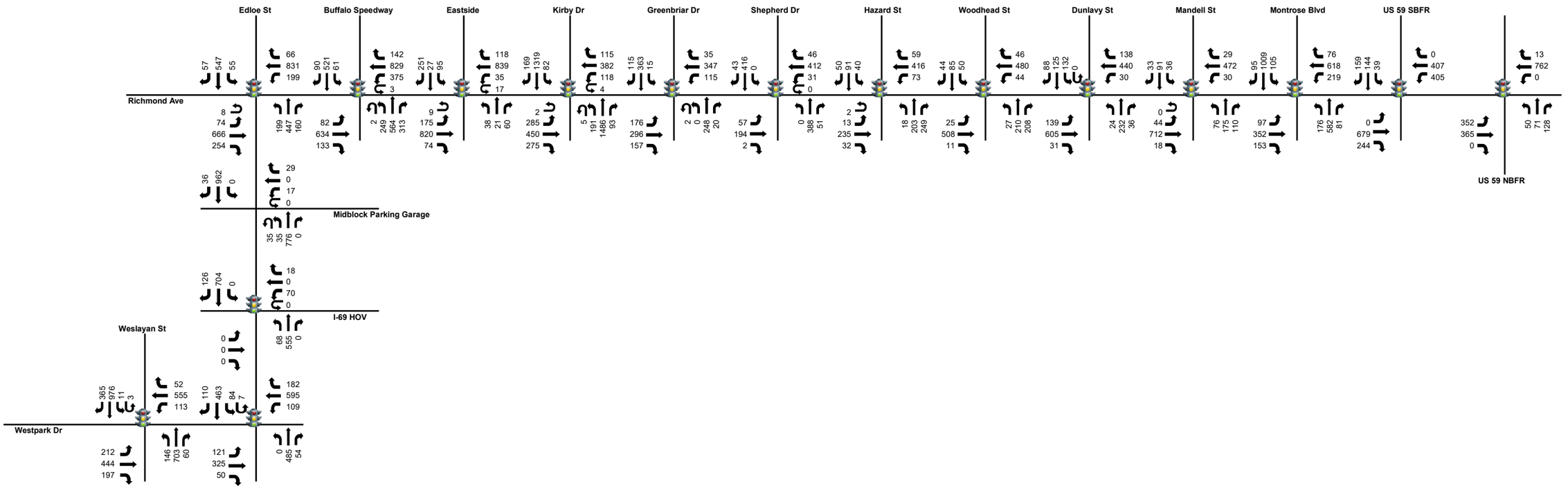

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Cleburne St
Main St
Fannin St
San Jacinto St
LaBranch St
Almeda Rd
Chartres St
Hutchins St
Richmond Ave
Wheeler Ave
St Emanuel St
Emancipation Ave
Ennis St
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Scott St
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UH Entrance
Spur 5 SBFR
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St Emanuel St
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Clinton Dr
Amour Dr
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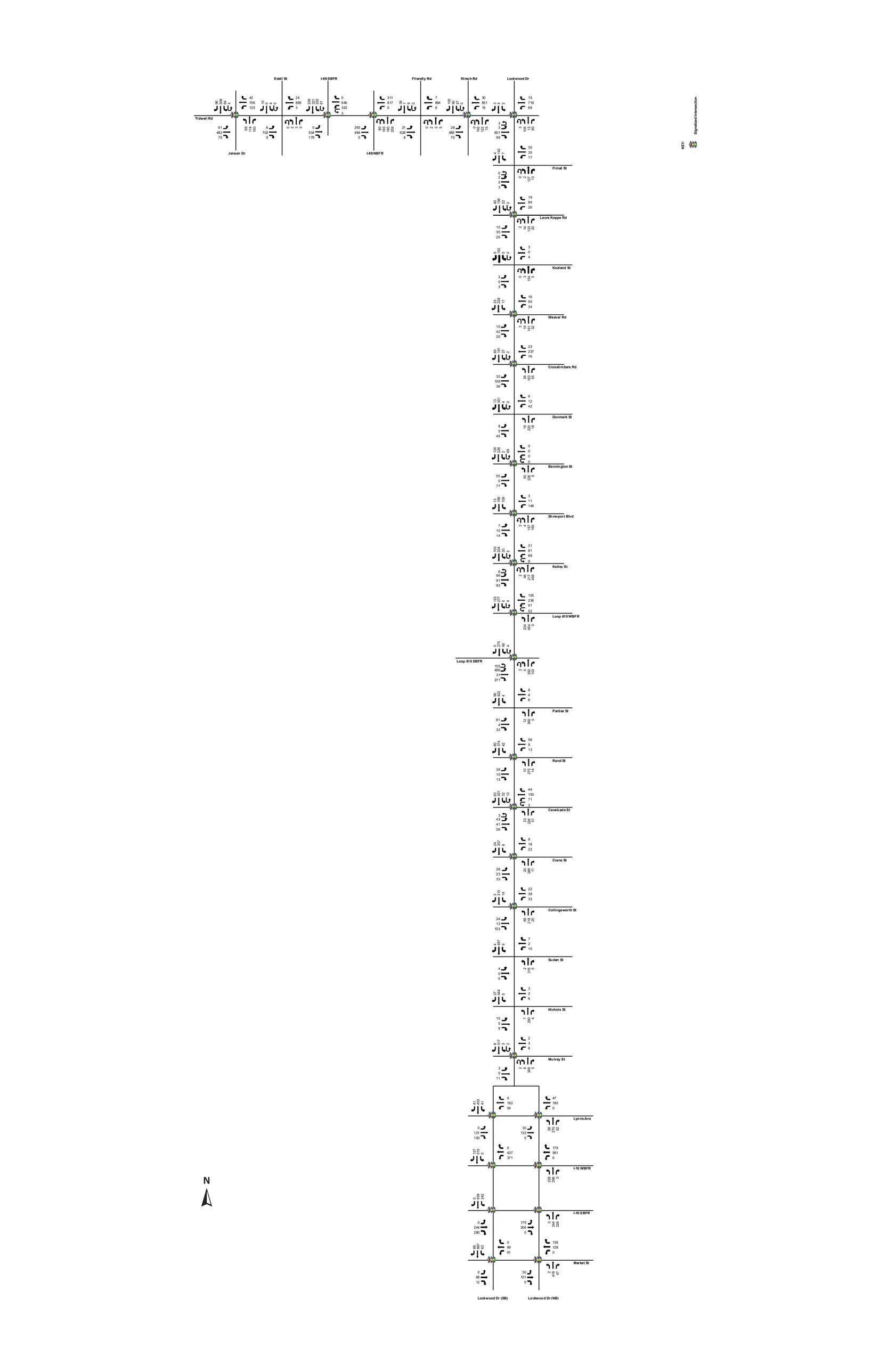
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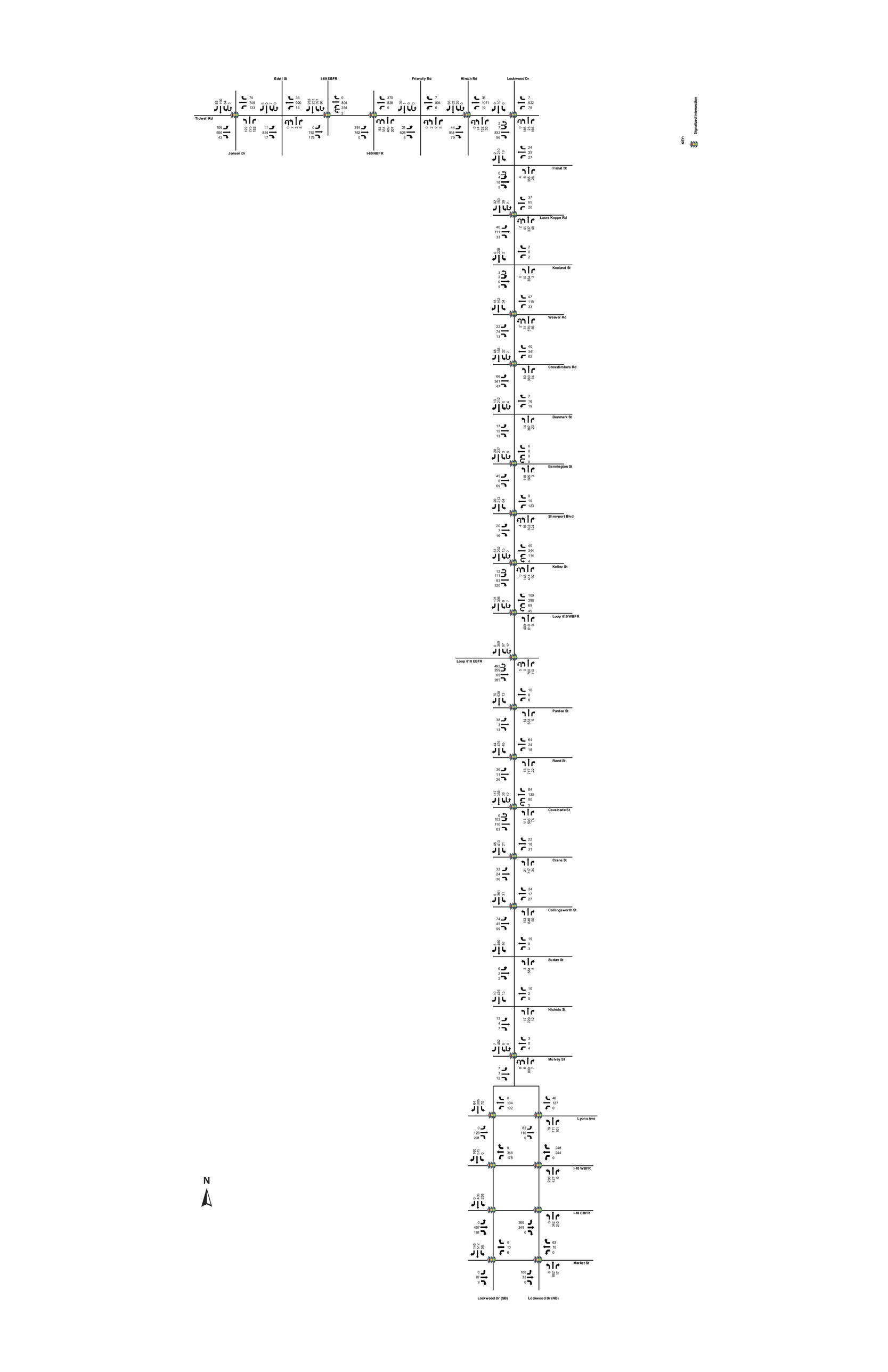
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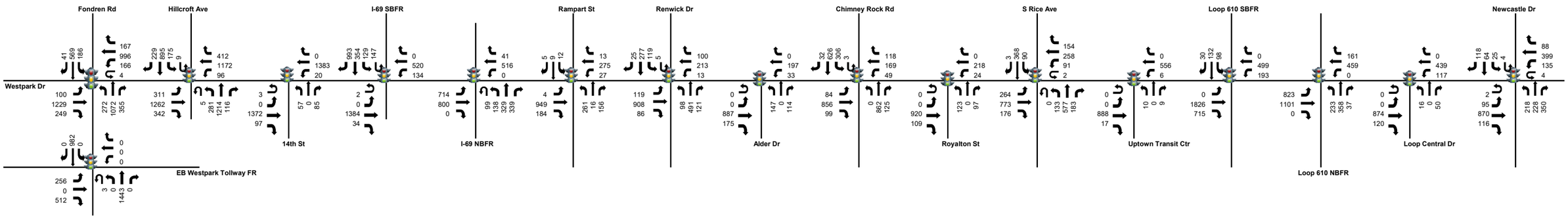

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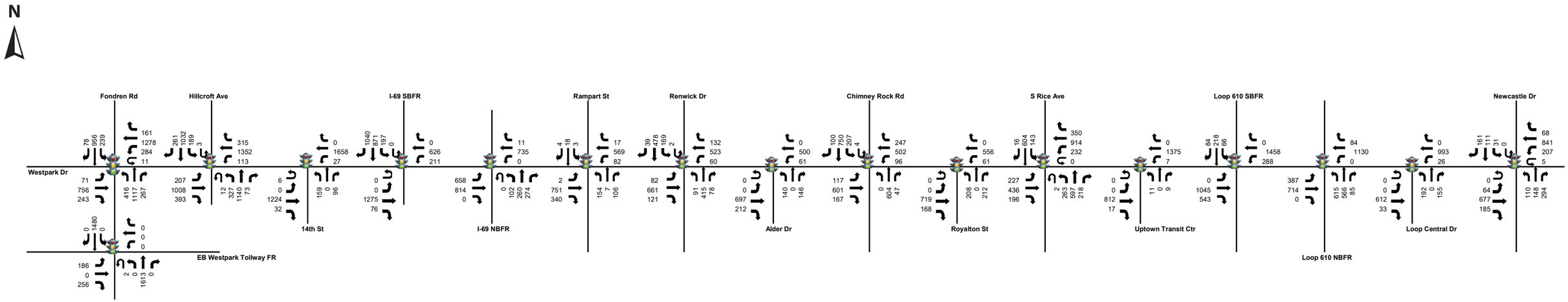

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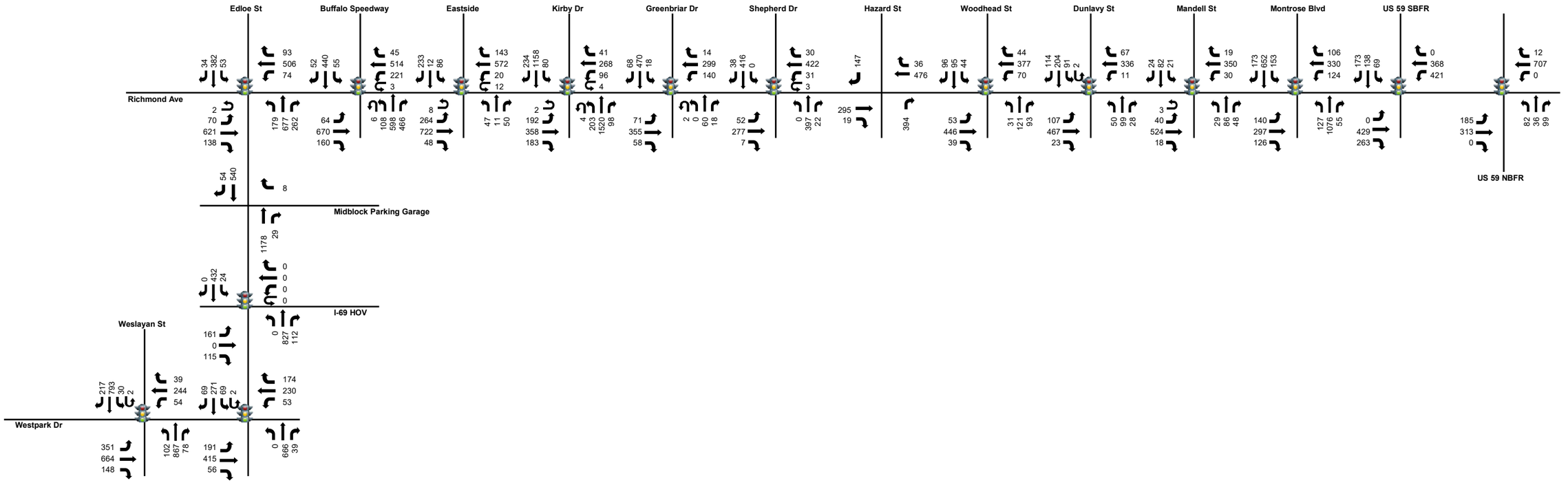

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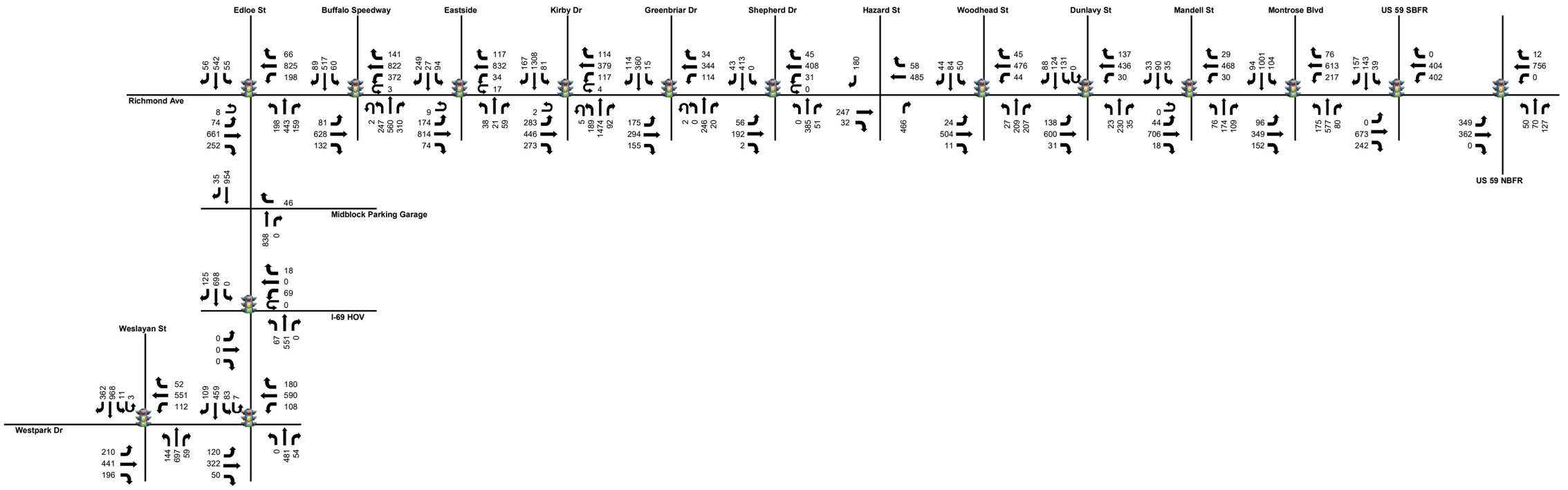

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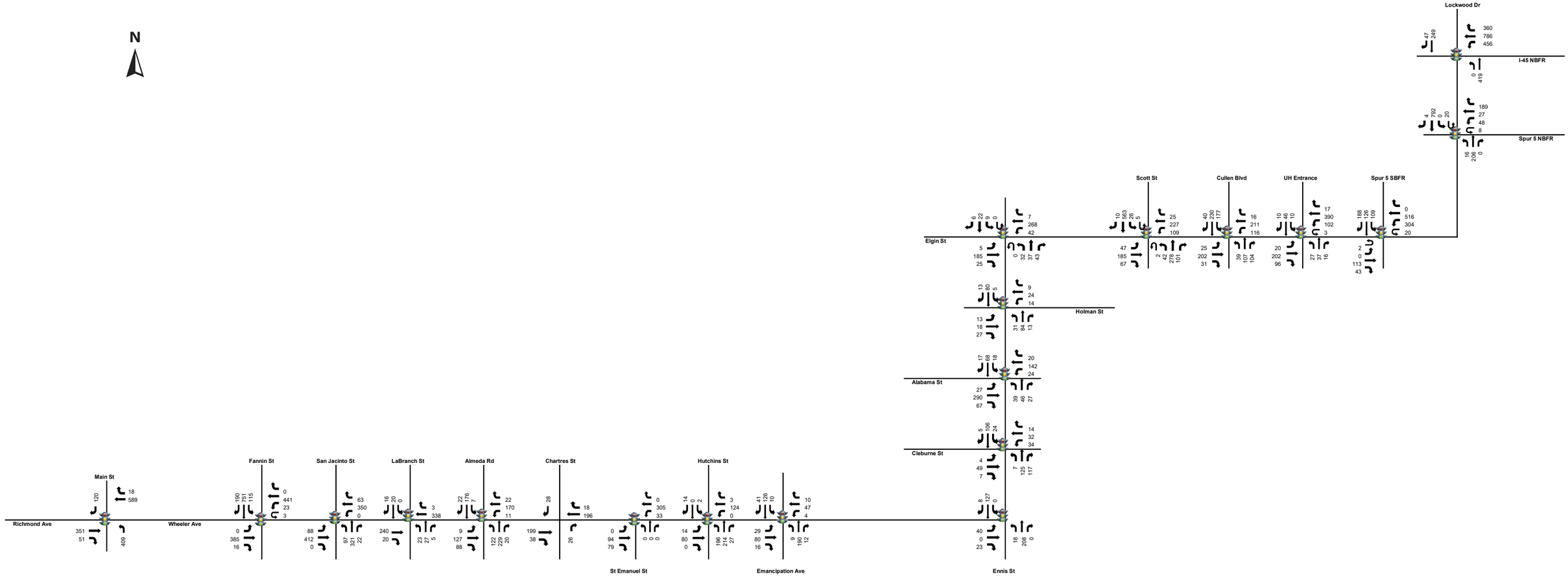

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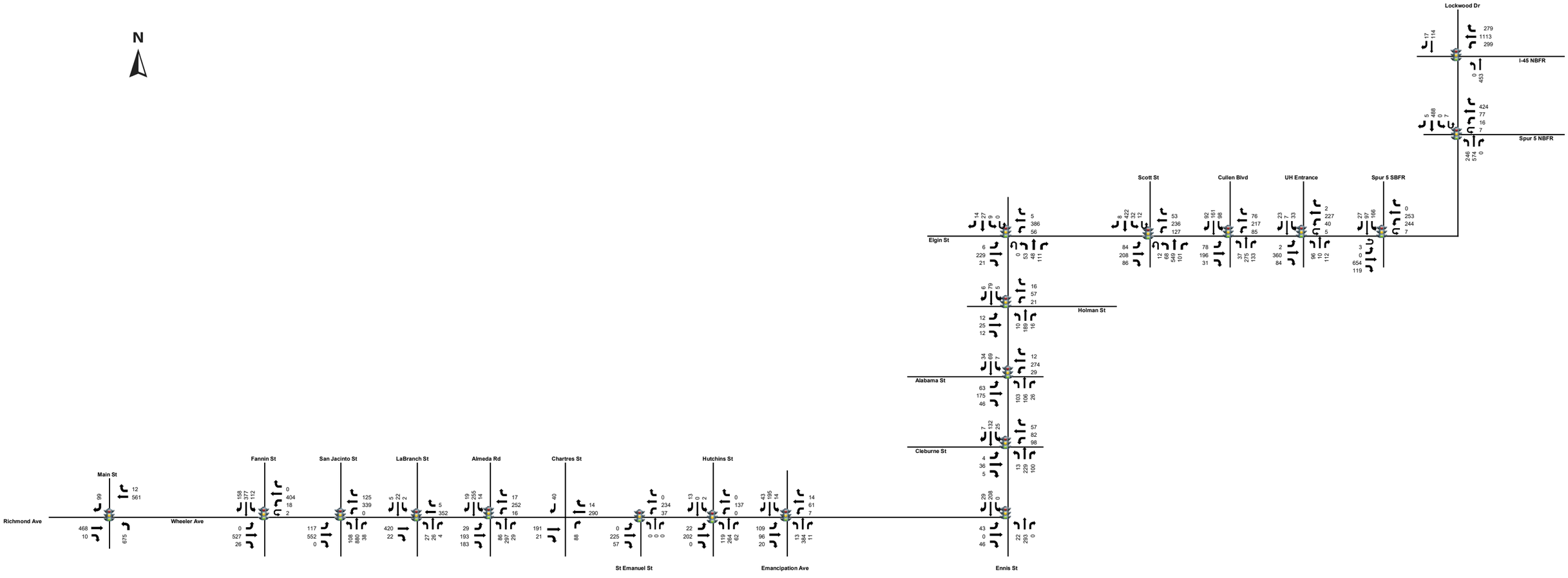
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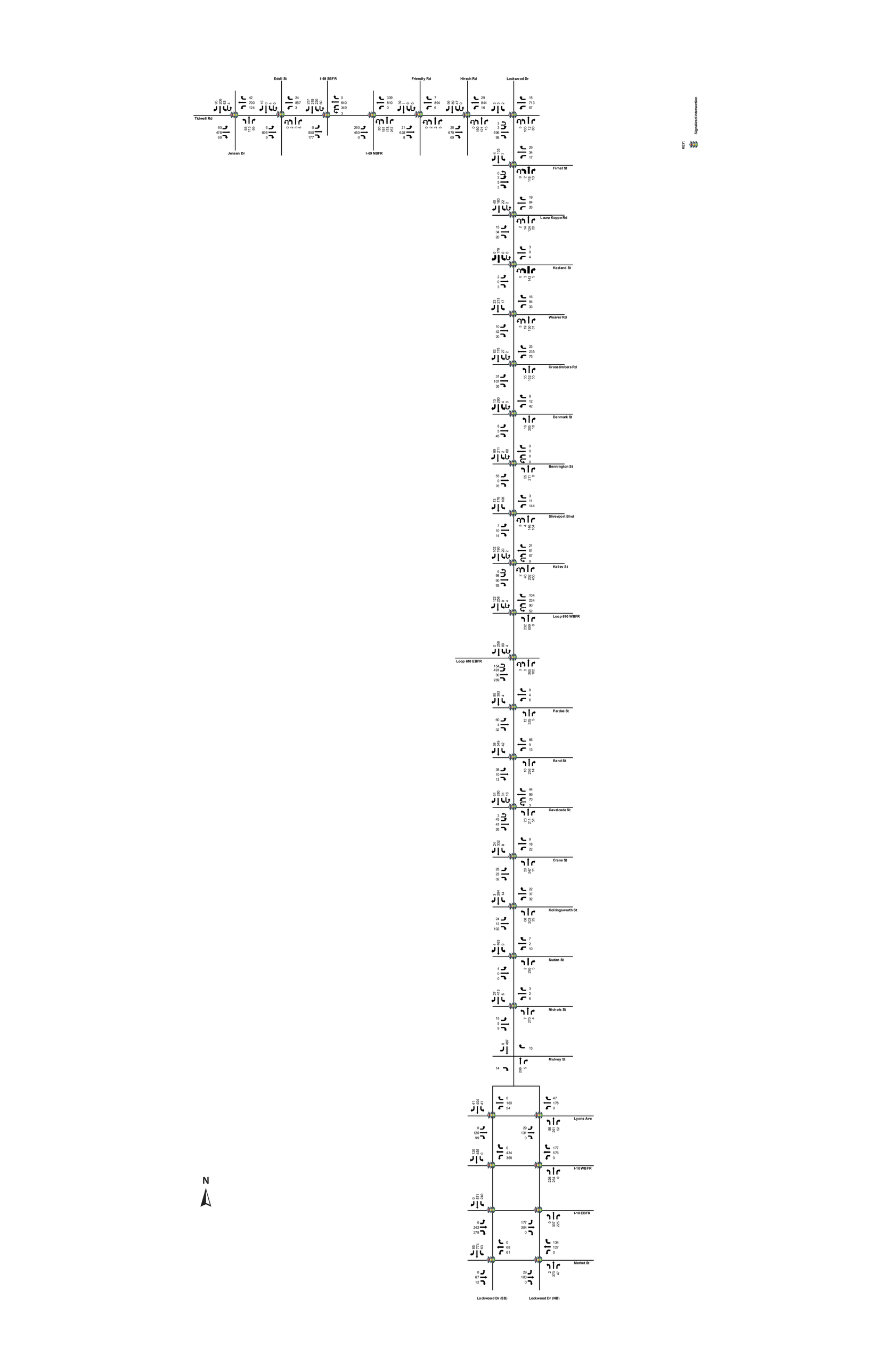
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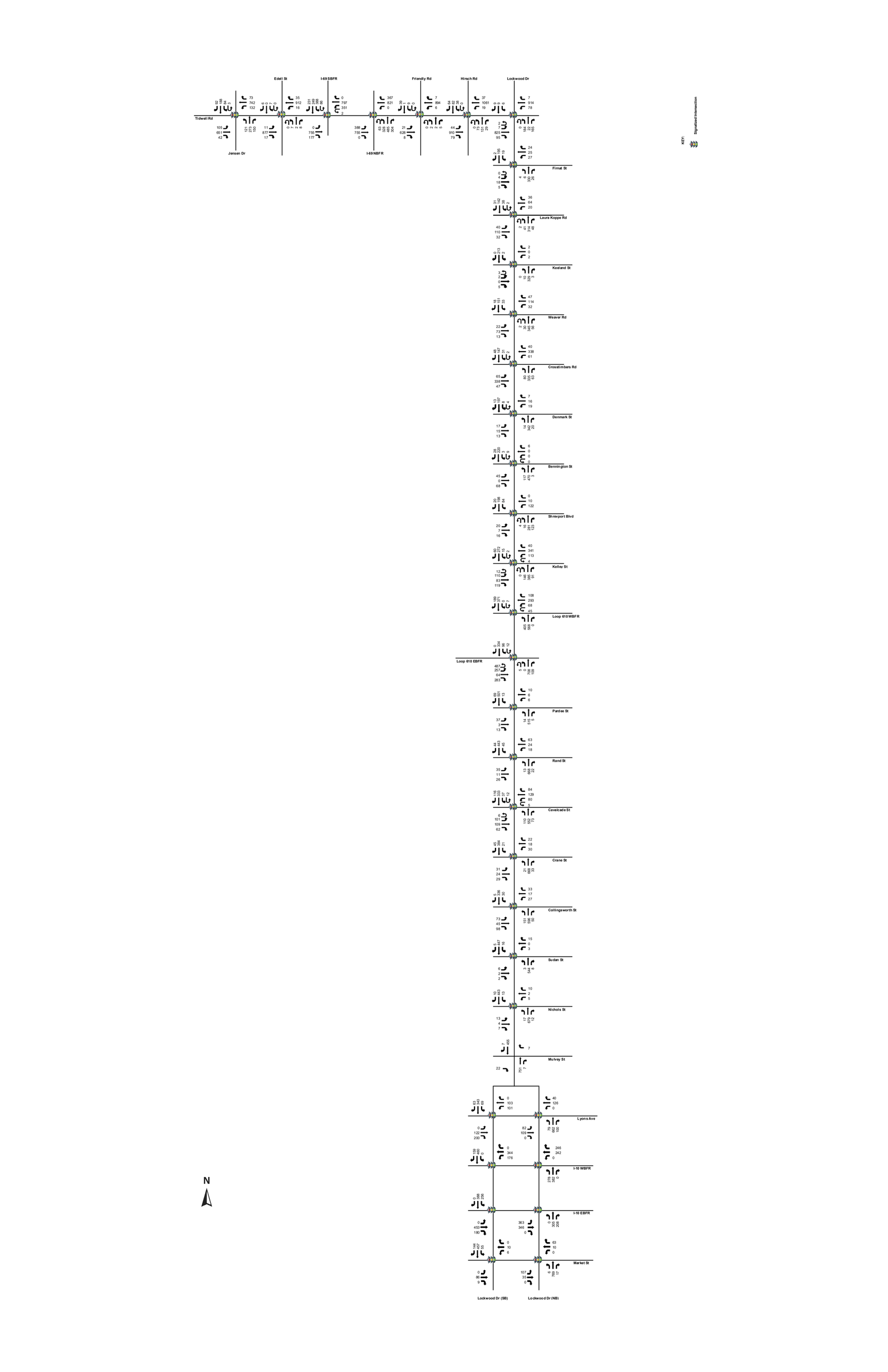
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I-10 EBFR
Market St
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Lockwood Dr (NB)
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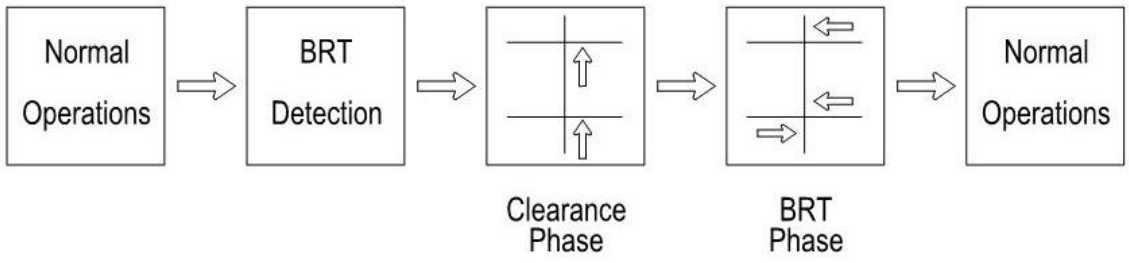
Signalized Intersection

3.2.2 Proposed Traffic Signal Operations

Adjustments were made to the traffic signal timing and phasing for the Build conditions models, as necessary, based on the design of the proposed BRT. **Appendix H** contains the proposed signal timing reports for the build conditions. The changes made to the traffic signal timing and phasing in the proposed models are as follows:

- In Segment 1, between Fondren Road and the IH-610 interchange, the BRT is proposed to operate in a separate guideway which will run on the south side of Westpark Drive. The proposed traffic models include preemption of the traffic signals to ensure there are no conflicts between BRT and general-purpose traffic at the signalized intersections in this area. Sensors will detect when a bus approaches the intersection and will transfer the signalized intersections into preemption mode. The first phase of preemption will clear any traffic queues across the cross street and then will move to the second phase which will prohibit movements across the BRT guideway until the BRT vehicle has cleared the intersection. **Figure 33** shows a high level overview of how the traffic signal pre-emption will operate.

Figure 33: Segment 1 Signal Pre-Emption Concept



- Cycle lengths which are currently running at the intersections within the study area were kept for the proposed 2030 Build Conditions Models except where BRT phases were added to the intersection or interchange. The current signal coordination patterns were also maintained. Intersection splits and offsets were optimized for the proposed build conditions.
- The existing permitted or permitted/protected left turn movements were adjusted to protected only for those left turns from the street on which the proposed BRT will run in the center. This will ensure there are no uncontrolled movements across the BRT guideway.
- For the intersections where the BRT is center running, the BRT will operate concurrently with the adjacent through movements of the general-purpose lanes when the BRT vehicle travels straight through the intersection. TSP was included in the models for the BRT vehicles to extend the green phase for the through movements up to 10 seconds as they approach the intersection based on sensors included in the models. Following a green time extension, the intersection will transition back to the appropriate cycle length and offset to maintain coordination along the corridor.

- Where the proposed BRT vehicle turns from one street to another from the center running BRT guideway, an exclusive BRT phase was provided at the intersection. This exclusive phase will be necessary as the proposed BRT will be crossing other traffic streams during its movement at these intersections.
- BRT headways were assumed to be 6 minutes between BRT vehicles.

Table 6 compares the existing signal phasing to the proposed signal phasing for each intersection within the study area.

Table 6: Signal Phasing Comparison

Intersection	Existing Phasing	Proposed Phasing
101 – EB Westpark Exit Ramp at Fondren Road	Protected Left Turns – EB Running on Same Controller as 102	Protected Left Turns – EB Running on Same Controller as 102 Preemptive Clearance & BRT Phase Added
102 – Westpark Drive at Fondren Road	Protected Left Turns – All Approaches Running on Same Controller as 101	Protected Left Turns – All Approaches Running on Same Controller as 101 Preemptive Clearance & BRT Phase Added
103 – Westpark Drive at Hillcroft Avenue	Projected Left Turns – All Approaches	Protected Left Turns - All Approaches Preemptive Clearance & BRT Phase Added
104 – Westpark Drive at 14th Street	Protected Left Turn – WB, NB	Protected Left Turn – WB, NB Preemptive Clearance & BRT Phase Added
105/106 – Westpark Drive at IH-69	TTI 3 Phase Interchange Phasing	TTI 3 Phase Interchange Phasing Preemptive Clearance & BRT Phase Added
107 – Westpark Drive at Rampart Street	Permitted Left Turn – All Approaches	Permitted Left Turn – All Approaches Preemptive Clearance & BRT Phase Added
108 – Westpark Drive at Renwick Drive	Protected Left Turn – All Approaches	Protected Left Turns – All Approaches Preemptive Clearance & BRT Phase Added
99558 – Westpark Drive at Alder Drive	Unsignalized	Permitted Left Turn – WB Approach Preemptive Clearance & BRT Phase Added
109 – Westpark Drive at Chimney Rock Road	Protected Left Turn – EB, WB, SB NB Left Turns Prohibited	Protected Left Turn – EB, WB, SB NB Left Turns Prohibited Preemptive Clearance & BRT Phase Added
309 – Westpark Drive at Royalton Street	Unsignalized	Protected Left Turn – WB, NB Preemptive Clearance & BRT Phase Added
110 – Westpark Drive at S Rice Avenue	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches Preemptive Clearance & BRT Phase Added
99553 – Westpark Drive at Uptown Transit Ctr.	Protected Left Turn – WB, NB	Protected Left Turn – WB, NB Exclusive BRT Phases Added for Silver Line and University Line
111/112 – Westpark Drive at IH-610	TTI 4 Phase Interchange Phasing	TTI 4 Phase Interchange Phasing Additional BRT phases for Silver Line and University Line
99561 – Westpark Drive at Loop Central Drive	Unsignalized	Protected Left Turn – WB, NB BRT runs with EB/WB Thru Movements – TSP Included
113 – Westpark Drive at Newcastle Drive	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
114 – Westpark Drive at Weslayan Street	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
115 – Westpark Drive at Edloe Street	Protected Left Turn – SB, EB Permitted Left Turn – WB NB Left Turns Prohibited	Protected Left Turn – All Approaches Exclusive BRT Phase Added

Intersection	Existing Phasing	Proposed Phasing
116 – IH-69 Express Lanes at Edloe Street	Protected Left Turn – NB Permitted Left Turn – EB, WB, SB	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
118 – Richmond Avenue at Edloe Street	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches Exclusive BRT Phase Added
119 – Richmond Ave at Buffalo Speedway	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
120 – Richmond Ave at Eastside St	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
121 – Richmond Ave at Kirby Drive	Protected Left Turn- All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
122 – Richmond Ave at Greenbriar St	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
123 – Richmond Ave at Shepherd Drive	Protected Left Turn – EB, WB NB, SB Left Turns Prohibited in Peak Hours	Protected Left Turn – EB, WB NB, SB Left Turns Prohibited in Peak Hours BRT runs with EB/WB Thru Movements – TSP Included
124 – Richmond Ave at Hazard Street	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB	Signal to be removed
125 – Richmond Ave at Woodhead Street	Permitted Left Turns – All Approaches	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
126 – Richmond Ave at Dunlavy Street	Permitted Left Turns – All Approaches	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
127 – Richmond Ave at Mandell Street	Permitted Left Turns – All Approaches	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
128 – Richmond Ave at Montrose Boulevard	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
129/130 – Richmond Ave at US 59/Spur 527	TTI 4 Phase Interchange Phasing	TTI 4 Phase Interchange Phasing Exclusive BRT Phase Added
131 – Richmond Ave at Main Street	Intersection Phasing to be modified by proposed COH Project EB and WB Left Turns to be Prohibited NB Left Turn Only SB Right Turn Only LRT Pre-Emption	NB Left Turn Only SB Right Turn Only LRT Pre-Emption BRT runs with EB/WB Thru Movements – TSP Included

Intersection	Existing Phasing	Proposed Phasing
132 – Wheeler Ave at Fannin Street	Permitted Left Turn - WB	Protected Left Turn – WB BRT runs with EB/WB Thru Movements – TSP Included
133 – Wheeler Ave at San Jacinto Street	Permitted Left Turn - EB	Permitted Left Turn – EB Exclusive BRT Phase Added
134 – Wheeler Ave at La Branch Street	Permitted Left Turn – All Approaches	Permitted Left Turn – NB, SB Left Turns Prohibited EB, WB BRT runs with EB/WB Thru Movements – TSP Included
135 – Wheeler Ave at Almeda Road	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
365 – Wheeler Ave at St Emanuel Street	Unsignalized	TTI 3 Phase Diamond Phasing BRT runs with EB/WB Thru Movements – TSP Included
367 – Wheeler Ave at Hutchins Street	Unsignalized	TTI 3 Phase Diamond Phasing BRT runs with EB/WB Thru Movements – TSP Included
136 – Wheeler Ave at Emancipation Ave	Permitted Left Turn – All Approaches	Permitted Left Turn – All Approaches Exclusive BRT Phase added
266 – Wheeler Ave at Ennis Street	Permitted Left Turn – NB, EB	Permitted Left Turn – NB, EB Exclusive BRT Phase Added
292 – Ennis Street at Cleburne Street	Permitted Left Turn – All Approaches	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
141 – Ennis Street at Alabama Street	Unsignalized	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
306 – Ennis Street at Holman Street	Permitted Left Turn – All Approaches	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
249 – Ennis Street at Elgin Street	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB	Protected Left Turn – SB, EB, WB Permitted Left Turn – NB Exclusive BRT Phase Added
143 – Elgin Street at Scott Street	Protected Left Turn – All Approaches LRT Pre-Emption	Protected Left Turn – All Approaches LRT Pre-Emption BRT runs with EB/WB Thru Movements – TSP Included
144 – Elgin Street at Cullen Boulevard	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with EB/WB Thru Movements – TSP Included
145 – Elgin Street at UH Entrance 18	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
353 – Elgin Street at UH Garage 5 Entrance	Unsignalized	Half Signal for WB Left Turn Movement BRT runs with EB/WB Thru Movements – TSP Included
146/147 – Elgin Street at Spur 5 Frontage Rds	TTI 3 Phase Interchange Phasing	TTI Interchange Phasing Queue Jump for EB BRT Vehicle and Spur 5 SB Frontage Road BRT Vehicle Operates in Mixed Flow through Interchange

Intersection	Existing Phasing	Proposed Phasing
148 – Elgin Street at IH-45 NB Frontage Rd	Left Turns Prohibited on Elgin Street	Left Turns Prohibited on Elgin Street Queue Jump for WB BRT Vehicle on WB Approach BRT Vehicle Operates in Mixed Flow through Interchange
452 – Ernestine Street at Munger Street	Unsignalized	Unsignalized BRT Does not Operate through Intersection
453 – Lockwood Drive at Munger Street	Unsignalized	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
149 – Ernestine Street at Leeland Street	Protected Left Turn - WB	Ernestine Street Converted to Two-Way Traffic Protected Left Turns – NB, SB Permitted Left Turn – WB BRT Does not Operate through Intersection
150 – Lockwood Drive at Leeland Street	Protected Left Turn - EB	Lockwood Drive Converted to Two-Way Traffic Protected Left Turns – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
151 – Ernestine / Lockwood at Polk Street	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
152 – Lockwood Drive at McKinney Street	Permitted Left Turn – All Approaches	Signal to be removed
153 – Lockwood Drive at Harrisburg Blvd	Protected Left Turn – All Approaches LRT Pre-Emption	Protected Left Turn – All Approaches LRT Pre-Emption BRT runs with NB/SB Thru Movements – TSP Included
154 – Lockwood Drive at Canal Street	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB	Protected Left Turn – WB, NB, SB Permitted Left Turn – EB BRT runs with NB/SB Thru Movements – TSP Included
155 – Lockwood Drive at Navigation Blvd	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
197 – Lockwood Drive at Marron Park Way	Proposed Intersection to be installed by Others	Protected Left Turn – NB, SB, EB BRT runs with NB/SB Thru Movements – TSP Included
156 – Lockwood Drive at Armour Drive	Protected Left Turn – All Approaches	Signal to be removed
514 – Lockwood Drive at Harvey Wilson Dr	Unsignalized	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
157 – Lockwood Drive at Clinton Drive	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT Above Grade – Does not interact with Intersection
158 – Lockwood Drive (SB) at Market St	Permitted Left Turn – WB	Permitted/Protected Left Turn – WB Exclusive BRT Phase Added

Intersection	Existing Phasing	Proposed Phasing
159 – Lockwood Drive (NB) at Market St	Permitted Left Turn - EB	Permitted/Protected Left Turn – EB Exclusive BRT Phase Added
160/161/162/163 – Lockwood Drive at IH-10	Interchange Box Phasing	Interchange Box Phasing Exclusive BRT Phase Added
164/165 – Lockwood Drive at Lyons Ave	Permitted Left Turn – All Approaches	Protected Left Turn – WB Permitted Left Turn – EB, NB, SB Exclusive BRT Phase Added
534 – Lockwood Drive at Hershe Street	Unsignalized	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
166 – Lockwood Drive at Mulvey Street	Permitted Left Turn – All Approaches	Signal to be removed
567 – Lockwood Drive at Nichols Street	Unsignalized	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
576 – Lockwood Drive at Sudan Street	Unsignalized	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
167 – Lockwood Drive at Collingsworth St	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
168 – Lockwood Drive at Crane Street	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
169 – Lockwood Drive at Cavalcade Street	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
170 – Lockwood Drive at Rand Street	Permitted Left Turn – All Approaches	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
604 – Lockwood Drive at Pardee Street	Unsignalized	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
171/172 – Lockwood Drive at IH-610	TTI 4 Phase Interchange Phasing	TTI 4 Phase Interchange Phasing Exclusive BRT Phase Added
173 – Lockwood Drive at Kelley Street	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
174 – Lockwood Drive at Shreveport Blvd	Protected Left Turn – SB Permitted Left Turn – NB, EB, WB	Permitted Left Turn – All Approaches BRT Above Grade – Does not interact with Intersection
175 – Lockwood Drive at Bennington St	Protected Left Turn – NB Permitted Left Turn – SB, EB, WB	Protected Left Turn – NB Permitted Left Turn – SB, EB, WB BRT Above Grade – Does not interact with Intersection

Intersection	Existing Phasing	Proposed Phasing
623 – Lockwood Drive at Denmark St	Unsignalized	Permitted Left Turn – All Approaches Exclusive BRT Phase Added
176 – Lockwood Drive at Crosstimbers St	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches BRT runs with NB/SB Thru Movements – TSP Included
177 – Lockwood Drive at Weaver Rd	Split Phasing for All Approaches	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
641 – Lockwood Drive at Keeland St	Unsignalized	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
178 – Lockwood Drive at Laura Koppe Road	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
659 – Lockwood Drive at Firnat Street	Unsignalized	Protected Left Turn – NB, SB Permitted Left Turn – EB, WB BRT runs with NB/SB Thru Movements – TSP Included
179 – Lockwood Drive at Tidwell Road	Protected Left Turn – All Approaches	Protected Left Turn – WB, NB Permitted Left Turn – EB, SB Exclusive BRT Phase Added
180 – Tidwell Road at Hirsch Road	Permitted Left Turn – All Approaches	Protected Left Turn – NB, EB, WB Permitted Left Turn – SB BRT Above Grade – Does not interact with Intersection
677 – Tidwell Road at Friendly Street	Unsignalized	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
181/182 – Tidwell Road at IH-69 Frontage Rds	TTI 4 Phase Interchange Phasing	TTI 4 Phase Interchange Phasing Exclusive BRT Phase Added
689 – Tidwell Road at Edell Street	Unsignalized	Protected Left Turn – EB, WB Permitted Left Turn – NB, SB BRT runs with EB/WB Thru Movements – TSP Included
183 – Tidwell Road at Jensen Drive	Protected Left Turn – All Approaches	Protected Left Turn – All Approaches Exclusive BRT Phase Added
705 – Jensen Drive at Turner Drive	Unsignalized	Protected Left Turn – SB Permitted Left Turn – NB, EB, WB Exclusive BRT Phase Added
690 – Epsom Rd, Edell St at Turner Drive	Unsignalized	Permitted Left Turn – NB Pre-emptive BRT Phase Added

3.3 Measures of Effectiveness (MOEs)

MOEs were used for a comparison of the Build scenario to the baseline No-Build scenario. As defined in the Highway Capacity Manual, 7th Edition (Transportation Research Board, 2022) LOS is a quantitative stratification of a performance measure or measures representing quality of service. For signalized intersections throughout the study area, LOS was used as the primary measure for comparing scenarios and alternatives. Signalized intersection LOS is based on average control delay (expressed in seconds per vehicle), which is the delay that is incurred when a traffic control device causes a vehicle to slow or stop. The LOS for each intersection is also a measure of how much congestion occurs at an intersection during a peak hour period. For signalized intersections, the LOS was aggregated by approach and also calculated for the overall intersection. The amount of delay at the intersection was calculated based on the microsimulation results from TransModeler. The LOS for the intersections were estimated based on the LOS criteria listed in the Highway Capacity Manual, 7th Edition (Transportation Research Board, 7th Edition) which are shown in **Table 7**.

Table 7: LOS Criteria for Intersections

Level of Service (LOS)	Signalized Intersection Average Control Delay Range (sec/veh)	Un-signalized Intersection Average Control Delay Range (sec/veh)
A	0 - 10	0 – 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	80+	50+

Source: Highway Capacity Manual, 7th Edition (Transportation Research Board, 2022)

To establish the traffic impacts of the proposed BRT Project, the LOS calculated by the No-Build and the Build traffic models were compared for each signalized intersection within the study area. The impacts at each of the intersections within the study area are documented in this report.

3.4 Coordination with Relevant Agencies

As this project will provide for a paradigm shift in the use of the roadways to a more multi-modal approach, the amount of people throughput in each segment with the proposed BRT in place was calculated and compared to the existing people throughput under the existing configuration. The existing and proposed throughputs at key locations along the corridor were compared and shared with the COH early on in the coordination process.

Ongoing coordination with COH has been occurring as the traffic modeling and design has progressed to inform and receive feedback to the proposed changes on city streets and to discuss mitigation scenarios. Representatives from METRO and their consultant team prepared for and

participated in a number of traffic-focused meetings and discussions with staff from COH as outlined below:

- September 26, 2022: METRO team outlined the methodology and assumptions that were used for the detailed traffic analysis including the traffic data collected, how the future traffic volumes were projected, why TransModeler was used for the proposed analysis, the calibration of the existing conditions models, and what adjustments are proposed to the signal phasing within the proposed BRT alignment. Traffic modeling results from TransModeler for Segment 1 were presented in tabular and graphic forms to COH.

- October 10, 2022: METRO team presented traffic modeling results from TransModeler for Segment 2 in tabular and graphic forms to COH.

- October 12, 2022: Following the previous meeting, COH asked for a different approach in reviewing the impacts to traffic operations, which included showing the mitigation scenarios explored at each intersection, comparing the mitigations based upon LOS, V/C ratio, drainage and ROW impacts, and recommending the mitigation to be implemented. The focus of this analysis would be those intersections with LOS E or F only. [NOTE: To expedite this process, Synchro software was used to model the mitigation scenarios. Once a scenario was selected, it would be included in the TransModeler model, if it was not already in it.]

- November 4, 2022: In order to confirm that the information prepared met COH request, METRO team presented the mitigation scenarios for the Richmond/Montrose intersection in Segment 2 and the resulting impacts. Overall, COH was agreeable to the format and information presented.

- January 9, 2023: METRO team presented Segment 2 intersections along Richmond Avenue, including Edloe, Buffalo Speedway, Eastside, Kirby, and Montrose and a couple of intersections along Westpark at Weslayan and Edloe.

- January 18, 2023: METRO team presented recommended scenarios for the Segment 2 intersections previously discussed during meeting on January 9, 2023 and the mitigation scenarios analyzed at the Tidwell/Jensen intersection in Segment 5.

- February 13, 2023: METRO team presented Segment 4 intersections along Lockwood Drive, including McKinney, Harrisburg, Canal, Navigation, Marron Park Way and Harvey Wilson, and compared the impacts of having 2-general purpose lanes vs. 1-general purpose lane in each direction.

- February 20, 2023: METRO team presented projected queue lengths to COH at the various TxDOT intersections along the University Corridor in preparation for a future meeting with TxDOT. The intent of the meeting was to determine any impacts to existing TxDOT facilities caused by projected traffic delays.

- February 27, 2023: METRO discussed throughput analysis at the Richmond/Spur 527 intersection with COH.

As all of the signals along the University Corridor are operated and maintained by COH, traffic impact coordination has primarily been with COH. The majority of coordination meetings with TxDOT Houston District during project development has related to future projects interfacing with the University Corridor. However, traffic impact discussions recently began as the traffic model has gone through multiple refinements during project development to optimize the signals along the alignment, including at crossings with TxDOT facilities, and to address comments and concerns from COH. The traffic-focused meeting and discussion with TxDOT staff is outlined below:

- April 4, 2023: METRO team presented the latest overall corridor alignment, identified the BRT crossings of TxDOT facilities, provided queue length impacts in tabular and graphic forms and showed exhibits of the proposed lane configurations at each location. The intent of the meeting was to provide the latest lane configuration information to TxDOT and to demonstrate that the projected traffic queues would not back up onto the existing freeway sections. At the conclusion of the meeting, TxDOT requested some additional information to be presented.
- May 23, 2023: In response to TxDOT's request, METRO team presented additional queue length information in tabular and graphic formats and provided additional exhibits of the existing and proposed lane configurations at each TxDOT crossing.

It is anticipated that additional traffic coordination meetings with COH and TxDOT will continue as the design progresses.

3.5 Traffic Modeling

TransModeler software was selected to develop the traffic models for the existing, 2030 No-Build, and 2030 Build conditions. This software was chosen over other traffic modeling tools based on the public transit features that are built into the software. The features include the ability to model exclusive bus guideways, TSP, and queue-jumping, all of which were employed as part of the BRT Project. This software also provided the ability to calculate MOEs for both the overall network and individual intersections, approaches, and movements. Further details concerning this software are included in a White Paper, dated March 30, 2021, discussing the selection of TransModeler in **Appendix G**. For all scenarios, the AM and the PM peak models were run 10 separate times with different random seed inputs. The results shown within this report and in the appendices are the averages of the 10 separate runs.

4 Existing Traffic Conditions

Traffic models were prepared for the existing conditions which were used as the basis of the future year traffic modeling. The existing roadway geometry, traffic volumes, and traffic signal timings were used to develop the existing conditions models for both the AM and PM peak hours. These models were then calibrated against measurements taken in the field to ensure they were an accurate representation of the existing conditions within the study area along the proposed alignment of the BRT. All signalized intersections along the proposed BRT route were included in the models.

4.1 Roadway Geometry

The existing roadway geometry was obtained through a review of aerial photographs and field visits to each of the intersections included in the proposed study area (alignment of the proposed BRT). At each intersection, the geometry was determined for each approach to the intersection including:

- Number of Through Lanes
- Presence and Length of Exclusive Left or Right Turn Lanes
- Presence of Shared Lanes (e.g. Thru / Right Turn Lane)
- Presence of Pedestrian Crosswalks
- Presence of On-Street Parking
- Any other considerations affecting operations of the traffic signals

Geometry was input into the TransModeler at each of the study intersections.

4.1.1 Segment 1

Segment 1 is between the Westchase Park & Ride partially within METRO ROW and partially within COH ROW along Westpark Drive to the UPRR crossing between Newcastle Drive and Weslayan Street. To the west of Fondren Road, the proposed BRT will be on a grade separated guideway, therefore no intersections were studied in this area since they would not be impacted by the proposed BRT operations. The existing and 2030 No-Build conditions models (AM & PM) contain the following intersections:

- 101 – Westpark Tollway Exit Ramp at Fondren Road
- 102 – Westpark Drive at Fondren Road
- 103 – Westpark Drive at Hillcroft Avenue
- 104 – Westpark Drive at 14th Street
- 105 – Westpark Drive at IH-69 SB Frontage Road
- 106 – Westpark Drive at IH-69 NB Frontage Road
- 107 – Westpark Drive at Rampart Street
- 108 – Westpark Drive at Renwick Drive
- 99558 – Westpark Drive at Alder Drive (Currently Unsignalized)
- 109 – Westpark Drive at Chimney Rock Road
- 309 – Westpark Drive at Royalton Street (Currently Unsignalized)
- 110 – Westpark Drive at S Rice Avenue
- 99553 – Westpark Drive at Uptown Transit Center

- 111 – Westpark Drive at IH-610 SB Frontage Road
- 112 – Westpark Drive at IH-610 NB Frontage Road
- 99561 – Westpark Drive at Loop Central Drive (Currently Unsignalized)
- 113 – Westpark Drive at Newcastle Drive

4.1.2 Segment 2

Segment 2 runs along Westpark Drive from the end of Segment 1 to Edloe Street where it travels to the north to Richmond Avenue and then runs along Richmond Avenue to the intersection of Richmond Avenue/Wheeler Avenue and Main Street. The existing and 2030 No-Build conditions models (AM & PM) contain the following intersections:

- 114 – Westpark Drive at Weslayan Street
- 115 – Westpark Drive at Edloe Street
- 116 – IH-69 Express Lanes at Edloe Street
- 118 – Richmond Avenue at Edloe Street
- 119 – Richmond Avenue at Buffalo Speedway
- 120 – Richmond Avenue at Eastside Street
- 121 – Richmond Avenue at Kirby Drive
- 122 – Richmond Avenue at Greenbriar Street
- 123 – Richmond Avenue at Shepherd Drive
- 124 – Richmond Avenue at Hazard Street
- 125 – Richmond Avenue at Woodhead Street
- 126 – Richmond Avenue at Dunlavy Street
- 127 – Richmond Avenue at Mandell Street
- 128 – Richmond Avenue at Montrose Boulevard
- 129 – Richmond Avenue at Spur 527 SB Frontage Road
- 130 – Richmond Avenue at Spur 527 NB Frontage Road

4.1.3 Segment 3

Segment 3 begins at the intersection of Wheeler Avenue and Main Street and then runs along Wheeler Avenue to the intersection with Ennis Street. The alignment then runs along Ennis Street to the intersection with Elgin Street and continues along Elgin Street to the intersection of Elgin Street/Lockwood Drive with the IH-45 NB Frontage Road Intersection. The existing and 2030 No-Build conditions models (AM & PM) contain the following intersections:

- 131 – Richmond Avenue/Wheeler Avenue at Main Street
- 132 – Wheeler Avenue at Fannin Street
- 133 – Wheeler Avenue at San Jacinto Street
- 134 – Wheeler Avenue at La Branch Street
- 135 – Wheeler Avenue at Almeda Road
- 365 – Wheeler Avenue at St Emanuel Street (Currently Unsignalized)
- 367 – Wheeler Avenue at Hutchins Street (Currently Unsignalized)
- 136 – Wheeler Avenue at Emancipation Avenue
- 266 – Wheeler Avenue at Ennis Street
- 292 – Ennis Street at Cleburne Street

- 141 – Ennis Street at Alabama Street
- 306 – Ennis Street at Holman Street
- 249 – Ennis Street at Elgin Street
- 143 – Elgin Street at Scott Street
- 144 – Elgin Street at Cullen Boulevard
- 145 – Elgin Street at UH Entrance 16
- 146 – Elgin Street at Spur 5 SB Frontage Road
- 147 – Elgin Street at Spur 5 NB Frontage Road
- 148 – IH-45 NB Frontage Road at S Lockwood Drive/Ernestine Street

4.1.4 Segment 4

Segment 4 begins at the intersection of S Lockwood Drive/Ernestine Street and the IH-45 NB Frontage Road and runs north along Lockwood Drive to the south of the interchange of Lockwood Drive with the IH-10 EB and WB frontage roads. Between the intersection with the IH-45 NB Frontage Road and Polk Street, Lockwood Drive is part of a one-way pair serving NB traffic. SB traffic in this area is served by Ernestine Street. At the northern end of Segment 4, Lockwood Drive has a wide median (approx. 120'). Therefore, separate intersections were established for the intersections of the cross streets with the NB and SB lanes of Lockwood Drive. The existing and 2030 No-Build conditions models (AM & PM) contain the following intersections:

- 452 – Ernestine Street at Munger Street (Currently Unsignalized)
- 453 – Lockwood Drive at Munger Street (Currently Unsignalized)
- 149 – Ernestine Street at Leeland Street
- 150 – Lockwood Drive at Leeland Street
- 151 – Ernestine Street/Lockwood Drive at Polk Street
- 152 – Lockwood Drive at McKinney Street
- 153 – Lockwood Drive at Harrisburg Boulevard
- 154 – Lockwood Drive at Canal Street
- 155 – Lockwood Drive at Navigation Boulevard
- 156 – Lockwood Drive at Armour Drive
- 514 – Lockwood Drive at Harvey Wilson Drive (Currently Unsignalized)
- 157 – Lockwood Drive at Clinton Drive

4.1.5 Segment 5

Segment 5 begins south of the interchange of Lockwood Drive and the IH-10 frontage roads. It runs along Lockwood Drive all the way to the intersection with Tidwell Road and continues west of Lockwood Drive on Tidwell Road to the intersection with Jensen Drive. The route then runs along Jensen Drive to Turner Drive where the buses will access the Tidwell Transit Center. The existing and 2030 No-Build conditions models (AM & PM) contain the following intersections:

- 158 – Lockwood Drive (SB) at Market Street
- 159 – Lockwood Drive (NB) at Market Street
- 160 – Lockwood Drive (SB) at IH-10 EB Frontage Road
- 161 – Lockwood Drive (NB) at IH-10 EB Frontage Road
- 162 – Lockwood Drive (SB) at IH-10 WB Frontage Road

- 163 – Lockwood Drive (NB) at IH-10 WB Frontage Road
- 164 – Lockwood Drive (SB) at Lyons Avenue
- 165 – Lockwood Drive (NB) at Lyons Avenue
- 534 – Lockwood Drive at Hershe Street (Currently Unsignalized)
- 166 – Lockwood Drive at Mulvey Street
- 567 – Lockwood Drive at Nichols Street (Currently Unsignalized)
- 576 – Lockwood Drive at Sudan Street (Currently Unsignalized)
- 167 – Lockwood Drive at Collingsworth Street
- 168 – Lockwood Drive at Crane Street
- 169 – Lockwood Drive at Cavalcade Street
- 170 – Lockwood Drive at Rand Street
- 604 – Lockwood Drive at Pardee Street (Currently Unsignalized)
- 171 – Lockwood Drive at IH-610 EB Frontage Road
- 172 – Lockwood Drive at IH-610 WB Frontage Road
- 173 – Lockwood Drive at Kelley Street
- 174 – Lockwood Drive at Shreveport Boulevard
- 175 – Lockwood Drive at Bennington Street
- 623 – Lockwood Drive at Denmark Street (Currently Unsignalized)
- 176 – Lockwood Drive at Crosstimbers Street
- 177 – Lockwood Drive at Weaver Road
- 641 – Lockwood Drive at Keeland Street (Currently Unsignalized)
- 178 – Lockwood Drive at Laura Koppe Road
- 659 – Lockwood Drive at Firnat Street (Currently Unsignalized)
- 179 – Lockwood Drive at Tidwell Road
- 180 – Tidwell Road at Hirsch Road
- 677 – Tidwell Road at Friendly Street
- 181 – Tidwell Road at IH-69 NB Frontage Road
- 182 – Tidwell Road at IH-69 SB Frontage Road
- 689 – Tidwell Road at Edell Street
- 183 – Tidwell Road at Jensen Drive
- 705 – Jensen Drive at Turner Drive
- 690 – Epsom Road/Edell Street at Turner Drive

4.2 Traffic Counts

Initial traffic counts were collected on Wednesday, September 1, 2021 and Thursday, September 9, 2021. Due to changes in the proposed alignment and design of the University Line BRT Project, supplemental counts were conducted on Tuesday March 8, 2022, Thursday March 24, 2022 and Tuesday April 19, 2022. Turning Movement Counts (TMCs) were collected at all intersections for 4 hours (7 AM – 9 AM, 4 PM – 6 PM) to capture both the AM and PM peak hours. AM and PM peak hours were determined for each segment and are shown in **Table 8**.

Table 8: Peak Hours by Segment

Segment	AM Peak Hour	PM Peak Hour
1	7:30 – 8:30 AM	4:00 – 5:00 PM
2	7:45 – 8:45 AM	4:15 – 5:15 PM
3	7:45 – 8:45 AM	4:45 – 5:45 PM
4	7:15 – 8:15 AM	4:00 – 5:00 PM
5	7:15 – 8:15 AM	4:15 – 5:15 PM

Traffic counts were balanced between intersections adjusting for mid-block sources and sinks for traffic. Existing condition traffic volumes for each intersection are previously shown in **Figures 2 through 11.**

4.3 Traffic Signal Timings

Intersection phasing and timing plans for the AM and PM peak hours were obtained from COH for each intersection included in the study area (proposed alignment of the BRT line). The traffic signal phasing at each intersection was coded into the traffic models, and the separate timing plans including the cycle length, intersection splits, and intersection offsets were coded into the AM and PM peak hour models. In addition to the vehicular phase timings, the pedestrian crossing timings (walk and ped clearance) were also entered into the traffic models. For the build conditions models the pedestrian timings which are existing in the field were verified to be adequate for pedestrians to cross to the center platforms. Pedestrian timings developed by COH are based on minimum walk times of 7 seconds and ped clearance times based on 3.5 feet per second walking speed.

5 Model Calibration

Model calibration is an important step to ensure that the models are returning realistic results which replicate actual conditions within the network. Calibration is conducted through a process. The first step is to evaluate the behavior of the model versus what was observed during field visits. Field visits were conducted to each segment during both the AM and PM peak hours in February of 2022 on normal weekdays. Travel time runs were conducted during the peak hours in both directions, and videos were collected to document the existing condition roadway geometry, intersection phasing, etc. and locations where traffic congestion was occurring within the proposed University Line BRT corridor.

Following the initial run of the completed traffic models, the output results were compared to the field collected data. As part of the second step, adjustments to operational parameters in the model were then made to ensure the Measures of Effectiveness (MOEs) output from the models fell within the calibration targets listed in **Table 9**.

Table 9: Traffic Model Calibration Targets

Measures of Effectiveness	Calibration Acceptance Targets
Individual Link Flows:	
< 700 vehicles per hour	Within 100 veh/hr of Field Counts
700 to 2,700 vehicles per hour	Within 15% of Field Counts
> 2,700 vehicles per hour	Within 400 veh/hr of Field Counts
Segment Speeds	Within 10 mph of Field Data
Travel Times	Within 15% of Field Data
Queue / Bottleneck Locations	Visually acceptable per Field Observations

Calibration of Link Flows required for minimum of 85% of individual links within the network.
Source: FHWA Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software

Detailed calibration data for the existing conditions traffic models are included in **Appendix D**. A high-level summary of the calibration results for the traffic volumes is shown in **Table 10** below. Traffic volume calibration was checked for the existing and future No-Build traffic volumes to ensure that they were within the acceptable calibration limits. Both link volumes on approaches to intersections and individual turning movement volumes generated by the models were checked against those in **Figures 2 through 11,** based on the criteria listed in **Table 9**. For a model to be considered calibrated regarding traffic volumes, 85% of the links must have volumes which are within the calibration criteria listed in **Table 9**. In addition to the link volumes, the individual turning movement volumes at all intersections were also checked for calibration. Both the percentage of links and turning movements, which were within calibration limits for the existing and the No-Build volumes, are noted **in Table 10** below.

Table 10: Traffic Model Calibration – Volume Summary

Scenario	Links Calibrated	Turning Movements Calibrated
Existing Conditions – AM Peak	88.40%	95.62%
Existing Conditions – PM Peak	89.69%	96.99%
2030 No-Build Conditions – AM Peak	86.08%	94.42%
2030 No-Build Conditions – PM Peak	87.63%	94.43%

In addition to the traffic volumes which were present at each of the intersections, the travel times and vehicular speeds for each segment were checked. Existing condition travel time runs were conducted during a normal weekday in each of the segments. Initial travel time runs were conducted in February of 2022. Due to changes in the proposed alignment in Segment 3, a travel time run was performed in February of 2023 for this segment. From the travel time runs, average speeds were developed within each of the segments. The travel times and speeds were measured along the proposed route of the BRT in both directions during both the AM and the PM peak hours. **Tables 11 through 14** show the comparison of the travel times and speeds, which were computed by the traffic models in comparison with the speeds and travel times from the field. These checks were only performed for the existing conditions models since these are the only conditions for which travel time runs can be verified.

Table 11: Segment Travel Time Calibration (AM Peak)

Segment	AM Peak Period					
	Field Travel Time (Min) (Towards TTC)	Modeled Travel Time (Min) (Towards TTC)	% Change	Field Travel Time (Min) (Towards WPR)	Modeled Travel Time (Min) (Towards WPR)	% Change
1	15.82	13.97	**11.7%**	13.12	12.95	**1.3%**
2	16.07	14.19	**7.1%**	14.88	13.56	**8.9%**
3	11.90	11.44	**3.9%**	13.15	13.51	**2.7%**
4	11.35	10.14	**10.7%**	10.75	9.81	**8.7%**
5	16.38	16.06	**2.0%**	15.47	14.81	**4.3%**

TTC – Tidwell Transit Center
WPR – Westchase Park & Ride

Table 12: Segment Travel Time Calibration (PM Peak)

Segment	PM Peak Period					
	Field Travel Time (Min) (Towards TTC)	Modeled Travel Time (Min) (Towards TTC)	% Change	Field Travel Time (Min) (Towards WPR)	Modeled Travel Time (Min) (Towards WPR)	% Change
1	12.07	12.26	**1.6%**	14.68	13.11	**10.7%**
2	16.37	16.63	**1.6%**	15.50	14.29	**7.8%**
3	12.50	12.44	**0.5%**	15.15	13.01	**14.1%**
4	8.67	8.21	**5.3%**	11.15	9.71	**12.9%**
5	18.53	16.57	**10.6%**	15.15	15.32	**1.1%**

TTC – Tidwell Transit Center
WPR – Westchase Park & Ride

Table 13: Segment Travel Speed Calibration (AM Peak)

Segment	AM Peak Period					
	Field Speed (mph) (Towards TTC)	Modeled Speed (mph) (Towards TTC)	mph Diff	Field Speed (mph) (Towards WPR)	Modeled Speed (mph) (Towards WPR)	mph Diff
1	15.64	19.75	**4.11**	18.86	20.05	**1.19**
2	14.56	17.71	**3.15**	15.72	21.65	**5.93**
3	17.61	20.81	**3.20**	15.94	20.00	**4.06**
4	18.67	19.48	**0.81**	19.71	19.19	**0.52**
5	23.55	23.73	**0.18**	24.93	24.37	**0.56**

TTC – Tidwell Transit Center
WPR – Westchase Park & Ride

Table 14: Segment Travel Speed Calibration (PM Peak)

Segment	PM Peak Period					
	Field Speed (mph) (Towards TTC)	Modeled Speed (mph) (Towards TTC)	% Change	Field Speed (mph) (Towards WPR)	Modeled Speed (mph) (Towards WPR)	% Change
1	20.50	22.03	**1.53**	16.86	21.92	**5.06**
2	14.29	17.89	**3.60**	15.10	20.36	**5.26**
3	16.77	19.55	**2.78**	13.83	19.12	**5.29**
4	24.44	19.58	**4.86**	19.01	19.96	**0.95**
5	20.82	22.76	**1.94**	25.46	24.00	**1.46**

TTC – Tidwell Transit Center
WPR – Westchase Park & Ride

As indicated in **Tables 11 through 14**, the traffic volumes, average travel times, and vehicular speeds being used by the existing conditions and 2030 No-Build traffic models for both the AM and PM peaks produced results which adequately represent actual conditions. Therefore, these models were deemed representative tools to aid in the determination of the impacts of the proposed BRT Project and in the analysis of mitigation strategies that could be implemented to minimize those impacts.

6 Existing Conditions Traffic Analysis Results

This section describes the analysis of the 2021 existing conditions for both the AM and PM peak hours and includes the results of the TransModeler simulations for all analyzed intersections within the study area.

The purpose of the existing conditions traffic modeling was to provide an understanding of the existing condition traffic operations. The existing conditions models were also calibrated to match the exiting conditions observed in the field, as previously discussed, to ensure that the results obtained from the traffic models could provide a realistic estimation of traffic operations in the future for both the No-Build and Build conditions. The existing conditions traffic models were developed with the existing lane configurations, traffic signal timings, and traffic volumes (2021 volumes).

The results of the analysis for the AM and PM peak hours are shown and discussed in this section. A LOS of D or better is generally considered to be acceptable, while LOS of E or F are generally considered to be unacceptable. The tables showing the results of the traffic analysis throughout this report highlight approaches and intersections green for those operating at an acceptable LOS during peak hours and red for those operating at an unacceptable LOS.

6.1 Segment 1

Table 15 shows the results of the traffic models for the existing conditions at each of the intersections which are included in Segment 1. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 15: Existing Conditions LOS Analysis Results – Segment 1

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
101	Eastbound Westpark Tollway Exit Ramp at Fondren Road	Eastbound	F	212.4	F	368.5
		Northbound	F	383.6	F	263.3
		Southbound	A	2.3	A	3.9
		Overall	**F**	**203.2**	**F**	**159.0**
102	Westpark Drive at Fondren Road	Eastbound	F	246.8	F	297.1
		Westbound	E	62.5	F	129.5
		Northbound	B	12.2	B	13.6
		Southbound	E	74.2	F	117.4
		Overall	**F**	**108.3**	**F**	**126.5**
103	Westpark Drive at Hillcroft Avenue	Eastbound	E	66.7	D	48.5
		Westbound	F	86.9	D	50.1
		Northbound	F	97.3	D	38.2
		Southbound	F	111.1	F	178.8
		Overall	**F**	**89.7**	**E**	**75.3**
104	Westpark Drive at 14th Street	Eastbound	B	10.3	C	29.4
		Westbound	C	20.6	A	6.6
		Northbound	B	10.5	D	37.6
		Overall	**B**	**15.7**	**B**	**18.2**
105	Westpark Drive at IH-69 SB FR	Eastbound	D	35.6	C	22.3
		Westbound	B	15.3	C	20.5
		Southbound	B	15.3	B	12.1
		Overall	**C**	**20.3**	**B**	**16.8**
106	Westpark Drive at IH-69 NB FR	Eastbound	C	22.8	B	15.2
		Westbound	C	21.3	C	24.9
		Northbound	B	16.6	B	18.9
		Overall	**C**	**20.7**	**B**	**18.8**
107	Westpark Drive at Rampart Street	Eastbound	A	8.6	A	6.9
		Westbound	A	5.4	B	10.5
		Northbound	F	143.2	D	46.2
		Southbound	C	31.2	C	33.7
		Overall	**C**	**34.5**	**B**	**13.1**
108	Westpark Drive at Renwick Drive	Eastbound	C	29.5	C	34.9
		Westbound	C	21.4	B	18.4
		Northbound	D	40.0	D	45.3
		Southbound	D	37.0	D	39.3
		Overall	**C**	**33.0**	**C**	**34.1**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
99558	Westpark Drive at Alder Drive (Unsignalized)	Eastbound	A	0.2	A	0.0
		Westbound	A	2.0	A	1.8
		Northbound	C	16.0	C	19.6
		Overall	**A**	**2.8**	**A**	**3.5**
109	Westpark Drive at Chimney Rock Road	Eastbound	E	69.1	C	31.1
		Westbound	C	21.2	D	52.3
		Northbound	D	41.7	D	39.2
		Southbound	D	40.9	C	25.9
		Overall	**D**	**48.7**	**D**	**35.9**
309	Westpark Driev at Royalton Street (Unsignalized)	Eastbound	A	5.2	A	0.0
		Westbound	A	1.0	A	0.7
		Northbound	F	149.6	F	241.6
		Overall	**C**	**17.6**	**D**	**27.5**
110	Westpark Drive at S Rice Avenue	Eastbound	F	82.1	D	55.0
		Westbound	C	23.7	F	91.8
		Northbound	D	54.3	D	35.8
		Southbound	D	45.0	D	40.6
		Overall	**E**	**58.2**	**E**	**59.8**
99553	Westpark Drive at Uptown Transit Center	Eastbound	B	12.7	A	0.3
		Westbound	A	2.8	D	44.8
		Northbound	D	48.3	D	43.8
		Overall	**A**	**9.6**	**C**	**28.9**
111	Westpark Drive at IH-610 SBFR	Eastbound	F	113.9	C	28.6
		Westbound	B	17.9	A	8.0
		Southbound	D	50.3	D	37.5
		Overall	**F**	**84.0**	**B**	**19.8**
112	Westpark Drive at IH-610 NBFR	Eastbound	B	17.7	C	25.0
		Westbound	D	36.6	D	36.1
		Northbound	D	49.2	F	97.2
		Overall	**C**	**30.1**	**E**	**55.2**
99561	Westpark Drive at Loop Central Drive (Unsignalized)	Eastbound	A	0.0	A	0.0
		Westbound	A	1.4	A	0.1
		Northbound	C	15.5	F	173.6
		Overall	**A**	**1.2**	**D**	**25.3**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
113	Westpark Drive at Newcastle Drive	Eastbound	C	25.3	C	28.3
		Westbound	D	35.3	D	40.1
		Northbound	F	96.8	D	40.3
		Southbound	C	31.0	C	34.8
		Overall	**D**	**49.0**	**D**	**36.9**

As shown in **Table 15**, there are multiple intersections which operate at an overall LOS of E or F during the AM and/or PM peak hours including the following:

- 101 & 102: Fondren Road at Westpark Drive/Westpark Tollway Exit Ramp
- 103: Westpark Drive at Hillcroft Avenue
- 110: Westpark Drive at S Rice Avenue
- 111: Westpark Drive at IH-610 SB Frontage Road
- 112: Westpark Drive at IH-610 NB Frontage Road

6.2 Segment 2

Table 16 shows the results of the traffic models for the existing conditions at each of the analyzed intersections which are included in Segment 2. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 16: Existing Conditions LOS Analysis Results – Segment 2

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
114	Westpark Drive at Weslayan Street	Eastbound	D	39.3	E	62.2
		Westbound	D	39.4	F	90.4
		Northbound	C	30.7	C	22.4
		Southbound	D	37.1	C	28.3
		Overall	**D**	**36.0**	**D**	**45.8**
115	Westpark Drive at Edloe Street	Eastbound	C	25.8	B	14.8
		Westbound	C	33.2	C	28.6
		Northbound	D	37.7	D	39.3
		Southbound	C	28.5	C	26.7
		Overall	**C**	**31.6**	**C**	**28.0**
116	IH-69 Express Lanes at Edloe Street*	Eastbound	C	20.4	-	-
		Westbound	-	-	D	36.3
		Northbound	A	1.0	A	8.2
		Southbound	A	3.1	A	6.5
		Overall	**A**	**5.0**	**A**	**9.6**
118	Richmond Avenue at Edloe Street	Eastbound	C	28.6	C	32.1
		Westbound	E	67.7	D	45.5
		Northbound	B	17.7	F	81.3
		Southbound	C	22.9	C	28.6
		Overall	**C**	**32.1**	**D**	**46.4**
119	Richmond Avenue at Buffalo Speedway	Eastbound	D	52.3	B	17.7
		Westbound	E	63.8	D	35.4
		Northbound	C	34.3	F	127.2
		Southbound	D	37.0	C	30.8
		Overall	**D**	**46.2**	**E**	**56.9**
120	Richmond Avenue at Eastside Street	Eastbound	B	16.0	A	7.2
		Westbound	A	6.7	A	6.3
		Northbound	D	38.3	E	59.4
		Southbound	C	27.6	D	40.6
		Overall	**B**	**16.3**	**B**	**15.7**

* - WB approach closed during AM Peak and EB approach closed during PM Peak

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
121	Richmond Avenue at Kirby Drive	Eastbound	D	41.9	E	58.3
		Westbound	B	16.8	D	49.3
		Northbound	C	29.5	F	87.3
		Southbound	D	35.4	E	78.0
		Overall	**C**	**32.3**	**E**	**74.7**
122	Richmond Avenue at Greenbriar Street	Eastbound	C	30.1	D	35.7
		Westbound	C	20.4	A	10.0
		Northbound	C	26.8	D	38.7
		Southbound	D	42.2	C	34.8
		Overall	**C**	**31.3**	**C**	**28.6**
123	Richmond Avenue at Shepherd Drive	Eastbound	B	13.0	A	4.8
		Westbound	B	16.0	A	7.7
		Northbound	D	42.3	D	39.9
		Southbound	D	43.1	D	40.6
		Overall	**C**	**28.7**	**C**	**24.7**
124	Richmond Avenue at Hazard Street	Eastbound	B	11.8	A	4.8
		Westbound	A	5.1	B	14.8
		Northbound	F	229.9	F	342.9
		Southbound	F	418.2	F	421.4
		Overall	**F**	**105.4**	**F**	**138.3**
125	Richmond Avenue at Woodhead Street	Eastbound	A	4.4	B	10.9
		Westbound	A	7.2	A	5.7
		Northbound	F	158.9	E	74.8
		Southbound	C	32.4	C	28.4
		Overall	**D**	**37.1**	**C**	**26.2**
126	Richmond Avenue at Dunlavy Street	Eastbound	A	4.3	B	10.0
		Westbound	A	5.0	A	5.0
		Northbound	F	93.2	D	36.4
		Southbound	F	190.4	F	377.7
		Overall	**E**	**63.6**	**E**	**71.7**
127	Richmond Avenue at Mandell Street	Eastbound	A	1.8	A	5.8
		Westbound	A	1.1	A	5.3
		Northbound	D	42.6	F	209.5
		Southbound	D	45.0	E	80.0
		Overall	**B**	**13.1**	**D**	**54.0**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
128	Richmond Avenue at Montrose Boulevard	Eastbound	C	32.3	D	38.4
		Westbound	D	45.1	F	105.7
		Northbound	F	86.5	D	36.9
		Southbound	E	63.4	D	45.3
		Overall	**E**	**62.6**	**E**	**56.5**
129	Richmond Avenue at US 59 / Spur 527 SBFR	Eastbound	D	35.7	F	138.7
		Westbound	A	0.6	A	0.3
		Southbound	C	28.2	C	24.3
		Overall	**B**	**18.1**	**E**	**61.5**
130	Richmond Avenue at US 59 / Spur 527 NBFR	Eastbound	A	3.8	A	4.1
		Westbound	E	65.0	C	24.4
		Northbound	C	26.9	C	34.4
		Overall	**D**	**36.6**	**B**	**18.1**

As shown in **Table 16**, there are multiple intersections within Segment 2 which are operating at LOS of E or F during the AM and/or PM peak hours. These intersections include the following:

- 119: Richmond Avenue at Buffalo Speedway
- 121: Richmond Avenue at Kirby Drive
- 124: Richmond Avenue at Hazard Street
- 126: Richmond Avenue at Dunlavy Street
- 128: Richmond Avenue at Montrose Boulevard
- 129: Richmond Avenue at US 59 / Spur 527 SB Frontage Road

6.3 Segment 3

Table 17 shows the results of the traffic models for the existing conditions at each of the analyzed intersections which are included in Segment 3. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 17: Existing Conditions LOS Analysis Results – Segment 3

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
131	Richmond Avenue at Main Street	Eastbound	D	54.2	F	82.2
		Westbound	F	88.7	D	42.7
		Northbound	C	28.8	D	42.0
		Southbound	D	41.7	D	44.9
		Overall	**E**	**55.8**	**D**	**53.8**
132	Wheeler Avenue at Fannin Street	Eastbound	C	22.3	C	20.3
		Westbound	E	75.0	C	31.2
		Southbound	B	19.6	B	12.4
		Overall	**C**	**29.8**	**B**	**19.8**
133	Wheeler Avenue at San Jacinto Street	Eastbound	B	13.5	D	38.3
		Westbound	E	79.6	C	20.6
		Northbound	C	23.9	B	13.4
		Overall	**D**	**37.0**	**C**	**22.3**
134	Wheeler Avenue at La Branch Street	Eastbound	A	2.8	A	1.5
		Westbound	A	5.1	A	0.7
		Northbound	C	33.4	D	36.1
		Southbound	C	28.0	C	34.9
		Overall	**A**	**9.4**	**A**	**5.2**
135	Wheeler Avenue at Almeda Road	Eastbound	B	15.4	B	18.9
		Westbound	C	25.3	C	30.8
		Northbound	B	17.5	B	13.0
		Southbound	B	14.0	C	22.0
		Overall	**B**	**17.5**	**B**	**19.2**
365	Wheeler Avenue at St Emanuel Street (Unsignalized)	Eastbound	A	0.0	A	0.0
		Westbound	A	0.0	A	0.0
		Overall	**A**	**0.0**	**A**	**0.0**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
367	Wheeler Avenue at Hutchins Street (Unsignalized)	Eastbound	B	13.3	D	28.8
		Westbound	A	8.9	D	29.7
		Northbound	B	12.9	F	201.7
		Southbound	A	6.9	B	12.2
		Overall	**B**	**12.0**	**F**	**91.0**
136	Wheeler Avenue at Emancipation Avenue	Eastbound	A	5.7	B	12.8
		Westbound	A	2.6	B	15.1
		Northbound	B	17.6	B	10.5
		Southbound	B	17.8	B	15.1
		Overall	**A**	**9.5**	**B**	**13.3**
266	Wheeler Avenue at Ennis Street	Eastbound	B	18.1	B	16.8
		Northbound	A	1.0	A	4.6
		Southbound	A	0.1	A	1.7
		Overall	**A**	**3.5**	**A**	**6.3**
292	Ennis Street at Cleburne Street	Eastbound	C	23.4	B	19.7
		Westbound	C	22.9	C	22.2
		Northbound	A	2.0	A	6.8
		Southbound	A	1.9	A	4.6
		Overall	**A**	**8.0**	**A**	**10.0**
141	Ennis Street at Alabama Street	Eastbound	A	8.7	E	42.3
		Westbound	C	17.7	E	48.8
		Northbound	A	6.3	E	35.4
		Southbound	B	14.9	D	33.3
		Overall	**B**	**11.2**	**E**	**41.2**
306	Ennis Street at Holman Street	Eastbound	A	7.0	A	8.4
		Westbound	A	9.5	B	11.8
		Northbound	B	11.0	B	11.0
		Southbound	A	9.9	B	12.7
		Overall	**A**	**9.7**	**B**	**11.3**
249	Ennis Street at Elgin Street	Eastbound	B	12.0	B	12.3
		Westbound	B	16.3	C	23.5
		Northbound	B	13.4	B	11.9
		Southbound	B	16.4	B	17.8
		Overall	**B**	**14.3**	**B**	**17.5**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
143	Elgin Street at Scott Street	Eastbound	D	38.2	D	41.2
		Westbound	D	44.2	E	55.9
		Northbound	B	10.8	A	7.5
		Southbound	C	23.4	C	26.3
		Overall	**C**	**28.1**	**C**	**30.0**
144	Elgin Street at Cullen Boulevard	Eastbound	E	64.9	D	41.9
		Westbound	D	44.7	C	25.2
		Northbound	B	11.9	C	30.5
		Southbound	C	30.3	C	33.2
		Overall	**D**	**35.1**	**C**	**31.5**
145	Elgin Street at UH Entrance 18	Eastbound	A	5.5	A	3.3
		Westbound	A	1.9	A	6.2
		Northbound	C	33.4	C	29.5
		Southbound	D	39.8	B	17.9
		Overall	**A**	**9.3**	**B**	**10.2**
146	Elgin St at Spur 5 SB Frontage Road	Eastbound	A	7.7	B	11.8
		Westbound	A	8.2	A	8.5
		Southbound	B	17.6	B	18.3
		Overall	**B**	**11.5**	**B**	**12.0**
147	Elgin St at Spur 5 NB Frontage Road	Eastbound	A	3.7	B	11.4
		Westbound	A	9.9	B	13.5
		Northbound	A	9.1	B	12.5
		Overall	**A**	**8.4**	**B**	**12.3**
148	Elgin St at IH-45 NB Frontage Road	Westbound	A	9.7	B	14.2
		Northbound	B	12.2	B	12.7
		Southbound	B	13.0	B	11.1
		Overall	**B**	**10.7**	**B**	**13.5**

As shown in **Table 17**, there are multiple intersections within Segment 3 which are operating at LOS of E or F during the AM and/or PM peak hours. These intersections include the following:

- 131: Richmond Avenue at Main Street
- 367: Wheeler Avenue at Hutchins Street
- 141: Elgin Street at Alabama Street

6.4 Segment 4

Table 18 shows the results of the traffic models for the existing conditions at each of the analyzed intersections which are included in Segment 4. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 18: Existing Conditions LOS Analysis Results – Segment 4

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
452	Ernestine Street at Munger Street (Unsignalized)	Eastbound	A	8.6	A	5.3
		Westbound	A	7.2	A	4.1
		Southbound	A	1.0	A	0.4
		Overall	**A**	**3.4**	**A**	**1.2**
453	Lockwood Drive at Munger Street (Unsignalized)	Eastbound	B	12.5	A	9.9
		Westbound	D	25.2	B	11.3
		Northbound	A	0.0	A	0.0
		Overall	**A**	**6.7**	**A**	**1.4**
149	Ernestine Street at Leeland Street	Eastbound	B	18.4	B	17.7
		Westbound	B	18.7	A	6.8
		Southbound	B	14.9	A	7.3
		Overall	**B**	**16.7**	**A**	**10.0**
150	Lockwood Drive at Leeland Street	Eastbound	B	11.9	A	9.4
		Westbound	C	26.7	C	24.8
		Northbound	B	10.6	B	10.3
		Overall	**B**	**13.9**	**B**	**14.6**
151	Ernestine Street / Lockwood Drive at Polk Street	Eastbound	C	27.1	C	21.9
		Westbound	C	24.1	B	16.1
		Northbound	B	15.1	C	22.7
		Southbound	C	31.1	D	41.9
		Overall	**C**	**24.6**	**C**	**27.1**
152	Lockwood Drive at McKinney Street	Eastbound	C	21.9	C	21.6
		Westbound	C	20.6	C	20.8
		Northbound	A	2.7	A	1.8
		Southbound	A	7.1	B	15.1
		Overall	**A**	**6.4**	**A**	**9.3**
153	Lockwood Drive at Harrisburg Boulevard	Eastbound	B	18.6	C	26.1
		Westbound	C	20.9	C	25.6
		Northbound	D	37.7	D	38.3
		Southbound	C	33.2	C	35.0
		Overall	**C**	**31.0**	**C**	**32.9**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
154	Lockwood Drive at Canal Street	Eastbound	B	15.7	C	20.4
		Westbound	C	29.2	C	33.2
		Northbound	A	7.3	B	11.7
		Southbound	B	13.6	B	10.6
		Overall	**B**	**14.5**	**B**	**16.6**
155	Lockwood Drive at Navigation Boulevard	Eastbound	C	24.7	C	24.0
		Westbound	C	25.3	C	24.3
		Northbound	C	23.6	C	25.6
		Southbound	B	17.7	C	24.0
		Overall	**C**	**22.6**	**C**	**24.5**
156	Lockwood Drive at Armour Drive	Westbound	B	17.5	B	17.3
		Northbound	C	25.9	C	34.3
		Southbound	B	15.5	B	12.3
		Overall	**B**	**19.4**	**C**	**24.6**
514	Lockwood Drive at Harvey Wilson Drive (Unsignalized)	Eastbound	E	41.6	F	83.8
		Westbound	E	39.7	E	37.6
		Northbound	A	2.8	A	4.5
		Southbound	A	0.4	A	0.7
		Overall	**A**	**4.3**	**B**	**12.4**
157	Lockwood Drive at Clinton Drive	Eastbound	C	27.8	D	41.6
		Westbound	C	26.0	C	26.2
		Northbound	C	27.5	C	20.3
		Southbound	A	10.0	B	10.7
		Overall	**B**	**19.7**	**C**	**21.6**

As shown in **Table 18**, all the existing intersections within Segment 4 are operating at an acceptable Level of Service during the AM and PM peak hours.

6.5 Segment 5

Table 19 shows the results of the traffic models for the existing conditions at each of the analyzed intersections which are included in Segment 5. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 19: Existing Conditions LOS Analysis Results – Segment 5

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
158	Lockwood Drive (SB) at Market Street	Eastbound	C	27.0	C	29.4
		Westbound	A	4.2	A	10.0
		Southbound	A	6.6	A	5.5
		Overall	**A**	**8.5**	**A**	**9.3**
159	Lockwood Drive (NB) at Market Street	Eastbound	A	3.8	B	17.7
		Westbound	C	25.9	C	33.0
		Northbound	D	37.4	B	13.0
		Overall	**C**	**30.5**	**B**	**14.6**
160	Lockwood Drive (SB) at IH-10 EB Frontage Road	Eastbound	C	26.9	D	39.9
		Southbound	A	3.3	A	4.9
		Overall	**B**	**10.9**	**C**	**20.6**
161	Lockwood Drive (NB) at IH-10 EB Frontage Road	Eastbound	A	6.4	A	5.8
		Northbound	C	27.7	D	36.8
		Overall	**B**	**17.6**	**C**	**23.9**
162	Lockwood Drive (SB) at IH-10 WB Frontage Road	Westbound	A	2.7	A	2.9
		Southbound	D	44.8	D	40.7
		Overall	**C**	**21.3**	**C**	**23.8**
163	Lockwood Drive (NB) at IH-10 WB Frontage Road	Westbound	C	28.9	B	16.2
		Northbound	A	5.9	A	7.5
		Overall	**B**	**18.5**	**B**	**10.8**
164	Lockwood Drive (SB) at Lyons Avenue	Eastbound	B	16.0	C	21.4
		Westbound	B	12.8	B	12.8
		Southbound	B	11.5	B	10.8
		Overall	**B**	**13.0**	**B**	**15.0**
165	Lockwood Drive (NB) at Lyons Avenue	Eastbound	A	3.6	A	6.1
		Westbound	B	16.4	B	17.1
		Northbound	C	34.9	B	10.7
		Overall	**C**	**23.6**	**B**	**11.0**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
534	Lockwood Drive at Hershe Street (Unsignalized)	Eastbound	A	8.3	B	12.0
		Westbound	A	8.9	B	10.0
		Northbound	A	0.1	A	0.1
		Southbound	A	0.5	A	0.3
		Overall	**A**	**0.7**	**A**	**0.5**
166	Lockwood Drive at Mulvey Street	Eastbound	B	19.2	D	39.6
		Westbound	B	17.2	C	32.3
		Northbound	A	7.4	A	1.0
		Southbound	A	6.5	A	1.0
		Overall	**A**	**7.2**	**A**	**2.0**
567	Lockwood Drive at Nichols Street (Unsignalized)	Eastbound	A	8.8	B	11.2
		Westbound	A	9.4	B	12.0
		Northbound	A	0.0	A	0.3
		Southbound	A	1.4	A	0.7
		Overall	**A**	**1.6**	**A**	**0.8**
576	Lockwood Drive at Sudan Street (Unsignalized)	Eastbound	A	8.1	B	13.6
		Westbound	A	9.1	A	5.8
		Northbound	A	0.0	A	0.0
		Southbound	A	0.2	A	0.7
		Overall	**A**	**0.4**	**A**	**0.5**
167	Lockwood Drive at Collingsworth Street	Eastbound	B	17.0	C	25.8
		Westbound	C	30.7	C	29.8
		Northbound	B	12.1	C	31.4
		Southbound	A	2.9	A	5.0
		Overall	**B**	**11.4**	**C**	**23.3**
168	Lockwood Drive at Crane Street	Eastbound	C	30.9	C	31.9
		Westbound	C	32.5	C	32.0
		Northbound	B	10.8	B	10.1
		Southbound	A	1.4	A	3.0
		Overall	**B**	**10.6**	**B**	**11.5**
169	Lockwood Drive at Calvalcade Street	Eastbound	C	21.4	C	23.2
		Westbound	C	21.3	C	21.1
		Northbound	A	4.7	B	12.6
		Southbound	B	18.0	B	17.5
		Overall	**B**	**15.5**	**B**	**17.1**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
170	Lockwood Drive at Rand Street	Eastbound	D	35.4	D	36.5
		Westbound	B	18.9	C	25.6
		Northbound	A	1.4	A	2.1
		Southbound	A	4.9	A	7.8
		Overall	**A**	**7.1**	**A**	**8.5**
604	Lockwood Drive at Pardee Street (Unsignalized)	Eastbound	C	15.9	C	21.1
		Westbound	B	14.5	C	20.9
		Northbound	A	0.3	A	1.1
		Southbound	A	0.3	A	0.5
		Overall	**A**	**1.7**	**A**	**1.8**
171	Lockwood Drive at IH-610 EB Frontage Road	Eastbound	C	29.9	C	33.3
		Northbound	D	37.3	D	43.6
		Southbound	A	0.9	A	1.5
		Overall	**C**	**23.6**	**C**	**29.5**
172	Lockwood Drive at IH-610 WB Frontage Road	Westbound	C	32.1	C	33.6
		Northbound	A	3.4	A	1.9
		Southbound	D	37.3	C	31.8
		Overall	**C**	**20.2**	**B**	**18.2**
173	Lockwood Drive at Kelley Street	Eastbound	C	24.0	C	27.2
		Westbound	C	22.6	B	19.2
		Northbound	D	42.9	C	24.3
		Southbound	C	21.6	C	26.0
		Overall	**C**	**31.2**	**C**	**23.8**
174	Lockwood Drive at Shreveport Boulevard	Eastbound	C	23.7	C	28.8
		Westbound	C	33.1	C	30.8
		Northbound	B	17.4	C	21.5
		Southbound	A	5.1	A	8.5
		Overall	**C**	**16.7**	**B**	**18.8**
175	Lockwood Drive at Bennington Street	Eastbound	B	15.0	C	22.6
		Westbound	A	3.3	A	4.4
		Northbound	A	0.8	A	0.6
		Southbound	A	3.2	A	4.7
		Overall	**A**	**3.1**	**A**	**6.6**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
623	Lockwood Drive at Denmark Street (Unsignalized)	Eastbound	A	9.7	B	10.3
		Westbound	B	10.2	B	10.4
		Northbound	A	0.5	A	0.1
		Southbound	A	0.0	A	0.1
		Overall	**A**	**3.0**	**A**	**1.7**
176	Lockwood Drive at Crosstimbers Street	Eastbound	C	20.6	C	22.5
		Westbound	B	17.7	B	17.2
		Northbound	C	28.2	C	28.6
		Southbound	C	26.1	C	26.0
		Overall	**C**	**22.9**	**C**	**23.0**
177	Lockwood Drive at Weaver Road	Eastbound	D	36.6	D	35.9
		Westbound	D	40.2	E	60.3
		Northbound	C	31.4	C	34.3
		Southbound	C	30.0	C	32.4
		Overall	**C**	**33.9**	**D**	**40.2**
641	Lockwood Drive at Keeland Street (Unsignalized)	Eastbound	A	4.2	A	5.8
		Westbound	A	6.1	A	7.8
		Northbound	A	0.0	A	0.0
		Southbound	A	0.0	A	0.0
		Overall	**A**	**0.3**	**A**	**0.2**
178	Lockwood Drive at Laura Koppe Road	Eastbound	C	25.8	C	29.6
		Westbound	C	32.9	C	30.4
		Northbound	B	10.8	B	12.0
		Southbound	A	3.6	A	4.9
		Overall	**B**	**15.9**	**B**	**17.0**
659	Lockwood Drive at Firnat Street	Eastbound	A	5.0	B	13.1
		Westbound	A	7.9	C	16.8
		Northbound	A	0.4	A	0.3
		Southbound	A	0.0	A	0.2
		Overall	**A**	**2.2**	**A**	**2.8**
179	Lockwood Drive at Tidwell Road	Eastbound	B	11.6	B	13.4
		Westbound	B	14.5	B	14.1
		Northbound	C	23.7	E	63.5
		Southbound	C	34.5	C	32.5
		Overall	**B**	**14.8**	**C**	**20.7**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
180	Tidwell Road at Hirsch Road	Eastbound	A	8.2	A	8.8
		Westbound	A	2.5	A	2.7
		Northbound	C	34.8	C	29.6
		Southbound	C	28.4	C	25.1
		Overall	**B**	**12.5**	**B**	**10.0**
677	Tidwell Road at Friendly Street (Unsignalized)	Eastbound	A	2.9	A	5.8
		Westbound	A	0.1	A	0.1
		Northbound	F	199.5	F	89.8
		Southbound	F	322.4	F	315.2
		Overall	**D**	**28.0**	**C**	**15.8**
181	Tidwell Road at IH-69 NB Frontage Road	Eastbound	B	17.3	B	16.9
		Westbound	B	15.2	B	17.5
		Northbound	B	15.0	B	17.3
		Overall	**B**	**15.8**	**B**	**17.2**
182	Tidwell Road at IH-69 SB Frontage Road	Eastbound	B	13.2	B	15.6
		Westbound	B	15.4	B	16.6
		Southbound	B	12.6	B	15.5
		Overall	**B**	**13.8**	**B**	**15.9**
689	Tidwell Road at Edell Street (Unsignalized)	Eastbound	A	0.0	A	0.4
		Westbound	A	0.1	A	0.0
		Northbound	B	12.2	B	11.7
		Southbound	C	15.1	C	17.4
		Overall	**A**	**1.7**	**A**	**0.9**
183	Tidwell Road at Jensen Drive	Eastbound	C	24.2	C	29.3
		Westbound	B	15.6	C	22.2
		Northbound	D	35.0	C	34.9
		Southbound	C	28.3	C	31.4
		Overall	**C**	**22.8**	**C**	**28.5**
705	Jensen Drive at Turner Drive (Unsignalized)	Eastbound	B	14.7	B	14.9
		Westbound	A	6.4	B	12.0
		Northbound	A	0.0	A	0.0
		Southbound	A	0.0	A	0.0
		Overall	**A**	**0.2**	**A**	**0.1**

ID	Intersection	Approach	Existing Conditions AM Peak		Existing Conditions PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
690	Epsom Road, Edell Street at Turner Drive (Unsignalized)	Eastbound	A	5.2	A	0.0
		Westbound	A	0.0	A	0.0
		Northbound	A	0.0	A	4.1
		Southbound	A	0.0	A	0.0
		Overall	**A**	**0.2**	**A**	**4.1**

As shown in **Table 19**, all of the existing intersections within Segment 5 are operating at an acceptable Level of Service during the AM and PM peak hours.

7 Future Year (2030) No-Build Traffic Analysis Results

This section describes the analysis of the future year (2030) No-Build traffic analysis and includes the results of the TransModeler simulations for all analyzed intersections within the study area. For the vast majority of the University Corridor, these conditions were identical to the existing conditions other than the projected traffic volumes have been grown based on the growth factors shown in **Table 4**. There are a few intersections in Segments 3 and 4 that have slightly modified configurations to account for future modifications not included in the H-GAC regional model. These intersections will be briefly described in the appropriate segment section below. The future year No-Build conditions were studied to establish a baseline projection of how traffic within the study area would operate without the proposed BRT Project in the design year of 2030 for comparison to the 2030 Build conditions. The results of the analysis for the AM and PM peak hours are shown and discussed in this section for the 2030 No-Build conditions.

7.1 Segment 1

Table 20 shows the results of the traffic models for the future year 2030 No-Build conditions at each of the analyzed intersections which are included in Segment 1. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 20: 2030 No-Build Conditions LOS Analysis Results – Segment 1

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
101	Eastbound Westpark Tollway Exit Ramp at Fondren Road	Eastbound	F	257.0	F	466.6
		Northbound	F	376.1	F	282.2
		Southbound	A	2.8	A	4.8
		Overall	**F**	**203.1**	**F**	**173.7**
102	Westpark Drive at Fondren Road	Eastbound	F	287.1	F	359.4
		Westbound	F	92.2	F	157.9
		Northbound	B	12.6	B	13.9
		Southbound	F	89.8	F	232.4
		Overall	**F**	**129.7**	**F**	**176.6**
103	Westpark Drive at Hillcroft Avenue	Eastbound	E	61.3	D	52.3
		Westbound	F	103.2	E	69.0
		Northbound	F	115.2	D	47.1
		Southbound	F	195.9	F	292.4
		Overall	**F**	**116.6**	**F**	**104.9**
104	Westpark Drive at 14th Street	Eastbound	B	14.6	D	52.2
		Westbound	E	58.7	C	21.9
		Northbound	B	11.8	D	45.0
		Overall	**D**	**37.6**	**D**	**35.1**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
105	Westpark Drive at IH-69 SB FR	Eastbound	D	42.8	C	24.4
		Westbound	B	17.2	C	23.8
		Southbound	B	17.2	B	16.1
		Overall	**C**	**29.0**	**B**	**20.0**
106	Westpark Drive at IH-69 NB FR	Eastbound	C	24.8	B	18.6
		Westbound	C	21.7	C	27.9
		Northbound	B	17.1	C	23.7
		Overall	**C**	**21.8**	**C**	**22.4**
107	Westpark Drive at Rampart Street	Eastbound	A	8.8	A	7.4
		Westbound	A	5.9	A	9.9
		Northbound	F	189.3	D	52.0
		Southbound	C	31.6	C	32.5
		Overall	**D**	**42.0**	**B**	**14.0**
108	Westpark Drive at Renwick Drive	Eastbound	C	31.4	D	36.5
		Westbound	C	22.4	B	19.9
		Northbound	D	42.8	D	39.6
		Southbound	D	38.2	D	40.5
		Overall	**D**	**35.0**	**C**	**34.1**
99558	Westpark Drive at Alder Drive (Unsignalized)	Eastbound	A	8.8	A	0.5
		Westbound	A	2.8	A	2.3
		Northbound	E	42.4	F	56.1
		Overall	**B**	**13.4**	**A**	**9.0**
109	Westpark Drive at Chimney Rock Road	Eastbound	F	116.0	C	34.6
		Westbound	C	20.9	D	48.5
		Northbound	D	50.4	D	40.7
		Southbound	D	48.6	C	27.8
		Overall	**E**	**67.7**	**D**	**36.7**
309	Westpark Drive at Royalton Street (Unsignalized)	Eastbound	E	41.4	A	0.1
		Westbound	A	1.3	A	0.9
		Northbound	F	345.8	F	323.5
		Total	**F**	**54.4**	**D**	**27.4**
110	Westpark Drive at S Rice Avenue	Eastbound	F	131.7	E	64.2
		Westbound	C	26.4	F	104.2
		Northbound	E	78.4	F	80.4
		Southbound	D	50.5	D	42.4
		Overall	**F**	**82.8**	**E**	**76.4**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
99553	Westpark Drive at Uptown Transit Center	Eastbound	C	20.4	A	0.3
		Westbound	A	3.6	F	95.8
		Northbound	D	42.5	D	46.0
		Overall	**B**	**14.3**	**E**	**59.6**
111	Westpark Drive at IH-610 SB Frontage Road	Eastbound	F	120.6	C	34.1
		Westbound	B	18.3	B	10.7
		Southbound	D	48.8	D	42.9
		Overall	**F**	**86.9**	**C**	**24.4**
112	Westpark Drive at IH-610 NB Frontage Road	Eastbound	B	18.3	C	28.2
		Westbound	D	42.8	E	70.0
		Northbound	D	48.2	F	139.1
		Overall	**C**	**32.8**	**F**	**81.5**
99561	Westpark Drive at Loop Central Drive (Unsignalized)	Eastbound	A	0.0	A	0.1
		Westbound	A	1.7	A	2.7
		Northbound	C	19.9	F	216.8
		Overall	**A**	**1.6**	**D**	**27.8**
113	Westpark Drive at Newcastle Drive	Eastbound	C	24.7	C	27.9
		Westbound	D	53.7	D	41.8
		Northbound	F	126.0	D	48.4
		Southbound	C	34.0	D	36.9
		Overall	**E**	**62.4**	**D**	**39.9**

As shown in **Table 20**, there are multiple intersections within Segment 1 which are projected to operate at a LOS of E or F during the AM and/or PM peak hours of traffic. These include the following:

- 101 & 102: Fondren Road at Westpark Drive/Westpark Tollway Exit Ramp
- 103: Westpark Drive at Hillcroft Avenue
- 109: Westpark Drive at Chimney Rock Road
- 110: Westpark Drive at S Rice Avenue
- 111: Westpark Drive at IH-610 SB Frontage Road
- 112: Westpark Drive at IH-610 NB Frontage Road
- 113: Westpark Drive at Newcastle Drive

Some intersections, which are currently operating at an acceptable LOS, are projected to operate at an unacceptable LOS in 2030 No-Build conditions due to the projected traffic growth including the following:

- 109: Westpark Drive at Chimney Rock Road
- 113: Westpark Drive at Newcastle Drive

7.2 Segment 2

Table 21 shows the results of the traffic models for the 2030 No-Build conditions at each of the analyzed intersections which are included in Segment 2. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 21: 2030 No-Build Conditions LOS Analysis Results – Segment 2

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
114	Westpark Drive at Weslayan Street	Eastbound	D	43.4	E	74.4
		Westbound	D	42.6	F	134.7
		Northbound	D	41.5	C	32.1
		Southbound	D	45.6	D	35.7
		Overall	**D**	**43.5**	**E**	**61.6**
115	Westpark Drive at Edloe Street	Eastbound	C	28.8	B	14.5
		Westbound	C	33.7	C	34.6
		Northbound	D	36.7	D	37.3
		Southbound	C	27.7	C	26.6
		Overall	**C**	**32.1**	**C**	**29.7**
116	IH-69 Express Lanes at Edloe Street	Eastbound	C	22.3	-	-
		Westbound	-	-	D	39.8
		Northbound	A	1.2	A	7.4
		Southbound	A	3.7	A	8.6
		Overall	**A**	**5.7**	**B**	**10.4**
118	Richmond Avenue at Edloe Street	Eastbound	C	29.7	C	32.8
		Westbound	E	66.3	D	46.8
		Northbound	B	18.7	E	74.2
		Southbound	C	23.0	C	31.5
		Overall	**C**	**32.1**	**D**	**46.1**
119	Richmond Avenue at Buffalo Speedway	Eastbound	D	52.0	B	17.1
		Westbound	E	66.3	D	36.1
		Northbound	D	44.8	F	152.3
		Southbound	D	37.6	C	32.3
		Overall	**D**	**50.4**	**E**	**62.8**
120	Richmond Avenue at Eastside Street	Eastbound	B	18.7	A	7.7
		Westbound	A	6.4	A	6.7
		Northbound	D	40.4	F	145.8
		Southbound	C	29.4	E	65.3
		Overall	**B**	**18.0**	**C**	**26.0**

* - WB approach closed during AM Peak and EB approach closed during PM Peak

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
121	Richmond Avenue at Kirby Drive	Eastbound	E	58.5	E	60.6
		Westbound	B	18.4	D	50.1
		Northbound	C	33.5	F	134.3
		Southbound	D	37.3	F	107.4
		Overall	**D**	**37.4**	**F**	**101.8**
122	Richmond Avenue at Greenbriar Street	Eastbound	C	34.6	D	37.0
		Westbound	C	20.5	B	10.7
		Northbound	C	27.3	D	39.9
		Southbound	E	64.0	D	36.1
		Overall	**D**	**40.7**	**C**	**30.0**
123	Richmond Avenue at Shepherd Drive	Eastbound	B	12.5	A	4.9
		Westbound	B	16.3	A	7.3
		Northbound	D	42.4	D	40.1
		Southbound	D	41.8	D	40.1
		Overall	**C**	**28.7**	**C**	**24.7**
124	Richmond Avenue at Hazard Street	Eastbound	B	12.0	A	4.6
		Westbound	A	4.8	B	15.0
		Northbound	F	262.2	F	331.5
		Southbound	F	383.4	F	510.9
		Overall	**F**	**113.0**	**F**	**146.8**
125	Richmond Avenue at Woodhead Street	Eastbound	A	4.1	B	12.2
		Westbound	A	8.5	A	6.1
		Northbound	F	198.3	F	148.7
		Southbound	C	33.0	C	26.4
		Overall	**D**	**45.2**	**D**	**46.4**
126	Richmond Avenue at Dunlavy Street	Eastbound	A	4.0	B	10.1
		Westbound	A	5.6	A	5.4
		Northbound	F	104.4	D	41.8
		Southbound	F	232.1	F	507.5
		Overall	**E**	**76.1**	**F**	**85.3**
127	Richmond Avenue at Mandell Street	Eastbound	A	2.4	A	5.7
		Westbound	A	1.5	A	5.1
		Northbound	D	42.2	F	270.7
		Southbound	D	45.8	E	74.9
		Overall	**B**	**13.9**	**E**	**61.1**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
128	Richmond Avenue at Montrose Boulevard	Eastbound	C	33.8	E	66.9
		Westbound	D	49.8	F	124.2
		Northbound	F	101.7	D	42.1
		Southbound	E	70.9	E	59.6
		Overall	**E**	**71.0**	**E**	**71.1**
129	Richmond Avenue at US 59 / Spur 527 SBFR	Eastbound	D	37.9	F	190.4
		Westbound	A	0.7	A	0.6
		Southbound	C	28.5	C	24.8
		Overall	**B**	**18.9**	**E**	**75.8**
130	Richmond Avenue at US 59 / Spur 527 NBFR	Eastbound	A	1.3	A	8.9
		Westbound	E	78.9	C	25.8
		Northbound	C	32.9	D	43.2
		Overall	**D**	**42.3**	**C**	**22.4**

As shown in **Table 21**, there are multiple intersections within Segment 2 which are projected to operate at a LOS of E or F (generally considered to be unacceptable) during the AM and/or PM peak hours of traffic. These include the following:

- 114: Westpark Drive at Weslayan Street
- 119: Richmond Avenue at Buffalo Speedway
- 121: Richmond Avenue at Kirby Drive
- 124: Richmond Avenue at Hazard Street
- 126: Richmond Avenue at Dunlavy Street
- 127: Richmond Avenue at Mandell Street
- 128: Richmond Avenue at Montrose Boulevard
- 129: Richmond Avenue at US 59/Spur 527 SB Frontage Road

Some intersections, which are currently operating at an acceptable LOS, are projected to operate at an unacceptable LOS during the peak hours in 2030 No-Build condition due to the projected traffic growth:

- 114: Westpark Drive at Weslayan Street

7.3 Segment 3

Table 22 shows the results of the traffic models for the 2030 No-Build conditions at each of the analyzed intersections which are included in Segment 3. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 22: 2030 No-Build Conditions LOS Analysis Results – Segment 3

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
131	Richmond Avenue at Main Street *	Eastbound	B	18.4	D	37.4
		Westbound	D	51.5	C	34.2
		Northbound	F	139.0	C	27.5
		Southbound	A	0.1	A	0.1
		Overall	**D**	**54.6**	**C**	**31.1**
132	Wheeler Avenue at Fannin Street	Eastbound	C	28.3	C	21.1
		Westbound	D	45.6	D	35.9
		Southbound	B	14.9	B	10.3
		Overall	**C**	**23.7**	**B**	**19.7**
133	Wheeler Avenue at San Jacinto Street	Eastbound	B	11.3	C	27.5
		Westbound	D	40.1	C	29.7
		Northbound	B	19.7	B	19.4
		Overall	**C**	**23.4**	**C**	**23.7**
134	Wheeler Avenue at La Branch Street	Eastbound	A	2.6	A	1.4
		Westbound	A	0.6	A	0.7
		Northbound	C	29.6	D	35.2
		Southbound	C	28.5	D	37.6
		Overall	**A**	**7.2**	**A**	**5.7**
135	Wheeler Avenue at Almeda Road	Eastbound	B	16.0	C	26.5
		Westbound	C	23.4	C	28.9
		Northbound	B	19.3	B	12.2
		Southbound	B	14.5	C	21.0
		Overall	**B**	**18.2**	**B**	**20.0**
365	Wheeler Avenue at St Emanuel Street (Unsignalized)	Eastbound	A	0.0	A	0.0
		Westbound	A	0.0	A	0.0
		Overall	**A**	**0.0**	**A**	**0.0**

* - Intersection configuration adjusted based on coordination with COH. SB through movement is eliminated and will have right turn onto Richmond Avenue only. NB through movement is eliminated and will have a left turn onto Richmond Avenue for general purpose traffic and a right turn for bus only. There will be no left turns from WB Richmond Avenue allowed onto Main Street.

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
367	Wheeler Avenue at Hutchins Street (Unsignalized)	Eastbound	B	12.7	D	32.6
		Westbound	A	9.8	D	28.0
		Northbound	B	12.5	F	200.5
		Southbound	A	6.3	B	12.6
		Overall	**B**	**11.9**	**F**	**93.1**
136	Wheeler Avenue at Emancipation Avenue	Eastbound	A	5.9	B	13.4
		Westbound	A	2.6	B	15.1
		Northbound	B	18.5	B	10.5
		Southbound	B	17.9	B	14.3
		Overall	**A**	**9.8**	**B**	**13.5**
266	Wheeler Avenue at Ennis Street	Eastbound	B	17.9	B	16.5
		Northbound	A	1.1	A	4.8
		Southbound	A	0.2	A	1.4
		Overall	**A**	**3.5**	**A**	**6.1**
292	Ennis Street at Cleburne Street	Eastbound	C	21.3	B	19.1
		Westbound	C	22.9	C	20.0
		Northbound	A	2.5	B	10.2
		Southbound	A	2.7	A	4.9
		Overall	**A**	**8.3**	**B**	**11.5**
141	Ennis Street at Alabama Street	Eastbound	B	11.1	F	82.8
		Westbound	C	18.9	F	133.9
		Northbound	A	7.6	F	108.8
		Southbound	C	16.4	E	47.5
		Overall	**B**	**13.0**	**F**	**96.0**
306	Ennis Street at Holman Street	Eastbound	A	7.0	A	9.8
		Westbound	A	9.4	B	11.0
		Northbound	B	11.8	B	11.4
		Southbound	A	9.6	B	13.0
		Overall	**A**	**9.9**	**B**	**11.5**
249	Ennis Street at Elgin Street	Eastbound	B	12.4	B	12.1
		Westbound	B	15.8	C	23.7
		Northbound	B	13.6	B	12.3
		Southbound	B	18.2	B	16.8
		Overall	**B**	**14.4**	**B**	**17.5**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
143	Elgin Street at Scott Street	Eastbound	D	36.2	D	40.1
		Westbound	D	43.1	E	55.5
		Northbound	A	5.0	A	5.4
		Southbound	C	25.0	C	26.4
		Overall	**C**	**28.3**	**C**	**30.3**
144	Elgin Street at Cullen Boulevard	Eastbound	E	68.5	D	41.0
		Westbound	D	46.0	C	27.1
		Northbound	B	13.0	C	31.1
		Southbound	C	33.2	C	33.1
		Overall	**D**	**37.3**	**C**	**32.2**
145	Elgin Street at UH Entrance 18	Eastbound	A	5.5	A	3.9
		Westbound	A	1.9	A	7.7
		Northbound	D	35.9	C	30.0
		Southbound	D	39.6	B	17.5
		Overall	**A**	**9.3**	**B**	**10.9**
146	Elgin Street at Spur 5 SB Frontage Road	Eastbound	A	7.1	B	12.4
		Westbound	A	8.2	A	8.4
		Southbound	B	17.9	B	18.8
		Overall	**B**	**11.5**	**B**	**12.4**
147	Elgin Street at Spur 5 NB Frontage Road	Eastbound	A	3.6	B	12.7
		Westbound	B	10.2	B	13.3
		Northbound	A	8.9	B	12.8
		Overall	**A**	**8.5**	**B**	**12.9**
148	Elgin Street at IH-45 NB Frontage Road	Eastbound	A	9.8	B	17.5
		Westbound	B	13.1	B	13.1
		Northbound	B	13.8	B	11.2
		Overall	**B**	**11.1**	**B**	**15.9**

As shown in **Table 22**, there are a couple of intersections within Segment 3 which are projected to operate at a LOS of E or F during the AM and/or PM peak hours of traffic under the No-Build scenario. These include the following:

- 367: Wheeler Avenue at Hutchins Street
- 141: Ennis Street at Alabama Street

7.4 Segment 4

Table 23 shows the results of the traffic models for the 2030 No-Build conditions at each of the analyzed intersections which are included in Segment 4. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 23: 2030 No-Build Conditions LOS Analysis Results – Segment 4

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
452	Ernestine Street at Munger Street (Unsignalized)	Eastbound	A	9.0	A	5.6
		Westbound	A	8.1	A	5.0
		Southbound	A	1.2	A	0.3
		Overall	**A**	**3.8**	**A**	**1.3**
453	Lockwood Drive at Munger Street (Unsignalized)	Eastbound	B	14.6	B	12.6
		Westbound	E	41.0	B	11.8
		Northbound	A	0.0	A	0.0
		Overall	**B**	**10.5**	**A**	**1.6**
149	Ernestine Street at Leeland Street	Eastbound	B	19.3	B	18.9
		Westbound	B	18.8	A	6.1
		Southbound	B	15.4	A	7.6
		Overall	**B**	**17.1**	**B**	**10.2**
150	Lockwood Drive at Leeland Street	Eastbound	B	11.7	B	10.1
		Westbound	C	27.6	C	26.3
		Northbound	B	10.8	B	10.3
		Overall	**B**	**14.2**	**B**	**15.2**
151	Ernestine Street / Lockwood Drive at Polk Street	Eastbound	C	26.0	C	21.5
		Westbound	C	23.6	B	17.0
		Northbound	B	15.5	C	23.3
		Southbound	C	34.6	D	43.3
		Overall	**C**	**25.7**	**C**	**27.8**
152	Lockwood Drive at McKinney Street	Eastbound	C	23.0	C	22.8
		Westbound	C	22.9	C	22.4
		Northbound	A	2.4	A	1.8
		Southbound	A	6.9	B	14.9
		Overall	**A**	**6.3**	**A**	**9.4**
153	Lockwood Drive at Harrisburg Boulevard	Eastbound	C	20.5	C	28.2
		Westbound	C	23.1	C	26.1
		Northbound	D	45.8	D	45.1
		Southbound	D	36.5	D	36.6
		Overall	**D**	**35.5**	**D**	**36.0**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
154	Lockwood Drive at Canal Street	Eastbound	B	15.3	C	22.6
		Westbound	C	29.9	D	35.2
		Northbound	A	7.5	B	16.3
		Southbound	B	15.9	B	14.9
		Overall	**B**	**15.5**	**C**	**20.1**
155	Lockwood Drive at Navigation Boulevard	Eastbound	C	27.1	C	26.1
		Westbound	C	26.8	C	24.8
		Northbound	C	28.8	D	47.4
		Southbound	B	19.5	C	20.7
		Overall	**C**	**25.2**	**C**	**29.4**
197	Lockwood Drive at Marron Park Way*	Eastbound	C	21.5	D	46.8
		Northbound	B	12.0	B	13.9
		Southbound	B	13.2	B	10.8
		Overall	**B**	**13.8**	**C**	**25.0**
156	Lockwood Drive at Armour Drive	Westbound	B	17.8	B	16.0
		Northbound	C	21.1	C	29.9
		Southbound	B	15.6	B	12.5
		Overall	**B**	**18.1**	**C**	**23.2**
514	Lockwood Drive at Harvey Wilson Drive (Unsignalized)	Eastbound	E	46.6	F	106.2
		Westbound	E	36.3	E	45.8
		Northbound	A	2.4	A	3.4
		Southbound	A	0.5	A	0.5
		Overall	**A**	**4.5**	**B**	**14.3**
157	Lockwood Drive at Clinton Drive	Eastbound	C	26.1	C	22.9
		Westbound	C	25.3	C	25.9
		Northbound	C	28.7	C	22.6
		Southbound	B	11.6	B	10.4
		Overall	**C**	**20.4**	**C**	**20.5**

* - Marron Park Way is a planned street by the Buffalo Bayou Partnership to serve future development in the area. Traffic information was obtained from a TIA prepared by Kimley Horn and dated June 2022.

All intersections within Segment 4 are projected to operate at an overall LOS of D or better during the peak hours under the 2030 No-Build conditions.

7.5 Segment 5

Table 24 shows the results of the traffic models for the 2030 No-Build conditions at each of the analyzed intersections which are included in Segment 5. The LOS is shown for the AM and PM peak hours of traffic and are summarized by both approach and overall intersection operations.

Table 24: 2030 No-Build Conditions LOS Analysis Results – Segment 5

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
158	Lockwood Drive (SB) at Market Street	Eastbound	C	27.7	C	30.3
		Westbound	A	4.3	A	9.9
		Southbound	A	6.6	A	6.1
		Overall	**A**	**8.6**	**A**	**9.9**
159	Lockwood Drive (NB) at Market Street	Eastbound	A	4.3	B	18.4
		Westbound	C	27.7	C	33.7
		Northbound	A	5.8	B	10.5
		Overall	**B**	**11.5**	**B**	**12.9**
160	Lockwood Drive (SB) at IH-10 EB Frontage Road	Eastbound	C	30.6	D	51.4
		Southbound	A	4.1	A	5.0
		Overall	**B**	**12.6**	**C**	**25.9**
161	Lockwood Drive (NB) at IH-10 EB Frontage Road	Eastbound	A	5.9	A	5.3
		Northbound	C	29.0	D	35.6
		Overall	**B**	**18.1**	**C**	**22.4**
162	Lockwood Drive (SB) at IH-10 WB Frontage Road	Westbound	A	2.9	A	3.2
		Southbound	D	53.7	D	44.7
		Overall	**C**	**25.1**	**C**	**26.1**
163	Lockwood Drive (NB) at IH-10 WB Frontage Road	Westbound	D	42.0	B	16.7
		Southbound	A	9.2	A	8.1
		Overall	**C**	**27.1**	**B**	**11.4**
164	Lockwood Drive (SB) at Lyons Avenue	Eastbound	B	17.1	C	24.5
		Westbound	B	12.3	B	12.3
		Southbound	B	12.5	B	11.0
		Overall	**B**	**13.7**	**B**	**16.2**
165	Lockwood Drive (NB) at Lyons Avenue	Eastbound	A	3.9	A	6.9
		Westbound	B	16.1	B	16.8
		Northbound	D	51.7	B	13.1
		Overall	**C**	**32.2**	**B**	**12.7**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
534	Lockwood Drive at Hershe Street	Eastbound	B	12.8	C	19.5
		Westbound	A	9.0	B	12.2
		Northbound	A	0.1	A	0.1
		Southbound	A	0.6	A	0.1
		Overall	**A**	**0.7**	**A**	**0.4**
166	Lockwood Drive at Mulvey Street	Eastbound	C	23.4	D	44.7
		Westbound	C	21.2	C	31.7
		Northbound	A	6.9	A	1.0
		Southbound	A	6.6	A	1.0
		Overall	**A**	**7.2**	**A**	**2.0**
567	Lockwood Drive at Nichols Street	Eastbound	A	8.3	C	16.2
		Westbound	B	11.2	B	14.8
		Northbound	A	0.1	A	0.2
		Southbound	A	1.3	A	0.8
		Overall	**A**	**1.6**	**A**	**1.0**
576	Lockwood Drive at Sudan Street	Eastbound	A	9.1	B	14.6
		Westbound	A	9.5	A	7.8
		Northbound	A	0.0	A	0.0
		Southbound	A	0.2	A	0.8
		Overall	**A**	**0.4**	**A**	**0.6**
167	Lockwood Drive at Collingsworth Street	Eastbound	B	18.4	C	25.9
		Westbound	C	34.7	C	30.9
		Northbound	B	12.5	C	34.2
		Southbound	A	3.1	A	5.8
		Overall	**B**	**12.1**	**C**	**24.9**
168	Lockwood Drive at Crane Street	Eastbound	C	30.4	C	32.3
		Westbound	C	32.1	C	33.0
		Northbound	B	10.2	A	9.6
		Southbound	A	1.4	A	2.9
		Overall	**B**	**10.3**	**B**	**11.3**
169	Lockwood Drive at Calvalcade Street	Eastbound	C	21.2	C	23.9
		Westbound	C	20.7	C	21.0
		Northbound	A	4.1	B	12.4
		Southbound	B	17.9	B	17.3
		Overall	**B**	**15.2**	**B**	**17.1**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
170	Lockwood Drive at Rand Street	Eastbound	D	38.5	C	34.1
		Westbound	C	20.3	C	26.0
		Northbound	A	1.7	A	2.3
		Southbound	A	5.2	A	8.0
		Overall	**A**	**7.7**	**A**	**8.4**
604	Lockwood Drive at Pardee Street	Eastbound	C	19.8	C	24.9
		Westbound	B	14.7	C	23.3
		Northbound	A	0.3	A	1.7
		Southbound	A	0.3	A	0.6
		Overall	**A**	**2.0**	**A**	**2.3**
171	Lockwood Drive at IH-610 EB Frontage Road	Eastbound	C	28.9	C	33.7
		Northbound	D	39.9	D	53.4
		Southbound	A	0.8	A	1.4
		Overall	**C**	**23.9**	**C**	**33.3**
172	Lockwood Drive at IH-610 WB Frontage Road	Westbound	C	31.6	C	34.2
		Northbound	A	3.3	A	1.8
		Southbound	D	37.1	C	32.9
		Overall	**C**	**20.0**	**B**	**18.8**
173	Lockwood Drive at Kelley Street	Eastbound	C	24.6	C	25.1
		Westbound	C	20.6	C	20.2
		Northbound	D	44.3	C	23.6
		Southbound	C	22.2	C	26.2
		Overall	**C**	**31.7**	**C**	**23.6**
174	Lockwood Drive at Shreveport Boulevard	Eastbound	C	24.5	C	28.7
		Westbound	C	32.2	C	32.3
		Northbound	B	18.0	C	21.0
		Southbound	A	5.4	A	9.2
		Overall	**B**	**16.8**	**B**	**19.0**
175	Lockwood Drive at Bennington Street	Eastbound	B	15.3	C	21.5
		Westbound	A	3.9	A	4.6
		Northbound	A	1.1	A	0.6
		Southbound	A	3.1	A	4.6
		Overall	**A**	**3.2**	**A**	**6.2**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
623	Lockwood Drive at Denmark Street	Eastbound	B	10.4	B	12.1
		Westbound	B	10.0	B	12.7
		Northbound	A	0.6	A	0.1
		Southbound	A	0.0	A	0.1
		Overall	**A**	**2.6**	**A**	**2.0**
176	Lockwood Drive at Crosstimbers Street	Eastbound	C	20.1	C	22.0
		Westbound	B	17.0	B	18.1
		Northbound	C	29.3	C	27.4
		Southbound	C	25.5	C	27.5
		Overall	**C**	**22.7**	**C**	**23.1**
177	Lockwood Drive at Weaver Road	Eastbound	C	33.1	D	35.6
		Westbound	D	41.8	E	75.1
		Northbound	C	31.7	C	32.1
		Southbound	C	32.1	C	31.8
		Overall	**C**	**34.6**	**D**	**42.8**
641	Lockwood Drive at Keeland Street	Eastbound	A	5.2	A	7.1
		Westbound	A	5.6	A	8.5
		Northbound	A	0.0	A	0.0
		Southbound	A	0.0	A	0.0
		Overall	**A**	**0.3**	**A**	**0.3**
178	Lockwood Drive at Laura Koppe Road	Eastbound	C	24.8	C	28.7
		Westbound	C	32.3	C	30.7
		Northbound	B	11.2	B	11.3
		Southbound	A	3.7	A	5.5
		Overall	**B**	**15.9**	**B**	**16.7**
659	Lockwood Drive at Firnat Street	Eastbound	A	5.0	B	12.2
		Westbound	A	8.5	C	16.5
		Northbound	A	0.5	A	0.3
		Southbound	A	0.0	A	0.2
		Overall	**A**	**2.4**	**A**	**2.9**
179	Lockwood Drive at Tidwell Road	Eastbound	B	11.1	B	13.7
		Westbound	B	14.0	B	15.1
		Northbound	C	24.8	E	65.0
		Southbound	D	35.8	C	30.7
		Overall	**B**	**14.4**	**C**	**21.3**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
180	Tidwell Road at Hirsch Road	Eastbound	A	8.4	A	8.7
		Westbound	A	2.9	A	3.0
		Northbound	D	38.4	C	28.2
		Southbound	C	27.8	C	24.0
		Overall	**B**	**13.3**	**A**	**9.8**
677	Tidwell Road at Friendly Street	Eastbound	A	3.0	A	6.0
		Westbound	A	0.1	A	0.2
		Northbound	F	250.2	F	128.6
		Southbound	F	360.0	F	358.7
		Overall	**D**	**29.3**	**C**	**16.9**
181	Tidwell Road at IH-69 NB Frontage Road	Eastbound	B	16.8	B	16.8
		Westbound	B	15.4	B	17.7
		Northbound	B	14.9	B	17.3
		Overall	**B**	**15.7**	**B**	**17.3**
182	Tidwell Road at IH-69 SB Frontage Road	Eastbound	B	13.2	B	15.2
		Westbound	B	15.7	B	16.5
		Southbound	B	12.6	B	14.1
		Overall	**B**	**14.0**	**B**	**15.4**
689	Tidwell Road at Edell Street	Eastbound	A	0.0	A	0.3
		Westbound	A	0.1	A	0.0
		Northbound	C	15.2	B	11.0
		Southbound	C	18.0	C	21.0
		Overall	**A**	**1.9**	**A**	**0.8**
183	Tidwell Road at Jensen Drive	Eastbound	C	24.0	C	29.4
		Westbound	B	16.4	C	23.3
		Northbound	C	33.8	C	32.3
		Southbound	C	29.2	C	31.0
		Overall	**C**	**23.2**	**C**	**28.3**
705	Jensen Drive at Turner Drive	Eastbound	B	11.6	B	11.6
		Westbound	A	6.6	B	11.3
		Northbound	A	0.1	A	0.0
		Southbound	A	0.0	A	0.0
		Overall	**A**	**0.2**	**A**	**0.2**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
690	Epsom Road, Edell Street at Turner Drive	Eastbound	A	6.1	A	0.0
		Westbound	A	0.0	A	0.0
		Northbound	A	0.0	A	0.0
		Southbound	A	0.0	A	0.0
		Overall	**A**	**6.1**	**A**	**0.0**

All intersections within Segment 5 are projected to operate at an overall LOS of D or better during the peak hours under the 2030 No-Build conditions.

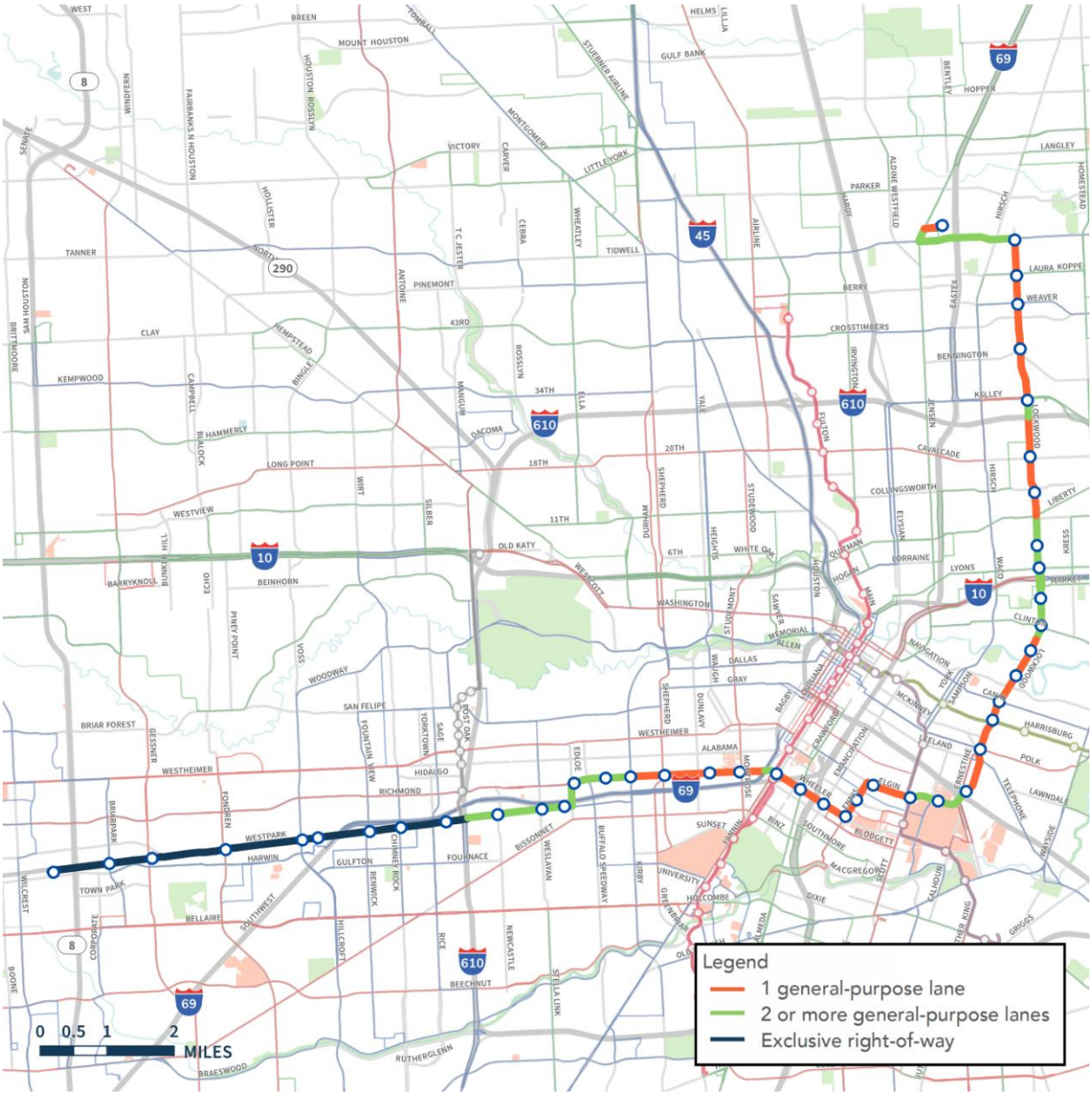
8 Future Year (2030) Build Traffic Analysis Results

This section of the report outlines the results of the 2030 Build conditions analysis and compares the results to the 2030 No-Build conditions. The Build conditions are those which will be present after the proposed University Line BRT Project is constructed and is operating. In general, one of the existing general purpose lanes in each direction will be converted to a dedicated BRT lane throughout the majority of the corridor and with COH ROW. There are a few areas that will maintain the same number of general purpose lanes as existing and will be identified in the sections below. With the removal of a general purpose lane in each direction, it is anticipated that traffic capacity will be reduced with resulting impacts to traffic conditions as reflected in the LOS for each intersection. However, when these traffic impacts are considered in the context of the multi-modal approach of the Project, the desire to move a higher number of people through the corridor and the negative impacts to adjacent properties that would be required to bring the LOS to within acceptable limits, the traffic impacts are more justifiable.

This section of the report outlines the changes that are currently planned throughout the study area and will also provide the LOS results for the Build conditions to compare with the No-Build conditions. A summary of the changes within each segment are listed in the sub-sections below along with the model results.

Figure 34 shows a map of the proposed number of general-purpose lanes along the proposed route of the University Line BRT project.

Figure 34: Map of General-Purpose Lanes



8.1 Segment 1

The proposed BRT will operate in a separate guideway which will parallel Westpark Drive between the Westchase Park & Ride and the interchange of IH-610 where it will transition into a center running BRT guideway. To the west of Fondren Road, the proposed BRT guideway will be grade separated and will not interact with the existing traffic signals along Westpark Drive.

8.1.1 Segment 1 Geometric and Traffic Signal Adjustments

The following adjustments are proposed at each of the intersections within Segment 1 to be implemented as part of the University Line BRT Project. These improvements were included in the TransModeler models for the Build conditions.

- 101 & 102: Westpark Tollway Exit Ramp at Fondren Road, Westpark Drive and Fondren Road
    - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive. The existing exit ramp from Westpark Tollway will be shifted to the north but will retain the existing lane configuration.
    - The lane configurations on the remainder of approaches will remain in place following the construction of the University Line BRT Project.
    - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. The traffic signal will transition back to normal operations after bus travels through the intersection.

- 103: Westpark Drive at Hillcroft Avenue
    - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
    - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
    - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. The traffic signal will transition back to normal operations after bus travels through the intersection. Since there are near side stops at this intersection, the detector will be placed so that it will not change the signal for the BRT until after the vehicle has left the station.

- 104: Westpark Drive at 14th Street
    - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
    - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
    - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection. Since there are near side stops at this intersection, the detector will be placed so that it will not change the signal for the BRT until after the vehicle has left the station.

- 105 & 106: Westpark Drive at IH-69 SB Frontage Road and IH-69 NB Frontage Road
    - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.

- The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
- An exclusive BRT phase will be added to the interchange which would prohibit other movements at the interchange when the BRT vehicles operate through the interchange. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 107: Westpark Drive at Rampart Street
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 108: Westpark Drive at Renwick Drive/Fountain View Drive
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection. Since there are near side stops at this intersection, the detector will be placed so that it will not change the signal for the BRT until after the vehicle has left the station.

- 99558: Westpark Drive at Alder Drive
  - A traffic signal will be installed at this intersection.
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 109: Westpark Drive at Chimney Rock Road
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.

- Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection. Since there are near side stops at this intersection, the detector will be placed so that it will not change the signal for the BRT until after the vehicle has left the station.

- 309: Westpark Drive at Royalton Street
  - A traffic signal will be installed at this intersection.
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 110: Westpark Drive at S Rice Avenue
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 99553: Westpark Drive at Uptown Transit Center
  - The BRT guideway will be constructed within the existing METRO ROW to the south of Westpark Drive.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Pre-emption for the traffic signals will be implemented to prohibit traffic across the BRT guideway when the BRT buses are approaching and traveling through the intersection. Traffic signal will transition back to normal operations after bus travels through the intersection.

- 111 & 112: Westpark Drive at IH-610 SB and NB Frontage Roads
  - The general-purpose lane configurations on all approaches will remain in place following the construction of the University Line BRT Project except for the EB approach at the NB Frontage Road, which will be changed to include an exclusive left turn lane, and two through lanes. The Silver Line BRT will be shifted from Westpark Drive to the proposed University Line BRT guideway.

- Implemented exclusive BRT phases for the University Line BRT along with the existing BRT phase for the Silver Line which is already in place at the intersection. The existing Silver Line will operate on the proposed University Line BRT guideway to the west of the interchange.
- The BRT will transition from operating on an exclusive BRT guideway to operating as a center running BRT at this interchange (at the intersection with the NB Frontage Road).

- 99561: Westpark Drive at Loop Central Drive
  - A traffic signal will be installed at this intersection.
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.
  - WB left turn movement will be protected only to prevent permitted left turn movements across the center running BRT guideway.

- 113: Westpark Drive at Newcastle Drive
  - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

8.1.2 Segment 1 2030 Build Traffic Analysis Results

Table 25 shows the results of the traffic analysis which was performed for the AM and PM peak hours at each of the intersections of Segment 1 for the 2030 Build conditions. The table also includes the 2030 No-Build traffic analysis results for a comparison to the 2030 Build conditions.

Table 25: 2030 Build Conditions LOS Analysis Results – Segment 1

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
101	Eastbound Westpark Tollway Exit Ramp at Fondren Road	EB	F	257.0	F	253.4	F	466.6	F	333.8
		NB	F	376.1	F	513.6	F	282.2	F	455.1
		SB	A	2.8	A	3.5	A	4.8	A	3.1
		Overall	**F**	**203.1**	**F**	**237.5**	**F**	**173.7**	**F**	**208.8**
102	Westpark Drive at Fondren Road	EB	F	287.1	F	350.1	F	359.4	F	81.4
		WB	F	92.2	F	113.9	F	157.9	F	425.9
		NB	B	12.6	A	8.7	B	13.9	B	1.6
		SB	F	89.8	F	129.6	F	232.4	F	440.2
		Overall	**F**	**129.7**	**F**	**164.0**	**F**	**176.6**	**F**	**233.0**
103	Westpark Drive at Hillcroft Avenue	EB	E	61.3	F	112.7	D	52.3	E	67.7
		WB	F	103.2	F	119.5	E	69.0	F	87.1
		NB	F	115.2	F	198.1	D	47.1	F	203.8
		SB	F	195.9	E	70.4	F	292.4	F	196.9
		Overall	**F**	**116.6**	**F**	**124.3**	**F**	**104.9**	**F**	**131.1**
104	Westpark Drive at 14th Street	EB	B	14.6	A	7.4	D	52.2	B	19.0
		WB	E	58.7	E	64.7	C	21.9	D	42.0
		NB	B	11.8	B	11.3	D	45.0	E	73.9
		Overall	**D**	**37.6**	**D**	**38.3**	**D**	**35.1**	**D**	**36.1**
105	Westpark Drive at IH-69 SB FR	EB	D	42.8	B	19.2	C	24.4	C	32.6
		WB	B	17.2	C	24.3	C	23.8	B	19.2
		SB	B	17.2	C	24.3	B	16.1	C	32.6
		Overall	**C**	**29.0**	**C**	**22.8**	**B**	**20.0**	**C**	**30.0**
106	Westpark Drive at IH-69 NBFR	EB	C	24.8	B	13.9	B	18.6	C	21.0
		WB	C	21.7	C	22.3	C	27.9	C	25.3
		NB	B	17.1	C	23.7	C	23.7	C	20.3
		Overall	**C**	**21.8**	**B**	**18.5**	**C**	**22.4**	**C**	**22.1**
107	Westpark Drive at Rampart Street	EB	A	8.8	B	10.8	A	7.4	A	8.6
		WB	A	5.9	A	8.0	A	9.9	B	11.5
		NB	F	189.3	F	213.5	D	52.0	F	110.0
		SB	C	31.6	D	53.7	C	32.5	D	41.1
		Overall	**D**	**42.0**	**D**	**40.1**	**B**	**14.0**	**C**	**21.8**
108	Westpark Drive at Renwick Drive	EB	C	31.4	E	75.9	D	36.5	D	46.6
		WB	C	22.4	D	41.0	B	19.9	E	55.0
		NB	D	42.8	E	68.5	D	39.6	E	56.6
		SB	D	38.2	E	55.6	D	40.5	E	56.7
		Overall	**D**	**35.0**	**E**	**65.8**	**C**	**34.1**	**D**	**53.5**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
99558	Westpark Drive at Alder Drive (Signalized)	EB	A	8.8	E	80.0	A	0.5	B	16.5
		WB	A	2.8	B	13.8	A	2.3	B	12.3
		NB	E	42.4	F	104.5	F	56.1	D	53.2
		Overall	**B**	**13.4**	**E**	**73.9**	**A**	**9.0**	**C**	**20.1**
109	Westpark Drive at Chimney Rock Road	EB	F	116.0	F	168.7	C	34.6	F	99.2
		WB	C	20.9	D	54.3	D	48.5	F	129.1
		NB	D	50.4	E	76.9	D	40.7	D	49.7
		SB	D	48.6	E	56.2	C	27.8	C	32.2
		Overall	**E**	**67.7**	**F**	**98.2**	**D**	**36.7**	**E**	**75.3**
309	Westpark Drive at Royalton Street (Signalized)	EB	E	41.4	B	15.5	A	0.1	B	18.2
		WB	A	1.3	A	9.5	A	0.9	B	17.3
		NB	F	345.8	F	140.4	F	323.5	F	291.0
		Overall	**F**	**54.4**	**C**	**27.9**	**D**	**27.4**	**D**	**43.5**
110	Westpark Drive at S Rice Avenue	EB	F	131.7	E	75.4	E	64.2	F	126.7
		WB	C	26.4	F	119.8	F	104.2	E	74.0
		NB	E	78.4	F	363.5	F	80.4	F	242.8
		SB	D	50.5	E	61.2	D	42.4	F	86.6
		Overall	**F**	**82.8**	**F**	**151.2**	**E**	**76.4**	**F**	**127.3**
99553	Westpark Drive at Uptown Transit Center	EB	C	20.4	A	9.6	A	0.3	B	14.1
		WB	A	3.6	C	29.1	F	95.8	C	28.9
		NB	D	42.5	E	76.9	D	46.0	E	72.1
		Overall	**B**	**14.3**	**B**	**17.5**	**E**	**59.6**	**C**	**24.4**
111	Westpark Drive at IH-610 SB Frontage Road	EB	F	120.6	F	126.4	C	34.1	F	84.0
		WB	B	18.3	C	28.5	B	10.7	A	1.6
		SB	D	48.8	E	58.0	D	42.9	E	68.9
		Overall	**F**	**86.9**	**F**	**99.1**	**C**	**24.4**	**D**	**45.2**
112	Westpark Drive at IH-610 NB Frontage Road	EB	B	18.3	B	13.2	C	28.2	C	31.1
		WB	D	42.8	D	44.2	E	70.0	C	25.3
		NB	D	48.2	D	47.3	F	139.1	D	40.5
		Overall	**C**	**32.8**	**C**	**27.5**	**F**	**81.5**	**C**	**32.7**
99561	Westpark Drive at Loop Central Drive (Signalized)	EB	A	0.0	B	17.8	A	0.1	C	25.5
		WB	A	1.7	A	6.7	A	2.7	B	14.1
		NB	C	19.9	C	27.1	F	216.8	D	35.5
		Overall	**A**	**1.6**	**B**	**13.4**	**D**	**27.8**	**C**	**20.8**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
113	Westpark Drive at Newcastle Drive	EB	C	24.7	D	39.4	C	27.9	C	22.0
		WB	D	53.7	C	27.1	D	41.8	C	30.0
		NB	F	126.0	F	132.9	D	48.4	D	38.3
		SB	C	34.0	D	38.1	D	36.9	D	52.2
		Overall	**E**	**62.4**	**E**	**59.5**	**D**	**39.9**	**C**	**33.3**

Multiple intersections are projected to operate at an overall LOS of E or F during both the 2030 No-Build and Build conditions including the following:

- 101 – Eastbound Westpark Tollway Exit Ramp at Fondren Road
- 102 – Westpark Drive at Fondren Road
- 103 – Westpark Drive at Hillcroft Avenue
- 109 – Westpark Drive at Chimney Rock Road (AM peak)
- 110 – Westpark Drive at S Rice Avenue
- 111 – Westpark Drive at IH-610 SB Frontage Road (AM peak)
- 113 – Westpark Drive at Newcastle Drive (AM peak)

There are also several intersections located within Segment 1 which are projected to operate at an overall LOS of D or better during the peak hours in the 2030 No-Build conditions. But, due to the changes from the University Line BRT Project, they will operate at LOS of E or F during the 2030 Build conditions and are listed below:

- 108 – Westpark Drive at Renwick Drive (AM peak)
- 99568 – Westpark Drive at Alder Drive (AM peak)
- 109 – Westpark Drive at Chimney Rock Road (PM peak)

There are several intersections which are projected to operate at a LOS of E or F under the 2030 No-Build conditions but are projected to operate at a LOS of D or better during the peak hours under the 2030 Build conditions including the following:

- Westpark Drive at Royalton Street (AM peak) – LOS improved since intersection is to be signalized.
- Westpark Drive at IH-610 NB Frontage Road (PM peak) – LOS improved since new phasing pattern implemented at the interchange which reduced delays.

All other intersections in Segment 1 are projected to operate at a LOS of D or better during the peak hours after the proposed University Line BRT is in operation.

8.2 Segment 2

The proposed University Line BRT will be center running throughout the limits of Segment 2. Westpark Drive will be widened to provide two (2) general purpose traffic lanes in each direction. On Edloe Drive and Richmond Avenue, one general purpose lane will be removed and converted to a dedicated BRT lane.

8.2.1 Segment 2 Geometric and Traffic Signal Adjustments

The following adjustments are proposed at each of the intersections within Segment 2 to be implemented as part of the University Line BRT Project. These improvements were included in the TransModeler models for the Build conditions.

- 114: Westpark Drive at Weslayan Street
    - The lane configurations on all approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 115: Westpark Drive at Edloe Street
    - An exclusive NB left turn lane and protected left turn phase will be added to the intersection.
    - An exclusive WB left turn lane and protected left turn phase will be added to the intersection.
    - The EB approach will be modified to include an exclusive left turn lane (lane drop from inside general purpose lane) and a shared through / right turn lane.
    - One through lane will be removed on Edloe Street to the north of Westpark Drive and converted to an exclusive BRT lane as part of the University Line BRT Project. SB approach will include an exclusive left turn lane and a shared through / right turn lane.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another. During this phase, the BRT will make the SB right turn movement and/or the EB left turn movement. The EB left turn movement for the BRT will also be able to operate with the EB left turn movement for the general-purpose lanes, but the SB right turn movement for the BRT will operate exclusively with the BRT phase.

- 116: IH-69 Express Lanes at Edloe Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB approach will consist of an exclusive left turn lane and a shared through / right turn lane and the SB approach will consist of an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 118: Richmond Avenue at Edloe Street
    - One through lane will be removed on the NB, EB, and WB approaches. The interior lanes on the NB and WB approaches will be converted to exclusive BRT lanes as part of the University Line BRT Project. The NB approach will consist of an exclusive BRT lane (for right turns), an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane. The EB approach will be modified to contain an exclusive left turn lane, two exclusive through lanes, and an exclusive right turn lane. The WB approach will be modified to contain an exclusive BRT lane (for left turns), an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the SB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another. During this phase, the BRT will make the NB right turn movement and/or the WB left turn movement. The WB left turn movement for the BRT will also be able to operate with the WB left turn movement for the general-purpose lanes, but the NB right turn movement for the BRT will operate exclusively with the BRT phase.

- 119: Richmond Avenue at Buffalo Speedway
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will include an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane. The WB approach will include two exclusive left turn lanes, an exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 120: Richmond Avenue at Eastside Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 121: Richmond Avenue at Kirby Drive
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane, an exclusive through lane, and a shared through / right turn lane. Park Street to the east of this intersection will be

closed and will no longer connect to Richmond Avenue to accommodate the lane reduction taper on the EB lanes from 2 lanes to 1 lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 122: Richmond Avenue at Greenbriar Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 123: Richmond Avenue at Shepherd Drive
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Existing turn prohibitions on the NB and SB approaches will remain in place during peak hours.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 124: Richmond Avenue at Hazard Street
    - The traffic signal at this intersection will be removed as part of the University Line BRT Project. Through movements along Hazard Street will no longer be allowed. The NB and SB approaches to the intersection will be converted to right-in/right-out entrances only.

- 125: Richmond Avenue at Woodhead Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 126: Richmond Avenue at Dunlavy Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 127: Richmond Avenue at Mandell Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 128: Richmond Avenue at Montrose Boulevard
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will include an exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 129: Richmond Avenue at US 59/Spur 527 SB Frontage Road
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of an exclusive through lane and a shared through / right turn lane. The WB approach will consist of an exclusive left turn lane and an exclusive through lane.
    - The lane configuration for the SB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added to the interchange for the BRT vehicles to travel through the interchange without any conflicting traffic.

- 130: Richmond Avenue at US 59/Spur 527 NB Frontage Road
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of an exclusive left turn lane and an exclusive through lane. The WB approach will consist of an exclusive through lane and a shared through / right turn lane.

- The lane configuration for the NB approach will remain in place following the construction of the University Line BRT Project.
- An exclusive BRT phase will be added to the interchange for the BRT vehicles to travel through the interchange without any conflicting traffic.

8.2.2 Segment 2 2030 Build Traffic Analysis Results

Table 26 shows the results of the traffic analysis which was performed for the AM and PM peak hours at each of the intersections within the study area of Segment 2 for the 2030 Build conditions. The table also includes the 2030 No-Build traffic analysis results for a comparison to the 2030 Build conditions.

Table 26: 2030 Build Conditions LOS Analysis Results – Segment 2

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
114	Westpark Drive at Weslayan Street	EB	D	43.4	F	140.4	E	74.4	E	60.9
		WB	D	42.6	F	85.5	F	134.7	E	60.4
		NB	D	41.5	D	50.2	C	32.1	D	35.9
		SB	D	45.6	E	57.2	D	35.7	D	44.7
		Overall	**D**	**43.5**	**F**	**82.1**	**E**	**61.6**	**D**	**48.8**
115	Westpark Drive at Edloe Street	EB	C	28.8	D	37.7	B	14.5	C	33.6
		WB	C	33.7	D	40.3	C	34.6	D	53.6
		NB	D	36.7	F	103.3	D	37.3	D	38.6
		SB	C	27.7	D	52.3	C	26.6	D	50.1
		Overall	**C**	**32.1**	**E**	**57.9**	**C**	**29.7**	**D**	**45.9**
116	IH-69 Express Lanes at Edloe Street	EB	C	22.3	C	23.0	-	-	-	-
		WB	-	-	-	-	D	39.8	F	190.6
		NB	A	1.2	B	11.9	A	7.4	B	18.6
		SB	A	3.7	B	16.0	A	8.6	F	82.4
		Overall	**A**	**5.7**	**B**	**15.3**	**B**	**10.4**	**E**	**66.4**
118	Richmond Avenue at Edloe Street *	EB	C	29.7	D	35.7	C	32.8	E	63.7
		WB	E	66.3	D	43.1	D	46.8	E	55.6
		NB	B	18.7	C	31.5	E	74.2	F	155.8
		SB	C	23.0	C	33.7	C	31.5	D	53.7
		Overall	**C**	**32.1**	**D**	**35.4**	**D**	**46.1**	**E**	**77.6**
119	Richmond Avenue at Buffalo Speedway	EB	D	52.0	E	72.0	B	17.1	E	58.1
		WB	E	66.3	D	44.0	D	36.1	D	52.1
		NB	D	44.8	D	52.2	F	152.3	F	125.9
		SB	D	37.6	C	33.2	C	32.3	D	40.6
		Overall	**D**	**50.4**	**D**	**51.5**	**E**	**62.8**	**E**	**73.5**
120	Richmond Avenue at Eastside Street	EB	B	18.7	F	115.6	A	7.7	C	29.5
		WB	A	6.4	C	33.2	A	6.7	C	21.9
		NB	D	40.4	D	53.6	F	145.8	F	93.6
		SB	C	29.4	C	33.8	E	65.3	D	50.1
		Overall	**B**	**18.0**	**E**	**69.6**	**C**	**26.0**	**C**	**34.5**
121	Richmond Avenue at Kirby Drive	EB	E	58.5	F	281.5	E	60.6	F	101.3
		WB	B	18.4	E	60.8	D	50.1	D	50.6
		NB	C	33.5	E	64.3	F	134.3	D	49.8
		SB	D	37.3	D	37.9	F	107.4	D	48.8
		Overall	**D**	**37.4**	**F**	**88.1**	**F**	**101.8**	**E**	**59.5**

* - WB approach closed during AM Peak and EB approach closed during PM Peak

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
122	Richmond Avenue at Greenbriar Street	EB	C	34.6	E	56.5	D	37.0	D	41.3
		WB	C	20.5	D	53.4	B	10.7	C	30.1
		NB	C	27.3	B	18.3	D	39.9	D	44.3
		SB	E	64.0	B	15.4	D	36.1	C	30.3
		Overall	**D**	**40.7**	**D**	**38.3**	**C**	**30.0**	**D**	**35.9**
123	Richmond Avenue at Shepherd Drive	EB	B	12.5	D	37.9	A	4.9	D	49.1
		WB	B	16.3	E	65.3	A	7.3	D	38.4
		NB	D	42.4	C	34.9	D	40.1	D	42.3
		SB	D	41.8	C	34.3	D	40.1	D	40.8
		Overall	**C**	**28.7**	**D**	**44.1**	**C**	**24.7**	**D**	**41.6**
124	Richmond Avenue at Hazard Street*	EB	B	12.0	-	-	A	4.6	-	-
		WB	A	4.8	-	-	B	15.0	-	-
		NB	F	262.2	-	-	F	331.5	-	-
		SB	F	383.4	-	-	F	510.9	-	-
		Overall	**F**	**113.0**	**-**	**-**	**F**	**146.8**	**-**	**-**
125	Richmond Avenue at Woodhead Street	EB	A	4.1	E	57.0	B	12.2	D	54.4
		WB	A	8.5	B	18.5	A	6.1	B	13.2
		NB	F	198.3	F	218.2	F	148.7	F	456.4
		SB	C	33.0	D	39.8	C	26..4	D	40.7
		Overall	**D**	**45.2**	**E**	**70.9**	**D**	**46.4**	**F**	**97.7**
126	Richmond Avenue at Dunlavy Street	EB	A	4.0	E	61.5	B	10.1	E	69.8
		WB	A	5.6	A	10.0	A	5.4	B	13.2
		NB	F	104.4	F	139.4	D	41.8	F	188.9
		SB	F	232.1	F	169.9	F	507.5	F	1176.3
		Overall	**E**	**76.1**	**F**	**90.3**	**F**	**85.3**	**F**	**137.7**
127	Richmond Avenue at Mandell Street	EB	A	2.4	F	85.4	A	5.7	F	104.4
		WB	A	1.5	E	72.2	A	5.1	C	33.3
		NB	D	42.2	F	140.6	F	270.7	F	577.6
		SB	D	45.8	F	208.2	E	74.9	F	411.8
		Overall	**B**	**13.9**	**F**	**109.2**	**E**	**61.1**	**F**	**176.7**
128	Richmond Avenue at Montrose Boulevard	EB	C	33.8	F	343.8	E	66.9	F	412.6
		WB	D	49.8	F	368.3	F	124.2	F	97.2
		NB	F	101.7	E	71.9	D	42.1	E	62.8
		SB	E	70.9	F	122.0	E	59.6	F	120.3
		Overall	**E**	**71.0**	**F**	**162.1**	**E**	**71.1**	**F**	**148.5**

* - LOS not provided for Build Conditions since Traffic Signal to be removed at this Intersection

ID	Intersection	Approach	2030 No-Build AM Peak		2030 No-Build PM Peak		2030 Build AM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
129	Richmond Avenue at US 59 / Spur 527 SB FR	EB	D	37.9	F	128.9	F	190.4	F	142.9
		WB	A	0.7	E	71.0	A	0.6	A	2.2
		SB	C	28.5	F	165.0	C	24.8	D	37.4
		Overall	**B**	**18.9**	**F**	**115.2**	**E**	**75.8**	**E**	**59.8**
130	Richmond Avenue at US 59 / Spur 527 NB FR	EB	A	1.3	B	17.2	A	8.9	A	8.1
		WB	E	78.9	F	236.6	C	25.8	E	73.3
		NB	C	32.9	F	284.3	D	43.2	F	147.1
		Overall	**D**	**42.3**	**F**	**130.6**	**C**	**22.4**	**E**	**62.3**

Multiple intersections are projected to operate at an overall LOS of E or F during both the 2030 No-Build and Build Conditions including the following:

- 119 – Richmond Avenue at Buffalo Speedway (PM peak)
- 121 – Richmond Avenue at Kirby Drive (PM peak)
- 126 – Richmond Avenue at Dunlavy Street
- 127 – Richmond Avenue at Mandell Street (PM peak)
- 128 – Richmond Avenue at Montrose Boulevard
- 129 – Richmond Avenue at US 59 / Spur 527 SB Frontage Road (PM peak)

There are also several intersections located within Segment 2 which are projected to operate at an overall LOS of D or better during the peak hours in the No-Build condition, but due to the changes from the University Line BRT Project, they will operate at a LOS of E or F during Build condition and include the following:

- 114 – Westpark Drive at Weslayan Street (AM peak)
- 115 – Westpark Drive at Edloe Street (AM peak)
- 116 – IH-69 Express Lanes at Edloe Street (PM peak)
- 118 – Richmond Avenue at Edloe Street (PM peak)
- 120 – Richmond Avenue at Eastside Street (AM peak)
- 121 – Richmond Avenue at Kirby Drive (AM peak)
- 125 – Richmond Avenue at Woodhead Street
- 127 – Richmond Avenue at Mandell Street (AM peak)
- 129 – Richmond Avenue at US 59 / Spur 527 SB Frontage Road (AM peak)
- 130 – Richmond Avenue at US 59 / Spur 527 NB Frontage Road

It is noted that a number of these intersections were evaluated to improve their LOS under a number of mitigation scenarios. ROW impacts were identified as the main reasons for not implementing strategies that could have improved the traffic conditions. Refer to **Appendix I** for further information on the scenarios.

There is one intersection that is projected to operate at a LOS of E or F under the 2030 No-Build conditions but are projected to operate at a LOS of D or better during the peak hours under the 2030 Build conditions including the following:

- 114 – Westpark Drive at Weslayan Street (PM peak) – LOS improved due to optimized signal timing plans to be deployed as part of the proposed University Line BRT Project.

All other intersections in Segment 2 are projected to operate at a LOS of D or better during the peak hours after the proposed University Line BRT is in operation.

8.3 Segment 3

The proposed University Line BRT will be center running throughout the limits of Segment 3. On Wheeler Avenue, Ennis Street, and Elgin Street west of Scott Street, one existing general-purpose lane in each direction will be converted to the proposed BRT guideway. To the east of Scott Street, the lane configurations on Elgin Avenue will match the existing configurations for the general-purpose lanes with the proposed BRT guideway added within an existing median in the center of the roadway.

8.3.1 Segment 3 Geometric and Traffic Signal Adjustments

The following adjustments are proposed at each of the intersections within Segment 3 to be implemented as part of the University Line BRT Project. These improvements were included in the TransModeler models for the Build conditions.

- 131: Richmond Avenue at Main Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of an exclusive through and an exclusive right turn lane. The WB approach will consist of an exclusive through lane and a shared through / right turn lane.
    - The lane configuration for the NB and SB approaches will remain in place following the construction of the University Line BRT Project. This includes proposed changes to Main Street being planned by the City of Houston to improve pedestrian accessibility at this intersection and provide only one lane in each direction north of Richmond Avenue / Wheeler Avenue. The SB approach will keep the right turn only with one lane. The NB approach will remain with left turn only for general purpose lanes and a right turn only lane for buses.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 132: Wheeler Avenue at Fannin Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of a shared through / right turn lane and an exclusive right turn lane for buses only. The WB approach will consist of an exclusive left turn lane and an exclusive through lane.
    - The lane configuration for the SB approach will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 133: Wheeler Avenue at San Jacinto Street
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of a shared through / left turn lane. The WB approach will consist of a shared through / right turn lane.

- The lane configuration for the NB approach will remain in place following the construction of the University Line BRT Project.
- Proposed BRT will operate traveling through the intersection with an exclusive BRT phase.

- 134: Wheeler Avenue at La Branch Street
  - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will consist of one shared through / right turn lane. Left turns from Wheeler Avenue will be prohibited at this intersection.
  - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 135: Wheeler Avenue at Almeda Road
  - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will consist of one exclusive left turn lane and one shared through / right turn lane.
  - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 365: Wheeler Avenue at St Emanuel Street
  - A traffic signal will be installed at this intersection.
  - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of one shared through / right turn lane. The WB approach will consist of an exclusive left turn lane and an exclusive through lane.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 367: Wheeler Avenue at Hutchins Street
  - A traffic signal will be installed at this intersection.
  - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of an exclusive left turn lane and one exclusive through lane. The WB approach will consist of one exclusive through / right turn lane.
  - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 136: Wheeler Avenue at Emancipation Avenue
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will both consist of one lane for all movements.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase is used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the EB and WB approaches.

- 266: Wheeler Avenue at Ennis Street
    - One through lane will be removed on the EB approach and converted to an exclusive BRT lane as part of the University Line BRT Project. This approach will consist of one shared left and right turn lane.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane on the SB approach as part of the University Line BRT Project. The SB approach will consist of a shared through / Right Turn Lane and the NB approach will consist of one exclusive left turn lane and one exclusive through lane.
    - An exclusive BRT phase will be added at this intersection to allow the BRT vehicles to make the EB left turn and the SB right turn movement.

- 292: Ennis Street at Cleburne Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will consist of one shared lane for all movements.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase is used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the NB and SB approaches.

- 141: Ennis Street at Alabama Street
    - A traffic signal will be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one lane for all movements.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase is used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the NB and SB approaches.

- 306: Ennis Street at Holman Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one lane for all movements.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase is used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the NB and SB approaches.

- 249: Ennis Street at Elgin Street
    - One through lane will be removed on the EB, WB, and NB approaches to the intersection. An exclusive BRT lane will be provided on the NB and the WB approaches as part of the University Line BRT Project.
        - The NB approach will have one general-purpose lane for all movements.
        - The EB approach will have one left turn lane and a shared through / right turn lane.
        - The WB approach will have one left turn lane and a shared through / right turn lane.
    - The lane configurations for the SB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added at this intersection to allow the BRT vehicles to make the WB left turn and the NB right turn movement.

- 143: Elgin Street at Scott Street
    - One through lane will be removed on the EB approach and converted to an exclusive BRT lane as part of the University Line BRT Project. One left turn lane will be removed on the WB approach and converted to an exclusive BRT lane. The EB approach will have one exclusive left turn lane and a shared through / right turn lane. The WB approach will have one exclusive left turn lane, one exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 144: Elgin Street at Cullen Boulevard
    - One left turn lane will be removed on the EB and WB approaches to the intersection (both currently have dual left turn lanes) based on the location of the proposed BRT lanes. Both the EB and WB approaches will consist of one exclusive left turn lane, one exclusive through lane, and one shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 145: Elgin Street at UH Entrance 18
    - All of the approaches to the intersection will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 353: Elgin Street at Garage 5 Entrance
    - A traffic signal will be installed at this intersection. Signalized approaches will be the EB through movements and the WB left turn movement. After discussions with the University of Houston, it became necessary to keep this entrance open and control the movement of traffic across the BRT guideway.
    - The lane configurations for all approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 146: Elgin Street at Spur 5 SB Frontage Road
    - All of the lane configurations at the intersection will remain in place following the construction of the University Line BRT Project for the general-purpose lanes.
    - Existing phasing will remain at this intersection.
    - In the EB direction at this intersection, the exclusive BRT lane will end. When a BRT vehicle is present at this intersection, a queue jump will be provided as the BRT vehicles will travel in mixed flow through the Spur 5 and IH-45 interchange and will reenter the exclusive BRT lane on Lockwood Drive to the east of IH-45.
    - In the WB direction the BRT vehicles will be operating in mixed flow but will re-enter the BRT only lane to the west of this intersection. The use of mixed flow at this location was necessary due to the physical constraints of the bridges at the interchange under Spur 5 and IH-45.

- 147: Elgin Street at Spur 5 NB Frontage Road
    - All of the lane configurations at the intersection will remain in place following the construction of the University Line BRT Project for the general-purpose lanes.
    - Existing phasing will remain at this intersection.
    - BRT vehicles in both directions will be operating in mixed flow through this intersection.

- 148: Elgin Street at IH-45 NB Frontage Road
    - All of the approach lane configurations to the intersection will remain in place following the construction of the University Line BRT Project for the general-purpose lanes.
    - BRT vehicles in both directions will be operating in mixed flow through this interchange. In the WB direction the BRT lane will end at this intersection. When a BRT vehicle is present at this location a queue jump will be provided for the BRT vehicle to enter mixed flow through the interchange. The EB BRT vehicles will reenter the exclusive BRT lane to the east of this intersection on Lockwood Drive.

8.3.2 Segment 3 2030 Build Traffic Analysis Results

Table 27 shows the results of the traffic analysis which was performed for the AM and PM peak hours at each of the intersections within the study area of Segment 3 for the 2030 Build conditions. The table also includes the 2030 No-Build traffic analysis results for a comparison to the 2030 Build conditions.

Table 27: 2030 Build Conditions LOS Analysis Results – Segment 3

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
131	Richmond Avenue and Main Street	EB	B	18.4	C	32.6	D	37.4	F	168.1
		WB	D	51.5	F	195.5	C	34.2	E	73.0
		NB	F	139.0	F	558.8	C	27.5	F	99.0
		SB	A	0.1	A	0.3	A	0.1	A	3.0
		Overall	**D**	**54.6**	**F**	**163.2**	**C**	**31.1**	**F**	**102.7**
132	Wheeler Avenue at Fannin Street	EB	C	28.3	D	45.4	C	21.1	E	62.8
		WB	D	45.6	F	218.4	D	35.9	E	57.6
		SB	B	14.9	C	34.1	B	10.3	D	46.3
		Overall	**C**	**23.7**	**D**	**50.8**	**B**	**19.7**	**D**	**53.7**
133	Wheeler Avenue at San Jacinto Street	EB	B	11.3	C	23.6	C	27.5	D	49.7
		WB	D	40.1	F	476.3	C	29.7	F	164.9
		NB	B	19.7	F	116.5	B	19.4	E	78.4
		Overall	**C**	**23.4**	**F**	**116.5**	**C**	**23.7**	**F**	**88.3**
134	Wheeler Avenue at La Branch Street	EB	A	2.6	A	8.6	A	1.4	A	5.4
		WB	A	0.6	F	351.7	A	0.7	F	170.3
		NB	C	29.6	F	476.2	D	35.2	F	147.6
		SB	C	28.5	F	256.6	D	37.6	D	44.7
		Overall	**A**	**7.2**	**F**	**144.4**	**A**	**5.7**	**E**	**77.9**
135	Wheeler Avenue at Almeda Road	EB	B	16.0	E	62.5	C	26.5	D	35.6
		WB	C	23.4	F	270.7	C	28.9	F	205.7
		NB	B	19.3	F	137.2	B	12.2	F	127.3
		SB	B	14.5	F	232.4	C	21.0	F	94.9
		Overall	**B**	**18.2**	**F**	**144.9**	**B**	**20.0**	**F**	**106.5**
365	Wheeler Avenue at St Emanuel Street	EB	A	0.0	A	5.4	A	0.0	B	17.0
		WB	A	0.0	F	86.6	A	0.0	D	54.6
		Overall	**A**	**0.0**	**D**	**43.2**	**A**	**0.0**	**C**	**32.8**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
367	Wheeler Avenue at Hutchins Street	EB	B	12.7	C	21.7	D	32.6	C	24.3
		WB	A	9.8	F	107.2	D	28.0	E	68.7
		NB	B	12.5	D	41.5	F	200.5	B	17.5
		SB	A	6.3	F	156.3	B	12.6	C	31.9
		Overall	**B**	**11.9**	**D**	**52.8**	**F**	**93.1**	**C**	**29.1**
136	Wheeler Avenue at Emancipation Avenue	EB	A	5.9	B	12.6	B	13.4	B	13.0
		WB	A	2.6	B	16.3	B	15.1	B	13.3
		NB	B	18.5	E	68.2	B	10.5	D	47.8
		SB	B	17.9	C	30.9	B	14.3	D	43.0
		Overall	**A**	**9.8**	**C**	**27.5**	**B**	**13.5**	**C**	**27.3**
266	Wheeler Avenue at Ennis Street	EB	B	17.9	C	24.9	B	16.5	C	25.5
		NB	A	1.1	A	1.9	A	4.8	A	2.9
		SB	A	0.2	A	5.8	A	1.4	A	4.6
		Overall	**A**	**3.5**	**A**	**7.4**	**A**	**6.1**	**A**	**8.6**
292	Ennis Street at Cleburne Street	EB	C	21.3	C	20.6	B	19.1	B	19.8
		WB	C	22.9	C	21.4	C	20.0	C	20.6
		NB	A	2.5	A	7.5	B	10.2	A	7.2
		SB	A	2.7	B	13.6	A	4.9	A	9.6
		Overall	**A**	**8.3**	**B**	**13.0**	**B**	**11.5**	**B**	**11.4**
141	Ennis Street at Alabama Street	EB	B	11.1	C	28.4	F	82.8	B	12.8
		WB	C	18.9	C	22.0	F	133.9	B	14.1
		NB	A	7.6	B	17.0	F	108.8	B	16.6
		SB	C	16.4	B	14.5	E	47.5	A	10.0
		Overall	**B**	**13.0**	**C**	**23.2**	**F**	**96.0**	**B**	**13.5**
306	Ennis Street at Holman Street	EB	A	7.0	B	11.4	A	9.8	B	17.1
		WB	A	9.4	B	14.9	B	11.0	C	22.8
		NB	B	11.8	B	13.5	B	11.4	A	9.7
		SB	A	9.6	B	15.8	B	13.0	B	11.6
		Overall	**A**	**9.9**	**B**	**14.2**	**B**	**11.5**	**B**	**13.7**
249	Ennis Street at Elgin Street	EB	B	12.4	B	12.7	B	12.1	B	16.3
		WB	B	15.8	B	16.5	C	23.7	B	14.3
		NB	B	13.6	C	29.0	B	12.3	B	19.4
		SB	B	18.2	C	26.6	B	16.8	B	16.6
		Overall	**B**	**14.4**	**B**	**17.7**	**B**	**17.5**	**B**	**16.1**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
143	Elgin Street at Scott Street	EB	D	36.2	D	47.5	D	40.1	D	40.6
		WB	D	43.1	D	47.9	E	55.5	D	39.9
		NB	A	5.0	A	5.5	A	5.4	A	5.3
		SB	C	25.0	C	22.0	C	26..4	C	22.1
		Overall	**C**	**28.3**	**D**	**36.0**	**C**	**30.3**	**C**	**34.6**
144	Elgin Street at Cullen Boulevard	EB	E	68.5	D	41.1	D	41.0	D	46.5
		WB	D	46.0	D	39.6	C	27.1	D	37.5
		NB	B	13.0	B	18.1	C	31.1	D	35.9
		SB	C	33.2	D	40.0	C	33.1	C	31.3
		Overall	**D**	**37.3**	**D**	**35.4**	**C**	**32.2**	**D**	**37.0**
145	Elgin Street at UH Entrance 18	EB	A	5.5	B	10.9	A	3.9	B	10.8
		WB	A	1.9	C	21.2	A	7.7	C	21.9
		NB	D	35.9	D	40.2	C	30.0	D	36.0
		SB	D	39.6	D	43.4	B	17.5	C	21.5
		Overall	**A**	**9.3**	**C**	**21.1**	**B**	**10.9**	**B**	**19.2**
353	Elgin Street at UH Garage 5 Entrance	EB	-	-	A	7.0	-	-	A	7.9
		WB	-	-	A	5.0	-	-	A	8.3
		NB	-	-	A	8.0	-	-	B	15.0
		Overall	**-**	**-**	**A**	**5.8**	**-**	**-**	**B**	**10.3**
146	Elgin Street at Spur 5 SB Frontage Road	EB	A	7.1	B	14.8	B	12.4	C	30.9
		WB	A	8.2	B	14.4	A	8.4	C	24.9
		SB	B	17.9	C	20.6	B	18.8	B	13.3
		Overall	**B**	**11.5**	**B**	**16.6**	**B**	**12.4**	**C**	**25.5**
147	Elgin Street at Spur 5 NB Frontage Road	EB	A	3.6	A	8.7	B	12.7	C	27.7
		WB	B	10.2	B	18.3	B	13.3	C	26.0
		NB	A	8.9	B	11.5	B	12.8	A	9.5
		Overall	**A**	**8.5**	**B**	**14.9**	**B**	**12.9**	**C**	**21.9**
148	Elgin Street at IH-45 NB Frontage Road	EB	A	9.8	D	35.9	B	17.5	C	23.5
		WB	B	13.1	B	14.8	B	13.1	C	25.6
		NB	B	13.8	A	9.4	B	11.2	B	14.0
		Overall	**B**	**11.1**	**C**	**27.7**	**B**	**15.9**	**C**	**22.6**

There are several intersections located within Segment 3 which are projected to operate at an overall LOS of D or better during the peak hours for No-Build conditions, but due to the changes from the University Line BRT Project, they will operate at a LOS of E or F during Build conditions and include the following:

- 131 – Richmond Avenue at Main Street
- 133 – Wheeler Avenue at San Jacinto Street
- 134 – Wheeler Avenue at La Branch Street
- 135 – Wheeler Avenue at Almeda Street

There are several intersections projected to operate at a LOS of E or F under the 2030 No-Build conditions but are projected to operate at a LOS of D or better during the peak hours under the 2030 Build conditions including the following:

- 367 – Wheeler Avenue at Hutchins Street – LOS improved due to signalization of the intersection
- 141 – Ennis Street at Alabama Street – LOS improved due to signalization of the intersection

All other intersections in Segment 3 are projected to operate at a LOS of D or better during the peak hours after the proposed University Line BRT is in operation.

8.4 Segment 4

The proposed University Line BRT will be center running throughout the limits of Segment 4. In the area of the existing one-way pair of Lockwood Drive and Ernestine Street and after coordination with COH, each of these roadways will be converted to two-way roadways. The proposed BRT will run along the existing Lockwood Drive alignment and will be center running. For the remainder of Segment 4 along Lockwood Drive, the BRT will continue to be center running.

In a couple of areas in Segment 4, the proposed BRT will operate within grade separated structures at the following locations:

- Underpass section along Lockwood Drive from Mckinney Street to Harrisburg Boulevard.
- Elevated section along Lockwood Drive from south of Clinton Drive to north of UPRR crossing.

8.4.1 Segment 4 Geometric and Traffic Signal Adjustments

The following adjustments are proposed at each of the intersections within the Segment 4 to be implemented as part of the University Line BRT Project:

- 452: Ernestine Street at Munger Street
  - Ernestine Street to be converted to a bi-directional roadway comprised of a two-way left turn lane median and one traffic lane in each direction.
  - BRT will not run along Ernestine Street.
  - The SB approach to the intersection will consist of one exclusive through lane and one exclusive left turn lane.
  - The NB approach to the intersection will consist of one shared through / right turn lane.
  - The WB approach to the intersection will consist of one exclusive left turn lane and one exclusive right turn lane.
  - Intersection will remain unsignalized following the construction of the University Line BRT Project.

- 453: Lockwood Drive at Munger Street
  - A traffic signal will be installed at this intersection.
  - Lockwood Drive to be converted to two-way traffic.
  - Proposed BRT guideway to run along Lockwood Drive in North-South Direction.
  - The NB, SB, and WB approaches to the intersection will consist of one exclusive left turn lane and one shared through / right turn lane.
  - The EB approach will consist of an exclusive left turn lane, an exclusive through lane, and a channelized right turn lane.
  - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 149: Ernestine Street at Leeland Street
    - Ernestine Street to be converted to two-way traffic south of Leeland Street and will remain one-way traffic north of Leeland Street.
    - The SB approach to the intersection will have one exclusive left turn lane and a shared through / right turn lane while the NB approach will have one exclusive left turn lane and one exclusive right turn lane following construction of the proposed University Line BRT.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - The proposed University Line BRT will not operate through this intersection.

- 150: Lockwood Drive at Leeland Street
    - Lockwood Drive to be converted to two-way traffic.
    - Proposed BRT guideway to run along Lockwood Drive in North-South Direction.
    - The SB and NB approaches to the intersection will have one exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the EB approach will remain in place following the construction of the University Line BRT Project. An exclusive left turn lane was added to the WB approach at this intersection after coordination with COH.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 151: Ernestine Street / Lockwood Drive at Polk Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 152: Lockwood Drive at McKinney Street
    - The traffic signal at this intersection will be removed as part of the University Line BRT Project.
    - Through movements along McKinney Street will no longer be allowed. The NB and SB approaches to the intersection will be converted to right-in/right-out entrances only.

- 153: Lockwood Drive at Harrisburg Boulevard
    - The NB and SB approaches will both consist of one exclusive left turn lane and a shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - The existing Light Rail Pre-Emption for the METRO Green Line will remain in place at this intersection following the construction of the University Line BRT.

- Proposed BRT will operate through the intersection along with the adjacent NB/SB through movements.
- South of this intersection, the Proposed BRT will operate in a guideway underpass below an existing UPRR crossing and will come back to grade at this intersection.

- 154: Lockwood Drive at Canal Street
  - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and a shared through / right turn lane.
  - The lane configurations for the EB approach will remain in place except for removal of the exclusive right turn lane following the construction of the University Line BRT Project. The WB approach was restriped to include an exclusive left turn lane and a shared through / right turn lane.
  - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 155: Lockwood Drive at Navigation Boulevard
  - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB approach will consist of an exclusive left turn lane and a shared through / right turn lane. The SB approach will consist of an exclusive left turn lane, and a shared through / right turn lane.
  - One exclusive left turn lane will be removed on the EB approach since only one receiving lane will remain on Lockwood Drive following the construction of the University Line BRT Project. All other existing lanes will remain as is.
  - The lane configuration for the WB approach will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 197: Lockwood Drive at Marron Park Way
  - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB approach will consist of one exclusive left turn lane and one exclusive through lane. The SB approach will consist of one exclusive U-turn lane and a shared through / right turn lane.
  - The EB approach will consist of an exclusive left turn lane and an exclusive right turn lane.
  - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 156: Lockwood Drive at Armour Drive
  - Existing traffic signal at intersection to be removed as part of this project. Left turn movements from Armour Drive will no longer be allowed. The east leg of the intersection will be converted to a right in / right out roadway intersection.

- 514: Lockwood Drive at Harvey Wilson Drive
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will consist of an exclusive left turn lane and a shared through / right turn lane.
    - The EB approach will consist of one lane for all traffic movements. The WB approach will consist of an exclusive left turn lane and an exclusive right turn lane.
    - The entrance on the west side of this intersection is an entrance to a COH facility which sees little traffic from this access point and has a gate across it. It is not anticipated that through traffic in the EB and WB directions will be present at this intersection.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 157: Lockwood Drive at Clinton Drive
    - The NB and SB approaches will consist of one exclusive left turn lane, one exclusive through lane, and a shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate in an elevated guideway above grade at this intersection and will not interact with the traffic signal at this location.

8.4.2 Segment 4 Traffic Demand Adjustments

As discussed in further detail in section 3.2.1 of this report, a reduction of through traffic on Lockwood Drive of 10% was assumed following the opening of the proposed University Line BRT due to the reduction in capacity on this roadway and the availability of parallel routes with excess capacity. Long range travel demand modeling was performed both with and without the proposed University Line BRT Project in place, which showed that a portion of the through traffic on Lockwood Drive would shift to either Hirsch Road or Wayside Drive within the limits of Segment 4.

8.4.3 Segment 4 2030 Build Traffic Analysis Results

Table 28 shows the results of the traffic analysis which was performed for the AM and PM peak hours at each of the intersections within the study area of Segment 4 for the 2030 Build conditions. The table also includes the 2030 No-Build traffic analysis results for a comparison to the 2030 Build conditions.

Table 28: 2030 Build Conditions LOS Analysis Results – Segment 4

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
452	Ernestine Street at Munger Street*	EB	A	9.0	-	-	A	5.6	-	-
		WB	A	8.1	A	6.9	A	5.0	A	3.4
		NB	-	-	A	0.0	-	-	A	0.0
		SB	A	1.2	A	0.0	A	0.3	A	0.0
		Overall	**A**	**3.8**	**A**	**0.9**	**A**	**1.3**	**A**	**0.1**
453	Lockwood Drive at Munger Street*	EB	B	14.6	B	17.4	B	12.6	B	14.9
		WB	E	41.0	C	23.2	B	11.8	C	20.8
		NB	A	0.0	A	6.0	A	0.0	A	4.3
		SB	-	-	C	29.4	-	-	C	28.6
		Overall	**B**	**10.5**	**B**	**17.8**	**A**	**1.6**	**B**	**12.8**
149	Ernestine Street at Leeland Street*	EB	B	19.3	B	15.4	B	18.9	B	15.4
		WB	B	18.8	C	21.0	A	6.1	C	22.7
		NB	-	-	E	66.9	-	-	B	10.9
		SB	B	15.4	B	16.9	A	7.6	A	9.8
		Overall	**B**	**17.1**	**C**	**23.3**	**B**	**10.2**	**B**	**16.0**
150	Lockwood Drive at Leeland Street*	EB	B	11.7	D	52.2	B	10.1	D	39.5
		WB	C	27.6	D	44.3	C	26.3	C	34.3
		NB	B	10.8	E	66.3	B	10.3	C	23.5
		SB	-	-	E	59.0	-	-	C	20.8
		Overall	**B**	**14.2**	**E**	**58.8**	**B**	**15.2**	**C**	**27.7**
151	Ernestine Street / Lockwood Drive at Polk Street	EB	C	26.0	D	50.2	C	21.5	D	37.1
		WB	C	23.6	D	44.8	B	17.0	D	35.9
		NB	B	15.5	C	30.8	C	23.3	C	31.3
		SB	C	34.6	D	44.0	D	43.3	E	65.3
		Overall	**C**	**25.7**	**D**	**41.6**	**C**	**27.8**	**D**	**44.2**

* LOS not provided for approaches which do not exist under current configuration which will remain under 2030 No-Build Scenario

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
153	Lockwood Drive at Harrisburg Boulevard	EB	C	20.5	C	28.2	C	28.2	C	27.2
		WB	C	23.1	D	38.0	C	26.1	D	49.0
		NB	D	45.8	D	35.6	D	45.1	E	58.8
		SB	D	36.5	E	64.2	D	36.6	E	69.7
		Overall	**D**	**35.5**	**D**	**45.8**	**D**	**36.0**	**E**	**55.1**
154	Lockwood Drive at Canal Street	EB	B	15.3	D	53.8	C	22.6	F	162.2
		WB	C	29.9	D	41.1	D	35.2	C	34.3
		NB	A	7.5	D	37.1	B	16.3	C	33.3
		SB	B	15.9	E	56.1	B	14.9	C	33.6
		Overall	**B**	**15.5**	**D**	**46.8**	**C**	**20.1**	**E**	**56.7**
155	Lockwood Drive at Navigation Boulevard	EB	C	27.1	D	40.1	C	26.1	D	37.1
		WB	C	26.8	D	49.3	C	24.8	D	40.9
		NB	C	28.8	C	25.0	D	47.4	B	18.6
		SB	B	19.5	C	33.0	C	20.7	D	42.3
		Overall	**C**	**25.2**	**D**	**36.8**	**C**	**29.4**	**C**	**34.9**
197	Lockwood Drive at Marron Park Way	EB	C	21.5	D	35.4	D	46.8	E	76.5
		NB	B	12.0	C	33.3	B	13.9	C	20.5
		SB	B	13.2	E	79.3	B	10.8	C	20.9
		Overall	**B**	**13.8**	**E**	**55.9**	**C**	**25.0**	**D**	**35.5**
514	Lockwood Drive at Harvey Wilson Drive	EB	E	46.6	D	51.7	F	106.2	D	41.6
		WB	E	36.3	B	19.5	E	45.8	B	15.3
		NB	A	2.4	C	22.8	A	3.4	C	22.7
		SB	A	0.5	B	14.9	A	0.5	B	10.5
		Overall	**A**	**4.5**	**B**	**18.5**	**B**	**14.3**	**B**	**18.0**
157	Lockwood Drive at Clinton Drive	EB	C	26.1	C	31.0	C	22.9	C	25.3
		WB	C	25.3	C	33.6	C	25.9	C	30.8
		NB	C	28.7	C	26.9	C	22.6	C	23.2
		SB	B	11.6	B	19.0	B	10.4	D	53.3
		Overall	**C**	**20.4**	**C**	**24.8**	**C**	**20.5**	**C**	**33.7**

There are several intersections located within Segment 4 which are projected to operate at an overall LOS of D or better during the peak hours for the No-Build conditions, but due to the changes from the University Line BRT Project, they will operate at a LOS of E or F in the Build conditions. They include the following:

- 150 – Lockwood Drive at Leeland Street (AM peak)
- 153 – Lockwood Drive at Harrisburg Boulevard (PM Peak)
- 154 – Lockwood Drive at Canal Street (PM peak)
- 197 – Lockwood Drive at Marron Park Way (AM peak)

All other intersections in Segment 4 are projected to operate at a LOS of D or better during the peak hours after the proposed University Line BRT is in operation.

8.5 Segment 5

The proposed University Line BRT will be center running throughout the limits of Segment 5. Segment 5 runs along Lockwood Drive, Tidwell Road, and Jensen Drive before accessing the Tidwell Transit center at the northern terminus of the proposed University Line BRT Project.

In several areas of Segment 5, the proposed BRT guideway will be constructed above grade on new elevated structures including the following locations:

- Lockwood Drive from South of Shreveport Boulevard to south of Denmark Street
- Tidwell Drive from east of Hirsch Road to east of Friendly Road

8.5.1 Segment 5 Geometric and Traffic Signal Adjustments

The following adjustments are proposed at each of the intersections within Segment 5:

- 158: Lockwood Drive (SB) at Market Street
  - The proposed BRT lane at this intersection will be constructed in the existing median adjacent to the existing SB lanes.
  - The SB approach will consist of a shared through / left turn lane and a shared through / right turn lane.
  - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be added at this for the BRT through movements since the rest of the interchange will be operating with TTI 4-phase hybrid phasing.

- 159: Lockwood Drive (NB) at Market Street
  - The proposed BRT lane at this intersection will be constructed in the existing median adjacent to the existing NB lanes.
  - The NB approach will consist of a shared through / left turn lane and a shared through / right turn lane.
  - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.

- An exclusive BRT phase will be added at this for the BRT through movements since the rest of the interchange will be operating with TTI 4-phase hybrid phasing.

- 160: Lockwood Drive (SB) at IH-10 EB Frontage Road
  - One lane will be removed on the SB approach to the intersection and converted to the exclusive BRT lane as part of the University Line BRT Project. The SB approach to the intersection will include a shared through / left turn lane and one exclusive through lane.
  - The lane configurations for the EB approach will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be added at the interchange of Lockwood Drive and IH-10 to accommodate the through movements for the BRT vehicles.

- 161: Lockwood Drive (NB) at IH-10 EB Frontage Road
  - One lane will be removed on the NB approach to the intersection and converted to the exclusive BRT lane as part of the University Line BRT Project. The NB approach to the intersection will include an exclusive through lane and a shared through / right turn lane.
  - The lane configurations for the EB approach will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be added at the interchange of Lockwood Drive and IH-10 to accommodate the through movements for the BRT vehicles.

- 162: Lockwood Drive (SB) at IH-10 WB Frontage Road
  - One lane will be removed on the SB approach to the intersection and converted to the exclusive BRT lane as part of the University Line BRT Project. The SB approach to the intersection will include an exclusive through lane and a shared through / right turn lane.
  - The lane configurations for the WB approach will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be added at the interchange of Lockwood Drive and IH-10 to accommodate the through movements for the BRT vehicles.

- 163: Lockwood Drive (NB) at IH-10 WB Frontage Road
  - One lane will be removed on the NB approach to the intersection and converted to the exclusive BRT lane as part of the University Line BRT Project. The NB approach to the intersection will include a shared through / left turn lane and one exclusive through lane.
  - The lane configurations for the WB approach will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be added at the interchange of Lockwood Drive and IH-10 to accommodate the through movements for the BRT vehicles.

- 164 & 165: Lockwood Drive at Lyons Avenue
    - The exclusive left turn lanes on the NB and SB approaches to the intersection will be removed as they will be impacted by the proposed BRT lane for the University Line BRT Project. The NB and SB approaches will consist of one shared through / left turn lane and one shared through / right turn lane.
    - The WB approach will consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configuration for the EB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added to the intersection for the BRT through movements which will operate when a BRT vehicle is present. This is necessary due to the presence of permitted left turn movements on the NB and SB approaches.

- 534: Lockwood Drive at Hershe Street
    - Intersection to be signalized as part of the University Line BRT Project.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one shared through / left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase was used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the NB and SB approaches.

- 166: Lockwood Drive at Mulvey Street
    - Existing traffic signal to be removed at this location and cross-street approaches to be converted to right-in / right-out only.

- 567: Lockwood Drive at Nichols Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one shared through / left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Since there are no exclusive left turn lanes, an exclusive BRT phase was used at this intersection for the BRT vehicles to travel through the intersection. This will allow for the permitted left turns on the NB and SB approaches.

- 576: Lockwood Drive at Sudan Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 167: Lockwood Drive at Collingsworth Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 168: Lockwood Drive at Crane Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 169: Lockwood Drive at Cavalcade Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 170: Lockwood Drive at Rand Street
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 604: Lockwood Drive at Pardee Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 171: Lockwood Drive at IH-610 EB Frontage Road
    - Existing lanes under the IH-610 overpass which are currently hatched out will be restriped to allow for traffic at the interchange. This will allow for the existing geometry for the general purpose lanes to remain in place following construction of the University Line BRT Project except for the SB approach, which will be restriped to include a shared through / left turn lane and an exclusive through lane.
    - An exclusive BRT phase will be provided at this interchange for the BRT vehicle to travel through the interchange without any conflicts.

- 172: Lockwood Drive at IH-610 WB Frontage Road
    - Existing lanes under the IH-610 overpass which are currently hatched out will be restriped to allow for traffic at the interchange. This will allow for the existing geometry for the general purpose lanes to remain in place following construction of the University Line BRT Project except for the SB approach which will consist of two exclusive through lanes and a channelized right turn lane.
    - An exclusive BRT phase will be provided at this interchange for the BRT vehicle to travel through the interchange without any conflicts.

- 173: Lockwood Drive at Kelley Street
    - One lane will be removed on the SB approach to the intersection for conversion to an exclusive BRT lane. The NB approach will consist of one exclusive left turn lane, one exclusive through lane, and an exclusive right turn lane. The SB approach will consist of one exclusive left turn lane and a shared through / right turn lane.

- The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
- Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 174: Lockwood Drive at Shreveport Boulevard
  - One through lane will be removed on the NB and SB approaches due to the location of the elevated BRT bridge structure. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
  - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will not interact with the traffic operations at this intersection since it will be on the elevated BRT structure.

- 175: Lockwood Drive at Bennington Street
  - One through lane will be removed on the NB and SB approaches due to the location of the elevated BRT bridge structure. The NB approach will consist of one exclusive left turn lane and one through lane. The SB approach will consist of one shared lane for all movements.
  - The lane configurations for the EB approach will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will not interact with the traffic operations at this intersection since it will be on the elevated BRT structure.

- 623: Lockwood Drive at Denmark Street
  - Traffic signal to be installed at this intersection.
  - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one lane for all movements.
  - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
  - An exclusive BRT phase will be provided at this interchange for the BRT vehicle to travel through the interchange without any conflicts.

- 176: Lockwood Drive at Crosstimbers Street
  - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
  - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
  - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 177: Lockwood Drive at Weaver Road
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 641: Lockwood Drive at Keeland Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist one exclusive left turn lane and one shared / through right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 178: Lockwood Drive at Laura Koppe Road
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 659: Lockwood Drive at Firnat Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the NB and SB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The NB and SB approaches will both consist one exclusive left turn lane and one shared / through right turn lane.
    - The lane configurations for the EB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent NB/SB through movements.

- 179: Lockwood Drive at Tidwell Road
    - The exclusive left turn lane on the EB approach to the intersection will be removed. The EB approach will include one shared through / left turn lane and one shared through / right turn lane.
    - The exclusive left turn lane on the NB approach will be removed. The NB approach will consist of a shared through / left turn lane and an exclusive right turn lane.
    - The lane configurations for the SB and WB approaches will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another. During this phase, the BRT will make the NB left turn movement and/or the EB right turn movement.

- 180: Tidwell Road at Hirsch Road
    - The lane configurations on the approaches to this intersection in all directions will match existing following the construction of the proposed BRT as it will be elevated at this location. As a result, the proposed BRT will not interact with the traffic signal at this location.

- 677: Tidwell Road at Friendly Street
    - Traffic signal to be installed at this intersection.
    - The existing medians and portions of existing left turn lanes will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will both consist of one exclusive left turn lane, one exclusive through lane, and one shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 181: Tidwell Road at IH-69 NB Frontage Road
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The WB approach will consist of two exclusive through lanes and a shared through / right turn lane. The EB approach will consist of an exclusive left turn lane, a shared through / left turn lane, and an exclusive through lane.
    - The lane configurations for the NB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added at the interchange of Tidwell Road and IH-69 to accommodate the through movements for the BRT vehicles.

- 182: Tidwell Road at IH-69 SB Frontage Road
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB approach will consist of three exclusive through lanes and a channelized right turn lane. The WB

approach will consist of an exclusive left turn lane, a shared through / left turn lane, and an exclusive through lane.
    - The lane configurations for the SB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added at the interchange of Tidwell Road and IH-69 to accommodate the through movements for the BRT vehicles.

- 689: Tidwell Road at Edell Street
    - Traffic signal to be installed at this intersection.
    - One through lane will be removed on the EB and WB approaches and converted to an exclusive BRT lane as part of the University Line BRT Project. The EB and WB approaches will both consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the NB and SB approaches will remain in place following the construction of the University Line BRT Project.
    - Proposed BRT will operate traveling through the intersection along with the adjacent EB/WB through movements.

- 183: Tidwell Road at Jensen Drive
    - One through lane will be removed on the EB, WB, and SB approaches to the intersection to accommodate the proposed BRT guideway. The EB approach will consist of one exclusive left turn lane and one shared through / right turn lane. The WB approach will consist of one exclusive left turn lane and one shared through / right turn lane. The SB approach will consist of one exclusive left turn lane and one shared through / right turn lane.
    - The lane configurations for the NB approach will remain in place following the construction of the University Line BRT Project.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another. During this phase, the BRT will make the SB left turn movement and/or the WB right turn movement.

- 705: Jensen Drive at Turner Drive
    - Traffic signal to be installed at this intersection.
    - The proposed NB approach will consist of a shared left / through lane and a shared through / right turn lane.
    - The proposed SB approach will consist of one exclusive left turn lane and one shared through / right turn lane.
    - The proposed EB and WB approaches will have one lane for all traffic movements.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another. During this phase, the BRT will make the NB right turn movement and/or the WB right turn movement.

- 690: Epsom Road, Edell Street at Turner Drive
    - Traffic signal to be installed at this intersection.
    - All approaches to the intersection will have only one lane for all movements. The WB approach will only be used by BRT vehicles.
    - An exclusive BRT phase will be added to the intersection with all other traffic stopping since this is an intersection where the BRT vehicles will turn from one roadway to another.

8.5.2 Segment 5 Traffic Demand Adjustments

As discussed in further detail in section 3.2.1 of this report, a reduction of through traffic on Lockwood Drive of 10% was assumed following the opening of the proposed University Line BRT due to the reduction in capacity on this roadway and the availability of parallel routes with excess capacity. Long range travel demand modeling was performed both with and without the proposed University Line BRT Project in place, which showed that a portion of the through traffic on Lockwood Drive would shift to either Hirsch Road or Wayside Drive within the limits of Segment 5.

8.5.3 Segment 5 2030 Build Traffic Analysis Results

Table 29 shows the results of the traffic analysis which was performed for the AM and PM peak hours at each of the intersections within the study area of Segment 5 for the 2030 Build conditions. The table also includes the 2030 No-Build traffic analysis results for a comparison to the 2030 Build conditions.

Table 29: 2030 Build Conditions LOS Analysis Results – Segment 5

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
158	Lockwood Drive (SB) at Market Street	EB	C	27.7	D	41.0	C	30.3	D	48.5
		WB	A	4.3	A	7.6	A	9.9	A	8.6
		SB	A	6.6	D	44.6	A	6.1	C	30.2
		Overall	**A**	**8.6**	**D**	**36.5**	**A**	**9.9**	**C**	**30.8**
159	Lockwood Drive (NB) at Market Street	EB	A	4.3	A	2.3	B	18.4	A	0.9
		WB	C	27.7	D	53.8	C	33.7	D	48.2
		NB	A	5.8	C	23.5	B	10.5	D	41.1
		Overall	**B**	**11.5**	**C**	**29.3**	**B**	**12.9**	**D**	**35.7**
160	Lockwood Drive (SB) at IH-10 EB Frontage Road	EB	C	30.6	D	41.9	D	51.4	D	41.0
		SB	A	4.1	A	5.5	A	5.0	A	7.6
		Overall	**B**	**12.6**	**B**	**16.1**	**C**	**25.9**	**C**	**20.4**
161	Lockwood Drive (NB) at IH-10 EB Frontage Road	EB	A	5.9	A	4.4	A	5.3	A	5.9
		NB	C	29.0	D	45.9	D	35.6	C	34.0
		Overall	**B**	**18.1**	**C**	**25.1**	**C**	**22.4**	**C**	**20.7**
162	Lockwood Drive (SB) at IH-10 WB Frontage Road	WB	A	2.9	A	4.4	A	3.2	A	4.6
		SB	D	53.7	C	29.9	D	44.7	D	41.4
		Overall	**C**	**25.1**	**B**	**15.9**	**C**	**26.1**	**C**	**26.3**
163	Lockwood Drive (NB) at IH-10 WB Frontage Road	WB	D	42.0	C	34.4	B	16.7	C	24.0
		NB	A	9.2	A	9.8	A	8.1	A	7.0
		Overall	**C**	**27.1**	**C**	**22.4**	**B**	**11.4**	**B**	**12.7**
164	Lockwood Drive (SB) at Lyons Avenue*	EB	B	17.1	-	-	C	24.5	-	-
		WB	B	12.3	-	-	B	12.3	-	-
		SB	B	12.5	-	-	B	11.0	-	-
		Overall	**B**	**13.7**	**-**	**-**	**B**	**16.2**	**-**	**-**
165	Lockwood Drive (NB) at Lyons Avenue*	EB	A	3.9	D	43.6	A	6.9	F	153.9
		WB	B	16.1	C	24.6	B	16.8	C	25.4
		NB	D	51.7	C	20.6	B	13.1	B	16.7
		NB	-	-	B	12.9	-	-	B	13.7
		Overall	**C**	**32.2**	**C**	**22.8**	**B**	**12.7**	**D**	**41.2**

* Configuration of Lockwood Drive at Lyons Avenue to be changed under Build Conditions. Changed from two separate intersections under 2030 No-Build Conditions to one Intersection under Build Conditions. Results for Build Conditions shown as node 165.

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
534	Lockwood Drive at Hershe Street	EB	B	12.8	C	29.9	C	19.5	C	30.9
		WB	A	9.0	D	38.7	B	12.2	C	31.2
		NB	A	0.1	A	1.8	A	0.1	A	6.8
		NB	A	0.6	A	2.9	A	0.1	A	3.4
		Overall	**A**	**0.7**	**A**	**3.4**	**A**	**0.4**	**A**	**4.2**
567	Lockwood Drive at Nichols Street	EB	A	8.3	B	14.5	C	16.2	C	29.6
		WB	B	11.2	A	1.7	B	14.8	A	3.1
		NB	A	0.1	A	3.6	A	0.2	A	5.7
		NB	A	1.3	A	4.5	A	0.8	A	4.0
		Overall	**A**	**1.6**	**A**	**4.2**	**A**	**1.0**	**A**	**5.3**
576	Lockwood Drive at Sudan Street	EB	A	9.1	D	40.0	B	14.6	D	38.8
		WB	A	9.5	C	29.6	A	7.8	B	12.5
		NB	A	0.0	B	10.4	A	0.0	A	8.9
		NB	A	0.2	A	3.9	A	0.8	A	2.4
		Overall	**A**	**0.4**	**A**	**6.9**	**A**	**0.6**	**A**	**6.1**
166	Lockwood Drive at Mulvey Street	EB	C	23.4	A	6.4	D	44.7	A	5.0
		WB	C	21.2	A	3.5	C	31.7	A	5.7
		NB	A	6.9	A	0.5	A	1.0	A	0.3
		SB	A	6.6	A	0.0	A	1.0	A	0.0
		Overall	**A**	**7.2**	**A**	**0.3**	**A**	**2.0**	**A**	**0.3**
167	Lockwood Drive at Collingsworth Street	EB	B	18.4	B	19.8	C	25.9	C	28.5
		WB	C	34.7	C	32.6	C	30.9	C	32.3
		NB	B	12.5	C	27.6	C	34.2	D	48.3
		SB	A	3.1	B	17.2	A	5.8	C	28.3
		Total	**B**	**12.1**	**C**	**23.4**	**C**	**24.9**	**D**	**39.3**
168	Lockwood Drive at Crane Street	EB	C	30.4	C	34.3	C	32.3	D	35.5
		WB	C	32.1	C	33.8	C	33.0	D	35.6
		NB	B	10.2	A	6.1	A	9.6	A	9.2
		SB	A	1.4	A	6.5	A	2.9	B	11.6
		Overall	**B**	**10.3**	**B**	**12.1**	**B**	**11.3**	**B**	**14.5**
169	Lockwood Drive at Cavalcade Street	EB	C	21.2	C	30.7	C	23.9	C	26.1
		WB	C	20.7	C	33.9	C	21.0	C	25.4
		NB	A	4.1	C	25.4	B	12.4	C	26.7
		SB	B	17.9	B	16.8	B	17.3	C	23.0
		Overall	**B**	**15.2**	**C**	**24.6**	**B**	**17.1**	**C**	**25.3**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
170	Lockwood Drive and Rand Street	EB	D	38.5	D	40.8	C	34.1	C	35.0
		WB	C	20.3	B	19.9	C	26.0	C	27.3
		NB	A	1.7	B	12.5	A	2.3	C	24.4
		SB	A	5.2	B	20.0	A	8.0	C	20.5
		Overall	**A**	**7.7**	**B**	**19.0**	**A**	**8.4**	**C**	**23.7**
604	Lockwood Drive at Pardee Street	EB	C	19.8	C	24.9	C	29.8	C	34.5
		WB	B	14.7	C	23.3	B	18.4	C	27.0
		NB	A	0.3	A	1.7	B	14.2	B	18.9
		SB	A	0.3	A	0.6	A	7.6	A	7.6
		Overall	**A**	**2.0**	**A**	**2.3**	**B**	**11.8**	**B**	**14.4**
171	Lockwood Drive at IH-610 EB Frontage Road	EB	C	28.9	C	32.4	C	33.7	C	33.8
		NB	D	39.9	D	42.2	D	53.4	D	49.4
		SB	A	0.8	A	9.9	A	1.4	B	11.7
		Overall	**C**	**23.9**	**C**	**28.8**	**C**	**33.3**	**C**	**34.4**
172	Lockwood Drive at IH-610 WB Frontage Road	WB	C	31.6	D	43.2	C	34.2	D	36.3
		NB	A	3.3	A	4.8	A	1.8	A	3.2
		SB	D	37.1	C	28.7	C	32.9	D	38.3
		Overall	**C**	**20.0**	**C**	**21.8**	**B**	**18.8**	**C**	**21.6**
173	Lockwood Drive at Kelley Street	EB	C	24.6	C	26.7	C	25.1	C	31.1
		WB	C	20.6	C	24.8	C	20.2	C	25.7
		NB	D	44.3	C	22.7	C	23.6	D	36.0
		SB	C	22.2	E	56.5	C	26.2	E	77.3
		Overall	**C**	**31.7**	**C**	**32.6**	**C**	**23.6**	**D**	**41.8**
174	Lockwood Drive at Shreveport Boulevard	EB	C	24.5	C	27.0	C	28.7	C	29.7
		WB	C	32.2	D	38.4	C	32.3	D	37.3
		NB	B	18.0	A	1.9	C	21.0	A	2.4
		SB	A	5.4	A	4.9	A	9.2	A	4.7
		Overall	**B**	**16.8**	**B**	**10.3**	**B**	**19.0**	**A**	**9.8**
175	Lockwood Drive at Bennington Street	EB	B	15.3	B	15.6	C	21.5	C	23.4
		WB	A	3.9	A	3.9	A	4.6	A	9.3
		NB	A	1.1	A	1.4	A	0.6	A	2.1
		SB	A	3.1	A	3.5	A	4.6	A	5.5
		Overall	**A**	**3.2**	**A**	**3.6**	**A**	**6.2**	**A**	**7.6**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
623	Lockwood Drive at Denmark Street	EB	B	10.4	C	22.9	B	12.1	D	37.0
		WB	B	10.0	C	33.3	B	12.7	C	34.4
		NB	A	0.6	B	10.1	A	0.1	A	4.9
		SB	A	0.0	B	13.1	A	0.1	A	2.8
		Overall	**A**	**2.6**	**B**	**15.6**	**A**	**2.0**	**A**	**9.0**
176	Lockwood Drive at Crosstimbers Street	EB	C	20.1	C	26.4	C	22.0	C	24.5
		WB	B	17.0	C	20.4	B	18.1	C	22.0
		NB	C	29.3	C	23.0	C	27.4	D	36.3
		SB	C	25.5	C	26.6	C	27.5	C	25.8
		Overall	**C**	**22.7**	**C**	**23.7**	**C**	**23.1**	**C**	**27.1**
177	Lockwood Drive at Weaver Road	EB	C	33.1	B	16.9	D	35.6	C	31.5
		WB	D	41.8	B	18.9	E	75.1	C	30.3
		NB	C	31.7	C	29.4	C	32.1	B	15.3
		SB	C	32.1	B	16.6	C	31.8	B	14.8
		Overall	**C**	**34.6**	**C**	**21.1**	**D**	**42.8**	**C**	**20.6**
641	Lockwood Drive at Keeland Street	EB	A	5.2	D	44.9	A	7.1	C	22.0
		WB	A	5.6	C	33.1	A	8.5	C	32.9
		NB	A	0.0	B	10.2	A	0.0	B	12.8
		SB	A	0.0	A	3.0	A	0.0	A	2.3
		Overall	**A**	**0.3**	**A**	**7.3**	**A**	**0.3**	**A**	**9.0**
178	Lockwood Drive at Laura Koppe Road	EB	C	24.8	C	25.6	C	28.7	C	29.5
		WB	C	32.3	C	32.7	C	30.7	C	31.9
		NB	B	11.2	B	11.4	B	11.3	C	24.6
		SB	A	3.7	B	10.5	A	5.5	A	9.1
		Overall	**B**	**15.9**	**B**	**17.9**	**B**	**16.7**	**C**	**22.6**
659	Lockwood Drive at Firnat Street	EB	A	5.0	A	7.9	B	12.2	C	30.5
		WB	A	8.5	C	27.7	C	16.5	D	35.0
		NB	A	0.5	B	16.1	A	0.3	B	14.6
		SB	A	0.0	A	6.5	A	0.2	A	7.9
		Overall	**A**	**2.4**	**B**	**12.7**	**A**	**2.9**	**B**	**15.1**
179	Lockwood Drive at Tidwell Road	EB	B	11.1	D	50.9	B	13.7	D	51.4
		WB	B	14.0	A	8.7	B	15.1	B	10.1
		NB	C	24.8	C	23.2	E	65.0	D	39.2
		SB	D	35.8	D	40.5	C	30.7	D	46.2
		Overall	**B**	**14.4**	**B**	**14.5**	**C**	**21.3**	**B**	**17.5**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
180	Tidwell Road at Hirsch Road	EB	A	8.4	B	12.3	A	8.7	C	28.4
		WB	A	2.9	B	17.1	A	3.0	C	22.5
		NB	D	38.4	C	28.1	C	28.2	C	26.6
		SB	C	27.8	C	28.2	C	24.0	D	37.5
		Overall	**B**	**13.3**	**B**	**18.4**	**A**	**9.8**	**C**	**26.7**
677	Tidwell Road at Friendly Street	EB	A	3.0	B	15.4	A	6.0	B	14.9
		WB	A	0.1	B	10.9	A	0.2	A	4.8
		NB	F	250.2	E	61.9	F	128.6	C	29.7
		SB	F	360.0	F	129.8	F	358.7	D	42.2
		Overall	**D**	**29.3**	**C**	**29.3**	**C**	**16.9**	**B**	**12.0**
181	Tidwell Road at IH-69 NB Frontage Road	EB	B	16.8	D	45.6	B	16.8	C	34.5
		WB	B	15.4	B	18.9	B	17.7	C	34.2
		NB	B	14.9	C	26.5	B	17.3	C	29.6
		Overall	**B**	**15.7**	**C**	**28.8**	**B**	**17.3**	**C**	**32.8**
182	Tidwell Road at IH-69 SB Frontage Road	EB	B	13.2	C	28.5	B	15.2	B	17.9
		WB	B	15.7	C	20.6	B	16.5	C	23.5
		SB	B	12.6	C	24.2	B	14.1	D	51.2
		Overall	**B**	**14.0**	**C**	**23.9**	**B**	**15.4**	**C**	**29.2**
689	Tidwell Road at Edell Street	EB	A	0.0	B	16.2	A	0.3	B	13.4
		WB	A	0.1	B	17.9	A	1.1	E	57.9
		NB	C	15.2	C	21.9	B	11.0	B	15.3
		SB	C	18.0	B	13.8	C	21.0	B	19.8
		Overall	**A**	**1.9**	**B**	**17.1**	**A**	**0.8**	**C**	**34.3**
183	Tidwell Road at Jensen Drive	EB	C	24.0	C	24.8	C	29.4	C	34.4
		WB	B	16.4	C	28.5	C	23.3	F	171.4
		NB	C	33.8	D	40.6	C	32.3	E	66.8
		SB	C	29.2	D	39.9	C	31.0	D	54.6
		Overall	**C**	**23.2**	**C**	**31.0**	**C**	**28.3**	**F**	**86.2**
705	Jensen Drive at Turner Drive	EB	B	11.6	A	6.5	B	11.6	A	4.3
		WB	A	6.6	A	8.6	B	11.3	B	10.0
		NB	A	0.1	A	1.8	A	0.0	A	1.2
		SB	A	0.0	A	1.5	A	0.0	A	1.1
		Overall	**A**	**0.2**	**A**	**1.9**	**A**	**0.2**	**A**	**1.3**

ID	Intersection	Approach	2030 No-Build AM Peak		2030 Build AM Peak		2030 No-Build PM Peak		2030 Build PM Peak	
			LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
690	Epsom Road, Edell Street at Turner Drive	EB	A	6.1	A	1.3	A	0.0	A	7.5
		WB	A	0.0	A	2.8	A	0.0	A	3.7
		NB	A	0.0	A	9.4	A	0.0	D	37.2
		SB	A	0.0	B	12.1	A	0.0	A	0.0
		Overall	**A**	**6.1**	**A**	**4.5**	**A**	**0.0**	**A**	**5.4**

There is one intersection located within Segment 5 which is projected to operate at an overall LOS of D or better during the peak hours for the No-Build conditions, but due to the changes from the University Line BRT Project, it will operate at a LOS of F in the Build condition and includes:

- 183 – Tidwell Road at Jensen Drive (PM peak)

All other intersections in Segment 5 are projected to operate at a LOS of D or better during the peak hours after the proposed University Line BRT is in operation.

8.6 Short-Term Construction Impacts on Traffic

Construction of the Build Conditions will likely result in temporary disruptions or changes to transit, vehicular, and pedestrian and bicycle traffic patterns in the vicinity of the work areas. As the construction activities include full reconstruction of existing roadways and pedestrian facility improvements between the edge of roadways and rights-of-way, temporary closures of roadways, traffic lanes, sidewalks and hike/bike trails are anticipated. These temporary closures are needed to enable construction activities, to maintain work area access and to provide for public and worker safety during construction.

All modes of traffic are impacted where temporary roadway or lane closures are required. Where roadway closures are necessary, temporary detours will be needed to provide reasonable alternative routes for transit services and vehicles. If needed, pedestrian and bike traffic will also need to be re-routed to alternative streets that have adequate pedestrian and bike facilities. In particular, access for the Harrisburg Hike and Bike Trail at its Lockwood Drive crossing and the Columbia Tap Hike and Bike Trail at the crossing on Elgin Street will need to be considered. For transit services, METRO may consider temporary schedule adjustments and bus stop relocations to accommodate its customers and the public. Where lane closures are needed, transit services and vehicles may still be able to use the roadways adjacent to the work areas but at reduced speeds and capacity. Additionally, pedestrian and bike traffic may still be able to be maintained on their current routes with some temporary modifications made to the existing facilities. METRO will ensure that all pedestrian and bicycle detours and adjustments are safe and meet all applicable accessibility standards.

Potential impacts due to construction of proposed grade-separated structures as part of the Project may restrict transit, vehicular, pedestrian and bicycle movements for both short-term and mid-range timeframes. Potential impacts would include:

- Temporary closures and detours for placement of bridge beams and pouring bridge decks over roadway sections, including:
    - Sam Houston Tollway main lanes and frontage roads
    - Ranchester Drive
    - Gessner Road
    - Clinton Drive
    - Shreveport Boulevard
    - Bennington Street
    - Hirsch Road
- Temporary closures and detours for placement of underpass at UPRR crossing along Lockwood Drive between McKinney Street and Harrisburg Boulevard.
- Shifting of transit, vehicular and pedestrian traffic and reducing travel lanes to allow for adjacent bridge, underpass and roadway construction along Lockwood Drive at various UPRR crossings, at Clinton Drive, at Shreveport Boulevard and at Bennington Street and along Tidwell Road at the UPRR crossing near Hirsch Road.

8.6.1 Construction Impact Mitigation Strategies

Certain mitigation strategies should be considered to minimize construction impacts to traffic. The following potential construction phase mitigation strategies are based upon information included in the preliminary engineering documents. Final mitigation measures will be established by METRO in coordination with COH, TxDOT, HCTRA and other agencies, stakeholders and the public as the design progresses. The recommended preliminary mitigation strategies are summarized below:

- Develop, maintain and share a construction schedule with impacted agencies, stakeholders, and the public that includes:
    - Timing and locations of proposed roadway and lane closures, detours, alternative routes and other construction phase details that would assist mobility for residents, businesses and others living, working and traveling within the work area.
    - Timing and locations of other coordinated construction projects within the work area.
- Prior to construction, METRO to develop traffic control plans that provide for the safe handling of transit, vehicular, pedestrian and bike traffic within and adjacent to the Project boundaries that minimize impacts to traffic conditions. Such traffic control plans shall describe construction phasing, temporary roadway and lane closures, detours, warning devices and traffic control measures in forms that are acceptable to COH, TxDOT, HCTRA and any other governing agency.
- Prior to construction, identify acceptable hauling routes and incorporate into traffic control plans.

- Prior to construction, phase construction activities and closures to avoid overlap with major events, such as the University of Houston's Centennial Celebration (2027).
- Prior to and during construction, METRO to promote awareness of traffic arrangements with local officials, media and the public of the construction activities via media alerts, social media updates, mailings, newspapers, magazines, advanced message signs and any other impactful news outlet.
- During construction, METRO to coordinate with property owners to manage and maintain access to businesses and residences within work areas.
- During construction, strictly adhere to Union Pacific Railroad requirements at all rail crossings.
- Limit temporary closures and detours for placement of bridge beams and pouring bridge decks over roadway sections to nighttime periods only.
- Limit short-term full closures to nighttime hours or non-peak periods.

8.7 Parking Impacts

With the BRT lanes and facilities being proposed along existing streets currently designated as either Major Thoroughfares, Major Collectors or Transit Corridors per the City of Houston's 2022 Major Thoroughfare and Freeway Plan, the Project will result in minimal loss of on-street parking as the majority of the streets do not allow on-street parking due to higher speeds, traffic volumes and safety. Restrictions to street parking is typically identified with "No Parking" signage along the streets. Additionally, Texas state law and local ordinances prohibit parking along streets within certain distances from existing intersections, driveways and fire hydrants among other things. As the Project is located within an urban environment, these restrictions alone prohibit on-street parking for the majority of the alignment.

On-street parking has been identified and is allowed in a couple of areas within Segment 3 only. Currently, Wheeler Avenue between Caroline Street and Ennis Street and Ennis Street between Barbee Street and Elgin Street allows on-street parking with either time restrictions limiting parking to non-peak periods or Sundays or with no restrictions. The total distance of this on-street parking is approximately 1.6 miles with its location being primarily residential with parking in front of homes. It is noted that the on-street parking appears to be more for convenience as the adjacent properties have existing driveways or parking lots with adequate room for more than one vehicle.

9 Traffic Safety Analysis

An evaluation of the existing safety conditions was performed using historical crash data from the TxDOT Crash Records Information System (CRIS) database. CRIS data includes specific information for all reported crashes including location, date, time, crash severity, crash type, and various roadway and environmental factors. Crash data from 2017 to 2019 was obtained and reviewed. Crash data does include pedestrian and bike crashes in addition to vehicular crashes. Crashes were summarized into severity and type for the entire corridor and by segment. Crash rates were also estimated and compared to the historical statewide average crash rates, obtained from TxDOT, for urban and 4-lane divided roadways. Crash rates were calculated per 100 Million Vehicle Miles Traveled (VMT).

9.1 Corridor-Wide Safety Analysis

Review of the crash data showed there was a total of 2,044 reported crashes along the corridor between 2017 and 2019. The crash rates for the entire corridor were higher than the respective statewide average for each of the years analyzed. **Table 30** shows the corridor crash rates compared to the statewide average for urban state highways.

Table 30: Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	659	24.65	19,143	382.61	160.94
2018	670	24.65	19,393	383.98	156.71
2019	715	24.65	20,240	392.61	155.98

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

The crash rate along the proposed BRT route between 2017 and 2019 has been higher than the statewide average for urban divided roadways with four or more lanes, which applies to all streets along which the BRT will run. The crashes which were reported in the study area were further classified by type as indicated in **Table 31.**

Table 31: Corridor Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	81	95	254	228	1	659
2018	75	96	267	231	1	670
2019	90	100	297	227	1	715
Total	**246**	**291**	**818**	**686**	**3**	**2,044**
%	**12.0%**	**14.2%**	**40.0%**	**33.6%**	**0.2%**	**100.0%**

From 2017 to 2019, a total of 51 crashes resulted in serious injuries or fatalities, while other crashes were reported as having non-incapacitating injury, possible injury, or property damage only. **Table 32** lists the corridor crash severity.

Table 32: Corridor Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	154	57	11	5	417	15	659
2018	150	61	14	1	425	19	670
2019	168	62	18	2	451	14	715
Total	**472**	**180**	**43**	**8**	**1,293**	**48**	**2,044**
%	**23.1%**	**8.8%**	**2.1%**	**0.4%**	**63.3%**	**2.3%**	**100.0%**

9.2 Segment 1 Safety Analysis

A total of 412 crashes were reported within Segment 1 between 2017 and 2019. A shown in **Table 33**, the crash rates for Segment 1 were higher than the respective statewide crash rates for each of the years analyzed, except 2017. For this segment, the statewide average used was for urban state highways.

Table 33: Segment 1 Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	115	6.63	35,515	133.81	160.94
2018	140	6.63	36,189	159.86	156.71
2019	157	6.63	36,877	175.93	155.98

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

Crash locations also were plotted using GIS and a heat map depicting these locations along Segment 1 for years 2017 through 2019 is shown in **Figure 35**. The intersections of Westpark Drive with Chimney Rock Road and South Rice Avenue were two of the existing crash hot spots located within Segment 1.

Figure 35: Segment 1 Crash Location



Table 34 shows the breakdown of crash types were reported within Segment 1 between 2017 and 2019.

Table 34: Segment 1 Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	9	20	57	29	0	115
2018	10	16	66	48	0	140
2019	9	25	86	37	0	157
Total	**28**	**61**	**209**	**114**	**0**	**412**
%	**6.8%**	**14.8%**	**50.7%**	**27.7%**	**0.0%**	**100.0%**

Table 35 shows the breakdown of crash severity which were reported within Segment 1 between 2017 and 2019.

Table 35: Segment 1 Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	20	10	3	0	77	5	115
2018	32	16	0	0	91	1	140
2019	38	11	0	0	106	2	157
Total	**90**	**37**	**3**	**0**	**274**	**8**	**412**
%	**21.8%**	**9.0%**	**0.8%**	**0.0%**	**66.5%**	**1.9%**	**100.0%**

9.3 Segment 2 Safety Analysis

A total of 480 crashes were reported along Segment 2 between 2017 and 2019. As shown in **Table 36**, the crash rates for the segment were higher than the respective statewide crash rates for each of the years analyzed. For this segment, the statewide average was for urban 4-lane divided highways.

Table 36: Segment 2 Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	181	4.26	20,851	558.27	160.94
2018	155	4.26	21,081	472.87	156.71
2019	144	4.26	21,313	434.53	155.98

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

Crash locations also were plotted using GIS and a heat map depicting these locations along Segment 2 for years 2017 through 2019 is shown in **Figure 36**. The intersections of Richmond Avenue with Montrose Boulevard and Kirby Drive were two of the existing crash hot spots along this segment.

Figure 36: Segment 2 Crash Location



Table 37 shows the breakdown of crash types which were reported within Segment 2 between 2017 and 2019.

Table 37: Segment 2 Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	13	27	71	69	1	181
2018	18	33	62	42	0	155
2019	14	23	59	48	0	144
Total	**45**	**83**	**192**	**159**	**1**	**480**
%	**9.4%**	**17.3%**	**40.0%**	**33.1%**	**0.2%**	**100.0%**

Table 38 shows the breakdown of crash severity which were reported within Segment 2 between 2017 and 2019.

Table 38: Segment 2 Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	45	11	2	1	120	2	181
2018	36	9	1	0	105	4	155
2019	22	11	1	0	105	5	144
Total	**103**	**31**	**4**	**1**	**330**	**11**	**480**
%	**21.5%**	**6.5%**	**0.8%**	**0.1%**	**68.8%**	**2.3%**	**100.0%**

9.4 Segment 3 Safety Analysis

A total of 373 crashes were reported along Segment 3 between 2017 and 2019. As shown in **Table 39**, the crash rates for the segment were greater that the respective statewide crash rates for each of the years analyzed. For this segment, the statewide average used was for urban 4-lane divided roadways.

Table 39: Segment 3 Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	124	3.45	7,282	1,352.3	170.06
2018	110	3.45	7,347	1,188.9	165.63
2019	139	3.45	7,414	1,488.9	169.99

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

Crash locations also were plotted using GIS and a heat map depicting these locations along Segment 3 for years 2017 through 2019 is shown in **Figure 37**. The intersections of Wheeler Avenue in the area of intersections with Main Street, Fannin Street, and San Jacinto Street were a

hot spot for crashes in this segment. Another hot spot is the intersections along Elgin Street between Ennis Street and IH-45.

Figure 37: Segment 3 Crash Location

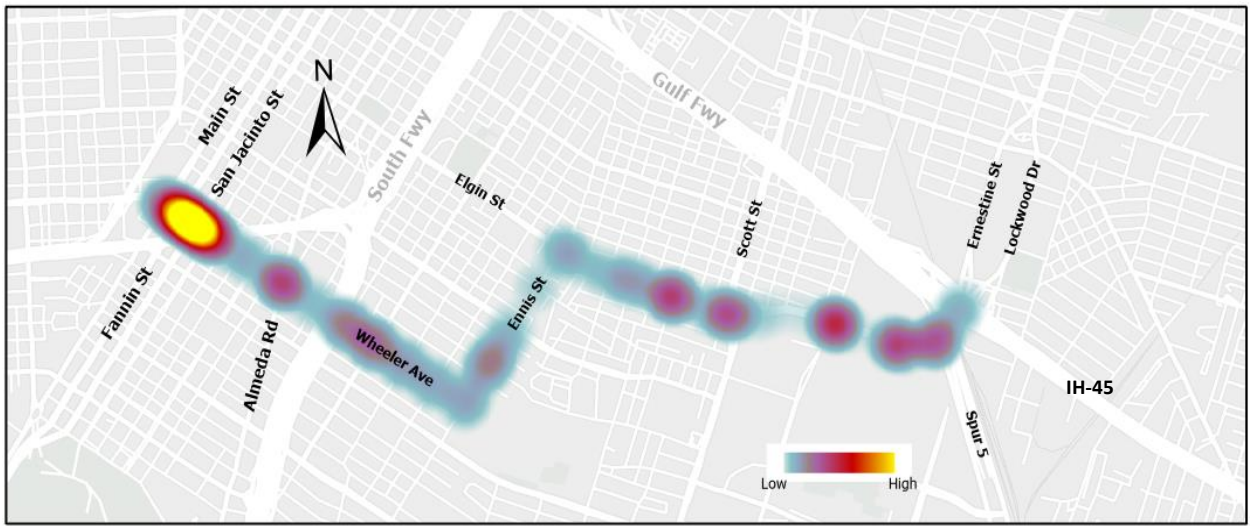


Table 40 shows the breakdown of crash types which were reported within Segment 3 between 2017 and 2019.

Table 40: Segment 2 Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	15	12	36	61	0	124
2018	12	11	37	49	1	110
2019	23	16	43	56	1	139
Total	**50**	**39**	**116**	**166**	**2**	**373**
%	**13.4%**	**10.5%**	**31.1%**	**44.5%**	**0.5%**	**100.0%**

Table 41 shows the breakdown of crash severity which were reported within Segment 3 between 2017 and 2019.

Table 41: Segment 3 Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	31	10	1	0	81	1	124
2018	17	9	3	0	78	3	110
2019	33	13	2	0	89	2	139
Total	**81**	**32**	**6**	**0**	**248**	**6**	**373**
%	**21.7%**	**8.6%**	**1.6%**	**0.0%**	**66.5%**	**1.6%**	**100.0%**

9.5 Segment 4 Safety Analysis

A total of 164 crashes were reported along Segment 4 between 2017 and 2019. As shown in **Table 42**, the crash rates for the segment were higher than the respective statewide crash rates for each of the years analyzed. For this segment, the statewide average used was for urban 4-lane divided highways.

Table 42: Segment 4 Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	58	2.94	13,924	388.05	160.94
2018	51	2.94	13,979	339.86	156.71
2019	55	2.94	14,036	365.04	155.98

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

Crash locations also were plotted using GIS and a heat map depicting these locations along Segment 4 for years 2017 through 2019 is shown in **Figure 38**. The intersections of Lockwood Drive with Clinton Drive and Navigation Boulevard were a few crash hot spots for this segment.

Figure 38: Segment 4 Crash Location

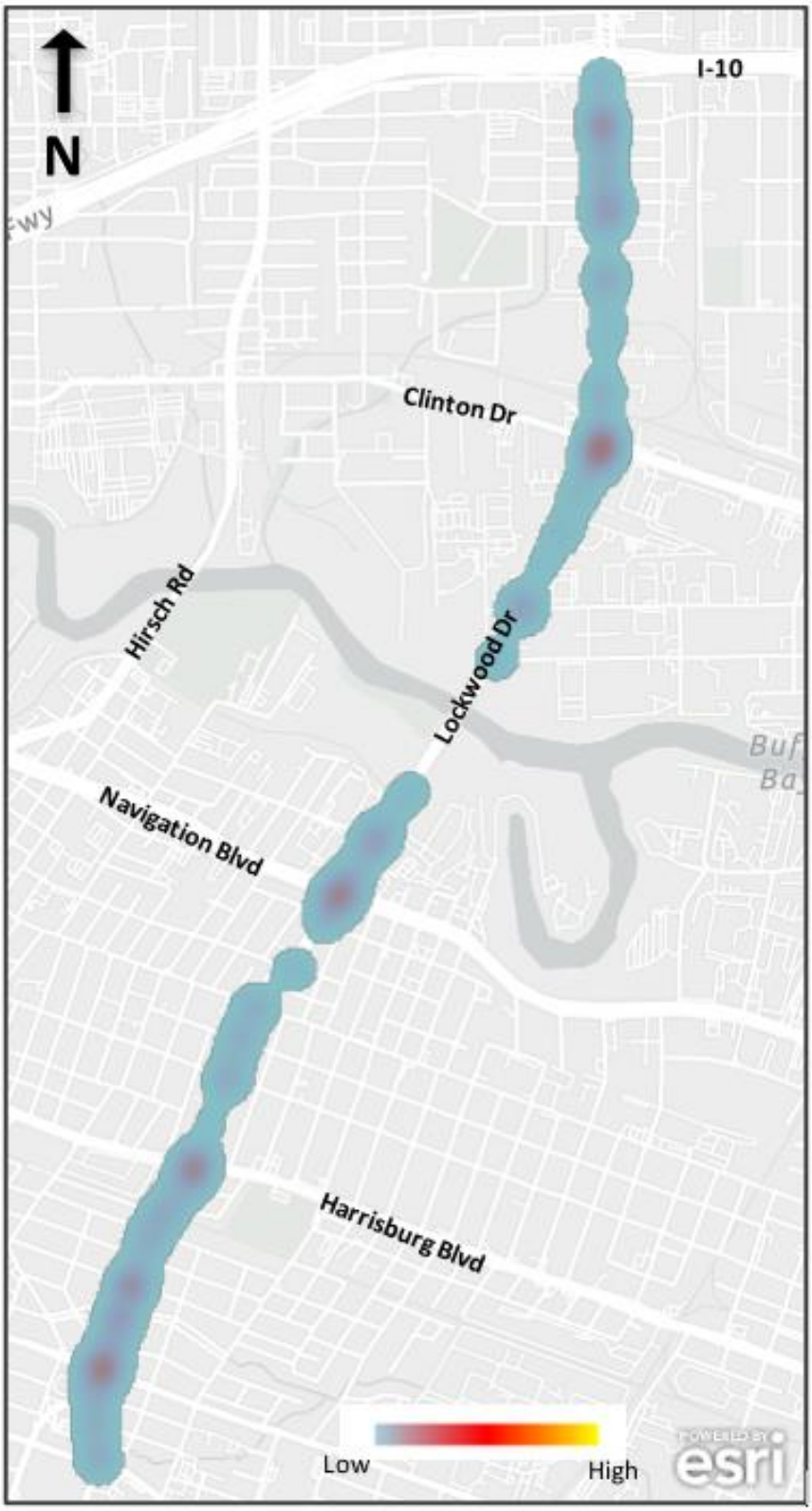


Table 43 shows the breakdown of crash types which were reported within Segment 4 between 2017 and 2019.

Table 43: Segment 4 Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	9	10	22	17	0	58
2018	6	9	19	17	0	51
2019	8	11	22	14	0	55
Total	**23**	**30**	**63**	**48**	**0**	**164**
%	**14.0%**	**18.3%**	**38.4%**	**29.3%**	**0.0%**	**100.0%**

Table 44 shows the breakdown of crash severity which were reported within Segment 4 between 2017 and 2019.

Table 44: Segment 4 Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	17	5	0	0	33	3	58
2018	9	5	1	0	32	4	51
2019	16	2	1	0	35	1	55
Total	**42**	**12**	**2**	**0**	**100**	**8**	**164**
%	**25.6%**	**7.3%**	**1.2%**	**0.0%**	**61.0%**	**4.9%**	**100.0%**

9.6 Segment 5 Safety Analysis

A total of 615 crashes were reported along Segment 5 between 2017 and 2019. As shown in **Table 45**, the crash rates for the segment were higher that the respective statewide crash rates for each of the years analyzed. For this segment, the statewide average used was for urban 4-lane divided highways.

Table 45: Segment 5 Corridor Crash Rates 2017 - 2019

Year	Crashes	Length (Miles)	AADT*	Crash Rate (Crashes per 100M VMT)	Statewide Average Crash Rate (Crashes Per 100M VMT)
2017	181	7.37	11,061	608.29	160.94
2018	214	7.37	11,106	716.30	156.71
2019	220	7.37	13,134	622.67	155.98

**AADT calculated as a weighted average of available AADT in TxDOT's Statewide Traffic Analysis and Reporting System (STARS)*

Crash locations also were plotted using GIS and a heat map depicting these locations along Segment 5 for years 2017 through 2019 is shown in **Figure 39**. The intersections of Lockwood Drive with Kelley Street and Lyons Avenue and the intersection of Tidwell Road and Jensen Drive were a few crash hot spots in this segment.

Figure 39: Segment 5 Crash Location



Table 46 shows the breakdown of crash types which were reported within Segment 5 between 2017 and 2019.

Table 46: Segment 5 Crash Types 2017 - 2019

Year	One Vehicle	Opposite Direction	Same Direction	Angle	Other	Total
2017	35	26	68	52	0	181
2018	29	27	83	75	0	214
2019	36	25	87	72	0	220
Total	**100**	**78**	**238**	**199**	**0**	**615**
%	**16.3%**	**12.6%**	**38.7%**	**32.4%**	**0.0%**	**100.0%**

Table 47 shows the breakdown of crash severity which were reported within Segment 5 between 2017 and 2019.

Table 47: Segment 5 Crash Severity 2017 - 2019

Year	Possible Injury	Non-Incapacitating Injury	Serious Injury	Fatality	Property Damage Only	Other	Total
2017	41	21	5	4	106	4	181
2018	56	22	9	1	119	7	214
2019	59	25	14	2	116	4	220
Total	**156**	**68**	**28**	**7**	**341**	**15**	**615**
%	**25.4%**	**11.1%**	**4.6%**	**1.1%**	**55.4%**	**2.4%**	**100.0%**

9.7 Projected Safety Benefits

The proposed University Line BRT Project will include provisions that will improve safety of the corridors on which the BRT will run. Safety for all modes of transportation including vehicular traffic, users of the proposed BRT, and pedestrians will be improved as a result of the University Line BRT Project. Further details for each mode are discussed in the following sub-sections.

9.7.1 Vehicular Safety Enhancements

The proposed Project will improve safety along the proposed route for vehicular traffic through the entire corridor. The primary mechanism which will improve safety will be implementation of access management and reduction in conflict points along the routes. Conflict points are locations where traffic either merges, diverges, or crosses. A standard 4-approach intersection contains a total of 32 conflict points. Conflict points also exist at each driveway entrance to and from main roadways. The number of conflict points will be reduced throughout the proposed BRT corridor since the proposed center running BRT will serve as a raised median that will prohibit uncontrolled movements across the street and will require controlled access. Left turns from or onto the proposed route will only be allowed at the signalized intersections along the University Corridor. The proposed improvements are not projected to significantly affect vehicular speeds along the corridors which are relatively low.

The TxDOT Access Management Manual summarizes the numerous studies which have been performed across the United States for undivided, Two Way Left Turn Lane (TWLTL), and Non-Traversable medians. Roadways with a non-traversable (raised) median have on average a 30% lower crash rate that those with no median or a TWLTL. **Table 48** below shows how the type of median and number of conflict points affects crash rates.

Table 48: Crash Rates per Median Type and Conflict Point Density

Representative Crash Rates (per 1 Million VMT) By Median Type and Conflict Point Density – Urban and Suburban Areas			
Access Points per Mile	Median Type		
	Undivided	TWLTL	Non-Traversable Median
< 20	3.8	3.4	2.9
20 – 40	7.3	5.9	5.1
40 – 60	9.4	7.9	6.8
> 60	10.6	9.2	5.6

Source: TxDOT Access Management Manual – July 1, 2011

Crash rates are a function of both the number of access points and the type of median which is present on a roadway. The proposed University Line BRT Project will reduce the number of conflict points throughout the proposed BRT corridor and provide a non-traversable median which can be expected to reduce the crash rate throughout the corridor.

A summary of the impacts on conflict points for each segment is listed below.

Segment 1

Westpark Drive between IH-610 and Edloe street currently has an existing two way left turn lane which will be removed and replaced with the proposed BRT Guideway. This will prohibit left turns to and from Westpark Drive at locations other than the signalized intersections. There are numerous driveways which will become right-in/right-out only entrances which would reduce the number of conflict points.

Segment 2

Approximately 27 unsignalized median openings along Richmond Avenue between Edloe Street and Main Street will be closed as part of the proposed University Line BRT Project. The side-streets or entrances at these locations will be converted to right-in/right-out only approaches to Richmond Avenue.

Segment 3

Wheeler Avenue is currently a four-lane undivided roadway between Main Street and Ennis Street. The proposed BRT guideway will act as a raised median on this roadway, which would make all entrances to the roadway in this area right-in/right-out only. Left turns to and from Wheeler Avenue will be restricted and will only be allowed at the signalized intersections on Wheeler Avenue.

There are also several intersections on Wheeler Avenue where exclusive left turn lanes do not exist for permitted left turns and causes vehicles to wait for a gap in oncoming traffic within an existing travel lane, which increases the chances of rear end collisions. Left turn lanes are proposed at all intersections on Wheeler Avenue except for La Branch Street where left turns will be prohibited from Wheeler Avenue.

Ennis Street is also currently a four-lane undivided roadway between Wheeler Avenue and Elgin Street. The proposed BRT guideway will act as a raised median on this roadway, which will make all entrances to the roadway in this area right-in/right-out only. Left turns to and from Wheeler Avenue will be controlled and will only be allowed at the signalized intersections on Ennis Street. Split phasing and exclusive BRT phases will be used at these intersections as there is not adequate room on this street to provide exclusive left turn lanes.

Approximately 13 unsignalized median openings along Elgin Street between Ennis Street and the NB IH-45 Frontage Road will be closed as part of the proposed University Line BRT Project. The side streets or entrances at these locations will be converted to right in / right out only approaches to Elgin Street.

Segment 4

Currently Lockwood Drive and Ernestine Street are a one-way pair between the IH-45 NB Frontage Road and Polk Street. As part of the proposed University Line BRT Project and in coordination with COH, both Lockwood Drive and Ernestine Street will be converted to two-way traffic. This change was necessary to maintain safe access to the existing developments between these two roadways

once the proposed University Line BRT is constructed. The proposed BRT guideway will run along Lockwood Drive as a center running BRT which will provide the access management benefits as in other areas of the corridor such as controlling left turns to and from Lockwood Drive and reducing the number of conflict points.

To the north of Polk Street, approximately 37 unsignalized median openings along Lockwood Drive will be closed within Segment 4, as part of the proposed University Line BRT Project. The side streets or entrances at these locations will be converted to right-in/right-out only approaches to Lockwood Drive.

Segment 5

Approximately 37 unsignalized median openings along Lockwood Drive will be closed within Segment 5 as part of the proposed University Line BRT Project. The side streets or entrances at these locations will be converted to right-in/right-out only approaches to Lockwood Drive. An additional 17 unsignalized median openings will be closed along Tidwell Road.

9.7.2 Transit Users Safety Enhancements

All crossings to the proposed stations for the University Line BRT Project will occur at either signalized intersections or signalized midblock crossings providing controlled access for pedestrians to and from the proposed stations. Pedestrian refuge areas and Z-crossings have been provided in the geometric design where median width and design context allows. The transit vehicles will also travel through the majority of the corridor without any conflicting vehicle paths. There is one area at the interchange of Elgin Street with Spur 5 and IH-45 where the BRT vehicles will operate in mixed traffic. At this interchange, BRT vehicles will be provided with a queue jump in both directions so they can access the intersection in advance of the general-purpose traffic and will not have to yield to any traffic within the intersection.

9.7.3 Pedestrian and Bicyclist Safety Enhancements

The University Corridor BRT Project will provide a safe, reliable walkable environment along the corridor that meets the intent of the City of Houston's Transit-Oriented Development (TOD) policies and conforms to its requirements. The main component of the TOD is the pedestrian realm, which is the area between the back of curb or edge of pavement and the Right-of-Way (ROW). The pedestrian realm includes an unobstructed sidewalk or sidepath and a safety buffer area. There is also a frontage buffer that is typically provided between the sidewalk or sidepath and the ROW. The safety buffer area is an important element that shields the sidewalk or sidepath from the street and can include a combination of landscaping, utilities and sidewalk amenities, such as street furniture, bike racks and decorative plantings.

As the majority of the University Corridor is within City of Houston ROW of various widths and extends through different area types, including neighborhoods, businesses and universities, the pedestrian realm dimensions will also vary to remain sensitive to the area's local context and to minimize impacts to the ROW. Ideally, the pedestrian realm would have a total minimum width of 16 feet with a 4-ft. safety buffer, 10-ft. sidepath and a 2-ft. frontage buffer.

However, as mentioned previously, the pedestrian realm dimensions vary throughout the University Corridor with the safety buffers ranging from 2 feet to 4 feet, sidewalks ranging from 5 feet to 8 feet, sidepaths with 8-ft and 10-ft widths, and frontage buffers with a minimum width of 1 foot. The larger pedestrian realms are located in Segments 1, 4 and 5, while Segments 2 and 3 would have the smaller pedestrian realms.

Through continued coordination with COH, METRO plans to align the University Corridor bike improvements with the Houston Bike Plan to the extent possible. The Houston Bike Plan identifies the network of existing, planned and proposed bikeways on-street and off-street and within dedicated lanes or shared lanes for the entire City limits. The University Corridor alignment seeks to accommodate the City's current and future bike network by maximizing the pedestrian realm space and providing 8-ft or 10-ft sidepaths, which are to be shared by both pedestrians and bicycle users, where feasible and with minimum impacts to ROW. The intent is to have bicycles operating off-street along the University Corridor alignment. At no time will bicycles operate with BRT lanes.

It is noted that the Houston Bike Plan does not identify existing, planned or proposed bikeways for the entire length of the University Corridor. There are a number of sections along the alignment that do not have bikeways. Segments 1, 4 and 5 contain the majority of the bikeways, while Segments 2 and 3 have minor bikeway distances along the alignment. The below table identifies the locations of the bikeways included on the Houston Bike Plan that overlap with the University Corridor and the preliminary accommodations proposed as part of the Project:

Table 49: Bike Lanes

SEGMENT	STREET	FROM	TO	DISTANCE	ACCOMMDATIONS
1	Westpark ROW	Westchase Park & Ride	IH-610	6.3 miles	10-ft sidepath; off-street
1	Westpark	IH-610	Edloe	1.5 miles	10-ft sidepath; off-street
2	Richmond	Edloe	Wakeforest	0.7 miles	8-ft sidepath; off-street
3	Wheeler	Emancipation	Ennis	0.4 miles	None; on-street or use parallel street
3	Elgin	Cullen	Spur 5	0.4 miles	10-ft sidepath; off-street
4	Lockwood	IH-45	Clinton	2.7 miles	10-ft sidepath; off-street
4	Lockwood	Clinton	Margarita	0.5 miles	8-ft sidepath; off-street
5	Lockwood	Margarita	IH-10	0.3 miles	8-ft sidepath; off-street
5	Lockwood	IH-10	IH-610	2.4 miles	10-ft sidepath; off-street
5	Lockwood	IH-610	Kelley	0.3 miles	8-ft sidepath; off-street
5	Tidwell	Lockwood	Jensen	1.4 miles	8-ft sidepath; off-street
5	Jensen	Tidwell	Turner	0.1 miles	8-ft sidepath; off-street

Over half of the University Corridor length will have 10-ft off-street sidepaths to accommodate both pedestrians and bicyclists. For those areas with 8-ft sidepaths and on-street bikeways, final pedestrian and bicyclist safety enhancements will continue to be coordinated with COH, stakeholders and the public as the design progresses.

APPENDIX A – EXISTING TRAFFIC COUNTS

EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

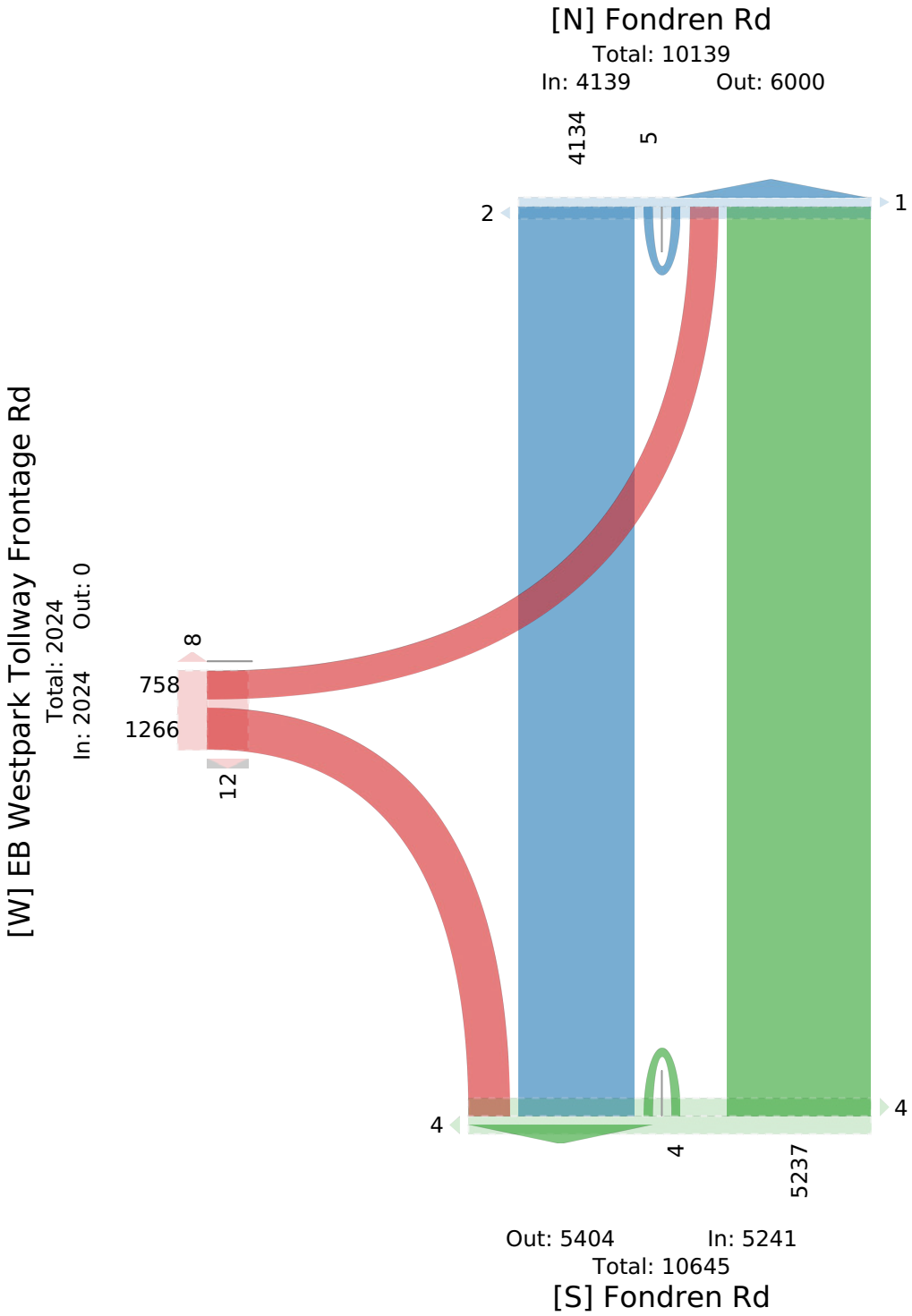
Leg / Direction	Fondren Rd Northbound					Fondren Rd Southbound					EB Westpark Tollway Frontage Rd Eastbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	281	0	**281**	2	181	0	0	**181**	1	49	76	0	**125**	0	**587**
7:15AM	0	342	0	**342**	1	251	0	0	**251**	0	51	81	0	**132**	5	**725**
7:30AM	0	297	0	**297**	1	238	0	0	**238**	0	56	103	0	**159**	4	**694**
7:45AM	0	332	1	**333**	0	240	0	0	**240**	1	58	127	0	**185**	0	**758**
Hourly Total	0	1252	1	**1253**	4	910	0	0	**910**	2	214	387	0	**601**	9	**2764**
8:00AM	0	287	0	**287**	1	194	0	0	**194**	0	51	91	0	**142**	2	**623**
8:15AM	0	326	1	**327**	1	180	0	0	**180**	0	55	119	0	**174**	0	**681**
8:30AM	0	253	0	**253**	1	222	0	0	**222**	0	52	104	0	**156**	1	**631**
8:45AM	0	270	0	**270**	0	221	0	1	**222**	0	59	148	0	**207**	0	**699**
Hourly Total	0	1136	1	**1137**	3	817	0	1	**818**	0	217	462	0	**679**	3	**2634**
4:00PM	0	297	0	**297**	1	311	0	0	**311**	0	34	53	0	**87**	2	**695**
4:15PM	0	380	1	**381**	0	304	0	0	**304**	0	41	54	0	**95**	0	**780**
4:30PM	0	330	0	**330**	0	301	0	1	**302**	0	40	54	0	**94**	1	**726**
4:45PM	0	381	0	**381**	0	303	0	1	**304**	0	45	59	0	**104**	1	**789**
Hourly Total	0	1388	1	**1389**	1	1219	0	2	**1221**	0	160	220	0	**380**	4	**2990**
5:00PM	0	348	0	**348**	0	302	0	1	**303**	0	42	57	0	**99**	0	**750**
5:15PM	0	393	0	**393**	0	310	0	0	**310**	1	37	38	0	**75**	1	**778**
5:30PM	0	334	0	**334**	0	304	0	0	**304**	0	41	40	0	**81**	1	**719**
5:45PM	0	386	1	**387**	0	272	0	1	**273**	0	47	62	0	**109**	2	**769**
Hourly Total	0	1461	1	**1462**	0	1188	0	2	**1190**	1	167	197	0	**364**	4	**3016**
Total	0	5237	4	**5241**	8	4134	0	5	**4139**	3	758	1266	0	**2024**	20	**11404**
% Approach	0%	99.9%	0.1%	**-**	-	99.9%	0%	0.1%	**-**	-	37.5%	62.5%	0%	**-**	-	-
% Total	0%	45.9%	0%	**46.0%**	-	36.3%	0%	0%	**36.3%**	-	6.6%	11.1%	0%	**17.7%**	-	-
Motorcycles	0	2	0	**2**	-	2	0	0	**2**	-	0	0	0	**0**	-	4
% Motorcycles	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Lights	0	5128	4	**5132**	-	4033	0	5	**4038**	-	723	1234	0	**1957**	-	11127
% Lights	0%	97.9%	100%	**97.9%**	-	97.6%	0%	100%	**97.6%**	-	95.4%	97.5%	0%	**96.7%**	-	97.6%
Single-Unit Trucks	0	47	0	**47**	-	42	0	0	**42**	-	26	22	0	**48**	-	137
% Single-Unit Trucks	0%	0.9%	0%	**0.9%**	-	1.0%	0%	0%	**1.0%**	-	3.4%	1.7%	0%	**2.4%**	-	1.2%
Articulated Trucks	0	18	0	**18**	-	8	0	0	**8**	-	6	5	0	**11**	-	37
% Articulated Trucks	0%	0.3%	0%	**0.3%**	-	0.2%	0%	0%	**0.2%**	-	0.8%	0.4%	0%	**0.5%**	-	0.3%
Buses	0	42	0	**42**	-	49	0	0	**49**	-	3	5	0	**8**	-	99
% Buses	0%	0.8%	0%	**0.8%**	-	1.2%	0%	0%	**1.2%**	-	0.4%	0.4%	0%	**0.4%**	-	0.9%
Pedestrians	-	-	-	-	8	-	-	-	-	3	-	-	-	-	16	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Fondren Rd					Fondren Rd					EB Westpark Tollway Frontage Rd					
Direction	Northbound					Southbound					Eastbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	0	342	0	**342**	1	251	0	0	**251**	0	51	81	0	**132**	5	**725**
7:30AM	0	297	0	**297**	1	238	0	0	**238**	0	56	103	0	**159**	4	**694**
7:45AM	0	332	1	**333**	0	240	0	0	**240**	1	58	127	0	**185**	0	**758**
8:00AM	0	287	0	**287**	1	194	0	0	**194**	0	51	91	0	**142**	2	**623**
Total	0	1258	1	**1259**	3	923	0	0	**923**	1	216	402	0	**618**	11	**2800**
% Approach	0%	99.9%	0.1%	**-**	-	100%	0%	0%	**-**	-	35.0%	65.0%	0%	**-**	-	-
% Total	0%	44.9%	0%	**45.0%**	-	33.0%	0%	0%	**33.0%**	-	7.7%	14.4%	0%	**22.1%**	-	-
PHF	-	0.920	0.250	**0.920**	-	0.919	-	-	**0.919**	-	0.931	0.791	-	**0.835**	-	0.923
Motorcycles	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Lights	0	1237	1	**1238**	-	904	0	0	**904**	-	211	398	0	**609**	-	2751
% Lights	0%	98.3%	100%	**98.3%**	-	97.9%	0%	0%	**97.9%**	-	97.7%	99.0%	0%	**98.5%**	-	98.3%
Single-Unit Trucks	0	9	0	**9**	-	1	0	0	**1**	-	1	3	0	**4**	-	14
% Single-Unit Trucks	0%	0.7%	0%	**0.7%**	-	0.1%	0%	0%	**0.1%**	-	0.5%	0.7%	0%	**0.6%**	-	0.5%
Articulated Trucks	0	0	0	**0**	-	3	0	0	**3**	-	4	1	0	**5**	-	8
% Articulated Trucks	0%	0%	0%	**0%**	-	0.3%	0%	0%	**0.3%**	-	1.9%	0.2%	0%	**0.8%**	-	0.3%
Buses	0	12	0	**12**	-	15	0	0	**15**	-	0	0	0	**0**	-	27
% Buses	0%	1.0%	0%	**1.0%**	-	1.6%	0%	0%	**1.6%**	-	0%	0%	0%	**0%**	-	1.0%
Pedestrians	-	-	-	-	3	-	-	-	-	1	-	-	-	-	10	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	90.9%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	9.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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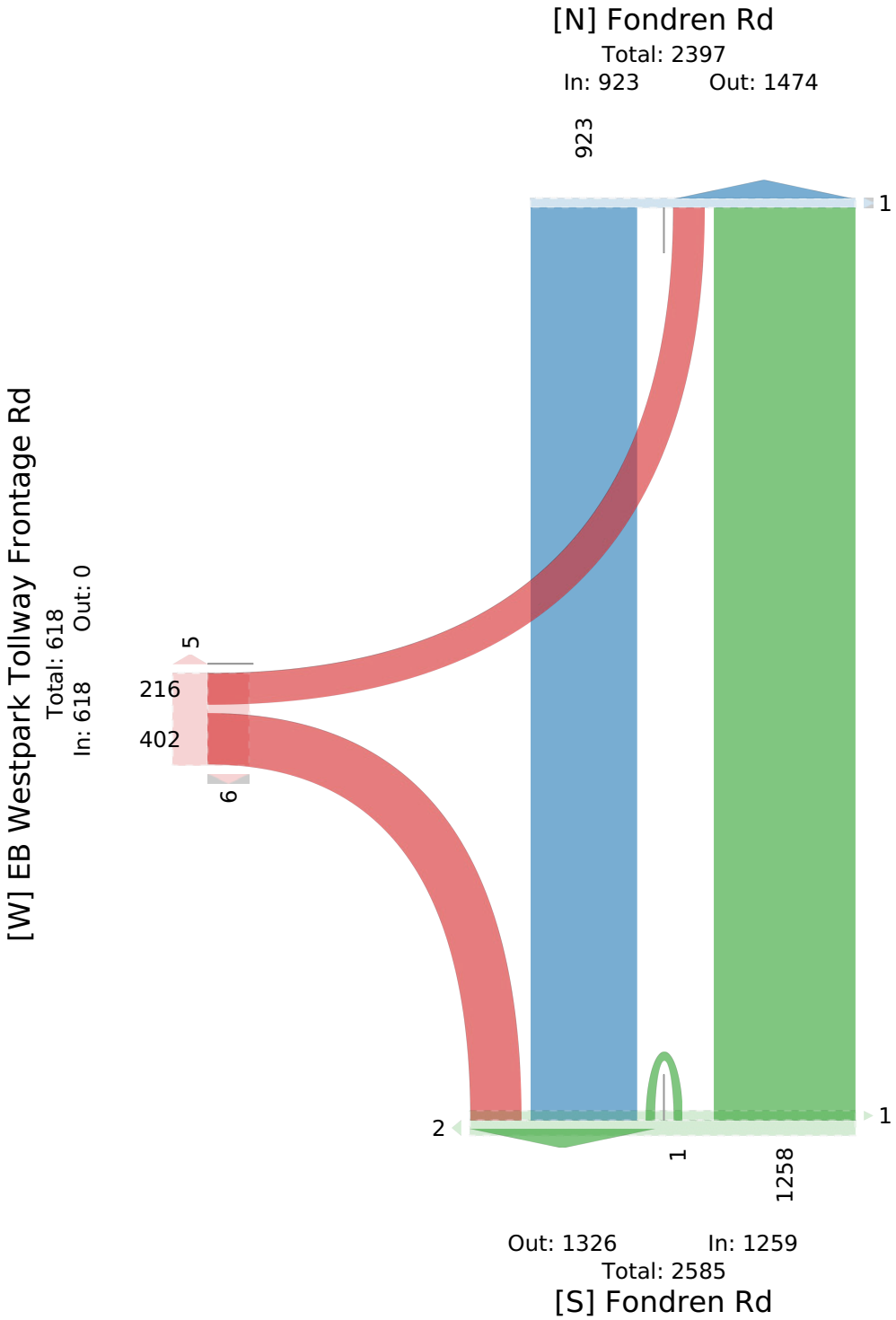

EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Fondren Rd Northbound					Fondren Rd Southbound					EB Westpark Tollway Frontage Rd Eastbound					
Time	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	L	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	0	380	1	**381**	0	304	0	0	**304**	0	41	54	0	**95**	0	**780**
4:30PM	0	330	0	**330**	0	301	0	1	**302**	0	40	54	0	**94**	1	**726**
4:45PM	0	381	0	**381**	0	303	0	1	**304**	0	45	59	0	**104**	1	**789**
5:00PM	0	348	0	**348**	0	302	0	1	**303**	0	42	57	0	**99**	0	**750**
Total	0	1439	1	**1440**	0	1210	0	3	**1213**	0	168	224	0	**392**	2	**3045**
% Approach	0%	99.9%	0.1%	**-**	-	99.8%	0%	0.2%	**-**	-	42.9%	57.1%	0%	**-**	-	-
% Total	0%	47.3%	0%	**47.3%**	-	39.7%	0%	0.1%	**39.8%**	-	5.5%	7.4%	0%	**12.9%**	-	-
PHF	-	0.944	0.250	**0.945**	-	0.995	-	0.750	**0.998**	-	0.933	0.949	-	**0.942**	-	0.965
Motorcycles	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Lights	0	1408	1	**1409**	-	1172	0	3	**1175**	-	159	213	0	**372**	-	2956
% Lights	0%	97.8%	100%	**97.8%**	-	96.9%	0%	100%	**96.9%**	-	94.6%	95.1%	0%	**94.9%**	-	97.1%
Single-Unit Trucks	0	12	0	**12**	-	20	0	0	**20**	-	6	10	0	**16**	-	48
% Single-Unit Trucks	0%	0.8%	0%	**0.8%**	-	1.7%	0%	0%	**1.6%**	-	3.6%	4.5%	0%	**4.1%**	-	1.6%
Articulated Trucks	0	8	0	**8**	-	0	0	0	**0**	-	1	0	0	**1**	-	9
% Articulated Trucks	0%	0.6%	0%	**0.6%**	-	0%	0%	0%	**0%**	-	0.6%	0%	0%	**0.3%**	-	0.3%
Buses	0	11	0	**11**	-	18	0	0	**18**	-	2	1	0	**3**	-	32
% Buses	0%	0.8%	0%	**0.8%**	-	1.5%	0%	0%	**1.5%**	-	1.2%	0.4%	0%	**0.8%**	-	1.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

EB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867307, Location: 29.720842, -95.520165

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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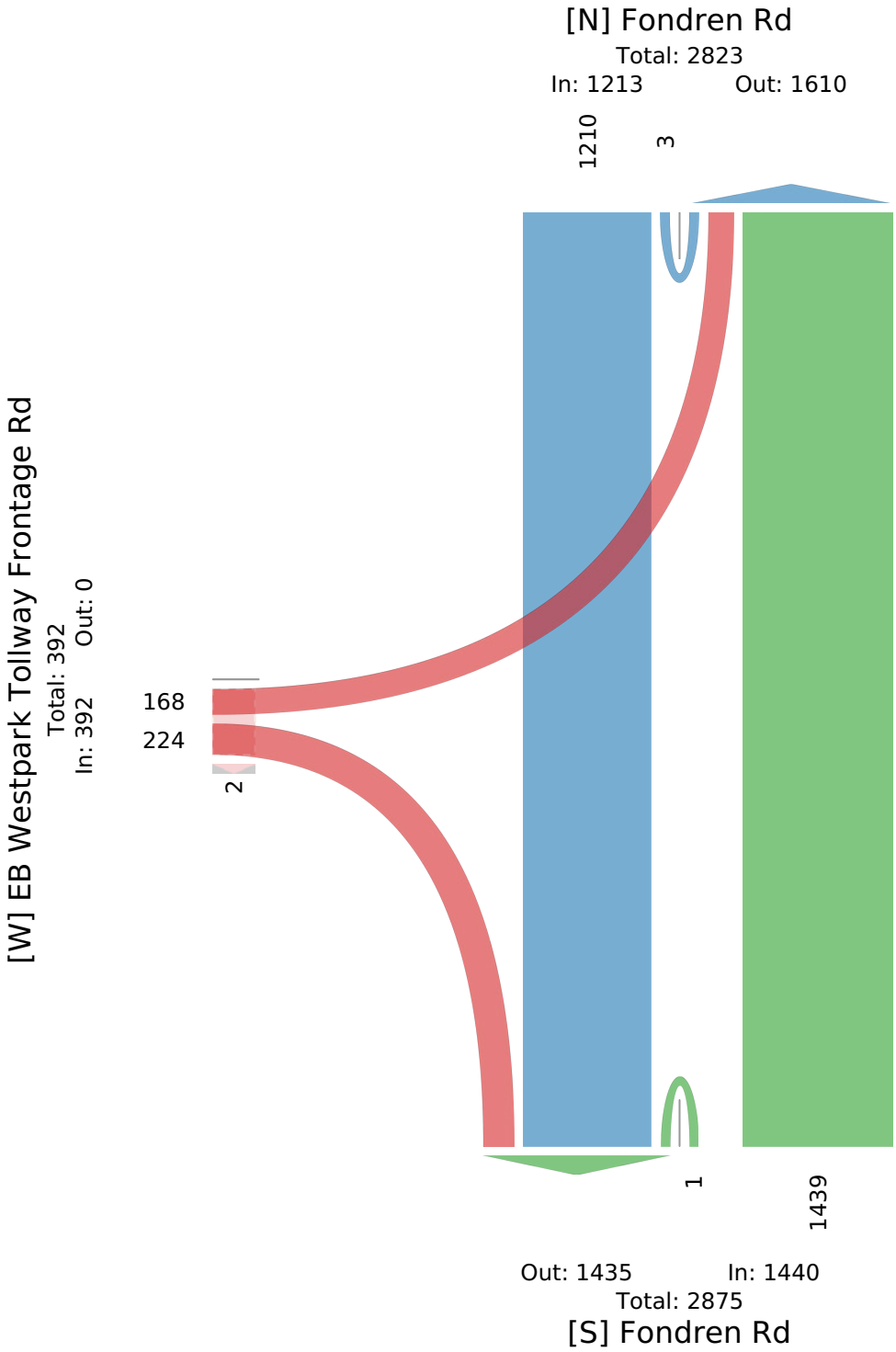

WB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Fondren Rd						Fondren Rd						WB Westpark Tollway Frontage Rd						WB Westpark Tollway Frontage Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	56	182	91	0	**329**	0	41	92	2	0	**135**	2	10	320	36	0	**366**	1	47	193	31	2	**273**	2	**1103**
7:15AM	64	220	97	0	**381**	0	57	147	10	0	**214**	1	25	290	60	0	**375**	0	42	185	29	1	**257**	1	**1227**
7:30AM	57	214	74	0	**345**	0	39	122	11	0	**172**	1	14	311	65	0	**390**	2	54	237	35	0	**326**	0	**1233**
7:45AM	64	239	74	0	**377**	0	41	133	8	0	**182**	0	21	225	56	0	**302**	0	41	206	39	0	**286**	2	**1147**
Hourly Total	241	855	336	0	**1432**	0	178	494	31	0	**703**	4	70	1146	217	0	**1433**	3	184	821	134	3	**1142**	5	**4710**
8:00AM	50	212	66	0	**328**	0	37	126	8	0	**171**	1	26	267	52	0	**345**	0	21	217	35	0	**273**	1	**1117**
8:15AM	56	232	82	0	**370**	0	43	108	8	0	**159**	0	25	254	41	0	**320**	0	26	197	34	3	**260**	2	**1109**
8:30AM	50	189	56	0	**295**	0	33	136	12	0	**181**	0	23	251	52	0	**326**	0	33	217	35	2	**287**	1	**1089**
8:45AM	57	178	81	0	**316**	0	42	120	10	0	**172**	0	21	231	60	0	**312**	0	30	180	35	3	**248**	3	**1048**
Hourly Total	213	811	285	0	**1309**	0	155	490	38	0	**683**	1	95	1003	205	0	**1303**	0	110	811	139	8	**1068**	7	**4363**
4:00PM	78	188	67	0	**333**	0	64	212	24	0	**300**	0	18	187	43	0	**248**	2	75	289	39	1	**404**	1	**1285**
4:15PM	91	258	55	0	**404**	0	48	201	15	1	**265**	0	16	157	54	0	**227**	0	62	253	28	0	**343**	1	**1239**
4:30PM	78	231	50	0	**359**	0	55	202	16	0	**273**	3	12	155	47	0	**214**	2	63	283	38	3	**387**	1	**1233**
4:45PM	104	265	52	0	**421**	0	38	207	12	0	**257**	0	15	152	65	0	**232**	0	44	274	33	5	**356**	1	**1266**
Hourly Total	351	942	224	0	**1517**	0	205	822	67	1	**1095**	3	61	651	209	0	**921**	4	244	1099	138	9	**1490**	4	**5023**
5:00PM	90	226	59	0	**375**	0	48	190	19	0	**257**	0	16	174	57	0	**247**	0	66	316	49	1	**432**	0	**1311**
5:15PM	94	279	52	0	**425**	0	44	205	17	0	**266**	1	15	175	50	0	**240**	1	49	277	50	0	**376**	0	**1307**
5:30PM	92	219	54	0	**365**	0	54	216	21	0	**291**	0	12	182	46	0	**240**	2	51	305	45	0	**401**	1	**1297**
5:45PM	87	260	68	0	**415**	0	46	206	17	0	**269**	0	16	163	39	0	**218**	1	31	282	25	3	**341**	1	**1243**
Hourly Total	363	984	233	0	**1580**	0	192	817	74	0	**1083**	1	59	694	192	0	**945**	4	197	1180	169	4	**1550**	2	**5158**
Total	1168	3592	1078	0	**5838**	0	730	2623	210	1	**3564**	9	285	3494	823	0	**4602**	11	735	3911	580	24	**5250**	18	**19254**
% Approach	20.0%	61.5%	18.5%	0%	**-**	-	20.5%	73.6%	5.9%	0%	**-**	-	6.2%	75.9%	17.9%	0%	**-**	-	14.0%	74.5%	11.0%	0.5%	**-**	-	-
% Total	6.1%	18.7%	5.6%	0%	**30.3%**	-	3.8%	13.6%	1.1%	0%	**18.5%**	-	1.5%	18.1%	4.3%	0%	**23.9%**	-	3.8%	20.3%	3.0%	0.1%	**27.3%**	-	-
Motorcycles	0	2	0	0	**2**	-	0	1	1	0	**2**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	7
% Motorcycles	0%	0.1%	0%	0%	**0%**	-	0%	0%	0.5%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0%**	-	0%
Lights	1143	3511	1037	0	**5691**	-	725	2563	205	1	**3494**	-	279	3424	806	0	**4509**	-	718	3823	570	24	**5135**	-	18829
% Lights	97.9%	97.7%	96.2%	0%	**97.5%**	-	99.3%	97.7%	97.6%	100%	**98.0%**	-	97.9%	98.0%	97.9%	0%	**98.0%**	-	97.7%	97.7%	98.3%	100%	**97.8%**	-	97.8%
Single-Unit Trucks	17	40	24	0	**81**	-	4	19	2	0	**25**	-	4	29	9	0	**42**	-	11	53	5	0	**69**	-	217
% Single-Unit Trucks	1.5%	1.1%	2.2%	0%	**1.4%**	-	0.5%	0.7%	1.0%	0%	**0.7%**	-	1.4%	0.8%	1.1%	0%	**0.9%**	-	1.5%	1.4%	0.9%	0%	**1.3%**	-	1.1%
Articulated Trucks	4	10	7	0	**21**	-	0	5	1	0	**6**	-	0	10	0	0	**10**	-	1	17	2	0	**20**	-	57
% Articulated Trucks	0.3%	0.3%	0.6%	0%	**0.4%**	-	0%	0.2%	0.5%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.1%	0.4%	0.3%	0%	**0.4%**	-	0.3%
Buses	4	29	10	0	**43**	-	1	35	1	0	**37**	-	2	30	8	0	**40**	-	5	16	3	0	**24**	-	144
% Buses	0.3%	0.8%	0.9%	0%	**0.7%**	-	0.1%	1.3%	0.5%	0%	**1.0%**	-	0.7%	0.9%	1.0%	0%	**0.9%**	-	0.7%	0.4%	0.5%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	10	-	-	-	-	-	14	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	90.9%	-	-	-	-	-	77.8%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	9.1%	-	-	-	-	-	22.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

WB Westpark Tollway Frontage Rd at Fondren Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

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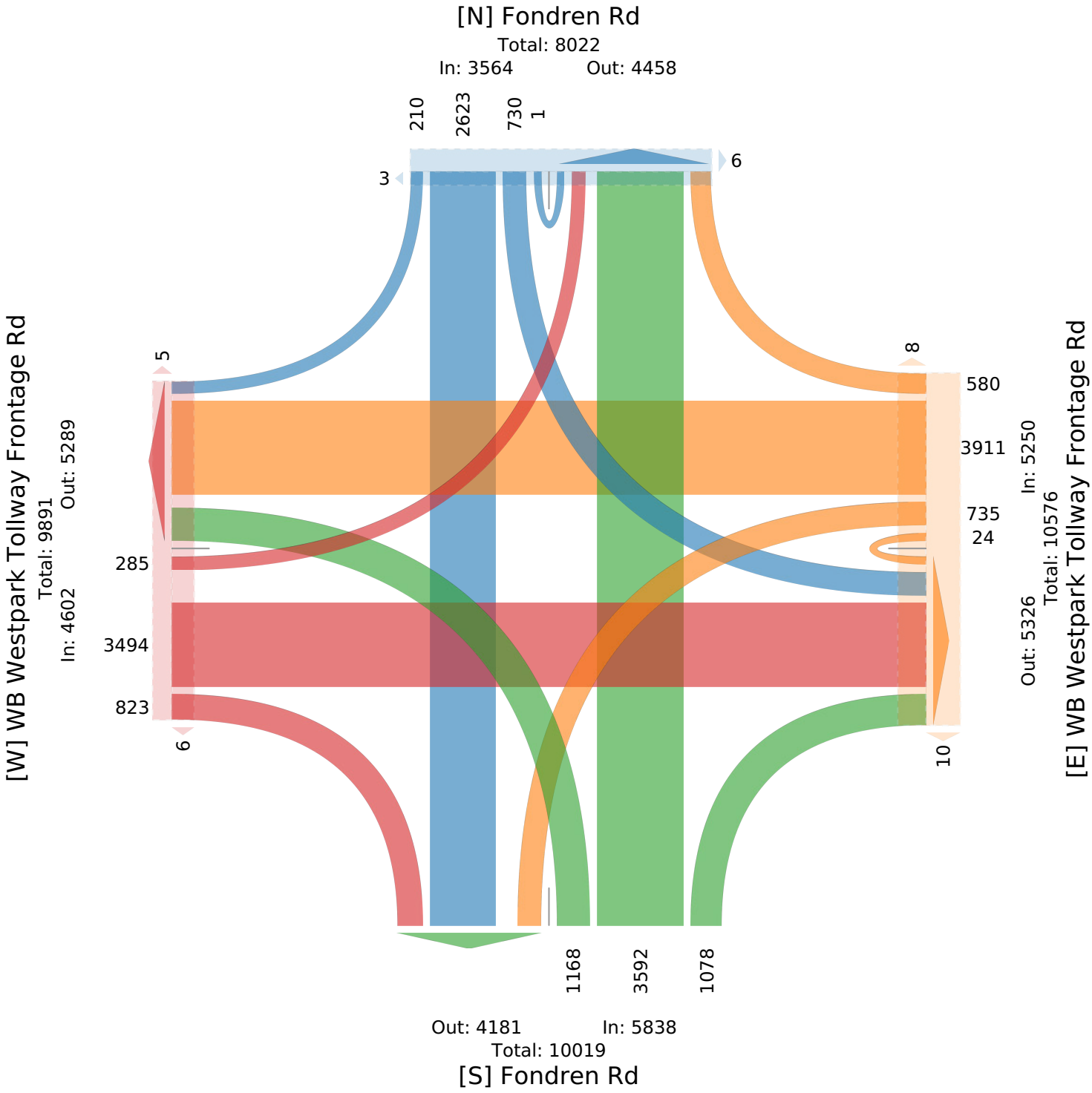


WB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

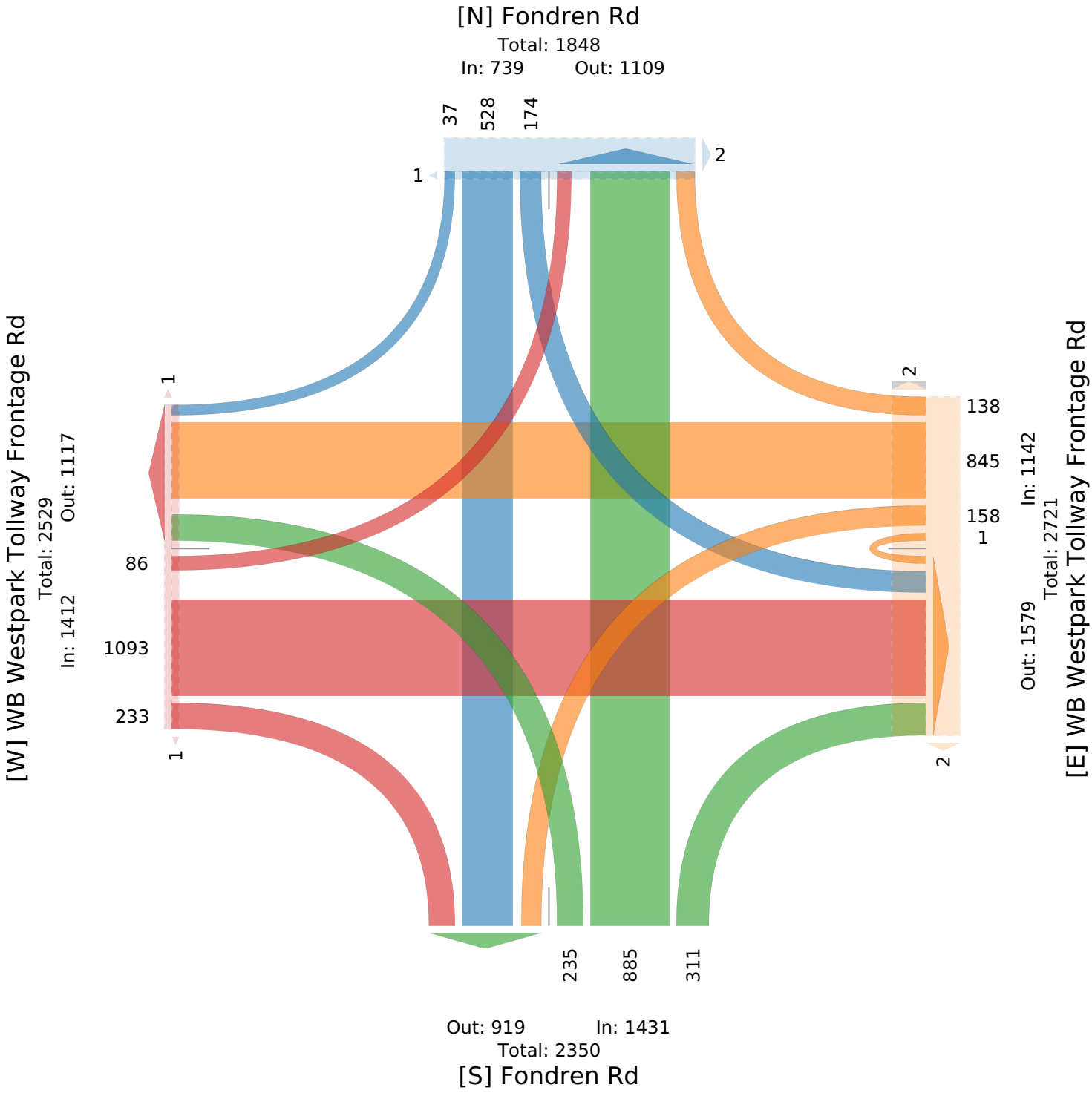
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Fondren Rd						Fondren Rd						WB Westpark Tollway Frontage Rd						WB Westpark Tollway Frontage Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	64	220	97	0	**381**	0	57	147	10	0	**214**	1	25	290	60	0	**375**	0	42	185	29	1	**257**	1	**1227**
7:30AM	57	214	74	0	**345**	0	39	122	11	0	**172**	1	14	311	65	0	**390**	2	54	237	35	0	**326**	0	**1233**
7:45AM	64	239	74	0	**377**	0	41	133	8	0	**182**	0	21	225	56	0	**302**	0	41	206	39	0	**286**	2	**1147**
8:00AM	50	212	66	0	**328**	0	37	126	8	0	**171**	1	26	267	52	0	**345**	0	21	217	35	0	**273**	1	**1117**
Total	235	885	311	0	**1431**	0	174	528	37	0	**739**	3	86	1093	233	0	**1412**	2	158	845	138	1	**1142**	4	**4724**
% Approach	16.4%	61.8%	21.7%	0%	**-**	-	23.5%	71.4%	5.0%	0%	**-**	-	6.1%	77.4%	16.5%	0%	**-**	-	13.8%	74.0%	12.1%	0.1%	**-**	-	-
% Total	5.0%	18.7%	6.6%	0%	**30.3%**	-	3.7%	11.2%	0.8%	0%	**15.6%**	-	1.8%	23.1%	4.9%	0%	**29.9%**	-	3.3%	17.9%	2.9%	0%	**24.2%**	-	-
PHF	0.918	0.926	0.802	-	**0.939**	-	0.763	0.898	0.841	-	**0.863**	-	0.827	0.879	0.896	-	**0.905**	-	0.731	0.891	0.885	0.250	**0.876**	-	0.958
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	233	868	306	0	**1407**	-	173	515	37	0	**725**	-	84	1076	228	0	**1388**	-	155	825	135	1	**1116**	-	4636
% Lights	99.1%	98.1%	98.4%	0%	**98.3%**	-	99.4%	97.5%	100%	0%	**98.1%**	-	97.7%	98.4%	97.9%	0%	**98.3%**	-	98.1%	97.6%	97.8%	100%	**97.7%**	-	98.1%
Single-Unit Trucks	0	6	3	0	**9**	-	1	1	0	0	**2**	-	1	8	2	0	**11**	-	0	14	1	0	**15**	-	37
% Single-Unit Trucks	0%	0.7%	1.0%	0%	**0.6%**	-	0.6%	0.2%	0%	0%	**0.3%**	-	1.2%	0.7%	0.9%	0%	**0.8%**	-	0%	1.7%	0.7%	0%	**1.3%**	-	0.8%
Articulated Trucks	0	4	0	0	**4**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	1	2	0	0	**3**	-	10
% Articulated Trucks	0%	0.5%	0%	0%	**0.3%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.6%	0.2%	0%	0%	**0.3%**	-	0.2%
Buses	2	7	2	0	**11**	-	0	10	0	0	**10**	-	1	8	3	0	**12**	-	2	4	2	0	**8**	-	41
% Buses	0.9%	0.8%	0.6%	0%	**0.8%**	-	0%	1.9%	0%	0%	**1.4%**	-	1.2%	0.7%	1.3%	0%	**0.8%**	-	1.3%	0.5%	1.4%	0%	**0.7%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

WB Westpark Tollway Frontage Rd at Fondren Rd - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



WB Westpark Tollway Frontage Rd at Fondren Rd - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

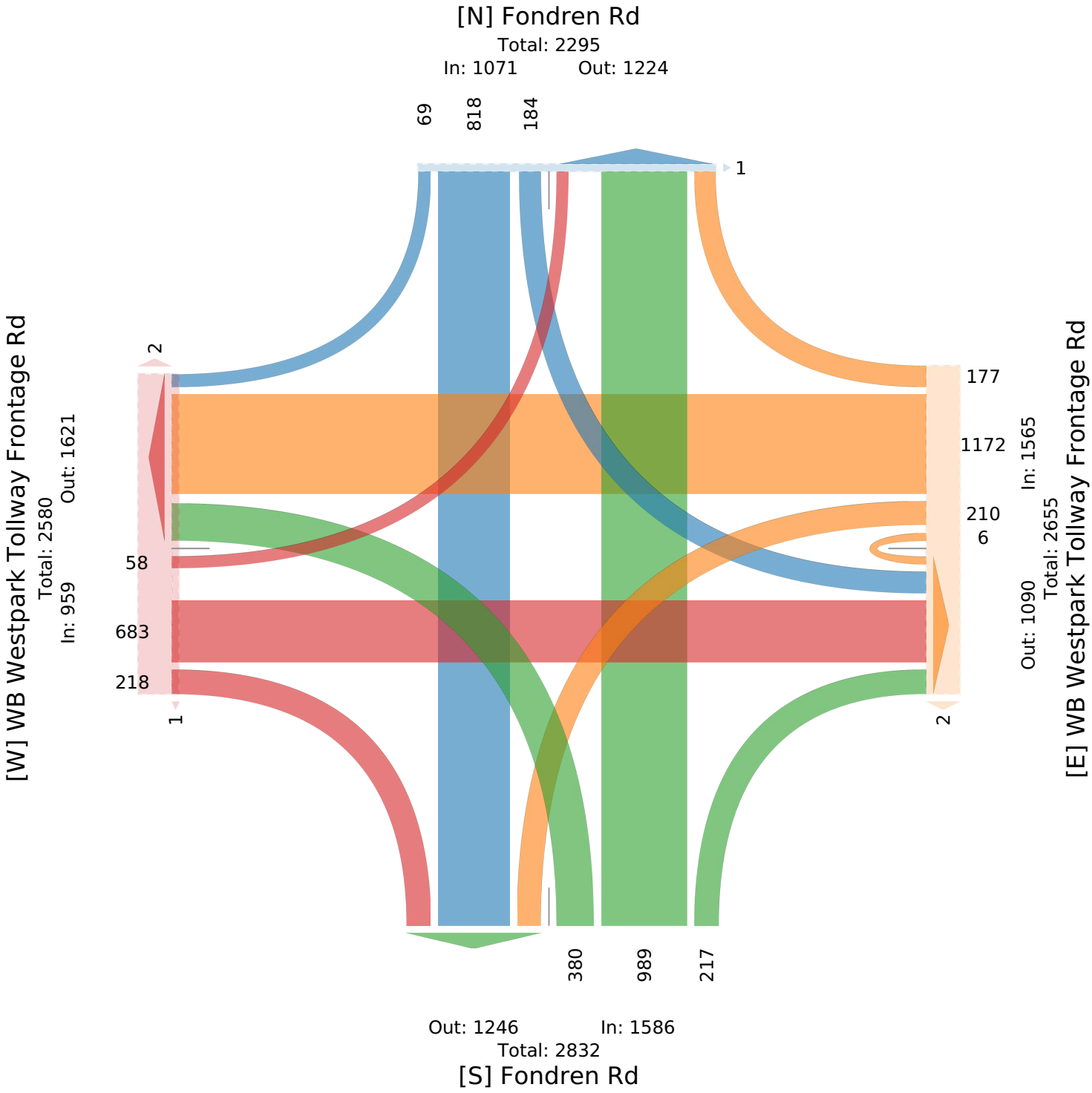
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Fondren Rd						Fondren Rd						WB Westpark Tollway Frontage Rd						WB Westpark Tollway Frontage Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:45PM	104	265	52	0	**421**	0	38	207	12	0	**257**	0	15	152	65	0	**232**	0	44	274	33	5	**356**	1	**1266**
5:00PM	90	226	59	0	**375**	0	48	190	19	0	**257**	0	16	174	57	0	**247**	0	66	316	49	1	**432**	0	**1311**
5:15PM	94	279	52	0	**425**	0	44	205	17	0	**266**	1	15	175	50	0	**240**	1	49	277	50	0	**376**	0	**1307**
5:30PM	92	219	54	0	**365**	0	54	216	21	0	**291**	0	12	182	46	0	**240**	2	51	305	45	0	**401**	1	**1297**
Total	380	989	217	0	**1586**	0	184	818	69	0	**1071**	1	58	683	218	0	**959**	3	210	1172	177	6	**1565**	2	**5181**
% Approach	24.0%	62.4%	13.7%	0%	**-**	-	17.2%	76.4%	6.4%	0%	**-**	-	6.0%	71.2%	22.7%	0%	**-**	-	13.4%	74.9%	11.3%	0.4%	**-**	-	**-**
% Total	7.3%	19.1%	4.2%	0%	**30.6%**	-	3.6%	15.8%	1.3%	0%	**20.7%**	-	1.1%	13.2%	4.2%	0%	**18.5%**	-	4.1%	22.6%	3.4%	0.1%	**30.2%**	-	**-**
PHF	0.913	0.886	0.919	-	**0.933**	-	0.852	0.947	0.821	-	**0.920**	-	0.906	0.938	0.838	-	**0.971**	-	0.795	0.927	0.885	0.300	**0.906**	-	0.988
Motorcycles	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	1.4%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	375	965	203	0	**1543**	-	183	800	67	0	**1050**	-	57	674	213	0	**944**	-	201	1147	173	6	**1527**	-	5064
% Lights	98.7%	97.6%	93.5%	0%	**97.3%**	-	99.5%	97.8%	97.1%	0%	**98.0%**	-	98.3%	98.7%	97.7%	0%	**98.4%**	-	95.7%	97.9%	97.7%	100%	**97.6%**	-	97.7%
Single-Unit Trucks	4	11	8	0	**23**	-	1	10	1	0	**12**	-	0	4	2	0	**6**	-	7	14	3	0	**24**	-	65
% Single-Unit Trucks	1.1%	1.1%	3.7%	0%	**1.5%**	-	0.5%	1.2%	1.4%	0%	**1.1%**	-	0%	0.6%	0.9%	0%	**0.6%**	-	3.3%	1.2%	1.7%	0%	**1.5%**	-	1.3%
Articulated Trucks	1	3	2	0	**6**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	6	0	0	**6**	-	13
% Articulated Trucks	0.3%	0.3%	0.9%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.3%
Buses	0	10	4	0	**14**	-	0	7	0	0	**7**	-	1	4	3	0	**8**	-	2	5	1	0	**8**	-	37
% Buses	0%	1.0%	1.8%	0%	**0.9%**	-	0%	0.9%	0%	0%	**0.7%**	-	1.7%	0.6%	1.4%	0%	**0.8%**	-	1.0%	0.4%	0.6%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

WB Westpark Tollway Frontage Rd at Fondren Rd - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867306, Location: 29.72144, -95.520301

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Hillcroft Ave - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hillcroft Ave						Hillcroft Ave						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	72	148	36	0	**256**	0	41	128	76	0	**245**	1	48	235	58	0	**341**	1	17	229	62	0	**308**	4	**1150**
7:15AM	72	227	47	0	**346**	0	39	157	90	1	**287**	1	69	271	71	0	**411**	1	23	215	79	0	**317**	1	**1361**
7:30AM	58	233	41	2	**334**	0	39	169	49	4	**261**	0	89	306	84	0	**479**	1	41	274	105	0	**420**	7	**1494**
7:45AM	59	279	38	0	**376**	0	36	223	51	3	**313**	0	84	271	79	0	**434**	4	17	251	98	0	**366**	2	**1489**
Hourly Total	261	887	162	2	**1312**	0	155	677	266	8	**1106**	2	290	1083	292	0	**1665**	7	98	969	344	0	**1411**	14	**5494**
8:00AM	64	237	11	0	**312**	0	36	191	59	0	**286**	0	42	253	58	0	**353**	1	11	294	98	0	**403**	5	**1354**
8:15AM	60	295	10	2	**367**	0	39	187	38	0	**264**	0	52	256	73	0	**381**	4	13	189	53	0	**255**	0	**1267**
8:30AM	53	184	6	1	**244**	0	30	204	55	1	**290**	0	36	247	72	0	**355**	1	16	207	48	0	**271**	1	**1160**
8:45AM	50	186	4	1	**241**	0	23	177	38	0	**238**	0	34	220	78	0	**332**	1	11	222	46	0	**279**	8	**1090**
Hourly Total	227	902	31	4	**1164**	0	128	759	190	1	**1078**	0	164	976	281	0	**1421**	7	51	912	245	0	**1208**	14	**4871**
4:00PM	63	208	19	3	**293**	0	47	201	59	1	**308**	0	40	213	110	0	**363**	4	25	313	81	0	**419**	0	**1383**
4:15PM	74	273	22	1	**370**	1	36	219	59	0	**314**	1	56	247	71	0	**374**	0	26	256	63	0	**345**	15	**1403**
4:30PM	68	234	9	2	**313**	1	37	219	56	1	**313**	0	45	201	87	0	**333**	5	23	307	72	0	**402**	5	**1361**
4:45PM	77	267	12	4	**360**	0	42	249	50	0	**341**	0	37	208	70	0	**315**	0	23	287	55	0	**365**	3	**1381**
Hourly Total	282	982	62	10	**1336**	2	162	888	224	2	**1276**	1	178	869	338	0	**1385**	9	97	1163	271	0	**1531**	23	**5528**
5:00PM	60	212	23	2	**297**	0	36	228	34	1	**299**	1	36	200	96	0	**332**	3	19	347	65	0	**431**	3	**1359**
5:15PM	72	257	31	1	**361**	0	33	240	33	0	**306**	0	30	226	70	0	**326**	1	18	323	67	0	**408**	1	**1401**
5:30PM	55	227	20	2	**304**	0	32	224	27	0	**283**	1	29	200	66	0	**295**	4	17	346	57	0	**420**	2	**1302**
5:45PM	73	272	24	1	**370**	0	24	209	33	0	**266**	0	37	206	60	0	**303**	0	12	304	63	0	**379**	2	**1318**
Hourly Total	260	968	98	6	**1332**	0	125	901	127	1	**1154**	2	132	832	292	0	**1256**	8	66	1320	252	0	**1638**	8	**5380**
Total	1030	3739	353	22	**5144**	2	570	3225	807	12	**4614**	5	764	3760	1203	0	**5727**	31	312	4364	1112	0	**5788**	59	**21273**
% Approach	20.0%	72.7%	6.9%	0.4%	**-**	-	12.4%	69.9%	17.5%	0.3%	**-**	-	13.3%	65.7%	21.0%	0%	**-**	-	5.4%	75.4%	19.2%	0%	**-**	-	-
% Total	4.8%	17.6%	1.7%	0.1%	**24.2%**	-	2.7%	15.2%	3.8%	0.1%	**21.7%**	-	3.6%	17.7%	5.7%	0%	**26.9%**	-	1.5%	20.5%	5.2%	0%	**27.2%**	-	-
Motorcycles	1	1	1	0	**3**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	2	0	0	**2**	-	7
% Motorcycles	0.1%	0%	0.3%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	1016	3662	349	22	**5049**	-	556	3165	791	12	**4524**	-	744	3686	1181	0	**5611**	-	308	4288	1087	0	**5683**	-	20867
% Lights	98.6%	97.9%	98.9%	100%	**98.2%**	-	97.5%	98.1%	98.0%	100%	**98.0%**	-	97.4%	98.0%	98.2%	0%	**98.0%**	-	98.7%	98.3%	97.8%	0%	**98.2%**	-	98.1%
Single-Unit Trucks	9	34	2	0	**45**	-	11	24	10	0	**45**	-	11	40	11	0	**62**	-	3	49	8	0	**60**	-	212
% Single-Unit Trucks	0.9%	0.9%	0.6%	0%	**0.9%**	-	1.9%	0.7%	1.2%	0%	**1.0%**	-	1.4%	1.1%	0.9%	0%	**1.1%**	-	1.0%	1.1%	0.7%	0%	**1.0%**	-	1.0%
Articulated Trucks	3	4	0	0	**7**	-	0	4	2	0	**6**	-	2	6	5	0	**13**	-	0	10	3	0	**13**	-	39
% Articulated Trucks	0.3%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.2%	0%	**0.1%**	-	0.3%	0.2%	0.4%	0%	**0.2%**	-	0%	0.2%	0.3%	0%	**0.2%**	-	0.2%
Buses	1	38	1	0	**40**	-	3	32	4	0	**39**	-	7	26	6	0	**39**	-	1	15	14	0	**30**	-	148
% Buses	0.1%	1.0%	0.3%	0%	**0.8%**	-	0.5%	1.0%	0.5%	0%	**0.8%**	-	0.9%	0.7%	0.5%	0%	**0.7%**	-	0.3%	0.3%	1.3%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	19	-	-	-	-	-	54	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	61.3%	-	-	-	-	-	91.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	12	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	38.7%	-	-	-	-	-	8.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Hillcroft Ave - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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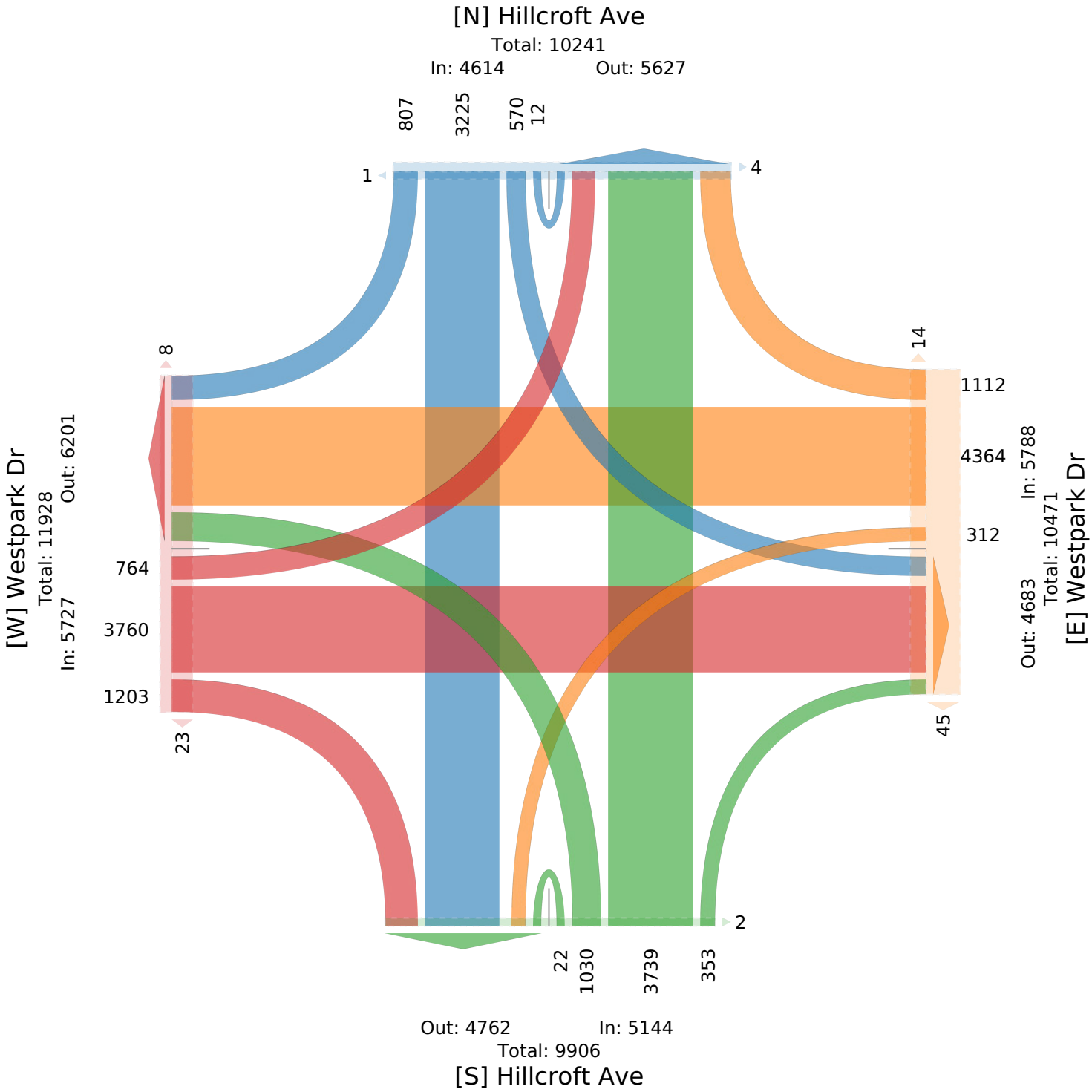


Westpark Dr at Hillcroft Ave - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

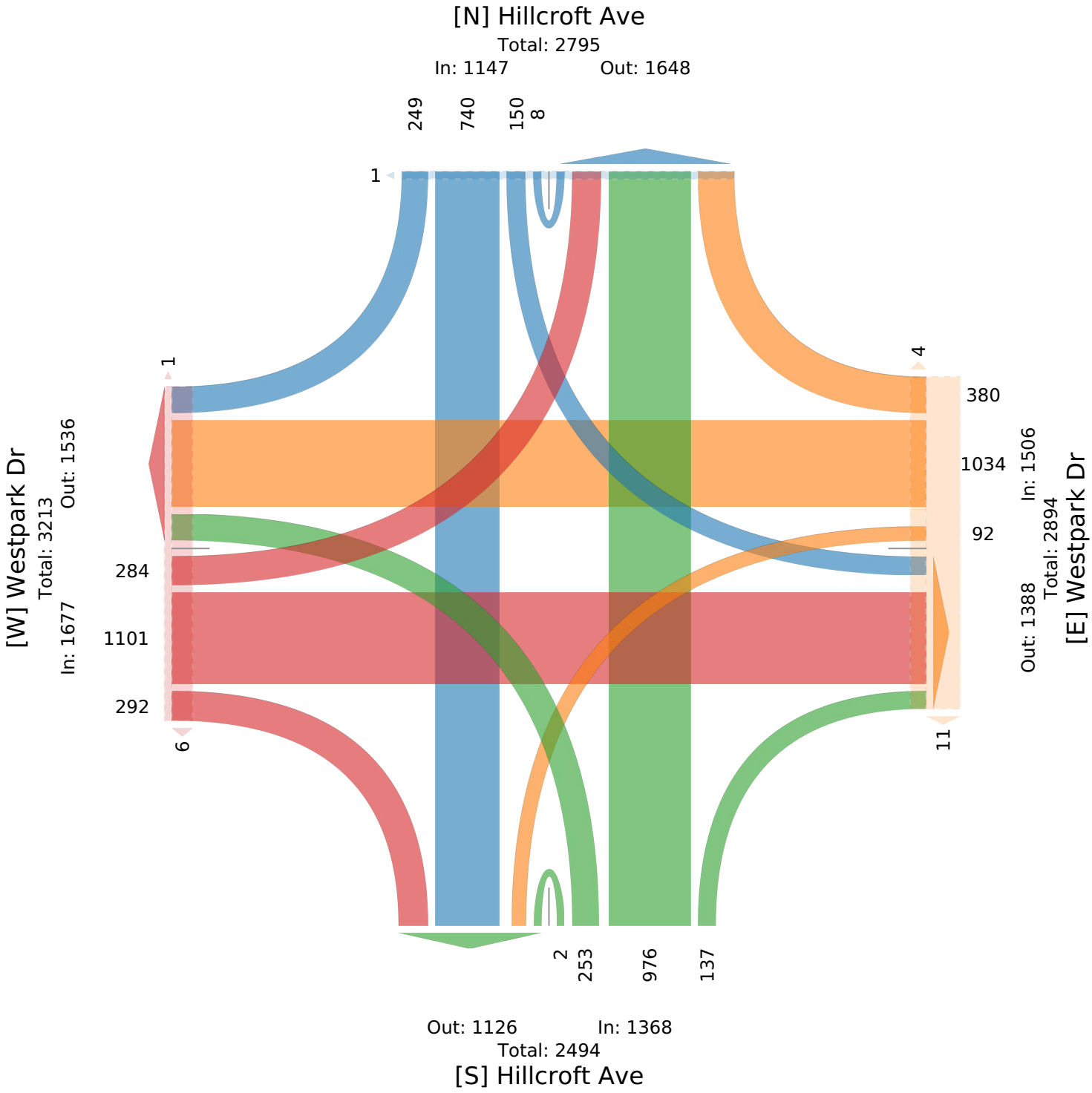
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hillcroft Ave						Hillcroft Ave						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	72	227	47	0	**346**	0	39	157	90	1	**287**	1	69	271	71	0	**411**	1	23	215	79	0	**317**	1	**1361**
7:30AM	58	233	41	2	**334**	0	39	169	49	4	**261**	0	89	306	84	0	**479**	1	41	274	105	0	**420**	7	**1494**
7:45AM	59	279	38	0	**376**	0	36	223	51	3	**313**	0	84	271	79	0	**434**	4	17	251	98	0	**366**	2	**1489**
8:00AM	64	237	11	0	**312**	0	36	191	59	0	**286**	0	42	253	58	0	**353**	1	11	294	98	0	**403**	5	**1354**
Total	253	976	137	2	**1368**	0	150	740	249	8	**1147**	1	284	1101	292	0	**1677**	7	92	1034	380	0	**1506**	15	**5698**
% Approach	18.5%	71.3%	10.0%	0.1%	**-**	-	13.1%	64.5%	21.7%	0.7%	**-**	-	16.9%	65.7%	17.4%	0%	**-**	-	6.1%	68.7%	25.2%	0%	**-**	-	-
% Total	4.4%	17.1%	2.4%	0%	**24.0%**	-	2.6%	13.0%	4.4%	0.1%	**20.1%**	-	5.0%	19.3%	5.1%	0%	**29.4%**	-	1.6%	18.1%	6.7%	0%	**26.4%**	-	-
PHF	0.878	0.875	0.729	0.250	**0.910**	-	0.962	0.830	0.692	0.500	**0.916**	-	0.798	0.900	0.869	-	**0.875**	-	0.561	0.879	0.905	-	**0.896**	-	0.953
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0.7%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	252	957	135	2	**1346**	-	148	728	241	8	**1125**	-	280	1081	288	0	**1649**	-	90	1013	368	0	**1471**	-	5591
% Lights	99.6%	98.1%	98.5%	100%	**98.4%**	-	98.7%	98.4%	96.8%	100%	**98.1%**	-	98.6%	98.2%	98.6%	0%	**98.3%**	-	97.8%	98.0%	96.8%	0%	**97.7%**	-	98.1%
Single-Unit Trucks	0	10	0	0	**10**	-	2	4	4	0	**10**	-	2	12	1	0	**15**	-	1	17	4	0	**22**	-	57
% Single-Unit Trucks	0%	1.0%	0%	0%	**0.7%**	-	1.3%	0.5%	1.6%	0%	**0.9%**	-	0.7%	1.1%	0.3%	0%	**0.9%**	-	1.1%	1.6%	1.1%	0%	**1.5%**	-	1.0%
Articulated Trucks	1	1	0	0	**2**	-	0	1	2	0	**3**	-	0	0	1	0	**1**	-	0	0	2	0	**2**	-	8
% Articulated Trucks	0.4%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.8%	0%	**0.3%**	-	0%	0%	0.3%	0%	**0.1%**	-	0%	0%	0.5%	0%	**0.1%**	-	0.1%
Buses	0	8	1	0	**9**	-	0	7	2	0	**9**	-	2	8	2	0	**12**	-	1	4	6	0	**11**	-	41
% Buses	0%	0.8%	0.7%	0%	**0.7%**	-	0%	0.9%	0.8%	0%	**0.8%**	-	0.7%	0.7%	0.7%	0%	**0.7%**	-	1.1%	0.4%	1.6%	0%	**0.7%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	- 100%	-	-	-	-	-	- 85.7%	-	-	-	-	-	- 100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	- 14.3%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Hillcroft Ave - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Hillcroft Ave - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

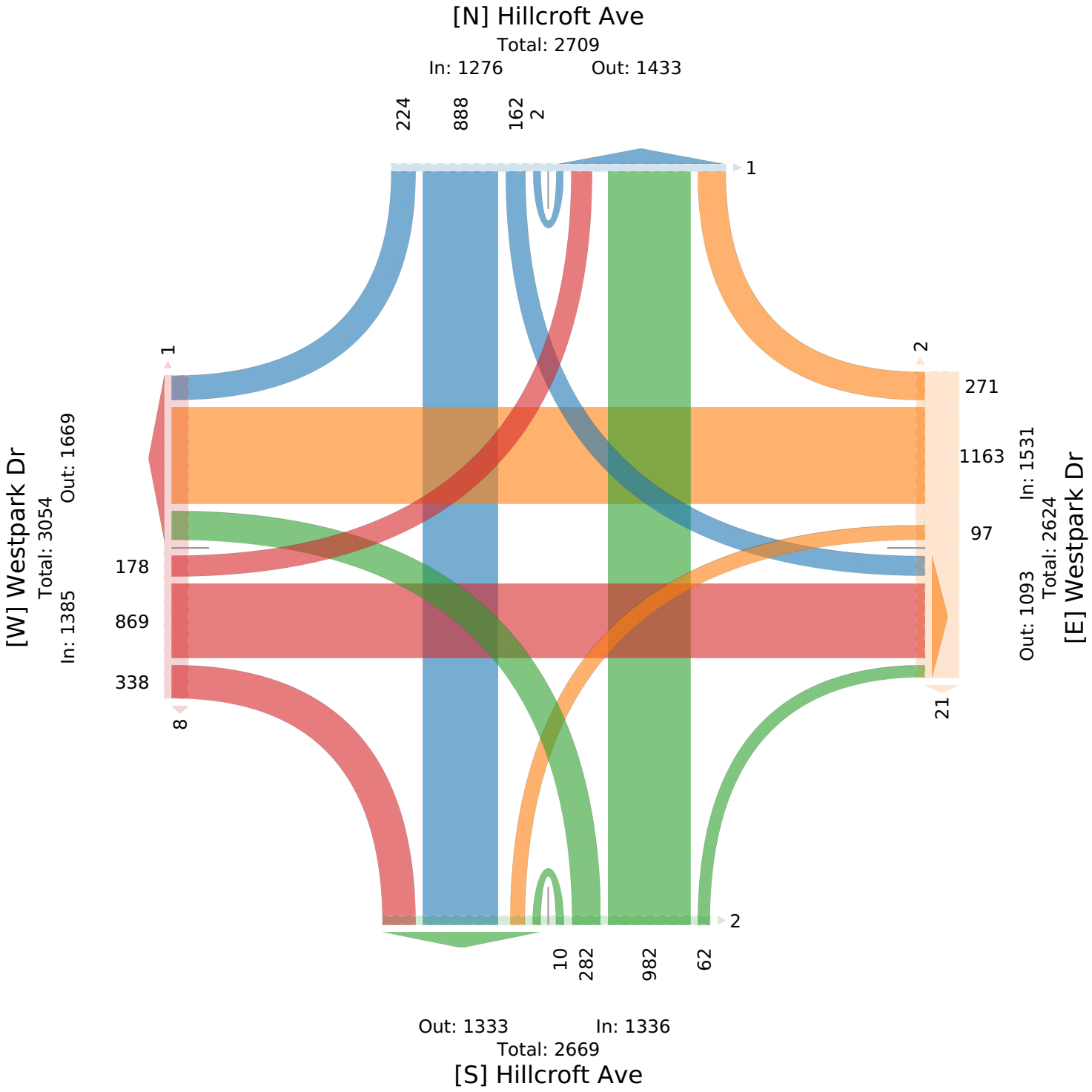
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hillcroft Ave						Hillcroft Ave						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:00PM	63	208	19	3	**293**	0	47	201	59	1	**308**	0	40	213	110	0	**363**	4	25	313	81	0	**419**	0	**1383**
4:15PM	74	273	22	1	**370**	1	36	219	59	0	**314**	1	56	247	71	0	**374**	0	26	256	63	0	**345**	15	**1403**
4:30PM	68	234	9	2	**313**	1	37	219	56	1	**313**	0	45	201	87	0	**333**	5	23	307	72	0	**402**	5	**1361**
4:45PM	77	267	12	4	**360**	0	42	249	50	0	**341**	0	37	208	70	0	**315**	0	23	287	55	0	**365**	3	**1381**
Total	282	982	62	10	**1336**	2	162	888	224	2	**1276**	1	178	869	338	0	**1385**	9	97	1163	271	0	**1531**	23	**5528**
% Approach	21.1%	73.5%	4.6%	0.7%	**-**	-	12.7%	69.6%	17.6%	0.2%	**-**	-	12.9%	62.7%	24.4%	0%	**-**	-	6.3%	76.0%	17.7%	0%	**-**	-	-
% Total	5.1%	17.8%	1.1%	0.2%	**24.2%**	-	2.9%	16.1%	4.1%	0%	**23.1%**	-	3.2%	15.7%	6.1%	0%	**25.1%**	-	1.8%	21.0%	4.9%	0%	**27.7%**	-	-
PHF	0.916	0.899	0.705	0.625	**0.903**	-	0.862	0.892	0.949	0.500	**0.935**	-	0.795	0.880	0.768	-	**0.926**	-	0.933	0.929	0.836	-	**0.913**	-	0.985
Motorcycles	1	1	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	4
% Motorcycles	0.4%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	277	964	62	10	**1313**	-	155	873	222	2	**1252**	-	170	857	331	0	**1358**	-	97	1147	267	0	**1511**	-	5434
% Lights	98.2%	98.2%	100%	100%	**98.3%**	-	95.7%	98.3%	99.1%	100%	**98.1%**	-	95.5%	98.6%	97.9%	0%	**98.1%**	-	100%	98.6%	98.5%	0%	**98.7%**	-	98.3%
Single-Unit Trucks	3	7	0	0	**10**	-	6	3	2	0	**11**	-	2	5	4	0	**11**	-	0	7	0	0	**7**	-	39
% Single-Unit Trucks	1.1%	0.7%	0%	0%	**0.7%**	-	3.7%	0.3%	0.9%	0%	**0.9%**	-	1.1%	0.6%	1.2%	0%	**0.8%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.7%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2	0	2	0	**4**	-	0	5	0	0	**5**	-	10
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	1.1%	0%	0.6%	0%	**0.3%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.2%
Buses	1	9	0	0	**10**	-	1	12	0	0	**13**	-	4	5	1	0	**10**	-	0	4	4	0	**8**	-	41
% Buses	0.4%	0.9%	0%	0%	**0.7%**	-	0.6%	1.4%	0%	0%	**1.0%**	-	2.2%	0.6%	0.3%	0%	**0.7%**	-	0%	0.3%	1.5%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	23	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	77.8%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	22.2%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Hillcroft Ave - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867308, Location: 29.72307, -95.501067

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at 14th St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	14th St					Westpark Dr					Westpark Dr					
Direction	Northbound					Eastbound					Westbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	20	1	0	**21**	0	251	17	1	**269**	0	2	253	0	**255**	5	**545**
7:15AM	26	15	0	**41**	0	293	19	1	**313**	0	6	325	0	**331**	8	**685**
7:30AM	22	22	0	**44**	0	309	27	0	**336**	0	3	305	0	**308**	5	**688**
7:45AM	10	17	0	**27**	0	310	23	0	**333**	0	8	341	0	**349**	4	**709**
Hourly Total	78	55	0	**133**	0	1163	86	2	**1251**	0	19	1224	0	**1243**	22	**2627**
8:00AM	6	17	0	**23**	0	272	21	0	**293**	1	2	286	0	**288**	1	**604**
8:15AM	11	18	0	**29**	1	290	12	2	**304**	0	4	258	0	**262**	5	**595**
8:30AM	7	14	0	**21**	0	279	12	3	**294**	0	4	258	0	**262**	8	**577**
8:45AM	7	24	0	**31**	0	235	7	1	**243**	1	3	291	0	**294**	2	**568**
Hourly Total	31	73	0	**104**	1	1076	52	6	**1134**	2	13	1093	0	**1106**	16	**2344**
4:00PM	24	20	0	**44**	0	284	7	0	**291**	0	4	375	0	**379**	4	**714**
4:15PM	37	20	0	**57**	0	279	7	1	**287**	0	4	347	0	**351**	1	**695**
4:30PM	38	20	0	**58**	0	260	7	1	**268**	0	10	333	0	**343**	1	**669**
4:45PM	37	22	0	**59**	0	232	6	3	**241**	0	5	371	1	**377**	3	**677**
Hourly Total	136	82	0	**218**	0	1055	27	5	**1087**	0	23	1426	1	**1450**	9	**2755**
5:00PM	40	30	0	**70**	0	267	5	0	**272**	0	13	326	0	**339**	5	**681**
5:15PM	17	25	0	**42**	0	263	12	0	**275**	0	7	376	0	**383**	7	**700**
5:30PM	34	20	0	**54**	0	244	10	0	**254**	0	6	363	0	**369**	3	**677**
5:45PM	13	16	0	**29**	0	248	4	0	**252**	0	11	366	0	**377**	0	**658**
Hourly Total	104	91	0	**195**	0	1022	31	0	**1053**	0	37	1431	0	**1468**	15	**2716**
Total	349	301	0	**650**	1	4316	196	13	**4525**	2	92	5174	1	**5267**	62	**10442**
% Approach	53.7%	46.3%	0%	**-**	-	95.4%	4.3%	0.3%	**-**	-	1.7%	98.2%	0%	**-**	-	-
% Total	3.3%	2.9%	0%	**6.2%**	-	41.3%	1.9%	0.1%	**43.3%**	-	0.9%	49.5%	0%	**50.4%**	-	-
Motorcycles	0	2	0	**2**	-	3	0	0	**3**	-	0	3	0	**3**	-	8
% Motorcycles	0%	0.7%	0%	**0.3%**	-	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	**0.1%**	-	0.1%
Lights	343	284	0	**627**	-	4229	186	13	**4428**	-	80	5077	1	**5158**	-	10213
% Lights	98.3%	94.4%	0%	**96.5%**	-	98.0%	94.9%	100%	**97.9%**	-	87.0%	98.1%	100%	**97.9%**	-	97.8%
Single-Unit Trucks	0	2	0	**2**	-	49	1	0	**50**	-	1	51	0	**52**	-	104
% Single-Unit Trucks	0%	0.7%	0%	**0.3%**	-	1.1%	0.5%	0%	**1.1%**	-	1.1%	1.0%	0%	**1.0%**	-	1.0%
Articulated Trucks	0	0	0	**0**	-	9	0	0	**9**	-	0	18	0	**18**	-	27
% Articulated Trucks	0%	0%	0%	**0%**	-	0.2%	0%	0%	**0.2%**	-	0%	0.3%	0%	**0.3%**	-	0.3%
Buses	6	13	0	**19**	-	26	9	0	**35**	-	11	25	0	**36**	-	90
% Buses	1.7%	4.3%	0%	**2.9%**	-	0.6%	4.6%	0%	**0.8%**	-	12.0%	0.5%	0%	**0.7%**	-	0.9%
Pedestrians	-	-	-	-	1	-	-	-	-	2	-	-	-	-	61	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	98.4%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	1.6%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at 14th St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

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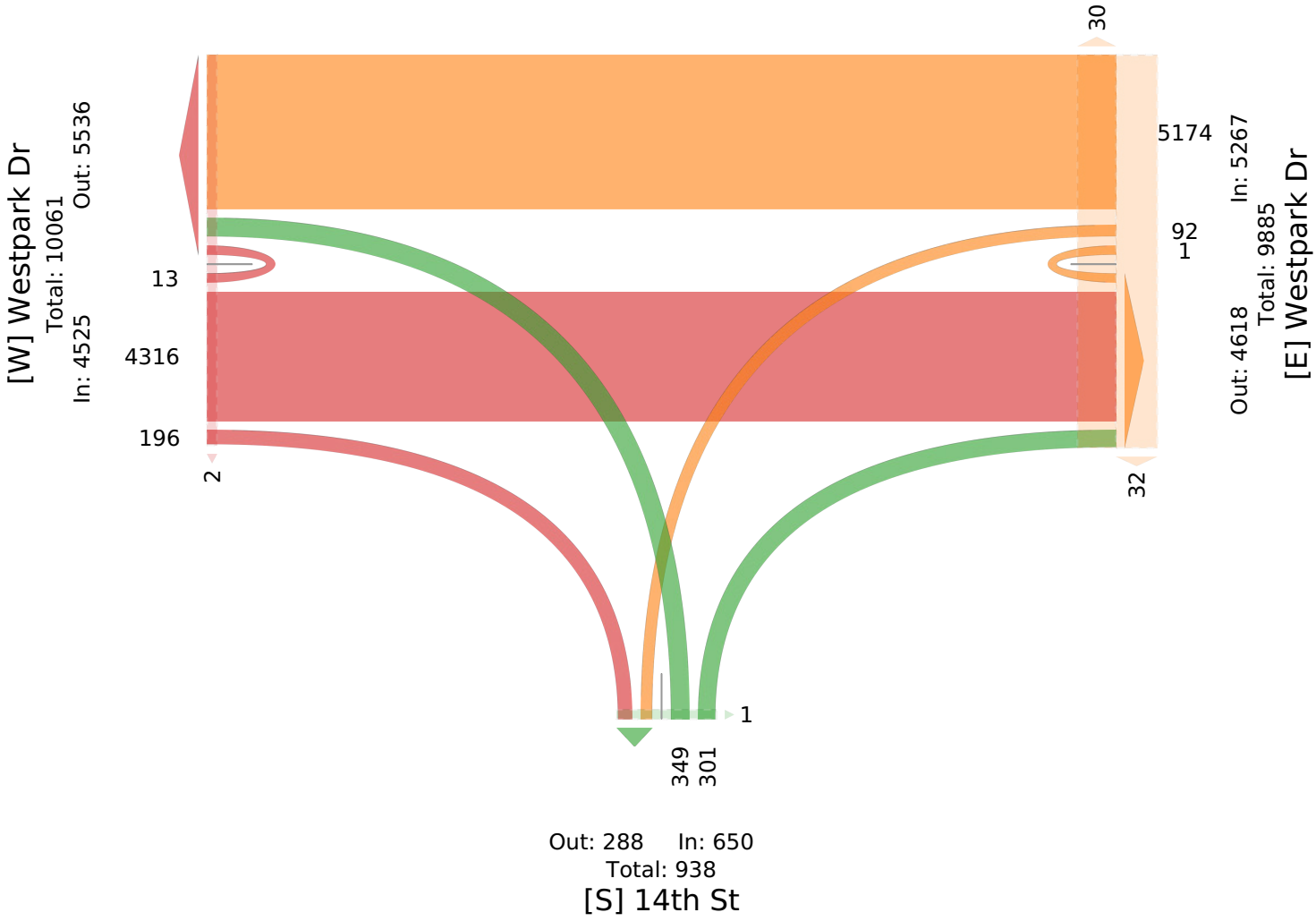

Westpark Dr at 14th St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	14th St					Westpark Dr					Westpark Dr					
Direction	Northbound					Eastbound					Westbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	26	15	0	**41**	0	293	19	1	**313**	0	6	325	0	**331**	8	**685**
7:30AM	22	22	0	**44**	0	309	27	0	**336**	0	3	305	0	**308**	5	**688**
7:45AM	10	17	0	**27**	0	310	23	0	**333**	0	8	341	0	**349**	4	**709**
8:00AM	6	17	0	**23**	0	272	21	0	**293**	1	2	286	0	**288**	1	**604**
Total	64	71	0	**135**	0	1184	90	1	**1275**	1	19	1257	0	**1276**	18	**2686**
% Approach	47.4%	52.6%	0%	**-**	-	92.9%	7.1%	0.1%	**-**	-	1.5%	98.5%	0%	**-**	-	-
% Total	2.4%	2.6%	0%	**5.0%**	-	44.1%	3.4%	0%	**47.5%**	-	0.7%	46.8%	0%	**47.5%**	-	-
PHF	0.615	0.807	-	**0.767**	-	0.955	0.833	0.250	**0.949**	-	0.594	0.922	-	**0.914**	-	0.947
Motorcycles	0	1	0	**1**	-	1	0	0	**1**	-	0	0	0	**0**	-	2
% Motorcycles	0%	1.4%	0%	**0.7%**	-	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	**0%**	-	0.1%
Lights	63	69	0	**132**	-	1158	88	1	**1247**	-	15	1230	0	**1245**	-	2624
% Lights	98.4%	97.2%	0%	**97.8%**	-	97.8%	97.8%	100%	**97.8%**	-	78.9%	97.9%	0%	**97.6%**	-	97.7%
Single-Unit Trucks	0	0	0	**0**	-	18	0	0	**18**	-	0	17	0	**17**	-	35
% Single-Unit Trucks	0%	0%	0%	**0%**	-	1.5%	0%	0%	**1.4%**	-	0%	1.4%	0%	**1.3%**	-	1.3%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	3	0	**3**	-	3
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.2%	0%	**0.2%**	-	0.1%
Buses	1	1	0	**2**	-	7	2	0	**9**	-	4	7	0	**11**	-	22
% Buses	1.6%	1.4%	0%	**1.5%**	-	0.6%	2.2%	0%	**0.7%**	-	21.1%	0.6%	0%	**0.9%**	-	0.8%
Pedestrians	-	-	-	-	0	-	-	-	-	1	-	-	-	-	18	
% Pedestrians	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at 14th St - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

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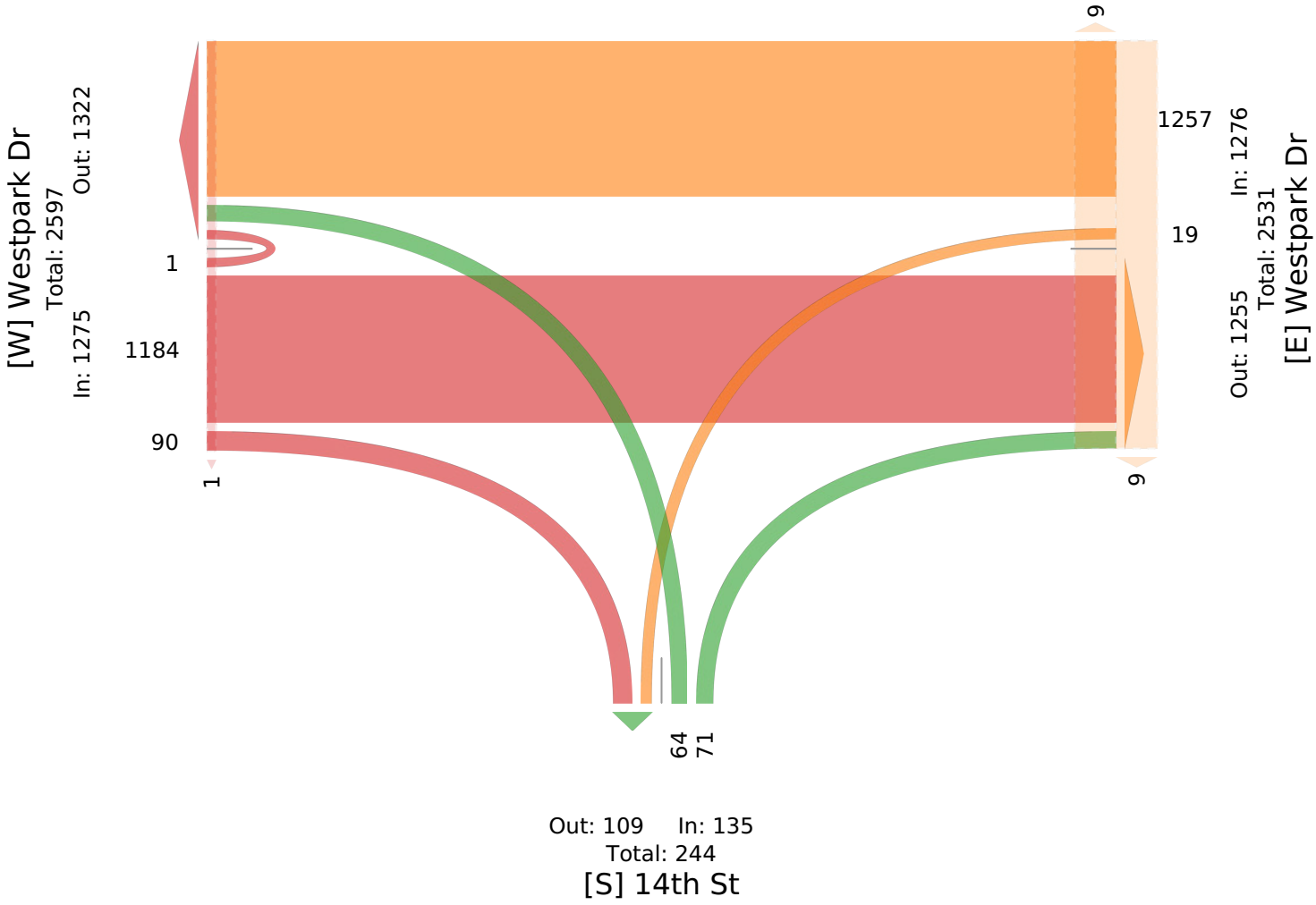


Westpark Dr at 14th St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

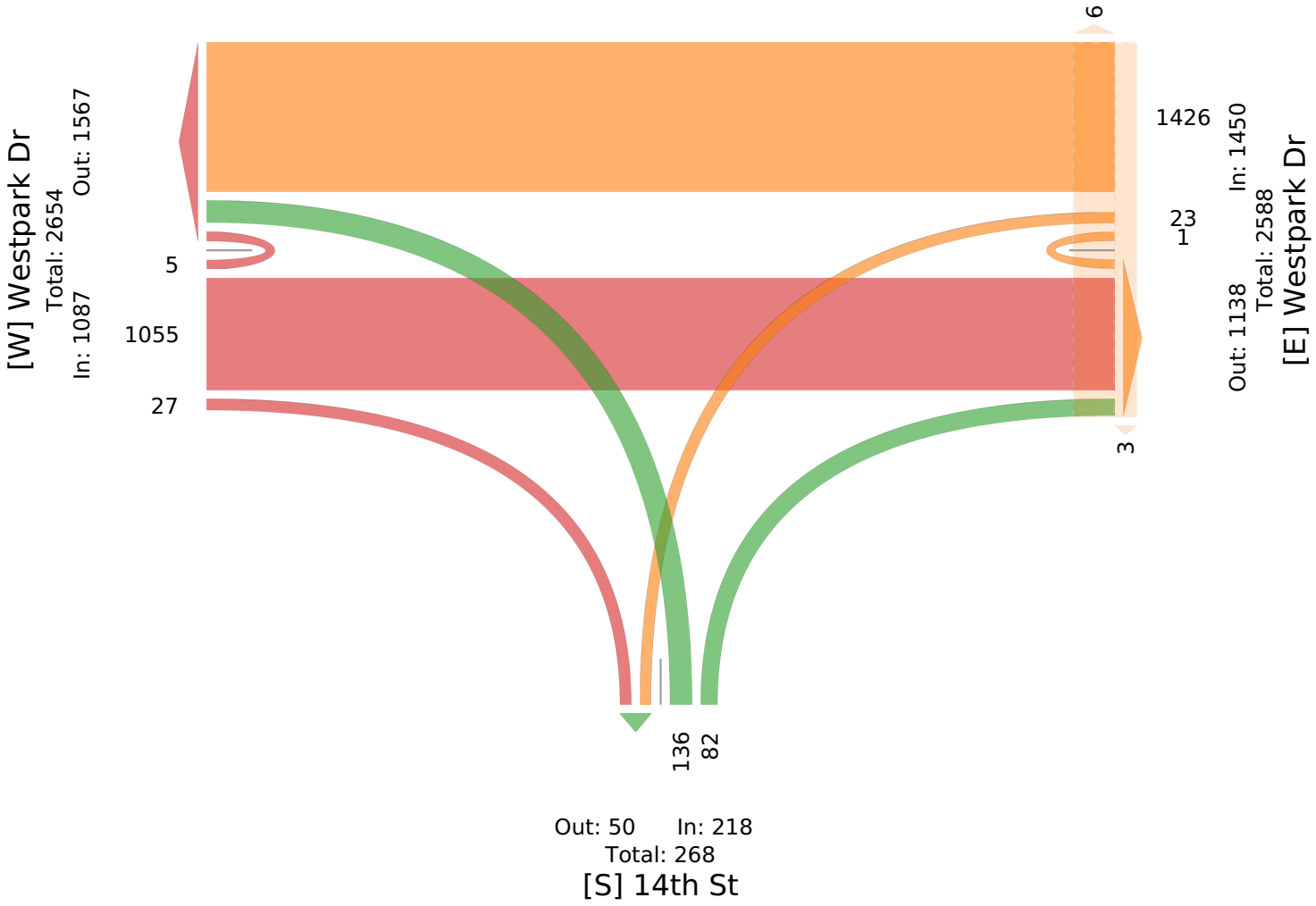
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	14th St					Westpark Dr					Westpark Dr					
Direction	Northbound					Eastbound					Westbound					
Time	L	R	U	**App**	Ped*	T	R	U	**App**	Ped*	L	T	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	24	20	0	**44**	0	284	7	0	**291**	0	4	375	0	**379**	4	**714**
4:15PM	37	20	0	**57**	0	279	7	1	**287**	0	4	347	0	**351**	1	**695**
4:30PM	38	20	0	**58**	0	260	7	1	**268**	0	10	333	0	**343**	1	**669**
4:45PM	37	22	0	**59**	0	232	6	3	**241**	0	5	371	1	**377**	3	**677**
Total	136	82	0	**218**	0	1055	27	5	**1087**	0	23	1426	1	**1450**	9	**2755**
% Approach	62.4%	37.6%	0%	**-**	-	97.1%	2.5%	0.5%	**-**	-	1.6%	98.3%	0.1%	**-**	-	**-**
% Total	4.9%	3.0%	0%	**7.9%**	-	38.3%	1.0%	0.2%	**39.5%**	-	0.8%	51.8%	0%	**52.6%**	-	**-**
PHF	0.895	0.932	-	**0.924**	-	0.929	0.964	0.417	**0.934**	-	0.575	0.951	0.250	**0.956**	-	0.965
Motorcycles	0	0	0	**0**	-	2	0	0	**2**	-	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	**0%**	-	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	**0%**	-	0.1%
Lights	135	76	0	**211**	-	1040	26	5	**1071**	-	23	1403	1	**1427**	-	2709
% Lights	99.3%	92.7%	0%	**96.8%**	-	98.6%	96.3%	100%	**98.5%**	-	100%	98.4%	100%	**98.4%**	-	98.3%
Single-Unit Trucks	0	0	0	**0**	-	9	0	0	**9**	-	0	8	0	**8**	-	17
% Single-Unit Trucks	0%	0%	0%	**0%**	-	0.9%	0%	0%	**0.8%**	-	0%	0.6%	0%	**0.6%**	-	0.6%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	5	0	**5**	-	5
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0.4%	0%	**0.3%**	-	0.2%
Buses	1	6	0	**7**	-	4	1	0	**5**	-	0	10	0	**10**	-	22
% Buses	0.7%	7.3%	0%	**3.2%**	-	0.4%	3.7%	0%	**0.5%**	-	0%	0.7%	0%	**0.7%**	-	0.8%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at 14th St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867309, Location: 29.723295, -95.497377

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 69 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

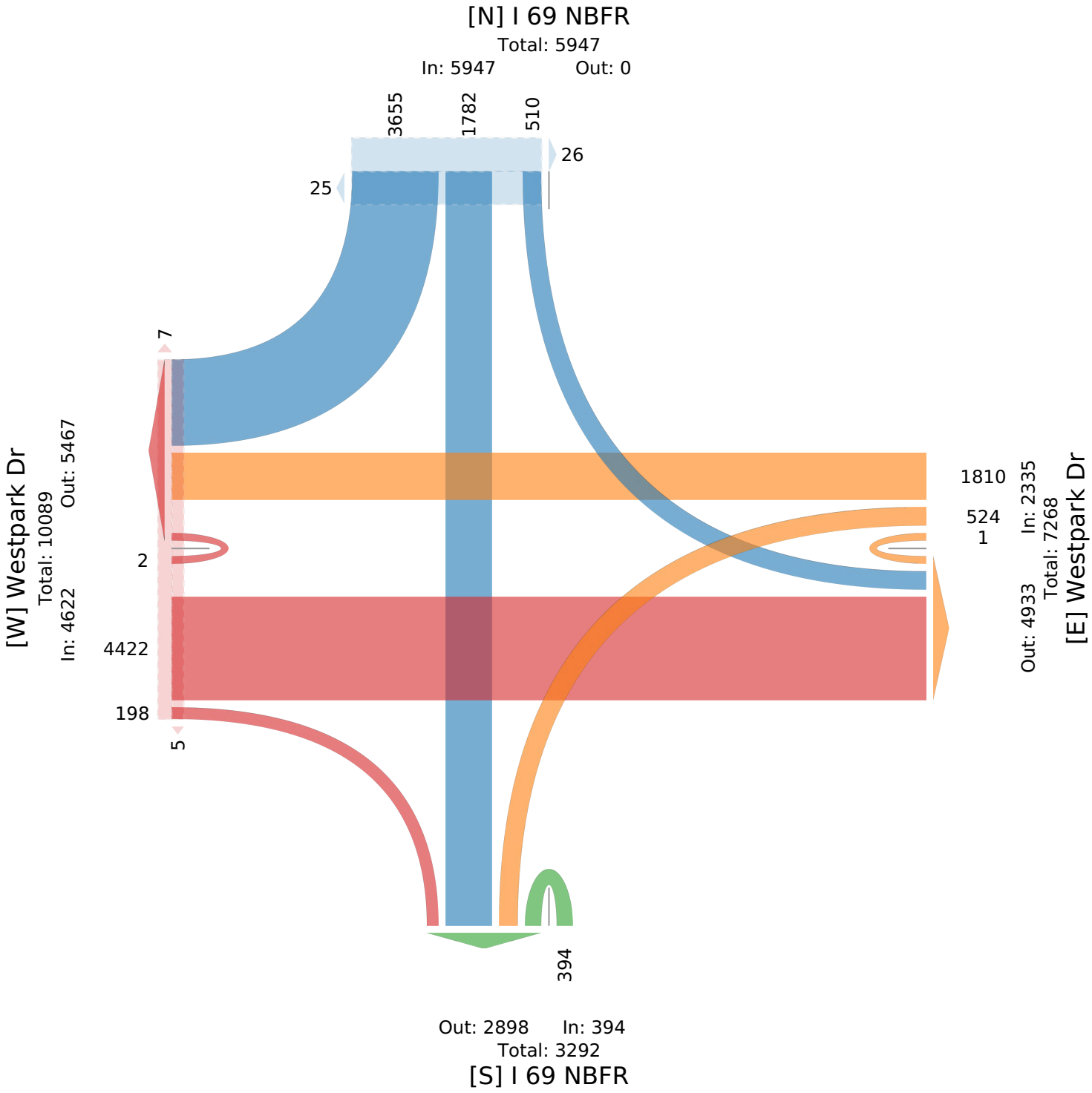
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 69 NBFR						I 69 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	0	0	21	**21**	0	17	49	189	0	**255**	5	0	231	2	0	**233**	1	13	81	0	0	**94**	0	**603**
7:15AM	0	0	0	22	**22**	0	16	51	245	0	**312**	1	0	294	4	0	**298**	0	14	108	0	0	**122**	0	**754**
7:30AM	0	0	0	25	**25**	0	30	86	211	0	**327**	5	0	315	5	0	**320**	2	30	116	0	0	**146**	0	**818**
7:45AM	0	0	0	19	**19**	0	25	83	225	0	**333**	3	0	322	8	0	**330**	1	34	126	0	0	**160**	0	**842**
Hourly Total	0	0	0	87	**87**	0	88	269	870	0	**1227**	14	0	1162	19	0	**1181**	4	91	431	0	0	**522**	0	**3017**
8:00AM	0	0	0	21	**21**	0	23	73	208	0	**304**	5	0	263	6	1	**270**	0	24	129	0	0	**153**	0	**748**
8:15AM	0	0	0	20	**20**	0	33	62	210	0	**305**	2	0	293	10	0	**303**	1	27	72	0	0	**99**	0	**727**
8:30AM	0	0	0	16	**16**	0	35	62	221	0	**318**	0	0	259	4	1	**264**	1	22	95	0	0	**117**	0	**715**
8:45AM	0	0	0	23	**23**	0	20	61	266	0	**347**	3	0	260	14	0	**274**	0	26	64	0	0	**90**	0	**734**
Hourly Total	0	0	0	80	**80**	0	111	258	905	0	**1274**	10	0	1075	34	2	**1111**	2	99	360	0	0	**459**	0	**2924**
4:00PM	0	0	0	23	**23**	0	27	164	231	0	**422**	0	0	274	18	0	**292**	0	38	143	0	0	**181**	0	**918**
4:15PM	0	0	0	28	**28**	0	61	181	224	0	**466**	3	0	309	17	0	**326**	0	41	130	0	0	**171**	0	**991**
4:30PM	0	0	0	22	**22**	0	34	216	197	0	**447**	5	0	256	14	0	**270**	1	46	131	0	0	**177**	0	**916**
4:45PM	0	0	0	29	**29**	0	47	189	243	0	**479**	0	0	259	17	0	**276**	1	56	135	0	0	**191**	0	**975**
Hourly Total	0	0	0	102	**102**	0	169	750	895	0	**1814**	8	0	1098	66	0	**1164**	2	181	539	0	0	**720**	0	**3800**
5:00PM	0	0	0	35	**35**	0	37	166	250	0	**453**	1	0	272	24	0	**296**	0	40	126	0	0	**166**	0	**950**
5:15PM	0	0	0	25	**25**	0	32	128	213	0	**373**	11	0	308	17	0	**325**	0	47	129	0	0	**176**	0	**899**
5:30PM	0	0	0	26	**26**	0	30	104	263	0	**397**	5	0	253	25	0	**278**	4	35	123	0	1	**159**	0	**860**
5:45PM	0	0	0	39	**39**	0	43	107	259	0	**409**	2	0	254	13	0	**267**	0	31	102	0	0	**133**	0	**848**
Hourly Total	0	0	0	125	**125**	0	142	505	985	0	**1632**	19	0	1087	79	0	**1166**	4	153	480	0	1	**634**	0	**3557**
Total	0	0	0	394	**394**	0	510	1782	3655	0	**5947**	51	0	4422	198	2	**4622**	12	524	1810	0	1	**2335**	0	**13298**
% Approach	0%	0%	0%	100%	**-**	-	8.6%	30.0%	61.5%	0%	**-**	-	0%	95.7%	4.3%	0%	**-**	-	22.4%	77.5%	0%	0%	**-**	-	-
% Total	0%	0%	0%	3.0%	**3.0%**	-	3.8%	13.4%	27.5%	0%	**44.7%**	-	0%	33.3%	1.5%	0%	**34.8%**	-	3.9%	13.6%	0%	0%	**17.6%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	2	1	0	**3**	-	0	4	1	0	**5**	-	0	1	0	0	**1**	-	9
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.5%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	387	**387**	-	501	1753	3576	0	**5830**	-	0	4322	193	2	**4517**	-	514	1779	0	1	**2294**	-	13028
% Lights	0%	0%	0%	98.2%	**98.2%**	-	98.2%	98.4%	97.8%	0%	**98.0%**	-	0%	97.7%	97.5%	100%	**97.7%**	-	98.1%	98.3%	0%	100%	**98.2%**	-	98.0%
Single-Unit Trucks	0	0	0	5	**5**	-	6	16	35	0	**57**	-	0	51	2	0	**53**	-	6	14	0	0	**20**	-	135
% Single-Unit Trucks	0%	0%	0%	1.3%	**1.3%**	-	1.2%	0.9%	1.0%	0%	**1.0%**	-	0%	1.2%	1.0%	0%	**1.1%**	-	1.1%	0.8%	0%	0%	**0.9%**	-	1.0%
Articulated Trucks	0	0	0	2	**2**	-	2	6	19	0	**27**	-	0	9	0	0	**9**	-	2	3	0	0	**5**	-	43
% Articulated Trucks	0%	0%	0%	0.5%	**0.5%**	-	0.4%	0.3%	0.5%	0%	**0.5%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.4%	0.2%	0%	0%	**0.2%**	-	0.3%
Buses	0	0	0	0	**0**	-	1	5	24	0	**30**	-	0	36	2	0	**38**	-	2	13	0	0	**15**	-	83
% Buses	0%	0%	0%	0%	**0%**	-	0.2%	0.3%	0.7%	0%	**0.5%**	-	0%	0.8%	1.0%	0%	**0.8%**	-	0.4%	0.7%	0%	0%	**0.6%**	-	0.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	41	-	-	-	-	-	10	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	80.4%	-	-	-	-	-	83.3%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	19.6%	-	-	-	-	-	16.7%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 SBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 69 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

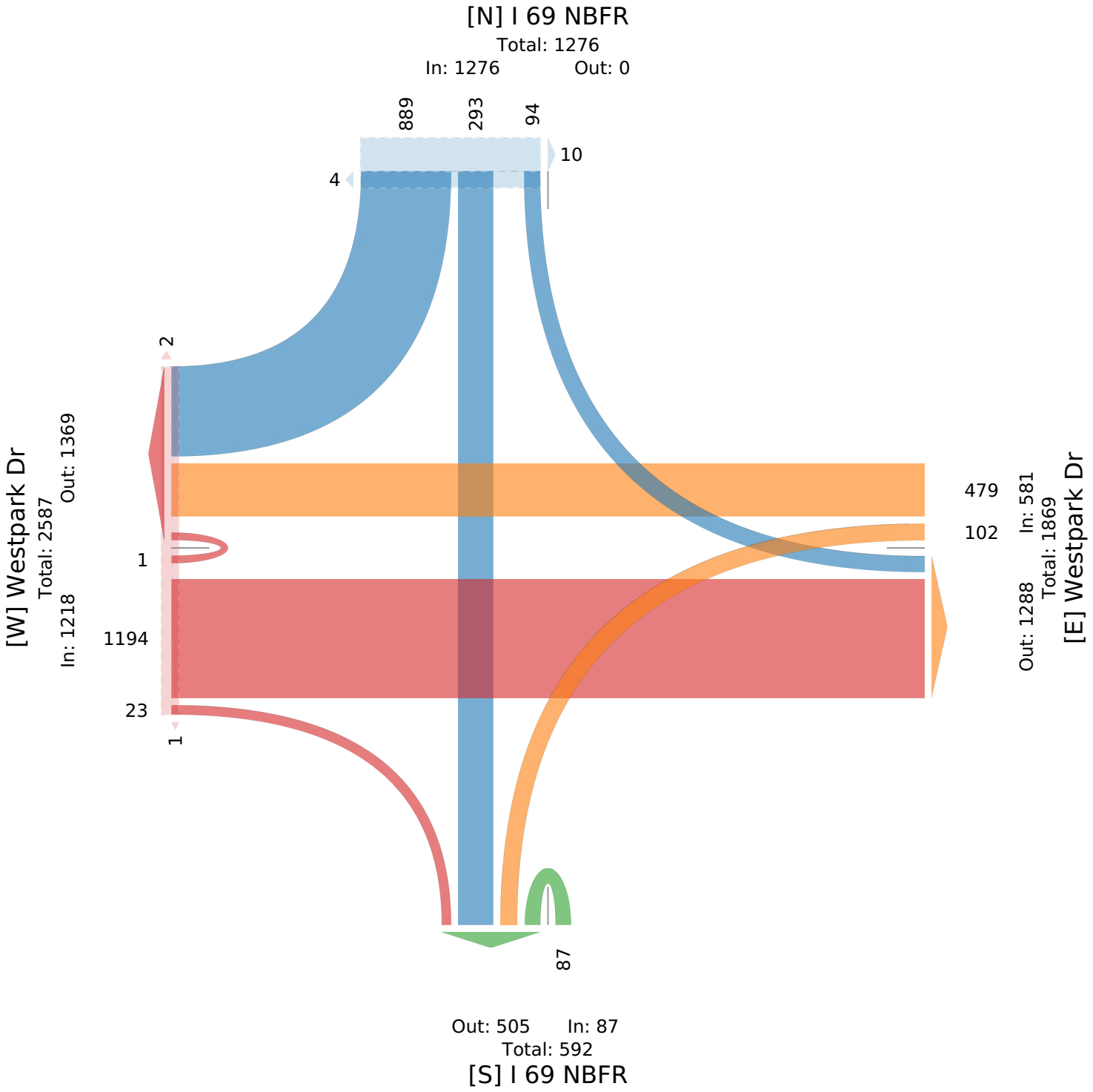
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I 69 NBFR Northbound						I 69 NBFR Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	0	0	0	22	**22**	0	16	51	245	0	**312**	1	0	294	4	0	**298**	0	14	108	0	0	**122**	0	**754**
7:30AM	0	0	0	25	**25**	0	30	86	211	0	**327**	5	0	315	5	0	**320**	2	30	116	0	0	**146**	0	**818**
7:45AM	0	0	0	19	**19**	0	25	83	225	0	**333**	3	0	322	8	0	**330**	1	34	126	0	0	**160**	0	**842**
8:00AM	0	0	0	21	**21**	0	23	73	208	0	**304**	5	0	263	6	1	**270**	0	24	129	0	0	**153**	0	**748**
Total	0	0	0	87	**87**	0	94	293	889	0	**1276**	14	0	1194	23	1	**1218**	3	102	479	0	0	**581**	0	**3162**
% Approach	0%	0%	0%	100%	**-**	-	7.4%	23.0%	69.7%	0%	**-**	-	0%	98.0%	1.9%	0.1%	**-**	-	17.6%	82.4%	0%	0%	**-**	-	-
% Total	0%	0%	0%	2.8%	**2.8%**	-	3.0%	9.3%	28.1%	0%	**40.4%**	-	0%	37.8%	0.7%	0%	**38.5%**	-	3.2%	15.1%	0%	0%	**18.4%**	-	-
PHF	-	-	-	0.870	**0.870**	-	0.783	0.852	0.907	-	**0.958**	-	-	0.927	0.719	0.250	**0.923**	-	0.750	0.928	-	-	**0.908**	-	0.939
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	87	**87**	-	91	285	864	0	**1240**	-	0	1168	23	1	**1192**	-	99	468	0	0	**567**	-	3086
% Lights	0%	0%	0%	100%	**100%**	-	96.8%	97.3%	97.2%	0%	**97.2%**	-	0%	97.8%	100%	100%	**97.9%**	-	97.1%	97.7%	0%	0%	**97.6%**	-	97.6%
Single-Unit Trucks	0	0	0	0	**0**	-	1	4	12	0	**17**	-	0	17	0	0	**17**	-	1	8	0	0	**9**	-	43
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	1.1%	1.4%	1.3%	0%	**1.3%**	-	0%	1.4%	0%	0%	**1.4%**	-	1.0%	1.7%	0%	0%	**1.5%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	2	2	4	0	**8**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	10
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	2.1%	0.7%	0.4%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	2.0%	0%	0%	0%	**0.3%**	-	0.3%
Buses	0	0	0	0	**0**	-	0	1	9	0	**10**	-	0	7	0	0	**7**	-	0	3	0	0	**3**	-	20
% Buses	0%	0%	0%	0%	**0%**	-	0%	0.3%	1.0%	0%	**0.8%**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	13	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	92.9%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	7.1%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 SBFR - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 69 SBFR - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

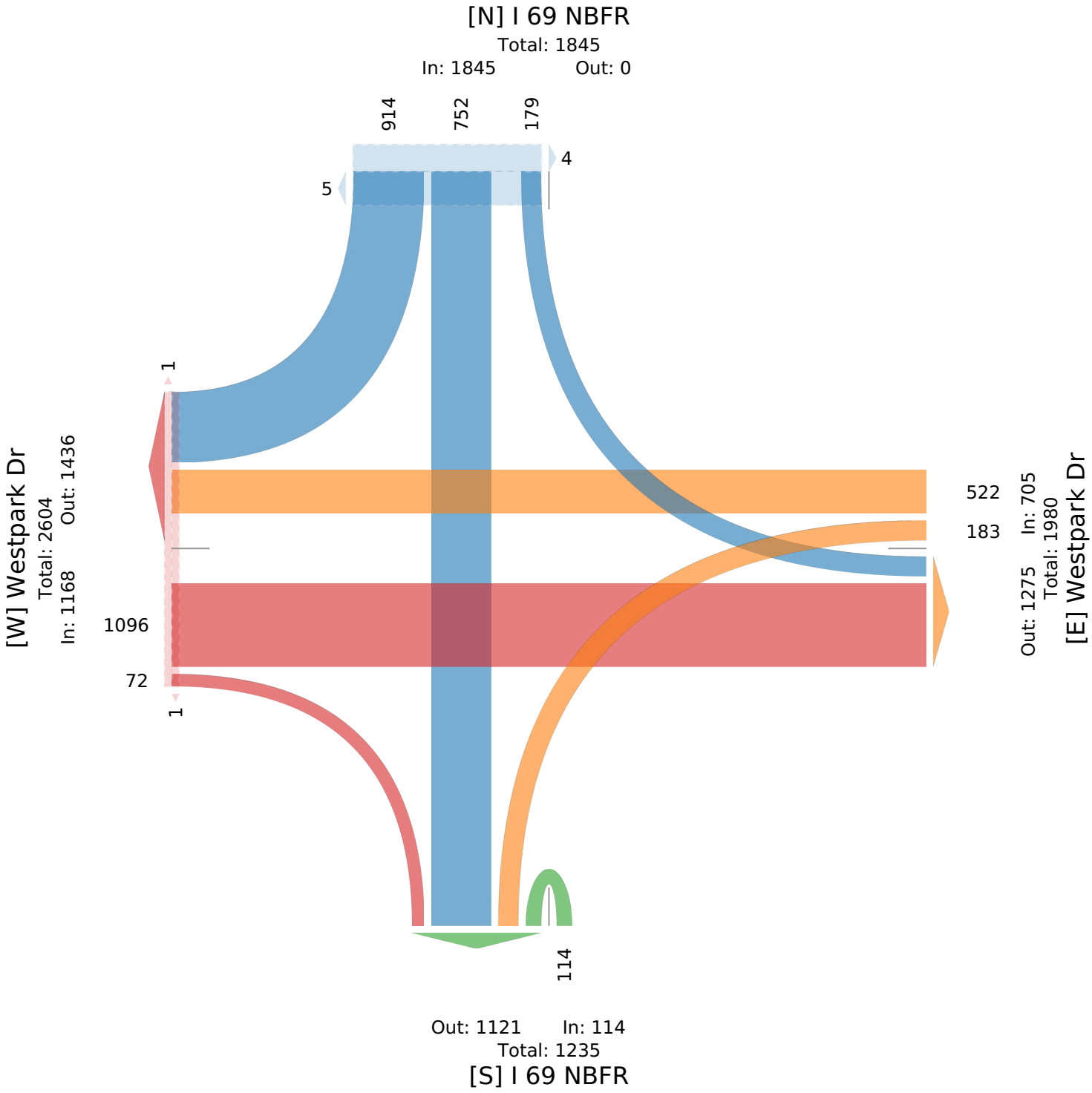
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I 69 NBFR Northbound						I 69 NBFR Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	0	0	0	28	**28**	0	61	181	224	0	**466**	3	0	309	17	0	**326**	0	41	130	0	0	**171**	0	**991**
4:30PM	0	0	0	22	**22**	0	34	216	197	0	**447**	5	0	256	14	0	**270**	1	46	131	0	0	**177**	0	**916**
4:45PM	0	0	0	29	**29**	0	47	189	243	0	**479**	0	0	259	17	0	**276**	1	56	135	0	0	**191**	0	**975**
5:00PM	0	0	0	35	**35**	0	37	166	250	0	**453**	1	0	272	24	0	**296**	0	40	126	0	0	**166**	0	**950**
Total	0	0	0	114	**114**	0	179	752	914	0	**1845**	9	0	1096	72	0	**1168**	2	183	522	0	0	**705**	0	**3832**
% Approach	0%	0%	0%	100%	**-**	-	9.7%	40.8%	49.5%	0%	**-**	-	0%	93.8%	6.2%	0%	**-**	-	26.0%	74.0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	3.0%	**3.0%**	-	4.7%	19.6%	23.9%	0%	**48.1%**	-	0%	28.6%	1.9%	0%	**30.5%**	-	4.8%	13.6%	0%	0%	**18.4%**	-	-
PHF	-	-	-	0.814	**0.814**	-	0.734	0.870	0.914	-	**0.963**	-	-	0.887	0.750	-	**0.896**	-	0.817	0.967	-	-	**0.923**	-	0.967
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	1.4%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	113	**113**	-	179	745	899	0	**1823**	-	0	1076	70	0	**1146**	-	179	512	0	0	**691**	-	3773
% Lights	0%	0%	0%	99.1%	**99.1%**	-	100%	99.1%	98.4%	0%	**98.8%**	-	0%	98.2%	97.2%	0%	**98.1%**	-	97.8%	98.1%	0%	0%	**98.0%**	-	98.5%
Single-Unit Trucks	0	0	0	1	**1**	-	0	5	6	0	**11**	-	0	10	0	0	**10**	-	3	3	0	0	**6**	-	28
% Single-Unit Trucks	0%	0%	0%	0.9%	**0.9%**	-	0%	0.7%	0.7%	0%	**0.6%**	-	0%	0.9%	0%	0%	**0.9%**	-	1.6%	0.6%	0%	0%	**0.9%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	5	0	**5**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.5%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.2%
Buses	0	0	0	0	**0**	-	0	1	4	0	**5**	-	0	9	1	0	**10**	-	1	5	0	0	**6**	-	21
% Buses	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.4%	0%	**0.3%**	-	0%	0.8%	1.4%	0%	**0.9%**	-	0.5%	1.0%	0%	0%	**0.9%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	88.9%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	11.1%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 SBFR - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867310, Location: 29.723702, -95.49188

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 69 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

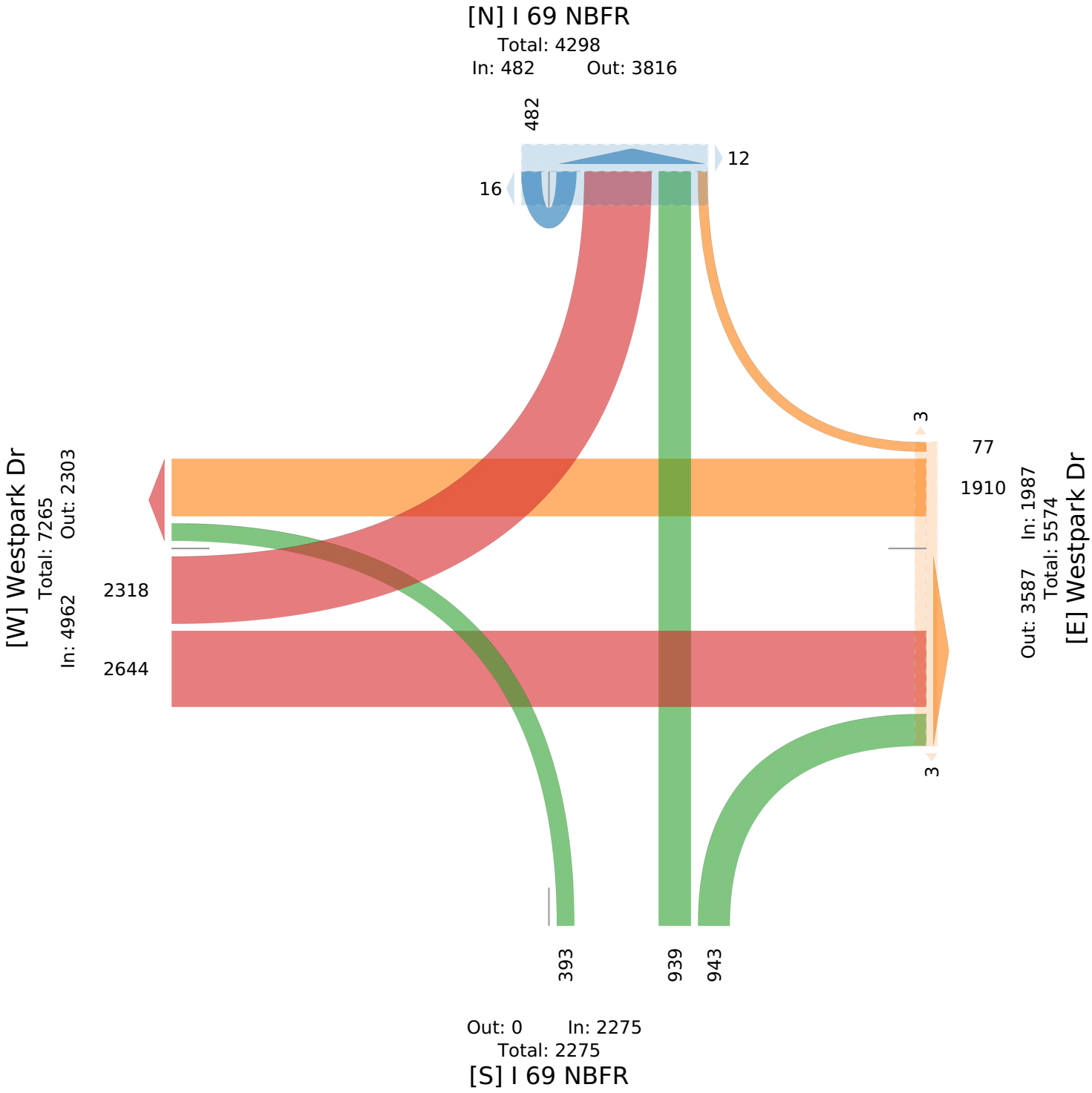
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 69 NBFR						I 69 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	22	40	52	0	**114**	0	0	0	0	32	**32**	2	118	137	0	0	**255**	0	0	70	3	0	**73**	0	**474**
7:15AM	39	59	72	0	**170**	0	0	0	0	36	**36**	0	138	166	0	0	**304**	0	0	84	7	0	**91**	0	**601**
7:30AM	29	59	86	0	**174**	0	0	0	0	46	**46**	2	152	199	0	0	**351**	0	0	114	11	0	**125**	0	**696**
7:45AM	34	87	76	0	**197**	0	0	0	0	35	**35**	3	160	200	0	0	**360**	0	0	125	5	0	**130**	1	**722**
Hourly Total	124	245	286	0	**655**	0	0	0	0	149	**149**	7	568	702	0	0	**1270**	0	0	393	26	0	**419**	1	**2493**
8:00AM	35	87	60	0	**182**	0	0	0	0	20	**20**	1	145	151	0	0	**296**	0	0	118	11	0	**129**	0	**627**
8:15AM	20	50	69	0	**139**	0	0	0	0	25	**25**	1	167	148	0	0	**315**	0	0	87	8	0	**95**	2	**574**
8:30AM	25	52	51	0	**128**	0	0	0	0	44	**44**	0	158	153	0	0	**311**	0	0	72	5	0	**77**	0	**560**
8:45AM	18	44	51	0	**113**	0	0	0	0	34	**34**	1	138	136	0	0	**274**	0	0	78	3	0	**81**	0	**502**
Hourly Total	98	233	231	0	**562**	0	0	0	0	123	**123**	3	608	588	0	0	**1196**	0	0	355	27	0	**382**	2	**2263**
4:00PM	26	57	58	0	**141**	0	0	0	0	40	**40**	0	137	163	0	0	**300**	0	0	150	3	0	**153**	1	**634**
4:15PM	26	48	40	0	**114**	0	0	0	0	25	**25**	2	165	208	0	0	**373**	0	0	141	1	0	**142**	1	**654**
4:30PM	21	57	70	0	**148**	0	0	0	0	35	**35**	0	131	160	0	0	**291**	0	0	158	4	0	**162**	0	**636**
4:45PM	15	62	67	0	**144**	0	0	0	0	17	**17**	3	133	167	0	0	**300**	0	0	183	1	0	**184**	1	**645**
Hourly Total	88	224	235	0	**547**	0	0	0	0	117	**117**	5	566	698	0	0	**1264**	0	0	632	9	0	**641**	3	**2569**
5:00PM	13	66	49	0	**128**	0	0	0	0	29	**29**	1	148	170	0	0	**318**	0	0	141	4	0	**145**	0	**620**
5:15PM	21	58	37	0	**116**	0	0	0	0	13	**13**	6	158	175	0	0	**333**	0	0	138	3	0	**141**	0	**603**
5:30PM	28	71	58	0	**157**	0	0	0	0	23	**23**	4	143	146	0	0	**289**	0	0	131	4	0	**135**	0	**604**
5:45PM	21	42	47	0	**110**	0	0	0	0	28	**28**	2	127	165	0	0	**292**	0	0	120	4	0	**124**	0	**554**
Hourly Total	83	237	191	0	**511**	0	0	0	0	93	**93**	13	576	656	0	0	**1232**	0	0	530	15	0	**545**	0	**2381**
Total	393	939	943	0	**2275**	0	0	0	0	482	**482**	28	2318	2644	0	0	**4962**	0	0	1910	77	0	**1987**	6	**9706**
% Approach	17.3%	41.3%	41.5%	0%	**-**	-	0%	0%	0%	100%	**-**	-	46.7%	53.3%	0%	0%	**-**	-	0%	96.1%	3.9%	0%	**-**	-	-
% Total	4.0%	9.7%	9.7%	0%	**23.4%**	-	0%	0%	0%	5.0%	**5.0%**	-	23.9%	27.2%	0%	0%	**51.1%**	-	0%	19.7%	0.8%	0%	**20.5%**	-	-
Motorcycles	2	1	0	0	**3**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	1	0	0	**1**	-	6
% Motorcycles	0.5%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	383	922	926	0	**2231**	-	0	0	0	461	**461**	-	2261	2595	0	0	**4856**	-	0	1877	73	0	**1950**	-	9498
% Lights	97.5%	98.2%	98.2%	0%	**98.1%**	-	0%	0%	0%	95.6%	**95.6%**	-	97.5%	98.1%	0%	0%	**97.9%**	-	0%	98.3%	94.8%	0%	**98.1%**	-	97.9%
Single-Unit Trucks	4	8	9	0	**21**	-	0	0	0	17	**17**	-	24	31	0	0	**55**	-	0	18	4	0	**22**	-	115
% Single-Unit Trucks	1.0%	0.9%	1.0%	0%	**0.9%**	-	0%	0%	0%	3.5%	**3.5%**	-	1.0%	1.2%	0%	0%	**1.1%**	-	0%	0.9%	5.2%	0%	**1.1%**	-	1.2%
Articulated Trucks	0	4	5	0	**9**	-	0	0	0	3	**3**	-	9	3	0	0	**12**	-	0	3	0	0	**3**	-	27
% Articulated Trucks	0%	0.4%	0.5%	0%	**0.4%**	-	0%	0%	0%	0.6%	**0.6%**	-	0.4%	0.1%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.3%
Buses	4	4	3	0	**11**	-	0	0	0	1	**1**	-	23	14	0	0	**37**	-	0	11	0	0	**11**	-	60
% Buses	1.0%	0.4%	0.3%	0%	**0.5%**	-	0%	0%	0%	0.2%	**0.2%**	-	1.0%	0.5%	0%	0%	**0.7%**	-	0%	0.6%	0%	0%	**0.6%**	-	0.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	20	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	71.4%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	28.6%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 NBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 69 NBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 69 NBFR						I 69 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	39	59	72	0	**170**	0	0	0	0	36	**36**	0	138	166	0	0	**304**	0	0	84	7	0	**91**	0	**601**
7:30AM	29	59	86	0	**174**	0	0	0	0	46	**46**	2	152	199	0	0	**351**	0	0	114	11	0	**125**	0	**696**
7:45AM	34	87	76	0	**197**	0	0	0	0	35	**35**	3	160	200	0	0	**360**	0	0	125	5	0	**130**	1	**722**
8:00AM	35	87	60	0	**182**	0	0	0	0	20	**20**	1	145	151	0	0	**296**	0	0	118	11	0	**129**	0	**627**
Total	137	292	294	0	**723**	0	0	0	0	137	**137**	6	595	716	0	0	**1311**	0	0	441	34	0	**475**	1	**2646**
% Approach	18.9%	40.4%	40.7%	0%	**-**	-	0%	0%	0%	100%	**-**	-	45.4%	54.6%	0%	0%	**-**	-	0%	92.8%	7.2%	0%	**-**	-	-
% Total	5.2%	11.0%	11.1%	0%	**27.3%**	-	0%	0%	0%	5.2%	**5.2%**	-	22.5%	27.1%	0%	0%	**49.5%**	-	0%	16.7%	1.3%	0%	**18.0%**	-	-
PHF	0.878	0.839	0.855	-	**0.918**	-	-	-	-	0.745	**0.745**	-	0.930	0.895	-	-	**0.910**	-	-	0.882	0.773	-	**0.913**	-	0.916
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	134	289	291	0	**714**	-	0	0	0	133	**133**	-	586	698	0	0	**1284**	-	0	430	31	0	**461**	-	2592
% Lights	97.8%	99.0%	99.0%	0%	**98.8%**	-	0%	0%	0%	97.1%	**97.1%**	-	98.5%	97.5%	0%	0%	**97.9%**	-	0%	97.5%	91.2%	0%	**97.1%**	-	98.0%
Single-Unit Trucks	2	2	2	0	**6**	-	0	0	0	4	**4**	-	7	11	0	0	**18**	-	0	7	3	0	**10**	-	38
% Single-Unit Trucks	1.5%	0.7%	0.7%	0%	**0.8%**	-	0%	0%	0%	2.9%	**2.9%**	-	1.2%	1.5%	0%	0%	**1.4%**	-	0%	1.6%	8.8%	0%	**2.1%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.1%
Buses	1	1	1	0	**3**	-	0	0	0	0	**0**	-	1	6	0	0	**7**	-	0	2	0	0	**2**	-	12
% Buses	0.7%	0.3%	0.3%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0.8%	0%	0%	**0.5%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	83.3%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 NBFR - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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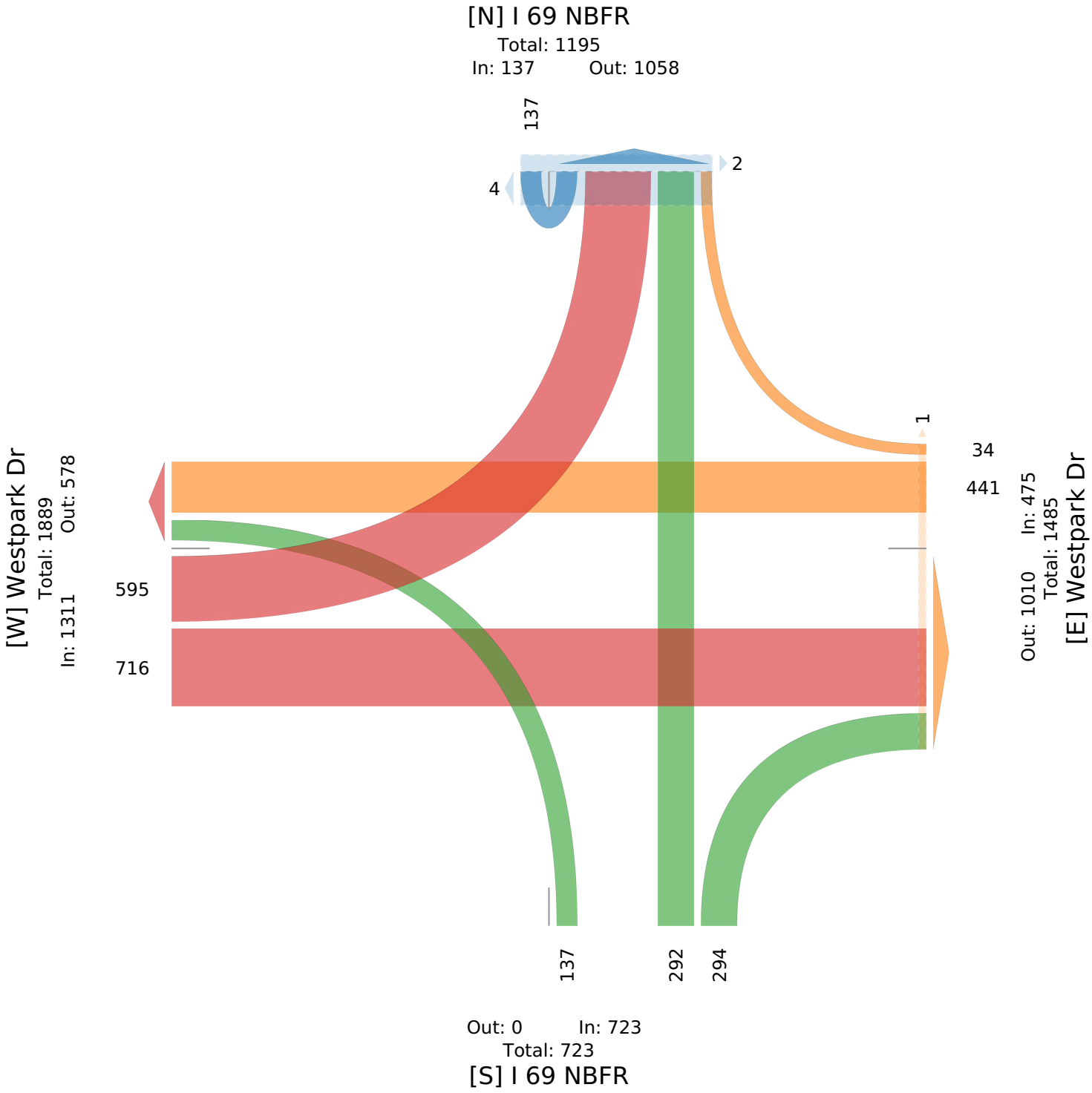


Westpark Dr at I 69 NBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

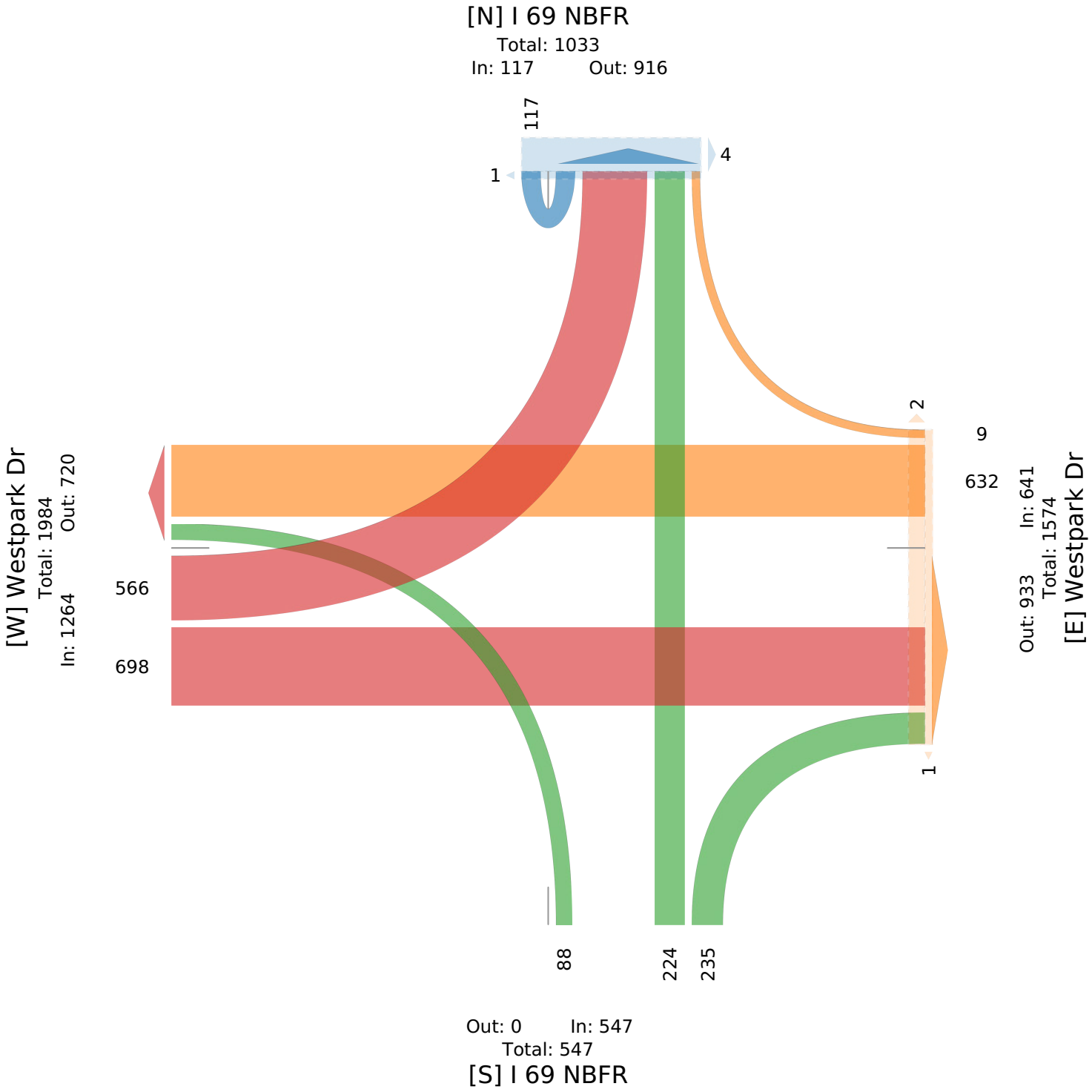
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 69 NBFR						I 69 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	26	57	58	0	**141**	0	0	0	0	40	**40**	0	137	163	0	0	**300**	0	0	150	3	0	**153**	1	**634**
4:15PM	26	48	40	0	**114**	0	0	0	0	25	**25**	2	165	208	0	0	**373**	0	0	141	1	0	**142**	1	**654**
4:30PM	21	57	70	0	**148**	0	0	0	0	35	**35**	0	131	160	0	0	**291**	0	0	158	4	0	**162**	0	**636**
4:45PM	15	62	67	0	**144**	0	0	0	0	17	**17**	3	133	167	0	0	**300**	0	0	183	1	0	**184**	1	**645**
Total	88	224	235	0	**547**	0	0	0	0	117	**117**	5	566	698	0	0	**1264**	0	0	632	9	0	**641**	3	**2569**
% Approach	16.1%	41.0%	43.0%	0%	**-**	-	0%	0%	0%	100%	**-**	-	44.8%	55.2%	0%	0%	**-**	-	0%	98.6%	1.4%	0%	**-**	-	-
% Total	3.4%	8.7%	9.1%	0%	**21.3%**	-	0%	0%	0%	4.6%	**4.6%**	-	22.0%	27.2%	0%	0%	**49.2%**	-	0%	24.6%	0.4%	0%	**25.0%**	-	-
PHF	0.846	0.903	0.839	-	**0.924**	-	-	-	-	0.731	**0.731**	-	0.858	0.839	-	-	**0.847**	-	-	0.863	0.563	-	**0.871**	-	0.982
Motorcycles	1	1	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Motorcycles	1.1%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	85	217	231	0	**533**	-	0	0	0	113	**113**	-	552	692	0	0	**1244**	-	0	619	9	0	**628**	-	2518
% Lights	96.6%	96.9%	98.3%	0%	**97.4%**	-	0%	0%	0%	96.6%	**96.6%**	-	97.5%	99.1%	0%	0%	**98.4%**	-	0%	97.9%	100%	0%	**98.0%**	-	98.0%
Single-Unit Trucks	0	2	2	0	**4**	-	0	0	0	3	**3**	-	5	5	0	0	**10**	-	0	6	0	0	**6**	-	23
% Single-Unit Trucks	0%	0.9%	0.9%	0%	**0.7%**	-	0%	0%	0%	2.6%	**2.6%**	-	0.9%	0.7%	0%	0%	**0.8%**	-	0%	0.9%	0%	0%	**0.9%**	-	0.9%
Articulated Trucks	0	2	1	0	**3**	-	0	0	0	1	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	5
% Articulated Trucks	0%	0.9%	0.4%	0%	**0.5%**	-	0%	0%	0%	0.9%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Buses	2	2	1	0	**5**	-	0	0	0	0	**0**	-	9	0	0	0	**9**	-	0	6	0	0	**6**	-	20
% Buses	2.3%	0.9%	0.4%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	1.6%	0%	0%	0%	**0.7%**	-	0%	0.9%	0%	0%	**0.9%**	-	0.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 69 NBFR - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867311, Location: 29.723804, -95.490501

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Rampart St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

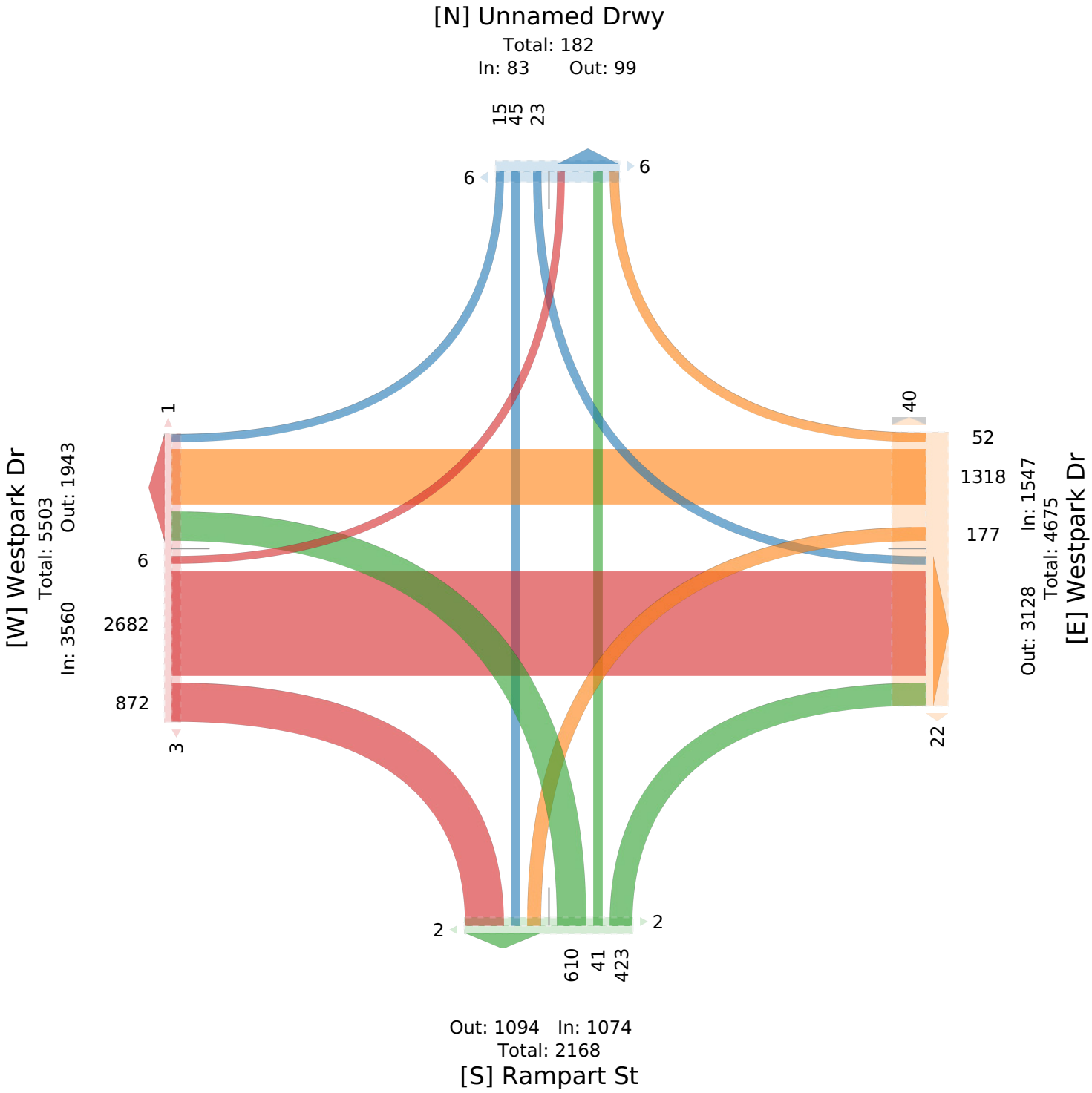
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Rampart St						Unnamed Drwy						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	39	4	30	0	**73**	0	1	2	0	0	**3**	2	0	159	33	0	**192**	0	4	25	4	0	**33**	3	**301**
7:15AM	56	6	46	0	**108**	0	1	1	1	0	**3**	0	0	189	44	0	**233**	0	7	47	2	0	**56**	8	**400**
7:30AM	54	2	39	0	**95**	1	3	2	0	0	**5**	0	1	234	49	0	**284**	0	3	66	5	0	**74**	6	**458**
7:45AM	64	7	37	0	**108**	0	3	2	3	0	**8**	1	1	246	29	0	**276**	0	6	64	5	0	**75**	7	**467**
Hourly Total	213	19	152	0	**384**	1	8	7	4	0	**19**	3	2	828	155	0	**985**	0	20	202	16	0	**238**	24	**1626**
8:00AM	58	3	33	0	**94**	0	4	0	0	0	**4**	0	1	170	42	0	**213**	1	6	66	0	0	**72**	3	**383**
8:15AM	48	1	26	0	**75**	0	0	3	1	0	**4**	1	0	166	39	0	**205**	0	8	40	1	0	**49**	1	**333**
8:30AM	28	1	22	0	**51**	0	2	3	0	0	**5**	0	0	179	41	0	**220**	0	4	45	2	0	**51**	5	**327**
8:45AM	38	3	29	0	**70**	0	3	1	5	0	**9**	3	0	128	29	0	**157**	0	2	38	4	0	**44**	3	**280**
Hourly Total	172	8	110	0	**290**	0	9	7	6	0	**22**	4	1	643	151	0	**795**	1	20	189	7	0	**216**	12	**1323**
4:00PM	34	0	25	0	**59**	0	0	7	2	0	**9**	0	0	177	61	0	**238**	0	8	118	3	0	**129**	0	**435**
4:15PM	31	1	30	0	**62**	0	0	2	1	0	**3**	0	0	161	83	0	**244**	0	21	107	3	0	**131**	4	**440**
4:30PM	34	3	21	0	**58**	1	2	2	0	0	**4**	2	0	154	73	0	**227**	0	22	132	5	0	**159**	6	**448**
4:45PM	33	2	15	0	**50**	0	0	4	0	0	**4**	0	1	155	75	0	**231**	1	19	132	3	0	**154**	0	**439**
Hourly Total	132	6	91	0	**229**	1	2	15	3	0	**20**	2	1	647	292	0	**940**	1	70	489	14	0	**573**	10	**1762**
5:00PM	18	1	25	0	**44**	0	1	4	2	0	**7**	1	1	142	74	0	**217**	0	14	124	4	0	**142**	3	**410**
5:15PM	20	3	18	0	**41**	0	0	3	0	0	**3**	2	1	147	60	0	**208**	0	17	115	3	0	**135**	2	**387**
5:30PM	22	2	14	0	**38**	2	1	3	0	0	**4**	0	0	145	67	0	**212**	0	18	117	5	0	**140**	4	**394**
5:45PM	33	2	13	0	**48**	0	2	6	0	0	**8**	0	0	130	73	0	**203**	2	18	82	3	0	**103**	7	**362**
Hourly Total	93	8	70	0	**171**	2	4	16	2	0	**22**	3	2	564	274	0	**840**	2	67	438	15	0	**520**	16	**1553**
Total	610	41	423	0	**1074**	4	23	45	15	0	**83**	12	6	2682	872	0	**3560**	4	177	1318	52	0	**1547**	62	**6264**
% Approach	56.8%	3.8%	39.4%	0%	**-**	-	27.7%	54.2%	18.1%	0%	**-**	-	0.2%	75.3%	24.5%	0%	**-**	-	11.4%	85.2%	3.4%	0%	**-**	-	-
% Total	9.7%	0.7%	6.8%	0%	**17.1%**	-	0.4%	0.7%	0.2%	0%	**1.3%**	-	0.1%	42.8%	13.9%	0%	**56.8%**	-	2.8%	21.0%	0.8%	0%	**24.7%**	-	-
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	2	1	0	**3**	-	0	1	0	0	**1**	-	5
% Motorcycles	0%	0%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.1%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	596	41	412	0	**1049**	-	21	43	15	0	**79**	-	6	2637	858	0	**3501**	-	171	1298	48	0	**1517**	-	6146
% Lights	97.7%	100%	97.4%	0%	**97.7%**	-	91.3%	95.6%	100%	0%	**95.2%**	-	100%	98.3%	98.4%	0%	**98.3%**	-	96.6%	98.5%	92.3%	0%	**98.1%**	-	98.1%
Single-Unit Trucks	9	0	4	0	**13**	-	2	2	0	0	**4**	-	0	26	7	0	**33**	-	4	10	4	0	**18**	-	68
% Single-Unit Trucks	1.5%	0%	0.9%	0%	**1.2%**	-	8.7%	4.4%	0%	0%	**4.8%**	-	0%	1.0%	0.8%	0%	**0.9%**	-	2.3%	0.8%	7.7%	0%	**1.2%**	-	1.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	6	0	0	**6**	-	0	3	0	0	**3**	-	9
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Buses	5	0	6	0	**11**	-	0	0	0	0	**0**	-	0	11	6	0	**17**	-	2	6	0	0	**8**	-	36
% Buses	0.8%	0%	1.4%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0.7%	0%	**0.5%**	-	1.1%	0.5%	0%	0%	**0.5%**	-	0.6%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	11	-	-	-	-	-	4	-	-	-	-	-	54	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	91.7%	-	-	-	-	-	100%	-	-	-	-	-	87.1%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	8	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	8.3%	-	-	-	-	-	0%	-	-	-	-	-	12.9%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Rampart St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Rampart St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

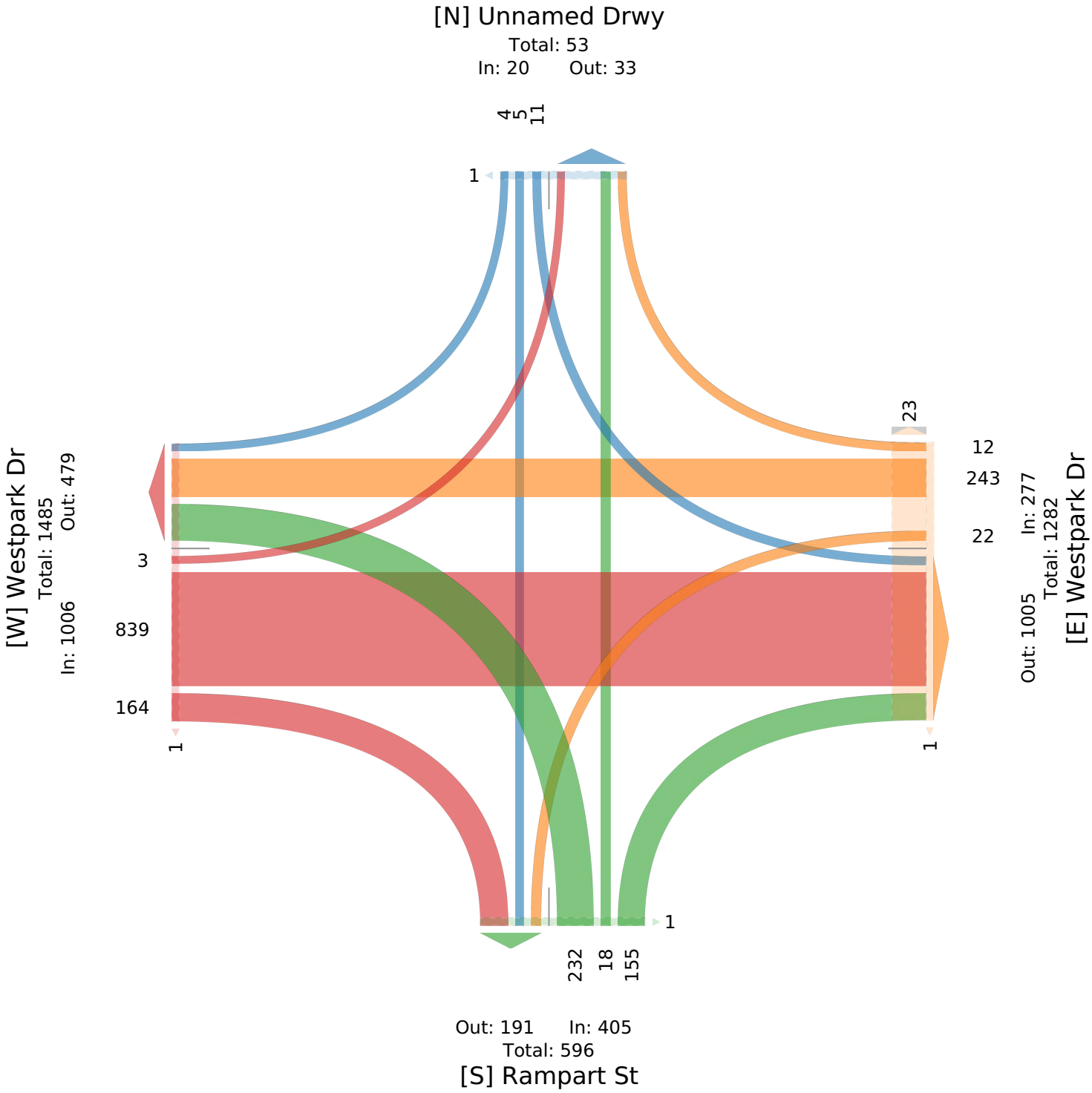
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Rampart St						Unnamed Drwy						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	56	6	46	0	**108**	0	1	1	1	0	**3**	0	0	189	44	0	**233**	0	7	47	2	0	**56**	8	**400**
7:30AM	54	2	39	0	**95**	1	3	2	0	0	**5**	0	1	234	49	0	**284**	0	3	66	5	0	**74**	6	**458**
7:45AM	64	7	37	0	**108**	0	3	2	3	0	**8**	1	1	246	29	0	**276**	0	6	64	5	0	**75**	7	**467**
8:00AM	58	3	33	0	**94**	0	4	0	0	0	**4**	0	1	170	42	0	**213**	1	6	66	0	0	**72**	3	**383**
Total	232	18	155	0	**405**	1	11	5	4	0	**20**	1	3	839	164	0	**1006**	1	22	243	12	0	**277**	24	**1708**
% Approach	57.3%	4.4%	38.3%	0%	**-**	-	55.0%	25.0%	20.0%	0%	**-**	-	0.3%	83.4%	16.3%	0%	**-**	-	7.9%	87.7%	4.3%	0%	**-**	-	-
% Total	13.6%	1.1%	9.1%	0%	**23.7%**	-	0.6%	0.3%	0.2%	0%	**1.2%**	-	0.2%	49.1%	9.6%	0%	**58.9%**	-	1.3%	14.2%	0.7%	0%	**16.2%**	-	-
PHF	0.906	0.643	0.842	-	**0.938**	-	0.688	0.625	0.333	-	**0.625**	-	0.750	0.853	0.837	-	**0.886**	-	0.786	0.920	0.600	-	**0.923**	-	0.914
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.6%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	228	18	149	0	**395**	-	10	5	4	0	**19**	-	3	825	157	0	**985**	-	21	235	11	0	**267**	-	1666
% Lights	98.3%	100%	96.1%	0%	**97.5%**	-	90.9%	100%	100%	0%	**95.0%**	-	100%	98.3%	95.7%	0%	**97.9%**	-	95.5%	96.7%	91.7%	0%	**96.4%**	-	97.5%
Single-Unit Trucks	4	0	1	0	**5**	-	1	0	0	0	**1**	-	0	9	2	0	**11**	-	0	4	1	0	**5**	-	22
% Single-Unit Trucks	1.7%	0%	0.6%	0%	**1.2%**	-	9.1%	0%	0%	0%	**5.0%**	-	0%	1.1%	1.2%	0%	**1.1%**	-	0%	1.6%	8.3%	0%	**1.8%**	-	1.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.8%	0%	0%	**0.7%**	-	0.2%
Buses	0	0	5	0	**5**	-	0	0	0	0	**0**	-	0	4	4	0	**8**	-	1	2	0	0	**3**	-	16
% Buses	0%	0%	3.2%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	2.4%	0%	**0.8%**	-	4.5%	0.8%	0%	0%	**1.1%**	-	0.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	22	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	91.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	8.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Rampart St - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Rampart St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

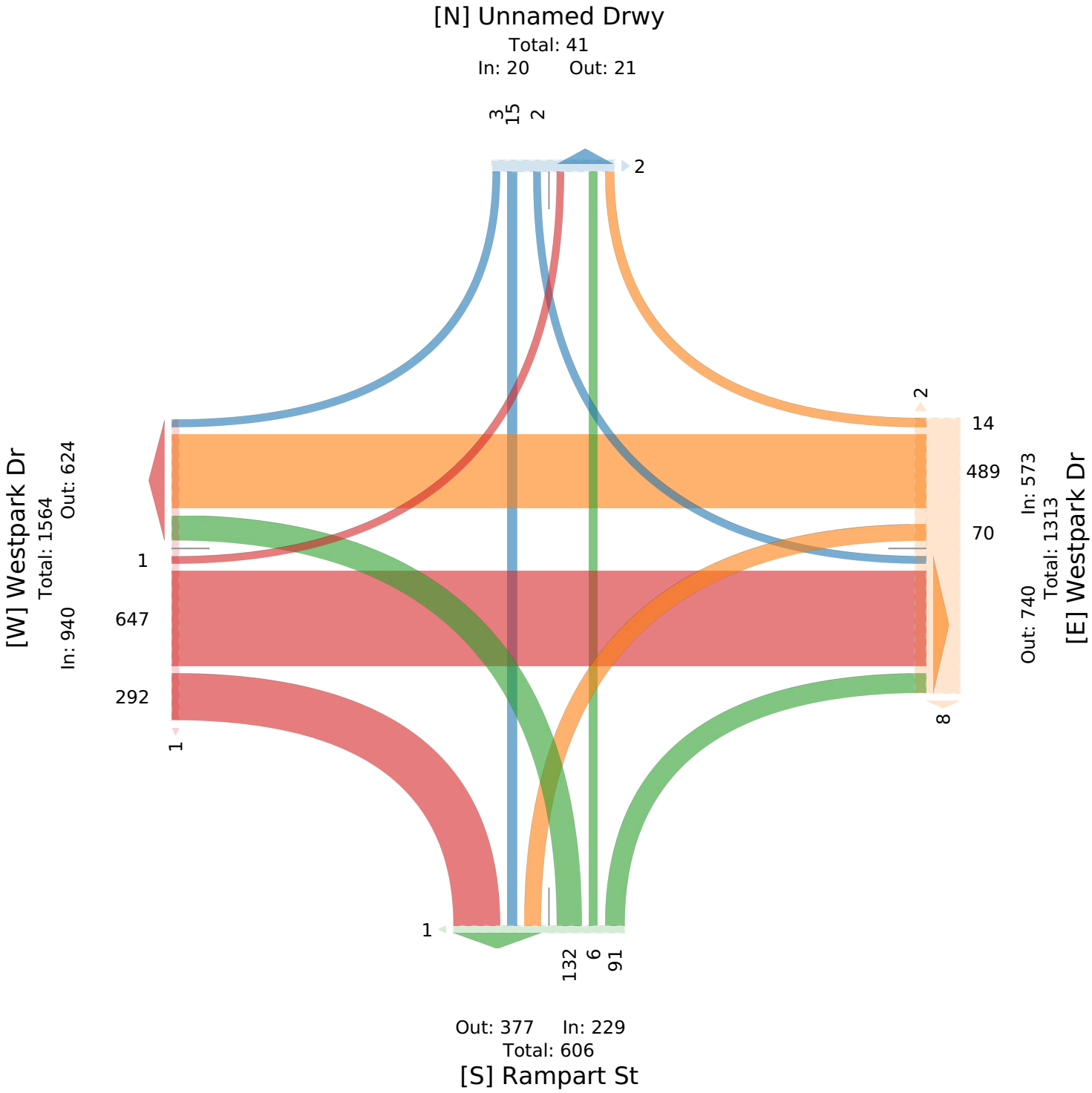
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Rampart St						Unnamed Drwy						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	34	0	25	0	**59**	0	0	7	2	0	**9**	0	0	177	61	0	**238**	0	8	118	3	0	**129**	0	**435**
4:15PM	31	1	30	0	**62**	0	0	2	1	0	**3**	0	0	161	83	0	**244**	0	21	107	3	0	**131**	4	**440**
4:30PM	34	3	21	0	**58**	1	2	2	0	0	**4**	2	0	154	73	0	**227**	0	22	132	5	0	**159**	6	**448**
4:45PM	33	2	15	0	**50**	0	0	4	0	0	**4**	0	1	155	75	0	**231**	1	19	132	3	0	**154**	0	**439**
Total	132	6	91	0	**229**	1	2	15	3	0	**20**	2	1	647	292	0	**940**	1	70	489	14	0	**573**	10	**1762**
% Approach	57.6%	2.6%	39.7%	0%	**-**	-	10.0%	75.0%	15.0%	0%	**-**	-	0.1%	68.8%	31.1%	0%	**-**	-	12.2%	85.3%	2.4%	0%	**-**	-	-
% Total	7.5%	0.3%	5.2%	0%	**13.0%**	-	0.1%	0.9%	0.2%	0%	**1.1%**	-	0.1%	36.7%	16.6%	0%	**53.3%**	-	4.0%	27.8%	0.8%	0%	**32.5%**	-	-
PHF	0.971	0.500	0.758	-	**0.923**	-	0.250	0.536	0.375	-	**0.556**	-	0.250	0.914	0.880	-	**0.963**	-	0.795	0.926	0.700	-	**0.901**	-	0.983
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	125	6	89	0	**220**	-	2	14	3	0	**19**	-	1	638	291	0	**930**	-	69	483	14	0	**566**	-	1735
% Lights	94.7%	100%	97.8%	0%	**96.1%**	-	100%	93.3%	100%	0%	**95.0%**	-	100%	98.6%	99.7%	0%	**98.9%**	-	98.6%	98.8%	100%	0%	**98.8%**	-	98.5%
Single-Unit Trucks	2	0	1	0	**3**	-	0	1	0	0	**1**	-	0	7	0	0	**7**	-	0	4	0	0	**4**	-	15
% Single-Unit Trucks	1.5%	0%	1.1%	0%	**1.3%**	-	0%	6.7%	0%	0%	**5.0%**	-	0%	1.1%	0%	0%	**0.7%**	-	0%	0.8%	0%	0%	**0.7%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Buses	5	0	1	0	**6**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1	1	0	0	**2**	-	9
% Buses	3.8%	0%	1.1%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.3%	0%	**0.1%**	-	1.4%	0.2%	0%	0%	**0.3%**	-	0.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Rampart St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867312, Location: 29.723898, -95.489076

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Renwick Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

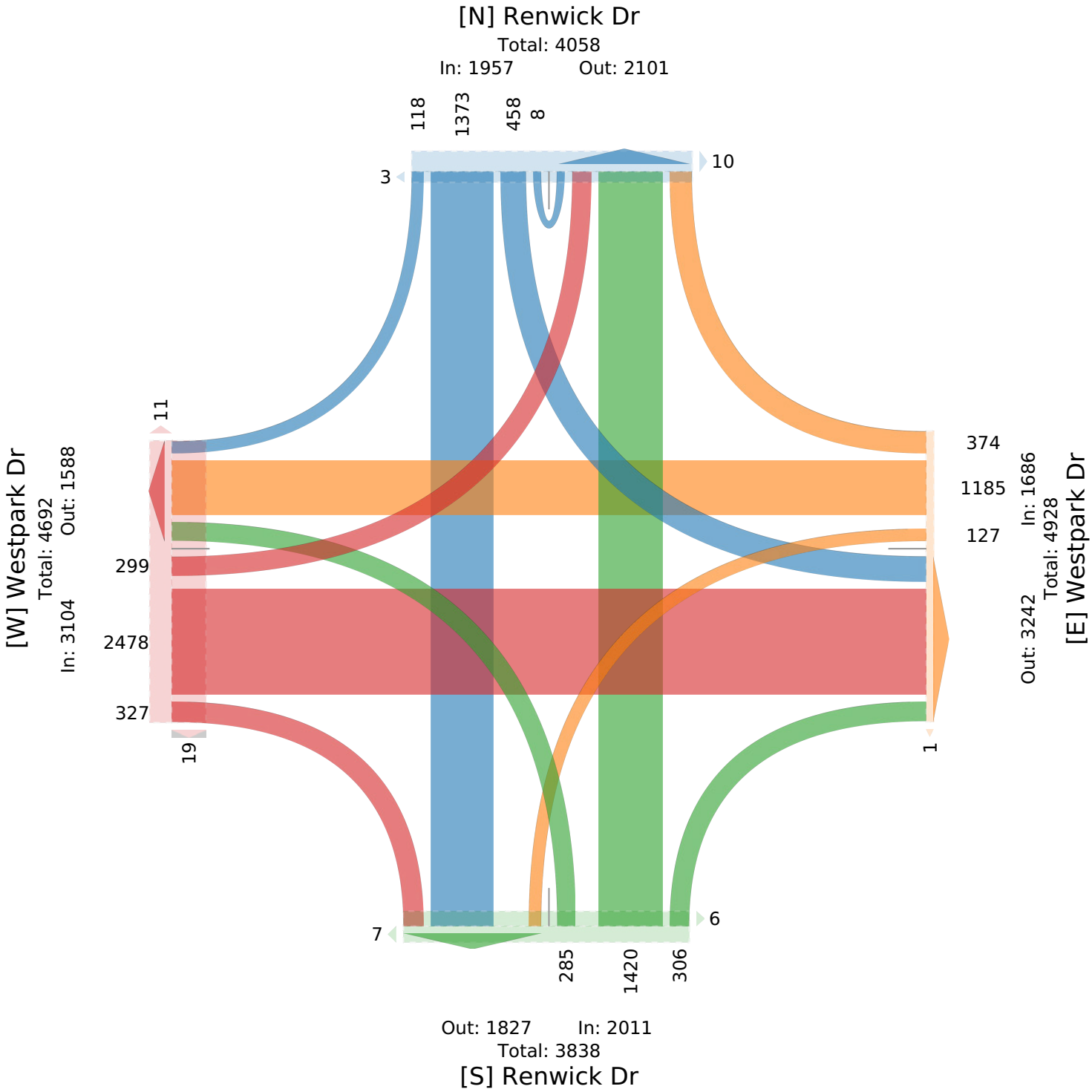
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Renwick Dr						Renwick Dr						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	10	80	24	0	**114**	0	21	58	3	0	**82**	1	21	141	18	0	**180**	1	2	16	8	0	**26**	0	**402**
7:15AM	17	78	26	0	**121**	1	31	62	10	0	**103**	1	15	196	29	0	**240**	1	5	36	16	0	**57**	1	**521**
7:30AM	28	109	32	0	**169**	1	27	49	3	1	**80**	2	24	221	20	0	**265**	0	1	46	11	0	**58**	0	**572**
7:45AM	22	96	33	0	**151**	1	29	70	8	1	**108**	0	33	239	24	0	**296**	0	3	58	22	0	**83**	0	**638**
Hourly Total	77	363	115	0	**555**	3	108	239	24	2	**373**	4	93	797	91	0	**981**	2	11	156	57	0	**224**	1	**2133**
8:00AM	20	121	19	0	**160**	1	23	55	6	1	**85**	0	24	163	21	0	**208**	0	4	45	23	0	**72**	0	**525**
8:15AM	14	96	20	0	**130**	1	23	65	4	1	**93**	1	22	159	9	0	**190**	3	3	34	30	0	**67**	0	**480**
8:30AM	10	83	15	0	**108**	0	23	64	8	3	**98**	0	21	149	20	0	**190**	1	3	48	16	0	**67**	0	**463**
8:45AM	9	99	16	0	**124**	2	20	57	4	0	**81**	1	14	128	15	0	**157**	6	1	38	18	0	**57**	0	**419**
Hourly Total	53	399	70	0	**522**	4	89	241	22	5	**357**	2	81	599	65	0	**745**	10	11	165	87	0	**263**	0	**1887**
4:00PM	20	95	13	0	**128**	0	31	100	6	0	**137**	0	16	146	30	0	**192**	0	6	93	23	0	**122**	0	**579**
4:15PM	19	107	13	0	**139**	1	40	117	9	1	**167**	0	27	144	26	0	**197**	1	19	108	30	0	**157**	0	**660**
4:30PM	21	71	27	0	**119**	0	51	105	8	0	**164**	4	18	140	21	0	**179**	2	12	124	27	0	**163**	0	**625**
4:45PM	18	85	14	0	**117**	0	23	90	10	0	**123**	0	9	139	27	0	**175**	3	14	125	33	0	**172**	0	**587**
Hourly Total	78	358	67	0	**503**	1	145	412	33	1	**591**	4	70	569	104	0	**743**	6	51	450	113	0	**614**	0	**2451**
5:00PM	22	76	12	0	**110**	0	24	132	8	0	**164**	0	15	129	19	0	**163**	4	12	105	31	0	**148**	0	**585**
5:15PM	24	76	19	0	**119**	1	35	116	9	0	**160**	1	17	138	14	0	**169**	6	14	120	34	0	**168**	0	**616**
5:30PM	15	86	11	0	**112**	3	28	117	8	0	**153**	0	15	123	20	0	**158**	2	16	106	32	0	**154**	0	**577**
5:45PM	16	62	12	0	**90**	1	29	116	14	0	**159**	2	8	123	14	0	**145**	0	12	83	20	0	**115**	0	**509**
Hourly Total	77	300	54	0	**431**	5	116	481	39	0	**636**	3	55	513	67	0	**635**	12	54	414	117	0	**585**	0	**2287**
Total	285	1420	306	0	**2011**	13	458	1373	118	8	**1957**	13	299	2478	327	0	**3104**	30	127	1185	374	0	**1686**	1	**8758**
% Approach	14.2%	70.6%	15.2%	0%	**-**	-	23.4%	70.2%	6.0%	0.4%	**-**	-	9.6%	79.8%	10.5%	0%	**-**	-	7.5%	70.3%	22.2%	0%	**-**	-	-
% Total	3.3%	16.2%	3.5%	0%	**23.0%**	-	5.2%	15.7%	1.3%	0.1%	**22.3%**	-	3.4%	28.3%	3.7%	0%	**35.4%**	-	1.5%	13.5%	4.3%	0%	**19.3%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	2	0	0	**2**	-	1	2	0	0	**3**	-	0	1	0	0	**1**	-	7
% Motorcycles	0%	0.1%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.3%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	279	1385	284	0	**1948**	-	445	1321	111	7	**1884**	-	294	2438	312	0	**3044**	-	125	1166	349	0	**1640**	-	8516
% Lights	97.9%	97.5%	92.8%	0%	**96.9%**	-	97.2%	96.2%	94.1%	87.5%	**96.3%**	-	98.3%	98.4%	95.4%	0%	**98.1%**	-	98.4%	98.4%	93.3%	0%	**97.3%**	-	97.2%
Single-Unit Trucks	4	16	15	0	**35**	-	7	24	6	1	**38**	-	1	22	11	0	**34**	-	1	11	16	0	**28**	-	135
% Single-Unit Trucks	1.4%	1.1%	4.9%	0%	**1.7%**	-	1.5%	1.7%	5.1%	12.5%	**1.9%**	-	0.3%	0.9%	3.4%	0%	**1.1%**	-	0.8%	0.9%	4.3%	0%	**1.7%**	-	1.5%
Articulated Trucks	1	4	6	0	**11**	-	0	11	0	0	**11**	-	1	3	2	0	**6**	-	0	2	5	0	**7**	-	35
% Articulated Trucks	0.4%	0.3%	2.0%	0%	**0.5%**	-	0%	0.8%	0%	0%	**0.6%**	-	0.3%	0.1%	0.6%	0%	**0.2%**	-	0%	0.2%	1.3%	0%	**0.4%**	-	0.4%
Buses	1	14	1	0	**16**	-	6	15	1	0	**22**	-	2	13	2	0	**17**	-	1	5	4	0	**10**	-	65
% Buses	0.4%	1.0%	0.3%	0%	**0.8%**	-	1.3%	1.1%	0.8%	0%	**1.1%**	-	0.7%	0.5%	0.6%	0%	**0.5%**	-	0.8%	0.4%	1.1%	0%	**0.6%**	-	0.7%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	11	-	-	-	-	-	25	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	84.6%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	15.4%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Renwick Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Renwick Dr - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

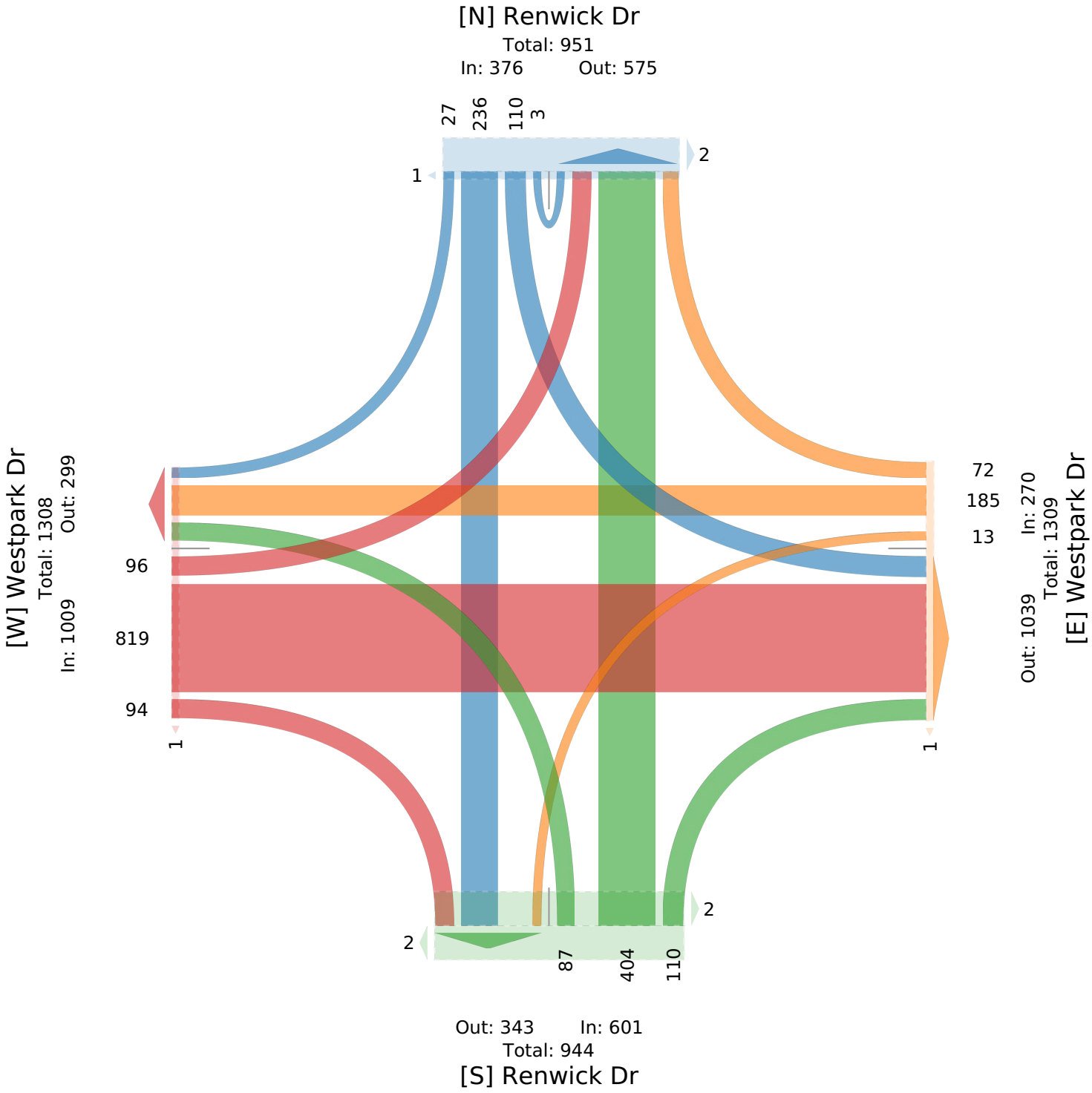
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Renwick Dr Northbound						Renwick Dr Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	17	78	26	0	**121**	1	31	62	10	0	**103**	1	15	196	29	0	**240**	1	5	36	16	0	**57**	1	**521**
7:30AM	28	109	32	0	**169**	1	27	49	3	1	**80**	2	24	221	20	0	**265**	0	1	46	11	0	**58**	0	**572**
7:45AM	22	96	33	0	**151**	1	29	70	8	1	**108**	0	33	239	24	0	**296**	0	3	58	22	0	**83**	0	**638**
8:00AM	20	121	19	0	**160**	1	23	55	6	1	**85**	0	24	163	21	0	**208**	0	4	45	23	0	**72**	0	**525**
Total	87	404	110	0	**601**	4	110	236	27	3	**376**	3	96	819	94	0	**1009**	1	13	185	72	0	**270**	1	**2256**
% Approach	14.5%	67.2%	18.3%	0%	**-**	-	29.3%	62.8%	7.2%	0.8%	**-**	-	9.5%	81.2%	9.3%	0%	**-**	-	4.8%	68.5%	26.7%	0%	**-**	-	**-**
% Total	3.9%	17.9%	4.9%	0%	**26.6%**	-	4.9%	10.5%	1.2%	0.1%	**16.7%**	-	4.3%	36.3%	4.2%	0%	**44.7%**	-	0.6%	8.2%	3.2%	0%	**12.0%**	-	**-**
PHF	0.777	0.835	0.833	-	**0.889**	-	0.887	0.843	0.675	0.750	**0.870**	-	0.727	0.857	0.810	-	**0.852**	-	0.650	0.797	0.783	-	**0.813**	-	0.884
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	83	393	98	0	**574**	-	108	223	24	3	**358**	-	94	806	85	0	**985**	-	13	179	62	0	**254**	-	2171
% Lights	95.4%	97.3%	89.1%	0%	**95.5%**	-	98.2%	94.5%	88.9%	100%	**95.2%**	-	97.9%	98.4%	90.4%	0%	**97.6%**	-	100%	96.8%	86.1%	0%	**94.1%**	-	96.2%
Single-Unit Trucks	3	6	9	0	**18**	-	1	5	2	0	**8**	-	0	6	7	0	**13**	-	0	3	8	0	**11**	-	50
% Single-Unit Trucks	3.4%	1.5%	8.2%	0%	**3.0%**	-	0.9%	2.1%	7.4%	0%	**2.1%**	-	0%	0.7%	7.4%	0%	**1.3%**	-	0%	1.6%	11.1%	0%	**4.1%**	-	2.2%
Articulated Trucks	1	1	3	0	**5**	-	0	4	0	0	**4**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	12
% Articulated Trucks	1.1%	0.2%	2.7%	0%	**0.8%**	-	0%	1.7%	0%	0%	**1.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.5%	1.4%	0%	**0.7%**	-	0.5%
Buses	0	4	0	0	**4**	-	1	3	1	0	**5**	-	2	5	2	0	**9**	-	0	2	1	0	**3**	-	21
% Buses	0%	1.0%	0%	0%	**0.7%**	-	0.9%	1.3%	3.7%	0%	**1.3%**	-	2.1%	0.6%	2.1%	0%	**0.9%**	-	0%	1.1%	1.4%	0%	**1.1%**	-	0.9%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Renwick Dr - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Renwick Dr - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

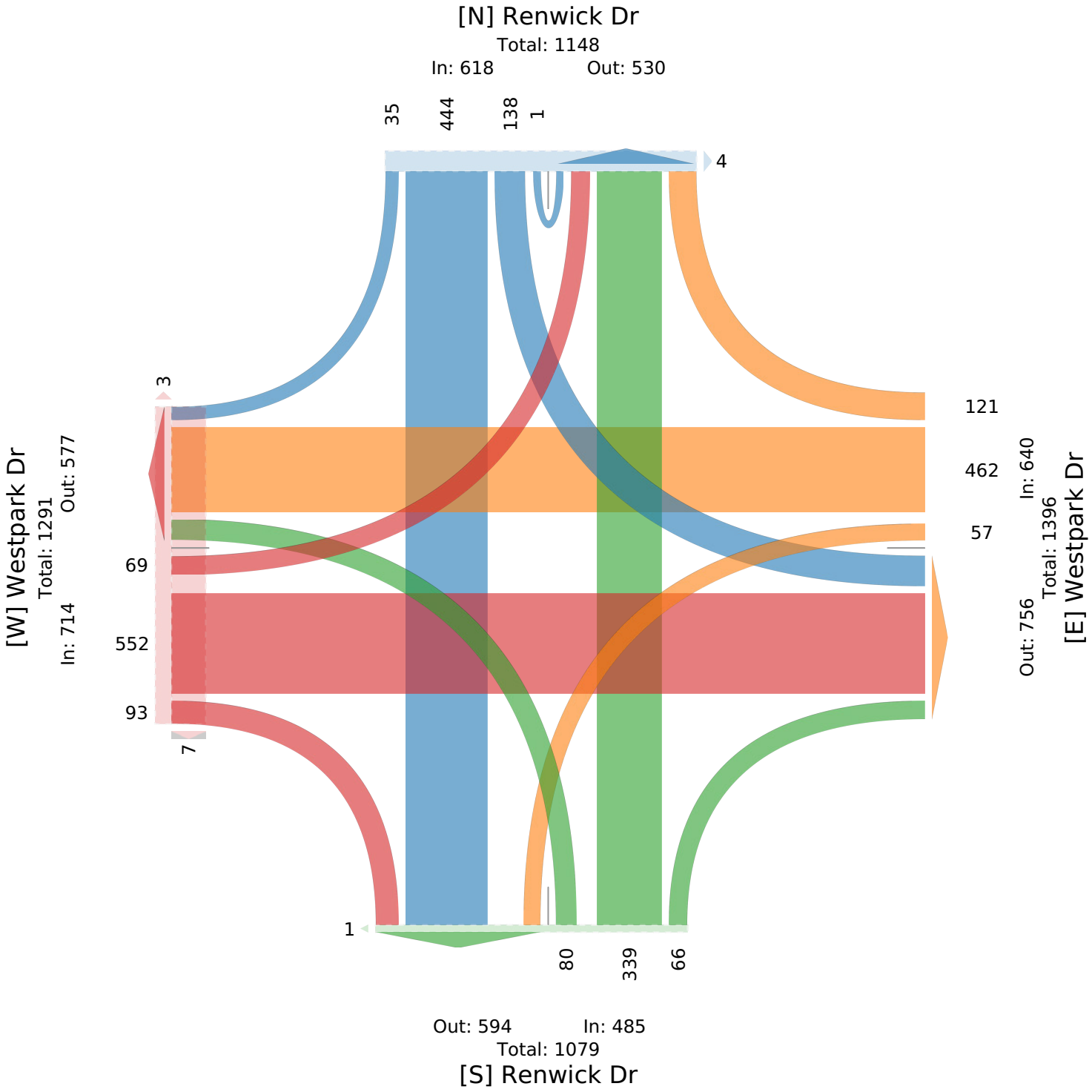
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Renwick Dr Northbound						Renwick Dr Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	19	107	13	0	**139**	1	40	117	9	1	**167**	0	27	144	26	0	**197**	1	19	108	30	0	**157**	0	**660**
4:30PM	21	71	27	0	**119**	0	51	105	8	0	**164**	4	18	140	21	0	**179**	2	12	124	27	0	**163**	0	**625**
4:45PM	18	85	14	0	**117**	0	23	90	10	0	**123**	0	9	139	27	0	**175**	3	14	125	33	0	**172**	0	**587**
5:00PM	22	76	12	0	**110**	0	24	132	8	0	**164**	0	15	129	19	0	**163**	4	12	105	31	0	**148**	0	**585**
Total	80	339	66	0	**485**	1	138	444	35	1	**618**	4	69	552	93	0	**714**	10	57	462	121	0	**640**	0	**2457**
% Approach	16.5%	69.9%	13.6%	0%	**-**	-	22.3%	71.8%	5.7%	0.2%	**-**	-	9.7%	77.3%	13.0%	0%	**-**	-	8.9%	72.2%	18.9%	0%	**-**	-	**-**
% Total	3.3%	13.8%	2.7%	0%	**19.7%**	-	5.6%	18.1%	1.4%	0%	**25.2%**	-	2.8%	22.5%	3.8%	0%	**29.1%**	-	2.3%	18.8%	4.9%	0%	**26.0%**	-	**-**
PHF	0.909	0.792	0.611	-	**0.872**	-	0.676	0.841	0.875	0.250	**0.925**	-	0.639	0.958	0.861	-	**0.906**	-	0.750	0.924	0.917	-	**0.930**	-	0.931
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	78	332	66	0	**476**	-	135	429	34	1	**599**	-	68	545	91	0	**704**	-	56	457	116	0	**629**	-	2408
% Lights	97.5%	97.9%	100%	0%	**98.1%**	-	97.8%	96.6%	97.1%	100%	**96.9%**	-	98.6%	98.7%	97.8%	0%	**98.6%**	-	98.2%	98.9%	95.9%	0%	**98.3%**	-	98.0%
Single-Unit Trucks	1	2	0	0	**3**	-	0	6	1	0	**7**	-	1	3	2	0	**6**	-	0	3	3	0	**6**	-	22
% Single-Unit Trucks	1.3%	0.6%	0%	0%	**0.6%**	-	0%	1.4%	2.9%	0%	**1.1%**	-	1.4%	0.5%	2.2%	0%	**0.8%**	-	0%	0.6%	2.5%	0%	**0.9%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Buses	1	4	0	0	**5**	-	3	8	0	0	**11**	-	0	2	0	0	**2**	-	1	1	2	0	**4**	-	22
% Buses	1.3%	1.2%	0%	0%	**1.0%**	-	2.2%	1.8%	0%	0%	**1.8%**	-	0%	0.4%	0%	0%	**0.3%**	-	1.8%	0.2%	1.7%	0%	**0.6%**	-	0.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	8	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Renwick Dr - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867313, Location: 29.724301, -95.484298

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Chimney Rick Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

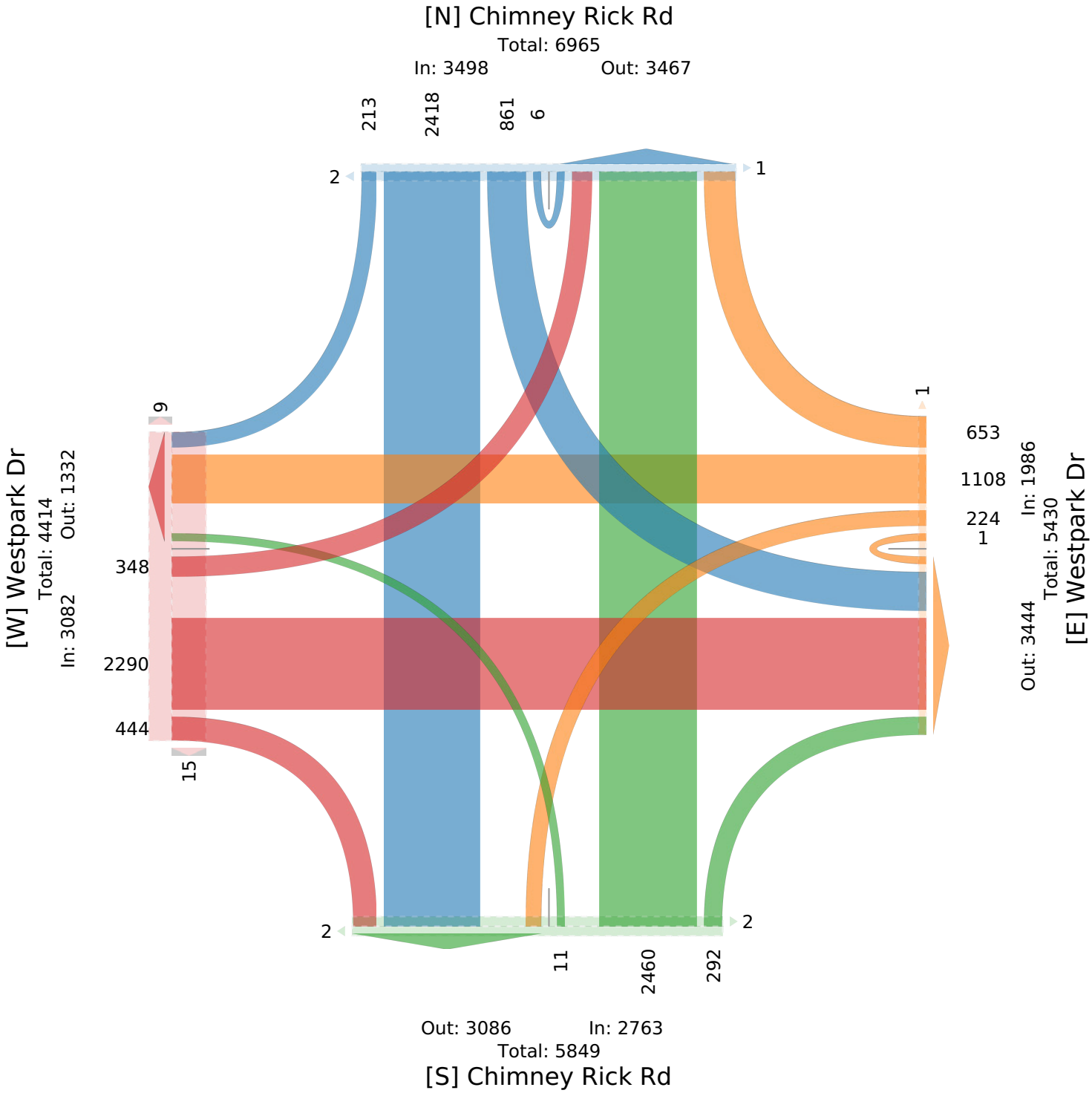
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Chimney Rick Rd						Chimney Rick Rd						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	152	26	0	**178**	0	45	134	11	0	**190**	0	19	129	23	0	**171**	0	4	13	17	1	**35**	0	**574**
7:15AM	0	193	25	0	**218**	0	59	139	10	0	**208**	0	26	163	24	0	**213**	3	3	26	16	0	**45**	0	**684**
7:30AM	0	202	35	0	**237**	0	74	122	6	0	**202**	0	17	183	21	0	**221**	1	3	43	14	0	**60**	0	**720**
7:45AM	0	205	25	0	**230**	1	63	142	7	1	**213**	0	18	188	16	0	**222**	2	17	34	19	0	**70**	0	**735**
Hourly Total	0	752	111	0	**863**	1	241	537	34	1	**813**	0	80	663	84	0	**827**	6	27	116	66	1	**210**	0	**2713**
8:00AM	0	169	25	0	**194**	0	69	151	8	0	**228**	0	22	179	25	0	**226**	2	11	41	31	0	**83**	0	**731**
8:15AM	0	165	22	0	**187**	0	57	123	6	1	**187**	0	15	187	23	0	**225**	1	11	27	37	0	**75**	0	**674**
8:30AM	4	168	25	0	**197**	0	54	111	7	0	**172**	0	15	161	20	0	**196**	0	10	42	31	0	**83**	0	**648**
8:45AM	1	181	25	0	**207**	0	46	156	8	0	**210**	0	18	125	26	0	**169**	3	6	40	33	0	**79**	0	**665**
Hourly Total	5	683	97	0	**785**	0	226	541	29	1	**797**	0	70	652	94	0	**816**	6	38	150	132	0	**320**	0	**2718**
4:00PM	0	133	14	0	**147**	0	42	132	21	0	**195**	0	19	123	28	0	**170**	3	21	101	57	0	**179**	0	**691**
4:15PM	2	123	6	0	**131**	1	35	171	18	0	**224**	0	29	117	56	0	**202**	0	19	125	47	0	**191**	0	**748**
4:30PM	0	139	12	0	**151**	1	46	173	30	0	**249**	0	25	142	34	0	**201**	4	21	95	48	0	**164**	0	**765**
4:45PM	1	124	8	0	**133**	0	55	169	17	3	**244**	1	28	136	25	0	**189**	0	21	111	60	0	**192**	0	**758**
Hourly Total	3	519	40	0	**562**	2	178	645	86	3	**912**	1	101	518	143	0	**762**	7	82	432	212	0	**726**	0	**2962**
5:00PM	2	118	14	0	**134**	0	47	156	16	0	**219**	0	30	121	30	0	**181**	2	18	104	45	0	**167**	0	**701**
5:15PM	1	123	8	0	**132**	0	61	155	16	1	**233**	0	30	129	37	0	**196**	2	22	114	60	0	**196**	1	**757**
5:30PM	0	129	11	0	**140**	0	59	187	16	0	**262**	2	18	102	27	0	**147**	1	21	110	66	0	**197**	0	**746**
5:45PM	0	136	11	0	**147**	1	49	197	16	0	**262**	0	19	105	29	0	**153**	0	16	82	72	0	**170**	0	**732**
Hourly Total	3	506	44	0	**553**	1	216	695	64	1	**976**	2	97	457	123	0	**677**	5	77	410	243	0	**730**	1	**2936**
Total	11	2460	292	0	**2763**	4	861	2418	213	6	**3498**	3	348	2290	444	0	**3082**	24	224	1108	653	1	**1986**	1	**11329**
% Approach	0.4%	89.0%	10.6%	0%	**-**	-	24.6%	69.1%	6.1%	0.2%	**-**	-	11.3%	74.3%	14.4%	0%	**-**	-	11.3%	55.8%	32.9%	0.1%	**-**	-	-
% Total	0.1%	21.7%	2.6%	0%	**24.4%**	-	7.6%	21.3%	1.9%	0.1%	**30.9%**	-	3.1%	20.2%	3.9%	0%	**27.2%**	-	2.0%	9.8%	5.8%	0%	**17.5%**	-	-
Motorcycles	0	1	0	0	**1**	-	1	1	0	0	**2**	-	1	3	0	0	**4**	-	1	0	1	0	**2**	-	9
% Motorcycles	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0.1%**	-	0.3%	0.1%	0%	0%	**0.1%**	-	0.4%	0%	0.2%	0%	**0.1%**	-	0.1%
Lights	10	2397	286	0	**2693**	-	844	2364	192	6	**3406**	-	333	2243	433	0	**3009**	-	222	1092	639	1	**1954**	-	11062
% Lights	90.9%	97.4%	97.9%	0%	**97.5%**	-	98.0%	97.8%	90.1%	100%	**97.4%**	-	95.7%	97.9%	97.5%	0%	**97.6%**	-	99.1%	98.6%	97.9%	100%	**98.4%**	-	97.6%
Single-Unit Trucks	1	33	5	0	**39**	-	8	24	11	0	**43**	-	10	30	3	0	**43**	-	0	10	10	0	**20**	-	145
% Single-Unit Trucks	9.1%	1.3%	1.7%	0%	**1.4%**	-	0.9%	1.0%	5.2%	0%	**1.2%**	-	2.9%	1.3%	0.7%	0%	**1.4%**	-	0%	0.9%	1.5%	0%	**1.0%**	-	1.3%
Articulated Trucks	0	6	0	0	**6**	-	7	4	10	0	**21**	-	1	6	0	0	**7**	-	0	1	3	0	**4**	-	38
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0.8%	0.2%	4.7%	0%	**0.6%**	-	0.3%	0.3%	0%	0%	**0.2%**	-	0%	0.1%	0.5%	0%	**0.2%**	-	0.3%
Buses	0	23	1	0	**24**	-	1	25	0	0	**26**	-	3	8	8	0	**19**	-	1	5	0	0	**6**	-	75
% Buses	0%	0.9%	0.3%	0%	**0.9%**	-	0.1%	1.0%	0%	0%	**0.7%**	-	0.9%	0.3%	1.8%	0%	**0.6%**	-	0.4%	0.5%	0%	0%	**0.3%**	-	0.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	19	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	25.0%	-	-	-	-	-	100%	-	-	-	-	-	79.2%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	75.0%	-	-	-	-	-	0%	-	-	-	-	-	20.8%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Chimney Rick Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Chimney Rick Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Chimney Rick Rd						Chimney Rick Rd						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	0	193	25	0	**218**	0	59	139	10	0	**208**	0	26	163	24	0	**213**	3	3	26	16	0	**45**	0	**684**
7:30AM	0	202	35	0	**237**	0	74	122	6	0	**202**	0	17	183	21	0	**221**	1	3	43	14	0	**60**	0	**720**
7:45AM	0	205	25	0	**230**	1	63	142	7	1	**213**	0	18	188	16	0	**222**	2	17	34	19	0	**70**	0	**735**
8:00AM	0	169	25	0	**194**	0	69	151	8	0	**228**	0	22	179	25	0	**226**	2	11	41	31	0	**83**	0	**731**
Total	0	769	110	0	**879**	1	265	554	31	1	**851**	0	83	713	86	0	**882**	8	34	144	80	0	**258**	0	**2870**
% Approach	0%	87.5%	12.5%	0%	**-**	-	31.1%	65.1%	3.6%	0.1%	**-**	-	9.4%	80.8%	9.8%	0%	**-**	-	13.2%	55.8%	31.0%	0%	**-**	-	-
% Total	0%	26.8%	3.8%	0%	**30.6%**	-	9.2%	19.3%	1.1%	0%	**29.7%**	-	2.9%	24.8%	3.0%	0%	**30.7%**	-	1.2%	5.0%	2.8%	0%	**9.0%**	-	-
PHF	-	0.938	0.786	-	**0.927**	-	0.895	0.917	0.775	0.250	**0.933**	-	0.798	0.948	0.860	-	**0.976**	-	0.500	0.837	0.645	-	**0.777**	-	0.976
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	749	107	0	**856**	-	261	534	25	1	**821**	-	82	694	82	0	**858**	-	34	139	79	0	**252**	-	2787
% Lights	0%	97.4%	97.3%	0%	**97.4%**	-	98.5%	96.4%	80.6%	100%	**96.5%**	-	98.8%	97.3%	95.3%	0%	**97.3%**	-	100%	96.5%	98.8%	0%	**97.7%**	-	97.1%
Single-Unit Trucks	0	12	2	0	**14**	-	3	6	4	0	**13**	-	1	11	1	0	**13**	-	0	5	0	0	**5**	-	45
% Single-Unit Trucks	0%	1.6%	1.8%	0%	**1.6%**	-	1.1%	1.1%	12.9%	0%	**1.5%**	-	1.2%	1.5%	1.2%	0%	**1.5%**	-	0%	3.5%	0%	0%	**1.9%**	-	1.6%
Articulated Trucks	0	2	0	0	**2**	-	1	3	2	0	**6**	-	0	5	0	0	**5**	-	0	0	1	0	**1**	-	14
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0.4%	0.5%	6.5%	0%	**0.7%**	-	0%	0.7%	0%	0%	**0.6%**	-	0%	0%	1.3%	0%	**0.4%**	-	0.5%
Buses	0	6	1	0	**7**	-	0	11	0	0	**11**	-	0	2	3	0	**5**	-	0	0	0	0	**0**	-	23
% Buses	0%	0.8%	0.9%	0%	**0.8%**	-	0%	2.0%	0%	0%	**1.3%**	-	0%	0.3%	3.5%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	62.5%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	37.5%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Chimney Rick Rd - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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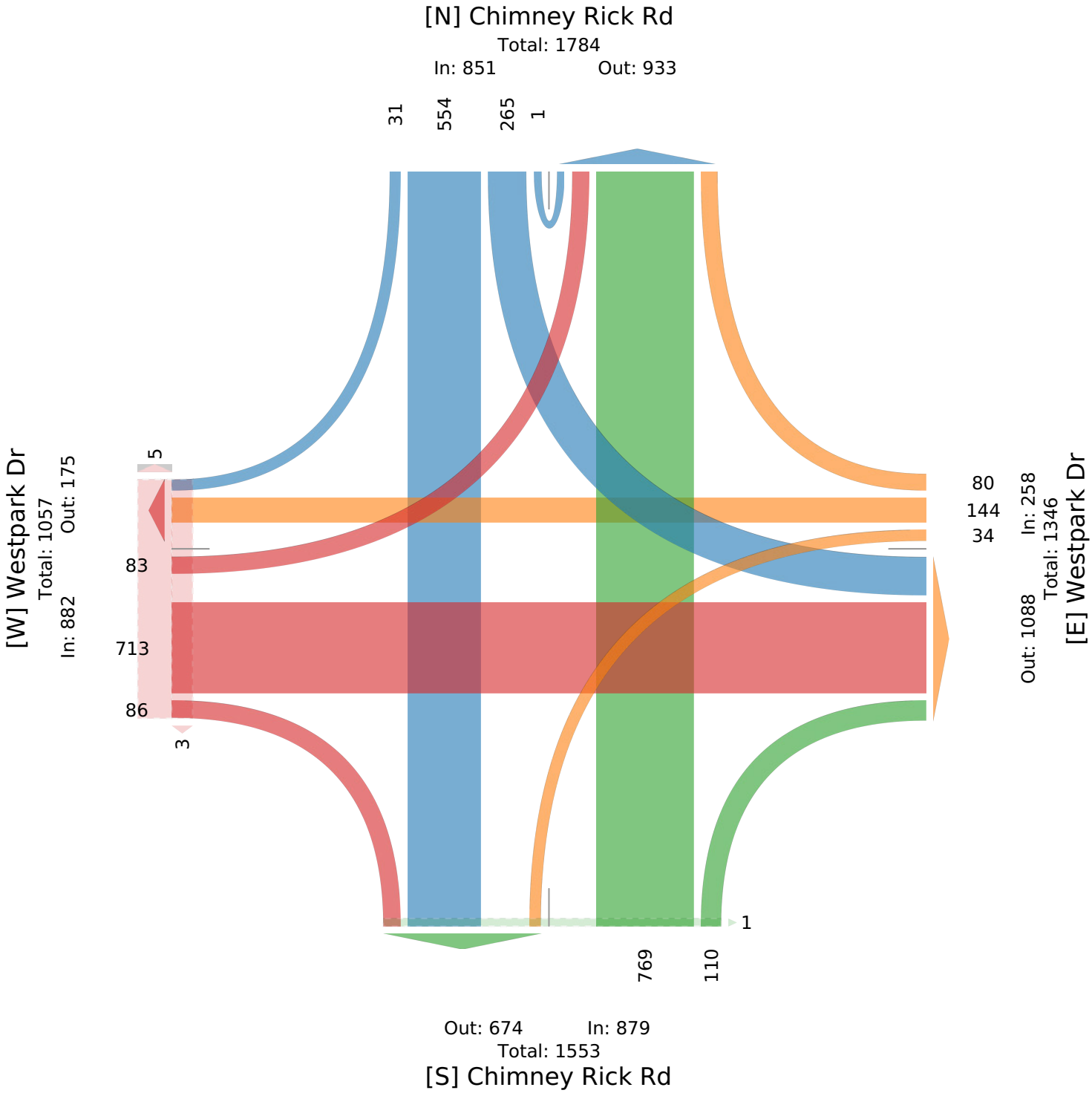


Westpark Dr at Chimney Rick Rd - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

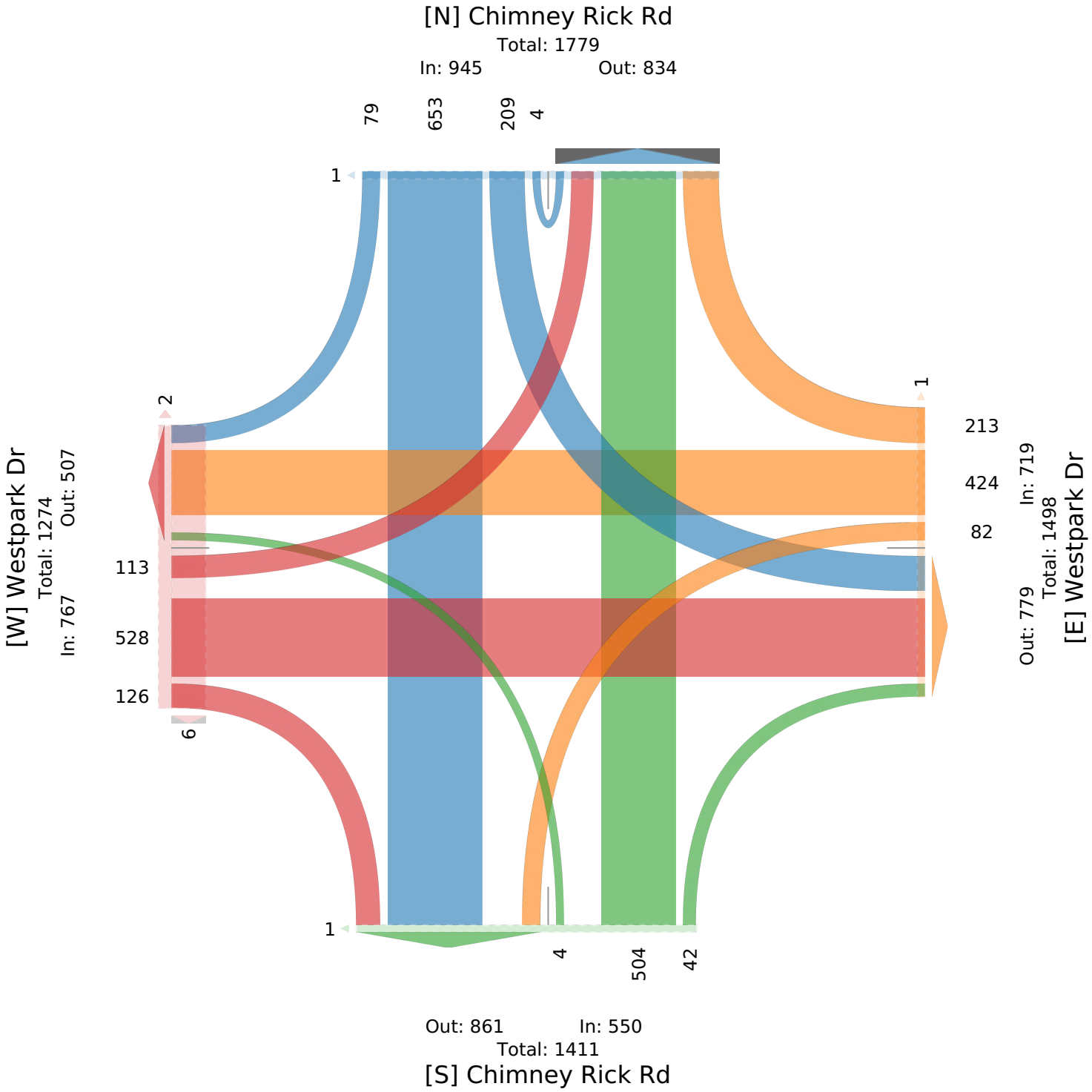
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Chimney Rick Rd						Chimney Rick Rd						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:30PM	0	139	12	0	**151**	1	46	173	30	0	**249**	0	25	142	34	0	**201**	4	21	95	48	0	**164**	0	**765**
4:45PM	1	124	8	0	**133**	0	55	169	17	3	**244**	1	28	136	25	0	**189**	0	21	111	60	0	**192**	0	**758**
5:00PM	2	118	14	0	**134**	0	47	156	16	0	**219**	0	30	121	30	0	**181**	2	18	104	45	0	**167**	0	**701**
5:15PM	1	123	8	0	**132**	0	61	155	16	1	**233**	0	30	129	37	0	**196**	2	22	114	60	0	**196**	1	**757**
Total	4	504	42	0	**550**	1	209	653	79	4	**945**	1	113	528	126	0	**767**	8	82	424	213	0	**719**	1	**2981**
% Approach	0.7%	91.6%	7.6%	0%	**-**	-	22.1%	69.1%	8.4%	0.4%	**-**	-	14.7%	68.8%	16.4%	0%	**-**	-	11.4%	59.0%	29.6%	0%	**-**	-	-
% Total	0.1%	16.9%	1.4%	0%	**18.5%**	-	7.0%	21.9%	2.7%	0.1%	**31.7%**	-	3.8%	17.7%	4.2%	0%	**25.7%**	-	2.8%	14.2%	7.1%	0%	**24.1%**	-	-
PHF	0.500	0.906	0.750	-	**0.911**	-	0.857	0.944	0.658	0.333	**0.949**	-	0.942	0.930	0.851	-	**0.954**	-	0.932	0.930	0.888	-	**0.917**	-	0.974
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0.5%	0%	**0.1%**	-	0.1%
Lights	4	491	42	0	**537**	-	206	647	74	4	**931**	-	109	524	125	0	**758**	-	81	421	209	0	**711**	-	2937
% Lights	100%	97.4%	100%	0%	**97.6%**	-	98.6%	99.1%	93.7%	100%	**98.5%**	-	96.5%	99.2%	99.2%	0%	**98.8%**	-	98.8%	99.3%	98.1%	0%	**98.9%**	-	98.5%
Single-Unit Trucks	0	5	0	0	**5**	-	0	2	2	0	**4**	-	4	2	0	0	**6**	-	0	2	3	0	**5**	-	20
% Single-Unit Trucks	0%	1.0%	0%	0%	**0.9%**	-	0%	0.3%	2.5%	0%	**0.4%**	-	3.5%	0.4%	0%	0%	**0.8%**	-	0%	0.5%	1.4%	0%	**0.7%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	3	0	3	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	1.4%	0%	3.8%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	8	0	0	**8**	-	0	4	0	0	**4**	-	0	1	1	0	**2**	-	1	1	0	0	**2**	-	16
% Buses	0%	1.6%	0%	0%	**1.5%**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	0.2%	0.8%	0%	**0.3%**	-	1.2%	0.2%	0%	0%	**0.3%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	87.5%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	12.5%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Chimney Rick Rd - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867314, Location: 29.724919, -95.476495

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at S Rice Ave - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867315, Location: 29.72559, -95.468185

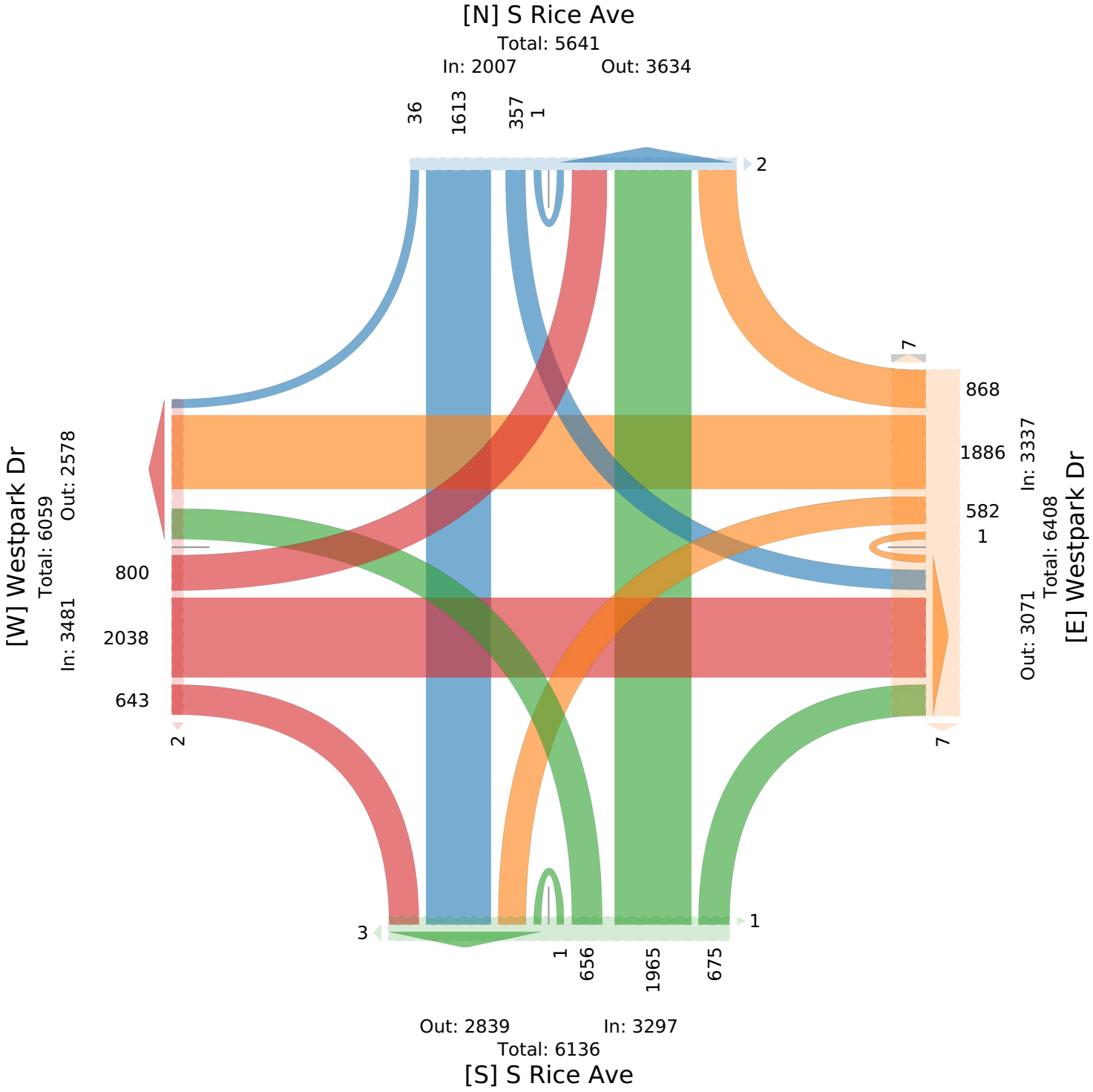
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	S Rice Ave Northbound						S Rice Ave Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-02 7:00AM	10	58	31	0	**99**	0	17	24	1	0	**42**	0	34	140	41	0	**215**	0	22	38	24	0	**84**	0	**440**
7:15AM	22	69	26	0	**117**	1	19	57	0	0	**76**	0	40	171	31	0	**242**	0	22	39	25	0	**86**	0	**521**
7:30AM	24	88	41	0	**153**	0	24	61	0	0	**85**	0	51	176	46	0	**273**	0	21	57	33	0	**111**	0	**622**
7:45AM	34	141	37	0	**212**	0	18	67	0	0	**85**	0	61	174	31	0	**266**	0	19	86	36	0	**141**	0	**704**
Hourly Total	90	356	135	0	**581**	1	78	209	1	0	**288**	0	186	661	149	0	**996**	0	84	220	118	0	**422**	0	**2287**
8:00AM	26	139	43	0	**208**	0	20	96	0	0	**116**	0	70	161	43	0	**274**	0	13	35	27	0	**75**	0	**673**
8:15AM	30	128	36	0	**194**	0	15	92	2	0	**109**	1	45	154	32	0	**231**	0	25	44	36	1	**106**	1	**640**
8:30AM	25	106	40	0	**171**	0	13	103	1	0	**117**	0	58	150	40	0	**248**	0	39	56	45	0	**140**	0	**676**
8:45AM	28	106	32	0	**166**	0	11	86	0	0	**97**	0	53	135	26	0	**214**	0	27	57	42	0	**126**	1	**603**
Hourly Total	109	479	151	0	**739**	0	59	377	3	0	**439**	1	226	600	141	0	**967**	0	104	192	150	1	**447**	2	**2592**
4:00PM	62	135	52	0	**249**	3	43	136	8	0	**187**	0	51	103	31	0	**185**	0	43	196	78	0	**317**	1	**938**
4:15PM	56	119	35	1	**211**	0	38	126	2	0	**166**	0	51	77	43	0	**171**	0	50	208	75	0	**333**	0	**881**
4:30PM	55	132	50	0	**237**	0	17	143	3	0	**163**	0	44	94	41	0	**179**	1	56	213	78	0	**347**	1	**926**
4:45PM	53	127	50	0	**230**	0	25	115	0	1	**141**	0	49	101	53	0	**203**	1	50	169	70	0	**289**	2	**863**
Hourly Total	226	513	187	1	**927**	3	123	520	13	1	**657**	0	195	375	168	0	**738**	2	199	786	301	0	**1286**	4	**3608**
5:00PM	61	145	55	0	**261**	0	26	142	6	0	**174**	1	45	102	51	0	**198**	0	60	178	71	0	**309**	2	**942**
5:15PM	53	161	53	0	**267**	0	21	124	8	0	**153**	0	56	103	37	0	**196**	0	48	191	72	0	**311**	3	**927**
5:30PM	56	153	46	0	**255**	0	29	113	4	0	**146**	0	49	104	56	0	**209**	0	38	153	92	0	**283**	2	**893**
5:45PM	61	158	48	0	**267**	0	21	128	1	0	**150**	0	43	93	41	0	**177**	0	49	166	64	0	**279**	1	**873**
Hourly Total	231	617	202	0	**1050**	0	97	507	19	0	**623**	1	193	402	185	0	**780**	0	195	688	299	0	**1182**	8	**3635**
Total	656	1965	675	1	**3297**	4	357	1613	36	1	**2007**	2	800	2038	643	0	**3481**	2	582	1886	868	1	**3337**	14	**12122**
% Approach	19.9%	59.6%	20.5%	0%	**-**	-	17.8%	80.4%	1.8%	0%	**-**	-	23.0%	58.5%	18.5%	0%	**-**	-	17.4%	56.5%	26.0%	0%	**-**	-	-
% Total	5.4%	16.2%	5.6%	0%	**27.2%**	-	2.9%	13.3%	0.3%	0%	**16.6%**	-	6.6%	16.8%	5.3%	0%	**28.7%**	-	4.8%	15.6%	7.2%	0%	**27.5%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1	2	1	0	**4**	-	0	0	0	0	**0**	-	5
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0%**	-	0.1%	0.1%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	649	1941	646	1	**3237**	-	349	1602	36	1	**1988**	-	793	1991	637	0	**3421**	-	557	1846	852	1	**3256**	-	11902
% Lights	98.9%	98.8%	95.7%	100%	**98.2%**	-	97.8%	99.3%	100%	100%	**99.1%**	-	99.1%	97.7%	99.1%	0%	**98.3%**	-	95.7%	97.9%	98.2%	100%	**97.6%**	-	98.2%
Single-Unit Trucks	5	12	8	0	**25**	-	1	3	0	0	**4**	-	3	25	4	0	**32**	-	4	16	3	0	**23**	-	84
% Single-Unit Trucks	0.8%	0.6%	1.2%	0%	**0.8%**	-	0.3%	0.2%	0%	0%	**0.2%**	-	0.4%	1.2%	0.6%	0%	**0.9%**	-	0.7%	0.8%	0.3%	0%	**0.7%**	-	0.7%
Articulated Trucks	1	2	5	0	**8**	-	0	0	0	0	**0**	-	0	8	1	0	**9**	-	0	7	4	0	**11**	-	28
% Articulated Trucks	0.2%	0.1%	0.7%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0.2%	0%	**0.3%**	-	0%	0.4%	0.5%	0%	**0.3%**	-	0.2%
Buses	1	10	16	0	**27**	-	7	7	0	0	**14**	-	3	12	0	0	**15**	-	21	17	9	0	**47**	-	103
% Buses	0.2%	0.5%	2.4%	0%	**0.8%**	-	2.0%	0.4%	0%	0%	**0.7%**	-	0.4%	0.6%	0%	0%	**0.4%**	-	3.6%	0.9%	1.0%	0%	**1.4%**	-	0.8%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	14	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at S Rice Ave - TMC
Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867315, Location: 29.72559, -95.468185

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at S Rice Ave - TMC

Thu Sep 2, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867315, Location: 29.72559, -95.468185

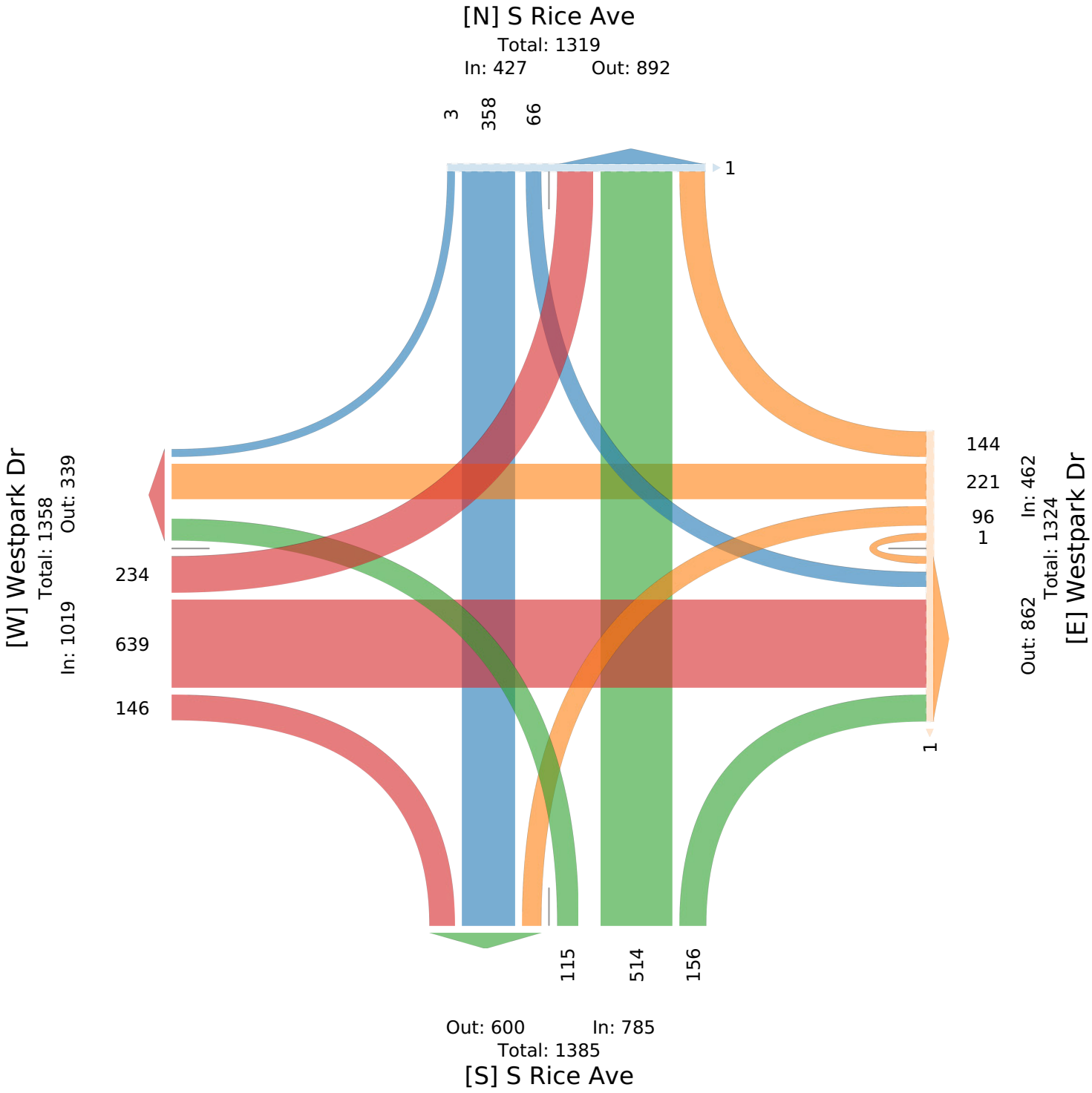
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	S Rice Ave						S Rice Ave						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-02 7:45AM	34	141	37	0	**212**	0	18	67	0	0	**85**	0	61	174	31	0	**266**	0	19	86	36	0	**141**	0	**704**
8:00AM	26	139	43	0	**208**	0	20	96	0	0	**116**	0	70	161	43	0	**274**	0	13	35	27	0	**75**	0	**673**
8:15AM	30	128	36	0	**194**	0	15	92	2	0	**109**	1	45	154	32	0	**231**	0	25	44	36	1	**106**	1	**640**
8:30AM	25	106	40	0	**171**	0	13	103	1	0	**117**	0	58	150	40	0	**248**	0	39	56	45	0	**140**	0	**676**
Total	115	514	156	0	**785**	0	66	358	3	0	**427**	1	234	639	146	0	**1019**	0	96	221	144	1	**462**	1	**2693**
% Approach	14.6%	65.5%	19.9%	0%	**-**	-	15.5%	83.8%	0.7%	0%	**-**	-	23.0%	62.7%	14.3%	0%	**-**	-	20.8%	47.8%	31.2%	0.2%	**-**	-	**-**
% Total	4.3%	19.1%	5.8%	0%	**29.1%**	-	2.5%	13.3%	0.1%	0%	**15.9%**	-	8.7%	23.7%	5.4%	0%	**37.8%**	-	3.6%	8.2%	5.3%	0%	**17.2%**	-	**-**
PHF	0.846	0.911	0.907	-	**0.926**	-	0.825	0.869	0.375	-	**0.912**	-	0.836	0.918	0.849	-	**0.930**	-	0.615	0.642	0.800	0.250	**0.819**	-	0.956
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0.7%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	111	506	145	0	**762**	-	64	355	3	0	**422**	-	233	622	143	0	**998**	-	88	212	141	1	**442**	-	2624
% Lights	96.5%	98.4%	92.9%	0%	**97.1%**	-	97.0%	99.2%	100%	0%	**98.8%**	-	99.6%	97.3%	97.9%	0%	**97.9%**	-	91.7%	95.9%	97.9%	100%	**95.7%**	-	97.4%
Single-Unit Trucks	4	3	6	0	**13**	-	0	1	0	0	**1**	-	1	7	1	0	**9**	-	1	2	1	0	**4**	-	27
% Single-Unit Trucks	3.5%	0.6%	3.8%	0%	**1.7%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.4%	1.1%	0.7%	0%	**0.9%**	-	1.0%	0.9%	0.7%	0%	**0.9%**	-	1.0%
Articulated Trucks	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	5	1	0	**6**	-	0	3	0	0	**3**	-	11
% Articulated Trucks	0%	0.2%	0.6%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.8%	0.7%	0%	**0.6%**	-	0%	1.4%	0%	0%	**0.6%**	-	0.4%
Buses	0	4	4	0	**8**	-	2	2	0	0	**4**	-	0	4	0	0	**4**	-	7	4	2	0	**13**	-	29
% Buses	0%	0.8%	2.6%	0%	**1.0%**	-	3.0%	0.6%	0%	0%	**0.9%**	-	0%	0.6%	0%	0%	**0.4%**	-	7.3%	1.8%	1.4%	0%	**2.8%**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at S Rice Ave - TMC
Thu Sep 2, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867315, Location: 29.72559, -95.468185

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at S Rice Ave - TMC

Thu Sep 2, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867315, Location: 29.72559, -95.468185

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	S Rice Ave						S Rice Ave						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-02 4:30PM	55	132	50	0	**237**	0	17	143	3	0	**163**	0	44	94	41	0	**179**	1	56	213	78	0	**347**	1	**926**
4:45PM	53	127	50	0	**230**	0	25	115	0	1	**141**	0	49	101	53	0	**203**	1	50	169	70	0	**289**	2	**863**
5:00PM	61	145	55	0	**261**	0	26	142	6	0	**174**	1	45	102	51	0	**198**	0	60	178	71	0	**309**	2	**942**
5:15PM	53	161	53	0	**267**	0	21	124	8	0	**153**	0	56	103	37	0	**196**	0	48	191	72	0	**311**	3	**927**
Total	222	565	208	0	**995**	0	89	524	17	1	**631**	1	194	400	182	0	**776**	2	214	751	291	0	**1256**	8	**3658**
% Approach	22.3%	56.8%	20.9%	0%	**-**	-	14.1%	83.0%	2.7%	0.2%	**-**	-	25.0%	51.5%	23.5%	0%	**-**	-	17.0%	59.8%	23.2%	0%	**-**	-	**-**
% Total	6.1%	15.4%	5.7%	0%	**27.2%**	-	2.4%	14.3%	0.5%	0%	**17.2%**	-	5.3%	10.9%	5.0%	0%	**21.2%**	-	5.9%	20.5%	8.0%	0%	**34.3%**	-	**-**
PHF	0.910	0.877	0.945	-	**0.932**	-	0.856	0.916	0.531	0.250	**0.907**	-	0.866	0.971	0.858	-	**0.956**	-	0.892	0.881	0.933	-	**0.905**	-	0.971
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	222	562	203	0	**987**	-	88	521	17	1	**627**	-	193	390	182	0	**765**	-	208	742	288	0	**1238**	-	3617
% Lights	100%	99.5%	97.6%	0%	**99.2%**	-	98.9%	99.4%	100%	100%	**99.4%**	-	99.5%	97.5%	100%	0%	**98.6%**	-	97.2%	98.8%	99.0%	0%	**98.6%**	-	98.9%
Single-Unit Trucks	0	2	0	0	**2**	-	0	2	0	0	**2**	-	1	6	0	0	**7**	-	2	3	1	0	**6**	-	17
% Single-Unit Trucks	0%	0.4%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.5%	1.5%	0%	0%	**0.9%**	-	0.9%	0.4%	0.3%	0%	**0.5%**	-	0.5%
Articulated Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	3	0	0	**3**	-	5
% Articulated Trucks	0%	0%	0.5%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0.4%	0%	0%	**0.2%**	-	0.1%
Buses	0	1	4	0	**5**	-	1	1	0	0	**2**	-	0	2	0	0	**2**	-	4	3	2	0	**9**	-	18
% Buses	0%	0.2%	1.9%	0%	**0.5%**	-	1.1%	0.2%	0%	0%	**0.3%**	-	0%	0.5%	0%	0%	**0.3%**	-	1.9%	0.4%	0.7%	0%	**0.7%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at S Rice Ave - TMC

Thu Sep 2, 2021

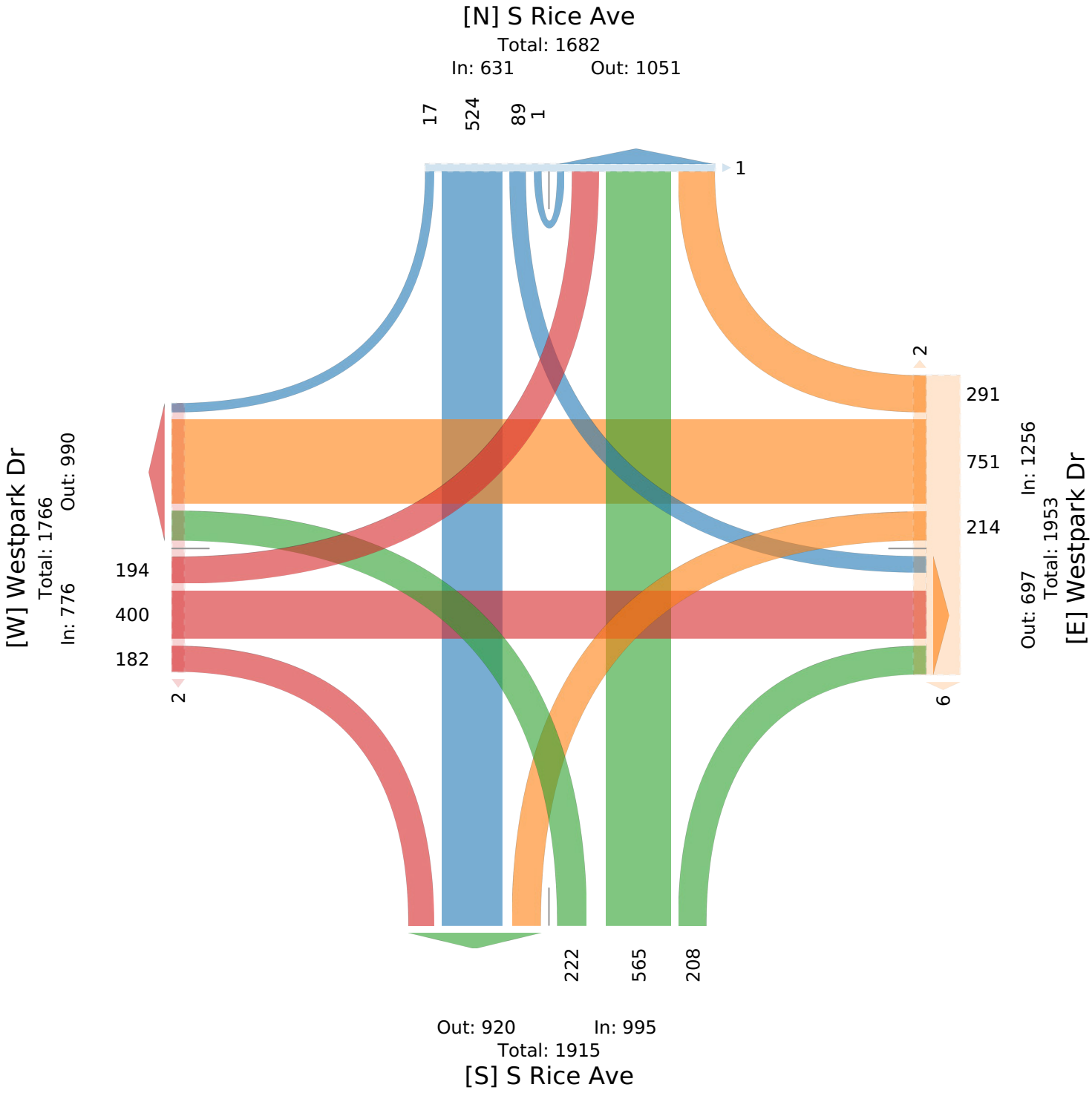
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 867315, Location: 29.72559, -95.468185

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 610 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

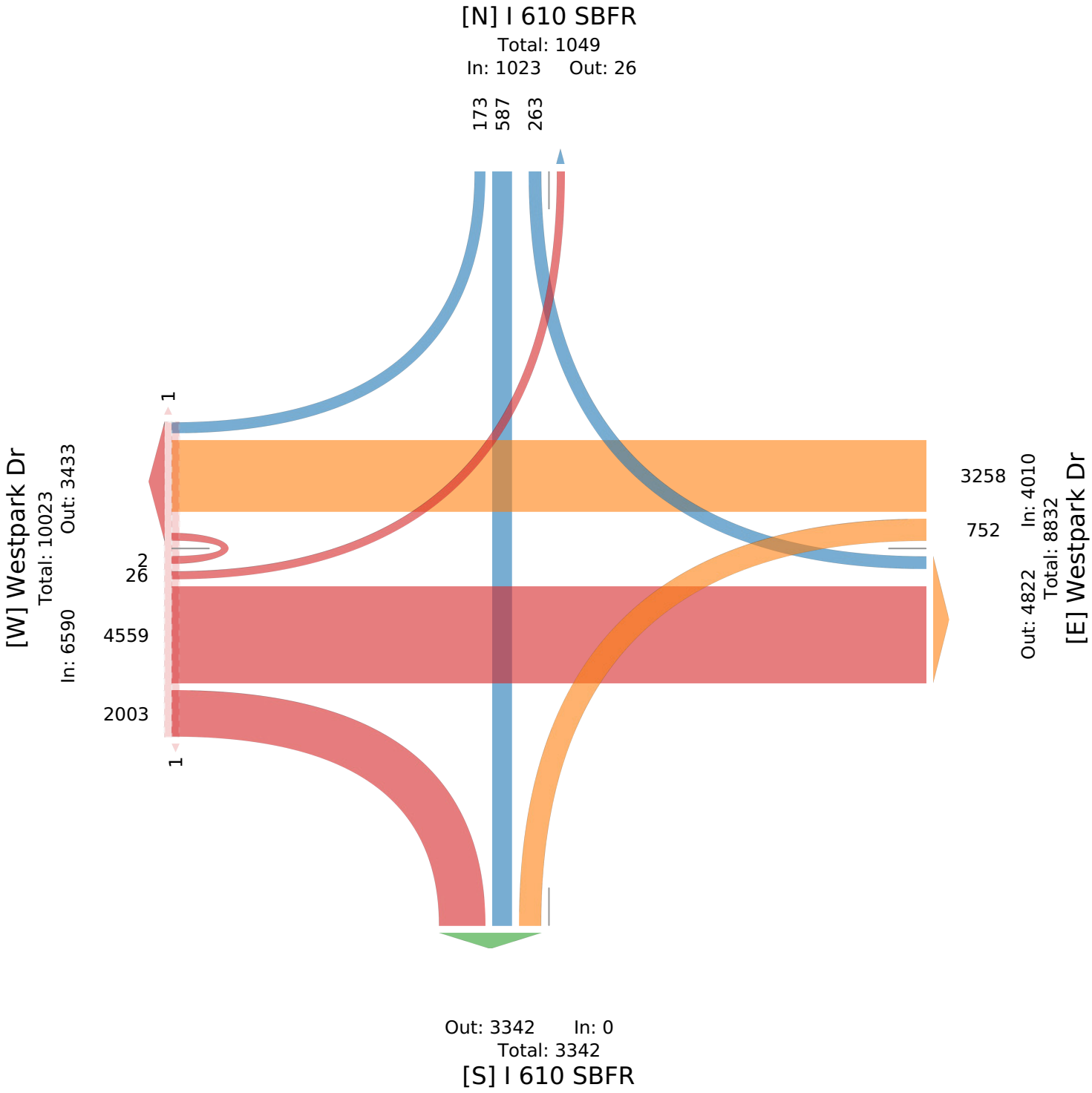
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I 610 SBFR Northbound						I 610 SBFR Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	0	0	0	**0**	0	13	33	6	0	**52**	0	1	301	141	0	**443**	0	40	70	0	0	**110**	0	**605**
7:15AM	0	0	0	0	**0**	0	7	32	3	0	**42**	0	1	324	164	0	**489**	0	35	83	0	0	**118**	0	**649**
7:30AM	0	0	0	0	**0**	0	14	27	3	0	**44**	0	3	376	168	0	**547**	1	39	81	0	0	**120**	0	**711**
7:45AM	0	0	0	0	**0**	0	21	33	6	0	**60**	0	1	411	177	0	**589**	0	40	110	0	0	**150**	0	**799**
Hourly Total	0	0	0	0	**0**	0	55	125	18	0	**198**	0	6	1412	650	0	**2068**	1	154	344	0	0	**498**	0	**2764**
8:00AM	0	0	0	0	**0**	0	24	26	6	0	**56**	0	2	384	155	0	**541**	1	48	124	0	0	**172**	0	**769**
8:15AM	0	0	0	0	**0**	0	25	27	10	0	**62**	0	3	401	116	0	**520**	0	39	125	0	0	**164**	0	**746**
8:30AM	0	0	0	0	**0**	0	26	18	7	0	**51**	0	2	399	125	1	**527**	0	39	91	0	0	**130**	0	**708**
8:45AM	0	0	0	0	**0**	0	13	20	8	0	**41**	0	1	331	118	0	**450**	0	40	112	0	0	**152**	0	**643**
Hourly Total	0	0	0	0	**0**	0	88	91	31	0	**210**	0	8	1515	514	1	**2038**	1	166	452	0	0	**618**	0	**2866**
4:00PM	0	0	0	0	**0**	0	16	41	18	0	**75**	0	1	231	127	0	**359**	0	61	305	0	0	**366**	0	**800**
4:15PM	0	0	0	0	**0**	0	10	60	10	0	**80**	0	2	243	146	0	**391**	0	91	321	0	0	**412**	0	**883**
4:30PM	0	0	0	0	**0**	0	12	42	26	0	**80**	0	2	217	105	0	**324**	0	53	307	0	0	**360**	0	**764**
4:45PM	0	0	0	0	**0**	0	19	44	18	0	**81**	0	2	208	89	0	**299**	0	42	317	0	0	**359**	0	**739**
Hourly Total	0	0	0	0	**0**	0	57	187	72	0	**316**	0	7	899	467	0	**1373**	0	247	1250	0	0	**1497**	0	**3186**
5:00PM	0	0	0	0	**0**	0	16	50	15	0	**81**	0	1	190	78	0	**269**	0	50	296	0	0	**346**	0	**696**
5:15PM	0	0	0	0	**0**	0	11	52	14	0	**77**	0	1	184	86	1	**272**	0	50	303	0	0	**353**	0	**702**
5:30PM	0	0	0	0	**0**	0	16	39	6	0	**61**	0	2	184	101	0	**287**	0	37	336	0	0	**373**	0	**721**
5:45PM	0	0	0	0	**0**	0	20	43	17	0	**80**	0	1	175	107	0	**283**	0	48	277	0	0	**325**	0	**688**
Hourly Total	0	0	0	0	**0**	0	63	184	52	0	**299**	0	5	733	372	1	**1111**	0	185	1212	0	0	**1397**	0	**2807**
Total	0	0	0	0	**0**	0	263	587	173	0	**1023**	0	26	4559	2003	2	**6590**	2	752	3258	0	0	**4010**	0	**11623**
% Approach	0%	0%	0%	0%	**-**	-	25.7%	57.4%	16.9%	0%	**-**	-	0.4%	69.2%	30.4%	0%	**-**	-	18.8%	81.2%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	2.3%	5.1%	1.5%	0%	**8.8%**	-	0.2%	39.2%	17.2%	0%	**56.7%**	-	6.5%	28.0%	0%	0%	**34.5%**	-	-
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	3	1	0	**4**	-	1	0	0	0	**1**	-	6
% Motorcycles	0%	0%	0%	0%	**-**	-	0.4%	0%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	0	**0**	-	260	583	150	0	**993**	-	5	4471	1954	2	**6432**	-	722	3213	0	0	**3935**	-	11360
% Lights	0%	0%	0%	0%	**-**	-	98.9%	99.3%	86.7%	0%	**97.1%**	-	19.2%	98.1%	97.6%	100%	**97.6%**	-	96.0%	98.6%	0%	0%	**98.1%**	-	97.7%
Single-Unit Trucks	0	0	0	0	**0**	-	0	4	2	0	**6**	-	1	54	30	0	**85**	-	12	19	0	0	**31**	-	122
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0.7%	1.2%	0%	**0.6%**	-	3.8%	1.2%	1.5%	0%	**1.3%**	-	1.6%	0.6%	0%	0%	**0.8%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	2	0	0	0	**2**	-	0	19	8	0	**27**	-	6	10	0	0	**16**	-	45
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0.8%	0%	0%	0%	**0.2%**	-	0%	0.4%	0.4%	0%	**0.4%**	-	0.8%	0.3%	0%	0%	**0.4%**	-	0.4%
Buses	0	0	0	0	**0**	-	0	0	21	0	**21**	-	20	12	10	0	**42**	-	11	16	0	0	**27**	-	90
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	12.1%	0%	**2.1%**	-	76.9%	0.3%	0.5%	0%	**0.6%**	-	1.5%	0.5%	0%	0%	**0.7%**	-	0.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 SBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 610 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 610 SBFR						I 610 SBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	0	0	0	**0**	0	14	27	3	0	**44**	0	3	376	168	0	**547**	1	39	81	0	0	**120**	0	**711**
7:45AM	0	0	0	0	**0**	0	21	33	6	0	**60**	0	1	411	177	0	**589**	0	40	110	0	0	**150**	0	**799**
8:00AM	0	0	0	0	**0**	0	24	26	6	0	**56**	0	2	384	155	0	**541**	1	48	124	0	0	**172**	0	**769**
8:15AM	0	0	0	0	**0**	0	25	27	10	0	**62**	0	3	401	116	0	**520**	0	39	125	0	0	**164**	0	**746**
Total	0	0	0	0	**0**	0	84	113	25	0	**222**	0	9	1572	616	0	**2197**	2	166	440	0	0	**606**	0	**3025**
% Approach	0%	0%	0%	0%	**-**	-	37.8%	50.9%	11.3%	0%	**-**	-	0.4%	71.6%	28.0%	0%	**-**	-	27.4%	72.6%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	2.8%	3.7%	0.8%	0%	**7.3%**	-	0.3%	52.0%	20.4%	0%	**72.6%**	-	5.5%	14.5%	0%	0%	**20.0%**	-	-
PHF	-	-	-	-	**-**	-	0.840	0.856	0.625	-	**0.895**	-	0.750	0.956	0.870	-	**0.933**	-	0.865	0.880	-	-	**0.881**	-	0.946
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	0	**0**	-	84	111	18	0	**213**	-	3	1546	606	0	**2155**	-	158	428	0	0	**586**	-	2954
% Lights	0%	0%	0%	0%	**-**	-	100%	98.2%	72.0%	0%	**95.9%**	-	33.3%	98.3%	98.4%	0%	**98.1%**	-	95.2%	97.3%	0%	0%	**96.7%**	-	97.7%
Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	1	17	6	0	**24**	-	5	4	0	0	**9**	-	35
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	1.8%	0%	0%	**0.9%**	-	11.1%	1.1%	1.0%	0%	**1.1%**	-	3.0%	0.9%	0%	0%	**1.5%**	-	1.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	6	2	0	**8**	-	1	5	0	0	**6**	-	14
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0.3%	0%	**0.4%**	-	0.6%	1.1%	0%	0%	**1.0%**	-	0.5%
Buses	0	0	0	0	**0**	-	0	0	7	0	**7**	-	5	2	1	0	**8**	-	2	3	0	0	**5**	-	20
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	28.0%	0%	**3.2%**	-	55.6%	0.1%	0.2%	0%	**0.4%**	-	1.2%	0.7%	0%	0%	**0.8%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 SBFR - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

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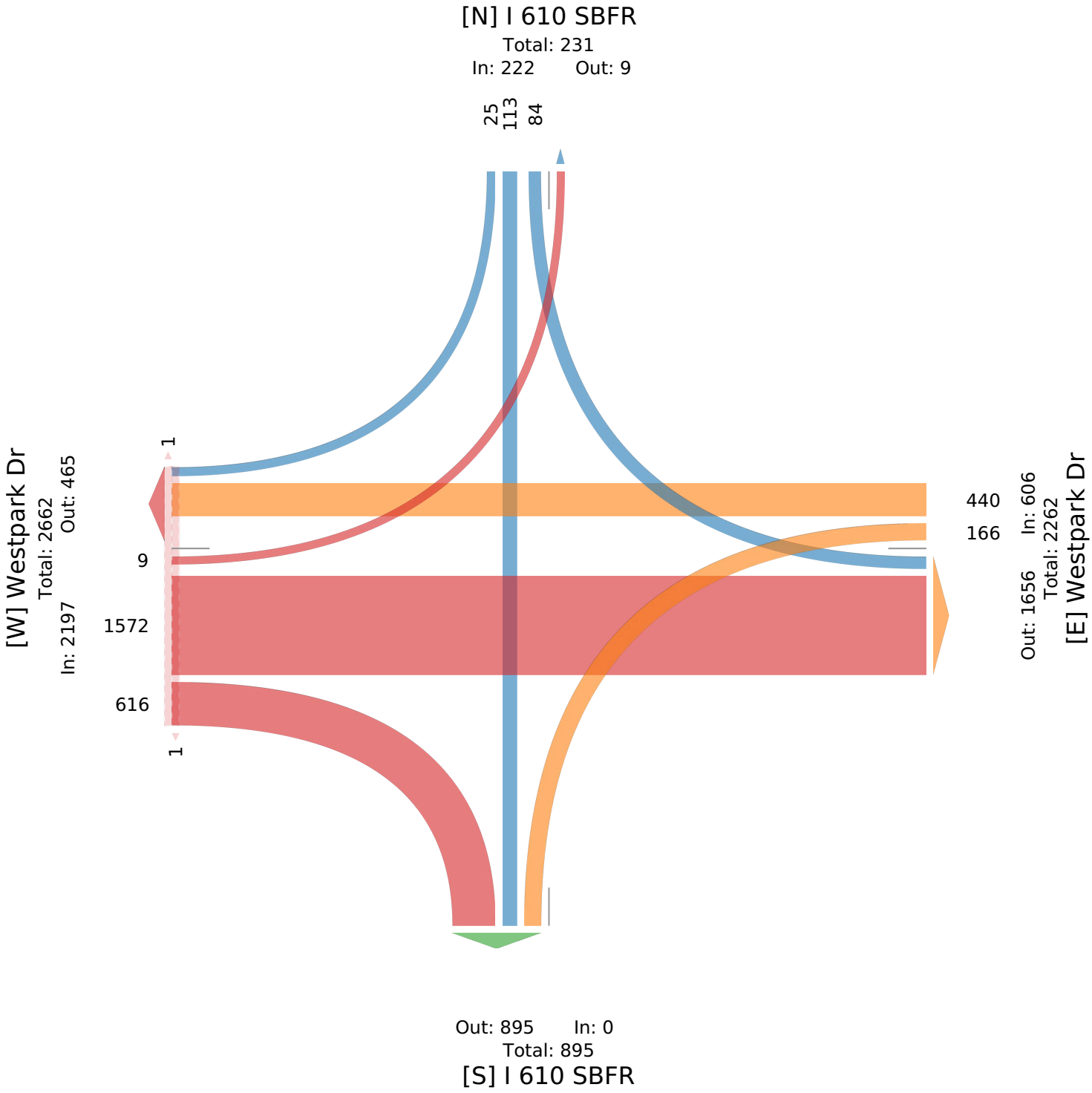

Westpark Dr at I 610 SBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 610 SBFR						I 610 SBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	0	0	0	0	**0**	0	16	41	18	0	**75**	0	1	231	127	0	**359**	0	61	305	0	0	**366**	0	**800**
4:15PM	0	0	0	0	**0**	0	10	60	10	0	**80**	0	2	243	146	0	**391**	0	91	321	0	0	**412**	0	**883**
4:30PM	0	0	0	0	**0**	0	12	42	26	0	**80**	0	2	217	105	0	**324**	0	53	307	0	0	**360**	0	**764**
4:45PM	0	0	0	0	**0**	0	19	44	18	0	**81**	0	2	208	89	0	**299**	0	42	317	0	0	**359**	0	**739**
Total	0	0	0	0	**0**	0	57	187	72	0	**316**	0	7	899	467	0	**1373**	0	247	1250	0	0	**1497**	0	**3186**
% Approach	0%	0%	0%	0%	**-**	-	18.0%	59.2%	22.8%	0%	**-**	-	0.5%	65.5%	34.0%	0%	**-**	-	16.5%	83.5%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	1.8%	5.9%	2.3%	0%	**9.9%**	-	0.2%	28.2%	14.7%	0%	**43.1%**	-	7.8%	39.2%	0%	0%	**47.0%**	-	-
PHF	-	-	-	-	**-**	-	0.750	0.779	0.692	-	**0.975**	-	0.875	0.925	0.800	-	**0.878**	-	0.679	0.974	-	-	**0.908**	-	0.902
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	1.8%	0%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	0	0	0	**0**	-	56	187	68	0	**311**	-	2	882	442	0	**1326**	-	238	1238	0	0	**1476**	-	3113
% Lights	0%	0%	0%	0%	**-**	-	98.2%	100%	94.4%	0%	**98.4%**	-	28.6%	98.1%	94.6%	0%	**96.6%**	-	96.4%	99.0%	0%	0%	**98.6%**	-	97.7%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	10	14	0	**24**	-	3	4	0	0	**7**	-	31
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	1.1%	3.0%	0%	**1.7%**	-	1.2%	0.3%	0%	0%	**0.5%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	4	0	**4**	-	4	2	0	0	**6**	-	10
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.9%	0%	**0.3%**	-	1.6%	0.2%	0%	0%	**0.4%**	-	0.3%
Buses	0	0	0	0	**0**	-	0	0	4	0	**4**	-	5	7	7	0	**19**	-	2	6	0	0	**8**	-	31
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	5.6%	0%	**1.3%**	-	71.4%	0.8%	1.5%	0%	**1.4%**	-	0.8%	0.5%	0%	0%	**0.5%**	-	1.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 SBFR - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867316, Location: 29.726163, -95.461146

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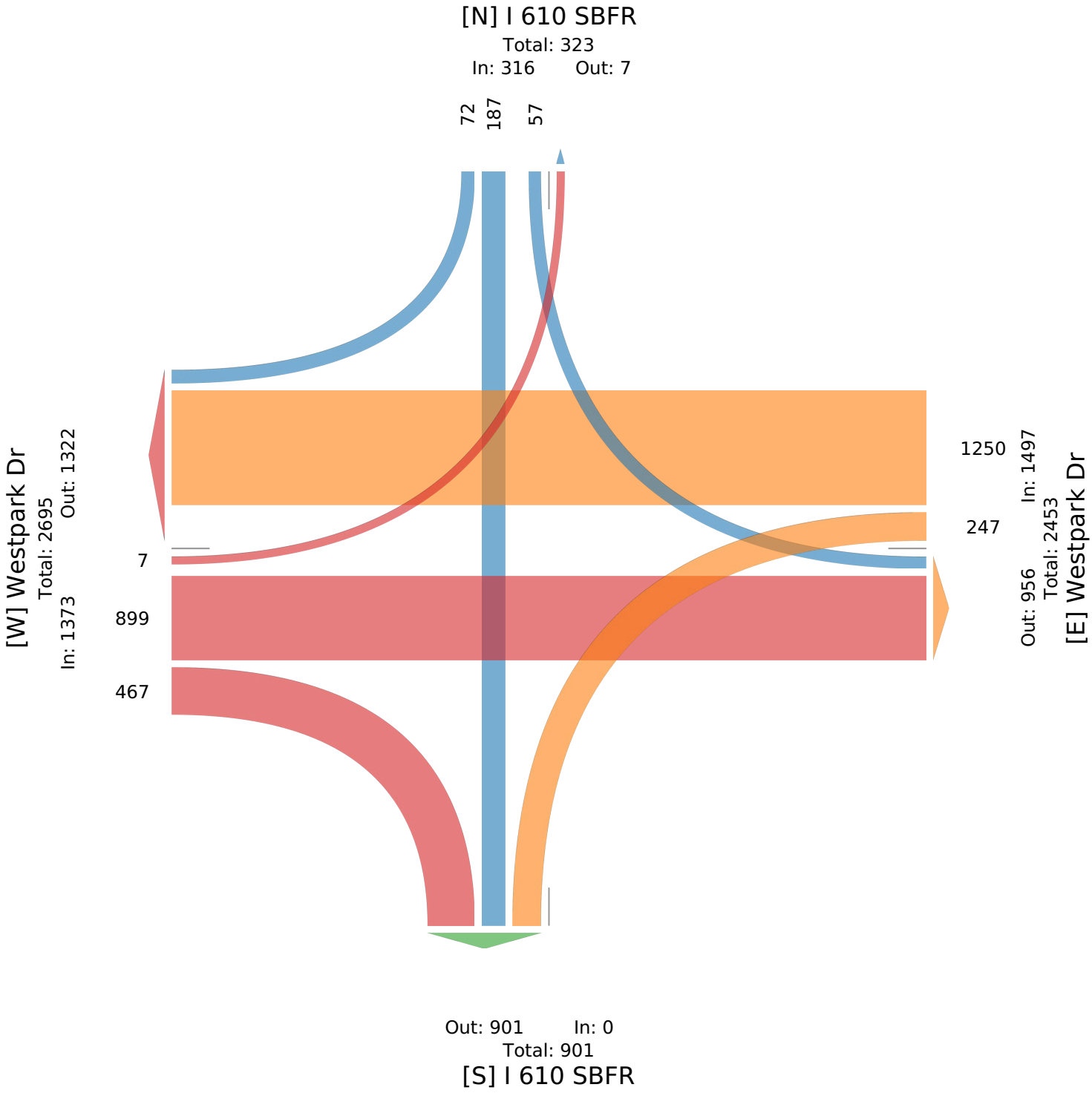


Westpark Dr at I 610 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

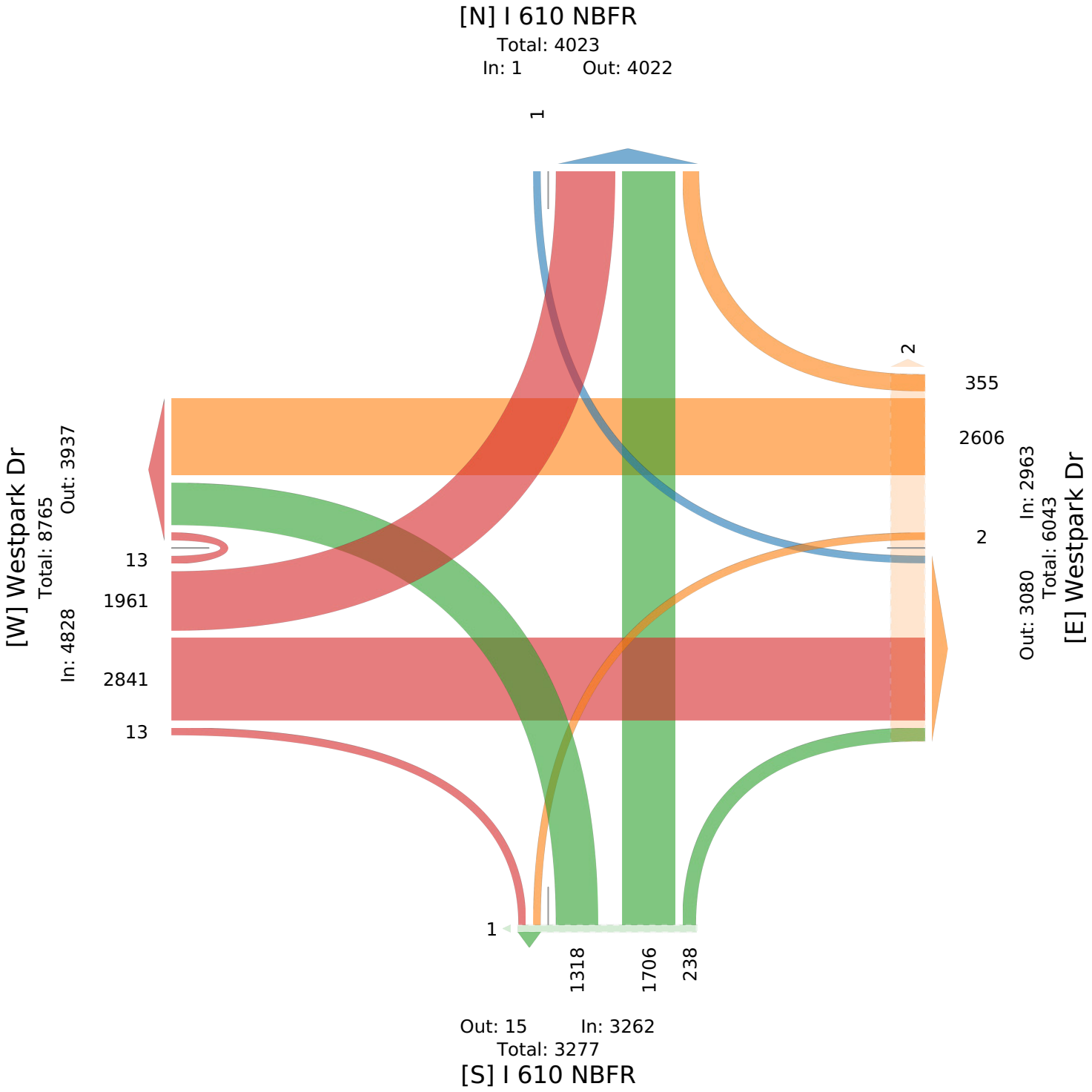
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 610 NBFR						I 610 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	47	91	17	0	**155**	0	0	0	0	0	**0**	0	150	179	1	0	**330**	0	0	58	6	0	**64**	0	**549**
7:15AM	50	95	11	0	**156**	0	0	0	0	0	**0**	0	155	168	1	0	**324**	0	0	49	14	0	**63**	0	**543**
7:30AM	43	82	9	0	**134**	0	0	0	0	0	**0**	0	192	226	1	0	**419**	0	0	68	23	0	**91**	0	**644**
7:45AM	55	74	5	0	**134**	0	1	0	0	0	**1**	0	201	235	1	0	**437**	0	1	88	40	0	**129**	0	**701**
Hourly Total	195	342	42	0	**579**	0	1	0	0	0	**1**	0	698	808	4	0	**1510**	0	1	263	83	0	**347**	0	**2437**
8:00AM	54	72	9	0	**135**	0	0	0	0	0	**0**	0	162	239	5	0	**406**	0	0	122	36	0	**158**	0	**699**
8:15AM	48	80	8	0	**136**	0	0	0	0	0	**0**	0	143	235	2	0	**380**	0	0	117	39	0	**156**	0	**672**
8:30AM	45	61	10	0	**116**	0	0	0	0	0	**0**	0	204	253	0	2	**459**	0	0	90	21	0	**111**	0	**686**
8:45AM	57	118	18	0	**193**	0	0	0	0	0	**0**	0	162	194	2	0	**358**	0	1	81	23	0	**105**	2	**656**
Hourly Total	204	331	45	0	**580**	0	0	0	0	0	**0**	0	671	921	9	2	**1603**	0	1	410	119	0	**530**	2	**2713**
4:00PM	147	115	18	0	**280**	1	0	0	0	0	**0**	0	78	154	0	5	**237**	0	0	223	17	0	**240**	0	**757**
4:15PM	151	96	17	0	**264**	0	0	0	0	0	**0**	0	71	173	0	2	**246**	0	0	251	23	0	**274**	0	**784**
4:30PM	106	148	16	0	**270**	0	0	0	0	0	**0**	0	87	135	0	0	**222**	0	0	256	16	0	**272**	0	**764**
4:45PM	125	128	22	0	**275**	0	0	0	0	0	**0**	0	90	136	0	1	**227**	0	0	242	16	0	**258**	0	**760**
Hourly Total	529	487	73	0	**1089**	1	0	0	0	0	**0**	0	326	598	0	8	**932**	0	0	972	72	0	**1044**	0	**3065**
5:00PM	103	146	16	0	**265**	0	0	0	0	0	**0**	0	73	122	0	1	**196**	0	0	236	20	0	**256**	0	**717**
5:15PM	90	141	25	0	**256**	0	0	0	0	0	**0**	0	68	125	0	1	**194**	0	0	245	22	0	**267**	0	**717**
5:30PM	109	123	25	0	**257**	0	0	0	0	0	**0**	0	50	140	0	1	**191**	0	0	249	25	0	**274**	0	**722**
5:45PM	88	136	12	0	**236**	0	0	0	0	0	**0**	0	75	127	0	0	**202**	0	0	231	14	0	**245**	0	**683**
Hourly Total	390	546	78	0	**1014**	0	0	0	0	0	**0**	0	266	514	0	3	**783**	0	0	961	81	0	**1042**	0	**2839**
Total	1318	1706	238	0	**3262**	1	1	0	0	0	**1**	0	1961	2841	13	13	**4828**	0	2	2606	355	0	**2963**	2	**11054**
% Approach	40.4%	52.3%	7.3%	0%	**-**	-	100%	0%	0%	0%	**-**	-	40.6%	58.8%	0.3%	0.3%	**-**	-	0.1%	88.0%	12.0%	0%	**-**	-	-
% Total	11.9%	15.4%	2.2%	0%	**29.5%**	-	0%	0%	0%	0%	**0%**	-	17.7%	25.7%	0.1%	0.1%	**43.7%**	-	0%	23.6%	3.2%	0%	**26.8%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2	1	0	0	**3**	-	0	1	0	0	**1**	-	4
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	1291	1672	228	0	**3191**	-	1	0	0	0	**1**	-	1904	2807	13	13	**4737**	-	2	2559	344	0	**2905**	-	10834
% Lights	98.0%	98.0%	95.8%	0%	**97.8%**	-	100%	0%	0%	0%	**100%**	-	97.1%	98.8%	100%	100%	**98.1%**	-	100%	98.2%	96.9%	0%	**98.0%**	-	98.0%
Single-Unit Trucks	11	21	2	0	**34**	-	0	0	0	0	**0**	-	36	21	0	0	**57**	-	0	18	7	0	**25**	-	116
% Single-Unit Trucks	0.8%	1.2%	0.8%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	1.8%	0.7%	0%	0%	**1.2%**	-	0%	0.7%	2.0%	0%	**0.8%**	-	1.0%
Articulated Trucks	9	8	0	0	**17**	-	0	0	0	0	**0**	-	14	6	0	0	**20**	-	0	6	3	0	**9**	-	46
% Articulated Trucks	0.7%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.7%	0.2%	0%	0%	**0.4%**	-	0%	0.2%	0.8%	0%	**0.3%**	-	0.4%
Buses	7	5	8	0	**20**	-	0	0	0	0	**0**	-	5	6	0	0	**11**	-	0	22	1	0	**23**	-	54
% Buses	0.5%	0.3%	3.4%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0.2%	0%	0%	**0.2%**	-	0%	0.8%	0.3%	0%	**0.8%**	-	0.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 NBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 610 NBFR - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

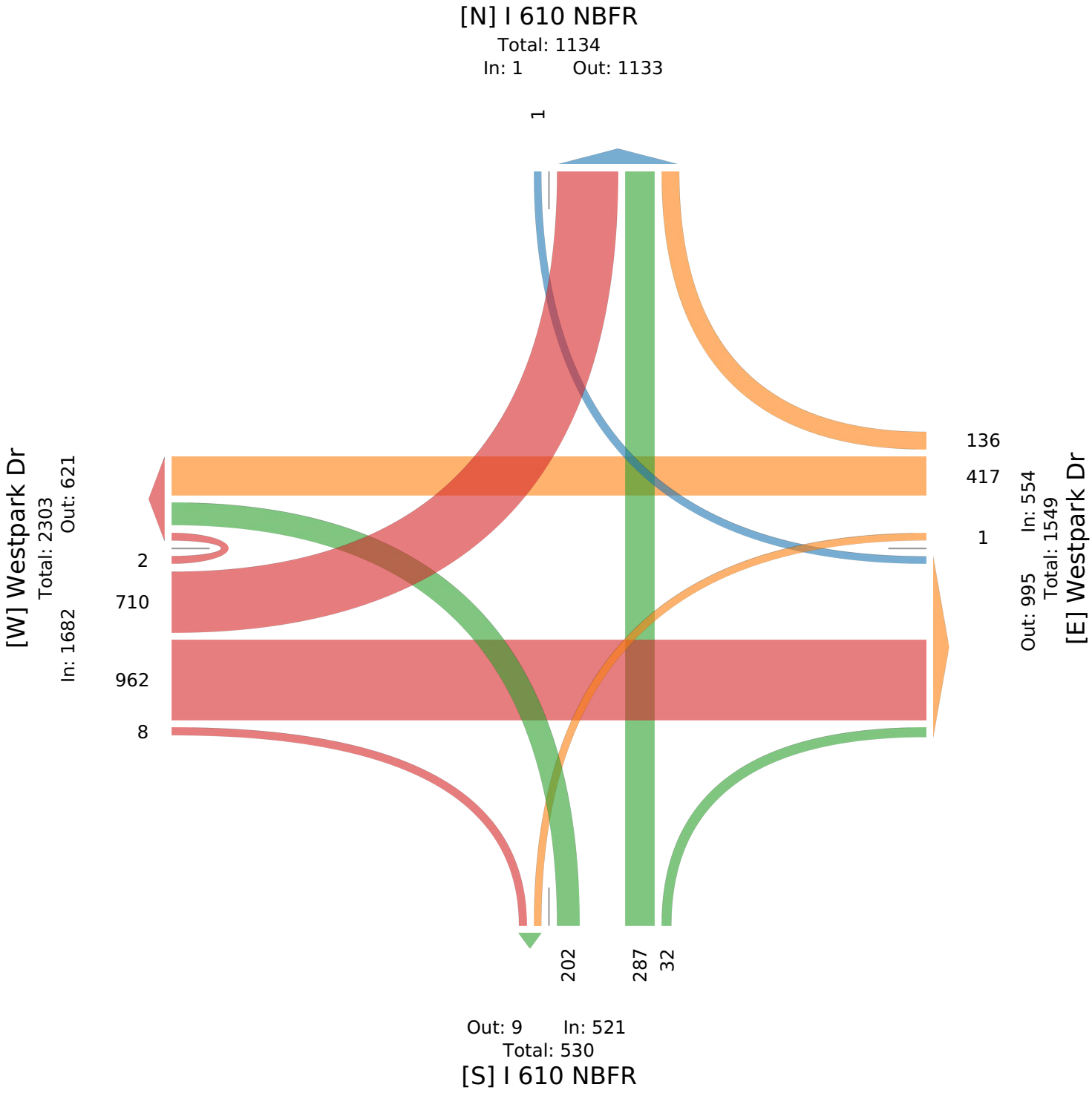
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 610 NBFR						I 610 NBFR						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	55	74	5	0	**134**	0	1	0	0	0	**1**	0	201	235	1	0	**437**	0	1	88	40	0	**129**	0	**701**
8:00AM	54	72	9	0	**135**	0	0	0	0	0	**0**	0	162	239	5	0	**406**	0	0	122	36	0	**158**	0	**699**
8:15AM	48	80	8	0	**136**	0	0	0	0	0	**0**	0	143	235	2	0	**380**	0	0	117	39	0	**156**	0	**672**
8:30AM	45	61	10	0	**116**	0	0	0	0	0	**0**	0	204	253	0	2	**459**	0	0	90	21	0	**111**	0	**686**
Total	202	287	32	0	**521**	0	1	0	0	0	**1**	0	710	962	8	2	**1682**	0	1	417	136	0	**554**	0	**2758**
% Approach	38.8%	55.1%	6.1%	0%	**-**	-	100%	0%	0%	0%	**-**	-	42.2%	57.2%	0.5%	0.1%	**-**	-	0.2%	75.3%	24.5%	0%	**-**	-	**-**
% Total	7.3%	10.4%	1.2%	0%	**18.9%**	-	0%	0%	0%	0%	**0%**	-	25.7%	34.9%	0.3%	0.1%	**61.0%**	-	0%	15.1%	4.9%	0%	**20.1%**	-	**-**
PHF	0.918	0.897	0.800	-	**0.958**	-	0.250	-	-	-	**0.250**	-	0.870	0.951	0.400	0.250	**0.916**	-	0.250	0.855	0.850	-	**0.877**	-	0.984
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	188	268	31	0	**487**	-	1	0	0	0	**1**	-	689	946	8	2	**1645**	-	1	407	131	0	**539**	-	2672
% Lights	93.1%	93.4%	96.9%	0%	**93.5%**	-	100%	0%	0%	0%	**100%**	-	97.0%	98.3%	100%	100%	**97.8%**	-	100%	97.6%	96.3%	0%	**97.3%**	-	96.9%
Single-Unit Trucks	6	13	0	0	**19**	-	0	0	0	0	**0**	-	13	11	0	0	**24**	-	0	5	3	0	**8**	-	51
% Single-Unit Trucks	3.0%	4.5%	0%	0%	**3.6%**	-	0%	0%	0%	0%	**0%**	-	1.8%	1.1%	0%	0%	**1.4%**	-	0%	1.2%	2.2%	0%	**1.4%**	-	1.8%
Articulated Trucks	5	4	0	0	**9**	-	0	0	0	0	**0**	-	7	4	0	0	**11**	-	0	1	2	0	**3**	-	23
% Articulated Trucks	2.5%	1.4%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	1.0%	0.4%	0%	0%	**0.7%**	-	0%	0.2%	1.5%	0%	**0.5%**	-	0.8%
Buses	3	2	1	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	10
% Buses	1.5%	0.7%	3.1%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.0%	0%	0%	**0.7%**	-	0.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 NBFR - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at I 610 NBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

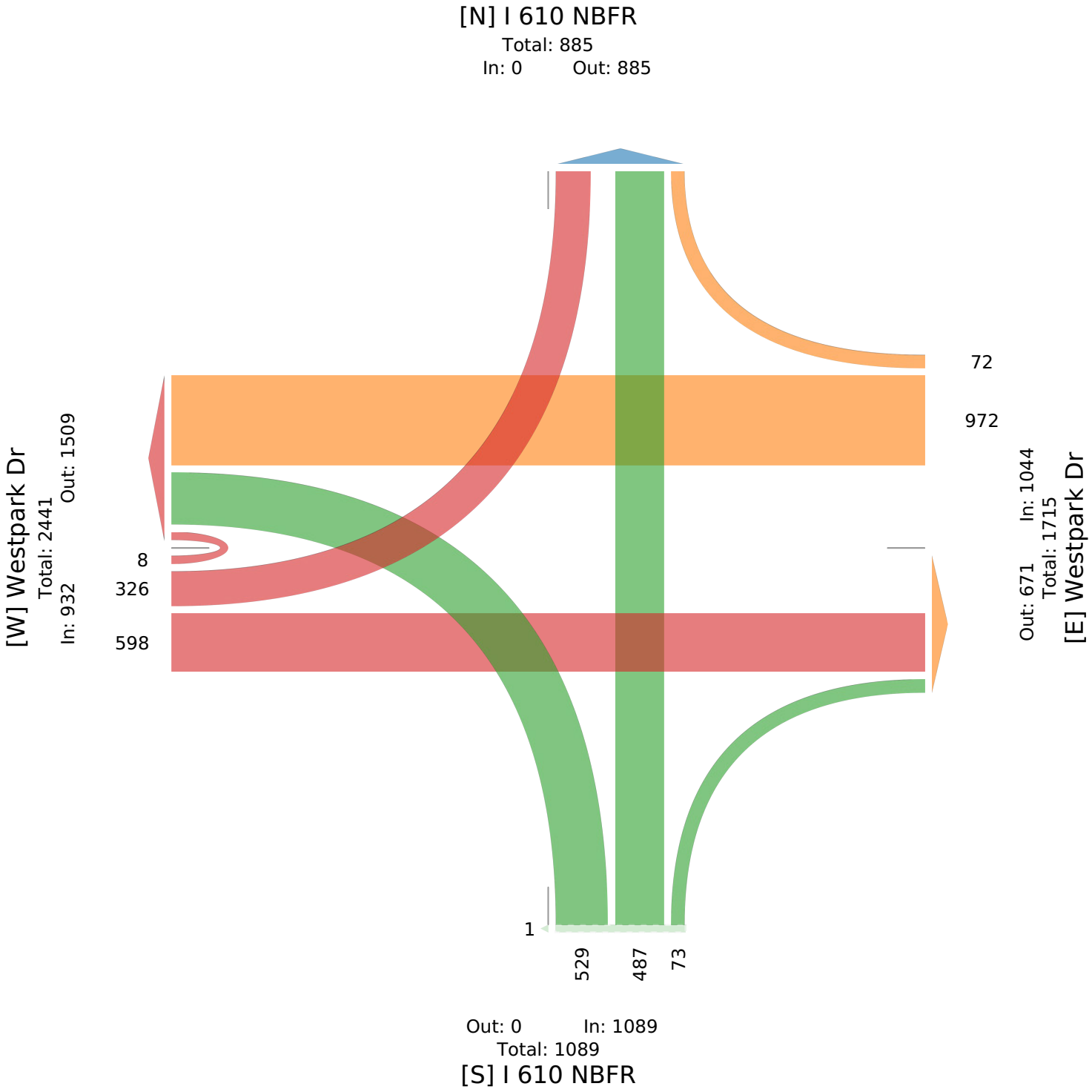
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	I 610 NBFR Northbound						I 610 NBFR Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	147	115	18	0	**280**	1	0	0	0	0	**0**	0	78	154	0	5	**237**	0	0	223	17	0	**240**	0	**757**
4:15PM	151	96	17	0	**264**	0	0	0	0	0	**0**	0	71	173	0	2	**246**	0	0	251	23	0	**274**	0	**784**
4:30PM	106	148	16	0	**270**	0	0	0	0	0	**0**	0	87	135	0	0	**222**	0	0	256	16	0	**272**	0	**764**
4:45PM	125	128	22	0	**275**	0	0	0	0	0	**0**	0	90	136	0	1	**227**	0	0	242	16	0	**258**	0	**760**
Total	529	487	73	0	**1089**	1	0	0	0	0	**0**	0	326	598	0	8	**932**	0	0	972	72	0	**1044**	0	**3065**
% Approach	48.6%	44.7%	6.7%	0%	**-**	-	0%	0%	0%	0%	**-**	-	35.0%	64.2%	0%	0.9%	**-**	-	0%	93.1%	6.9%	0%	**-**	-	-
% Total	17.3%	15.9%	2.4%	0%	**35.5%**	-	0%	0%	0%	0%	**0%**	-	10.6%	19.5%	0%	0.3%	**30.4%**	-	0%	31.7%	2.3%	0%	**34.1%**	-	-
PHF	0.876	0.823	0.830	-	**0.972**	-	-	-	-	-	**-**	-	0.906	0.864	-	0.400	**0.947**	-	-	0.949	0.783	-	**0.953**	-	0.977
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	525	479	71	0	**1075**	-	0	0	0	0	**0**	-	317	590	0	8	**915**	-	0	955	71	0	**1026**	-	3016
% Lights	99.2%	98.4%	97.3%	0%	**98.7%**	-	0%	0%	0%	0%	**-**	-	97.2%	98.7%	0%	100%	**98.2%**	-	0%	98.3%	98.6%	0%	**98.3%**	-	98.4%
Single-Unit Trucks	1	3	0	0	**4**	-	0	0	0	0	**0**	-	5	4	0	0	**9**	-	0	5	1	0	**6**	-	19
% Single-Unit Trucks	0.2%	0.6%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	1.5%	0.7%	0%	0%	**1.0%**	-	0%	0.5%	1.4%	0%	**0.6%**	-	0.6%
Articulated Trucks	2	3	0	0	**5**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	9
% Articulated Trucks	0.4%	0.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.3%
Buses	1	2	2	0	**5**	-	0	0	0	0	**0**	-	3	4	0	0	**7**	-	0	8	0	0	**8**	-	20
% Buses	0.2%	0.4%	2.7%	0%	**0.5%**	-	0%	0%	0%	0%	**-**	-	0.9%	0.7%	0%	0%	**0.8%**	-	0%	0.8%	0%	0%	**0.8%**	-	0.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at I 610 NBFR - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867317, Location: 29.726217, -95.459593

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Newcastle Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

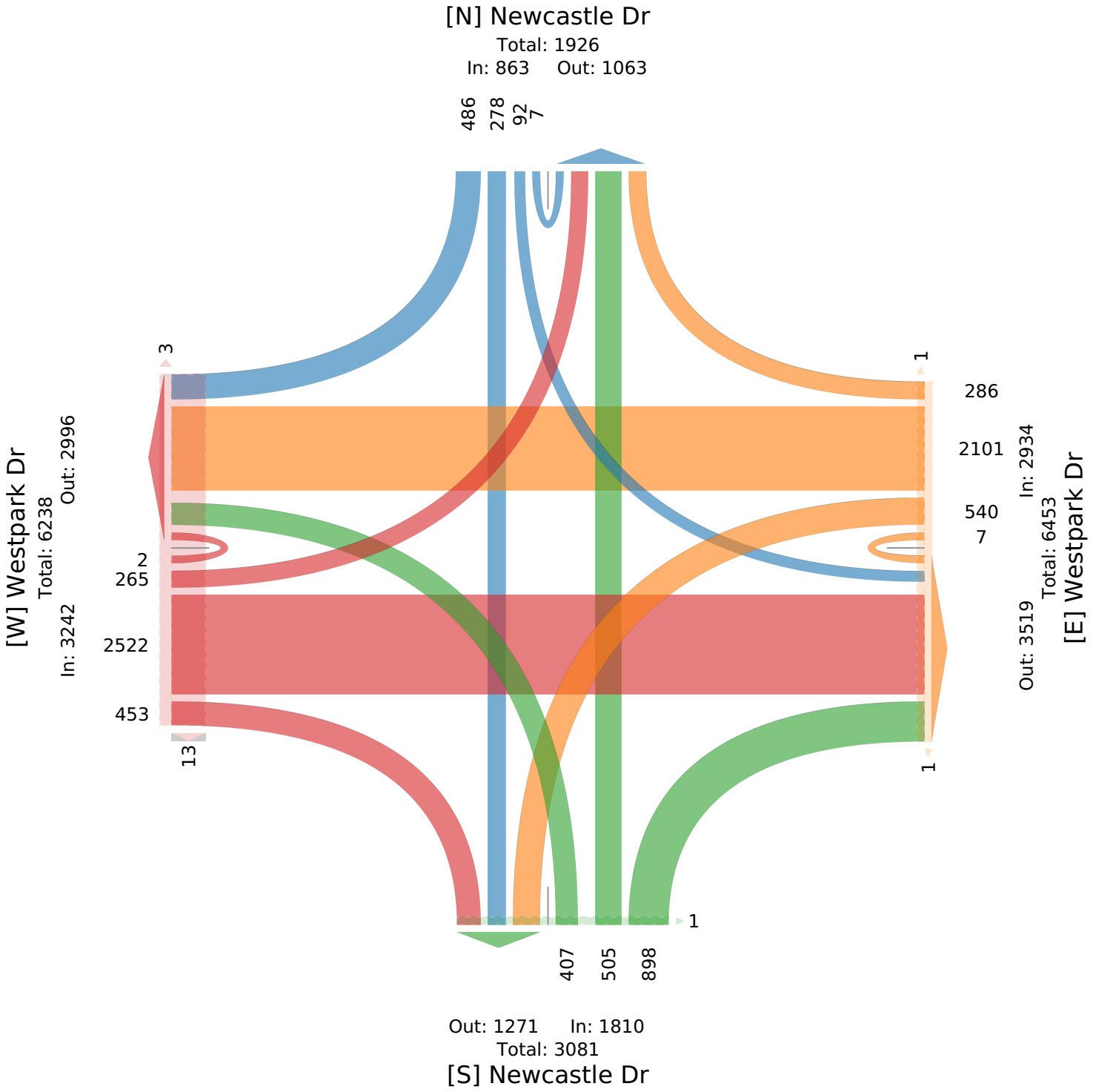
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Newcastle Dr Northbound						Newcastle Dr Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	13	14	24	0	**51**	0	4	13	22	0	**39**	0	20	178	13	0	**211**	0	12	47	17	0	**76**	0	**377**
7:15AM	13	19	43	0	**75**	0	2	10	18	0	**30**	0	11	147	15	0	**173**	1	20	55	10	0	**85**	0	**363**
7:30AM	25	15	48	0	**88**	0	5	10	25	0	**40**	0	21	168	27	0	**216**	2	31	84	17	0	**132**	0	**476**
7:45AM	59	51	74	0	**184**	0	6	16	30	2	**54**	0	11	168	25	0	**204**	1	32	90	17	3	**142**	0	**584**
Hourly Total	110	99	189	0	**398**	0	17	49	95	2	**163**	0	63	661	80	0	**804**	4	95	276	61	3	**435**	0	**1800**
8:00AM	45	62	86	0	**193**	0	7	15	26	0	**48**	0	30	214	18	1	**263**	2	22	87	21	0	**130**	0	**634**
8:15AM	58	70	93	0	**221**	0	3	14	20	1	**38**	0	19	198	29	0	**246**	0	31	82	20	0	**133**	0	**638**
8:30AM	21	39	74	0	**134**	0	7	7	18	1	**33**	0	20	214	19	0	**253**	1	16	80	30	0	**126**	1	**546**
8:45AM	24	32	69	0	**125**	0	4	12	24	0	**40**	0	20	158	19	1	**198**	2	25	78	29	0	**132**	0	**495**
Hourly Total	148	203	322	0	**673**	0	21	48	88	2	**159**	0	89	784	85	2	**960**	5	94	327	100	0	**521**	1	**2313**
4:00PM	25	31	76	0	**132**	0	7	29	41	0	**77**	0	17	165	40	0	**222**	0	46	176	9	1	**232**	0	**663**
4:15PM	38	41	95	0	**174**	0	9	22	32	0	**63**	0	15	148	40	0	**203**	0	31	180	13	3	**227**	0	**667**
4:30PM	15	30	52	0	**97**	0	2	16	36	0	**54**	0	14	150	39	0	**203**	0	46	197	14	0	**257**	0	**611**
4:45PM	16	25	30	0	**71**	0	8	28	29	0	**65**	0	9	119	40	0	**168**	0	55	170	22	0	**247**	0	**551**
Hourly Total	94	127	253	0	**474**	0	26	95	138	0	**259**	0	55	582	159	0	**796**	0	178	723	58	4	**963**	0	**2492**
5:00PM	17	22	45	0	**84**	1	4	27	44	1	**76**	0	20	128	36	0	**184**	1	52	212	15	0	**279**	1	**623**
5:15PM	18	19	30	0	**67**	0	6	16	41	0	**63**	0	14	124	31	0	**169**	0	41	191	17	0	**249**	0	**548**
5:30PM	6	14	34	0	**54**	0	8	20	41	1	**70**	0	12	138	34	0	**184**	5	46	205	20	0	**271**	0	**579**
5:45PM	14	21	25	0	**60**	0	10	23	39	1	**73**	0	12	105	28	0	**145**	1	34	167	15	0	**216**	0	**494**
Hourly Total	55	76	134	0	**265**	1	28	86	165	3	**282**	0	58	495	129	0	**682**	7	173	775	67	0	**1015**	1	**2244**
Total	407	505	898	0	**1810**	1	92	278	486	7	**863**	0	265	2522	453	2	**3242**	16	540	2101	286	7	**2934**	2	**8849**
% Approach	22.5%	27.9%	49.6%	0%	**-**	-	10.7%	32.2%	56.3%	0.8%	**-**	-	8.2%	77.8%	14.0%	0.1%	**-**	-	18.4%	71.6%	9.7%	0.2%	**-**	-	-
% Total	4.6%	5.7%	10.1%	0%	**20.5%**	-	1.0%	3.1%	5.5%	0.1%	**9.8%**	-	3.0%	28.5%	5.1%	0%	**36.6%**	-	6.1%	23.7%	3.2%	0.1%	**33.2%**	-	-
Motorcycles	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Motorcycles	0%	0.4%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Lights	397	498	893	0	**1788**	-	89	277	478	6	**850**	-	261	2475	446	2	**3184**	-	532	2066	286	7	**2891**	-	8713
% Lights	97.5%	98.6%	99.4%	0%	**98.8%**	-	96.7%	99.6%	98.4%	85.7%	**98.5%**	-	98.5%	98.1%	98.5%	100%	**98.2%**	-	98.5%	98.3%	100%	100%	**98.5%**	-	98.5%
Single-Unit Trucks	4	2	3	0	**9**	-	3	1	5	0	**9**	-	4	26	6	0	**36**	-	4	16	0	0	**20**	-	74
% Single-Unit Trucks	1.0%	0.4%	0.3%	0%	**0.5%**	-	3.3%	0.4%	1.0%	0%	**1.0%**	-	1.5%	1.0%	1.3%	0%	**1.1%**	-	0.7%	0.8%	0%	0%	**0.7%**	-	0.8%
Articulated Trucks	1	0	1	0	**2**	-	0	0	2	0	**2**	-	0	6	1	0	**7**	-	0	3	0	0	**3**	-	14
% Articulated Trucks	0.2%	0%	0.1%	0%	**0.1%**	-	0%	0%	0.4%	0%	**0.2%**	-	0%	0.2%	0.2%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Buses	5	3	1	0	**9**	-	0	0	1	1	**2**	-	0	15	0	0	**15**	-	4	14	0	0	**18**	-	44
% Buses	1.2%	0.6%	0.1%	0%	**0.5%**	-	0%	0%	0.2%	14.3%	**0.2%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.7%	0.7%	0%	0%	**0.6%**	-	0.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	15	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	93.8%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	6.3%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Newcastle Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Newcastle Dr - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

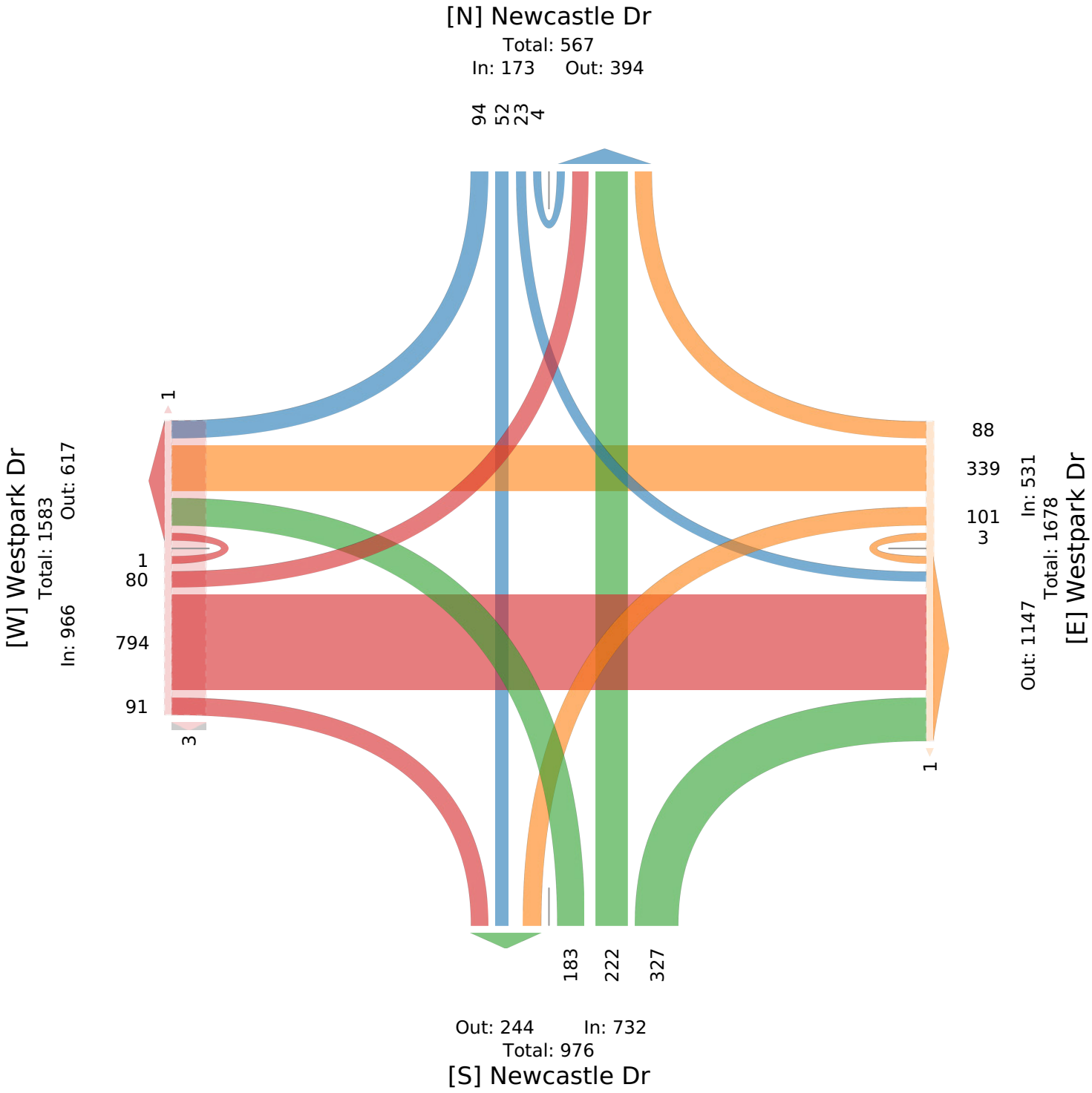
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Newcastle Dr Northbound						Newcastle Dr Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	59	51	74	0	**184**	0	6	16	30	2	**54**	0	11	168	25	0	**204**	1	32	90	17	3	**142**	0	**584**
8:00AM	45	62	86	0	**193**	0	7	15	26	0	**48**	0	30	214	18	1	**263**	2	22	87	21	0	**130**	0	**634**
8:15AM	58	70	93	0	**221**	0	3	14	20	1	**38**	0	19	198	29	0	**246**	0	31	82	20	0	**133**	0	**638**
8:30AM	21	39	74	0	**134**	0	7	7	18	1	**33**	0	20	214	19	0	**253**	1	16	80	30	0	**126**	1	**546**
Total	183	222	327	0	**732**	0	23	52	94	4	**173**	0	80	794	91	1	**966**	4	101	339	88	3	**531**	1	**2402**
% Approach	25.0%	30.3%	44.7%	0%	**-**	-	13.3%	30.1%	54.3%	2.3%	**-**	-	8.3%	82.2%	9.4%	0.1%	**-**	-	19.0%	63.8%	16.6%	0.6%	**-**	-	-
% Total	7.6%	9.2%	13.6%	0%	**30.5%**	-	1.0%	2.2%	3.9%	0.2%	**7.2%**	-	3.3%	33.1%	3.8%	0%	**40.2%**	-	4.2%	14.1%	3.7%	0.1%	**22.1%**	-	-
PHF	0.775	0.793	0.879	-	**0.828**	-	0.821	0.813	0.783	0.500	**0.801**	-	0.667	0.928	0.784	0.250	**0.918**	-	0.789	0.942	0.733	0.250	**0.935**	-	0.941
Motorcycles	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.9%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	181	219	325	0	**725**	-	21	51	90	3	**165**	-	78	774	89	1	**942**	-	98	333	88	3	**522**	-	2354
% Lights	98.9%	98.6%	99.4%	0%	**99.0%**	-	91.3%	98.1%	95.7%	75.0%	**95.4%**	-	97.5%	97.5%	97.8%	100%	**97.5%**	-	97.0%	98.2%	100%	100%	**98.3%**	-	98.0%
Single-Unit Trucks	2	0	1	0	**3**	-	2	1	2	0	**5**	-	2	11	2	0	**15**	-	2	3	0	0	**5**	-	28
% Single-Unit Trucks	1.1%	0%	0.3%	0%	**0.4%**	-	8.7%	1.9%	2.1%	0%	**2.9%**	-	2.5%	1.4%	2.2%	0%	**1.6%**	-	2.0%	0.9%	0%	0%	**0.9%**	-	1.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	1.1%	0%	**0.6%**	-	0%	0.8%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Buses	0	1	1	0	**2**	-	0	0	1	1	**2**	-	0	3	0	0	**3**	-	1	3	0	0	**4**	-	11
% Buses	0%	0.5%	0.3%	0%	**0.3%**	-	0%	0%	1.1%	25.0%	**1.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	1.0%	0.9%	0%	0%	**0.8%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Newcastle Dr - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Newcastle Dr - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

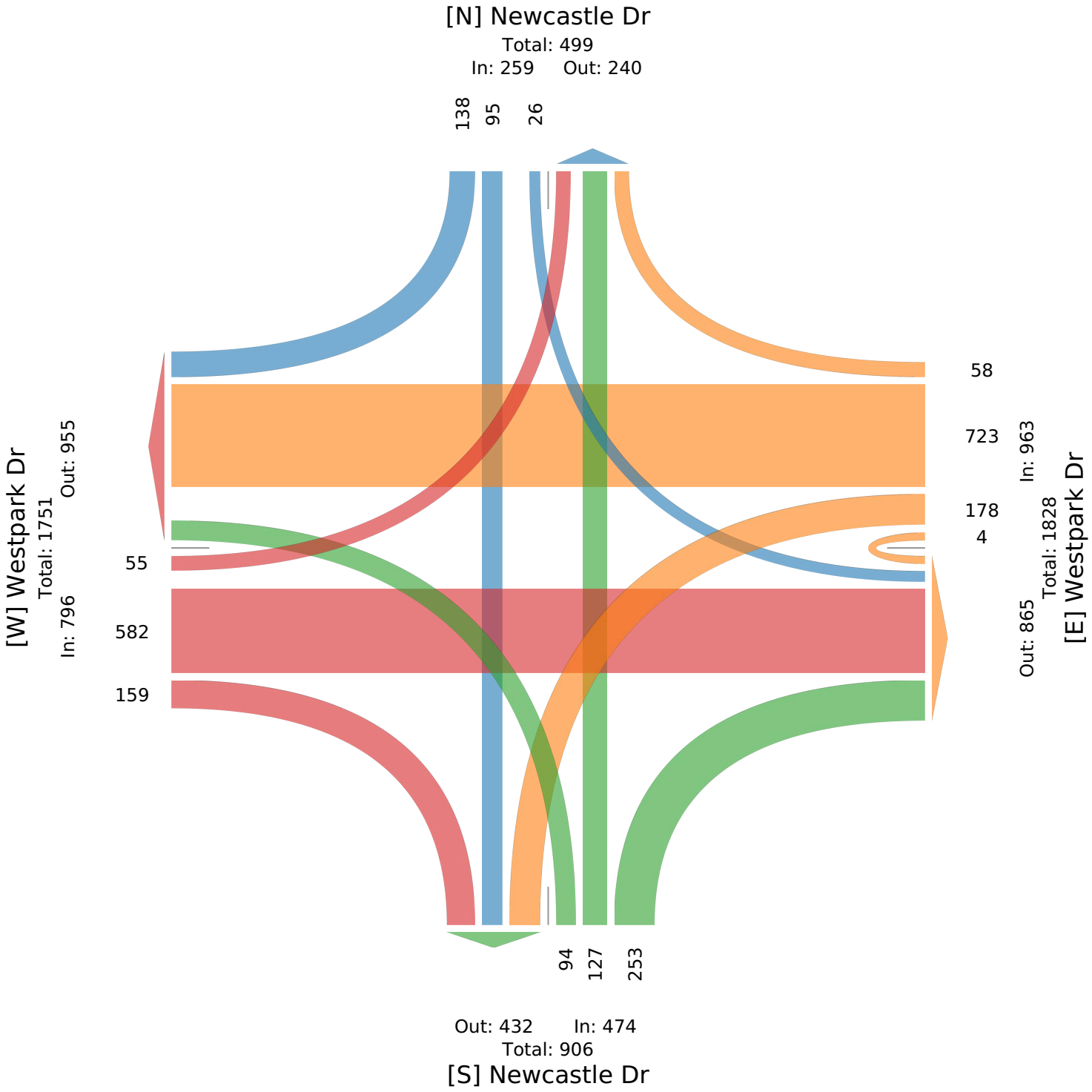
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Newcastle Dr						Newcastle Dr						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	25	31	76	0	**132**	0	7	29	41	0	**77**	0	17	165	40	0	**222**	0	46	176	9	1	**232**	0	**663**
4:15PM	38	41	95	0	**174**	0	9	22	32	0	**63**	0	15	148	40	0	**203**	0	31	180	13	3	**227**	0	**667**
4:30PM	15	30	52	0	**97**	0	2	16	36	0	**54**	0	14	150	39	0	**203**	0	46	197	14	0	**257**	0	**611**
4:45PM	16	25	30	0	**71**	0	8	28	29	0	**65**	0	9	119	40	0	**168**	0	55	170	22	0	**247**	0	**551**
Total	94	127	253	0	**474**	0	26	95	138	0	**259**	0	55	582	159	0	**796**	0	178	723	58	4	**963**	0	**2492**
% Approach	19.8%	26.8%	53.4%	0%	**-**	-	10.0%	36.7%	53.3%	0%	**-**	-	6.9%	73.1%	20.0%	0%	**-**	-	18.5%	75.1%	6.0%	0.4%	**-**	-	-
% Total	3.8%	5.1%	10.2%	0%	**19.0%**	-	1.0%	3.8%	5.5%	0%	**10.4%**	-	2.2%	23.4%	6.4%	0%	**31.9%**	-	7.1%	29.0%	2.3%	0.2%	**38.6%**	-	-
PHF	0.618	0.774	0.666	-	**0.681**	-	0.722	0.819	0.841	-	**0.841**	-	0.809	0.882	0.994	-	**0.896**	-	0.809	0.918	0.659	0.333	**0.937**	-	0.934
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	87	125	252	0	**464**	-	26	95	138	0	**259**	-	55	571	157	0	**783**	-	174	713	58	4	**949**	-	2455
% Lights	92.6%	98.4%	99.6%	0%	**97.9%**	-	100%	100%	100%	0%	**100%**	-	100%	98.1%	98.7%	0%	**98.4%**	-	97.8%	98.6%	100%	100%	**98.5%**	-	98.5%
Single-Unit Trucks	2	1	1	0	**4**	-	0	0	0	0	**0**	-	0	5	1	0	**6**	-	1	4	0	0	**5**	-	15
% Single-Unit Trucks	2.1%	0.8%	0.4%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0.9%	0.6%	0%	**0.8%**	-	0.6%	0.6%	0%	0%	**0.5%**	-	0.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	3	0	0	**3**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.6%	0%	**0.1%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.2%
Buses	5	1	0	0	**6**	-	0	0	0	0	**0**	-	0	6	0	0	**6**	-	3	3	0	0	**6**	-	18
% Buses	5.3%	0.8%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	0%	1.0%	0%	0%	**0.8%**	-	1.7%	0.4%	0%	0%	**0.6%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Newcastle Dr - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867318, Location: 29.726894, -95.45166

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Weslayan St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

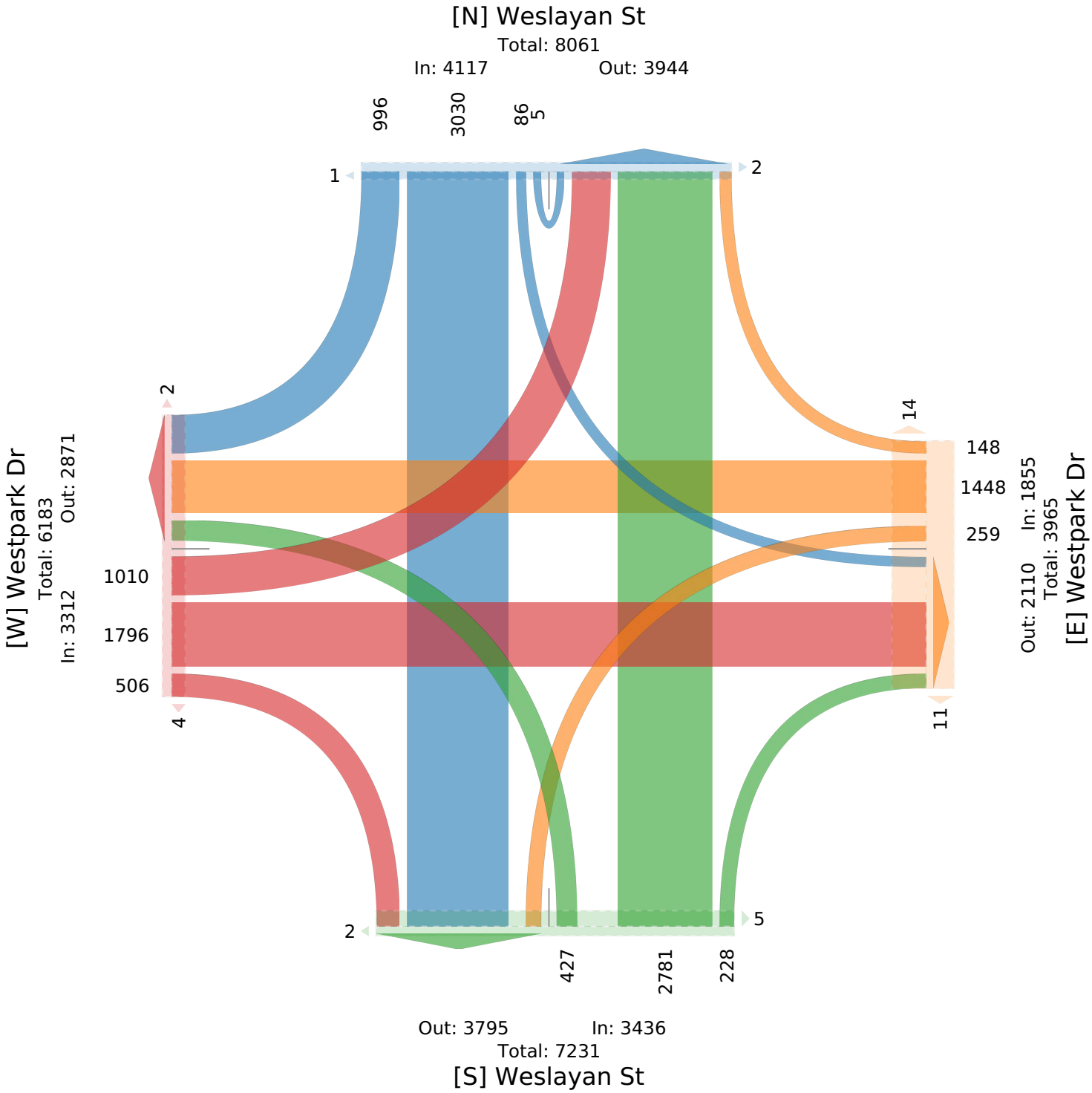
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Weslayan St						Weslayan St						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	22	121	5	0	**148**	1	3	81	31	0	**115**	1	70	91	24	0	**185**	1	2	23	2	0	**27**	1	**475**
7:15AM	15	179	8	0	**202**	0	3	109	35	0	**147**	0	66	104	17	0	**187**	1	8	32	3	0	**43**	0	**579**
7:30AM	32	197	14	0	**243**	0	2	112	42	0	**156**	0	81	109	21	0	**211**	0	7	51	10	0	**68**	1	**678**
7:45AM	29	180	18	0	**227**	1	8	181	52	0	**241**	0	74	139	20	0	**233**	0	7	53	5	0	**65**	4	**766**
Hourly Total	98	677	45	0	**820**	2	16	483	160	0	**659**	1	291	443	82	0	**816**	2	24	159	20	0	**203**	6	**2498**
8:00AM	20	212	23	0	**255**	1	7	187	45	1	**240**	0	83	169	33	0	**285**	0	14	57	14	0	**85**	2	**865**
8:15AM	18	213	18	0	**249**	0	7	196	60	0	**263**	0	89	146	49	0	**284**	0	17	62	11	0	**90**	2	**886**
8:30AM	26	190	12	0	**228**	0	5	163	42	0	**210**	0	77	155	33	0	**265**	0	11	51	5	0	**67**	1	**770**
8:45AM	23	172	13	0	**208**	0	5	167	60	0	**232**	0	78	122	19	0	**219**	0	11	61	15	0	**87**	0	**746**
Hourly Total	87	787	66	0	**940**	1	24	713	207	1	**945**	0	327	592	134	0	**1053**	0	53	231	45	0	**329**	5	**3267**
4:00PM	28	159	15	0	**202**	2	13	262	73	0	**348**	1	46	107	40	0	**193**	2	14	116	10	0	**140**	3	**883**
4:15PM	31	151	8	0	**190**	0	5	201	81	2	**289**	0	56	126	60	0	**242**	0	28	124	14	0	**166**	0	**887**
4:30PM	29	153	16	0	**198**	0	3	224	87	0	**314**	1	46	103	54	0	**203**	0	18	121	10	0	**149**	1	**864**
4:45PM	34	188	18	0	**240**	1	1	216	82	0	**299**	0	50	92	27	0	**169**	0	32	136	8	0	**176**	3	**884**
Hourly Total	122	651	57	0	**830**	3	22	903	323	2	**1250**	2	198	428	181	0	**807**	2	92	497	42	0	**631**	7	**3518**
5:00PM	38	147	12	0	**197**	0	1	247	82	0	**330**	0	40	83	38	0	**161**	0	24	124	15	0	**163**	0	**851**
5:15PM	29	147	12	0	**188**	0	13	231	83	2	**329**	0	54	92	26	0	**172**	0	18	148	9	0	**175**	2	**864**
5:30PM	29	199	24	0	**252**	0	5	241	78	0	**324**	0	53	77	23	0	**153**	1	20	138	5	0	**163**	3	**892**
5:45PM	24	173	12	0	**209**	1	5	212	63	0	**280**	0	47	81	22	0	**150**	1	28	151	12	0	**191**	2	**830**
Hourly Total	120	666	60	0	**846**	1	24	931	306	2	**1263**	0	194	333	109	0	**636**	2	90	561	41	0	**692**	7	**3437**
Total	427	2781	228	0	**3436**	7	86	3030	996	5	**4117**	3	1010	1796	506	0	**3312**	6	259	1448	148	0	**1855**	25	**12720**
% Approach	12.4%	80.9%	6.6%	0%	**-**	-	2.1%	73.6%	24.2%	0.1%	**-**	-	30.5%	54.2%	15.3%	0%	**-**	-	14.0%	78.1%	8.0%	0%	**-**	-	-
% Total	3.4%	21.9%	1.8%	0%	**27.0%**	-	0.7%	23.8%	7.8%	0%	**32.4%**	-	7.9%	14.1%	4.0%	0%	**26.0%**	-	2.0%	11.4%	1.2%	0%	**14.6%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Lights	420	2743	225	0	**3388**	-	86	2995	981	5	**4067**	-	988	1766	501	0	**3255**	-	257	1422	144	0	**1823**	-	12533
% Lights	98.4%	98.6%	98.7%	0%	**98.6%**	-	100%	98.8%	98.5%	100%	**98.8%**	-	97.8%	98.3%	99.0%	0%	**98.3%**	-	99.2%	98.2%	97.3%	0%	**98.3%**	-	98.5%
Single-Unit Trucks	5	20	2	0	**27**	-	0	25	9	0	**34**	-	12	15	3	0	**30**	-	2	10	3	0	**15**	-	106
% Single-Unit Trucks	1.2%	0.7%	0.9%	0%	**0.8%**	-	0%	0.8%	0.9%	0%	**0.8%**	-	1.2%	0.8%	0.6%	0%	**0.9%**	-	0.8%	0.7%	2.0%	0%	**0.8%**	-	0.8%
Articulated Trucks	2	10	1	0	**13**	-	0	4	3	0	**7**	-	5	2	2	0	**9**	-	0	0	1	0	**1**	-	30
% Articulated Trucks	0.5%	0.4%	0.4%	0%	**0.4%**	-	0%	0.1%	0.3%	0%	**0.2%**	-	0.5%	0.1%	0.4%	0%	**0.3%**	-	0%	0%	0.7%	0%	**0.1%**	-	0.2%
Buses	0	7	0	0	**7**	-	0	6	3	0	**9**	-	4	13	0	0	**17**	-	0	15	0	0	**15**	-	48
% Buses	0%	0.3%	0%	0%	**0.2%**	-	0%	0.2%	0.3%	0%	**0.2%**	-	0.4%	0.7%	0%	0%	**0.5%**	-	0%	1.0%	0%	0%	**0.8%**	-	0.4%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	20	
% Pedestrians	-	-	-	-	-	85.7%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	14.3%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Weslayan St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Weslayan St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

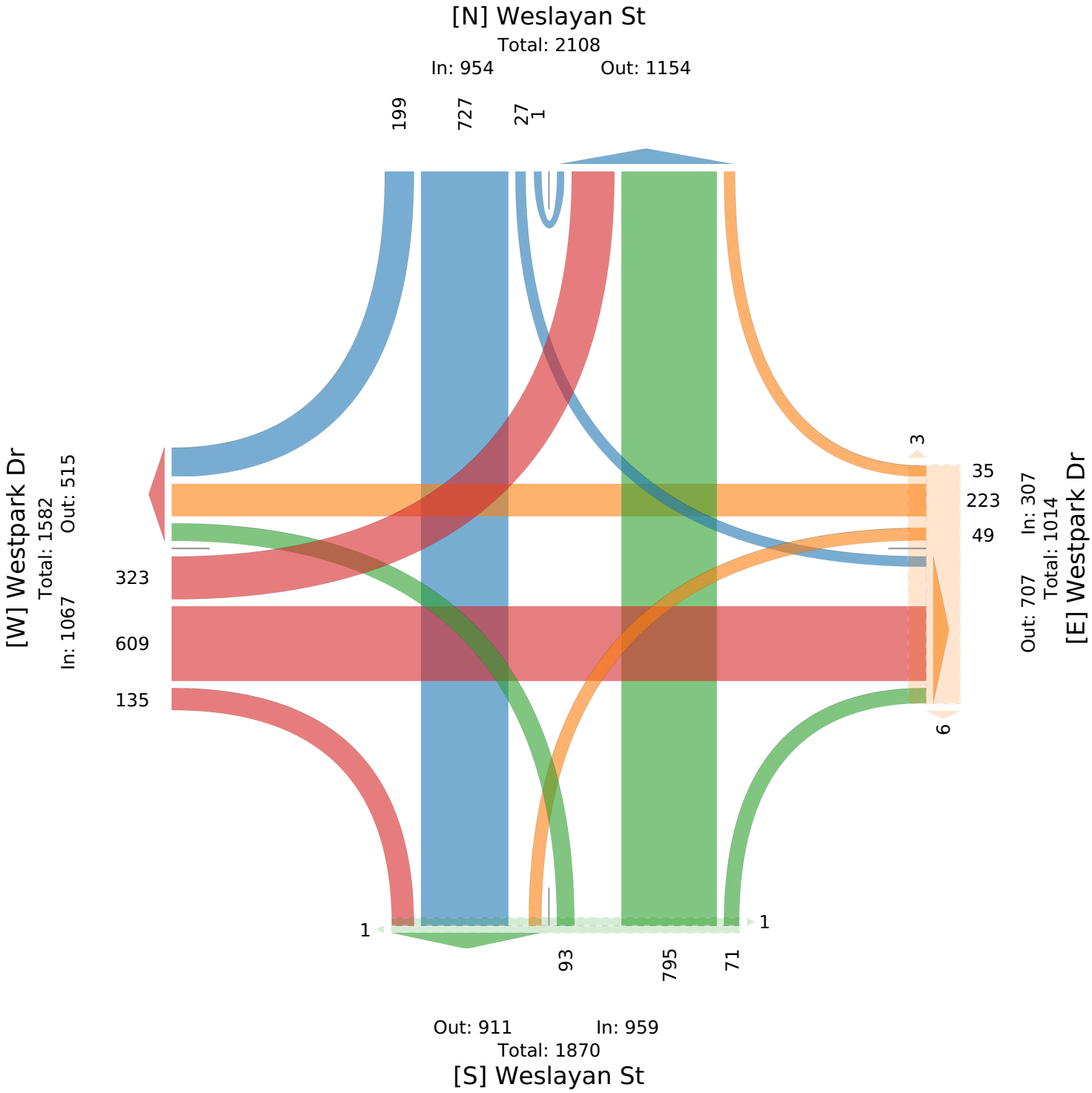
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Weslayan St						Weslayan St						Westpark Dr						Westpark Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:45AM	29	180	18	0	**227**	1	8	181	52	0	**241**	0	74	139	20	0	**233**	0	7	53	5	0	**65**	4	**766**
8:00AM	20	212	23	0	**255**	1	7	187	45	1	**240**	0	83	169	33	0	**285**	0	14	57	14	0	**85**	2	**865**
8:15AM	18	213	18	0	**249**	0	7	196	60	0	**263**	0	89	146	49	0	**284**	0	17	62	11	0	**90**	2	**886**
8:30AM	26	190	12	0	**228**	0	5	163	42	0	**210**	0	77	155	33	0	**265**	0	11	51	5	0	**67**	1	**770**
Total	93	795	71	0	**959**	2	27	727	199	1	**954**	0	323	609	135	0	**1067**	0	49	223	35	0	**307**	9	**3287**
% Approach	9.7%	82.9%	7.4%	0%	**-**	-	2.8%	76.2%	20.9%	0.1%	**-**	-	30.3%	57.1%	12.7%	0%	**-**	-	16.0%	72.6%	11.4%	0%	**-**	-	-
% Total	2.8%	24.2%	2.2%	0%	**29.2%**	-	0.8%	22.1%	6.1%	0%	**29.0%**	-	9.8%	18.5%	4.1%	0%	**32.5%**	-	1.5%	6.8%	1.1%	0%	**9.3%**	-	-
PHF	0.802	0.933	0.772	-	**0.940**	-	0.844	0.927	0.829	0.250	**0.907**	-	0.907	0.901	0.689	-	**0.936**	-	0.721	0.899	0.625	-	**0.853**	-	0.927
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	93	786	71	0	**950**	-	27	715	196	1	**939**	-	313	597	135	0	**1045**	-	49	219	34	0	**302**	-	3236
% Lights	100%	98.9%	100%	0%	**99.1%**	-	100%	98.3%	98.5%	100%	**98.4%**	-	96.9%	98.0%	100%	0%	**97.9%**	-	100%	98.2%	97.1%	0%	**98.4%**	-	98.4%
Single-Unit Trucks	0	5	0	0	**5**	-	0	10	2	0	**12**	-	5	6	0	0	**11**	-	0	2	0	0	**2**	-	30
% Single-Unit Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	1.4%	1.0%	0%	**1.3%**	-	1.5%	1.0%	0%	0%	**1.0%**	-	0%	0.9%	0%	0%	**0.7%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4	1	0	0	**5**	-	0	0	1	0	**1**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%	0.2%	0%	0%	**0.5%**	-	0%	0%	2.9%	0%	**0.3%**	-	0.2%
Buses	0	4	0	0	**4**	-	0	2	1	0	**3**	-	0	5	0	0	**5**	-	0	2	0	0	**2**	-	14
% Buses	0%	0.5%	0%	0%	**0.4%**	-	0%	0.3%	0.5%	0%	**0.3%**	-	0%	0.8%	0%	0%	**0.5%**	-	0%	0.9%	0%	0%	**0.7%**	-	0.4%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	88.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Weslayan St - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Weslayan St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

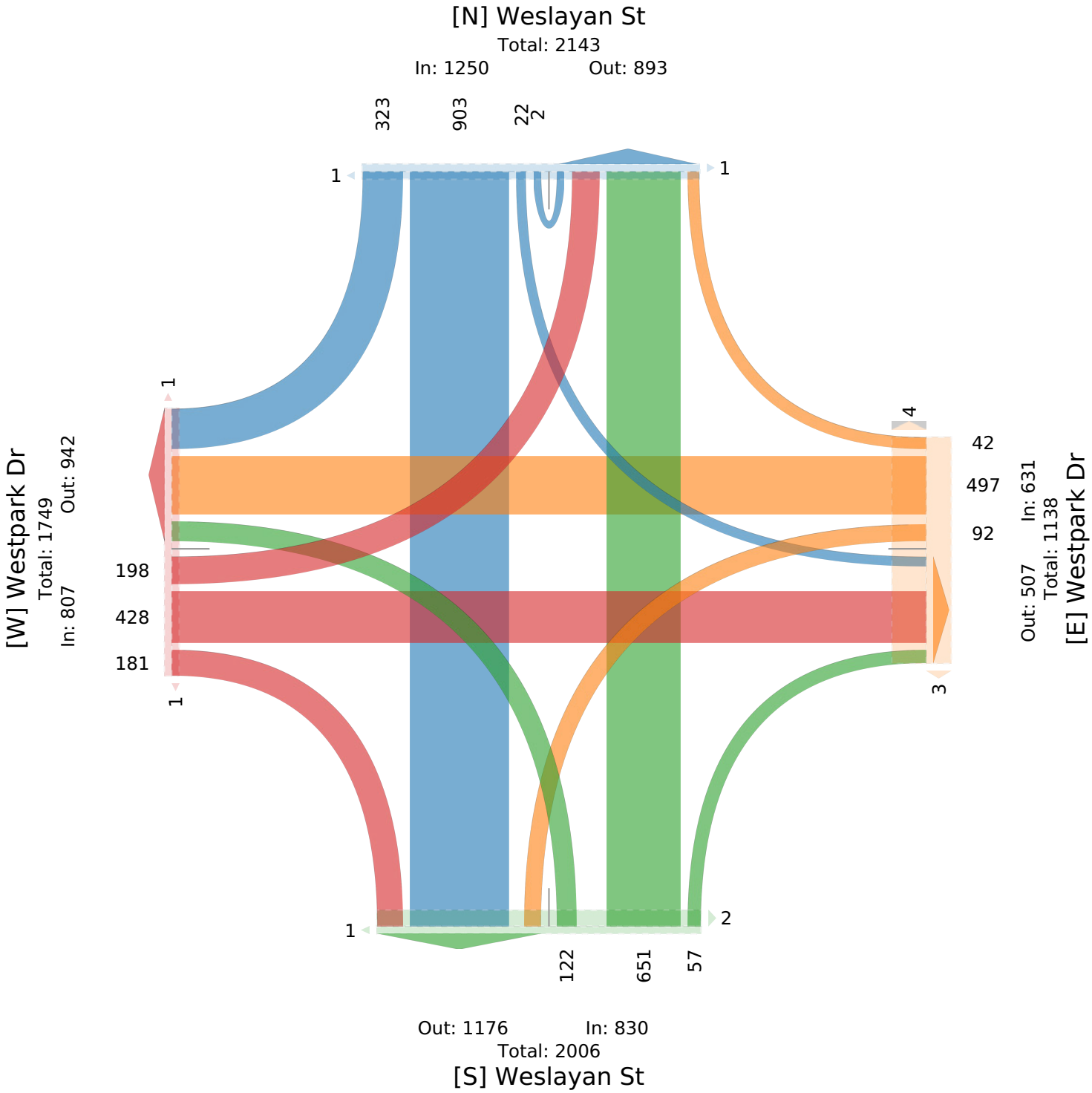
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Weslayan St Northbound						Weslayan St Southbound						Westpark Dr Eastbound						Westpark Dr Westbound						
Direction																									
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	28	159	15	0	**202**	2	13	262	73	0	**348**	1	46	107	40	0	**193**	2	14	116	10	0	**140**	3	**883**
4:15PM	31	151	8	0	**190**	0	5	201	81	2	**289**	0	56	126	60	0	**242**	0	28	124	14	0	**166**	0	**887**
4:30PM	29	153	16	0	**198**	0	3	224	87	0	**314**	1	46	103	54	0	**203**	0	18	121	10	0	**149**	1	**864**
4:45PM	34	188	18	0	**240**	1	1	216	82	0	**299**	0	50	92	27	0	**169**	0	32	136	8	0	**176**	3	**884**
Total	122	651	57	0	**830**	3	22	903	323	2	**1250**	2	198	428	181	0	**807**	2	92	497	42	0	**631**	7	**3518**
% Approach	14.7%	78.4%	6.9%	0%	**-**	-	1.8%	72.2%	25.8%	0.2%	**-**	-	24.5%	53.0%	22.4%	0%	**-**	-	14.6%	78.8%	6.7%	0%	**-**	-	**-**
% Total	3.5%	18.5%	1.6%	0%	**23.6%**	-	0.6%	25.7%	9.2%	0.1%	**35.5%**	-	5.6%	12.2%	5.1%	0%	**22.9%**	-	2.6%	14.1%	1.2%	0%	**17.9%**	-	**-**
PHF	0.897	0.866	0.792	-	**0.865**	-	0.423	0.862	0.928	0.250	**0.898**	-	0.884	0.849	0.754	-	**0.834**	-	0.719	0.914	0.750	-	**0.896**	-	0.992
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	121	643	56	0	**820**	-	22	899	317	2	**1240**	-	193	422	179	0	**794**	-	91	489	41	0	**621**	-	3475
% Lights	99.2%	98.8%	98.2%	0%	**98.8%**	-	100%	99.6%	98.1%	100%	**99.2%**	-	97.5%	98.6%	98.9%	0%	**98.4%**	-	98.9%	98.4%	97.6%	0%	**98.4%**	-	98.8%
Single-Unit Trucks	1	6	1	0	**8**	-	0	1	2	0	**3**	-	1	3	1	0	**5**	-	1	4	1	0	**6**	-	22
% Single-Unit Trucks	0.8%	0.9%	1.8%	0%	**1.0%**	-	0%	0.1%	0.6%	0%	**0.2%**	-	0.5%	0.7%	0.6%	0%	**0.6%**	-	1.1%	0.8%	2.4%	0%	**1.0%**	-	0.6%
Articulated Trucks	0	2	0	0	**2**	-	0	0	3	0	**3**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	7
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0.9%	0%	**0.2%**	-	0%	0.2%	0.6%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	0	0	0	**0**	-	0	3	1	0	**4**	-	4	2	0	0	**6**	-	0	4	0	0	**4**	-	14
% Buses	0%	0%	0%	0%	**0%**	-	0%	0.3%	0.3%	0%	**0.3%**	-	2.0%	0.5%	0%	0%	**0.7%**	-	0%	0.8%	0%	0%	**0.6%**	-	0.4%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Weslayan St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867319, Location: 29.727686, -95.441484

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St						Edloe St							Westpark Dr					
Direction	Northbound						Southbound							Eastbound					
Time	L	T	R	U	**App**	Ped*	L	T	R	HR	U	**App**	Ped*	L	T	R	U	**App**	Ped*
2021-09-02 7:00AM	0	57	2	0	**59**	2	12	32	7	26	0	**77**	0	11	57	5	0	**73**	0
7:15AM	2	126	8	0	**136**	2	13	34	5	39	0	**91**	0	25	64	5	0	**94**	2
7:30AM	1	164	5	0	**170**	0	3	60	22	31	0	**116**	0	21	87	3	0	**111**	2
7:45AM	1	166	11	0	**178**	0	9	41	8	33	0	**91**	0	47	88	11	0	**146**	0
Hourly Total	4	513	26	0	**543**	4	37	167	42	129	0	**375**	0	104	296	24	0	**424**	4
8:00AM	0	196	14	0	**210**	1	15	66	17	23	1	**122**	0	56	111	12	0	**179**	0
8:15AM	1	161	4	0	**166**	1	19	74	23	30	0	**146**	0	36	108	19	0	**163**	1
8:30AM	1	88	6	0	**95**	1	20	67	15	39	0	**141**	0	36	73	9	0	**118**	0
8:45AM	1	101	4	0	**106**	0	17	37	13	32	0	**99**	0	17	125	10	0	**152**	0
Hourly Total	3	546	28	0	**577**	3	71	244	68	124	1	**508**	0	145	417	50	0	**612**	1
4:00PM	1	132	15	0	**148**	0	19	155	23	43	1	**241**	1	35	68	11	0	**114**	1
4:15PM	1	112	14	0	**127**	0	20	123	25	30	2	**200**	2	33	80	19	0	**132**	0
4:30PM	2	101	8	0	**111**	0	24	113	37	22	1	**197**	2	20	69	7	0	**96**	1
4:45PM	3	95	13	0	**111**	0	18	85	23	21	1	**148**	2	23	79	10	0	**112**	0
Hourly Total	7	440	50	0	**497**	0	81	476	108	116	5	**786**	7	111	296	47	0	**454**	2
5:00PM	0	133	14	0	**147**	0	14	100	15	29	2	**160**	1	34	67	9	0	**110**	0
5:15PM	1	99	11	0	**111**	0	17	103	20	30	1	**171**	1	17	73	11	0	**101**	1
5:30PM	3	132	8	0	**143**	0	20	103	24	21	4	**172**	0	29	83	14	0	**126**	0
5:45PM	0	102	9	0	**111**	0	17	117	17	22	0	**173**	0	26	59	8	0	**93**	0
Hourly Total	4	466	42	0	**512**	0	68	423	76	102	7	**676**	2	106	282	42	0	**430**	1
Total	18	1965	146	0	**2129**	7	257	1310	294	471	13	**2345**	9	466	1291	163	0	**1920**	8
% Approach	0.8%	92.3%	6.9%	0%	**-**	-	11.0%	55.9%	12.5%	20.1%	0.6%	**-**	-	24.3%	67.2%	8.5%	0%	**-**	-
% Total	0.2%	22.7%	1.7%	0%	**24.6%**	-	3.0%	15.1%	3.4%	5.4%	0.1%	**27.1%**	-	5.4%	14.9%	1.9%	0%	**22.2%**	-
Motorcycles	0	0	0	0	**0**	-	0	1	1	0	0	**2**	-	0	0	0	0	**0**	-
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.3%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-
Lights	17	1957	142	0	**2116**	-	256	1304	288	467	13	**2328**	-	463	1264	160	0	**1887**	-
% Lights	94.4%	99.6%	97.3%	0%	**99.4%**	-	99.6%	99.5%	98.0%	99.2%	100%	**99.3%**	-	99.4%	97.9%	98.2%	0%	**98.3%**	-
Single-Unit Trucks	1	4	3	0	**8**	-	1	3	2	2	0	**8**	-	2	12	0	0	**14**	-
% Single-Unit Trucks	5.6%	0.2%	2.1%	0%	**0.4%**	-	0.4%	0.2%	0.7%	0.4%	0%	**0.3%**	-	0.4%	0.9%	0%	0%	**0.7%**	-
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	1	0	**2**	-	0	3	1	0	**4**	-
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0.2%	0%	**0.1%**	-	0%	0.2%	0.6%	0%	**0.2%**	-
Buses	0	4	1	0	**5**	-	0	1	3	1	0	**5**	-	1	12	2	0	**15**	-
% Buses	0%	0.2%	0.7%	0%	**0.2%**	-	0%	0.1%	1.0%	0.2%	0%	**0.2%**	-	0.2%	0.9%	1.2%	0%	**0.8%**	-
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	-	9	-	-	-	-	-	6
% Pedestrians	-	-	-	-	-	57.1%	-	-	-	-	-	-	100%	-	-	-	-	-	75.0%
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	-	0	-	-	-	-	-	2
% Bicycles on Crosswalk	-	-	-	-	-	42.9%	-	-	-	-	-	-	0%	-	-	-	-	-	25.0%

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

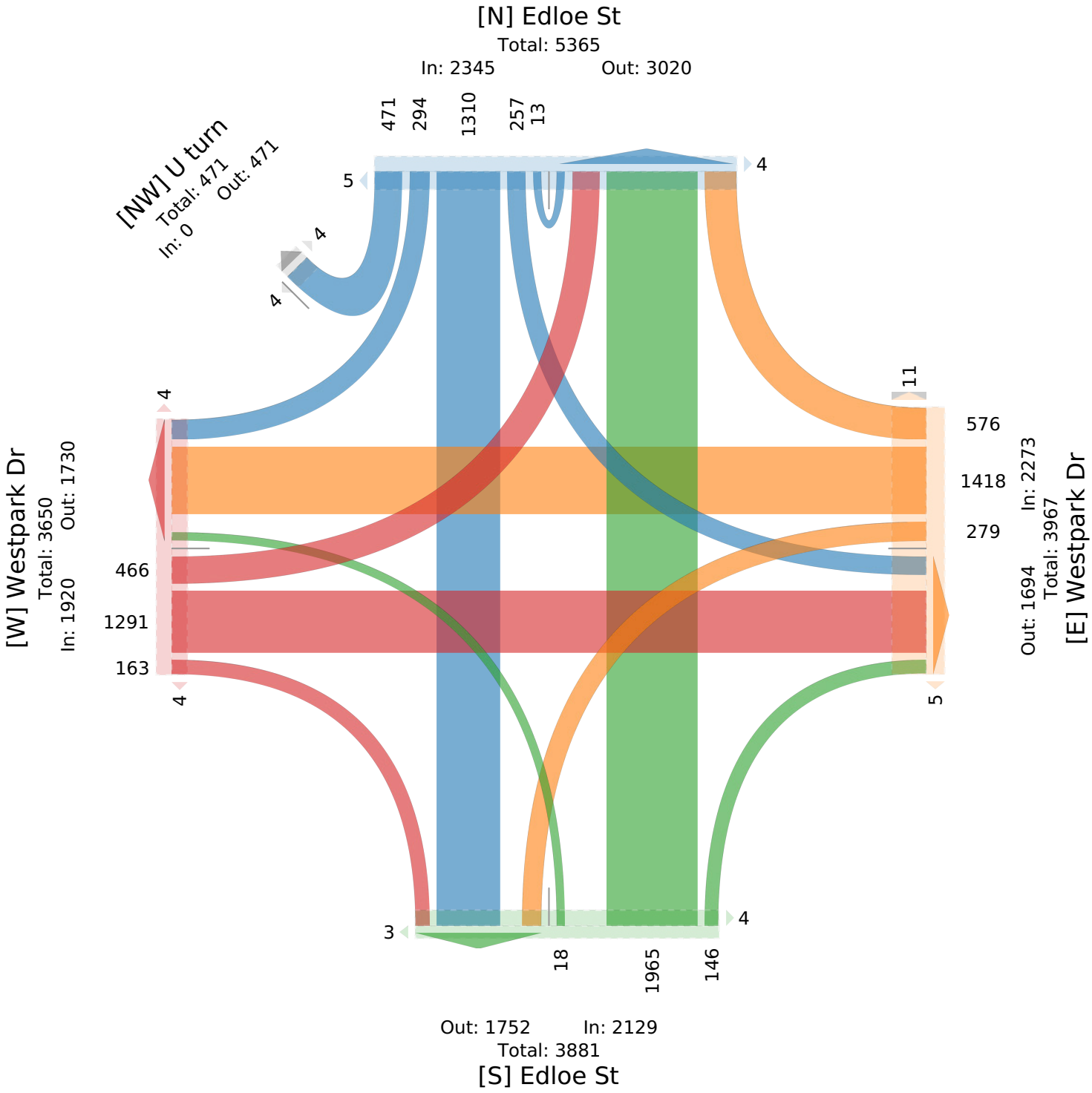
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Westpark Dr Westbound						U turn Southeastbound		
Time	L	T	R	U	**App**	Ped*	**App**	Ped*	**Int**
2021-09-02 7:00AM	6	22	25	0	**53**	3	**0**	0	**262**
7:15AM	10	29	36	0	**75**	1	**0**	2	**396**
7:30AM	5	39	32	0	**76**	0	**0**	2	**473**
7:45AM	14	54	38	0	**106**	0	**0**	0	**521**
Hourly Total	35	144	131	0	**310**	4	**0**	4	**1652**
8:00AM	5	59	39	0	**103**	2	**0**	0	**614**
8:15AM	11	44	48	0	**103**	0	**0**	1	**578**
8:30AM	18	54	34	0	**106**	2	**0**	0	**460**
8:45AM	12	51	34	0	**97**	0	**0**	0	**454**
Hourly Total	46	208	155	0	**409**	4	**0**	1	**2106**
4:00PM	19	120	27	0	**166**	1	**0**	1	**669**
4:15PM	24	121	38	0	**183**	1	**0**	0	**642**
4:30PM	34	155	35	0	**224**	1	**0**	1	**628**
4:45PM	24	133	43	0	**200**	2	**0**	0	**571**
Hourly Total	101	529	143	0	**773**	5	**0**	2	**2510**
5:00PM	18	132	49	0	**199**	2	**0**	0	**616**
5:15PM	30	144	37	0	**211**	0	**0**	1	**594**
5:30PM	26	141	28	0	**195**	1	**0**	0	**636**
5:45PM	23	120	33	0	**176**	0	**0**	0	**553**
Hourly Total	97	537	147	0	**781**	3	**0**	1	**2399**
Total	279	1418	576	0	**2273**	16	**0**	8	**8667**
% Approach	12.3%	62.4%	25.3%	0%	**-**	-	**-**	-	-
% Total	3.2%	16.4%	6.6%	0%	**26.2%**	-	**0%**	-	-
Motorcycles	1	0	0	0	**1**	-	**0**	-	3
% Motorcycles	0.4%	0%	0%	0%	**0%**	-	**-**	-	0%
Lights	277	1390	575	0	**2242**	-	**0**	-	8573
% Lights	99.3%	98.0%	99.8%	0%	**98.6%**	-	**-**	-	98.9%
Single-Unit Trucks	1	13	0	0	**14**	-	**0**	-	44
% Single-Unit Trucks	0.4%	0.9%	0%	0%	**0.6%**	-	**-**	-	0.5%
Articulated Trucks	0	2	0	0	**2**	-	**0**	-	8
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	**-**	-	0.1%
Buses	0	13	1	0	**14**	-	**0**	-	39
% Buses	0%	0.9%	0.2%	0%	**0.6%**	-	**-**	-	0.4%
Pedestrians	-	-	-	-	-	14	-	5	
% Pedestrians	-	-	-	-	-	87.5%	-	62.5%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	12.5%	-	37.5%	-

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC
Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St						Edloe St							Westpark Dr					
Direction	Northbound						Southbound							Eastbound					
Time	L	T	R	U	**App**	Ped*	L	T	R	HR	U	**App**	Ped*	L	T	R	U	**App**	Ped*
2021-09-02 7:30AM	1	164	5	0	**170**	0	3	60	22	31	0	**116**	0	21	87	3	0	**111**	2
7:45AM	1	166	11	0	**178**	0	9	41	8	33	0	**91**	0	47	88	11	0	**146**	0
8:00AM	0	196	14	0	**210**	1	15	66	17	23	1	**122**	0	56	111	12	0	**179**	0
8:15AM	1	161	4	0	**166**	1	19	74	23	30	0	**146**	0	36	108	19	0	**163**	1
Total	3	687	34	0	**724**	2	46	241	70	117	1	**475**	0	160	394	45	0	**599**	3
% Approach	0.4%	94.9%	4.7%	0%	**-**	-	9.7%	50.7%	14.7%	24.6%	0.2%	**-**	-	26.7%	65.8%	7.5%	0%	**-**	-
% Total	0.1%	31.4%	1.6%	0%	**33.1%**	-	2.1%	11.0%	3.2%	5.4%	0%	**21.7%**	-	7.3%	18.0%	2.1%	0%	**27.4%**	-
PHF	0.750	0.876	0.607	-	**0.862**	-	0.605	0.814	0.761	0.886	0.250	**0.813**	-	0.714	0.887	0.592	-	**0.837**	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	0	0	**0**	-
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-
Lights	2	684	34	0	**720**	-	46	241	70	116	1	**474**	-	158	386	43	0	**587**	-
% Lights	66.7%	99.6%	100%	0%	**99.4%**	-	100%	100%	100%	99.1%	100%	**99.8%**	-	98.8%	98.0%	95.6%	0%	**98.0%**	-
Single-Unit Trucks	1	0	0	0	**1**	-	0	0	0	1	0	**1**	-	1	3	0	0	**4**	-
% Single-Unit Trucks	33.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0.9%	0%	**0.2%**	-	0.6%	0.8%	0%	0%	**0.7%**	-
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	2	1	0	**3**	-
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0.5%	2.2%	0%	**0.5%**	-
Buses	0	3	0	0	**3**	-	0	0	0	0	0	**0**	-	1	3	1	0	**5**	-
% Buses	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	0%	**0%**	-	0.6%	0.8%	2.2%	0%	**0.8%**	-
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	-	0	-	-	-	-	-	2
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	66.7%
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	33.3%

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

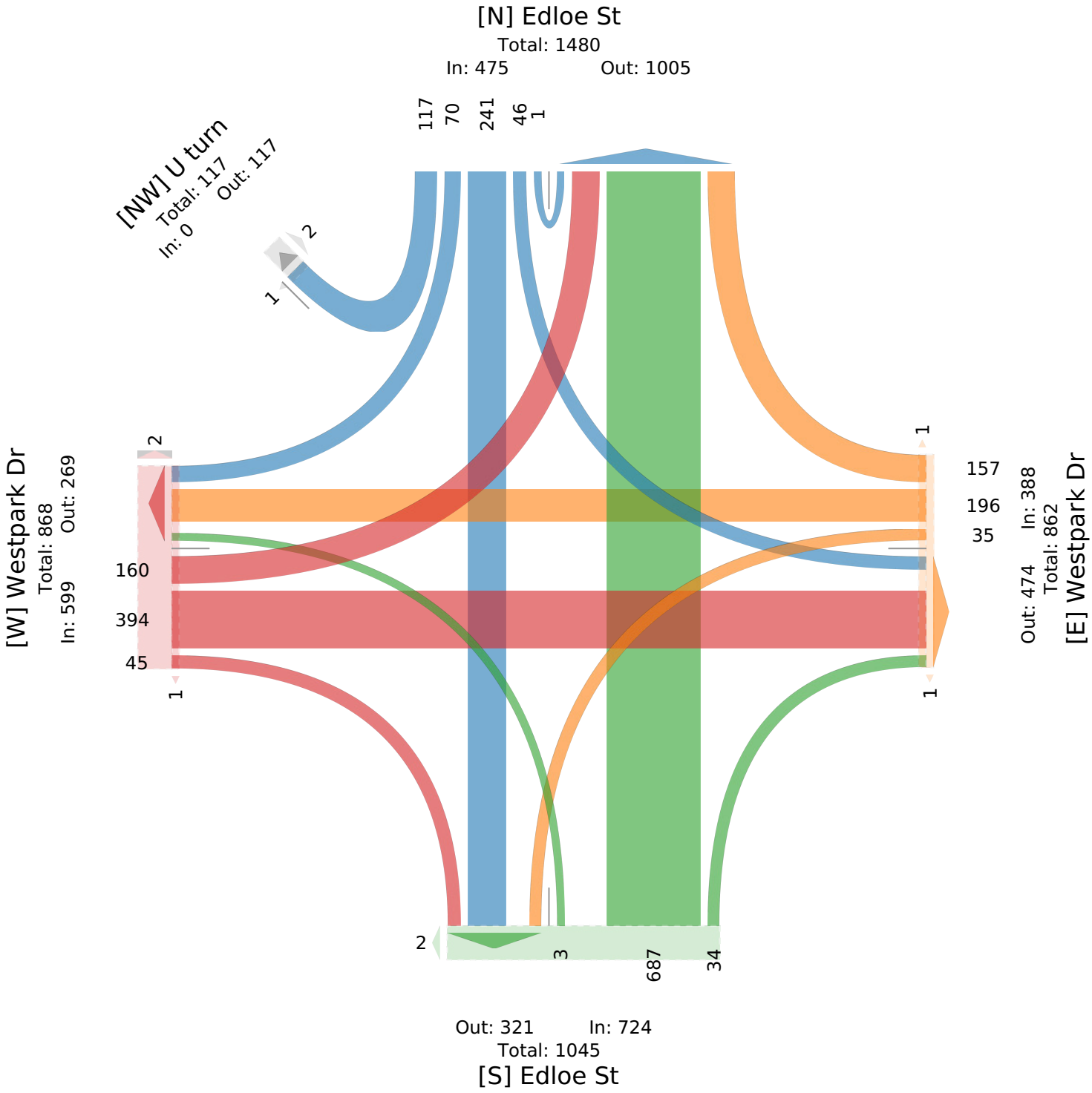
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Westpark Dr Westbound						U turn Southeastbound		
Time	L	T	R	U	**App**	Ped*	**App**	Ped*	**Int**
2021-09-02 7:30AM	5	39	32	0	**76**	0	**0**	2	**473**
7:45AM	14	54	38	0	**106**	0	**0**	0	**521**
8:00AM	5	59	39	0	**103**	2	**0**	0	**614**
8:15AM	11	44	48	0	**103**	0	**0**	1	**578**
Total	35	196	157	0	**388**	2	**0**	3	**2186**
% Approach	9.0%	50.5%	40.5%	0%	**-**	-	**-**	-	-
% Total	1.6%	9.0%	7.2%	0%	**17.7%**	-	**0%**	-	-
PHF	0.625	0.831	0.818	-	**0.915**	-	**-**	-	0.890
Motorcycles	0	0	0	0	**0**	-	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	**-**	-	0%
Lights	34	188	156	0	**378**	-	**0**	-	2159
% Lights	97.1%	95.9%	99.4%	0%	**97.4%**	-	**-**	-	98.8%
Single-Unit Trucks	1	3	0	0	**4**	-	**0**	-	10
% Single-Unit Trucks	2.9%	1.5%	0%	0%	**1.0%**	-	**-**	-	0.5%
Articulated Trucks	0	0	0	0	**0**	-	**0**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	**-**	-	0.1%
Buses	0	5	1	0	**6**	-	**0**	-	14
% Buses	0%	2.6%	0.6%	0%	**1.5%**	-	**-**	-	0.6%
Pedestrians	-	-	-	-	-	2	-	2	
% Pedestrians	-	-	-	-	-	100%	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC
Thu Sep 2, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St						Edloe St							Westpark Dr					
Direction	Northbound						Southbound							Eastbound					
Time	L	T	R	U	**App**	Ped*	L	T	R	HR	U	**App**	Ped*	L	T	R	U	**App**	Ped*
2021-09-02 4:00PM	1	132	15	0	**148**	0	19	155	23	43	1	**241**	1	35	68	11	0	**114**	1
4:15PM	1	112	14	0	**127**	0	20	123	25	30	2	**200**	2	33	80	19	0	**132**	0
4:30PM	2	101	8	0	**111**	0	24	113	37	22	1	**197**	2	20	69	7	0	**96**	1
4:45PM	3	95	13	0	**111**	0	18	85	23	21	1	**148**	2	23	79	10	0	**112**	0
Total	7	440	50	0	**497**	0	81	476	108	116	5	**786**	7	111	296	47	0	**454**	2
% Approach	1.4%	88.5%	10.1%	0%	**-**	-	10.3%	60.6%	13.7%	14.8%	0.6%	**-**	-	24.4%	65.2%	10.4%	0%	**-**	-
% Total	0.3%	17.5%	2.0%	0%	**19.8%**	-	3.2%	19.0%	4.3%	4.6%	0.2%	**31.3%**	-	4.4%	11.8%	1.9%	0%	**18.1%**	-
PHF	0.583	0.833	0.833	-	**0.840**	-	0.844	0.768	0.730	0.674	0.625	**0.815**	-	0.793	0.925	0.618	-	**0.860**	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	0	0	**0**	-
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-
Lights	7	438	48	0	**493**	-	81	473	104	114	5	**777**	-	111	290	47	0	**448**	-
% Lights	100%	99.5%	96.0%	0%	**99.2%**	-	100%	99.4%	96.3%	98.3%	100%	**98.9%**	-	100%	98.0%	100%	0%	**98.7%**	-
Single-Unit Trucks	0	1	2	0	**3**	-	0	1	2	1	0	**4**	-	0	3	0	0	**3**	-
% Single-Unit Trucks	0%	0.2%	4.0%	0%	**0.6%**	-	0%	0.2%	1.9%	0.9%	0%	**0.5%**	-	0%	1.0%	0%	0%	**0.7%**	-
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	0	**1**	-	0	0	0	0	**0**	-
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-
Buses	0	1	0	0	**1**	-	0	1	2	1	0	**4**	-	0	3	0	0	**3**	-
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	1.9%	0.9%	0%	**0.5%**	-	0%	1.0%	0%	0%	**0.7%**	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	7	-	-	-	-	-	2
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

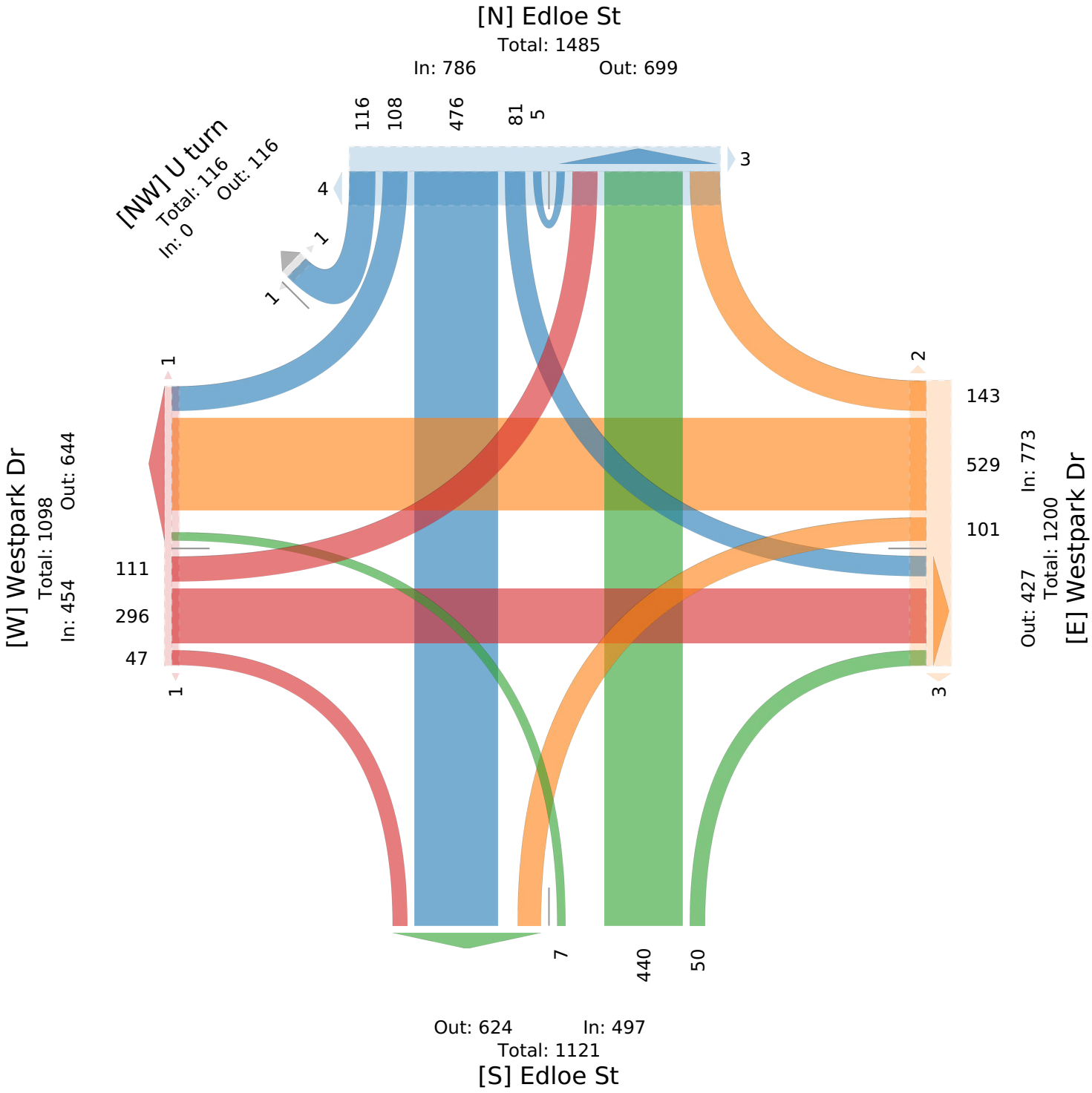
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Westpark Dr Westbound						U turn Southeastbound		
Time	L	T	R	U	**App**	Ped*	**App**	Ped*	**Int**
2021-09-02 4:00PM	19	120	27	0	**166**	1	**0**	1	**669**
4:15PM	24	121	38	0	**183**	1	**0**	0	**642**
4:30PM	34	155	35	0	**224**	1	**0**	1	**628**
4:45PM	24	133	43	0	**200**	2	**0**	0	**571**
Total	101	529	143	0	**773**	5	**0**	2	**2510**
% Approach	13.1%	68.4%	18.5%	0%	**-**	-	**-**	-	-
% Total	4.0%	21.1%	5.7%	0%	**30.8%**	-	**0%**	-	-
PHF	0.743	0.853	0.831	-	**0.863**	-	**-**	-	0.938
Motorcycles	1	0	0	0	**1**	-	**0**	-	1
% Motorcycles	1.0%	0%	0%	0%	**0.1%**	-	**-**	-	0%
Lights	100	519	143	0	**762**	-	**0**	-	2480
% Lights	99.0%	98.1%	100%	0%	**98.6%**	-	**-**	-	98.8%
Single-Unit Trucks	0	5	0	0	**5**	-	**0**	-	15
% Single-Unit Trucks	0%	0.9%	0%	0%	**0.6%**	-	**-**	-	0.6%
Articulated Trucks	0	2	0	0	**2**	-	**0**	-	3
% Articulated Trucks	0%	0.4%	0%	0%	**0.3%**	-	**-**	-	0.1%
Buses	0	3	0	0	**3**	-	**0**	-	11
% Buses	0%	0.6%	0%	0%	**0.4%**	-	**-**	-	0.4%
Pedestrians	-	-	-	-	-	5	-	1	
% Pedestrians	-	-	-	-	-	100%	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Westpark Dr at Edloe St - TMC
Thu Sep 2, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867320, Location: 29.727949, -95.433412

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

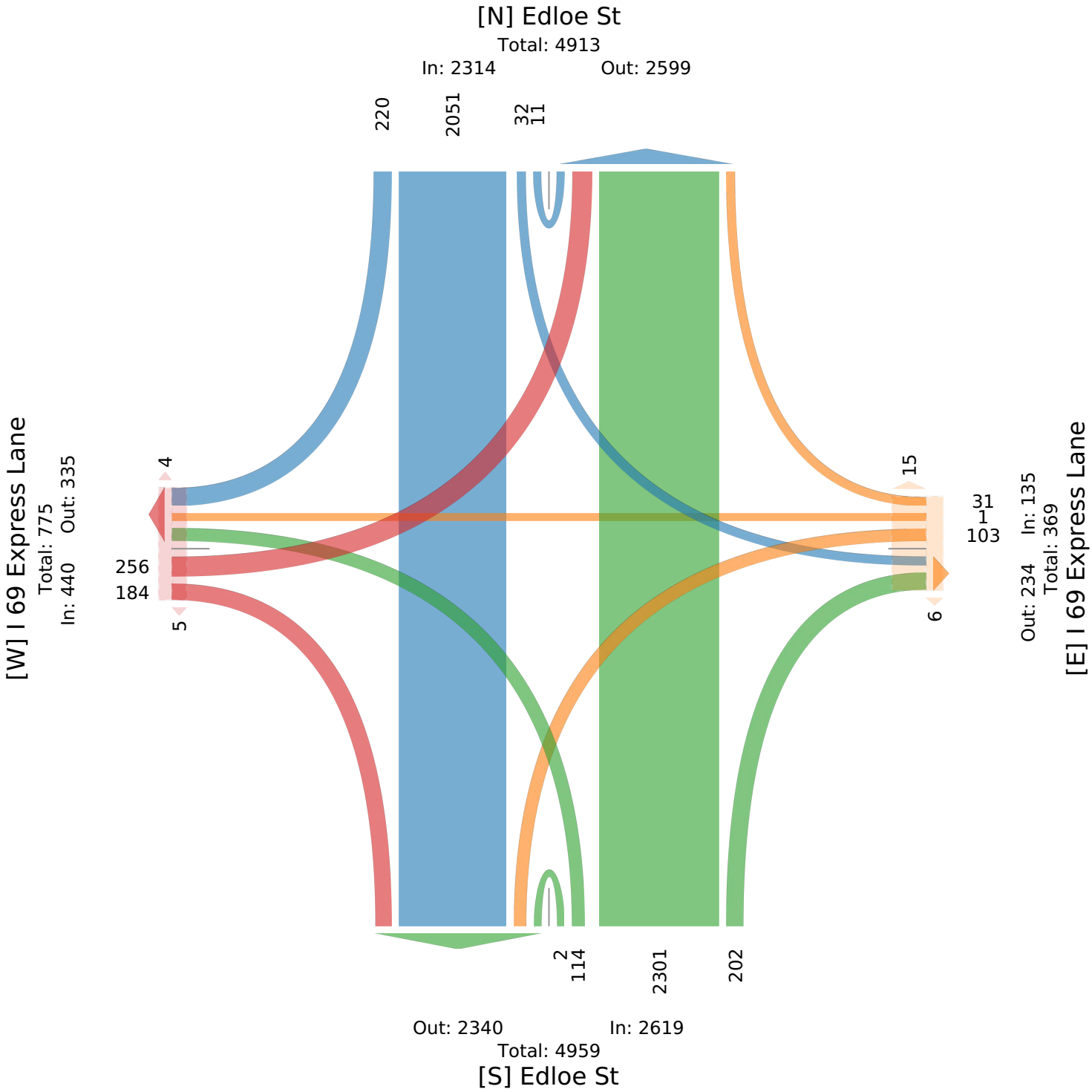
Leg	Edloe St						Edloe St						I 69 Express Lane						I 69 Express Lane						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-02 7:00AM	0	82	12	0	**94**	0	1	64	0	0	**65**	0	19	0	14	0	**33**	0	0	0	0	0	**0**	4	**192**
7:15AM	0	120	36	0	**156**	0	3	66	0	0	**69**	0	30	0	25	0	**55**	2	0	0	0	0	**0**	1	**280**
7:30AM	0	138	46	0	**184**	0	4	98	0	0	**102**	0	26	0	21	0	**47**	2	0	0	0	0	**0**	0	**333**
7:45AM	0	206	35	0	**241**	0	10	70	0	0	**80**	0	37	0	19	0	**56**	0	0	0	0	0	**0**	0	**377**
Hourly Total	0	546	129	0	**675**	0	18	298	0	0	**316**	0	112	0	79	0	**191**	4	0	0	0	0	**0**	5	**1182**
8:00AM	0	255	36	0	**291**	0	3	97	0	0	**100**	0	50	0	26	0	**76**	0	0	0	0	0	**0**	2	**467**
8:15AM	0	183	21	0	**204**	0	5	115	0	0	**120**	0	35	0	36	0	**71**	1	0	0	0	0	**0**	0	**395**
8:30AM	0	114	10	0	**124**	0	4	114	0	0	**118**	0	27	0	24	0	**51**	0	0	0	0	0	**0**	2	**293**
8:45AM	0	130	6	0	**136**	0	2	81	0	0	**83**	0	32	0	19	0	**51**	0	0	0	0	0	**0**	0	**270**
Hourly Total	0	682	73	0	**755**	0	14	407	0	0	**421**	0	144	0	105	0	**249**	1	0	0	0	0	**0**	4	**1425**
4:00PM	18	116	0	1	**135**	0	0	213	37	1	**251**	0	0	0	0	0	**0**	1	14	0	7	0	**21**	1	**407**
4:15PM	21	118	0	0	**139**	0	0	183	42	2	**227**	0	0	0	0	0	**0**	0	25	0	5	0	**30**	2	**396**
4:30PM	17	104	0	0	**121**	0	0	159	32	3	**194**	0	0	0	0	0	**0**	1	27	0	4	0	**31**	5	**346**
4:45PM	12	121	0	0	**133**	0	0	141	14	2	**157**	0	0	0	0	0	**0**	0	9	0	5	0	**14**	1	**304**
Hourly Total	68	459	0	1	**528**	0	0	696	125	8	**829**	0	0	0	0	0	**0**	2	75	0	21	0	**96**	9	**1453**
5:00PM	11	162	0	0	**173**	0	0	157	26	2	**185**	0	0	0	0	0	**0**	1	2	0	2	0	**4**	1	**362**
5:15PM	11	145	0	1	**157**	0	0	161	21	0	**182**	0	0	0	0	0	**0**	1	8	0	1	0	**9**	1	**348**
5:30PM	12	172	0	0	**184**	0	0	172	25	1	**198**	0	0	0	0	0	**0**	0	10	0	3	0	**13**	1	**395**
5:45PM	12	135	0	0	**147**	0	0	160	23	0	**183**	0	0	0	0	0	**0**	0	8	1	4	0	**13**	0	**343**
Hourly Total	46	614	0	1	**661**	0	0	650	95	3	**748**	0	0	0	0	0	**0**	2	28	1	10	0	**39**	3	**1448**
Total	114	2301	202	2	**2619**	0	32	2051	220	11	**2314**	0	256	0	184	0	**440**	9	103	1	31	0	**135**	21	**5508**
% Approach	4.4%	87.9%	7.7%	0.1%	**-**	-	1.4%	88.6%	9.5%	0.5%	**-**	-	58.2%	0%	41.8%	0%	**-**	-	76.3%	0.7%	23.0%	0%	**-**	-	-
% Total	2.1%	41.8%	3.7%	0%	**47.5%**	-	0.6%	37.2%	4.0%	0.2%	**42.0%**	-	4.6%	0%	3.3%	0%	**8.0%**	-	1.9%	0%	0.6%	0%	**2.5%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3	0	0	0	**3**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%	0%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	105	2291	202	2	**2600**	-	32	2042	219	11	**2304**	-	253	0	184	0	**437**	-	97	1	31	0	**129**	-	5470
% Lights	92.1%	99.6%	100%	100%	**99.3%**	-	100%	99.6%	99.5%	100%	**99.6%**	-	98.8%	0%	100%	0%	**99.3%**	-	94.2%	100%	100%	0%	**95.6%**	-	99.3%
Single-Unit Trucks	0	4	0	0	**4**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	12
% Single-Unit Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	1.9%	0%	0%	0%	**1.5%**	-	0.2%
Articulated Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	9	5	0	0	**14**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	4	0	0	0	**4**	-	20
% Buses	7.9%	0.2%	0%	0%	**0.5%**	-	0%	0%	0.5%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	3.9%	0%	0%	0%	**3.0%**	-	0.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	18	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 66.7%		-	-	-	-	- 85.7%		-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 33.3%		-	-	-	-	- 14.3%		-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

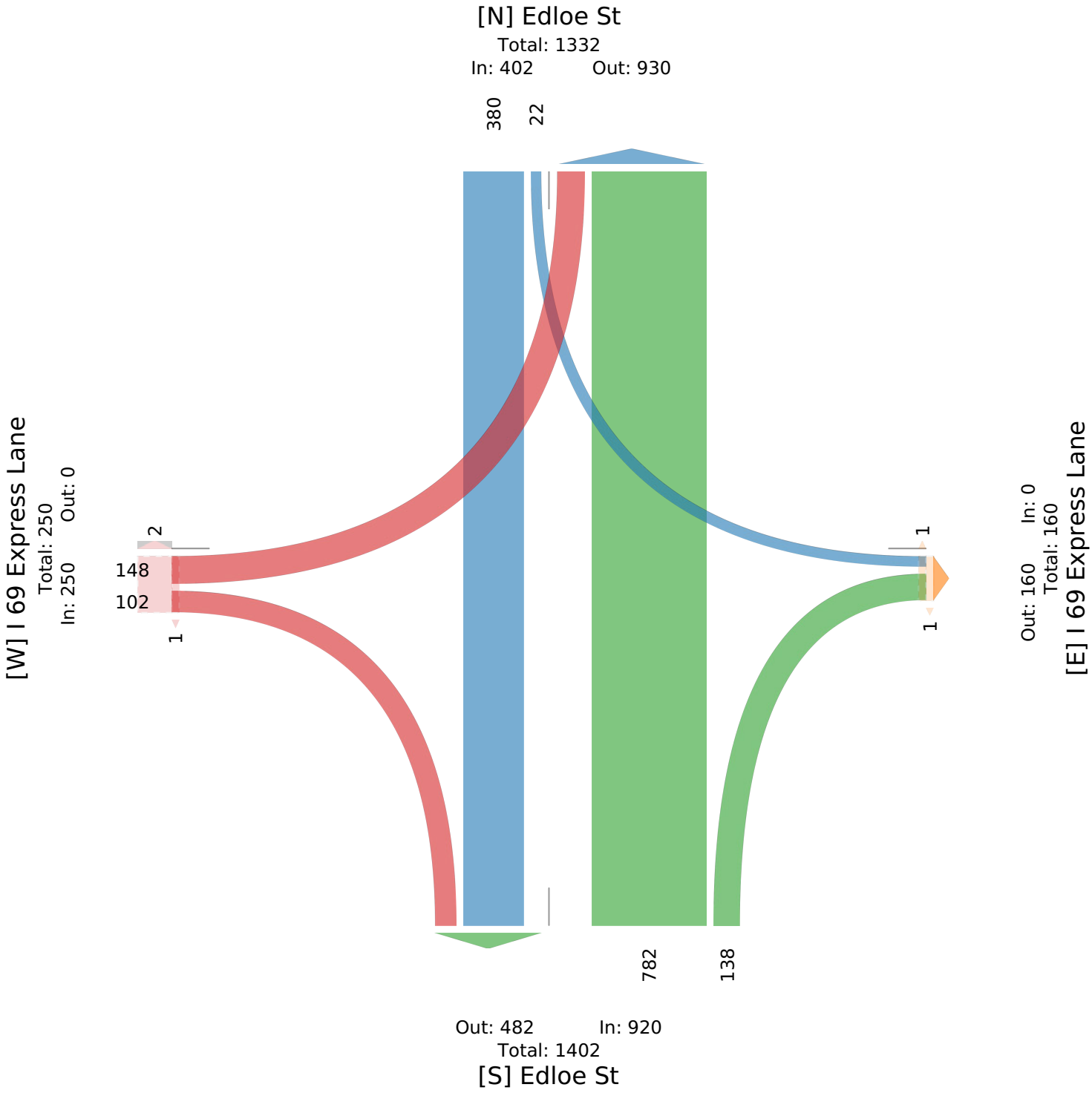
Leg / Direction	Edloe St Northbound						Edloe St Southbound						I 69 Express Lane Eastbound						I 69 Express Lane Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-02 7:30AM	0	138	46	0	**184**	0	4	98	0	0	**102**	0	26	0	21	0	**47**	2	0	0	0	0	**0**	0	**333**
7:45AM	0	206	35	0	**241**	0	10	70	0	0	**80**	0	37	0	19	0	**56**	0	0	0	0	0	**0**	0	**377**
8:00AM	0	255	36	0	**291**	0	3	97	0	0	**100**	0	50	0	26	0	**76**	0	0	0	0	0	**0**	2	**467**
8:15AM	0	183	21	0	**204**	0	5	115	0	0	**120**	0	35	0	36	0	**71**	1	0	0	0	0	**0**	0	**395**
Total	0	782	138	0	**920**	0	22	380	0	0	**402**	0	148	0	102	0	**250**	3	0	0	0	0	**0**	2	**1572**
% Approach	0%	85.0%	15.0%	0%	**-**	-	5.5%	94.5%	0%	0%	**-**	-	59.2%	0%	40.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	49.7%	8.8%	0%	**58.5%**	-	1.4%	24.2%	0%	0%	**25.6%**	-	9.4%	0%	6.5%	0%	**15.9%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.767	0.750	-	**0.790**	-	0.550	0.826	-	-	**0.838**	-	0.740	-	0.708	-	**0.822**	-	-	-	-	-	**-**	-	0.842
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.0%	0%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**-**	-	0.2%
Lights	0	777	138	0	**915**	-	22	379	0	0	**401**	-	145	0	102	0	**247**	-	0	0	0	0	**0**	-	1563
% Lights	0%	99.4%	100%	0%	**99.5%**	-	100%	99.7%	0%	0%	**99.8%**	-	98.0%	0%	100%	0%	**98.8%**	-	0%	0%	0%	0%	**-**	-	99.4%
Single-Unit Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Single-Unit Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Buses	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Buses	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.7%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.3%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

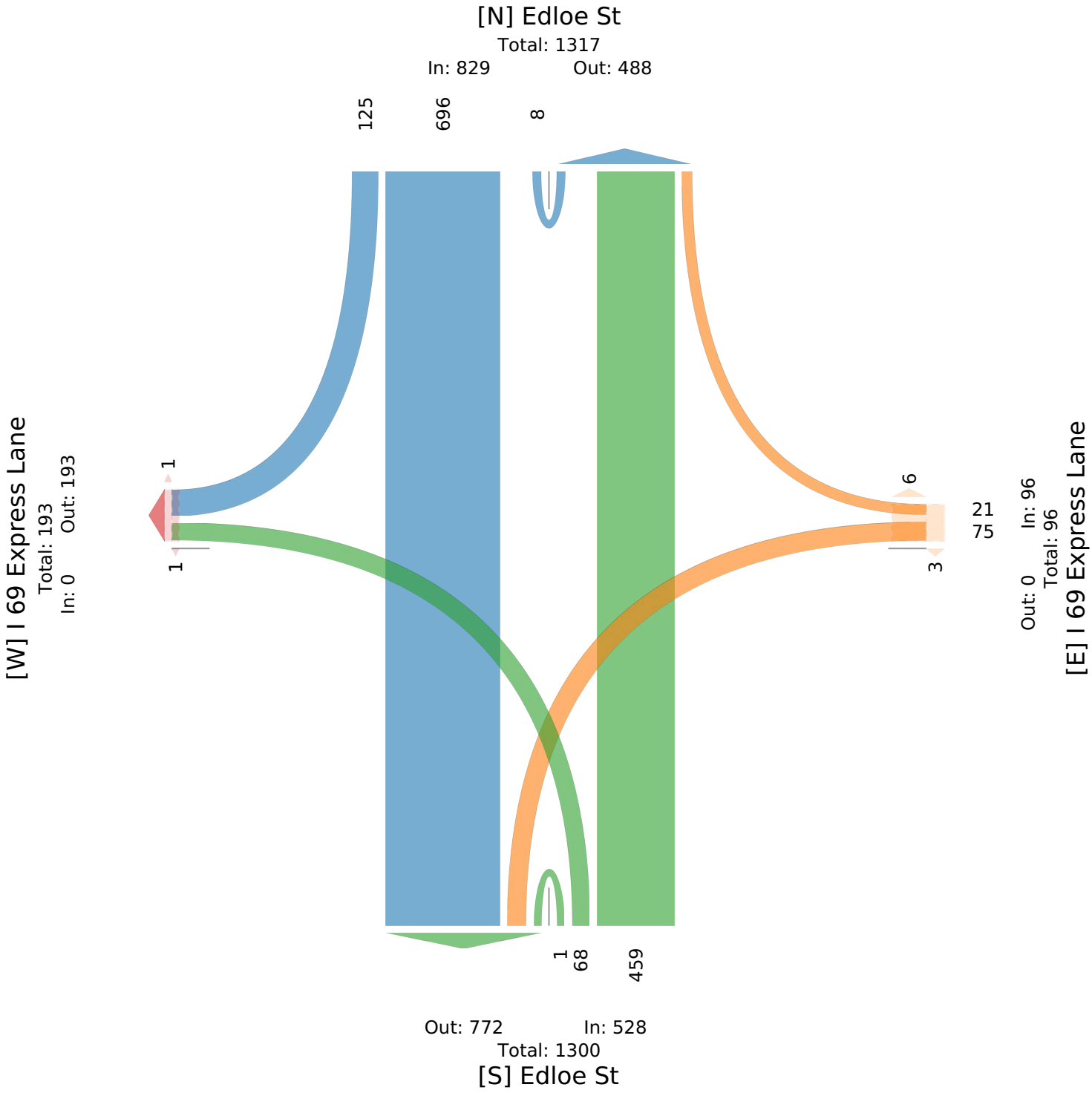
Leg	Edloe St						Edloe St						I 69 Express Lane						I 69 Express Lane						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-02 4:00PM	18	116	0	1	**135**	0	0	213	37	1	**251**	0	0	0	0	0	**0**	1	14	0	7	0	**21**	1	**407**
4:15PM	21	118	0	0	**139**	0	0	183	42	2	**227**	0	0	0	0	0	**0**	0	25	0	5	0	**30**	2	**396**
4:30PM	17	104	0	0	**121**	0	0	159	32	3	**194**	0	0	0	0	0	**0**	1	27	0	4	0	**31**	5	**346**
4:45PM	12	121	0	0	**133**	0	0	141	14	2	**157**	0	0	0	0	0	**0**	0	9	0	5	0	**14**	1	**304**
Total	68	459	0	1	**528**	0	0	696	125	8	**829**	0	0	0	0	0	**0**	2	75	0	21	0	**96**	9	**1453**
% Approach	12.9%	86.9%	0%	0.2%	**-**	-	0%	84.0%	15.1%	1.0%	**-**	-	0%	0%	0%	0%	**-**	-	78.1%	0%	21.9%	0%	**-**	-	-
% Total	4.7%	31.6%	0%	0.1%	**36.3%**	-	0%	47.9%	8.6%	0.6%	**57.1%**	-	0%	0%	0%	0%	**0%**	-	5.2%	0%	1.4%	0%	**6.6%**	-	-
PHF	0.810	0.948	-	0.250	**0.950**	-	-	0.817	0.744	0.667	**0.826**	-	-	-	-	-	**-**	-	0.694	-	0.750	-	**0.774**	-	0.893
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	68	457	0	1	**526**	-	0	692	124	8	**824**	-	0	0	0	0	**0**	-	72	0	21	0	**93**	-	1443
% Lights	100%	99.6%	0%	100%	**99.6%**	-	0%	99.4%	99.2%	100%	**99.4%**	-	0%	0%	0%	0%	**-**	-	96.0%	0%	100%	0%	**96.9%**	-	99.3%
Single-Unit Trucks	0	1	0	0	**1**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	5
% Single-Unit Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	1.3%	0%	0%	0%	**1.0%**	-	0.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	1	0	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	5
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0.1%	0.8%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	2.7%	0%	0%	0%	**2.1%**	-	0.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

I 69 Express Lane at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867321, Location: 29.729246, -95.433452

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St							Edloe St							Richmond Ave						
Direction	Northbound							Southbound							Eastbound						
Time	L	BL	T	R	U	App	Ped*	L	T	R	HR	U	App	Ped*	HL	L	T	R	U	App	Ped*
2021-09-02 7:00AM	7	15	44	21	0	**87**	0	0	0	0	0	0	**0**	0	4	8	94	22	1	**129**	0
7:15AM	23	14	109	35	0	**181**	1	0	0	0	0	0	**0**	3	4	9	83	29	0	**125**	0
7:30AM	18	16	103	32	0	**169**	1	0	0	0	0	0	**0**	7	3	6	119	30	0	**158**	1
7:45AM	22	12	168	84	0	**286**	0	0	0	0	0	0	**0**	4	2	15	154	34	0	**205**	2
Hourly Total	70	57	424	172	0	**723**	2	0	0	0	0	0	**0**	14	13	38	450	115	1	**617**	3
8:00AM	22	10	182	72	0	**286**	2	0	0	0	0	0	**0**	0	6	11	154	30	1	**202**	0
8:15AM	32	26	216	63	0	**337**	0	0	0	0	0	0	**0**	0	3	13	116	30	0	**162**	0
8:30AM	26	23	84	33	0	**166**	4	0	0	0	0	0	**0**	1	3	11	145	32	0	**191**	1
8:45AM	37	16	112	33	0	**198**	1	0	0	0	0	0	**0**	3	5	15	93	39	0	**152**	1
Hourly Total	117	75	594	201	0	**987**	7	0	0	0	0	0	**0**	4	17	50	508	131	1	**707**	2
4:00PM	49	0	92	36	2	**179**	0	0	0	0	0	0	**0**	1	0	16	128	60	1	**205**	1
4:15PM	30	0	93	46	0	**169**	1	0	0	0	0	0	**0**	1	0	15	166	68	1	**250**	0
4:30PM	36	0	88	33	0	**157**	3	0	0	0	0	0	**0**	0	0	11	158	47	0	**216**	0
4:45PM	55	0	114	29	0	**198**	0	0	0	0	0	0	**0**	4	0	20	129	47	2	**198**	1
Hourly Total	170	0	387	144	2	**703**	4	0	0	0	0	0	**0**	6	0	62	581	222	4	**869**	2
5:00PM	60	0	120	37	0	**217**	0	0	0	0	0	0	**0**	2	0	21	154	69	4	**248**	2
5:15PM	42	0	97	37	0	**176**	0	0	0	0	0	0	**0**	0	0	12	186	51	0	**249**	2
5:30PM	38	0	108	35	1	**182**	5	0	0	0	0	0	**0**	0	0	14	132	52	0	**198**	2
5:45PM	43	0	105	27	0	**175**	0	0	0	0	0	0	**0**	0	0	14	151	51	0	**216**	3
Hourly Total	183	0	430	136	1	**750**	5	0	0	0	0	0	**0**	2	0	61	623	223	4	**911**	9
Total	540	132	1835	653	3	**3163**	18	0	0	0	0	0	**0**	26	30	211	2162	691	10	**3104**	16
% Approach	17.1%	4.2%	58.0%	20.6%	0.1%	**-**	-	0%	0%	0%	0%	0%	**-**	-	1.0%	6.8%	69.7%	22.3%	0.3%	**-**	-
% Total	4.9%	1.2%	16.6%	5.9%	0%	**28.7%**	-	0%	0%	0%	0%	0%	**0%**	-	0.3%	1.9%	19.6%	6.3%	0.1%	**28.1%**	-
Motorcycles	2	0	0	1	0	**3**	-	0	0	0	0	0	**0**	-	0	0	1	1	0	**2**	-
% Motorcycles	0.4%	0%	0%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0%	0.1%	0%	**0.1%**	-
Lights	533	131	1826	646	3	**3139**	-	0	0	0	0	0	**0**	-	30	209	2110	686	10	**3045**	-
% Lights	98.7%	99.2%	99.5%	98.9%	100%	**99.2%**	-	0%	0%	0%	0%	0%	**-**	-	100%	99.1%	97.6%	99.3%	100%	**98.1%**	-
Single-Unit Trucks	4	0	2	2	0	**8**	-	0	0	0	0	0	**0**	-	0	1	12	4	0	**17**	-
% Single-Unit Trucks	0.7%	0%	0.1%	0.3%	0%	**0.3%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0.5%	0.6%	0.6%	0%	**0.5%**	-
Articulated Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	1	1	0	0	**2**	-
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0.5%	0%	0%	0%	**0.1%**	-
Buses	1	1	7	4	0	**13**	-	0	0	0	0	0	**0**	-	0	0	38	0	0	**38**	-
% Buses	0.2%	0.8%	0.4%	0.6%	0%	**0.4%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	1.8%	0%	0%	**1.2%**	-
Pedestrians	-	-	-	-	-	-	17	-	-	-	-	-	-	25	-	-	-	-	-	-	15
% Pedestrians	-	-	-	-	-	-	94.4%	-	-	-	-	-	-	96.2%	-	-	-	-	-	-	93.8%
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	5.6%	-	-	-	-	-	-	3.8%	-	-	-	-	-	-	6.3%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

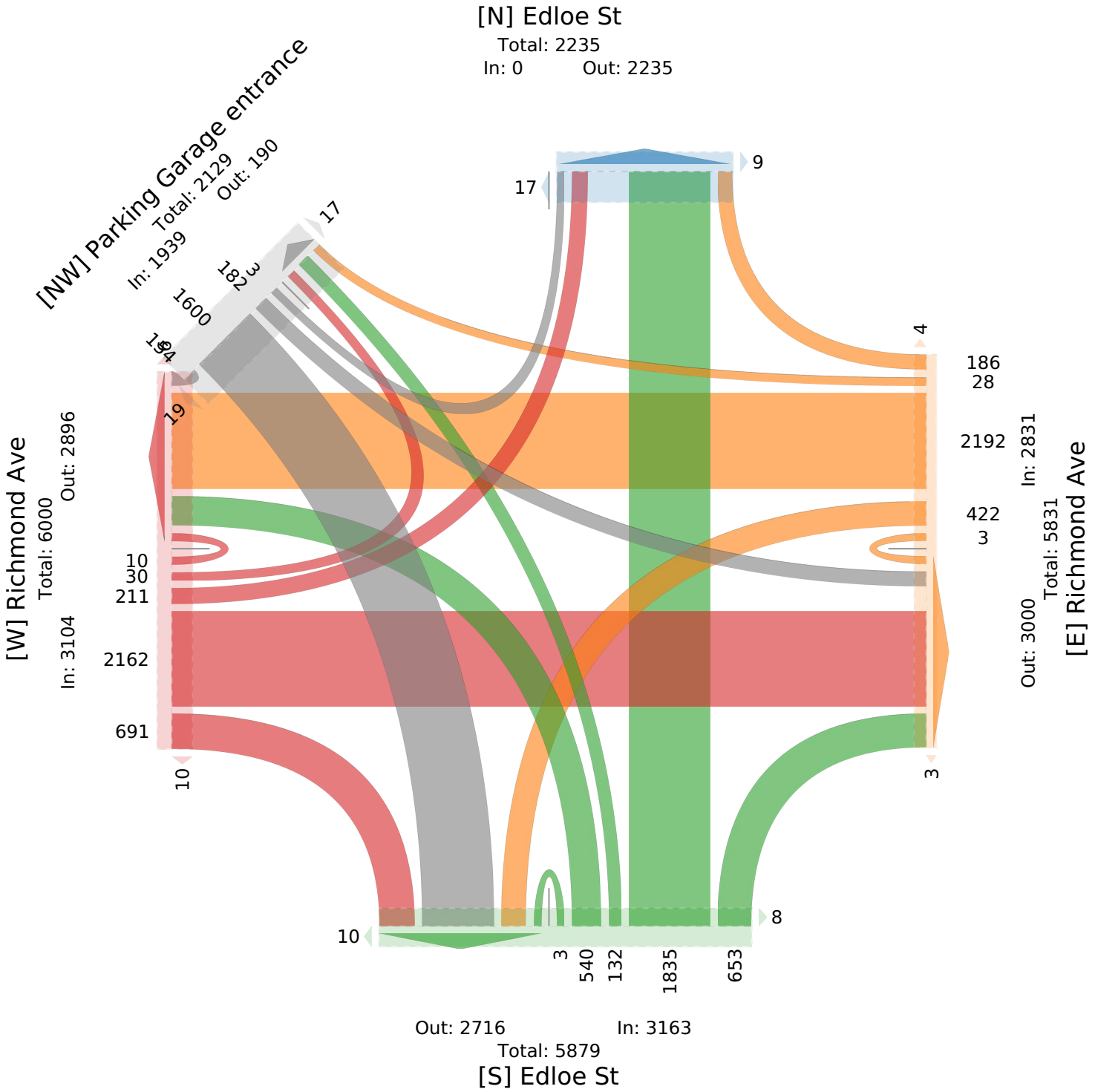
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Richmond Ave							Parking Garage entrance							
Direction	Westbound							Southeastbound							
Time	L	T	BR	R	U	App	Ped*	HL	BL	BR	HR	U	App	Ped*	Int
2021-09-02 7:00AM	6	41	2	3	0	**52**	1	0	5	42	6	0	**53**	0	**321**
7:15AM	7	52	2	5	0	**66**	0	0	6	71	5	0	**82**	3	**454**
7:30AM	6	84	3	7	1	**101**	0	0	3	74	5	0	**82**	7	**510**
7:45AM	10	86	4	9	0	**109**	1	0	6	74	12	0	**92**	3	**692**
Hourly Total	29	263	11	24	1	**328**	2	0	20	261	28	0	**309**	13	**1977**
8:00AM	19	104	3	19	0	**145**	0	0	14	78	4	0	**96**	3	**729**
8:15AM	15	138	7	17	0	**177**	1	0	19	127	7	0	**153**	1	**829**
8:30AM	23	136	6	20	0	**185**	1	0	9	71	8	0	**88**	1	**630**
8:45AM	15	90	1	3	0	**109**	0	0	10	66	7	0	**83**	3	**542**
Hourly Total	72	468	17	59	0	**616**	2	0	52	342	26	0	**420**	8	**2730**
4:00PM	31	174	0	10	0	**215**	1	0	24	160	16	0	**200**	1	**799**
4:15PM	48	181	0	12	1	**242**	1	2	13	141	10	0	**166**	1	**827**
4:30PM	57	220	0	20	0	**297**	0	0	10	115	12	0	**137**	0	**807**
4:45PM	28	164	0	10	0	**202**	0	0	16	105	14	0	**135**	4	**733**
Hourly Total	164	739	0	52	1	**956**	2	2	63	521	52	0	**638**	6	**3166**
5:00PM	48	192	0	18	1	**259**	0	0	11	137	15	0	**163**	3	**887**
5:15PM	34	205	0	11	0	**250**	0	0	13	110	9	0	**132**	2	**807**
5:30PM	36	165	0	12	0	**213**	1	0	12	141	14	0	**167**	2	**760**
5:45PM	39	160	0	10	0	**209**	0	1	11	88	10	0	**110**	2	**710**
Hourly Total	157	722	0	51	1	**931**	1	1	47	476	48	0	**572**	9	**3164**
Total	422	2192	28	186	3	**2831**	7	3	182	1600	154	0	**1939**	36	**11037**
% Approach	14.9%	77.4%	1.0%	6.6%	0.1%	**-**	-	0.2%	9.4%	82.5%	7.9%	0%	**-**	-	-
% Total	3.8%	19.9%	0.3%	1.7%	0%	**25.7%**	-	0%	1.6%	14.5%	1.4%	0%	**17.6%**	-	-
Motorcycles	0	1	0	0	0	**1**	-	0	0	2	0	0	**2**	-	8
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	419	2140	28	184	3	**2774**	-	3	180	1592	151	0	**1926**	-	10884
% Lights	99.3%	97.6%	100%	98.9%	100%	**98.0%**	-	100%	98.9%	99.5%	98.1%	0%	**99.3%**	-	98.6%
Single-Unit Trucks	2	12	0	2	0	**16**	-	0	2	4	2	0	**8**	-	49
% Single-Unit Trucks	0.5%	0.5%	0%	1.1%	0%	**0.6%**	-	0%	1.1%	0.3%	1.3%	0%	**0.4%**	-	0.4%
Articulated Trucks	0	6	0	0	0	**6**	-	0	0	1	0	0	**1**	-	9
% Articulated Trucks	0%	0.3%	0%	0%	0%	**0.2%**	-	0%	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	1	33	0	0	0	**34**	-	0	0	1	1	0	**2**	-	87
% Buses	0.2%	1.5%	0%	0%	0%	**1.2%**	-	0%	0%	0.1%	0.6%	0%	**0.1%**	-	0.8%
Pedestrians	-	-	-	-	-	-	7	-	-	-	-	-	-	35	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	97.2%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	2.8%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC
Thu Sep 2, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St							Edloe St							Richmond Ave						
Direction	Northbound							Southbound							Eastbound						
Time	L	BL	T	R	U	App	Ped*	L	T	R	HR	U	App	Ped*	HL	L	T	R	U	App	Ped*
2021-09-02 7:45AM	22	12	168	84	0	**286**	0	0	0	0	0	0	**0**	4	2	15	154	34	0	**205**	2
8:00AM	22	10	182	72	0	**286**	2	0	0	0	0	0	**0**	0	6	11	154	30	1	**202**	0
8:15AM	32	26	216	63	0	**337**	0	0	0	0	0	0	**0**	0	3	13	116	30	0	**162**	0
8:30AM	26	23	84	33	0	**166**	4	0	0	0	0	0	**0**	1	3	11	145	32	0	**191**	1
Total	102	71	650	252	0	**1075**	6	0	0	0	0	0	**0**	5	14	50	569	126	1	**760**	3
% Approach	9.5%	6.6%	60.5%	23.4%	0%	**-**	-	0%	0%	0%	0%	0%	**-**	-	1.8%	6.6%	74.9%	16.6%	0.1%	**-**	-
% Total	3.5%	2.5%	22.6%	8.8%	0%	**37.3%**	-	0%	0%	0%	0%	0%	**0%**	-	0.5%	1.7%	19.8%	4.4%	0%	**26.4%**	-
PHF	0.797	0.683	0.752	0.750	-	**0.797**	-	-	-	-	-	-	**-**	-	0.583	0.833	0.924	0.926	0.250	**0.927**	-
Motorcycles	1	0	0	1	0	**2**	-	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-
% Motorcycles	1.0%	0%	0%	0.4%	0%	**0.2%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	0%	**0%**	-
Lights	100	71	644	246	0	**1061**	-	0	0	0	0	0	**0**	-	14	50	554	125	1	**744**	-
% Lights	98.0%	100%	99.1%	97.6%	0%	**98.7%**	-	0%	0%	0%	0%	0%	**-**	-	100%	100%	97.4%	99.2%	100%	**97.9%**	-
Single-Unit Trucks	0	0	1	1	0	**2**	-	0	0	0	0	0	**0**	-	0	0	5	1	0	**6**	-
% Single-Unit Trucks	0%	0%	0.2%	0.4%	0%	**0.2%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0.9%	0.8%	0%	**0.8%**	-
Articulated Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	0%	**0%**	-
Buses	1	0	5	4	0	**10**	-	0	0	0	0	0	**0**	-	0	0	10	0	0	**10**	-
% Buses	1.0%	0%	0.8%	1.6%	0%	**0.9%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	1.8%	0%	0%	**1.3%**	-
Pedestrians	-	-	-	-	-	-	6	-	-	-	-	-	-	5	-	-	-	-	-	-	2
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	-	66.7%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	33.3%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

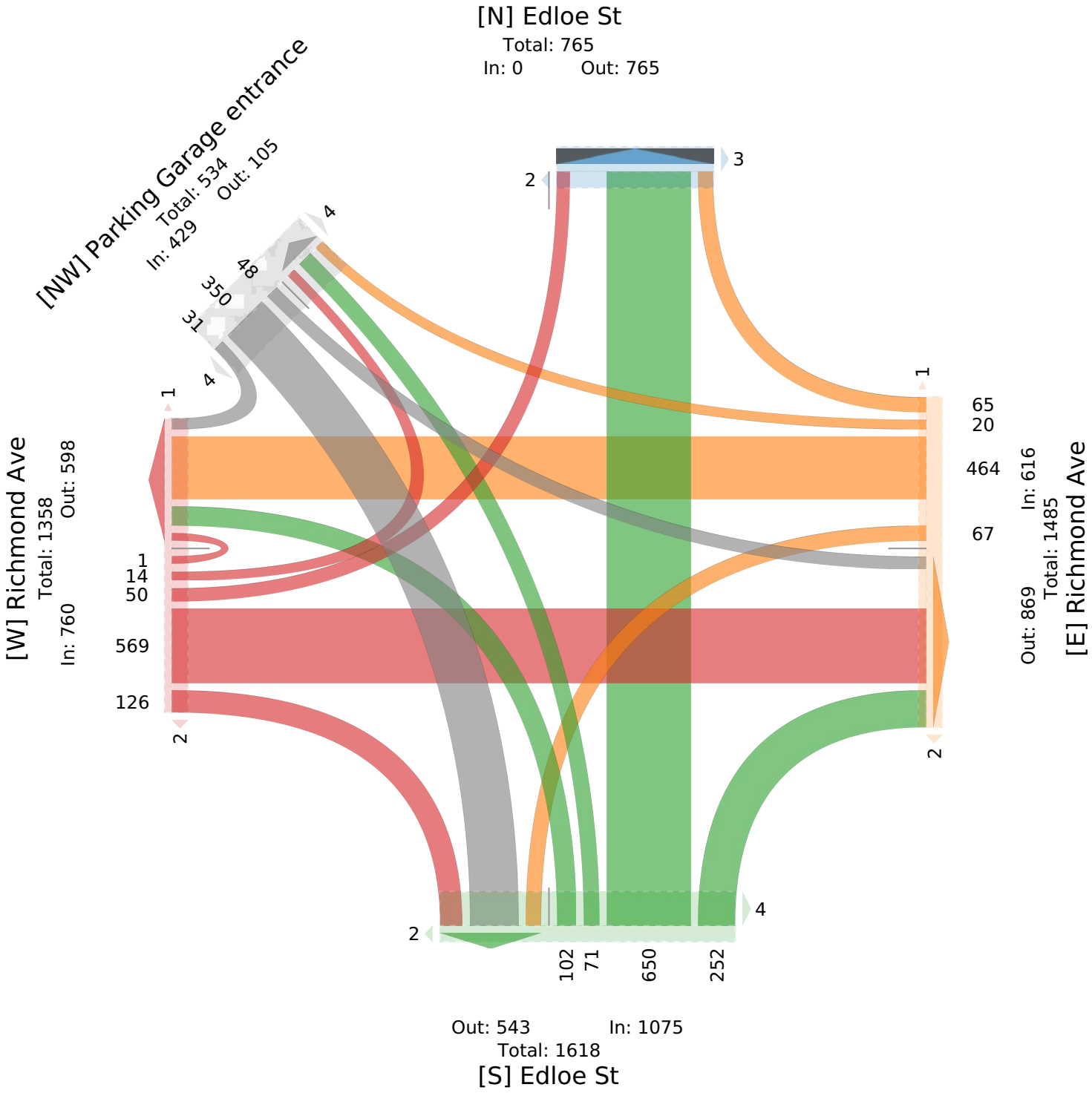
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Richmond Ave							Parking Garage entrance							
Direction	Westbound							Southeastbound							
Time	L	T	BR	R	U	App	Ped*	HL	BL	BR	HR	U	App	Ped*	Int
2021-09-02 7:45AM	10	86	4	9	0	**109**	1	0	6	74	12	0	**92**	3	**692**
8:00AM	19	104	3	19	0	**145**	0	0	14	78	4	0	**96**	3	**729**
8:15AM	15	138	7	17	0	**177**	1	0	19	127	7	0	**153**	1	**829**
8:30AM	23	136	6	20	0	**185**	1	0	9	71	8	0	**88**	1	**630**
Total	67	464	20	65	0	**616**	3	0	48	350	31	0	**429**	8	**2880**
% Approach	10.9%	75.3%	3.2%	10.6%	0%	**-**	-	0%	11.2%	81.6%	7.2%	0%	**-**	-	-
% Total	2.3%	16.1%	0.7%	2.3%	0%	**21.4%**	-	0%	1.7%	12.2%	1.1%	0%	**14.9%**	-	-
PHF	0.728	0.841	0.714	0.813	-	**0.832**	-	-	0.632	0.689	0.646	-	**0.701**	-	0.869
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0.1%
Lights	66	449	20	65	0	**600**	-	0	48	349	29	0	**426**	-	2831
% Lights	98.5%	96.8%	100%	100%	0%	**97.4%**	-	0%	100%	99.7%	93.5%	0%	**99.3%**	-	98.3%
Single-Unit Trucks	1	3	0	0	0	**4**	-	0	0	1	1	0	**2**	-	14
% Single-Unit Trucks	1.5%	0.6%	0%	0%	0%	**0.6%**	-	0%	0%	0.3%	3.2%	0%	**0.5%**	-	0.5%
Articulated Trucks	0	3	0	0	0	**3**	-	0	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0.6%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	9	0	0	0	**9**	-	0	0	0	1	0	**1**	-	30
% Buses	0%	1.9%	0%	0%	0%	**1.5%**	-	0%	0%	0%	3.2%	0%	**0.2%**	-	1.0%
Pedestrians	-	-	-	-	-	-	3	-	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC
Thu Sep 2, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Edloe St							Edloe St							Richmond Ave						
Direction	Northbound							Southbound							Eastbound						
Time	L	BL	T	R	U	App	Ped*	L	T	R	HR	U	App	Ped*	HL	L	T	R	U	App	Ped*
2021-09-02 4:15PM	30	0	93	46	0	**169**	1	0	0	0	0	0	**0**	1	0	15	166	68	1	**250**	0
4:30PM	36	0	88	33	0	**157**	3	0	0	0	0	0	**0**	0	0	11	158	47	0	**216**	0
4:45PM	55	0	114	29	0	**198**	0	0	0	0	0	0	**0**	4	0	20	129	47	2	**198**	1
5:00PM	60	0	120	37	0	**217**	0	0	0	0	0	0	**0**	2	0	21	154	69	4	**248**	2
Total	181	0	415	145	0	**741**	4	0	0	0	0	0	**0**	7	0	67	607	231	7	**912**	3
% Approach	24.4%	0%	56.0%	19.6%	0%	**-**	-	0%	0%	0%	0%	0%	**-**	-	0%	7.3%	66.6%	25.3%	0.8%	**-**	-
% Total	5.6%	0%	12.8%	4.5%	0%	**22.8%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	2.1%	18.7%	7.1%	0.2%	**28.0%**	-
PHF	0.754	-	0.865	0.788	-	**0.854**	-	-	-	-	-	-	**-**	-	-	0.798	0.914	0.837	0.438	**0.912**	-
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	1	0	0	**1**	-
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0.2%	0%	0%	**0.1%**	-
Lights	180	0	413	145	0	**738**	-	0	0	0	0	0	**0**	-	0	67	591	231	7	**896**	-
% Lights	99.4%	0%	99.5%	100%	0%	**99.6%**	-	0%	0%	0%	0%	0%	**-**	-	0%	100%	97.4%	100%	100%	**98.2%**	-
Single-Unit Trucks	1	0	1	0	0	**2**	-	0	0	0	0	0	**0**	-	0	0	4	0	0	**4**	-
% Single-Unit Trucks	0.6%	0%	0.2%	0%	0%	**0.3%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0.7%	0%	0%	**0.4%**	-
Articulated Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	1	0	0	**1**	-
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	0.2%	0%	0%	**0.1%**	-
Buses	0	0	1	0	0	**1**	-	0	0	0	0	0	**0**	-	0	0	10	0	0	**10**	-
% Buses	0%	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**-**	-	0%	0%	1.6%	0%	0%	**1.1%**	-
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	7	-	-	-	-	-	-	3
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC

Thu Sep 2, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

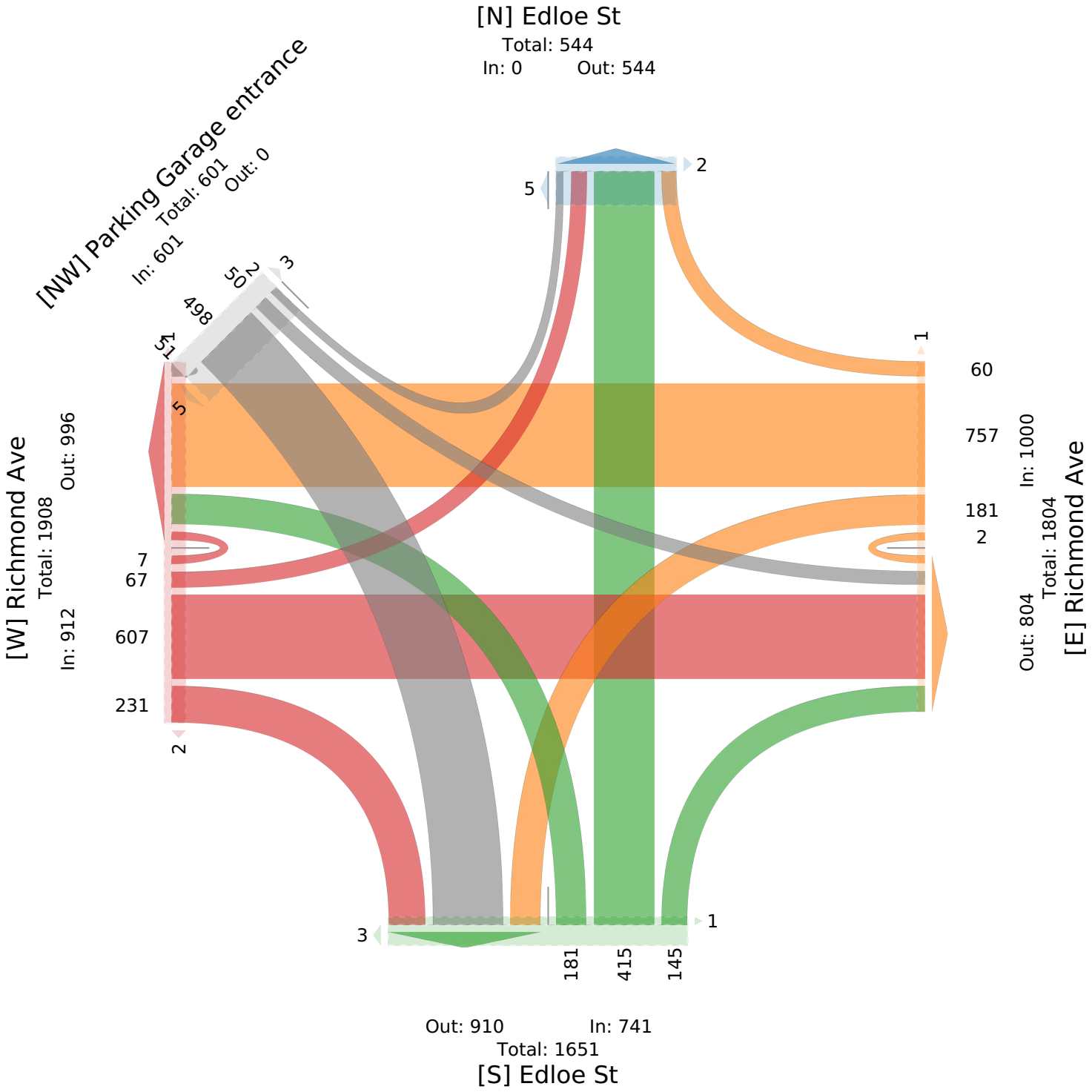
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Richmond Ave							Parking Garage entrance							
Direction	Westbound							Southeastbound							
Time	L	T	BR	R	U	**App**	Ped*	HL	BL	BR	HR	U	**App**	Ped*	**Int**
2021-09-02 4:15PM	48	181	0	12	1	**242**	1	2	13	141	10	0	**166**	1	**827**
4:30PM	57	220	0	20	0	**297**	0	0	10	115	12	0	**137**	0	**807**
4:45PM	28	164	0	10	0	**202**	0	0	16	105	14	0	**135**	4	**733**
5:00PM	48	192	0	18	1	**259**	0	0	11	137	15	0	**163**	3	**887**
Total	181	757	0	60	2	**1000**	1	2	50	498	51	0	**601**	8	**3254**
% Approach	18.1%	75.7%	0%	6.0%	0.2%	**-**	-	0.3%	8.3%	82.9%	8.5%	0%	**-**	-	-
% Total	5.6%	23.3%	0%	1.8%	0.1%	**30.7%**	-	0.1%	1.5%	15.3%	1.6%	0%	**18.5%**	-	-
PHF	0.794	0.860	-	0.750	0.500	**0.842**	-	0.250	0.781	0.883	0.850	-	**0.905**	-	0.917
Motorcycles	0	1	0	0	0	**1**	-	0	0	1	0	0	**1**	-	3
% Motorcycles	0%	0.1%	0%	0%	0%	**0.1%**	-	0%	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Lights	180	746	0	60	2	**988**	-	2	50	496	51	0	**599**	-	3221
% Lights	99.4%	98.5%	0%	100%	100%	**98.8%**	-	100%	100%	99.6%	100%	0%	**99.7%**	-	99.0%
Single-Unit Trucks	0	2	0	0	0	**2**	-	0	0	1	0	0	**1**	-	9
% Single-Unit Trucks	0%	0.3%	0%	0%	0%	**0.2%**	-	0%	0%	0.2%	0%	0%	**0.2%**	-	0.3%
Articulated Trucks	0	2	0	0	0	**2**	-	0	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0.3%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	0%	**0%**	-	0.1%
Buses	1	6	0	0	0	**7**	-	0	0	0	0	0	**0**	-	18
% Buses	0.6%	0.8%	0%	0%	0%	**0.7%**	-	0%	0%	0%	0%	0%	**0%**	-	0.6%
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Edloe St - TMC
Thu Sep 2, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867322, Location: 29.732965, -95.433507

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Buffalo Speedway - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

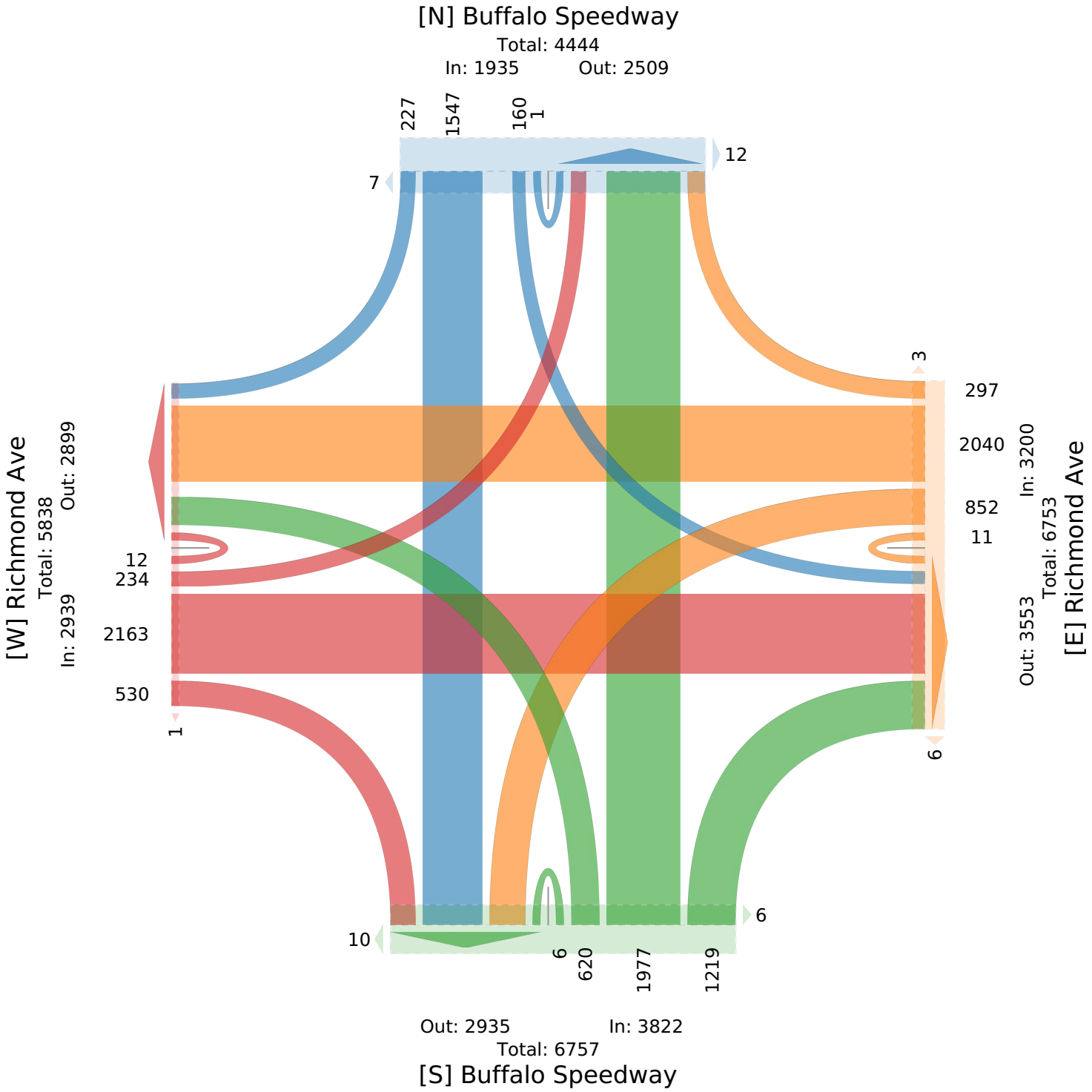
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Buffalo Speedway						Buffalo Speedway						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	17	64	44	0	**125**	0	6	49	5	0	**60**	1	4	57	23	0	**84**	0	12	37	6	0	**55**	1	**324**
7:15AM	20	112	61	0	**193**	0	8	81	7	0	**96**	3	5	68	30	0	**103**	1	15	36	3	0	**54**	1	**446**
7:30AM	20	114	68	0	**202**	0	7	65	11	0	**83**	1	12	103	23	0	**138**	0	31	67	4	0	**102**	0	**525**
7:45AM	32	170	104	1	**307**	0	8	84	9	0	**101**	1	16	142	25	0	**183**	0	33	88	6	0	**127**	0	**718**
Hourly Total	89	460	277	1	**827**	0	29	279	32	0	**340**	6	37	370	101	0	**508**	1	91	228	19	0	**338**	2	**2013**
8:00AM	19	152	133	4	**308**	0	13	115	11	0	**139**	1	22	182	39	0	**243**	0	63	121	10	2	**196**	0	**886**
8:15AM	25	141	110	0	**276**	0	15	116	10	0	**141**	0	15	165	41	0	**221**	0	47	124	11	0	**182**	0	**820**
8:30AM	23	85	80	0	**188**	0	14	89	17	0	**120**	0	5	126	41	0	**172**	0	59	138	14	0	**211**	0	**691**
8:45AM	19	88	81	0	**188**	0	8	75	16	0	**99**	1	6	87	33	1	**127**	0	21	83	3	0	**107**	0	**521**
Hourly Total	86	466	404	4	**960**	0	50	395	54	0	**499**	2	48	560	154	1	**763**	0	190	466	38	2	**696**	0	**2918**
4:00PM	29	102	78	0	**209**	1	7	121	14	0	**142**	0	18	199	34	0	**251**	0	57	151	21	2	**231**	0	**833**
4:15PM	45	127	76	0	**248**	6	23	124	17	0	**164**	2	12	127	26	0	**165**	0	81	192	17	0	**290**	1	**867**
4:30PM	47	102	71	1	**221**	1	14	141	23	0	**178**	4	18	169	35	0	**222**	0	107	190	41	0	**338**	3	**959**
4:45PM	65	156	70	0	**291**	7	16	118	19	0	**153**	2	16	148	31	1	**196**	0	59	151	30	0	**240**	1	**880**
Hourly Total	186	487	295	1	**969**	15	60	504	73	0	**637**	8	64	643	126	1	**834**	0	304	684	109	2	**1099**	5	**3539**
5:00PM	69	128	67	0	**264**	0	2	91	22	0	**115**	0	28	132	29	7	**196**	0	94	221	41	2	**358**	0	**933**
5:15PM	69	152	54	0	**275**	0	6	110	17	0	**133**	0	22	146	38	1	**207**	0	59	142	24	0	**225**	1	**840**
5:30PM	52	131	55	0	**238**	1	8	80	17	0	**105**	1	17	165	35	2	**219**	0	59	184	37	4	**284**	0	**846**
5:45PM	69	153	67	0	**289**	0	5	88	12	1	**106**	2	18	147	47	0	**212**	0	55	115	29	1	**200**	1	**807**
Hourly Total	259	564	243	0	**1066**	1	21	369	68	1	**459**	3	85	590	149	10	**834**	0	267	662	131	7	**1067**	2	**3426**
Total	620	1977	1219	6	**3822**	16	160	1547	227	1	**1935**	19	234	2163	530	12	**2939**	1	852	2040	297	11	**3200**	9	**11896**
% Approach	16.2%	51.7%	31.9%	0.2%	**-**	-	8.3%	79.9%	11.7%	0.1%	**-**	-	8.0%	73.6%	18.0%	0.4%	**-**	-	26.6%	63.8%	9.3%	0.3%	**-**	-	-
% Total	5.2%	16.6%	10.2%	0.1%	**32.1%**	-	1.3%	13.0%	1.9%	0%	**16.3%**	-	2.0%	18.2%	4.5%	0.1%	**24.7%**	-	7.2%	17.1%	2.5%	0.1%	**26.9%**	-	-
Motorcycles	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	5
% Motorcycles	0.2%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Lights	606	1954	1208	6	**3774**	-	159	1529	226	1	**1915**	-	232	2121	519	12	**2884**	-	839	2005	295	11	**3150**	-	11723
% Lights	97.7%	98.8%	99.1%	100%	**98.7%**	-	99.4%	98.8%	99.6%	100%	**99.0%**	-	99.1%	98.1%	97.9%	100%	**98.1%**	-	98.5%	98.3%	99.3%	100%	**98.4%**	-	98.5%
Single-Unit Trucks	4	8	9	0	**21**	-	1	7	1	0	**9**	-	1	11	3	0	**15**	-	4	5	2	0	**11**	-	56
% Single-Unit Trucks	0.6%	0.4%	0.7%	0%	**0.5%**	-	0.6%	0.5%	0.4%	0%	**0.5%**	-	0.4%	0.5%	0.6%	0%	**0.5%**	-	0.5%	0.2%	0.7%	0%	**0.3%**	-	0.5%
Articulated Trucks	2	1	1	0	**4**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	6
% Articulated Trucks	0.3%	0.1%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0%**	-	0.1%
Buses	7	14	1	0	**22**	-	0	10	0	0	**10**	-	1	29	8	0	**38**	-	8	28	0	0	**36**	-	106
% Buses	1.1%	0.7%	0.1%	0%	**0.6%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.4%	1.3%	1.5%	0%	**1.3%**	-	0.9%	1.4%	0%	0%	**1.1%**	-	0.9%
Pedestrians	-	-	-	-	-	16	-	-	-	-	-	17	-	-	-	-	-	1	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	89.5%	-	-	-	-	-	100%	-	-	-	-	-	88.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	10.5%	-	-	-	-	-	0%	-	-	-	-	-	11.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Buffalo Speedway - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Buffalo Speedway - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

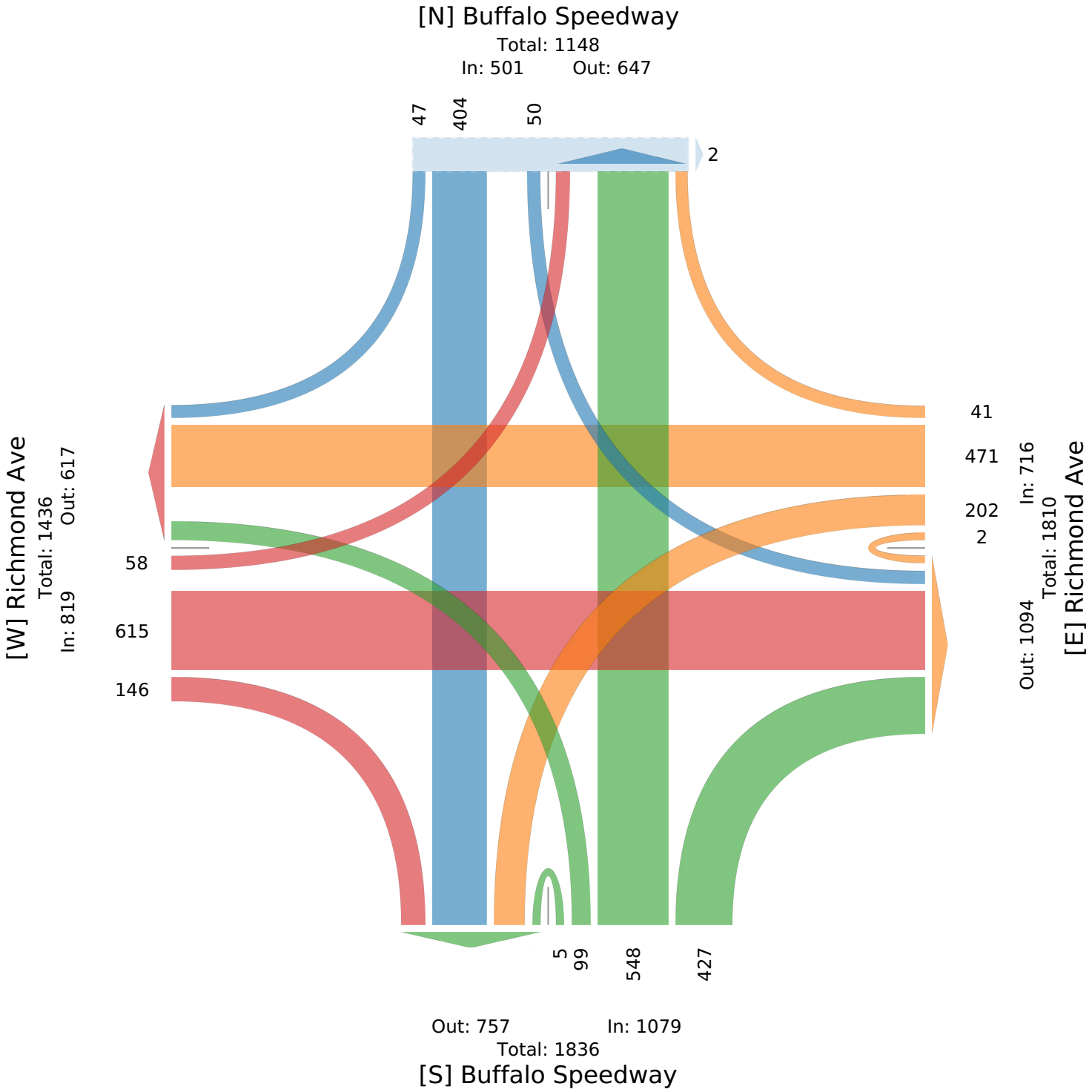
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Buffalo Speedway						Buffalo Speedway						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	32	170	104	1	**307**	0	8	84	9	0	**101**	1	16	142	25	0	**183**	0	33	88	6	0	**127**	0	**718**
8:00AM	19	152	133	4	**308**	0	13	115	11	0	**139**	1	22	182	39	0	**243**	0	63	121	10	2	**196**	0	**886**
8:15AM	25	141	110	0	**276**	0	15	116	10	0	**141**	0	15	165	41	0	**221**	0	47	124	11	0	**182**	0	**820**
8:30AM	23	85	80	0	**188**	0	14	89	17	0	**120**	0	5	126	41	0	**172**	0	59	138	14	0	**211**	0	**691**
Total	99	548	427	5	**1079**	0	50	404	47	0	**501**	2	58	615	146	0	**819**	0	202	471	41	2	**716**	0	**3115**
% Approach	9.2%	50.8%	39.6%	0.5%	**-**	-	10.0%	80.6%	9.4%	0%	**-**	-	7.1%	75.1%	17.8%	0%	**-**	-	28.2%	65.8%	5.7%	0.3%	**-**	-	-
% Total	3.2%	17.6%	13.7%	0.2%	**34.6%**	-	1.6%	13.0%	1.5%	0%	**16.1%**	-	1.9%	19.7%	4.7%	0%	**26.3%**	-	6.5%	15.1%	1.3%	0.1%	**23.0%**	-	-
PHF	0.773	0.806	0.803	0.313	**0.876**	-	0.833	0.871	0.691	-	**0.888**	-	0.659	0.845	0.890	-	**0.843**	-	0.802	0.853	0.732	0.250	**0.848**	-	0.879
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	95	534	421	5	**1055**	-	50	400	47	0	**497**	-	57	601	143	0	**801**	-	197	460	41	2	**700**	-	3053
% Lights	96.0%	97.4%	98.6%	100%	**97.8%**	-	100%	99.0%	100%	0%	**99.2%**	-	98.3%	97.7%	97.9%	0%	**97.8%**	-	97.5%	97.7%	100%	100%	**97.8%**	-	98.0%
Single-Unit Trucks	2	5	5	0	**12**	-	0	0	0	0	**0**	-	1	4	1	0	**6**	-	1	3	0	0	**4**	-	22
% Single-Unit Trucks	2.0%	0.9%	1.2%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	1.7%	0.7%	0.7%	0%	**0.7%**	-	0.5%	0.6%	0%	0%	**0.6%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%	0%	0%	0%	**0.1%**	-	0%
Buses	2	9	1	0	**12**	-	0	3	0	0	**3**	-	0	9	2	0	**11**	-	3	8	0	0	**11**	-	37
% Buses	2.0%	1.6%	0.2%	0%	**1.1%**	-	0%	0.7%	0%	0%	**0.6%**	-	0%	1.5%	1.4%	0%	**1.3%**	-	1.5%	1.7%	0%	0%	**1.5%**	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Buffalo Speedway - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Buffalo Speedway - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

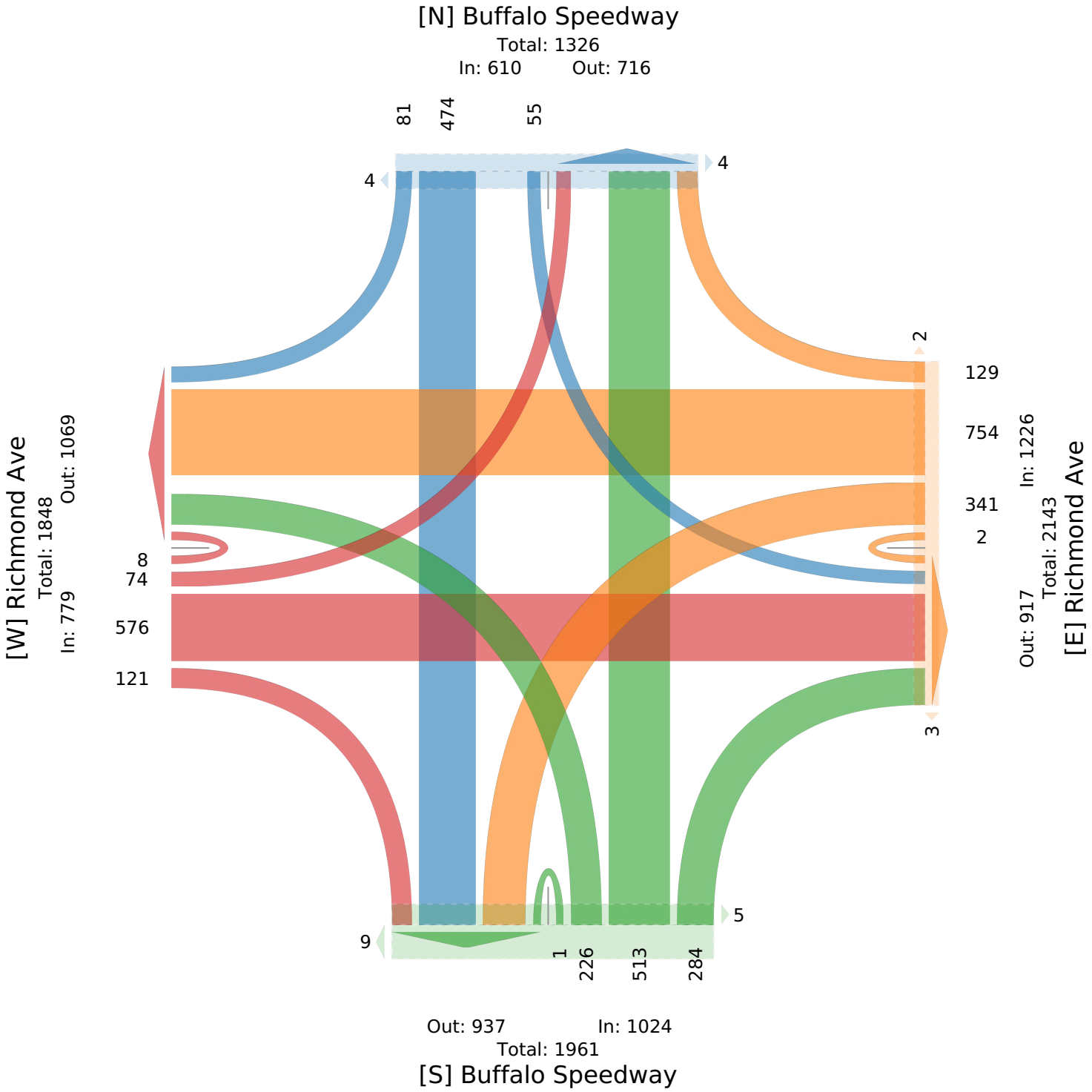
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Buffalo Speedway Northbound						Buffalo Speedway Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	45	127	76	0	**248**	6	23	124	17	0	**164**	2	12	127	26	0	**165**	0	81	192	17	0	**290**	1	**867**
4:30PM	47	102	71	1	**221**	1	14	141	23	0	**178**	4	18	169	35	0	**222**	0	107	190	41	0	**338**	3	**959**
4:45PM	65	156	70	0	**291**	7	16	118	19	0	**153**	2	16	148	31	1	**196**	0	59	151	30	0	**240**	1	**880**
5:00PM	69	128	67	0	**264**	0	2	91	22	0	**115**	0	28	132	29	7	**196**	0	94	221	41	2	**358**	0	**933**
Total	226	513	284	1	**1024**	14	55	474	81	0	**610**	8	74	576	121	8	**779**	0	341	754	129	2	**1226**	5	**3639**
% Approach	22.1%	50.1%	27.7%	0.1%	**-**	-	9.0%	77.7%	13.3%	0%	**-**	-	9.5%	73.9%	15.5%	1.0%	**-**	-	27.8%	61.5%	10.5%	0.2%	**-**	-	-
% Total	6.2%	14.1%	7.8%	0%	**28.1%**	-	1.5%	13.0%	2.2%	0%	**16.8%**	-	2.0%	15.8%	3.3%	0.2%	**21.4%**	-	9.4%	20.7%	3.5%	0.1%	**33.7%**	-	-
PHF	0.819	0.822	0.934	0.250	**0.880**	-	0.598	0.840	0.880	-	**0.857**	-	0.661	0.852	0.864	0.286	**0.877**	-	0.797	0.853	0.787	0.250	**0.856**	-	0.949
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	223	510	283	1	**1017**	-	55	468	81	0	**604**	-	73	567	118	8	**766**	-	336	746	128	2	**1212**	-	3599
% Lights	98.7%	99.4%	99.6%	100%	**99.3%**	-	100%	98.7%	100%	0%	**99.0%**	-	98.6%	98.4%	97.5%	100%	**98.3%**	-	98.5%	98.9%	99.2%	100%	**98.9%**	-	98.9%
Single-Unit Trucks	0	1	1	0	**2**	-	0	2	0	0	**2**	-	0	2	1	0	**3**	-	1	1	1	0	**3**	-	10
% Single-Unit Trucks	0%	0.2%	0.4%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0.3%	0.8%	0%	**0.4%**	-	0.3%	0.1%	0.8%	0%	**0.2%**	-	0.3%
Articulated Trucks	2	0	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0.9%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	1	2	0	0	**3**	-	0	4	0	0	**4**	-	1	6	2	0	**9**	-	4	7	0	0	**11**	-	27
% Buses	0.4%	0.4%	0%	0%	**0.3%**	-	0%	0.8%	0%	0%	**0.7%**	-	1.4%	1.0%	1.7%	0%	**1.2%**	-	1.2%	0.9%	0%	0%	**0.9%**	-	0.7%
Pedestrians	-	-	-	-	-	14	-	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	87.5%	-	-	-	-	-	-	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	12.5%	-	-	-	-	-	-	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Buffalo Speedway - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867323, Location: 29.733893, -95.429322

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Eastside St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Eastside St						Eastside St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	3	4	21	0	**28**	9	7	1	9	0	**17**	2	16	61	2	0	**79**	0	2	49	14	1	**66**	2	**190**
7:15AM	4	1	17	0	**22**	1	4	2	13	0	**19**	0	20	96	4	0	**120**	2	3	54	22	3	**82**	0	**243**
7:30AM	7	0	19	0	**26**	3	8	0	20	0	**28**	0	40	117	5	3	**165**	3	5	84	24	0	**113**	0	**332**
7:45AM	5	6	7	0	**18**	1	15	2	40	0	**57**	0	71	165	6	1	**243**	3	5	112	30	2	**149**	1	**467**
Hourly Total	19	11	64	0	**94**	14	34	5	82	0	**121**	2	147	439	17	4	**607**	8	15	299	90	6	**410**	3	**1232**
8:00AM	8	3	15	0	**26**	1	18	2	67	0	**87**	0	90	164	15	2	**271**	0	2	120	51	2	**175**	4	**559**
8:15AM	14	0	11	0	**25**	0	26	3	59	0	**88**	3	67	179	12	3	**261**	0	4	154	37	6	**201**	0	**575**
8:30AM	16	1	12	0	**29**	0	19	4	47	0	**70**	2	14	156	11	1	**182**	0	7	138	13	1	**159**	3	**440**
8:45AM	10	5	13	0	**28**	0	7	2	14	0	**23**	1	22	109	17	1	**149**	0	4	117	10	5	**136**	1	**336**
Hourly Total	48	9	51	0	**108**	1	70	11	187	0	**268**	6	193	608	55	7	**863**	0	17	529	111	14	**671**	8	**1910**
4:00PM	14	7	8	0	**29**	1	9	1	31	0	**41**	0	65	210	10	2	**287**	0	4	148	43	2	**197**	0	**554**
4:15PM	10	5	14	0	**29**	10	23	3	87	0	**113**	1	51	177	12	2	**242**	14	11	183	26	3	**223**	4	**607**
4:30PM	8	5	21	0	**34**	3	29	10	68	0	**107**	2	37	221	14	3	**275**	4	7	179	22	3	**211**	4	**627**
4:45PM	7	6	6	0	**19**	0	24	5	38	0	**67**	0	34	170	16	0	**220**	2	8	161	26	3	**198**	0	**504**
Hourly Total	39	23	49	0	**111**	14	85	19	224	0	**328**	3	187	778	52	7	**1024**	20	30	671	117	11	**829**	8	**2292**
5:00PM	9	3	13	0	**25**	4	10	6	35	0	**51**	0	37	179	25	3	**244**	3	5	241	33	6	**285**	1	**605**
5:15PM	10	4	11	0	**25**	0	11	5	19	0	**35**	0	39	175	19	8	**241**	0	16	172	38	4	**230**	2	**531**
5:30PM	14	5	6	0	**25**	1	8	5	24	0	**37**	0	41	182	17	9	**249**	1	8	206	32	3	**249**	0	**560**
5:45PM	14	3	17	0	**34**	0	13	6	20	0	**39**	1	26	173	14	4	**217**	1	11	155	30	4	**200**	3	**490**
Hourly Total	47	15	47	0	**109**	5	42	22	98	0	**162**	1	143	709	75	24	**951**	5	40	774	133	17	**964**	6	**2186**
Total	153	58	211	0	**422**	34	231	57	591	0	**879**	12	670	2534	199	42	**3445**	33	102	2273	451	48	**2874**	25	**7620**
% Approach	36.3%	13.7%	50.0%	0%	**-**	-	26.3%	6.5%	67.2%	0%	**-**	-	19.4%	73.6%	5.8%	1.2%	**-**	-	3.5%	79.1%	15.7%	1.7%	**-**	-	-
% Total	2.0%	0.8%	2.8%	0%	**5.5%**	-	3.0%	0.7%	7.8%	0%	**11.5%**	-	8.8%	33.3%	2.6%	0.6%	**45.2%**	-	1.3%	29.8%	5.9%	0.6%	**37.7%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	3	0	0	**3**	-	0	3	1	0	**4**	-	9
% Motorcycles	0%	1.7%	0%	0%	**0.2%**	-	0%	1.8%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.2%	0%	**0.1%**	-	0.1%
Lights	151	57	210	0	**418**	-	228	55	582	0	**865**	-	665	2485	198	42	**3390**	-	102	2229	448	47	**2826**	-	7499
% Lights	98.7%	98.3%	99.5%	0%	**99.1%**	-	98.7%	96.5%	98.5%	0%	**98.4%**	-	99.3%	98.1%	99.5%	100%	**98.4%**	-	100%	98.1%	99.3%	97.9%	**98.3%**	-	98.4%
Single-Unit Trucks	2	0	1	0	**3**	-	2	1	3	0	**6**	-	4	16	1	0	**21**	-	0	12	0	0	**12**	-	42
% Single-Unit Trucks	1.3%	0%	0.5%	0%	**0.7%**	-	0.9%	1.8%	0.5%	0%	**0.7%**	-	0.6%	0.6%	0.5%	0%	**0.6%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0.1%**	-	0%
Buses	0	0	0	0	**0**	-	1	0	6	0	**7**	-	1	29	0	0	**30**	-	0	28	1	1	**30**	-	67
% Buses	0%	0%	0%	0%	**0%**	-	0.4%	0%	1.0%	0%	**0.8%**	-	0.1%	1.1%	0%	0%	**0.9%**	-	0%	1.2%	0.2%	2.1%	**1.0%**	-	0.9%
Pedestrians	-	-	-	-	-	33	-	-	-	-	-	10	-	-	-	-	-	33	-	-	-	-	-	23	
% Pedestrians	-	-	-	-	-	97.1%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	92.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	2.9%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	8.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Eastside St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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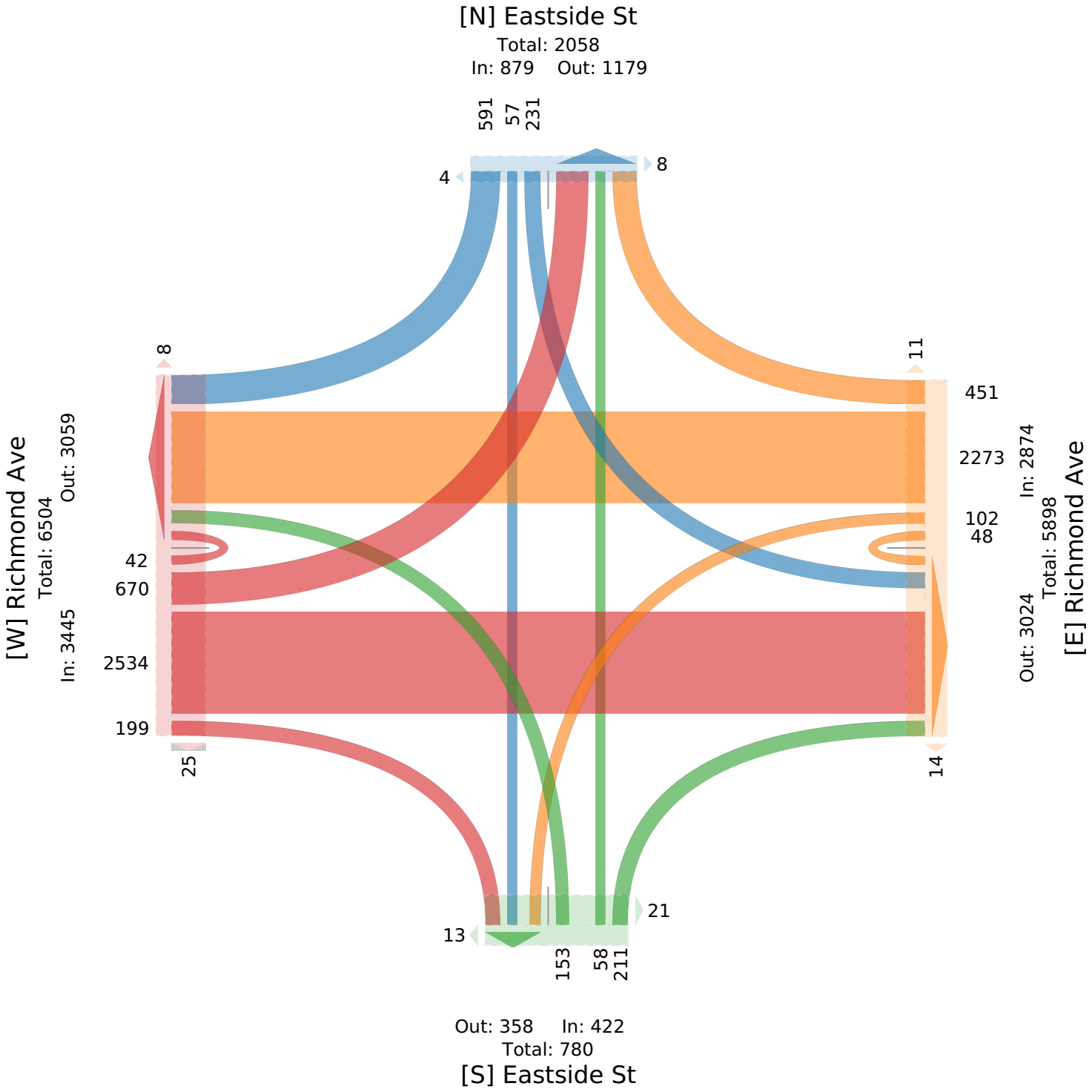


Richmond Ave at Eastside St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

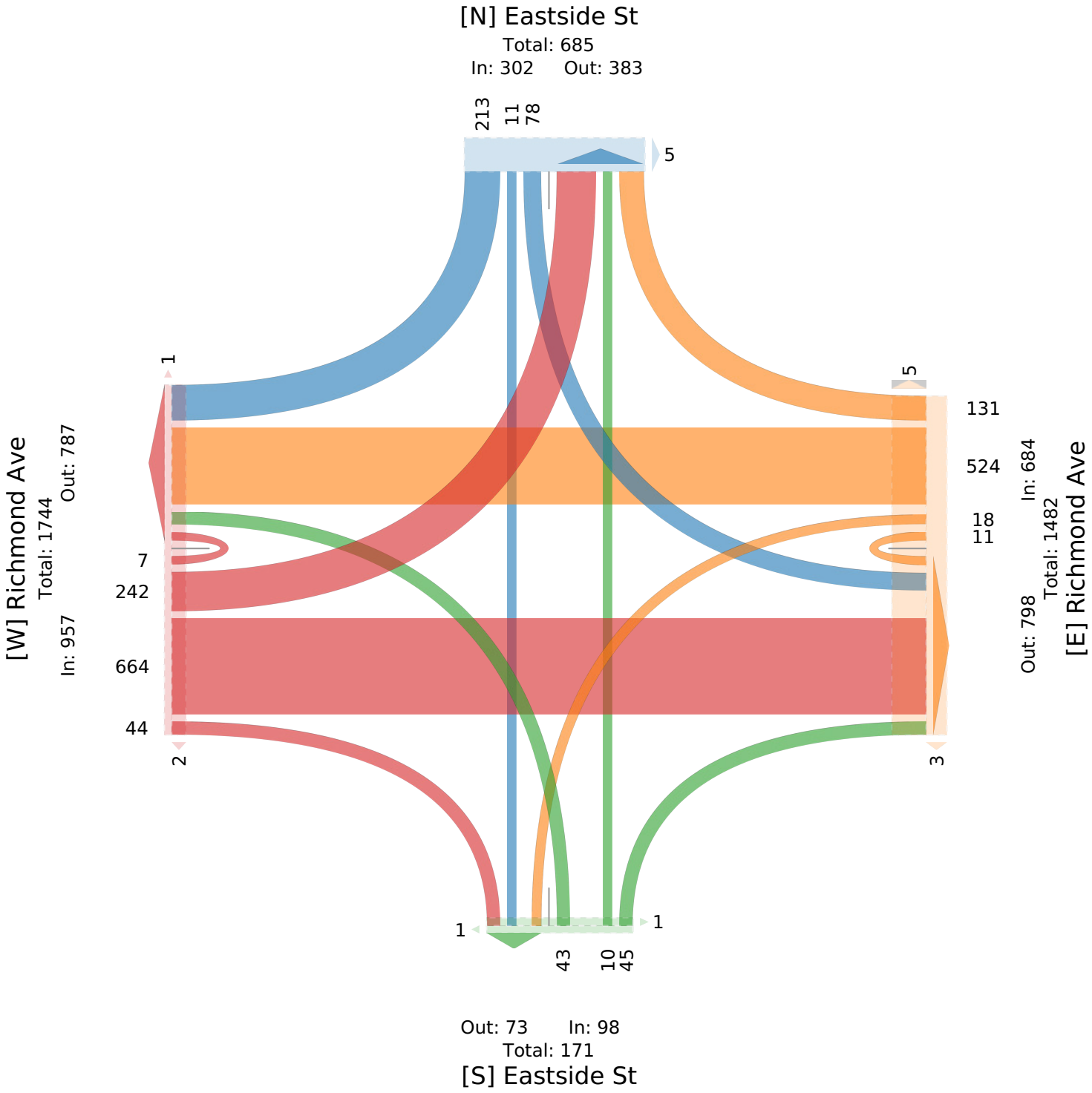
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Eastside St						Eastside St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:45AM	5	6	7	0	**18**	1	15	2	40	0	**57**	0	71	165	6	1	**243**	3	5	112	30	2	**149**	1	**467**
8:00AM	8	3	15	0	**26**	1	18	2	67	0	**87**	0	90	164	15	2	**271**	0	2	120	51	2	**175**	4	**559**
8:15AM	14	0	11	0	**25**	0	26	3	59	0	**88**	3	67	179	12	3	**261**	0	4	154	37	6	**201**	0	**575**
8:30AM	16	1	12	0	**29**	0	19	4	47	0	**70**	2	14	156	11	1	**182**	0	7	138	13	1	**159**	3	**440**
Total	43	10	45	0	**98**	2	78	11	213	0	**302**	5	242	664	44	7	**957**	3	18	524	131	11	**684**	8	**2041**
% Approach	43.9%	10.2%	45.9%	0%	**-**	-	25.8%	3.6%	70.5%	0%	**-**	-	25.3%	69.4%	4.6%	0.7%	**-**	-	2.6%	76.6%	19.2%	1.6%	**-**	-	-
% Total	2.1%	0.5%	2.2%	0%	**4.8%**	-	3.8%	0.5%	10.4%	0%	**14.8%**	-	11.9%	32.5%	2.2%	0.3%	**46.9%**	-	0.9%	25.7%	6.4%	0.5%	**33.5%**	-	-
PHF	0.672	0.417	0.750		**- 0.845**	-	0.750	0.688	0.795		**- 0.858**	-	0.672	0.927	0.733	0.583	**0.883**	-	0.643	0.851	0.642	0.458	**0.851**	-	0.887
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	43	10	45	0	**98**	-	78	11	209	0	**298**	-	239	647	44	7	**937**	-	18	511	131	11	**671**	-	2004
% Lights	100%	100%	100%	0%	**100%**	-	100%	100%	98.1%	0%	**98.7%**	-	98.8%	97.4%	100%	100%	**97.9%**	-	100%	97.5%	100%	100%	**98.1%**	-	98.2%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	2	6	0	0	**8**	-	0	4	0	0	**4**	-	13
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.5%	0%	**0.3%**	-	0.8%	0.9%	0%	0%	**0.8%**	-	0%	0.8%	0%	0%	**0.6%**	-	0.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%
Buses	0	0	0	0	**0**	-	0	0	3	0	**3**	-	1	9	0	0	**10**	-	0	8	0	0	**8**	-	21
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	1.4%	0%	**1.0%**	-	0.4%	1.4%	0%	0%	**1.0%**	-	0%	1.5%	0%	0%	**1.2%**	-	1.0%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	- 100%	-	-	-	-	-	- 80.0%	-	-	-	-	-	- 100%	-	-	-	-	-	- 75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	- 20.0%	-	-	-	-	-	0%	-	-	-	-	-	- 25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Eastside St - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Eastside St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

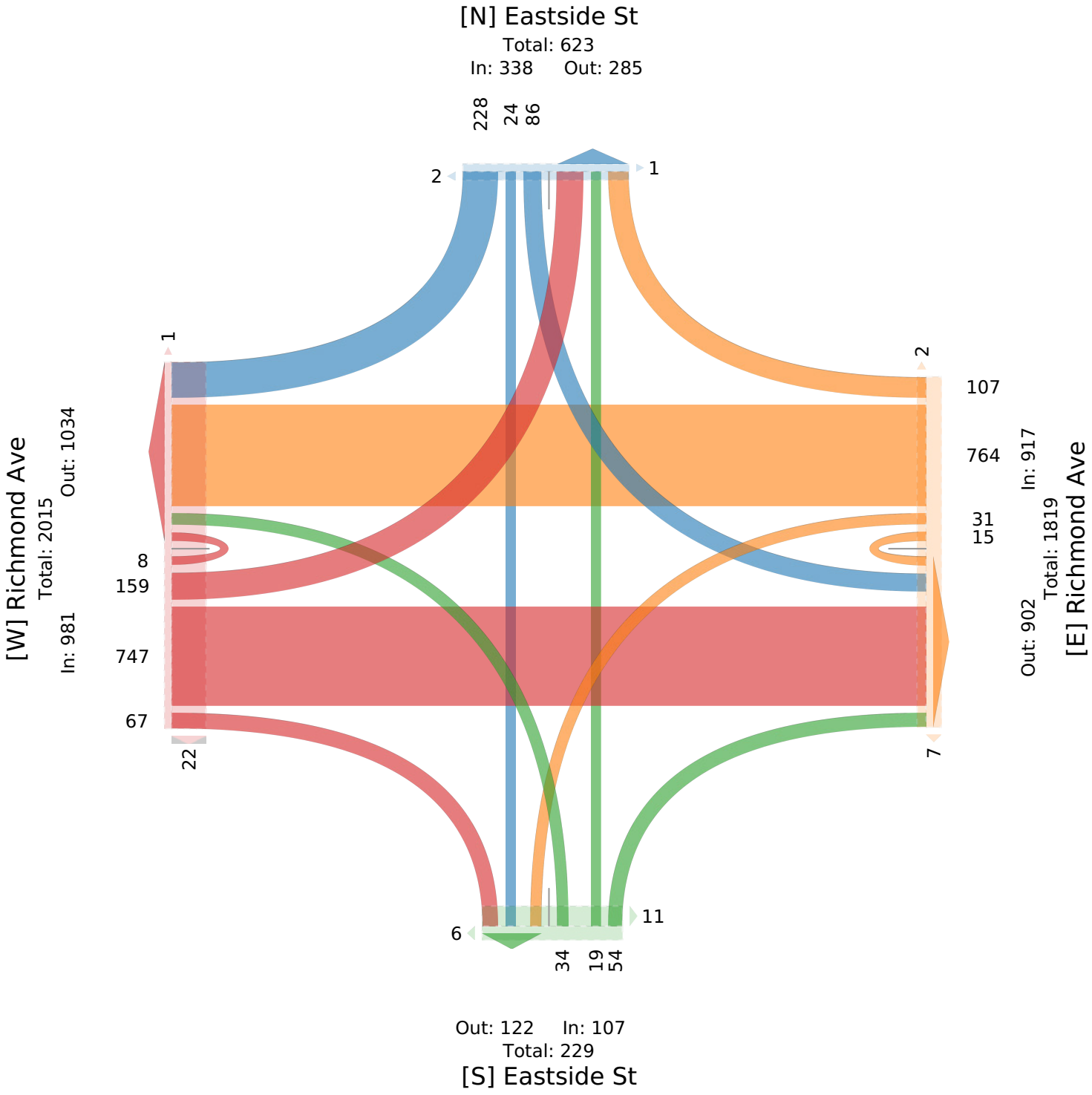
Leg	Eastside St Northbound						Eastside St Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Direction																									
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	10	5	14	0	**29**	10	23	3	87	0	**113**	1	51	177	12	2	**242**	14	11	183	26	3	**223**	4	**607**
4:30PM	8	5	21	0	**34**	3	29	10	68	0	**107**	2	37	221	14	3	**275**	4	7	179	22	3	**211**	4	**627**
4:45PM	7	6	6	0	**19**	0	24	5	38	0	**67**	0	34	170	16	0	**220**	2	8	161	26	3	**198**	0	**504**
5:00PM	9	3	13	0	**25**	4	10	6	35	0	**51**	0	37	179	25	3	**244**	3	5	241	33	6	**285**	1	**605**
Total	34	19	54	0	**107**	17	86	24	228	0	**338**	3	159	747	67	8	**981**	23	31	764	107	15	**917**	9	**2343**
% Approach	31.8%	17.8%	50.5%	0%	**-**	-	25.4%	7.1%	67.5%	0%	**-**	-	16.2%	76.1%	6.8%	0.8%	**-**	-	3.4%	83.3%	11.7%	1.6%	**-**	-	-
% Total	1.5%	0.8%	2.3%	0%	**4.6%**	-	3.7%	1.0%	9.7%	0%	**14.4%**	-	6.8%	31.9%	2.9%	0.3%	**41.9%**	-	1.3%	32.6%	4.6%	0.6%	**39.1%**	-	-
PHF	0.850	0.792	0.643	-	**0.787**	-	0.741	0.600	0.655	-	**0.748**	-	0.779	0.845	0.670	0.667	**0.892**	-	0.705	0.793	0.811	0.625	**0.804**	-	0.934
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	33	19	54	0	**106**	-	84	23	223	0	**330**	-	158	737	66	8	**969**	-	31	754	107	15	**907**	-	2312
% Lights	97.1%	100%	100%	0%	**99.1%**	-	97.7%	95.8%	97.8%	0%	**97.6%**	-	99.4%	98.7%	98.5%	100%	**98.8%**	-	100%	98.7%	100%	100%	**98.9%**	-	98.7%
Single-Unit Trucks	1	0	0	0	**1**	-	1	1	2	0	**4**	-	1	2	1	0	**4**	-	0	3	0	0	**3**	-	12
% Single-Unit Trucks	2.9%	0%	0%	0%	**0.9%**	-	1.2%	4.2%	0.9%	0%	**1.2%**	-	0.6%	0.3%	1.5%	0%	**0.4%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	0	0	0	**0**	-	1	0	3	0	**4**	-	0	6	0	0	**6**	-	0	6	0	0	**6**	-	16
% Buses	0%	0%	0%	0%	**0%**	-	1.2%	0%	1.3%	0%	**1.2%**	-	0%	0.8%	0%	0%	**0.6%**	-	0%	0.8%	0%	0%	**0.7%**	-	0.7%
Pedestrians	-	-	-	-	-	16	-	-	-	-	-	2	-	-	-	-	-	23	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	94.1%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	5.9%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Eastside St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867324, Location: 29.734017, -95.424479

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Kirby Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Kirby Dr						Kirby Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	21	229	14	0	**264**	0	6	152	15	0	**173**	1	21	46	37	0	**104**	0	7	26	3	0	**36**	0	**577**
7:15AM	31	332	19	0	**382**	0	3	235	29	0	**267**	0	16	46	34	0	**96**	1	12	28	5	0	**45**	2	**790**
7:30AM	36	313	22	1	**372**	0	8	277	31	0	**316**	1	35	67	33	0	**135**	1	21	49	5	1	**76**	0	**899**
7:45AM	46	413	21	1	**481**	1	17	263	65	0	**345**	0	47	82	31	0	**160**	0	25	43	11	1	**80**	1	**1066**
Hourly Total	134	1287	76	2	**1499**	1	34	927	140	0	**1101**	2	119	241	135	0	**495**	2	65	146	24	2	**237**	3	**3332**
8:00AM	42	382	22	1	**447**	3	14	249	36	0	**299**	0	44	80	38	1	**163**	3	17	67	14	0	**98**	1	**1007**
8:15AM	54	373	24	0	**451**	1	22	283	63	0	**368**	0	49	81	42	0	**172**	0	22	67	8	2	**99**	3	**1090**
8:30AM	44	271	22	1	**338**	1	20	267	50	0	**337**	1	39	85	56	0	**180**	0	24	68	4	0	**96**	0	**951**
8:45AM	34	334	24	0	**392**	1	17	272	59	1	**349**	0	33	48	30	0	**111**	1	17	39	6	0	**62**	2	**914**
Hourly Total	174	1360	92	2	**1628**	6	73	1071	208	1	**1353**	1	165	294	166	1	**626**	4	80	241	32	2	**355**	6	**3962**
4:00PM	40	317	14	2	**373**	2	16	268	35	0	**319**	2	81	109	43	0	**233**	4	26	73	25	0	**124**	2	**1049**
4:15PM	43	356	18	3	**420**	1	17	311	46	0	**374**	3	71	89	60	0	**220**	2	28	95	13	1	**137**	3	**1151**
4:30PM	35	318	20	1	**374**	4	16	315	29	0	**360**	1	77	120	69	0	**266**	0	23	87	33	1	**144**	1	**1144**
4:45PM	46	360	21	0	**427**	2	21	288	35	0	**344**	1	53	95	52	0	**200**	3	26	69	24	1	**120**	0	**1091**
Hourly Total	164	1351	73	6	**1594**	9	70	1182	145	0	**1397**	7	282	413	224	0	**919**	9	103	324	95	3	**525**	6	**4435**
5:00PM	49	318	25	0	**392**	2	20	286	43	0	**349**	4	58	106	69	1	**234**	2	30	96	34	0	**160**	1	**1135**
5:15PM	53	381	17	1	**452**	3	18	285	30	2	**335**	0	52	99	64	3	**218**	1	36	87	26	0	**149**	2	**1154**
5:30PM	52	331	22	0	**405**	1	13	313	42	0	**368**	1	66	114	48	2	**230**	1	27	102	17	0	**146**	0	**1149**
5:45PM	41	381	29	0	**451**	1	17	289	32	1	**339**	0	64	99	48	3	**214**	2	41	64	27	0	**132**	1	**1136**
Hourly Total	195	1411	93	1	**1700**	7	68	1173	147	3	**1391**	5	240	418	229	9	**896**	6	134	349	104	0	**587**	4	**4574**
Total	667	5409	334	11	**6421**	23	245	4353	640	4	**5242**	15	806	1366	754	10	**2936**	21	382	1060	255	7	**1704**	19	**16303**
% Approach	10.4%	84.2%	5.2%	0.2%	**-**	-	4.7%	83.0%	12.2%	0.1%	**-**	-	27.5%	46.5%	25.7%	0.3%	**-**	-	22.4%	62.2%	15.0%	0.4%	**-**	-	-
% Total	4.1%	33.2%	2.0%	0.1%	**39.4%**	-	1.5%	26.7%	3.9%	0%	**32.2%**	-	4.9%	8.4%	4.6%	0.1%	**18.0%**	-	2.3%	6.5%	1.6%	0%	**10.5%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	4	1	1	0	**6**	-	0	0	0	0	**0**	-	7
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%	0.1%	0.1%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	665	5344	328	11	**6348**	-	241	4288	636	4	**5169**	-	794	1327	742	10	**2873**	-	375	1029	249	7	**1660**	-	16050
% Lights	99.7%	98.8%	98.2%	100%	**98.9%**	-	98.4%	98.5%	99.4%	100%	**98.6%**	-	98.5%	97.1%	98.4%	100%	**97.9%**	-	98.2%	97.1%	97.6%	100%	**97.4%**	-	98.4%
Single-Unit Trucks	1	39	5	0	**45**	-	3	31	2	0	**36**	-	6	11	9	0	**26**	-	6	5	4	0	**15**	-	122
% Single-Unit Trucks	0.1%	0.7%	1.5%	0%	**0.7%**	-	1.2%	0.7%	0.3%	0%	**0.7%**	-	0.7%	0.8%	1.2%	0%	**0.9%**	-	1.6%	0.5%	1.6%	0%	**0.9%**	-	0.7%
Articulated Trucks	0	5	1	0	**6**	-	1	5	2	0	**8**	-	1	2	0	0	**3**	-	0	0	1	0	**1**	-	18
% Articulated Trucks	0%	0.1%	0.3%	0%	**0.1%**	-	0.4%	0.1%	0.3%	0%	**0.2%**	-	0.1%	0.1%	0%	0%	**0.1%**	-	0%	0%	0.4%	0%	**0.1%**	-	0.1%
Buses	1	21	0	0	**22**	-	0	28	0	0	**28**	-	1	25	2	0	**28**	-	1	26	1	0	**28**	-	106
% Buses	0.1%	0.4%	0%	0%	**0.3%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.1%	1.8%	0.3%	0%	**1.0%**	-	0.3%	2.5%	0.4%	0%	**1.6%**	-	0.7%
Pedestrians	-	-	-	-	-	20	-	-	-	-	-	14	-	-	-	-	-	18	-	-	-	-	-	18	
% Pedestrians	-	-	-	-	-	87.0%	-	-	-	-	-	93.3%	-	-	-	-	-	85.7%	-	-	-	-	-	94.7%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	13.0%	-	-	-	-	-	6.7%	-	-	-	-	-	14.3%	-	-	-	-	-	5.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Kirby Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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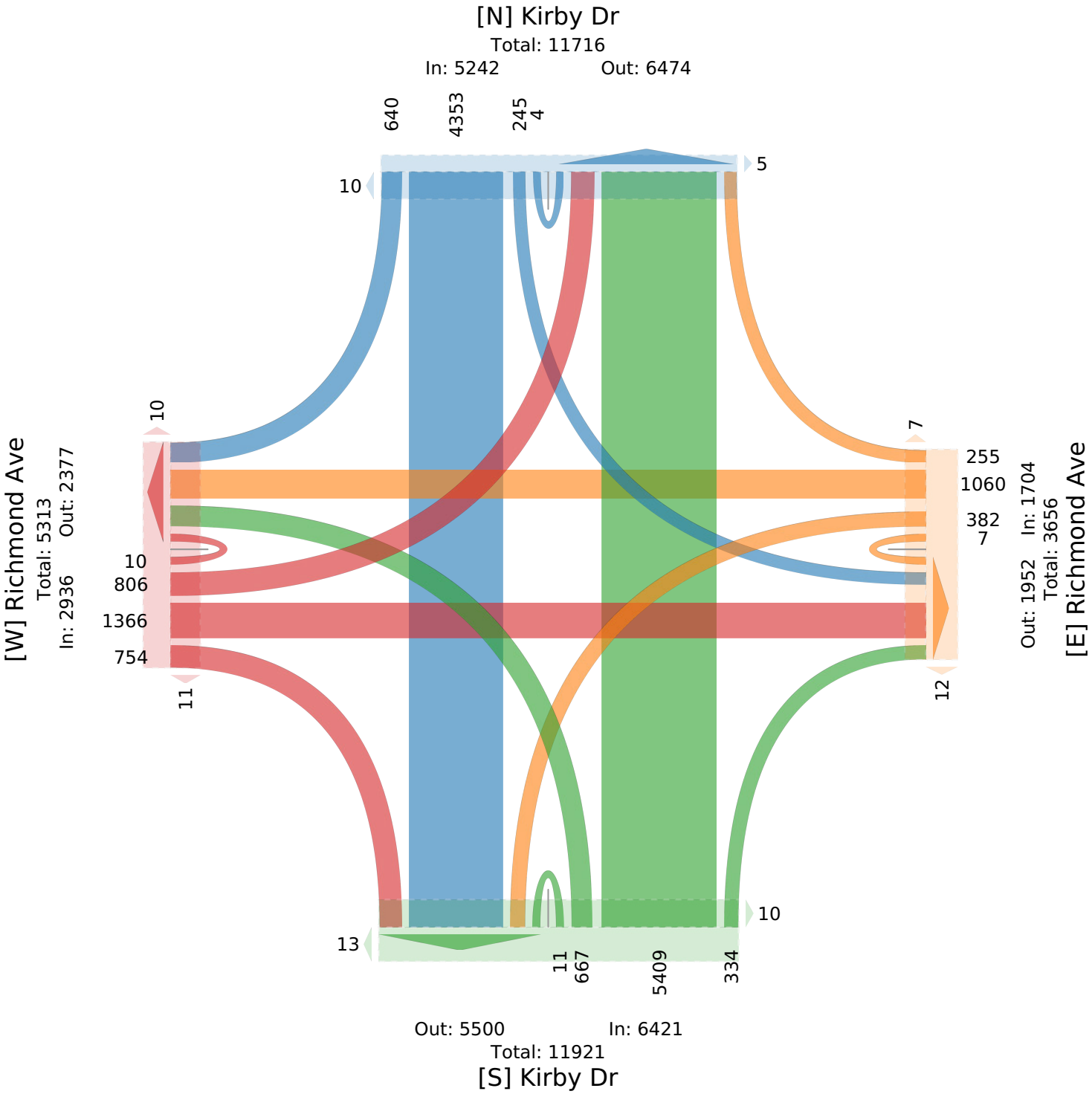


Richmond Ave at Kirby Dr - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

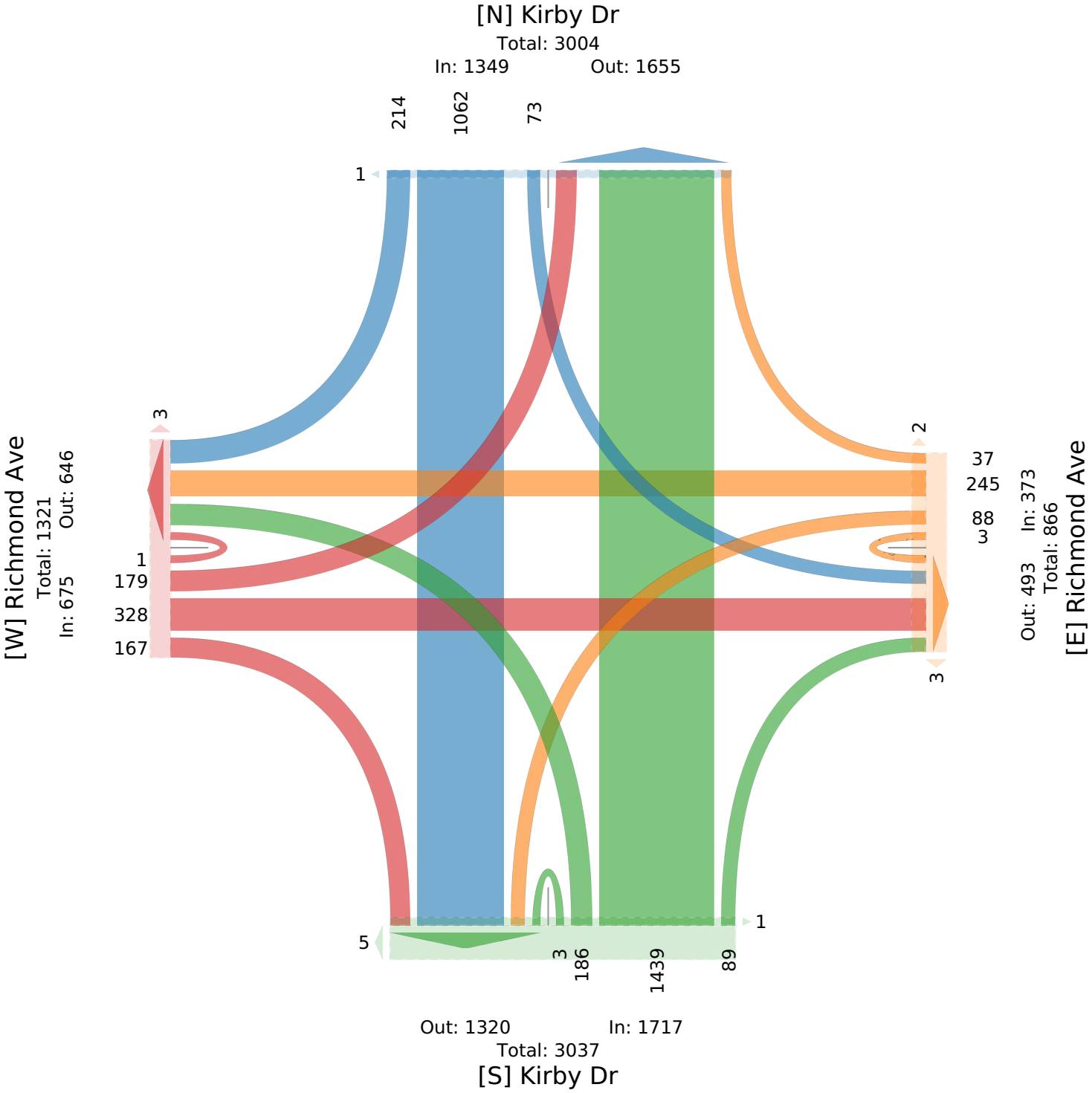
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Kirby Dr Northbound						Kirby Dr Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	46	413	21	1	**481**	1	17	263	65	0	**345**	0	47	82	31	0	**160**	0	25	43	11	1	**80**	1	**1066**
8:00AM	42	382	22	1	**447**	3	14	249	36	0	**299**	0	44	80	38	1	**163**	3	17	67	14	0	**98**	1	**1007**
8:15AM	54	373	24	0	**451**	1	22	283	63	0	**368**	0	49	81	42	0	**172**	0	22	67	8	2	**99**	3	**1090**
8:30AM	44	271	22	1	**338**	1	20	267	50	0	**337**	1	39	85	56	0	**180**	0	24	68	4	0	**96**	0	**951**
Total	186	1439	89	3	**1717**	6	73	1062	214	0	**1349**	1	179	328	167	1	**675**	3	88	245	37	3	**373**	5	**4114**
% Approach	10.8%	83.8%	5.2%	0.2%	**-**	-	5.4%	78.7%	15.9%	0%	**-**	-	26.5%	48.6%	24.7%	0.1%	**-**	-	23.6%	65.7%	9.9%	0.8%	**-**	-	**-**
% Total	4.5%	35.0%	2.2%	0.1%	**41.7%**	-	1.8%	25.8%	5.2%	0%	**32.8%**	-	4.4%	8.0%	4.1%	0%	**16.4%**	-	2.1%	6.0%	0.9%	0.1%	**9.1%**	-	**-**
PHF	0.861	0.871	0.927	0.750	**0.892**	-	0.830	0.938	0.823	-	**0.916**	-	0.913	0.965	0.746	0.250	**0.938**	-	0.880	0.901	0.661	0.375	**0.942**	-	0.944
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.7%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	186	1414	86	3	**1689**	-	72	1042	212	0	**1326**	-	172	316	164	1	**653**	-	84	234	34	3	**355**	-	4023
% Lights	100%	98.3%	96.6%	100%	**98.4%**	-	98.6%	98.1%	99.1%	0%	**98.3%**	-	96.1%	96.3%	98.2%	100%	**96.7%**	-	95.5%	95.5%	91.9%	100%	**95.2%**	-	97.8%
Single-Unit Trucks	0	16	2	0	**18**	-	1	7	1	0	**9**	-	3	6	2	0	**11**	-	4	3	2	0	**9**	-	47
% Single-Unit Trucks	0%	1.1%	2.2%	0%	**1.0%**	-	1.4%	0.7%	0.5%	0%	**0.7%**	-	1.7%	1.8%	1.2%	0%	**1.6%**	-	4.5%	1.2%	5.4%	0%	**2.4%**	-	1.1%
Articulated Trucks	0	3	1	0	**4**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	6
% Articulated Trucks	0%	0.2%	1.1%	0%	**0.2%**	-	0%	0.1%	0.5%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	6	0	0	**6**	-	0	12	0	0	**12**	-	1	6	1	0	**8**	-	0	8	1	0	**9**	-	35
% Buses	0%	0.4%	0%	0%	**0.3%**	-	0%	1.1%	0%	0%	**0.9%**	-	0.6%	1.8%	0.6%	0%	**1.2%**	-	0%	3.3%	2.7%	0%	**2.4%**	-	0.9%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Kirby Dr - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Kirby Dr - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

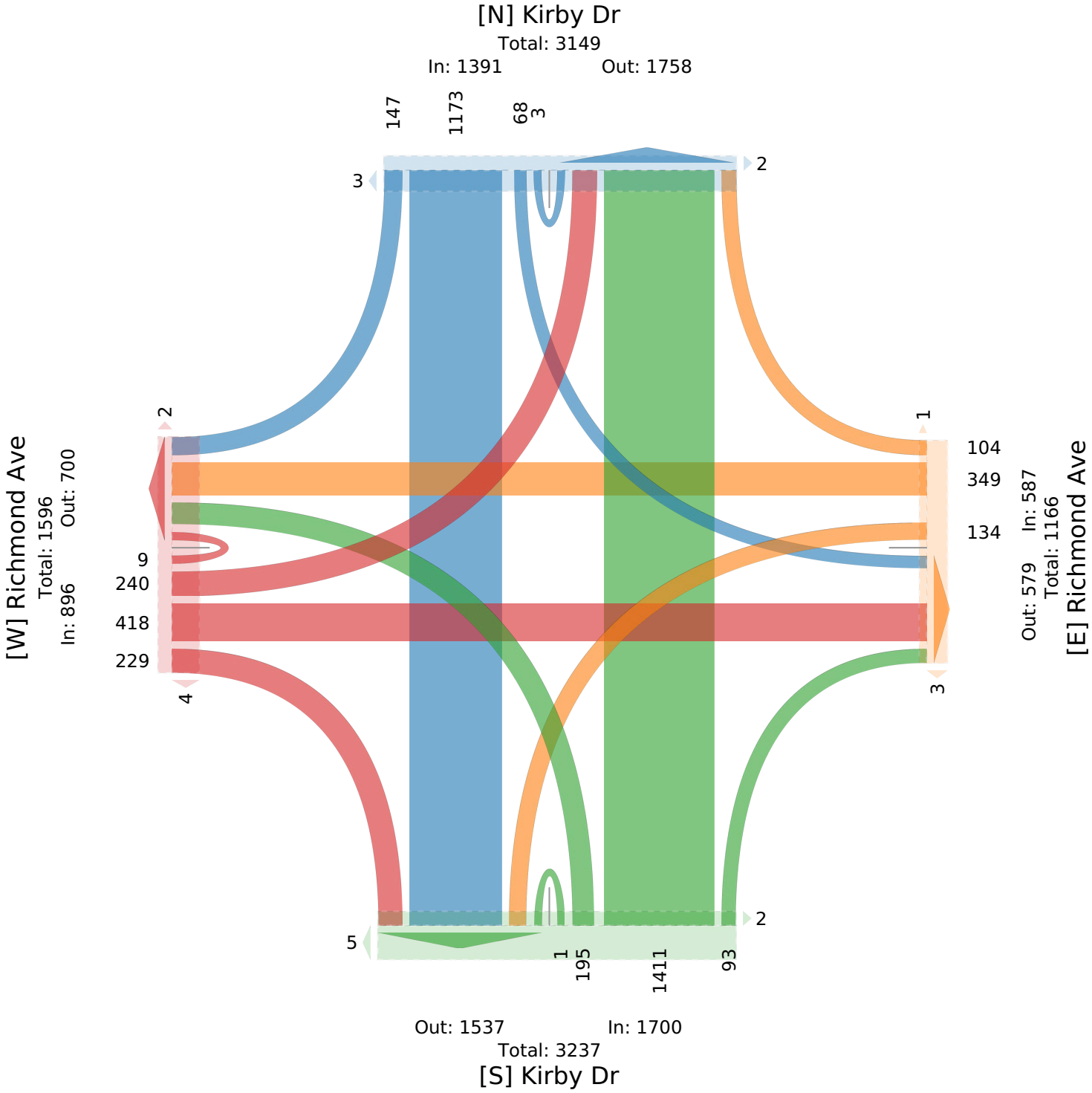
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Kirby Dr						Kirby Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	49	318	25	0	**392**	2	20	286	43	0	**349**	4	58	106	69	1	**234**	2	30	96	34	0	**160**	1	**1135**
5:15PM	53	381	17	1	**452**	3	18	285	30	2	**335**	0	52	99	64	3	**218**	1	36	87	26	0	**149**	2	**1154**
5:30PM	52	331	22	0	**405**	1	13	313	42	0	**368**	1	66	114	48	2	**230**	1	27	102	17	0	**146**	0	**1149**
5:45PM	41	381	29	0	**451**	1	17	289	32	1	**339**	0	64	99	48	3	**214**	2	41	64	27	0	**132**	1	**1136**
Total	195	1411	93	1	**1700**	7	68	1173	147	3	**1391**	5	240	418	229	9	**896**	6	134	349	104	0	**587**	4	**4574**
% Approach	11.5%	83.0%	5.5%	0.1%	**-**	-	4.9%	84.3%	10.6%	0.2%	**-**	-	26.8%	46.7%	25.6%	1.0%	**-**	-	22.8%	59.5%	17.7%	0%	**-**	-	-
% Total	4.3%	30.8%	2.0%	0%	**37.2%**	-	1.5%	25.6%	3.2%	0.1%	**30.4%**	-	5.2%	9.1%	5.0%	0.2%	**19.6%**	-	2.9%	7.6%	2.3%	0%	**12.8%**	-	-
PHF	0.920	0.926	0.802	0.250	**0.940**	-	0.850	0.937	0.855	0.375	**0.945**	-	0.909	0.917	0.830	0.750	**0.957**	-	0.817	0.855	0.765	-	**0.917**	-	0.991
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	195	1403	92	1	**1691**	-	67	1168	146	3	**1384**	-	239	407	227	9	**882**	-	133	343	103	0	**579**	-	4536
% Lights	100%	99.4%	98.9%	100%	**99.5%**	-	98.5%	99.6%	99.3%	100%	**99.5%**	-	99.6%	97.4%	99.1%	100%	**98.4%**	-	99.3%	98.3%	99.0%	0%	**98.6%**	-	99.2%
Single-Unit Trucks	0	3	1	0	**4**	-	1	3	1	0	**5**	-	0	1	2	0	**3**	-	1	0	0	0	**1**	-	13
% Single-Unit Trucks	0%	0.2%	1.1%	0%	**0.2%**	-	1.5%	0.3%	0.7%	0%	**0.4%**	-	0%	0.2%	0.9%	0%	**0.3%**	-	0.7%	0%	0%	0%	**0.2%**	-	0.3%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	4
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	1.0%	0%	**0.2%**	-	0.1%
Buses	0	3	0	0	**3**	-	0	2	0	0	**2**	-	0	8	0	0	**8**	-	0	6	0	0	**6**	-	19
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	1.9%	0%	0%	**0.9%**	-	0%	1.7%	0%	0%	**1.0%**	-	0.4%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	5	-	-	-	-	-	4	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	85.7%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	14.3%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Kirby Dr - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867325, Location: 29.734029, -95.41868

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Greenbriar Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Greenbriar Dr						Greenbriar Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	0	0	0	**0**	0	1	51	4	0	**56**	0	6	46	7	0	**59**	1	15	27	0	0	**42**	0	**157**
7:15AM	0	5	2	0	**7**	0	3	67	7	0	**77**	0	8	56	4	0	**68**	0	12	37	4	0	**53**	0	**205**
7:30AM	0	10	2	0	**12**	0	2	83	11	0	**96**	0	3	83	9	0	**95**	0	29	57	3	0	**89**	0	**292**
7:45AM	0	16	3	1	**20**	0	3	121	9	0	**133**	0	15	90	11	0	**116**	1	32	57	4	0	**93**	0	**362**
Hourly Total	0	31	7	1	**39**	0	9	322	31	0	**362**	0	32	275	31	0	**338**	2	88	178	11	0	**277**	0	**1016**
8:00AM	0	9	5	0	**14**	0	7	88	11	0	**106**	0	10	79	19	0	**108**	0	28	85	2	0	**115**	0	**343**
8:15AM	0	15	6	0	**21**	0	6	110	20	0	**136**	0	23	77	13	0	**113**	0	41	69	2	0	**112**	0	**382**
8:30AM	1	16	2	0	**19**	0	1	113	22	0	**136**	0	17	79	10	0	**106**	0	27	63	4	0	**94**	1	**355**
8:45AM	0	13	1	0	**14**	0	3	82	9	0	**94**	0	15	57	14	0	**86**	0	22	53	2	0	**77**	0	**271**
Hourly Total	1	53	14	0	**68**	0	17	393	62	0	**472**	0	65	292	56	0	**413**	0	118	270	10	0	**398**	1	**1351**
4:00PM	0	38	2	0	**40**	1	1	100	15	0	**116**	1	39	58	27	0	**124**	0	19	80	4	0	**103**	0	**383**
4:15PM	2	53	3	0	**58**	0	2	111	23	0	**136**	1	37	61	40	0	**138**	1	31	88	8	1	**128**	0	**460**
4:30PM	2	49	6	0	**57**	1	2	87	28	0	**117**	2	47	72	37	0	**156**	0	24	67	7	0	**98**	1	**428**
4:45PM	2	68	4	1	**75**	0	2	69	33	0	**104**	0	39	64	27	0	**130**	0	23	75	11	0	**109**	0	**418**
Hourly Total	6	208	15	1	**230**	2	7	367	99	0	**473**	4	162	255	131	0	**548**	1	97	310	30	1	**438**	1	**1689**
5:00PM	2	56	5	0	**63**	0	7	63	20	0	**90**	0	38	72	38	0	**148**	0	26	85	5	0	**116**	0	**417**
5:15PM	1	47	4	0	**52**	3	4	84	20	0	**108**	0	37	61	28	0	**126**	0	16	84	7	0	**107**	0	**393**
5:30PM	1	46	6	0	**53**	2	1	74	20	0	**95**	0	48	71	29	0	**148**	1	25	84	4	0	**113**	0	**409**
5:45PM	0	47	5	0	**52**	3	0	79	24	0	**103**	0	33	60	38	0	**131**	0	20	80	10	0	**110**	0	**396**
Hourly Total	4	196	20	0	**220**	8	12	300	84	0	**396**	0	156	264	133	0	**553**	1	87	333	26	0	**446**	0	**1615**
Total	11	488	56	2	**557**	10	45	1382	276	0	**1703**	4	415	1086	351	0	**1852**	4	390	1091	77	1	**1559**	2	**5671**
% Approach	2.0%	87.6%	10.1%	0.4%	**-**	-	2.6%	81.2%	16.2%	0%	**-**	-	22.4%	58.6%	19.0%	0%	**-**	-	25.0%	70.0%	4.9%	0.1%	**-**	-	-
% Total	0.2%	8.6%	1.0%	0%	**9.8%**	-	0.8%	24.4%	4.9%	0%	**30.0%**	-	7.3%	19.2%	6.2%	0%	**32.7%**	-	6.9%	19.2%	1.4%	0%	**27.5%**	-	-
Motorcycles	0	3	0	0	**3**	-	1	1	0	0	**2**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	6
% Motorcycles	0%	0.6%	0%	0%	**0.5%**	-	2.2%	0.1%	0%	0%	**0.1%**	-	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	11	481	54	2	**548**	-	43	1369	271	0	**1683**	-	409	1044	349	0	**1802**	-	382	1054	76	1	**1513**	-	5546
% Lights	100%	98.6%	96.4%	100%	**98.4%**	-	95.6%	99.1%	98.2%	0%	**98.8%**	-	98.6%	96.1%	99.4%	0%	**97.3%**	-	97.9%	96.6%	98.7%	100%	**97.0%**	-	97.8%
Single-Unit Trucks	0	3	2	0	**5**	-	1	11	4	0	**16**	-	3	12	1	0	**16**	-	7	9	0	0	**16**	-	53
% Single-Unit Trucks	0%	0.6%	3.6%	0%	**0.9%**	-	2.2%	0.8%	1.4%	0%	**0.9%**	-	0.7%	1.1%	0.3%	0%	**0.9%**	-	1.8%	0.8%	0%	0%	**1.0%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.4%	0%	**0.1%**	-	0%	0.2%	0.3%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	1	0	0	**1**	-	0	1	0	0	**1**	-	2	28	0	0	**30**	-	1	28	1	0	**30**	-	62
% Buses	0%	0.2%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.5%	2.6%	0%	0%	**1.6%**	-	0.3%	2.6%	1.3%	0%	**1.9%**	-	1.1%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	90.0%	-	-	-	-	-	75.0%	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	10.0%	-	-	-	-	-	25.0%	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Greenbriar Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

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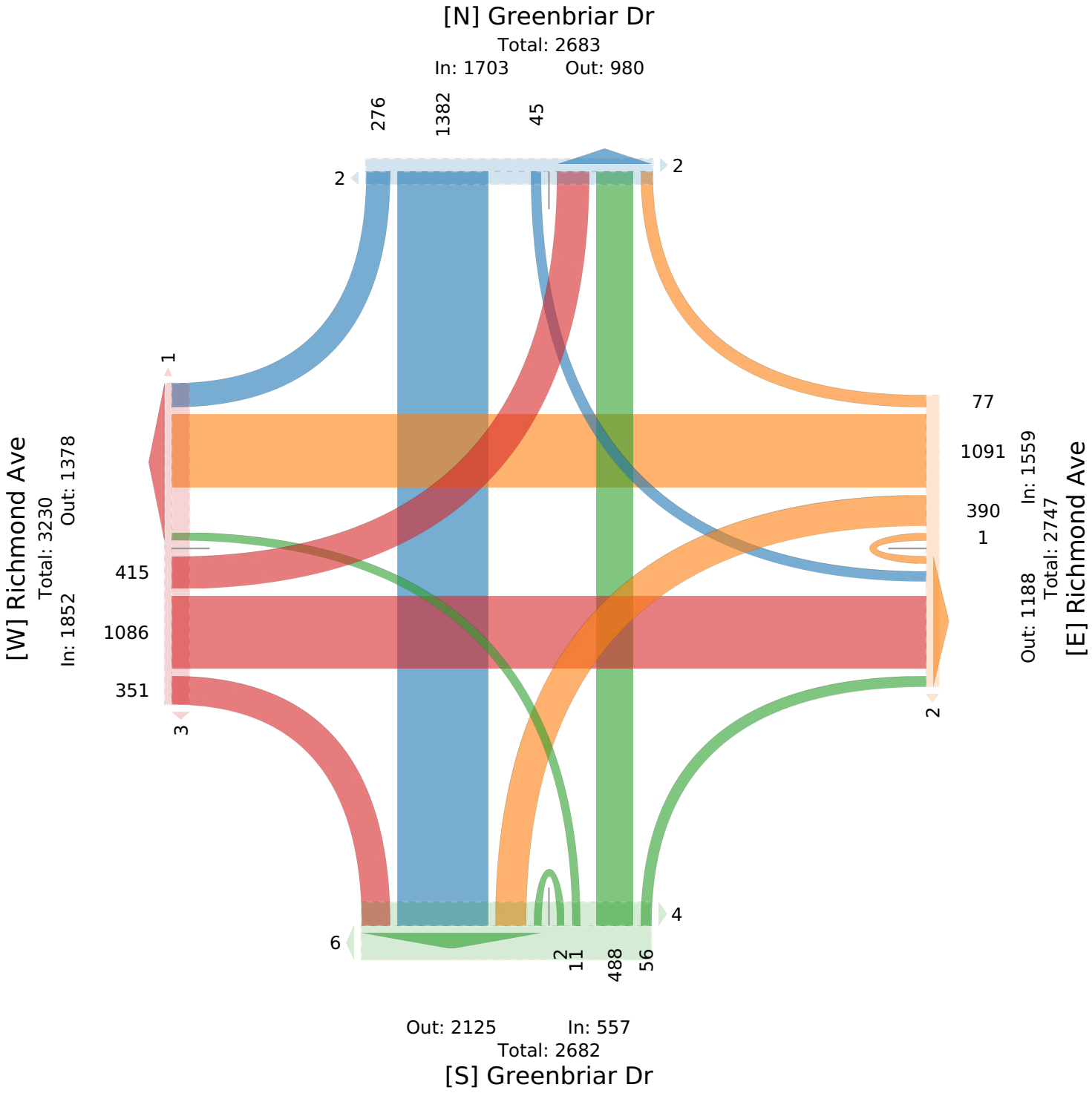

Richmond Ave at Greenbriar Dr - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Greenbriar Dr Northbound						Greenbriar Dr Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	0	16	3	1	**20**	0	3	121	9	0	**133**	0	15	90	11	0	**116**	1	32	57	4	0	**93**	0	**362**
8:00AM	0	9	5	0	**14**	0	7	88	11	0	**106**	0	10	79	19	0	**108**	0	28	85	2	0	**115**	0	**343**
8:15AM	0	15	6	0	**21**	0	6	110	20	0	**136**	0	23	77	13	0	**113**	0	41	69	2	0	**112**	0	**382**
8:30AM	1	16	2	0	**19**	0	1	113	22	0	**136**	0	17	79	10	0	**106**	0	27	63	4	0	**94**	1	**355**
Total	1	56	16	1	**74**	0	17	432	62	0	**511**	0	65	325	53	0	**443**	1	128	274	12	0	**414**	1	**1442**
% Approach	1.4%	75.7%	21.6%	1.4%	**-**	-	3.3%	84.5%	12.1%	0%	**-**	-	14.7%	73.4%	12.0%	0%	**-**	-	30.9%	66.2%	2.9%	0%	**-**	-	**-**
% Total	0.1%	3.9%	1.1%	0.1%	**5.1%**	-	1.2%	30.0%	4.3%	0%	**35.4%**	-	4.5%	22.5%	3.7%	0%	**30.7%**	-	8.9%	19.0%	0.8%	0%	**28.7%**	-	**-**
PHF	0.250	0.875	0.667	0.250	**0.881**	-	0.607	0.893	0.705	-	**0.939**	-	0.707	0.903	0.697	-	**0.955**	-	0.780	0.806	0.750	-	**0.900**	-	0.944
Motorcycles	0	1	0	0	**1**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	1.8%	0%	0%	**1.4%**	-	5.9%	0.2%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	1	53	16	1	**71**	-	15	429	60	0	**504**	-	65	314	52	0	**431**	-	124	262	11	0	**397**	-	1403
% Lights	100%	94.6%	100%	100%	**95.9%**	-	88.2%	99.3%	96.8%	0%	**98.6%**	-	100%	96.6%	98.1%	0%	**97.3%**	-	96.9%	95.6%	91.7%	0%	**95.9%**	-	97.3%
Single-Unit Trucks	0	1	0	0	**1**	-	1	2	1	0	**4**	-	0	4	0	0	**4**	-	4	3	0	0	**7**	-	16
% Single-Unit Trucks	0%	1.8%	0%	0%	**1.4%**	-	5.9%	0.5%	1.6%	0%	**0.8%**	-	0%	1.2%	0%	0%	**0.9%**	-	3.1%	1.1%	0%	0%	**1.7%**	-	1.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	1.6%	0%	**0.2%**	-	0%	0%	1.9%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	9	1	0	**10**	-	18
% Buses	0%	1.8%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	2.2%	0%	0%	**1.6%**	-	0%	3.3%	8.3%	0%	**2.4%**	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Greenbriar Dr - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

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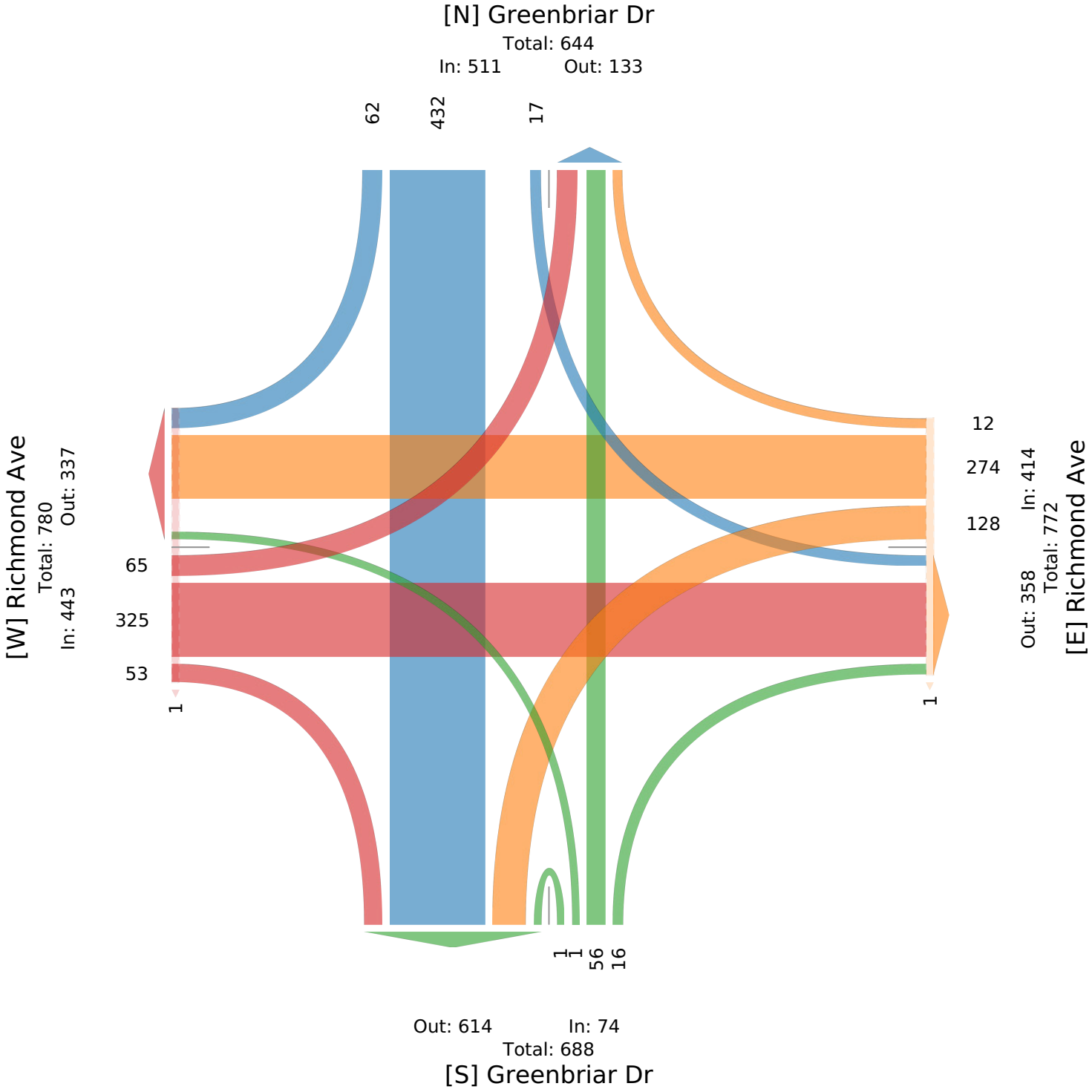


Richmond Ave at Greenbriar Dr - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

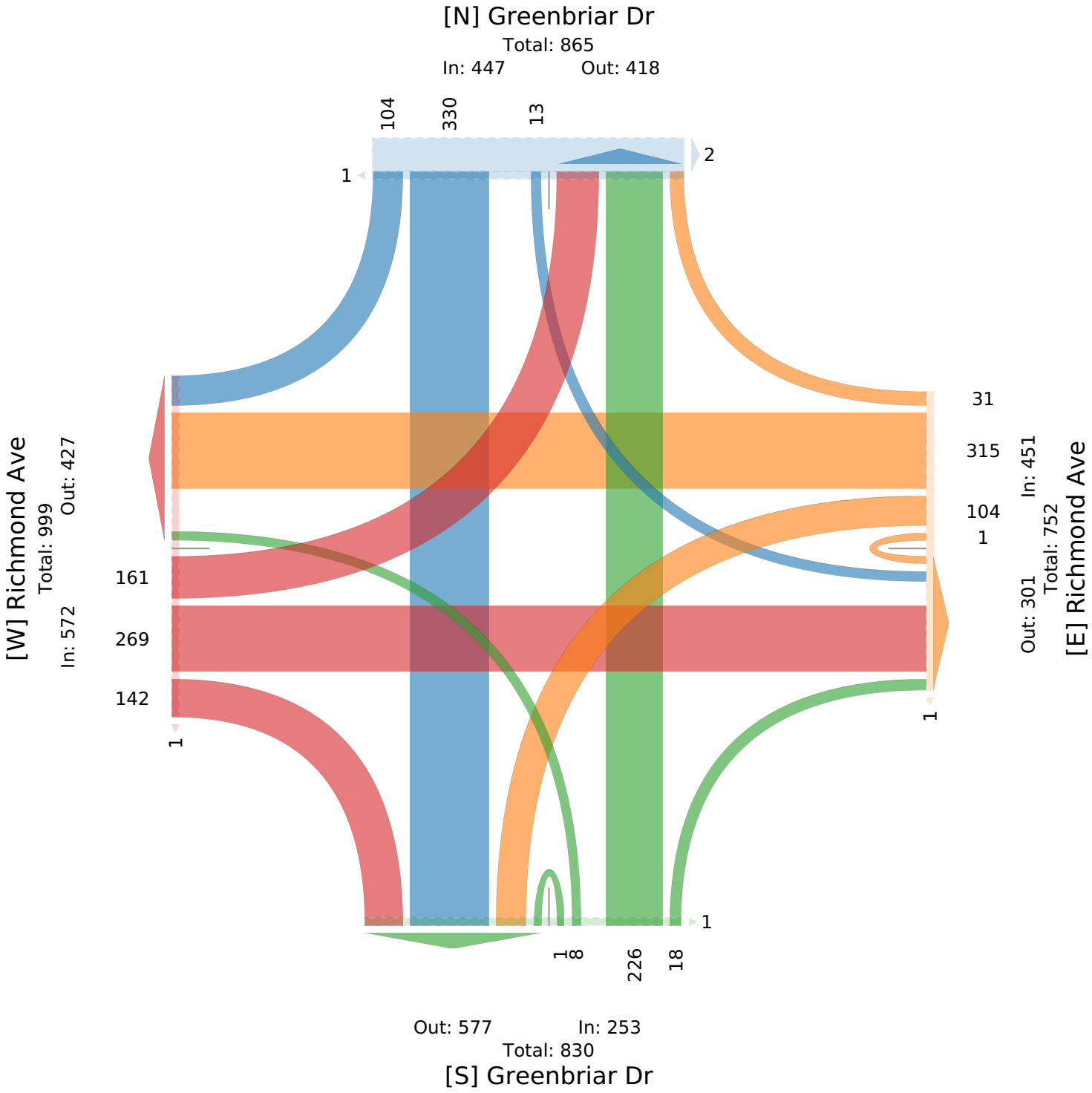
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Greenbriar Dr Northbound						Greenbriar Dr Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	2	53	3	0	**58**	0	2	111	23	0	**136**	1	37	61	40	0	**138**	1	31	88	8	1	**128**	0	**460**
4:30PM	2	49	6	0	**57**	1	2	87	28	0	**117**	2	47	72	37	0	**156**	0	24	67	7	0	**98**	1	**428**
4:45PM	2	68	4	1	**75**	0	2	69	33	0	**104**	0	39	64	27	0	**130**	0	23	75	11	0	**109**	0	**418**
5:00PM	2	56	5	0	**63**	0	7	63	20	0	**90**	0	38	72	38	0	**148**	0	26	85	5	0	**116**	0	**417**
Total	8	226	18	1	**253**	1	13	330	104	0	**447**	3	161	269	142	0	**572**	1	104	315	31	1	**451**	1	**1723**
% Approach	3.2%	89.3%	7.1%	0.4%	**-**	-	2.9%	73.8%	23.3%	0%	**-**	-	28.1%	47.0%	24.8%	0%	**-**	-	23.1%	69.8%	6.9%	0.2%	**-**	-	-
% Total	0.5%	13.1%	1.0%	0.1%	**14.7%**	-	0.8%	19.2%	6.0%	0%	**25.9%**	-	9.3%	15.6%	8.2%	0%	**33.2%**	-	6.0%	18.3%	1.8%	0.1%	**26.2%**	-	-
PHF	1.000	0.831	0.750	0.250	**0.843**	-	0.464	0.743	0.788	-	**0.822**	-	0.856	0.934	0.888	-	**0.917**	-	0.839	0.895	0.705	0.250	**0.881**	-	0.936
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.6%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	8	224	17	1	**250**	-	13	327	103	0	**443**	-	156	259	142	0	**557**	-	103	305	31	1	**440**	-	1690
% Lights	100%	99.1%	94.4%	100%	**98.8%**	-	100%	99.1%	99.0%	0%	**99.1%**	-	96.9%	96.3%	100%	0%	**97.4%**	-	99.0%	96.8%	100%	100%	**97.6%**	-	98.1%
Single-Unit Trucks	0	1	1	0	**2**	-	0	3	1	0	**4**	-	2	2	0	0	**4**	-	1	3	0	0	**4**	-	14
% Single-Unit Trucks	0%	0.4%	5.6%	0%	**0.8%**	-	0%	0.9%	1.0%	0%	**0.9%**	-	1.2%	0.7%	0%	0%	**0.7%**	-	1.0%	1.0%	0%	0%	**0.9%**	-	0.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2	7	0	0	**9**	-	0	7	0	0	**7**	-	16
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%	2.6%	0%	0%	**1.6%**	-	0%	2.2%	0%	0%	**1.6%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Greenbriar Dr - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867326, Location: 29.734186, -95.412915

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Shepherd Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

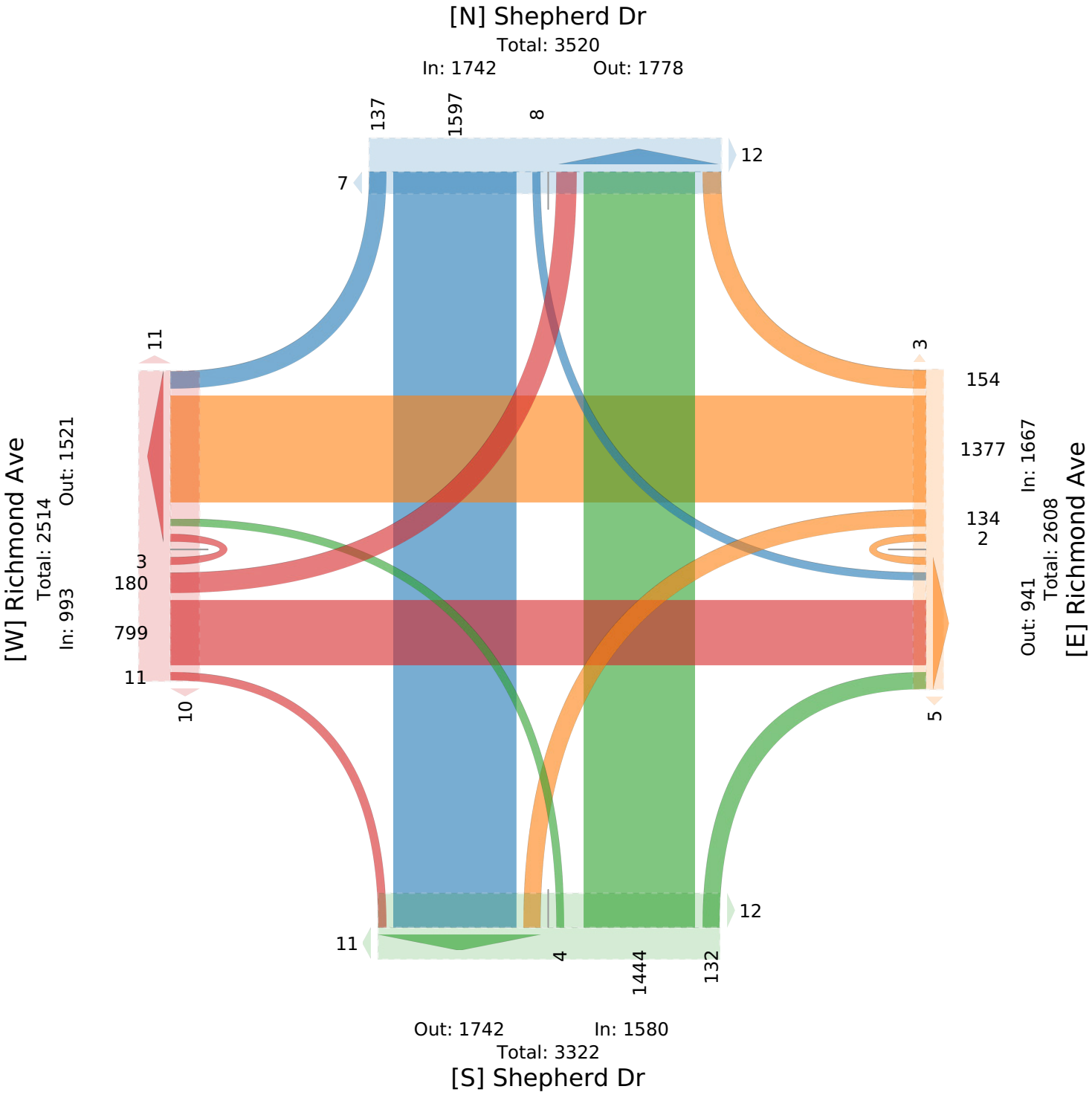
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Shepherd Dr						Shepherd Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	68	12	0	**80**	0	0	103	3	0	**106**	0	6	46	0	2	**54**	1	11	38	4	0	**53**	1	**293**
7:15AM	0	87	2	0	**89**	0	0	117	2	0	**119**	0	10	38	1	0	**49**	1	7	57	12	0	**76**	0	**333**
7:30AM	0	96	9	0	**105**	1	3	127	3	0	**133**	0	9	70	1	0	**80**	0	12	88	15	0	**115**	0	**433**
7:45AM	0	110	4	0	**114**	0	2	88	8	0	**98**	0	13	79	3	0	**95**	1	9	92	10	1	**112**	0	**419**
Hourly Total	0	361	27	0	**388**	1	5	435	16	0	**456**	0	38	233	5	2	**278**	3	39	275	41	1	**356**	1	**1478**
8:00AM	0	90	5	0	**95**	2	1	100	5	0	**106**	1	10	60	2	0	**72**	1	11	112	5	0	**128**	0	**401**
8:15AM	0	75	7	0	**82**	6	0	102	10	0	**112**	0	8	68	0	0	**76**	0	1	105	5	1	**112**	1	**382**
8:30AM	0	89	4	0	**93**	1	0	91	11	0	**102**	1	16	47	1	0	**64**	1	7	78	7	0	**92**	0	**351**
8:45AM	0	92	8	0	**100**	3	0	98	10	0	**108**	1	14	31	1	0	**46**	1	10	68	9	0	**87**	3	**341**
Hourly Total	0	346	24	0	**370**	12	1	391	36	0	**428**	3	48	206	4	0	**258**	3	29	363	26	1	**419**	4	**1475**
4:00PM	0	113	7	0	**120**	1	0	105	14	0	**119**	0	21	25	0	1	**47**	4	15	82	8	0	**105**	1	**391**
4:15PM	0	91	10	0	**101**	0	1	93	7	0	**101**	2	16	35	0	0	**51**	0	3	108	3	0	**114**	0	**367**
4:30PM	1	90	11	0	**102**	4	0	89	9	0	**98**	2	10	47	0	0	**57**	0	10	83	11	0	**104**	0	**361**
4:45PM	1	67	13	0	**81**	2	0	99	11	0	**110**	3	16	44	0	0	**60**	2	9	86	11	0	**106**	1	**357**
Hourly Total	2	361	41	0	**404**	7	1	386	41	0	**428**	7	63	151	0	1	**215**	6	37	359	33	0	**429**	2	**1476**
5:00PM	0	105	12	0	**117**	0	1	97	12	0	**110**	1	9	50	1	0	**60**	5	6	97	16	0	**119**	0	**406**
5:15PM	2	77	10	0	**89**	0	0	89	11	0	**100**	4	7	55	0	0	**62**	2	13	93	8	0	**114**	1	**365**
5:30PM	0	101	7	0	**108**	0	0	99	10	0	**109**	2	6	53	1	0	**60**	1	4	100	12	0	**116**	0	**393**
5:45PM	0	93	11	0	**104**	3	0	100	11	0	**111**	2	9	51	0	0	**60**	1	6	90	18	0	**114**	0	**389**
Hourly Total	2	376	40	0	**418**	3	1	385	44	0	**430**	9	31	209	2	0	**242**	9	29	380	54	0	**463**	1	**1553**
Total	4	1444	132	0	**1580**	23	8	1597	137	0	**1742**	19	180	799	11	3	**993**	21	134	1377	154	2	**1667**	8	**5982**
% Approach	0.3%	91.4%	8.4%	0%	**-**	-	0.5%	91.7%	7.9%	0%	**-**	-	18.1%	80.5%	1.1%	0.3%	**-**	-	8.0%	82.6%	9.2%	0.1%	**-**	-	-
% Total	0.1%	24.1%	2.2%	0%	**26.4%**	-	0.1%	26.7%	2.3%	0%	**29.1%**	-	3.0%	13.4%	0.2%	0.1%	**16.6%**	-	2.2%	23.0%	2.6%	0%	**27.9%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	4	1406	126	0	**1536**	-	7	1560	136	0	**1703**	-	178	755	11	3	**947**	-	131	1334	147	1	**1613**	-	5799
% Lights	100%	97.4%	95.5%	0%	**97.2%**	-	87.5%	97.7%	99.3%	0%	**97.8%**	-	98.9%	94.5%	100%	100%	**95.4%**	-	97.8%	96.9%	95.5%	50.0%	**96.8%**	-	96.9%
Single-Unit Trucks	0	14	6	0	**20**	-	0	17	0	0	**17**	-	2	15	0	0	**17**	-	2	16	6	1	**25**	-	79
% Single-Unit Trucks	0%	1.0%	4.5%	0%	**1.3%**	-	0%	1.1%	0%	0%	**1.0%**	-	1.1%	1.9%	0%	0%	**1.7%**	-	1.5%	1.2%	3.9%	50.0%	**1.5%**	-	1.3%
Articulated Trucks	0	3	0	0	**3**	-	0	4	1	0	**5**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	10
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.3%	0.7%	0%	**0.3%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0.6%	0%	**0.1%**	-	0.2%
Buses	0	20	0	0	**20**	-	1	16	0	0	**17**	-	0	28	0	0	**28**	-	1	27	0	0	**28**	-	93
% Buses	0%	1.4%	0%	0%	**1.3%**	-	12.5%	1.0%	0%	0%	**1.0%**	-	0%	3.5%	0%	0%	**2.8%**	-	0.7%	2.0%	0%	0%	**1.7%**	-	1.6%
Pedestrians	-	-	-	-	-	22	-	-	-	-	-	18	-	-	-	-	-	20	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	95.7%	-	-	-	-	-	94.7%	-	-	-	-	-	95.2%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	4.3%	-	-	-	-	-	5.3%	-	-	-	-	-	4.8%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Shepherd Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Shepherd Dr - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Shepherd Dr						Shepherd Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	0	96	9	0	**105**	1	3	127	3	0	**133**	0	9	70	1	0	**80**	0	12	88	15	0	**115**	0	**433**
7:45AM	0	110	4	0	**114**	0	2	88	8	0	**98**	0	13	79	3	0	**95**	1	9	92	10	1	**112**	0	**419**
8:00AM	0	90	5	0	**95**	2	1	100	5	0	**106**	1	10	60	2	0	**72**	1	11	112	5	0	**128**	0	**401**
8:15AM	0	75	7	0	**82**	6	0	102	10	0	**112**	0	8	68	0	0	**76**	0	1	105	5	1	**112**	1	**382**
Total	0	371	25	0	**396**	9	6	417	26	0	**449**	1	40	277	6	0	**323**	2	33	397	35	2	**467**	1	**1635**
% Approach	0%	93.7%	6.3%	0%	**-**	-	1.3%	92.9%	5.8%	0%	**-**	-	12.4%	85.8%	1.9%	0%	**-**	-	7.1%	85.0%	7.5%	0.4%	**-**	-	-
% Total	0%	22.7%	1.5%	0%	**24.2%**	-	0.4%	25.5%	1.6%	0%	**27.5%**	-	2.4%	16.9%	0.4%	0%	**19.8%**	-	2.0%	24.3%	2.1%	0.1%	**28.6%**	-	-
PHF	-	0.843	0.694	-	**0.868**	-	0.500	0.821	0.650	-	**0.844**	-	0.769	0.877	0.500	-	**0.850**	-	0.688	0.886	0.583	0.500	**0.912**	-	0.944
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	362	24	0	**386**	-	5	406	25	0	**436**	-	39	265	6	0	**310**	-	33	384	35	1	**453**	-	1585
% Lights	0%	97.6%	96.0%	0%	**97.5%**	-	83.3%	97.4%	96.2%	0%	**97.1%**	-	97.5%	95.7%	100%	0%	**96.0%**	-	100%	96.7%	100%	50.0%	**97.0%**	-	96.9%
Single-Unit Trucks	0	4	1	0	**5**	-	0	5	0	0	**5**	-	1	4	0	0	**5**	-	0	5	0	1	**6**	-	21
% Single-Unit Trucks	0%	1.1%	4.0%	0%	**1.3%**	-	0%	1.2%	0%	0%	**1.1%**	-	2.5%	1.4%	0%	0%	**1.5%**	-	0%	1.3%	0%	50.0%	**1.3%**	-	1.3%
Articulated Trucks	0	1	0	0	**1**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.3%	0%	0%	**0.3%**	-	0%	0.5%	3.8%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	4	0	0	**4**	-	1	4	0	0	**5**	-	0	8	0	0	**8**	-	0	8	0	0	**8**	-	25
% Buses	0%	1.1%	0%	0%	**1.0%**	-	16.7%	1.0%	0%	0%	**1.1%**	-	0%	2.9%	0%	0%	**2.5%**	-	0%	2.0%	0%	0%	**1.7%**	-	1.5%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Shepherd Dr - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

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5215 Sycamore Ave.,
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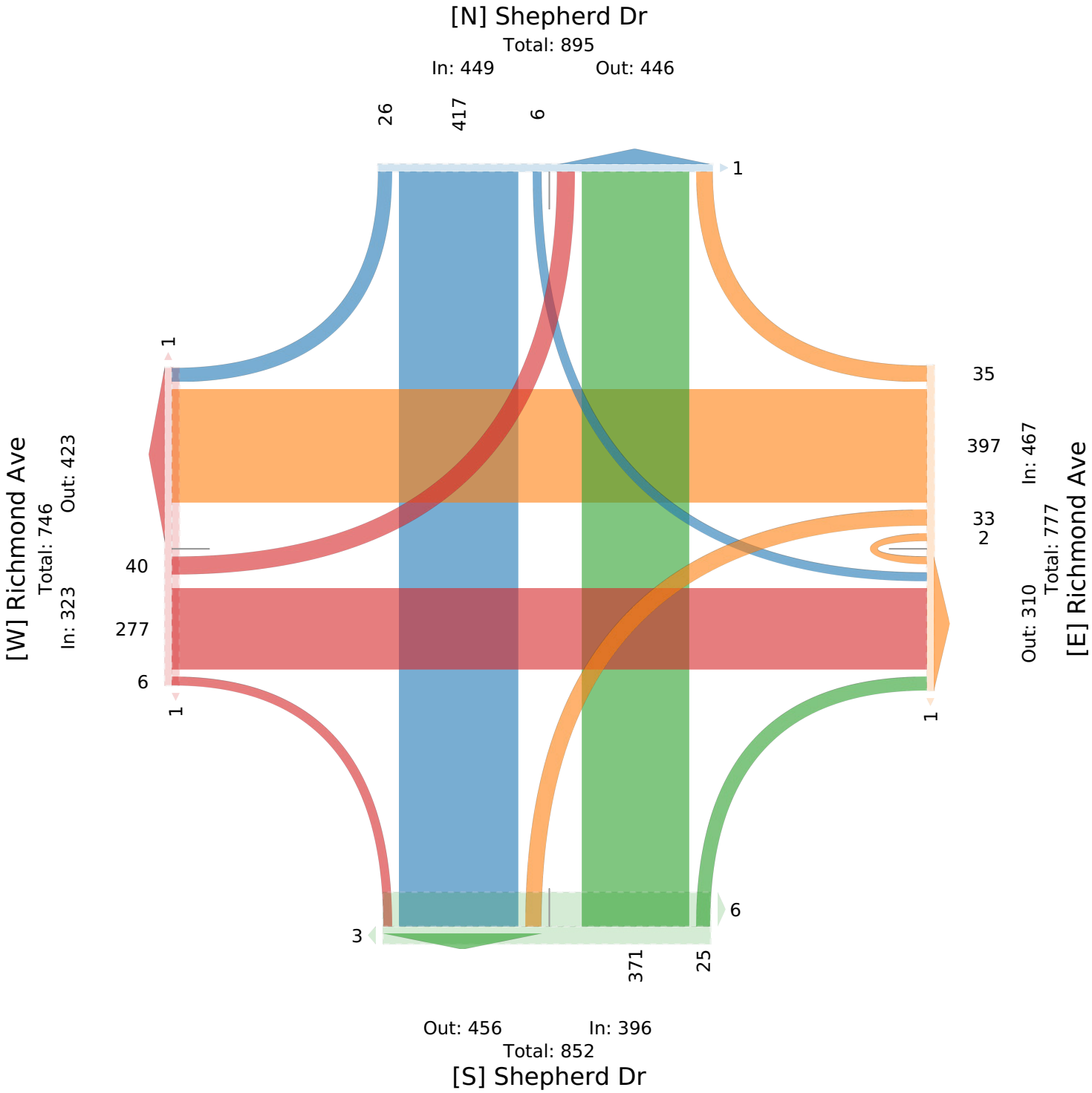


Richmond Ave at Shepherd Dr - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

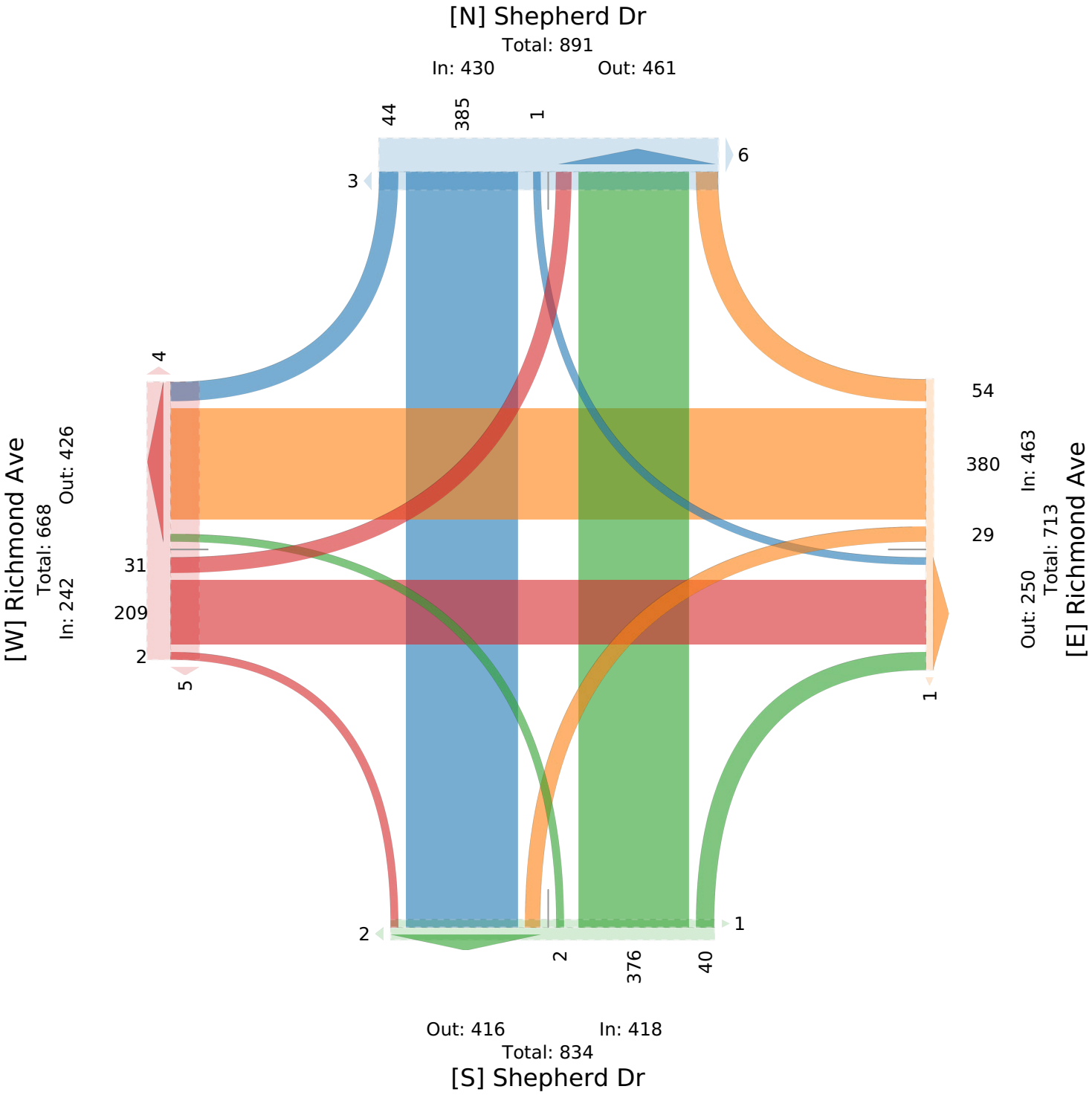
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Shepherd Dr						Shepherd Dr						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	0	105	12	0	**117**	0	1	97	12	0	**110**	1	9	50	1	0	**60**	5	6	97	16	0	**119**	0	**406**
5:15PM	2	77	10	0	**89**	0	0	89	11	0	**100**	4	7	55	0	0	**62**	2	13	93	8	0	**114**	1	**365**
5:30PM	0	101	7	0	**108**	0	0	99	10	0	**109**	2	6	53	1	0	**60**	1	4	100	12	0	**116**	0	**393**
5:45PM	0	93	11	0	**104**	3	0	100	11	0	**111**	2	9	51	0	0	**60**	1	6	90	18	0	**114**	0	**389**
Total	2	376	40	0	**418**	3	1	385	44	0	**430**	9	31	209	2	0	**242**	9	29	380	54	0	**463**	1	**1553**
% Approach	0.5%	90.0%	9.6%	0%	**-**	-	0.2%	89.5%	10.2%	0%	**-**	-	12.8%	86.4%	0.8%	0%	**-**	-	6.3%	82.1%	11.7%	0%	**-**	-	-
% Total	0.1%	24.2%	2.6%	0%	**26.9%**	-	0.1%	24.8%	2.8%	0%	**27.7%**	-	2.0%	13.5%	0.1%	0%	**15.6%**	-	1.9%	24.5%	3.5%	0%	**29.8%**	-	-
PHF	0.250	0.895	0.833	-	**0.893**	-	0.250	0.963	0.917	-	**0.968**	-	0.861	0.950	0.500	-	**0.976**	-	0.558	0.950	0.750	-	**0.973**	-	0.956
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	2	370	37	0	**409**	-	1	378	44	0	**423**	-	31	197	2	0	**230**	-	29	372	52	0	**453**	-	1515
% Lights	100%	98.4%	92.5%	0%	**97.8%**	-	100%	98.2%	100%	0%	**98.4%**	-	100%	94.3%	100%	0%	**95.0%**	-	100%	97.9%	96.3%	0%	**97.8%**	-	97.6%
Single-Unit Trucks	0	2	3	0	**5**	-	0	1	0	0	**1**	-	0	4	0	0	**4**	-	0	1	1	0	**2**	-	12
% Single-Unit Trucks	0%	0.5%	7.5%	0%	**1.2%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	1.9%	0%	0%	**1.7%**	-	0%	0.3%	1.9%	0%	**0.4%**	-	0.8%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.9%	0%	**0.2%**	-	0.2%
Buses	0	4	0	0	**4**	-	0	4	0	0	**4**	-	0	8	0	0	**8**	-	0	7	0	0	**7**	-	23
% Buses	0%	1.1%	0%	0%	**1.0%**	-	0%	1.0%	0%	0%	**0.9%**	-	0%	3.8%	0%	0%	**3.3%**	-	0%	1.8%	0%	0%	**1.5%**	-	1.5%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	9	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Shepherd Dr - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867327, Location: 29.734159, -95.410644

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Hazard St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

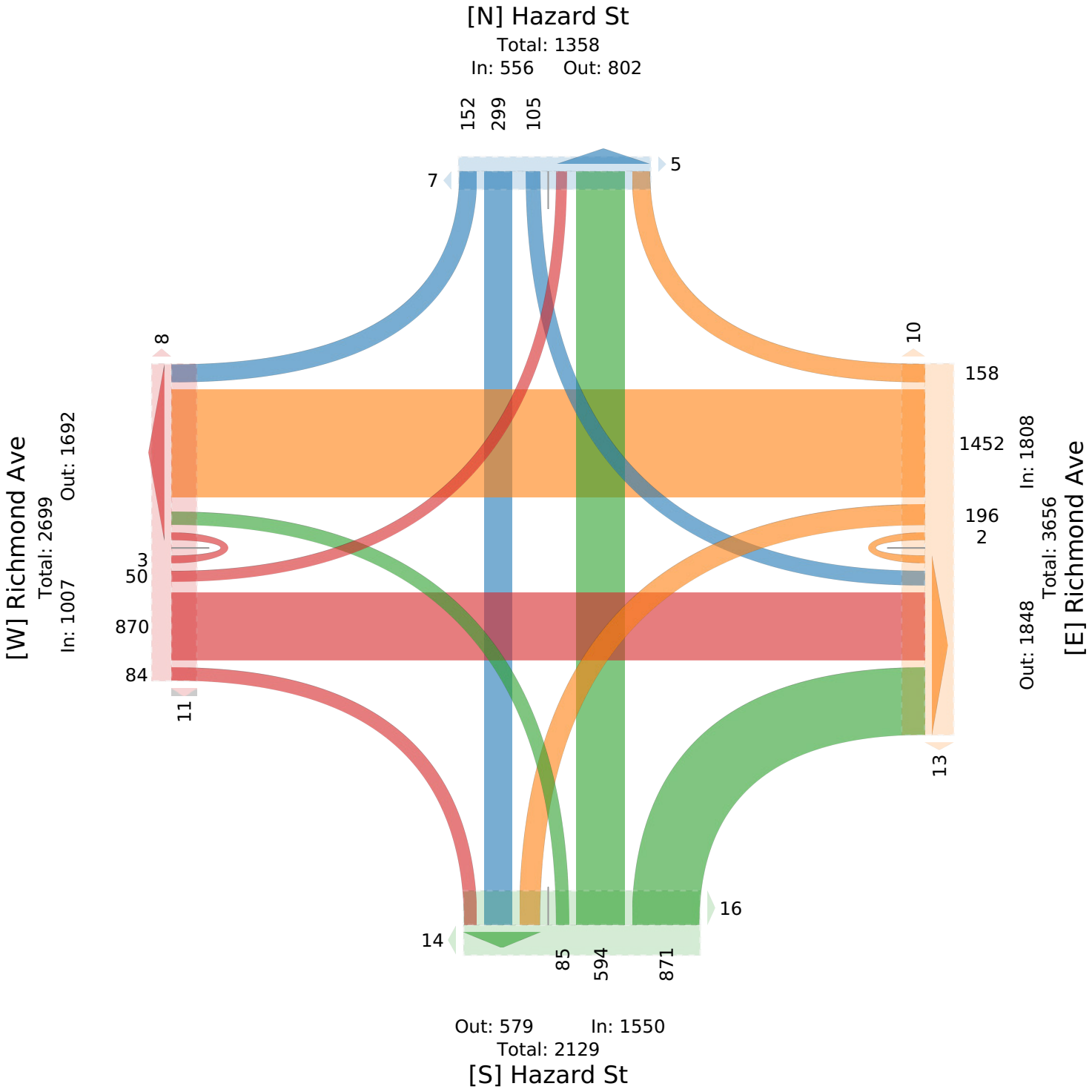
Leg	Hazard St						Hazard St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	4	10	33	0	**47**	0	8	16	7	0	**31**	1	1	39	10	0	**50**	1	3	43	2	0	**48**	2	**176**
7:15AM	10	23	55	0	**88**	0	4	20	4	0	**28**	0	4	39	10	0	**53**	0	10	54	2	0	**66**	0	**235**
7:30AM	14	37	62	0	**113**	0	5	13	10	0	**28**	2	4	68	2	0	**74**	0	5	94	2	0	**101**	3	**316**
7:45AM	5	29	61	0	**95**	1	6	18	19	0	**43**	0	1	69	6	0	**76**	2	11	116	3	0	**130**	0	**344**
Hourly Total	33	99	211	0	**343**	1	23	67	40	0	**130**	3	10	215	28	0	**253**	3	29	307	9	0	**345**	5	**1071**
8:00AM	2	45	54	0	**101**	1	2	17	10	0	**29**	1	6	58	4	1	**69**	2	18	109	16	0	**143**	1	**342**
8:15AM	6	35	58	0	**99**	3	3	24	9	0	**36**	0	9	70	4	0	**83**	2	7	99	12	0	**118**	0	**336**
8:30AM	4	20	42	0	**66**	5	8	10	7	0	**25**	0	1	54	3	0	**58**	3	4	72	2	0	**78**	0	**227**
8:45AM	6	18	56	0	**80**	3	3	22	6	0	**31**	0	0	41	4	0	**45**	0	9	78	4	0	**91**	2	**247**
Hourly Total	18	118	210	0	**346**	12	16	73	32	0	**121**	1	16	223	15	1	**255**	7	38	358	34	0	**430**	3	**1152**
4:00PM	4	47	44	0	**95**	1	9	25	10	0	**44**	1	3	33	4	0	**40**	2	20	104	16	1	**141**	0	**320**
4:15PM	0	46	66	0	**112**	0	9	25	20	0	**54**	2	2	45	4	0	**51**	0	17	95	9	1	**122**	1	**339**
4:30PM	6	38	62	0	**106**	2	5	21	12	0	**38**	1	2	62	10	1	**75**	1	21	91	22	0	**134**	3	**353**
4:45PM	4	57	43	0	**104**	1	12	14	7	0	**33**	1	2	50	11	0	**63**	0	12	90	12	0	**114**	2	**314**
Hourly Total	14	188	215	0	**417**	4	35	85	49	0	**169**	5	9	190	29	1	**229**	3	70	380	59	2	**511**	6	**1326**
5:00PM	6	44	55	0	**105**	4	11	22	6	0	**39**	1	5	56	4	0	**65**	3	16	102	10	0	**128**	0	**337**
5:15PM	2	44	59	0	**105**	5	5	17	6	0	**28**	1	5	62	6	1	**74**	2	20	96	18	0	**134**	7	**341**
5:30PM	3	51	69	0	**123**	2	9	19	5	0	**33**	0	2	69	0	0	**71**	0	14	94	13	0	**121**	1	**348**
5:45PM	9	50	52	0	**111**	2	6	16	14	0	**36**	1	3	55	2	0	**60**	1	9	115	15	0	**139**	1	**346**
Hourly Total	20	189	235	0	**444**	13	31	74	31	0	**136**	3	15	242	12	1	**270**	6	59	407	56	0	**522**	9	**1372**
Total	85	594	871	0	**1550**	30	105	299	152	0	**556**	12	50	870	84	3	**1007**	19	196	1452	158	2	**1808**	23	**4921**
% Approach	5.5%	38.3%	56.2%	0%	**-**	-	18.9%	53.8%	27.3%	0%	**-**	-	5.0%	86.4%	8.3%	0.3%	**-**	-	10.8%	80.3%	8.7%	0.1%	**-**	-	-
% Total	1.7%	12.1%	17.7%	0%	**31.5%**	-	2.1%	6.1%	3.1%	0%	**11.3%**	-	1.0%	17.7%	1.7%	0.1%	**20.5%**	-	4.0%	29.5%	3.2%	0%	**36.7%**	-	-
Motorcycles	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0.5%	0%	0%	**0.2%**	-	1.0%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	85	587	859	0	**1531**	-	100	295	150	0	**545**	-	48	830	75	3	**956**	-	196	1406	158	2	**1762**	-	4794
% Lights	100%	98.8%	98.6%	0%	**98.8%**	-	95.2%	98.7%	98.7%	0%	**98.0%**	-	96.0%	95.4%	89.3%	100%	**94.9%**	-	100%	96.8%	100%	100%	**97.5%**	-	97.4%
Single-Unit Trucks	0	2	8	0	**10**	-	3	2	2	0	**7**	-	2	12	9	0	**23**	-	0	17	0	0	**17**	-	57
% Single-Unit Trucks	0%	0.3%	0.9%	0%	**0.6%**	-	2.9%	0.7%	1.3%	0%	**1.3%**	-	4.0%	1.4%	10.7%	0%	**2.3%**	-	0%	1.2%	0%	0%	**0.9%**	-	1.2%
Articulated Trucks	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	2	2	0	**4**	-	1	2	0	0	**3**	-	0	27	0	0	**27**	-	0	29	0	0	**29**	-	63
% Buses	0%	0.3%	0.2%	0%	**0.3%**	-	1.0%	0.7%	0%	0%	**0.5%**	-	0%	3.1%	0%	0%	**2.7%**	-	0%	2.0%	0%	0%	**1.6%**	-	1.3%
Pedestrians	-	-	-	-	-	24	-	-	-	-	-	9	-	-	-	-	-	13	-	-	-	-	-	20	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	75.0%	-	-	-	-	-	68.4%	-	-	-	-	-	87.0%	-
Bicycles on Crosswalk	-	-	-	-	-	6	-	-	-	-	-	3	-	-	-	-	-	6	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	25.0%	-	-	-	-	-	31.6%	-	-	-	-	-	13.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Hazard St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Hazard St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

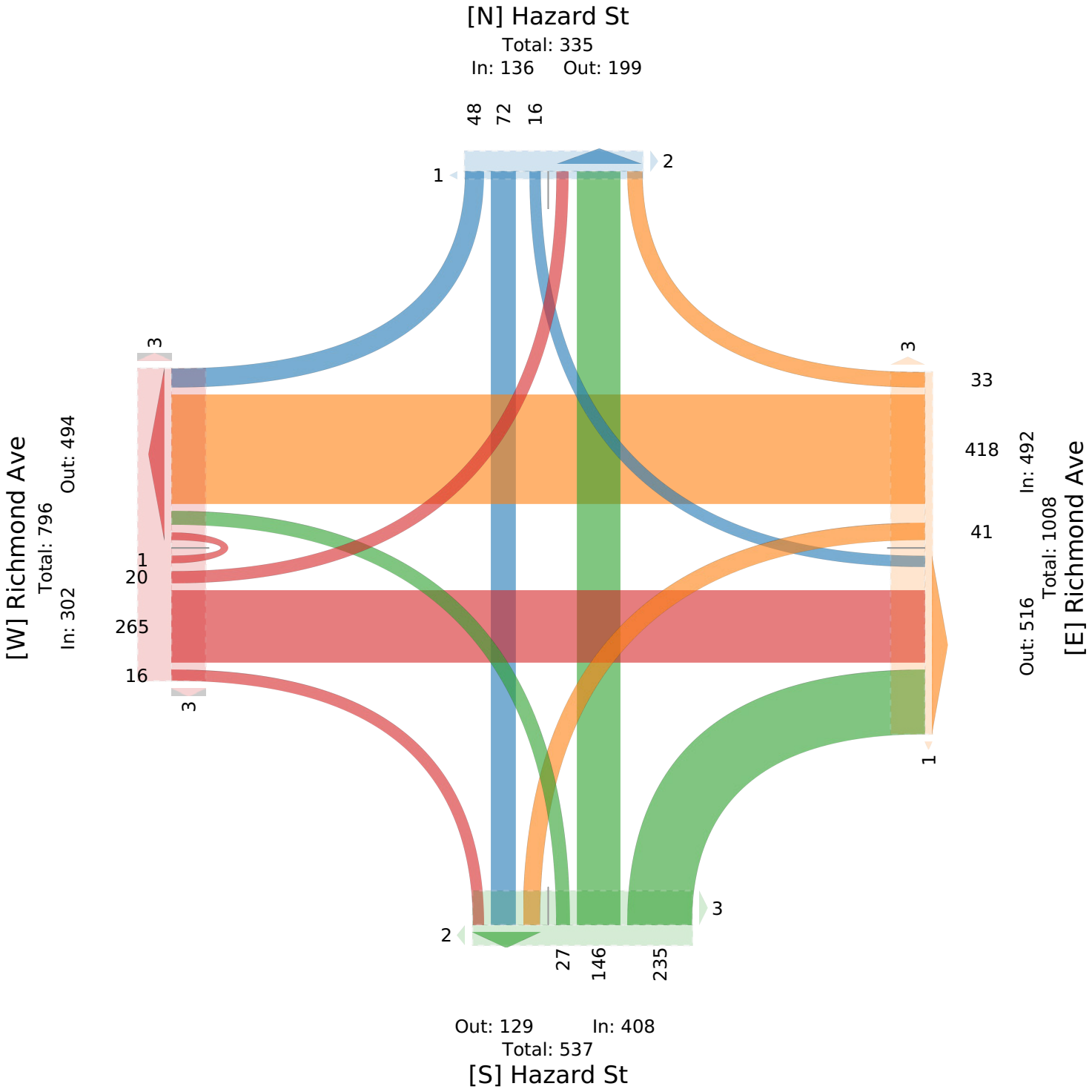
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hazard St						Hazard St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	14	37	62	0	**113**	0	5	13	10	0	**28**	2	4	68	2	0	**74**	0	5	94	2	0	**101**	3	**316**
7:45AM	5	29	61	0	**95**	1	6	18	19	0	**43**	0	1	69	6	0	**76**	2	11	116	3	0	**130**	0	**344**
8:00AM	2	45	54	0	**101**	1	2	17	10	0	**29**	1	6	58	4	1	**69**	2	18	109	16	0	**143**	1	**342**
8:15AM	6	35	58	0	**99**	3	3	24	9	0	**36**	0	9	70	4	0	**83**	2	7	99	12	0	**118**	0	**336**
Total	27	146	235	0	**408**	5	16	72	48	0	**136**	3	20	265	16	1	**302**	6	41	418	33	0	**492**	4	**1338**
% Approach	6.6%	35.8%	57.6%	0%	**-**	-	11.8%	52.9%	35.3%	0%	**-**	-	6.6%	87.7%	5.3%	0.3%	**-**	-	8.3%	85.0%	6.7%	0%	**-**	-	**-**
% Total	2.0%	10.9%	17.6%	0%	**30.5%**	-	1.2%	5.4%	3.6%	0%	**10.2%**	-	1.5%	19.8%	1.2%	0.1%	**22.6%**	-	3.1%	31.2%	2.5%	0%	**36.8%**	-	**-**
PHF	0.482	0.811	0.948	-	**0.903**	-	0.667	0.750	0.632	-	**0.791**	-	0.556	0.946	0.667	0.250	**0.910**	-	0.569	0.901	0.516	-	**0.860**	-	0.972
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.7%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	27	144	228	0	**399**	-	16	72	46	0	**134**	-	19	256	14	1	**290**	-	41	406	33	0	**480**	-	1303
% Lights	100%	98.6%	97.0%	0%	**97.8%**	-	100%	100%	95.8%	0%	**98.5%**	-	95.0%	96.6%	87.5%	100%	**96.0%**	-	100%	97.1%	100%	0%	**97.6%**	-	97.4%
Single-Unit Trucks	0	1	5	0	**6**	-	0	0	2	0	**2**	-	1	1	2	0	**4**	-	0	4	0	0	**4**	-	16
% Single-Unit Trucks	0%	0.7%	2.1%	0%	**1.5%**	-	0%	0%	4.2%	0%	**1.5%**	-	5.0%	0.4%	12.5%	0%	**1.3%**	-	0%	1.0%	0%	0%	**0.8%**	-	1.2%
Articulated Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0.4%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	8	0	0	**8**	-	0	8	0	0	**8**	-	17
% Buses	0%	0%	0.4%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	3.0%	0%	0%	**2.6%**	-	0%	1.9%	0%	0%	**1.6%**	-	1.3%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Hazard St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Hazard St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

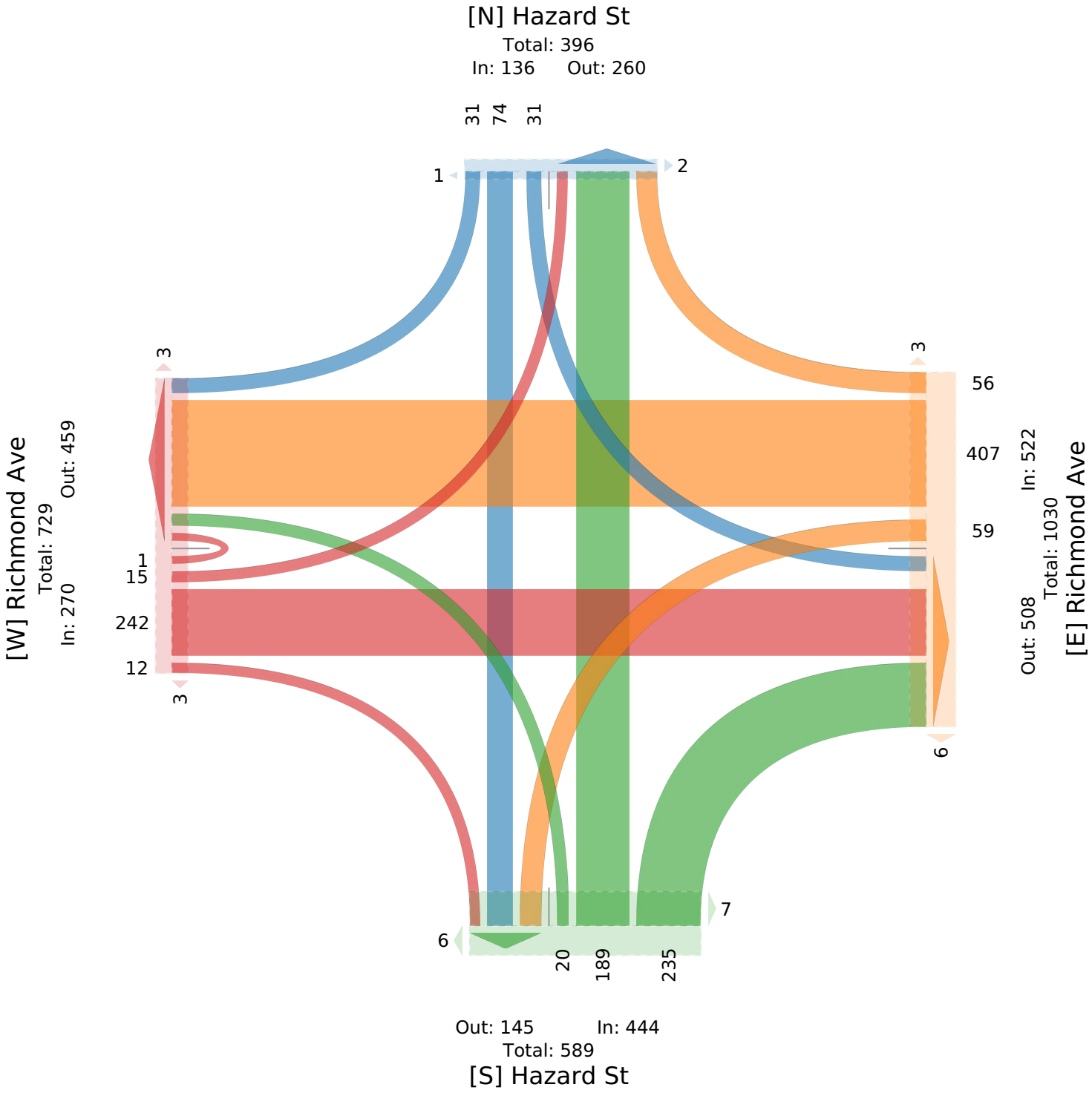
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hazard St						Hazard St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	6	44	55	0	**105**	4	11	22	6	0	**39**	1	5	56	4	0	**65**	3	16	102	10	0	**128**	0	**337**
5:15PM	2	44	59	0	**105**	5	5	17	6	0	**28**	1	5	62	6	1	**74**	2	20	96	18	0	**134**	7	**341**
5:30PM	3	51	69	0	**123**	2	9	19	5	0	**33**	0	2	69	0	0	**71**	0	14	94	13	0	**121**	1	**348**
5:45PM	9	50	52	0	**111**	2	6	16	14	0	**36**	1	3	55	2	0	**60**	1	9	115	15	0	**139**	1	**346**
Total	20	189	235	0	**444**	13	31	74	31	0	**136**	3	15	242	12	1	**270**	6	59	407	56	0	**522**	9	**1372**
% Approach	4.5%	42.6%	52.9%	0%	**-**	-	22.8%	54.4%	22.8%	0%	**-**	-	5.6%	89.6%	4.4%	0.4%	**-**	-	11.3%	78.0%	10.7%	0%	**-**	-	-
% Total	1.5%	13.8%	17.1%	0%	**32.4%**	-	2.3%	5.4%	2.3%	0%	**9.9%**	-	1.1%	17.6%	0.9%	0.1%	**19.7%**	-	4.3%	29.7%	4.1%	0%	**38.0%**	-	-
PHF	0.556	0.926	0.851	-	**0.902**	-	0.705	0.841	0.554	-	**0.872**	-	0.750	0.877	0.500	0.250	**0.912**	-	0.738	0.885	0.778	-	**0.939**	-	0.986
Motorcycles	0	2	0	0	**2**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	1.1%	0%	0%	**0.5%**	-	3.2%	0%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	20	187	234	0	**441**	-	29	74	31	0	**134**	-	15	231	12	1	**259**	-	59	399	56	0	**514**	-	1348
% Lights	100%	98.9%	99.6%	0%	**99.3%**	-	93.5%	100%	100%	0%	**98.5%**	-	100%	95.5%	100%	100%	**95.9%**	-	100%	98.0%	100%	0%	**98.5%**	-	98.3%
Single-Unit Trucks	0	0	1	0	**1**	-	1	0	0	0	**1**	-	0	4	0	0	**4**	-	0	1	0	0	**1**	-	7
% Single-Unit Trucks	0%	0%	0.4%	0%	**0.2%**	-	3.2%	0%	0%	0%	**0.7%**	-	0%	1.7%	0%	0%	**1.5%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	7	0	0	**7**	-	14
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	2.9%	0%	0%	**2.6%**	-	0%	1.7%	0%	0%	**1.3%**	-	1.0%
Pedestrians	-	-	-	-	-	11	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	84.6%	-	-	-	-	-	66.7%	-	-	-	-	-	66.7%	-	-	-	-	-	77.8%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	15.4%	-	-	-	-	-	33.3%	-	-	-	-	-	33.3%	-	-	-	-	-	22.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Hazard St - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867382, Location: 29.734241, -95.407063

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Woodhead St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

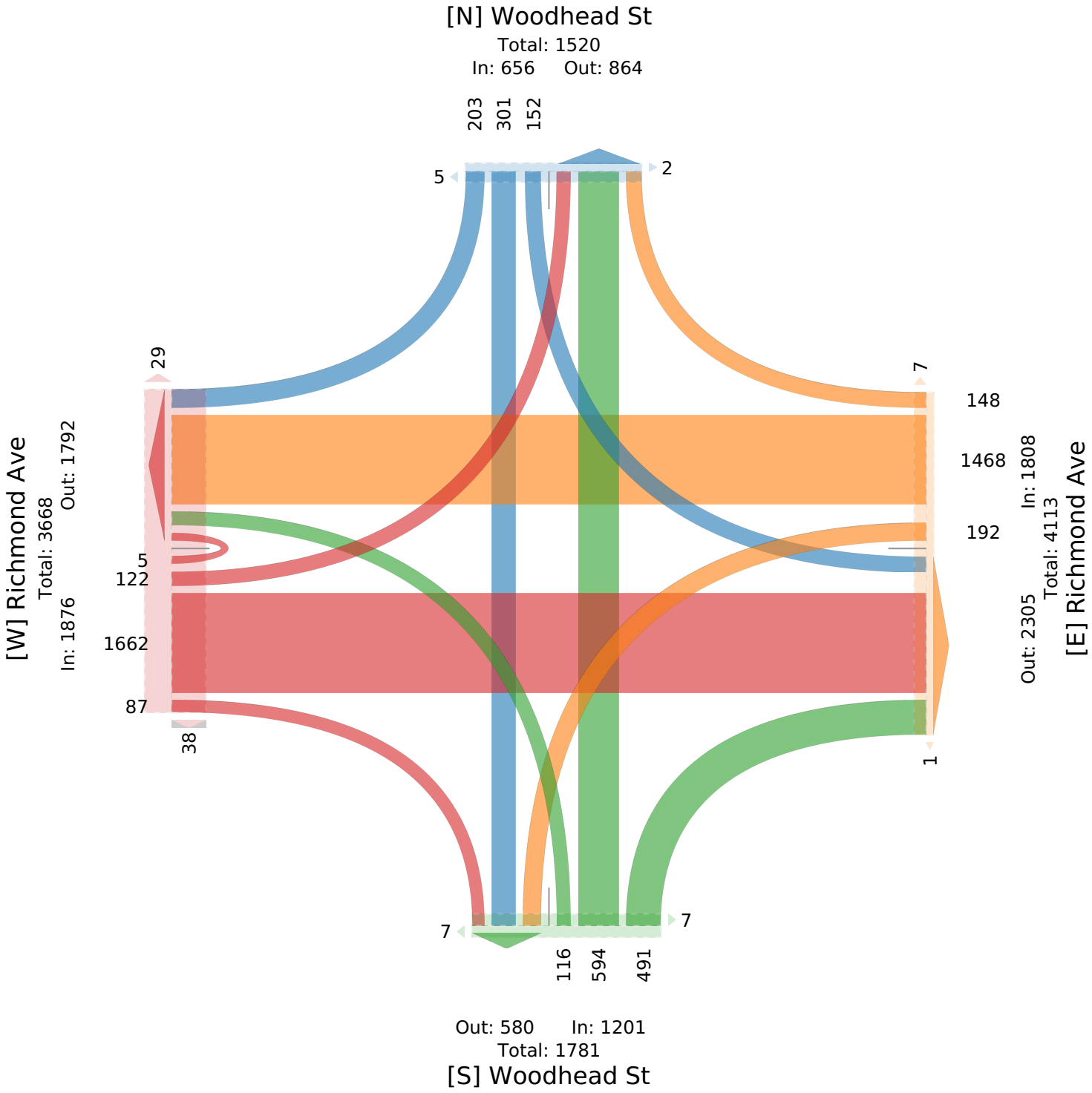
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Woodhead St						Woodhead St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	6	7	8	0	**21**	0	4	15	1	0	**20**	1	6	64	4	0	**74**	0	13	36	3	0	**52**	1	**167**
7:15AM	13	28	12	0	**53**	0	4	16	4	0	**24**	0	6	76	18	1	**101**	2	12	49	6	0	**67**	0	**245**
7:30AM	12	37	25	0	**74**	1	3	11	12	0	**26**	0	13	113	10	0	**136**	2	7	77	6	0	**90**	0	**326**
7:45AM	7	26	14	0	**47**	0	11	19	18	0	**48**	0	11	111	12	0	**134**	8	23	99	14	0	**136**	0	**365**
Hourly Total	38	98	59	0	**195**	1	22	61	35	0	**118**	1	36	364	44	1	**445**	12	55	261	29	0	**345**	1	**1103**
8:00AM	7	48	33	0	**88**	0	8	15	31	0	**54**	0	20	93	5	0	**118**	15	8	111	12	0	**131**	2	**391**
8:15AM	9	29	14	0	**52**	1	15	28	27	0	**70**	0	11	105	12	0	**128**	3	16	76	10	0	**102**	0	**352**
8:30AM	5	8	24	0	**37**	0	6	25	12	0	**43**	0	6	101	6	0	**113**	1	17	59	4	0	**80**	0	**273**
8:45AM	10	15	19	0	**44**	0	7	20	10	0	**37**	0	0	87	7	1	**95**	2	17	62	6	0	**85**	0	**261**
Hourly Total	31	100	90	0	**221**	1	36	88	80	0	**204**	0	37	386	30	1	**454**	21	58	308	32	0	**398**	2	**1277**
4:00PM	5	46	47	0	**98**	6	11	23	17	0	**51**	1	5	84	0	0	**89**	11	11	133	16	0	**160**	0	**398**
4:15PM	5	38	39	0	**82**	0	13	21	24	0	**58**	2	11	116	3	0	**130**	10	15	112	16	0	**143**	0	**413**
4:30PM	6	42	37	0	**85**	0	9	17	6	0	**32**	0	2	120	2	0	**124**	3	7	105	10	0	**122**	0	**363**
4:45PM	8	52	57	0	**117**	3	10	21	3	0	**34**	1	7	107	2	1	**117**	0	7	106	9	0	**122**	3	**390**
Hourly Total	24	178	180	0	**382**	9	43	82	50	0	**175**	4	25	427	7	1	**460**	24	40	456	51	0	**547**	3	**1564**
5:00PM	5	59	56	0	**120**	2	13	18	7	0	**38**	1	2	119	3	1	**125**	5	11	113	6	0	**130**	1	**413**
5:15PM	5	64	28	0	**97**	0	13	14	13	0	**40**	1	10	135	0	1	**146**	0	14	110	9	0	**133**	0	**416**
5:30PM	7	55	34	0	**96**	0	13	21	10	0	**44**	0	9	126	3	0	**138**	5	10	114	13	0	**137**	0	**415**
5:45PM	6	40	44	0	**90**	1	12	17	8	0	**37**	0	3	105	0	0	**108**	0	4	106	8	0	**118**	1	**353**
Hourly Total	23	218	162	0	**403**	3	51	70	38	0	**159**	2	24	485	6	2	**517**	10	39	443	36	0	**518**	2	**1597**
Total	116	594	491	0	**1201**	14	152	301	203	0	**656**	7	122	1662	87	5	**1876**	67	192	1468	148	0	**1808**	8	**5541**
% Approach	9.7%	49.5%	40.9%	0%	**-**	-	23.2%	45.9%	30.9%	0%	**-**	-	6.5%	88.6%	4.6%	0.3%	**-**	-	10.6%	81.2%	8.2%	0%	**-**	-	-
% Total	2.1%	10.7%	8.9%	0%	**21.7%**	-	2.7%	5.4%	3.7%	0%	**11.8%**	-	2.2%	30.0%	1.6%	0.1%	**33.9%**	-	3.5%	26.5%	2.7%	0%	**32.6%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	116	590	487	0	**1193**	-	147	297	203	0	**647**	-	121	1607	87	5	**1820**	-	190	1421	145	0	**1756**	-	5416
% Lights	100%	99.3%	99.2%	0%	**99.3%**	-	96.7%	98.7%	100%	0%	**98.6%**	-	99.2%	96.7%	100%	100%	**97.0%**	-	99.0%	96.8%	98.0%	0%	**97.1%**	-	97.7%
Single-Unit Trucks	0	1	3	0	**4**	-	3	1	0	0	**4**	-	0	23	0	0	**23**	-	0	18	2	0	**20**	-	51
% Single-Unit Trucks	0%	0.2%	0.6%	0%	**0.3%**	-	2.0%	0.3%	0%	0%	**0.6%**	-	0%	1.4%	0%	0%	**1.2%**	-	0%	1.2%	1.4%	0%	**1.1%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	3	1	0	**4**	-	2	2	0	0	**4**	-	1	27	0	0	**28**	-	2	29	1	0	**32**	-	68
% Buses	0%	0.5%	0.2%	0%	**0.3%**	-	1.3%	0.7%	0%	0%	**0.6%**	-	0.8%	1.6%	0%	0%	**1.5%**	-	1.0%	2.0%	0.7%	0%	**1.8%**	-	1.2%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	5	-	-	-	-	-	63	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	- 92.9%	-	-	-	-	-	- 71.4%	-	-	-	-	-	- 94.0%	-	-	-	-	-	- 62.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	7.1%	-	-	-	-	-	- 28.6%	-	-	-	-	-	6.0%	-	-	-	-	-	- 37.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Woodhead St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Woodhead St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

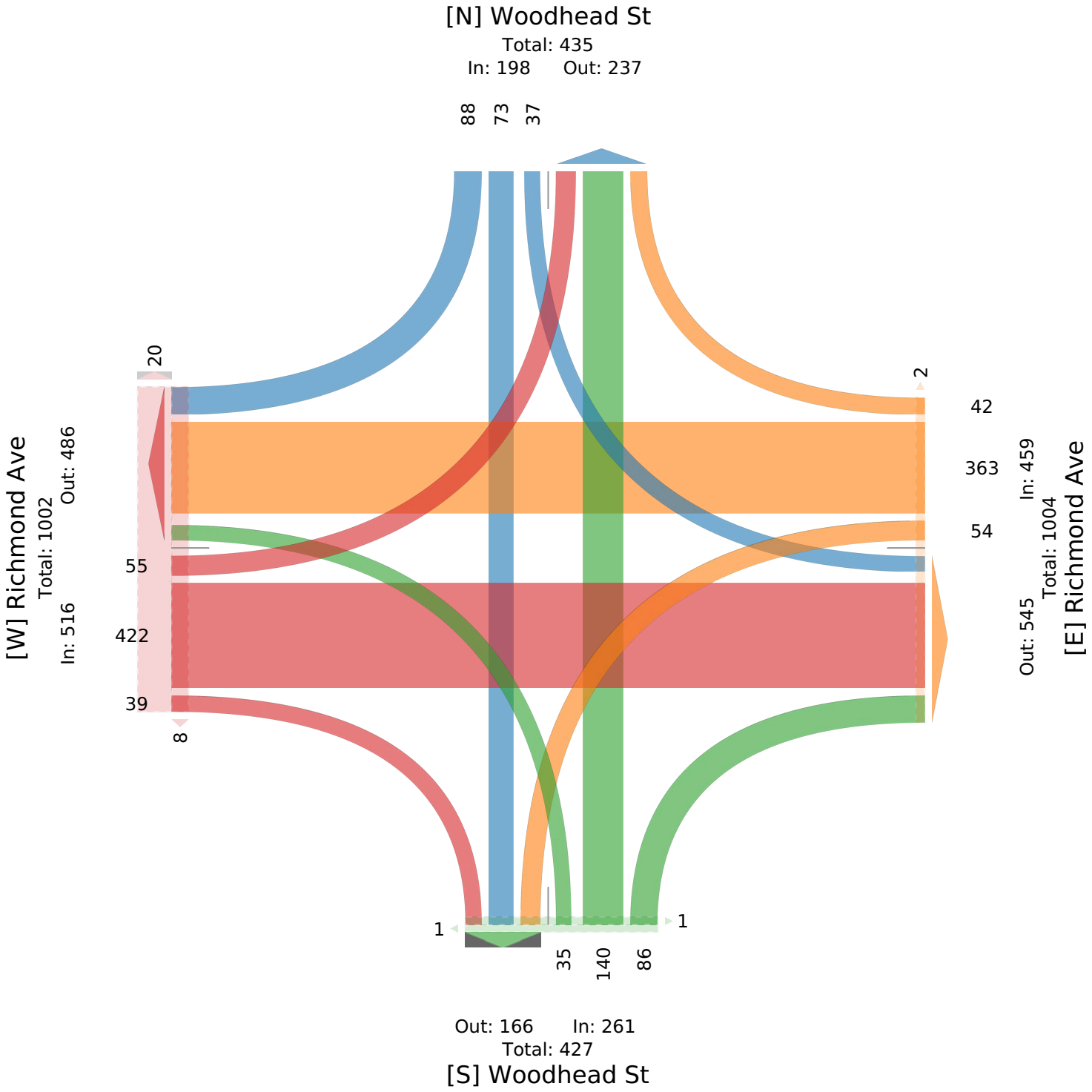
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Woodhead St						Woodhead St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	12	37	25	0	**74**	1	3	11	12	0	**26**	0	13	113	10	0	**136**	2	7	77	6	0	**90**	0	**326**
7:45AM	7	26	14	0	**47**	0	11	19	18	0	**48**	0	11	111	12	0	**134**	8	23	99	14	0	**136**	0	**365**
8:00AM	7	48	33	0	**88**	0	8	15	31	0	**54**	0	20	93	5	0	**118**	15	8	111	12	0	**131**	2	**391**
8:15AM	9	29	14	0	**52**	1	15	28	27	0	**70**	0	11	105	12	0	**128**	3	16	76	10	0	**102**	0	**352**
Total	35	140	86	0	**261**	2	37	73	88	0	**198**	0	55	422	39	0	**516**	28	54	363	42	0	**459**	2	**1434**
% Approach	13.4%	53.6%	33.0%	0%	**-**	-	18.7%	36.9%	44.4%	0%	**-**	-	10.7%	81.8%	7.6%	0%	**-**	-	11.8%	79.1%	9.2%	0%	**-**	-	-
% Total	2.4%	9.8%	6.0%	0%	**18.2%**	-	2.6%	5.1%	6.1%	0%	**13.8%**	-	3.8%	29.4%	2.7%	0%	**36.0%**	-	3.8%	25.3%	2.9%	0%	**32.0%**	-	-
PHF	0.729	0.729	0.652	-	**0.741**	-	0.617	0.652	0.710	-	**0.707**	-	0.688	0.934	0.813	-	**0.949**	-	0.587	0.818	0.750	-	**0.844**	-	0.917
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	35	140	85	0	**260**	-	36	73	88	0	**197**	-	55	407	39	0	**501**	-	54	353	40	0	**447**	-	1405
% Lights	100%	100%	98.8%	0%	**99.6%**	-	97.3%	100%	100%	0%	**99.5%**	-	100%	96.4%	100%	0%	**97.1%**	-	100%	97.2%	95.2%	0%	**97.4%**	-	98.0%
Single-Unit Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	6	0	0	**6**	-	0	2	1	0	**3**	-	10
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	2.7%	0%	0%	0%	**0.5%**	-	0%	1.4%	0%	0%	**1.2%**	-	0%	0.6%	2.4%	0%	**0.7%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	8	0	0	**8**	-	0	8	1	0	**9**	-	18
% Buses	0%	0%	1.2%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	1.9%	0%	0%	**1.6%**	-	0%	2.2%	2.4%	0%	**2.0%**	-	1.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	27	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	96.4%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	3.6%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Woodhead St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Woodhead St - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

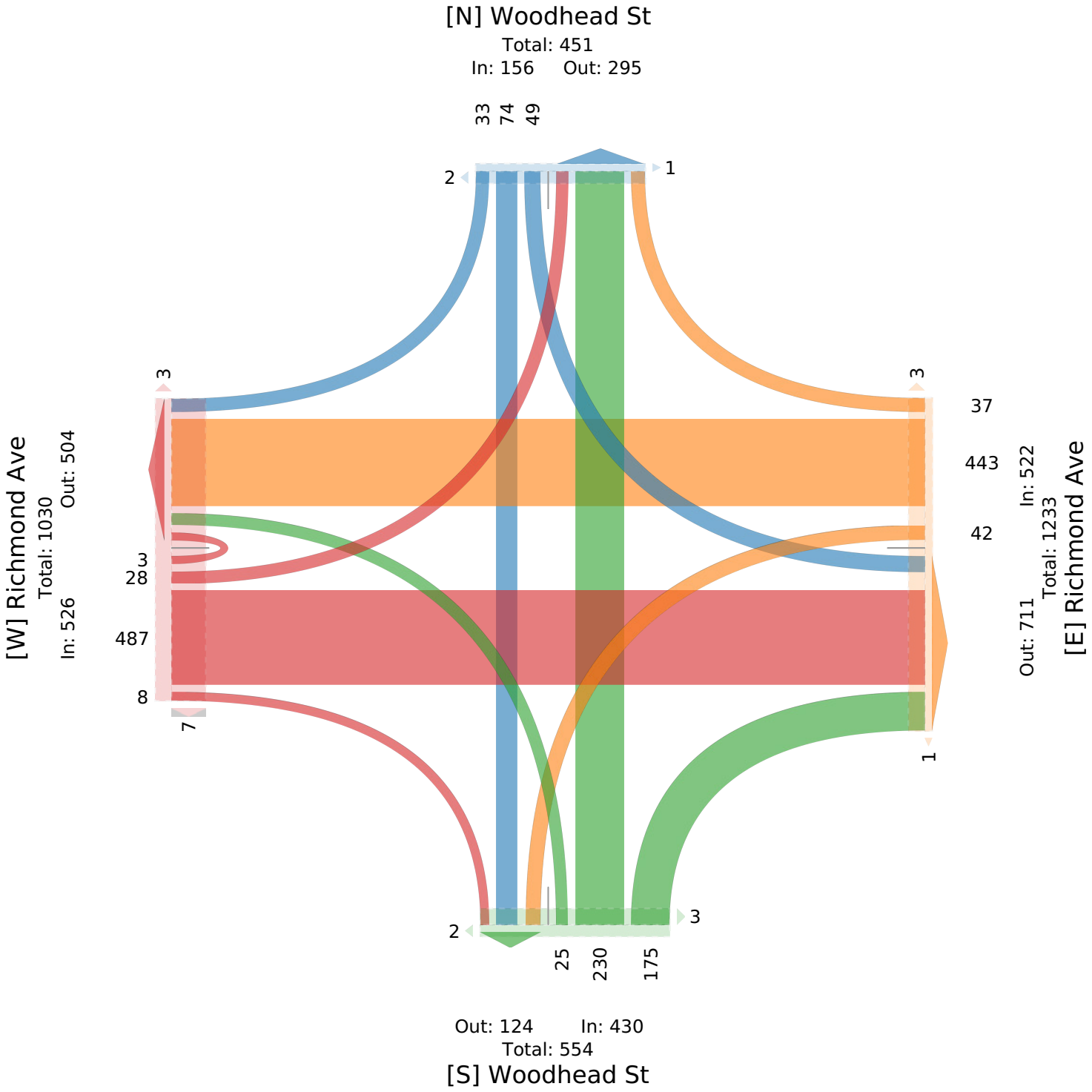
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Woodhead St						Woodhead St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:45PM	8	52	57	0	**117**	3	10	21	3	0	**34**	1	7	107	2	1	**117**	0	7	106	9	0	**122**	3	**390**
5:00PM	5	59	56	0	**120**	2	13	18	7	0	**38**	1	2	119	3	1	**125**	5	11	113	6	0	**130**	1	**413**
5:15PM	5	64	28	0	**97**	0	13	14	13	0	**40**	1	10	135	0	1	**146**	0	14	110	9	0	**133**	0	**416**
5:30PM	7	55	34	0	**96**	0	13	21	10	0	**44**	0	9	126	3	0	**138**	5	10	114	13	0	**137**	0	**415**
Total	25	230	175	0	**430**	5	49	74	33	0	**156**	3	28	487	8	3	**526**	10	42	443	37	0	**522**	4	**1634**
% Approach	5.8%	53.5%	40.7%	0%	**-**	-	31.4%	47.4%	21.2%	0%	**-**	-	5.3%	92.6%	1.5%	0.6%	**-**	-	8.0%	84.9%	7.1%	0%	**-**	-	**-**
% Total	1.5%	14.1%	10.7%	0%	**26.3%**	-	3.0%	4.5%	2.0%	0%	**9.5%**	-	1.7%	29.8%	0.5%	0.2%	**32.2%**	-	2.6%	27.1%	2.3%	0%	**31.9%**	-	**-**
PHF	0.781	0.898	0.768	-	**0.896**	-	0.942	0.881	0.635	-	**0.886**	-	0.700	0.902	0.667	0.750	**0.901**	-	0.750	0.971	0.712	-	**0.953**	-	0.982
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	1.4%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	25	227	174	0	**426**	-	48	71	33	0	**152**	-	28	473	8	3	**512**	-	42	435	37	0	**514**	-	1604
% Lights	100%	98.7%	99.4%	0%	**99.1%**	-	98.0%	95.9%	100%	0%	**97.4%**	-	100%	97.1%	100%	100%	**97.3%**	-	100%	98.2%	100%	0%	**98.5%**	-	98.2%
Single-Unit Trucks	0	1	1	0	**2**	-	1	1	0	0	**2**	-	0	6	0	0	**6**	-	0	4	0	0	**4**	-	14
% Single-Unit Trucks	0%	0.4%	0.6%	0%	**0.5%**	-	2.0%	1.4%	0%	0%	**1.3%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	0.9%	0%	0%	**0.8%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	8	0	0	**8**	-	0	4	0	0	**4**	-	15
% Buses	0%	0.9%	0%	0%	**0.5%**	-	0%	1.4%	0%	0%	**0.6%**	-	0%	1.6%	0%	0%	**1.5%**	-	0%	0.9%	0%	0%	**0.8%**	-	0.9%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	10	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	33.3%	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	66.7%	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Woodhead St - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867383, Location: 29.734282, -95.404471

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Dunlavy St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

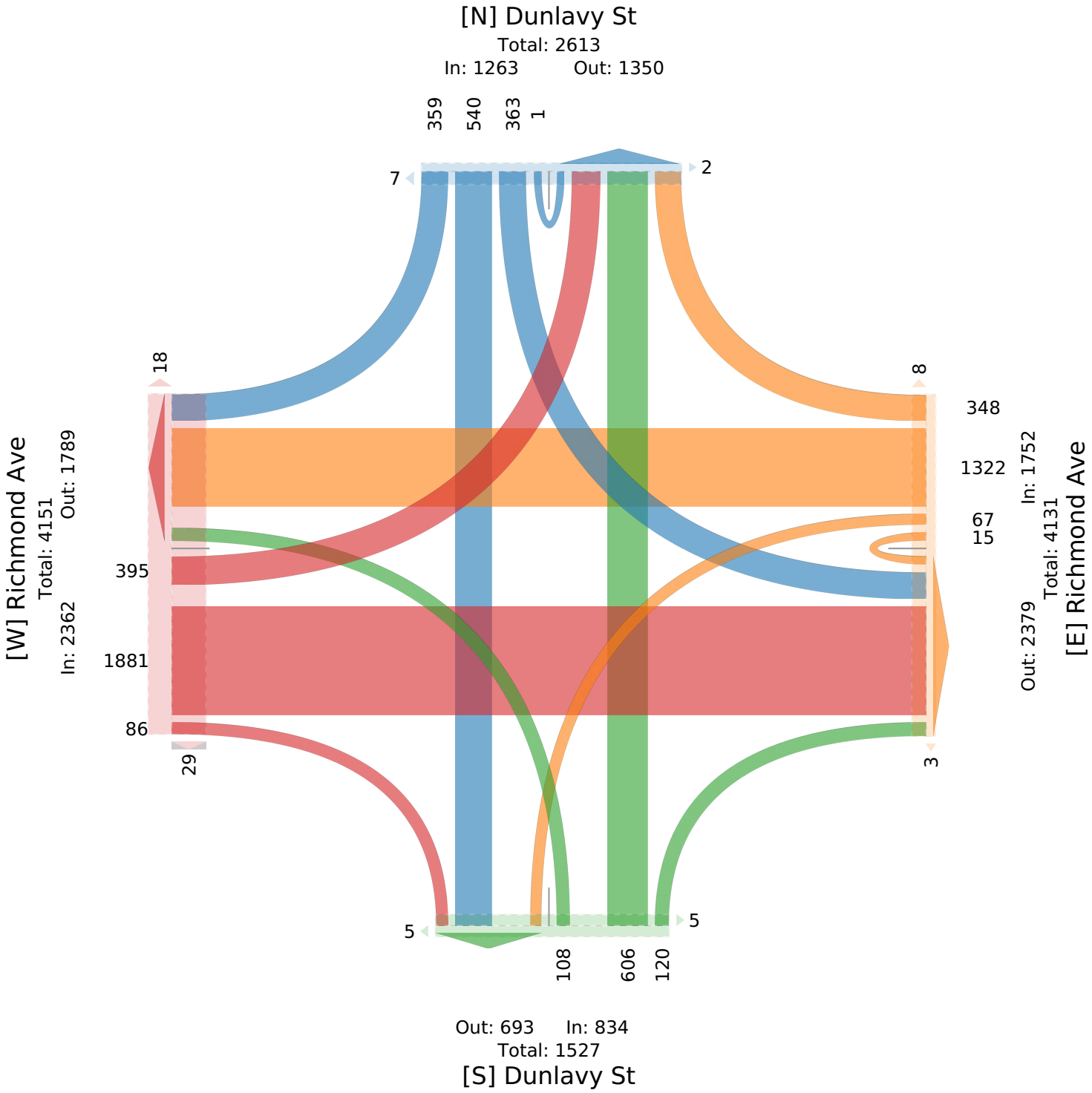
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Dunlavy St						Dunlavy St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	16	6	0	**24**	2	11	19	16	0	**46**	0	7	60	3	0	**70**	2	2	33	5	0	**40**	0	**180**
7:15AM	6	21	9	0	**36**	0	14	18	17	0	**49**	0	10	88	3	0	**101**	3	3	49	11	0	**63**	0	**249**
7:30AM	7	13	6	0	**26**	0	8	15	21	0	**44**	0	34	96	4	0	**134**	1	2	63	17	0	**82**	0	**286**
7:45AM	18	15	9	0	**42**	1	24	32	26	0	**82**	0	25	124	5	0	**154**	1	2	97	16	0	**115**	2	**393**
Hourly Total	33	65	30	0	**128**	3	57	84	80	0	**221**	0	76	368	15	0	**459**	7	9	242	49	0	**300**	2	**1108**
8:00AM	15	23	5	0	**43**	0	25	47	26	1	**99**	1	21	101	5	0	**127**	2	2	92	15	0	**109**	0	**378**
8:15AM	8	31	4	0	**43**	0	19	57	33	0	**109**	0	28	105	7	0	**140**	0	5	61	15	0	**81**	1	**373**
8:30AM	4	21	7	0	**32**	0	15	52	19	0	**86**	1	24	99	4	0	**127**	3	1	58	15	0	**74**	0	**319**
8:45AM	6	20	5	0	**31**	0	18	33	24	0	**75**	1	18	101	3	0	**122**	2	4	55	20	1	**80**	0	**308**
Hourly Total	33	95	21	0	**149**	0	77	189	102	1	**369**	3	91	406	19	0	**516**	7	12	266	65	1	**344**	1	**1378**
4:00PM	5	59	5	0	**69**	3	28	47	40	0	**115**	0	22	105	6	0	**133**	2	1	112	22	0	**135**	1	**452**
4:15PM	6	31	8	0	**45**	0	28	31	24	0	**83**	2	25	135	6	0	**166**	8	8	103	28	0	**139**	0	**433**
4:30PM	3	56	12	0	**71**	0	32	19	22	0	**73**	0	30	140	5	0	**175**	4	6	99	29	1	**135**	1	**454**
4:45PM	5	64	7	0	**76**	0	22	28	11	0	**61**	1	46	128	7	0	**181**	3	5	101	34	1	**141**	0	**459**
Hourly Total	19	210	32	0	**261**	3	110	125	97	0	**332**	3	123	508	24	0	**655**	17	20	415	113	2	**550**	2	**1798**
5:00PM	7	61	5	0	**73**	1	38	35	23	0	**96**	2	25	148	10	0	**183**	5	8	97	34	1	**140**	1	**492**
5:15PM	7	71	5	0	**83**	0	25	33	16	0	**74**	0	25	155	4	0	**184**	0	8	101	29	5	**143**	2	**484**
5:30PM	5	58	14	0	**77**	0	28	31	26	0	**85**	0	21	141	6	0	**168**	3	4	89	25	4	**122**	1	**452**
5:45PM	4	46	13	0	**63**	3	28	43	15	0	**86**	1	34	155	8	0	**197**	8	6	112	33	2	**153**	2	**499**
Hourly Total	23	236	37	0	**296**	4	119	142	80	0	**341**	3	105	599	28	0	**732**	16	26	399	121	12	**558**	6	**1927**
Total	108	606	120	0	**834**	10	363	540	359	1	**1263**	9	395	1881	86	0	**2362**	47	67	1322	348	15	**1752**	11	**6211**
% Approach	12.9%	72.7%	14.4%	0%	**-**	-	28.7%	42.8%	28.4%	0.1%	**-**	-	16.7%	79.6%	3.6%	0%	**-**	-	3.8%	75.5%	19.9%	0.9%	**-**	-	-
% Total	1.7%	9.8%	1.9%	0%	**13.4%**	-	5.8%	8.7%	5.8%	0%	**20.3%**	-	6.4%	30.3%	1.4%	0%	**38.0%**	-	1.1%	21.3%	5.6%	0.2%	**28.2%**	-	-
Motorcycles	0	4	0	0	**4**	-	0	1	0	0	**1**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	9
% Motorcycles	0%	0.7%	0%	0%	**0.5%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	106	597	119	0	**822**	-	354	538	351	1	**1244**	-	387	1825	86	0	**2298**	-	67	1278	345	15	**1705**	-	6069
% Lights	98.1%	98.5%	99.2%	0%	**98.6%**	-	97.5%	99.6%	97.8%	100%	**98.5%**	-	98.0%	97.0%	100%	0%	**97.3%**	-	100%	96.7%	99.1%	100%	**97.3%**	-	97.7%
Single-Unit Trucks	2	4	1	0	**7**	-	6	1	6	0	**13**	-	4	24	0	0	**28**	-	0	14	2	0	**16**	-	64
% Single-Unit Trucks	1.9%	0.7%	0.8%	0%	**0.8%**	-	1.7%	0.2%	1.7%	0%	**1.0%**	-	1.0%	1.3%	0%	0%	**1.2%**	-	0%	1.1%	0.6%	0%	**0.9%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	**0.1%**	-	0.5%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	1	0	0	**1**	-	2	0	2	0	**4**	-	2	28	0	0	**30**	-	0	30	1	0	**31**	-	66
% Buses	0%	0.2%	0%	0%	**0.1%**	-	0.6%	0%	0.6%	0%	**0.3%**	-	0.5%	1.5%	0%	0%	**1.3%**	-	0%	2.3%	0.3%	0%	**1.8%**	-	1.1%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	9	-	-	-	-	-	45	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	90.0%	-	-	-	-	-	100%	-	-	-	-	-	95.7%	-	-	-	-	-	54.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	10.0%	-	-	-	-	-	0%	-	-	-	-	-	4.3%	-	-	-	-	-	45.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Dunlavy St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Dunlavy St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

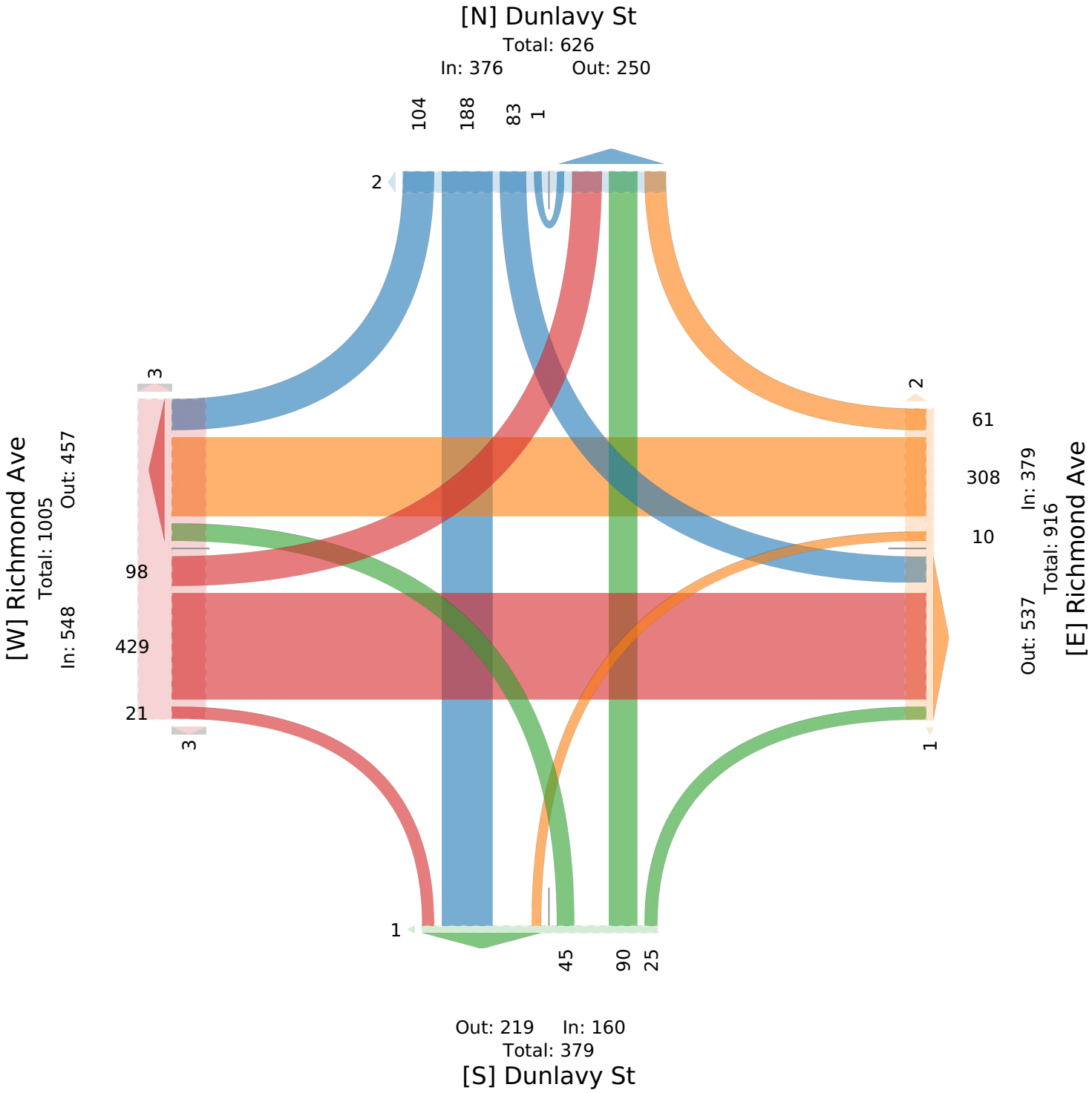
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Dunlavy St Northbound						Dunlavy St Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	18	15	9	0	**42**	1	24	32	26	0	**82**	0	25	124	5	0	**154**	1	2	97	16	0	**115**	2	**393**
8:00AM	15	23	5	0	**43**	0	25	47	26	1	**99**	1	21	101	5	0	**127**	2	2	92	15	0	**109**	0	**378**
8:15AM	8	31	4	0	**43**	0	19	57	33	0	**109**	0	28	105	7	0	**140**	0	5	61	15	0	**81**	1	**373**
8:30AM	4	21	7	0	**32**	0	15	52	19	0	**86**	1	24	99	4	0	**127**	3	1	58	15	0	**74**	0	**319**
Total	45	90	25	0	**160**	1	83	188	104	1	**376**	2	98	429	21	0	**548**	6	10	308	61	0	**379**	3	**1463**
% Approach	28.1%	56.3%	15.6%	0%	**-**	-	22.1%	50.0%	27.7%	0.3%	**-**	-	17.9%	78.3%	3.8%	0%	**-**	-	2.6%	81.3%	16.1%	0%	**-**	-	**-**
% Total	3.1%	6.2%	1.7%	0%	**10.9%**	-	5.7%	12.9%	7.1%	0.1%	**25.7%**	-	6.7%	29.3%	1.4%	0%	**37.5%**	-	0.7%	21.1%	4.2%	0%	**25.9%**	-	**-**
PHF	0.625	0.726	0.694	-	**0.930**	-	0.830	0.825	0.788	0.250	**0.862**	-	0.875	0.865	0.750	-	**0.890**	-	0.500	0.794	0.953	-	**0.824**	-	0.931
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	45	89	24	0	**158**	-	81	187	102	1	**371**	-	92	414	21	0	**527**	-	10	297	60	0	**367**	-	1423
% Lights	100%	98.9%	96.0%	0%	**98.8%**	-	97.6%	99.5%	98.1%	100%	**98.7%**	-	93.9%	96.5%	100%	0%	**96.2%**	-	100%	96.4%	98.4%	0%	**96.8%**	-	97.3%
Single-Unit Trucks	0	0	1	0	**1**	-	1	0	1	0	**2**	-	4	6	0	0	**10**	-	0	1	1	0	**2**	-	15
% Single-Unit Trucks	0%	0%	4.0%	0%	**0.6%**	-	1.2%	0%	1.0%	0%	**0.5%**	-	4.1%	1.4%	0%	0%	**1.8%**	-	0%	0.3%	1.6%	0%	**0.5%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	1.2%	0%	0%	0%	**0.3%**	-	1.0%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	1	0	0	**1**	-	0	0	1	0	**1**	-	1	8	0	0	**9**	-	0	10	0	0	**10**	-	21
% Buses	0%	1.1%	0%	0%	**0.6%**	-	0%	0%	1.0%	0%	**0.3%**	-	1.0%	1.9%	0%	0%	**1.6%**	-	0%	3.2%	0%	0%	**2.6%**	-	1.4%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Dunlavy St - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Dunlavy St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

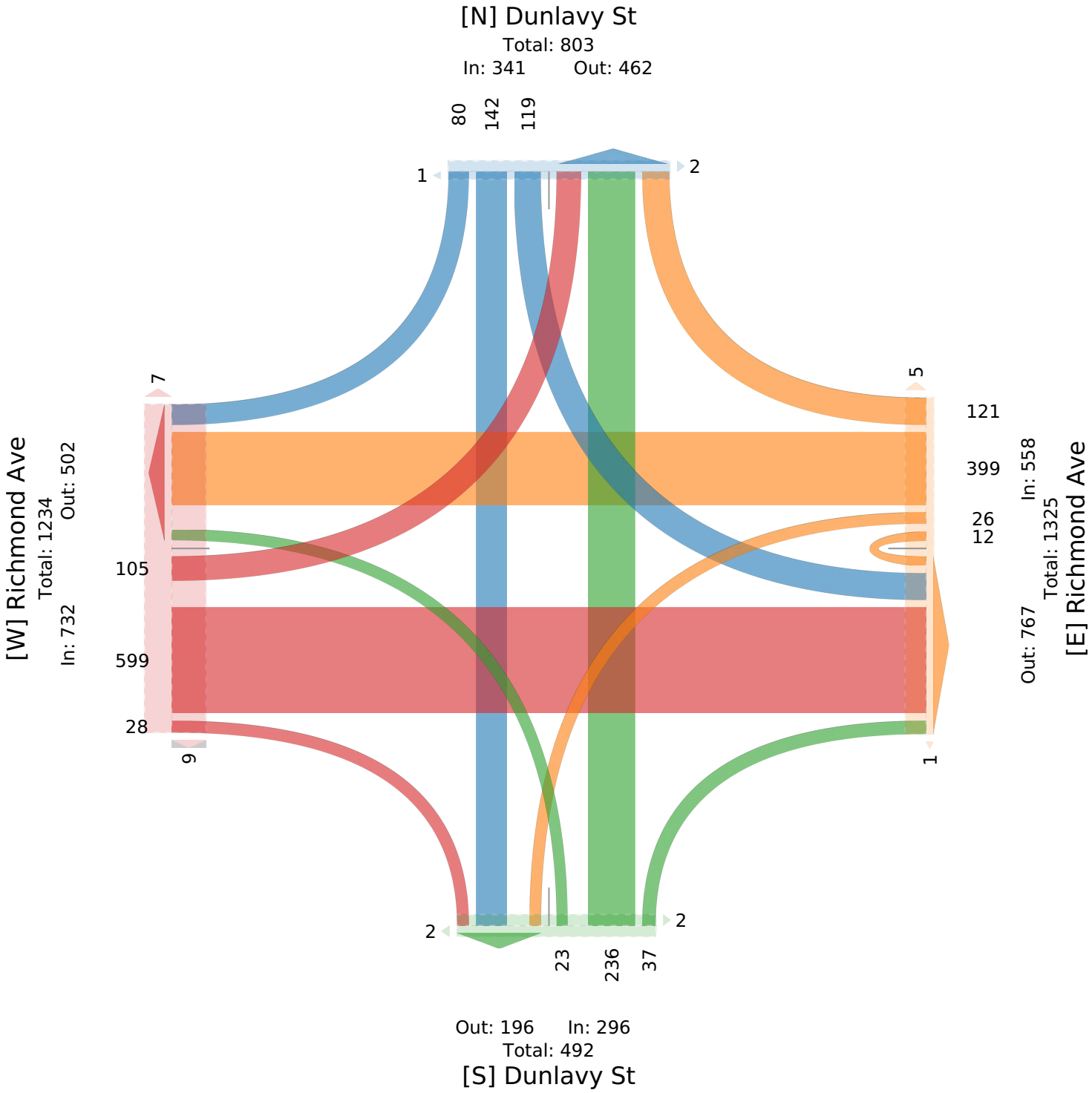
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Dunlavy St Northbound						Dunlavy St Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	7	61	5	0	**73**	1	38	35	23	0	**96**	2	25	148	10	0	**183**	5	8	97	34	1	**140**	1	**492**
5:15PM	7	71	5	0	**83**	0	25	33	16	0	**74**	0	25	155	4	0	**184**	0	8	101	29	5	**143**	2	**484**
5:30PM	5	58	14	0	**77**	0	28	31	26	0	**85**	0	21	141	6	0	**168**	3	4	89	25	4	**122**	1	**452**
5:45PM	4	46	13	0	**63**	3	28	43	15	0	**86**	1	34	155	8	0	**197**	8	6	112	33	2	**153**	2	**499**
Total	23	236	37	0	**296**	4	119	142	80	0	**341**	3	105	599	28	0	**732**	16	26	399	121	12	**558**	6	**1927**
% Approach	7.8%	79.7%	12.5%	0%	**-**	-	34.9%	41.6%	23.5%	0%	**-**	-	14.3%	81.8%	3.8%	0%	**-**	-	4.7%	71.5%	21.7%	2.2%	**-**	-	-
% Total	1.2%	12.2%	1.9%	0%	**15.4%**	-	6.2%	7.4%	4.2%	0%	**17.7%**	-	5.4%	31.1%	1.5%	0%	**38.0%**	-	1.3%	20.7%	6.3%	0.6%	**29.0%**	-	-
PHF	0.821	0.831	0.661	-	**0.892**	-	0.783	0.826	0.769	-	**0.888**	-	0.772	0.966	0.700	-	**0.929**	-	0.813	0.891	0.890	0.600	**0.912**	-	0.965
Motorcycles	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0.8%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	22	232	37	0	**291**	-	117	141	79	0	**337**	-	105	581	28	0	**714**	-	26	392	121	12	**551**	-	1893
% Lights	95.7%	98.3%	100%	0%	**98.3%**	-	98.3%	99.3%	98.8%	0%	**98.8%**	-	100%	97.0%	100%	0%	**97.5%**	-	100%	98.2%	100%	100%	**98.7%**	-	98.2%
Single-Unit Trucks	1	2	0	0	**3**	-	2	1	1	0	**4**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	16
% Single-Unit Trucks	4.3%	0.8%	0%	0%	**1.0%**	-	1.7%	0.7%	1.3%	0%	**1.2%**	-	0%	1.5%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	7	0	0	**7**	-	14
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.2%	0%	0%	**1.0%**	-	0%	1.8%	0%	0%	**1.3%**	-	0.7%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	15	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-	-	-	-	-	93.8%	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-	-	-	-	-	6.3%	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Dunlavy St - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867328, Location: 29.734249, -95.402136

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Mandell St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

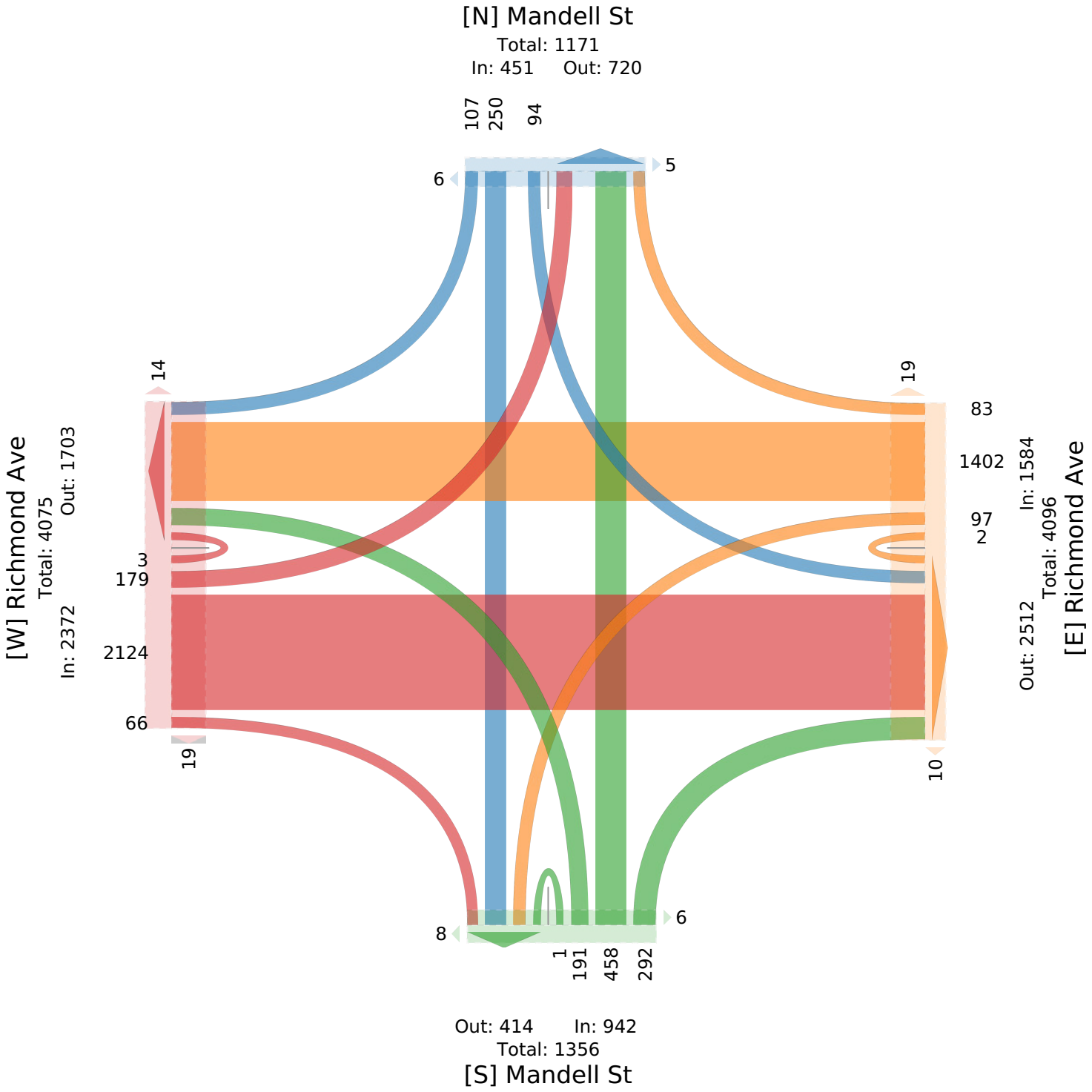
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Mandell St						Mandell St						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	5	4	0	**11**	0	0	7	4	0	**11**	0	5	70	1	0	**76**	3	3	37	1	0	**41**	1	**139**
7:15AM	9	8	9	0	**26**	0	3	10	0	0	**13**	3	9	100	4	0	**113**	2	3	45	2	0	**50**	2	**202**
7:30AM	7	28	7	0	**42**	1	4	11	5	0	**20**	1	22	89	3	0	**114**	2	9	66	3	1	**79**	2	**255**
7:45AM	7	30	11	0	**48**	2	4	20	6	0	**30**	0	13	140	5	1	**159**	1	7	102	6	0	**115**	2	**352**
Hourly Total	25	71	31	0	**127**	3	11	48	15	0	**74**	4	49	399	13	1	**462**	8	22	250	12	1	**285**	7	**948**
8:00AM	8	15	8	0	**31**	0	4	9	6	0	**19**	0	9	114	7	0	**130**	0	6	92	2	0	**100**	1	**280**
8:15AM	7	18	11	0	**36**	1	5	31	5	0	**41**	1	6	118	3	0	**127**	1	6	71	4	0	**81**	6	**285**
8:30AM	4	15	14	0	**33**	0	6	16	5	0	**27**	0	8	109	1	1	**119**	1	8	56	5	0	**69**	5	**248**
8:45AM	9	7	9	0	**25**	0	3	14	8	0	**25**	0	12	100	5	1	**118**	2	3	58	4	0	**65**	3	**233**
Hourly Total	28	55	42	0	**125**	1	18	70	24	0	**112**	1	35	441	16	2	**494**	4	23	277	15	0	**315**	15	**1046**
4:00PM	21	39	33	0	**93**	2	12	17	10	0	**39**	2	13	127	0	0	**140**	1	2	112	12	0	**126**	0	**398**
4:15PM	14	34	24	0	**72**	1	8	29	8	0	**45**	2	13	140	3	0	**156**	1	7	111	6	0	**124**	0	**397**
4:30PM	12	34	36	0	**82**	1	7	18	10	0	**35**	0	10	181	3	0	**194**	1	9	113	5	0	**127**	0	**438**
4:45PM	19	34	20	0	**73**	1	9	17	6	0	**32**	0	13	148	2	0	**163**	0	5	105	10	0	**120**	2	**388**
Hourly Total	66	141	113	0	**320**	5	36	81	34	0	**151**	4	49	596	8	0	**653**	3	23	441	33	0	**497**	2	**1621**
5:00PM	24	57	20	1	**102**	0	8	18	6	0	**32**	2	4	179	8	0	**191**	7	6	101	5	1	**113**	0	**438**
5:15PM	17	37	32	0	**86**	1	6	15	14	0	**35**	0	14	172	8	0	**194**	7	9	107	10	0	**126**	1	**441**
5:30PM	18	45	33	0	**96**	3	6	12	8	0	**26**	0	12	173	7	0	**192**	2	9	111	4	0	**124**	3	**438**
5:45PM	13	52	21	0	**86**	1	9	6	6	0	**21**	0	16	164	6	0	**186**	2	5	115	4	0	**124**	1	**417**
Hourly Total	72	191	106	1	**370**	5	29	51	34	0	**114**	2	46	688	29	0	**763**	18	29	434	23	1	**487**	5	**1734**
Total	191	458	292	1	**942**	14	94	250	107	0	**451**	11	179	2124	66	3	**2372**	33	97	1402	83	2	**1584**	29	**5349**
% Approach	20.3%	48.6%	31.0%	0.1%	**-**	-	20.8%	55.4%	23.7%	0%	**-**	-	7.5%	89.5%	2.8%	0.1%	**-**	-	6.1%	88.5%	5.2%	0.1%	**-**	-	-
% Total	3.6%	8.6%	5.5%	0%	**17.6%**	-	1.8%	4.7%	2.0%	0%	**8.4%**	-	3.3%	39.7%	1.2%	0.1%	**44.3%**	-	1.8%	26.2%	1.6%	0%	**29.6%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	4	0	0	**4**	-	0	1	0	0	**1**	-	7
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	191	456	291	1	**939**	-	91	246	105	0	**442**	-	177	2058	66	3	**2304**	-	96	1357	81	2	**1536**	-	5221
% Lights	100%	99.6%	99.7%	100%	**99.7%**	-	96.8%	98.4%	98.1%	0%	**98.0%**	-	98.9%	96.9%	100%	100%	**97.1%**	-	99.0%	96.8%	97.6%	100%	**97.0%**	-	97.6%
Single-Unit Trucks	0	2	1	0	**3**	-	2	2	1	0	**5**	-	1	29	0	0	**30**	-	1	14	2	0	**17**	-	55
% Single-Unit Trucks	0%	0.4%	0.3%	0%	**0.3%**	-	2.1%	0.8%	0.9%	0%	**1.1%**	-	0.6%	1.4%	0%	0%	**1.3%**	-	1.0%	1.0%	2.4%	0%	**1.1%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Buses	0	0	0	0	**0**	-	1	0	1	0	**2**	-	1	32	0	0	**33**	-	0	29	0	0	**29**	-	64
% Buses	0%	0%	0%	0%	**0%**	-	1.1%	0%	0.9%	0%	**0.4%**	-	0.6%	1.5%	0%	0%	**1.4%**	-	0%	2.1%	0%	0%	**1.8%**	-	1.2%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	9	-	-	-	-	-	31	-	-	-	-	-	27	
% Pedestrians	-	-	-	-	-	92.9%	-	-	-	-	-	81.8%	-	-	-	-	-	93.9%	-	-	-	-	-	93.1%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	7.1%	-	-	-	-	-	18.2%	-	-	-	-	-	6.1%	-	-	-	-	-	6.9%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Mandell St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Mandell St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

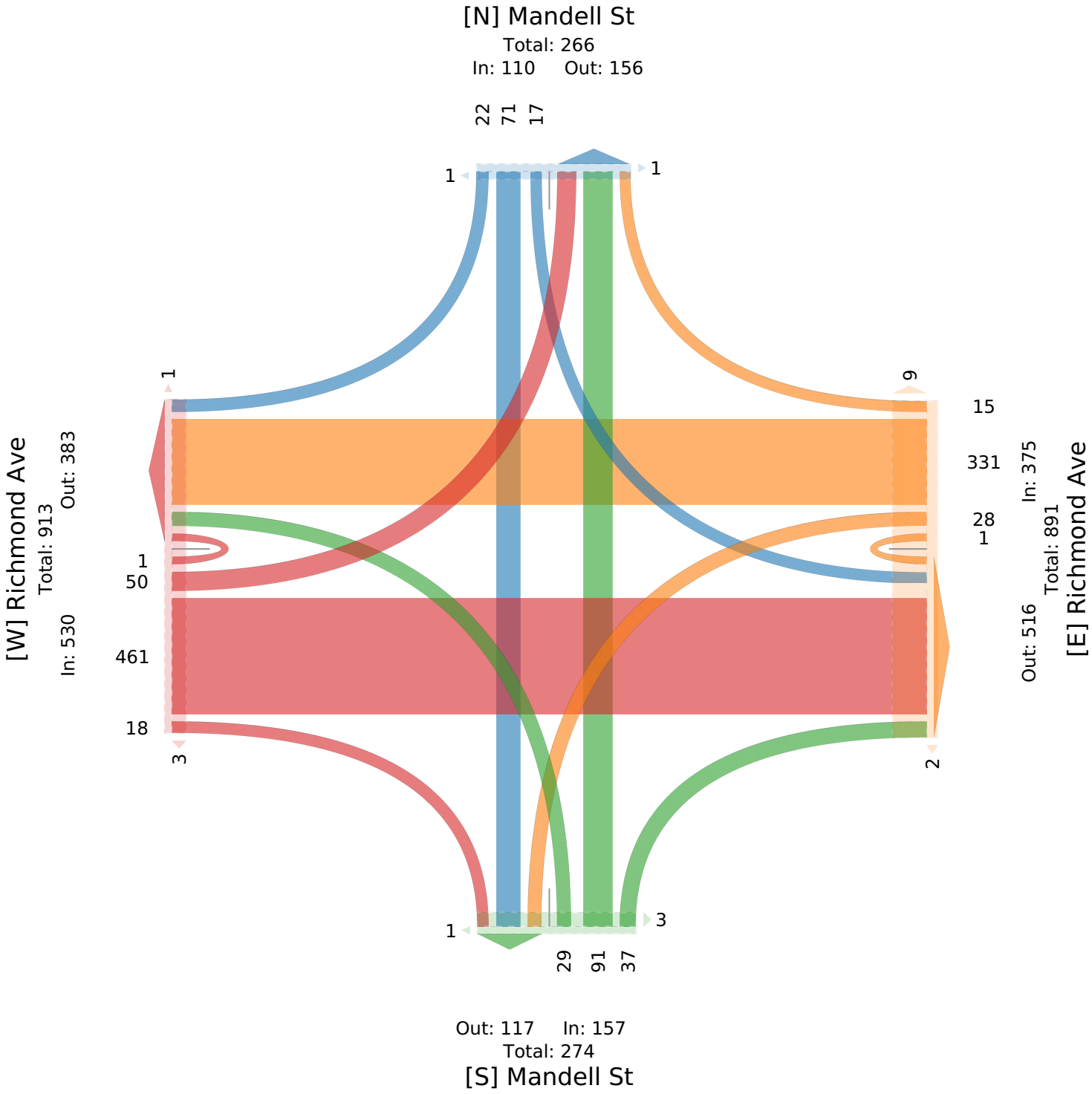
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Mandell St Northbound						Mandell St Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Direction																									
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	7	28	7	0	**42**	1	4	11	5	0	**20**	1	22	89	3	0	**114**	2	9	66	3	1	**79**	2	**255**
7:45AM	7	30	11	0	**48**	2	4	20	6	0	**30**	0	13	140	5	1	**159**	1	7	102	6	0	**115**	2	**352**
8:00AM	8	15	8	0	**31**	0	4	9	6	0	**19**	0	9	114	7	0	**130**	0	6	92	2	0	**100**	1	**280**
8:15AM	7	18	11	0	**36**	1	5	31	5	0	**41**	1	6	118	3	0	**127**	1	6	71	4	0	**81**	6	**285**
Total	29	91	37	0	**157**	4	17	71	22	0	**110**	2	50	461	18	1	**530**	4	28	331	15	1	**375**	11	**1172**
% Approach	18.5%	58.0%	23.6%	0%	**-**	-	15.5%	64.5%	20.0%	0%	**-**	-	9.4%	87.0%	3.4%	0.2%	**-**	-	7.5%	88.3%	4.0%	0.3%	**-**	-	-
% Total	2.5%	7.8%	3.2%	0%	**13.4%**	-	1.5%	6.1%	1.9%	0%	**9.4%**	-	4.3%	39.3%	1.5%	0.1%	**45.2%**	-	2.4%	28.2%	1.3%	0.1%	**32.0%**	-	-
PHF	0.906	0.758	0.841	-	**0.818**	-	0.850	0.573	0.917	-	**0.671**	-	0.568	0.823	0.643	0.250	**0.833**	-	0.778	0.811	0.625	0.250	**0.815**	-	0.832
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	2.8%	0%	0%	**1.8%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Lights	29	91	37	0	**157**	-	17	68	22	0	**107**	-	50	448	18	1	**517**	-	27	320	15	1	**363**	-	1144
% Lights	100%	100%	100%	0%	**100%**	-	100%	95.8%	100%	0%	**97.3%**	-	100%	97.2%	100%	100%	**97.5%**	-	96.4%	96.7%	100%	100%	**96.8%**	-	97.6%
Single-Unit Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	4	0	0	**4**	-	1	2	0	0	**3**	-	8
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	1.4%	0%	0%	**0.9%**	-	0%	0.9%	0%	0%	**0.8%**	-	3.6%	0.6%	0%	0%	**0.8%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.1%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	8	0	0	**8**	-	0	8	0	0	**8**	-	16
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.7%	0%	0%	**1.5%**	-	0%	2.4%	0%	0%	**2.1%**	-	1.4%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	90.9%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	9.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Mandell St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Mandell St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

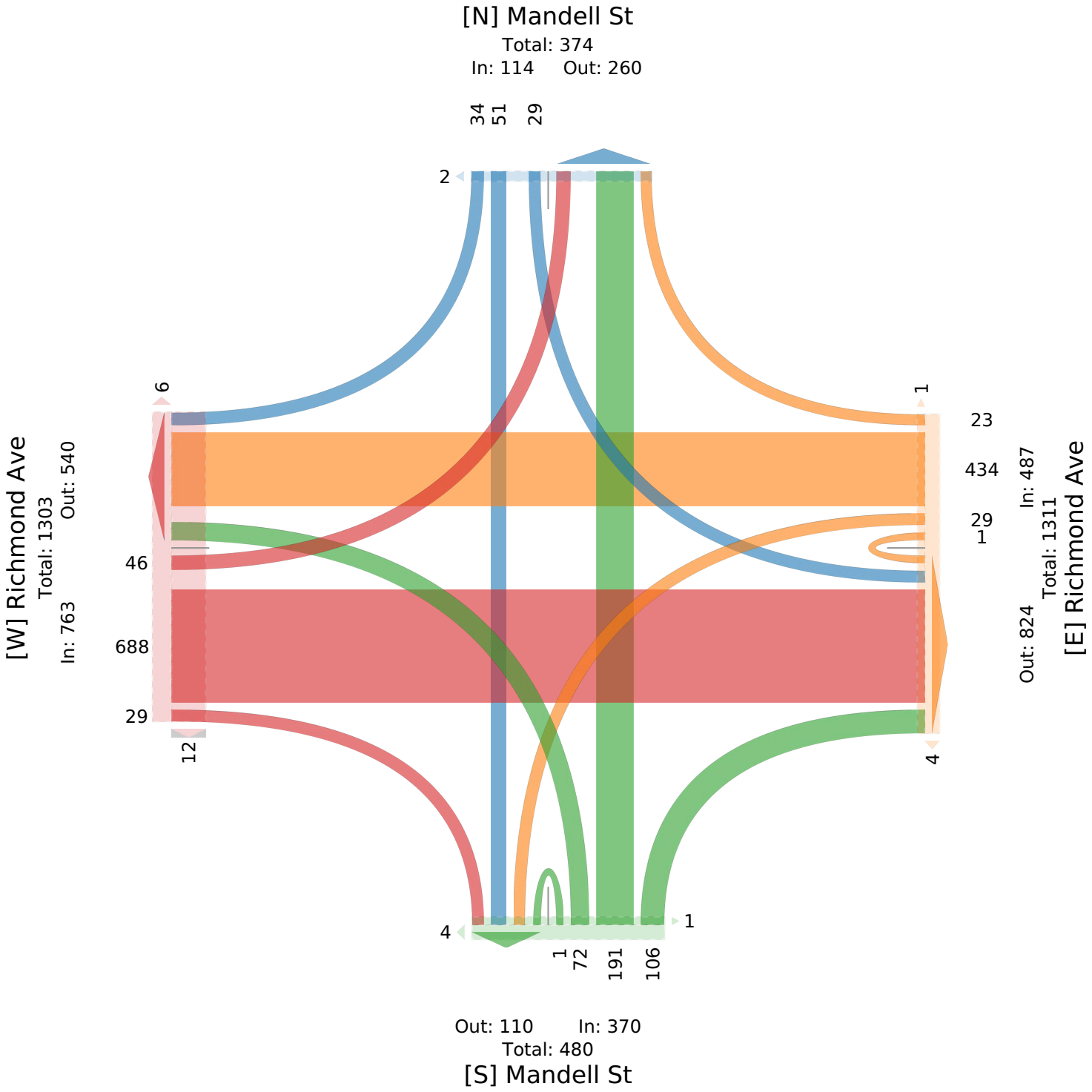
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Mandell St Northbound						Mandell St Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 5:00PM	24	57	20	1	**102**	0	8	18	6	0	**32**	2	4	179	8	0	**191**	7	6	101	5	1	**113**	0	**438**
5:15PM	17	37	32	0	**86**	1	6	15	14	0	**35**	0	14	172	8	0	**194**	7	9	107	10	0	**126**	1	**441**
5:30PM	18	45	33	0	**96**	3	6	12	8	0	**26**	0	12	173	7	0	**192**	2	9	111	4	0	**124**	3	**438**
5:45PM	13	52	21	0	**86**	1	9	6	6	0	**21**	0	16	164	6	0	**186**	2	5	115	4	0	**124**	1	**417**
Total	72	191	106	1	**370**	5	29	51	34	0	**114**	2	46	688	29	0	**763**	18	29	434	23	1	**487**	5	**1734**
% Approach	19.5%	51.6%	28.6%	0.3%	**-**	-	25.4%	44.7%	29.8%	0%	**-**	-	6.0%	90.2%	3.8%	0%	**-**	-	6.0%	89.1%	4.7%	0.2%	**-**	-	**-**
% Total	4.2%	11.0%	6.1%	0.1%	**21.3%**	-	1.7%	2.9%	2.0%	0%	**6.6%**	-	2.7%	39.7%	1.7%	0%	**44.0%**	-	1.7%	25.0%	1.3%	0.1%	**28.1%**	-	**-**
PHF	0.750	0.838	0.803	0.250	**0.907**	-	0.806	0.708	0.607	-	**0.814**	-	0.719	0.961	0.906	-	**0.983**	-	0.806	0.943	0.575	0.250	**0.966**	-	0.983
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%
Lights	72	190	106	1	**369**	-	27	50	34	0	**111**	-	46	670	29	0	**745**	-	29	427	23	1	**480**	-	1705
% Lights	100%	99.5%	100%	100%	**99.7%**	-	93.1%	98.0%	100%	0%	**97.4%**	-	100%	97.4%	100%	0%	**97.6%**	-	100%	98.4%	100%	100%	**98.6%**	-	98.3%
Single-Unit Trucks	0	1	0	0	**1**	-	1	1	0	0	**2**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	12
% Single-Unit Trucks	0%	0.5%	0%	0%	**0.3%**	-	3.4%	2.0%	0%	0%	**1.8%**	-	0%	1.3%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	7	0	0	**7**	-	0	6	0	0	**6**	-	14
% Buses	0%	0%	0%	0%	**0%**	-	3.4%	0%	0%	0%	**0.9%**	-	0%	1.0%	0%	0%	**0.9%**	-	0%	1.4%	0%	0%	**1.2%**	-	0.8%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	18	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Mandell St - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867329, Location: 29.734395, -95.399494

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Montrose Blvd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

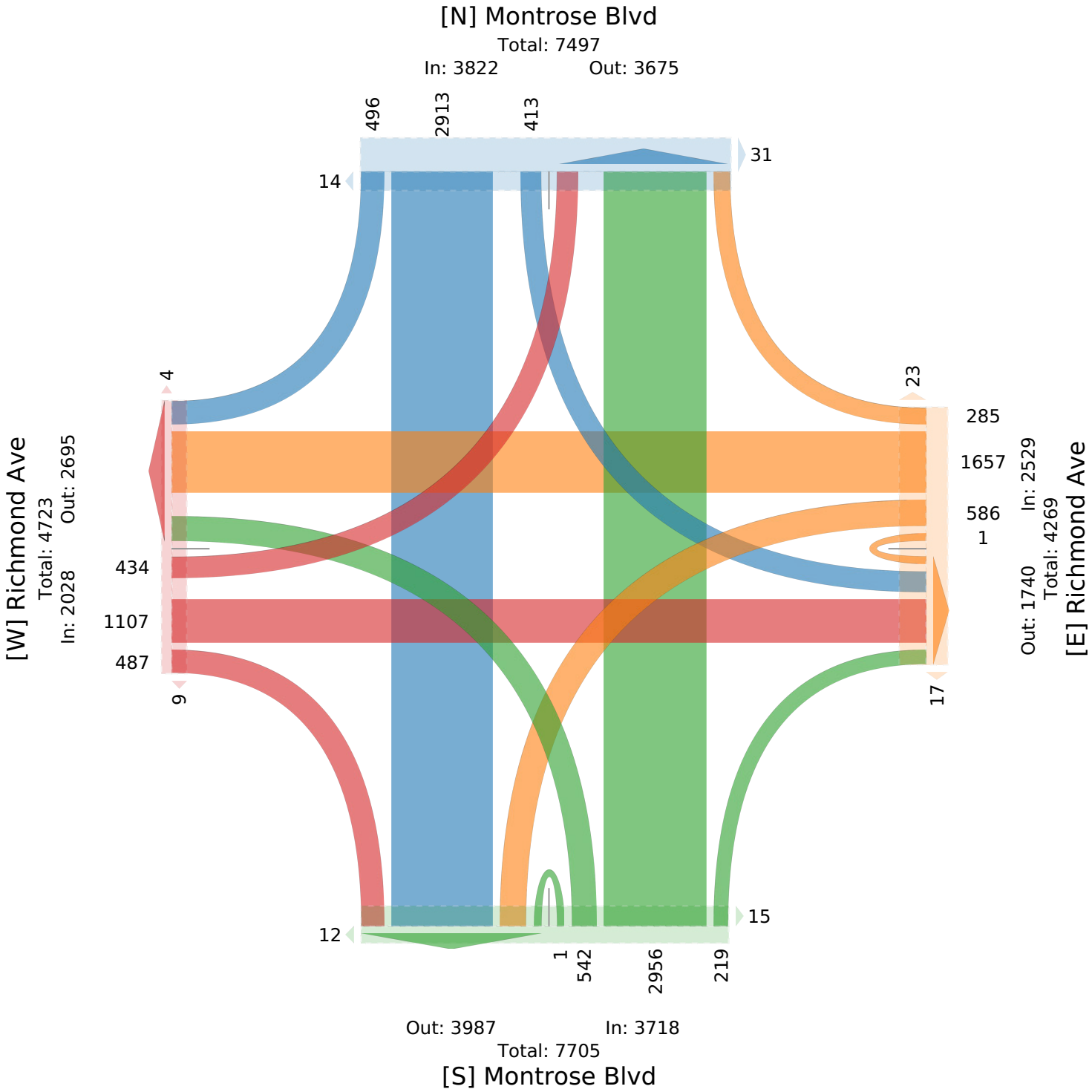
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Montrose Blvd						Montrose Blvd						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	26	179	9	0	**214**	1	12	68	23	0	**103**	0	16	20	18	0	**54**	0	16	43	14	0	**73**	2	**444**
7:15AM	17	196	6	0	**219**	3	15	118	48	0	**181**	0	29	33	35	0	**97**	0	29	81	23	0	**133**	4	**630**
7:30AM	25	299	15	0	**339**	2	23	167	49	0	**239**	1	35	60	21	0	**116**	0	23	60	22	0	**105**	0	**799**
7:45AM	35	238	10	0	**283**	4	37	139	38	0	**214**	1	37	70	25	0	**132**	1	26	80	26	0	**132**	1	**761**
Hourly Total	103	912	40	0	**1055**	10	87	492	158	0	**737**	2	117	183	99	0	**399**	1	94	264	85	0	**443**	7	**2634**
8:00AM	29	234	20	0	**283**	4	40	179	43	0	**262**	1	29	63	23	0	**115**	0	26	81	29	0	**136**	4	**796**
8:15AM	24	241	11	0	**276**	0	31	138	43	0	**212**	3	29	71	38	0	**138**	1	32	74	25	0	**131**	1	**757**
8:30AM	28	275	9	0	**312**	3	32	142	34	0	**208**	1	33	68	29	0	**130**	1	29	67	17	0	**113**	1	**763**
8:45AM	18	189	10	0	**217**	0	22	116	30	0	**168**	0	38	62	35	0	**135**	0	30	66	17	0	**113**	6	**633**
Hourly Total	99	939	50	0	**1088**	7	125	575	150	0	**850**	5	129	264	125	0	**518**	2	117	288	88	0	**493**	12	**2949**
4:00PM	62	143	24	0	**229**	1	38	212	41	0	**291**	2	21	75	26	0	**122**	0	52	125	16	0	**193**	7	**835**
4:15PM	33	133	22	0	**188**	1	26	212	31	0	**269**	3	13	78	31	0	**122**	0	44	127	18	0	**189**	1	**768**
4:30PM	46	136	24	0	**206**	1	18	230	17	0	**265**	3	21	79	33	0	**133**	4	48	156	26	0	**230**	5	**834**
4:45PM	37	137	22	0	**196**	4	24	247	26	0	**297**	6	25	74	32	0	**131**	2	51	129	16	1	**197**	3	**821**
Hourly Total	178	549	92	0	**819**	7	106	901	115	0	**1122**	14	80	306	122	0	**508**	6	195	537	76	1	**809**	16	**3258**
5:00PM	44	123	5	0	**172**	0	27	230	12	0	**269**	3	29	89	43	0	**161**	2	56	150	9	0	**215**	1	**817**
5:15PM	41	149	12	1	**203**	1	29	269	19	0	**317**	10	24	84	29	0	**137**	0	41	138	8	0	**187**	2	**844**
5:30PM	39	128	11	0	**178**	1	19	207	20	0	**246**	8	30	103	35	0	**168**	0	48	147	8	0	**203**	2	**795**
5:45PM	38	156	9	0	**203**	1	20	239	22	0	**281**	3	25	78	34	0	**137**	2	35	133	11	0	**179**	0	**800**
Hourly Total	162	556	37	1	**756**	3	95	945	73	0	**1113**	24	108	354	141	0	**603**	4	180	568	36	0	**784**	5	**3256**
Total	542	2956	219	1	**3718**	27	413	2913	496	0	**3822**	45	434	1107	487	0	**2028**	13	586	1657	285	1	**2529**	40	**12097**
% Approach	14.6%	79.5%	5.9%	0%	**-**	-	10.8%	76.2%	13.0%	0%	**-**	-	21.4%	54.6%	24.0%	0%	**-**	-	23.2%	65.5%	11.3%	0%	**-**	-	-
% Total	4.5%	24.4%	1.8%	0%	**30.7%**	-	3.4%	24.1%	4.1%	0%	**31.6%**	-	3.6%	9.2%	4.0%	0%	**16.8%**	-	4.8%	13.7%	2.4%	0%	**20.9%**	-	-
Motorcycles	1	1	0	0	**2**	-	0	1	0	0	**1**	-	2	0	0	0	**2**	-	2	2	0	0	**4**	-	9
% Motorcycles	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.5%	0%	0%	0%	**0.1%**	-	0.3%	0.1%	0%	0%	**0.2%**	-	0.1%
Lights	529	2897	214	1	**3641**	-	410	2877	491	0	**3778**	-	423	1065	482	0	**1970**	-	575	1605	281	1	**2462**	-	11851
% Lights	97.6%	98.0%	97.7%	100%	**97.9%**	-	99.3%	98.8%	99.0%	0%	**98.8%**	-	97.5%	96.2%	99.0%	0%	**97.1%**	-	98.1%	96.9%	98.6%	100%	**97.4%**	-	98.0%
Single-Unit Trucks	11	16	3	0	**30**	-	1	14	4	0	**19**	-	4	15	2	0	**21**	-	8	22	1	0	**31**	-	101
% Single-Unit Trucks	2.0%	0.5%	1.4%	0%	**0.8%**	-	0.2%	0.5%	0.8%	0%	**0.5%**	-	0.9%	1.4%	0.4%	0%	**1.0%**	-	1.4%	1.3%	0.4%	0%	**1.2%**	-	0.8%
Articulated Trucks	1	3	0	0	**4**	-	0	2	0	0	**2**	-	0	1	2	0	**3**	-	0	2	0	0	**2**	-	11
% Articulated Trucks	0.2%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.4%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	0	39	2	0	**41**	-	2	19	1	0	**22**	-	5	26	1	0	**32**	-	1	26	3	0	**30**	-	125
% Buses	0%	1.3%	0.9%	0%	**1.1%**	-	0.5%	0.7%	0.2%	0%	**0.6%**	-	1.2%	2.3%	0.2%	0%	**1.6%**	-	0.2%	1.6%	1.1%	0%	**1.2%**	-	1.0%
Pedestrians	-	-	-	-	-	23	-	-	-	-	-	44	-	-	-	-	-	10	-	-	-	-	-	30	
% Pedestrians	-	-	-	-	-	85.2%	-	-	-	-	-	97.8%	-	-	-	-	-	76.9%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	10	
% Bicycles on Crosswalk	-	-	-	-	-	14.8%	-	-	-	-	-	2.2%	-	-	-	-	-	23.1%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Montrose Blvd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Montrose Blvd - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

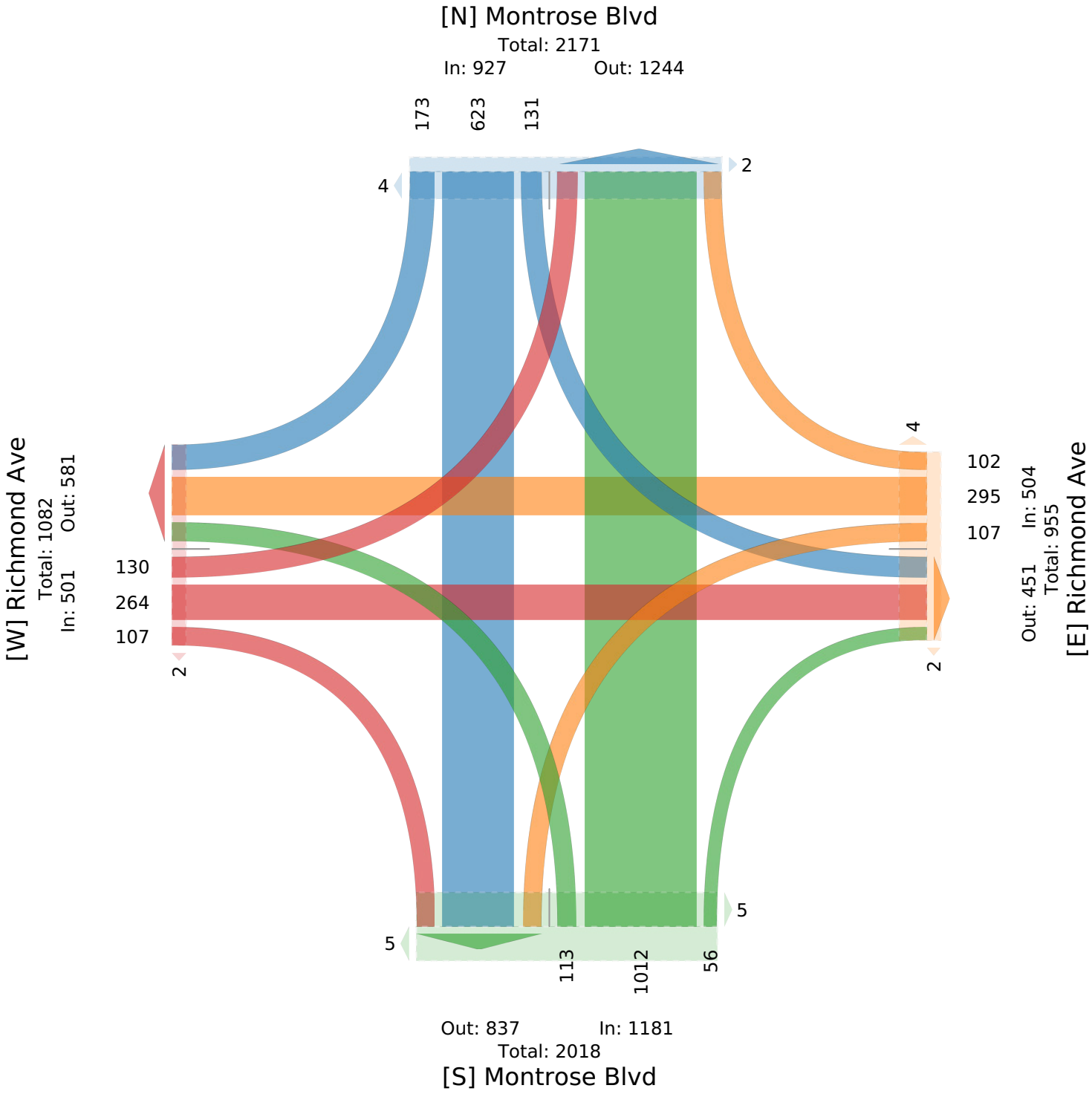
Leg	Montrose Blvd						Montrose Blvd						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	25	299	15	0	**339**	2	23	167	49	0	**239**	1	35	60	21	0	**116**	0	23	60	22	0	**105**	0	**799**
7:45AM	35	238	10	0	**283**	4	37	139	38	0	**214**	1	37	70	25	0	**132**	1	26	80	26	0	**132**	1	**761**
8:00AM	29	234	20	0	**283**	4	40	179	43	0	**262**	1	29	63	23	0	**115**	0	26	81	29	0	**136**	4	**796**
8:15AM	24	241	11	0	**276**	0	31	138	43	0	**212**	3	29	71	38	0	**138**	1	32	74	25	0	**131**	1	**757**
Total	113	1012	56	0	**1181**	10	131	623	173	0	**927**	6	130	264	107	0	**501**	2	107	295	102	0	**504**	6	**3113**
% Approach	9.6%	85.7%	4.7%	0%	**-**	-	14.1%	67.2%	18.7%	0%	**-**	-	25.9%	52.7%	21.4%	0%	**-**	-	21.2%	58.5%	20.2%	0%	**-**	-	-
% Total	3.6%	32.5%	1.8%	0%	**37.9%**	-	4.2%	20.0%	5.6%	0%	**29.8%**	-	4.2%	8.5%	3.4%	0%	**16.1%**	-	3.4%	9.5%	3.3%	0%	**16.2%**	-	-
PHF	0.807	0.846	0.700	-	**0.871**	-	0.819	0.870	0.883	-	**0.885**	-	0.878	0.930	0.704	-	**0.908**	-	0.836	0.910	0.879	-	**0.926**	-	0.974
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1	0	0	0	**1**	-	3
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.8%	0%	0%	0%	**0.2%**	-	0.9%	0%	0%	0%	**0.2%**	-	0.1%
Lights	110	994	56	0	**1160**	-	130	613	172	0	**915**	-	125	255	106	0	**486**	-	102	288	101	0	**491**	-	3052
% Lights	97.3%	98.2%	100%	0%	**98.2%**	-	99.2%	98.4%	99.4%	0%	**98.7%**	-	96.2%	96.6%	99.1%	0%	**97.0%**	-	95.3%	97.6%	99.0%	0%	**97.4%**	-	98.0%
Single-Unit Trucks	3	4	0	0	**7**	-	0	5	1	0	**6**	-	1	1	1	0	**3**	-	3	1	1	0	**5**	-	21
% Single-Unit Trucks	2.7%	0.4%	0%	0%	**0.6%**	-	0%	0.8%	0.6%	0%	**0.6%**	-	0.8%	0.4%	0.9%	0%	**0.6%**	-	2.8%	0.3%	1.0%	0%	**1.0%**	-	0.7%
Articulated Trucks	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	12	0	0	**12**	-	1	3	0	0	**4**	-	3	7	0	0	**10**	-	1	6	0	0	**7**	-	33
% Buses	0%	1.2%	0%	0%	**1.0%**	-	0.8%	0.5%	0%	0%	**0.4%**	-	2.3%	2.7%	0%	0%	**2.0%**	-	0.9%	2.0%	0%	0%	**1.4%**	-	1.1%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	90.0%	-	-	-	-	-	83.3%	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	10.0%	-	-	-	-	-	16.7%	-	-	-	-	-	50.0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Montrose Blvd - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Montrose Blvd - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

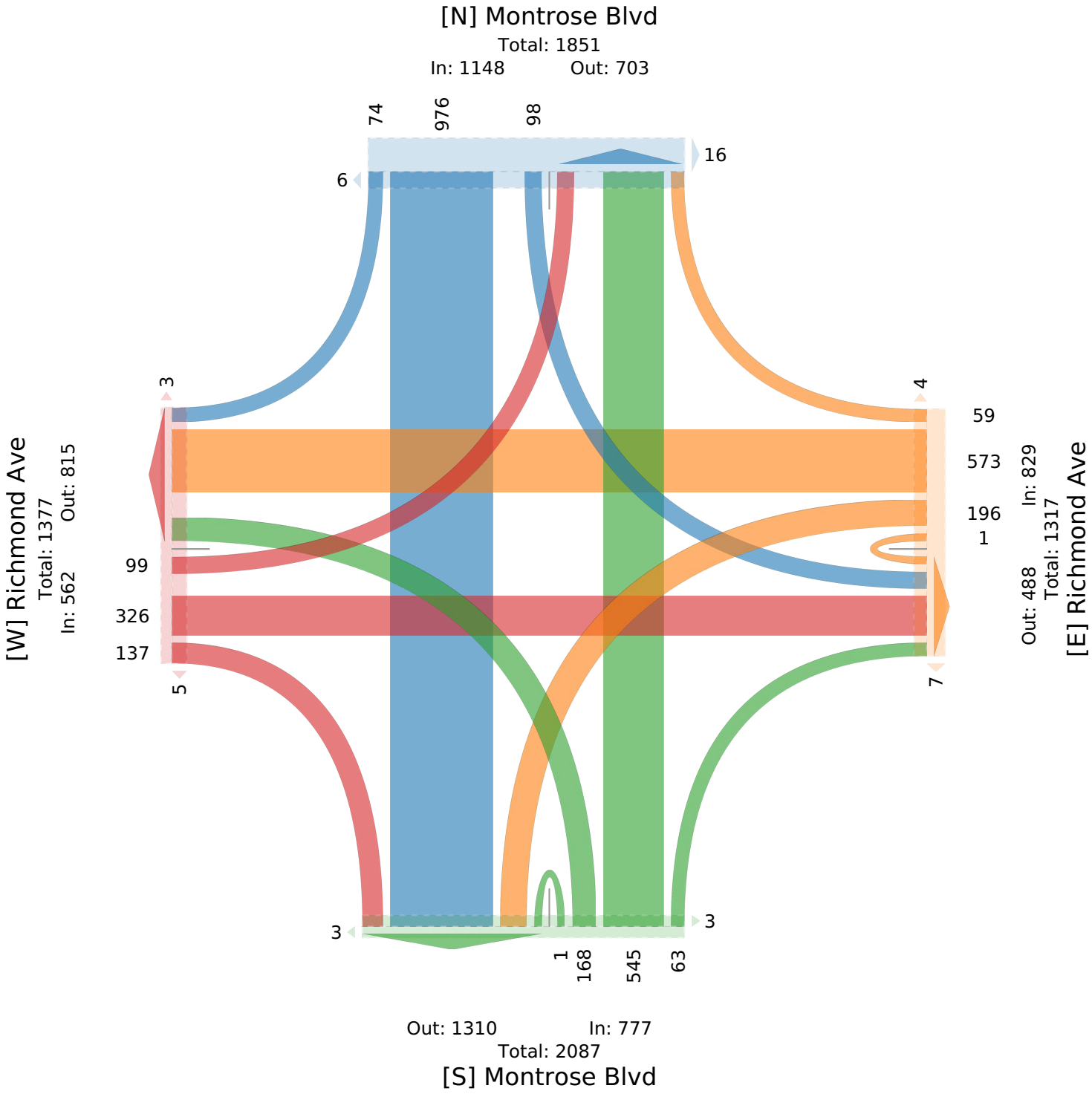
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Montrose Blvd Northbound						Montrose Blvd Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:30PM	46	136	24	0	**206**	1	18	230	17	0	**265**	3	21	79	33	0	**133**	4	48	156	26	0	**230**	5	**834**
4:45PM	37	137	22	0	**196**	4	24	247	26	0	**297**	6	25	74	32	0	**131**	2	51	129	16	1	**197**	3	**821**
5:00PM	44	123	5	0	**172**	0	27	230	12	0	**269**	3	29	89	43	0	**161**	2	56	150	9	0	**215**	1	**817**
5:15PM	41	149	12	1	**203**	1	29	269	19	0	**317**	10	24	84	29	0	**137**	0	41	138	8	0	**187**	2	**844**
Total	168	545	63	1	**777**	6	98	976	74	0	**1148**	22	99	326	137	0	**562**	8	196	573	59	1	**829**	11	**3316**
% Approach	21.6%	70.1%	8.1%	0.1%	**-**	-	8.5%	85.0%	6.4%	0%	**-**	-	17.6%	58.0%	24.4%	0%	**-**	-	23.6%	69.1%	7.1%	0.1%	**-**	-	-
% Total	5.1%	16.4%	1.9%	0%	**23.4%**	-	3.0%	29.4%	2.2%	0%	**34.6%**	-	3.0%	9.8%	4.1%	0%	**16.9%**	-	5.9%	17.3%	1.8%	0%	**25.0%**	-	-
PHF	0.913	0.914	0.656	0.250	**0.943**	-	0.845	0.907	0.712	-	**0.905**	-	0.853	0.916	0.797	-	**0.873**	-	0.875	0.918	0.567	0.250	**0.901**	-	0.982
Motorcycles	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3
% Motorcycles	0.6%	0%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.1%
Lights	164	536	62	1	**763**	-	98	964	74	0	**1136**	-	97	316	137	0	**550**	-	195	556	58	1	**810**	-	3259
% Lights	97.6%	98.3%	98.4%	100%	**98.2%**	-	100%	98.8%	100%	0%	**99.0%**	-	98.0%	96.9%	100%	0%	**97.9%**	-	99.5%	97.0%	98.3%	100%	**97.7%**	-	98.3%
Single-Unit Trucks	3	3	1	0	**7**	-	0	2	0	0	**2**	-	1	5	0	0	**6**	-	1	9	0	0	**10**	-	25
% Single-Unit Trucks	1.8%	0.6%	1.6%	0%	**0.9%**	-	0%	0.2%	0%	0%	**0.2%**	-	1.0%	1.5%	0%	0%	**1.1%**	-	0.5%	1.6%	0%	0%	**1.2%**	-	0.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%
Buses	0	6	0	0	**6**	-	0	9	0	0	**9**	-	1	5	0	0	**6**	-	0	6	1	0	**7**	-	28
% Buses	0%	1.1%	0%	0%	**0.8%**	-	0%	0.9%	0%	0%	**0.8%**	-	1.0%	1.5%	0%	0%	**1.1%**	-	0%	1.0%	1.7%	0%	**0.8%**	-	0.8%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	22	-	-	-	-	-	7	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	87.5%	-	-	-	-	-	72.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	12.5%	-	-	-	-	-	27.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Montrose Blvd - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867330, Location: 29.734595, -95.391129

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

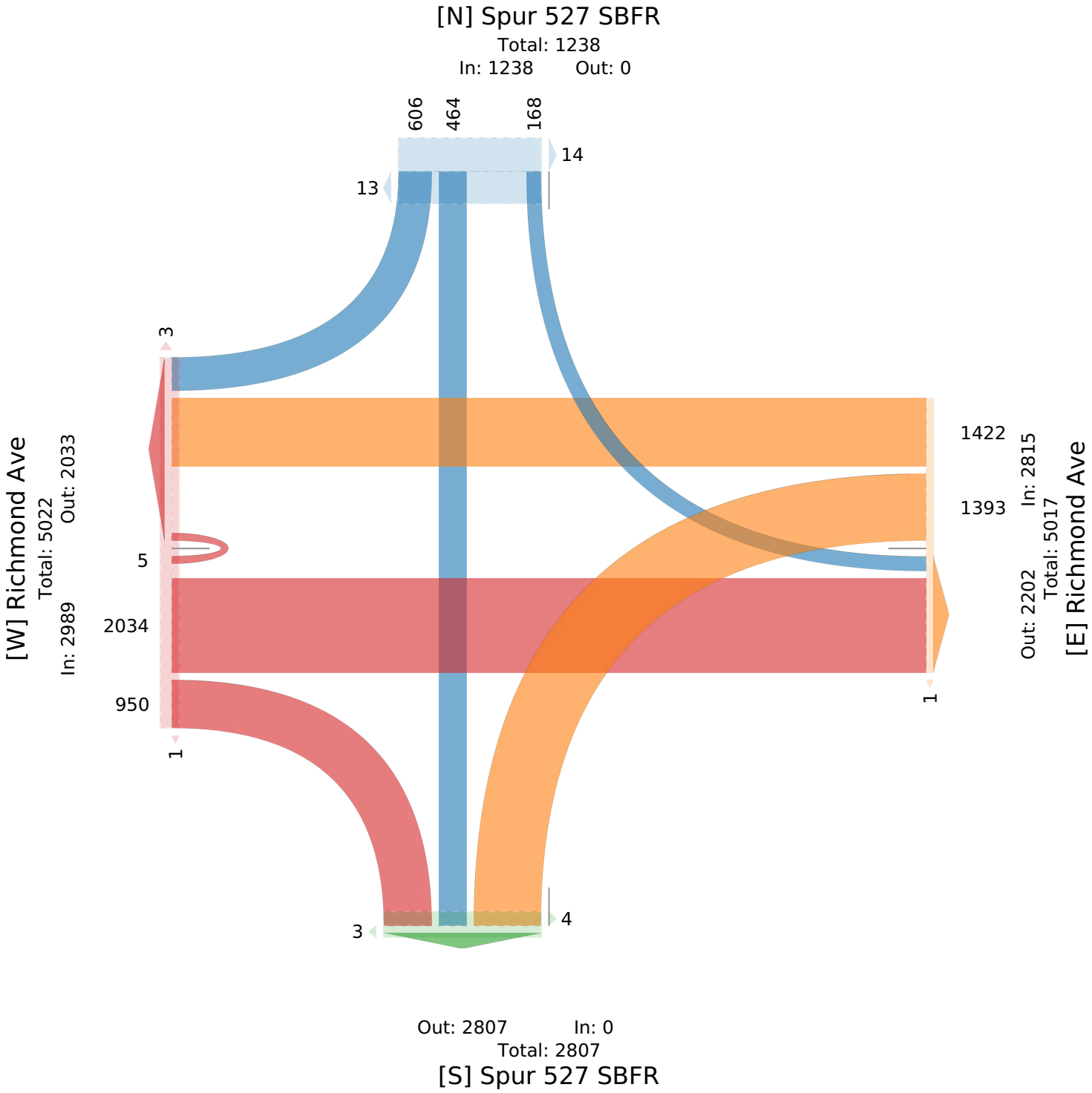
Leg	Spur 527 SBFR						Spur 527 SBFR						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	0	0	0	**0**	1	6	15	16	0	**37**	0	0	58	41	1	**100**	0	48	47	0	0	**95**	0	**232**
7:15AM	0	0	0	0	**0**	1	11	19	24	0	**54**	1	0	94	91	0	**185**	0	66	87	0	0	**153**	0	**392**
7:30AM	0	0	0	0	**0**	0	19	35	33	0	**87**	2	0	108	89	1	**198**	0	79	93	0	0	**172**	0	**457**
7:45AM	0	0	0	0	**0**	0	10	30	30	0	**70**	3	0	93	62	0	**155**	0	93	77	0	0	**170**	0	**395**
Hourly Total	0	0	0	0	**0**	2	46	99	103	0	**248**	6	0	353	283	2	**638**	0	286	304	0	0	**590**	0	**1476**
8:00AM	0	0	0	0	**0**	0	11	35	38	0	**84**	2	0	117	66	0	**183**	1	126	77	0	0	**203**	0	**470**
8:15AM	0	0	0	0	**0**	0	22	29	43	0	**94**	2	0	81	66	0	**147**	0	105	107	0	0	**212**	0	**453**
8:30AM	0	0	0	0	**0**	0	20	32	47	0	**99**	0	0	102	47	0	**149**	0	77	88	0	0	**165**	0	**413**
8:45AM	0	0	0	0	**0**	0	7	29	53	0	**89**	1	0	81	39	0	**120**	0	82	81	0	0	**163**	0	**372**
Hourly Total	0	0	0	0	**0**	0	60	125	181	0	**366**	5	0	381	218	0	**599**	1	390	353	0	0	**743**	0	**1708**
4:00PM	0	0	0	0	**0**	1	5	24	43	0	**72**	2	0	150	95	0	**245**	1	104	69	0	0	**173**	0	**490**
4:15PM	0	0	0	0	**0**	1	8	44	30	0	**82**	1	0	136	76	0	**212**	0	104	93	0	0	**197**	0	**491**
4:30PM	0	0	0	0	**0**	1	5	34	35	0	**74**	2	0	160	59	1	**220**	0	84	93	0	0	**177**	1	**471**
4:45PM	0	0	0	0	**0**	0	13	24	37	0	**74**	2	0	172	44	0	**216**	0	98	78	0	0	**176**	0	**466**
Hourly Total	0	0	0	0	**0**	3	31	126	145	0	**302**	7	0	618	274	1	**893**	1	390	333	0	0	**723**	1	**1918**
5:00PM	0	0	0	0	**0**	0	9	29	42	0	**80**	5	0	149	43	1	**193**	1	75	98	0	0	**173**	0	**446**
5:15PM	0	0	0	0	**0**	0	7	35	50	0	**92**	1	0	194	40	0	**234**	0	97	98	0	0	**195**	0	**521**
5:30PM	0	0	0	0	**0**	1	4	23	42	0	**69**	2	0	170	49	1	**220**	1	76	124	0	0	**200**	0	**489**
5:45PM	0	0	0	0	**0**	1	11	27	43	0	**81**	1	0	169	43	0	**212**	0	79	112	0	0	**191**	0	**484**
Hourly Total	0	0	0	0	**0**	2	31	114	177	0	**322**	9	0	682	175	2	**859**	2	327	432	0	0	**759**	0	**1940**
Total	0	0	0	0	**0**	7	168	464	606	0	**1238**	27	0	2034	950	5	**2989**	4	1393	1422	0	0	**2815**	1	**7042**
% Approach	0%	0%	0%	0%	**-**	-	13.6%	37.5%	48.9%	0%	**-**	-	0%	68.0%	31.8%	0.2%	**-**	-	49.5%	50.5%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	2.4%	6.6%	8.6%	0%	**17.6%**	-	0%	28.9%	13.5%	0.1%	**42.4%**	-	19.8%	20.2%	0%	0%	**40.0%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	1	0	0	0	**1**	-	4
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	0	**0**	-	167	461	593	0	**1221**	-	0	1973	939	5	**2917**	-	1328	1377	0	0	**2705**	-	6843
% Lights	0%	0%	0%	0%	**-**	-	99.4%	99.4%	97.9%	0%	**98.6%**	-	0%	97.0%	98.8%	100%	**97.6%**	-	95.3%	96.8%	0%	0%	**96.1%**	-	97.2%
Single-Unit Trucks	0	0	0	0	**0**	-	1	3	9	0	**13**	-	0	28	8	0	**36**	-	23	11	0	0	**34**	-	83
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0.6%	0.6%	1.5%	0%	**1.1%**	-	0%	1.4%	0.8%	0%	**1.2%**	-	1.7%	0.8%	0%	0%	**1.2%**	-	1.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	1	0	**3**	-	1	4	0	0	**5**	-	8
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.1%	0%	**0.1%**	-	0.1%	0.3%	0%	0%	**0.2%**	-	0.1%
Buses	0	0	0	0	**0**	-	0	0	4	0	**4**	-	0	28	2	0	**30**	-	40	30	0	0	**70**	-	104
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	0.7%	0%	**0.3%**	-	0%	1.4%	0.2%	0%	**1.0%**	-	2.9%	2.1%	0%	0%	**2.5%**	-	1.5%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	21	-	-	-	-	-	3	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	77.8%	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	22.2%	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

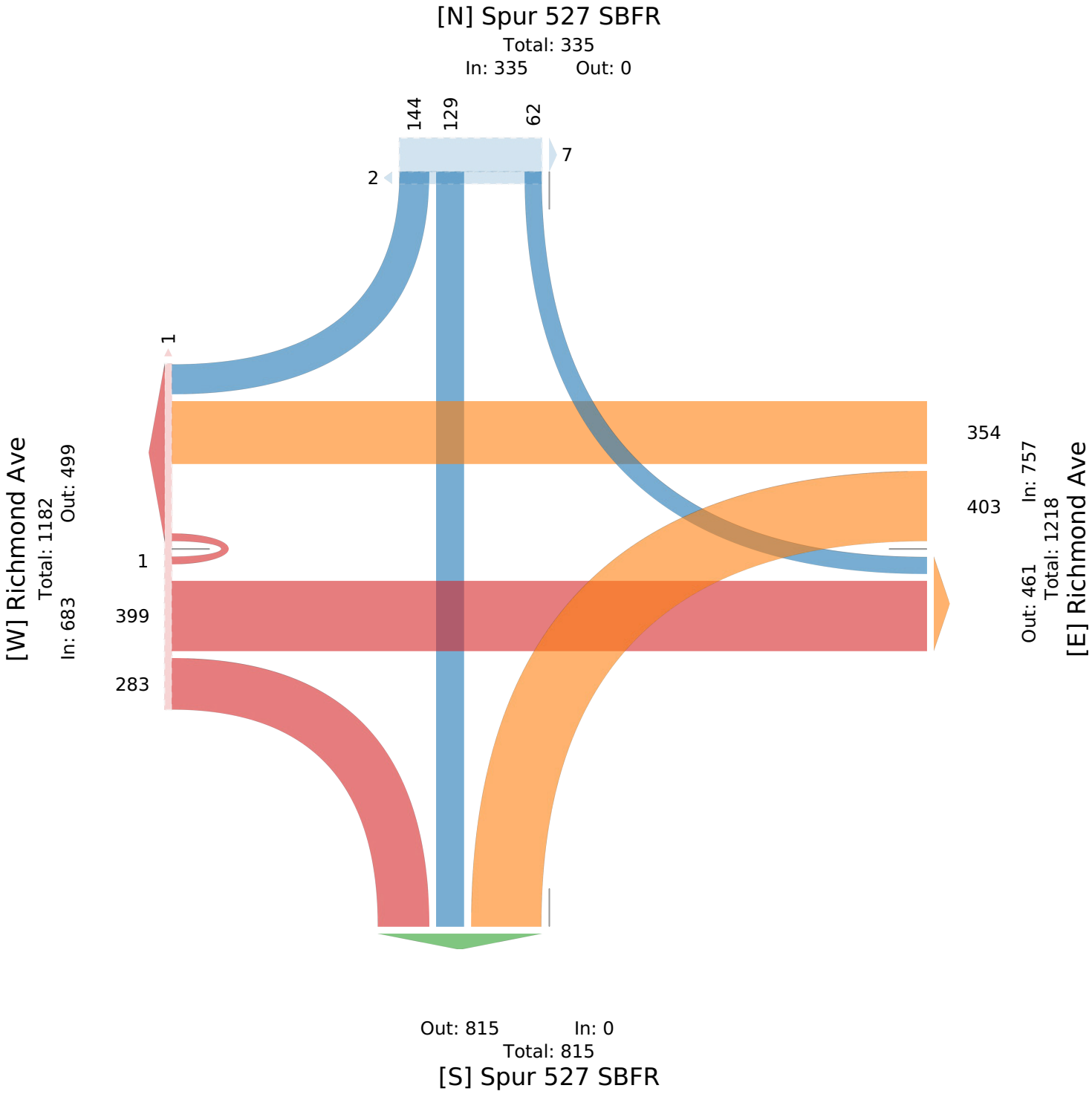
Leg / Direction	Spur 527 SBFR Northbound						Spur 527 SBFR Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	0	0	0	**0**	0	19	35	33	0	**87**	2	0	108	89	1	**198**	0	79	93	0	0	**172**	0	**457**
7:45AM	0	0	0	0	**0**	0	10	30	30	0	**70**	3	0	93	62	0	**155**	0	93	77	0	0	**170**	0	**395**
8:00AM	0	0	0	0	**0**	0	11	35	38	0	**84**	2	0	117	66	0	**183**	1	126	77	0	0	**203**	0	**470**
8:15AM	0	0	0	0	**0**	0	22	29	43	0	**94**	2	0	81	66	0	**147**	0	105	107	0	0	**212**	0	**453**
Total	0	0	0	0	**0**	0	62	129	144	0	**335**	9	0	399	283	1	**683**	1	403	354	0	0	**757**	0	**1775**
% Approach	0%	0%	0%	0%	**-**	-	18.5%	38.5%	43.0%	0%	**-**	-	0%	58.4%	41.4%	0.1%	**-**	-	53.2%	46.8%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	3.5%	7.3%	8.1%	0%	**18.9%**	-	0%	22.5%	15.9%	0.1%	**38.5%**	-	22.7%	19.9%	0%	0%	**42.6%**	-	-
PHF	-	-	-	-	**-**	-	0.705	0.921	0.837	-	**0.891**	-	-	0.853	0.795	0.250	**0.862**	-	0.800	0.827	-	-	**0.893**	-	0.944
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0%	0%	0%	**0.1%**	-	0.1%
Lights	0	0	0	0	**0**	-	62	126	140	0	**328**	-	0	389	279	1	**669**	-	382	341	0	0	**723**	-	1720
% Lights	0%	0%	0%	0%	**-**	-	100%	97.7%	97.2%	0%	**97.9%**	-	0%	97.5%	98.6%	100%	**98.0%**	-	94.8%	96.3%	0%	0%	**95.5%**	-	96.9%
Single-Unit Trucks	0	0	0	0	**0**	-	0	3	1	0	**4**	-	0	2	2	0	**4**	-	5	4	0	0	**9**	-	17
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	2.3%	0.7%	0%	**1.2%**	-	0%	0.5%	0.7%	0%	**0.6%**	-	1.2%	1.1%	0%	0%	**1.2%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1	2	0	0	**3**	-	4
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.4%	0%	**0.1%**	-	0.2%	0.6%	0%	0%	**0.4%**	-	0.2%
Buses	0	0	0	0	**0**	-	0	0	3	0	**3**	-	0	8	1	0	**9**	-	14	7	0	0	**21**	-	33
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	2.1%	0%	**0.9%**	-	0%	2.0%	0.4%	0%	**1.3%**	-	3.5%	2.0%	0%	0%	**2.8%**	-	1.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	77.8%	-	-	-	-	-	0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	22.2%	-	-	-	-	-	100%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

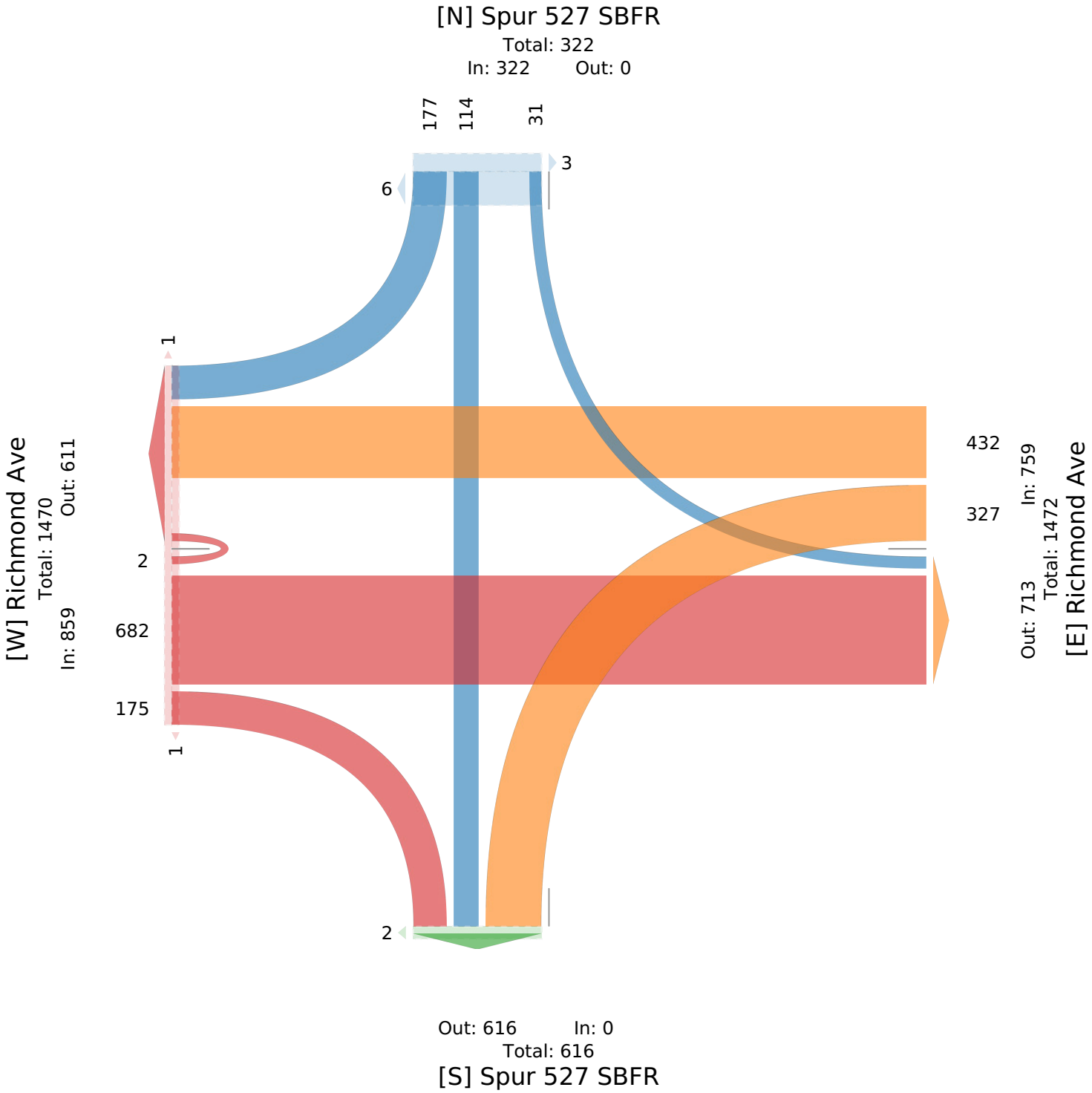
Leg / Direction	Spur 527 SBFR Northbound						Spur 527 SBFR Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 5:00PM	0	0	0	0	**0**	0	9	29	42	0	**80**	5	0	149	43	1	**193**	1	75	98	0	0	**173**	0	**446**
5:15PM	0	0	0	0	**0**	0	7	35	50	0	**92**	1	0	194	40	0	**234**	0	97	98	0	0	**195**	0	**521**
5:30PM	0	0	0	0	**0**	1	4	23	42	0	**69**	2	0	170	49	1	**220**	1	76	124	0	0	**200**	0	**489**
5:45PM	0	0	0	0	**0**	1	11	27	43	0	**81**	1	0	169	43	0	**212**	0	79	112	0	0	**191**	0	**484**
Total	0	0	0	0	**0**	2	31	114	177	0	**322**	9	0	682	175	2	**859**	2	327	432	0	0	**759**	0	**1940**
% Approach	0%	0%	0%	0%	**-**	-	9.6%	35.4%	55.0%	0%	**-**	-	0%	79.4%	20.4%	0.2%	**-**	-	43.1%	56.9%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	1.6%	5.9%	9.1%	0%	**16.6%**	-	0%	35.2%	9.0%	0.1%	**44.3%**	-	16.9%	22.3%	0%	0%	**39.1%**	-	-
PHF	-	-	-	-	**-**	-	0.705	0.814	0.885	-	**0.875**	-	-	0.879	0.893	0.500	**0.918**	-	0.843	0.871	-	-	**0.949**	-	0.931
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	0	0	0	0	**0**	-	30	114	176	0	**320**	-	0	666	174	2	**842**	-	311	420	0	0	**731**	-	1893
% Lights	0%	0%	0%	0%	**-**	-	96.8%	100%	99.4%	0%	**99.4%**	-	0%	97.7%	99.4%	100%	**98.0%**	-	95.1%	97.2%	0%	0%	**96.3%**	-	97.6%
Single-Unit Trucks	0	0	0	0	**0**	-	1	0	1	0	**2**	-	0	8	1	0	**9**	-	8	2	0	0	**10**	-	21
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	3.2%	0%	0.6%	0%	**0.6%**	-	0%	1.2%	0.6%	0%	**1.0%**	-	2.4%	0.5%	0%	0%	**1.3%**	-	1.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.1%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	8	9	0	0	**17**	-	22
% Buses	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.7%	0%	0%	**0.6%**	-	2.4%	2.1%	0%	0%	**2.2%**	-	1.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	77.8%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	22.2%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 SBFR - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867331, Location: 29.734559, -95.385819

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Spur 527 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

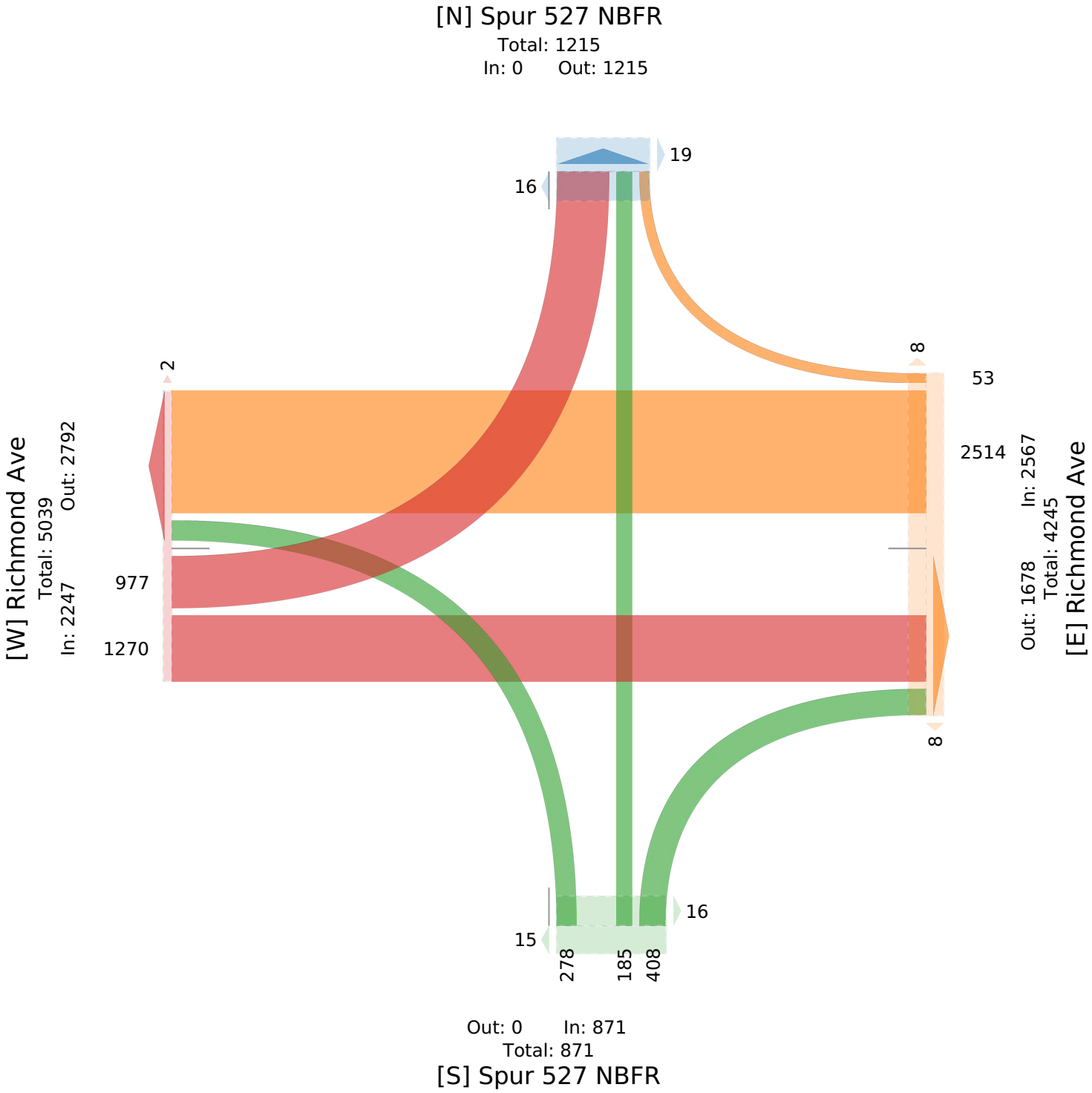
Leg	Spur 527 NBFR						Spur 527 NBFR						Richmond Ave						Richmond Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	20	2	13	0	**35**	6	0	0	0	0	**0**	1	22	48	0	0	**70**	0	0	69	2	0	**71**	2	**176**
7:15AM	32	7	19	0	**58**	1	0	0	0	0	**0**	1	35	72	0	0	**107**	0	0	114	1	0	**115**	0	**280**
7:30AM	15	6	20	0	**41**	1	0	0	0	0	**0**	4	40	90	0	0	**130**	0	0	162	3	0	**165**	1	**336**
7:45AM	9	5	17	0	**31**	2	0	0	0	0	**0**	4	36	75	0	0	**111**	0	0	176	2	0	**178**	1	**320**
Hourly Total	76	20	69	0	**165**	10	0	0	0	0	**0**	10	133	285	0	0	**418**	0	0	521	8	0	**529**	4	**1112**
8:00AM	13	6	26	0	**45**	0	0	0	0	0	**0**	3	61	71	0	0	**132**	0	0	184	1	0	**185**	1	**362**
8:15AM	28	13	24	0	**65**	1	0	0	0	0	**0**	3	33	74	0	0	**107**	0	0	159	5	0	**164**	2	**336**
8:30AM	25	9	23	0	**57**	0	0	0	0	0	**0**	1	47	82	0	0	**129**	0	0	130	3	0	**133**	1	**319**
8:45AM	32	12	39	0	**83**	3	0	0	0	0	**0**	2	41	48	0	0	**89**	0	0	121	8	0	**129**	2	**301**
Hourly Total	98	40	112	0	**250**	4	0	0	0	0	**0**	9	182	275	0	0	**457**	0	0	594	17	0	**611**	6	**1318**
4:00PM	17	13	22	0	**52**	1	0	0	0	0	**0**	0	71	90	0	0	**161**	1	0	176	4	0	**180**	0	**393**
4:15PM	11	11	27	0	**49**	2	0	0	0	0	**0**	2	68	78	0	0	**146**	0	0	192	1	0	**193**	1	**388**
4:30PM	6	15	39	0	**60**	3	0	0	0	0	**0**	1	89	80	0	0	**169**	1	0	176	3	0	**179**	1	**408**
4:45PM	14	19	31	0	**64**	0	0	0	0	0	**0**	2	85	98	0	0	**183**	0	0	168	6	0	**174**	1	**421**
Hourly Total	48	58	119	0	**225**	6	0	0	0	0	**0**	5	313	346	0	0	**659**	2	0	712	14	0	**726**	3	**1610**
5:00PM	14	19	19	0	**52**	4	0	0	0	0	**0**	4	82	80	0	0	**162**	0	0	157	1	0	**158**	1	**372**
5:15PM	16	22	27	0	**65**	1	0	0	0	0	**0**	0	93	108	0	0	**201**	0	0	168	5	0	**173**	0	**439**
5:30PM	9	14	29	0	**52**	2	0	0	0	0	**0**	5	81	93	0	0	**174**	0	0	180	3	0	**183**	1	**409**
5:45PM	17	12	33	0	**62**	4	0	0	0	0	**0**	2	93	83	0	0	**176**	0	0	182	5	0	**187**	1	**425**
Hourly Total	56	67	108	0	**231**	11	0	0	0	0	**0**	11	349	364	0	0	**713**	0	0	687	14	0	**701**	3	**1645**
Total	278	185	408	0	**871**	31	0	0	0	0	**0**	35	977	1270	0	0	**2247**	2	0	2514	53	0	**2567**	16	**5685**
% Approach	31.9%	21.2%	46.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	43.5%	56.5%	0%	0%	**-**	-	0%	97.9%	2.1%	0%	**-**	-	-
% Total	4.9%	3.3%	7.2%	0%	**15.3%**	-	0%	0%	0%	0%	**0%**	-	17.2%	22.3%	0%	0%	**39.5%**	-	0%	44.2%	0.9%	0%	**45.2%**	-	-
Motorcycles	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	5
% Motorcycles	0%	1.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	276	181	376	0	**833**	-	0	0	0	0	**0**	-	958	1228	0	0	**2186**	-	0	2415	50	0	**2465**	-	5484
% Lights	99.3%	97.8%	92.2%	0%	**95.6%**	-	0%	0%	0%	0%	**-**	-	98.1%	96.7%	0%	0%	**97.3%**	-	0%	96.1%	94.3%	0%	**96.0%**	-	96.5%
Single-Unit Trucks	1	0	4	0	**5**	-	0	0	0	0	**0**	-	16	13	0	0	**29**	-	0	15	3	0	**18**	-	52
% Single-Unit Trucks	0.4%	0%	1.0%	0%	**0.6%**	-	0%	0%	0%	0%	**-**	-	1.6%	1.0%	0%	0%	**1.3%**	-	0%	0.6%	5.7%	0%	**0.7%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2	1	0	0	**3**	-	0	3	0	0	**3**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.2%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	1	2	28	0	**31**	-	0	0	0	0	**0**	-	1	28	0	0	**29**	-	0	78	0	0	**78**	-	138
% Buses	0.4%	1.1%	6.9%	0%	**3.6%**	-	0%	0%	0%	0%	**-**	-	0.1%	2.2%	0%	0%	**1.3%**	-	0%	3.1%	0%	0%	**3.0%**	-	2.4%
Pedestrians	-	-	-	-	-	27	-	-	-	-	-	29	-	-	-	-	-	1	-	-	-	-	-	16	
% Pedestrians	-	-	-	-	-	87.1%	-	-	-	-	-	82.9%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	12.9%	-	-	-	-	-	17.1%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Spur 527 NBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Spur 527 NBFR Northbound						Spur 527 NBFR Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	15	6	20	0	**41**	1	0	0	0	0	**0**	4	40	90	0	0	**130**	0	0	162	3	0	**165**	1	**336**
7:45AM	9	5	17	0	**31**	2	0	0	0	0	**0**	4	36	75	0	0	**111**	0	0	176	2	0	**178**	1	**320**
8:00AM	13	6	26	0	**45**	0	0	0	0	0	**0**	3	61	71	0	0	**132**	0	0	184	1	0	**185**	1	**362**
8:15AM	28	13	24	0	**65**	1	0	0	0	0	**0**	3	33	74	0	0	**107**	0	0	159	5	0	**164**	2	**336**
Total	65	30	87	0	**182**	4	0	0	0	0	**0**	14	170	310	0	0	**480**	0	0	681	11	0	**692**	5	**1354**
% Approach	35.7%	16.5%	47.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	35.4%	64.6%	0%	0%	**-**	-	0%	98.4%	1.6%	0%	**-**	-	-
% Total	4.8%	2.2%	6.4%	0%	**13.4%**	-	0%	0%	0%	0%	**0%**	-	12.6%	22.9%	0%	0%	**35.5%**	-	0%	50.3%	0.8%	0%	**51.1%**	-	-
PHF	0.580	0.577	0.837	-	**0.700**	-	-	-	-	-	**-**	-	0.697	0.861	-	-	**0.909**	-	-	0.925	0.550	-	**0.935**	-	0.935
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	65	30	81	0	**176**	-	0	0	0	0	**0**	-	170	300	0	0	**470**	-	0	651	11	0	**662**	-	1308
% Lights	100%	100%	93.1%	0%	**96.7%**	-	0%	0%	0%	0%	**-**	-	100%	96.8%	0%	0%	**97.9%**	-	0%	95.6%	100%	0%	**95.7%**	-	96.6%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	6	0	0	**6**	-	8
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	0.9%	0%	0%	**0.9%**	-	0.6%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.1%
Buses	0	0	6	0	**6**	-	0	0	0	0	**0**	-	0	8	0	0	**8**	-	0	21	0	0	**21**	-	35
% Buses	0%	0%	6.9%	0%	**3.3%**	-	0%	0%	0%	0%	**-**	-	0%	2.6%	0%	0%	**1.7%**	-	0%	3.1%	0%	0%	**3.0%**	-	2.6%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	13	-	-	-	-	-	0	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	92.9%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	7.1%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 NBFR - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

Provided by: C. J. Hensch & Associates Inc.
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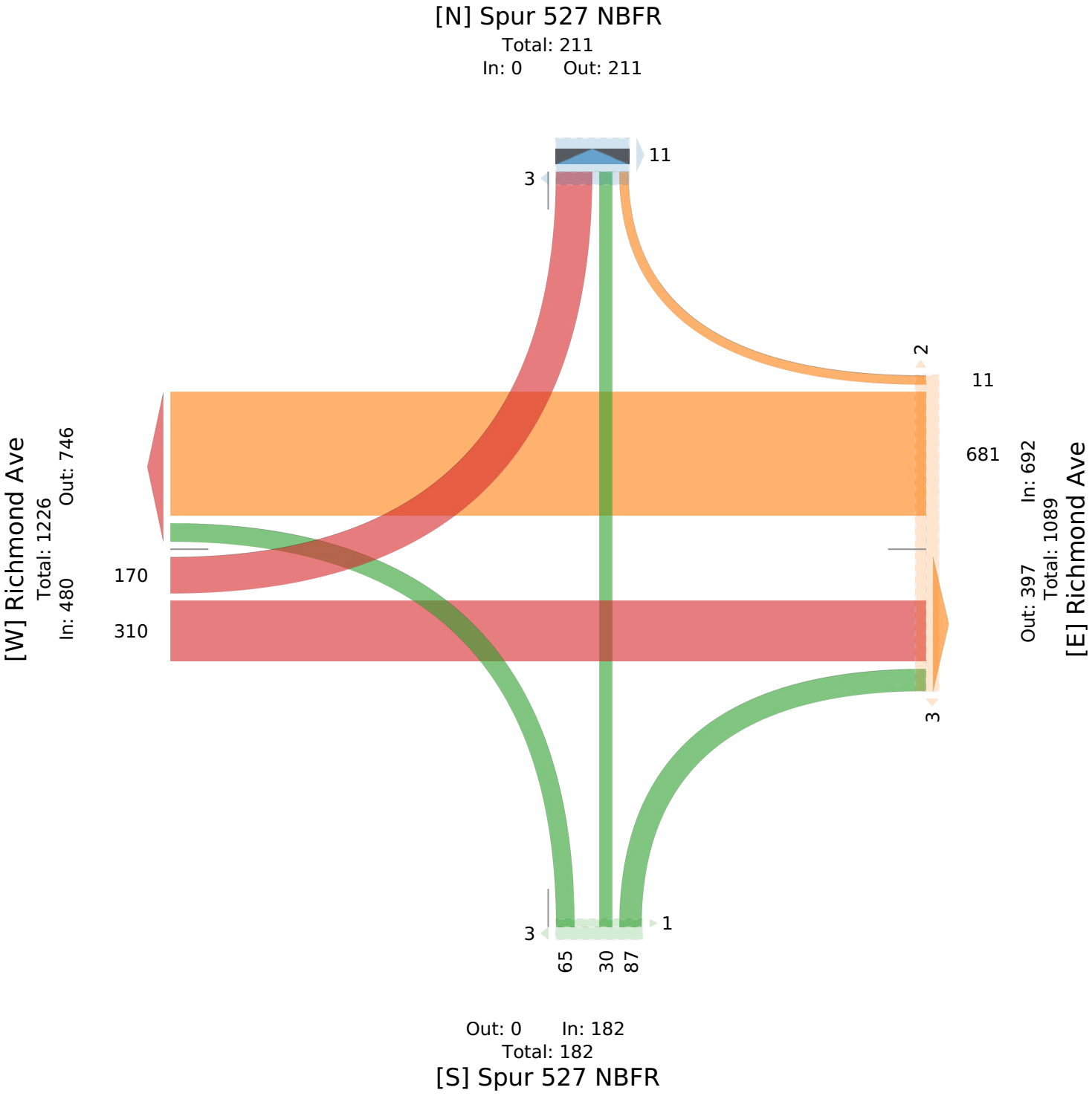


Richmond Ave at Spur 527 NBFR - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

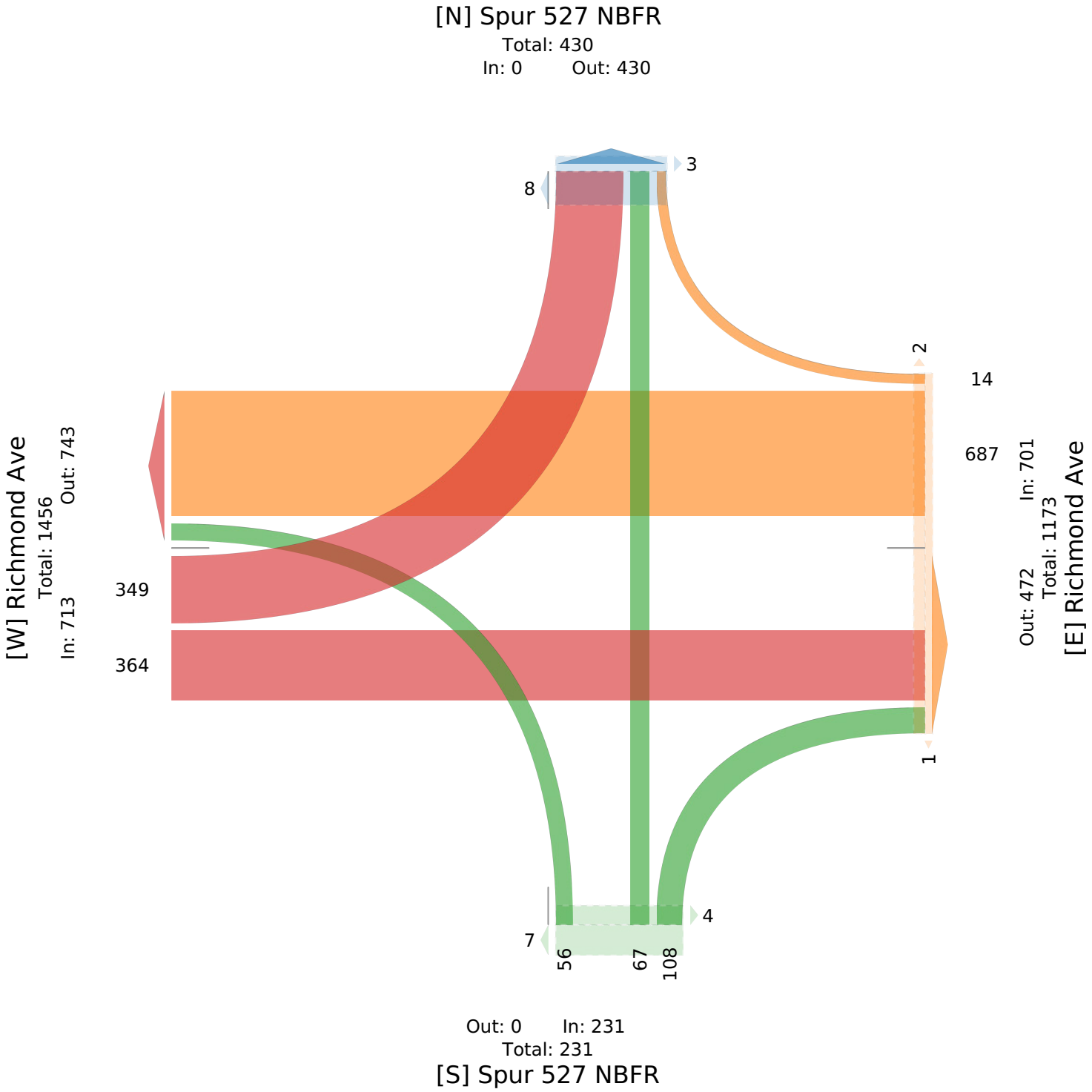
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Spur 527 NBFR Northbound						Spur 527 NBFR Southbound						Richmond Ave Eastbound						Richmond Ave Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 5:00PM	14	19	19	0	**52**	4	0	0	0	0	**0**	4	82	80	0	0	**162**	0	0	157	1	0	**158**	1	**372**
5:15PM	16	22	27	0	**65**	1	0	0	0	0	**0**	0	93	108	0	0	**201**	0	0	168	5	0	**173**	0	**439**
5:30PM	9	14	29	0	**52**	2	0	0	0	0	**0**	5	81	93	0	0	**174**	0	0	180	3	0	**183**	1	**409**
5:45PM	17	12	33	0	**62**	4	0	0	0	0	**0**	2	93	83	0	0	**176**	0	0	182	5	0	**187**	1	**425**
Total	56	67	108	0	**231**	11	0	0	0	0	**0**	11	349	364	0	0	**713**	0	0	687	14	0	**701**	3	**1645**
% Approach	24.2%	29.0%	46.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	48.9%	51.1%	0%	0%	**-**	-	0%	98.0%	2.0%	0%	**-**	-	-
% Total	3.4%	4.1%	6.6%	0%	**14.0%**	-	0%	0%	0%	0%	**0%**	-	21.2%	22.1%	0%	0%	**43.3%**	-	0%	41.8%	0.9%	0%	**42.6%**	-	-
PHF	0.824	0.761	0.818	-	**0.888**	-	-	-	-	-	**-**	-	0.938	0.843	-	-	**0.887**	-	-	0.944	0.700	-	**0.937**	-	0.937
Motorcycles	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Motorcycles	0%	3.0%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.2%
Lights	55	64	97	0	**216**	-	0	0	0	0	**0**	-	344	354	0	0	**698**	-	0	661	12	0	**673**	-	1587
% Lights	98.2%	95.5%	89.8%	0%	**93.5%**	-	0%	0%	0%	0%	**-**	-	98.6%	97.3%	0%	0%	**97.9%**	-	0%	96.2%	85.7%	0%	**96.0%**	-	96.5%
Single-Unit Trucks	0	0	2	0	**2**	-	0	0	0	0	**0**	-	4	6	0	0	**10**	-	0	1	2	0	**3**	-	15
% Single-Unit Trucks	0%	0%	1.9%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	1.1%	1.6%	0%	0%	**1.4%**	-	0%	0.1%	14.3%	0%	**0.4%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	1	1	9	0	**11**	-	0	0	0	0	**0**	-	1	4	0	0	**5**	-	0	22	0	0	**22**	-	38
% Buses	1.8%	1.5%	8.3%	0%	**4.8%**	-	0%	0%	0%	0%	**-**	-	0.3%	1.1%	0%	0%	**0.7%**	-	0%	3.2%	0%	0%	**3.1%**	-	2.3%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	72.7%	-	-	-	-	-	72.7%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	27.3%	-	-	-	-	-	27.3%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Spur 527 NBFR - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867332, Location: 29.73458, -95.384846

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Main St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

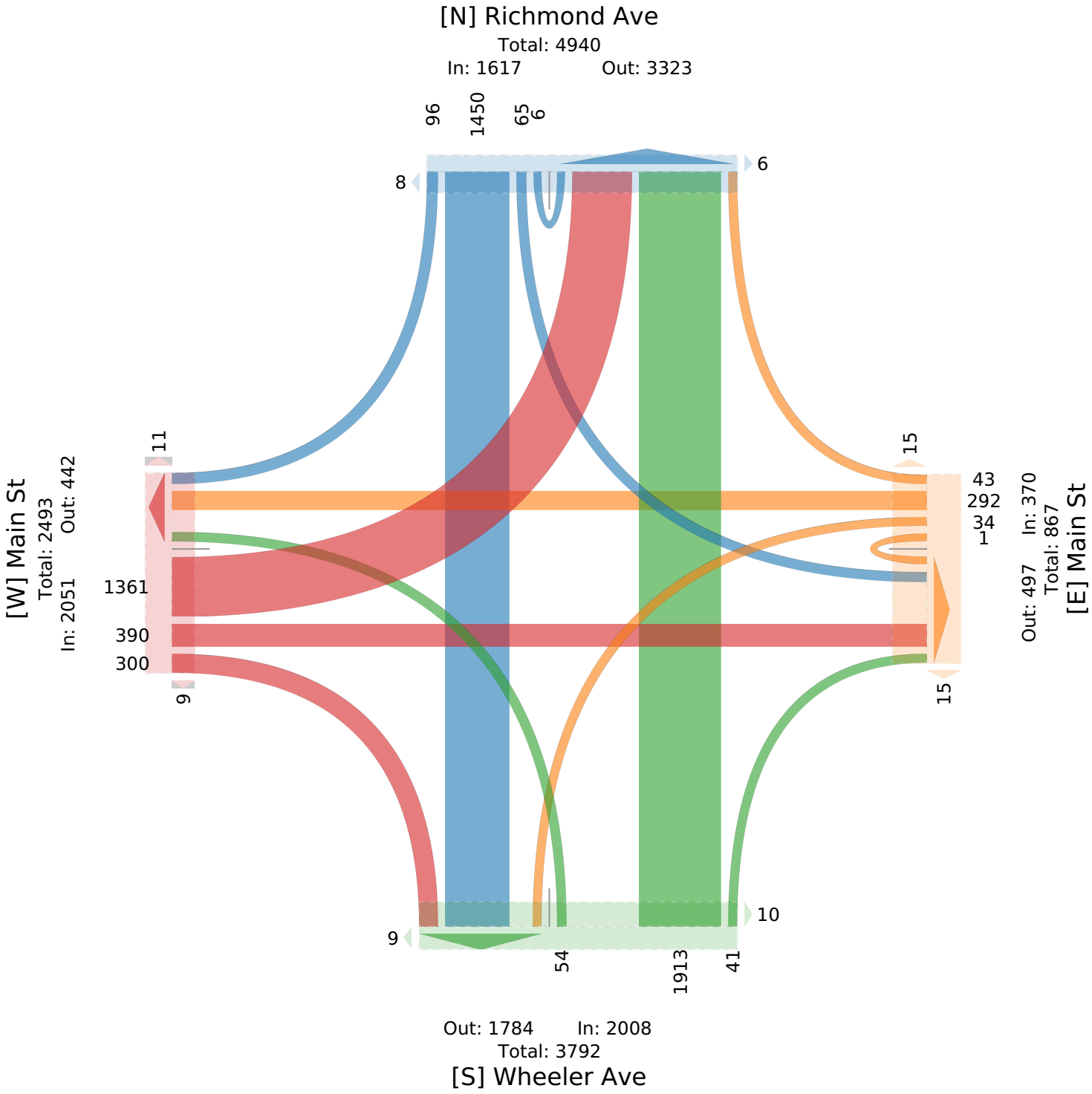
Leg	Wheeler Ave						Richmond Ave						Main St						Main St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	1	57	1	0	**59**	1	4	57	3	0	**64**	0	53	11	11	0	**75**	2	1	12	1	0	**14**	0	**212**
7:15AM	2	79	3	0	**84**	0	2	82	5	2	**91**	2	60	13	12	0	**85**	0	4	21	1	0	**26**	2	**286**
7:30AM	0	132	1	0	**133**	1	5	82	14	2	**103**	0	78	10	14	0	**102**	2	2	17	2	0	**21**	0	**359**
7:45AM	7	156	5	0	**168**	0	5	80	12	2	**99**	0	81	11	22	0	**114**	0	1	21	3	1	**26**	1	**407**
Hourly Total	10	424	10	0	**444**	2	16	301	34	6	**357**	2	272	45	59	0	**376**	4	8	71	7	1	**87**	3	**1264**
8:00AM	6	140	3	0	**149**	0	2	72	11	0	**85**	2	71	15	14	0	**100**	0	1	21	3	0	**25**	6	**359**
8:15AM	4	123	5	0	**132**	0	3	79	11	0	**93**	0	67	15	15	0	**97**	0	0	18	6	0	**24**	1	**346**
8:30AM	2	102	3	0	**107**	2	1	77	12	0	**90**	1	51	11	18	0	**80**	0	2	30	0	0	**32**	1	**309**
8:45AM	5	84	2	0	**91**	2	7	72	7	0	**86**	0	69	21	15	0	**105**	0	0	25	2	0	**27**	0	**309**
Hourly Total	17	449	13	0	**479**	4	13	300	41	0	**354**	3	258	62	62	0	**382**	0	3	94	11	0	**108**	8	**1323**
4:00PM	2	129	0	0	**131**	1	2	103	3	0	**108**	0	104	41	19	0	**164**	0	0	14	6	0	**20**	2	**423**
4:15PM	4	140	2	0	**146**	1	1	94	2	0	**97**	0	124	32	20	0	**176**	2	1	15	1	0	**17**	2	**436**
4:30PM	2	127	6	0	**135**	3	6	104	2	0	**112**	1	96	32	21	0	**149**	5	7	11	3	0	**21**	1	**417**
4:45PM	3	108	3	0	**114**	4	5	111	1	0	**117**	2	97	28	17	0	**142**	1	2	15	3	0	**20**	4	**393**
Hourly Total	11	504	11	0	**526**	9	14	412	8	0	**434**	3	421	133	77	0	**631**	8	10	55	13	0	**78**	9	**1669**
5:00PM	8	122	0	0	**130**	2	11	96	4	0	**111**	2	100	34	18	0	**152**	0	7	21	4	0	**32**	3	**425**
5:15PM	4	135	3	0	**142**	0	3	124	3	0	**130**	0	105	44	28	0	**177**	0	1	19	2	0	**22**	0	**471**
5:30PM	3	148	2	0	**153**	1	6	98	5	0	**109**	2	110	42	25	0	**177**	4	2	19	3	0	**24**	3	**463**
5:45PM	1	131	2	0	**134**	1	2	119	1	0	**122**	2	95	30	31	0	**156**	4	3	13	3	0	**19**	4	**431**
Hourly Total	16	536	7	0	**559**	4	22	437	13	0	**472**	6	410	150	102	0	**662**	8	13	72	12	0	**97**	10	**1790**
Total	54	1913	41	0	**2008**	19	65	1450	96	6	**1617**	14	1361	390	300	0	**2051**	20	34	292	43	1	**370**	30	**6046**
% Approach	2.7%	95.3%	2.0%	0%	**-**	-	4.0%	89.7%	5.9%	0.4%	**-**	-	66.4%	19.0%	14.6%	0%	**-**	-	9.2%	78.9%	11.6%	0.3%	**-**	-	-
% Total	0.9%	31.6%	0.7%	0%	**33.2%**	-	1.1%	24.0%	1.6%	0.1%	**26.7%**	-	22.5%	6.5%	5.0%	0%	**33.9%**	-	0.6%	4.8%	0.7%	0%	**6.1%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0.3%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	49	1888	41	0	**1978**	-	64	1373	95	4	**1536**	-	1260	343	261	0	**1864**	-	31	252	42	1	**326**	-	5704
% Lights	90.7%	98.7%	100%	0%	**98.5%**	-	98.5%	94.7%	99.0%	66.7%	**95.0%**	-	92.6%	87.9%	87.0%	0%	**90.9%**	-	91.2%	86.3%	97.7%	100%	**88.1%**	-	94.3%
Single-Unit Trucks	0	14	0	0	**14**	-	1	14	1	0	**16**	-	13	6	5	0	**24**	-	1	1	1	0	**3**	-	57
% Single-Unit Trucks	0%	0.7%	0%	0%	**0.7%**	-	1.5%	1.0%	1.0%	0%	**1.0%**	-	1.0%	1.5%	1.7%	0%	**1.2%**	-	2.9%	0.3%	2.3%	0%	**0.8%**	-	0.9%
Articulated Trucks	0	2	0	0	**2**	-	0	3	0	0	**3**	-	3	14	0	0	**17**	-	0	1	0	0	**1**	-	23
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.2%	3.6%	0%	0%	**0.8%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.4%
Buses	5	9	0	0	**14**	-	0	58	0	2	**60**	-	85	27	33	0	**145**	-	2	38	0	0	**40**	-	259
% Buses	9.3%	0.5%	0%	0%	**0.7%**	-	0%	4.0%	0%	33.3%	**3.7%**	-	6.2%	6.9%	11.0%	0%	**7.1%**	-	5.9%	13.0%	0%	0%	**10.8%**	-	4.3%
Pedestrians	-	-	-	-	-	19	-	-	-	-	-	11	-	-	-	-	-	18	-	-	-	-	-	24	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	78.6%	-	-	-	-	-	90.0%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	6	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	21.4%	-	-	-	-	-	10.0%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Main St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Main St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

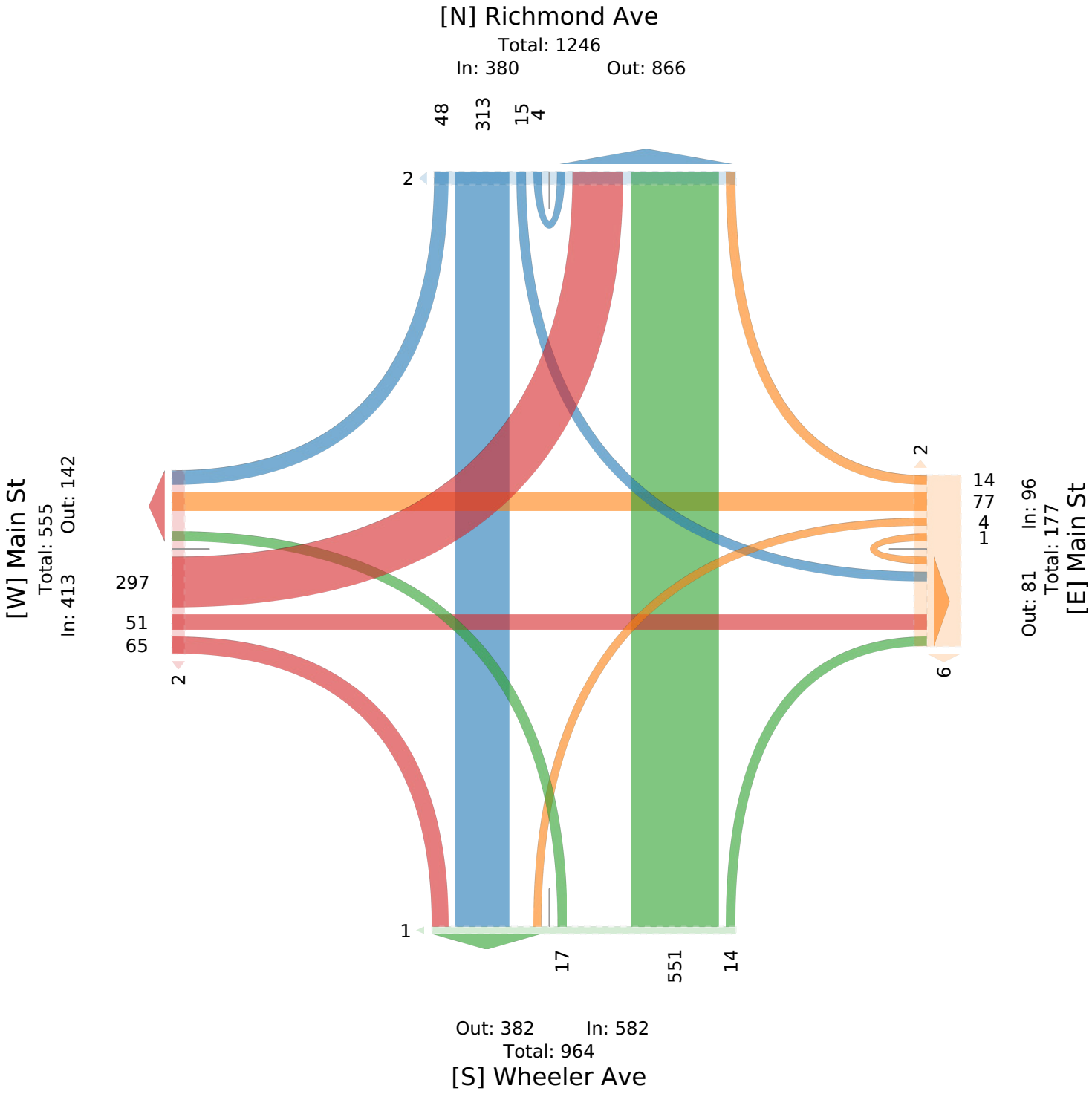
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Richmond Ave						Main St						Main St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	0	132	1	0	**133**	1	5	82	14	2	**103**	0	78	10	14	0	**102**	2	2	17	2	0	**21**	0	**359**
7:45AM	7	156	5	0	**168**	0	5	80	12	2	**99**	0	81	11	22	0	**114**	0	1	21	3	1	**26**	1	**407**
8:00AM	6	140	3	0	**149**	0	2	72	11	0	**85**	2	71	15	14	0	**100**	0	1	21	3	0	**25**	6	**359**
8:15AM	4	123	5	0	**132**	0	3	79	11	0	**93**	0	67	15	15	0	**97**	0	0	18	6	0	**24**	1	**346**
Total	17	551	14	0	**582**	1	15	313	48	4	**380**	2	297	51	65	0	**413**	2	4	77	14	1	**96**	8	**1471**
% Approach	2.9%	94.7%	2.4%	0%	**-**	-	3.9%	82.4%	12.6%	1.1%	**-**	-	71.9%	12.3%	15.7%	0%	**-**	-	4.2%	80.2%	14.6%	1.0%	**-**	-	-
% Total	1.2%	37.5%	1.0%	0%	**39.6%**	-	1.0%	21.3%	3.3%	0.3%	**25.8%**	-	20.2%	3.5%	4.4%	0%	**28.1%**	-	0.3%	5.2%	1.0%	0.1%	**6.5%**	-	-
PHF	0.607	0.883	0.700	-	**0.866**	-	0.750	0.954	0.857	0.500	**0.922**	-	0.917	0.850	0.739	-	**0.906**	-	0.500	0.917	0.583	0.250	**0.923**	-	0.904
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	16	542	14	0	**572**	-	14	297	48	4	**363**	-	273	40	56	0	**369**	-	4	68	14	1	**87**	-	1391
% Lights	94.1%	98.4%	100%	0%	**98.3%**	-	93.3%	94.9%	100%	100%	**95.5%**	-	91.9%	78.4%	86.2%	0%	**89.3%**	-	100%	88.3%	100%	100%	**90.6%**	-	94.6%
Single-Unit Trucks	0	4	0	0	**4**	-	1	2	0	0	**3**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	9
% Single-Unit Trucks	0%	0.7%	0%	0%	**0.7%**	-	6.7%	0.6%	0%	0%	**0.8%**	-	0.3%	2.0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.6%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2	1	0	0	**3**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.7%	2.0%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Buses	1	4	0	0	**5**	-	0	14	0	0	**14**	-	21	9	9	0	**39**	-	0	9	0	0	**9**	-	67
% Buses	5.9%	0.7%	0%	0%	**0.9%**	-	0%	4.5%	0%	0%	**3.7%**	-	7.1%	17.6%	13.8%	0%	**9.4%**	-	0%	11.7%	0%	0%	**9.4%**	-	4.6%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	87.5%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	12.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Main St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Richmond Ave at Main St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

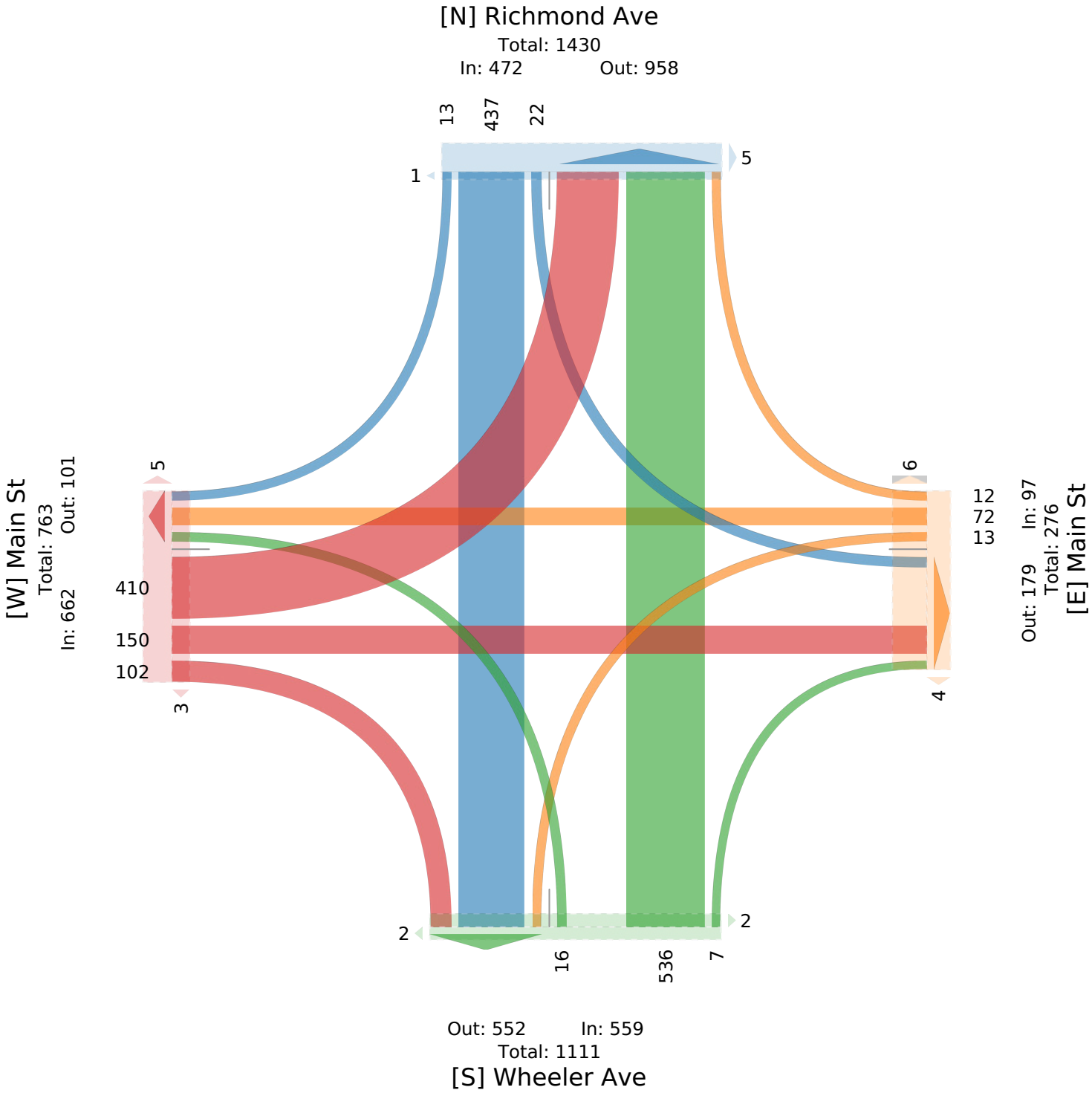
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Richmond Ave						Main St						Main St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	8	122	0	0	**130**	2	11	96	4	0	**111**	2	100	34	18	0	**152**	0	7	21	4	0	**32**	3	**425**
5:15PM	4	135	3	0	**142**	0	3	124	3	0	**130**	0	105	44	28	0	**177**	0	1	19	2	0	**22**	0	**471**
5:30PM	3	148	2	0	**153**	1	6	98	5	0	**109**	2	110	42	25	0	**177**	4	2	19	3	0	**24**	3	**463**
5:45PM	1	131	2	0	**134**	1	2	119	1	0	**122**	2	95	30	31	0	**156**	4	3	13	3	0	**19**	4	**431**
Total	16	536	7	0	**559**	4	22	437	13	0	**472**	6	410	150	102	0	**662**	8	13	72	12	0	**97**	10	**1790**
% Approach	2.9%	95.9%	1.3%	0%	**-**	-	4.7%	92.6%	2.8%	0%	**-**	-	61.9%	22.7%	15.4%	0%	**-**	-	13.4%	74.2%	12.4%	0%	**-**	-	-
% Total	0.9%	29.9%	0.4%	0%	**31.2%**	-	1.2%	24.4%	0.7%	0%	**26.4%**	-	22.9%	8.4%	5.7%	0%	**37.0%**	-	0.7%	4.0%	0.7%	0%	**5.4%**	-	-
PHF	0.500	0.905	0.583	-	**0.913**	-	0.500	0.881	0.650	-	**0.908**	-	0.932	0.852	0.823	-	**0.935**	-	0.464	0.857	0.750	-	**0.758**	-	0.950
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	14	532	7	0	**553**	-	22	412	12	0	**446**	-	378	140	95	0	**613**	-	12	60	12	0	**84**	-	1696
% Lights	87.5%	99.3%	100%	0%	**98.9%**	-	100%	94.3%	92.3%	0%	**94.5%**	-	92.2%	93.3%	93.1%	0%	**92.6%**	-	92.3%	83.3%	100%	0%	**86.6%**	-	94.7%
Single-Unit Trucks	0	2	0	0	**2**	-	0	6	1	0	**7**	-	5	0	0	0	**5**	-	0	1	0	0	**1**	-	15
% Single-Unit Trucks	0%	0.4%	0%	0%	**0.4%**	-	0%	1.4%	7.7%	0%	**1.5%**	-	1.2%	0%	0%	0%	**0.8%**	-	0%	1.4%	0%	0%	**1.0%**	-	0.8%
Articulated Trucks	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	12
% Articulated Trucks	0%	0.2%	0%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	6.0%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0.7%
Buses	2	1	0	0	**3**	-	0	15	0	0	**15**	-	27	1	7	0	**35**	-	1	11	0	0	**12**	-	65
% Buses	12.5%	0.2%	0%	0%	**0.5%**	-	0%	3.4%	0%	0%	**3.2%**	-	6.6%	0.7%	6.9%	0%	**5.3%**	-	7.7%	15.3%	0%	0%	**12.4%**	-	3.6%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	7	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	87.5%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	12.5%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Richmond Ave at Main St - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867333, Location: 29.734117, -95.382975

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Fannin St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867334, Location: 29.733591, -95.382113

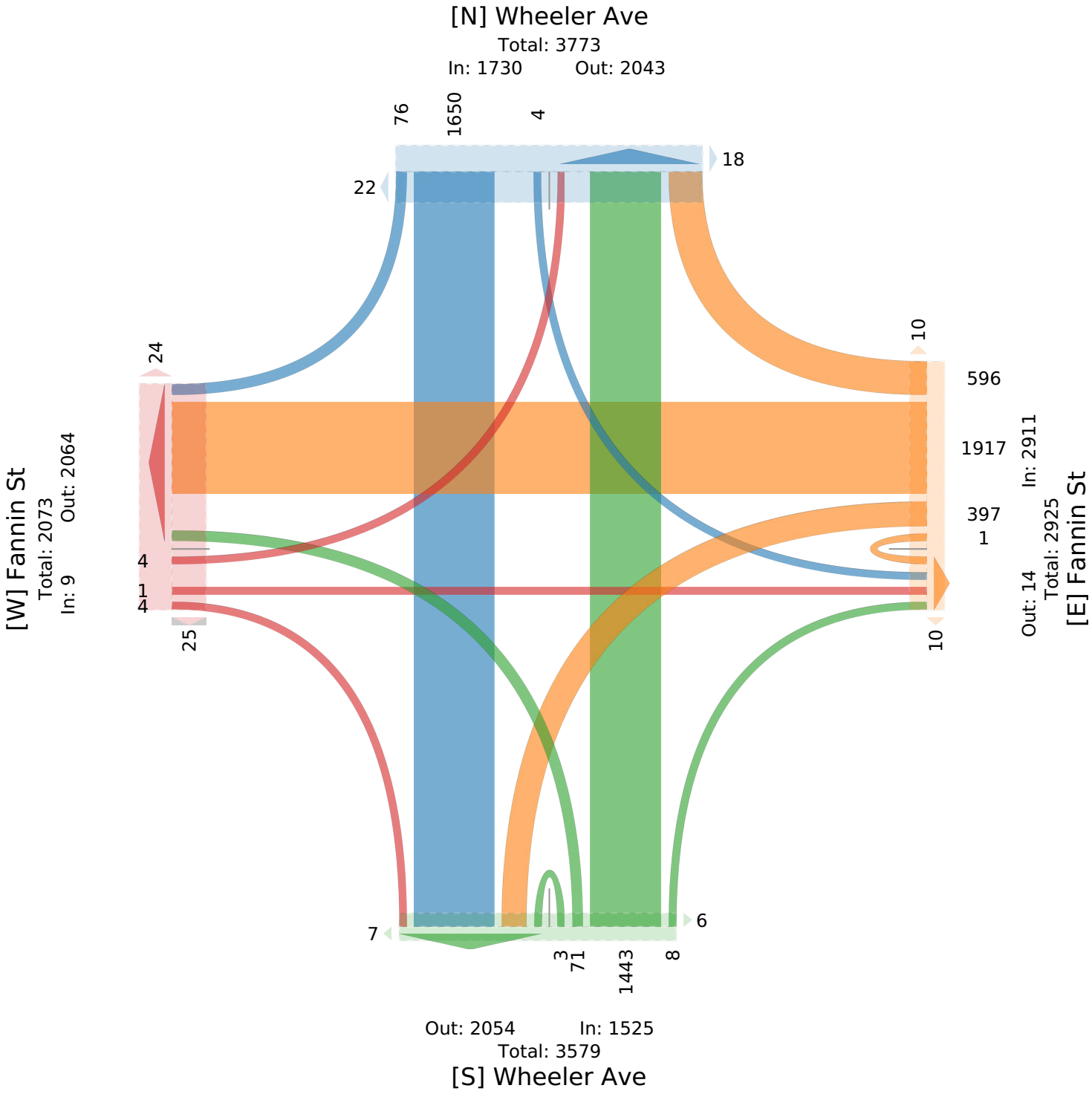
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						Fannin St						Fannin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	5	45	0	0	**50**	0	1	60	1	0	**62**	4	0	0	0	0	**0**	6	9	80	16	0	**105**	2	**217**
7:15AM	5	61	0	0	**66**	1	0	84	7	0	**91**	1	0	0	0	0	**0**	0	18	129	17	0	**164**	0	**321**
7:30AM	10	97	1	0	**108**	0	0	91	3	0	**94**	2	1	0	0	0	**1**	1	28	158	26	0	**212**	0	**415**
7:45AM	3	115	2	0	**120**	0	0	77	5	0	**82**	1	0	0	0	0	**0**	3	38	187	47	0	**272**	1	**474**
Hourly Total	23	318	3	0	**344**	1	1	312	16	0	**329**	8	1	0	0	0	**1**	10	93	554	106	0	**753**	3	**1427**
8:00AM	1	111	0	2	**114**	0	0	101	2	0	**103**	2	0	0	1	0	**1**	3	22	166	48	1	**237**	1	**455**
8:15AM	10	103	0	0	**113**	1	0	86	3	0	**89**	4	0	0	0	0	**0**	4	28	154	43	0	**225**	2	**427**
8:30AM	7	82	0	0	**89**	0	0	95	4	0	**99**	4	0	0	0	0	**0**	2	19	194	39	0	**252**	0	**440**
8:45AM	6	69	0	0	**75**	5	0	84	2	0	**86**	2	1	0	0	0	**1**	4	18	145	28	0	**191**	0	**353**
Hourly Total	24	365	0	2	**391**	6	0	366	11	0	**377**	12	1	0	1	0	**2**	13	87	659	158	1	**905**	3	**1675**
4:00PM	0	86	1	0	**87**	0	0	100	4	0	**104**	0	0	0	0	0	**0**	0	20	84	44	0	**148**	0	**339**
4:15PM	6	102	0	0	**108**	1	0	119	7	0	**126**	2	0	0	1	0	**1**	6	27	96	49	0	**172**	2	**407**
4:30PM	1	98	1	0	**100**	1	0	120	6	0	**126**	3	1	1	1	0	**3**	6	27	83	42	0	**152**	0	**381**
4:45PM	4	82	3	0	**89**	0	0	127	5	0	**132**	1	0	0	1	0	**1**	3	18	89	39	0	**146**	1	**368**
Hourly Total	11	368	5	0	**384**	2	0	466	22	0	**488**	6	1	1	3	0	**5**	15	92	352	174	0	**618**	3	**1495**
5:00PM	5	94	0	0	**99**	2	0	96	7	0	**103**	2	1	0	0	0	**1**	2	35	94	30	0	**159**	0	**362**
5:15PM	4	99	0	1	**104**	2	0	145	7	0	**152**	1	0	0	0	0	**0**	0	21	96	42	0	**159**	3	**415**
5:30PM	3	101	0	0	**104**	0	2	125	5	0	**132**	4	0	0	0	0	**0**	3	30	72	36	0	**138**	6	**374**
5:45PM	1	98	0	0	**99**	0	1	140	8	0	**149**	7	0	0	0	0	**0**	6	39	90	50	0	**179**	2	**427**
Hourly Total	13	392	0	1	**406**	4	3	506	27	0	**536**	14	1	0	0	0	**1**	11	125	352	158	0	**635**	11	**1578**
Total	71	1443	8	3	**1525**	13	4	1650	76	0	**1730**	40	4	1	4	0	**9**	49	397	1917	596	1	**2911**	20	**6175**
% Approach	4.7%	94.6%	0.5%	0.2%	**-**	-	0.2%	95.4%	4.4%	0%	**-**	-	44.4%	11.1%	44.4%	0%	**-**	-	13.6%	65.9%	20.5%	0%	**-**	-	-
% Total	1.1%	23.4%	0.1%	0%	**24.7%**	-	0.1%	26.7%	1.2%	0%	**28.0%**	-	0.1%	0%	0.1%	0%	**0.1%**	-	6.4%	31.0%	9.7%	0%	**47.1%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	5
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	69	1403	8	3	**1483**	-	3	1585	75	0	**1663**	-	3	1	4	0	**8**	-	392	1881	586	1	**2860**	-	6014
% Lights	97.2%	97.2%	100%	100%	**97.2%**	-	75.0%	96.1%	98.7%	0%	**96.1%**	-	75.0%	100%	100%	0%	**88.9%**	-	98.7%	98.1%	98.3%	100%	**98.2%**	-	97.4%
Single-Unit Trucks	2	10	0	0	**12**	-	1	21	0	0	**22**	-	1	0	0	0	**1**	-	2	22	7	0	**31**	-	66
% Single-Unit Trucks	2.8%	0.7%	0%	0%	**0.8%**	-	25.0%	1.3%	0%	0%	**1.3%**	-	25.0%	0%	0%	0%	**11.1%**	-	0.5%	1.1%	1.2%	0%	**1.1%**	-	1.1%
Articulated Trucks	0	2	0	0	**2**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	7
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	0	28	0	0	**28**	-	0	38	1	0	**39**	-	0	0	0	0	**0**	-	3	10	3	0	**16**	-	83
% Buses	0%	1.9%	0%	0%	**1.8%**	-	0%	2.3%	1.3%	0%	**2.3%**	-	0%	0%	0%	0%	**0%**	-	0.8%	0.5%	0.5%	0%	**0.5%**	-	1.3%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	33	-	-	-	-	-	39	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	82.5%	-	-	-	-	-	79.6%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	10	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	17.5%	-	-	-	-	-	20.4%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Fannin St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867334, Location: 29.733591, -95.382113

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Fannin St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867334, Location: 29.733591, -95.382113

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						Fannin St						Fannin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:45AM	3	115	2	0	**120**	0	0	77	5	0	**82**	1	0	0	0	0	**0**	3	38	187	47	0	**272**	1	**474**
8:00AM	1	111	0	2	**114**	0	0	101	2	0	**103**	2	0	0	1	0	**1**	3	22	166	48	1	**237**	1	**455**
8:15AM	10	103	0	0	**113**	1	0	86	3	0	**89**	4	0	0	0	0	**0**	4	28	154	43	0	**225**	2	**427**
8:30AM	7	82	0	0	**89**	0	0	95	4	0	**99**	4	0	0	0	0	**0**	2	19	194	39	0	**252**	0	**440**
Total	21	411	2	2	**436**	1	0	359	14	0	**373**	11	0	0	1	0	**1**	12	107	701	177	1	**986**	4	**1796**
% Approach	4.8%	94.3%	0.5%	0.5%	**-**	-	0%	96.2%	3.8%	0%	**-**	-	0%	0%	100%	0%	**-**	-	10.9%	71.1%	18.0%	0.1%	**-**	-	-
% Total	1.2%	22.9%	0.1%	0.1%	**24.3%**	-	0%	20.0%	0.8%	0%	**20.8%**	-	0%	0%	0.1%	0%	**0.1%**	-	6.0%	39.0%	9.9%	0.1%	**54.9%**	-	-
PHF	0.525	0.893	0.250	0.250	**0.908**	-	-	0.889	0.700	-	**0.905**	-	-	-	0.250	-	**0.250**	-	0.704	0.903	0.922	0.250	**0.906**	-	0.947
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	20	401	2	2	**425**	-	0	346	14	0	**360**	-	0	0	1	0	**1**	-	105	688	172	1	**966**	-	1752
% Lights	95.2%	97.6%	100%	100%	**97.5%**	-	0%	96.4%	100%	0%	**96.5%**	-	0%	0%	100%	0%	**100%**	-	98.1%	98.1%	97.2%	100%	**98.0%**	-	97.6%
Single-Unit Trucks	1	1	0	0	**2**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	1	9	3	0	**13**	-	17
% Single-Unit Trucks	4.8%	0.2%	0%	0%	**0.5%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.9%	1.3%	1.7%	0%	**1.3%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	0	9	0	0	**9**	-	0	10	0	0	**10**	-	0	0	0	0	**0**	-	1	2	2	0	**5**	-	24
% Buses	0%	2.2%	0%	0%	**2.1%**	-	0%	2.8%	0%	0%	**2.7%**	-	0%	0%	0%	0%	**0%**	-	0.9%	0.3%	1.1%	0%	**0.5%**	-	1.3%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	11	-	-	-	-	-	11	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	91.7%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	8.3%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Fannin St - TMC

Wed Sep 1, 2021

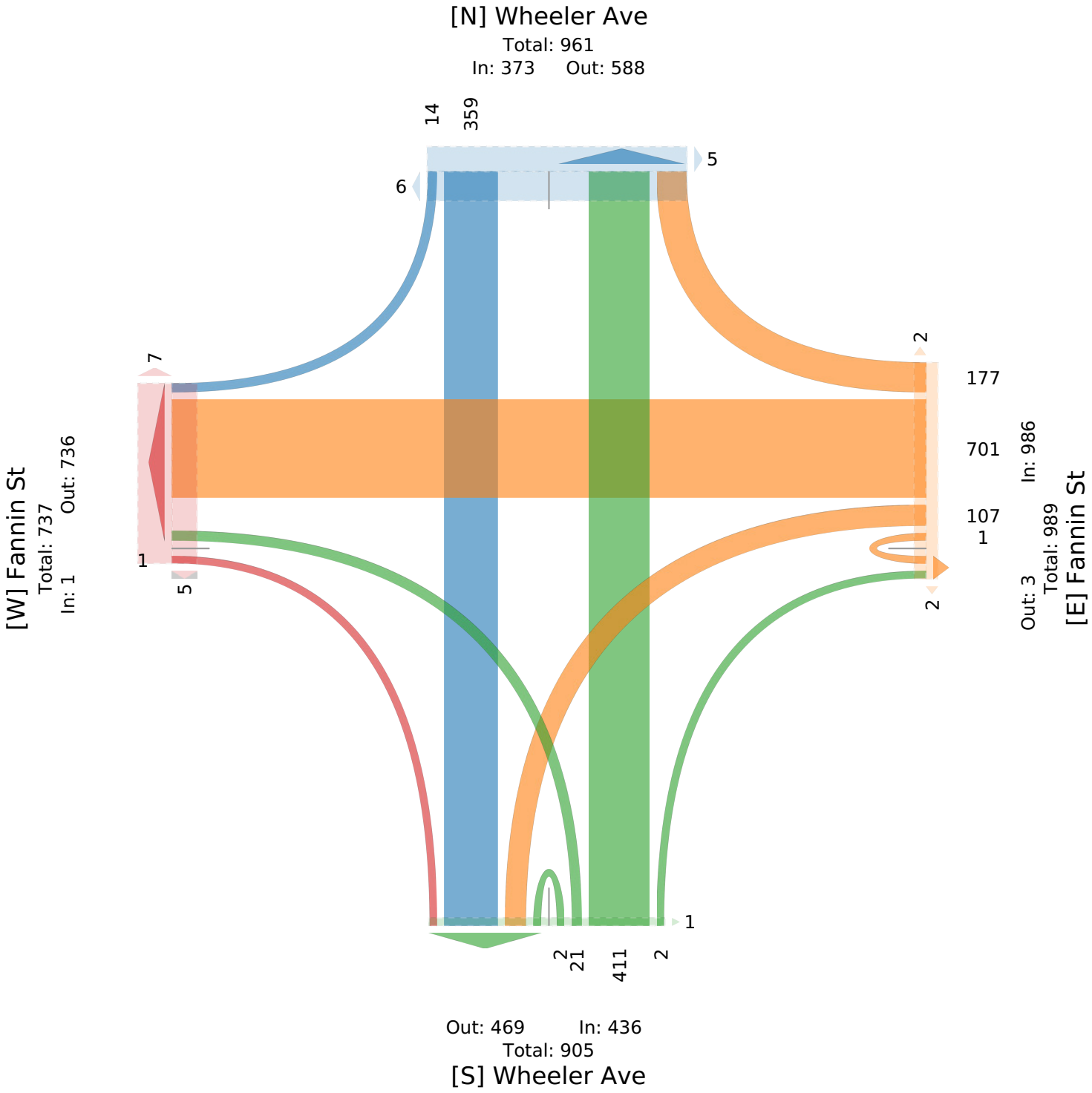
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 867334, Location: 29.733591, -95.382113

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Fannin St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867334, Location: 29.733591, -95.382113

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						Fannin St						Fannin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	5	94	0	0	**99**	2	0	96	7	0	**103**	2	1	0	0	0	**1**	2	35	94	30	0	**159**	0	**362**
5:15PM	4	99	0	1	**104**	2	0	145	7	0	**152**	1	0	0	0	0	**0**	0	21	96	42	0	**159**	3	**415**
5:30PM	3	101	0	0	**104**	0	2	125	5	0	**132**	4	0	0	0	0	**0**	3	30	72	36	0	**138**	6	**374**
5:45PM	1	98	0	0	**99**	0	1	140	8	0	**149**	7	0	0	0	0	**0**	6	39	90	50	0	**179**	2	**427**
Total	13	392	0	1	**406**	4	3	506	27	0	**536**	14	1	0	0	0	**1**	11	125	352	158	0	**635**	11	**1578**
% Approach	3.2%	96.6%	0%	0.2%	**-**	-	0.6%	94.4%	5.0%	0%	**-**	-	100%	0%	0%	0%	**-**	-	19.7%	55.4%	24.9%	0%	**-**	-	-
% Total	0.8%	24.8%	0%	0.1%	**25.7%**	-	0.2%	32.1%	1.7%	0%	**34.0%**	-	0.1%	0%	0%	0%	**0.1%**	-	7.9%	22.3%	10.0%	0%	**40.2%**	-	-
PHF	0.650	0.970	-	0.250	**0.976**	-	0.375	0.872	0.844	-	**0.882**	-	0.250	-	-	-	**0.250**	-	0.801	0.917	0.790	-	**0.887**	-	0.924
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	12	382	0	1	**395**	-	3	486	27	0	**516**	-	1	0	0	0	**1**	-	123	349	158	0	**630**	-	1542
% Lights	92.3%	97.4%	0%	100%	**97.3%**	-	100%	96.0%	100%	0%	**96.3%**	-	100%	0%	0%	0%	**100%**	-	98.4%	99.1%	100%	0%	**99.2%**	-	97.7%
Single-Unit Trucks	1	3	0	0	**4**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	15
% Single-Unit Trucks	7.7%	0.8%	0%	0%	**1.0%**	-	0%	1.8%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0.8%	0.3%	0%	0%	**0.3%**	-	1.0%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	6	0	0	**6**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	1	2	0	0	**3**	-	18
% Buses	0%	1.5%	0%	0%	**1.5%**	-	0%	1.8%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0.8%	0.6%	0%	0%	**0.5%**	-	1.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	10	-	-	-	-	-	10	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	71.4%	-	-	-	-	-	90.9%	-	-	-	-	-	81.8%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	28.6%	-	-	-	-	-	9.1%	-	-	-	-	-	18.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Fannin St - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867334, Location: 29.733591, -95.382113

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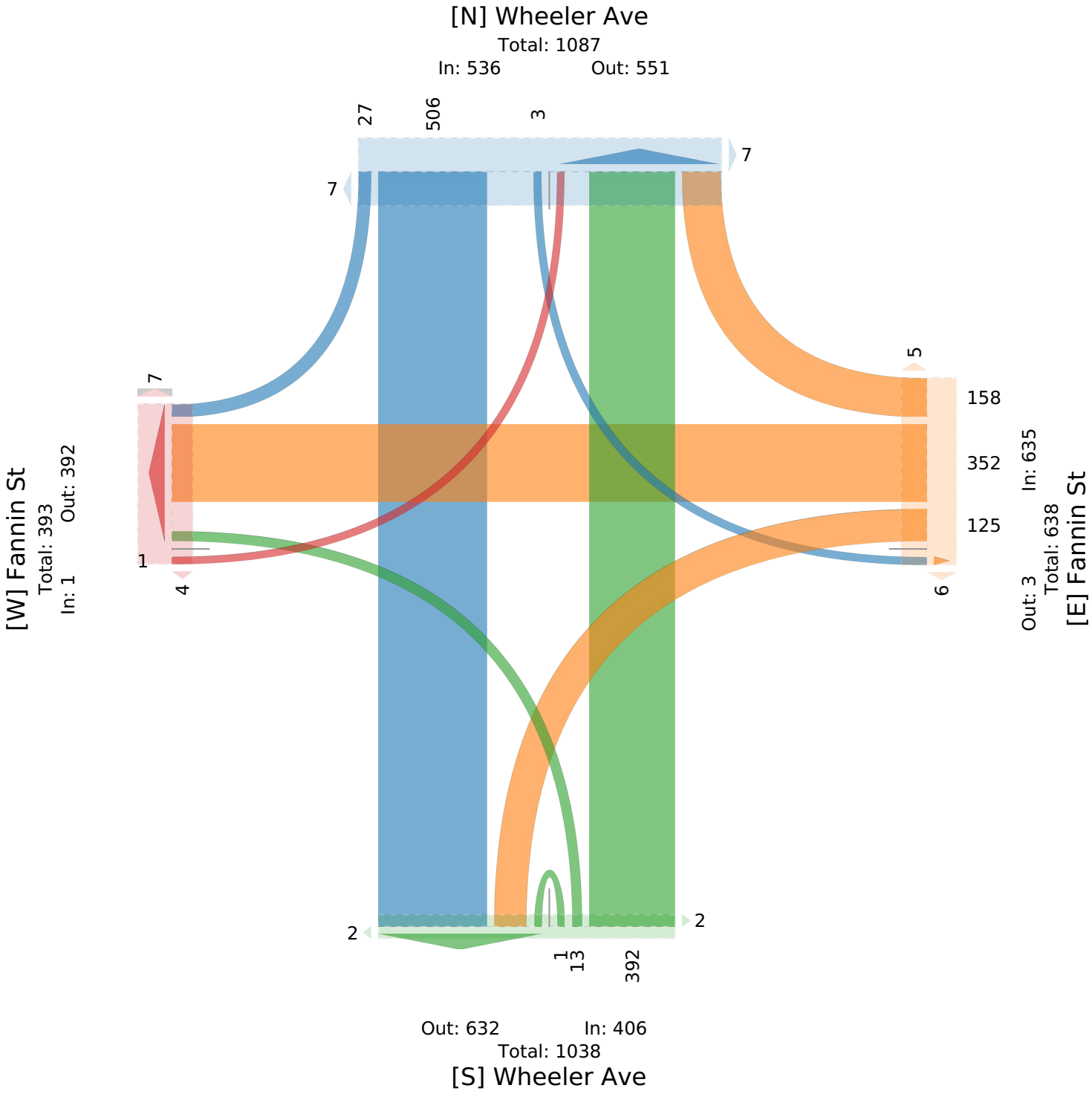


Wheeler Ave at San Jacinto St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867381, Location: 29.733112, -95.381304

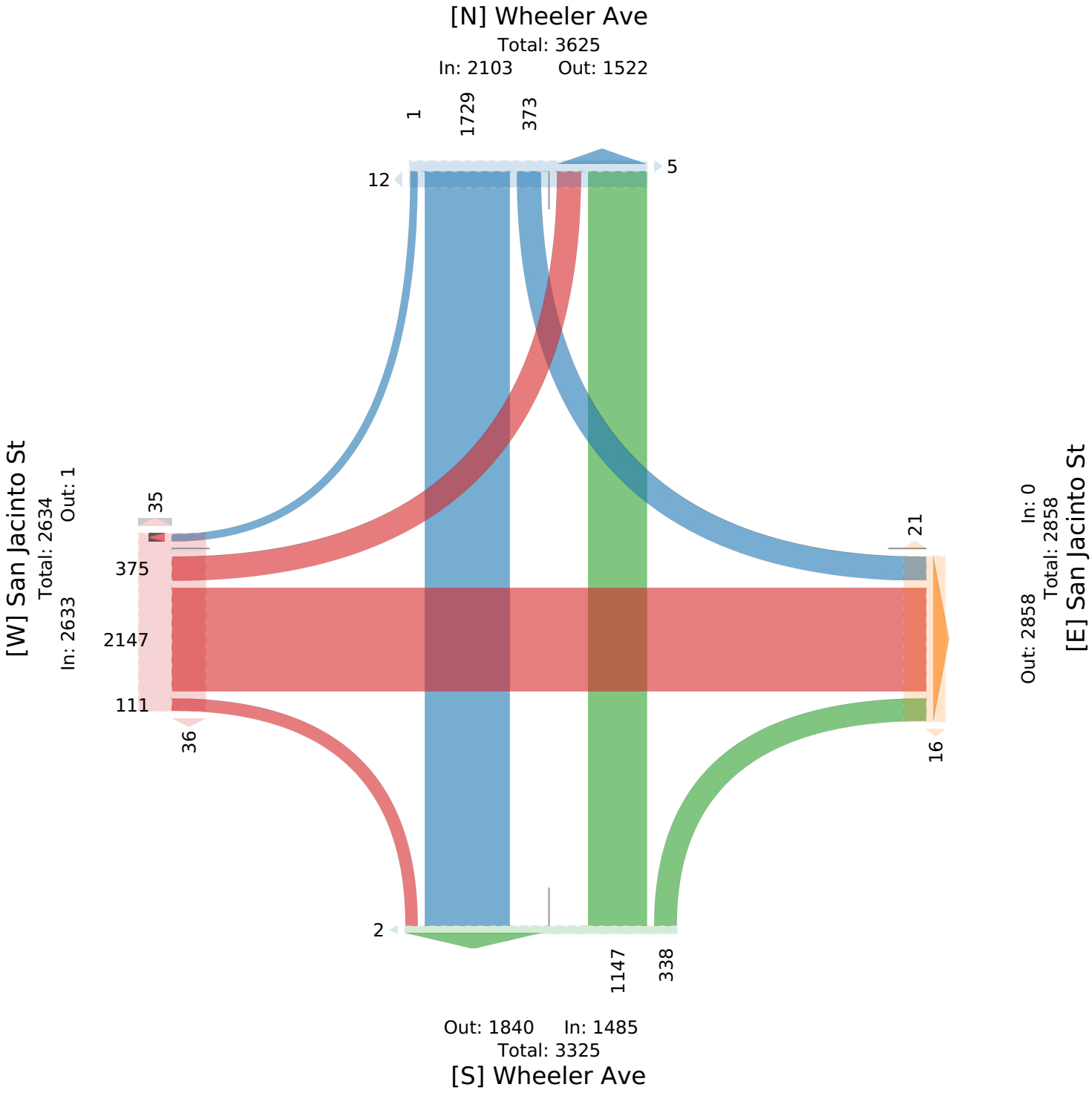
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						San Jacinto St						San Jacinto St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	31	2	0	**33**	0	9	64	0	0	**73**	0	15	51	1	0	**67**	3	0	0	0	0	**0**	0	**173**
7:15AM	0	44	10	0	**54**	0	17	94	1	0	**112**	0	22	73	6	0	**101**	1	0	0	0	0	**0**	1	**267**
7:30AM	0	75	16	0	**91**	0	18	109	0	0	**127**	1	33	82	5	0	**120**	4	0	0	0	0	**0**	0	**338**
7:45AM	0	100	21	0	**121**	0	14	95	0	0	**109**	1	23	103	2	0	**128**	4	0	0	0	0	**0**	2	**358**
Hourly Total	0	250	49	0	**299**	0	58	362	1	0	**421**	2	93	309	14	0	**416**	12	0	0	0	0	**0**	3	**1136**
8:00AM	0	85	12	0	**97**	1	31	95	0	0	**126**	2	23	66	7	0	**96**	5	0	0	0	0	**0**	2	**319**
8:15AM	0	75	14	0	**89**	0	16	100	0	0	**116**	1	28	68	5	0	**101**	4	0	0	0	0	**0**	2	**306**
8:30AM	0	66	11	0	**77**	0	21	94	0	0	**115**	2	16	62	6	0	**84**	3	0	0	0	0	**0**	3	**276**
8:45AM	0	57	11	0	**68**	0	15	86	0	0	**101**	2	20	59	6	0	**85**	1	0	0	0	0	**0**	3	**254**
Hourly Total	0	283	48	0	**331**	1	83	375	0	0	**458**	7	87	255	24	0	**366**	13	0	0	0	0	**0**	10	**1155**
4:00PM	0	68	32	0	**100**	0	24	93	0	0	**117**	1	24	195	6	0	**225**	2	0	0	0	0	**0**	3	**442**
4:15PM	0	86	26	0	**112**	0	30	115	0	0	**145**	3	20	167	7	0	**194**	2	0	0	0	0	**0**	4	**451**
4:30PM	0	76	36	0	**112**	1	29	127	0	0	**156**	0	28	218	14	0	**260**	5	0	0	0	0	**0**	0	**528**
4:45PM	0	65	28	0	**93**	0	24	127	0	0	**151**	0	25	181	9	0	**215**	10	0	0	0	0	**0**	1	**459**
Hourly Total	0	295	122	0	**417**	1	107	462	0	0	**569**	4	97	761	36	0	**894**	19	0	0	0	0	**0**	8	**1880**
5:00PM	0	82	30	0	**112**	0	24	122	0	0	**146**	2	22	247	10	0	**279**	3	0	0	0	0	**0**	5	**537**
5:15PM	0	75	26	0	**101**	0	30	142	0	0	**172**	0	32	195	10	0	**237**	10	0	0	0	0	**0**	4	**510**
5:30PM	0	94	32	0	**126**	0	31	125	0	0	**156**	0	21	197	6	0	**224**	7	0	0	0	0	**0**	3	**506**
5:45PM	0	68	31	0	**99**	0	40	141	0	0	**181**	2	23	183	11	0	**217**	7	0	0	0	0	**0**	4	**497**
Hourly Total	0	319	119	0	**438**	0	125	530	0	0	**655**	4	98	822	37	0	**957**	27	0	0	0	0	**0**	16	**2050**
Total	0	1147	338	0	**1485**	2	373	1729	1	0	**2103**	17	375	2147	111	0	**2633**	71	0	0	0	0	**0**	37	**6221**
% Approach	0%	77.2%	22.8%	0%	**-**	-	17.7%	82.2%	0%	0%	**-**	-	14.2%	81.5%	4.2%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	18.4%	5.4%	0%	**23.9%**	-	6.0%	27.8%	0%	0%	**33.8%**	-	6.0%	34.5%	1.8%	0%	**42.3%**	-	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	0	0	0	**0**	-	1	3	0	0	**4**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	5
% Motorcycles	0%	0%	0%	0%	**0%**	-	0.3%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	1113	335	0	**1448**	-	359	1673	1	0	**2033**	-	370	2119	110	0	**2599**	-	0	0	0	0	**0**	-	6080
% Lights	0%	97.0%	99.1%	0%	**97.5%**	-	96.2%	96.8%	100%	0%	**96.7%**	-	98.7%	98.7%	99.1%	0%	**98.7%**	-	0%	0%	0%	0%	**-**	-	97.7%
Single-Unit Trucks	0	5	1	0	**6**	-	4	21	0	0	**25**	-	5	17	1	0	**23**	-	0	0	0	0	**0**	-	54
% Single-Unit Trucks	0%	0.4%	0.3%	0%	**0.4%**	-	1.1%	1.2%	0%	0%	**1.2%**	-	1.3%	0.8%	0.9%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	0.9%
Articulated Trucks	0	2	0	0	**2**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.2%	0%	0%	**0.1%**	-	0.3%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Buses	0	27	2	0	**29**	-	8	32	0	0	**40**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	78
% Buses	0%	2.4%	0.6%	0%	**2.0%**	-	2.1%	1.9%	0%	0%	**1.9%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	1.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	15	-	-	-	-	-	62	-	-	-	-	-	29	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	88.2%	-	-	-	-	-	87.3%	-	-	-	-	-	78.4%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	8	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	11.8%	-	-	-	-	-	12.7%	-	-	-	-	-	21.6%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at San Jacinto St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867381, Location: 29.733112, -95.381304

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at San Jacinto St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867381, Location: 29.733112, -95.381304

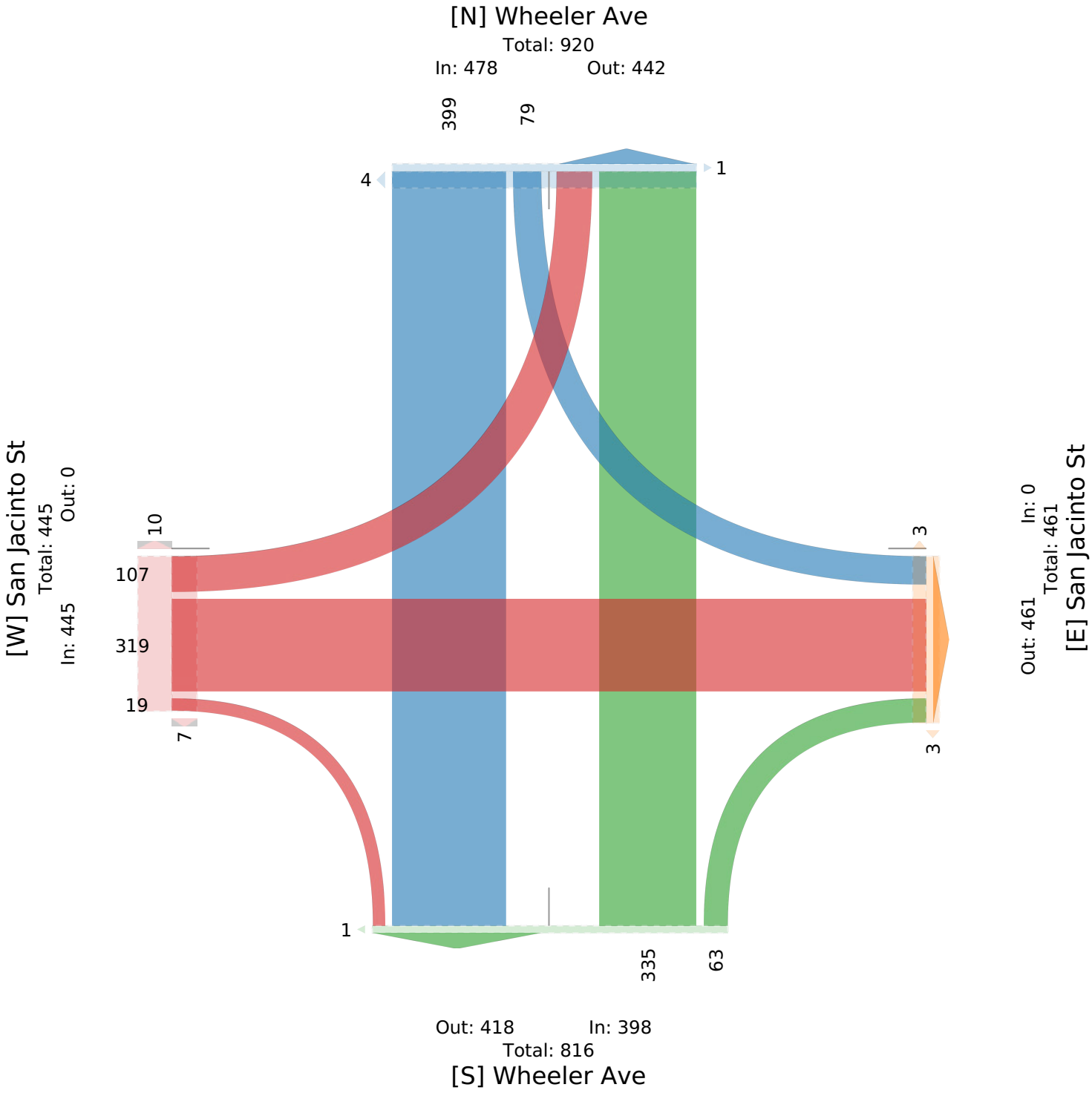
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Wheeler Ave Northbound						Wheeler Ave Southbound						San Jacinto St Eastbound						San Jacinto St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	75	16	0	**91**	0	18	109	0	0	**127**	1	33	82	5	0	**120**	4	0	0	0	0	**0**	0	**338**
7:45AM	0	100	21	0	**121**	0	14	95	0	0	**109**	1	23	103	2	0	**128**	4	0	0	0	0	**0**	2	**358**
8:00AM	0	85	12	0	**97**	1	31	95	0	0	**126**	2	23	66	7	0	**96**	5	0	0	0	0	**0**	2	**319**
8:15AM	0	75	14	0	**89**	0	16	100	0	0	**116**	1	28	68	5	0	**101**	4	0	0	0	0	**0**	2	**306**
Total	0	335	63	0	**398**	1	79	399	0	0	**478**	5	107	319	19	0	**445**	17	0	0	0	0	**0**	6	**1321**
% Approach	0%	84.2%	15.8%	0%	**-**	-	16.5%	83.5%	0%	0%	**-**	-	24.0%	71.7%	4.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	25.4%	4.8%	0%	**30.1%**	-	6.0%	30.2%	0%	0%	**36.2%**	-	8.1%	24.1%	1.4%	0%	**33.7%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.838	0.750	-	**0.822**	-	0.637	0.915	-	-	**0.941**	-	0.811	0.774	0.679	-	**0.869**	-	-	-	-	-	**-**	-	0.922
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	322	61	0	**383**	-	78	386	0	0	**464**	-	105	312	18	0	**435**	-	0	0	0	0	**0**	-	1282
% Lights	0%	96.1%	96.8%	0%	**96.2%**	-	98.7%	96.7%	0%	0%	**97.1%**	-	98.1%	97.8%	94.7%	0%	**97.8%**	-	0%	0%	0%	0%	**-**	-	97.0%
Single-Unit Trucks	0	3	0	0	**3**	-	0	3	0	0	**3**	-	2	4	1	0	**7**	-	0	0	0	0	**0**	-	13
% Single-Unit Trucks	0%	0.9%	0%	0%	**0.8%**	-	0%	0.8%	0%	0%	**0.6%**	-	1.9%	1.3%	5.3%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	1.0%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Buses	0	9	2	0	**11**	-	1	9	0	0	**10**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	24
% Buses	0%	2.7%	3.2%	0%	**2.8%**	-	1.3%	2.3%	0%	0%	**2.1%**	-	0%	0.9%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**-**	-	1.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	14	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	82.4%	-	-	-	-	-	83.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	17.6%	-	-	-	-	-	16.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at San Jacinto St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867381, Location: 29.733112, -95.381304

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at San Jacinto St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867381, Location: 29.733112, -95.381304

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Wheeler Ave Northbound						Wheeler Ave Southbound						San Jacinto St Eastbound						San Jacinto St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 5:00PM	0	82	30	0	**112**	0	24	122	0	0	**146**	2	22	247	10	0	**279**	3	0	0	0	0	**0**	5	**537**
5:15PM	0	75	26	0	**101**	0	30	142	0	0	**172**	0	32	195	10	0	**237**	10	0	0	0	0	**0**	4	**510**
5:30PM	0	94	32	0	**126**	0	31	125	0	0	**156**	0	21	197	6	0	**224**	7	0	0	0	0	**0**	3	**506**
5:45PM	0	68	31	0	**99**	0	40	141	0	0	**181**	2	23	183	11	0	**217**	7	0	0	0	0	**0**	4	**497**
Total	0	319	119	0	**438**	0	125	530	0	0	**655**	4	98	822	37	0	**957**	27	0	0	0	0	**0**	16	**2050**
% Approach	0%	72.8%	27.2%	0%	**-**	-	19.1%	80.9%	0%	0%	**-**	-	10.2%	85.9%	3.9%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	15.6%	5.8%	0%	**21.4%**	-	6.1%	25.9%	0%	0%	**32.0%**	-	4.8%	40.1%	1.8%	0%	**46.7%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.848	0.930	-	**0.869**	-	0.781	0.933	-	-	**0.905**	-	0.766	0.832	0.841	-	**0.858**	-	-	-	-	-	**-**	-	0.954
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	313	119	0	**432**	-	119	514	0	0	**633**	-	97	815	37	0	**949**	-	0	0	0	0	**0**	-	2014
% Lights	0%	98.1%	100%	0%	**98.6%**	-	95.2%	97.0%	0%	0%	**96.6%**	-	99.0%	99.1%	100%	0%	**99.2%**	-	0%	0%	0%	0%	**-**	-	98.2%
Single-Unit Trucks	0	0	0	0	**0**	-	2	8	0	0	**10**	-	1	5	0	0	**6**	-	0	0	0	0	**0**	-	16
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	1.6%	1.5%	0%	0%	**1.5%**	-	1.0%	0.6%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**-**	-	0.8%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Buses	0	5	0	0	**5**	-	4	6	0	0	**10**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	17
% Buses	0%	1.6%	0%	0%	**1.1%**	-	3.2%	1.1%	0%	0%	**1.5%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	25	-	-	-	-	-	12	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	92.6%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	7.4%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at San Jacinto St - TMC

Wed Sep 1, 2021

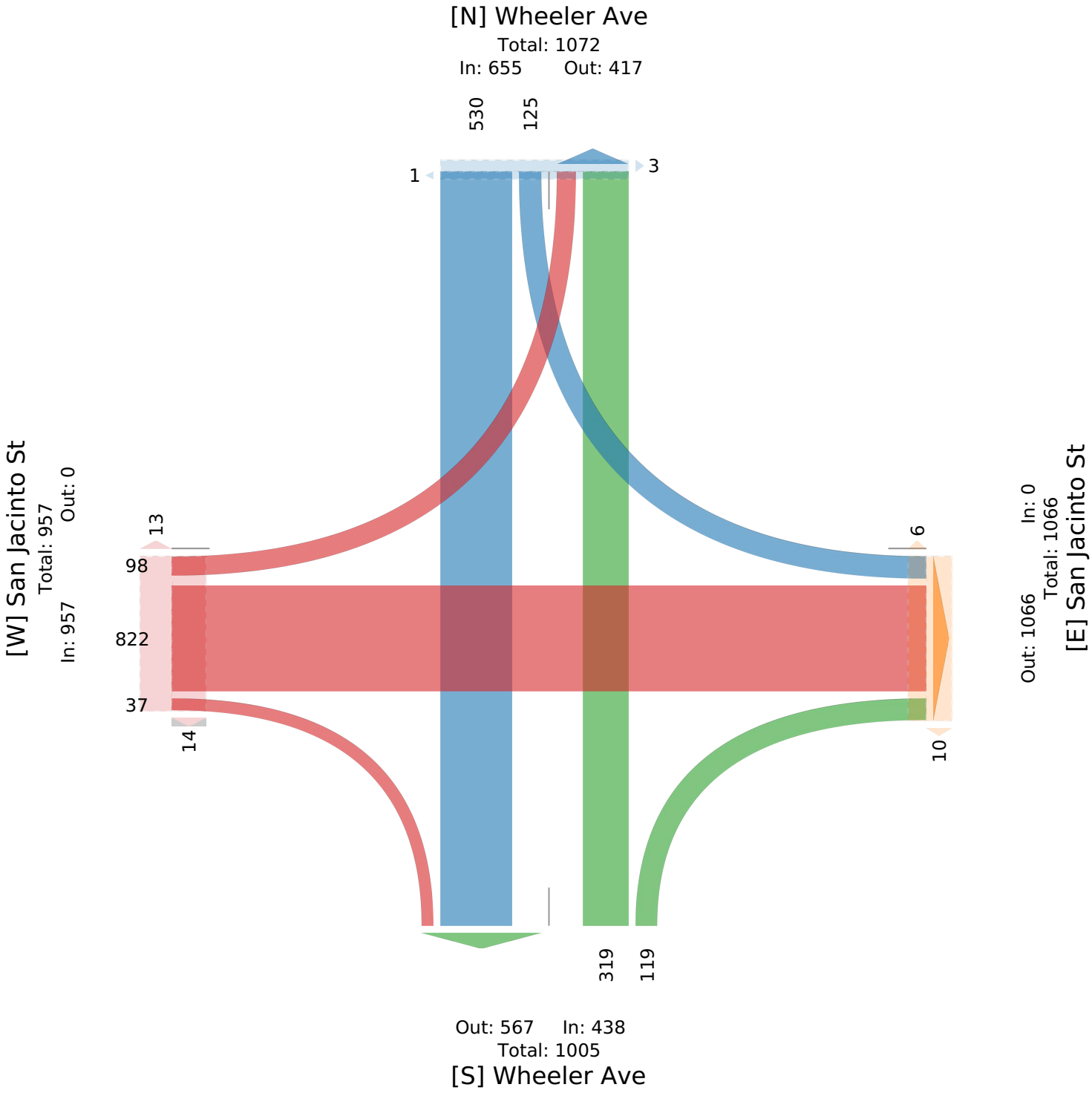
PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 867381, Location: 29.733112, -95.381304

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at LaBranch St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867335, Location: 29.731539, -95.378686

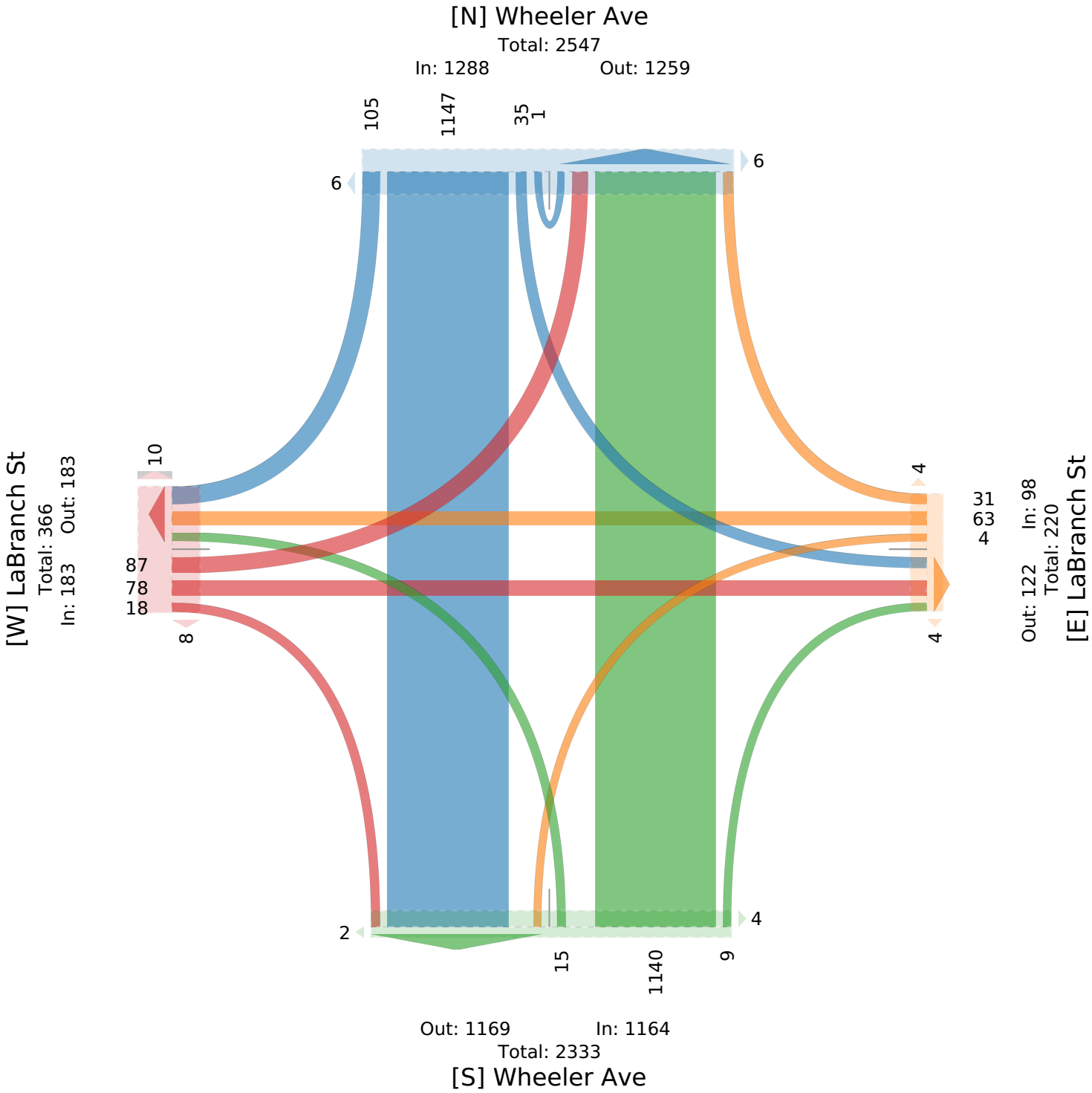
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						LaBranch St						LaBranch St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	23	0	0	**25**	1	0	30	4	0	**34**	1	2	4	0	0	**6**	1	0	0	1	0	**1**	0	**66**
7:15AM	1	43	0	0	**44**	0	1	61	7	0	**69**	1	3	8	0	0	**11**	0	0	6	0	0	**6**	0	**130**
7:30AM	0	66	1	0	**67**	0	1	56	16	0	**73**	1	9	4	5	0	**18**	0	0	4	5	0	**9**	1	**167**
7:45AM	0	103	0	0	**103**	2	0	48	4	0	**52**	0	8	6	1	0	**15**	1	0	2	4	0	**6**	0	**176**
Hourly Total	3	235	1	0	**239**	3	2	195	31	0	**228**	3	22	22	6	0	**50**	2	0	12	10	0	**22**	1	**539**
8:00AM	1	75	0	0	**76**	0	2	50	6	0	**58**	1	5	9	1	0	**15**	3	0	5	2	0	**7**	2	**156**
8:15AM	2	66	1	0	**69**	0	0	69	3	0	**72**	0	4	6	2	0	**12**	1	0	5	5	0	**10**	0	**163**
8:30AM	0	67	1	0	**68**	1	2	52	5	0	**59**	2	4	4	0	0	**8**	1	0	6	3	0	**9**	0	**144**
8:45AM	0	45	0	0	**45**	1	2	54	9	0	**65**	2	7	5	1	0	**13**	1	0	3	0	0	**3**	0	**126**
Hourly Total	3	253	2	0	**258**	2	6	225	23	0	**254**	5	20	24	4	0	**48**	6	0	19	10	0	**29**	2	**589**
4:00PM	2	82	0	0	**84**	0	3	78	5	0	**86**	1	3	2	1	0	**6**	0	0	2	0	0	**2**	0	**178**
4:15PM	3	83	1	0	**87**	0	1	74	11	0	**86**	2	6	2	3	0	**11**	3	0	5	2	0	**7**	0	**191**
4:30PM	1	90	1	0	**92**	0	4	93	10	0	**107**	0	4	2	1	0	**7**	0	1	2	3	0	**6**	1	**212**
4:45PM	0	65	0	0	**65**	0	6	97	2	0	**105**	1	6	4	1	0	**11**	4	0	9	1	0	**10**	1	**191**
Hourly Total	6	320	2	0	**328**	0	14	342	28	0	**384**	4	19	10	6	0	**35**	7	1	18	6	0	**25**	2	**772**
5:00PM	1	78	2	0	**81**	0	1	95	7	1	**104**	0	7	10	1	0	**18**	0	0	4	2	0	**6**	1	**209**
5:15PM	0	82	1	0	**83**	1	5	101	5	0	**111**	0	8	6	1	0	**15**	2	0	5	1	0	**6**	1	**215**
5:30PM	2	99	1	0	**102**	0	2	85	6	0	**93**	0	4	4	0	0	**8**	0	1	2	0	0	**3**	0	**206**
5:45PM	0	73	0	0	**73**	0	5	104	5	0	**114**	0	7	2	0	0	**9**	1	2	3	2	0	**7**	1	**203**
Hourly Total	3	332	4	0	**339**	1	13	385	23	1	**422**	0	26	22	2	0	**50**	3	3	14	5	0	**22**	3	**833**
Total	15	1140	9	0	**1164**	6	35	1147	105	1	**1288**	12	87	78	18	0	**183**	18	4	63	31	0	**98**	8	**2733**
% Approach	1.3%	97.9%	0.8%	0%	**-**	-	2.7%	89.1%	8.2%	0.1%	**-**	-	47.5%	42.6%	9.8%	0%	**-**	-	4.1%	64.3%	31.6%	0%	**-**	-	-
% Total	0.5%	41.7%	0.3%	0%	**42.6%**	-	1.3%	42.0%	3.8%	0%	**47.1%**	-	3.2%	2.9%	0.7%	0%	**6.7%**	-	0.1%	2.3%	1.1%	0%	**3.6%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	15	1097	9	0	**1121**	-	35	1099	103	1	**1238**	-	87	76	17	0	**180**	-	4	62	30	0	**96**	-	2635
% Lights	100%	96.2%	100%	0%	**96.3%**	-	100%	95.8%	98.1%	100%	**96.1%**	-	100%	97.4%	94.4%	0%	**98.4%**	-	100%	98.4%	96.8%	0%	**98.0%**	-	96.4%
Single-Unit Trucks	0	8	0	0	**8**	-	0	12	1	0	**13**	-	0	1	1	0	**2**	-	0	1	0	0	**1**	-	24
% Single-Unit Trucks	0%	0.7%	0%	0%	**0.7%**	-	0%	1.0%	1.0%	0%	**1.0%**	-	0%	1.3%	5.6%	0%	**1.1%**	-	0%	1.6%	0%	0%	**1.0%**	-	0.9%
Articulated Trucks	0	4	0	0	**4**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	9
% Articulated Trucks	0%	0.4%	0%	0%	**0.3%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Buses	0	31	0	0	**31**	-	0	29	1	0	**30**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	63
% Buses	0%	2.7%	0%	0%	**2.7%**	-	0%	2.5%	1.0%	0%	**2.3%**	-	0%	1.3%	0%	0%	**0.5%**	-	0%	0%	3.2%	0%	**1.0%**	-	2.3%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	10	-	-	-	-	-	15	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	83.3%	-	-	-	-	-	83.3%	-	-	-	-	-	87.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	16.7%	-	-	-	-	-	16.7%	-	-	-	-	-	12.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at LaBranch St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867335, Location: 29.731539, -95.378686

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at LaBranch St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867335, Location: 29.731539, -95.378686

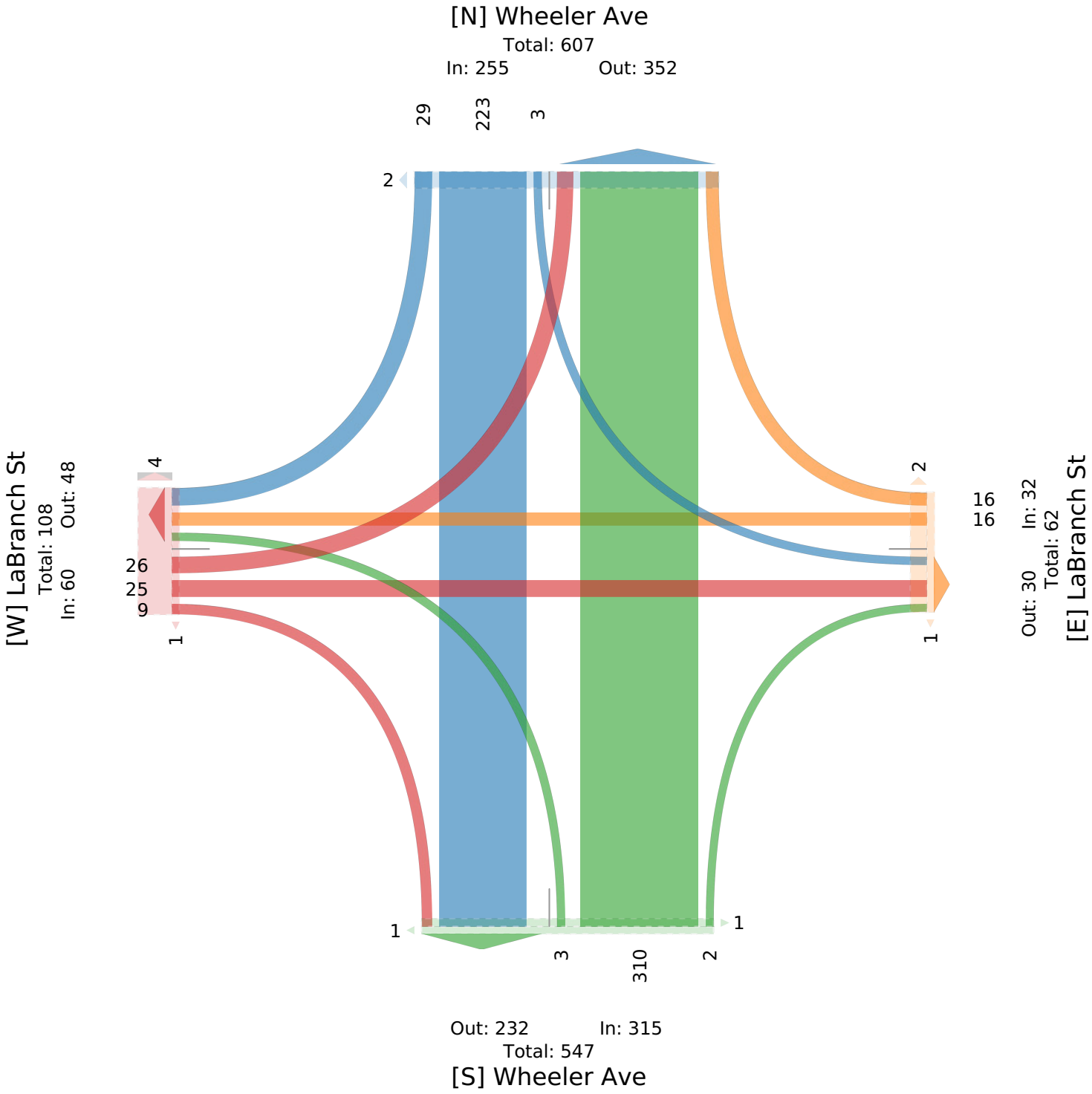
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						LaBranch St						LaBranch St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	66	1	0	**67**	0	1	56	16	0	**73**	1	9	4	5	0	**18**	0	0	4	5	0	**9**	1	**167**
7:45AM	0	103	0	0	**103**	2	0	48	4	0	**52**	0	8	6	1	0	**15**	1	0	2	4	0	**6**	0	**176**
8:00AM	1	75	0	0	**76**	0	2	50	6	0	**58**	1	5	9	1	0	**15**	3	0	5	2	0	**7**	2	**156**
8:15AM	2	66	1	0	**69**	0	0	69	3	0	**72**	0	4	6	2	0	**12**	1	0	5	5	0	**10**	0	**163**
Total	3	310	2	0	**315**	2	3	223	29	0	**255**	2	26	25	9	0	**60**	5	0	16	16	0	**32**	3	**662**
% Approach	1.0%	98.4%	0.6%	0%	**-**	-	1.2%	87.5%	11.4%	0%	**-**	-	43.3%	41.7%	15.0%	0%	**-**	-	0%	50.0%	50.0%	0%	**-**	-	**-**
% Total	0.5%	46.8%	0.3%	0%	**47.6%**	-	0.5%	33.7%	4.4%	0%	**38.5%**	-	3.9%	3.8%	1.4%	0%	**9.1%**	-	0%	2.4%	2.4%	0%	**4.8%**	-	**-**
PHF	0.375	0.752	0.500	-	**0.765**	-	0.375	0.808	0.453	-	**0.873**	-	0.722	0.694	0.450	-	**0.833**	-	-	0.800	0.800	-	**0.800**	-	0.940
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	3	294	2	0	**299**	-	3	212	29	0	**244**	-	26	25	9	0	**60**	-	0	16	16	0	**32**	-	635
% Lights	100%	94.8%	100%	0%	**94.9%**	-	100%	95.1%	100%	0%	**95.7%**	-	100%	100%	100%	0%	**100%**	-	0%	100%	100%	0%	**100%**	-	95.9%
Single-Unit Trucks	0	2	0	0	**2**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Single-Unit Trucks	0%	0.6%	0%	0%	**0.6%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.6%
Articulated Trucks	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	1.0%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Buses	0	11	0	0	**11**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	20
% Buses	0%	3.5%	0%	0%	**3.5%**	-	0%	4.0%	0%	0%	**3.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	3.0%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	80.0%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	20.0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at LaBranch St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867335, Location: 29.731539, -95.378686

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at LaBranch St - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867335, Location: 29.731539, -95.378686

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave						Wheeler Ave						LaBranch St						LaBranch St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	1	78	2	0	**81**	0	1	95	7	1	**104**	0	7	10	1	0	**18**	0	0	4	2	0	**6**	1	**209**
5:15PM	0	82	1	0	**83**	1	5	101	5	0	**111**	0	8	6	1	0	**15**	2	0	5	1	0	**6**	1	**215**
5:30PM	2	99	1	0	**102**	0	2	85	6	0	**93**	0	4	4	0	0	**8**	0	1	2	0	0	**3**	0	**206**
5:45PM	0	73	0	0	**73**	0	5	104	5	0	**114**	0	7	2	0	0	**9**	1	2	3	2	0	**7**	1	**203**
Total	3	332	4	0	**339**	1	13	385	23	1	**422**	0	26	22	2	0	**50**	3	3	14	5	0	**22**	3	**833**
% Approach	0.9%	97.9%	1.2%	0%	**-**	-	3.1%	91.2%	5.5%	0.2%	**-**	-	52.0%	44.0%	4.0%	0%	**-**	-	13.6%	63.6%	22.7%	0%	**-**	-	-
% Total	0.4%	39.9%	0.5%	0%	**40.7%**	-	1.6%	46.2%	2.8%	0.1%	**50.7%**	-	3.1%	2.6%	0.2%	0%	**6.0%**	-	0.4%	1.7%	0.6%	0%	**2.6%**	-	-
PHF	0.375	0.838	0.500	-	**0.831**	-	0.650	0.925	0.821	0.250	**0.925**	-	0.813	0.550	0.500	-	**0.694**	-	0.375	0.700	0.625	-	**0.786**	-	0.969
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	3	323	4	0	**330**	-	13	371	23	1	**408**	-	26	22	2	0	**50**	-	3	14	5	0	**22**	-	810
% Lights	100%	97.3%	100%	0%	**97.3%**	-	100%	96.4%	100%	100%	**96.7%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	97.2%
Single-Unit Trucks	0	2	0	0	**2**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	6
% Single-Unit Trucks	0%	0.6%	0%	0%	**0.6%**	-	0%	1.0%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.7%
Articulated Trucks	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0.3%	0%	0%	**0.3%**	-	0%	0.5%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	0	6	0	0	**6**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	12
% Buses	0%	1.8%	0%	0%	**1.8%**	-	0%	1.6%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	- 66.7%		-	-	-	-	- 100%		-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	- 100%		-	-	-	-	-	-	-	-	-	-	- 33.3%		-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at LaBranch St - TMC

Wed Sep 1, 2021

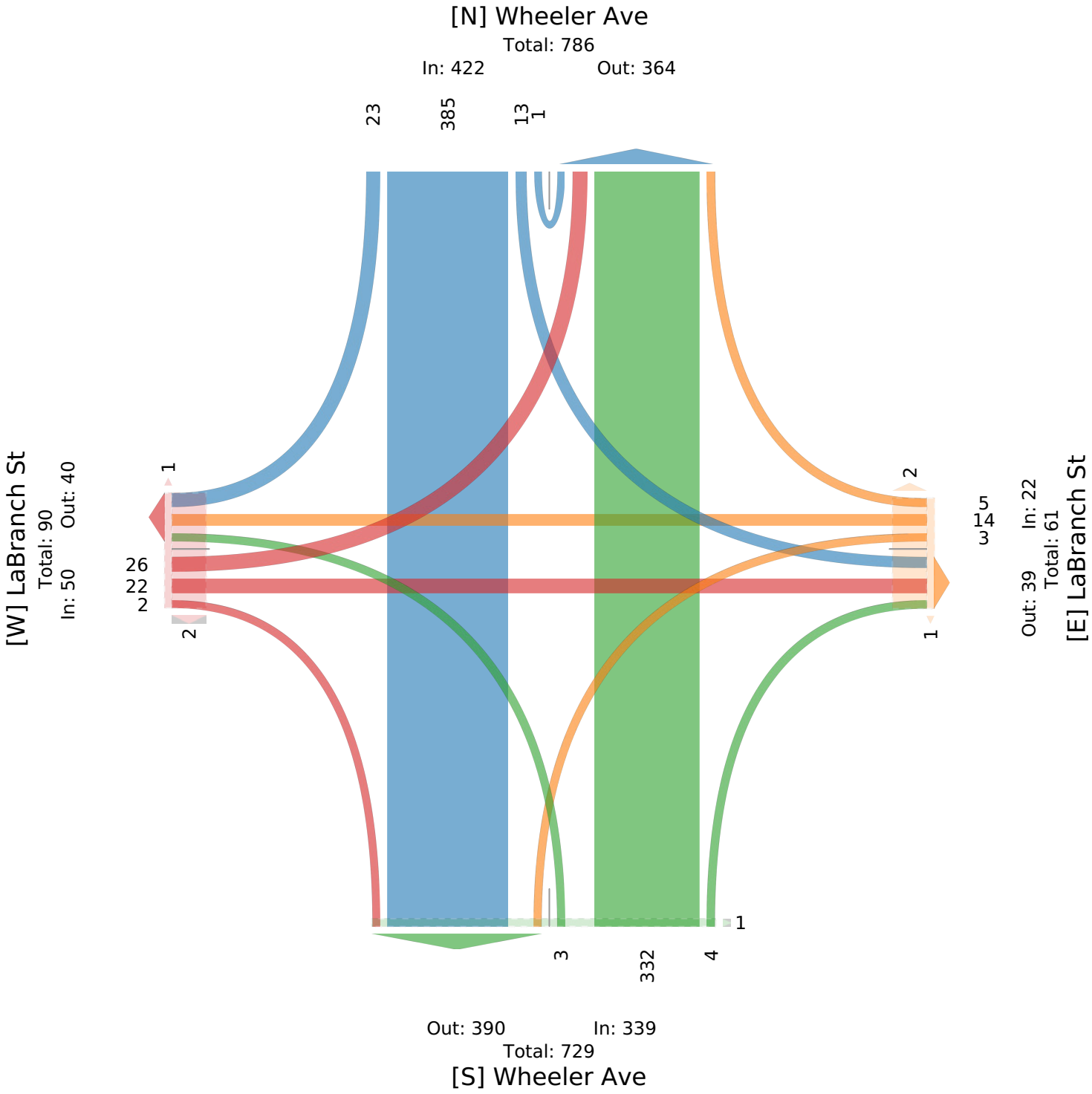
PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 867335, Location: 29.731539, -95.378686

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave							Wheeler Ave							Almeda Rd						
Direction	Northbound							Southbound							Eastbound						
Time	L	T	R	HR	U	App	Ped*	L	BL	T	R	U	App	Ped*	L	T	BR	R	U	App	Ped*
2021-09-01 7:00AM	0	16	4	0	0	**20**	0	4	1	17	11	0	**33**	0	6	25	3	1	0	**35**	0
7:15AM	0	20	3	0	0	**23**	0	3	0	31	22	0	**56**	2	15	26	4	2	0	**47**	0
7:30AM	0	36	5	5	0	**46**	0	0	3	38	29	0	**70**	1	21	56	5	2	0	**84**	0
7:45AM	4	54	6	6	0	**70**	0	1	5	28	18	0	**52**	3	36	75	5	7	0	**123**	1
Hourly Total	4	126	18	11	0	**159**	0	8	9	114	80	0	**211**	6	78	182	17	12	0	**289**	1
8:00AM	2	36	8	13	0	**59**	1	1	6	20	27	0	**54**	2	27	61	11	5	0	**104**	0
8:15AM	3	33	4	5	0	**45**	0	5	2	37	22	0	**66**	0	26	45	11	2	0	**84**	3
8:30AM	1	35	2	2	0	**40**	1	1	1	33	15	0	**50**	0	24	32	1	4	0	**61**	0
8:45AM	1	28	2	0	0	**31**	2	4	1	34	15	0	**54**	0	11	35	5	2	0	**53**	2
Hourly Total	7	132	16	20	0	**175**	4	11	10	124	79	0	**224**	2	88	173	28	13	0	**302**	5
4:00PM	5	57	7	9	0	**78**	0	5	7	40	27	0	**79**	0	21	66	6	7	0	**100**	1
4:15PM	1	52	9	3	0	**65**	1	4	2	35	30	0	**71**	4	23	81	7	2	0	**113**	1
4:30PM	2	55	5	5	0	**67**	0	8	3	41	43	0	**95**	1	31	78	2	8	0	**119**	0
4:45PM	1	43	4	3	0	**51**	1	7	1	43	45	1	**97**	4	21	72	3	7	0	**103**	0
Hourly Total	9	207	25	20	0	**261**	2	24	13	159	145	1	**342**	9	96	297	18	24	0	**435**	2
5:00PM	3	52	2	0	0	**57**	0	4	2	47	45	0	**98**	1	21	70	0	6	0	**97**	2
5:15PM	5	62	6	3	0	**76**	0	8	1	43	40	0	**92**	1	18	63	6	8	0	**95**	1
5:30PM	5	78	3	2	0	**88**	1	8	2	47	40	0	**97**	1	20	72	9	7	0	**108**	1
5:45PM	2	47	4	2	0	**55**	1	4	2	40	54	0	**100**	1	26	70	7	9	0	**112**	0
Hourly Total	15	239	15	7	0	**276**	2	24	7	177	179	0	**387**	4	85	275	22	30	0	**412**	4
Total	35	704	74	58	0	**871**	8	67	39	574	483	1	**1164**	21	347	927	85	79	0	**1438**	12
% Approach	4.0%	80.8%	8.5%	6.7%	0%	**-**	-	5.8%	3.4%	49.3%	41.5%	0.1%	**-**	-	24.1%	64.5%	5.9%	5.5%	0%	**-**	-
% Total	0.8%	16.1%	1.7%	1.3%	0%	**19.9%**	-	1.5%	0.9%	13.1%	11.0%	0%	**26.6%**	-	7.9%	21.1%	1.9%	1.8%	0%	**32.8%**	-
Motorcycles	0	0	0	1	0	**1**	-	0	0	0	0	0	**0**	-	0	0	0	1	0	**1**	-
% Motorcycles	0%	0%	0%	1.7%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	1.3%	0%	**0.1%**	-
Lights	35	669	72	55	0	**831**	-	65	39	539	475	1	**1119**	-	338	902	83	74	0	**1397**	-
% Lights	100%	95.0%	97.3%	94.8%	0%	**95.4%**	-	97.0%	100%	93.9%	98.3%	100%	**96.1%**	-	97.4%	97.3%	97.6%	93.7%	0%	**97.1%**	-
Single-Unit Trucks	0	3	0	0	0	**3**	-	1	0	2	6	0	**9**	-	6	11	0	3	0	**20**	-
% Single-Unit Trucks	0%	0.4%	0%	0%	0%	**0.3%**	-	1.5%	0%	0.3%	1.2%	0%	**0.8%**	-	1.7%	1.2%	0%	3.8%	0%	**1.4%**	-
Articulated Trucks	0	2	0	0	0	**2**	-	0	0	4	1	0	**5**	-	2	3	0	0	0	**5**	-
% Articulated Trucks	0%	0.3%	0%	0%	0%	**0.2%**	-	0%	0%	0.7%	0.2%	0%	**0.4%**	-	0.6%	0.3%	0%	0%	0%	**0.3%**	-
Buses	0	30	2	2	0	**34**	-	1	0	29	1	0	**31**	-	1	11	2	1	0	**15**	-
% Buses	0%	4.3%	2.7%	3.4%	0%	**3.9%**	-	1.5%	0%	5.1%	0.2%	0%	**2.7%**	-	0.3%	1.2%	2.4%	1.3%	0%	**1.0%**	-
Pedestrians	-	-	-	-	-	-	7	-	-	-	-	-	-	20	-	-	-	-	-	-	11
% Pedestrians	-	-	-	-	-	-	87.5%	-	-	-	-	-	-	95.2%	-	-	-	-	-	-	91.7%
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	12.5%	-	-	-	-	-	-	4.8%	-	-	-	-	-	-	8.3%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

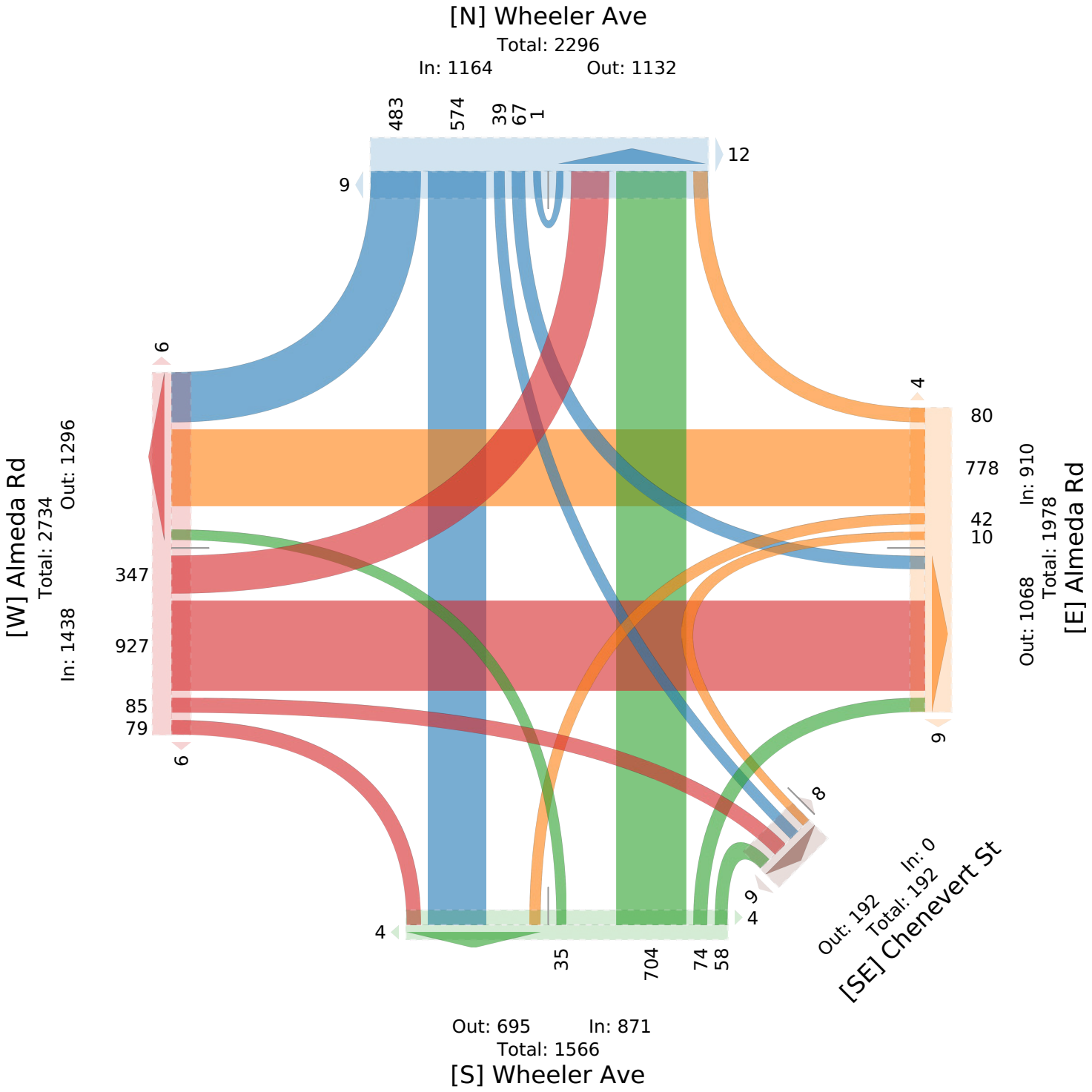
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Almeda Rd							Chenevert St							
Direction	Westbound							Northwestbound							
Time	HL	L	T	R	U	**App**	Ped*	HL	BL	BR	HR	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	0	31	1	0	**32**	0	0	0	0	0	0	**0**	0	**120**
7:15AM	1	0	31	2	0	**34**	1	0	0	0	0	0	**0**	2	**160**
7:30AM	0	2	45	4	0	**51**	0	0	0	0	0	0	**0**	2	**251**
7:45AM	0	2	40	5	0	**47**	1	0	0	0	0	0	**0**	1	**292**
Hourly Total	1	4	147	12	0	**164**	2	0	0	0	0	0	**0**	5	**823**
8:00AM	0	0	44	5	0	**49**	1	0	0	0	0	0	**0**	1	**266**
8:15AM	1	3	40	3	0	**47**	0	0	0	0	0	0	**0**	2	**242**
8:30AM	1	1	40	7	0	**49**	1	0	0	0	0	0	**0**	3	**200**
8:45AM	0	1	33	7	0	**41**	0	0	0	0	0	0	**0**	0	**179**
Hourly Total	2	5	157	22	0	**186**	2	0	0	0	0	0	**0**	6	**887**
4:00PM	3	1	52	3	0	**59**	0	0	0	0	0	0	**0**	0	**316**
4:15PM	2	9	73	11	0	**95**	3	0	0	0	0	0	**0**	0	**344**
4:30PM	0	4	52	9	0	**65**	0	0	0	0	0	0	**0**	0	**346**
4:45PM	0	2	64	4	0	**70**	0	0	0	0	0	0	**0**	0	**321**
Hourly Total	5	16	241	27	0	**289**	3	0	0	0	0	0	**0**	0	**1327**
5:00PM	0	6	57	3	0	**66**	3	0	0	0	0	0	**0**	3	**318**
5:15PM	0	3	60	5	0	**68**	0	0	0	0	0	0	**0**	1	**331**
5:30PM	2	2	56	5	0	**65**	0	0	0	0	0	0	**0**	1	**358**
5:45PM	0	6	60	6	0	**72**	3	0	0	0	0	0	**0**	1	**339**
Hourly Total	2	17	233	19	0	**271**	6	0	0	0	0	0	**0**	6	**1346**
Total	10	42	778	80	0	**910**	13	0	0	0	0	0	**0**	17	**4383**
% Approach	1.1%	4.6%	85.5%	8.8%	0%	**-**	-	0%	0%	0%	0%	0%	**-**	-	-
% Total	0.2%	1.0%	17.8%	1.8%	0%	**20.8%**	-	0%	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%
Lights	10	41	758	79	0	**888**	-	0	0	0	0	0	**0**	-	4235
% Lights	100%	97.6%	97.4%	98.8%	0%	**97.6%**	-	0%	0%	0%	0%	0%	**-**	-	96.6%
Single-Unit Trucks	0	0	5	1	0	**6**	-	0	0	0	0	0	**0**	-	38
% Single-Unit Trucks	0%	0%	0.6%	1.3%	0%	**0.7%**	-	0%	0%	0%	0%	0%	**-**	-	0.9%
Articulated Trucks	0	0	1	0	0	**1**	-	0	0	0	0	0	**0**	-	13
% Articulated Trucks	0%	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**-**	-	0.3%
Buses	0	1	14	0	0	**15**	-	0	0	0	0	0	**0**	-	95
% Buses	0%	2.4%	1.8%	0%	0%	**1.6%**	-	0%	0%	0%	0%	0%	**-**	-	2.2%
Pedestrians	-	-	-	-	-	-	11	-	-	-	-	-	-	17	
% Pedestrians	-	-	-	-	-	-	84.6%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	2	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	15.4%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave							Wheeler Ave							Almeda Rd						
Direction	Northbound							Southbound							Eastbound						
Time	L	T	R	HR	U	**App**	Ped*	L	BL	T	R	U	**App**	Ped*	L	T	BR	R	U	**App**	Ped*
2021-09-01 7:30AM	0	36	5	5	0	**46**	0	0	3	38	29	0	**70**	1	21	56	5	2	0	**84**	0
7:45AM	4	54	6	6	0	**70**	0	1	5	28	18	0	**52**	3	36	75	5	7	0	**123**	1
8:00AM	2	36	8	13	0	**59**	1	1	6	20	27	0	**54**	2	27	61	11	5	0	**104**	0
8:15AM	3	33	4	5	0	**45**	0	5	2	37	22	0	**66**	0	26	45	11	2	0	**84**	3
Total	9	159	23	29	0	**220**	1	7	16	123	96	0	**242**	6	110	237	32	16	0	**395**	4
% Approach	4.1%	72.3%	10.5%	13.2%	0%	**-**	-	2.9%	6.6%	50.8%	39.7%	0%	**-**	-	27.8%	60.0%	8.1%	4.1%	0%	**-**	-
% Total	0.9%	15.1%	2.2%	2.8%	0%	**20.9%**	-	0.7%	1.5%	11.7%	9.1%	0%	**23.0%**	-	10.5%	22.5%	3.0%	1.5%	0%	**37.6%**	-
PHF	0.563	0.736	0.719	0.558	-	**0.786**	-	0.350	0.667	0.809	0.828	-	**0.864**	-	0.764	0.790	0.727	0.571	-	**0.803**	-
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-
Lights	9	148	23	27	0	**207**	-	6	16	114	94	0	**230**	-	107	230	32	15	0	**384**	-
% Lights	100%	93.1%	100%	93.1%	0%	**94.1%**	-	85.7%	100%	92.7%	97.9%	0%	**95.0%**	-	97.3%	97.0%	100%	93.8%	0%	**97.2%**	-
Single-Unit Trucks	0	0	0	0	0	**0**	-	0	0	1	1	0	**2**	-	2	3	0	0	0	**5**	-
% Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0.8%	1.0%	0%	**0.8%**	-	1.8%	1.3%	0%	0%	0%	**1.3%**	-
Articulated Trucks	0	1	0	0	0	**1**	-	0	0	0	0	0	**0**	-	0	1	0	0	0	**1**	-
% Articulated Trucks	0%	0.6%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	0%	**0.3%**	-
Buses	0	10	0	2	0	**12**	-	1	0	8	1	0	**10**	-	1	3	0	1	0	**5**	-
% Buses	0%	6.3%	0%	6.9%	0%	**5.5%**	-	14.3%	0%	6.5%	1.0%	0%	**4.1%**	-	0.9%	1.3%	0%	6.3%	0%	**1.3%**	-
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	6	-	-	-	-	-	-	4
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

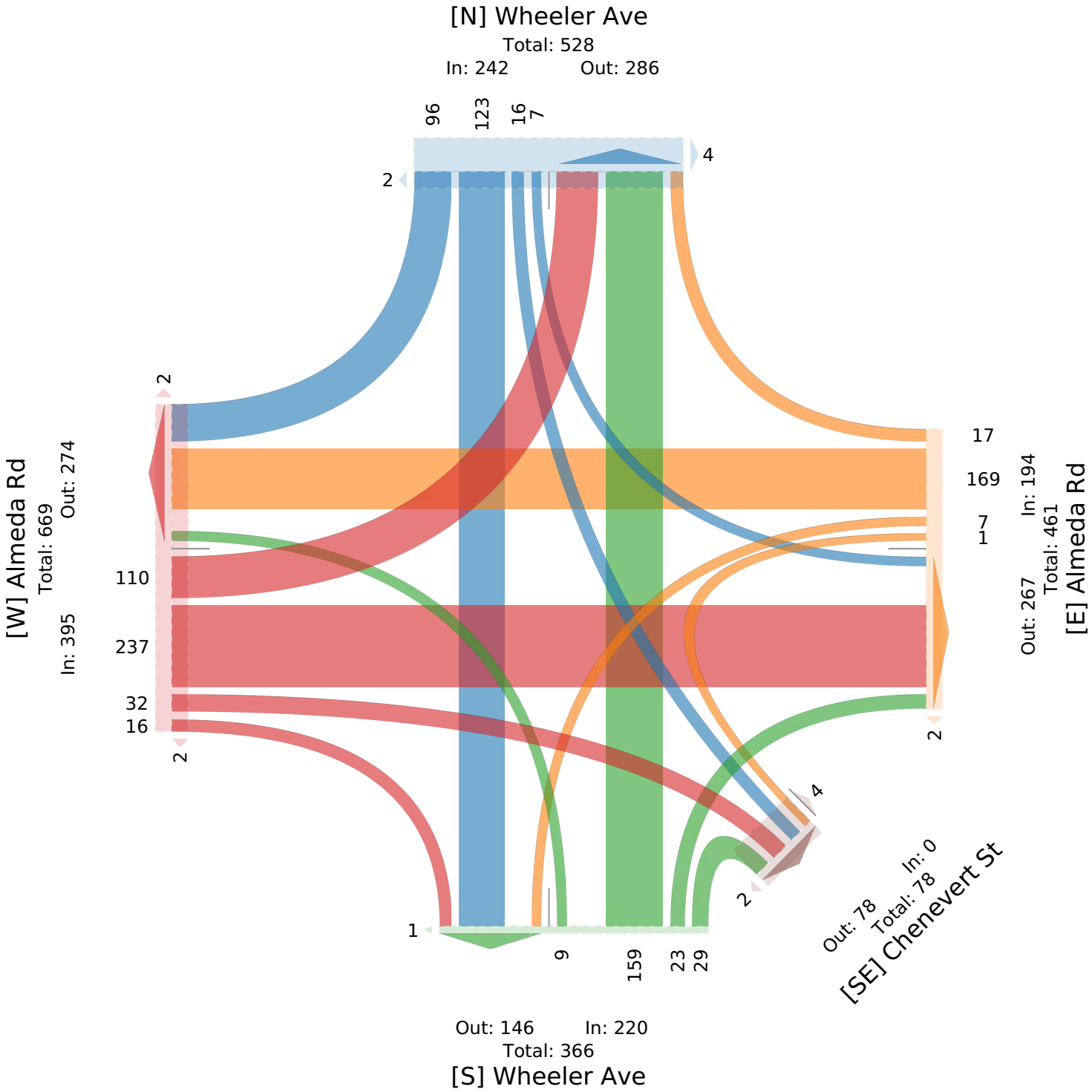
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Almeda Rd							Chenevert St							
Direction	Westbound							Northwestbound							
Time	HL	L	T	R	U	**App**	Ped*	HL	BL	BR	HR	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	2	45	4	0	**51**	0	0	0	0	0	0	**0**	2	**251**
7:45AM	0	2	40	5	0	**47**	1	0	0	0	0	0	**0**	1	**292**
8:00AM	0	0	44	5	0	**49**	1	0	0	0	0	0	**0**	1	**266**
8:15AM	1	3	40	3	0	**47**	0	0	0	0	0	0	**0**	2	**242**
Total	1	7	169	17	0	**194**	2	0	0	0	0	0	**0**	6	**1051**
% Approach	0.5%	3.6%	87.1%	8.8%	0%	**-**	-	0%	0%	0%	0%	0%	**-**	-	-
% Total	0.1%	0.7%	16.1%	1.6%	0%	**18.5%**	-	0%	0%	0%	0%	0%	**0%**	-	-
PHF	0.250	0.583	0.939	0.850	-	**0.951**	-	-	-	-	-	-	**-**	-	0.900
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0%
Lights	1	7	164	17	0	**189**	-	0	0	0	0	0	**0**	-	1010
% Lights	100%	100%	97.0%	100%	0%	**97.4%**	-	0%	0%	0%	0%	0%	**-**	-	96.1%
Single-Unit Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	7
% Single-Unit Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0.7%
Articulated Trucks	0	0	1	0	0	**1**	-	0	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	0%	**-**	-	0.3%
Buses	0	0	4	0	0	**4**	-	0	0	0	0	0	**0**	-	31
% Buses	0%	0%	2.4%	0%	0%	**2.1%**	-	0%	0%	0%	0%	0%	**-**	-	2.9%
Pedestrians	-	-	-	-	-	-	2	-	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Wheeler Ave							Wheeler Ave							Almeda Rd						
Direction	Northbound							Southbound							Eastbound						
Time	L	T	R	HR	U	**App**	Ped*	L	BL	T	R	U	**App**	Ped*	L	T	BR	R	U	**App**	Ped*
2021-09-01 5:00PM	3	52	2	0	0	**57**	0	4	2	47	45	0	**98**	1	21	70	0	6	0	**97**	2
5:15PM	5	62	6	3	0	**76**	0	8	1	43	40	0	**92**	1	18	63	6	8	0	**95**	1
5:30PM	5	78	3	2	0	**88**	1	8	2	47	40	0	**97**	1	20	72	9	7	0	**108**	1
5:45PM	2	47	4	2	0	**55**	1	4	2	40	54	0	**100**	1	26	70	7	9	0	**112**	0
Total	15	239	15	7	0	**276**	2	24	7	177	179	0	**387**	4	85	275	22	30	0	**412**	4
% Approach	5.4%	86.6%	5.4%	2.5%	0%	**-**	-	6.2%	1.8%	45.7%	46.3%	0%	**-**	-	20.6%	66.7%	5.3%	7.3%	0%	**-**	-
% Total	1.1%	17.8%	1.1%	0.5%	0%	**20.5%**	-	1.8%	0.5%	13.2%	13.3%	0%	**28.8%**	-	6.3%	20.4%	1.6%	2.2%	0%	**30.6%**	-
PHF	0.750	0.766	0.625	0.583	-	**0.784**	-	0.750	0.875	0.941	0.829	-	**0.968**	-	0.817	0.955	0.611	0.833	-	**0.920**	-
Motorcycles	0	0	0	1	0	**1**	-	0	0	0	0	0	**0**	-	0	0	0	1	0	**1**	-
% Motorcycles	0%	0%	0%	14.3%	0%	**0.4%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	3.3%	0%	**0.2%**	-
Lights	15	231	15	6	0	**267**	-	24	7	168	175	0	**374**	-	84	268	22	28	0	**402**	-
% Lights	100%	96.7%	100%	85.7%	0%	**96.7%**	-	100%	100%	94.9%	97.8%	0%	**96.6%**	-	98.8%	97.5%	100%	93.3%	0%	**97.6%**	-
Single-Unit Trucks	0	1	0	0	0	**1**	-	0	0	0	4	0	**4**	-	0	4	0	1	0	**5**	-
% Single-Unit Trucks	0%	0.4%	0%	0%	0%	**0.4%**	-	0%	0%	0%	2.2%	0%	**1.0%**	-	0%	1.5%	0%	3.3%	0%	**1.2%**	-
Articulated Trucks	0	1	0	0	0	**1**	-	0	0	2	0	0	**2**	-	1	0	0	0	0	**1**	-
% Articulated Trucks	0%	0.4%	0%	0%	0%	**0.4%**	-	0%	0%	1.1%	0%	0%	**0.5%**	-	1.2%	0%	0%	0%	0%	**0.2%**	-
Buses	0	6	0	0	0	**6**	-	0	0	7	0	0	**7**	-	0	3	0	0	0	**3**	-
% Buses	0%	2.5%	0%	0%	0%	**2.2%**	-	0%	0%	4.0%	0%	0%	**1.8%**	-	0%	1.1%	0%	0%	0%	**0.7%**	-
Pedestrians	-	-	-	-	-	-	1	-	-	-	-	-	-	4	-	-	-	-	-	-	3
% Pedestrians	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	100%	-	-	-	-	-	-	75.0%
Bicycles on Crosswalk	-	-	-	-	-	-	1	-	-	-	-	-	-	0	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	50.0%	-	-	-	-	-	-	0%	-	-	-	-	-	-	25.0%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

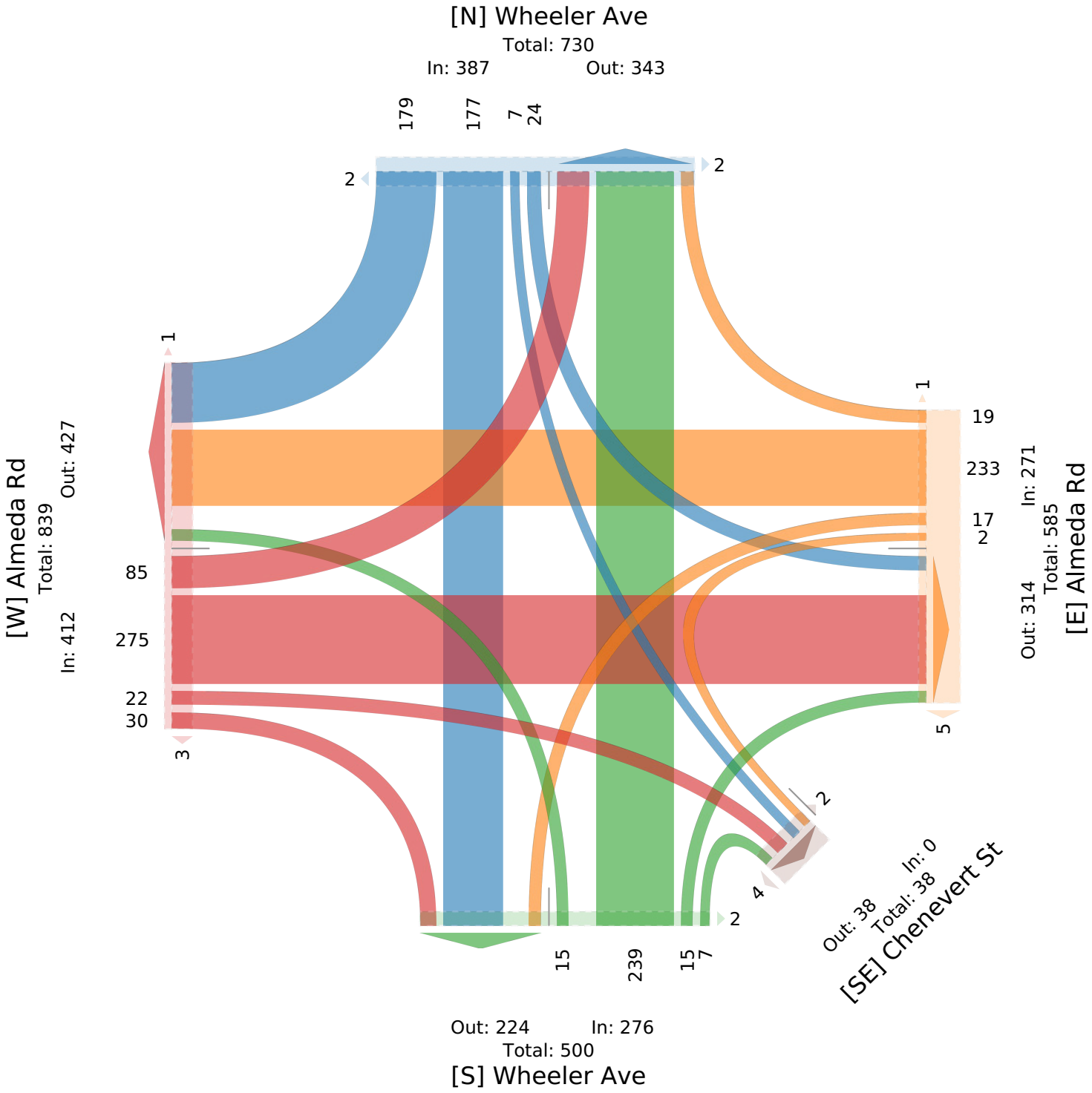
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Almeda Rd							Chenevert St							
Direction	Westbound							Northwestbound							
Time	HL	L	T	R	U	**App**	Ped*	HL	BL	BR	HR	U	**App**	Ped*	**Int**
2021-09-01 5:00PM	0	6	57	3	0	**66**	3	0	0	0	0	0	**0**	3	**318**
5:15PM	0	3	60	5	0	**68**	0	0	0	0	0	0	**0**	1	**331**
5:30PM	2	2	56	5	0	**65**	0	0	0	0	0	0	**0**	1	**358**
5:45PM	0	6	60	6	0	**72**	3	0	0	0	0	0	**0**	1	**339**
Total	2	17	233	19	0	**271**	6	0	0	0	0	0	**0**	6	**1346**
% Approach	0.7%	6.3%	86.0%	7.0%	0%	**-**	-	0%	0%	0%	0%	0%	**-**	-	-
% Total	0.1%	1.3%	17.3%	1.4%	0%	**20.1%**	-	0%	0%	0%	0%	0%	**0%**	-	-
PHF	0.250	0.708	0.971	0.792	-	**0.941**	-	-	-	-	-	-	**-**	-	0.940
Motorcycles	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0.1%
Lights	2	17	227	19	0	**265**	-	0	0	0	0	0	**0**	-	1308
% Lights	100%	100%	97.4%	100%	0%	**97.8%**	-	0%	0%	0%	0%	0%	**-**	-	97.2%
Single-Unit Trucks	0	0	3	0	0	**3**	-	0	0	0	0	0	**0**	-	13
% Single-Unit Trucks	0%	0%	1.3%	0%	0%	**1.1%**	-	0%	0%	0%	0%	0%	**-**	-	1.0%
Articulated Trucks	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**-**	-	0.3%
Buses	0	0	3	0	0	**3**	-	0	0	0	0	0	**0**	-	19
% Buses	0%	0%	1.3%	0%	0%	**1.1%**	-	0%	0%	0%	0%	0%	**-**	-	1.4%
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	-	66.7%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	2	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	33.3%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Almeda Rd - TMC
Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867336, Location: 29.730078, -95.37627

CJ Henson & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Emancipation Ave - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

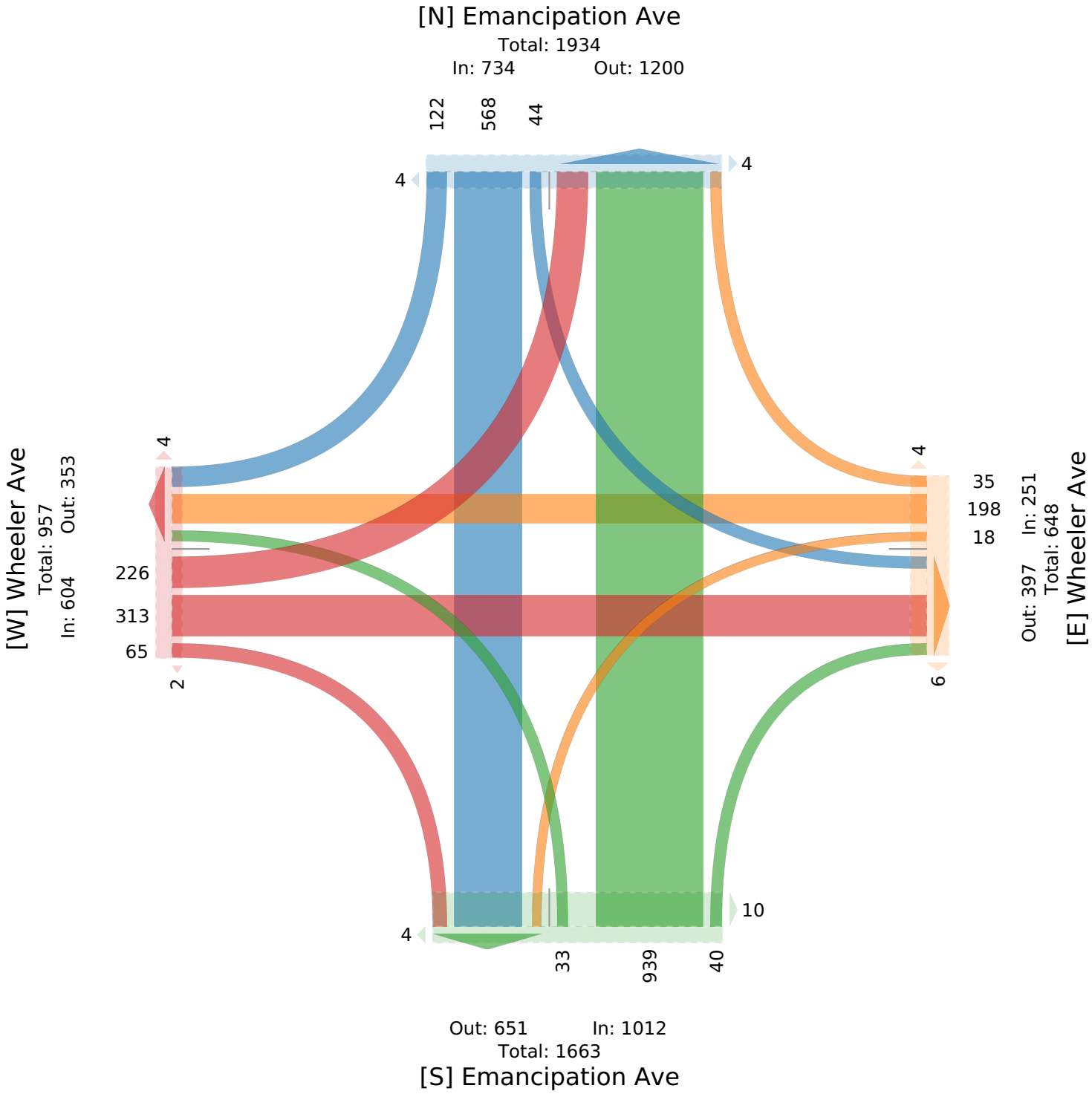
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Emancipation Ave						Emancipation Ave						Wheeler Ave						Wheeler Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	0	6	3	0	**9**	0	3	18	2	0	**23**	0	1	13	2	0	**16**	0	0	4	1	0	**5**	1	**53**
7:15AM	2	21	1	0	**24**	0	2	31	5	0	**38**	0	3	11	4	0	**18**	0	1	10	3	0	**14**	0	**94**
7:30AM	2	37	3	0	**42**	2	0	42	4	0	**46**	2	4	15	0	0	**19**	0	0	10	0	0	**10**	1	**117**
7:45AM	1	47	2	0	**50**	2	5	28	13	0	**46**	0	10	16	3	0	**29**	1	1	7	1	0	**9**	3	**134**
Hourly Total	5	111	9	0	**125**	4	10	119	24	0	**153**	2	18	55	9	0	**82**	1	2	31	5	0	**38**	5	**398**
8:00AM	2	53	5	0	**60**	0	2	31	8	0	**41**	0	3	17	4	0	**24**	0	0	14	3	0	**17**	1	**142**
8:15AM	3	50	2	0	**55**	0	0	38	12	0	**50**	0	7	16	4	0	**27**	0	2	13	2	0	**17**	0	**149**
8:30AM	3	27	2	0	**32**	0	2	20	5	0	**27**	0	7	25	4	0	**36**	1	0	9	3	0	**12**	0	**107**
8:45AM	2	32	0	0	**34**	1	3	27	4	0	**34**	1	5	22	2	0	**29**	0	1	8	1	0	**10**	0	**107**
Hourly Total	10	162	9	0	**181**	1	7	116	29	0	**152**	1	22	80	14	0	**116**	1	3	44	9	0	**56**	1	**505**
4:00PM	0	75	2	0	**77**	0	2	50	8	0	**60**	0	15	26	7	0	**48**	0	4	13	2	0	**19**	0	**204**
4:15PM	4	66	3	0	**73**	0	3	31	11	0	**45**	0	19	26	8	0	**53**	1	2	20	1	0	**23**	1	**194**
4:30PM	1	79	2	0	**82**	1	5	35	5	0	**45**	0	29	19	7	0	**55**	1	0	16	3	0	**19**	0	**201**
4:45PM	3	102	2	0	**107**	0	5	37	4	0	**46**	1	38	26	8	0	**72**	0	1	13	4	0	**18**	0	**243**
Hourly Total	8	322	9	0	**339**	1	15	153	28	0	**196**	1	101	97	30	0	**228**	2	7	62	10	0	**79**	1	**842**
5:00PM	1	79	3	0	**83**	3	3	47	13	0	**63**	1	21	23	1	0	**45**	2	3	15	4	0	**22**	2	**213**
5:15PM	4	90	3	0	**97**	1	1	58	13	0	**72**	0	18	27	5	0	**50**	0	0	13	3	0	**16**	0	**235**
5:30PM	4	89	2	0	**95**	2	4	40	10	0	**54**	1	24	13	4	0	**41**	0	2	15	2	0	**19**	1	**209**
5:45PM	1	86	5	0	**92**	2	4	35	5	0	**44**	2	22	18	2	0	**42**	0	1	18	2	0	**21**	0	**199**
Hourly Total	10	344	13	0	**367**	8	12	180	41	0	**233**	4	85	81	12	0	**178**	2	6	61	11	0	**78**	3	**856**
Total	33	939	40	0	**1012**	14	44	568	122	0	**734**	8	226	313	65	0	**604**	6	18	198	35	0	**251**	10	**2601**
% Approach	3.3%	92.8%	4.0%	0%	**-**	-	6.0%	77.4%	16.6%	0%	**-**	-	37.4%	51.8%	10.8%	0%	**-**	-	7.2%	78.9%	13.9%	0%	**-**	-	-
% Total	1.3%	36.1%	1.5%	0%	**38.9%**	-	1.7%	21.8%	4.7%	0%	**28.2%**	-	8.7%	12.0%	2.5%	0%	**23.2%**	-	0.7%	7.6%	1.3%	0%	**9.7%**	-	-
Motorcycles	1	3	0	0	**4**	-	0	1	0	0	**1**	-	2	0	1	0	**3**	-	0	0	0	0	**0**	-	8
% Motorcycles	3.0%	0.3%	0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.9%	0%	1.5%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Lights	31	915	40	0	**986**	-	44	557	120	0	**721**	-	222	288	63	0	**573**	-	18	172	35	0	**225**	-	2505
% Lights	93.9%	97.4%	100%	0%	**97.4%**	-	100%	98.1%	98.4%	0%	**98.2%**	-	98.2%	92.0%	96.9%	0%	**94.9%**	-	100%	86.9%	100%	0%	**89.6%**	-	96.3%
Single-Unit Trucks	1	11	0	0	**12**	-	0	6	1	0	**7**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	21
% Single-Unit Trucks	3.0%	1.2%	0%	0%	**1.2%**	-	0%	1.1%	0.8%	0%	**1.0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.8%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.4%	0.3%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	9	0	0	**9**	-	0	4	1	0	**5**	-	1	23	1	0	**25**	-	0	25	0	0	**25**	-	64
% Buses	0%	1.0%	0%	0%	**0.9%**	-	0%	0.7%	0.8%	0%	**0.7%**	-	0.4%	7.3%	1.5%	0%	**4.1%**	-	0%	12.6%	0%	0%	**10.0%**	-	2.5%
Pedestrians	-	-	-	-	-	11	-	-	-	-	-	8	-	-	-	-	-	5	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	78.6%	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	21.4%	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Emancipation Ave - TMC
Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Emancipation Ave - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

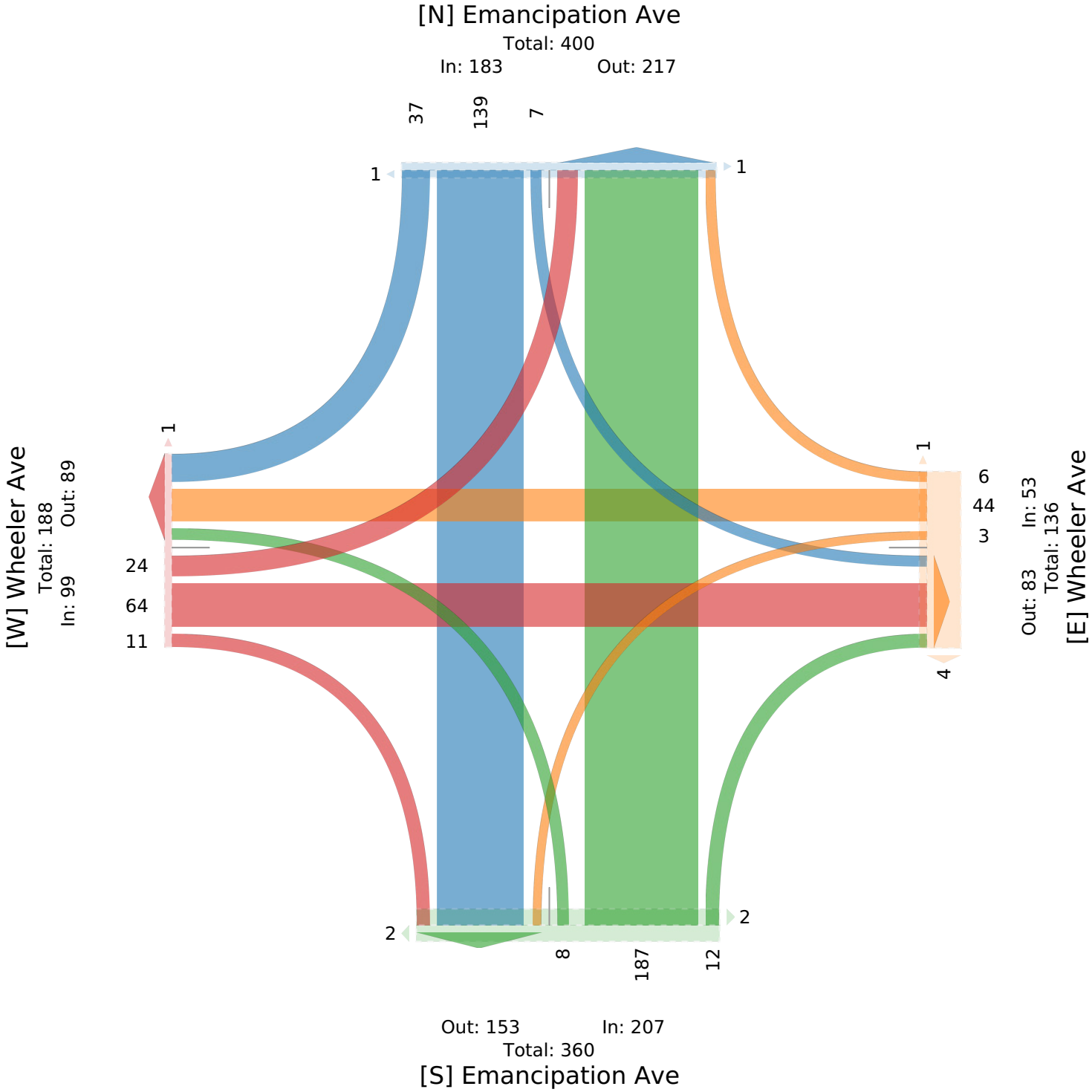
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Emancipation Ave						Emancipation Ave						Wheeler Ave						Wheeler Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:30AM	2	37	3	0	**42**	2	0	42	4	0	**46**	2	4	15	0	0	**19**	0	0	10	0	0	**10**	1	**117**
7:45AM	1	47	2	0	**50**	2	5	28	13	0	**46**	0	10	16	3	0	**29**	1	1	7	1	0	**9**	3	**134**
8:00AM	2	53	5	0	**60**	0	2	31	8	0	**41**	0	3	17	4	0	**24**	0	0	14	3	0	**17**	1	**142**
8:15AM	3	50	2	0	**55**	0	0	38	12	0	**50**	0	7	16	4	0	**27**	0	2	13	2	0	**17**	0	**149**
Total	8	187	12	0	**207**	4	7	139	37	0	**183**	2	24	64	11	0	**99**	1	3	44	6	0	**53**	5	**542**
% Approach	3.9%	90.3%	5.8%	0%	**-**	-	3.8%	76.0%	20.2%	0%	**-**	-	24.2%	64.6%	11.1%	0%	**-**	-	5.7%	83.0%	11.3%	0%	**-**	-	-
% Total	1.5%	34.5%	2.2%	0%	**38.2%**	-	1.3%	25.6%	6.8%	0%	**33.8%**	-	4.4%	11.8%	2.0%	0%	**18.3%**	-	0.6%	8.1%	1.1%	0%	**9.8%**	-	-
PHF	0.667	0.882	0.600	-	**0.863**	-	0.350	0.827	0.712	-	**0.915**	-	0.600	0.941	0.688	-	**0.853**	-	0.375	0.786	0.500	-	**0.779**	-	0.909
Motorcycles	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	12.5%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	9.1%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Lights	7	183	12	0	**202**	-	7	136	36	0	**179**	-	24	58	9	0	**91**	-	3	37	6	0	**46**	-	518
% Lights	87.5%	97.9%	100%	0%	**97.6%**	-	100%	97.8%	97.3%	0%	**97.8%**	-	100%	90.6%	81.8%	0%	**91.9%**	-	100%	84.1%	100%	0%	**86.8%**	-	95.6%
Single-Unit Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Single-Unit Trucks	0%	0.5%	0%	0%	**0.5%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	3	0	0	**3**	-	0	2	1	0	**3**	-	0	6	1	0	**7**	-	0	7	0	0	**7**	-	20
% Buses	0%	1.6%	0%	0%	**1.4%**	-	0%	1.4%	2.7%	0%	**1.6%**	-	0%	9.4%	9.1%	0%	**7.1%**	-	0%	15.9%	0%	0%	**13.2%**	-	3.7%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Emancipation Ave - TMC
Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Wheeler Ave at Emancipation Ave - TMC

Thu Sep 9, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

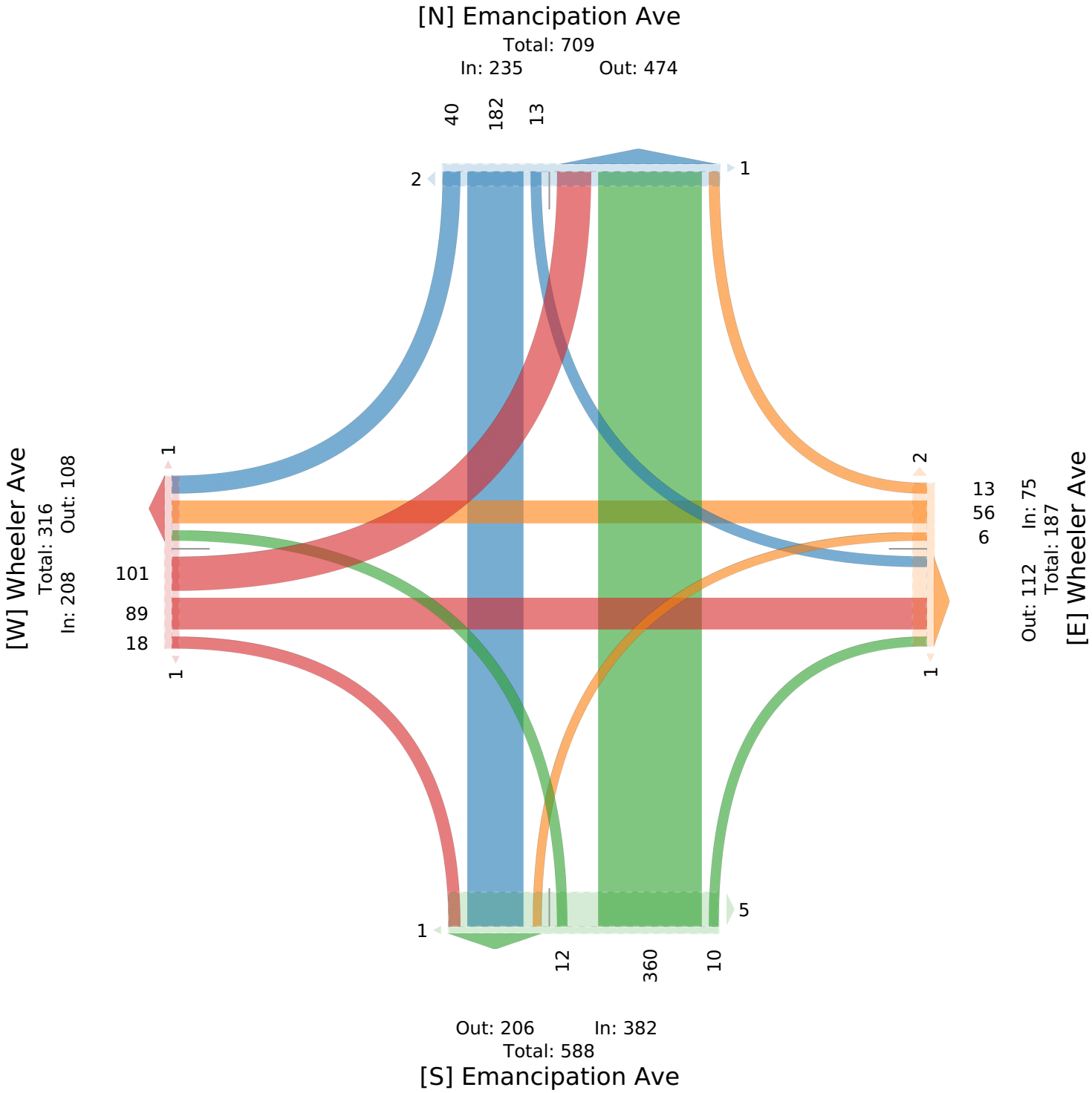
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Emancipation Ave						Emancipation Ave						Wheeler Ave						Wheeler Ave						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 4:45PM	3	102	2	0	**107**	0	5	37	4	0	**46**	1	38	26	8	0	**72**	0	1	13	4	0	**18**	0	**243**
5:00PM	1	79	3	0	**83**	3	3	47	13	0	**63**	1	21	23	1	0	**45**	2	3	15	4	0	**22**	2	**213**
5:15PM	4	90	3	0	**97**	1	1	58	13	0	**72**	0	18	27	5	0	**50**	0	0	13	3	0	**16**	0	**235**
5:30PM	4	89	2	0	**95**	2	4	40	10	0	**54**	1	24	13	4	0	**41**	0	2	15	2	0	**19**	1	**209**
Total	12	360	10	0	**382**	6	13	182	40	0	**235**	3	101	89	18	0	**208**	2	6	56	13	0	**75**	3	**900**
% Approach	3.1%	94.2%	2.6%	0%	**-**	-	5.5%	77.4%	17.0%	0%	**-**	-	48.6%	42.8%	8.7%	0%	**-**	-	8.0%	74.7%	17.3%	0%	**-**	-	-
% Total	1.3%	40.0%	1.1%	0%	**42.4%**	-	1.4%	20.2%	4.4%	0%	**26.1%**	-	11.2%	9.9%	2.0%	0%	**23.1%**	-	0.7%	6.2%	1.4%	0%	**8.3%**	-	-
PHF	0.750	0.882	0.833	-	**0.893**	-	0.650	0.784	0.769	-	**0.816**	-	0.664	0.824	0.563	-	**0.722**	-	0.500	0.933	0.813	-	**0.852**	-	0.926
Motorcycles	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0.6%	0%	0%	**0.5%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Lights	12	349	10	0	**371**	-	13	178	40	0	**231**	-	101	81	18	0	**200**	-	6	50	13	0	**69**	-	871
% Lights	100%	96.9%	100%	0%	**97.1%**	-	100%	97.8%	100%	0%	**98.3%**	-	100%	91.0%	100%	0%	**96.2%**	-	100%	89.3%	100%	0%	**92.0%**	-	96.8%
Single-Unit Trucks	0	5	0	0	**5**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	8
% Single-Unit Trucks	0%	1.4%	0%	0%	**1.3%**	-	0%	1.1%	0%	0%	**0.9%**	-	0%	1.1%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.9%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	4	0	0	**4**	-	0	1	0	0	**1**	-	0	7	0	0	**7**	-	0	6	0	0	**6**	-	18
% Buses	0%	1.1%	0%	0%	**1.0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	7.9%	0%	0%	**3.4%**	-	0%	10.7%	0%	0%	**8.0%**	-	2.0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Wheeler Ave at Emancipation Ave - TMC
Thu Sep 9, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867337, Location: 29.726941, -95.370985

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Alabama St at Ennis St - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

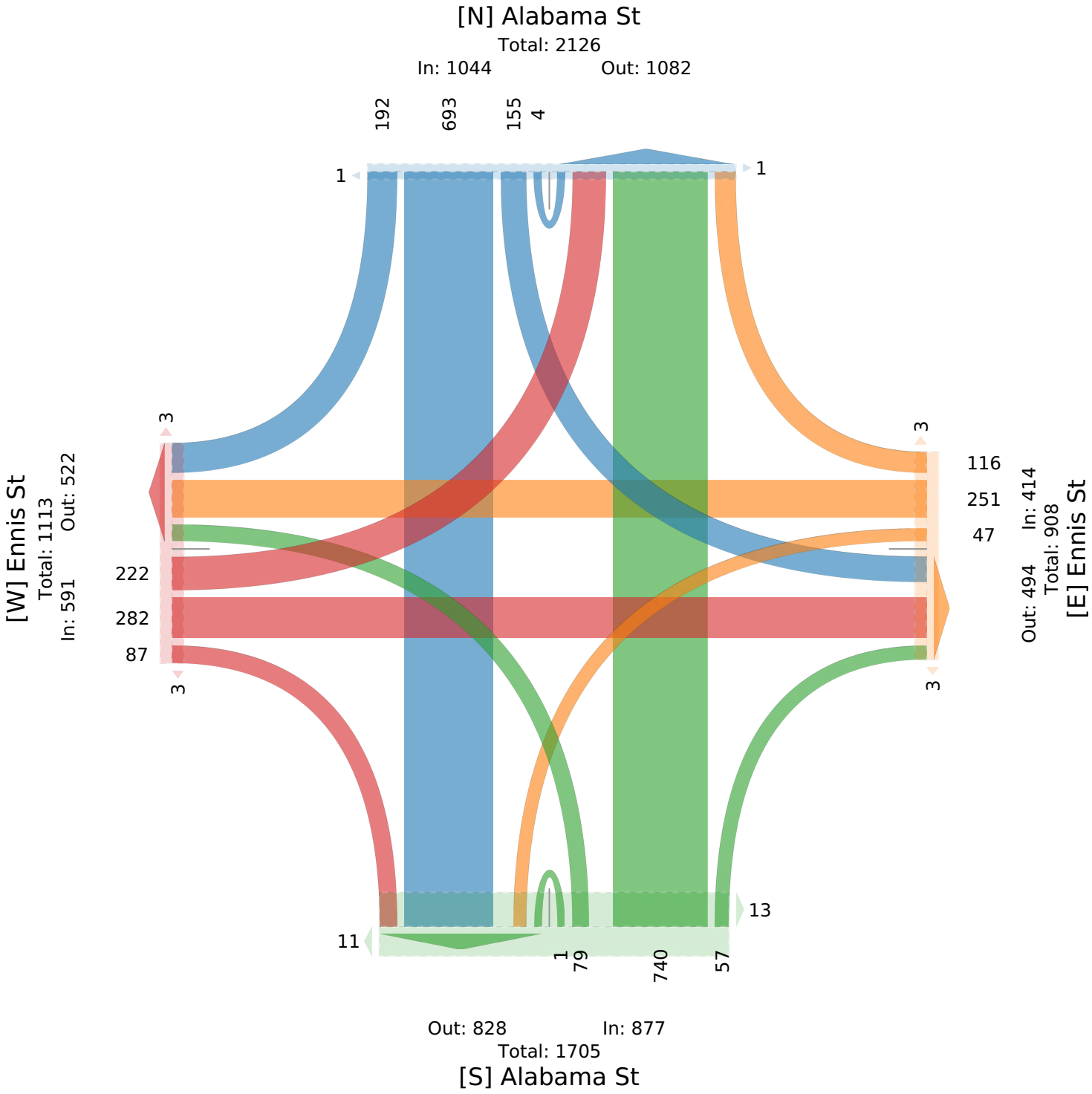
Leg	Alabama St						Alabama St						Ennis St						Ennis St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	0	11	3	0	**14**	1	5	18	5	0	**28**	0	6	6	1	0	**13**	0	0	11	6	0	**17**	0	**72**
7:15AM	4	20	5	0	**29**	1	5	23	7	0	**35**	0	8	14	5	0	**27**	0	5	11	3	0	**19**	0	**110**
7:30AM	1	31	14	0	**46**	8	13	32	12	0	**57**	1	18	11	3	0	**32**	2	10	19	8	0	**37**	0	**172**
7:45AM	7	35	9	0	**51**	2	5	49	15	0	**69**	0	14	10	5	0	**29**	0	5	16	10	0	**31**	0	**180**
Hourly Total	12	97	31	0	**140**	12	28	122	39	0	**189**	1	46	41	14	0	**101**	2	20	57	27	0	**104**	0	**534**
8:00AM	6	36	5	0	**47**	3	3	59	8	0	**70**	0	6	12	7	0	**25**	0	4	16	2	0	**22**	0	**164**
8:15AM	6	35	2	0	**43**	2	6	59	16	0	**81**	0	12	7	10	0	**29**	0	6	16	2	0	**24**	0	**177**
8:30AM	3	26	2	0	**31**	0	7	59	13	0	**79**	0	4	13	4	0	**21**	1	1	15	1	0	**17**	1	**148**
8:45AM	3	20	0	0	**23**	1	6	51	16	0	**73**	0	4	11	2	0	**17**	0	3	15	4	0	**22**	0	**135**
Hourly Total	18	117	9	0	**144**	6	22	228	53	0	**303**	0	26	43	23	0	**92**	1	14	62	9	0	**85**	1	**624**
4:00PM	3	67	5	0	**75**	0	12	48	12	1	**73**	0	10	36	7	0	**53**	0	2	22	13	0	**37**	2	**238**
4:15PM	8	93	0	0	**101**	0	16	48	14	2	**80**	0	14	20	8	0	**42**	0	2	20	16	0	**38**	1	**261**
4:30PM	7	56	1	0	**64**	5	8	35	16	1	**60**	0	17	22	4	0	**43**	0	1	17	11	0	**29**	1	**196**
4:45PM	8	46	3	0	**57**	0	7	51	8	0	**66**	0	21	24	5	0	**50**	0	2	19	9	0	**30**	0	**203**
Hourly Total	26	262	9	0	**297**	5	43	182	50	4	**279**	0	62	102	24	0	**188**	0	7	78	49	0	**134**	4	**898**
5:00PM	3	73	2	0	**78**	1	18	47	15	0	**80**	0	28	28	5	0	**61**	0	1	10	3	0	**14**	0	**233**
5:15PM	8	67	2	0	**77**	0	24	42	13	0	**79**	0	20	23	7	0	**50**	2	1	16	8	0	**25**	0	**231**
5:30PM	8	69	4	0	**81**	0	13	36	9	0	**58**	1	27	23	7	0	**57**	0	2	19	11	0	**32**	0	**228**
5:45PM	4	55	0	1	**60**	0	7	36	13	0	**56**	0	13	22	7	0	**42**	1	2	9	9	0	**20**	1	**178**
Hourly Total	23	264	8	1	**296**	1	62	161	50	0	**273**	1	88	96	26	0	**210**	3	6	54	31	0	**91**	1	**870**
Total	79	740	57	1	**877**	24	155	693	192	4	**1044**	2	222	282	87	0	**591**	6	47	251	116	0	**414**	6	**2926**
% Approach	9.0%	84.4%	6.5%	0.1%	**-**	-	14.8%	66.4%	18.4%	0.4%	**-**	-	37.6%	47.7%	14.7%	0%	**-**	-	11.4%	60.6%	28.0%	0%	**-**	-	-
% Total	2.7%	25.3%	1.9%	0%	**30.0%**	-	5.3%	23.7%	6.6%	0.1%	**35.7%**	-	7.6%	9.6%	3.0%	0%	**20.2%**	-	1.6%	8.6%	4.0%	0%	**14.1%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.1%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	79	734	55	1	**869**	-	152	689	185	4	**1030**	-	219	274	83	0	**576**	-	46	243	116	0	**405**	-	2880
% Lights	100%	99.2%	96.5%	100%	**99.1%**	-	98.1%	99.4%	96.4%	100%	**98.7%**	-	98.6%	97.2%	95.4%	0%	**97.5%**	-	97.9%	96.8%	100%	0%	**97.8%**	-	98.4%
Single-Unit Trucks	0	1	2	0	**3**	-	2	1	2	0	**5**	-	1	1	0	0	**2**	-	0	2	0	0	**2**	-	12
% Single-Unit Trucks	0%	0.1%	3.5%	0%	**0.3%**	-	1.3%	0.1%	1.0%	0%	**0.5%**	-	0.5%	0.4%	0%	0%	**0.3%**	-	0%	0.8%	0%	0%	**0.5%**	-	0.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	5	0	0	**5**	-	1	3	5	0	**9**	-	2	6	3	0	**11**	-	1	6	0	0	**7**	-	32
% Buses	0%	0.7%	0%	0%	**0.6%**	-	0.6%	0.4%	2.6%	0%	**0.9%**	-	0.9%	2.1%	3.4%	0%	**1.9%**	-	2.1%	2.4%	0%	0%	**1.7%**	-	1.1%
Pedestrians	-	-	-	-	-	22	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	91.7%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	8.3%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Alabama St at Ennis St - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Alabama St at Ennis St - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

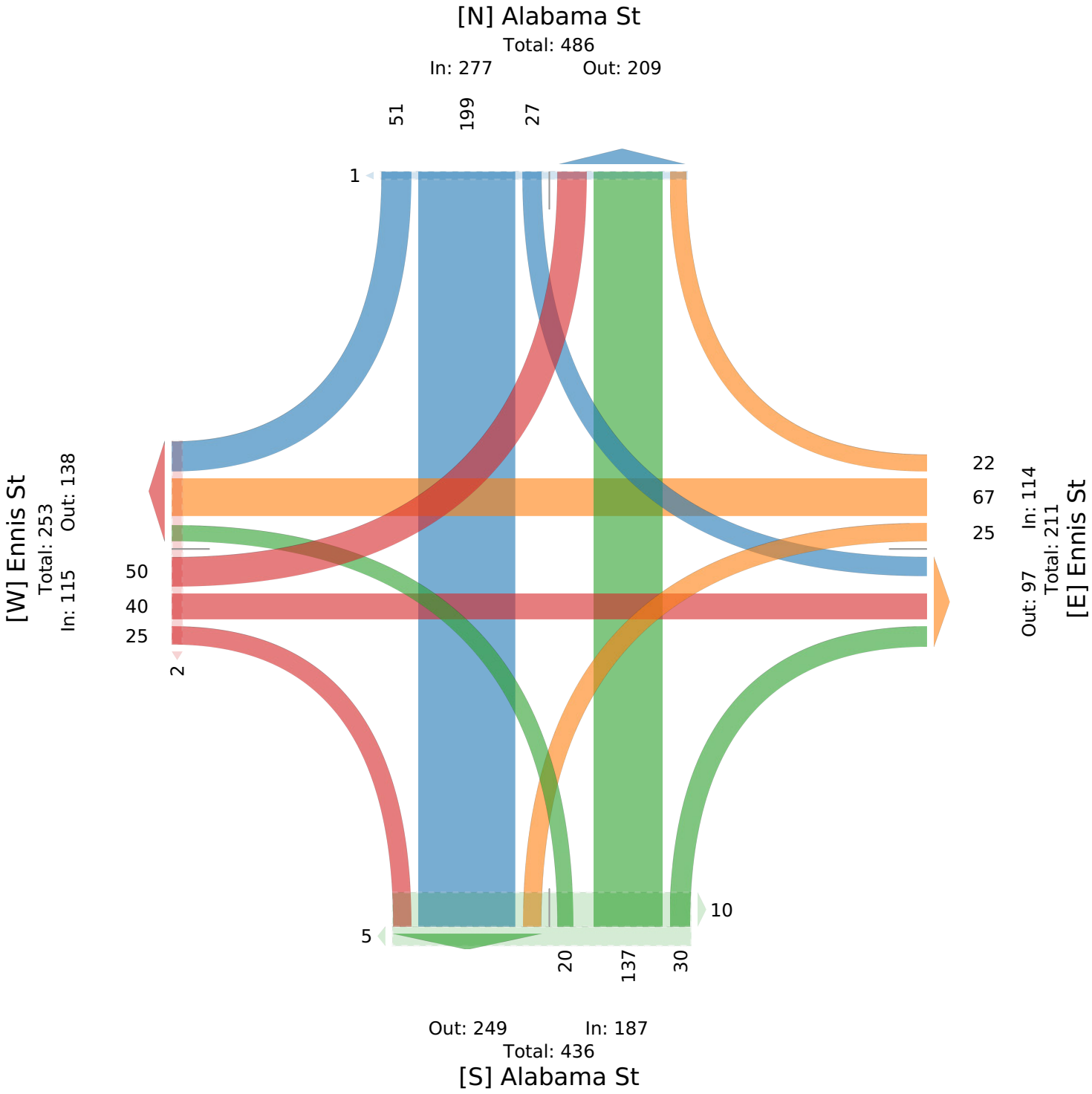
Leg	Alabama St						Alabama St						Ennis St						Ennis St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:30AM	1	31	14	0	**46**	8	13	32	12	0	**57**	1	18	11	3	0	**32**	2	10	19	8	0	**37**	0	**172**
7:45AM	7	35	9	0	**51**	2	5	49	15	0	**69**	0	14	10	5	0	**29**	0	5	16	10	0	**31**	0	**180**
8:00AM	6	36	5	0	**47**	3	3	59	8	0	**70**	0	6	12	7	0	**25**	0	4	16	2	0	**22**	0	**164**
8:15AM	6	35	2	0	**43**	2	6	59	16	0	**81**	0	12	7	10	0	**29**	0	6	16	2	0	**24**	0	**177**
Total	20	137	30	0	**187**	15	27	199	51	0	**277**	1	50	40	25	0	**115**	2	25	67	22	0	**114**	0	**693**
% Approach	10.7%	73.3%	16.0%	0%	**-**	-	9.7%	71.8%	18.4%	0%	**-**	-	43.5%	34.8%	21.7%	0%	**-**	-	21.9%	58.8%	19.3%	0%	**-**	-	-
% Total	2.9%	19.8%	4.3%	0%	**27.0%**	-	3.9%	28.7%	7.4%	0%	**40.0%**	-	7.2%	5.8%	3.6%	0%	**16.6%**	-	3.6%	9.7%	3.2%	0%	**16.5%**	-	-
PHF	0.714	0.951	0.536	-	**0.917**	-	0.519	0.843	0.797	-	**0.855**	-	0.694	0.833	0.625	-	**0.898**	-	0.625	0.882	0.550	-	**0.770**	-	0.963
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	4.0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	20	135	29	0	**184**	-	26	198	51	0	**275**	-	49	37	22	0	**108**	-	24	64	22	0	**110**	-	677
% Lights	100%	98.5%	96.7%	0%	**98.4%**	-	96.3%	99.5%	100%	0%	**99.3%**	-	98.0%	92.5%	88.0%	0%	**93.9%**	-	96.0%	95.5%	100%	0%	**96.5%**	-	97.7%
Single-Unit Trucks	0	0	1	0	**1**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	5
% Single-Unit Trucks	0%	0%	3.3%	0%	**0.5%**	-	3.7%	0%	0%	0%	**0.4%**	-	0%	2.5%	0%	0%	**0.9%**	-	0%	3.0%	0%	0%	**1.8%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	2	0	0	**2**	-	0	1	0	0	**1**	-	1	2	2	0	**5**	-	1	1	0	0	**2**	-	10
% Buses	0%	1.5%	0%	0%	**1.1%**	-	0%	0.5%	0%	0%	**0.4%**	-	2.0%	5.0%	8.0%	0%	**4.3%**	-	4.0%	1.5%	0%	0%	**1.8%**	-	1.4%
Pedestrians	-	-	-	-	-	15	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Alabama St at Ennis St - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Alabama St at Ennis St - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

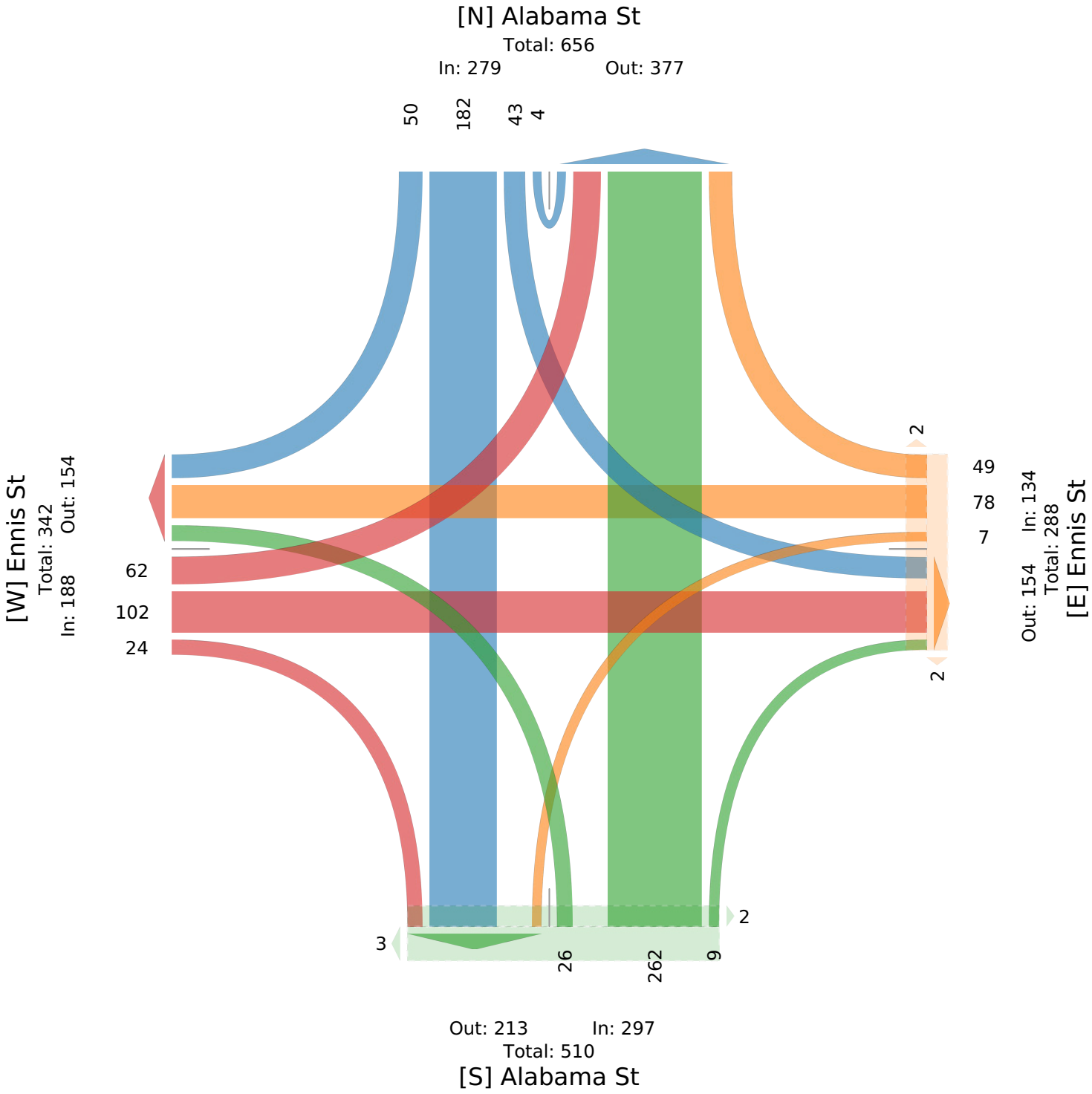
Leg / Direction	Alabama St Northbound						Alabama St Southbound						Ennis St Eastbound						Ennis St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 4:00PM	3	67	5	0	**75**	0	12	48	12	1	**73**	0	10	36	7	0	**53**	0	2	22	13	0	**37**	2	**238**
4:15PM	8	93	0	0	**101**	0	16	48	14	2	**80**	0	14	20	8	0	**42**	0	2	20	16	0	**38**	1	**261**
4:30PM	7	56	1	0	**64**	5	8	35	16	1	**60**	0	17	22	4	0	**43**	0	1	17	11	0	**29**	1	**196**
4:45PM	8	46	3	0	**57**	0	7	51	8	0	**66**	0	21	24	5	0	**50**	0	2	19	9	0	**30**	0	**203**
Total	26	262	9	0	**297**	5	43	182	50	4	**279**	0	62	102	24	0	**188**	0	7	78	49	0	**134**	4	**898**
% Approach	8.8%	88.2%	3.0%	0%	**-**	-	15.4%	65.2%	17.9%	1.4%	**-**	-	33.0%	54.3%	12.8%	0%	**-**	-	5.2%	58.2%	36.6%	0%	**-**	-	**-**
% Total	2.9%	29.2%	1.0%	0%	**33.1%**	-	4.8%	20.3%	5.6%	0.4%	**31.1%**	-	6.9%	11.4%	2.7%	0%	**20.9%**	-	0.8%	8.7%	5.5%	0%	**14.9%**	-	**-**
PHF	0.813	0.704	0.450	-	**0.735**	-	0.672	0.892	0.781	0.500	**0.872**	-	0.738	0.708	0.750	-	**0.887**	-	0.875	0.886	0.766	-	**0.882**	-	0.860
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	26	261	9	0	**296**	-	42	181	47	4	**274**	-	61	98	23	0	**182**	-	7	76	49	0	**132**	-	884
% Lights	100%	99.6%	100%	0%	**99.7%**	-	97.7%	99.5%	94.0%	100%	**98.2%**	-	98.4%	96.1%	95.8%	0%	**96.8%**	-	100%	97.4%	100%	0%	**98.5%**	-	98.4%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	2.0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	1	0	0	**1**	-	1	1	2	0	**4**	-	1	3	1	0	**5**	-	0	2	0	0	**2**	-	12
% Buses	0%	0.4%	0%	0%	**0.3%**	-	2.3%	0.5%	4.0%	0%	**1.4%**	-	1.6%	2.9%	4.2%	0%	**2.7%**	-	0%	2.6%	0%	0%	**1.5%**	-	1.3%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Alabama St at Ennis St - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867387, Location: 29.727555, -95.362877

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Scott St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

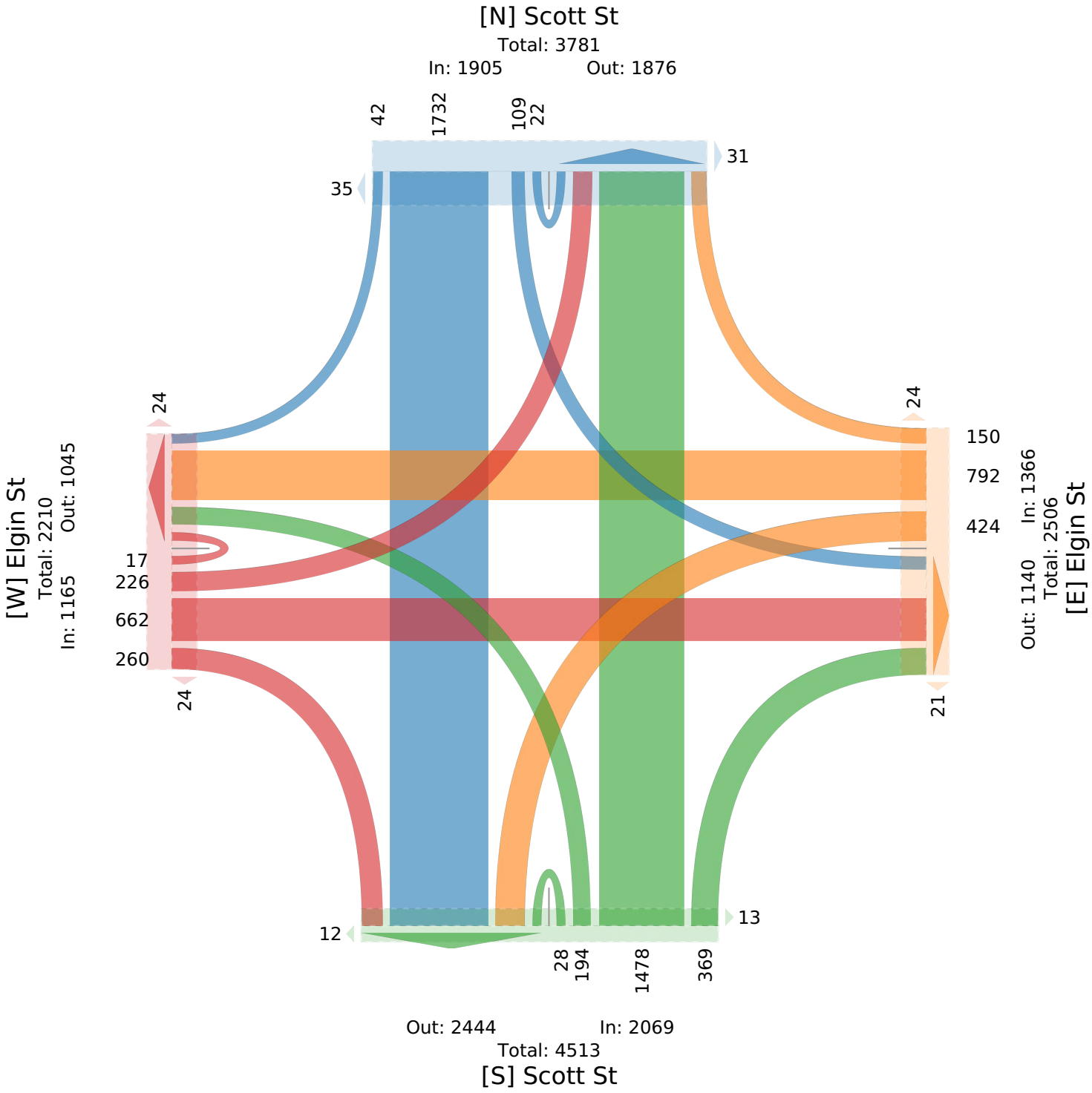
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Scott St						Scott St						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	3	41	16	0	**60**	0	6	81	2	1	**90**	1	4	25	6	0	**35**	4	13	20	3	0	**36**	0	**221**
7:15AM	5	48	15	0	**68**	1	8	140	3	0	**151**	1	3	24	10	0	**37**	1	21	39	4	0	**64**	2	**320**
7:30AM	9	65	22	0	**96**	2	7	102	2	0	**111**	2	8	48	14	0	**70**	2	22	39	5	0	**66**	1	**343**
7:45AM	15	77	32	0	**124**	1	3	131	2	1	**137**	1	11	29	12	0	**52**	7	35	58	6	0	**99**	0	**412**
Hourly Total	32	231	85	0	**348**	4	24	454	9	2	**489**	5	26	126	42	0	**194**	14	91	156	18	0	**265**	3	**1296**
8:00AM	10	57	22	0	**89**	1	7	117	1	1	**126**	5	15	45	17	0	**77**	1	17	54	4	0	**75**	2	**367**
8:15AM	10	81	26	1	**118**	3	6	131	5	0	**142**	5	8	47	17	0	**72**	0	25	55	8	0	**88**	1	**420**
8:30AM	4	44	14	0	**62**	2	8	146	1	2	**157**	13	9	52	16	0	**77**	0	24	44	5	0	**73**	7	**369**
8:45AM	8	53	25	2	**88**	2	9	147	7	0	**163**	12	9	27	14	1	**51**	4	35	36	12	0	**83**	5	**385**
Hourly Total	32	235	87	3	**357**	8	30	541	14	3	**588**	35	41	171	64	1	**277**	5	101	189	29	0	**319**	15	**1541**
4:00PM	24	165	33	4	**226**	2	5	98	3	3	**109**	1	23	49	23	1	**96**	4	33	56	17	0	**106**	4	**537**
4:15PM	10	156	19	6	**191**	1	10	92	5	1	**108**	4	24	58	23	2	**107**	3	27	50	16	0	**93**	2	**499**
4:30PM	16	101	31	2	**150**	1	4	88	2	1	**95**	4	18	33	17	3	**71**	5	37	66	12	0	**115**	7	**431**
4:45PM	10	108	26	2	**146**	0	9	116	2	4	**131**	2	23	59	24	3	**109**	2	33	56	14	0	**103**	0	**489**
Hourly Total	60	530	109	14	**713**	4	28	394	12	9	**443**	11	88	199	87	9	**383**	14	130	228	59	0	**417**	13	**1956**
5:00PM	16	139	24	3	**182**	4	7	95	1	4	**107**	8	13	45	21	3	**82**	6	36	51	4	0	**91**	5	**462**
5:15PM	25	151	22	1	**199**	1	9	111	1	1	**122**	0	24	53	21	1	**99**	2	20	57	20	0	**97**	0	**517**
5:30PM	12	114	22	5	**153**	1	4	71	3	2	**80**	3	18	37	14	1	**70**	3	29	56	11	0	**96**	2	**399**
5:45PM	17	78	20	2	**117**	3	7	66	2	1	**76**	4	16	31	11	2	**60**	4	17	55	9	0	**81**	7	**334**
Hourly Total	70	482	88	11	**651**	9	27	343	7	8	**385**	15	71	166	67	7	**311**	15	102	219	44	0	**365**	14	**1712**
Total	194	1478	369	28	**2069**	25	109	1732	42	22	**1905**	66	226	662	260	17	**1165**	48	424	792	150	0	**1366**	45	**6505**
% Approach	9.4%	71.4%	17.8%	1.4%	**-**	-	5.7%	90.9%	2.2%	1.2%	**-**	-	19.4%	56.8%	22.3%	1.5%	**-**	-	31.0%	58.0%	11.0%	0%	**-**	-	-
% Total	3.0%	22.7%	5.7%	0.4%	**31.8%**	-	1.7%	26.6%	0.6%	0.3%	**29.3%**	-	3.5%	10.2%	4.0%	0.3%	**17.9%**	-	6.5%	12.2%	2.3%	0%	**21.0%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	4
% Motorcycles	0%	0.1%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	186	1405	363	28	**1982**	-	98	1656	41	22	**1817**	-	222	642	258	17	**1139**	-	414	779	135	0	**1328**	-	6266
% Lights	95.9%	95.1%	98.4%	100%	**95.8%**	-	89.9%	95.6%	97.6%	100%	**95.4%**	-	98.2%	97.0%	99.2%	100%	**97.8%**	-	97.6%	98.4%	90.0%	0%	**97.2%**	-	96.3%
Single-Unit Trucks	1	9	2	0	**12**	-	0	14	0	0	**14**	-	1	8	0	0	**9**	-	4	5	1	0	**10**	-	45
% Single-Unit Trucks	0.5%	0.6%	0.5%	0%	**0.6%**	-	0%	0.8%	0%	0%	**0.7%**	-	0.4%	1.2%	0%	0%	**0.8%**	-	0.9%	0.6%	0.7%	0%	**0.7%**	-	0.7%
Articulated Trucks	2	4	1	0	**7**	-	0	4	1	0	**5**	-	2	1	0	0	**3**	-	3	1	1	0	**5**	-	20
% Articulated Trucks	1.0%	0.3%	0.3%	0%	**0.3%**	-	0%	0.2%	2.4%	0%	**0.3%**	-	0.9%	0.2%	0%	0%	**0.3%**	-	0.7%	0.1%	0.7%	0%	**0.4%**	-	0.3%
Buses	5	59	3	0	**67**	-	11	57	0	0	**68**	-	1	10	2	0	**13**	-	3	6	13	0	**22**	-	170
% Buses	2.6%	4.0%	0.8%	0%	**3.2%**	-	10.1%	3.3%	0%	0%	**3.6%**	-	0.4%	1.5%	0.8%	0%	**1.1%**	-	0.7%	0.8%	8.7%	0%	**1.6%**	-	2.6%
Pedestrians	-	-	-	-	-	18	-	-	-	-	-	64	-	-	-	-	-	39	-	-	-	-	-	44	
% Pedestrians	-	-	-	-	-	72.0%	-	-	-	-	-	97.0%	-	-	-	-	-	81.3%	-	-	-	-	-	97.8%	-
Bicycles on Crosswalk	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	28.0%	-	-	-	-	-	3.0%	-	-	-	-	-	18.8%	-	-	-	-	-	2.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Scott St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Scott St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

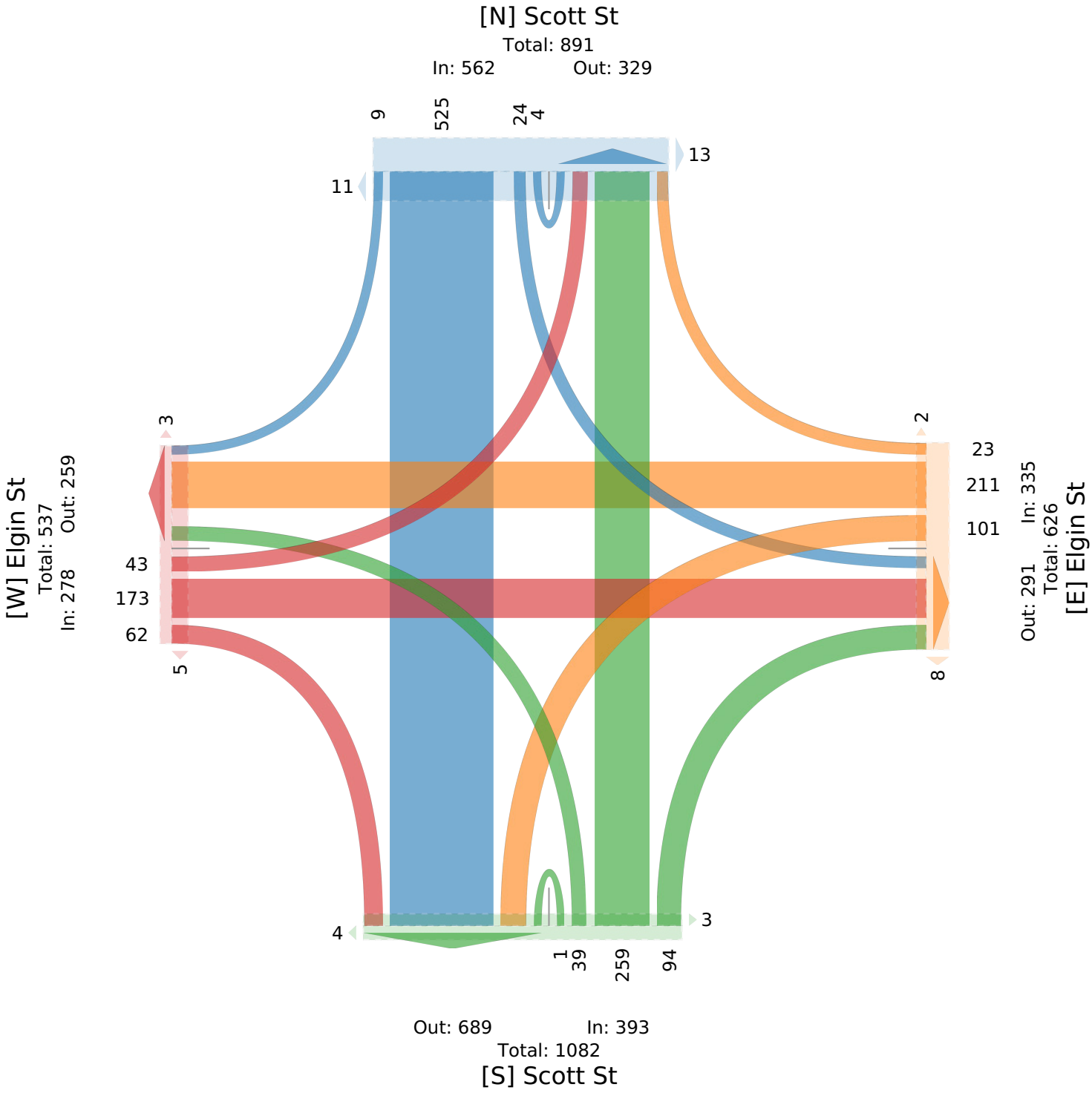
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Scott St						Scott St						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:45AM	15	77	32	0	**124**	1	3	131	2	1	**137**	1	11	29	12	0	**52**	7	35	58	6	0	**99**	0	**412**
8:00AM	10	57	22	0	**89**	1	7	117	1	1	**126**	5	15	45	17	0	**77**	1	17	54	4	0	**75**	2	**367**
8:15AM	10	81	26	1	**118**	3	6	131	5	0	**142**	5	8	47	17	0	**72**	0	25	55	8	0	**88**	1	**420**
8:30AM	4	44	14	0	**62**	2	8	146	1	2	**157**	13	9	52	16	0	**77**	0	24	44	5	0	**73**	7	**369**
Total	39	259	94	1	**393**	7	24	525	9	4	**562**	24	43	173	62	0	**278**	8	101	211	23	0	**335**	10	**1568**
% Approach	9.9%	65.9%	23.9%	0.3%	**-**	-	4.3%	93.4%	1.6%	0.7%	**-**	-	15.5%	62.2%	22.3%	0%	**-**	-	30.1%	63.0%	6.9%	0%	**-**	-	-
% Total	2.5%	16.5%	6.0%	0.1%	**25.1%**	-	1.5%	33.5%	0.6%	0.3%	**35.8%**	-	2.7%	11.0%	4.0%	0%	**17.7%**	-	6.4%	13.5%	1.5%	0%	**21.4%**	-	-
PHF	0.650	0.799	0.734	0.250	**0.792**	-	0.750	0.899	0.450	0.500	**0.895**	-	0.717	0.832	0.912	-	**0.903**	-	0.721	0.909	0.719	-	**0.846**	-	0.933
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	36	235	92	1	**364**	-	22	499	9	4	**534**	-	42	168	62	0	**272**	-	98	207	20	0	**325**	-	1495
% Lights	92.3%	90.7%	97.9%	100%	**92.6%**	-	91.7%	95.0%	100%	100%	**95.0%**	-	97.7%	97.1%	100%	0%	**97.8%**	-	97.0%	98.1%	87.0%	0%	**97.0%**	-	95.3%
Single-Unit Trucks	1	3	0	0	**4**	-	0	8	0	0	**8**	-	0	3	0	0	**3**	-	1	2	0	0	**3**	-	18
% Single-Unit Trucks	2.6%	1.2%	0%	0%	**1.0%**	-	0%	1.5%	0%	0%	**1.4%**	-	0%	1.7%	0%	0%	**1.1%**	-	1.0%	0.9%	0%	0%	**0.9%**	-	1.1%
Articulated Trucks	2	2	0	0	**4**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	6
% Articulated Trucks	5.1%	0.8%	0%	0%	**1.0%**	-	0%	0.2%	0%	0%	**0.2%**	-	2.3%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	0	19	2	0	**21**	-	2	17	0	0	**19**	-	0	1	0	0	**1**	-	2	2	3	0	**7**	-	48
% Buses	0%	7.3%	2.1%	0%	**5.3%**	-	8.3%	3.2%	0%	0%	**3.4%**	-	0%	0.6%	0%	0%	**0.4%**	-	2.0%	0.9%	13.0%	0%	**2.1%**	-	3.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	24	-	-	-	-	-	7	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	57.1%	-	-	-	-	-	100%	-	-	-	-	-	87.5%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	42.9%	-	-	-	-	-	0%	-	-	-	-	-	12.5%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Scott St - TMC
Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Scott St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

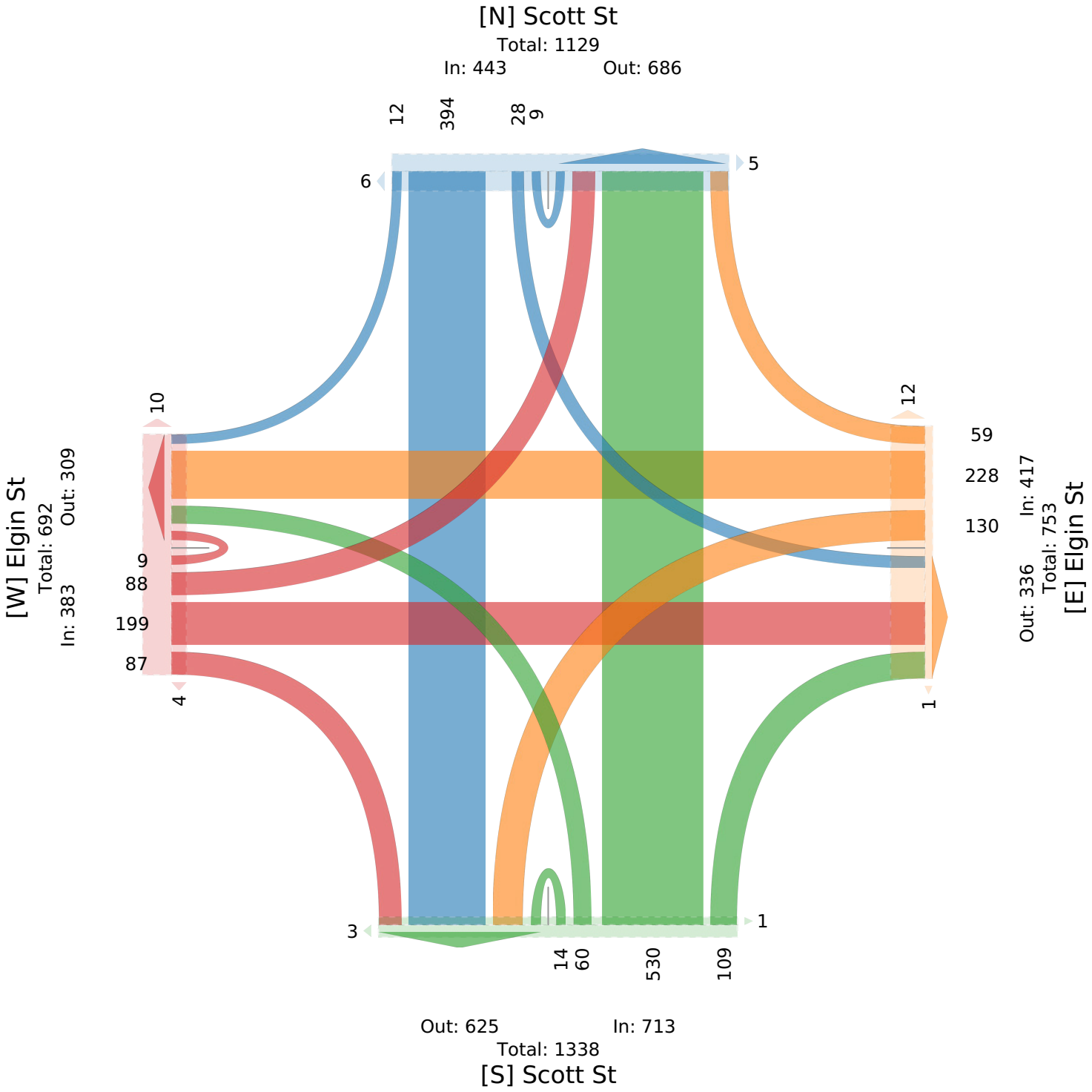
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Scott St						Scott St						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:00PM	24	165	33	4	**226**	2	5	98	3	3	**109**	1	23	49	23	1	**96**	4	33	56	17	0	**106**	4	**537**
4:15PM	10	156	19	6	**191**	1	10	92	5	1	**108**	4	24	58	23	2	**107**	3	27	50	16	0	**93**	2	**499**
4:30PM	16	101	31	2	**150**	1	4	88	2	1	**95**	4	18	33	17	3	**71**	5	37	66	12	0	**115**	7	**431**
4:45PM	10	108	26	2	**146**	0	9	116	2	4	**131**	2	23	59	24	3	**109**	2	33	56	14	0	**103**	0	**489**
Total	60	530	109	14	**713**	4	28	394	12	9	**443**	11	88	199	87	9	**383**	14	130	228	59	0	**417**	13	**1956**
% Approach	8.4%	74.3%	15.3%	2.0%	**-**	-	6.3%	88.9%	2.7%	2.0%	**-**	-	23.0%	52.0%	22.7%	2.3%	**-**	-	31.2%	54.7%	14.1%	0%	**-**	-	-
% Total	3.1%	27.1%	5.6%	0.7%	**36.5%**	-	1.4%	20.1%	0.6%	0.5%	**22.6%**	-	4.5%	10.2%	4.4%	0.5%	**19.6%**	-	6.6%	11.7%	3.0%	0%	**21.3%**	-	-
PHF	0.625	0.803	0.826	0.583	**0.789**	-	0.700	0.849	0.600	0.563	**0.845**	-	0.917	0.843	0.906	0.750	**0.878**	-	0.878	0.864	0.868	-	**0.907**	-	0.911
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.2%**	-	0.1%
Lights	59	512	107	14	**692**	-	25	376	12	9	**422**	-	87	192	86	9	**374**	-	129	226	55	0	**410**	-	1898
% Lights	98.3%	96.6%	98.2%	100%	**97.1%**	-	89.3%	95.4%	100%	100%	**95.3%**	-	98.9%	96.5%	98.9%	100%	**97.7%**	-	99.2%	99.1%	93.2%	0%	**98.3%**	-	97.0%
Single-Unit Trucks	0	2	1	0	**3**	-	0	1	0	0	**1**	-	1	3	0	0	**4**	-	0	1	0	0	**1**	-	9
% Single-Unit Trucks	0%	0.4%	0.9%	0%	**0.4%**	-	0%	0.3%	0%	0%	**0.2%**	-	1.1%	1.5%	0%	0%	**1.0%**	-	0%	0.4%	0%	0%	**0.2%**	-	0.5%
Articulated Trucks	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.3%**	-	0.8%	0%	0%	0%	**0.2%**	-	0.2%
Buses	1	16	1	0	**18**	-	3	16	0	0	**19**	-	0	3	1	0	**4**	-	0	0	4	0	**4**	-	45
% Buses	1.7%	3.0%	0.9%	0%	**2.5%**	-	10.7%	4.1%	0%	0%	**4.3%**	-	0%	1.5%	1.1%	0%	**1.0%**	-	0%	0%	6.8%	0%	**1.0%**	-	2.3%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	9	-	-	-	-	-	11	-	-	-	-	-	13	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	81.8%	-	-	-	-	-	78.6%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	18.2%	-	-	-	-	-	21.4%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Scott St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867341, Location: 29.727843, -95.349894

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Cullen Blvd - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

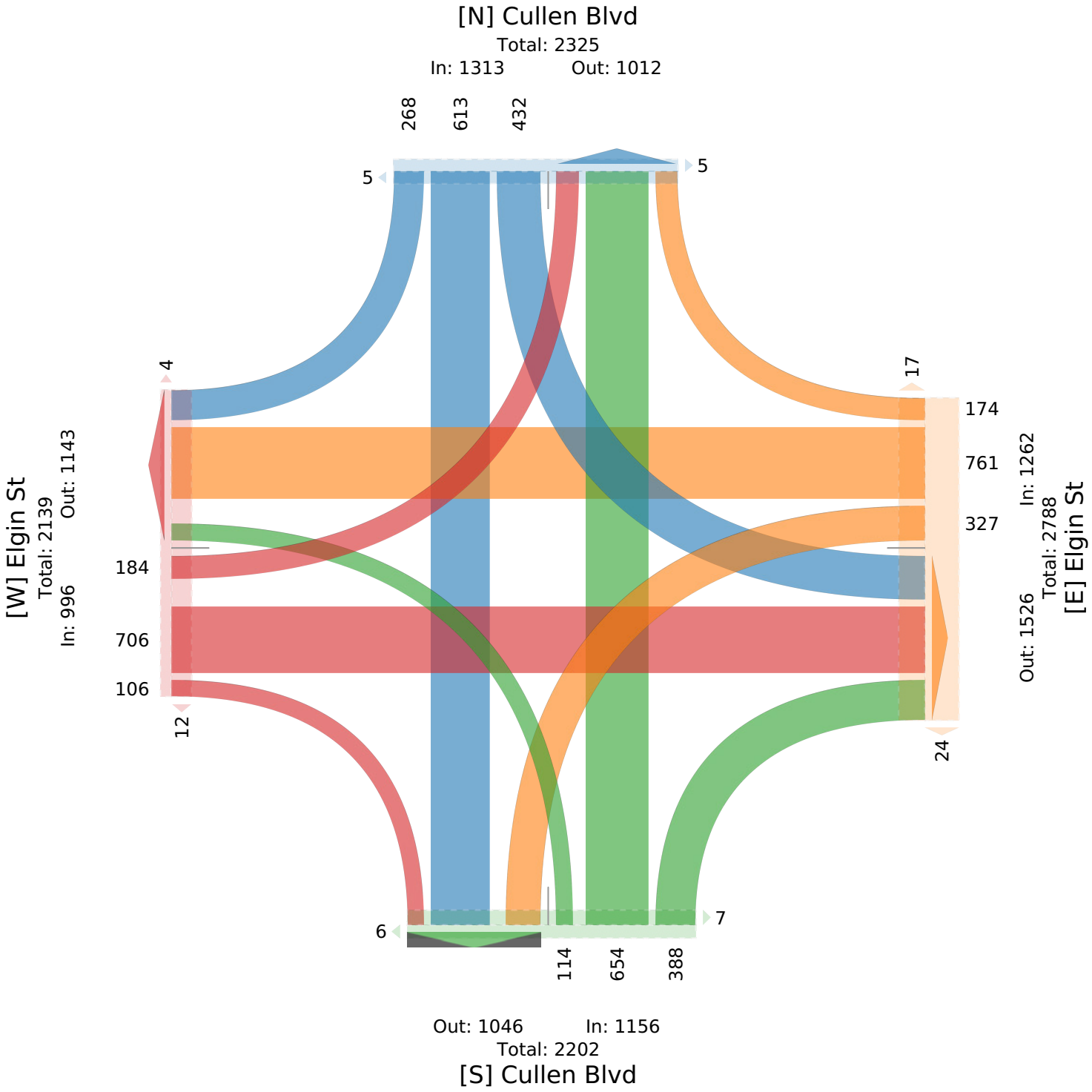
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Cullen Blvd						Cullen Blvd						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	3	14	11	0	**28**	1	16	27	12	0	**55**	0	9	33	4	0	**46**	2	16	31	3	0	**50**	0	**179**
7:15AM	2	12	14	0	**28**	0	25	31	16	0	**72**	0	8	32	4	0	**44**	0	27	39	2	0	**68**	1	**212**
7:30AM	3	11	17	0	**31**	0	40	46	14	0	**100**	1	10	43	9	0	**62**	0	21	44	2	0	**67**	0	**260**
7:45AM	11	27	32	0	**70**	0	40	61	5	0	**106**	1	4	34	8	0	**46**	0	24	45	1	0	**70**	1	**292**
Hourly Total	19	64	74	0	**157**	1	121	165	47	0	**333**	2	31	142	25	0	**198**	2	88	159	8	0	**255**	2	**943**
8:00AM	12	25	17	0	**54**	0	42	64	13	0	**119**	0	6	51	8	0	**65**	2	22	39	5	0	**66**	3	**304**
8:15AM	8	30	28	0	**66**	2	40	54	15	0	**109**	1	9	44	5	0	**58**	1	35	72	5	0	**112**	4	**345**
8:30AM	5	17	20	0	**42**	5	44	35	4	0	**83**	0	4	60	7	0	**71**	3	27	41	3	0	**71**	0	**267**
8:45AM	7	12	16	0	**35**	1	31	29	13	0	**73**	0	4	37	4	0	**45**	1	22	48	2	0	**72**	6	**225**
Hourly Total	32	84	81	0	**197**	8	157	182	45	0	**384**	1	23	192	24	0	**239**	7	106	200	15	0	**321**	13	**1141**
4:00PM	7	72	20	0	**99**	0	22	27	15	0	**64**	1	10	48	6	0	**64**	0	13	46	25	0	**84**	1	**311**
4:15PM	5	79	25	0	**109**	2	19	32	20	0	**71**	1	19	47	12	0	**78**	1	9	51	21	0	**81**	3	**339**
4:30PM	8	55	29	0	**92**	0	15	38	19	0	**72**	1	18	44	6	0	**68**	0	20	56	15	0	**91**	1	**323**
4:45PM	6	56	28	0	**90**	0	22	45	15	0	**82**	1	16	40	7	0	**63**	2	14	51	11	0	**76**	1	**311**
Hourly Total	26	262	102	0	**390**	2	78	142	69	0	**289**	4	63	179	31	0	**273**	3	56	204	72	0	**332**	6	**1284**
5:00PM	6	49	32	0	**87**	1	27	39	19	0	**85**	0	15	47	9	0	**71**	0	24	43	23	0	**90**	2	**333**
5:15PM	7	83	29	0	**119**	1	26	46	28	0	**100**	1	17	44	8	0	**69**	1	15	53	17	0	**85**	10	**373**
5:30PM	15	68	36	0	**119**	0	16	20	23	0	**59**	1	24	51	4	0	**79**	0	26	55	19	0	**100**	1	**357**
5:45PM	9	44	34	0	**87**	0	7	19	37	0	**63**	1	11	51	5	0	**67**	3	12	47	20	0	**79**	7	**296**
Hourly Total	37	244	131	0	**412**	2	76	124	107	0	**307**	3	67	193	26	0	**286**	4	77	198	79	0	**354**	20	**1359**
Total	114	654	388	0	**1156**	13	432	613	268	0	**1313**	10	184	706	106	0	**996**	16	327	761	174	0	**1262**	41	**4727**
% Approach	9.9%	56.6%	33.6%	0%	**-**	-	32.9%	46.7%	20.4%	0%	**-**	-	18.5%	70.9%	10.6%	0%	**-**	-	25.9%	60.3%	13.8%	0%	**-**	-	-
% Total	2.4%	13.8%	8.2%	0%	**24.5%**	-	9.1%	13.0%	5.7%	0%	**27.8%**	-	3.9%	14.9%	2.2%	0%	**21.1%**	-	6.9%	16.1%	3.7%	0%	**26.7%**	-	-
Motorcycles	0	0	1	0	**1**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	5
% Motorcycles	0%	0%	0.3%	0%	**0.1%**	-	0.2%	0%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0.6%	0%	**0.2%**	-	0.1%
Lights	101	647	346	0	**1094**	-	430	599	267	0	**1296**	-	180	683	94	0	**957**	-	289	747	173	0	**1209**	-	4556
% Lights	88.6%	98.9%	89.2%	0%	**94.6%**	-	99.5%	97.7%	99.6%	0%	**98.7%**	-	97.8%	96.7%	88.7%	0%	**96.1%**	-	88.4%	98.2%	99.4%	0%	**95.8%**	-	96.4%
Single-Unit Trucks	0	3	4	0	**7**	-	0	5	1	0	**6**	-	2	5	0	0	**7**	-	1	7	0	0	**8**	-	28
% Single-Unit Trucks	0%	0.5%	1.0%	0%	**0.6%**	-	0%	0.8%	0.4%	0%	**0.5%**	-	1.1%	0.7%	0%	0%	**0.7%**	-	0.3%	0.9%	0%	0%	**0.6%**	-	0.6%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	3	0	0	**3**	-	0	1	0	0	**1**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Buses	13	4	37	0	**54**	-	1	7	0	0	**8**	-	2	14	12	0	**28**	-	37	5	0	0	**42**	-	132
% Buses	11.4%	0.6%	9.5%	0%	**4.7%**	-	0.2%	1.1%	0%	0%	**0.6%**	-	1.1%	2.0%	11.3%	0%	**2.8%**	-	11.3%	0.7%	0%	0%	**3.3%**	-	2.8%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	6	-	-	-	-	-	12	-	-	-	-	-	29	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	60.0%	-	-	-	-	-	75.0%	-	-	-	-	-	70.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	12	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	40.0%	-	-	-	-	-	25.0%	-	-	-	-	-	29.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Cullen Blvd - TMC
Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Cullen Blvd - TMC

Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

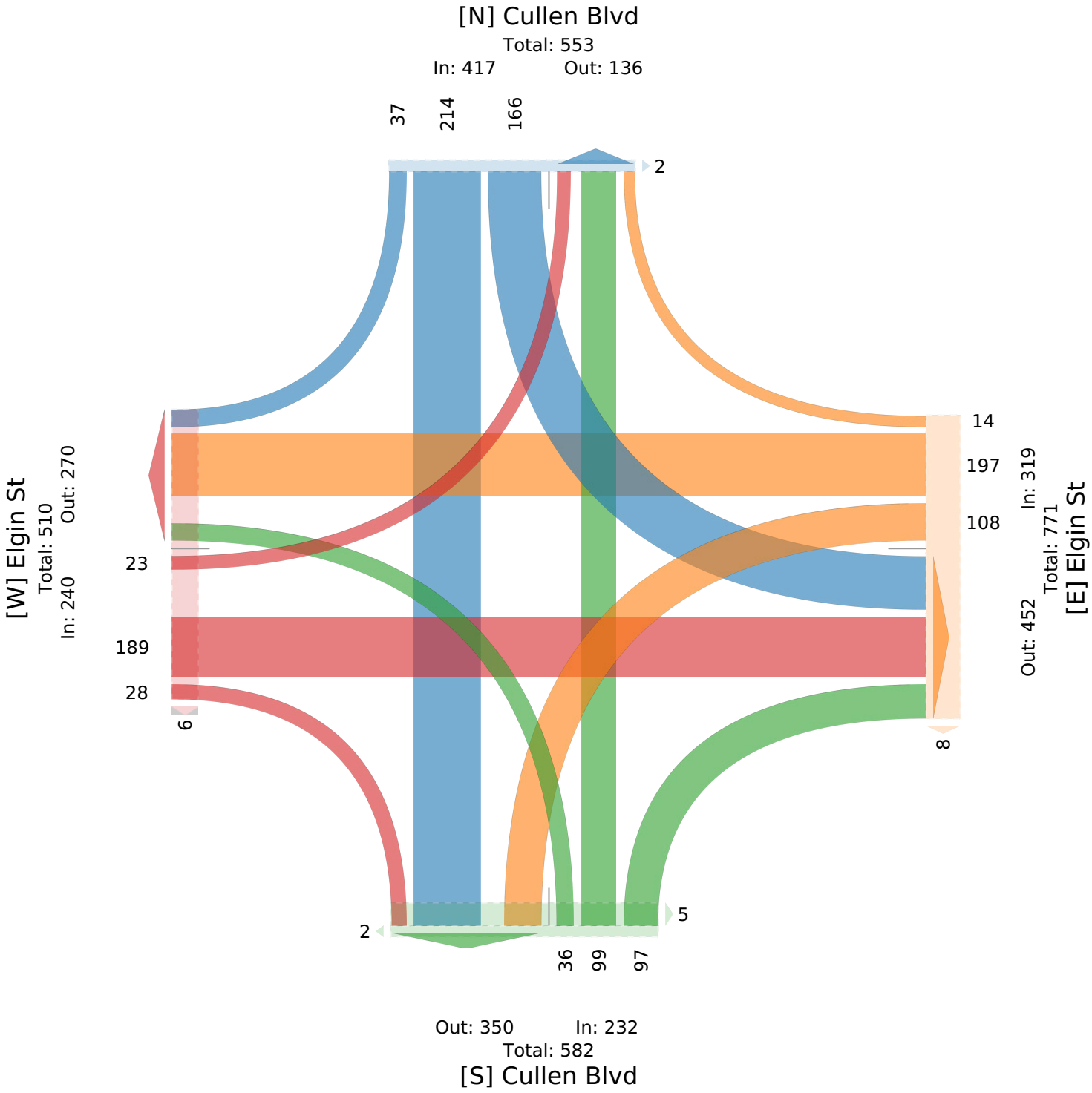
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Cullen Blvd						Cullen Blvd						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:45AM	11	27	32	0	**70**	0	40	61	5	0	**106**	1	4	34	8	0	**46**	0	24	45	1	0	**70**	1	**292**
8:00AM	12	25	17	0	**54**	0	42	64	13	0	**119**	0	6	51	8	0	**65**	2	22	39	5	0	**66**	3	**304**
8:15AM	8	30	28	0	**66**	2	40	54	15	0	**109**	1	9	44	5	0	**58**	1	35	72	5	0	**112**	4	**345**
8:30AM	5	17	20	0	**42**	5	44	35	4	0	**83**	0	4	60	7	0	**71**	3	27	41	3	0	**71**	0	**267**
Total	36	99	97	0	**232**	7	166	214	37	0	**417**	2	23	189	28	0	**240**	6	108	197	14	0	**319**	8	**1208**
% Approach	15.5%	42.7%	41.8%	0%	**-**	-	39.8%	51.3%	8.9%	0%	**-**	-	9.6%	78.8%	11.7%	0%	**-**	-	33.9%	61.8%	4.4%	0%	**-**	-	-
% Total	3.0%	8.2%	8.0%	0%	**19.2%**	-	13.7%	17.7%	3.1%	0%	**34.5%**	-	1.9%	15.6%	2.3%	0%	**19.9%**	-	8.9%	16.3%	1.2%	0%	**26.4%**	-	-
PHF	0.750	0.825	0.758	-	**0.829**	-	0.943	0.836	0.617	-	**0.876**	-	0.639	0.788	0.875	-	**0.845**	-	0.771	0.684	0.700	-	**0.712**	-	0.875
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0.6%	0%	0%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.3%**	-	0.2%
Lights	33	96	86	0	**215**	-	165	211	36	0	**412**	-	23	183	24	0	**230**	-	96	193	14	0	**303**	-	1160
% Lights	91.7%	97.0%	88.7%	0%	**92.7%**	-	99.4%	98.6%	97.3%	0%	**98.8%**	-	100%	96.8%	85.7%	0%	**95.8%**	-	88.9%	98.0%	100%	0%	**95.0%**	-	96.0%
Single-Unit Trucks	0	2	1	0	**3**	-	0	1	1	0	**2**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	8
% Single-Unit Trucks	0%	2.0%	1.0%	0%	**1.3%**	-	0%	0.5%	2.7%	0%	**0.5%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	1.0%	0%	0%	**0.6%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	3	1	10	0	**14**	-	0	2	0	0	**2**	-	0	3	4	0	**7**	-	12	1	0	0	**13**	-	36
% Buses	8.3%	1.0%	10.3%	0%	**6.0%**	-	0%	0.9%	0%	0%	**0.5%**	-	0%	1.6%	14.3%	0%	**2.9%**	-	11.1%	0.5%	0%	0%	**4.1%**	-	3.0%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Cullen Blvd - TMC
Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Cullen Blvd - TMC

Thu Sep 9, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

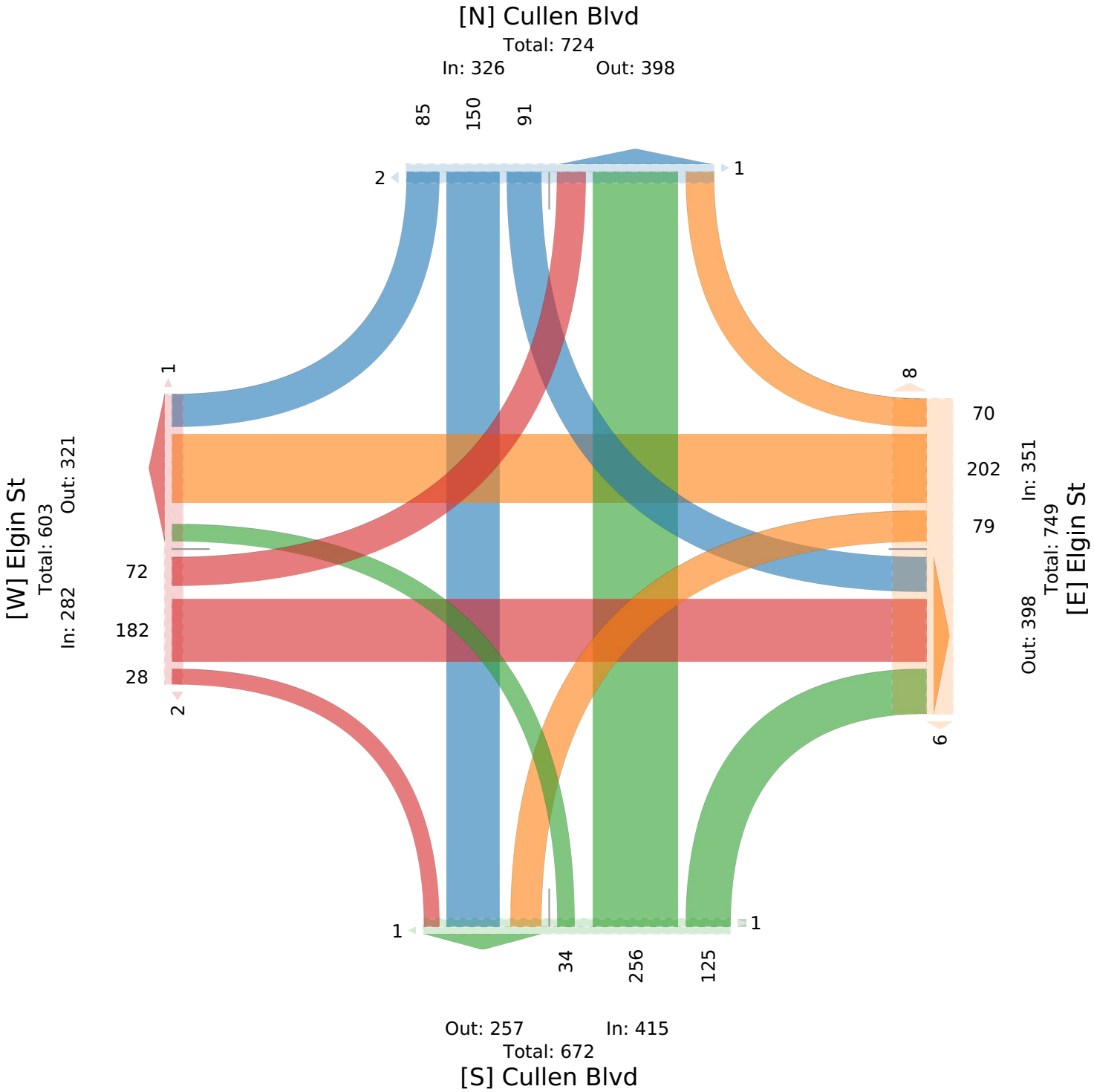
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Cullen Blvd						Cullen Blvd						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 4:45PM	6	56	28	0	**90**	0	22	45	15	0	**82**	1	16	40	7	0	**63**	2	14	51	11	0	**76**	1	**311**
5:00PM	6	49	32	0	**87**	1	27	39	19	0	**85**	0	15	47	9	0	**71**	0	24	43	23	0	**90**	2	**333**
5:15PM	7	83	29	0	**119**	1	26	46	28	0	**100**	1	17	44	8	0	**69**	1	15	53	17	0	**85**	10	**373**
5:30PM	15	68	36	0	**119**	0	16	20	23	0	**59**	1	24	51	4	0	**79**	0	26	55	19	0	**100**	1	**357**
Total	34	256	125	0	**415**	2	91	150	85	0	**326**	3	72	182	28	0	**282**	3	79	202	70	0	**351**	14	**1374**
% Approach	8.2%	61.7%	30.1%	0%	**-**	-	27.9%	46.0%	26.1%	0%	**-**	-	25.5%	64.5%	9.9%	0%	**-**	-	22.5%	57.5%	19.9%	0%	**-**	-	**-**
% Total	2.5%	18.6%	9.1%	0%	**30.2%**	-	6.6%	10.9%	6.2%	0%	**23.7%**	-	5.2%	13.2%	2.0%	0%	**20.5%**	-	5.7%	14.7%	5.1%	0%	**25.5%**	-	**-**
PHF	0.567	0.771	0.868	-	**0.872**	-	0.843	0.815	0.759	-	**0.815**	-	0.750	0.892	0.778	-	**0.892**	-	0.760	0.918	0.761	-	**0.878**	-	0.921
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0.8%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	31	254	114	0	**399**	-	91	147	85	0	**323**	-	71	177	26	0	**274**	-	70	202	70	0	**342**	-	1338
% Lights	91.2%	99.2%	91.2%	0%	**96.1%**	-	100%	98.0%	100%	0%	**99.1%**	-	98.6%	97.3%	92.9%	0%	**97.2%**	-	88.6%	100%	100%	0%	**97.4%**	-	97.4%
Single-Unit Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Single-Unit Trucks	0%	0.4%	0%	0%	**0.2%**	-	0%	0.7%	0%	0%	**0.3%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	3	1	10	0	**14**	-	0	2	0	0	**2**	-	1	3	2	0	**6**	-	9	0	0	0	**9**	-	31
% Buses	8.8%	0.4%	8.0%	0%	**3.4%**	-	0%	1.3%	0%	0%	**0.6%**	-	1.4%	1.6%	7.1%	0%	**2.1%**	-	11.4%	0%	0%	0%	**2.6%**	-	2.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-	-	-	-	-	100%	-	-	-	-	-	78.6%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-	-	-	-	-	0%	-	-	-	-	-	21.4%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Cullen Blvd - TMC
Thu Sep 9, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867342, Location: 29.727309, -95.344036

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at UH Entrance - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

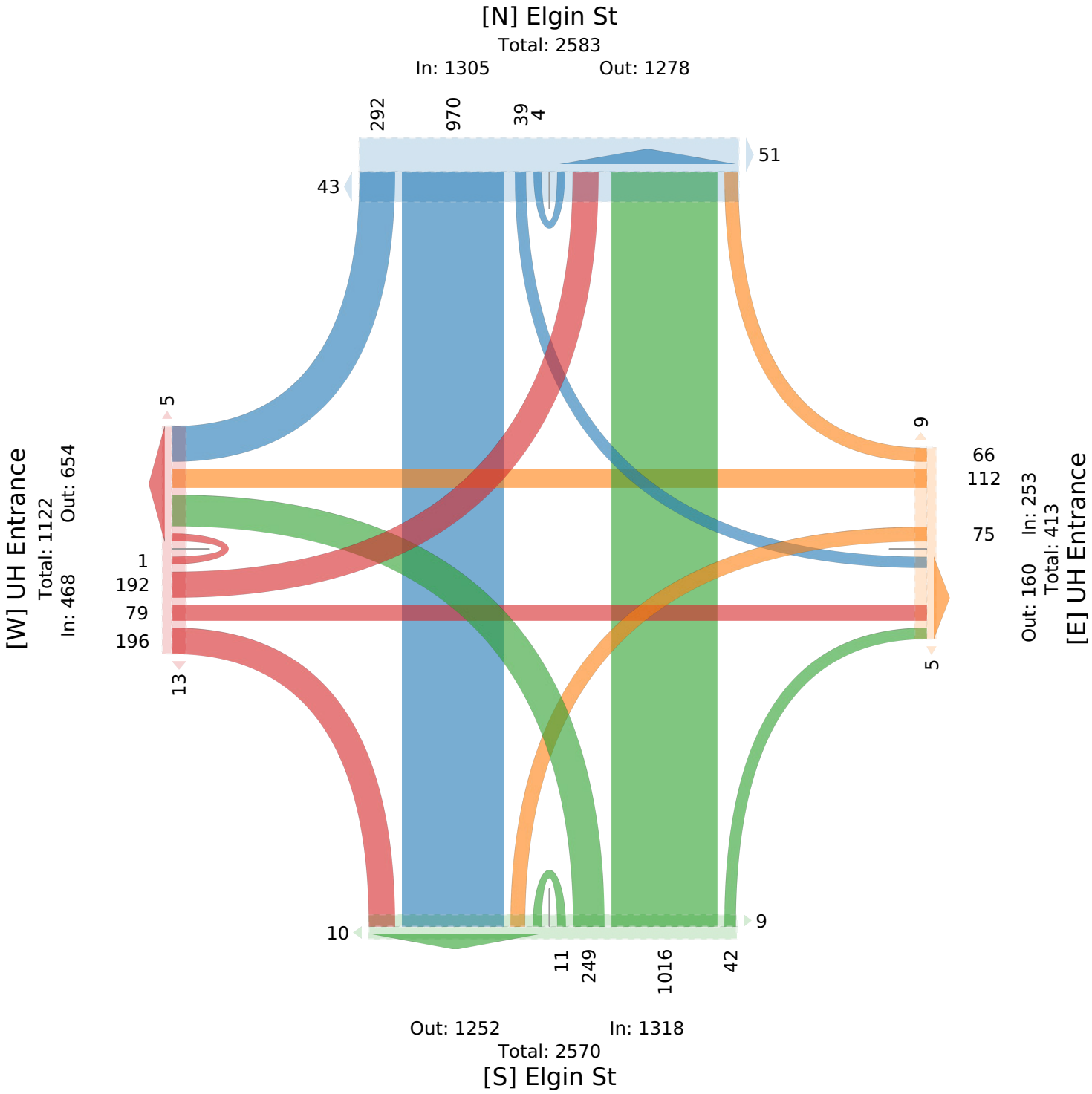
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Elgin St						Elgin St						UH Entrance						UH Entrance						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	11	36	6	0	**53**	2	3	30	8	0	**41**	0	2	6	1	0	**9**	0	2	17	2	0	**21**	0	**124**
7:15AM	10	54	5	0	**69**	0	2	38	14	0	**54**	2	1	4	3	0	**8**	1	2	21	4	0	**27**	0	**158**
7:30AM	17	104	6	0	**127**	2	4	50	22	1	**77**	4	3	10	6	0	**19**	0	1	12	5	0	**18**	1	**241**
7:45AM	16	97	5	0	**118**	1	7	32	21	0	**60**	6	5	8	3	0	**16**	1	0	11	3	0	**14**	0	**208**
Hourly Total	54	291	22	0	**367**	5	16	150	65	1	**232**	12	11	28	13	0	**52**	2	5	61	14	0	**80**	1	**731**
8:00AM	31	90	3	0	**124**	2	5	45	17	0	**67**	6	4	8	1	0	**13**	0	7	11	4	0	**22**	0	**226**
8:15AM	17	99	4	1	**121**	3	3	58	16	0	**77**	9	7	7	1	0	**15**	1	1	12	1	0	**14**	2	**227**
8:30AM	31	77	3	1	**112**	0	3	53	35	0	**91**	7	9	11	9	0	**29**	0	1	9	1	0	**11**	1	**243**
8:45AM	37	76	6	0	**119**	0	5	46	25	0	**76**	3	5	9	6	0	**20**	2	1	10	3	0	**14**	0	**229**
Hourly Total	116	342	16	2	**476**	5	16	202	93	0	**311**	25	25	35	17	0	**77**	3	10	42	9	0	**61**	3	**925**
4:00PM	10	31	1	2	**44**	1	2	86	14	1	**103**	14	16	2	23	0	**41**	0	8	2	5	0	**15**	3	**203**
4:15PM	14	55	1	1	**71**	2	0	70	10	0	**80**	11	18	3	9	0	**30**	5	11	1	7	0	**19**	3	**200**
4:30PM	13	46	0	1	**60**	1	3	73	13	1	**90**	7	16	2	12	0	**30**	0	9	0	9	0	**18**	0	**198**
4:45PM	2	59	1	2	**64**	2	1	69	22	0	**92**	9	19	5	14	0	**38**	2	7	4	5	0	**16**	2	**210**
Hourly Total	39	191	3	6	**239**	6	6	298	59	2	**365**	41	69	12	58	0	**139**	7	35	7	26	0	**68**	8	**811**
5:00PM	12	55	0	1	**68**	3	0	75	24	0	**99**	6	29	3	25	0	**57**	2	10	0	8	0	**18**	2	**242**
5:15PM	11	51	0	0	**62**	0	0	83	16	0	**99**	4	25	0	30	0	**55**	4	8	1	5	0	**14**	0	**230**
5:30PM	12	46	0	1	**59**	0	0	108	16	1	**125**	3	16	1	35	1	**53**	0	5	1	3	0	**9**	0	**246**
5:45PM	5	40	1	1	**47**	0	1	54	19	0	**74**	3	17	0	18	0	**35**	0	2	0	1	0	**3**	0	**159**
Hourly Total	40	192	1	3	**236**	3	1	320	75	1	**397**	16	87	4	108	1	**200**	6	25	2	17	0	**44**	2	**877**
Total	249	1016	42	11	**1318**	19	39	970	292	4	**1305**	94	192	79	196	1	**468**	18	75	112	66	0	**253**	14	**3344**
% Approach	18.9%	77.1%	3.2%	0.8%	**-**	-	3.0%	74.3%	22.4%	0.3%	**-**	-	41.0%	16.9%	41.9%	0.2%	**-**	-	29.6%	44.3%	26.1%	0%	**-**	-	-
% Total	7.4%	30.4%	1.3%	0.3%	**39.4%**	-	1.2%	29.0%	8.7%	0.1%	**39.0%**	-	5.7%	2.4%	5.9%	0%	**14.0%**	-	2.2%	3.3%	2.0%	0%	**7.6%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	3	0	0	**3**	-	4
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.3%	0%	0%	**0.2%**	-	0%	2.7%	0%	0%	**1.2%**	-	0.1%
Lights	249	970	42	11	**1272**	-	36	925	280	4	**1245**	-	180	75	194	1	**450**	-	72	106	61	0	**239**	-	3206
% Lights	100%	95.5%	100%	100%	**96.5%**	-	92.3%	95.4%	95.9%	100%	**95.4%**	-	93.8%	94.9%	99.0%	100%	**96.2%**	-	96.0%	94.6%	92.4%	0%	**94.5%**	-	95.9%
Single-Unit Trucks	0	6	0	0	**6**	-	3	4	0	0	**7**	-	1	3	2	0	**6**	-	3	3	5	0	**11**	-	30
% Single-Unit Trucks	0%	0.6%	0%	0%	**0.5%**	-	7.7%	0.4%	0%	0%	**0.5%**	-	0.5%	3.8%	1.0%	0%	**1.3%**	-	4.0%	2.7%	7.6%	0%	**4.3%**	-	0.9%
Articulated Trucks	0	3	0	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses	0	37	0	0	**37**	-	0	40	12	0	**52**	-	11	0	0	0	**11**	-	0	0	0	0	**0**	-	100
% Buses	0%	3.6%	0%	0%	**2.8%**	-	0%	4.1%	4.1%	0%	**4.0%**	-	5.7%	0%	0%	0%	**2.4%**	-	0%	0%	0%	0%	**0%**	-	3.0%
Pedestrians	-	-	-	-	-	17	-	-	-	-	-	88	-	-	-	-	-	18	-	-	-	-	-	12	
% Pedestrians	-	-	-	-	-	89.5%	-	-	-	-	-	93.6%	-	-	-	-	-	100%	-	-	-	-	-	85.7%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	10.5%	-	-	-	-	-	6.4%	-	-	-	-	-	0%	-	-	-	-	-	14.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at UH Entrance - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at UH Entrance - TMC

Wed Sep 1, 2021
AM Peak (8 AM - 9 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

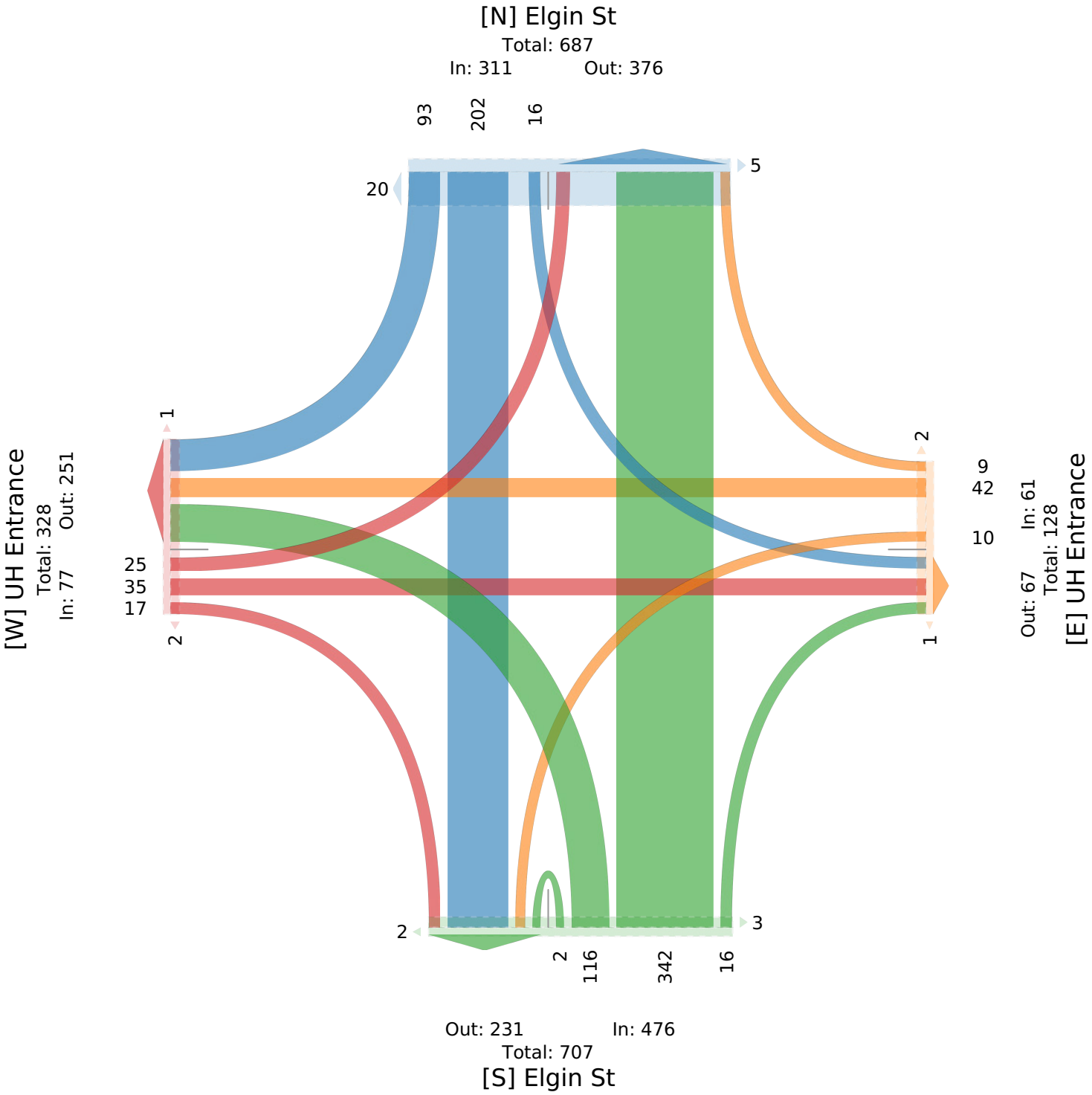
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Elgin St						Elgin St						UH Entrance						UH Entrance						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 8:00AM	31	90	3	0	**124**	2	5	45	17	0	**67**	6	4	8	1	0	**13**	0	7	11	4	0	**22**	0	**226**
8:15AM	17	99	4	1	**121**	3	3	58	16	0	**77**	9	7	7	1	0	**15**	1	1	12	1	0	**14**	2	**227**
8:30AM	31	77	3	1	**112**	0	3	53	35	0	**91**	7	9	11	9	0	**29**	0	1	9	1	0	**11**	1	**243**
8:45AM	37	76	6	0	**119**	0	5	46	25	0	**76**	3	5	9	6	0	**20**	2	1	10	3	0	**14**	0	**229**
Total	116	342	16	2	**476**	5	16	202	93	0	**311**	25	25	35	17	0	**77**	3	10	42	9	0	**61**	3	**925**
% Approach	24.4%	71.8%	3.4%	0.4%	**-**	-	5.1%	65.0%	29.9%	0%	**-**	-	32.5%	45.5%	22.1%	0%	**-**	-	16.4%	68.9%	14.8%	0%	**-**	-	-
% Total	12.5%	37.0%	1.7%	0.2%	**51.5%**	-	1.7%	21.8%	10.1%	0%	**33.6%**	-	2.7%	3.8%	1.8%	0%	**8.3%**	-	1.1%	4.5%	1.0%	0%	**6.6%**	-	-
PHF	0.784	0.864	0.667	0.500	**0.960**	-	0.800	0.871	0.664	-	**0.854**	-	0.694	0.795	0.472	-	**0.664**	-	0.357	0.875	0.563	-	**0.693**	-	0.952
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	3	0	0	**3**	-	4
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	2.9%	0%	0%	**1.3%**	-	0%	7.1%	0%	0%	**4.9%**	-	0.4%
Lights	116	331	16	2	**465**	-	13	190	89	0	**292**	-	22	31	17	0	**70**	-	9	38	8	0	**55**	-	882
% Lights	100%	96.8%	100%	100%	**97.7%**	-	81.3%	94.1%	95.7%	0%	**93.9%**	-	88.0%	88.6%	100%	0%	**90.9%**	-	90.0%	90.5%	88.9%	0%	**90.2%**	-	95.4%
Single-Unit Trucks	0	1	0	0	**1**	-	3	0	0	0	**3**	-	1	3	0	0	**4**	-	1	1	1	0	**3**	-	11
% Single-Unit Trucks	0%	0.3%	0%	0%	**0.2%**	-	18.8%	0%	0%	0%	**1.0%**	-	4.0%	8.6%	0%	0%	**5.2%**	-	10.0%	2.4%	11.1%	0%	**4.9%**	-	1.2%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0.6%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	8	0	0	**8**	-	0	12	4	0	**16**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	26
% Buses	0%	2.3%	0%	0%	**1.7%**	-	0%	5.9%	4.3%	0%	**5.1%**	-	8.0%	0%	0%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	2.8%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	22	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	88.0%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	12.0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at UH Entrance - TMC
Wed Sep 1, 2021
AM Peak (8 AM - 9 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at UH Entrance - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

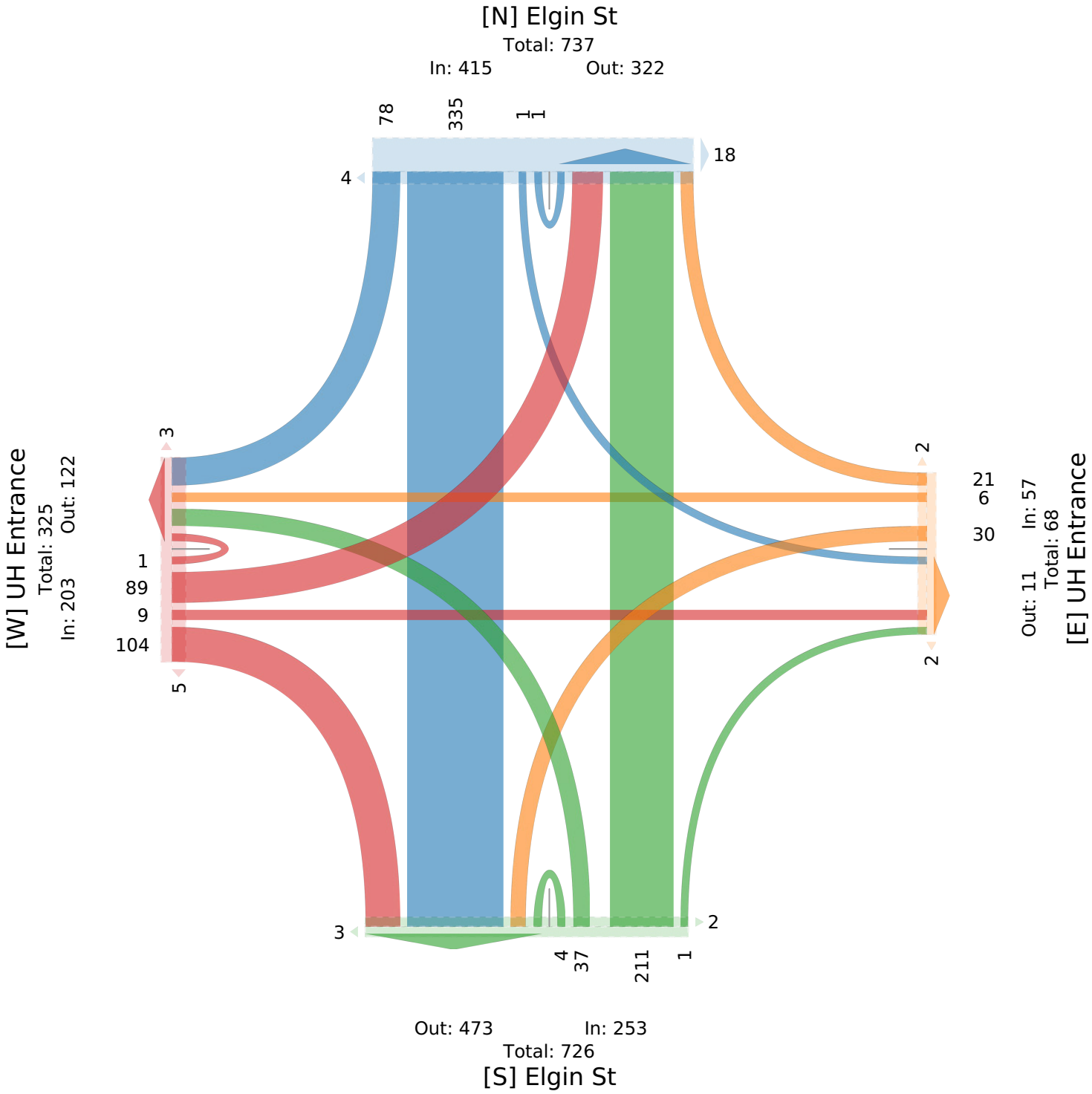
Leg / Direction	Elgin St Northbound						Elgin St Southbound						UH Entrance Eastbound						UH Entrance Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:45PM	2	59	1	2	**64**	2	1	69	22	0	**92**	9	19	5	14	0	**38**	2	7	4	5	0	**16**	2	**210**
5:00PM	12	55	0	1	**68**	3	0	75	24	0	**99**	6	29	3	25	0	**57**	2	10	0	8	0	**18**	2	**242**
5:15PM	11	51	0	0	**62**	0	0	83	16	0	**99**	4	25	0	30	0	**55**	4	8	1	5	0	**14**	0	**230**
5:30PM	12	46	0	1	**59**	0	0	108	16	1	**125**	3	16	1	35	1	**53**	0	5	1	3	0	**9**	0	**246**
Total	37	211	1	4	**253**	5	1	335	78	1	**415**	22	89	9	104	1	**203**	8	30	6	21	0	**57**	4	**928**
% Approach	14.6%	83.4%	0.4%	1.6%	**-**	-	0.2%	80.7%	18.8%	0.2%	**-**	-	43.8%	4.4%	51.2%	0.5%	**-**	-	52.6%	10.5%	36.8%	0%	**-**	-	-
% Total	4.0%	22.7%	0.1%	0.4%	**27.3%**	-	0.1%	36.1%	8.4%	0.1%	**44.7%**	-	9.6%	1.0%	11.2%	0.1%	**21.9%**	-	3.2%	0.6%	2.3%	0%	**6.1%**	-	-
PHF	0.771	0.894	0.250	0.500	**0.930**	-	0.250	0.775	0.813	0.250	**0.830**	-	0.767	0.450	0.743	0.250	**0.890**	-	0.750	0.375	0.656	-	**0.792**	-	0.943
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	37	201	1	4	**243**	-	1	324	74	1	**400**	-	87	9	104	1	**201**	-	30	6	21	0	**57**	-	901
% Lights	100%	95.3%	100%	100%	**96.0%**	-	100%	96.7%	94.9%	100%	**96.4%**	-	97.8%	100%	100%	100%	**99.0%**	-	100%	100%	100%	0%	**100%**	-	97.1%
Single-Unit Trucks	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Single-Unit Trucks	0%	0.5%	0%	0%	**0.4%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses	0	9	0	0	**9**	-	0	9	4	0	**13**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	24
% Buses	0%	4.3%	0%	0%	**3.6%**	-	0%	2.7%	5.1%	0%	**3.1%**	-	2.2%	0%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	2.6%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	22	-	-	-	-	-	8	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at UH Entrance - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867343, Location: 29.726291, -95.340782

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Spur 5 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

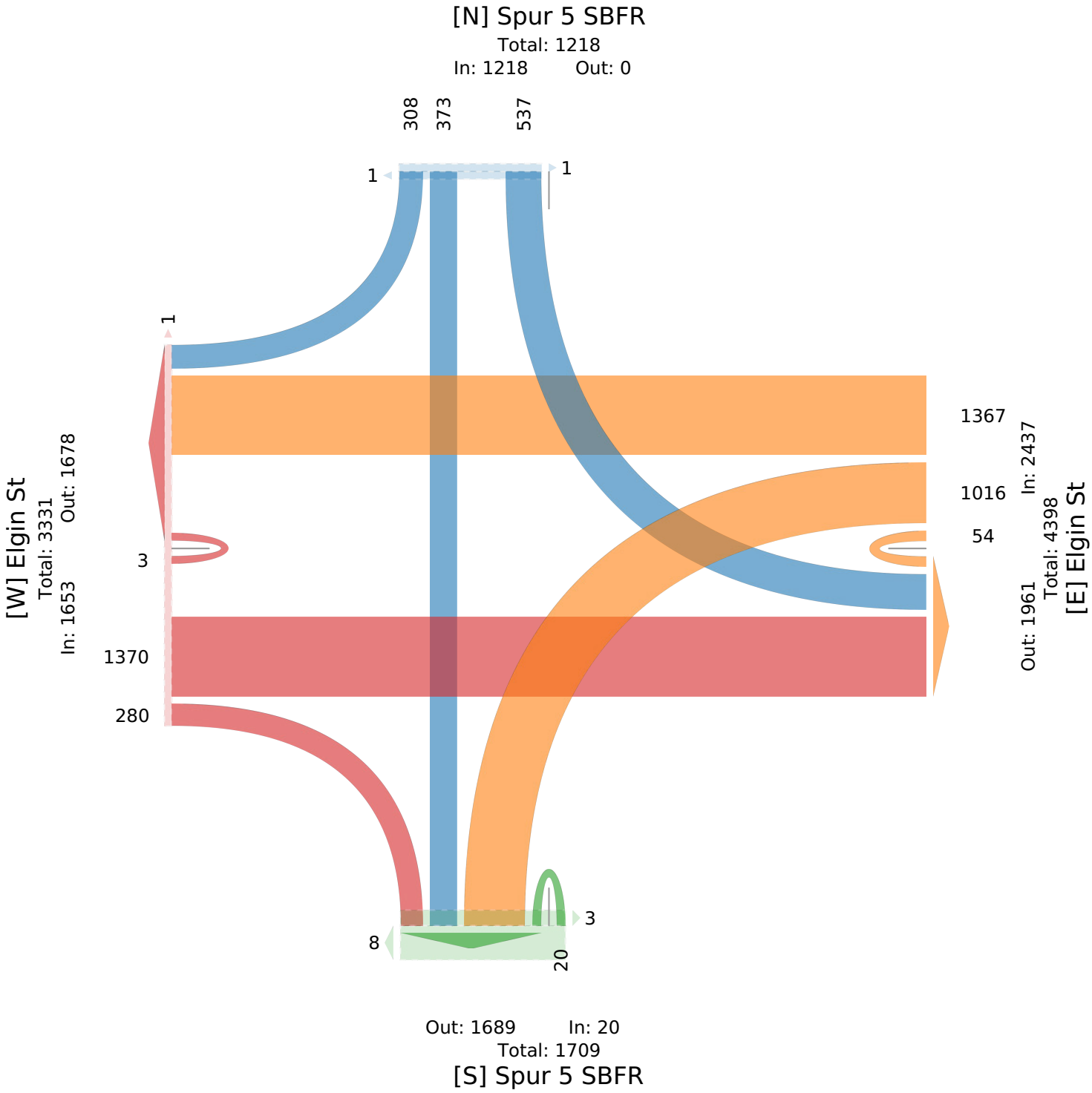
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Spur 5 SBFR						Spur 5 SBFR						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	0	0	1	**1**	0	38	21	10	0	**69**	0	0	19	6	0	**25**	0	46	53	0	8	**107**	0	**202**
7:15AM	0	0	0	0	**0**	0	43	17	10	0	**70**	0	0	32	7	0	**39**	0	61	69	0	2	**132**	0	**241**
7:30AM	0	0	0	0	**0**	1	37	24	15	0	**76**	0	0	36	9	0	**45**	1	84	140	0	4	**228**	0	**349**
7:45AM	0	0	0	1	**1**	1	30	20	27	0	**77**	0	0	24	13	0	**37**	0	87	129	0	8	**224**	0	**339**
Hourly Total	0	0	0	2	**2**	2	148	82	62	0	**292**	0	0	111	35	0	**146**	1	278	391	0	22	**691**	0	**1131**
8:00AM	0	0	0	0	**0**	1	18	30	34	0	**82**	0	0	32	5	0	**37**	0	76	132	0	2	**210**	0	**329**
8:15AM	0	0	0	1	**1**	1	20	40	54	0	**114**	0	0	23	11	0	**34**	0	82	136	0	8	**226**	0	**375**
8:30AM	0	0	0	5	**5**	1	33	27	60	0	**120**	0	0	26	11	1	**38**	0	60	119	0	1	**180**	0	**343**
8:45AM	0	0	0	0	**0**	0	16	35	50	0	**101**	0	0	31	11	0	**42**	0	70	119	0	2	**191**	0	**334**
Hourly Total	0	0	0	6	**6**	3	87	132	198	0	**417**	0	0	112	38	1	**151**	0	288	506	0	13	**807**	0	**1381**
4:00PM	0	0	0	0	**0**	3	30	15	7	0	**52**	1	0	213	30	0	**243**	0	62	48	0	9	**119**	0	**414**
4:15PM	0	0	0	2	**2**	3	48	14	3	0	**65**	0	0	117	31	0	**148**	0	62	68	0	1	**131**	0	**346**
4:30PM	0	0	0	3	**3**	0	32	18	6	0	**56**	0	0	106	22	0	**128**	0	34	59	0	0	**93**	0	**280**
4:45PM	0	0	0	1	**1**	0	41	23	3	0	**67**	1	0	106	19	0	**125**	0	62	70	0	0	**132**	0	**325**
Hourly Total	0	0	0	6	**6**	6	151	70	19	0	**240**	2	0	542	102	0	**644**	0	220	245	0	10	**475**	0	**1365**
5:00PM	0	0	0	2	**2**	0	40	20	6	0	**66**	0	0	144	26	1	**171**	0	72	66	0	1	**139**	0	**378**
5:15PM	0	0	0	2	**2**	0	41	22	8	0	**71**	0	0	154	32	1	**187**	0	56	58	0	1	**115**	0	**375**
5:30PM	0	0	0	1	**1**	0	32	25	8	0	**65**	0	0	206	34	0	**240**	0	52	57	0	4	**113**	0	**419**
5:45PM	0	0	0	1	**1**	0	38	22	7	0	**67**	0	0	101	13	0	**114**	0	50	44	0	3	**97**	0	**279**
Hourly Total	0	0	0	6	**6**	0	151	89	29	0	**269**	0	0	605	105	2	**712**	0	230	225	0	9	**464**	0	**1451**
Total	0	0	0	20	**20**	11	537	373	308	0	**1218**	2	0	1370	280	3	**1653**	1	1016	1367	0	54	**2437**	0	**5328**
% Approach	0%	0%	0%	100%	**-**	-	44.1%	30.6%	25.3%	0%	**-**	-	0%	82.9%	16.9%	0.2%	**-**	-	41.7%	56.1%	0%	2.2%	**-**	-	-
% Total	0%	0%	0%	0.4%	**0.4%**	-	10.1%	7.0%	5.8%	0%	**22.9%**	-	0%	25.7%	5.3%	0.1%	**31.0%**	-	19.1%	25.7%	0%	1.0%	**45.7%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0%	0%	0%	**0.1%**	-	0.1%
Lights	0	0	0	19	**19**	-	497	369	308	0	**1174**	-	0	1326	276	3	**1605**	-	965	1320	0	54	**2339**	-	5137
% Lights	0%	0%	0%	95.0%	**95.0%**	-	92.6%	98.9%	100%	0%	**96.4%**	-	0%	96.8%	98.6%	100%	**97.1%**	-	95.0%	96.6%	0%	100%	**96.0%**	-	96.4%
Single-Unit Trucks	0	0	0	0	**0**	-	18	1	0	0	**19**	-	0	5	2	0	**7**	-	9	7	0	0	**16**	-	42
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	3.4%	0.3%	0%	0%	**1.6%**	-	0%	0.4%	0.7%	0%	**0.4%**	-	0.9%	0.5%	0%	0%	**0.7%**	-	0.8%
Articulated Trucks	0	0	0	1	**1**	-	10	2	0	0	**12**	-	0	2	0	0	**2**	-	3	3	0	0	**6**	-	21
% Articulated Trucks	0%	0%	0%	5.0%	**5.0%**	-	1.9%	0.5%	0%	0%	**1.0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.3%	0.2%	0%	0%	**0.2%**	-	0.4%
Buses	0	0	0	0	**0**	-	12	0	0	0	**12**	-	0	37	2	0	**39**	-	37	37	0	0	**74**	-	125
% Buses	0%	0%	0%	0%	**0%**	-	2.2%	0%	0%	0%	**1.0%**	-	0%	2.7%	0.7%	0%	**2.4%**	-	3.6%	2.7%	0%	0%	**3.0%**	-	2.3%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	81.8%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	18.2%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 SBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Spur 5 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Spur 5 SBFR Northbound						Spur 5 SBFR Southbound						Elgin St Eastbound						Elgin St Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	0	0	0	0	**0**	1	37	24	15	0	**76**	0	0	36	9	0	**45**	1	84	140	0	4	**228**	0	**349**
7:45AM	0	0	0	1	**1**	1	30	20	27	0	**77**	0	0	24	13	0	**37**	0	87	129	0	8	**224**	0	**339**
8:00AM	0	0	0	0	**0**	1	18	30	34	0	**82**	0	0	32	5	0	**37**	0	76	132	0	2	**210**	0	**329**
8:15AM	0	0	0	1	**1**	1	20	40	54	0	**114**	0	0	23	11	0	**34**	0	82	136	0	8	**226**	0	**375**
Total	0	0	0	2	**2**	4	105	114	130	0	**349**	0	0	115	38	0	**153**	1	329	537	0	22	**888**	0	**1392**
% Approach	0%	0%	0%	100%	**-**	-	30.1%	32.7%	37.2%	0%	**-**	-	0%	75.2%	24.8%	0%	**-**	-	37.0%	60.5%	0%	2.5%	**-**	-	-
% Total	0%	0%	0%	0.1%	**0.1%**	-	7.5%	8.2%	9.3%	0%	**25.1%**	-	0%	8.3%	2.7%	0%	**11.0%**	-	23.6%	38.6%	0%	1.6%	**63.8%**	-	-
PHF	-	-	-	0.500	**0.500**	-	0.709	0.713	0.602	-	**0.765**	-	-	0.799	0.731	-	**0.850**	-	0.945	0.959	-	0.688	**0.974**	-	0.928
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	**0.1%**	-	0.1%
Lights	0	0	0	2	**2**	-	97	112	130	0	**339**	-	0	104	36	0	**140**	-	312	524	0	22	**858**	-	1339
% Lights	0%	0%	0%	100%	**100%**	-	92.4%	98.2%	100%	0%	**97.1%**	-	0%	90.4%	94.7%	0%	**91.5%**	-	94.8%	97.6%	0%	100%	**96.6%**	-	96.2%
Single-Unit Trucks	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	0	1	0	**1**	-	4	2	0	0	**6**	-	10
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	2.9%	0%	0%	0%	**0.9%**	-	0%	0%	2.6%	0%	**0.7%**	-	1.2%	0.4%	0%	0%	**0.7%**	-	0.7%
Articulated Trucks	0	0	0	0	**0**	-	2	2	0	0	**4**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	5
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	1.9%	1.8%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	**0.1%**	-	0.4%
Buses	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	11	1	0	**12**	-	11	11	0	0	**22**	-	37
% Buses	0%	0%	0%	0%	**0%**	-	2.9%	0%	0%	0%	**0.9%**	-	0%	9.6%	2.6%	0%	**7.8%**	-	3.3%	2.0%	0%	0%	**2.5%**	-	2.7%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 SBFR - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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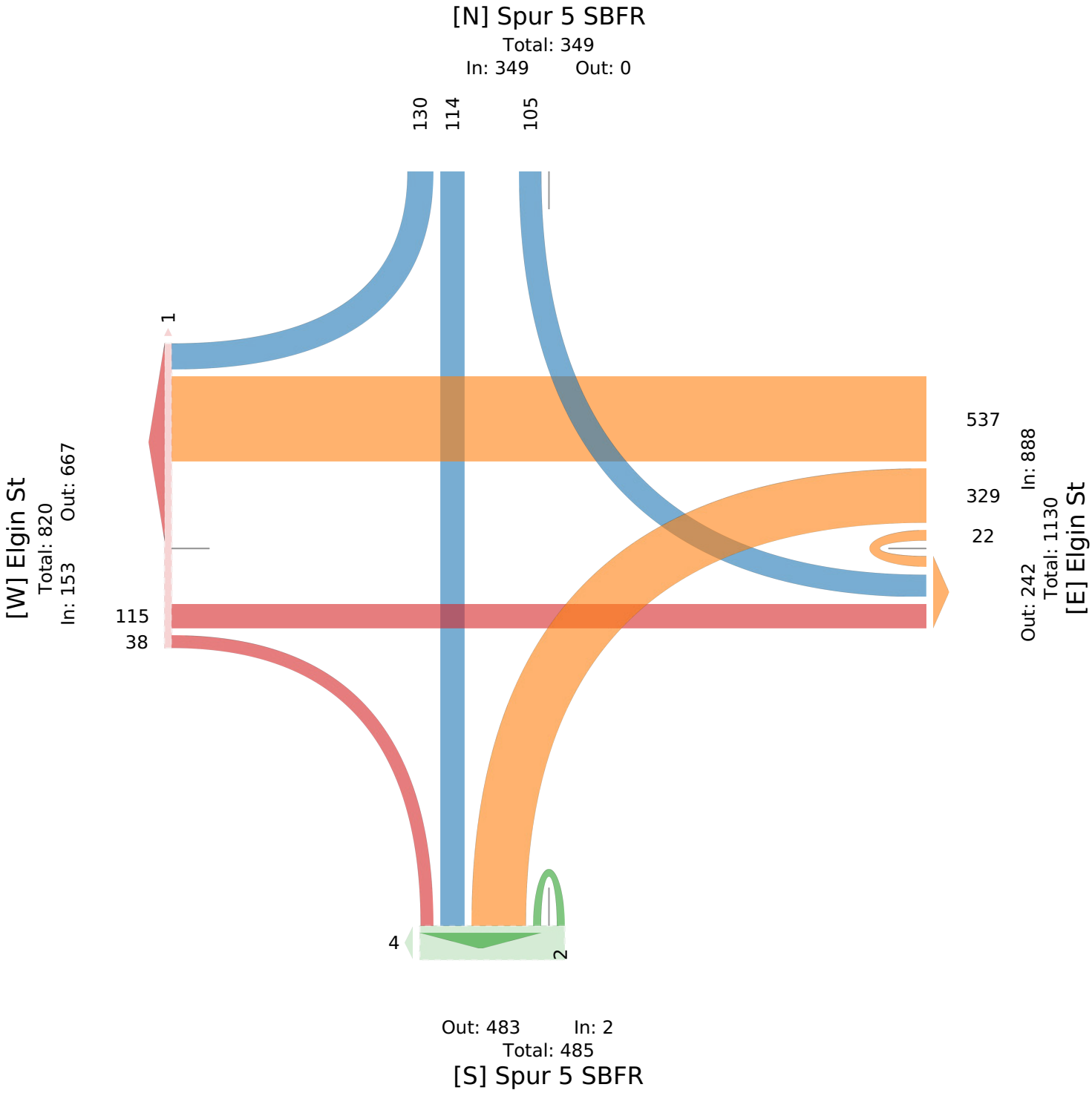


Elgin St at Spur 5 SBFR - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

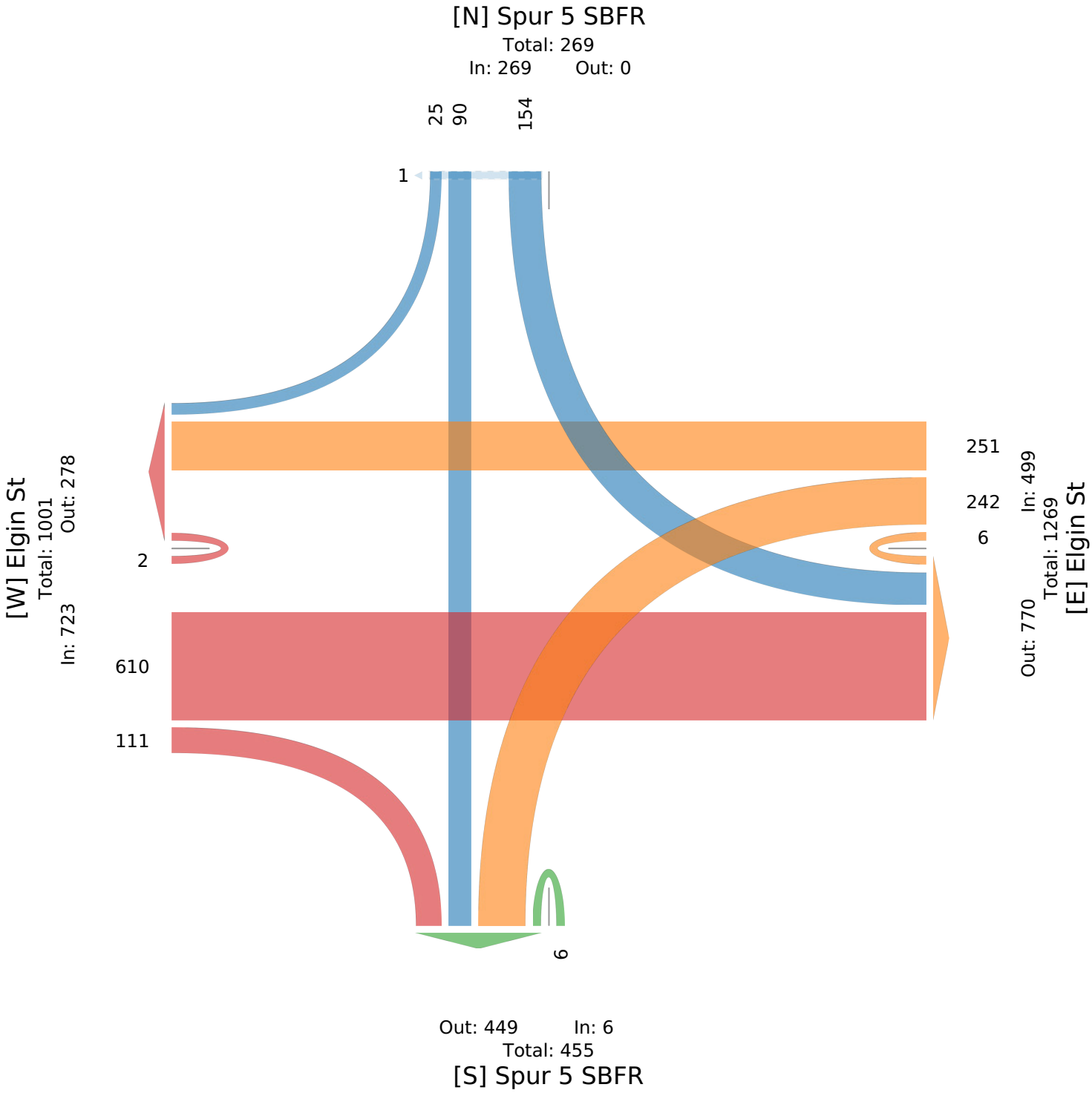
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Spur 5 SBFR Northbound						Spur 5 SBFR Southbound						Elgin St Eastbound						Elgin St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:45PM	0	0	0	1	**1**	0	41	23	3	0	**67**	1	0	106	19	0	**125**	0	62	70	0	0	**132**	0	**325**
5:00PM	0	0	0	2	**2**	0	40	20	6	0	**66**	0	0	144	26	1	**171**	0	72	66	0	1	**139**	0	**378**
5:15PM	0	0	0	2	**2**	0	41	22	8	0	**71**	0	0	154	32	1	**187**	0	56	58	0	1	**115**	0	**375**
5:30PM	0	0	0	1	**1**	0	32	25	8	0	**65**	0	0	206	34	0	**240**	0	52	57	0	4	**113**	0	**419**
Total	0	0	0	6	**6**	0	154	90	25	0	**269**	1	0	610	111	2	**723**	0	242	251	0	6	**499**	0	**1497**
% Approach	0%	0%	0%	100%	**-**	-	57.2%	33.5%	9.3%	0%	**-**	-	0%	84.4%	15.4%	0.3%	**-**	-	48.5%	50.3%	0%	1.2%	**-**	-	-
% Total	0%	0%	0%	0.4%	**0.4%**	-	10.3%	6.0%	1.7%	0%	**18.0%**	-	0%	40.7%	7.4%	0.1%	**48.3%**	-	16.2%	16.8%	0%	0.4%	**33.3%**	-	-
PHF	-	-	-	0.750	**0.750**	-	0.939	0.900	0.781	-	**0.947**	-	-	0.740	0.816	0.500	**0.753**	-	0.840	0.896	-	0.375	**0.897**	-	0.893
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%	0%	0%	0%	**0.2%**	-	0.1%
Lights	0	0	0	6	**6**	-	143	90	25	0	**258**	-	0	599	111	2	**712**	-	230	241	0	6	**477**	-	1453
% Lights	0%	0%	0%	100%	**100%**	-	92.9%	100%	100%	0%	**95.9%**	-	0%	98.2%	100%	100%	**98.5%**	-	95.0%	96.0%	0%	100%	**95.6%**	-	97.1%
Single-Unit Trucks	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	1	0	0	**1**	-	2	1	0	0	**3**	-	7
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	1.9%	0%	0%	0%	**1.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0.8%	0.4%	0%	0%	**0.6%**	-	0.5%
Articulated Trucks	0	0	0	0	**0**	-	3	0	0	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	1.9%	0%	0%	0%	**1.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.3%
Buses	0	0	0	0	**0**	-	5	0	0	0	**5**	-	0	9	0	0	**9**	-	9	9	0	0	**18**	-	32
% Buses	0%	0%	0%	0%	**0%**	-	3.2%	0%	0%	0%	**1.9%**	-	0%	1.5%	0%	0%	**1.2%**	-	3.7%	3.6%	0%	0%	**3.6%**	-	2.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 SBFR - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867344, Location: 29.726218, -95.338184

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Spur 5 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

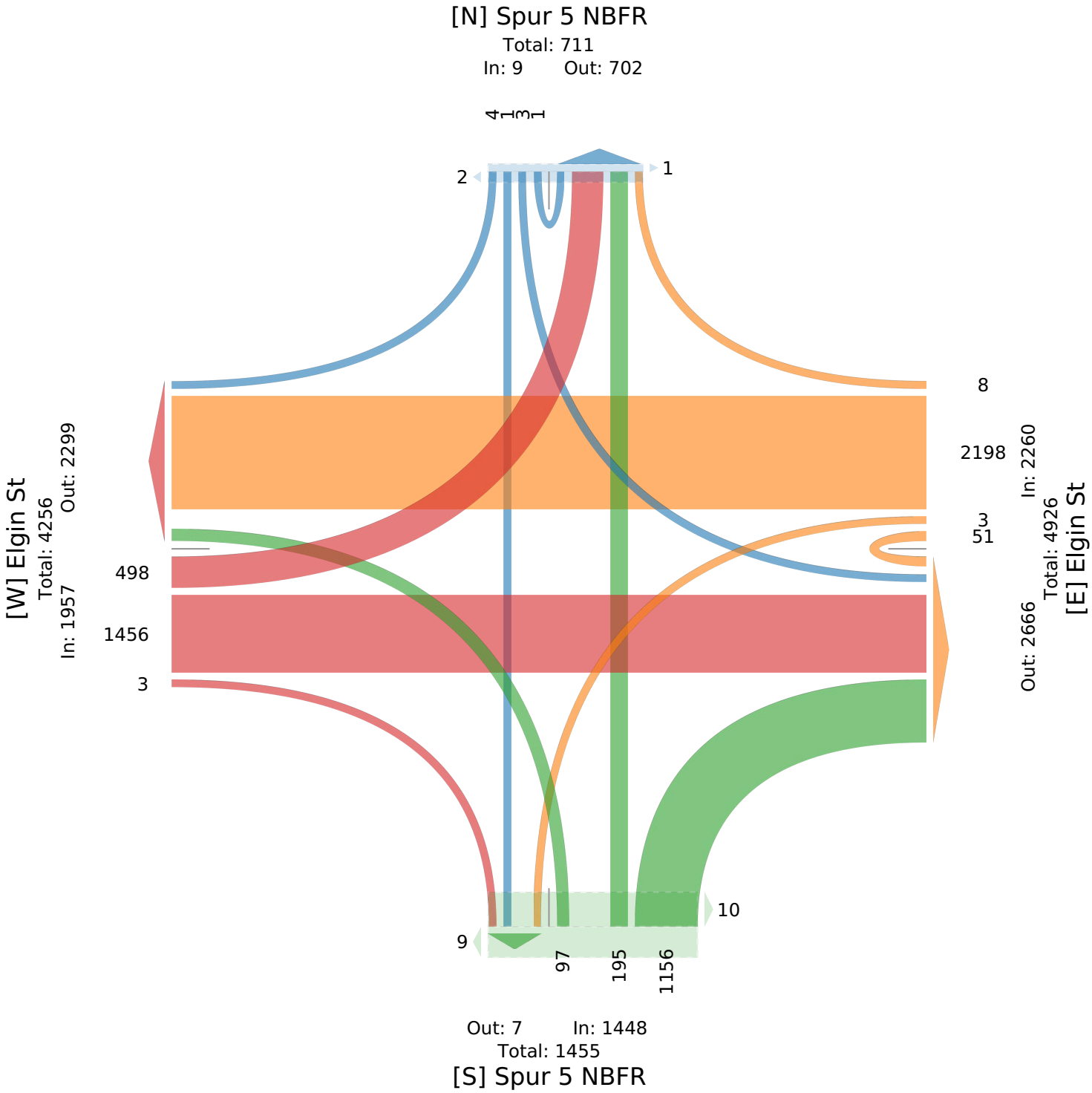
Leg	Spur 5 NBFR						Spur 5 NBFR						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	5	6	42	0	**53**	0	0	0	0	0	**0**	0	5	54	0	0	**59**	0	0	98	1	6	**105**	0	**217**
7:15AM	6	4	57	0	**67**	1	0	0	0	0	**0**	0	1	77	0	0	**78**	0	0	120	0	6	**126**	0	**271**
7:30AM	8	5	69	0	**82**	1	0	0	1	0	**1**	0	4	76	0	0	**80**	0	1	208	0	4	**213**	0	**376**
7:45AM	13	10	52	0	**75**	1	0	0	0	0	**0**	1	4	57	0	0	**61**	0	0	190	3	8	**201**	0	**337**
Hourly Total	32	25	220	0	**277**	3	0	0	1	0	**1**	1	14	264	0	0	**278**	0	1	616	4	24	**645**	0	**1201**
8:00AM	10	7	53	0	**70**	1	0	0	0	0	**0**	0	3	48	0	0	**51**	0	0	184	0	3	**187**	0	**308**
8:15AM	11	5	37	0	**53**	1	0	0	1	0	**1**	0	4	44	1	0	**49**	0	0	203	0	5	**208**	0	**311**
8:30AM	10	3	35	0	**48**	1	0	0	1	0	**1**	0	4	57	1	0	**62**	0	1	162	0	2	**165**	0	**276**
8:45AM	8	8	43	0	**59**	0	0	0	0	0	**0**	0	3	47	0	0	**50**	0	0	179	0	2	**181**	0	**290**
Hourly Total	39	23	168	0	**230**	3	0	0	2	0	**2**	0	14	196	2	0	**212**	0	1	728	0	12	**741**	0	**1185**
4:00PM	3	15	101	0	**119**	3	1	0	0	1	**2**	1	112	144	0	0	**256**	0	0	109	0	4	**113**	0	**490**
4:15PM	3	22	95	0	**120**	3	0	0	0	0	**0**	0	48	110	0	0	**158**	0	0	117	0	2	**119**	0	**397**
4:30PM	5	19	88	0	**112**	0	0	0	0	0	**0**	0	37	104	0	0	**141**	0	0	82	0	2	**84**	0	**337**
4:45PM	4	15	90	0	**109**	0	0	0	0	0	**0**	1	36	112	1	0	**149**	0	1	119	3	2	**125**	0	**383**
Hourly Total	15	71	374	0	**460**	6	1	0	0	1	**2**	2	233	470	1	0	**704**	0	1	427	3	10	**441**	0	**1607**
5:00PM	2	18	91	0	**111**	1	0	0	0	0	**0**	0	46	136	0	0	**182**	0	0	127	0	0	**127**	0	**420**
5:15PM	5	22	97	0	**124**	1	0	0	0	0	**0**	0	60	131	0	0	**191**	0	0	104	0	1	**105**	0	**420**
5:30PM	3	16	117	0	**136**	2	1	0	0	0	**1**	0	89	159	0	0	**248**	0	0	106	1	3	**110**	0	**495**
5:45PM	1	20	89	0	**110**	3	1	1	1	0	**3**	0	42	100	0	0	**142**	0	0	90	0	1	**91**	0	**346**
Hourly Total	11	76	394	0	**481**	7	2	1	1	0	**4**	0	237	526	0	0	**763**	0	0	427	1	5	**433**	0	**1681**
Total	97	195	1156	0	**1448**	19	3	1	4	1	**9**	3	498	1456	3	0	**1957**	0	3	2198	8	51	**2260**	0	**5674**
% Approach	6.7%	13.5%	79.8%	0%	**-**	-	33.3%	11.1%	44.4%	11.1%	**-**	-	25.4%	74.4%	0.2%	0%	**-**	-	0.1%	97.3%	0.4%	2.3%	**-**	-	-
% Total	1.7%	3.4%	20.4%	0%	**25.5%**	-	0.1%	0%	0.1%	0%	**0.2%**	-	8.8%	25.7%	0.1%	0%	**34.5%**	-	0.1%	38.7%	0.1%	0.9%	**39.8%**	-	-
Motorcycles	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	4
% Motorcycles	0%	0%	0.2%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	96	193	1092	0	**1381**	-	3	1	4	1	**9**	-	495	1386	3	0	**1884**	-	2	2103	8	51	**2164**	-	5438
% Lights	99.0%	99.0%	94.5%	0%	**95.4%**	-	100%	100%	100%	100%	**100%**	-	99.4%	95.2%	100%	0%	**96.3%**	-	66.7%	95.7%	100%	100%	**95.8%**	-	95.8%
Single-Unit Trucks	1	1	10	0	**12**	-	0	0	0	0	**0**	-	2	18	0	0	**20**	-	0	10	0	0	**10**	-	42
% Single-Unit Trucks	1.0%	0.5%	0.9%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0.4%	1.2%	0%	0%	**1.0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.7%
Articulated Trucks	0	0	6	0	**6**	-	0	0	0	0	**0**	-	0	8	0	0	**8**	-	0	6	0	0	**6**	-	20
% Articulated Trucks	0%	0%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.4%
Buses	0	1	46	0	**47**	-	0	0	0	0	**0**	-	1	44	0	0	**45**	-	1	77	0	0	**78**	-	170
% Buses	0%	0.5%	4.0%	0%	**3.2%**	-	0%	0%	0%	0%	**0%**	-	0.2%	3.0%	0%	0%	**2.3%**	-	33.3%	3.5%	0%	0%	**3.5%**	-	3.0%
Pedestrians	-	-	-	-	-	17	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	89.5%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	10.5%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Elgin St at Spur 5 NBFR - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Spur 5 NBFR Northbound						Spur 5 NBFR Southbound						Elgin St Eastbound						Elgin St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	8	5	69	0	**82**	1	0	0	1	0	**1**	0	4	76	0	0	**80**	0	1	208	0	4	**213**	0	**376**
7:45AM	13	10	52	0	**75**	1	0	0	0	0	**0**	1	4	57	0	0	**61**	0	0	190	3	8	**201**	0	**337**
8:00AM	10	7	53	0	**70**	1	0	0	0	0	**0**	0	3	48	0	0	**51**	0	0	184	0	3	**187**	0	**308**
8:15AM	11	5	37	0	**53**	1	0	0	1	0	**1**	0	4	44	1	0	**49**	0	0	203	0	5	**208**	0	**311**
Total	42	27	211	0	**280**	4	0	0	2	0	**2**	1	15	225	1	0	**241**	0	1	785	3	20	**809**	0	**1332**
% Approach	15.0%	9.6%	75.4%	0%	**-**	-	0%	0%	100%	0%	**-**	-	6.2%	93.4%	0.4%	0%	**-**	-	0.1%	97.0%	0.4%	2.5%	**-**	-	-
% Total	3.2%	2.0%	15.8%	0%	**21.0%**	-	0%	0%	0.2%	0%	**0.2%**	-	1.1%	16.9%	0.1%	0%	**18.1%**	-	0.1%	58.9%	0.2%	1.5%	**60.7%**	-	-
PHF	0.808	0.675	0.764	-	**0.854**	-	-	-	0.500	-	**0.500**	-	0.938	0.740	0.250	-	**0.753**	-	0.250	0.944	0.250	0.625	**0.950**	-	0.886
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Motorcycles	0%	0%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Lights	42	26	198	0	**266**	-	0	0	2	0	**2**	-	15	210	1	0	**226**	-	1	755	3	20	**779**	-	1273
% Lights	100%	96.3%	93.8%	0%	**95.0%**	-	0%	0%	100%	0%	**100%**	-	100%	93.3%	100%	0%	**93.8%**	-	100%	96.2%	100%	100%	**96.3%**	-	95.6%
Single-Unit Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	3	0	0	**3**	-	7
% Single-Unit Trucks	0%	0%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	1.3%	0%	0%	**1.2%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.5%
Articulated Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	4
% Articulated Trucks	0%	0%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.3%
Buses	0	1	10	0	**11**	-	0	0	0	0	**0**	-	0	10	0	0	**10**	-	0	25	0	0	**25**	-	46
% Buses	0%	3.7%	4.7%	0%	**3.9%**	-	0%	0%	0%	0%	**0%**	-	0%	4.4%	0%	0%	**4.1%**	-	0%	3.2%	0%	0%	**3.1%**	-	3.5%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 NBFR - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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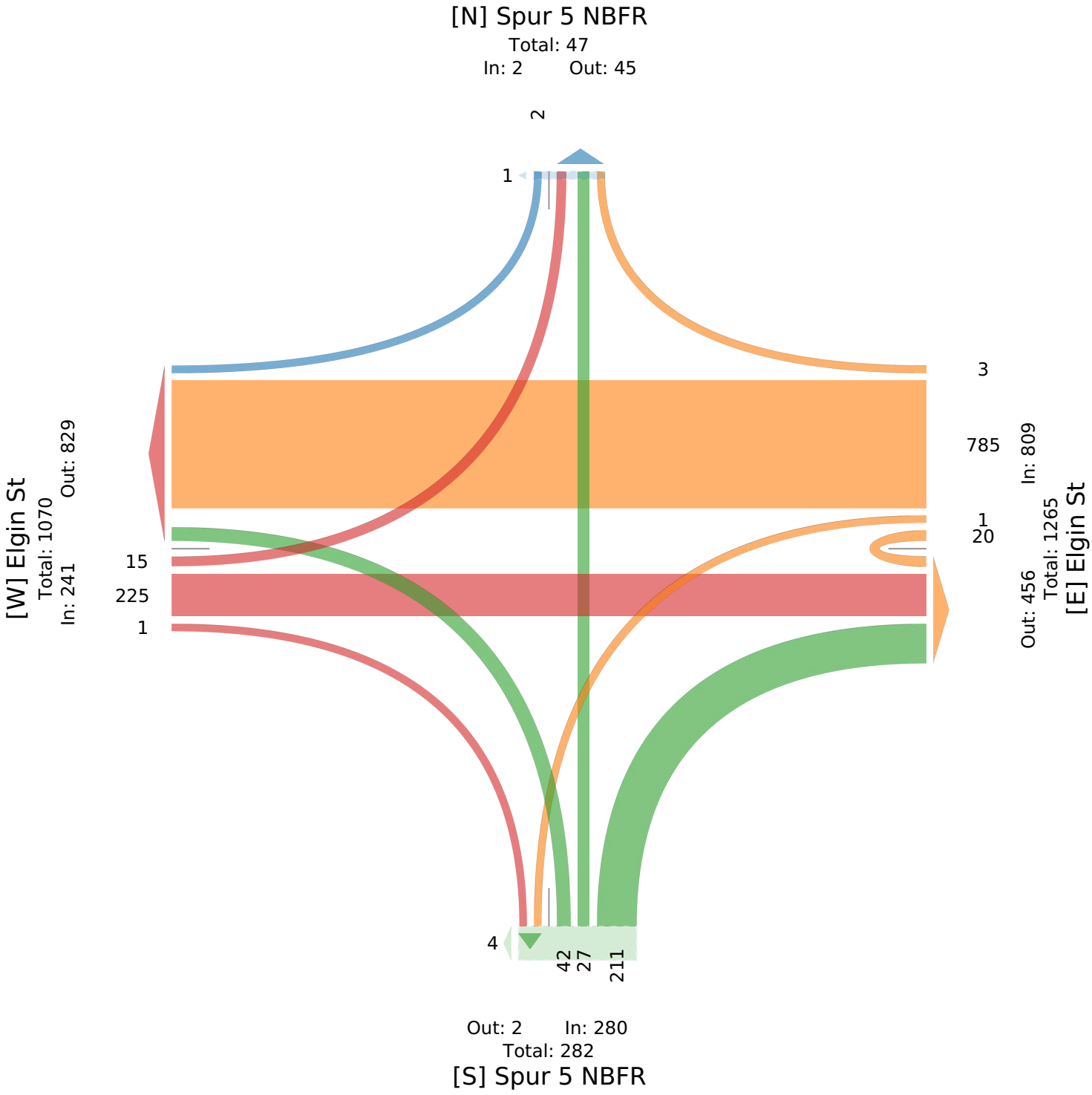


Elgin St at Spur 5 NBFR - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

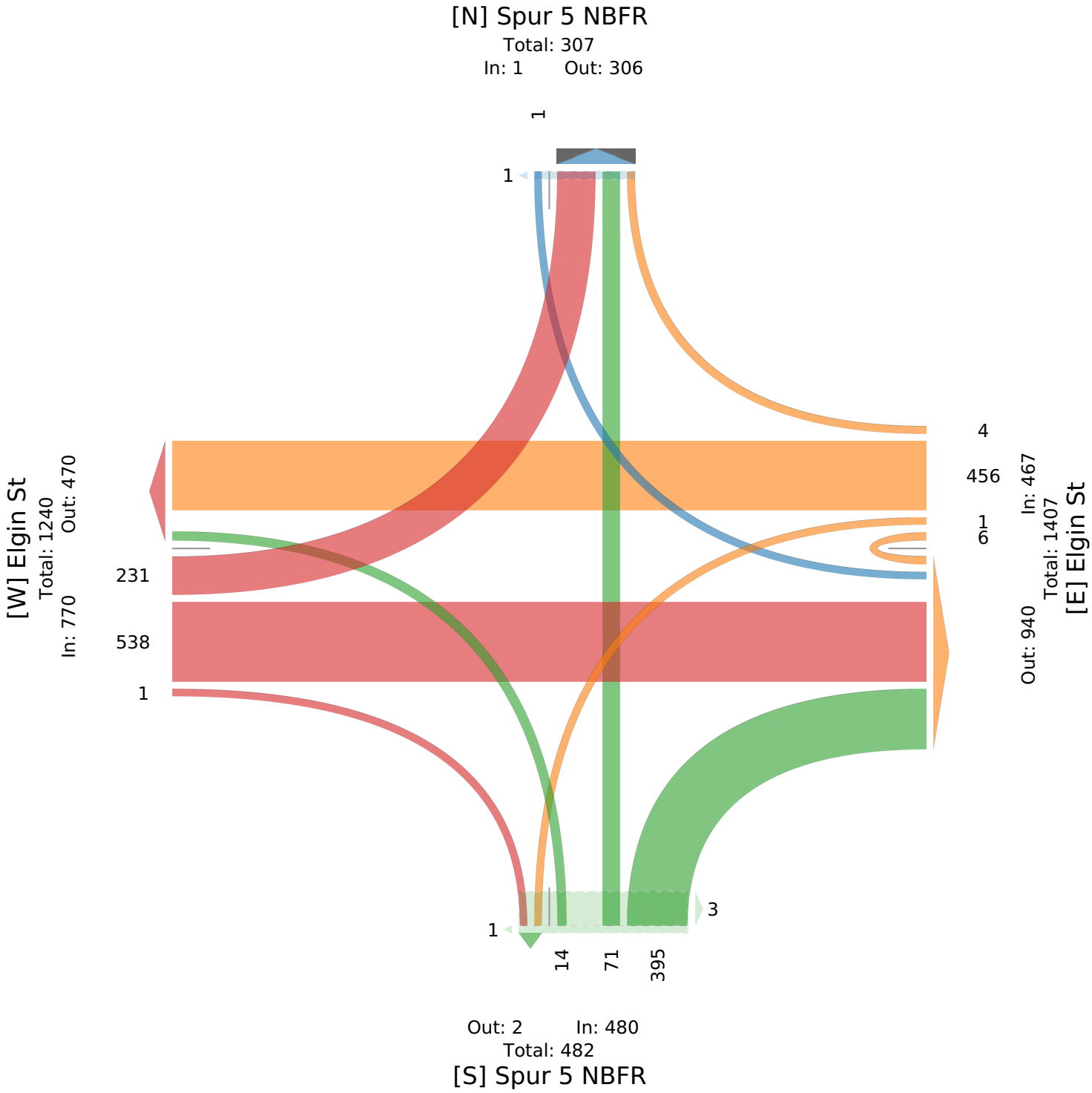
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Spur 5 NBFR						Spur 5 NBFR						Elgin St						Elgin St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:45PM	4	15	90	0	**109**	0	0	0	0	0	**0**	1	36	112	1	0	**149**	0	1	119	3	2	**125**	0	**383**
5:00PM	2	18	91	0	**111**	1	0	0	0	0	**0**	0	46	136	0	0	**182**	0	0	127	0	0	**127**	0	**420**
5:15PM	5	22	97	0	**124**	1	0	0	0	0	**0**	0	60	131	0	0	**191**	0	0	104	0	1	**105**	0	**420**
5:30PM	3	16	117	0	**136**	2	1	0	0	0	**1**	0	89	159	0	0	**248**	0	0	106	1	3	**110**	0	**495**
Total	14	71	395	0	**480**	4	1	0	0	0	**1**	1	231	538	1	0	**770**	0	1	456	4	6	**467**	0	**1718**
% Approach	2.9%	14.8%	82.3%	0%	**-**	-	100%	0%	0%	0%	**-**	-	30.0%	69.9%	0.1%	0%	**-**	-	0.2%	97.6%	0.9%	1.3%	**-**	-	-
% Total	0.8%	4.1%	23.0%	0%	**27.9%**	-	0.1%	0%	0%	0%	**0.1%**	-	13.4%	31.3%	0.1%	0%	**44.8%**	-	0.1%	26.5%	0.2%	0.3%	**27.2%**	-	-
PHF	0.700	0.807	0.844	-	**0.882**	-	0.250	-	-	-	**0.250**	-	0.649	0.846	0.250	-	**0.776**	-	0.250	0.898	0.333	0.500	**0.919**	-	0.868
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.1%
Lights	14	71	383	0	**468**	-	1	0	0	0	**1**	-	230	521	1	0	**752**	-	0	434	4	6	**444**	-	1665
% Lights	100%	100%	97.0%	0%	**97.5%**	-	100%	0%	0%	0%	**100%**	-	99.6%	96.8%	100%	0%	**97.7%**	-	0%	95.2%	100%	100%	**95.1%**	-	96.9%
Single-Unit Trucks	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	3	0	0	**3**	-	9
% Single-Unit Trucks	0%	0%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0.7%	0%	0%	**0.6%**	-	0.5%
Articulated Trucks	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0.3%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	0	9	0	**9**	-	0	0	0	0	**0**	-	1	11	0	0	**12**	-	1	18	0	0	**19**	-	40
% Buses	0%	0%	2.3%	0%	**1.9%**	-	0%	0%	0%	0%	**0%**	-	0.4%	2.0%	0%	0%	**1.6%**	-	100%	3.9%	0%	0%	**4.1%**	-	2.3%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elgin St at Spur 5 NBFR - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867345, Location: 29.726946, -95.337282

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Maplewood Dr/Lockwood Dr at I 45 - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

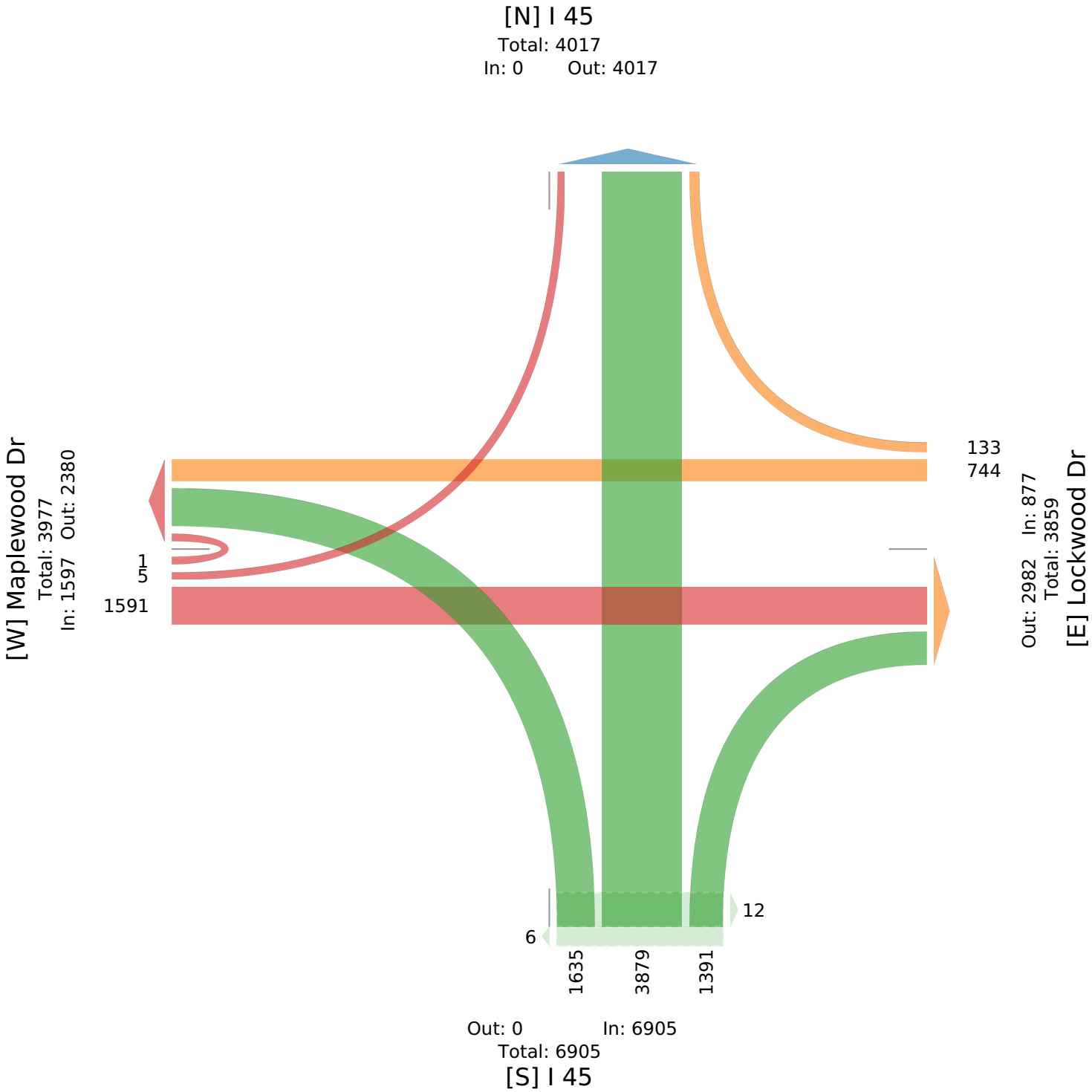
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 45						I 45						Maplewood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	79	172	122	0	**373**	0	0	0	0	0	**0**	0	0	68	0	0	**68**	0	0	31	7	0	**38**	0	**479**
7:15AM	87	217	158	0	**462**	0	0	0	0	0	**0**	0	0	108	0	0	**108**	0	0	45	2	0	**47**	0	**617**
7:30AM	170	249	138	0	**557**	0	0	0	0	0	**0**	0	0	110	0	0	**110**	0	0	62	14	0	**76**	0	**743**
7:45AM	128	257	100	0	**485**	0	0	0	0	0	**0**	0	0	70	0	0	**70**	0	0	88	19	0	**107**	0	**662**
Hourly Total	464	895	518	0	**1877**	0	0	0	0	0	**0**	0	0	356	0	0	**356**	0	0	226	42	0	**268**	0	**2501**
8:00AM	134	264	61	0	**459**	0	0	0	0	0	**0**	0	0	67	0	0	**67**	0	0	76	3	0	**79**	0	**605**
8:15AM	141	221	54	0	**416**	1	0	0	0	0	**0**	0	0	39	0	0	**39**	0	0	69	8	0	**77**	0	**532**
8:30AM	136	134	38	0	**308**	1	0	0	0	0	**0**	0	0	51	0	0	**51**	0	0	43	4	0	**47**	0	**406**
8:45AM	112	92	30	0	**234**	0	0	0	0	0	**0**	0	0	43	0	0	**43**	0	0	66	10	0	**76**	0	**353**
Hourly Total	523	711	183	0	**1417**	2	0	0	0	0	**0**	0	0	200	0	0	**200**	0	0	254	25	0	**279**	0	**1896**
4:00PM	90	242	92	0	**424**	7	0	0	0	0	**0**	0	1	115	0	0	**116**	0	0	25	2	0	**27**	0	**567**
4:15PM	93	284	90	0	**467**	1	0	0	0	0	**0**	0	1	126	0	0	**127**	0	0	30	5	0	**35**	0	**629**
4:30PM	73	334	80	0	**487**	0	0	0	0	0	**0**	0	1	107	0	0	**108**	0	0	20	4	0	**24**	0	**619**
4:45PM	84	257	94	0	**435**	1	0	0	0	0	**0**	0	2	138	0	0	**140**	0	0	48	5	0	**53**	0	**628**
Hourly Total	340	1117	356	0	**1813**	9	0	0	0	0	**0**	0	5	486	0	0	**491**	0	0	123	16	0	**139**	0	**2443**
5:00PM	84	280	69	0	**433**	0	0	0	0	0	**0**	0	0	136	0	0	**136**	0	0	48	29	0	**77**	0	**646**
5:15PM	83	272	94	0	**449**	1	0	0	0	0	**0**	0	0	139	0	0	**139**	0	0	27	5	0	**32**	0	**620**
5:30PM	73	313	91	0	**477**	2	0	0	0	0	**0**	0	0	161	0	1	**162**	0	0	38	9	0	**47**	0	**686**
5:45PM	68	291	80	0	**439**	4	0	0	0	0	**0**	0	0	113	0	0	**113**	0	0	28	7	0	**35**	0	**587**
Hourly Total	308	1156	334	0	**1798**	7	0	0	0	0	**0**	0	0	549	0	1	**550**	0	0	141	50	0	**191**	0	**2539**
Total	1635	3879	1391	0	**6905**	18	0	0	0	0	**0**	0	5	1591	0	1	**1597**	0	0	744	133	0	**877**	0	**9379**
% Approach	23.7%	56.2%	20.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0.3%	99.6%	0%	0.1%	**-**	-	0%	84.8%	15.2%	0%	**-**	-	-
% Total	17.4%	41.4%	14.8%	0%	**73.6%**	-	0%	0%	0%	0%	**0%**	-	0.1%	17.0%	0%	0%	**17.0%**	-	0%	7.9%	1.4%	0%	**9.4%**	-	-
Motorcycles	1	3	1	0	**5**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	7
% Motorcycles	0.1%	0.1%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	1616	3791	1346	0	**6753**	-	0	0	0	0	**0**	-	5	1462	0	1	**1468**	-	0	670	128	0	**798**	-	9019
% Lights	98.8%	97.7%	96.8%	0%	**97.8%**	-	0%	0%	0%	0%	**-**	-	100%	91.9%	0%	100%	**91.9%**	-	0%	90.1%	96.2%	0%	**91.0%**	-	96.2%
Single-Unit Trucks	8	53	19	0	**80**	-	0	0	0	0	**0**	-	0	24	0	0	**24**	-	0	4	3	0	**7**	-	111
% Single-Unit Trucks	0.5%	1.4%	1.4%	0%	**1.2%**	-	0%	0%	0%	0%	**-**	-	0%	1.5%	0%	0%	**1.5%**	-	0%	0.5%	2.3%	0%	**0.8%**	-	1.2%
Articulated Trucks	5	13	8	0	**26**	-	0	0	0	0	**0**	-	0	12	0	0	**12**	-	0	1	0	0	**1**	-	39
% Articulated Trucks	0.3%	0.3%	0.6%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0%	0.8%	0%	0%	**0.8%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.4%
Buses	5	19	17	0	**41**	-	0	0	0	0	**0**	-	0	92	0	0	**92**	-	0	68	2	0	**70**	-	203
% Buses	0.3%	0.5%	1.2%	0%	**0.6%**	-	0%	0%	0%	0%	**-**	-	0%	5.8%	0%	0%	**5.8%**	-	0%	9.1%	1.5%	0%	**8.0%**	-	2.2%
Pedestrians	-	-	-	-	-	16	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	88.9%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	11.1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Maplewood Dr/Lockwood Dr at I 45 - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Maplewood Dr/Lockwood Dr at I 45 - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

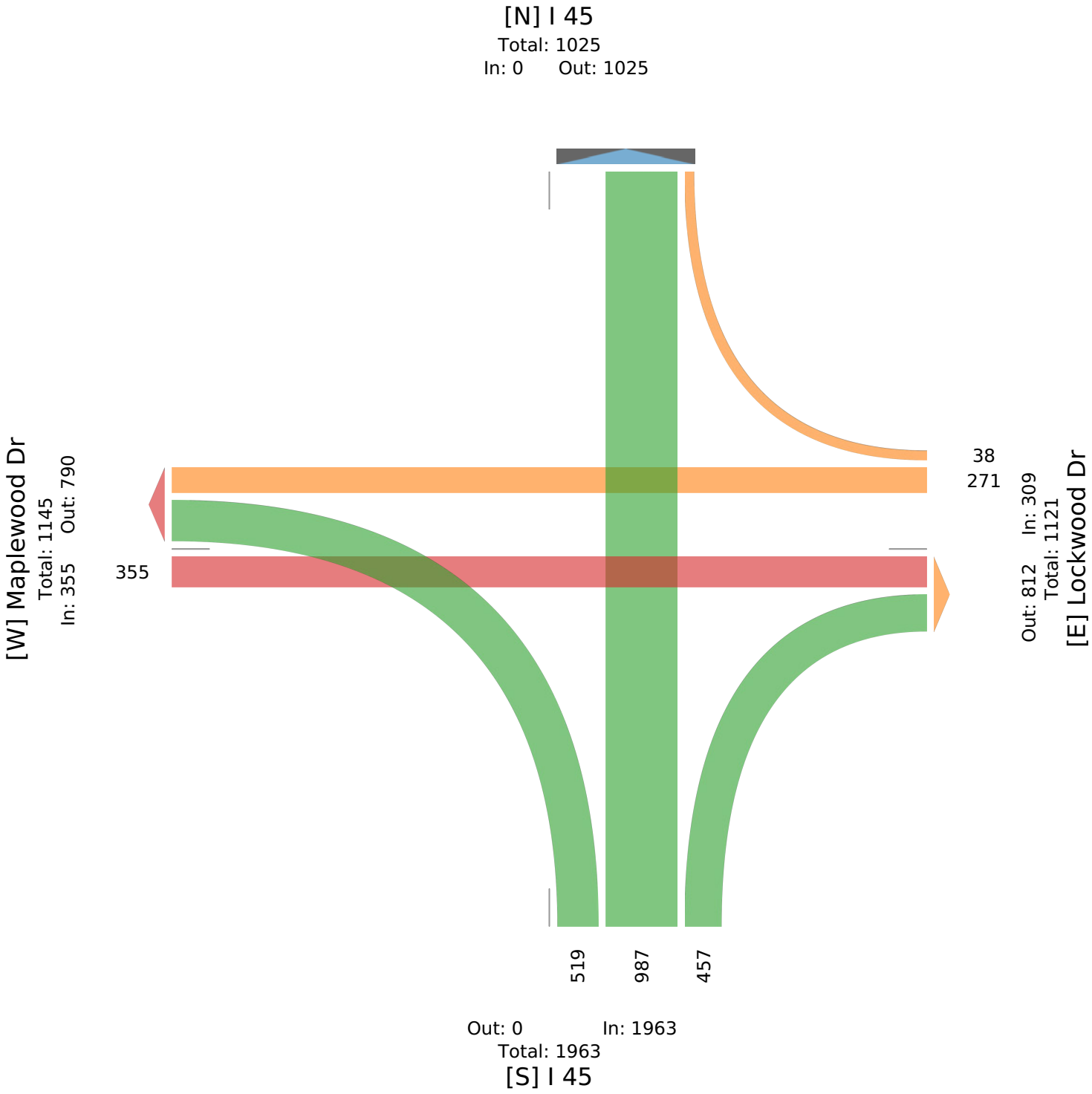
Leg	I 45						I 45						Maplewood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	87	217	158	0	**462**	0	0	0	0	0	**0**	0	0	108	0	0	**108**	0	0	45	2	0	**47**	0	**617**
7:30AM	170	249	138	0	**557**	0	0	0	0	0	**0**	0	0	110	0	0	**110**	0	0	62	14	0	**76**	0	**743**
7:45AM	128	257	100	0	**485**	0	0	0	0	0	**0**	0	0	70	0	0	**70**	0	0	88	19	0	**107**	0	**662**
8:00AM	134	264	61	0	**459**	0	0	0	0	0	**0**	0	0	67	0	0	**67**	0	0	76	3	0	**79**	0	**605**
Total	519	987	457	0	**1963**	0	0	0	0	0	**0**	0	0	355	0	0	**355**	0	0	271	38	0	**309**	0	**2627**
% Approach	26.4%	50.3%	23.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	0%	87.7%	12.3%	0%	**-**	-	-
% Total	19.8%	37.6%	17.4%	0%	**74.7%**	-	0%	0%	0%	0%	**0%**	-	0%	13.5%	0%	0%	**13.5%**	-	0%	10.3%	1.4%	0%	**11.8%**	-	-
PHF	0.763	0.935	0.723	-	**0.881**	-	-	-	-	-	**-**	-	-	0.807	-	-	**0.807**	-	-	0.770	0.500	-	**0.722**	-	0.884
Motorcycles	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	3
% Motorcycles	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.3%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.1%
Lights	509	966	451	0	**1926**	-	0	0	0	0	**0**	-	0	329	0	0	**329**	-	0	249	36	0	**285**	-	2540
% Lights	98.1%	97.9%	98.7%	0%	**98.1%**	-	0%	0%	0%	0%	**-**	-	0%	92.7%	0%	0%	**92.7%**	-	0%	91.9%	94.7%	0%	**92.2%**	-	96.7%
Single-Unit Trucks	6	12	1	0	**19**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	1	1	0	**2**	-	25
% Single-Unit Trucks	1.2%	1.2%	0.2%	0%	**1.0%**	-	0%	0%	0%	0%	**-**	-	0%	1.1%	0%	0%	**1.1%**	-	0%	0.4%	2.6%	0%	**0.6%**	-	1.0%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	5
% Articulated Trucks	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	0.4%	0%	0%	**0.3%**	-	0.2%
Buses	3	7	5	0	**15**	-	0	0	0	0	**0**	-	0	19	0	0	**19**	-	0	19	1	0	**20**	-	54
% Buses	0.6%	0.7%	1.1%	0%	**0.8%**	-	0%	0%	0%	0%	**-**	-	0%	5.4%	0%	0%	**5.4%**	-	0%	7.0%	2.6%	0%	**6.5%**	-	2.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Maplewood Dr/Lockwood Dr at I 45 - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Maplewood Dr/Lockwood Dr at I 45 - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

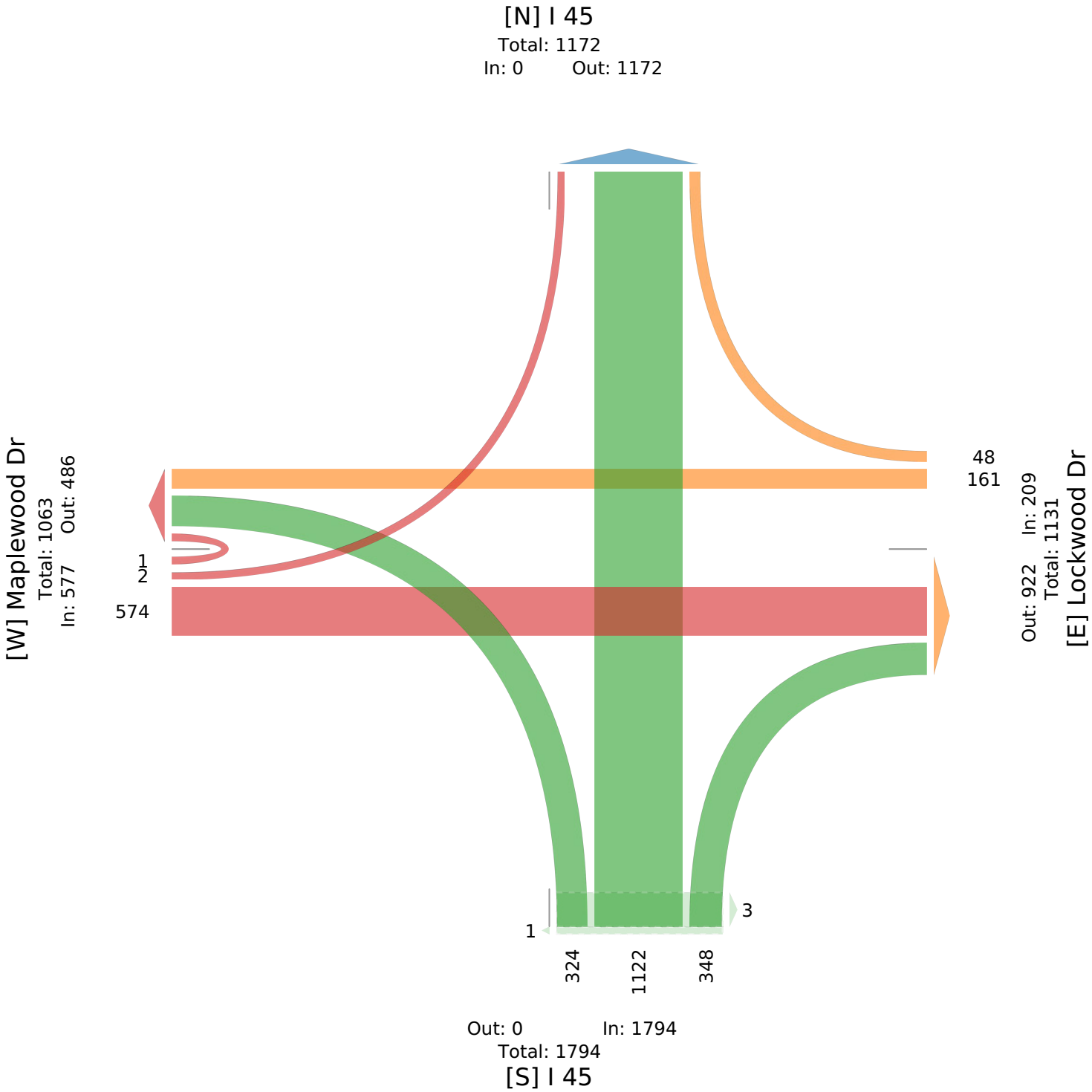
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	I 45 Northbound						I 45 Southbound						Maplewood Dr Eastbound						Lockwood Dr Westbound						
Direction																									
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:45PM	84	257	94	0	**435**	1	0	0	0	0	**0**	0	2	138	0	0	**140**	0	0	48	5	0	**53**	0	**628**
5:00PM	84	280	69	0	**433**	0	0	0	0	0	**0**	0	0	136	0	0	**136**	0	0	48	29	0	**77**	0	**646**
5:15PM	83	272	94	0	**449**	1	0	0	0	0	**0**	0	0	139	0	0	**139**	0	0	27	5	0	**32**	0	**620**
5:30PM	73	313	91	0	**477**	2	0	0	0	0	**0**	0	0	161	0	1	**162**	0	0	38	9	0	**47**	0	**686**
Total	324	1122	348	0	**1794**	4	0	0	0	0	**0**	0	2	574	0	1	**577**	0	0	161	48	0	**209**	0	**2580**
% Approach	18.1%	62.5%	19.4%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0.3%	99.5%	0%	0.2%	**-**	-	0%	77.0%	23.0%	0%	**-**	-	-
% Total	12.6%	43.5%	13.5%	0%	**69.5%**	-	0%	0%	0%	0%	**0%**	-	0.1%	22.2%	0%	0%	**22.4%**	-	0%	6.2%	1.9%	0%	**8.1%**	-	-
PHF	0.964	0.896	0.926	-	**0.940**	-	-	-	-	-	**-**	-	0.250	0.891	-	0.250	**0.890**	-	-	0.839	0.414	-	**0.679**	-	0.940
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	322	1102	339	0	**1763**	-	0	0	0	0	**0**	-	2	542	0	1	**545**	-	0	143	45	0	**188**	-	2496
% Lights	99.4%	98.2%	97.4%	0%	**98.3%**	-	0%	0%	0%	0%	**-**	-	100%	94.4%	0%	100%	**94.5%**	-	0%	88.8%	93.8%	0%	**90.0%**	-	96.7%
Single-Unit Trucks	1	13	3	0	**17**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	0	2	2	0	**4**	-	26
% Single-Unit Trucks	0.3%	1.2%	0.9%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	0%	0.9%	0%	0%	**0.9%**	-	0%	1.2%	4.2%	0%	**1.9%**	-	1.0%
Articulated Trucks	0	3	3	0	**6**	-	0	0	0	0	**0**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	10
% Articulated Trucks	0%	0.3%	0.9%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	0.7%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	1	4	3	0	**8**	-	0	0	0	0	**0**	-	0	23	0	0	**23**	-	0	16	1	0	**17**	-	48
% Buses	0.3%	0.4%	0.9%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0%	4.0%	0%	0%	**4.0%**	-	0%	9.9%	2.1%	0%	**8.1%**	-	1.9%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Maplewood Dr/Lockwood Dr at I 45 - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867346, Location: 29.728286, -95.33621

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St at Leeland St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

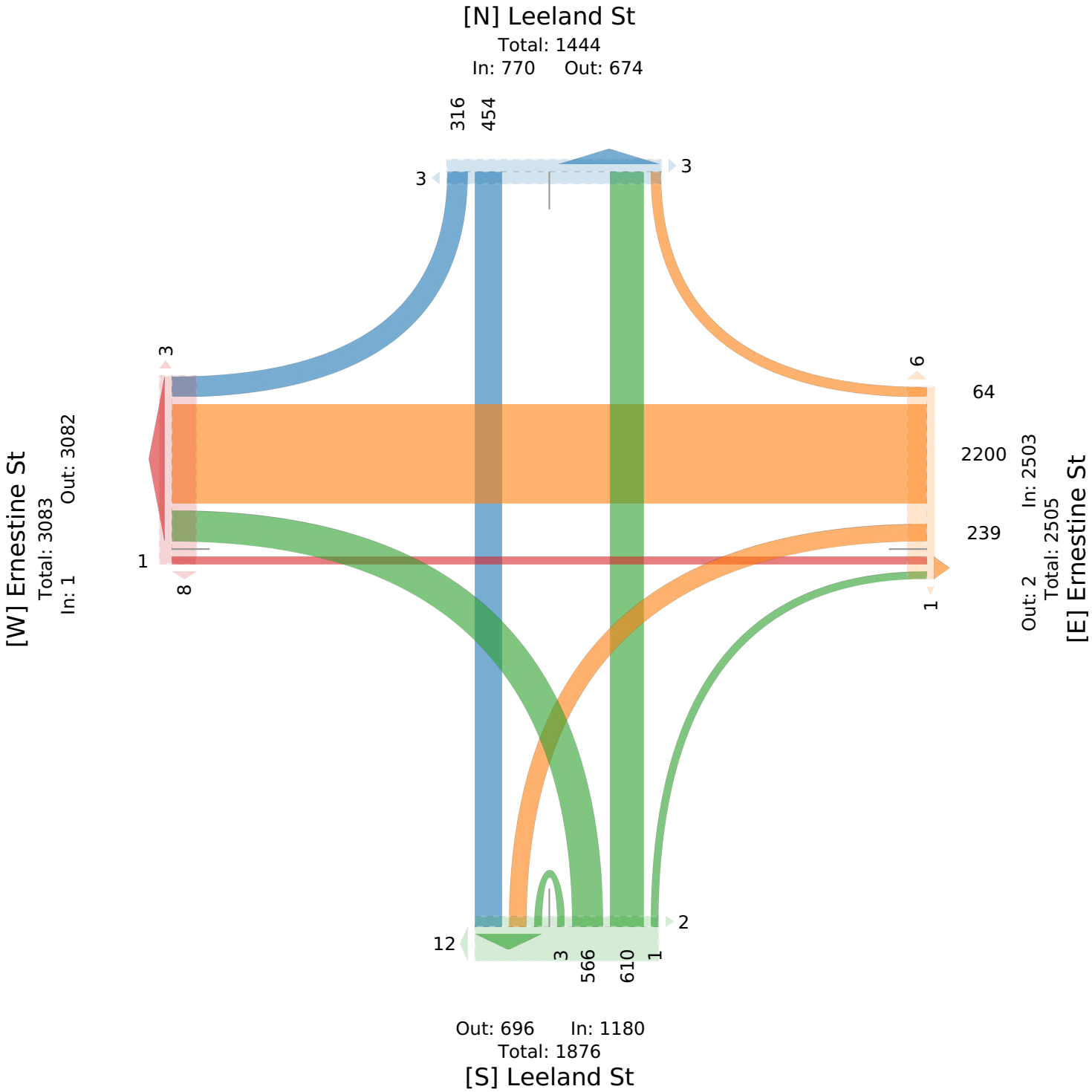
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Leeland St						Leeland St						Ernestine St						Ernestine St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	77	39	0	0	**116**	2	0	27	29	0	**56**	0	0	0	0	0	**0**	3	23	113	3	0	**139**	0	**311**
7:15AM	73	49	0	1	**123**	7	0	42	26	0	**68**	0	0	0	0	0	**0**	4	39	173	3	0	**215**	0	**406**
7:30AM	78	49	0	2	**129**	3	0	29	16	0	**45**	0	0	0	0	0	**0**	0	24	191	11	0	**226**	1	**400**
7:45AM	76	46	0	0	**122**	0	0	35	12	0	**47**	1	0	1	0	0	**1**	0	23	217	4	0	**244**	1	**414**
Hourly Total	304	183	0	3	**490**	12	0	133	83	0	**216**	1	0	1	0	0	**1**	7	109	694	21	0	**824**	2	**1531**
8:00AM	28	27	0	0	**55**	0	0	24	26	0	**50**	0	0	0	0	0	**0**	0	12	190	7	0	**209**	1	**314**
8:15AM	35	21	0	0	**56**	0	0	25	6	0	**31**	1	0	0	0	0	**0**	1	9	139	4	0	**152**	0	**239**
8:30AM	17	30	0	0	**47**	1	0	12	14	0	**26**	0	0	0	0	0	**0**	0	3	80	4	0	**87**	1	**160**
8:45AM	16	23	0	0	**39**	0	0	21	8	0	**29**	1	0	0	0	0	**0**	1	9	114	6	0	**129**	0	**197**
Hourly Total	96	101	0	0	**197**	1	0	82	54	0	**136**	2	0	0	0	0	**0**	2	33	523	21	0	**577**	2	**910**
4:00PM	25	36	0	0	**61**	0	0	40	10	0	**50**	0	0	0	0	0	**0**	1	18	120	2	0	**140**	2	**251**
4:15PM	30	38	0	0	**68**	0	0	33	21	0	**54**	0	0	0	0	0	**0**	0	15	116	1	0	**132**	0	**254**
4:30PM	20	50	1	0	**71**	0	0	27	40	0	**67**	1	0	0	0	0	**0**	0	7	100	4	0	**111**	0	**249**
4:45PM	22	37	0	0	**59**	0	0	25	34	0	**59**	0	0	0	0	0	**0**	0	19	149	5	0	**173**	0	**291**
Hourly Total	97	161	1	0	**259**	0	0	125	105	0	**230**	1	0	0	0	0	**0**	1	59	485	12	0	**556**	2	**1045**
5:00PM	27	42	0	0	**69**	0	0	15	37	0	**52**	1	0	0	0	0	**0**	0	13	162	4	0	**179**	0	**300**
5:15PM	19	32	0	0	**51**	0	0	35	18	0	**53**	1	0	0	0	0	**0**	0	8	123	3	0	**134**	0	**238**
5:30PM	11	39	0	0	**50**	0	0	32	14	0	**46**	0	0	0	0	0	**0**	0	11	134	1	0	**146**	0	**242**
5:45PM	12	52	0	0	**64**	1	0	32	5	0	**37**	0	0	0	0	0	**0**	1	6	79	2	0	**87**	1	**188**
Hourly Total	69	165	0	0	**234**	1	0	114	74	0	**188**	2	0	0	0	0	**0**	1	38	498	10	0	**546**	1	**968**
Total	566	610	1	3	**1180**	14	0	454	316	0	**770**	6	0	1	0	0	**1**	11	239	2200	64	0	**2503**	7	**4454**
% Approach	48.0%	51.7%	0.1%	0.3%	**-**	-	0%	59.0%	41.0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	9.5%	87.9%	2.6%	0%	**-**	-	-
% Total	12.7%	13.7%	0%	0.1%	**26.5%**	-	0%	10.2%	7.1%	0%	**17.3%**	-	0%	0%	0%	0%	**0%**	-	5.4%	49.4%	1.4%	0%	**56.2%**	-	-
Motorcycles	0	6	0	0	**6**	-	0	2	2	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	10
% Motorcycles	0%	1.0%	0%	0%	**0.5%**	-	0%	0.4%	0.6%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	548	591	1	3	**1143**	-	0	445	309	0	**754**	-	0	0	0	0	**0**	-	225	2062	62	0	**2349**	-	4246
% Lights	96.8%	96.9%	100%	100%	**96.9%**	-	0%	98.0%	97.8%	0%	**97.9%**	-	0%	0%	0%	0%	**0%**	-	94.1%	93.7%	96.9%	0%	**93.8%**	-	95.3%
Single-Unit Trucks	3	9	0	0	**12**	-	0	4	2	0	**6**	-	0	0	0	0	**0**	-	3	44	1	0	**48**	-	66
% Single-Unit Trucks	0.5%	1.5%	0%	0%	**1.0%**	-	0%	0.9%	0.6%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	1.3%	2.0%	1.6%	0%	**1.9%**	-	1.5%
Articulated Trucks	1	1	0	0	**2**	-	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	34	0	0	**34**	-	38
% Articulated Trucks	0.2%	0.2%	0%	0%	**0.2%**	-	0%	0%	0.6%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	1.5%	0%	0%	**1.4%**	-	0.9%
Buses	14	3	0	0	**17**	-	0	3	1	0	**4**	-	0	1	0	0	**1**	-	11	60	1	0	**72**	-	94
% Buses	2.5%	0.5%	0%	0%	**1.4%**	-	0%	0.7%	0.3%	0%	**0.5%**	-	0%	100%	0%	0%	**100%**	-	4.6%	2.7%	1.6%	0%	**2.9%**	-	2.1%
Pedestrians	-	-	-	-	-	14	-	-	-	-	-	6	-	-	-	-	-	11	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	71.4%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	28.6%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St at Leeland St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St at Leeland St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

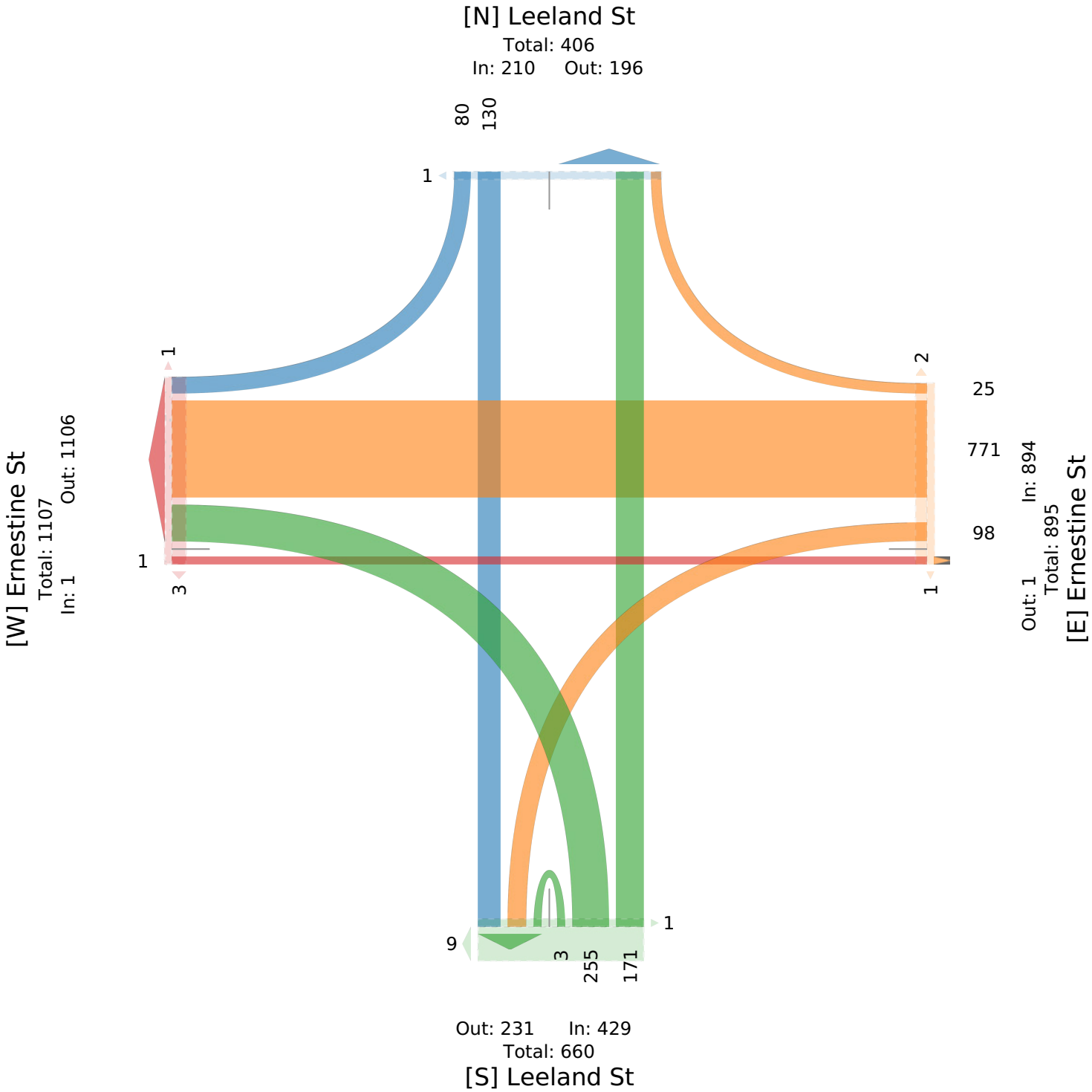
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Leeland St						Leeland St						Ernestine St						Ernestine St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	73	49	0	1	**123**	7	0	42	26	0	**68**	0	0	0	0	0	**0**	4	39	173	3	0	**215**	0	**406**
7:30AM	78	49	0	2	**129**	3	0	29	16	0	**45**	0	0	0	0	0	**0**	0	24	191	11	0	**226**	1	**400**
7:45AM	76	46	0	0	**122**	0	0	35	12	0	**47**	1	0	1	0	0	**1**	0	23	217	4	0	**244**	1	**414**
8:00AM	28	27	0	0	**55**	0	0	24	26	0	**50**	0	0	0	0	0	**0**	0	12	190	7	0	**209**	1	**314**
Total	255	171	0	3	**429**	10	0	130	80	0	**210**	1	0	1	0	0	**1**	4	98	771	25	0	**894**	3	**1534**
% Approach	59.4%	39.9%	0%	0.7%	**-**	-	0%	61.9%	38.1%	0%	**-**	-	0%	100%	0%	0%	**-**	-	11.0%	86.2%	2.8%	0%	**-**	-	-
% Total	16.6%	11.1%	0%	0.2%	**28.0%**	-	0%	8.5%	5.2%	0%	**13.7%**	-	0%	0.1%	0%	0%	**0.1%**	-	6.4%	50.3%	1.6%	0%	**58.3%**	-	-
PHF	0.817	0.872	-	0.375	**0.831**	-	-	0.774	0.769	-	**0.772**	-	-	0.250	-	-	**0.250**	-	0.628	0.888	0.568	-	**0.916**	-	0.926
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.6%	0%	0%	**0.2%**	-	0%	0.8%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	249	167	0	3	**419**	-	0	128	80	0	**208**	-	0	0	0	0	**0**	-	91	722	24	0	**837**	-	1464
% Lights	97.6%	97.7%	0%	100%	**97.7%**	-	0%	98.5%	100%	0%	**99.0%**	-	0%	0%	0%	0%	**0%**	-	92.9%	93.6%	96.0%	0%	**93.6%**	-	95.4%
Single-Unit Trucks	1	2	0	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	17	0	0	**18**	-	22
% Single-Unit Trucks	0.4%	1.2%	0%	0%	**0.7%**	-	0%	0.8%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	1.0%	2.2%	0%	0%	**2.0%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	14	0	0	**14**	-	14
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.8%	0%	0%	**1.6%**	-	0.9%
Buses	5	1	0	0	**6**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	6	18	1	0	**25**	-	32
% Buses	2.0%	0.6%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	100%	0%	0%	**100%**	-	6.1%	2.3%	4.0%	0%	**2.8%**	-	2.1%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St at Leeland St - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St at Leeland St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Leeland St						Leeland St						Ernestine St						Ernestine St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	30	38	0	0	**68**	0	0	33	21	0	**54**	0	0	0	0	0	**0**	0	15	116	1	0	**132**	0	**254**
4:30PM	20	50	1	0	**71**	0	0	27	40	0	**67**	1	0	0	0	0	**0**	0	7	100	4	0	**111**	0	**249**
4:45PM	22	37	0	0	**59**	0	0	25	34	0	**59**	0	0	0	0	0	**0**	0	19	149	5	0	**173**	0	**291**
5:00PM	27	42	0	0	**69**	0	0	15	37	0	**52**	1	0	0	0	0	**0**	0	13	162	4	0	**179**	0	**300**
Total	99	167	1	0	**267**	0	0	100	132	0	**232**	2	0	0	0	0	**0**	0	54	527	14	0	**595**	0	**1094**
% Approach	37.1%	62.5%	0.4%	0%	**-**	-	0%	43.1%	56.9%	0%	**-**	-	0%	0%	0%	0%	**-**	-	9.1%	88.6%	2.4%	0%	**-**	-	-
% Total	9.0%	15.3%	0.1%	0%	**24.4%**	-	0%	9.1%	12.1%	0%	**21.2%**	-	0%	0%	0%	0%	**0%**	-	4.9%	48.2%	1.3%	0%	**54.4%**	-	-
PHF	0.825	0.835	0.250	-	**0.940**	-	-	0.758	0.825	-	**0.866**	-	-	-	-	-	**-**	-	0.711	0.813	0.700	-	**0.831**	-	0.912
Motorcycles	0	2	0	0	**2**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	1.2%	0%	0%	**0.7%**	-	0%	0%	0.8%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.3%
Lights	94	162	1	0	**257**	-	0	98	127	0	**225**	-	0	0	0	0	**0**	-	51	504	14	0	**569**	-	1051
% Lights	94.9%	97.0%	100%	0%	**96.3%**	-	0%	98.0%	96.2%	0%	**97.0%**	-	0%	0%	0%	0%	**-**	-	94.4%	95.6%	100%	0%	**95.6%**	-	96.1%
Single-Unit Trucks	0	2	0	0	**2**	-	0	1	2	0	**3**	-	0	0	0	0	**0**	-	0	6	0	0	**6**	-	11
% Single-Unit Trucks	0%	1.2%	0%	0%	**0.7%**	-	0%	1.0%	1.5%	0%	**1.3%**	-	0%	0%	0%	0%	**-**	-	0%	1.1%	0%	0%	**1.0%**	-	1.0%
Articulated Trucks	1	0	0	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	3	0	0	**3**	-	5
% Articulated Trucks	1.0%	0%	0%	0%	**0.4%**	-	0%	0%	0.8%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0%	0.6%	0%	0%	**0.5%**	-	0.5%
Buses	4	1	0	0	**5**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	3	14	0	0	**17**	-	24
% Buses	4.0%	0.6%	0%	0%	**1.9%**	-	0%	1.0%	0.8%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	5.6%	2.7%	0%	0%	**2.9%**	-	2.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St at Leeland St - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867384, Location: 29.735709, -95.333951

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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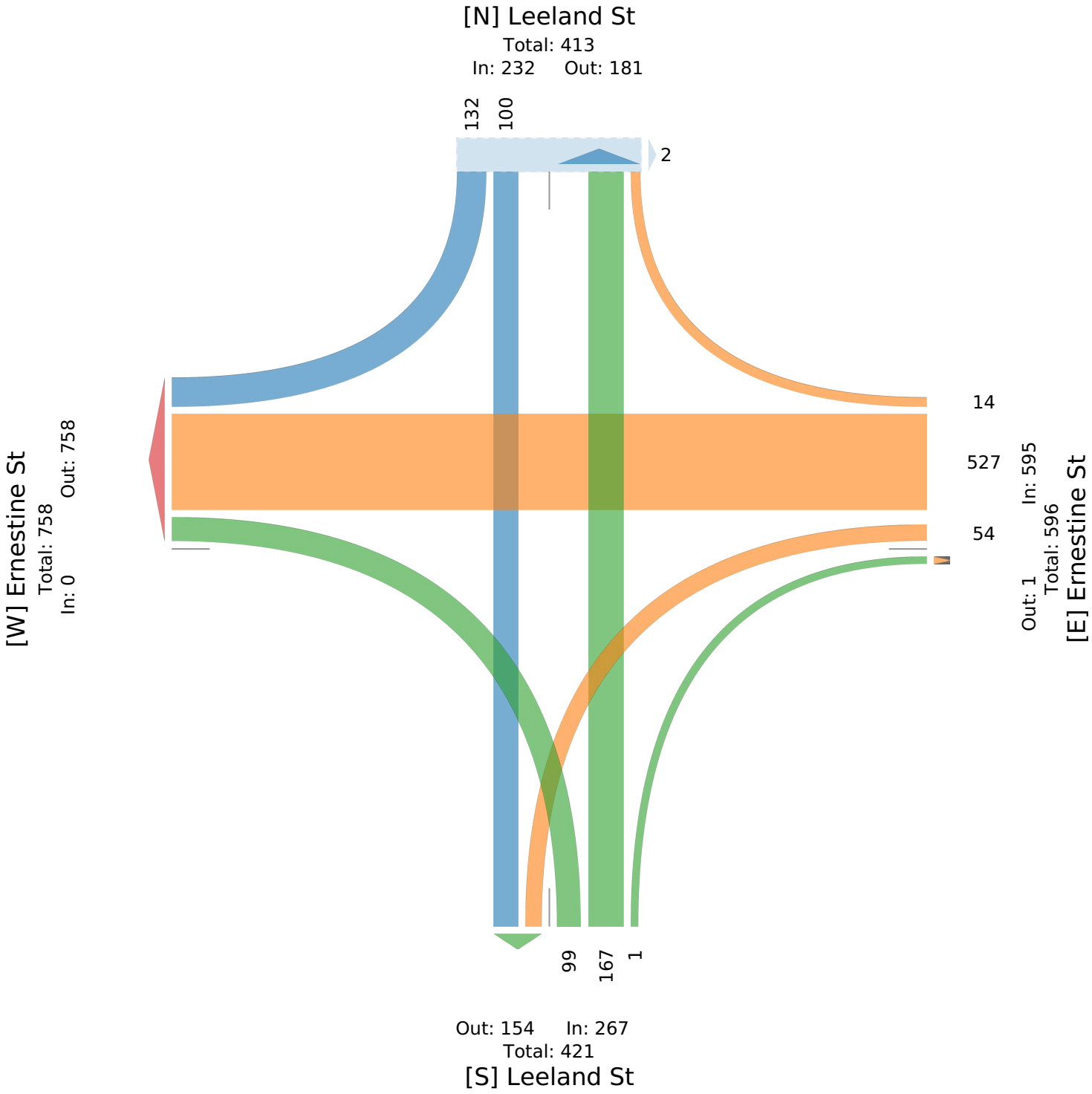


Lockwood Dr at Leeland St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

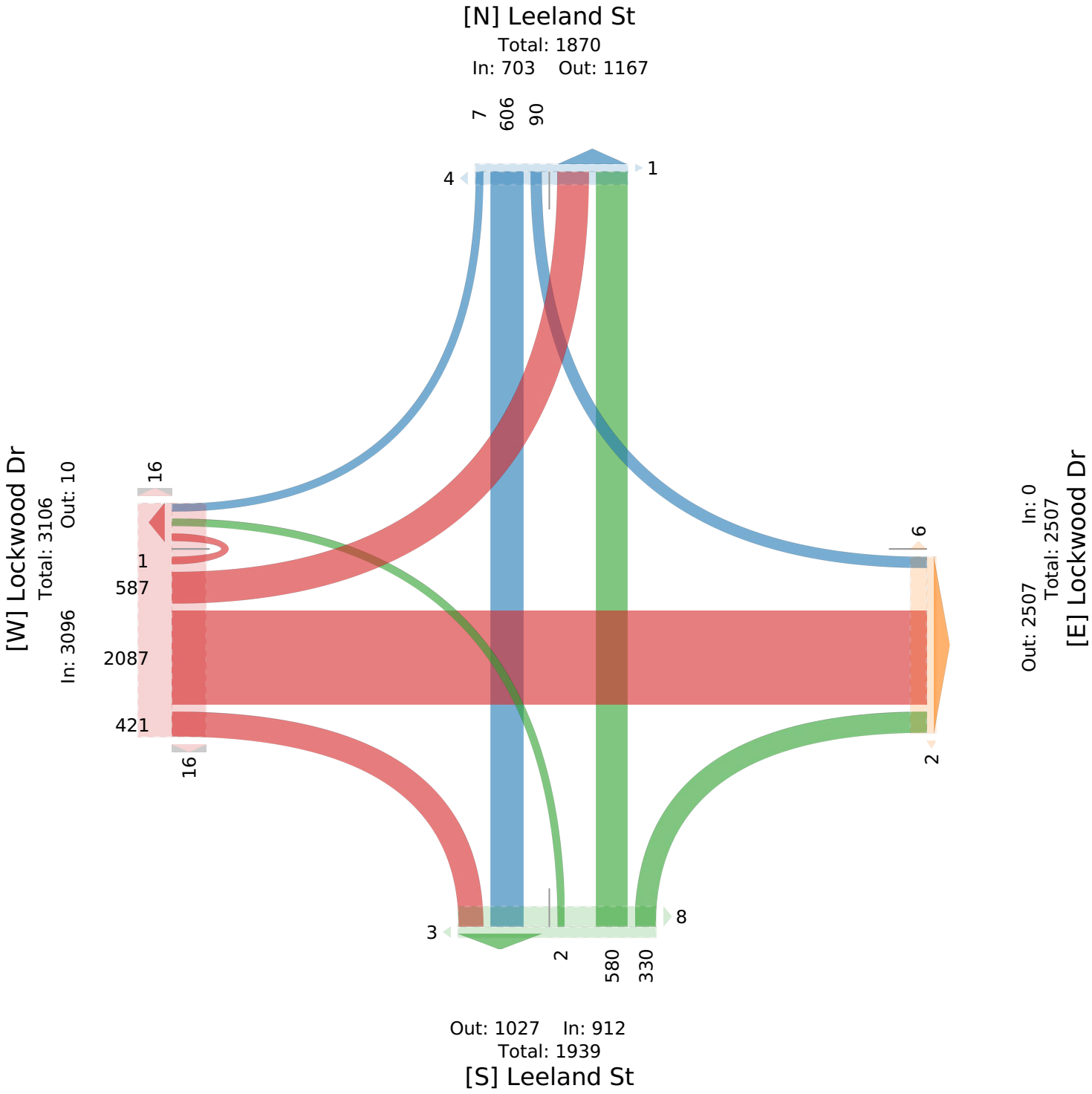
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Leeland St						Leeland St						Lockwood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	40	11	0	**51**	1	12	33	0	0	**45**	0	82	122	16	0	**220**	4	0	0	0	0	**0**	0	**316**
7:15AM	1	32	15	0	**48**	3	16	71	1	0	**88**	2	97	196	51	0	**344**	11	0	0	0	0	**0**	0	**480**
7:30AM	0	43	16	0	**59**	1	12	45	1	0	**58**	1	87	228	88	0	**403**	6	0	0	0	0	**0**	1	**520**
7:45AM	0	39	14	0	**53**	0	7	49	4	0	**60**	0	63	170	60	0	**293**	0	0	0	0	0	**0**	0	**406**
Hourly Total	1	154	56	0	**211**	5	47	198	6	0	**251**	3	329	716	215	0	**1260**	21	0	0	0	0	**0**	1	**1722**
8:00AM	0	38	10	0	**48**	0	6	30	0	0	**36**	0	18	86	17	0	**121**	0	0	0	0	0	**0**	0	**205**
8:15AM	0	37	11	0	**48**	0	5	29	0	0	**34**	1	19	61	15	0	**95**	1	0	0	0	0	**0**	0	**177**
8:30AM	0	32	16	0	**48**	1	2	15	0	0	**17**	0	13	60	6	0	**79**	1	0	0	0	0	**0**	1	**144**
8:45AM	1	26	20	0	**47**	0	3	24	0	0	**27**	0	11	52	7	0	**70**	2	0	0	0	0	**0**	0	**144**
Hourly Total	1	133	57	0	**191**	1	16	98	0	0	**114**	1	61	259	45	0	**365**	4	0	0	0	0	**0**	1	**670**
4:00PM	0	39	26	0	**65**	0	4	51	0	0	**55**	0	20	133	22	0	**175**	0	0	0	0	0	**0**	2	**295**
4:15PM	0	58	36	0	**94**	2	5	46	0	0	**51**	0	18	149	21	1	**189**	0	0	0	0	0	**0**	0	**334**
4:30PM	0	39	36	0	**75**	0	3	33	0	0	**36**	0	30	120	12	0	**162**	0	0	0	0	0	**0**	0	**273**
4:45PM	0	42	19	0	**61**	0	2	39	1	0	**42**	0	29	136	26	0	**191**	0	0	0	0	0	**0**	0	**294**
Hourly Total	0	178	117	0	**295**	2	14	169	1	0	**184**	0	97	538	81	1	**717**	0	0	0	0	0	**0**	2	**1196**
5:00PM	0	34	29	0	**63**	0	2	29	0	0	**31**	0	20	135	22	0	**177**	2	0	0	0	0	**0**	0	**271**
5:15PM	0	30	31	0	**61**	2	5	36	0	0	**41**	0	22	156	19	0	**197**	1	0	0	0	0	**0**	0	**299**
5:30PM	0	13	12	0	**25**	1	3	45	0	0	**48**	1	36	155	24	0	**215**	2	0	0	0	0	**0**	3	**288**
5:45PM	0	38	28	0	**66**	0	3	31	0	0	**34**	0	22	128	15	0	**165**	2	0	0	0	0	**0**	1	**265**
Hourly Total	0	115	100	0	**215**	3	13	141	0	0	**154**	1	100	574	80	0	**754**	7	0	0	0	0	**0**	4	**1123**
Total	2	580	330	0	**912**	11	90	606	7	0	**703**	5	587	2087	421	1	**3096**	32	0	0	0	0	**0**	8	**4711**
% Approach	0.2%	63.6%	36.2%	0%	**-**	-	12.8%	86.2%	1.0%	0%	**-**	-	19.0%	67.4%	13.6%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	12.3%	7.0%	0%	**19.4%**	-	1.9%	12.9%	0.1%	0%	**14.9%**	-	12.5%	44.3%	8.9%	0%	**65.7%**	-	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	3	0	0	**3**	-	0	2	0	0	**2**	-	2	2	0	0	**4**	-	0	0	0	0	**0**	-	9
% Motorcycles	0%	0.5%	0%	0%	**0.3%**	-	0%	0.3%	0%	0%	**0.3%**	-	0.3%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0.2%
Lights	2	555	325	0	**882**	-	86	588	7	0	**681**	-	578	1978	398	1	**2955**	-	0	0	0	0	**0**	-	4518
% Lights	100%	95.7%	98.5%	0%	**96.7%**	-	95.6%	97.0%	100%	0%	**96.9%**	-	98.5%	94.8%	94.5%	100%	**95.4%**	-	0%	0%	0%	0%	**-**	-	95.9%
Single-Unit Trucks	0	8	2	0	**10**	-	0	7	0	0	**7**	-	3	35	7	0	**45**	-	0	0	0	0	**0**	-	62
% Single-Unit Trucks	0%	1.4%	0.6%	0%	**1.1%**	-	0%	1.2%	0%	0%	**1.0%**	-	0.5%	1.7%	1.7%	0%	**1.5%**	-	0%	0%	0%	0%	**-**	-	1.3%
Articulated Trucks	0	0	2	0	**2**	-	0	0	0	0	**0**	-	1	11	0	0	**12**	-	0	0	0	0	**0**	-	14
% Articulated Trucks	0%	0%	0.6%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.2%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0.3%
Buses	0	14	1	0	**15**	-	4	9	0	0	**13**	-	3	61	16	0	**80**	-	0	0	0	0	**0**	-	108
% Buses	0%	2.4%	0.3%	0%	**1.6%**	-	4.4%	1.5%	0%	0%	**1.8%**	-	0.5%	2.9%	3.8%	0%	**2.6%**	-	0%	0%	0%	0%	**-**	-	2.3%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	4	-	-	-	-	-	29	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	90.9%	-	-	-	-	-	80.0%	-	-	-	-	-	90.6%	-	-	-	-	-	87.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	9.1%	-	-	-	-	-	20.0%	-	-	-	-	-	9.4%	-	-	-	-	-	12.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Leeland St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Leeland St - TMC

Wed Sep 1, 2021
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

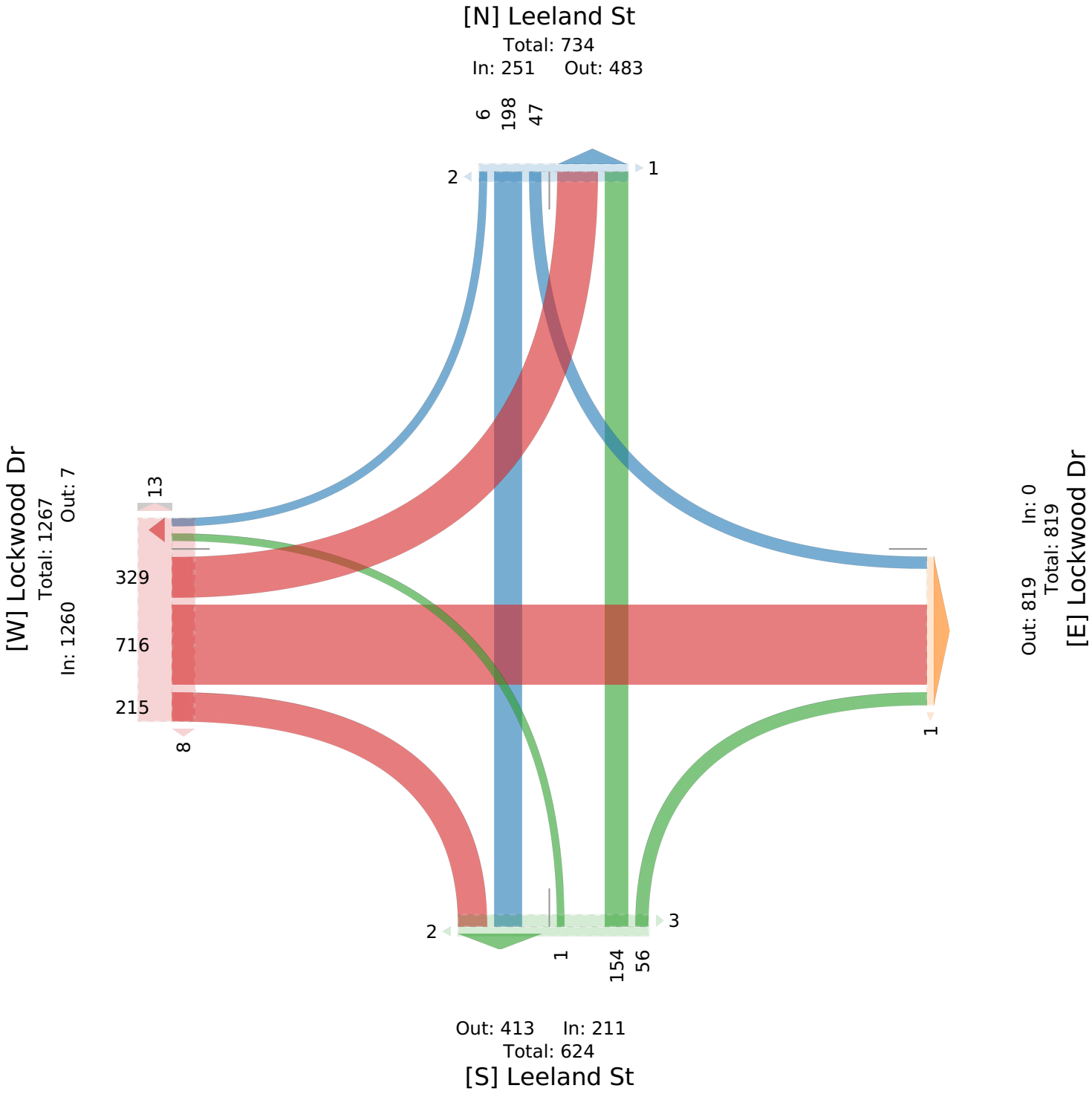
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Leeland St Northbound						Leeland St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	40	11	0	**51**	1	12	33	0	0	**45**	0	82	122	16	0	**220**	4	0	0	0	0	**0**	0	**316**
7:15AM	1	32	15	0	**48**	3	16	71	1	0	**88**	2	97	196	51	0	**344**	11	0	0	0	0	**0**	0	**480**
7:30AM	0	43	16	0	**59**	1	12	45	1	0	**58**	1	87	228	88	0	**403**	6	0	0	0	0	**0**	1	**520**
7:45AM	0	39	14	0	**53**	0	7	49	4	0	**60**	0	63	170	60	0	**293**	0	0	0	0	0	**0**	0	**406**
Total	1	154	56	0	**211**	5	47	198	6	0	**251**	3	329	716	215	0	**1260**	21	0	0	0	0	**0**	1	**1722**
% Approach	0.5%	73.0%	26.5%	0%	**-**	-	18.7%	78.9%	2.4%	0%	**-**	-	26.1%	56.8%	17.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0.1%	8.9%	3.3%	0%	**12.3%**	-	2.7%	11.5%	0.3%	0%	**14.6%**	-	19.1%	41.6%	12.5%	0%	**73.2%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	0.250	0.895	0.875	-	**0.894**	-	0.734	0.697	0.375	-	**0.713**	-	0.848	0.785	0.611	-	**0.782**	-	-	-	-	-	**-**	-	0.828
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	2	0	0	**3**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0.2%
Lights	1	147	53	0	**201**	-	46	190	6	0	**242**	-	327	692	207	0	**1226**	-	0	0	0	0	**0**	-	1669
% Lights	100%	95.5%	94.6%	0%	**95.3%**	-	97.9%	96.0%	100%	0%	**96.4%**	-	99.4%	96.6%	96.3%	0%	**97.3%**	-	0%	0%	0%	0%	**-**	-	96.9%
Single-Unit Trucks	0	3	0	0	**3**	-	0	3	0	0	**3**	-	0	5	4	0	**9**	-	0	0	0	0	**0**	-	15
% Single-Unit Trucks	0%	1.9%	0%	0%	**1.4%**	-	0%	1.5%	0%	0%	**1.2%**	-	0%	0.7%	1.9%	0%	**0.7%**	-	0%	0%	0%	0%	**-**	-	0.9%
Articulated Trucks	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	3.6%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Buses	0	4	1	0	**5**	-	1	5	0	0	**6**	-	1	17	4	0	**22**	-	0	0	0	0	**0**	-	33
% Buses	0%	2.6%	1.8%	0%	**2.4%**	-	2.1%	2.5%	0%	0%	**2.4%**	-	0.3%	2.4%	1.9%	0%	**1.7%**	-	0%	0%	0%	0%	**-**	-	1.9%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	21	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Leeland St - TMC
Wed Sep 1, 2021
AM Peak (7 AM - 8 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Leeland St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

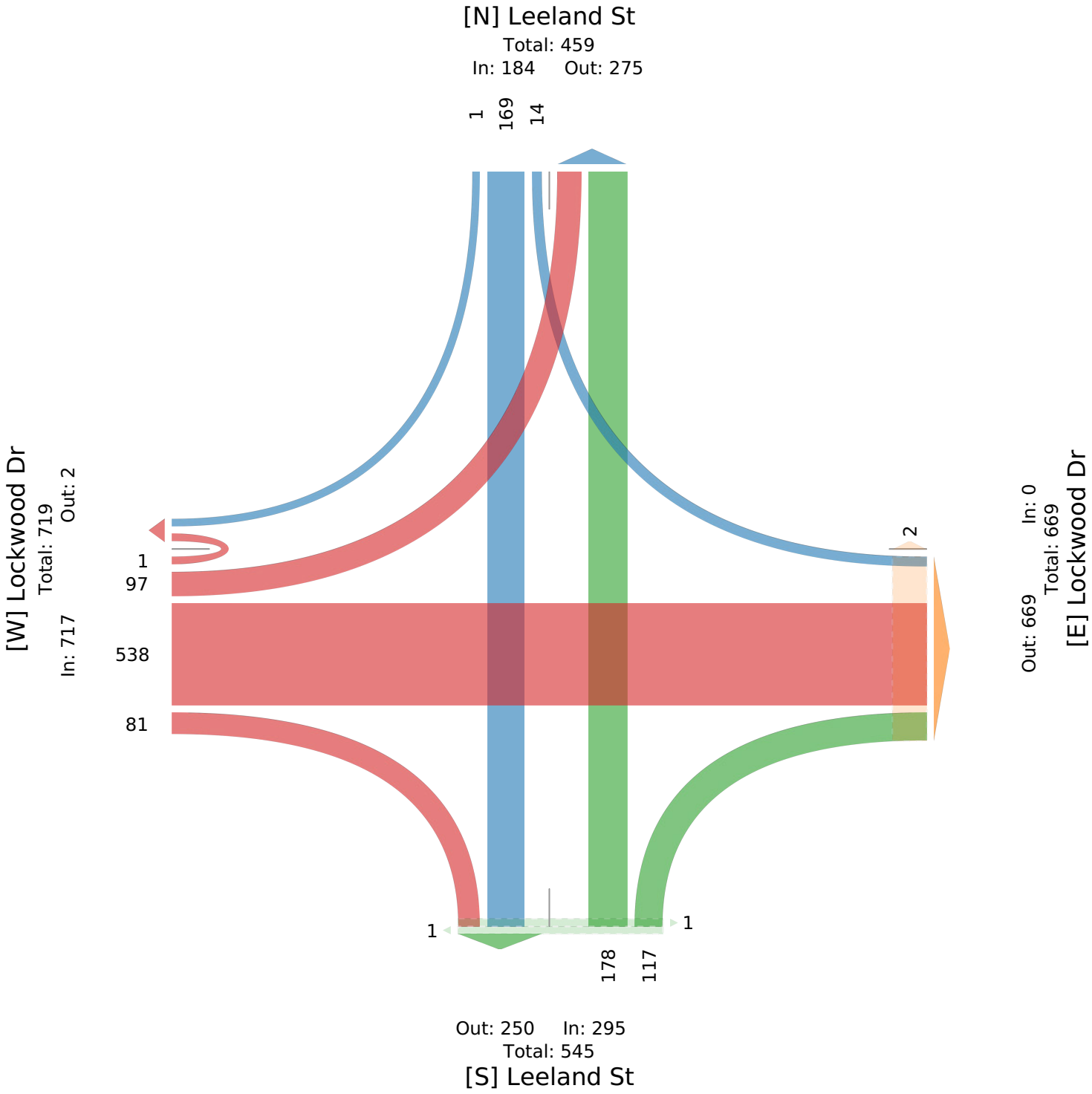
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Leeland St Northbound						Leeland St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	0	39	26	0	**65**	0	4	51	0	0	**55**	0	20	133	22	0	**175**	0	0	0	0	0	**0**	2	**295**
4:15PM	0	58	36	0	**94**	2	5	46	0	0	**51**	0	18	149	21	1	**189**	0	0	0	0	0	**0**	0	**334**
4:30PM	0	39	36	0	**75**	0	3	33	0	0	**36**	0	30	120	12	0	**162**	0	0	0	0	0	**0**	0	**273**
4:45PM	0	42	19	0	**61**	0	2	39	1	0	**42**	0	29	136	26	0	**191**	0	0	0	0	0	**0**	0	**294**
Total	0	178	117	0	**295**	2	14	169	1	0	**184**	0	97	538	81	1	**717**	0	0	0	0	0	**0**	2	**1196**
% Approach	0%	60.3%	39.7%	0%	**-**	-	7.6%	91.8%	0.5%	0%	**-**	-	13.5%	75.0%	11.3%	0.1%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	14.9%	9.8%	0%	**24.7%**	-	1.2%	14.1%	0.1%	0%	**15.4%**	-	8.1%	45.0%	6.8%	0.1%	**59.9%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.767	0.813	-	**0.785**	-	0.700	0.828	0.250	-	**0.836**	-	0.808	0.903	0.779	0.250	**0.938**	-	-	-	-	-	**-**	-	0.895
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.6%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	1.0%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0.2%
Lights	0	172	117	0	**289**	-	12	167	1	0	**180**	-	94	501	77	1	**673**	-	0	0	0	0	**0**	-	1142
% Lights	0%	96.6%	100%	0%	**98.0%**	-	85.7%	98.8%	100%	0%	**97.8%**	-	96.9%	93.1%	95.1%	100%	**93.9%**	-	0%	0%	0%	0%	**-**	-	95.5%
Single-Unit Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	22	1	0	**23**	-	0	0	0	0	**0**	-	25
% Single-Unit Trucks	0%	1.1%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0%	4.1%	1.2%	0%	**3.2%**	-	0%	0%	0%	0%	**-**	-	2.1%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.0%	0.2%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0.2%
Buses	0	3	0	0	**3**	-	2	2	0	0	**4**	-	1	14	3	0	**18**	-	0	0	0	0	**0**	-	25
% Buses	0%	1.7%	0%	0%	**1.0%**	-	14.3%	1.2%	0%	0%	**2.2%**	-	1.0%	2.6%	3.7%	0%	**2.5%**	-	0%	0%	0%	0%	**-**	-	2.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Leeland St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867347, Location: 29.735172, -95.331833

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St/Lockwood Dr at Polk St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

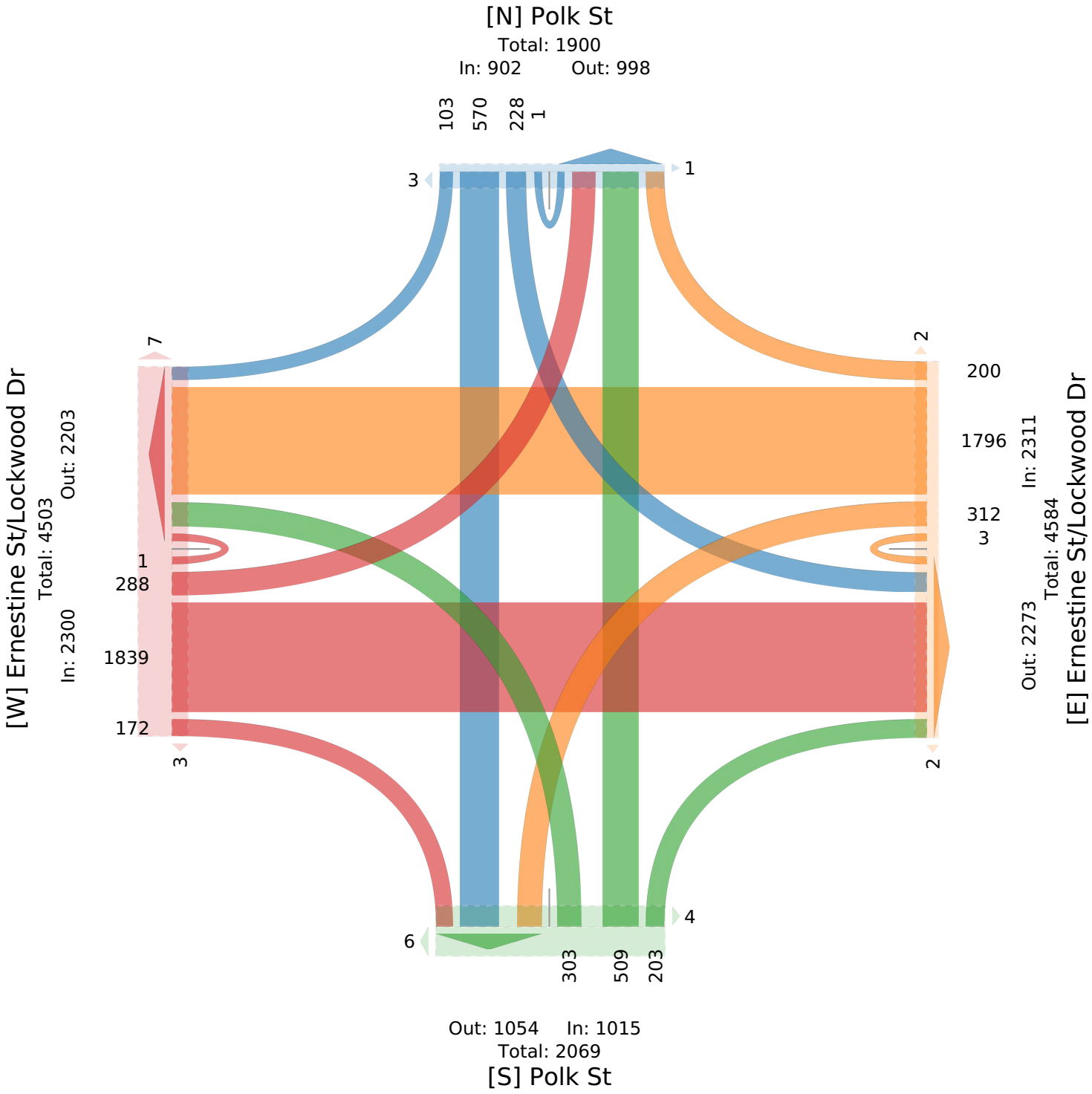
Leg	Polk St						Polk St						Ernestine St/Lockwood Dr						Ernestine St/Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	28	20	3	0	**51**	0	12	22	5	0	**39**	0	16	72	4	0	**92**	0	26	83	12	0	**121**	0	**303**
7:15AM	39	35	9	0	**83**	5	15	36	3	0	**54**	0	25	132	20	0	**177**	1	14	133	10	0	**157**	0	**471**
7:30AM	23	36	12	0	**71**	1	16	53	9	0	**78**	0	36	177	30	0	**243**	0	27	161	12	0	**200**	1	**592**
7:45AM	17	29	19	0	**65**	0	7	41	8	0	**56**	0	25	153	26	0	**204**	1	32	202	13	0	**247**	0	**572**
Hourly Total	107	120	43	0	**270**	6	50	152	25	0	**227**	0	102	534	80	0	**716**	2	99	579	47	0	**725**	1	**1938**
8:00AM	15	45	17	0	**77**	1	7	36	10	0	**53**	0	6	79	11	0	**96**	0	27	160	15	0	**202**	0	**428**
8:15AM	17	29	16	0	**62**	0	9	31	4	0	**44**	1	8	71	6	0	**85**	1	21	112	16	1	**150**	1	**341**
8:30AM	10	20	6	0	**36**	0	9	25	7	0	**41**	0	7	50	7	0	**64**	0	8	78	16	0	**102**	0	**243**
8:45AM	10	14	5	0	**29**	0	2	23	6	0	**31**	1	12	60	6	0	**78**	0	12	80	14	0	**106**	0	**244**
Hourly Total	52	108	44	0	**204**	1	27	115	27	0	**169**	2	33	260	30	0	**323**	1	68	430	61	1	**560**	1	**1256**
4:00PM	19	36	18	0	**73**	1	17	35	4	0	**56**	0	13	122	7	0	**142**	2	25	109	13	0	**147**	1	**418**
4:15PM	18	46	16	0	**80**	0	18	33	7	0	**58**	0	25	140	11	0	**176**	1	17	79	14	0	**110**	0	**424**
4:30PM	21	50	8	0	**79**	0	12	44	7	0	**63**	0	32	96	11	0	**139**	0	13	74	18	0	**105**	1	**386**
4:45PM	23	21	9	0	**53**	0	19	32	11	0	**62**	1	23	118	2	1	**144**	1	21	133	10	1	**165**	0	**424**
Hourly Total	81	153	51	0	**285**	1	66	144	29	0	**239**	1	93	476	31	1	**601**	4	76	395	55	1	**527**	2	**1652**
5:00PM	24	47	18	0	**89**	0	18	33	9	0	**60**	0	16	135	10	0	**161**	0	13	122	9	0	**144**	0	**454**
5:15PM	15	40	20	0	**75**	2	27	41	4	1	**73**	0	16	159	8	0	**183**	1	29	106	14	0	**149**	0	**480**
5:30PM	11	24	12	0	**47**	0	21	34	5	0	**60**	0	13	145	5	0	**163**	2	17	98	6	0	**121**	0	**391**
5:45PM	13	17	15	0	**45**	0	19	51	4	0	**74**	1	15	130	8	0	**153**	0	10	66	8	1	**85**	0	**357**
Hourly Total	63	128	65	0	**256**	2	85	159	22	1	**267**	1	60	569	31	0	**660**	3	69	392	37	1	**499**	0	**1682**
Total	303	509	203	0	**1015**	10	228	570	103	1	**902**	4	288	1839	172	1	**2300**	10	312	1796	200	3	**2311**	4	**6528**
% Approach	29.9%	50.1%	20.0%	0%	**-**	-	25.3%	63.2%	11.4%	0.1%	**-**	-	12.5%	80.0%	7.5%	0%	**-**	-	13.5%	77.7%	8.7%	0.1%	**-**	-	-
% Total	4.6%	7.8%	3.1%	0%	**15.5%**	-	3.5%	8.7%	1.6%	0%	**13.8%**	-	4.4%	28.2%	2.6%	0%	**35.2%**	-	4.8%	27.5%	3.1%	0%	**35.4%**	-	-
Motorcycles	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	7
% Motorcycles	0%	0%	0.5%	0%	**0.1%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	272	485	198	0	**955**	-	223	548	88	0	**859**	-	261	1769	150	0	**2180**	-	299	1700	197	3	**2199**	-	6193
% Lights	89.8%	95.3%	97.5%	0%	**94.1%**	-	97.8%	96.1%	85.4%	0%	**95.2%**	-	90.6%	96.2%	87.2%	0%	**94.8%**	-	95.8%	94.7%	98.5%	100%	**95.2%**	-	94.9%
Single-Unit Trucks	3	5	2	0	**10**	-	4	3	0	0	**7**	-	1	33	4	0	**38**	-	8	42	1	0	**51**	-	106
% Single-Unit Trucks	1.0%	1.0%	1.0%	0%	**1.0%**	-	1.8%	0.5%	0%	0%	**0.8%**	-	0.3%	1.8%	2.3%	0%	**1.7%**	-	2.6%	2.3%	0.5%	0%	**2.2%**	-	1.6%
Articulated Trucks	5	2	0	0	**7**	-	1	0	0	0	**1**	-	1	9	3	0	**13**	-	0	28	1	0	**29**	-	50
% Articulated Trucks	1.7%	0.4%	0%	0%	**0.7%**	-	0.4%	0%	0%	0%	**0.1%**	-	0.3%	0.5%	1.7%	0%	**0.6%**	-	0%	1.6%	0.5%	0%	**1.3%**	-	0.8%
Buses	23	17	2	0	**42**	-	0	18	15	1	**34**	-	25	23	15	1	**64**	-	5	26	1	0	**32**	-	172
% Buses	7.6%	3.3%	1.0%	0%	**4.1%**	-	0%	3.2%	14.6%	100%	**3.8%**	-	8.7%	1.3%	8.7%	100%	**2.8%**	-	1.6%	1.4%	0.5%	0%	**1.4%**	-	2.6%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	4	-	-	-	-	-	10	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St/Lockwood Dr at Polk St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St/Lockwood Dr at Polk St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

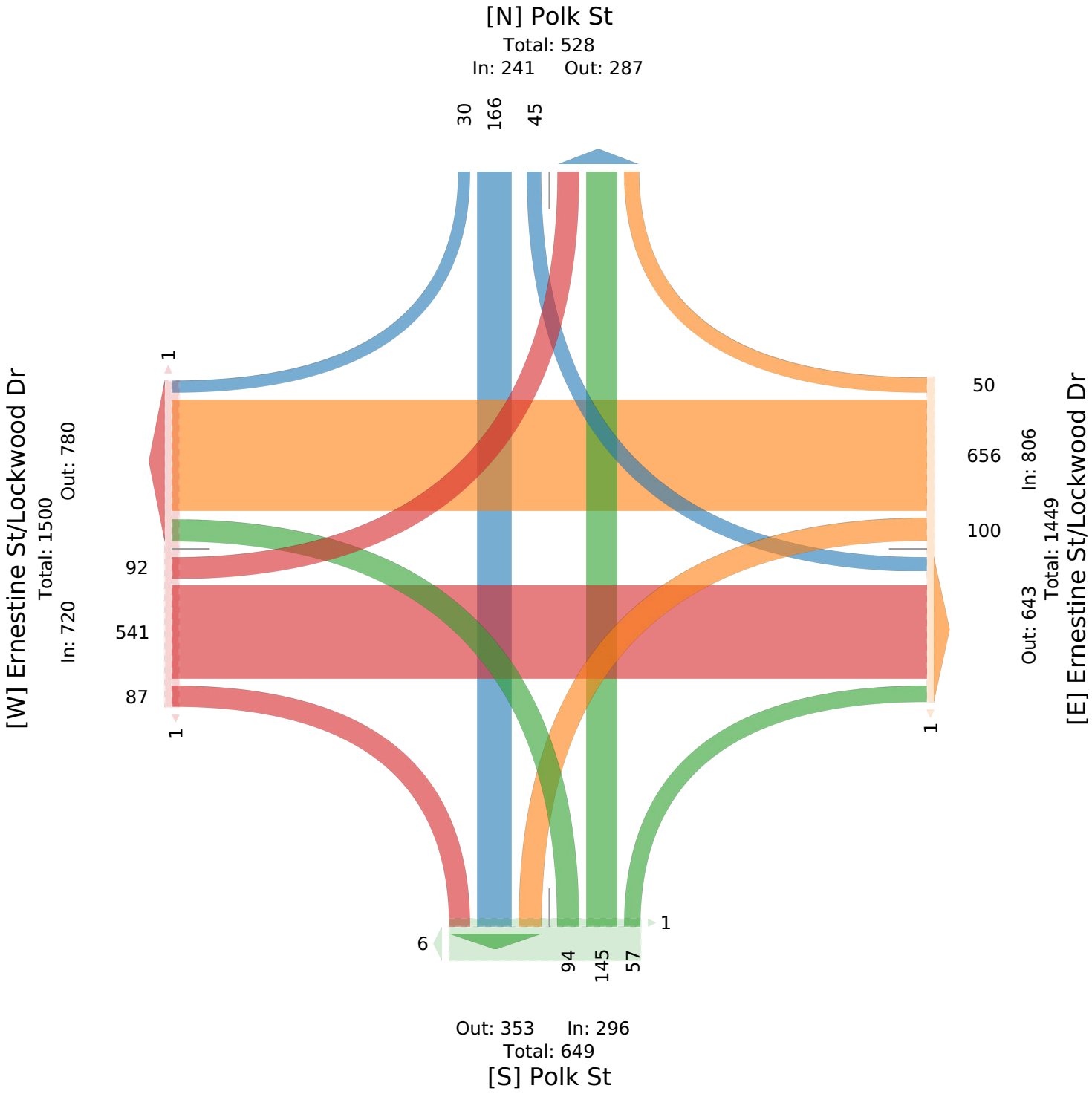
Leg	Polk St						Polk St						Ernestine St/Lockwood Dr						Ernestine St/Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	39	35	9	0	**83**	5	15	36	3	0	**54**	0	25	132	20	0	**177**	1	14	133	10	0	**157**	0	**471**
7:30AM	23	36	12	0	**71**	1	16	53	9	0	**78**	0	36	177	30	0	**243**	0	27	161	12	0	**200**	1	**592**
7:45AM	17	29	19	0	**65**	0	7	41	8	0	**56**	0	25	153	26	0	**204**	1	32	202	13	0	**247**	0	**572**
8:00AM	15	45	17	0	**77**	1	7	36	10	0	**53**	0	6	79	11	0	**96**	0	27	160	15	0	**202**	0	**428**
Total	94	145	57	0	**296**	7	45	166	30	0	**241**	0	92	541	87	0	**720**	2	100	656	50	0	**806**	1	**2063**
% Approach	31.8%	49.0%	19.3%	0%	**-**	-	18.7%	68.9%	12.4%	0%	**-**	-	12.8%	75.1%	12.1%	0%	**-**	-	12.4%	81.4%	6.2%	0%	**-**	-	-
% Total	4.6%	7.0%	2.8%	0%	**14.3%**	-	2.2%	8.0%	1.5%	0%	**11.7%**	-	4.5%	26.2%	4.2%	0%	**34.9%**	-	4.8%	31.8%	2.4%	0%	**39.1%**	-	-
PHF	0.603	0.806	0.750	-	**0.892**	-	0.703	0.783	0.750	-	**0.772**	-	0.639	0.764	0.725	-	**0.741**	-	0.781	0.812	0.833	-	**0.816**	-	0.871
Motorcycles	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0%	1.8%	0%	**0.3%**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	85	139	54	0	**278**	-	45	161	26	0	**232**	-	85	525	80	0	**690**	-	96	615	50	0	**761**	-	1961
% Lights	90.4%	95.9%	94.7%	0%	**93.9%**	-	100%	97.0%	86.7%	0%	**96.3%**	-	92.4%	97.0%	92.0%	0%	**95.8%**	-	96.0%	93.8%	100%	0%	**94.4%**	-	95.1%
Single-Unit Trucks	0	3	1	0	**4**	-	0	0	0	0	**0**	-	0	5	1	0	**6**	-	1	17	0	0	**18**	-	28
% Single-Unit Trucks	0%	2.1%	1.8%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.9%	1.1%	0%	**0.8%**	-	1.0%	2.6%	0%	0%	**2.2%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	2	0	**2**	-	0	14	0	0	**14**	-	16
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	2.3%	0%	**0.3%**	-	0%	2.1%	0%	0%	**1.7%**	-	0.8%
Buses	9	3	1	0	**13**	-	0	4	4	0	**8**	-	7	9	4	0	**20**	-	3	10	0	0	**13**	-	54
% Buses	9.6%	2.1%	1.8%	0%	**4.4%**	-	0%	2.4%	13.3%	0%	**3.3%**	-	7.6%	1.7%	4.6%	0%	**2.8%**	-	3.0%	1.5%	0%	0%	**1.6%**	-	2.6%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St/Lockwood Dr at Polk St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Ernestine St/Lockwood Dr at Polk St - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

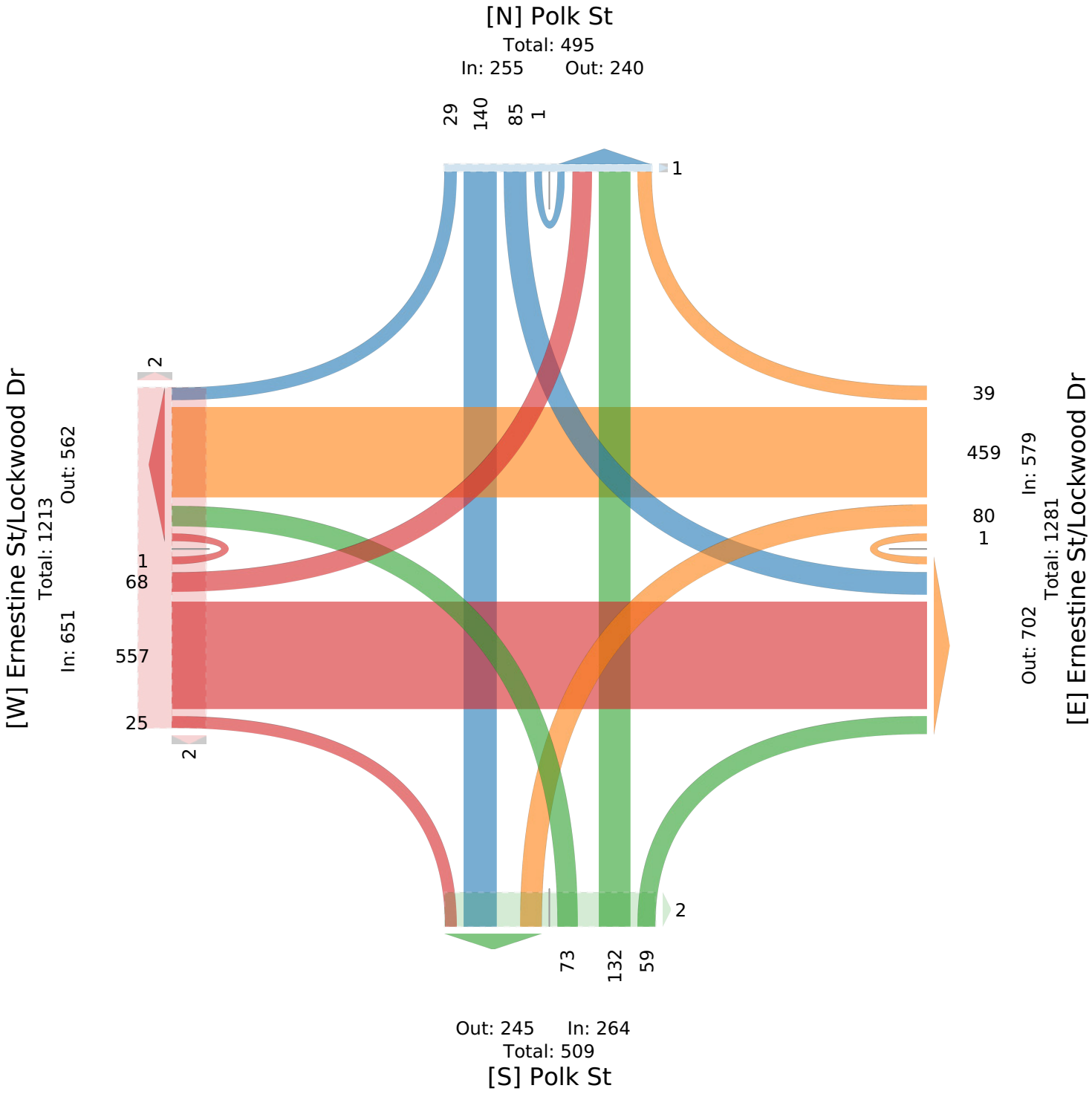
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Polk St Northbound						Polk St Southbound						Ernestine St/Lockwood Dr Eastbound						Ernestine St/Lockwood Dr Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:45PM	23	21	9	0	**53**	0	19	32	11	0	**62**	1	23	118	2	1	**144**	1	21	133	10	1	**165**	0	**424**
5:00PM	24	47	18	0	**89**	0	18	33	9	0	**60**	0	16	135	10	0	**161**	0	13	122	9	0	**144**	0	**454**
5:15PM	15	40	20	0	**75**	2	27	41	4	1	**73**	0	16	159	8	0	**183**	1	29	106	14	0	**149**	0	**480**
5:30PM	11	24	12	0	**47**	0	21	34	5	0	**60**	0	13	145	5	0	**163**	2	17	98	6	0	**121**	0	**391**
Total	73	132	59	0	**264**	2	85	140	29	1	**255**	1	68	557	25	1	**651**	4	80	459	39	1	**579**	0	**1749**
% Approach	27.7%	50.0%	22.3%	0%	**-**	-	33.3%	54.9%	11.4%	0.4%	**-**	-	10.4%	85.6%	3.8%	0.2%	**-**	-	13.8%	79.3%	6.7%	0.2%	**-**	-	-
% Total	4.2%	7.5%	3.4%	0%	**15.1%**	-	4.9%	8.0%	1.7%	0.1%	**14.6%**	-	3.9%	31.8%	1.4%	0.1%	**37.2%**	-	4.6%	26.2%	2.2%	0.1%	**33.1%**	-	-
PHF	0.760	0.702	0.738	-	**0.742**	-	0.787	0.854	0.659	0.250	**0.873**	-	0.739	0.876	0.625	0.250	**0.889**	-	0.690	0.863	0.696	0.250	**0.877**	-	0.911
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	68	126	58	0	**252**	-	81	135	25	0	**241**	-	63	541	22	0	**626**	-	76	452	39	1	**568**	-	1687
% Lights	93.2%	95.5%	98.3%	0%	**95.5%**	-	95.3%	96.4%	86.2%	0%	**94.5%**	-	92.6%	97.1%	88.0%	0%	**96.2%**	-	95.0%	98.5%	100%	100%	**98.1%**	-	96.5%
Single-Unit Trucks	0	1	0	0	**1**	-	3	2	0	0	**5**	-	0	9	0	0	**9**	-	3	3	0	0	**6**	-	21
% Single-Unit Trucks	0%	0.8%	0%	0%	**0.4%**	-	3.5%	1.4%	0%	0%	**2.0%**	-	0%	1.6%	0%	0%	**1.4%**	-	3.8%	0.7%	0%	0%	**1.0%**	-	1.2%
Articulated Trucks	1	1	0	0	**2**	-	1	0	0	0	**1**	-	0	5	0	0	**5**	-	0	1	0	0	**1**	-	9
% Articulated Trucks	1.4%	0.8%	0%	0%	**0.8%**	-	1.2%	0%	0%	0%	**0.4%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.5%
Buses	4	4	1	0	**9**	-	0	3	4	1	**8**	-	5	2	3	1	**11**	-	1	3	0	0	**4**	-	32
% Buses	5.5%	3.0%	1.7%	0%	**3.4%**	-	0%	2.1%	13.8%	100%	**3.1%**	-	7.4%	0.4%	12.0%	100%	**1.7%**	-	1.3%	0.7%	0%	0%	**0.7%**	-	1.8%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ernestine St/Lockwood Dr at Polk St - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867348, Location: 29.737711, -95.33172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at McKinney St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

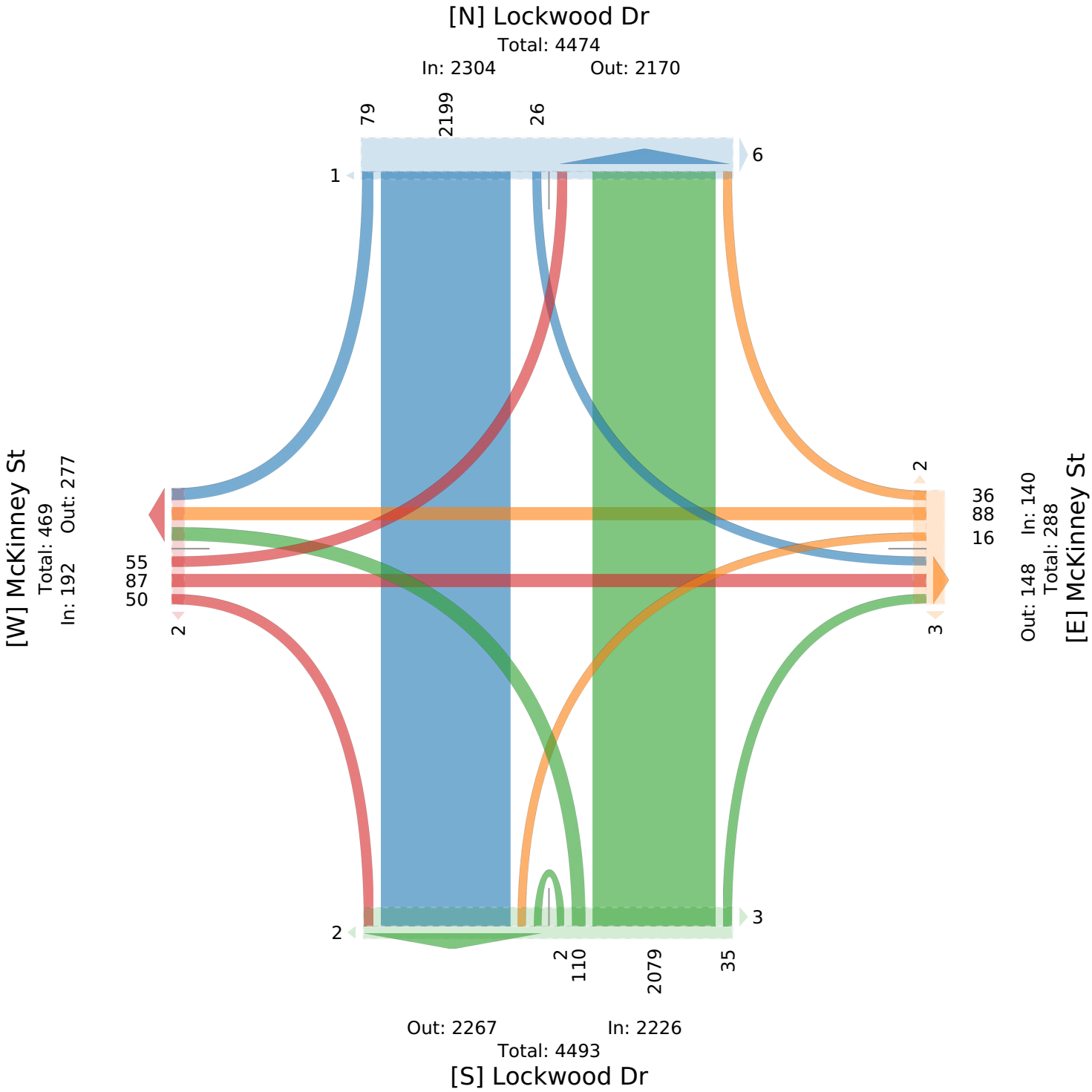
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						McKinney St						McKinney St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	2	93	1	0	**96**	0	0	101	2	0	**103**	2	0	3	2	0	**5**	0	1	3	3	0	**7**	0	**211**
7:15AM	7	147	2	0	**156**	1	2	156	7	0	**165**	2	4	5	4	0	**13**	0	5	6	2	0	**13**	0	**347**
7:30AM	5	199	3	0	**207**	1	1	182	12	0	**195**	0	7	5	5	0	**17**	1	3	3	6	0	**12**	1	**431**
7:45AM	5	189	2	0	**196**	0	2	236	4	0	**242**	0	4	8	5	0	**17**	0	0	6	1	0	**7**	0	**462**
Hourly Total	19	628	8	0	**655**	2	5	675	25	0	**705**	4	15	21	16	0	**52**	1	9	18	12	0	**39**	1	**1451**
8:00AM	5	101	0	0	**106**	0	2	198	4	0	**204**	0	2	3	6	0	**11**	1	1	3	6	0	**10**	0	**331**
8:15AM	6	82	2	0	**90**	1	1	131	3	0	**135**	1	1	5	1	0	**7**	0	0	5	2	0	**7**	0	**239**
8:30AM	17	46	8	0	**71**	0	1	100	2	0	**103**	0	6	7	4	0	**17**	0	0	7	1	0	**8**	1	**199**
8:45AM	2	56	2	0	**60**	0	2	104	5	0	**111**	0	3	5	1	0	**9**	0	0	8	1	0	**9**	0	**189**
Hourly Total	30	285	12	0	**327**	1	6	533	14	0	**553**	1	12	20	12	0	**44**	1	1	23	10	0	**34**	1	**958**
4:00PM	5	147	0	0	**152**	0	1	136	7	0	**144**	0	1	8	6	0	**15**	0	0	4	1	0	**5**	0	**316**
4:15PM	15	140	0	0	**155**	0	2	98	1	0	**101**	0	0	6	2	0	**8**	0	1	12	1	0	**14**	0	**278**
4:30PM	7	76	0	2	**85**	0	3	124	5	0	**132**	0	3	2	3	0	**8**	0	2	9	4	0	**15**	0	**240**
4:45PM	10	146	3	0	**159**	1	3	133	5	0	**141**	0	8	5	2	0	**15**	0	0	2	3	0	**5**	0	**320**
Hourly Total	37	509	3	2	**551**	1	9	491	18	0	**518**	0	12	21	13	0	**46**	0	3	27	9	0	**39**	0	**1154**
5:00PM	7	156	4	0	**167**	0	1	145	5	0	**151**	1	2	7	1	0	**10**	0	1	5	1	0	**7**	0	**335**
5:15PM	3	190	2	0	**195**	1	1	147	4	0	**152**	0	7	4	3	0	**14**	0	0	4	1	0	**5**	2	**366**
5:30PM	5	162	4	0	**171**	0	1	121	9	0	**131**	0	4	9	5	0	**18**	0	0	5	2	0	**7**	0	**327**
5:45PM	9	149	2	0	**160**	0	3	87	4	0	**94**	1	3	5	0	0	**8**	0	2	6	1	0	**9**	1	**271**
Hourly Total	24	657	12	0	**693**	1	6	500	22	0	**528**	2	16	25	9	0	**50**	0	3	20	5	0	**28**	3	**1299**
Total	110	2079	35	2	**2226**	5	26	2199	79	0	**2304**	7	55	87	50	0	**192**	2	16	88	36	0	**140**	5	**4862**
% Approach	4.9%	93.4%	1.6%	0.1%	**-**	-	1.1%	95.4%	3.4%	0%	**-**	-	28.6%	45.3%	26.0%	0%	**-**	-	11.4%	62.9%	25.7%	0%	**-**	-	**-**
% Total	2.3%	42.8%	0.7%	0%	**45.8%**	-	0.5%	45.2%	1.6%	0%	**47.4%**	-	1.1%	1.8%	1.0%	0%	**3.9%**	-	0.3%	1.8%	0.7%	0%	**2.9%**	-	**-**
Motorcycles	1	3	0	0	**4**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	7
% Motorcycles	0.9%	0.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	1.1%	0%	0%	**0.5%**	-	0%	1.1%	0%	0%	**0.7%**	-	0.1%
Lights	107	2006	34	2	**2149**	-	26	2082	77	0	**2185**	-	54	85	50	0	**189**	-	15	85	35	0	**135**	-	4658
% Lights	97.3%	96.5%	97.1%	100%	**96.5%**	-	100%	94.7%	97.5%	0%	**94.8%**	-	98.2%	97.7%	100%	0%	**98.4%**	-	93.8%	96.6%	97.2%	0%	**96.4%**	-	95.8%
Single-Unit Trucks	0	34	0	0	**34**	-	0	59	1	0	**60**	-	0	0	0	0	**0**	-	0	2	1	0	**3**	-	97
% Single-Unit Trucks	0%	1.6%	0%	0%	**1.5%**	-	0%	2.7%	1.3%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0%	2.3%	2.8%	0%	**2.1%**	-	2.0%
Articulated Trucks	1	14	0	0	**15**	-	0	26	0	0	**26**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	42
% Articulated Trucks	0.9%	0.7%	0%	0%	**0.7%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	1.1%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0.9%
Buses	1	22	1	0	**24**	-	0	31	1	0	**32**	-	1	0	0	0	**1**	-	1	0	0	0	**1**	-	58
% Buses	0.9%	1.1%	2.9%	0%	**1.1%**	-	0%	1.4%	1.3%	0%	**1.4%**	-	1.8%	0%	0%	0%	**0.5%**	-	6.3%	0%	0%	0%	**0.7%**	-	1.2%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at McKinney St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at McKinney St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

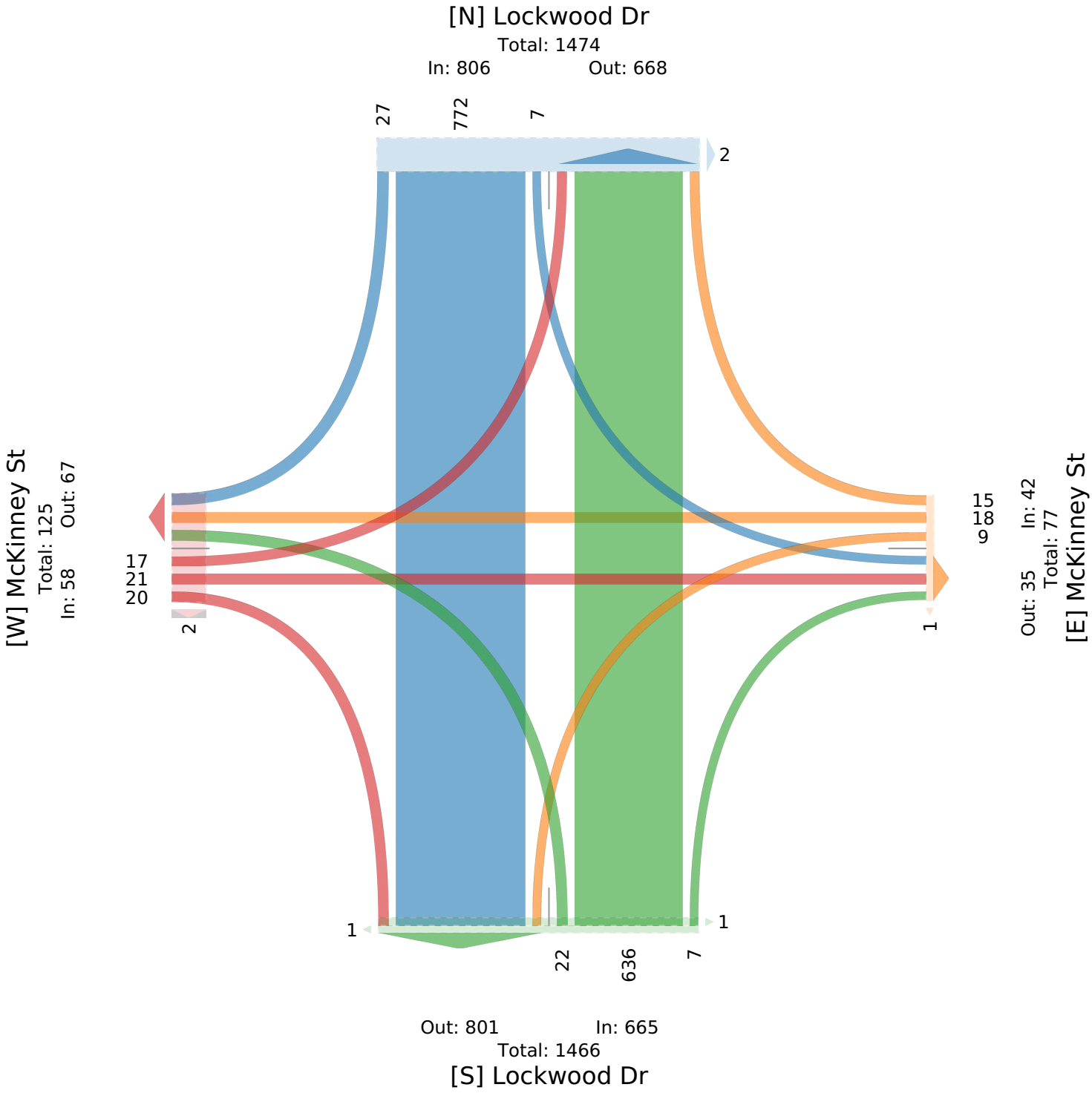
Leg	Lockwood Dr						Lockwood Dr						McKinney St						McKinney St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	7	147	2	0	**156**	1	2	156	7	0	**165**	2	4	5	4	0	**13**	0	5	6	2	0	**13**	0	**347**
7:30AM	5	199	3	0	**207**	1	1	182	12	0	**195**	0	7	5	5	0	**17**	1	3	3	6	0	**12**	1	**431**
7:45AM	5	189	2	0	**196**	0	2	236	4	0	**242**	0	4	8	5	0	**17**	0	0	6	1	0	**7**	0	**462**
8:00AM	5	101	0	0	**106**	0	2	198	4	0	**204**	0	2	3	6	0	**11**	1	1	3	6	0	**10**	0	**331**
Total	22	636	7	0	**665**	2	7	772	27	0	**806**	2	17	21	20	0	**58**	2	9	18	15	0	**42**	1	**1571**
% Approach	3.3%	95.6%	1.1%	0%	**-**	-	0.9%	95.8%	3.3%	0%	**-**	-	29.3%	36.2%	34.5%	0%	**-**	-	21.4%	42.9%	35.7%	0%	**-**	-	-
% Total	1.4%	40.5%	0.4%	0%	**42.3%**	-	0.4%	49.1%	1.7%	0%	**51.3%**	-	1.1%	1.3%	1.3%	0%	**3.7%**	-	0.6%	1.1%	1.0%	0%	**2.7%**	-	-
PHF	0.786	0.799	0.583	-	**0.803**	-	0.875	0.818	0.563	-	**0.833**	-	0.607	0.656	0.833	-	**0.853**	-	0.450	0.750	0.625	-	**0.808**	-	0.850
Motorcycles	1	2	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	4.5%	0.3%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	21	620	7	0	**648**	-	7	728	25	0	**760**	-	17	21	20	0	**58**	-	9	18	14	0	**41**	-	1507
% Lights	95.5%	97.5%	100%	0%	**97.4%**	-	100%	94.3%	92.6%	0%	**94.3%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	93.3%	0%	**97.6%**	-	95.9%
Single-Unit Trucks	0	5	0	0	**5**	-	0	20	1	0	**21**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	27
% Single-Unit Trucks	0%	0.8%	0%	0%	**0.8%**	-	0%	2.6%	3.7%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	6.7%	0%	**2.4%**	-	1.7%
Articulated Trucks	0	0	0	0	**0**	-	0	12	0	0	**12**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	12
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.6%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.8%
Buses	0	9	0	0	**9**	-	0	12	1	0	**13**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	22
% Buses	0%	1.4%	0%	0%	**1.4%**	-	0%	1.6%	3.7%	0%	**1.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at McKinney St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at McKinney St - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

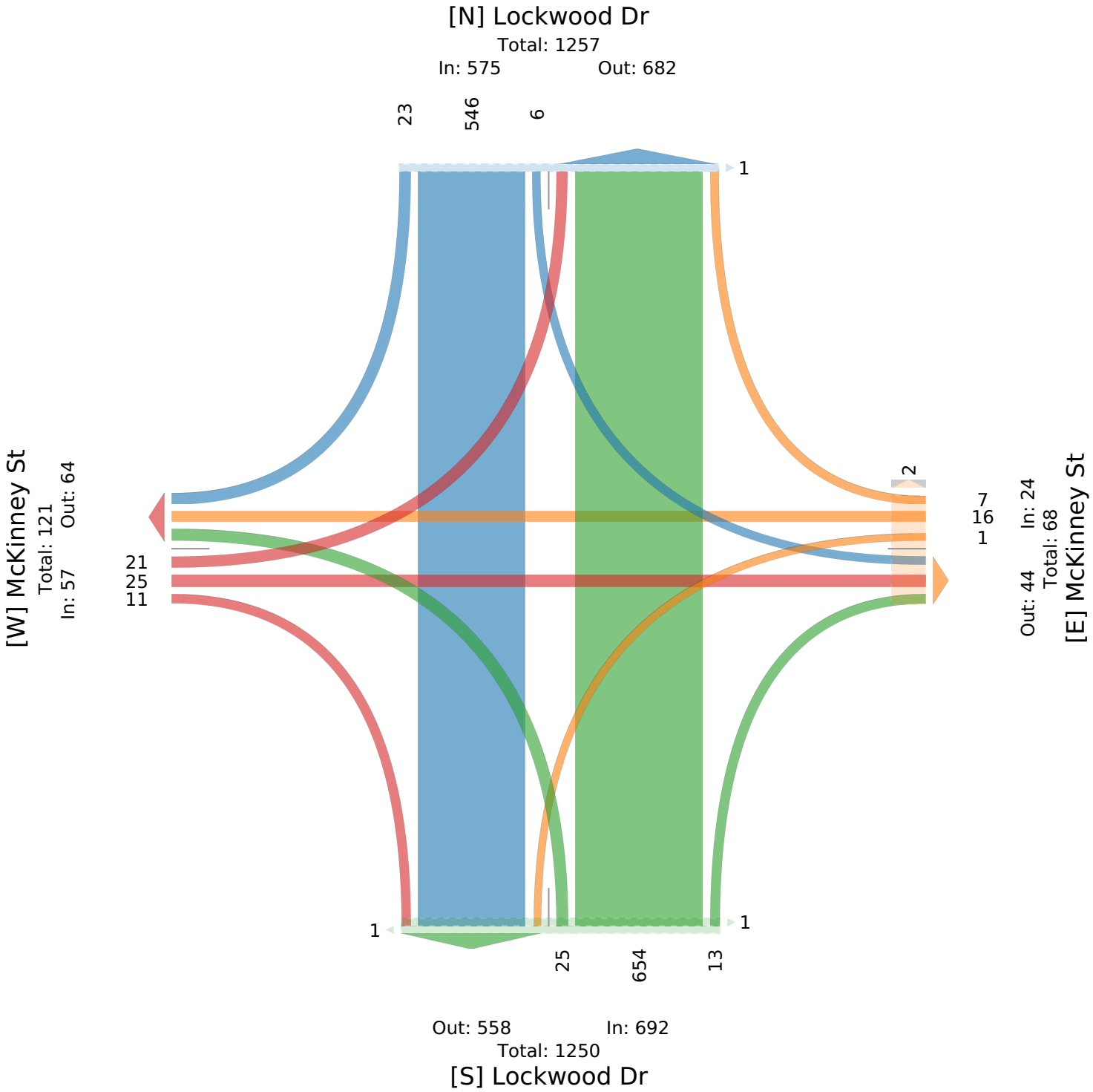
Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						McKinney St Eastbound						McKinney St Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:45PM	10	146	3	0	**159**	1	3	133	5	0	**141**	0	8	5	2	0	**15**	0	0	2	3	0	**5**	0	**320**
5:00PM	7	156	4	0	**167**	0	1	145	5	0	**151**	1	2	7	1	0	**10**	0	1	5	1	0	**7**	0	**335**
5:15PM	3	190	2	0	**195**	1	1	147	4	0	**152**	0	7	4	3	0	**14**	0	0	4	1	0	**5**	2	**366**
5:30PM	5	162	4	0	**171**	0	1	121	9	0	**131**	0	4	9	5	0	**18**	0	0	5	2	0	**7**	0	**327**
Total	25	654	13	0	**692**	2	6	546	23	0	**575**	1	21	25	11	0	**57**	0	1	16	7	0	**24**	2	**1348**
% Approach	3.6%	94.5%	1.9%	0%	**-**	-	1.0%	95.0%	4.0%	0%	**-**	-	36.8%	43.9%	19.3%	0%	**-**	-	4.2%	66.7%	29.2%	0%	**-**	-	-
% Total	1.9%	48.5%	1.0%	0%	**51.3%**	-	0.4%	40.5%	1.7%	0%	**42.7%**	-	1.6%	1.9%	0.8%	0%	**4.2%**	-	0.1%	1.2%	0.5%	0%	**1.8%**	-	-
PHF	0.625	0.861	0.813	-	**0.887**	-	0.500	0.929	0.639	-	**0.946**	-	0.656	0.694	0.550	-	**0.792**	-	0.250	0.800	0.583	-	**0.857**	-	0.921
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	25	633	13	0	**671**	-	6	533	23	0	**562**	-	20	25	11	0	**56**	-	1	16	7	0	**24**	-	1313
% Lights	100%	96.8%	100%	0%	**97.0%**	-	100%	97.6%	100%	0%	**97.7%**	-	95.2%	100%	100%	0%	**98.2%**	-	100%	100%	100%	0%	**100%**	-	97.4%
Single-Unit Trucks	0	11	0	0	**11**	-	0	8	0	0	**8**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	19
% Single-Unit Trucks	0%	1.7%	0%	0%	**1.6%**	-	0%	1.5%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Articulated Trucks	0	7	0	0	**7**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	9
% Articulated Trucks	0%	1.1%	0%	0%	**1.0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.7%
Buses	0	3	0	0	**3**	-	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	7
% Buses	0%	0.5%	0%	0%	**0.4%**	-	0%	0.5%	0%	0%	**0.5%**	-	4.8%	0%	0%	0%	**1.8%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at McKinney St - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867350, Location: 29.740147, -95.330682

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Harrisburg Blvd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

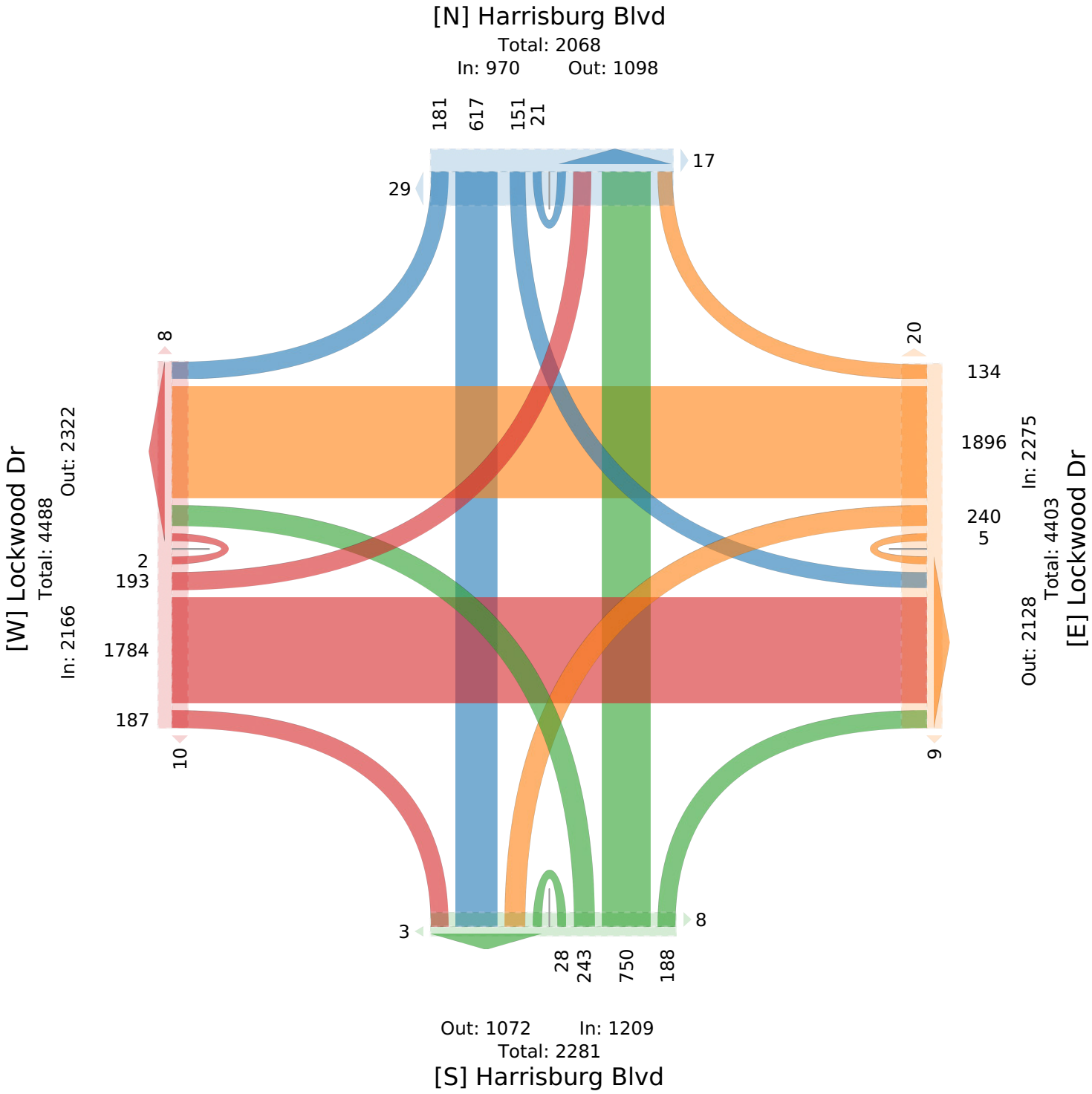
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Harrisburg Blvd						Harrisburg Blvd						Lockwood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	17	33	8	0	**58**	1	2	25	10	0	**37**	4	7	90	5	0	**102**	0	8	88	0	0	**96**	9	**293**
7:15AM	23	40	15	0	**78**	0	3	18	7	1	**29**	1	15	112	24	0	**151**	1	7	134	4	0	**145**	0	**403**
7:30AM	33	67	9	0	**109**	1	7	24	15	1	**47**	1	13	175	18	0	**206**	0	3	163	8	0	**174**	1	**536**
7:45AM	15	50	12	1	**78**	0	4	25	8	0	**37**	1	15	167	20	0	**202**	0	11	222	6	0	**239**	1	**556**
Hourly Total	88	190	44	1	**323**	2	16	92	40	2	**150**	7	50	544	67	0	**661**	1	29	607	18	0	**654**	11	**1788**
8:00AM	9	52	7	0	**68**	1	7	22	6	3	**38**	0	16	81	7	0	**104**	2	5	175	3	0	**183**	1	**393**
8:15AM	14	31	7	1	**53**	0	7	35	11	1	**54**	1	9	56	13	0	**78**	1	20	126	17	0	**163**	0	**348**
8:30AM	9	40	12	4	**65**	1	11	31	2	1	**45**	6	5	45	3	0	**53**	3	39	60	37	1	**137**	1	**300**
8:45AM	9	29	11	0	**49**	1	8	17	5	0	**30**	4	6	44	7	0	**57**	0	5	87	4	0	**96**	3	**232**
Hourly Total	41	152	37	5	**235**	3	33	105	24	5	**167**	11	36	226	30	0	**292**	6	69	448	61	1	**579**	5	**1273**
4:00PM	22	59	11	6	**98**	0	15	49	16	3	**83**	1	18	115	10	0	**143**	1	14	121	5	0	**140**	4	**464**
4:15PM	10	39	18	1	**68**	0	15	68	20	1	**104**	6	10	112	12	0	**134**	1	18	103	16	1	**138**	2	**444**
4:30PM	11	53	16	4	**84**	3	16	63	12	4	**95**	1	6	80	6	0	**92**	3	23	91	8	2	**124**	1	**395**
4:45PM	14	48	6	2	**70**	0	12	45	31	2	**90**	6	14	151	10	0	**175**	1	14	126	8	0	**148**	1	**483**
Hourly Total	57	199	51	13	**320**	3	58	225	79	10	**372**	14	48	458	38	0	**544**	6	69	441	37	3	**550**	8	**1786**
5:00PM	17	55	17	1	**90**	1	11	58	13	3	**85**	5	12	138	12	0	**162**	2	20	119	6	0	**145**	0	**482**
5:15PM	17	55	7	4	**83**	0	12	50	14	0	**76**	3	21	161	15	1	**198**	0	19	113	6	1	**139**	1	**496**
5:30PM	16	48	18	3	**85**	0	12	50	4	0	**66**	3	19	125	14	1	**159**	0	24	91	2	0	**117**	1	**427**
5:45PM	7	51	14	1	**73**	2	9	37	7	1	**54**	3	7	132	11	0	**150**	3	10	77	4	0	**91**	3	**368**
Hourly Total	57	209	56	9	**331**	3	44	195	38	4	**281**	14	59	556	52	2	**669**	5	73	400	18	1	**492**	5	**1773**
Total	243	750	188	28	**1209**	11	151	617	181	21	**970**	46	193	1784	187	2	**2166**	18	240	1896	134	5	**2275**	29	**6620**
% Approach	20.1%	62.0%	15.6%	2.3%	**-**	-	15.6%	63.6%	18.7%	2.2%	**-**	-	8.9%	82.4%	8.6%	0.1%	**-**	-	10.5%	83.3%	5.9%	0.2%	**-**	-	-
% Total	3.7%	11.3%	2.8%	0.4%	**18.3%**	-	2.3%	9.3%	2.7%	0.3%	**14.7%**	-	2.9%	26.9%	2.8%	0%	**32.7%**	-	3.6%	28.6%	2.0%	0.1%	**34.4%**	-	-
Motorcycles	0	3	0	0	**3**	-	0	2	0	0	**2**	-	1	4	0	0	**5**	-	0	0	7	0	**7**	-	17
% Motorcycles	0%	0.4%	0%	0%	**0.2%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.5%	0.2%	0%	0%	**0.2%**	-	0%	0%	5.2%	0%	**0.3%**	-	0.3%
Lights	236	718	182	27	**1163**	-	150	585	180	20	**935**	-	188	1714	182	2	**2086**	-	229	1795	125	5	**2154**	-	6338
% Lights	97.1%	95.7%	96.8%	96.4%	**96.2%**	-	99.3%	94.8%	99.4%	95.2%	**96.4%**	-	97.4%	96.1%	97.3%	100%	**96.3%**	-	95.4%	94.7%	93.3%	100%	**94.7%**	-	95.7%
Single-Unit Trucks	1	4	4	1	**10**	-	1	6	0	0	**7**	-	1	31	2	0	**34**	-	6	44	2	0	**52**	-	103
% Single-Unit Trucks	0.4%	0.5%	2.1%	3.6%	**0.8%**	-	0.7%	1.0%	0%	0%	**0.7%**	-	0.5%	1.7%	1.1%	0%	**1.6%**	-	2.5%	2.3%	1.5%	0%	**2.3%**	-	1.6%
Articulated Trucks	2	1	1	0	**4**	-	0	1	1	1	**3**	-	0	14	1	0	**15**	-	4	29	0	0	**33**	-	55
% Articulated Trucks	0.8%	0.1%	0.5%	0%	**0.3%**	-	0%	0.2%	0.6%	4.8%	**0.3%**	-	0%	0.8%	0.5%	0%	**0.7%**	-	1.7%	1.5%	0%	0%	**1.5%**	-	0.8%
Buses	4	24	1	0	**29**	-	0	23	0	0	**23**	-	3	21	2	0	**26**	-	1	28	0	0	**29**	-	107
% Buses	1.6%	3.2%	0.5%	0%	**2.4%**	-	0%	3.7%	0%	0%	**2.4%**	-	1.6%	1.2%	1.1%	0%	**1.2%**	-	0.4%	1.5%	0%	0%	**1.3%**	-	1.6%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	44	-	-	-	-	-	17	-	-	-	-	-	24	
% Pedestrians	-	-	-	-	-	90.9%	-	-	-	-	-	95.7%	-	-	-	-	-	94.4%	-	-	-	-	-	82.8%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	9.1%	-	-	-	-	-	4.3%	-	-	-	-	-	5.6%	-	-	-	-	-	17.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Harrisburg Blvd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Harrisburg Blvd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

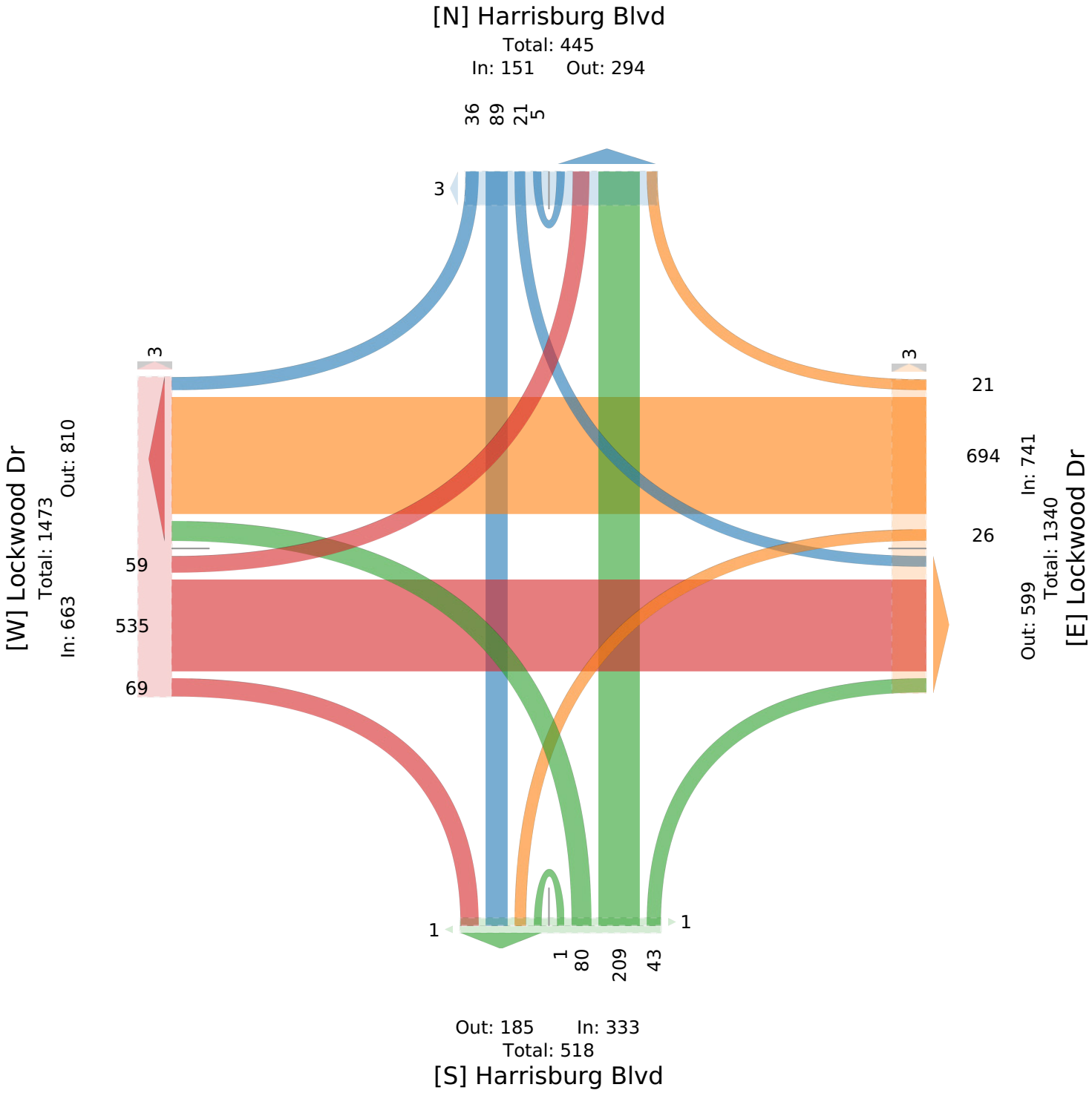
Leg / Direction	Harrisburg Blvd Northbound						Harrisburg Blvd Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	23	40	15	0	**78**	0	3	18	7	1	**29**	1	15	112	24	0	**151**	1	7	134	4	0	**145**	0	**403**
7:30AM	33	67	9	0	**109**	1	7	24	15	1	**47**	1	13	175	18	0	**206**	0	3	163	8	0	**174**	1	**536**
7:45AM	15	50	12	1	**78**	0	4	25	8	0	**37**	1	15	167	20	0	**202**	0	11	222	6	0	**239**	1	**556**
8:00AM	9	52	7	0	**68**	1	7	22	6	3	**38**	0	16	81	7	0	**104**	2	5	175	3	0	**183**	1	**393**
Total	80	209	43	1	**333**	2	21	89	36	5	**151**	3	59	535	69	0	**663**	3	26	694	21	0	**741**	3	**1888**
% Approach	24.0%	62.8%	12.9%	0.3%	**-**	-	13.9%	58.9%	23.8%	3.3%	**-**	-	8.9%	80.7%	10.4%	0%	**-**	-	3.5%	93.7%	2.8%	0%	**-**	-	-
% Total	4.2%	11.1%	2.3%	0.1%	**17.6%**	-	1.1%	4.7%	1.9%	0.3%	**8.0%**	-	3.1%	28.3%	3.7%	0%	**35.1%**	-	1.4%	36.8%	1.1%	0%	**39.2%**	-	-
PHF	0.606	0.780	0.717	0.250	**0.764**	-	0.750	0.890	0.600	0.417	**0.803**	-	0.922	0.764	0.719	-	**0.805**	-	0.591	0.782	0.656	-	**0.775**	-	0.849
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	79	200	42	1	**322**	-	21	84	36	5	**146**	-	58	519	66	0	**643**	-	26	652	21	0	**699**	-	1810
% Lights	98.8%	95.7%	97.7%	100%	**96.7%**	-	100%	94.4%	100%	100%	**96.7%**	-	98.3%	97.0%	95.7%	0%	**97.0%**	-	100%	93.9%	100%	0%	**94.3%**	-	95.9%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	6	2	0	**9**	-	0	17	0	0	**17**	-	26
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.7%	1.1%	2.9%	0%	**1.4%**	-	0%	2.4%	0%	0%	**2.3%**	-	1.4%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	12	0	0	**12**	-	13
% Articulated Trucks	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.7%	0%	0%	**1.6%**	-	0.7%
Buses	1	7	1	0	**9**	-	0	5	0	0	**5**	-	0	8	1	0	**9**	-	0	13	0	0	**13**	-	36
% Buses	1.3%	3.3%	2.3%	0%	**2.7%**	-	0%	5.6%	0%	0%	**3.3%**	-	0%	1.5%	1.4%	0%	**1.4%**	-	0%	1.9%	0%	0%	**1.8%**	-	1.9%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Harrisburg Blvd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Harrisburg Blvd - TMC

Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

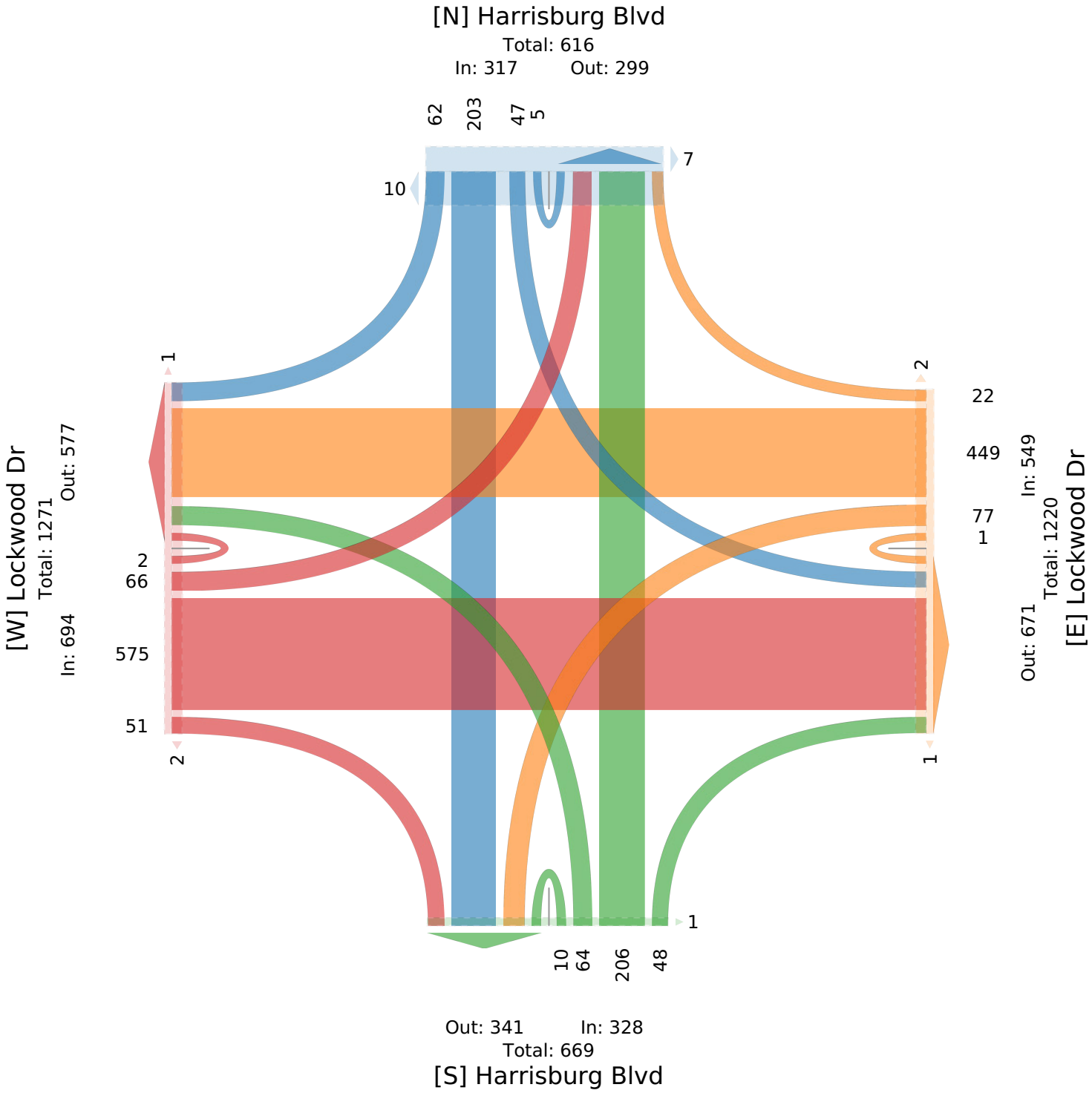
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Harrisburg Blvd						Harrisburg Blvd						Lockwood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:45PM	14	48	6	2	**70**	0	12	45	31	2	**90**	6	14	151	10	0	**175**	1	14	126	8	0	**148**	1	**483**
5:00PM	17	55	17	1	**90**	1	11	58	13	3	**85**	5	12	138	12	0	**162**	2	20	119	6	0	**145**	0	**482**
5:15PM	17	55	7	4	**83**	0	12	50	14	0	**76**	3	21	161	15	1	**198**	0	19	113	6	1	**139**	1	**496**
5:30PM	16	48	18	3	**85**	0	12	50	4	0	**66**	3	19	125	14	1	**159**	0	24	91	2	0	**117**	1	**427**
Total	64	206	48	10	**328**	1	47	203	62	5	**317**	17	66	575	51	2	**694**	3	77	449	22	1	**549**	3	**1888**
% Approach	19.5%	62.8%	14.6%	3.0%	**-**	-	14.8%	64.0%	19.6%	1.6%	**-**	-	9.5%	82.9%	7.3%	0.3%	**-**	-	14.0%	81.8%	4.0%	0.2%	**-**	-	-
% Total	3.4%	10.9%	2.5%	0.5%	**17.4%**	-	2.5%	10.8%	3.3%	0.3%	**16.8%**	-	3.5%	30.5%	2.7%	0.1%	**36.8%**	-	4.1%	23.8%	1.2%	0.1%	**29.1%**	-	-
PHF	0.941	0.936	0.667	0.625	**0.911**	-	0.979	0.875	0.500	0.417	**0.881**	-	0.786	0.893	0.850	0.500	**0.876**	-	0.802	0.891	0.688	0.250	**0.927**	-	0.952
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	64	198	47	10	**319**	-	47	197	62	5	**311**	-	65	554	50	2	**671**	-	75	440	22	1	**538**	-	1839
% Lights	100%	96.1%	97.9%	100%	**97.3%**	-	100%	97.0%	100%	100%	**98.1%**	-	98.5%	96.3%	98.0%	100%	**96.7%**	-	97.4%	98.0%	100%	100%	**98.0%**	-	97.4%
Single-Unit Trucks	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	10	0	0	**10**	-	2	5	0	0	**7**	-	19
% Single-Unit Trucks	0%	0.5%	2.1%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	1.7%	0%	0%	**1.4%**	-	2.6%	1.1%	0%	0%	**1.3%**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	0	1	0	0	**1**	-	8
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.2%	0%	0%	**1.0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0.4%
Buses	0	6	0	0	**6**	-	0	6	0	0	**6**	-	1	4	1	0	**6**	-	0	3	0	0	**3**	-	21
% Buses	0%	2.9%	0%	0%	**1.8%**	-	0%	3.0%	0%	0%	**1.9%**	-	1.5%	0.7%	2.0%	0%	**0.9%**	-	0%	0.7%	0%	0%	**0.5%**	-	1.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	17	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Harrisburg Blvd - TMC
Wed Sep 1, 2021
PM Peak (4:45 PM - 5:45 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867349, Location: 29.743452, -95.328659

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Canal St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

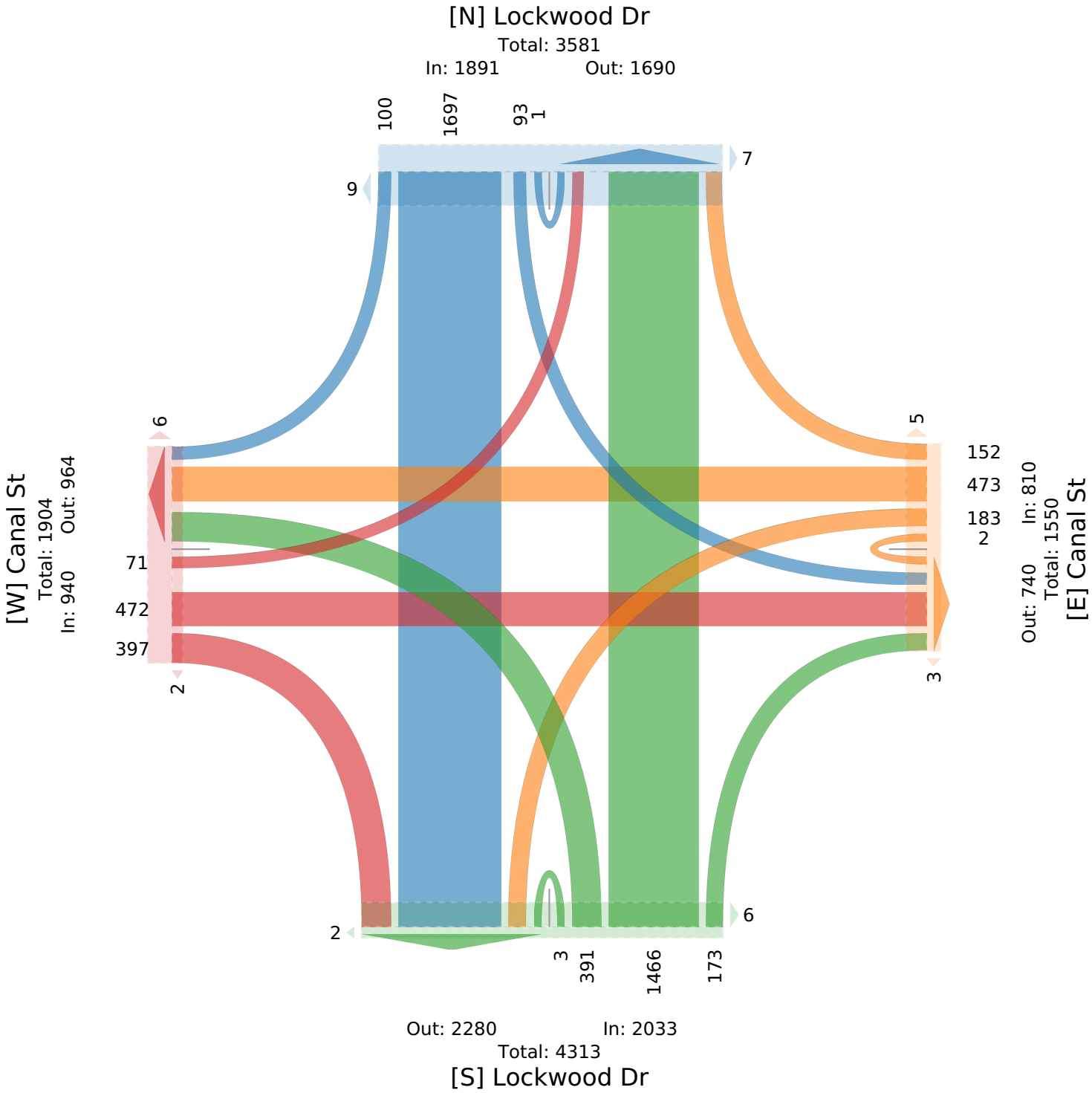
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Canal St						Canal St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	13	66	10	0	**89**	0	2	67	2	0	**71**	2	0	9	8	0	**17**	0	12	21	4	0	**37**	0	**214**
7:15AM	35	83	15	0	**133**	0	8	105	4	0	**117**	2	1	29	20	0	**50**	0	17	35	20	0	**72**	1	**372**
7:30AM	68	97	14	0	**179**	1	7	122	7	0	**136**	3	4	33	38	0	**75**	1	13	58	18	0	**89**	1	**479**
7:45AM	43	115	17	0	**175**	0	3	152	7	0	**162**	1	2	32	52	0	**86**	0	14	45	11	0	**70**	2	**493**
Hourly Total	159	361	56	0	**576**	1	20	446	20	0	**486**	8	7	103	118	0	**228**	1	56	159	53	0	**268**	4	**1558**
8:00AM	21	62	7	1	**91**	0	2	156	3	0	**161**	0	6	20	24	0	**50**	1	7	18	12	0	**37**	0	**339**
8:15AM	13	49	5	0	**67**	0	4	136	12	0	**152**	0	6	24	16	0	**46**	1	4	28	8	0	**40**	0	**305**
8:30AM	11	47	9	0	**67**	0	11	107	11	0	**129**	1	3	13	15	0	**31**	0	35	22	2	0	**59**	0	**286**
8:45AM	12	47	7	0	**66**	0	1	81	5	0	**87**	1	5	21	12	0	**38**	0	5	26	7	0	**38**	0	**229**
Hourly Total	57	205	28	1	**291**	0	18	480	31	0	**529**	2	20	78	67	0	**165**	2	51	94	29	0	**174**	0	**1159**
4:00PM	24	115	8	0	**147**	1	9	92	5	0	**106**	0	4	45	37	0	**86**	1	13	39	12	0	**64**	0	**403**
4:15PM	18	97	10	0	**125**	1	6	100	5	0	**111**	2	4	32	25	0	**61**	1	10	28	6	0	**44**	0	**341**
4:30PM	21	81	16	0	**118**	0	4	122	10	0	**136**	3	6	41	25	0	**72**	0	12	24	6	2	**44**	0	**370**
4:45PM	21	133	9	0	**163**	1	5	91	6	0	**102**	0	7	41	27	0	**75**	1	13	37	11	0	**61**	1	**401**
Hourly Total	84	426	43	0	**553**	3	24	405	26	0	**455**	5	21	159	114	0	**294**	3	48	128	35	2	**213**	1	**1515**
5:00PM	19	120	15	0	**154**	2	7	117	7	0	**131**	1	3	35	26	0	**64**	0	6	30	10	0	**46**	0	**395**
5:15PM	25	125	14	0	**164**	1	6	93	6	0	**105**	0	7	34	29	0	**70**	0	16	31	7	0	**54**	0	**393**
5:30PM	23	122	11	1	**157**	1	11	83	5	1	**100**	0	2	34	17	0	**53**	0	3	23	12	0	**38**	0	**348**
5:45PM	24	107	6	1	**138**	0	7	73	5	0	**85**	0	11	29	26	0	**66**	2	3	8	6	0	**17**	3	**306**
Hourly Total	91	474	46	2	**613**	4	31	366	23	1	**421**	1	23	132	98	0	**253**	2	28	92	35	0	**155**	3	**1442**
Total	391	1466	173	3	**2033**	8	93	1697	100	1	**1891**	16	71	472	397	0	**940**	8	183	473	152	2	**810**	8	**5674**
% Approach	19.2%	72.1%	8.5%	0.1%	**-**	-	4.9%	89.7%	5.3%	0.1%	**-**	-	7.6%	50.2%	42.2%	0%	**-**	-	22.6%	58.4%	18.8%	0.2%	**-**	-	-
% Total	6.9%	25.8%	3.0%	0.1%	**35.8%**	-	1.6%	29.9%	1.8%	0%	**33.3%**	-	1.3%	8.3%	7.0%	0%	**16.6%**	-	3.2%	8.3%	2.7%	0%	**14.3%**	-	-
Motorcycles	1	2	1	0	**4**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	7	1	0	0	**8**	-	15
% Motorcycles	0.3%	0.1%	0.6%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.4%	0%	0%	**0.2%**	-	3.8%	0.2%	0%	0%	**1.0%**	-	0.3%
Lights	381	1405	164	3	**1953**	-	90	1601	97	1	**1789**	-	69	454	388	0	**911**	-	167	459	150	2	**778**	-	5431
% Lights	97.4%	95.8%	94.8%	100%	**96.1%**	-	96.8%	94.3%	97.0%	100%	**94.6%**	-	97.2%	96.2%	97.7%	0%	**96.9%**	-	91.3%	97.0%	98.7%	100%	**96.0%**	-	95.7%
Single-Unit Trucks	2	32	3	0	**37**	-	1	45	1	0	**47**	-	1	1	2	0	**4**	-	3	2	0	0	**5**	-	93
% Single-Unit Trucks	0.5%	2.2%	1.7%	0%	**1.8%**	-	1.1%	2.7%	1.0%	0%	**2.5%**	-	1.4%	0.2%	0.5%	0%	**0.4%**	-	1.6%	0.4%	0%	0%	**0.6%**	-	1.6%
Articulated Trucks	0	11	4	0	**15**	-	1	27	1	0	**29**	-	1	1	1	0	**3**	-	6	0	1	0	**7**	-	54
% Articulated Trucks	0%	0.8%	2.3%	0%	**0.7%**	-	1.1%	1.6%	1.0%	0%	**1.5%**	-	1.4%	0.2%	0.3%	0%	**0.3%**	-	3.3%	0%	0.7%	0%	**0.9%**	-	1.0%
Buses	7	16	1	0	**24**	-	1	23	1	0	**25**	-	0	14	6	0	**20**	-	0	11	1	0	**12**	-	81
% Buses	1.8%	1.1%	0.6%	0%	**1.2%**	-	1.1%	1.4%	1.0%	0%	**1.3%**	-	0%	3.0%	1.5%	0%	**2.1%**	-	0%	2.3%	0.7%	0%	**1.5%**	-	1.4%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	16	-	-	-	-	-	8	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	87.5%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	12.5%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Canal St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Canal St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

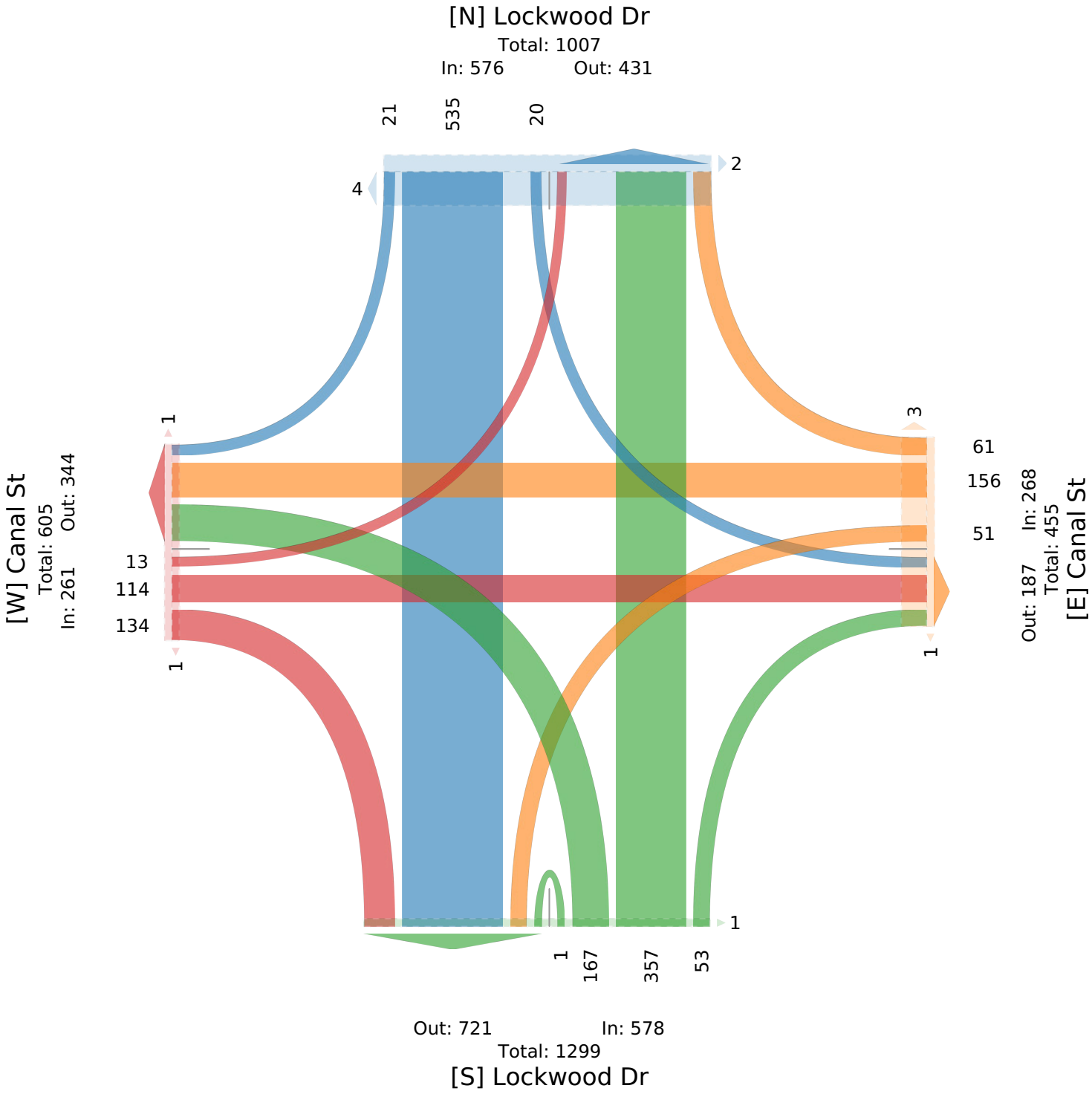
Leg	Lockwood Dr						Lockwood Dr						Canal St						Canal St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	35	83	15	0	**133**	0	8	105	4	0	**117**	2	1	29	20	0	**50**	0	17	35	20	0	**72**	1	**372**
7:30AM	68	97	14	0	**179**	1	7	122	7	0	**136**	3	4	33	38	0	**75**	1	13	58	18	0	**89**	1	**479**
7:45AM	43	115	17	0	**175**	0	3	152	7	0	**162**	1	2	32	52	0	**86**	0	14	45	11	0	**70**	2	**493**
8:00AM	21	62	7	1	**91**	0	2	156	3	0	**161**	0	6	20	24	0	**50**	1	7	18	12	0	**37**	0	**339**
Total	167	357	53	1	**578**	1	20	535	21	0	**576**	6	13	114	134	0	**261**	2	51	156	61	0	**268**	4	**1683**
% Approach	28.9%	61.8%	9.2%	0.2%	**-**	-	3.5%	92.9%	3.6%	0%	**-**	-	5.0%	43.7%	51.3%	0%	**-**	-	19.0%	58.2%	22.8%	0%	**-**	-	**-**
% Total	9.9%	21.2%	3.1%	0.1%	**34.3%**	-	1.2%	31.8%	1.2%	0%	**34.2%**	-	0.8%	6.8%	8.0%	0%	**15.5%**	-	3.0%	9.3%	3.6%	0%	**15.9%**	-	**-**
PHF	0.614	0.776	0.779	0.250	**0.807**	-	0.625	0.857	0.750	-	**0.889**	-	0.542	0.864	0.644	-	**0.759**	-	0.750	0.672	0.763	-	**0.753**	-	0.853
Motorcycles	1	0	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0.6%	0%	1.9%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	161	349	50	1	**561**	-	18	502	20	0	**540**	-	13	110	129	0	**252**	-	49	153	60	0	**262**	-	1615
% Lights	96.4%	97.8%	94.3%	100%	**97.1%**	-	90.0%	93.8%	95.2%	0%	**93.8%**	-	100%	96.5%	96.3%	0%	**96.6%**	-	96.1%	98.1%	98.4%	0%	**97.8%**	-	96.0%
Single-Unit Trucks	1	4	1	0	**6**	-	1	15	0	0	**16**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	23
% Single-Unit Trucks	0.6%	1.1%	1.9%	0%	**1.0%**	-	5.0%	2.8%	0%	0%	**2.8%**	-	0%	0%	0.7%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	1	10	0	0	**11**	-	0	1	1	0	**2**	-	2	0	0	0	**2**	-	15
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	5.0%	1.9%	0%	0%	**1.9%**	-	0%	0.9%	0.7%	0%	**0.8%**	-	3.9%	0%	0%	0%	**0.7%**	-	0.9%
Buses	4	4	1	0	**9**	-	0	8	1	0	**9**	-	0	3	3	0	**6**	-	0	3	1	0	**4**	-	28
% Buses	2.4%	1.1%	1.9%	0%	**1.6%**	-	0%	1.5%	4.8%	0%	**1.6%**	-	0%	2.6%	2.2%	0%	**2.3%**	-	0%	1.9%	1.6%	0%	**1.5%**	-	1.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Canal St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Canal St - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

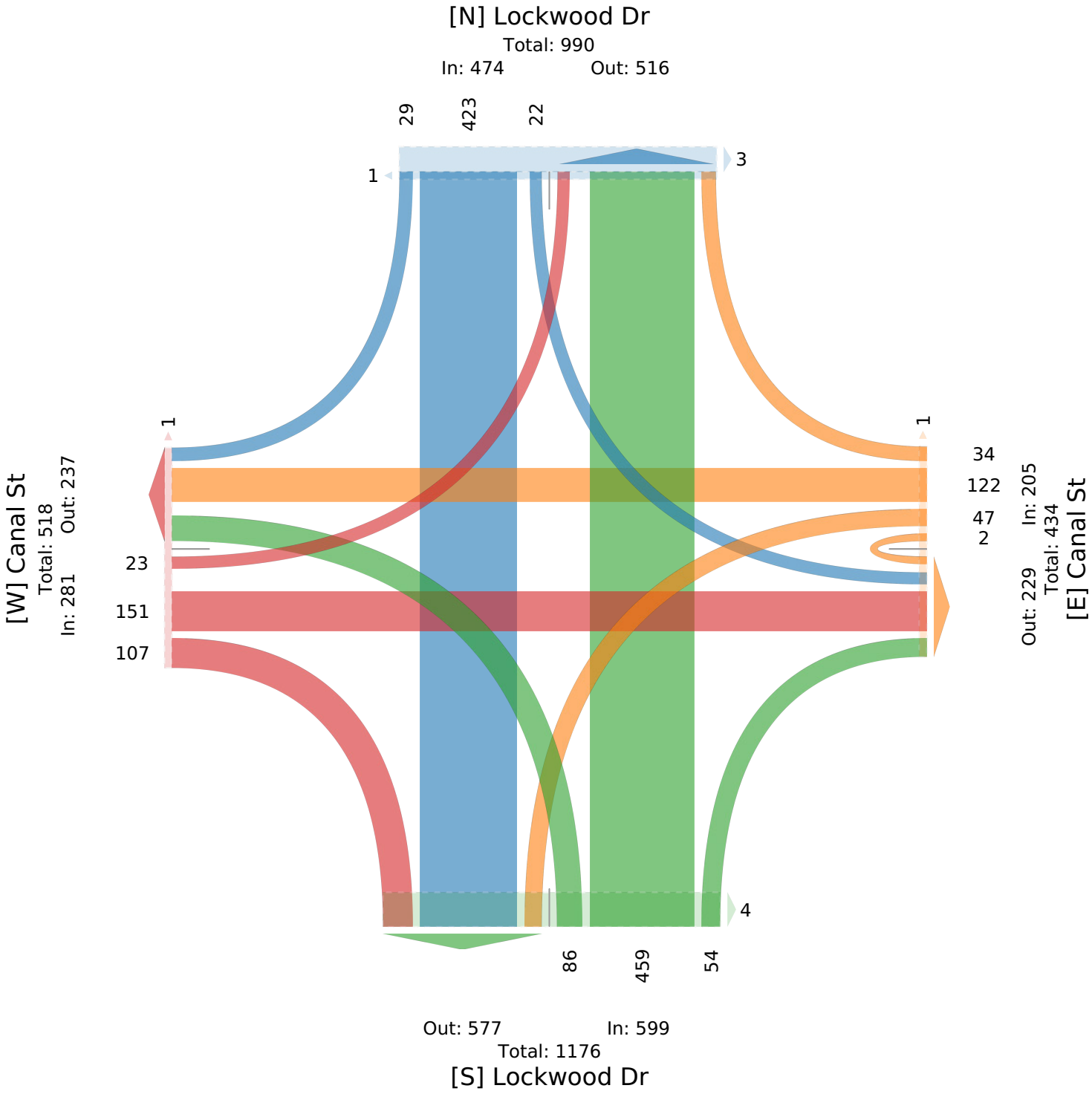
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Canal St						Canal St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:30PM	21	81	16	0	**118**	0	4	122	10	0	**136**	3	6	41	25	0	**72**	0	12	24	6	2	**44**	0	**370**
4:45PM	21	133	9	0	**163**	1	5	91	6	0	**102**	0	7	41	27	0	**75**	1	13	37	11	0	**61**	1	**401**
5:00PM	19	120	15	0	**154**	2	7	117	7	0	**131**	1	3	35	26	0	**64**	0	6	30	10	0	**46**	0	**395**
5:15PM	25	125	14	0	**164**	1	6	93	6	0	**105**	0	7	34	29	0	**70**	0	16	31	7	0	**54**	0	**393**
Total	86	459	54	0	**599**	4	22	423	29	0	**474**	4	23	151	107	0	**281**	1	47	122	34	2	**205**	1	**1559**
% Approach	14.4%	76.6%	9.0%	0%	**-**	-	4.6%	89.2%	6.1%	0%	**-**	-	8.2%	53.7%	38.1%	0%	**-**	-	22.9%	59.5%	16.6%	1.0%	**-**	-	**-**
% Total	5.5%	29.4%	3.5%	0%	**38.4%**	-	1.4%	27.1%	1.9%	0%	**30.4%**	-	1.5%	9.7%	6.9%	0%	**18.0%**	-	3.0%	7.8%	2.2%	0.1%	**13.1%**	-	**-**
PHF	0.860	0.863	0.844	-	**0.913**	-	0.786	0.867	0.725	-	**0.871**	-	0.821	0.921	0.922	-	**0.937**	-	0.734	0.824	0.773	0.250	**0.840**	-	0.972
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	1.3%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	85	437	53	0	**575**	-	22	409	29	0	**460**	-	22	145	106	0	**273**	-	47	117	34	2	**200**	-	1508
% Lights	98.8%	95.2%	98.1%	0%	**96.0%**	-	100%	96.7%	100%	0%	**97.0%**	-	95.7%	96.0%	99.1%	0%	**97.2%**	-	100%	95.9%	100%	100%	**97.6%**	-	96.7%
Single-Unit Trucks	0	12	1	0	**13**	-	0	8	0	0	**8**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	23
% Single-Unit Trucks	0%	2.6%	1.9%	0%	**2.2%**	-	0%	1.9%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	0%	0%	**1.0%**	-	1.5%
Articulated Trucks	0	6	0	0	**6**	-	0	2	0	0	**2**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	9
% Articulated Trucks	0%	1.3%	0%	0%	**1.0%**	-	0%	0.5%	0%	0%	**0.4%**	-	4.3%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.6%
Buses	1	4	0	0	**5**	-	0	3	0	0	**3**	-	0	4	1	0	**5**	-	0	3	0	0	**3**	-	16
% Buses	1.2%	0.9%	0%	0%	**0.8%**	-	0%	0.7%	0%	0%	**0.6%**	-	0%	2.6%	0.9%	0%	**1.8%**	-	0%	2.5%	0%	0%	**1.5%**	-	1.0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Canal St - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867351, Location: 29.74787, -95.326647

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Navigation Blvd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

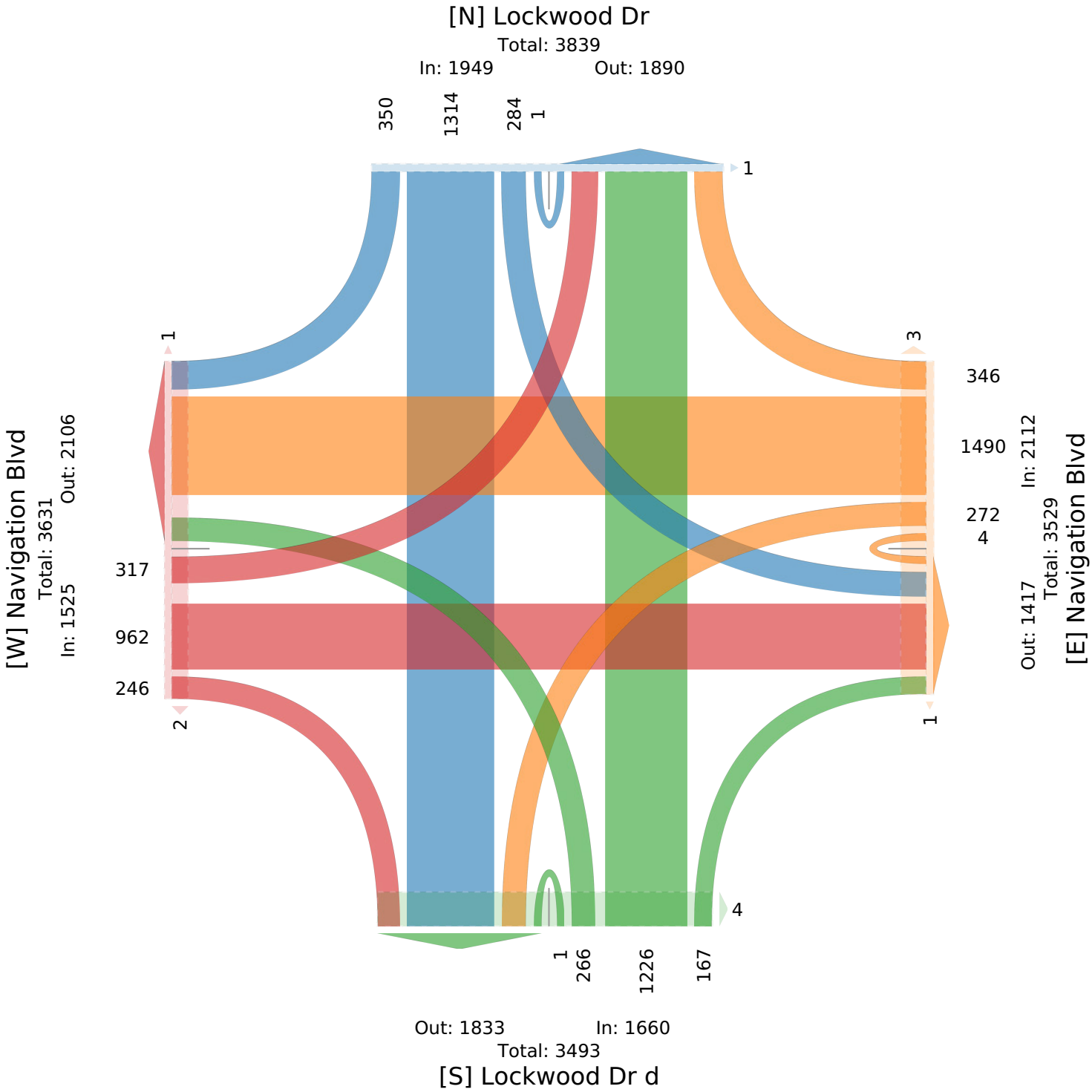
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr d						Lockwood Dr						Navigation Blvd						Navigation Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	17	39	11	0	**67**	0	18	49	15	0	**82**	0	11	45	12	0	**68**	0	4	83	20	1	**108**	0	**325**
7:15AM	19	67	13	0	**99**	0	24	72	23	0	**119**	0	29	78	17	0	**124**	0	25	102	16	0	**143**	0	**485**
7:30AM	26	70	11	0	**107**	0	18	113	37	0	**168**	0	31	65	14	0	**110**	1	16	159	16	1	**192**	0	**577**
7:45AM	23	87	16	0	**126**	0	21	117	27	0	**165**	0	41	85	14	0	**140**	0	23	123	22	0	**168**	1	**599**
Hourly Total	85	263	51	0	**399**	0	81	351	102	0	**534**	0	112	273	57	0	**442**	1	68	467	74	2	**611**	1	**1986**
8:00AM	14	57	12	0	**83**	0	16	129	30	0	**175**	0	16	58	18	0	**92**	0	17	104	6	1	**128**	1	**478**
8:15AM	12	47	6	0	**65**	2	21	104	19	0	**144**	0	21	37	7	0	**65**	1	17	72	16	0	**105**	0	**379**
8:30AM	4	30	5	0	**39**	0	19	109	27	0	**155**	1	12	40	9	0	**61**	1	12	62	28	0	**102**	1	**357**
8:45AM	10	47	14	0	**71**	0	15	65	18	0	**98**	0	19	44	9	0	**72**	0	19	61	16	0	**96**	0	**337**
Hourly Total	40	181	37	0	**258**	2	71	407	94	0	**572**	1	68	179	43	0	**290**	2	65	299	66	1	**431**	2	**1551**
4:00PM	22	100	10	1	**133**	1	17	67	25	1	**110**	0	34	81	19	0	**134**	0	22	81	37	0	**140**	0	**517**
4:15PM	23	78	9	0	**110**	1	18	68	15	0	**101**	0	10	57	18	0	**85**	0	22	77	25	0	**124**	1	**420**
4:30PM	10	56	8	0	**74**	0	14	80	17	0	**111**	0	17	56	24	0	**97**	0	24	96	34	0	**154**	0	**436**
4:45PM	17	132	10	0	**159**	0	20	69	24	0	**113**	0	19	69	16	0	**104**	0	13	99	24	0	**136**	0	**512**
Hourly Total	72	366	37	1	**476**	2	69	284	81	1	**435**	0	80	263	77	0	**420**	0	81	353	120	0	**554**	1	**1885**
5:00PM	23	98	12	0	**133**	0	28	100	22	0	**150**	0	16	67	16	0	**99**	0	17	105	31	0	**153**	0	**535**
5:15PM	19	113	11	0	**143**	0	10	64	19	0	**93**	0	15	67	21	0	**103**	0	10	108	23	1	**142**	0	**481**
5:30PM	14	100	11	0	**125**	0	10	57	13	0	**80**	0	12	61	16	0	**89**	0	15	83	22	0	**120**	0	**414**
5:45PM	13	105	8	0	**126**	0	15	51	19	0	**85**	0	14	52	16	0	**82**	0	16	75	10	0	**101**	0	**394**
Hourly Total	69	416	42	0	**527**	0	63	272	73	0	**408**	0	57	247	69	0	**373**	0	58	371	86	1	**516**	0	**1824**
Total	266	1226	167	1	**1660**	4	284	1314	350	1	**1949**	1	317	962	246	0	**1525**	3	272	1490	346	4	**2112**	4	**7246**
% Approach	16.0%	73.9%	10.1%	0.1%	**-**	-	14.6%	67.4%	18.0%	0.1%	**-**	-	20.8%	63.1%	16.1%	0%	**-**	-	12.9%	70.5%	16.4%	0.2%	**-**	-	**-**
% Total	3.7%	16.9%	2.3%	0%	**22.9%**	-	3.9%	18.1%	4.8%	0%	**26.9%**	-	4.4%	13.3%	3.4%	0%	**21.0%**	-	3.8%	20.6%	4.8%	0.1%	**29.1%**	-	**-**
Motorcycles	1	0	1	0	**2**	-	0	2	1	0	**3**	-	1	1	0	0	**2**	-	0	4	1	0	**5**	-	12
% Motorcycles	0.4%	0%	0.6%	0%	**0.1%**	-	0%	0.2%	0.3%	0%	**0.2%**	-	0.3%	0.1%	0%	0%	**0.1%**	-	0%	0.3%	0.3%	0%	**0.2%**	-	0.2%
Lights	256	1187	150	1	**1594**	-	243	1237	329	1	**1810**	-	299	912	242	0	**1453**	-	240	1422	296	4	**1962**	-	6819
% Lights	96.2%	96.8%	89.8%	100%	**96.0%**	-	85.6%	94.1%	94.0%	100%	**92.9%**	-	94.3%	94.8%	98.4%	0%	**95.3%**	-	88.2%	95.4%	85.5%	100%	**92.9%**	-	94.1%
Single-Unit Trucks	5	19	10	0	**34**	-	23	36	13	0	**72**	-	11	27	3	0	**41**	-	16	46	31	0	**93**	-	240
% Single-Unit Trucks	1.9%	1.5%	6.0%	0%	**2.0%**	-	8.1%	2.7%	3.7%	0%	**3.7%**	-	3.5%	2.8%	1.2%	0%	**2.7%**	-	5.9%	3.1%	9.0%	0%	**4.4%**	-	3.3%
Articulated Trucks	1	7	4	0	**12**	-	18	16	5	0	**39**	-	3	16	1	0	**20**	-	14	13	16	0	**43**	-	114
% Articulated Trucks	0.4%	0.6%	2.4%	0%	**0.7%**	-	6.3%	1.2%	1.4%	0%	**2.0%**	-	0.9%	1.7%	0.4%	0%	**1.3%**	-	5.1%	0.9%	4.6%	0%	**2.0%**	-	1.6%
Buses	3	13	2	0	**18**	-	0	23	2	0	**25**	-	3	6	0	0	**9**	-	2	5	2	0	**9**	-	61
% Buses	1.1%	1.1%	1.2%	0%	**1.1%**	-	0%	1.8%	0.6%	0%	**1.3%**	-	0.9%	0.6%	0%	0%	**0.6%**	-	0.7%	0.3%	0.6%	0%	**0.4%**	-	0.8%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Navigation Blvd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Navigation Blvd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

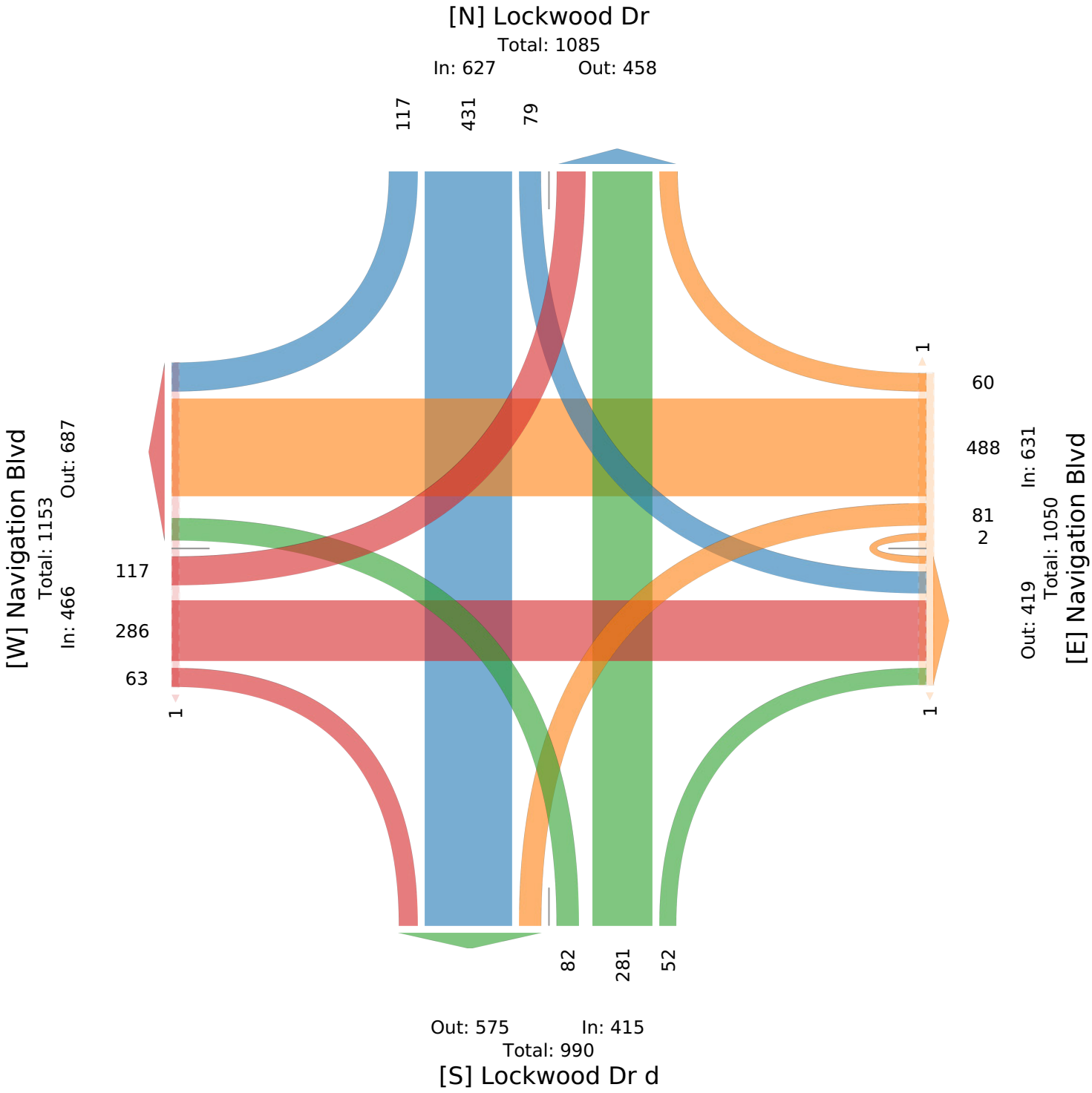
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr d Northbound						Lockwood Dr Southbound						Navigation Blvd Eastbound						Navigation Blvd Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	19	67	13	0	**99**	0	24	72	23	0	**119**	0	29	78	17	0	**124**	0	25	102	16	0	**143**	0	**485**
7:30AM	26	70	11	0	**107**	0	18	113	37	0	**168**	0	31	65	14	0	**110**	1	16	159	16	1	**192**	0	**577**
7:45AM	23	87	16	0	**126**	0	21	117	27	0	**165**	0	41	85	14	0	**140**	0	23	123	22	0	**168**	1	**599**
8:00AM	14	57	12	0	**83**	0	16	129	30	0	**175**	0	16	58	18	0	**92**	0	17	104	6	1	**128**	1	**478**
Total	82	281	52	0	**415**	0	79	431	117	0	**627**	0	117	286	63	0	**466**	1	81	488	60	2	**631**	2	**2139**
% Approach	19.8%	67.7%	12.5%	0%	**-**	-	12.6%	68.7%	18.7%	0%	**-**	-	25.1%	61.4%	13.5%	0%	**-**	-	12.8%	77.3%	9.5%	0.3%	**-**	-	**-**
% Total	3.8%	13.1%	2.4%	0%	**19.4%**	-	3.7%	20.1%	5.5%	0%	**29.3%**	-	5.5%	13.4%	2.9%	0%	**21.8%**	-	3.8%	22.8%	2.8%	0.1%	**29.5%**	-	**-**
PHF	0.788	0.807	0.813	-	**0.823**	-	0.823	0.835	0.791	-	**0.896**	-	0.713	0.841	0.875	-	**0.832**	-	0.810	0.767	0.682	0.500	**0.822**	-	0.893
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	1.9%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.9%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	82	274	49	0	**405**	-	67	406	111	0	**584**	-	111	271	63	0	**445**	-	69	465	48	2	**584**	-	2018
% Lights	100%	97.5%	94.2%	0%	**97.6%**	-	84.8%	94.2%	94.9%	0%	**93.1%**	-	94.9%	94.8%	100%	0%	**95.5%**	-	85.2%	95.3%	80.0%	100%	**92.6%**	-	94.3%
Single-Unit Trucks	0	3	1	0	**4**	-	7	13	2	0	**22**	-	2	8	0	0	**10**	-	3	15	11	0	**29**	-	65
% Single-Unit Trucks	0%	1.1%	1.9%	0%	**1.0%**	-	8.9%	3.0%	1.7%	0%	**3.5%**	-	1.7%	2.8%	0%	0%	**2.1%**	-	3.7%	3.1%	18.3%	0%	**4.6%**	-	3.0%
Articulated Trucks	0	0	0	0	**0**	-	5	4	3	0	**12**	-	1	6	0	0	**7**	-	8	6	1	0	**15**	-	34
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	6.3%	0.9%	2.6%	0%	**1.9%**	-	0.9%	2.1%	0%	0%	**1.5%**	-	9.9%	1.2%	1.7%	0%	**2.4%**	-	1.6%
Buses	0	4	1	0	**5**	-	0	8	1	0	**9**	-	2	1	0	0	**3**	-	1	2	0	0	**3**	-	20
% Buses	0%	1.4%	1.9%	0%	**1.2%**	-	0%	1.9%	0.9%	0%	**1.4%**	-	1.7%	0.3%	0%	0%	**0.6%**	-	1.2%	0.4%	0%	0%	**0.5%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Navigation Blvd - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Navigation Blvd - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

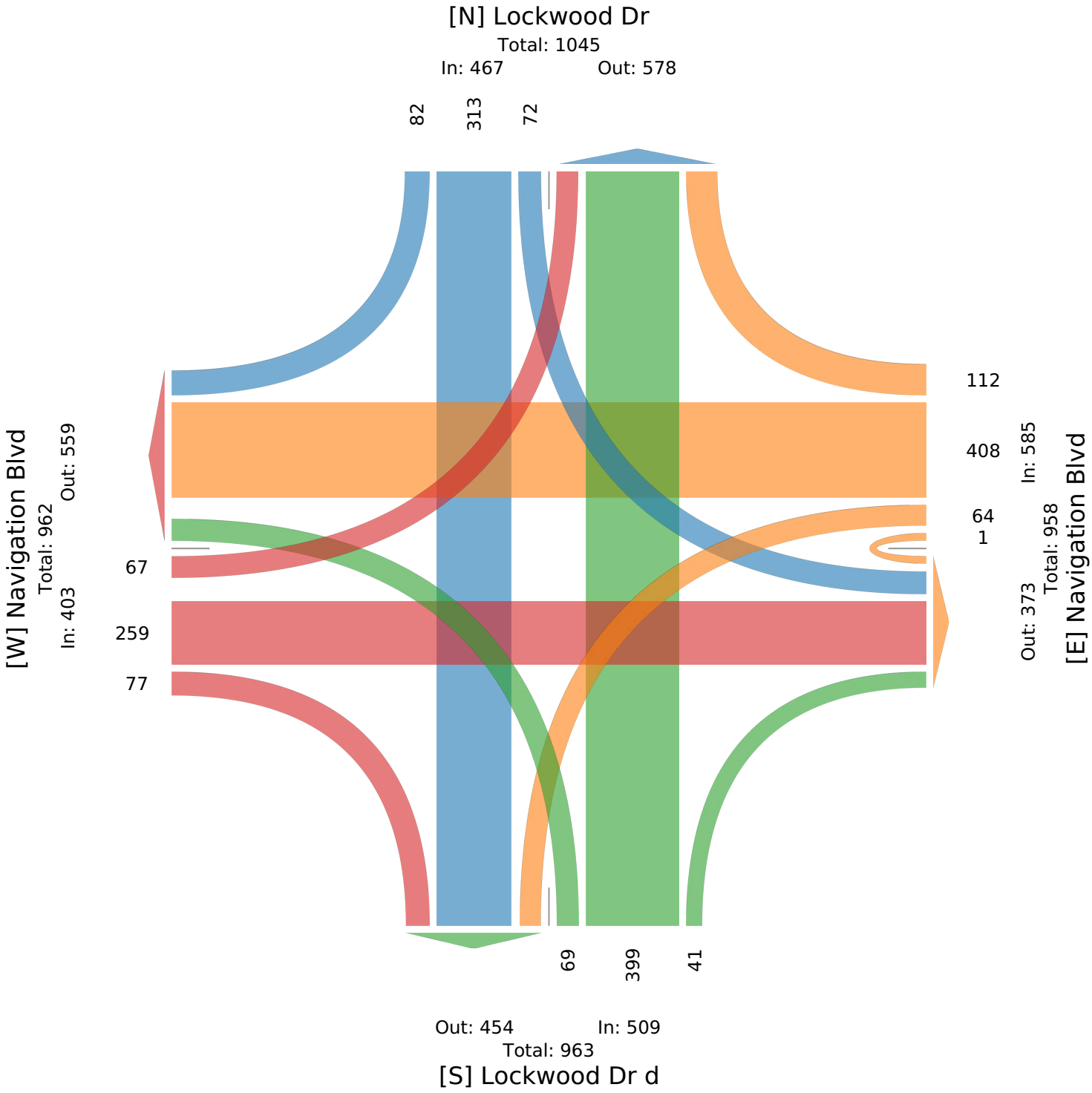
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr d Northbound						Lockwood Dr Southbound						Navigation Blvd Eastbound						Navigation Blvd Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:30PM	10	56	8	0	**74**	0	14	80	17	0	**111**	0	17	56	24	0	**97**	0	24	96	34	0	**154**	0	**436**
4:45PM	17	132	10	0	**159**	0	20	69	24	0	**113**	0	19	69	16	0	**104**	0	13	99	24	0	**136**	0	**512**
5:00PM	23	98	12	0	**133**	0	28	100	22	0	**150**	0	16	67	16	0	**99**	0	17	105	31	0	**153**	0	**535**
5:15PM	19	113	11	0	**143**	0	10	64	19	0	**93**	0	15	67	21	0	**103**	0	10	108	23	1	**142**	0	**481**
Total	69	399	41	0	**509**	0	72	313	82	0	**467**	0	67	259	77	0	**403**	0	64	408	112	1	**585**	0	**1964**
% Approach	13.6%	78.4%	8.1%	0%	**-**	-	15.4%	67.0%	17.6%	0%	**-**	-	16.6%	64.3%	19.1%	0%	**-**	-	10.9%	69.7%	19.1%	0.2%	**-**	-	-
% Total	3.5%	20.3%	2.1%	0%	**25.9%**	-	3.7%	15.9%	4.2%	0%	**23.8%**	-	3.4%	13.2%	3.9%	0%	**20.5%**	-	3.3%	20.8%	5.7%	0.1%	**29.8%**	-	-
PHF	0.750	0.756	0.854	-	**0.800**	-	0.643	0.783	0.854	-	**0.778**	-	0.882	0.938	0.802	-	**0.969**	-	0.667	0.944	0.824	0.250	**0.950**	-	0.918
Motorcycles	0	0	0	0	**0**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	0	2	1	0	**3**	-	6
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.6%	1.2%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0.5%	0.9%	0%	**0.5%**	-	0.3%
Lights	66	387	34	0	**487**	-	63	303	81	0	**447**	-	61	253	75	0	**389**	-	60	399	103	1	**563**	-	1886
% Lights	95.7%	97.0%	82.9%	0%	**95.7%**	-	87.5%	96.8%	98.8%	0%	**95.7%**	-	91.0%	97.7%	97.4%	0%	**96.5%**	-	93.8%	97.8%	92.0%	100%	**96.2%**	-	96.0%
Single-Unit Trucks	2	5	5	0	**12**	-	5	5	0	0	**10**	-	4	4	2	0	**10**	-	3	4	5	0	**12**	-	44
% Single-Unit Trucks	2.9%	1.3%	12.2%	0%	**2.4%**	-	6.9%	1.6%	0%	0%	**2.1%**	-	6.0%	1.5%	2.6%	0%	**2.5%**	-	4.7%	1.0%	4.5%	0%	**2.1%**	-	2.2%
Articulated Trucks	0	5	1	0	**6**	-	4	1	0	0	**5**	-	2	2	0	0	**4**	-	1	2	1	0	**4**	-	19
% Articulated Trucks	0%	1.3%	2.4%	0%	**1.2%**	-	5.6%	0.3%	0%	0%	**1.1%**	-	3.0%	0.8%	0%	0%	**1.0%**	-	1.6%	0.5%	0.9%	0%	**0.7%**	-	1.0%
Buses	1	2	1	0	**4**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	1	2	0	**3**	-	9
% Buses	1.4%	0.5%	2.4%	0%	**0.8%**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.2%	1.8%	0%	**0.5%**	-	0.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Navigation Blvd - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867352, Location: 29.751062, -95.324019

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Clinton Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

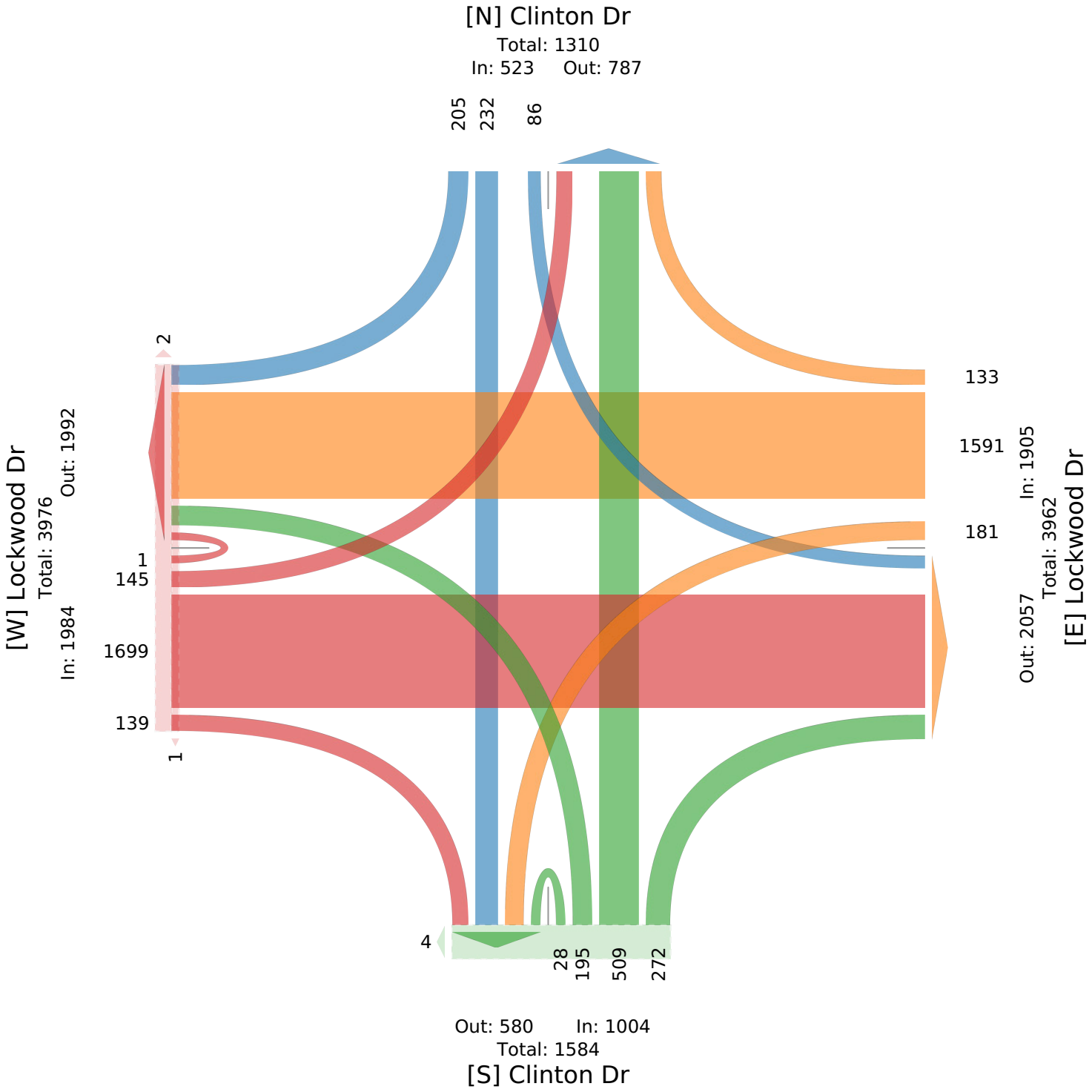
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Clinton Dr Northbound						Clinton Dr Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	13	19	4	1	**37**	0	3	7	15	0	**25**	0	2	44	5	0	**51**	0	16	69	8	0	**93**	0	**206**
7:15AM	12	28	0	3	**43**	1	5	18	23	0	**46**	0	8	59	4	0	**71**	1	15	118	2	0	**135**	0	**295**
7:30AM	26	32	7	5	**70**	0	5	21	15	0	**41**	0	11	95	8	0	**114**	0	17	133	13	0	**163**	0	**388**
7:45AM	16	37	9	5	**67**	1	1	18	17	0	**36**	0	15	94	11	0	**120**	0	20	162	11	0	**193**	0	**416**
Hourly Total	67	116	20	14	**217**	2	14	64	70	0	**148**	0	36	292	28	0	**356**	1	68	482	34	0	**584**	0	**1305**
8:00AM	12	39	9	3	**63**	0	4	20	12	0	**36**	0	5	80	8	0	**93**	0	16	168	10	0	**194**	0	**386**
8:15AM	9	30	17	2	**58**	0	2	19	14	0	**35**	0	6	70	6	0	**82**	0	15	137	11	0	**163**	0	**338**
8:30AM	21	22	21	1	**65**	0	8	9	14	0	**31**	0	10	48	6	0	**64**	0	15	118	8	0	**141**	0	**301**
8:45AM	11	19	13	0	**43**	0	9	8	9	0	**26**	0	11	70	8	0	**89**	0	16	95	6	0	**117**	0	**275**
Hourly Total	53	110	60	6	**229**	0	23	56	49	0	**128**	0	32	268	28	0	**328**	0	62	518	35	0	**615**	0	**1300**
4:00PM	11	45	30	1	**87**	0	10	17	17	0	**44**	0	11	150	14	0	**175**	0	5	70	9	0	**84**	0	**390**
4:15PM	8	43	22	0	**73**	0	4	17	17	0	**38**	0	10	136	6	0	**152**	0	11	70	6	0	**87**	0	**350**
4:30PM	11	36	23	0	**70**	1	8	10	16	0	**34**	0	9	102	11	0	**122**	1	9	80	9	0	**98**	0	**324**
4:45PM	8	43	32	0	**83**	0	6	12	7	0	**25**	0	6	175	17	1	**199**	0	6	84	11	0	**101**	0	**408**
Hourly Total	38	167	107	1	**313**	1	28	56	57	0	**141**	0	36	563	48	1	**648**	1	31	304	35	0	**370**	0	**1472**
5:00PM	19	51	40	5	**115**	0	5	15	11	0	**31**	0	10	152	9	0	**171**	0	4	79	6	0	**89**	0	**406**
5:15PM	4	35	24	0	**63**	0	4	19	6	0	**29**	0	11	158	9	0	**178**	0	4	76	9	0	**89**	0	**359**
5:30PM	6	19	12	0	**37**	1	6	10	5	0	**21**	0	11	144	7	0	**162**	1	7	67	9	0	**83**	0	**303**
5:45PM	8	11	9	2	**30**	0	6	12	7	0	**25**	0	9	122	10	0	**141**	0	5	65	5	0	**75**	0	**271**
Hourly Total	37	116	85	7	**245**	1	21	56	29	0	**106**	0	41	576	35	0	**652**	1	20	287	29	0	**336**	0	**1339**
Total	195	509	272	28	**1004**	4	86	232	205	0	**523**	0	145	1699	139	1	**1984**	3	181	1591	133	0	**1905**	0	**5416**
% Approach	19.4%	50.7%	27.1%	2.8%	**-**	-	16.4%	44.4%	39.2%	0%	**-**	-	7.3%	85.6%	7.0%	0.1%	**-**	-	9.5%	83.5%	7.0%	0%	**-**	-	-
% Total	3.6%	9.4%	5.0%	0.5%	**18.5%**	-	1.6%	4.3%	3.8%	0%	**9.7%**	-	2.7%	31.4%	2.6%	0%	**36.6%**	-	3.3%	29.4%	2.5%	0%	**35.2%**	-	-
Motorcycles	0	1	1	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0.2%	0.4%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	182	474	237	28	**921**	-	76	206	190	0	**472**	-	133	1565	132	1	**1831**	-	154	1470	127	0	**1751**	-	4975
% Lights	93.3%	93.1%	87.1%	100%	**91.7%**	-	88.4%	88.8%	92.7%	0%	**90.2%**	-	91.7%	92.1%	95.0%	100%	**92.3%**	-	85.1%	92.4%	95.5%	0%	**91.9%**	-	91.9%
Single-Unit Trucks	6	16	12	0	**34**	-	5	12	8	0	**25**	-	11	64	3	0	**78**	-	12	52	1	0	**65**	-	202
% Single-Unit Trucks	3.1%	3.1%	4.4%	0%	**3.4%**	-	5.8%	5.2%	3.9%	0%	**4.8%**	-	7.6%	3.8%	2.2%	0%	**3.9%**	-	6.6%	3.3%	0.8%	0%	**3.4%**	-	3.7%
Articulated Trucks	6	13	21	0	**40**	-	5	9	3	0	**17**	-	0	53	4	0	**57**	-	15	46	5	0	**66**	-	180
% Articulated Trucks	3.1%	2.6%	7.7%	0%	**4.0%**	-	5.8%	3.9%	1.5%	0%	**3.3%**	-	0%	3.1%	2.9%	0%	**2.9%**	-	8.3%	2.9%	3.8%	0%	**3.5%**	-	3.3%
Buses	1	5	1	0	**7**	-	0	4	4	0	**8**	-	1	17	0	0	**18**	-	0	23	0	0	**23**	-	56
% Buses	0.5%	1.0%	0.4%	0%	**0.7%**	-	0%	1.7%	2.0%	0%	**1.5%**	-	0.7%	1.0%	0%	0%	**0.9%**	-	0%	1.4%	0%	0%	**1.2%**	-	1.0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Clinton Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Clinton Dr - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

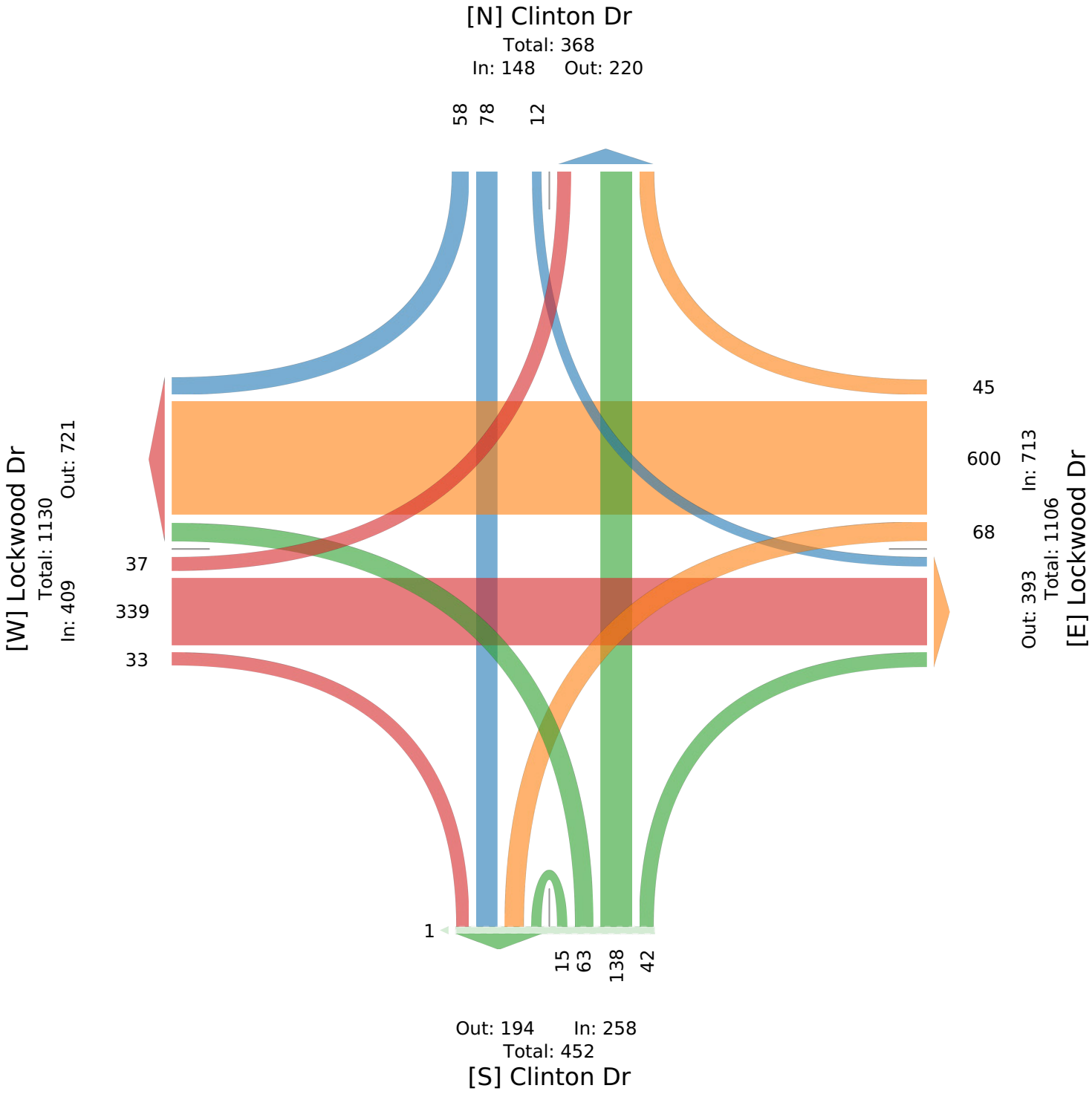
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Clinton Dr Northbound						Clinton Dr Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	26	32	7	5	**70**	0	5	21	15	0	**41**	0	11	95	8	0	**114**	0	17	133	13	0	**163**	0	**388**
7:45AM	16	37	9	5	**67**	1	1	18	17	0	**36**	0	15	94	11	0	**120**	0	20	162	11	0	**193**	0	**416**
8:00AM	12	39	9	3	**63**	0	4	20	12	0	**36**	0	5	80	8	0	**93**	0	16	168	10	0	**194**	0	**386**
8:15AM	9	30	17	2	**58**	0	2	19	14	0	**35**	0	6	70	6	0	**82**	0	15	137	11	0	**163**	0	**338**
Total	63	138	42	15	**258**	1	12	78	58	0	**148**	0	37	339	33	0	**409**	0	68	600	45	0	**713**	0	**1528**
% Approach	24.4%	53.5%	16.3%	5.8%	**-**	-	8.1%	52.7%	39.2%	0%	**-**	-	9.0%	82.9%	8.1%	0%	**-**	-	9.5%	84.2%	6.3%	0%	**-**	-	**-**
% Total	4.1%	9.0%	2.7%	1.0%	**16.9%**	-	0.8%	5.1%	3.8%	0%	**9.7%**	-	2.4%	22.2%	2.2%	0%	**26.8%**	-	4.5%	39.3%	2.9%	0%	**46.7%**	-	**-**
PHF	0.606	0.885	0.618	0.750	**0.921**	-	0.600	0.929	0.853	-	**0.902**	-	0.617	0.892	0.750	-	**0.852**	-	0.850	0.893	0.865	-	**0.919**	-	0.918
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	57	127	34	15	**233**	-	9	69	54	0	**132**	-	34	305	31	0	**370**	-	61	555	44	0	**660**	-	1395
% Lights	90.5%	92.0%	81.0%	100%	**90.3%**	-	75.0%	88.5%	93.1%	0%	**89.2%**	-	91.9%	90.0%	93.9%	0%	**90.5%**	-	89.7%	92.5%	97.8%	0%	**92.6%**	-	91.3%
Single-Unit Trucks	4	6	3	0	**13**	-	3	4	2	0	**9**	-	3	21	1	0	**25**	-	2	23	0	0	**25**	-	72
% Single-Unit Trucks	6.3%	4.3%	7.1%	0%	**5.0%**	-	25.0%	5.1%	3.4%	0%	**6.1%**	-	8.1%	6.2%	3.0%	0%	**6.1%**	-	2.9%	3.8%	0%	0%	**3.5%**	-	4.7%
Articulated Trucks	1	4	5	0	**10**	-	0	4	2	0	**6**	-	0	9	1	0	**10**	-	5	16	1	0	**22**	-	48
% Articulated Trucks	1.6%	2.9%	11.9%	0%	**3.9%**	-	0%	5.1%	3.4%	0%	**4.1%**	-	0%	2.7%	3.0%	0%	**2.4%**	-	7.4%	2.7%	2.2%	0%	**3.1%**	-	3.1%
Buses	1	1	0	0	**2**	-	0	1	0	0	**1**	-	0	4	0	0	**4**	-	0	6	0	0	**6**	-	13
% Buses	1.6%	0.7%	0%	0%	**0.8%**	-	0%	1.3%	0%	0%	**0.7%**	-	0%	1.2%	0%	0%	**1.0%**	-	0%	1.0%	0%	0%	**0.8%**	-	0.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Clinton Dr - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Clinton Dr - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Clinton Dr Northbound						Clinton Dr Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:30PM	11	36	23	0	**70**	1	8	10	16	0	**34**	0	9	102	11	0	**122**	1	9	80	9	0	**98**	0	**324**
4:45PM	8	43	32	0	**83**	0	6	12	7	0	**25**	0	6	175	17	1	**199**	0	6	84	11	0	**101**	0	**408**
5:00PM	19	51	40	5	**115**	0	5	15	11	0	**31**	0	10	152	9	0	**171**	0	4	79	6	0	**89**	0	**406**
5:15PM	4	35	24	0	**63**	0	4	19	6	0	**29**	0	11	158	9	0	**178**	0	4	76	9	0	**89**	0	**359**
Total	42	165	119	5	**331**	1	23	56	40	0	**119**	0	36	587	46	1	**670**	1	23	319	35	0	**377**	0	**1497**
% Approach	12.7%	49.8%	36.0%	1.5%	**-**	-	19.3%	47.1%	33.6%	0%	**-**	-	5.4%	87.6%	6.9%	0.1%	**-**	-	6.1%	84.6%	9.3%	0%	**-**	-	-
% Total	2.8%	11.0%	7.9%	0.3%	**22.1%**	-	1.5%	3.7%	2.7%	0%	**7.9%**	-	2.4%	39.2%	3.1%	0.1%	**44.8%**	-	1.5%	21.3%	2.3%	0%	**25.2%**	-	-
PHF	0.553	0.809	0.744	0.250	**0.720**	-	0.719	0.737	0.625	-	**0.875**	-	0.818	0.839	0.676	0.250	**0.842**	-	0.639	0.949	0.795	-	**0.933**	-	0.917
Motorcycles	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.6%	0.8%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	40	158	111	5	**314**	-	21	54	39	0	**114**	-	34	559	45	1	**639**	-	18	298	34	0	**350**	-	1417
% Lights	95.2%	95.8%	93.3%	100%	**94.9%**	-	91.3%	96.4%	97.5%	0%	**95.8%**	-	94.4%	95.2%	97.8%	100%	**95.4%**	-	78.3%	93.4%	97.1%	0%	**92.8%**	-	94.7%
Single-Unit Trucks	0	2	3	0	**5**	-	0	1	1	0	**2**	-	1	10	0	0	**11**	-	3	11	0	0	**14**	-	32
% Single-Unit Trucks	0%	1.2%	2.5%	0%	**1.5%**	-	0%	1.8%	2.5%	0%	**1.7%**	-	2.8%	1.7%	0%	0%	**1.6%**	-	13.0%	3.4%	0%	0%	**3.7%**	-	2.1%
Articulated Trucks	2	2	3	0	**7**	-	2	0	0	0	**2**	-	0	15	1	0	**16**	-	2	8	1	0	**11**	-	36
% Articulated Trucks	4.8%	1.2%	2.5%	0%	**2.1%**	-	8.7%	0%	0%	0%	**1.7%**	-	0%	2.6%	2.2%	0%	**2.4%**	-	8.7%	2.5%	2.9%	0%	**2.9%**	-	2.4%
Buses	0	2	1	0	**3**	-	0	1	0	0	**1**	-	1	3	0	0	**4**	-	0	2	0	0	**2**	-	10
% Buses	0%	1.2%	0.8%	0%	**0.9%**	-	0%	1.8%	0%	0%	**0.8%**	-	2.8%	0.5%	0%	0%	**0.6%**	-	0%	0.6%	0%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Clinton Dr - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867354, Location: 29.763629, -95.315554

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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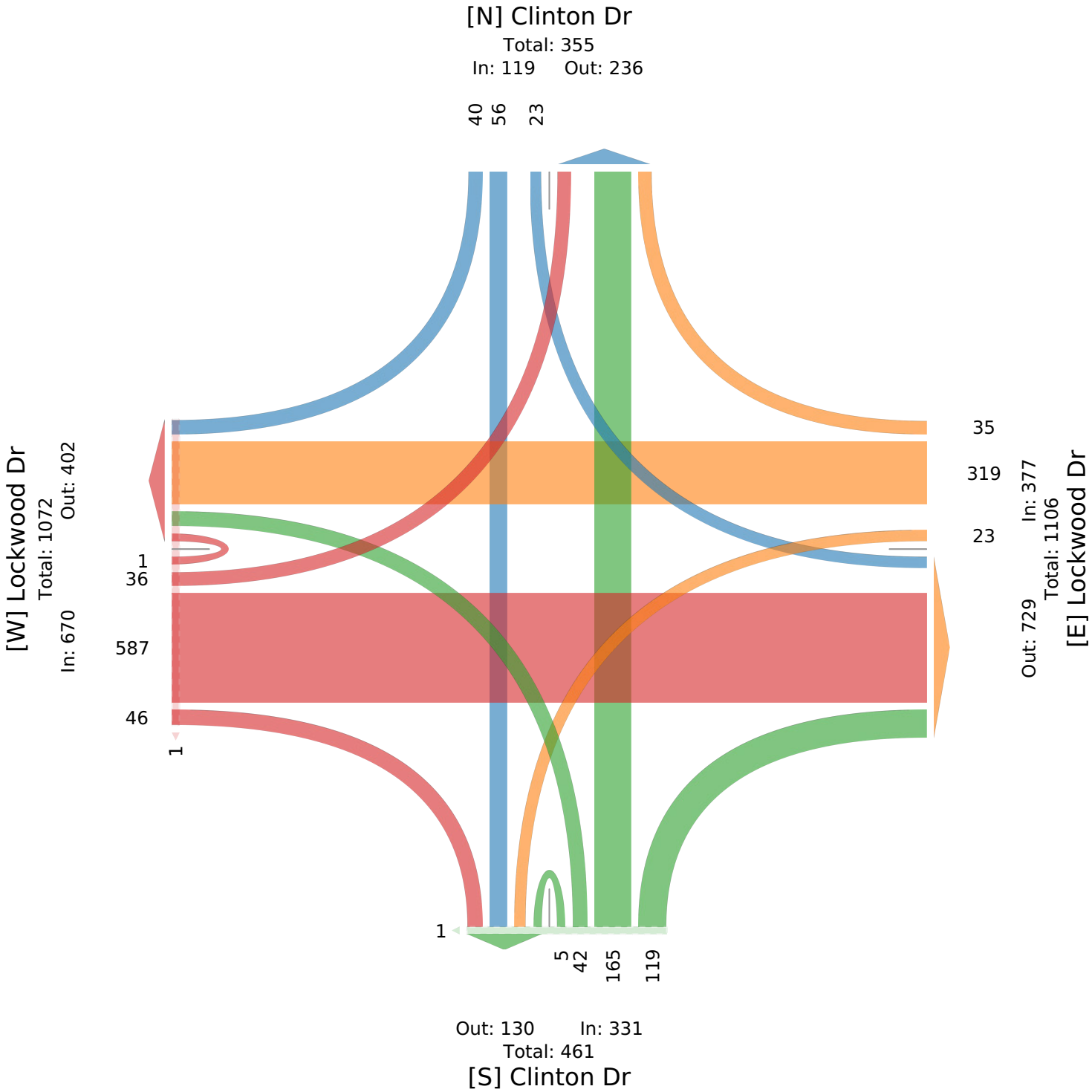


Lockwood Dr (SB) at Market St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

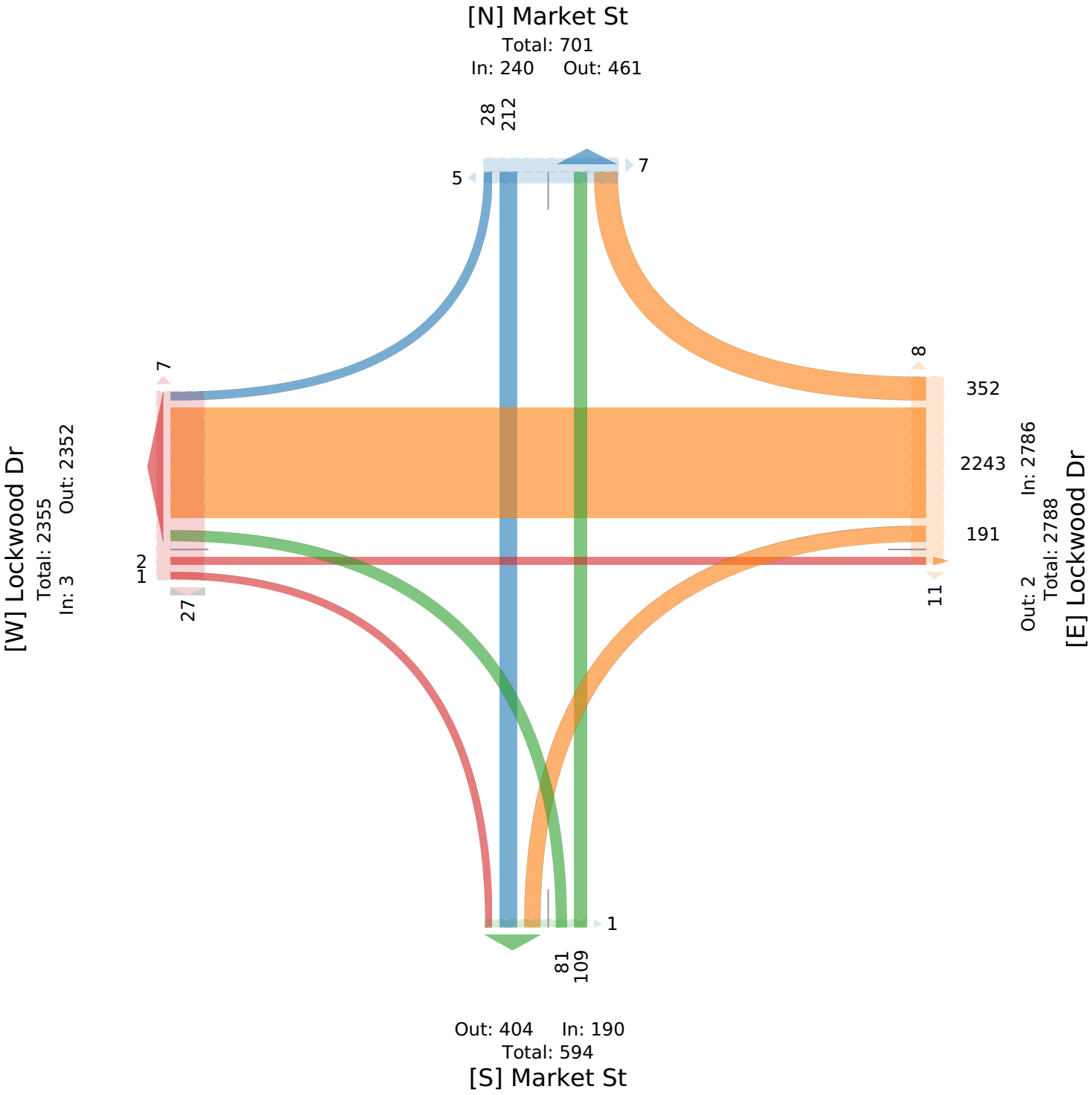
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Market St						Market St						Lockwood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	4	3	0	0	**7**	0	0	7	0	0	**7**	1	0	0	0	0	**0**	0	12	107	5	0	**124**	0	**138**
7:15AM	5	6	0	0	**11**	0	0	8	1	0	**9**	1	0	0	0	0	**0**	5	14	154	10	0	**178**	0	**198**
7:30AM	17	13	0	0	**30**	0	0	13	2	0	**15**	0	0	1	1	0	**2**	2	16	178	21	0	**215**	0	**262**
7:45AM	11	25	0	0	**36**	0	0	21	3	0	**24**	0	0	0	0	0	**0**	0	14	234	31	0	**279**	2	**339**
Hourly Total	37	47	0	0	**84**	0	0	49	6	0	**55**	2	0	1	1	0	**2**	7	56	673	67	0	**796**	2	**937**
8:00AM	23	22	0	0	**45**	0	0	20	5	0	**25**	0	0	1	0	0	**1**	4	14	236	17	0	**267**	1	**338**
8:15AM	5	12	0	0	**17**	0	0	18	2	0	**20**	1	0	0	0	0	**0**	2	14	205	32	0	**251**	0	**288**
8:30AM	5	8	0	0	**13**	0	0	10	4	0	**14**	0	0	0	0	0	**0**	2	6	147	16	0	**169**	2	**196**
8:45AM	5	5	0	0	**10**	0	0	3	1	0	**4**	3	0	0	0	0	**0**	1	15	118	16	0	**149**	0	**163**
Hourly Total	38	47	0	0	**85**	0	0	51	12	0	**63**	4	0	1	0	0	**1**	9	49	706	81	0	**836**	3	**985**
4:00PM	2	3	0	0	**5**	0	0	28	0	0	**28**	1	0	0	0	0	**0**	6	15	124	45	0	**184**	3	**217**
4:15PM	1	5	0	0	**6**	1	0	22	3	0	**25**	0	0	0	0	0	**0**	10	19	117	41	0	**177**	3	**208**
4:30PM	2	1	0	0	**3**	0	0	19	4	0	**23**	0	0	0	0	0	**0**	0	6	115	25	0	**146**	2	**172**
4:45PM	0	0	0	0	**0**	0	0	14	1	0	**15**	0	0	0	0	0	**0**	2	11	117	23	0	**151**	3	**166**
Hourly Total	5	9	0	0	**14**	1	0	83	8	0	**91**	1	0	0	0	0	**0**	18	51	473	134	0	**658**	11	**763**
5:00PM	0	2	0	0	**2**	0	0	13	2	0	**15**	2	0	0	0	0	**0**	0	11	95	19	0	**125**	1	**142**
5:15PM	1	0	0	0	**1**	0	0	4	0	0	**4**	1	0	0	0	0	**0**	0	9	121	17	0	**147**	1	**152**
5:30PM	0	2	0	0	**2**	0	0	7	0	0	**7**	1	0	0	0	0	**0**	0	4	93	20	0	**117**	0	**126**
5:45PM	0	2	0	0	**2**	0	0	5	0	0	**5**	1	0	0	0	0	**0**	0	11	82	14	0	**107**	1	**114**
Hourly Total	1	6	0	0	**7**	0	0	29	2	0	**31**	5	0	0	0	0	**0**	0	35	391	70	0	**496**	3	**534**
Total	81	109	0	0	**190**	1	0	212	28	0	**240**	12	0	2	1	0	**3**	34	191	2243	352	0	**2786**	19	**3219**
% Approach	42.6%	57.4%	0%	0%	**-**	-	0%	88.3%	11.7%	0%	**-**	-	0%	66.7%	33.3%	0%	**-**	-	6.9%	80.5%	12.6%	0%	**-**	-	**-**
% Total	2.5%	3.4%	0%	0%	**5.9%**	-	0%	6.6%	0.9%	0%	**7.5%**	-	0%	0.1%	0%	0%	**0.1%**	-	5.9%	69.7%	10.9%	0%	**86.5%**	-	**-**
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	75	109	0	0	**184**	-	0	201	26	0	**227**	-	0	2	1	0	**3**	-	179	2070	332	0	**2581**	-	2995
% Lights	92.6%	100%	0%	0%	**96.8%**	-	0%	94.8%	92.9%	0%	**94.6%**	-	0%	100%	100%	0%	**100%**	-	93.7%	92.3%	94.3%	0%	**92.6%**	-	93.0%
Single-Unit Trucks	6	0	0	0	**6**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	6	71	6	0	**83**	-	90
% Single-Unit Trucks	7.4%	0%	0%	0%	**3.2%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	3.1%	3.2%	1.7%	0%	**3.0%**	-	2.8%
Articulated Trucks	0	0	0	0	**0**	-	0	0	2	0	**2**	-	0	0	0	0	**0**	-	4	73	1	0	**78**	-	80
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	7.1%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	2.1%	3.3%	0.3%	0%	**2.8%**	-	2.5%
Buses	0	0	0	0	**0**	-	0	10	0	0	**10**	-	0	0	0	0	**0**	-	2	29	13	0	**44**	-	54
% Buses	0%	0%	0%	0%	**0%**	-	0%	4.7%	0%	0%	**4.2%**	-	0%	0%	0%	0%	**0%**	-	1.0%	1.3%	3.7%	0%	**1.6%**	-	1.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	34	-	-	-	-	-	19	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	58.3%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	41.7%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Market St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at Market St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

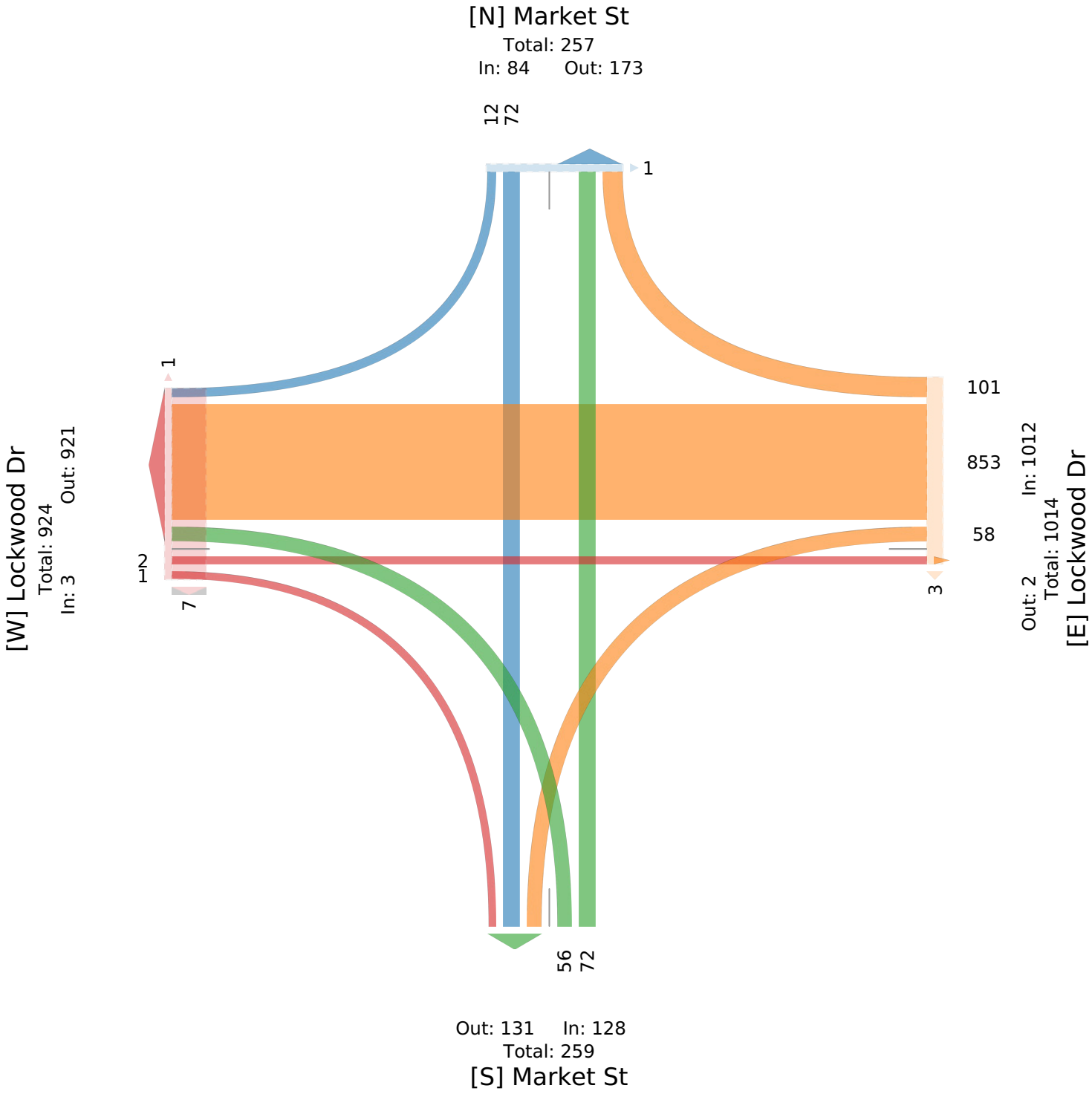
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Market St						Market St						Lockwood Dr						Lockwood Dr						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	17	13	0	0	**30**	0	0	13	2	0	**15**	0	0	1	1	0	**2**	2	16	178	21	0	**215**	0	**262**
7:45AM	11	25	0	0	**36**	0	0	21	3	0	**24**	0	0	0	0	0	**0**	0	14	234	31	0	**279**	2	**339**
8:00AM	23	22	0	0	**45**	0	0	20	5	0	**25**	0	0	1	0	0	**1**	4	14	236	17	0	**267**	1	**338**
8:15AM	5	12	0	0	**17**	0	0	18	2	0	**20**	1	0	0	0	0	**0**	2	14	205	32	0	**251**	0	**288**
Total	56	72	0	0	**128**	0	0	72	12	0	**84**	1	0	2	1	0	**3**	8	58	853	101	0	**1012**	3	**1227**
% Approach	43.8%	56.3%	0%	0%	**-**	-	0%	85.7%	14.3%	0%	**-**	-	0%	66.7%	33.3%	0%	**-**	-	5.7%	84.3%	10.0%	0%	**-**	-	-
% Total	4.6%	5.9%	0%	0%	**10.4%**	-	0%	5.9%	1.0%	0%	**6.8%**	-	0%	0.2%	0.1%	0%	**0.2%**	-	4.7%	69.5%	8.2%	0%	**82.5%**	-	-
PHF	0.609	0.720	-	-	**0.711**	-	-	0.857	0.600	-	**0.840**	-	-	0.500	0.250	-	**0.375**	-	0.906	0.904	0.789	-	**0.907**	-	0.905
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	51	72	0	0	**123**	-	0	70	11	0	**81**	-	0	2	1	0	**3**	-	55	796	99	0	**950**	-	1157
% Lights	91.1%	100%	0%	0%	**96.1%**	-	0%	97.2%	91.7%	0%	**96.4%**	-	0%	100%	100%	0%	**100%**	-	94.8%	93.3%	98.0%	0%	**93.9%**	-	94.3%
Single-Unit Trucks	5	0	0	0	**5**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	21	0	0	**22**	-	28
% Single-Unit Trucks	8.9%	0%	0%	0%	**3.9%**	-	0%	1.4%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	1.7%	2.5%	0%	0%	**2.2%**	-	2.3%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1	29	0	0	**30**	-	31
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	8.3%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	1.7%	3.4%	0%	0%	**3.0%**	-	2.5%
Buses	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	1	7	2	0	**10**	-	11
% Buses	0%	0%	0%	0%	**0%**	-	0%	1.4%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	1.7%	0.8%	2.0%	0%	**1.0%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Market St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at Market St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

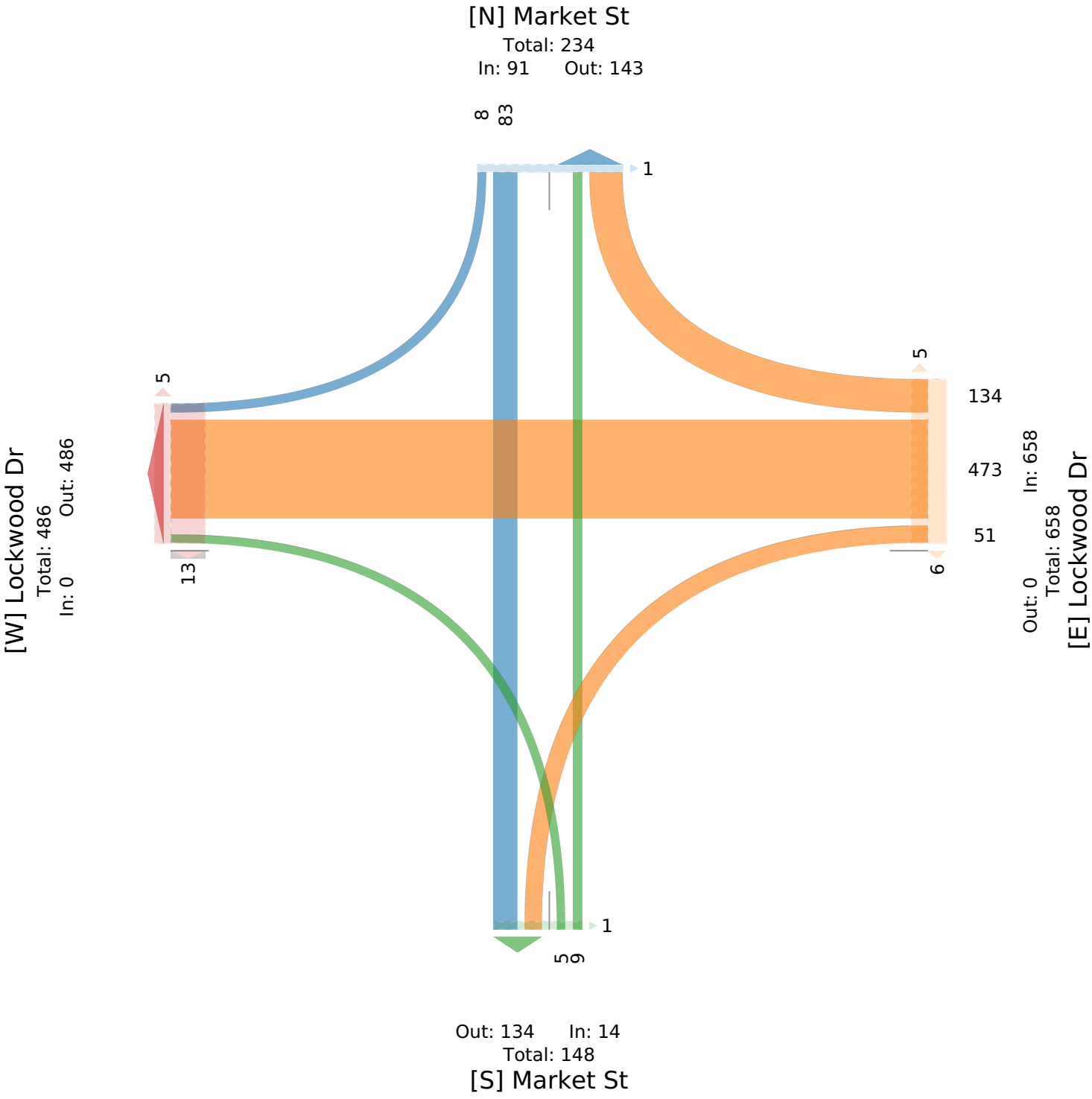
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Market St Northbound						Market St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	2	3	0	0	**5**	0	0	28	0	0	**28**	1	0	0	0	0	**0**	6	15	124	45	0	**184**	3	**217**
4:15PM	1	5	0	0	**6**	1	0	22	3	0	**25**	0	0	0	0	0	**0**	10	19	117	41	0	**177**	3	**208**
4:30PM	2	1	0	0	**3**	0	0	19	4	0	**23**	0	0	0	0	0	**0**	0	6	115	25	0	**146**	2	**172**
4:45PM	0	0	0	0	**0**	0	0	14	1	0	**15**	0	0	0	0	0	**0**	2	11	117	23	0	**151**	3	**166**
Total	5	9	0	0	**14**	1	0	83	8	0	**91**	1	0	0	0	0	**0**	18	51	473	134	0	**658**	11	**763**
% Approach	35.7%	64.3%	0%	0%	**-**	-	0%	91.2%	8.8%	0%	**-**	-	0%	0%	0%	0%	**-**	-	7.8%	71.9%	20.4%	0%	**-**	-	-
% Total	0.7%	1.2%	0%	0%	**1.8%**	-	0%	10.9%	1.0%	0%	**11.9%**	-	0%	0%	0%	0%	**0%**	-	6.7%	62.0%	17.6%	0%	**86.2%**	-	-
PHF	0.625	0.450	-	-	**0.583**	-	-	0.741	0.500	-	**0.813**	-	-	-	-	-	**-**	-	0.671	0.954	0.744	-	**0.894**	-	0.879
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	5	9	0	0	**14**	-	0	78	8	0	**86**	-	0	0	0	0	**0**	-	51	440	129	0	**620**	-	720
% Lights	100%	100%	0%	0%	**100%**	-	0%	94.0%	100%	0%	**94.5%**	-	0%	0%	0%	0%	**-**	-	100%	93.0%	96.3%	0%	**94.2%**	-	94.4%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	16	1	0	**17**	-	17
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	3.4%	0.7%	0%	**2.6%**	-	2.2%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	12	0	0	**12**	-	12
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	2.5%	0%	0%	**1.8%**	-	1.6%
Buses	0	0	0	0	**0**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	5	4	0	**9**	-	14
% Buses	0%	0%	0%	0%	**0%**	-	0%	6.0%	0%	0%	**5.5%**	-	0%	0%	0%	0%	**-**	-	0%	1.1%	3.0%	0%	**1.4%**	-	1.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	18	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Market St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867356, Location: 29.772649, -95.31555

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at Market St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

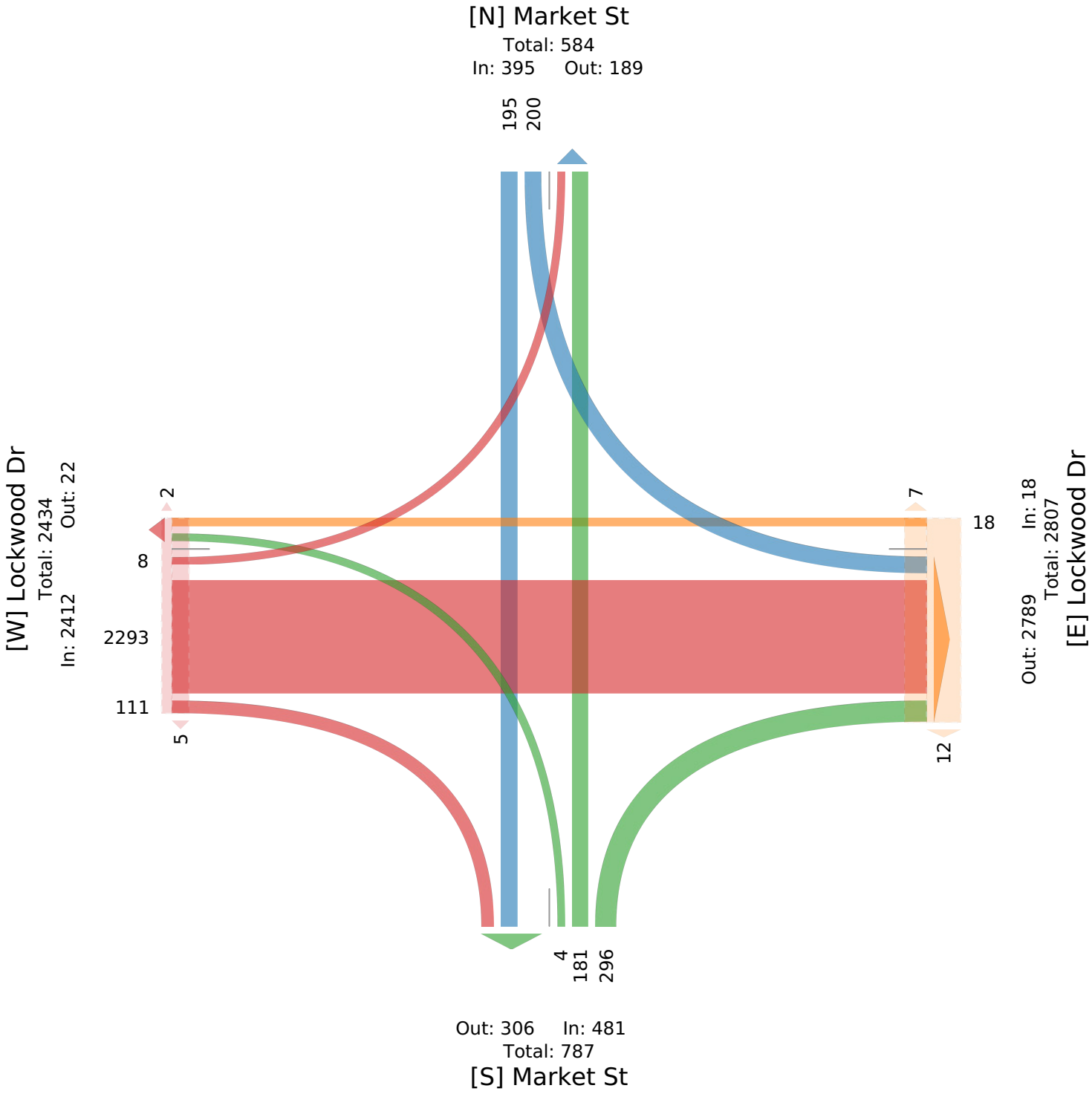
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Market St Northbound						Market St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	7	17	0	**24**	0	3	17	0	0	**20**	0	0	57	3	0	**60**	0	0	0	0	0	**0**	0	**104**
7:15AM	0	11	26	0	**37**	0	5	14	0	0	**19**	0	0	75	3	0	**78**	0	0	0	0	0	**0**	0	**134**
7:30AM	0	29	33	0	**62**	0	7	21	0	0	**28**	0	0	107	9	0	**116**	0	0	0	0	0	**0**	0	**206**
7:45AM	0	32	36	0	**68**	0	5	29	0	0	**34**	0	1	102	18	0	**121**	0	0	0	0	0	**0**	2	**223**
Hourly Total	0	79	112	0	**191**	0	20	81	0	0	**101**	0	1	341	33	0	**375**	0	0	0	0	0	**0**	2	**667**
8:00AM	0	46	30	0	**76**	0	10	24	0	0	**34**	0	0	102	13	0	**115**	0	0	0	0	0	**0**	1	**225**
8:15AM	0	19	26	0	**45**	0	12	21	0	0	**33**	0	0	102	9	0	**111**	0	0	0	0	0	**0**	0	**189**
8:30AM	0	12	15	0	**27**	0	10	8	0	0	**18**	0	1	92	10	0	**103**	0	0	0	0	0	**0**	2	**148**
8:45AM	0	10	14	0	**24**	0	4	10	0	0	**14**	0	0	95	5	0	**100**	1	0	0	0	0	**0**	0	**138**
Hourly Total	0	87	85	0	**172**	0	36	63	0	0	**99**	0	1	391	37	0	**429**	1	0	0	0	0	**0**	3	**700**
4:00PM	0	4	15	0	**19**	0	29	10	0	0	**39**	0	1	228	7	0	**236**	2	0	5	0	0	**5**	2	**299**
4:15PM	0	2	22	0	**24**	0	29	11	0	0	**40**	0	3	209	5	0	**217**	4	0	3	0	0	**3**	4	**284**
4:30PM	0	3	11	0	**14**	0	23	3	0	0	**26**	0	0	154	2	0	**156**	0	0	4	0	0	**4**	2	**200**
4:45PM	0	0	10	0	**10**	0	18	8	0	0	**26**	0	1	208	1	0	**210**	0	0	0	0	0	**0**	3	**246**
Hourly Total	0	9	58	0	**67**	0	99	32	0	0	**131**	0	5	799	15	0	**819**	6	0	12	0	0	**12**	11	**1029**
5:00PM	1	1	15	0	**17**	0	16	8	0	0	**24**	0	1	235	9	0	**245**	0	0	1	0	0	**1**	1	**287**
5:15PM	1	1	13	0	**15**	0	10	2	0	0	**12**	0	0	199	6	0	**205**	0	0	1	0	0	**1**	1	**233**
5:30PM	0	2	6	0	**8**	0	9	4	0	0	**13**	0	0	176	5	0	**181**	0	0	2	0	0	**2**	0	**204**
5:45PM	2	2	7	0	**11**	0	10	5	0	0	**15**	0	0	152	6	0	**158**	0	0	2	0	0	**2**	1	**186**
Hourly Total	4	6	41	0	**51**	0	45	19	0	0	**64**	0	1	762	26	0	**789**	0	0	6	0	0	**6**	3	**910**
Total	4	181	296	0	**481**	0	200	195	0	0	**395**	0	8	2293	111	0	**2412**	7	0	18	0	0	**18**	19	**3306**
% Approach	0.8%	37.6%	61.5%	0%	**-**	-	50.6%	49.4%	0%	0%	**-**	-	0.3%	95.1%	4.6%	0%	**-**	-	0%	100%	0%	0%	**-**	-	-
% Total	0.1%	5.5%	9.0%	0%	**14.5%**	-	6.0%	5.9%	0%	0%	**11.9%**	-	0.2%	69.4%	3.4%	0%	**73.0%**	-	0%	0.5%	0%	0%	**0.5%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	3	175	292	0	**470**	-	190	188	0	0	**378**	-	8	2105	107	0	**2220**	-	0	16	0	0	**16**	-	3084
% Lights	75.0%	96.7%	98.6%	0%	**97.7%**	-	95.0%	96.4%	0%	0%	**95.7%**	-	100%	91.8%	96.4%	0%	**92.0%**	-	0%	88.9%	0%	0%	**88.9%**	-	93.3%
Single-Unit Trucks	1	6	1	0	**8**	-	1	2	0	0	**3**	-	0	81	4	0	**85**	-	0	1	0	0	**1**	-	97
% Single-Unit Trucks	25.0%	3.3%	0.3%	0%	**1.7%**	-	0.5%	1.0%	0%	0%	**0.8%**	-	0%	3.5%	3.6%	0%	**3.5%**	-	0%	5.6%	0%	0%	**5.6%**	-	2.9%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	81	0	0	**81**	-	0	0	0	0	**0**	-	83
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.0%	0%	0%	**0.5%**	-	0%	3.5%	0%	0%	**3.4%**	-	0%	0%	0%	0%	**0%**	-	2.5%
Buses	0	0	3	0	**3**	-	9	3	0	0	**12**	-	0	24	0	0	**24**	-	0	1	0	0	**1**	-	40
% Buses	0%	0%	1.0%	0%	**0.6%**	-	4.5%	1.5%	0%	0%	**3.0%**	-	0%	1.0%	0%	0%	**1.0%**	-	0%	5.6%	0%	0%	**5.6%**	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	19	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Market St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at Market St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

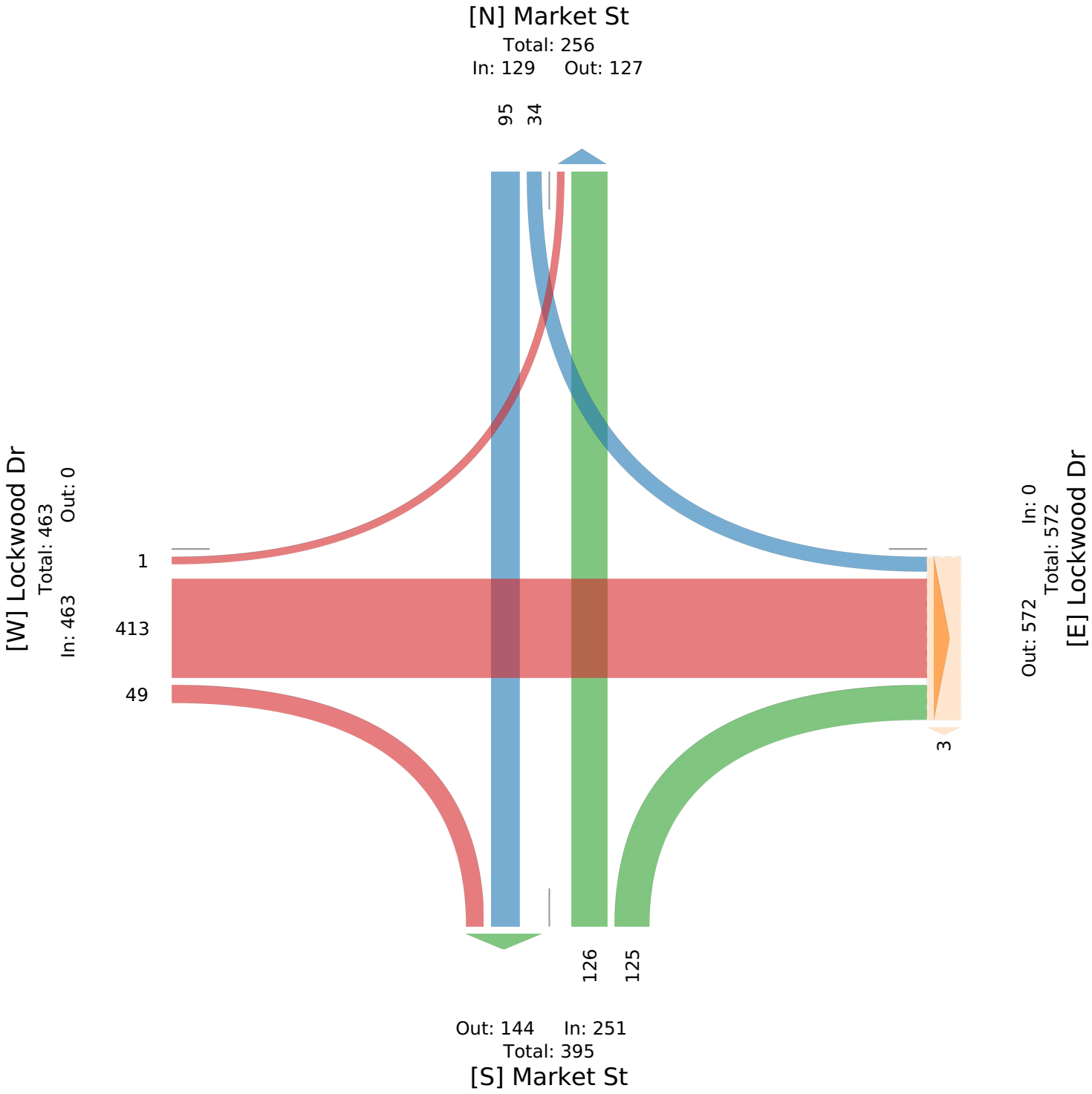
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Market St Northbound						Market St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	0	29	33	0	**62**	0	7	21	0	0	**28**	0	0	107	9	0	**116**	0	0	0	0	0	**0**	0	**206**
7:45AM	0	32	36	0	**68**	0	5	29	0	0	**34**	0	1	102	18	0	**121**	0	0	0	0	0	**0**	2	**223**
8:00AM	0	46	30	0	**76**	0	10	24	0	0	**34**	0	0	102	13	0	**115**	0	0	0	0	0	**0**	1	**225**
8:15AM	0	19	26	0	**45**	0	12	21	0	0	**33**	0	0	102	9	0	**111**	0	0	0	0	0	**0**	0	**189**
Total	0	126	125	0	**251**	0	34	95	0	0	**129**	0	1	413	49	0	**463**	0	0	0	0	0	**0**	3	**843**
% Approach	0%	50.2%	49.8%	0%	**-**	-	26.4%	73.6%	0%	0%	**-**	-	0.2%	89.2%	10.6%	0%	**-**	-	0%	0%	0%	0%	**-**	-	**-**
% Total	0%	14.9%	14.8%	0%	**29.8%**	-	4.0%	11.3%	0%	0%	**15.3%**	-	0.1%	49.0%	5.8%	0%	**54.9%**	-	0%	0%	0%	0%	**0%**	-	**-**
PHF	-	0.685	0.868	-	**0.826**	-	0.708	0.819	-	-	**0.949**	-	0.250	0.965	0.681	-	**0.957**	-	-	-	-	-	**-**	-	0.937
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Lights	0	121	123	0	**244**	-	33	93	0	0	**126**	-	1	363	48	0	**412**	-	0	0	0	0	**0**	-	782
% Lights	0%	96.0%	98.4%	0%	**97.2%**	-	97.1%	97.9%	0%	0%	**97.7%**	-	100%	87.9%	98.0%	0%	**89.0%**	-	0%	0%	0%	0%	**-**	-	92.8%
Single-Unit Trucks	0	5	1	0	**6**	-	0	1	0	0	**1**	-	0	29	1	0	**30**	-	0	0	0	0	**0**	-	37
% Single-Unit Trucks	0%	4.0%	0.8%	0%	**2.4%**	-	0%	1.1%	0%	0%	**0.8%**	-	0%	7.0%	2.0%	0%	**6.5%**	-	0%	0%	0%	0%	**-**	-	4.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	16	0	0	**16**	-	0	0	0	0	**0**	-	16
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	3.9%	0%	0%	**3.5%**	-	0%	0%	0%	0%	**-**	-	1.9%
Buses	0	0	1	0	**1**	-	1	1	0	0	**2**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	8
% Buses	0%	0%	0.8%	0%	**0.4%**	-	2.9%	1.1%	0%	0%	**1.6%**	-	0%	1.2%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Market St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at Market St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

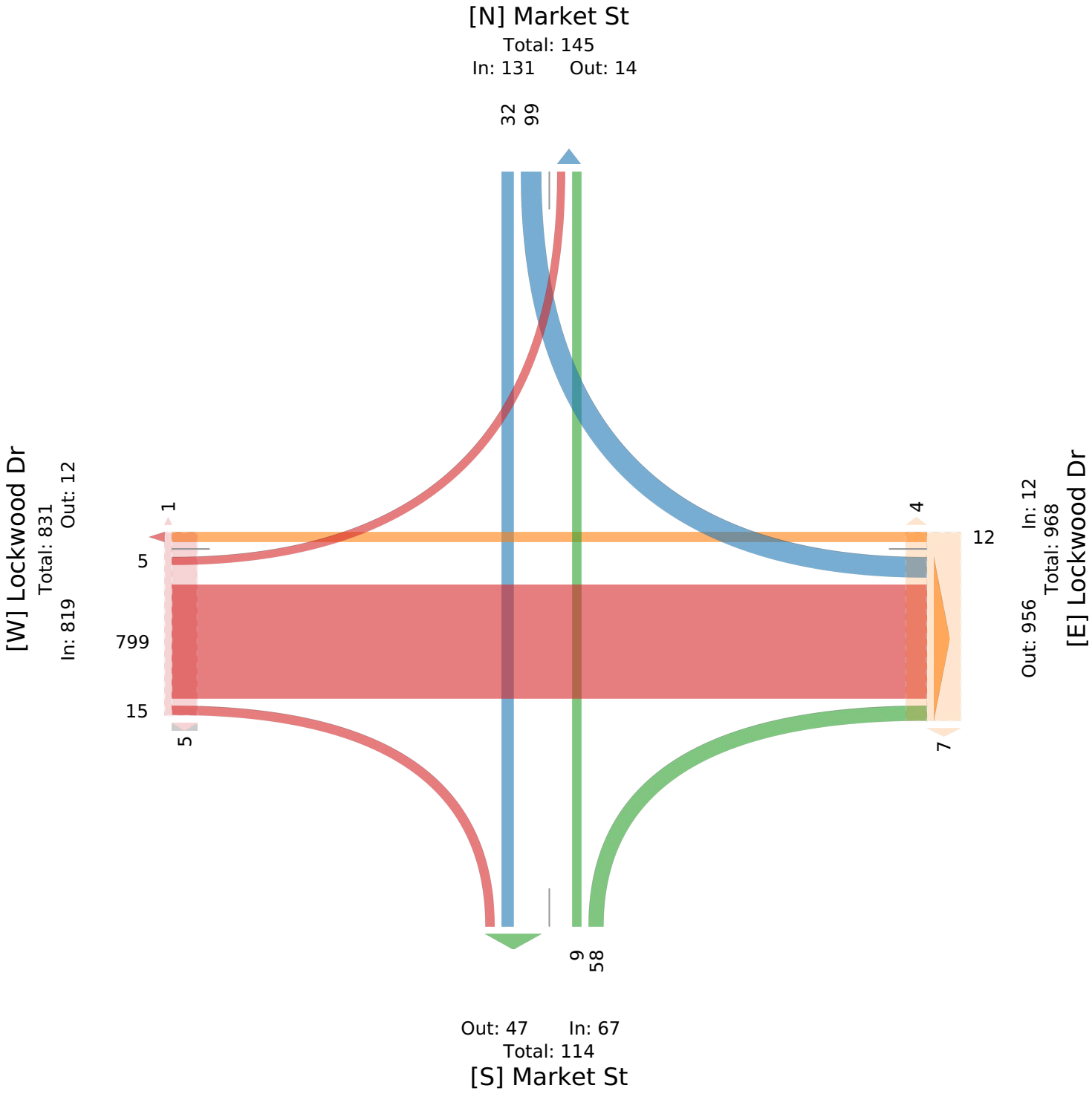
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Market St Northbound						Market St Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	0	4	15	0	**19**	0	29	10	0	0	**39**	0	1	228	7	0	**236**	2	0	5	0	0	**5**	2	**299**
4:15PM	0	2	22	0	**24**	0	29	11	0	0	**40**	0	3	209	5	0	**217**	4	0	3	0	0	**3**	4	**284**
4:30PM	0	3	11	0	**14**	0	23	3	0	0	**26**	0	0	154	2	0	**156**	0	0	4	0	0	**4**	2	**200**
4:45PM	0	0	10	0	**10**	0	18	8	0	0	**26**	0	1	208	1	0	**210**	0	0	0	0	0	**0**	3	**246**
Total	0	9	58	0	**67**	0	99	32	0	0	**131**	0	5	799	15	0	**819**	6	0	12	0	0	**12**	11	**1029**
% Approach	0%	13.4%	86.6%	0%	**-**	-	75.6%	24.4%	0%	0%	**-**	-	0.6%	97.6%	1.8%	0%	**-**	-	0%	100%	0%	0%	**-**	-	-
% Total	0%	0.9%	5.6%	0%	**6.5%**	-	9.6%	3.1%	0%	0%	**12.7%**	-	0.5%	77.6%	1.5%	0%	**79.6%**	-	0%	1.2%	0%	0%	**1.2%**	-	-
PHF	-	0.563	0.659	-	**0.698**	-	0.853	0.727	-	-	**0.819**	-	0.417	0.876	0.536	-	**0.868**	-	-	0.600	-	-	**0.600**	-	0.860
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	0	9	58	0	**67**	-	94	32	0	0	**126**	-	5	747	15	0	**767**	-	0	10	0	0	**10**	-	970
% Lights	0%	100%	100%	0%	**100%**	-	94.9%	100%	0%	0%	**96.2%**	-	100%	93.5%	100%	0%	**93.7%**	-	0%	83.3%	0%	0%	**83.3%**	-	94.3%
Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	13	0	0	**13**	-	0	1	0	0	**1**	-	14
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	0%	0%	**1.6%**	-	0%	8.3%	0%	0%	**8.3%**	-	1.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	28	0	0	**28**	-	0	0	0	0	**0**	-	28
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	3.5%	0%	0%	**3.4%**	-	0%	0%	0%	0%	**0%**	-	2.7%
Buses	0	0	0	0	**0**	-	5	0	0	0	**5**	-	0	9	0	0	**9**	-	0	1	0	0	**1**	-	15
% Buses	0%	0%	0%	0%	**0%**	-	5.1%	0%	0%	0%	**3.8%**	-	0%	1.1%	0%	0%	**1.1%**	-	0%	8.3%	0%	0%	**8.3%**	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Market St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867357, Location: 29.772663, -95.315123

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 EBFR - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

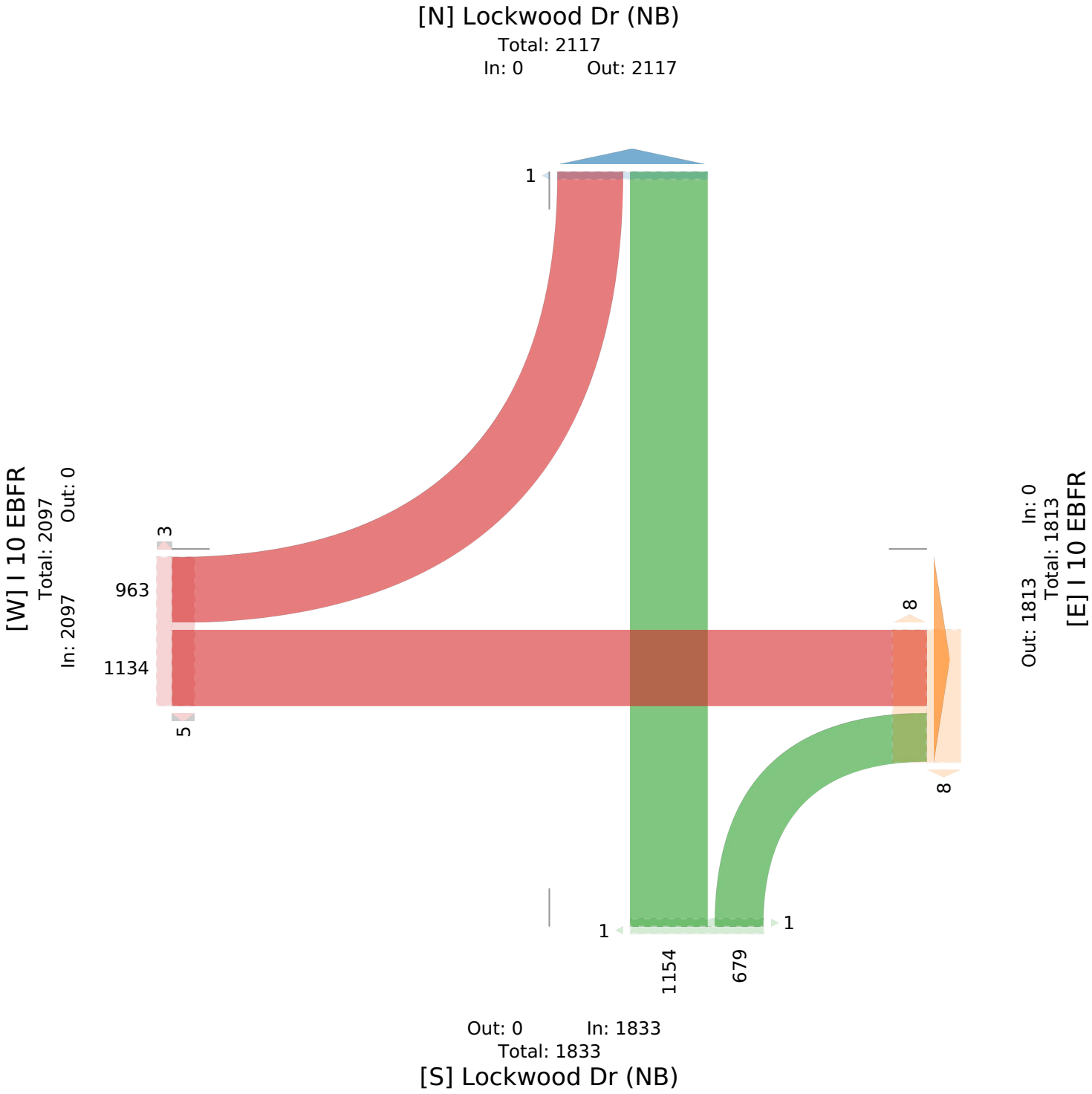
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (NB)						Lockwood Dr (NB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	0	51	23	0	**74**	0	0	0	0	0	**0**	0	20	55	0	0	**75**	0	0	0	0	0	**0**	0	**149**
7:15AM	0	69	25	0	**94**	0	0	0	0	0	**0**	0	35	63	0	0	**98**	0	0	0	0	0	**0**	1	**192**
7:30AM	0	76	48	0	**124**	0	0	0	0	0	**0**	0	31	70	0	0	**101**	0	0	0	0	0	**0**	0	**225**
7:45AM	0	83	54	0	**137**	0	0	0	0	0	**0**	0	51	77	0	0	**128**	0	0	0	0	0	**0**	2	**265**
Hourly Total	0	279	150	0	**429**	0	0	0	0	0	**0**	0	137	265	0	0	**402**	0	0	0	0	0	**0**	3	**831**
8:00AM	0	90	82	0	**172**	0	0	0	0	0	**0**	0	48	81	0	0	**129**	0	0	0	0	0	**0**	1	**301**
8:15AM	0	88	41	0	**129**	0	0	0	0	0	**0**	0	53	55	0	0	**108**	0	0	0	0	0	**0**	1	**237**
8:30AM	0	76	37	0	**113**	0	0	0	0	0	**0**	0	53	52	0	0	**105**	0	0	0	0	0	**0**	0	**218**
8:45AM	0	51	30	0	**81**	0	0	0	0	0	**0**	1	35	51	0	0	**86**	2	0	0	0	0	**0**	1	**167**
Hourly Total	0	305	190	0	**495**	0	0	0	0	0	**0**	1	189	239	0	0	**428**	2	0	0	0	0	**0**	3	**923**
4:00PM	0	103	50	0	**153**	0	0	0	0	0	**0**	0	72	82	0	0	**154**	0	0	0	0	0	**0**	1	**307**
4:15PM	0	90	58	0	**148**	2	0	0	0	0	**0**	0	90	93	0	0	**183**	1	0	0	0	0	**0**	1	**331**
4:30PM	0	64	48	0	**112**	0	0	0	0	0	**0**	0	104	79	0	0	**183**	4	0	0	0	0	**0**	0	**295**
4:45PM	0	59	39	0	**98**	0	0	0	0	0	**0**	0	72	69	0	0	**141**	1	0	0	0	0	**0**	3	**239**
Hourly Total	0	316	195	0	**511**	2	0	0	0	0	**0**	0	338	323	0	0	**661**	6	0	0	0	0	**0**	5	**1172**
5:00PM	0	62	36	0	**98**	0	0	0	0	0	**0**	0	66	79	0	0	**145**	0	0	0	0	0	**0**	3	**243**
5:15PM	0	63	32	0	**95**	0	0	0	0	0	**0**	0	74	89	0	0	**163**	0	0	0	0	0	**0**	1	**258**
5:30PM	0	55	40	0	**95**	0	0	0	0	0	**0**	0	76	74	0	0	**150**	0	0	0	0	0	**0**	0	**245**
5:45PM	0	74	36	0	**110**	0	0	0	0	0	**0**	0	83	65	0	0	**148**	0	0	0	0	0	**0**	1	**258**
Hourly Total	0	254	144	0	**398**	0	0	0	0	0	**0**	0	299	307	0	0	**606**	0	0	0	0	0	**0**	5	**1004**
Total	0	1154	679	0	**1833**	2	0	0	0	0	**0**	1	963	1134	0	0	**2097**	8	0	0	0	0	**0**	16	**3930**
% Approach	0%	63.0%	37.0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	45.9%	54.1%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	29.4%	17.3%	0%	**46.6%**	-	0%	0%	0%	0%	**0%**	-	24.5%	28.9%	0%	0%	**53.4%**	-	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1	3	0	0	**4**	-	0	0	0	0	**0**	-	5
% Motorcycles	0%	0%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0.1%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	1046	607	0	**1653**	-	0	0	0	0	**0**	-	923	1052	0	0	**1975**	-	0	0	0	0	**0**	-	3628
% Lights	0%	90.6%	89.4%	0%	**90.2%**	-	0%	0%	0%	0%	**-**	-	95.8%	92.8%	0%	0%	**94.2%**	-	0%	0%	0%	0%	**-**	-	92.3%
Single-Unit Trucks	0	56	17	0	**73**	-	0	0	0	0	**0**	-	11	21	0	0	**32**	-	0	0	0	0	**0**	-	105
% Single-Unit Trucks	0%	4.9%	2.5%	0%	**4.0%**	-	0%	0%	0%	0%	**-**	-	1.1%	1.9%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**-**	-	2.7%
Articulated Trucks	0	24	45	0	**69**	-	0	0	0	0	**0**	-	7	21	0	0	**28**	-	0	0	0	0	**0**	-	97
% Articulated Trucks	0%	2.1%	6.6%	0%	**3.8%**	-	0%	0%	0%	0%	**-**	-	0.7%	1.9%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**-**	-	2.5%
Buses	0	28	9	0	**37**	-	0	0	0	0	**0**	-	21	37	0	0	**58**	-	0	0	0	0	**0**	-	95
% Buses	0%	2.4%	1.3%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	2.2%	3.3%	0%	0%	**2.8%**	-	0%	0%	0%	0%	**-**	-	2.4%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	8	-	-	-	-	-	16	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 EBFR - TMC
Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 EBFR - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

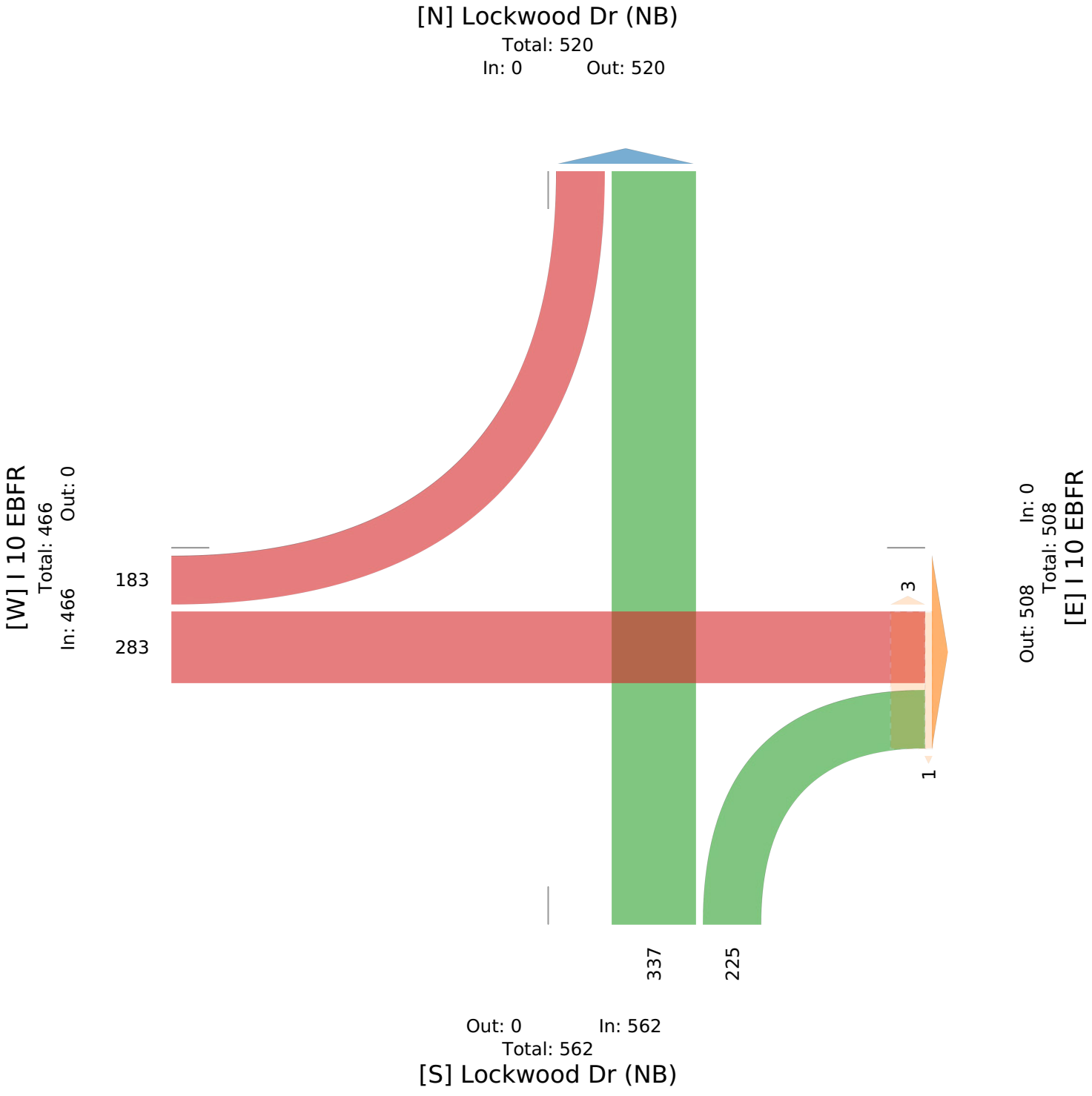
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (NB)						Lockwood Dr (NB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:30AM	0	76	48	0	**124**	0	0	0	0	0	**0**	0	31	70	0	0	**101**	0	0	0	0	0	**0**	0	**225**
7:45AM	0	83	54	0	**137**	0	0	0	0	0	**0**	0	51	77	0	0	**128**	0	0	0	0	0	**0**	2	**265**
8:00AM	0	90	82	0	**172**	0	0	0	0	0	**0**	0	48	81	0	0	**129**	0	0	0	0	0	**0**	1	**301**
8:15AM	0	88	41	0	**129**	0	0	0	0	0	**0**	0	53	55	0	0	**108**	0	0	0	0	0	**0**	1	**237**
Total	0	337	225	0	**562**	0	0	0	0	0	**0**	0	183	283	0	0	**466**	0	0	0	0	0	**0**	4	**1028**
% Approach	0%	60.0%	40.0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	39.3%	60.7%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	32.8%	21.9%	0%	**54.7%**	-	0%	0%	0%	0%	**0%**	-	17.8%	27.5%	0%	0%	**45.3%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.936	0.686	-	**0.817**	-	-	-	-	-	**-**	-	0.863	0.873	-	-	**0.903**	-	-	-	-	-	**-**	-	0.854
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Lights	0	306	203	0	**509**	-	0	0	0	0	**0**	-	176	260	0	0	**436**	-	0	0	0	0	**0**	-	945
% Lights	0%	90.8%	90.2%	0%	**90.6%**	-	0%	0%	0%	0%	**-**	-	96.2%	91.9%	0%	0%	**93.6%**	-	0%	0%	0%	0%	**-**	-	91.9%
Single-Unit Trucks	0	19	4	0	**23**	-	0	0	0	0	**0**	-	3	9	0	0	**12**	-	0	0	0	0	**0**	-	35
% Single-Unit Trucks	0%	5.6%	1.8%	0%	**4.1%**	-	0%	0%	0%	0%	**-**	-	1.6%	3.2%	0%	0%	**2.6%**	-	0%	0%	0%	0%	**-**	-	3.4%
Articulated Trucks	0	5	16	0	**21**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	26
% Articulated Trucks	0%	1.5%	7.1%	0%	**3.7%**	-	0%	0%	0%	0%	**-**	-	0%	1.8%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	2.5%
Buses	0	7	2	0	**9**	-	0	0	0	0	**0**	-	4	9	0	0	**13**	-	0	0	0	0	**0**	-	22
% Buses	0%	2.1%	0.9%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	2.2%	3.2%	0%	0%	**2.8%**	-	0%	0%	0%	0%	**-**	-	2.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 EBFR - TMC
Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 EBFR - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (NB)						Lockwood Dr (NB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 4:00PM	0	103	50	0	**153**	0	0	0	0	0	**0**	0	72	82	0	0	**154**	0	0	0	0	0	**0**	1	**307**
4:15PM	0	90	58	0	**148**	2	0	0	0	0	**0**	0	90	93	0	0	**183**	1	0	0	0	0	**0**	1	**331**
4:30PM	0	64	48	0	**112**	0	0	0	0	0	**0**	0	104	79	0	0	**183**	4	0	0	0	0	**0**	0	**295**
4:45PM	0	59	39	0	**98**	0	0	0	0	0	**0**	0	72	69	0	0	**141**	1	0	0	0	0	**0**	3	**239**
Total	0	316	195	0	**511**	2	0	0	0	0	**0**	0	338	323	0	0	**661**	6	0	0	0	0	**0**	5	**1172**
% Approach	0%	61.8%	38.2%	0%	**-**	-	0%	0%	0%	0%	**-**	-	51.1%	48.9%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	27.0%	16.6%	0%	**43.6%**	-	0%	0%	0%	0%	**0%**	-	28.8%	27.6%	0%	0%	**56.4%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.767	0.841	-	**0.835**	-	-	-	-	-	**-**	-	0.813	0.868	-	-	**0.903**	-	-	-	-	-	**-**	-	0.885
Motorcycles	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0.5%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0.2%
Lights	0	299	177	0	**476**	-	0	0	0	0	**0**	-	324	303	0	0	**627**	-	0	0	0	0	**0**	-	1103
% Lights	0%	94.6%	90.8%	0%	**93.2%**	-	0%	0%	0%	0%	**-**	-	95.9%	93.8%	0%	0%	**94.9%**	-	0%	0%	0%	0%	**-**	-	94.1%
Single-Unit Trucks	0	6	4	0	**10**	-	0	0	0	0	**0**	-	2	4	0	0	**6**	-	0	0	0	0	**0**	-	16
% Single-Unit Trucks	0%	1.9%	2.1%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	0.6%	1.2%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	1.4%
Articulated Trucks	0	4	8	0	**12**	-	0	0	0	0	**0**	-	5	5	0	0	**10**	-	0	0	0	0	**0**	-	22
% Articulated Trucks	0%	1.3%	4.1%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	1.5%	1.5%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**-**	-	1.9%
Buses	0	7	5	0	**12**	-	0	0	0	0	**0**	-	7	10	0	0	**17**	-	0	0	0	0	**0**	-	29
% Buses	0%	2.2%	2.6%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	2.1%	3.1%	0%	0%	**2.6%**	-	0%	0%	0%	0%	**-**	-	2.5%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 EBFR - TMC
Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867355, Location: 29.773873, -95.315208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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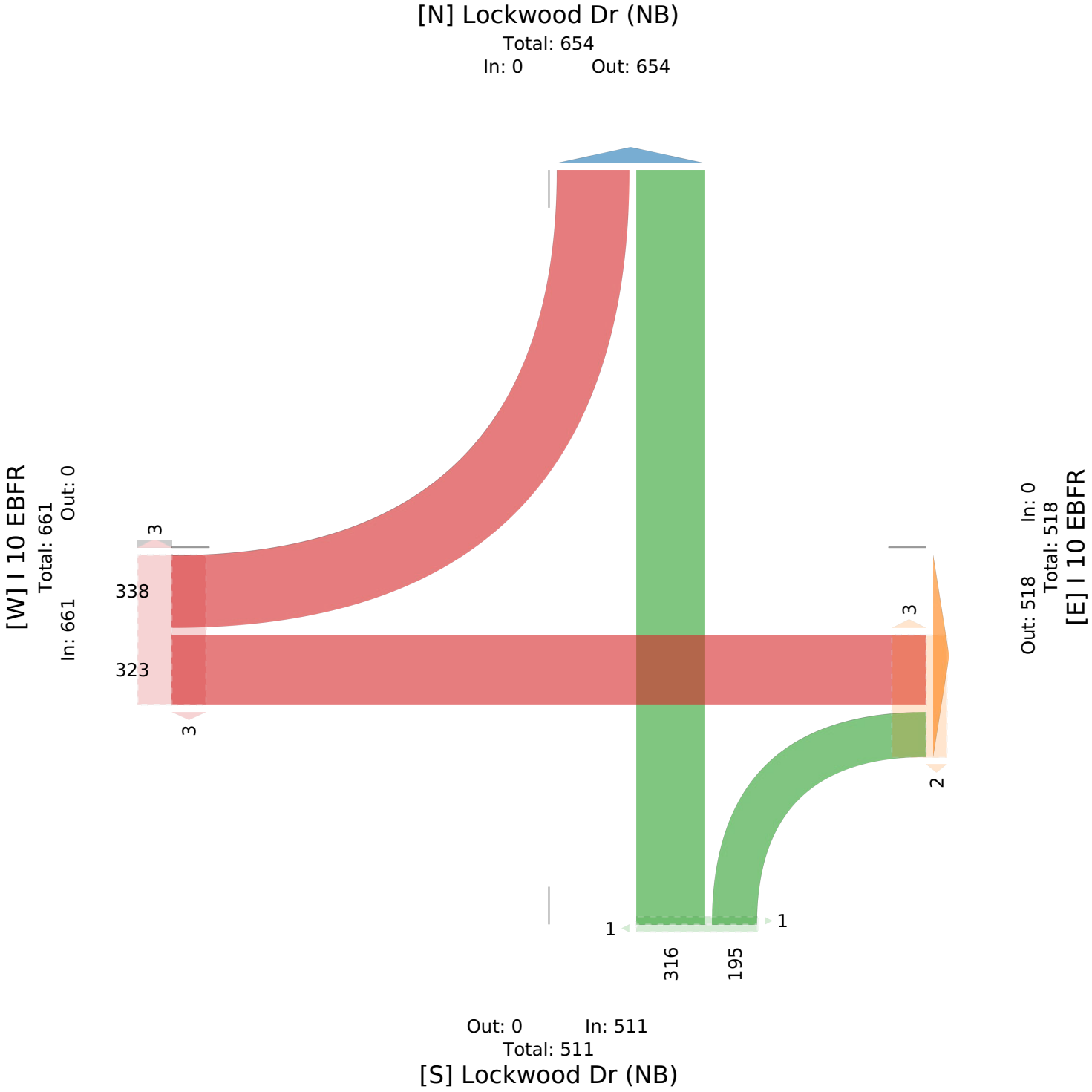


Lockwood Dr (SB) at I 10 EBFR - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

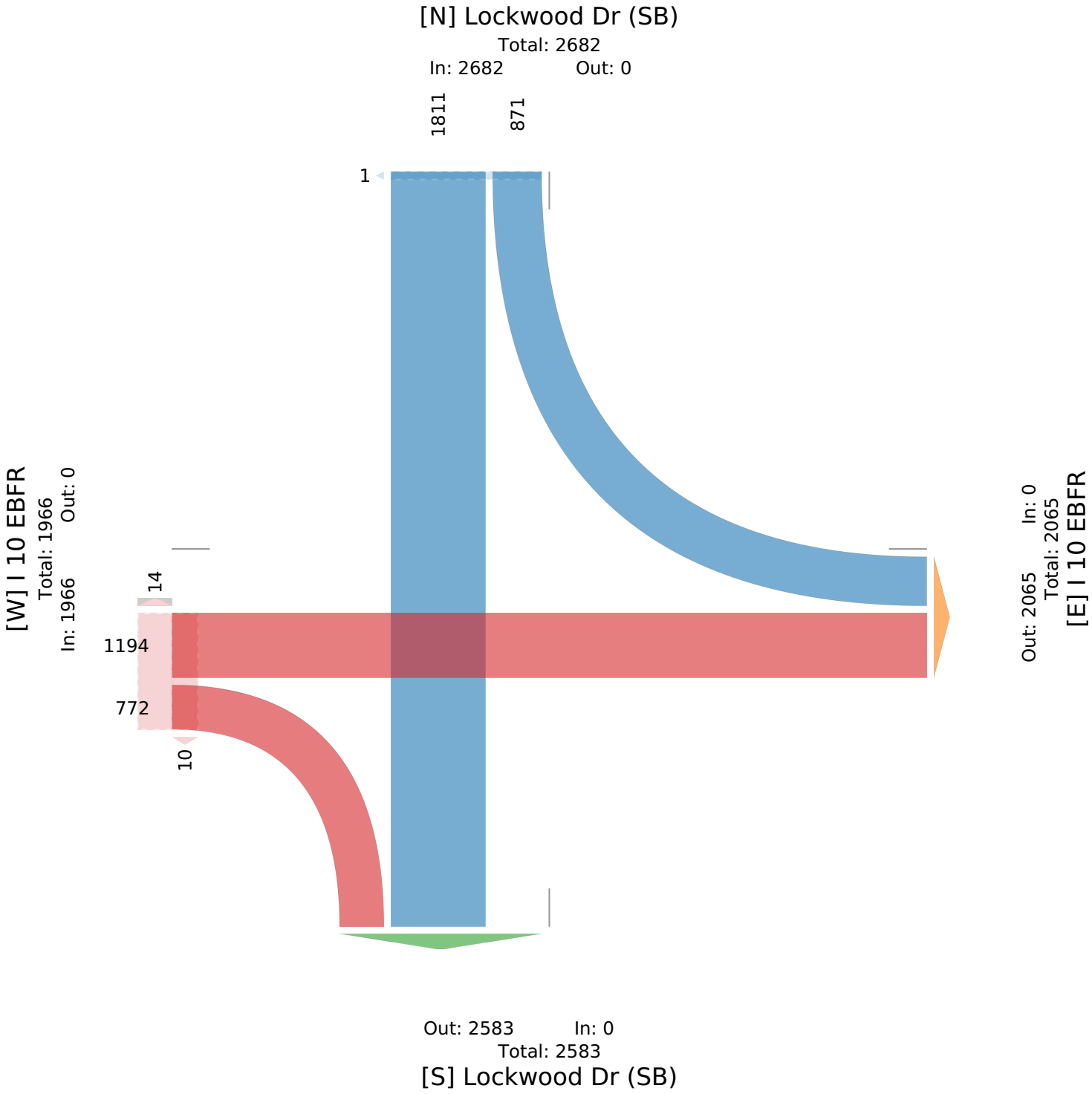
Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	0	0	0	0	**0**	0	47	76	0	0	**123**	0	0	27	57	0	**84**	2	0	0	0	0	**0**	0	**207**
7:15AM	0	0	0	0	**0**	0	48	123	0	0	**171**	0	0	49	58	0	**107**	1	0	0	0	0	**0**	0	**278**
7:30AM	0	0	0	0	**0**	0	50	114	0	0	**164**	0	0	46	72	0	**118**	0	0	0	0	0	**0**	0	**282**
7:45AM	0	0	0	0	**0**	0	63	205	0	0	**268**	0	0	64	77	0	**141**	0	0	0	0	0	**0**	0	**409**
Hourly Total	0	0	0	0	**0**	0	208	518	0	0	**726**	0	0	186	264	0	**450**	3	0	0	0	0	**0**	0	**1176**
8:00AM	0	0	0	0	**0**	0	63	166	0	0	**229**	0	0	66	52	0	**118**	0	0	0	0	0	**0**	0	**347**
8:15AM	0	0	0	0	**0**	0	42	160	0	0	**202**	0	0	60	62	0	**122**	1	0	0	0	0	**0**	0	**324**
8:30AM	0	0	0	0	**0**	0	40	142	0	0	**182**	0	0	64	44	0	**108**	1	0	0	0	0	**0**	0	**290**
8:45AM	0	0	0	0	**0**	0	45	92	0	0	**137**	0	0	41	55	0	**96**	0	0	0	0	0	**0**	0	**233**
Hourly Total	0	0	0	0	**0**	0	190	560	0	0	**750**	0	0	231	213	0	**444**	2	0	0	0	0	**0**	0	**1194**
4:00PM	0	0	0	0	**0**	0	61	133	0	0	**194**	0	0	93	45	0	**138**	2	0	0	0	0	**0**	0	**332**
4:15PM	0	0	0	0	**0**	0	63	96	0	0	**159**	0	0	116	38	0	**154**	5	0	0	0	0	**0**	0	**313**
4:30PM	0	0	0	0	**0**	0	57	95	0	0	**152**	0	0	119	48	0	**167**	4	0	0	0	0	**0**	0	**319**
4:45PM	0	0	0	0	**0**	0	58	84	0	0	**142**	1	0	82	36	0	**118**	2	0	0	0	0	**0**	0	**260**
Hourly Total	0	0	0	0	**0**	0	239	408	0	0	**647**	1	0	410	167	0	**577**	13	0	0	0	0	**0**	0	**1224**
5:00PM	0	0	0	0	**0**	0	54	80	0	0	**134**	0	0	89	35	0	**124**	3	0	0	0	0	**0**	0	**258**
5:15PM	0	0	0	0	**0**	0	67	78	0	0	**145**	0	0	100	33	0	**133**	2	0	0	0	0	**0**	0	**278**
5:30PM	0	0	0	0	**0**	0	59	77	0	0	**136**	0	0	85	32	0	**117**	1	0	0	0	0	**0**	0	**253**
5:45PM	0	0	0	0	**0**	0	54	90	0	0	**144**	0	0	93	28	0	**121**	0	0	0	0	0	**0**	0	**265**
Hourly Total	0	0	0	0	**0**	0	234	325	0	0	**559**	0	0	367	128	0	**495**	6	0	0	0	0	**0**	0	**1054**
Total	0	0	0	0	**0**	0	871	1811	0	0	**2682**	1	0	1194	772	0	**1966**	24	0	0	0	0	**0**	0	**4648**
% Approach	0%	0%	0%	0%	**-**	-	32.5%	67.5%	0%	0%	**-**	-	0%	60.7%	39.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	18.7%	39.0%	0%	0%	**57.7%**	-	0%	25.7%	16.6%	0%	**42.3%**	-	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	0	0	0	**0**	-	3	1	0	0	**4**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	5
% Motorcycles	0%	0%	0%	0%	**-**	-	0.3%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	0	0	0	**0**	-	803	1693	0	0	**2496**	-	0	1137	691	0	**1828**	-	0	0	0	0	**0**	-	4324
% Lights	0%	0%	0%	0%	**-**	-	92.2%	93.5%	0%	0%	**93.1%**	-	0%	95.2%	89.5%	0%	**93.0%**	-	0%	0%	0%	0%	**-**	-	93.0%
Single-Unit Trucks	0	0	0	0	**0**	-	21	55	0	0	**76**	-	0	15	36	0	**51**	-	0	0	0	0	**0**	-	127
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	2.4%	3.0%	0%	0%	**2.8%**	-	0%	1.3%	4.7%	0%	**2.6%**	-	0%	0%	0%	0%	**-**	-	2.7%
Articulated Trucks	0	0	0	0	**0**	-	20	33	0	0	**53**	-	0	9	38	0	**47**	-	0	0	0	0	**0**	-	100
% Articulated Trucks	0%	0%	0%	0%	**-**	-	2.3%	1.8%	0%	0%	**2.0%**	-	0%	0.8%	4.9%	0%	**2.4%**	-	0%	0%	0%	0%	**-**	-	2.2%
Buses	0	0	0	0	**0**	-	24	29	0	0	**53**	-	0	32	7	0	**39**	-	0	0	0	0	**0**	-	92
% Buses	0%	0%	0%	0%	**-**	-	2.8%	1.6%	0%	0%	**2.0%**	-	0%	2.7%	0.9%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	24	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 EBFR - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at I 10 EBFR - TMC

Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

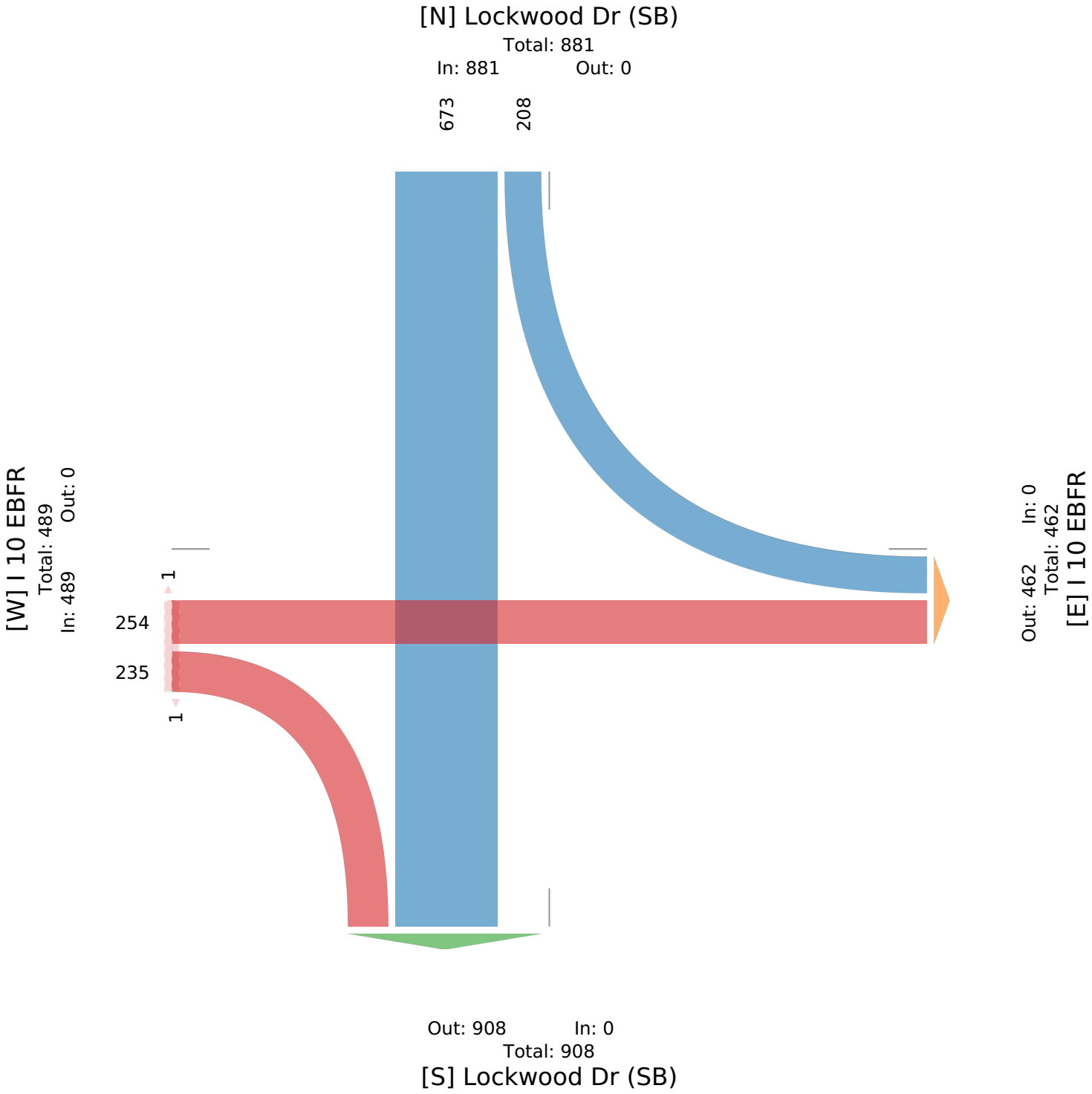
Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 7:45AM	0	0	0	0	**0**	0	63	205	0	0	**268**	0	0	64	77	0	**141**	0	0	0	0	0	**0**	0	**409**
8:00AM	0	0	0	0	**0**	0	63	166	0	0	**229**	0	0	66	52	0	**118**	0	0	0	0	0	**0**	0	**347**
8:15AM	0	0	0	0	**0**	0	42	160	0	0	**202**	0	0	60	62	0	**122**	1	0	0	0	0	**0**	0	**324**
8:30AM	0	0	0	0	**0**	0	40	142	0	0	**182**	0	0	64	44	0	**108**	1	0	0	0	0	**0**	0	**290**
Total	0	0	0	0	**0**	0	208	673	0	0	**881**	0	0	254	235	0	**489**	2	0	0	0	0	**0**	0	**1370**
% Approach	0%	0%	0%	0%	**-**	-	23.6%	76.4%	0%	0%	**-**	-	0%	51.9%	48.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	15.2%	49.1%	0%	0%	**64.3%**	-	0%	18.5%	17.2%	0%	**35.7%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	-	-	-	**-**	-	0.825	0.821	-	-	**0.822**	-	-	0.962	0.763	-	**0.867**	-	-	-	-	-	**-**	-	0.837
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	0	0	0	**0**	-	190	628	0	0	**818**	-	0	240	207	0	**447**	-	0	0	0	0	**0**	-	1265
% Lights	0%	0%	0%	0%	**-**	-	91.3%	93.3%	0%	0%	**92.8%**	-	0%	94.5%	88.1%	0%	**91.4%**	-	0%	0%	0%	0%	**-**	-	92.3%
Single-Unit Trucks	0	0	0	0	**0**	-	7	22	0	0	**29**	-	0	5	8	0	**13**	-	0	0	0	0	**0**	-	42
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	3.4%	3.3%	0%	0%	**3.3%**	-	0%	2.0%	3.4%	0%	**2.7%**	-	0%	0%	0%	0%	**-**	-	3.1%
Articulated Trucks	0	0	0	0	**0**	-	6	15	0	0	**21**	-	0	0	16	0	**16**	-	0	0	0	0	**0**	-	37
% Articulated Trucks	0%	0%	0%	0%	**-**	-	2.9%	2.2%	0%	0%	**2.4%**	-	0%	0%	6.8%	0%	**3.3%**	-	0%	0%	0%	0%	**-**	-	2.7%
Buses	0	0	0	0	**0**	-	5	7	0	0	**12**	-	0	9	4	0	**13**	-	0	0	0	0	**0**	-	25
% Buses	0%	0%	0%	0%	**-**	-	2.4%	1.0%	0%	0%	**1.4%**	-	0%	3.5%	1.7%	0%	**2.7%**	-	0%	0%	0%	0%	**-**	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 EBFR - TMC

Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at I 10 EBFR - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 EBFR						I 10 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 4:00PM	0	0	0	0	**0**	0	61	133	0	0	**194**	0	0	93	45	0	**138**	2	0	0	0	0	**0**	0	**332**
4:15PM	0	0	0	0	**0**	0	63	96	0	0	**159**	0	0	116	38	0	**154**	5	0	0	0	0	**0**	0	**313**
4:30PM	0	0	0	0	**0**	0	57	95	0	0	**152**	0	0	119	48	0	**167**	4	0	0	0	0	**0**	0	**319**
4:45PM	0	0	0	0	**0**	0	58	84	0	0	**142**	1	0	82	36	0	**118**	2	0	0	0	0	**0**	0	**260**
Total	0	0	0	0	**0**	0	239	408	0	0	**647**	1	0	410	167	0	**577**	13	0	0	0	0	**0**	0	**1224**
% Approach	0%	0%	0%	0%	**-**	-	36.9%	63.1%	0%	0%	**-**	-	0%	71.1%	28.9%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	19.5%	33.3%	0%	0%	**52.9%**	-	0%	33.5%	13.6%	0%	**47.1%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	-	-	-	**-**	-	0.948	0.767	-	-	**0.834**	-	-	0.861	0.870	-	**0.864**	-	-	-	-	-	**-**	-	0.922
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	0.4%	0%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	0	0	0	**0**	-	222	382	0	0	**604**	-	0	391	151	0	**542**	-	0	0	0	0	**0**	-	1146
% Lights	0%	0%	0%	0%	**-**	-	92.9%	93.6%	0%	0%	**93.4%**	-	0%	95.4%	90.4%	0%	**93.9%**	-	0%	0%	0%	0%	**-**	-	93.6%
Single-Unit Trucks	0	0	0	0	**0**	-	3	14	0	0	**17**	-	0	3	9	0	**12**	-	0	0	0	0	**0**	-	29
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	1.3%	3.4%	0%	0%	**2.6%**	-	0%	0.7%	5.4%	0%	**2.1%**	-	0%	0%	0%	0%	**-**	-	2.4%
Articulated Trucks	0	0	0	0	**0**	-	6	4	0	0	**10**	-	0	6	7	0	**13**	-	0	0	0	0	**0**	-	23
% Articulated Trucks	0%	0%	0%	0%	**-**	-	2.5%	1.0%	0%	0%	**1.5%**	-	0%	1.5%	4.2%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	1.9%
Buses	0	0	0	0	**0**	-	7	8	0	0	**15**	-	0	10	0	0	**10**	-	0	0	0	0	**0**	-	25
% Buses	0%	0%	0%	0%	**-**	-	2.9%	2.0%	0%	0%	**2.3%**	-	0%	2.4%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**-**	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	13	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 EBFR - TMC
Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867358, Location: 29.773835, -95.315584

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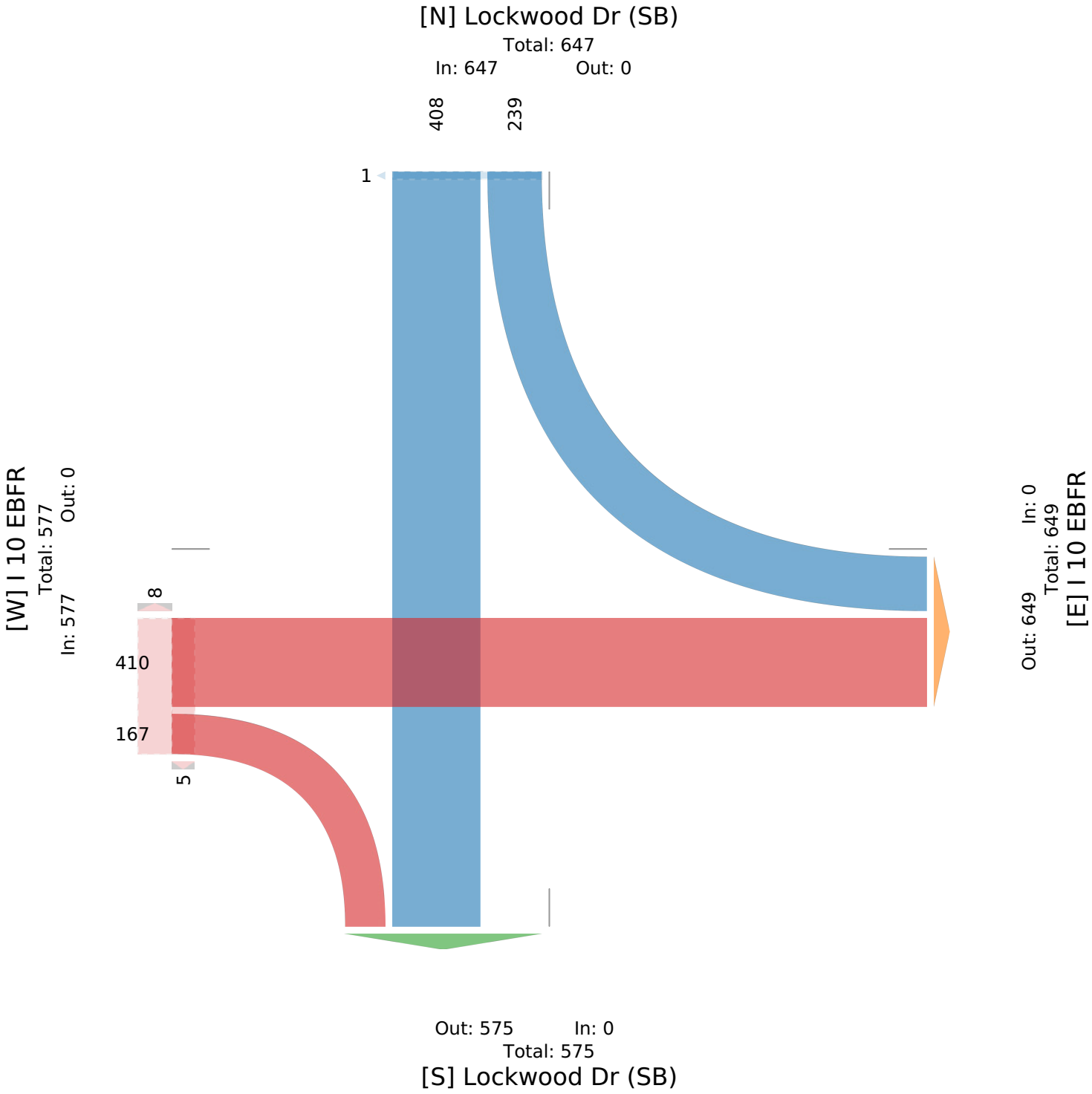

Lockwood Dr (SB) at I 10 WBFR - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 WBFR						I 10 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	0	0	0	0	**0**	0	0	77	28	0	**105**	1	0	0	0	0	**0**	2	47	59	0	0	**106**	0	**211**
7:15AM	0	0	0	0	**0**	0	0	101	32	0	**133**	0	0	0	0	0	**0**	1	70	89	0	0	**159**	0	**292**
7:30AM	0	0	0	0	**0**	0	0	109	34	0	**143**	0	0	0	0	0	**0**	0	55	108	0	0	**163**	0	**306**
7:45AM	0	0	0	0	**0**	0	0	140	28	0	**168**	0	0	0	0	0	**0**	0	125	116	0	0	**241**	0	**409**
Hourly Total	0	0	0	0	**0**	0	0	427	122	0	**549**	1	0	0	0	0	**0**	3	297	372	0	0	**669**	0	**1218**
8:00AM	0	0	0	0	**0**	0	0	121	23	0	**144**	0	0	0	0	0	**0**	0	102	101	0	0	**203**	0	**347**
8:15AM	0	0	0	0	**0**	0	0	124	31	0	**155**	0	0	0	0	0	**0**	1	79	95	0	0	**174**	0	**329**
8:30AM	0	0	0	0	**0**	0	0	99	27	0	**126**	0	0	0	0	0	**0**	1	75	75	0	0	**150**	0	**276**
8:45AM	0	0	0	0	**0**	0	0	86	31	0	**117**	0	0	0	0	0	**0**	0	50	59	0	0	**109**	0	**226**
Hourly Total	0	0	0	0	**0**	0	0	430	112	0	**542**	0	0	0	0	0	**0**	2	306	330	0	0	**636**	0	**1178**
4:00PM	0	0	0	0	**0**	0	0	147	35	0	**182**	0	0	0	0	0	**0**	3	45	82	0	0	**127**	0	**309**
4:15PM	0	0	0	0	**0**	0	0	126	37	0	**163**	0	0	0	0	0	**0**	5	32	91	0	0	**123**	0	**286**
4:30PM	0	0	0	0	**0**	0	0	103	36	0	**139**	0	0	0	0	0	**0**	5	47	78	0	0	**125**	0	**264**
4:45PM	0	0	0	0	**0**	0	0	101	40	0	**141**	0	0	0	0	0	**0**	3	40	69	0	0	**109**	0	**250**
Hourly Total	0	0	0	0	**0**	0	0	477	148	0	**625**	0	0	0	0	0	**0**	16	164	320	0	0	**484**	0	**1109**
5:00PM	0	0	0	0	**0**	0	0	99	33	0	**132**	1	0	0	0	0	**0**	3	33	65	0	0	**98**	0	**230**
5:15PM	0	0	0	0	**0**	0	0	108	41	0	**149**	0	0	0	0	0	**0**	2	32	75	0	0	**107**	0	**256**
5:30PM	0	0	0	0	**0**	0	0	93	28	0	**121**	0	0	0	0	0	**0**	1	42	87	0	0	**129**	0	**250**
5:45PM	0	0	0	0	**0**	0	0	99	36	0	**135**	0	0	0	0	0	**0**	0	43	78	0	0	**121**	0	**256**
Hourly Total	0	0	0	0	**0**	0	0	399	138	0	**537**	1	0	0	0	0	**0**	6	150	305	0	0	**455**	0	**992**
Total	0	0	0	0	**0**	0	0	1733	520	0	**2253**	2	0	0	0	0	**0**	27	917	1327	0	0	**2244**	0	**4497**
% Approach	0%	0%	0%	0%	**-**	-	0%	76.9%	23.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	40.9%	59.1%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0%	38.5%	11.6%	0%	**50.1%**	-	0%	0%	0%	0%	**0%**	-	20.4%	29.5%	0%	0%	**49.9%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	4
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**-**	-	0.1%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	0	**0**	-	0	1627	478	0	**2105**	-	0	0	0	0	**0**	-	841	1254	0	0	**2095**	-	4200
% Lights	0%	0%	0%	0%	**-**	-	0%	93.9%	91.9%	0%	**93.4%**	-	0%	0%	0%	0%	**-**	-	91.7%	94.5%	0%	0%	**93.4%**	-	93.4%
Single-Unit Trucks	0	0	0	0	**0**	-	0	33	11	0	**44**	-	0	0	0	0	**0**	-	37	46	0	0	**83**	-	127
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	1.9%	2.1%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	4.0%	3.5%	0%	0%	**3.7%**	-	2.8%
Articulated Trucks	0	0	0	0	**0**	-	0	26	9	0	**35**	-	0	0	0	0	**0**	-	29	22	0	0	**51**	-	86
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	1.5%	1.7%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	3.2%	1.7%	0%	0%	**2.3%**	-	1.9%
Buses	0	0	0	0	**0**	-	0	44	22	0	**66**	-	0	0	0	0	**0**	-	9	5	0	0	**14**	-	80
% Buses	0%	0%	0%	0%	**-**	-	0%	2.5%	4.2%	0%	**2.9%**	-	0%	0%	0%	0%	**-**	-	1.0%	0.4%	0%	0%	**0.6%**	-	1.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	27	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 WBFR - TMC
Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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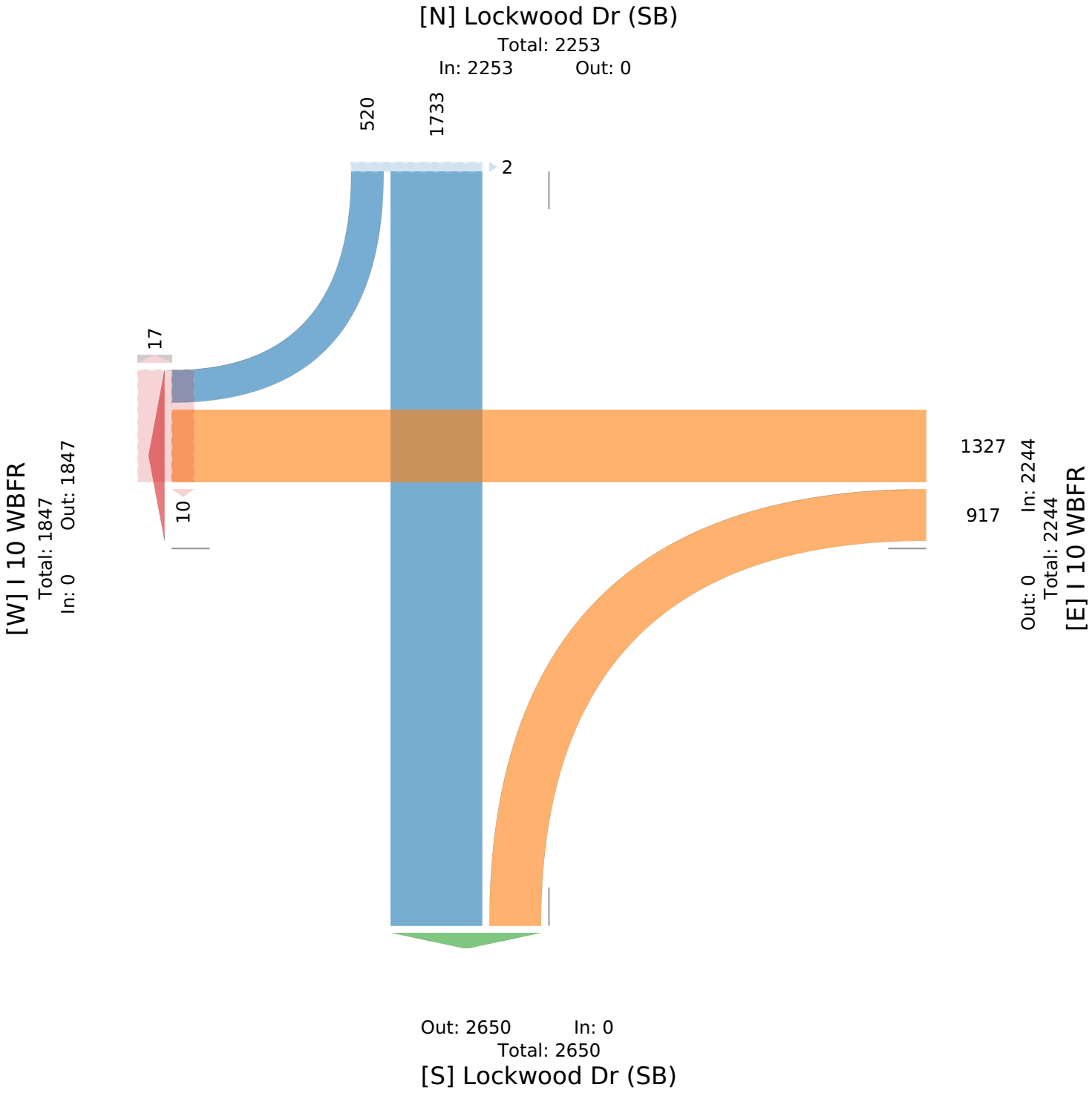


Lockwood Dr (SB) at I 10 WBFR - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

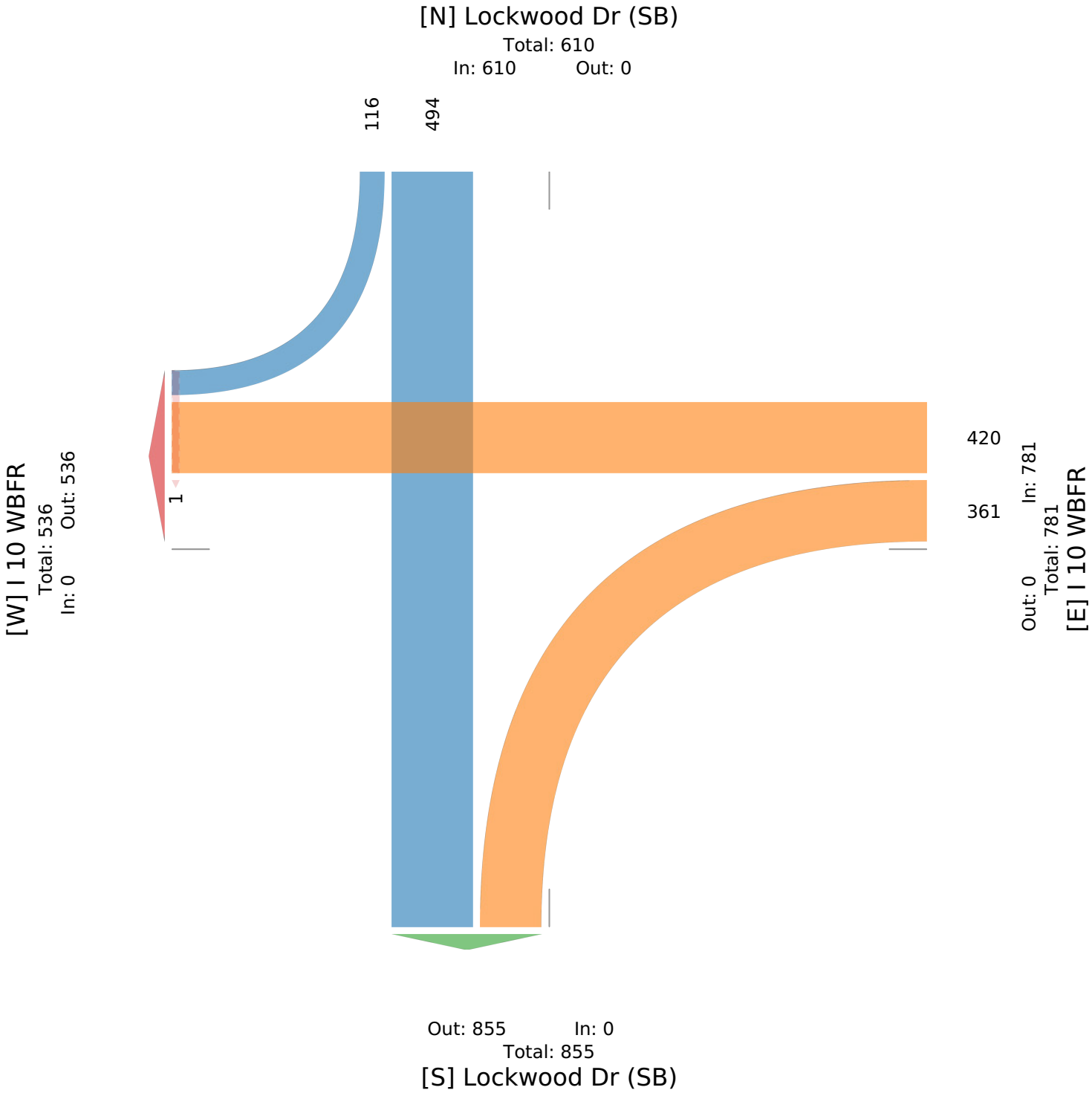
Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 WBFR						I 10 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 7:30AM	0	0	0	0	**0**	0	0	109	34	0	**143**	0	0	0	0	0	**0**	0	55	108	0	0	**163**	0	**306**
7:45AM	0	0	0	0	**0**	0	0	140	28	0	**168**	0	0	0	0	0	**0**	0	125	116	0	0	**241**	0	**409**
8:00AM	0	0	0	0	**0**	0	0	121	23	0	**144**	0	0	0	0	0	**0**	0	102	101	0	0	**203**	0	**347**
8:15AM	0	0	0	0	**0**	0	0	124	31	0	**155**	0	0	0	0	0	**0**	1	79	95	0	0	**174**	0	**329**
Total	0	0	0	0	**0**	0	0	494	116	0	**610**	0	0	0	0	0	**0**	1	361	420	0	0	**781**	0	**1391**
% Approach	0%	0%	0%	0%	**-**	-	0%	81.0%	19.0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	46.2%	53.8%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0%	35.5%	8.3%	0%	**43.9%**	-	0%	0%	0%	0%	**0%**	-	26.0%	30.2%	0%	0%	**56.1%**	-	-
PHF	-	-	-	-	**-**	-	-	0.882	0.853	-	**0.908**	-	-	-	-	-	**-**	-	0.722	0.905	-	-	**0.810**	-	0.850
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.3%	0%	0%	0%	**0.1%**	-	0.1%
Lights	0	0	0	0	**0**	-	0	465	102	0	**567**	-	0	0	0	0	**0**	-	334	396	0	0	**730**	-	1297
% Lights	0%	0%	0%	0%	**-**	-	0%	94.1%	87.9%	0%	**93.0%**	-	0%	0%	0%	0%	**-**	-	92.5%	94.3%	0%	0%	**93.5%**	-	93.2%
Single-Unit Trucks	0	0	0	0	**0**	-	0	10	5	0	**15**	-	0	0	0	0	**0**	-	12	16	0	0	**28**	-	43
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	2.0%	4.3%	0%	**2.5%**	-	0%	0%	0%	0%	**-**	-	3.3%	3.8%	0%	0%	**3.6%**	-	3.1%
Articulated Trucks	0	0	0	0	**0**	-	0	8	4	0	**12**	-	0	0	0	0	**0**	-	12	6	0	0	**18**	-	30
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	1.6%	3.4%	0%	**2.0%**	-	0%	0%	0%	0%	**-**	-	3.3%	1.4%	0%	0%	**2.3%**	-	2.2%
Buses	0	0	0	0	**0**	-	0	11	5	0	**16**	-	0	0	0	0	**0**	-	2	2	0	0	**4**	-	20
% Buses	0%	0%	0%	0%	**-**	-	0%	2.2%	4.3%	0%	**2.6%**	-	0%	0%	0%	0%	**-**	-	0.6%	0.5%	0%	0%	**0.5%**	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 WBFR - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at I 10 WBFR - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

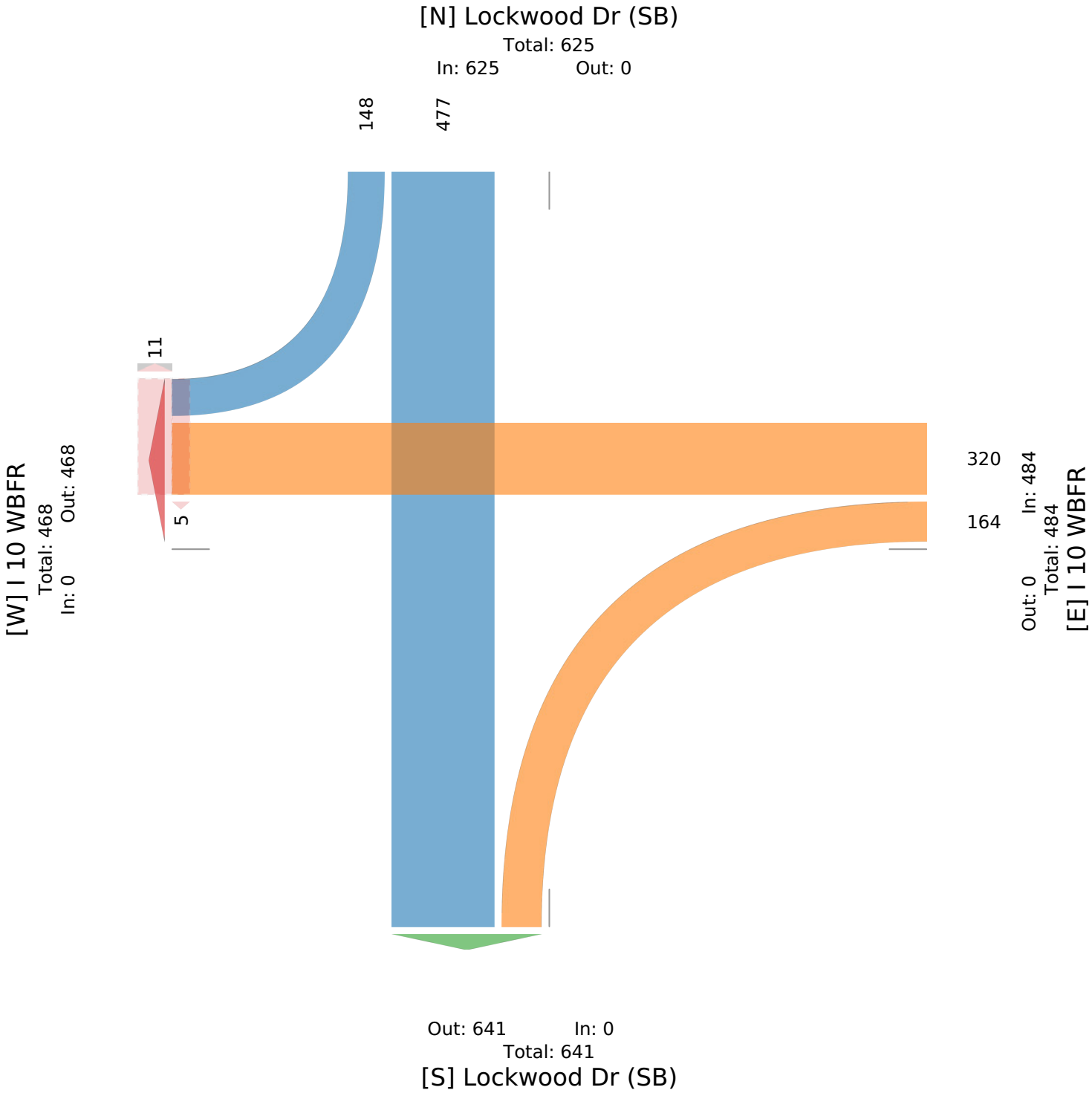
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (SB)						Lockwood Dr (SB)						I 10 WBFR						I 10 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 4:00PM	0	0	0	0	**0**	0	0	147	35	0	**182**	0	0	0	0	0	**0**	3	45	82	0	0	**127**	0	**309**
4:15PM	0	0	0	0	**0**	0	0	126	37	0	**163**	0	0	0	0	0	**0**	5	32	91	0	0	**123**	0	**286**
4:30PM	0	0	0	0	**0**	0	0	103	36	0	**139**	0	0	0	0	0	**0**	5	47	78	0	0	**125**	0	**264**
4:45PM	0	0	0	0	**0**	0	0	101	40	0	**141**	0	0	0	0	0	**0**	3	40	69	0	0	**109**	0	**250**
Total	0	0	0	0	**0**	0	0	477	148	0	**625**	0	0	0	0	0	**0**	16	164	320	0	0	**484**	0	**1109**
% Approach	0%	0%	0%	0%	**-**	-	0%	76.3%	23.7%	0%	**-**	-	0%	0%	0%	0%	**-**	-	33.9%	66.1%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0%	43.0%	13.3%	0%	**56.4%**	-	0%	0%	0%	0%	**0%**	-	14.8%	28.9%	0%	0%	**43.6%**	-	-
PHF	-	-	-	-	**-**	-	-	0.811	0.925	-	**0.859**	-	-	-	-	-	**-**	-	0.872	0.879	-	-	**0.953**	-	0.897
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**-**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	0	0	0	0	**0**	-	0	451	138	0	**589**	-	0	0	0	0	**0**	-	150	309	0	0	**459**	-	1048
% Lights	0%	0%	0%	0%	**-**	-	0%	94.5%	93.2%	0%	**94.2%**	-	0%	0%	0%	0%	**-**	-	91.5%	96.6%	0%	0%	**94.8%**	-	94.5%
Single-Unit Trucks	0	0	0	0	**0**	-	0	7	1	0	**8**	-	0	0	0	0	**0**	-	7	7	0	0	**14**	-	22
% Single-Unit Trucks	0%	0%	0%	0%	**-**	-	0%	1.5%	0.7%	0%	**1.3%**	-	0%	0%	0%	0%	**-**	-	4.3%	2.2%	0%	0%	**2.9%**	-	2.0%
Articulated Trucks	0	0	0	0	**0**	-	0	6	3	0	**9**	-	0	0	0	0	**0**	-	4	3	0	0	**7**	-	16
% Articulated Trucks	0%	0%	0%	0%	**-**	-	0%	1.3%	2.0%	0%	**1.4%**	-	0%	0%	0%	0%	**-**	-	2.4%	0.9%	0%	0%	**1.4%**	-	1.4%
Buses	0	0	0	0	**0**	-	0	12	6	0	**18**	-	0	0	0	0	**0**	-	3	1	0	0	**4**	-	22
% Buses	0%	0%	0%	0%	**-**	-	0%	2.5%	4.1%	0%	**2.9%**	-	0%	0%	0%	0%	**-**	-	1.8%	0.3%	0%	0%	**0.8%**	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	16	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at I 10 WBFR - TMC
Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867360, Location: 29.774652, -95.31559

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 WBFR - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

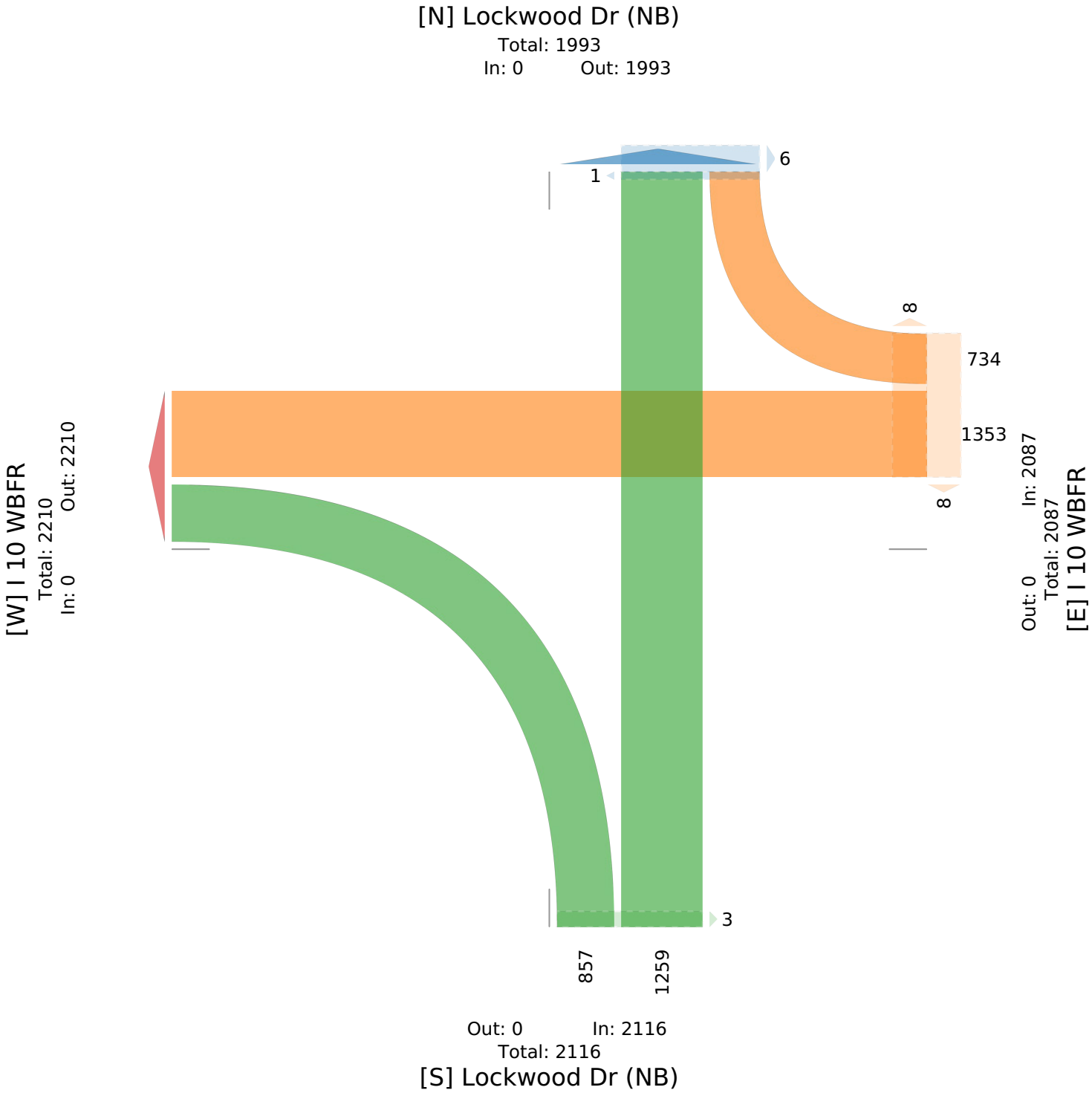
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr (NB)						Lockwood Dr (NB)						I 10 WBFR						I 10 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:00AM	31	33	0	0	**64**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	72	29	0	**101**	0	**165**
7:15AM	52	55	0	0	**107**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	105	32	0	**137**	1	**244**
7:30AM	53	56	0	0	**109**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	101	33	0	**134**	0	**243**
7:45AM	49	83	0	0	**132**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	181	42	0	**223**	2	**355**
Hourly Total	185	227	0	0	**412**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	459	136	0	**595**	3	**1007**
8:00AM	56	84	0	0	**140**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	150	58	0	**208**	2	**348**
8:15AM	54	86	0	0	**140**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	115	26	0	**141**	1	**281**
8:30AM	48	86	0	0	**134**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	99	37	0	**136**	0	**270**
8:45AM	39	51	0	0	**90**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	64	29	0	**93**	0	**183**
Hourly Total	197	307	0	0	**504**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	428	150	0	**578**	3	**1082**
4:00PM	68	105	0	0	**173**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	56	59	0	**115**	1	**288**
4:15PM	72	108	0	0	**180**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	53	59	0	**112**	1	**292**
4:30PM	66	96	0	0	**162**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	59	55	0	**114**	0	**276**
4:45PM	53	80	0	0	**133**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	57	56	0	**113**	5	**246**
Hourly Total	259	389	0	0	**648**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	225	229	0	**454**	7	**1102**
5:00PM	45	84	0	0	**129**	3	0	0	0	0	**0**	4	0	0	0	0	**0**	0	0	53	62	0	**115**	0	**244**
5:15PM	51	85	0	0	**136**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	58	62	0	**120**	1	**256**
5:30PM	58	72	0	0	**130**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	70	48	0	**118**	0	**248**
5:45PM	62	95	0	0	**157**	0	0	0	0	0	**0**	1	0	0	0	0	**0**	0	0	60	47	0	**107**	2	**264**
Hourly Total	216	336	0	0	**552**	3	0	0	0	0	**0**	6	0	0	0	0	**0**	0	0	241	219	0	**460**	3	**1012**
Total	857	1259	0	0	**2116**	3	0	0	0	0	**0**	7	0	0	0	0	**0**	0	0	1353	734	0	**2087**	16	**4203**
% Approach	40.5%	59.5%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	64.8%	35.2%	0%	**-**	-	-
% Total	20.4%	30.0%	0%	0%	**50.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	32.2%	17.5%	0%	**49.7%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	789	1183	0	0	**1972**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1274	666	0	**1940**	-	3912
% Lights	92.1%	94.0%	0%	0%	**93.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	94.2%	90.7%	0%	**93.0%**	-	93.1%
Single-Unit Trucks	37	22	0	0	**59**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	40	12	0	**52**	-	111
% Single-Unit Trucks	4.3%	1.7%	0%	0%	**2.8%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	3.0%	1.6%	0%	**2.5%**	-	2.6%
Articulated Trucks	25	9	0	0	**34**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	28	27	0	**55**	-	89
% Articulated Trucks	2.9%	0.7%	0%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	2.1%	3.7%	0%	**2.6%**	-	2.1%
Buses	6	44	0	0	**50**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	11	29	0	**40**	-	90
% Buses	0.7%	3.5%	0%	0%	**2.4%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0.8%	4.0%	0%	**1.9%**	-	2.1%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	7	-	-	-	-	-	0	-	-	-	-	-	16	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 WBFR - TMC
Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 WBFR - TMC

Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

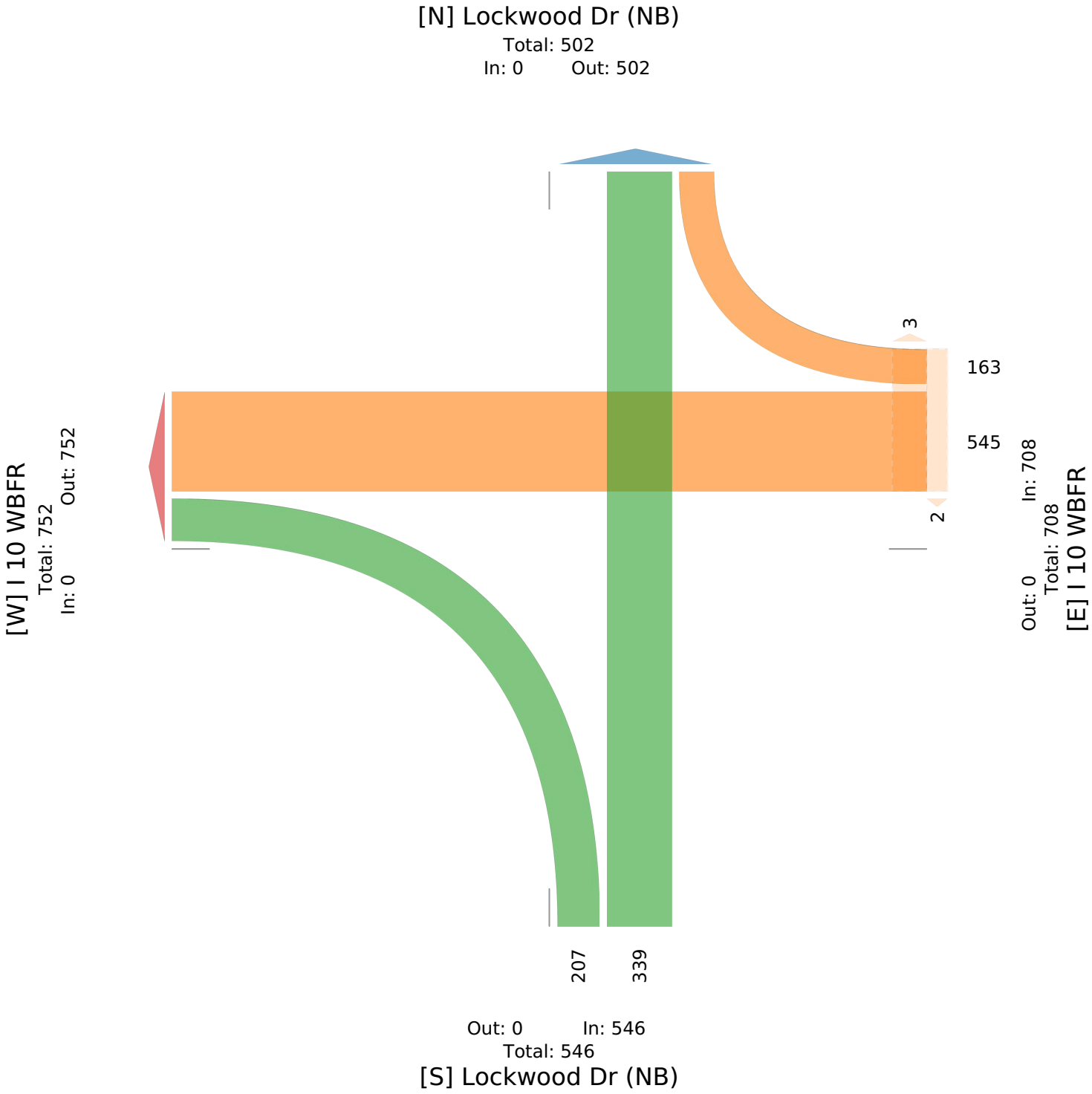
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr (NB) Northbound						Lockwood Dr (NB) Southbound						I 10 WBFR Eastbound						I 10 WBFR Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:45AM	49	83	0	0	**132**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	181	42	0	**223**	2	**355**
8:00AM	56	84	0	0	**140**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	150	58	0	**208**	2	**348**
8:15AM	54	86	0	0	**140**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	115	26	0	**141**	1	**281**
8:30AM	48	86	0	0	**134**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	99	37	0	**136**	0	**270**
Total	207	339	0	0	**546**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	545	163	0	**708**	5	**1254**
% Approach	37.9%	62.1%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	77.0%	23.0%	0%	**-**	-	-
% Total	16.5%	27.0%	0%	0%	**43.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	43.5%	13.0%	0%	**56.5%**	-	-
PHF	0.924	0.985	-	-	**0.975**	-	-	-	-	-	**-**	-	-	-	-	-	**-**	-	-	0.753	0.703	-	**0.794**	-	0.883
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	179	316	0	0	**495**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	514	149	0	**663**	-	1158
% Lights	86.5%	93.2%	0%	0%	**90.7%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	94.3%	91.4%	0%	**93.6%**	-	92.3%
Single-Unit Trucks	16	11	0	0	**27**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	17	3	0	**20**	-	47
% Single-Unit Trucks	7.7%	3.2%	0%	0%	**4.9%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	3.1%	1.8%	0%	**2.8%**	-	3.7%
Articulated Trucks	11	1	0	0	**12**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	13	4	0	**17**	-	29
% Articulated Trucks	5.3%	0.3%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	2.4%	2.5%	0%	**2.4%**	-	2.3%
Buses	1	11	0	0	**12**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	7	0	**8**	-	20
% Buses	0.5%	3.2%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0.2%	4.3%	0%	**1.1%**	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 WBFR - TMC
Thu Sep 9, 2021
AM Peak (7:45 AM - 8:45 AM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at I 10 WBFR - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

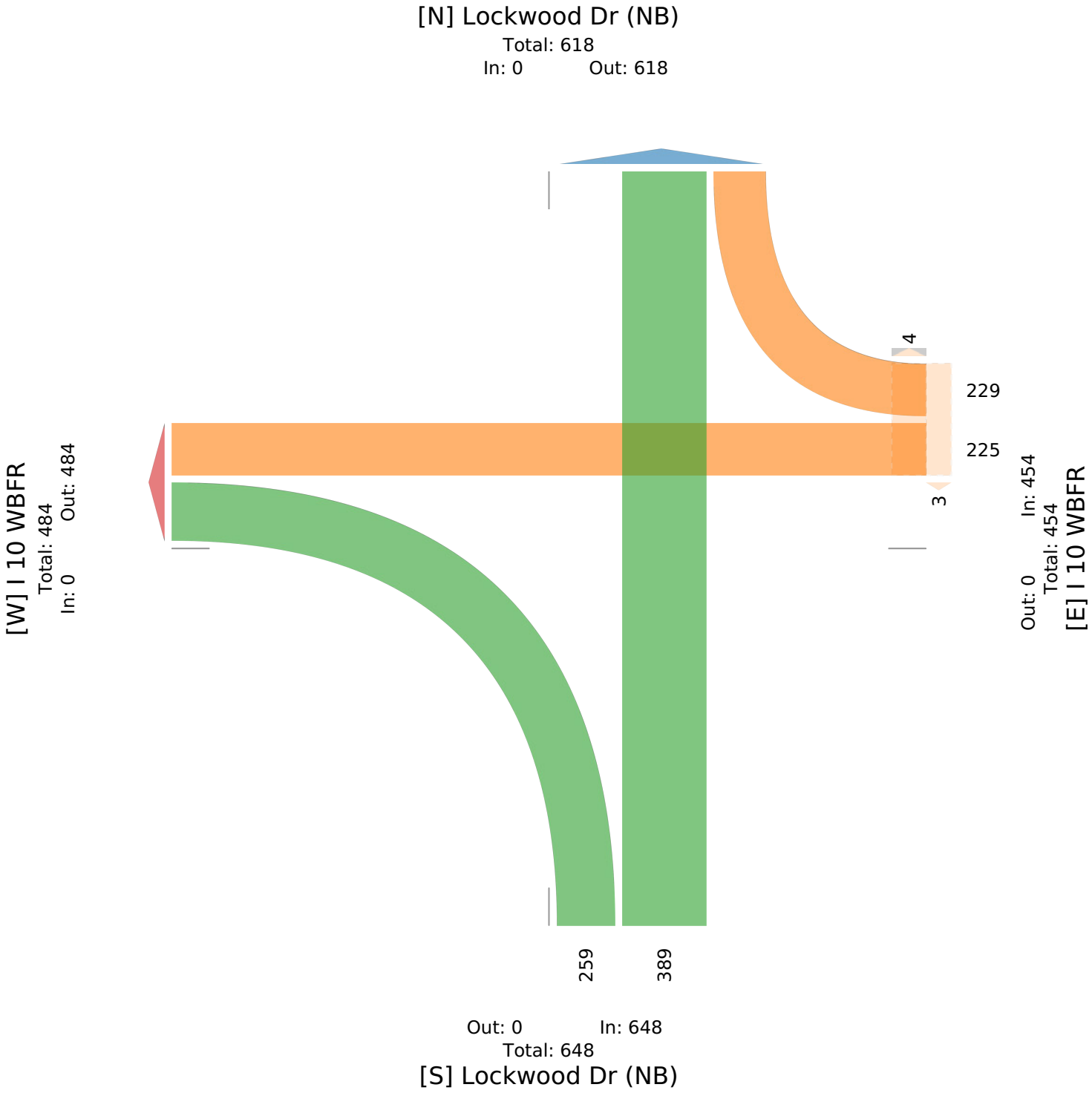
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr (NB) Northbound						Lockwood Dr (NB) Southbound						I 10 WBFR Eastbound						I 10 WBFR Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 4:00PM	68	105	0	0	**173**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	56	59	0	**115**	1	**288**
4:15PM	72	108	0	0	**180**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	53	59	0	**112**	1	**292**
4:30PM	66	96	0	0	**162**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	59	55	0	**114**	0	**276**
4:45PM	53	80	0	0	**133**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	57	56	0	**113**	5	**246**
Total	259	389	0	0	**648**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	225	229	0	**454**	7	**1102**
% Approach	40.0%	60.0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	49.6%	50.4%	0%	**-**	-	-
% Total	23.5%	35.3%	0%	0%	**58.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	20.4%	20.8%	0%	**41.2%**	-	-
PHF	0.899	0.900	-	-	**0.900**	-	-	-	-	-	**-**	-	-	-	-	-	**-**	-	-	0.953	0.970	-	**0.987**	-	0.943
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	249	367	0	0	**616**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	209	211	0	**420**	-	1036
% Lights	96.1%	94.3%	0%	0%	**95.1%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	92.9%	92.1%	0%	**92.5%**	-	94.0%
Single-Unit Trucks	5	2	0	0	**7**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	9	4	0	**13**	-	20
% Single-Unit Trucks	1.9%	0.5%	0%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	4.0%	1.7%	0%	**2.9%**	-	1.8%
Articulated Trucks	3	6	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	3	7	0	**10**	-	19
% Articulated Trucks	1.2%	1.5%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	1.3%	3.1%	0%	**2.2%**	-	1.7%
Buses	2	14	0	0	**16**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	4	7	0	**11**	-	27
% Buses	0.8%	3.6%	0%	0%	**2.5%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	0%	1.8%	3.1%	0%	**2.4%**	-	2.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at I 10 WBFR - TMC
Thu Sep 9, 2021
PM Peak (4 PM - 5 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867359, Location: 29.774652, -95.315196

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at Lyons Ave - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	12	16	0	0	**28**	0	0	17	12	0	**29**	0	0	0	0	0	**0**	0	14	99	5	0	**118**	0	**175**
7:15AM	11	42	0	0	**53**	0	0	19	12	0	**31**	8	0	0	0	0	**0**	4	10	110	6	0	**126**	0	**210**
7:30AM	14	35	0	0	**49**	0	0	24	24	0	**48**	4	0	0	0	0	**0**	3	3	114	11	0	**128**	0	**225**
7:45AM	12	41	0	0	**53**	2	0	38	32	0	**70**	1	0	0	0	0	**0**	0	10	114	10	0	**134**	2	**257**
Hourly Total	49	134	0	0	**183**	2	0	98	80	0	**178**	13	0	0	0	0	**0**	7	37	437	32	0	**506**	2	**867**
8:00AM	15	57	0	0	**72**	1	0	35	28	0	**63**	7	0	0	0	0	**0**	6	16	100	12	0	**128**	3	**263**
8:15AM	14	44	0	0	**58**	0	0	53	26	0	**79**	0	0	0	0	0	**0**	2	10	109	7	0	**126**	0	**263**
8:30AM	20	27	0	0	**47**	1	0	38	35	0	**73**	5	0	0	0	0	**0**	1	11	64	11	0	**86**	1	**206**
8:45AM	12	25	0	0	**37**	0	0	27	19	0	**46**	3	0	0	0	0	**0**	2	11	79	11	0	**101**	2	**184**
Hourly Total	61	153	0	0	**214**	2	0	153	108	0	**261**	15	0	0	0	0	**0**	11	48	352	41	0	**441**	6	**916**
4:00PM	26	34	0	0	**60**	0	0	33	64	0	**97**	6	0	0	0	0	**0**	1	14	105	16	0	**135**	3	**292**
4:15PM	26	42	0	0	**68**	1	0	33	61	0	**94**	1	0	0	0	0	**0**	0	14	93	23	0	**130**	0	**292**
4:30PM	31	24	0	0	**55**	2	0	29	49	0	**78**	7	0	0	0	0	**0**	4	15	95	12	0	**122**	1	**255**
4:45PM	16	20	0	0	**36**	0	0	26	31	0	**57**	1	0	0	0	0	**0**	2	16	85	16	0	**117**	2	**210**
Hourly Total	99	120	0	0	**219**	3	0	121	205	0	**326**	15	0	0	0	0	**0**	7	59	378	67	0	**504**	6	**1049**
5:00PM	25	15	0	0	**40**	0	0	32	53	0	**85**	3	0	0	0	0	**0**	0	22	98	10	0	**130**	0	**255**
5:15PM	22	21	0	0	**43**	2	0	32	43	0	**75**	6	0	0	0	0	**0**	2	23	101	18	0	**142**	3	**260**
5:30PM	26	24	0	0	**50**	0	0	19	44	0	**63**	1	0	0	0	0	**0**	1	15	93	15	0	**123**	0	**236**
5:45PM	25	16	0	0	**41**	0	1	24	43	0	**68**	5	0	0	0	0	**0**	3	20	85	9	0	**114**	1	**223**
Hourly Total	98	76	0	0	**174**	2	1	107	183	0	**291**	15	0	0	0	0	**0**	6	80	377	52	0	**509**	4	**974**
Total	307	483	0	0	**790**	9	1	479	576	0	**1056**	58	0	0	0	0	**0**	31	224	1544	192	0	**1960**	18	**3806**
% Approach	38.9%	61.1%	0%	0%	**-**	-	0.1%	45.4%	54.5%	0%	**-**	-	0%	0%	0%	0%	**-**	-	11.4%	78.8%	9.8%	0%	**-**	-	-
% Total	8.1%	12.7%	0%	0%	**20.8%**	-	0%	12.6%	15.1%	0%	**27.7%**	-	0%	0%	0%	0%	**0%**	-	5.9%	40.6%	5.0%	0%	**51.5%**	-	-
Motorcycles	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Motorcycles	0.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	297	465	0	0	**762**	-	1	474	560	0	**1035**	-	0	0	0	0	**0**	-	218	1450	191	0	**1859**	-	3656
% Lights	96.7%	96.3%	0%	0%	**96.5%**	-	100%	99.0%	97.2%	0%	**98.0%**	-	0%	0%	0%	0%	**-**	-	97.3%	93.9%	99.5%	0%	**94.8%**	-	96.1%
Single-Unit Trucks	4	4	0	0	**8**	-	0	2	4	0	**6**	-	0	0	0	0	**0**	-	5	29	0	0	**34**	-	48
% Single-Unit Trucks	1.3%	0.8%	0%	0%	**1.0%**	-	0%	0.4%	0.7%	0%	**0.6%**	-	0%	0%	0%	0%	**-**	-	2.2%	1.9%	0%	0%	**1.7%**	-	1.3%
Articulated Trucks	3	0	0	0	**3**	-	0	2	1	0	**3**	-	0	0	0	0	**0**	-	1	37	1	0	**39**	-	45
% Articulated Trucks	1.0%	0%	0%	0%	**0.4%**	-	0%	0.4%	0.2%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0.4%	2.4%	0.5%	0%	**2.0%**	-	1.2%
Buses	2	14	0	0	**16**	-	0	1	11	0	**12**	-	0	0	0	0	**0**	-	0	27	0	0	**27**	-	55
% Buses	0.7%	2.9%	0%	0%	**2.0%**	-	0%	0.2%	1.9%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	0%	1.7%	0%	0%	**1.4%**	-	1.4%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	51	-	-	-	-	-	30	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	88.9%	-	-	-	-	-	87.9%	-	-	-	-	-	96.8%	-	-	-	-	-	83.3%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	11.1%	-	-	-	-	-	12.1%	-	-	-	-	-	3.2%	-	-	-	-	-	16.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Lyons Ave - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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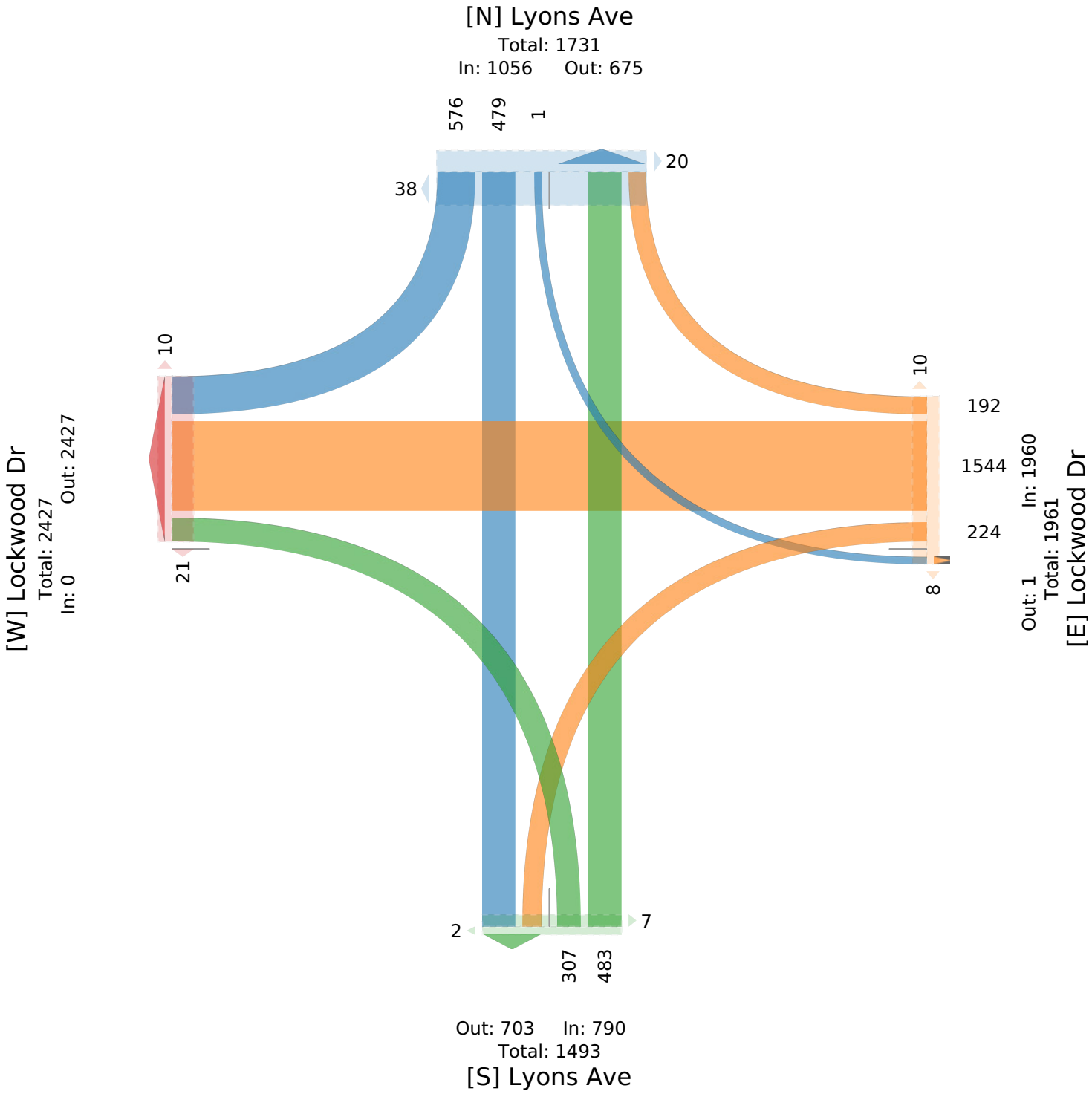


Lockwood Dr (SB) at Lyons Ave - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

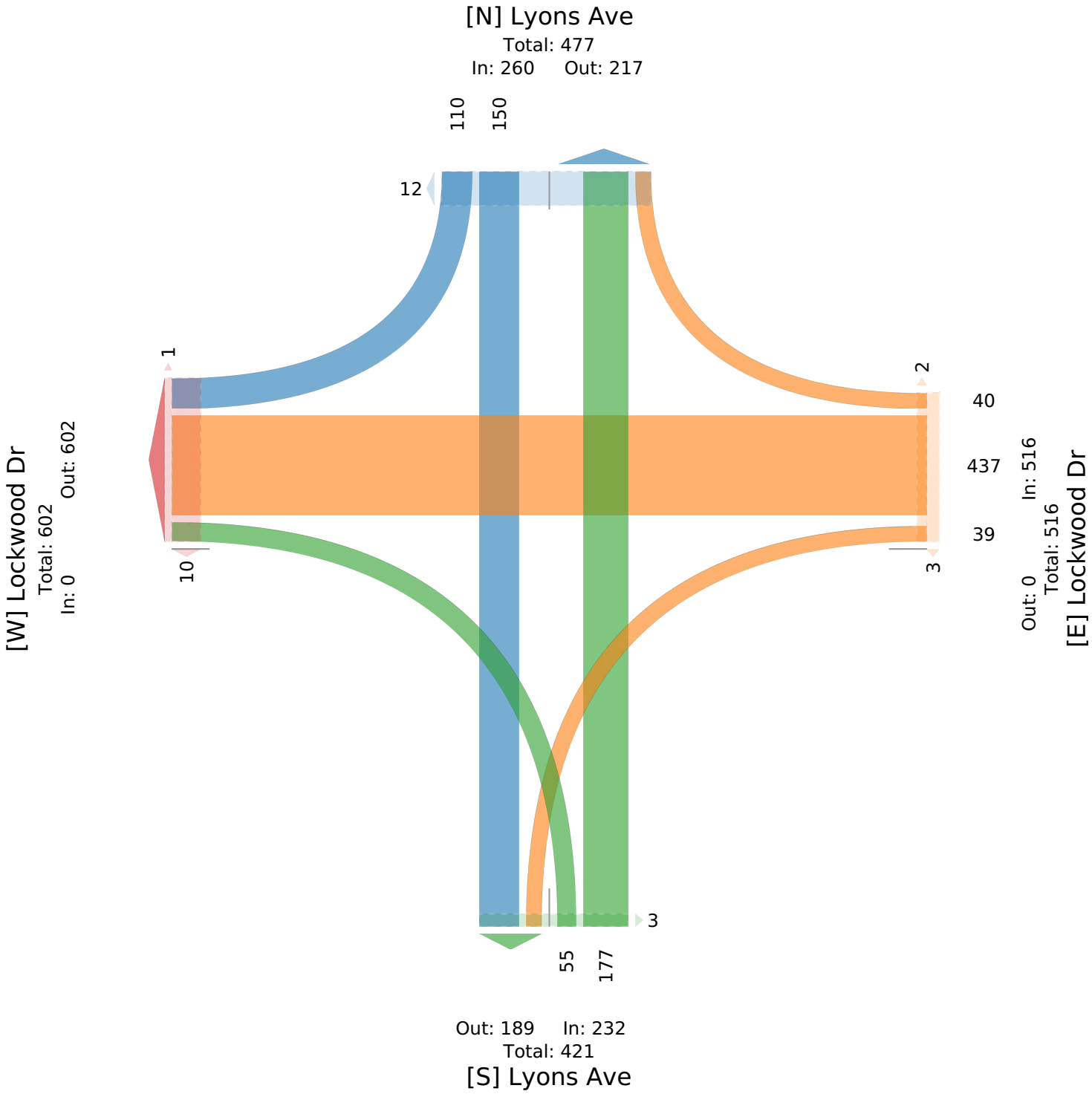
Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	14	35	0	0	**49**	0	0	24	24	0	**48**	4	0	0	0	0	**0**	3	3	114	11	0	**128**	0	**225**
7:45AM	12	41	0	0	**53**	2	0	38	32	0	**70**	1	0	0	0	0	**0**	0	10	114	10	0	**134**	2	**257**
8:00AM	15	57	0	0	**72**	1	0	35	28	0	**63**	7	0	0	0	0	**0**	6	16	100	12	0	**128**	3	**263**
8:15AM	14	44	0	0	**58**	0	0	53	26	0	**79**	0	0	0	0	0	**0**	2	10	109	7	0	**126**	0	**263**
Total	55	177	0	0	**232**	3	0	150	110	0	**260**	12	0	0	0	0	**0**	11	39	437	40	0	**516**	5	**1008**
% Approach	23.7%	76.3%	0%	0%	**-**	-	0%	57.7%	42.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	7.6%	84.7%	7.8%	0%	**-**	-	-
% Total	5.5%	17.6%	0%	0%	**23.0%**	-	0%	14.9%	10.9%	0%	**25.8%**	-	0%	0%	0%	0%	**0%**	-	3.9%	43.4%	4.0%	0%	**51.2%**	-	-
PHF	0.917	0.776	-	-	**0.806**	-	-	0.708	0.859	-	**0.823**	-	-	-	-	-	**-**	-	0.609	0.958	0.833	-	**0.963**	-	0.958
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	52	170	0	0	**222**	-	0	149	107	0	**256**	-	0	0	0	0	**0**	-	37	421	40	0	**498**	-	976
% Lights	94.5%	96.0%	0%	0%	**95.7%**	-	0%	99.3%	97.3%	0%	**98.5%**	-	0%	0%	0%	0%	**-**	-	94.9%	96.3%	100%	0%	**96.5%**	-	96.8%
Single-Unit Trucks	0	2	0	0	**2**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	2	4	0	0	**6**	-	9
% Single-Unit Trucks	0%	1.1%	0%	0%	**0.9%**	-	0%	0%	0.9%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	5.1%	0.9%	0%	0%	**1.2%**	-	0.9%
Articulated Trucks	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	9
% Articulated Trucks	1.8%	0%	0%	0%	**0.4%**	-	0%	0.7%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	0%	1.6%	0%	0%	**1.4%**	-	0.9%
Buses	2	5	0	0	**7**	-	0	0	2	0	**2**	-	0	0	0	0	**0**	-	0	5	0	0	**5**	-	14
% Buses	3.6%	2.8%	0%	0%	**3.0%**	-	0%	0%	1.8%	0%	**0.8%**	-	0%	0%	0%	0%	**-**	-	0%	1.1%	0%	0%	**1.0%**	-	1.4%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	10	-	-	-	-	-	11	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Lyons Ave - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (SB) at Lyons Ave - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

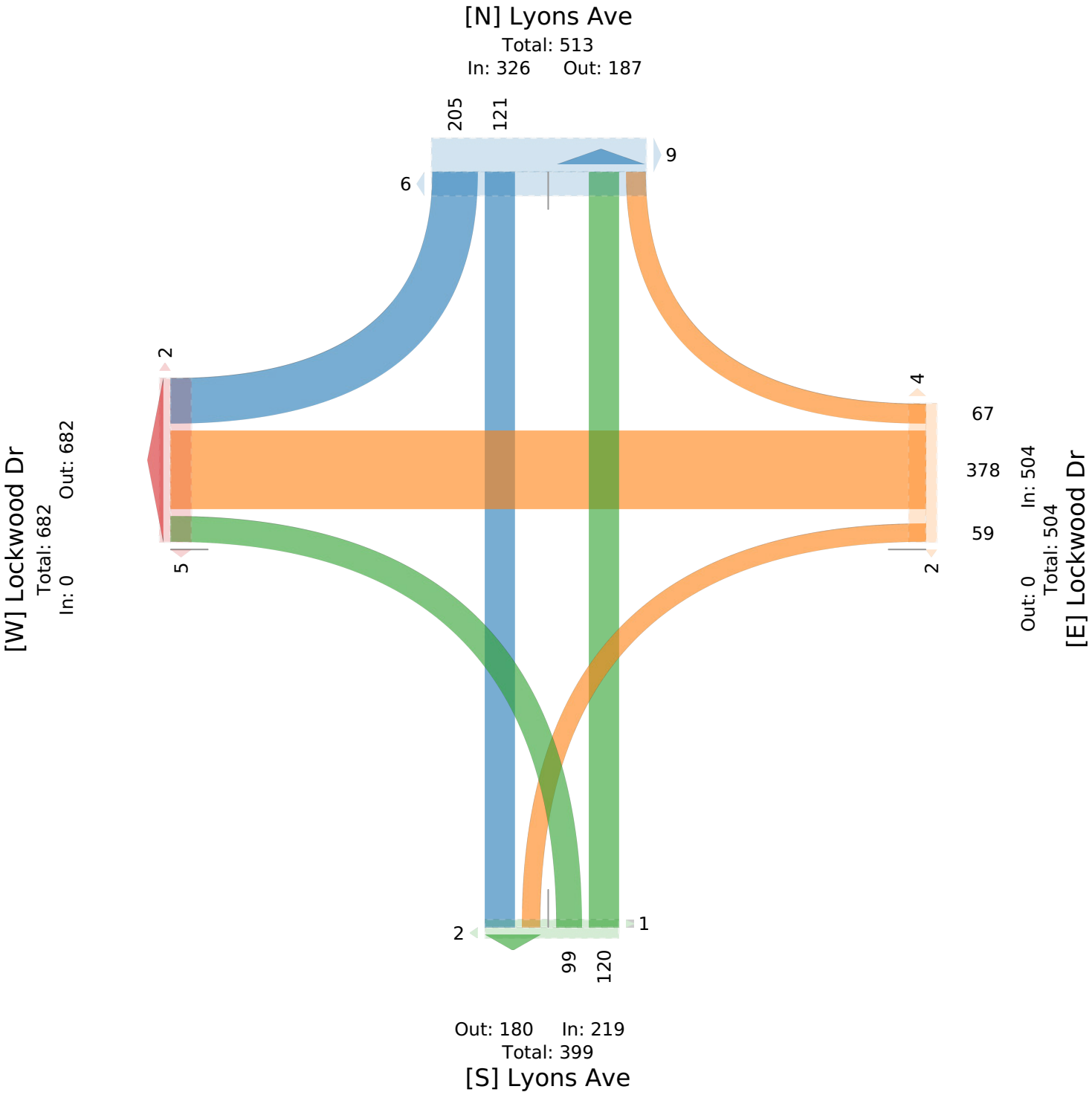
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	26	34	0	0	**60**	0	0	33	64	0	**97**	6	0	0	0	0	**0**	1	14	105	16	0	**135**	3	**292**
4:15PM	26	42	0	0	**68**	1	0	33	61	0	**94**	1	0	0	0	0	**0**	0	14	93	23	0	**130**	0	**292**
4:30PM	31	24	0	0	**55**	2	0	29	49	0	**78**	7	0	0	0	0	**0**	4	15	95	12	0	**122**	1	**255**
4:45PM	16	20	0	0	**36**	0	0	26	31	0	**57**	1	0	0	0	0	**0**	2	16	85	16	0	**117**	2	**210**
Total	99	120	0	0	**219**	3	0	121	205	0	**326**	15	0	0	0	0	**0**	7	59	378	67	0	**504**	6	**1049**
% Approach	45.2%	54.8%	0%	0%	**-**	-	0%	37.1%	62.9%	0%	**-**	-	0%	0%	0%	0%	**-**	-	11.7%	75.0%	13.3%	0%	**-**	-	-
% Total	9.4%	11.4%	0%	0%	**20.9%**	-	0%	11.5%	19.5%	0%	**31.1%**	-	0%	0%	0%	0%	**0%**	-	5.6%	36.0%	6.4%	0%	**48.0%**	-	-
PHF	0.798	0.714	-	-	**0.805**	-	-	0.917	0.801	-	**0.840**	-	-	-	-	-	**-**	-	0.922	0.900	0.728	-	**0.933**	-	0.898
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	97	117	0	0	**214**	-	0	121	200	0	**321**	-	0	0	0	0	**0**	-	58	352	67	0	**477**	-	1012
% Lights	98.0%	97.5%	0%	0%	**97.7%**	-	0%	100%	97.6%	0%	**98.5%**	-	0%	0%	0%	0%	**-**	-	98.3%	93.1%	100%	0%	**94.6%**	-	96.5%
Single-Unit Trucks	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	5	0	0	**6**	-	7
% Single-Unit Trucks	1.0%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	1.7%	1.3%	0%	0%	**1.2%**	-	0.7%
Articulated Trucks	1	0	0	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	14	0	0	**14**	-	16
% Articulated Trucks	1.0%	0%	0%	0%	**0.5%**	-	0%	0%	0.5%	0%	**0.3%**	-	0%	0%	0%	0%	**-**	-	0%	3.7%	0%	0%	**2.8%**	-	1.5%
Buses	0	3	0	0	**3**	-	0	0	4	0	**4**	-	0	0	0	0	**0**	-	0	7	0	0	**7**	-	14
% Buses	0%	2.5%	0%	0%	**1.4%**	-	0%	0%	2.0%	0%	**1.2%**	-	0%	0%	0%	0%	**-**	-	0%	1.9%	0%	0%	**1.4%**	-	1.3%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	15	-	-	-	-	-	7	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (SB) at Lyons Ave - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867361, Location: 29.776438, -95.315748

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at Lyons Ave - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	21	9	0	**30**	0	3	27	0	0	**30**	0	7	34	9	0	**50**	0	0	0	0	0	**0**	0	**110**
7:15AM	0	41	9	0	**50**	0	1	29	0	0	**30**	0	13	43	10	0	**66**	0	0	0	0	0	**0**	0	**146**
7:30AM	0	33	15	0	**48**	0	9	19	0	0	**28**	0	15	81	8	0	**104**	2	0	0	0	0	**0**	0	**180**
7:45AM	0	43	11	0	**54**	0	10	39	0	0	**49**	0	11	59	11	0	**81**	0	0	0	0	0	**0**	1	**184**
Hourly Total	0	138	44	0	**182**	0	23	114	0	0	**137**	0	46	217	38	0	**301**	2	0	0	0	0	**0**	1	**620**
8:00AM	0	56	10	0	**66**	1	8	43	0	0	**51**	0	15	77	21	0	**113**	3	0	0	0	0	**0**	3	**230**
8:15AM	0	48	6	0	**54**	3	4	57	0	0	**61**	0	10	96	23	0	**129**	2	0	0	0	0	**0**	0	**244**
8:30AM	0	27	8	0	**35**	0	16	28	0	0	**44**	0	17	74	17	0	**108**	0	0	0	0	0	**0**	0	**187**
8:45AM	0	30	17	0	**47**	1	8	31	0	0	**39**	0	7	50	13	0	**70**	3	0	0	0	0	**0**	2	**156**
Hourly Total	0	161	41	0	**202**	5	36	159	0	0	**195**	0	49	297	74	0	**420**	8	0	0	0	0	**0**	5	**817**
4:00PM	0	31	9	0	**40**	3	18	29	0	0	**47**	0	26	150	17	0	**193**	0	0	0	0	0	**0**	3	**280**
4:15PM	0	41	13	0	**54**	1	16	31	0	0	**47**	0	30	181	30	0	**241**	1	0	0	0	0	**0**	0	**342**
4:30PM	0	34	6	0	**40**	0	25	18	0	0	**43**	0	17	157	24	0	**198**	3	0	0	0	0	**0**	0	**281**
4:45PM	0	21	7	0	**28**	0	18	22	0	0	**40**	1	15	159	20	0	**194**	2	0	0	0	0	**0**	1	**262**
Hourly Total	0	127	35	0	**162**	4	77	100	0	0	**177**	1	88	647	91	0	**826**	6	0	0	0	0	**0**	4	**1165**
5:00PM	0	26	12	0	**38**	0	20	35	0	0	**55**	0	14	189	23	0	**226**	1	0	0	0	0	**0**	0	**319**
5:15PM	0	25	10	0	**35**	0	19	36	0	0	**55**	0	18	138	17	0	**173**	1	0	0	0	0	**0**	2	**263**
5:30PM	0	30	15	0	**45**	1	12	22	0	0	**34**	0	20	125	16	0	**161**	1	0	0	0	0	**0**	0	**240**
5:45PM	0	28	6	0	**34**	2	19	25	0	0	**44**	1	13	119	24	0	**156**	3	0	0	0	0	**0**	3	**234**
Hourly Total	0	109	43	0	**152**	3	70	118	0	0	**188**	1	65	571	80	0	**716**	6	0	0	0	0	**0**	5	**1056**
Total	0	535	163	0	**698**	12	206	491	0	0	**697**	2	248	1732	283	0	**2263**	22	0	0	0	0	**0**	15	**3658**
% Approach	0%	76.6%	23.4%	0%	**-**	-	29.6%	70.4%	0%	0%	**-**	-	11.0%	76.5%	12.5%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	14.6%	4.5%	0%	**19.1%**	-	5.6%	13.4%	0%	0%	**19.1%**	-	6.8%	47.3%	7.7%	0%	**61.9%**	-	0%	0%	0%	0%	**0%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	0	522	162	0	**684**	-	205	481	0	0	**686**	-	234	1627	275	0	**2136**	-	0	0	0	0	**0**	-	3506
% Lights	0%	97.6%	99.4%	0%	**98.0%**	-	99.5%	98.0%	0%	0%	**98.4%**	-	94.4%	93.9%	97.2%	0%	**94.4%**	-	0%	0%	0%	0%	**-**	-	95.8%
Single-Unit Trucks	0	5	1	0	**6**	-	0	7	0	0	**7**	-	1	25	3	0	**29**	-	0	0	0	0	**0**	-	42
% Single-Unit Trucks	0%	0.9%	0.6%	0%	**0.9%**	-	0%	1.4%	0%	0%	**1.0%**	-	0.4%	1.4%	1.1%	0%	**1.3%**	-	0%	0%	0%	0%	**-**	-	1.1%
Articulated Trucks	0	2	0	0	**2**	-	1	2	0	0	**3**	-	1	43	0	0	**44**	-	0	0	0	0	**0**	-	49
% Articulated Trucks	0%	0.4%	0%	0%	**0.3%**	-	0.5%	0.4%	0%	0%	**0.4%**	-	0.4%	2.5%	0%	0%	**1.9%**	-	0%	0%	0%	0%	**-**	-	1.3%
Buses	0	5	0	0	**5**	-	0	1	0	0	**1**	-	12	36	5	0	**53**	-	0	0	0	0	**0**	-	59
% Buses	0%	0.9%	0%	0%	**0.7%**	-	0%	0.2%	0%	0%	**0.1%**	-	4.8%	2.1%	1.8%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	1.6%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	2	-	-	-	-	-	20	-	-	-	-	-	14	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-	-	-	-	-	90.9%	-	-	-	-	-	93.3%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-	-	-	-	-	9.1%	-	-	-	-	-	6.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Lyons Ave - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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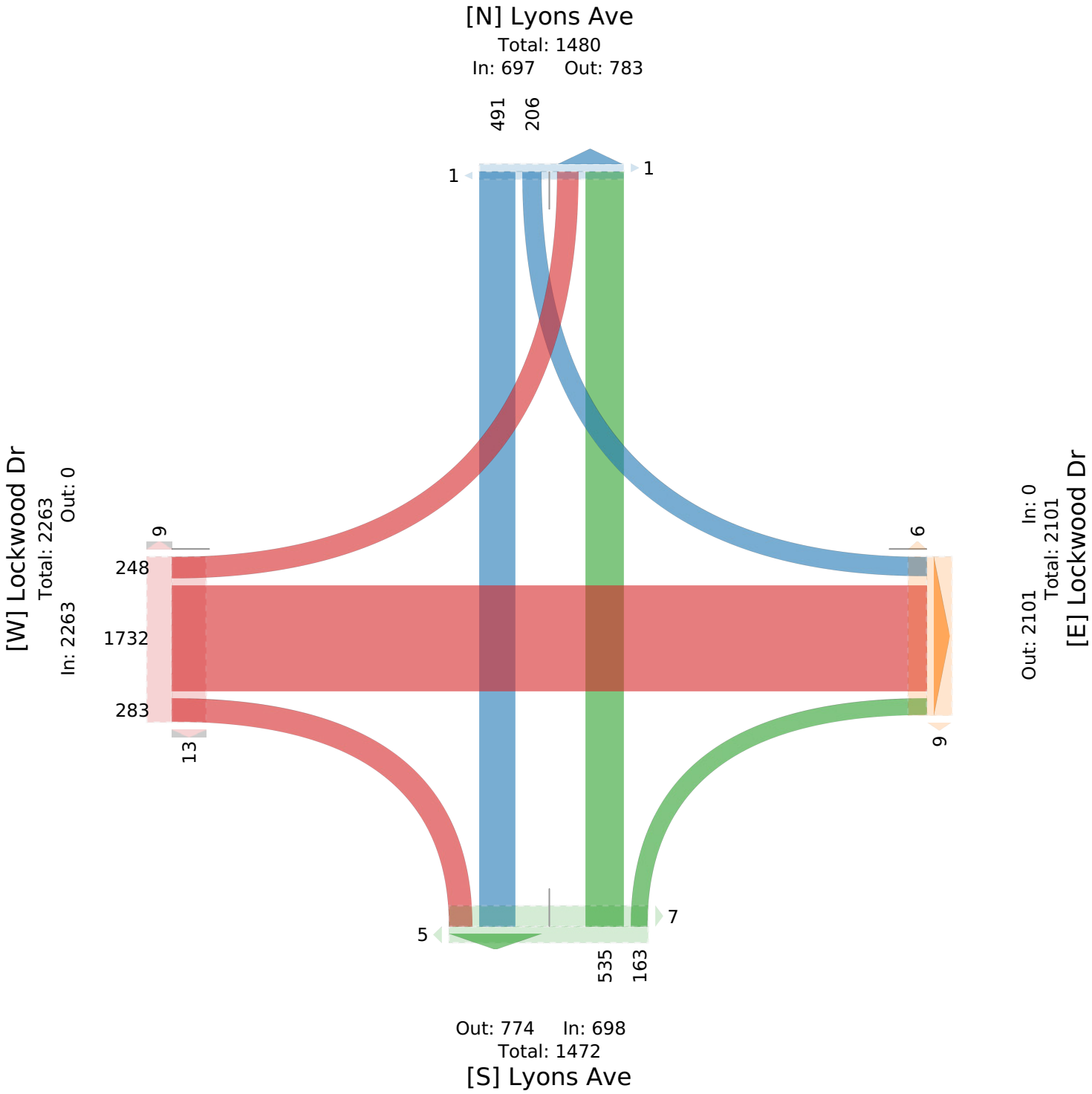


Lockwood Dr (NB) at Lyons Ave - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

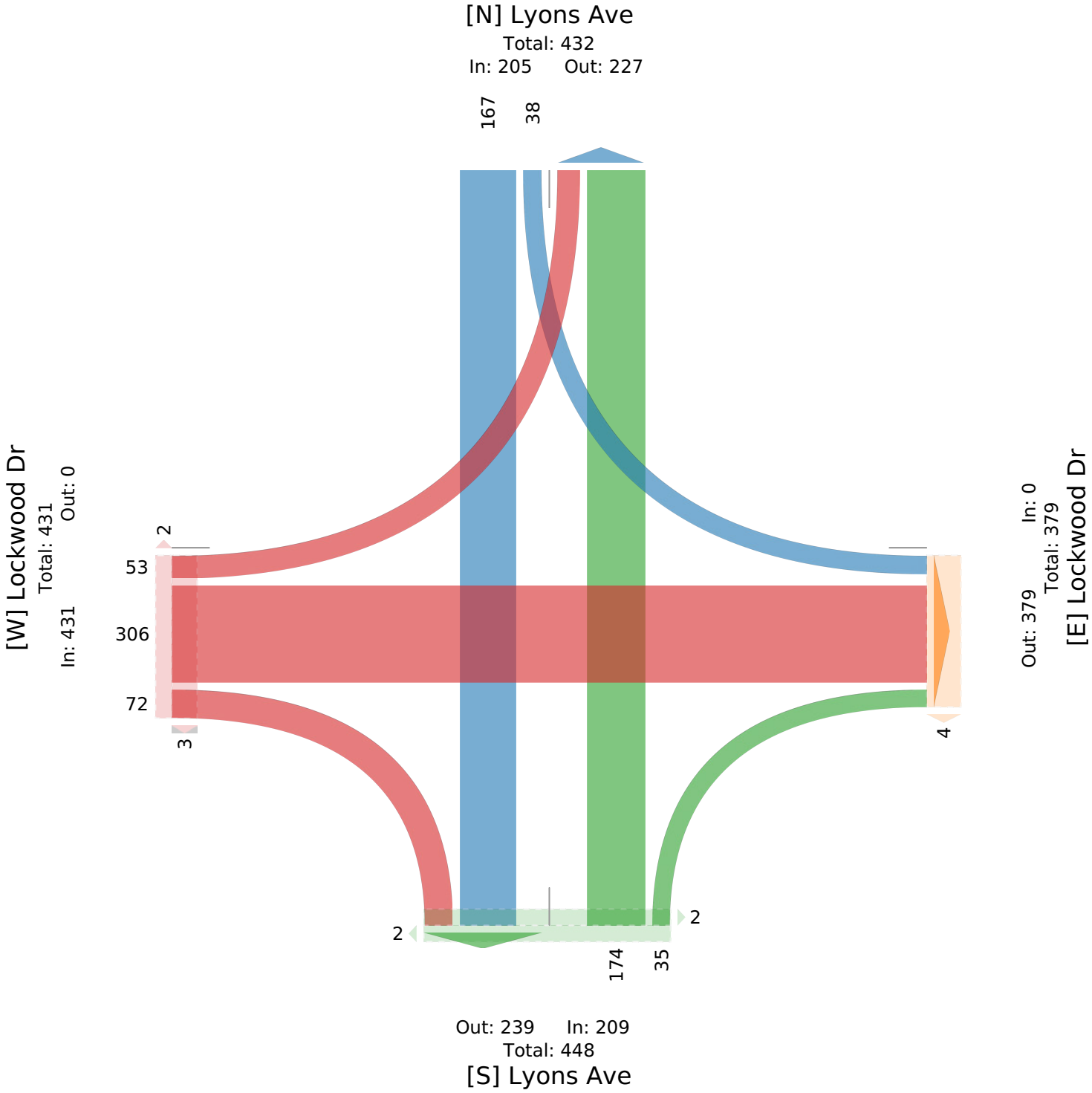
Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	0	43	11	0	**54**	0	10	39	0	0	**49**	0	11	59	11	0	**81**	0	0	0	0	0	**0**	1	**184**
8:00AM	0	56	10	0	**66**	1	8	43	0	0	**51**	0	15	77	21	0	**113**	3	0	0	0	0	**0**	3	**230**
8:15AM	0	48	6	0	**54**	3	4	57	0	0	**61**	0	10	96	23	0	**129**	2	0	0	0	0	**0**	0	**244**
8:30AM	0	27	8	0	**35**	0	16	28	0	0	**44**	0	17	74	17	0	**108**	0	0	0	0	0	**0**	0	**187**
Total	0	174	35	0	**209**	4	38	167	0	0	**205**	0	53	306	72	0	**431**	5	0	0	0	0	**0**	4	**845**
% Approach	0%	83.3%	16.7%	0%	**-**	-	18.5%	81.5%	0%	0%	**-**	-	12.3%	71.0%	16.7%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	20.6%	4.1%	0%	**24.7%**	-	4.5%	19.8%	0%	0%	**24.3%**	-	6.3%	36.2%	8.5%	0%	**51.0%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.777	0.795	-	**0.792**	-	0.594	0.732	-	-	**0.840**	-	0.779	0.797	0.783	-	**0.835**	-	-	-	-	-	**-**	-	0.866
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Lights	0	169	35	0	**204**	-	38	164	0	0	**202**	-	49	289	68	0	**406**	-	0	0	0	0	**0**	-	812
% Lights	0%	97.1%	100%	0%	**97.6%**	-	100%	98.2%	0%	0%	**98.5%**	-	92.5%	94.4%	94.4%	0%	**94.2%**	-	0%	0%	0%	0%	**-**	-	96.1%
Single-Unit Trucks	0	1	0	0	**1**	-	0	2	0	0	**2**	-	1	4	2	0	**7**	-	0	0	0	0	**0**	-	10
% Single-Unit Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	1.2%	0%	0%	**1.0%**	-	1.9%	1.3%	2.8%	0%	**1.6%**	-	0%	0%	0%	0%	**-**	-	1.2%
Articulated Trucks	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	8
% Articulated Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	0.6%	0%	0%	**0.5%**	-	0%	2.0%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**-**	-	0.9%
Buses	0	3	0	0	**3**	-	0	0	0	0	**0**	-	3	7	2	0	**12**	-	0	0	0	0	**0**	-	15
% Buses	0%	1.7%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	5.7%	2.3%	2.8%	0%	**2.8%**	-	0%	0%	0%	0%	**-**	-	1.8%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Lyons Ave - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr (NB) at Lyons Ave - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

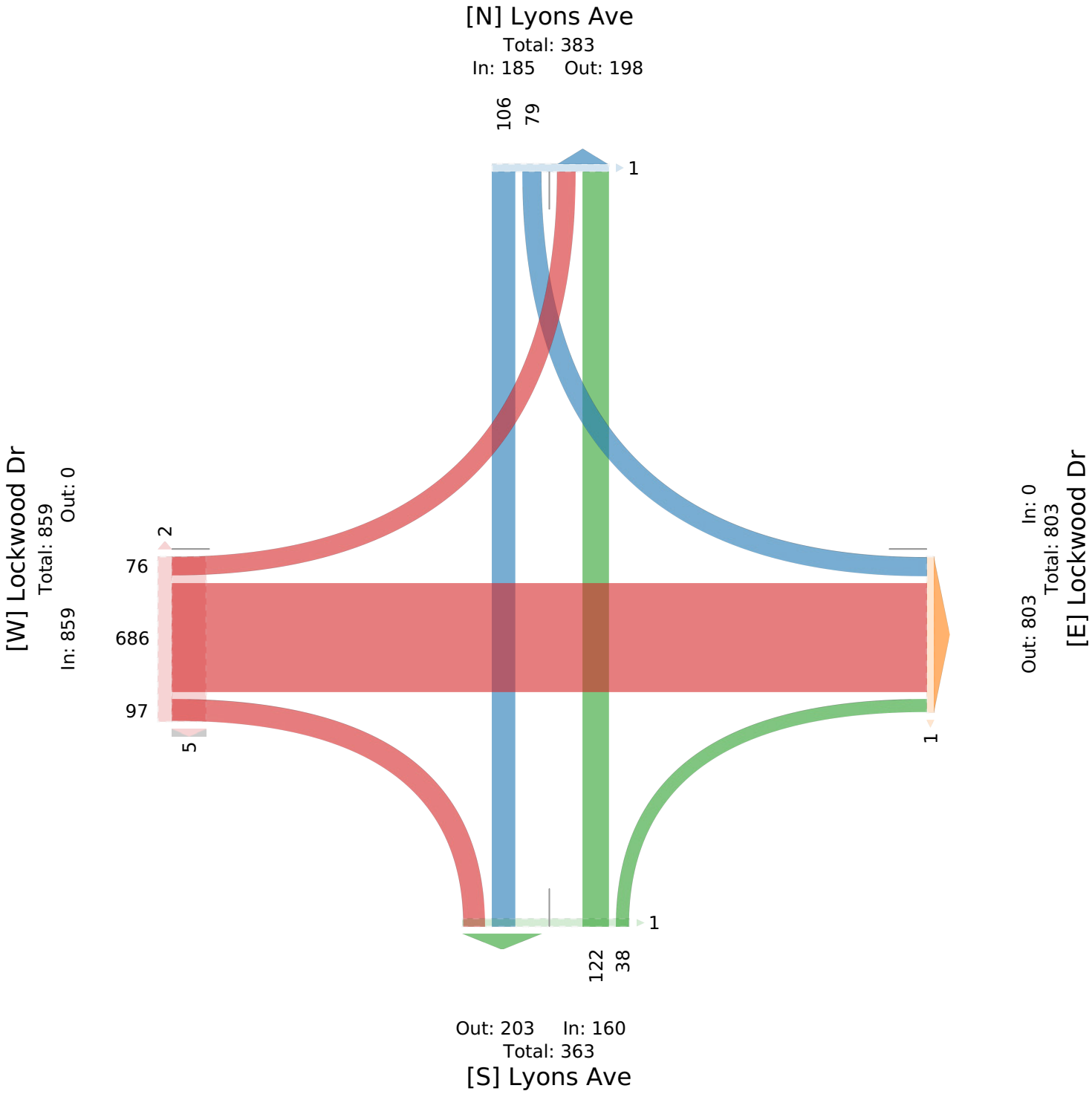
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lyons Ave Northbound						Lyons Ave Southbound						Lockwood Dr Eastbound						Lockwood Dr Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	0	41	13	0	**54**	1	16	31	0	0	**47**	0	30	181	30	0	**241**	1	0	0	0	0	**0**	0	**342**
4:30PM	0	34	6	0	**40**	0	25	18	0	0	**43**	0	17	157	24	0	**198**	3	0	0	0	0	**0**	0	**281**
4:45PM	0	21	7	0	**28**	0	18	22	0	0	**40**	1	15	159	20	0	**194**	2	0	0	0	0	**0**	1	**262**
5:00PM	0	26	12	0	**38**	0	20	35	0	0	**55**	0	14	189	23	0	**226**	1	0	0	0	0	**0**	0	**319**
Total	0	122	38	0	**160**	1	79	106	0	0	**185**	1	76	686	97	0	**859**	7	0	0	0	0	**0**	1	**1204**
% Approach	0%	76.3%	23.8%	0%	**-**	-	42.7%	57.3%	0%	0%	**-**	-	8.8%	79.9%	11.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	10.1%	3.2%	0%	**13.3%**	-	6.6%	8.8%	0%	0%	**15.4%**	-	6.3%	57.0%	8.1%	0%	**71.3%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	0.744	0.731	-	**0.741**	-	0.790	0.757	-	-	**0.841**	-	0.633	0.907	0.808	-	**0.891**	-	-	-	-	-	**-**	-	0.880
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0%
Lights	0	122	38	0	**160**	-	79	104	0	0	**183**	-	74	645	96	0	**815**	-	0	0	0	0	**0**	-	1158
% Lights	0%	100%	100%	0%	**100%**	-	100%	98.1%	0%	0%	**98.9%**	-	97.4%	94.0%	99.0%	0%	**94.9%**	-	0%	0%	0%	0%	**-**	-	96.2%
Single-Unit Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	10	0	0	**10**	-	0	0	0	0	**0**	-	12
% Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	1.9%	0%	0%	**1.1%**	-	0%	1.5%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**-**	-	1.0%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	21	0	0	**21**	-	0	0	0	0	**0**	-	21
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	3.1%	0%	0%	**2.4%**	-	0%	0%	0%	0%	**-**	-	1.7%
Buses	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2	10	1	0	**13**	-	0	0	0	0	**0**	-	13
% Buses	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.6%	1.5%	1.0%	0%	**1.5%**	-	0%	0%	0%	0%	**-**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr (NB) at Lyons Ave - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867362, Location: 29.776452, -95.315358

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Mulvey St						Mulvey St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	41	1	0	**42**	0	1	109	0	0	**110**	4	0	1	3	0	**4**	2	4	0	1	0	**5**	0	**161**
7:15AM	2	47	2	0	**51**	0	0	123	4	0	**127**	0	0	0	4	0	**4**	1	2	1	0	0	**3**	0	**185**
7:30AM	2	89	0	1	**92**	0	1	115	2	1	**119**	2	1	0	4	0	**5**	0	2	0	1	0	**3**	1	**219**
7:45AM	0	82	1	0	**83**	1	1	141	1	0	**143**	0	1	0	1	0	**2**	0	2	1	0	0	**3**	4	**231**
Hourly Total	4	259	4	1	**268**	1	3	488	7	1	**499**	6	2	1	12	0	**15**	3	10	2	2	0	**14**	5	**796**
8:00AM	1	80	1	0	**82**	0	0	121	0	0	**121**	0	0	0	1	0	**1**	0	1	0	0	0	**1**	0	**205**
8:15AM	0	99	2	0	**101**	0	0	117	1	0	**118**	0	0	0	1	0	**1**	0	6	0	2	0	**8**	0	**228**
8:30AM	1	96	0	0	**97**	0	1	93	0	0	**94**	0	1	1	0	0	**2**	0	1	0	1	0	**2**	1	**195**
8:45AM	1	68	0	0	**69**	0	0	106	1	1	**108**	0	1	0	0	0	**1**	0	0	1	1	0	**2**	1	**180**
Hourly Total	3	343	3	0	**349**	0	1	437	2	1	**441**	0	2	1	2	0	**5**	0	8	1	4	0	**13**	2	**808**
4:00PM	3	170	1	0	**174**	0	0	114	0	0	**114**	0	1	0	2	0	**3**	0	3	0	1	0	**4**	1	**295**
4:15PM	2	204	1	0	**207**	0	3	125	0	0	**128**	0	0	0	2	0	**2**	0	0	0	1	0	**1**	0	**338**
4:30PM	0	180	4	0	**184**	0	1	112	3	0	**116**	0	3	1	3	0	**7**	0	1	0	0	0	**1**	3	**308**
4:45PM	2	185	0	0	**187**	0	0	114	1	0	**115**	0	0	1	4	0	**5**	0	0	0	1	0	**1**	3	**308**
Hourly Total	7	739	6	0	**752**	0	4	465	4	0	**473**	0	4	2	11	0	**17**	0	4	0	3	0	**7**	7	**1249**
5:00PM	1	204	1	0	**206**	0	1	114	2	0	**117**	2	3	0	2	0	**5**	2	2	0	0	0	**2**	2	**330**
5:15PM	3	155	3	0	**161**	2	1	134	1	1	**137**	0	0	1	2	0	**3**	1	0	0	0	0	**0**	1	**301**
5:30PM	2	141	2	0	**145**	3	1	124	2	0	**127**	0	4	0	2	0	**6**	0	2	0	0	0	**2**	1	**280**
5:45PM	0	134	3	0	**137**	0	2	102	1	1	**106**	0	0	1	3	0	**4**	0	2	1	2	0	**5**	4	**252**
Hourly Total	6	634	9	0	**649**	5	5	474	6	2	**487**	2	7	2	9	0	**18**	3	6	1	2	0	**9**	8	**1163**
Total	20	1975	22	1	**2018**	6	13	1864	19	4	**1900**	8	15	6	34	0	**55**	6	28	4	11	0	**43**	22	**4016**
% Approach	1.0%	97.9%	1.1%	0%	**-**	-	0.7%	98.1%	1.0%	0.2%	**-**	-	27.3%	10.9%	61.8%	0%	**-**	-	65.1%	9.3%	25.6%	0%	**-**	-	-
% Total	0.5%	49.2%	0.5%	0%	**50.2%**	-	0.3%	46.4%	0.5%	0.1%	**47.3%**	-	0.4%	0.1%	0.8%	0%	**1.4%**	-	0.7%	0.1%	0.3%	0%	**1.1%**	-	-
Motorcycles	0	2	0	0	**2**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	19	1868	22	1	**1910**	-	13	1765	19	4	**1801**	-	15	6	33	0	**54**	-	28	4	11	0	**43**	-	3808
% Lights	95.0%	94.6%	100%	100%	**94.6%**	-	100%	94.7%	100%	100%	**94.8%**	-	100%	100%	97.1%	0%	**98.2%**	-	100%	100%	100%	0%	**100%**	-	94.8%
Single-Unit Trucks	1	29	0	0	**30**	-	0	33	0	0	**33**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	63
% Single-Unit Trucks	5.0%	1.5%	0%	0%	**1.5%**	-	0%	1.8%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.6%
Articulated Trucks	0	43	0	0	**43**	-	0	39	0	0	**39**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	82
% Articulated Trucks	0%	2.2%	0%	0%	**2.1%**	-	0%	2.1%	0%	0%	**2.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.0%
Buses	0	33	0	0	**33**	-	0	25	0	0	**25**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	59
% Buses	0%	1.7%	0%	0%	**1.6%**	-	0%	1.3%	0%	0%	**1.3%**	-	0%	0%	2.9%	0%	**1.8%**	-	0%	0%	0%	0%	**0%**	-	1.5%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	8	-	-	-	-	-	4	-	-	-	-	-	15	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	68.2%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	7	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	31.8%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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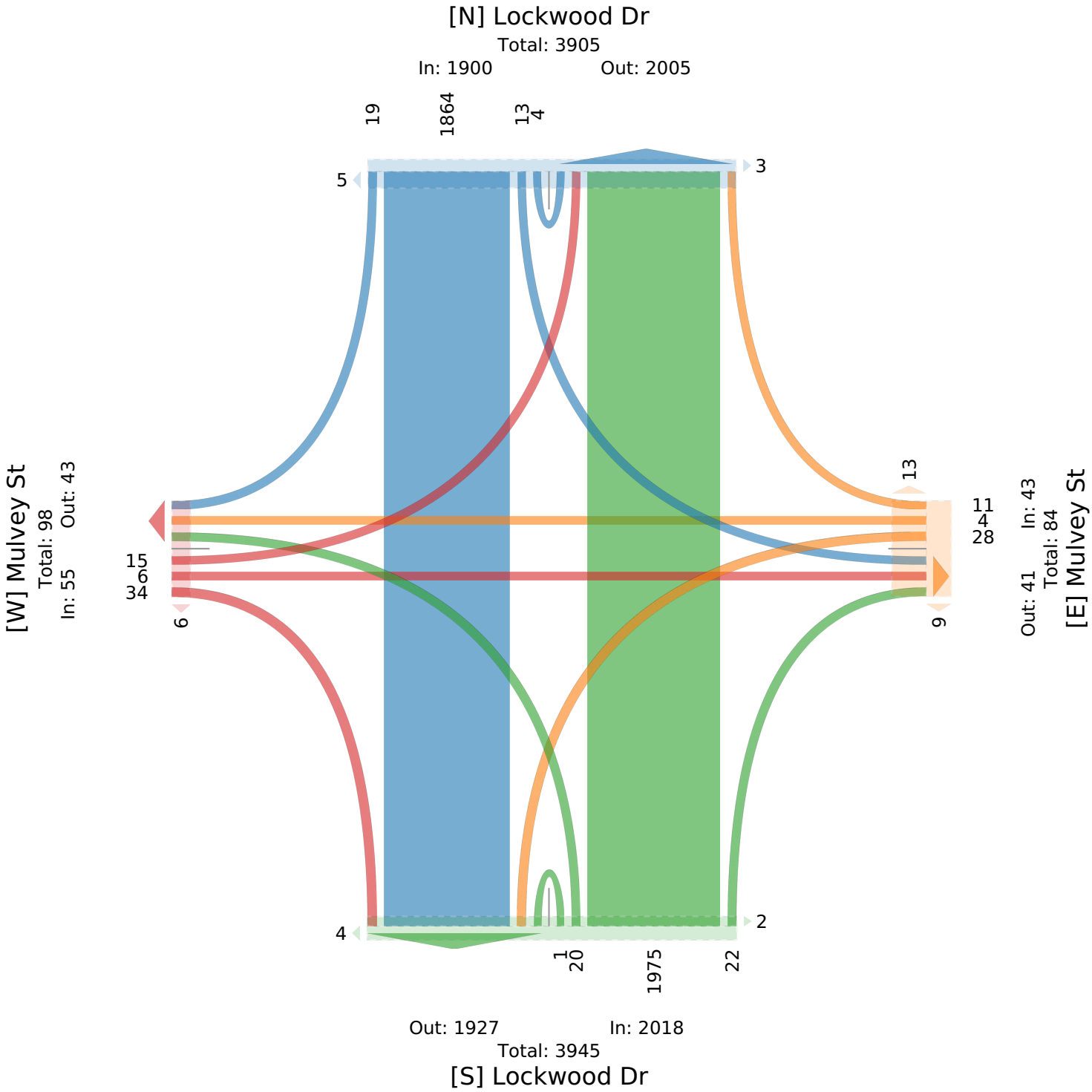

Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Mulvey St						Mulvey St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	2	89	0	1	**92**	0	1	115	2	1	**119**	2	1	0	4	0	**5**	0	2	0	1	0	**3**	1	**219**
7:45AM	0	82	1	0	**83**	1	1	141	1	0	**143**	0	1	0	1	0	**2**	0	2	1	0	0	**3**	4	**231**
8:00AM	1	80	1	0	**82**	0	0	121	0	0	**121**	0	0	0	1	0	**1**	0	1	0	0	0	**1**	0	**205**
8:15AM	0	99	2	0	**101**	0	0	117	1	0	**118**	0	0	0	1	0	**1**	0	6	0	2	0	**8**	0	**228**
Total	3	350	4	1	**358**	1	2	494	4	1	**501**	2	2	0	7	0	**9**	0	11	1	3	0	**15**	5	**883**
% Approach	0.8%	97.8%	1.1%	0.3%	**-**	-	0.4%	98.6%	0.8%	0.2%	**-**	-	22.2%	0%	77.8%	0%	**-**	-	73.3%	6.7%	20.0%	0%	**-**	-	-
% Total	0.3%	39.6%	0.5%	0.1%	**40.5%**	-	0.2%	55.9%	0.5%	0.1%	**56.7%**	-	0.2%	0%	0.8%	0%	**1.0%**	-	1.2%	0.1%	0.3%	0%	**1.7%**	-	-
PHF	0.375	0.884	0.500	0.250	**0.886**	-	0.500	0.876	0.500	0.250	**0.876**	-	0.500	-	0.438	-	**0.450**	-	0.458	0.250	0.375	-	**0.469**	-	0.956
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	3	335	4	1	**343**	-	2	475	4	1	**482**	-	2	0	7	0	**9**	-	11	1	3	0	**15**	-	849
% Lights	100%	95.7%	100%	100%	**95.8%**	-	100%	96.2%	100%	100%	**96.2%**	-	100%	0%	100%	0%	**100%**	-	100%	100%	100%	0%	**100%**	-	96.1%
Single-Unit Trucks	0	3	0	0	**3**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	8
% Single-Unit Trucks	0%	0.9%	0%	0%	**0.8%**	-	0%	1.0%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.9%
Articulated Trucks	0	3	0	0	**3**	-	0	7	0	0	**7**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	10
% Articulated Trucks	0%	0.9%	0%	0%	**0.8%**	-	0%	1.4%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Buses	0	9	0	0	**9**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	15
% Buses	0%	2.6%	0%	0%	**2.5%**	-	0%	1.2%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.7%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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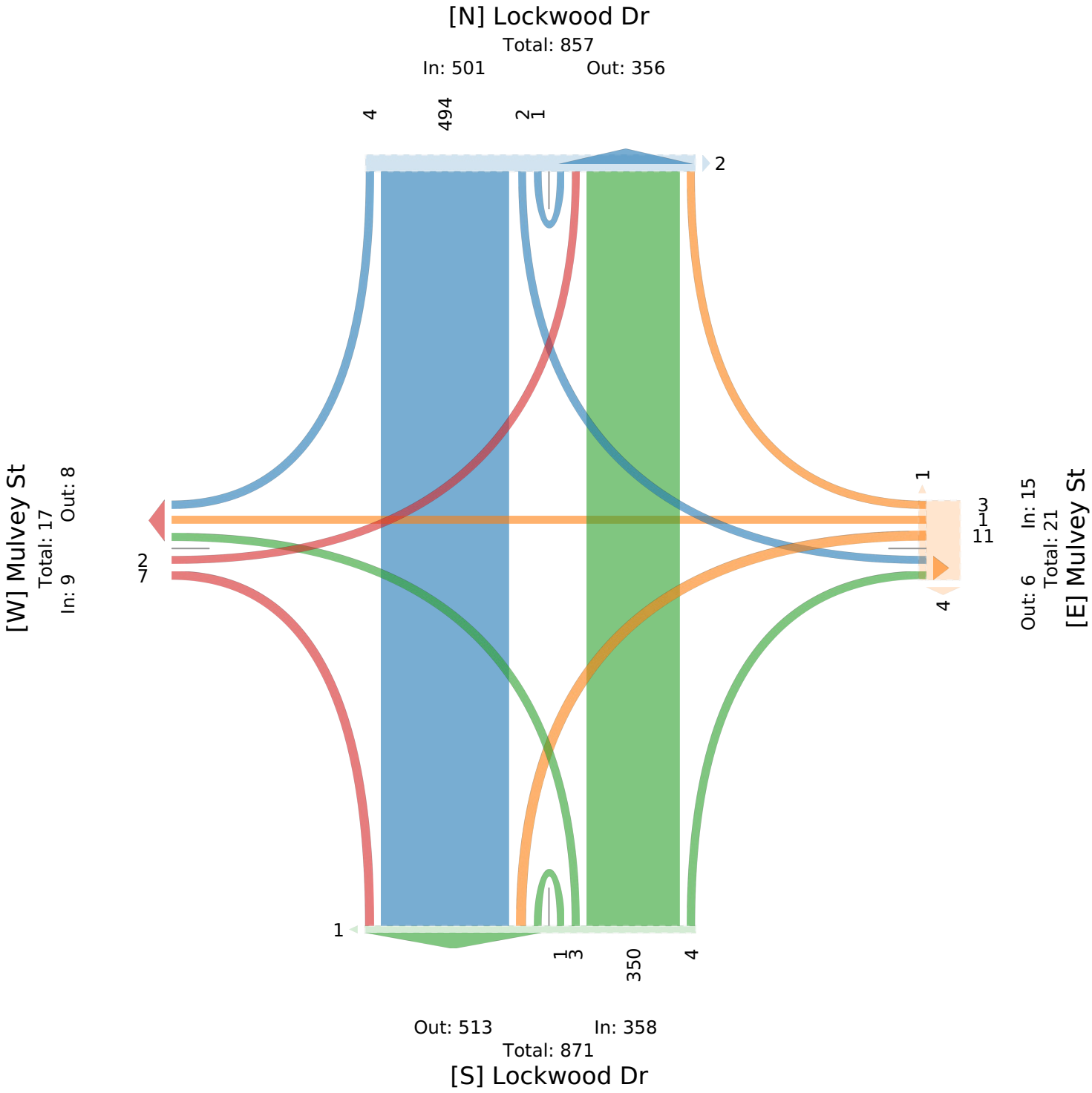


Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

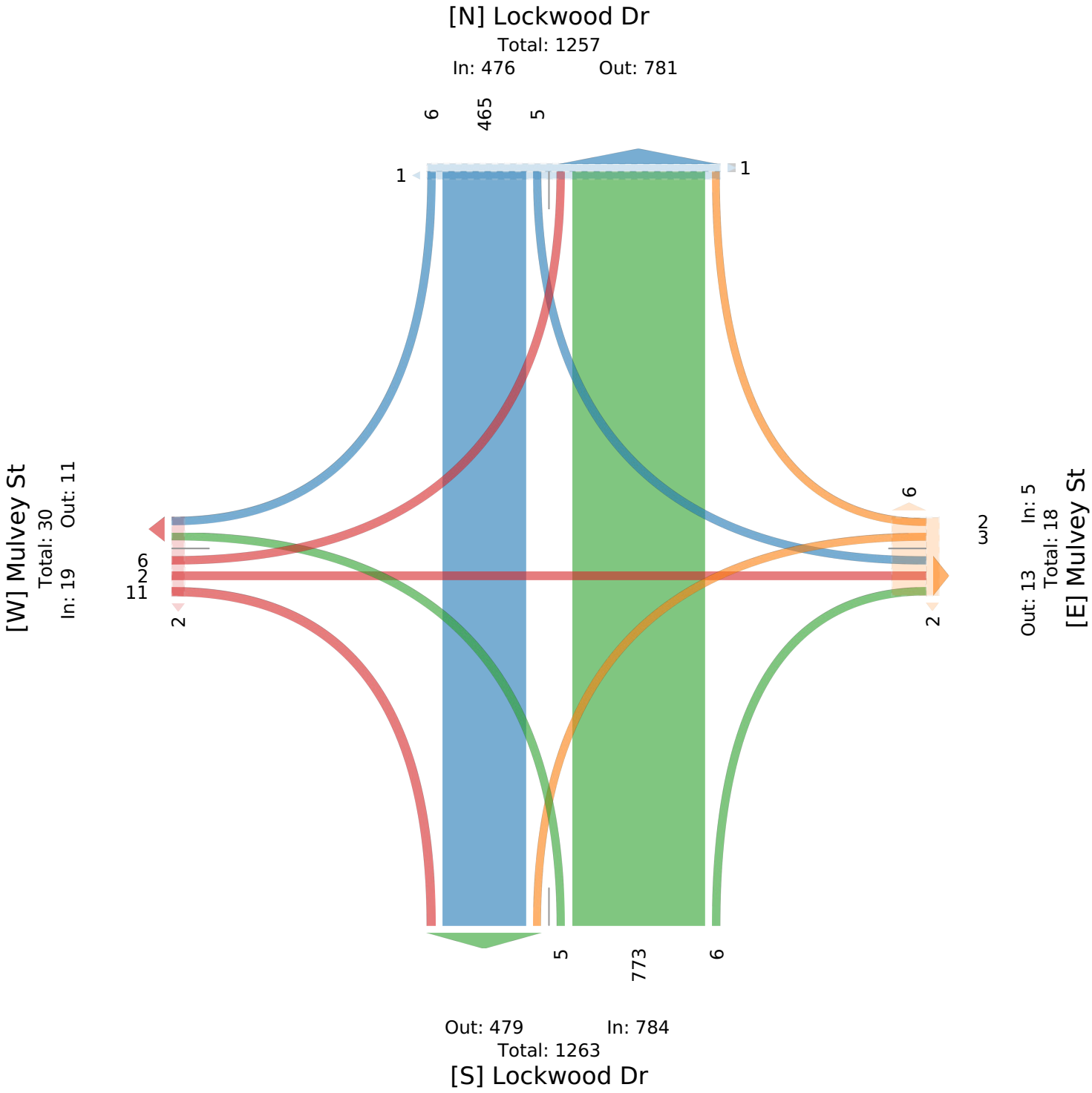
Leg	Lockwood Dr						Lockwood Dr						Mulvey St						Mulvey St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	2	204	1	0	**207**	0	3	125	0	0	**128**	0	0	0	2	0	**2**	0	0	0	1	0	**1**	0	**338**
4:30PM	0	180	4	0	**184**	0	1	112	3	0	**116**	0	3	1	3	0	**7**	0	1	0	0	0	**1**	3	**308**
4:45PM	2	185	0	0	**187**	0	0	114	1	0	**115**	0	0	1	4	0	**5**	0	0	0	1	0	**1**	3	**308**
5:00PM	1	204	1	0	**206**	0	1	114	2	0	**117**	2	3	0	2	0	**5**	2	2	0	0	0	**2**	2	**330**
Total	5	773	6	0	**784**	0	5	465	6	0	**476**	2	6	2	11	0	**19**	2	3	0	2	0	**5**	8	**1284**
% Approach	0.6%	98.6%	0.8%	0%	**-**	-	1.1%	97.7%	1.3%	0%	**-**	-	31.6%	10.5%	57.9%	0%	**-**	-	60.0%	0%	40.0%	0%	**-**	-	-
% Total	0.4%	60.2%	0.5%	0%	**61.1%**	-	0.4%	36.2%	0.5%	0%	**37.1%**	-	0.5%	0.2%	0.9%	0%	**1.5%**	-	0.2%	0%	0.2%	0%	**0.4%**	-	-
PHF	0.625	0.947	0.375	-	**0.947**	-	0.417	0.930	0.500	-	**0.930**	-	0.500	0.500	0.688	-	**0.679**	-	0.375	-	0.500	-	**0.625**	-	0.950
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	5	729	6	0	**740**	-	5	435	6	0	**446**	-	6	2	10	0	**18**	-	3	0	2	0	**5**	-	1209
% Lights	100%	94.3%	100%	0%	**94.4%**	-	100%	93.5%	100%	0%	**93.7%**	-	100%	100%	90.9%	0%	**94.7%**	-	100%	0%	100%	0%	**100%**	-	94.2%
Single-Unit Trucks	0	13	0	0	**13**	-	0	9	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	22
% Single-Unit Trucks	0%	1.7%	0%	0%	**1.7%**	-	0%	1.9%	0%	0%	**1.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.7%
Articulated Trucks	0	20	0	0	**20**	-	0	15	0	0	**15**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	35
% Articulated Trucks	0%	2.6%	0%	0%	**2.6%**	-	0%	3.2%	0%	0%	**3.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	2.7%
Buses	0	10	0	0	**10**	-	0	6	0	0	**6**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	17
% Buses	0%	1.3%	0%	0%	**1.3%**	-	0%	1.3%	0%	0%	**1.3%**	-	0%	0%	9.1%	0%	**5.3%**	-	0%	0%	0%	0%	**0%**	-	1.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	87.5%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	12.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Mulvey St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867363, Location: 29.780282, -95.315882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Collingsworth St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Collingsworth St						Collingsworth St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	7	36	1	0	**44**	0	4	66	1	0	**71**	3	1	3	20	0	**24**	1	12	8	6	0	**26**	2	**165**
7:15AM	9	37	3	0	**49**	2	3	64	0	0	**67**	1	1	3	23	0	**27**	0	12	10	3	0	**25**	0	**168**
7:30AM	19	53	6	0	**78**	2	5	71	0	0	**76**	0	5	2	25	0	**32**	0	4	11	9	0	**24**	0	**210**
7:45AM	21	65	8	0	**94**	0	3	95	0	0	**98**	0	10	4	27	0	**41**	0	9	7	5	0	**21**	1	**254**
Hourly Total	56	191	18	0	**265**	4	15	296	1	0	**312**	4	17	12	95	0	**124**	1	37	36	23	0	**96**	3	**797**
8:00AM	17	55	7	0	**79**	1	2	75	2	0	**79**	0	7	3	24	0	**34**	0	6	8	4	0	**18**	0	**210**
8:15AM	15	69	6	0	**90**	1	3	78	0	0	**81**	0	8	5	28	0	**41**	0	6	5	1	0	**12**	0	**224**
8:30AM	9	60	5	0	**74**	3	3	72	0	0	**75**	0	8	10	13	0	**31**	0	4	8	3	0	**15**	0	**195**
8:45AM	10	51	0	0	**61**	3	4	81	1	0	**86**	0	4	0	12	0	**16**	0	11	5	3	0	**19**	0	**182**
Hourly Total	51	235	18	0	**304**	8	12	306	3	0	**321**	0	27	18	77	0	**122**	0	27	26	11	0	**64**	0	**811**
4:00PM	33	159	13	0	**205**	8	7	70	2	0	**79**	1	27	12	36	0	**75**	0	7	10	2	0	**19**	2	**378**
4:15PM	40	169	10	0	**219**	1	8	75	3	0	**86**	0	19	13	33	0	**65**	0	7	4	9	1	**21**	2	**391**
4:30PM	36	143	14	0	**193**	1	8	90	0	0	**98**	0	19	11	19	0	**49**	1	7	5	11	0	**23**	1	**363**
4:45PM	24	146	11	0	**181**	2	6	84	1	0	**91**	0	19	11	15	0	**45**	1	8	3	3	0	**14**	1	**331**
Hourly Total	133	617	48	0	**798**	12	29	319	6	0	**354**	1	84	47	103	0	**234**	2	29	22	25	1	**77**	6	**1463**
5:00PM	47	159	13	0	**219**	1	7	99	0	0	**106**	0	14	8	28	0	**50**	0	4	4	9	0	**17**	2	**392**
5:15PM	27	121	12	0	**160**	4	10	112	2	0	**124**	2	11	10	30	0	**51**	0	9	5	4	0	**18**	1	**353**
5:30PM	20	104	4	0	**128**	0	6	77	0	0	**83**	5	10	4	17	0	**31**	0	7	3	5	0	**15**	0	**257**
5:45PM	16	96	10	0	**122**	1	7	65	0	0	**72**	2	7	5	19	1	**32**	1	8	5	7	0	**20**	0	**246**
Hourly Total	110	480	39	0	**629**	6	30	353	2	0	**385**	9	42	27	94	1	**164**	1	28	17	25	0	**70**	3	**1248**
Total	350	1523	123	0	**1996**	30	86	1274	12	0	**1372**	14	170	104	369	1	**644**	4	121	101	84	1	**307**	12	**4319**
% Approach	17.5%	76.3%	6.2%	0%	**-**	-	6.3%	92.9%	0.9%	0%	**-**	-	26.4%	16.1%	57.3%	0.2%	**-**	-	39.4%	32.9%	27.4%	0.3%	**-**	-	-
% Total	8.1%	35.3%	2.8%	0%	**46.2%**	-	2.0%	29.5%	0.3%	0%	**31.8%**	-	3.9%	2.4%	8.5%	0%	**14.9%**	-	2.8%	2.3%	1.9%	0%	**7.1%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	342	1455	118	0	**1915**	-	82	1210	10	0	**1302**	-	158	103	360	1	**622**	-	119	98	81	1	**299**	-	4138
% Lights	97.7%	95.5%	95.9%	0%	**95.9%**	-	95.3%	95.0%	83.3%	0%	**94.9%**	-	92.9%	99.0%	97.6%	100%	**96.6%**	-	98.3%	97.0%	96.4%	100%	**97.4%**	-	95.8%
Single-Unit Trucks	2	24	3	0	**29**	-	2	25	1	0	**28**	-	1	1	2	0	**4**	-	1	2	2	0	**5**	-	66
% Single-Unit Trucks	0.6%	1.6%	2.4%	0%	**1.5%**	-	2.3%	2.0%	8.3%	0%	**2.0%**	-	0.6%	1.0%	0.5%	0%	**0.6%**	-	0.8%	2.0%	2.4%	0%	**1.6%**	-	1.5%
Articulated Trucks	2	20	0	0	**22**	-	1	20	0	0	**21**	-	4	0	1	0	**5**	-	0	0	1	0	**1**	-	49
% Articulated Trucks	0.6%	1.3%	0%	0%	**1.1%**	-	1.2%	1.6%	0%	0%	**1.5%**	-	2.4%	0%	0.3%	0%	**0.8%**	-	0%	0%	1.2%	0%	**0.3%**	-	1.1%
Buses	4	24	2	0	**30**	-	1	17	1	0	**19**	-	7	0	6	0	**13**	-	1	1	0	0	**2**	-	64
% Buses	1.1%	1.6%	1.6%	0%	**1.5%**	-	1.2%	1.3%	8.3%	0%	**1.4%**	-	4.1%	0%	1.6%	0%	**2.0%**	-	0.8%	1.0%	0%	0%	**0.7%**	-	1.5%
Pedestrians	-	-	-	-	-	29	-	-	-	-	-	14	-	-	-	-	-	2	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	96.7%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	66.7%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	3.3%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	33.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Collingsworth St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

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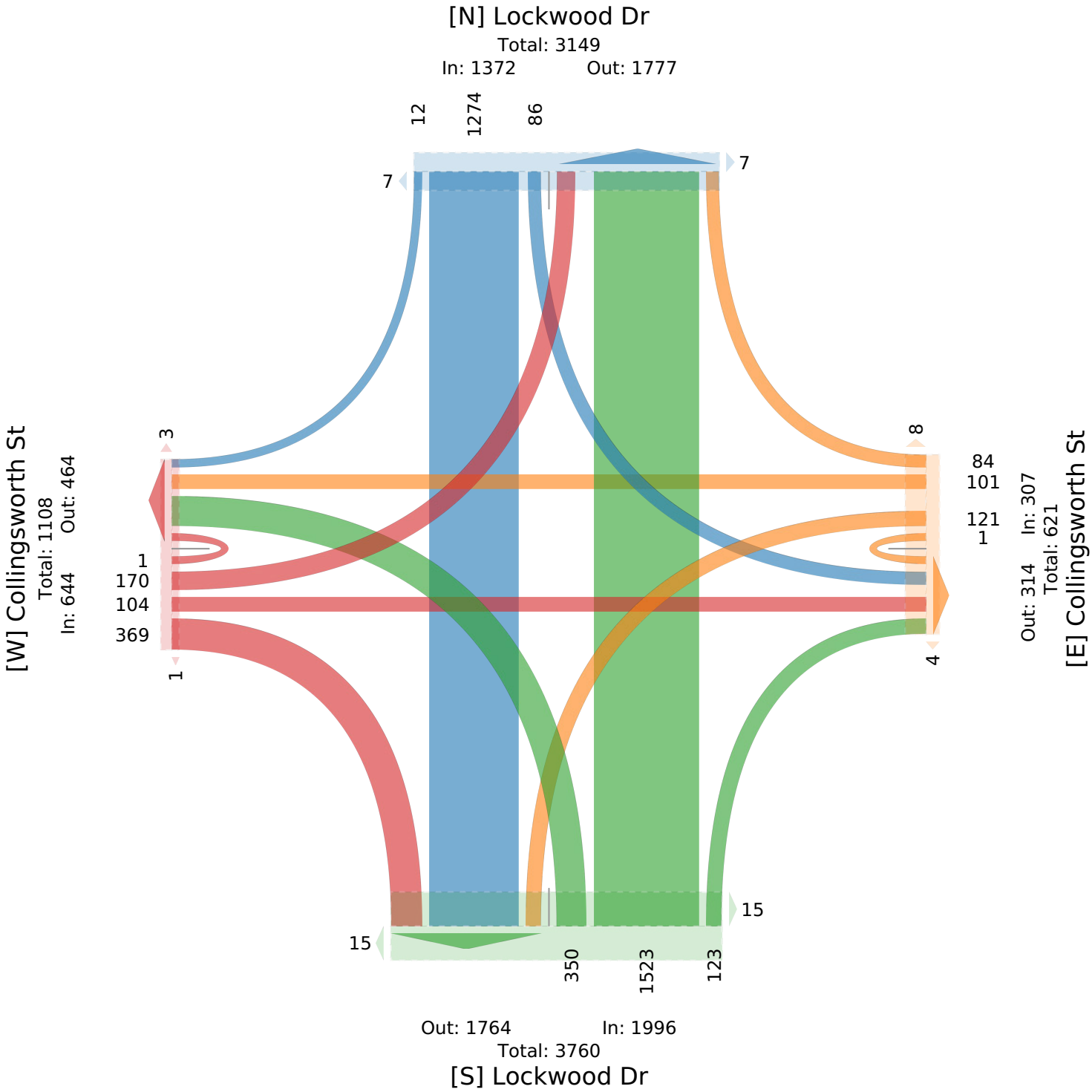

Lockwood Dr at Collingsworth St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

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Leg	Lockwood Dr						Lockwood Dr						Collingsworth St						Collingsworth St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	19	53	6	0	**78**	2	5	71	0	0	**76**	0	5	2	25	0	**32**	0	4	11	9	0	**24**	0	**210**
7:45AM	21	65	8	0	**94**	0	3	95	0	0	**98**	0	10	4	27	0	**41**	0	9	7	5	0	**21**	1	**254**
8:00AM	17	55	7	0	**79**	1	2	75	2	0	**79**	0	7	3	24	0	**34**	0	6	8	4	0	**18**	0	**210**
8:15AM	15	69	6	0	**90**	1	3	78	0	0	**81**	0	8	5	28	0	**41**	0	6	5	1	0	**12**	0	**224**
Total	72	242	27	0	**341**	4	13	319	2	0	**334**	0	30	14	104	0	**148**	0	25	31	19	0	**75**	1	**898**
% Approach	21.1%	71.0%	7.9%	0%	**-**	-	3.9%	95.5%	0.6%	0%	**-**	-	20.3%	9.5%	70.3%	0%	**-**	-	33.3%	41.3%	25.3%	0%	**-**	-	-
% Total	8.0%	26.9%	3.0%	0%	**38.0%**	-	1.4%	35.5%	0.2%	0%	**37.2%**	-	3.3%	1.6%	11.6%	0%	**16.5%**	-	2.8%	3.5%	2.1%	0%	**8.4%**	-	-
PHF	0.857	0.877	0.844	-	**0.907**	-	0.650	0.839	0.250	-	**0.852**	-	0.750	0.700	0.929	-	**0.902**	-	0.694	0.705	0.528	-	**0.781**	-	0.884
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	70	229	27	0	**326**	-	13	310	2	0	**325**	-	28	14	104	0	**146**	-	23	31	18	0	**72**	-	869
% Lights	97.2%	94.6%	100%	0%	**95.6%**	-	100%	97.2%	100%	0%	**97.3%**	-	93.3%	100%	100%	0%	**98.6%**	-	92.0%	100%	94.7%	0%	**96.0%**	-	96.8%
Single-Unit Trucks	2	4	0	0	**6**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	1	0	1	0	**2**	-	12
% Single-Unit Trucks	2.8%	1.7%	0%	0%	**1.8%**	-	0%	1.3%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	4.0%	0%	5.3%	0%	**2.7%**	-	1.3%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses	0	9	0	0	**9**	-	0	3	0	0	**3**	-	2	0	0	0	**2**	-	1	0	0	0	**1**	-	15
% Buses	0%	3.7%	0%	0%	**2.6%**	-	0%	0.9%	0%	0%	**0.9%**	-	6.7%	0%	0%	0%	**1.4%**	-	4.0%	0%	0%	0%	**1.3%**	-	1.7%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Collingsworth St - TMC
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AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

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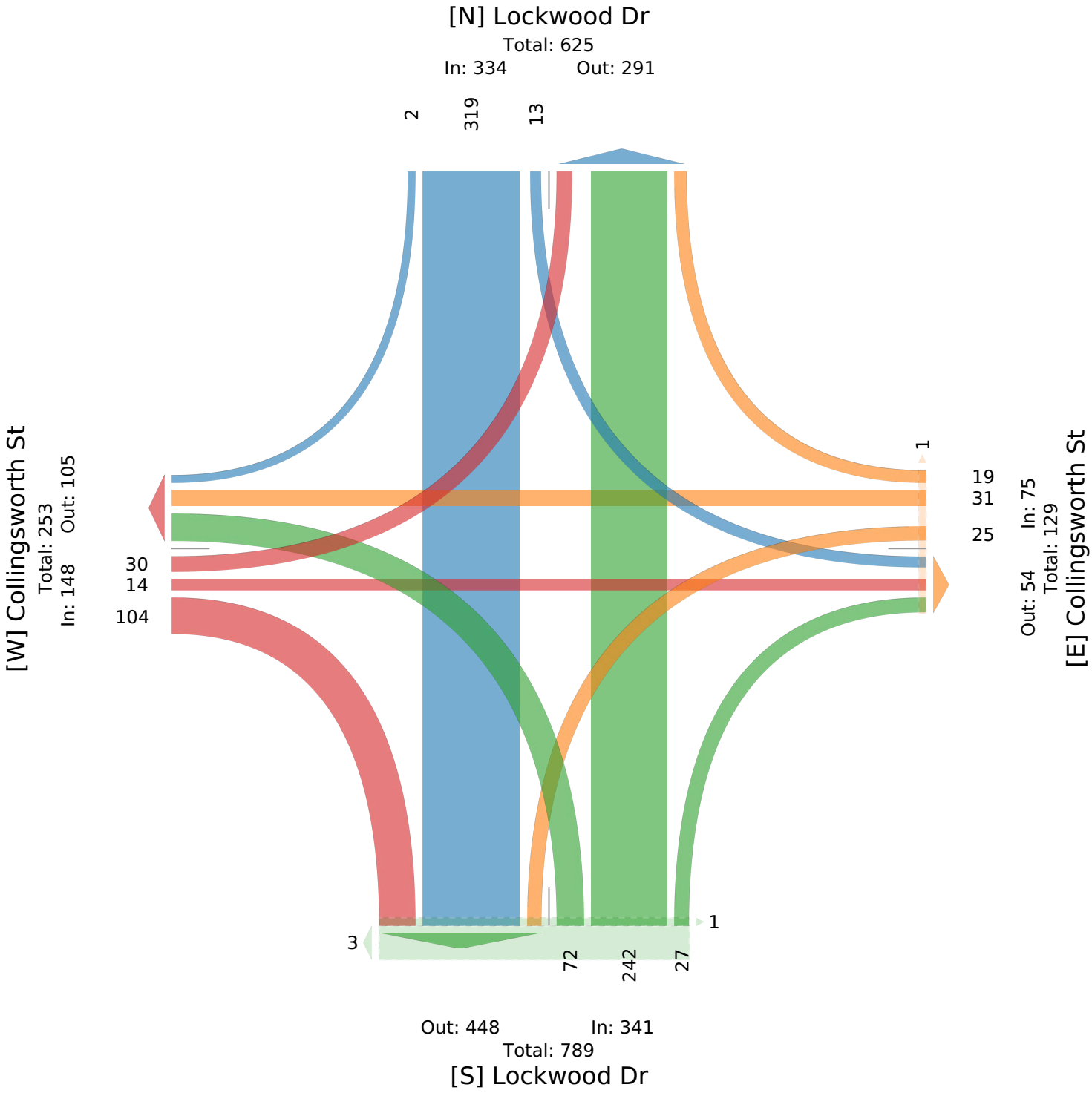


Lockwood Dr at Collingsworth St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

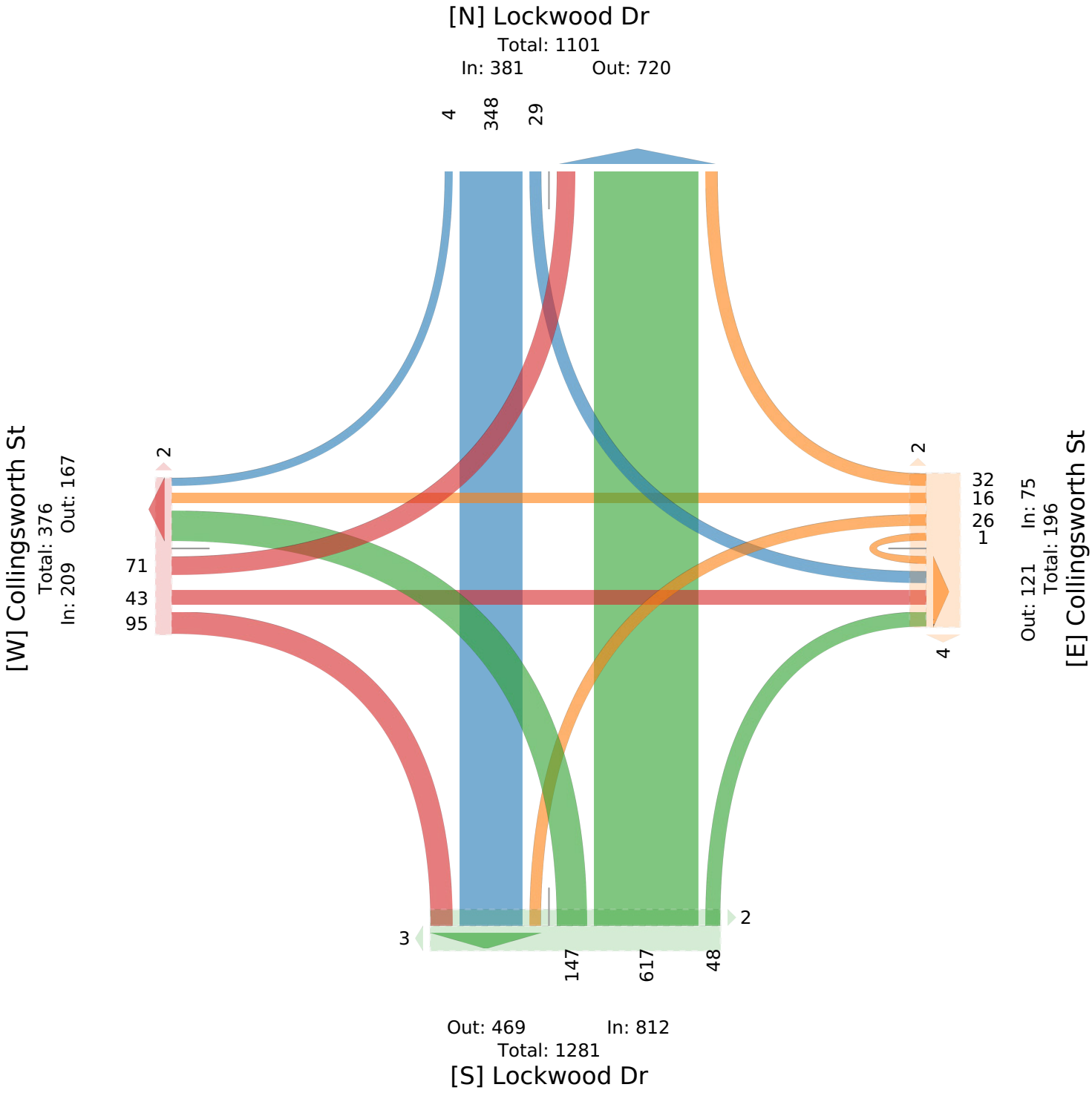
Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Collingsworth St Eastbound						Collingsworth St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	40	169	10	0	**219**	1	8	75	3	0	**86**	0	19	13	33	0	**65**	0	7	4	9	1	**21**	2	**391**
4:30PM	36	143	14	0	**193**	1	8	90	0	0	**98**	0	19	11	19	0	**49**	1	7	5	11	0	**23**	1	**363**
4:45PM	24	146	11	0	**181**	2	6	84	1	0	**91**	0	19	11	15	0	**45**	1	8	3	3	0	**14**	1	**331**
5:00PM	47	159	13	0	**219**	1	7	99	0	0	**106**	0	14	8	28	0	**50**	0	4	4	9	0	**17**	2	**392**
Total	147	617	48	0	**812**	5	29	348	4	0	**381**	0	71	43	95	0	**209**	2	26	16	32	1	**75**	6	**1477**
% Approach	18.1%	76.0%	5.9%	0%	**-**	-	7.6%	91.3%	1.0%	0%	**-**	-	34.0%	20.6%	45.5%	0%	**-**	-	34.7%	21.3%	42.7%	1.3%	**-**	-	-
% Total	10.0%	41.8%	3.2%	0%	**55.0%**	-	2.0%	23.6%	0.3%	0%	**25.8%**	-	4.8%	2.9%	6.4%	0%	**14.2%**	-	1.8%	1.1%	2.2%	0.1%	**5.1%**	-	-
PHF	0.782	0.913	0.857	-	**0.927**	-	0.906	0.879	0.333	-	**0.899**	-	0.934	0.827	0.720	-	**0.804**	-	0.813	0.800	0.727	0.250	**0.815**	-	0.942
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	142	598	45	0	**785**	-	27	327	3	0	**357**	-	66	42	95	0	**203**	-	26	15	31	1	**73**	-	1418
% Lights	96.6%	96.9%	93.8%	0%	**96.7%**	-	93.1%	94.0%	75.0%	0%	**93.7%**	-	93.0%	97.7%	100%	0%	**97.1%**	-	100%	93.8%	96.9%	100%	**97.3%**	-	96.0%
Single-Unit Trucks	0	8	1	0	**9**	-	1	8	1	0	**10**	-	1	1	0	0	**2**	-	0	0	1	0	**1**	-	22
% Single-Unit Trucks	0%	1.3%	2.1%	0%	**1.1%**	-	3.4%	2.3%	25.0%	0%	**2.6%**	-	1.4%	2.3%	0%	0%	**1.0%**	-	0%	0%	3.1%	0%	**1.3%**	-	1.5%
Articulated Trucks	1	7	0	0	**8**	-	1	9	0	0	**10**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	20
% Articulated Trucks	0.7%	1.1%	0%	0%	**1.0%**	-	3.4%	2.6%	0%	0%	**2.6%**	-	2.8%	0%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Buses	4	4	2	0	**10**	-	0	4	0	0	**4**	-	2	0	0	0	**2**	-	0	1	0	0	**1**	-	17
% Buses	2.7%	0.6%	4.2%	0%	**1.2%**	-	0%	1.1%	0%	0%	**1.0%**	-	2.8%	0%	0%	0%	**1.0%**	-	0%	6.3%	0%	0%	**1.3%**	-	1.2%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Collingsworth St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867364, Location: 29.793667, -95.316172

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

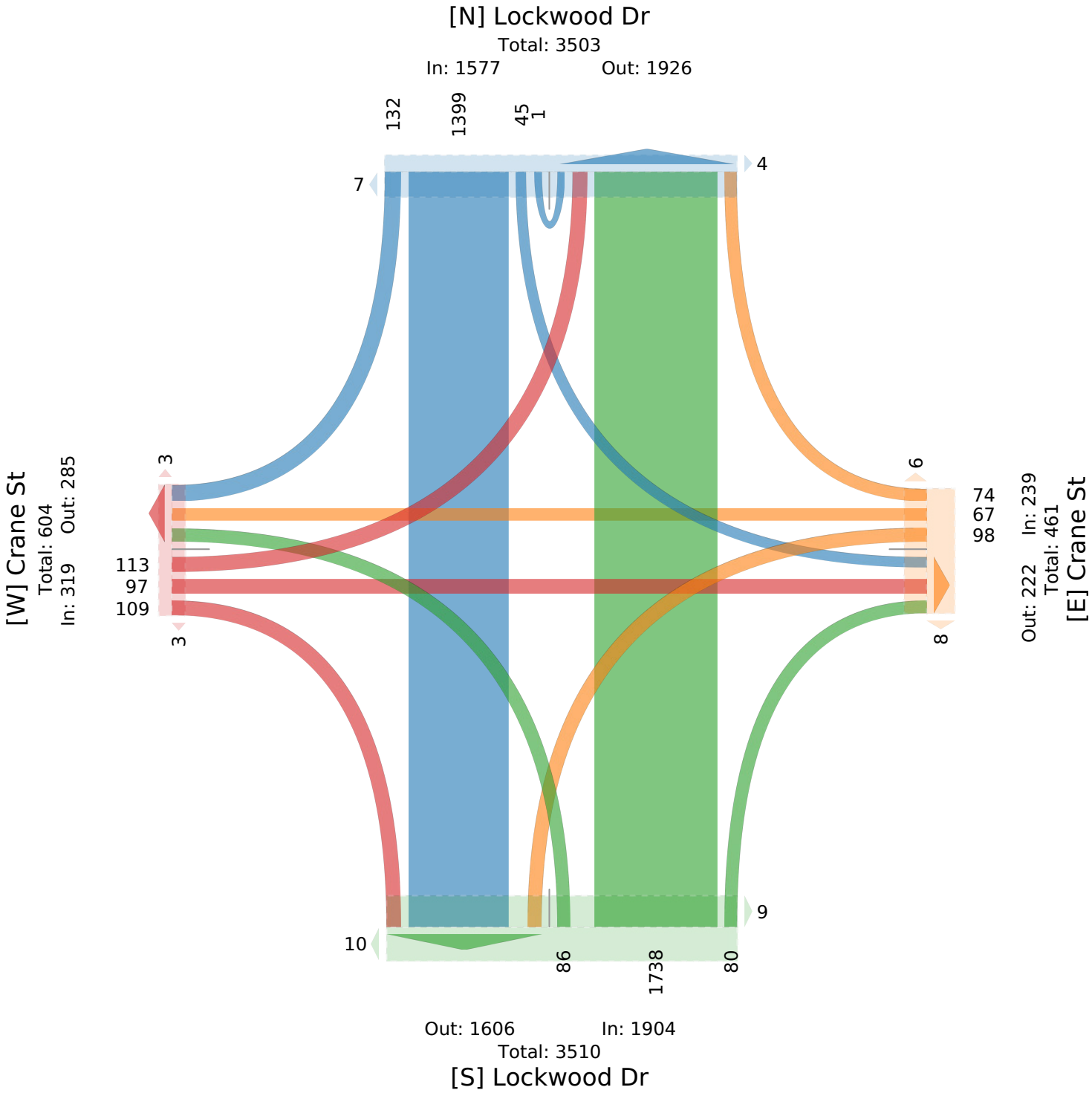
Leg	Lockwood Dr						Lockwood Dr						Crane St						Crane St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	48	3	0	**53**	8	1	62	9	0	**72**	0	4	5	8	0	**17**	0	7	4	2	0	**13**	5	**155**
7:15AM	2	43	1	0	**46**	4	3	78	7	0	**88**	0	8	5	8	0	**21**	0	11	3	2	0	**16**	0	**171**
7:30AM	8	70	4	0	**82**	1	0	86	9	0	**95**	2	8	9	7	0	**24**	2	4	8	3	0	**15**	2	**216**
7:45AM	5	73	3	0	**81**	2	2	94	2	0	**98**	3	5	6	10	0	**21**	0	4	3	2	0	**9**	1	**209**
Hourly Total	17	234	11	0	**262**	15	6	320	27	0	**353**	5	25	25	33	0	**83**	2	26	18	9	0	**53**	8	**751**
8:00AM	4	70	2	0	**76**	1	2	87	5	0	**94**	0	6	2	6	0	**14**	0	2	3	1	0	**6**	1	**190**
8:15AM	5	74	5	0	**84**	0	0	78	7	0	**85**	1	3	3	5	0	**11**	0	8	2	2	0	**12**	2	**192**
8:30AM	5	69	6	0	**80**	0	0	85	5	0	**90**	0	4	5	2	0	**11**	0	6	2	3	0	**11**	0	**192**
8:45AM	2	59	0	0	**61**	0	1	80	4	0	**85**	0	8	6	2	0	**16**	0	5	3	4	0	**12**	0	**174**
Hourly Total	16	272	13	0	**301**	1	3	330	21	0	**354**	1	21	16	15	0	**52**	0	21	10	10	0	**41**	3	**748**
4:00PM	8	206	3	0	**217**	1	5	77	13	0	**95**	1	13	7	9	0	**29**	0	2	2	4	0	**8**	0	**349**
4:15PM	5	184	10	0	**199**	0	4	91	12	0	**107**	0	7	5	7	0	**19**	0	7	4	4	0	**15**	2	**340**
4:30PM	4	163	5	0	**172**	0	5	102	11	0	**118**	2	4	6	8	0	**18**	1	10	4	4	0	**18**	1	**326**
4:45PM	3	174	9	0	**186**	0	5	90	8	0	**103**	0	10	4	6	0	**20**	0	7	3	9	0	**19**	0	**328**
Hourly Total	20	727	27	0	**774**	1	19	360	44	0	**423**	3	34	22	30	0	**86**	1	26	13	21	0	**60**	3	**1343**
5:00PM	8	171	8	0	**187**	0	6	115	12	1	**134**	1	9	8	7	0	**24**	1	5	6	4	0	**15**	0	**360**
5:15PM	7	132	6	0	**145**	0	4	119	4	0	**127**	0	6	4	8	0	**18**	1	5	7	10	0	**22**	0	**312**
5:30PM	12	108	5	0	**125**	2	3	83	9	0	**95**	0	7	11	9	0	**27**	1	7	8	12	0	**27**	0	**274**
5:45PM	6	94	10	0	**110**	0	4	72	15	0	**91**	1	11	11	7	0	**29**	0	8	5	8	0	**21**	0	**251**
Hourly Total	33	505	29	0	**567**	2	17	389	40	1	**447**	2	33	34	31	0	**98**	3	25	26	34	0	**85**	0	**1197**
Total	86	1738	80	0	**1904**	19	45	1399	132	1	**1577**	11	113	97	109	0	**319**	6	98	67	74	0	**239**	14	**4039**
% Approach	4.5%	91.3%	4.2%	0%	**-**	-	2.9%	88.7%	8.4%	0.1%	**-**	-	35.4%	30.4%	34.2%	0%	**-**	-	41.0%	28.0%	31.0%	0%	**-**	-	-
% Total	2.1%	43.0%	2.0%	0%	**47.1%**	-	1.1%	34.6%	3.3%	0%	**39.0%**	-	2.8%	2.4%	2.7%	0%	**7.9%**	-	2.4%	1.7%	1.8%	0%	**5.9%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	1.5%	0%	0%	**0.4%**	-	0%
Lights	84	1650	80	0	**1814**	-	42	1326	132	1	**1501**	-	112	94	107	0	**313**	-	97	66	71	0	**234**	-	3862
% Lights	97.7%	94.9%	100%	0%	**95.3%**	-	93.3%	94.8%	100%	100%	**95.2%**	-	99.1%	96.9%	98.2%	0%	**98.1%**	-	99.0%	98.5%	95.9%	0%	**97.9%**	-	95.6%
Single-Unit Trucks	0	30	0	0	**30**	-	1	31	0	0	**32**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	64
% Single-Unit Trucks	0%	1.7%	0%	0%	**1.6%**	-	2.2%	2.2%	0%	0%	**2.0%**	-	0%	1.0%	0%	0%	**0.3%**	-	0%	0%	1.4%	0%	**0.4%**	-	1.6%
Articulated Trucks	0	27	0	0	**27**	-	2	22	0	0	**24**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	51
% Articulated Trucks	0%	1.6%	0%	0%	**1.4%**	-	4.4%	1.6%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.3%
Buses	2	31	0	0	**33**	-	0	19	0	0	**19**	-	1	2	2	0	**5**	-	1	0	2	0	**3**	-	60
% Buses	2.3%	1.8%	0%	0%	**1.7%**	-	0%	1.4%	0%	0%	**1.2%**	-	0.9%	2.1%	1.8%	0%	**1.6%**	-	1.0%	0%	2.7%	0%	**1.3%**	-	1.5%
Pedestrians	-	-	-	-	-	19	-	-	-	-	-	10	-	-	-	-	-	5	-	-	-	-	-	12	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	90.9%	-	-	-	-	-	83.3%	-	-	-	-	-	85.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	9.1%	-	-	-	-	-	16.7%	-	-	-	-	-	14.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

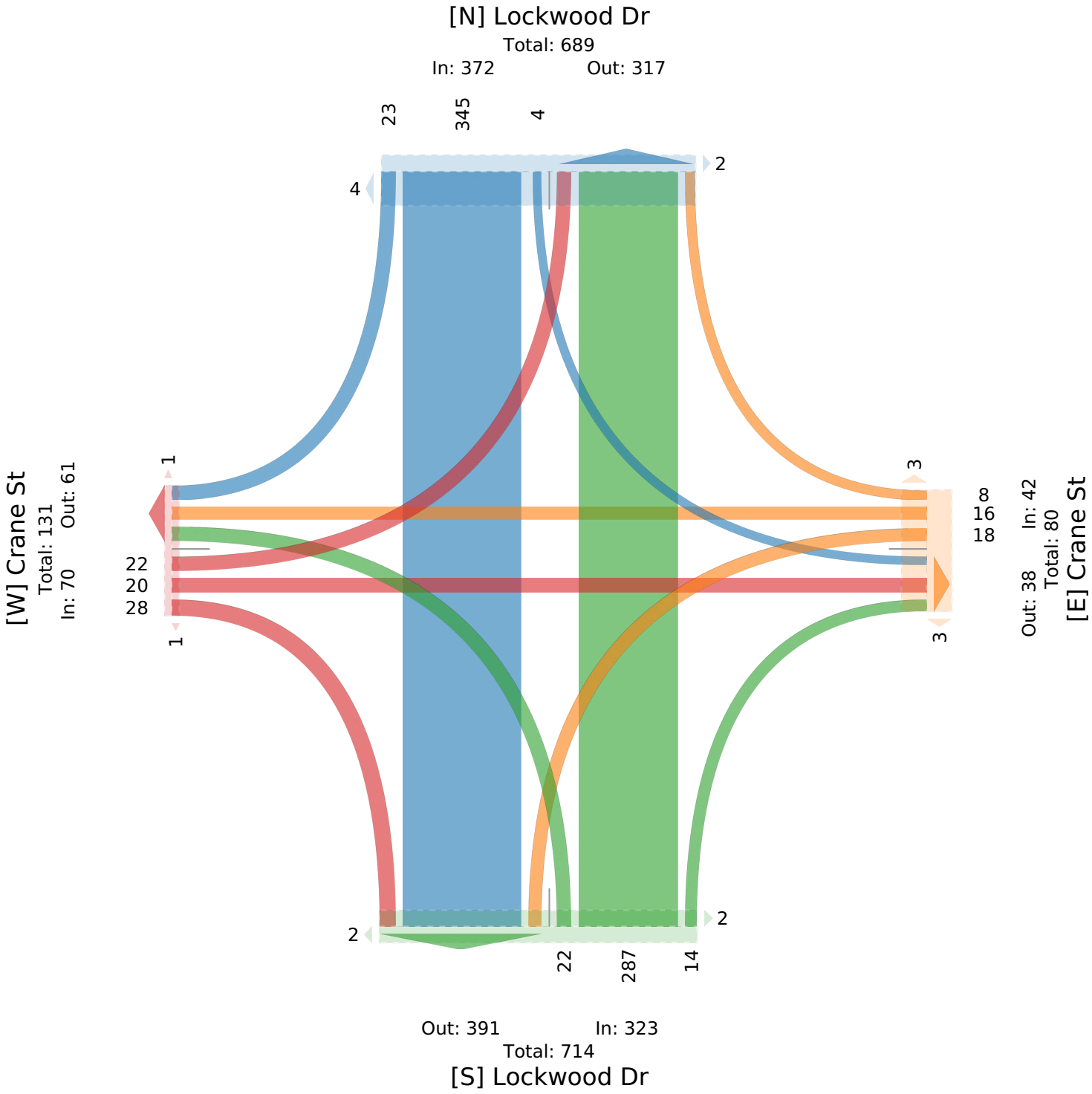
Leg	Lockwood Dr						Lockwood Dr						Crane St						Crane St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	8	70	4	0	**82**	1	0	86	9	0	**95**	2	8	9	7	0	**24**	2	4	8	3	0	**15**	2	**216**
7:45AM	5	73	3	0	**81**	2	2	94	2	0	**98**	3	5	6	10	0	**21**	0	4	3	2	0	**9**	1	**209**
8:00AM	4	70	2	0	**76**	1	2	87	5	0	**94**	0	6	2	6	0	**14**	0	2	3	1	0	**6**	1	**190**
8:15AM	5	74	5	0	**84**	0	0	78	7	0	**85**	1	3	3	5	0	**11**	0	8	2	2	0	**12**	2	**192**
Total	22	287	14	0	**323**	4	4	345	23	0	**372**	6	22	20	28	0	**70**	2	18	16	8	0	**42**	6	**807**
% Approach	6.8%	88.9%	4.3%	0%	**-**	-	1.1%	92.7%	6.2%	0%	**-**	-	31.4%	28.6%	40.0%	0%	**-**	-	42.9%	38.1%	19.0%	0%	**-**	-	-
% Total	2.7%	35.6%	1.7%	0%	**40.0%**	-	0.5%	42.8%	2.9%	0%	**46.1%**	-	2.7%	2.5%	3.5%	0%	**8.7%**	-	2.2%	2.0%	1.0%	0%	**5.2%**	-	-
PHF	0.688	0.970	0.700	-	**0.961**	-	0.500	0.918	0.639	-	**0.949**	-	0.688	0.556	0.700	-	**0.729**	-	0.563	0.500	0.667	-	**0.700**	-	0.934
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	21	270	14	0	**305**	-	4	334	23	0	**361**	-	22	19	27	0	**68**	-	18	16	8	0	**42**	-	776
% Lights	95.5%	94.1%	100%	0%	**94.4%**	-	100%	96.8%	100%	0%	**97.0%**	-	100%	95.0%	96.4%	0%	**97.1%**	-	100%	100%	100%	0%	**100%**	-	96.2%
Single-Unit Trucks	0	7	0	0	**7**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	12
% Single-Unit Trucks	0%	2.4%	0%	0%	**2.2%**	-	0%	1.4%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.5%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	1	10	0	0	**11**	-	0	3	0	0	**3**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	16
% Buses	4.5%	3.5%	0%	0%	**3.4%**	-	0%	0.9%	0%	0%	**0.8%**	-	0%	5.0%	3.6%	0%	**2.9%**	-	0%	0%	0%	0%	**0%**	-	2.0%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

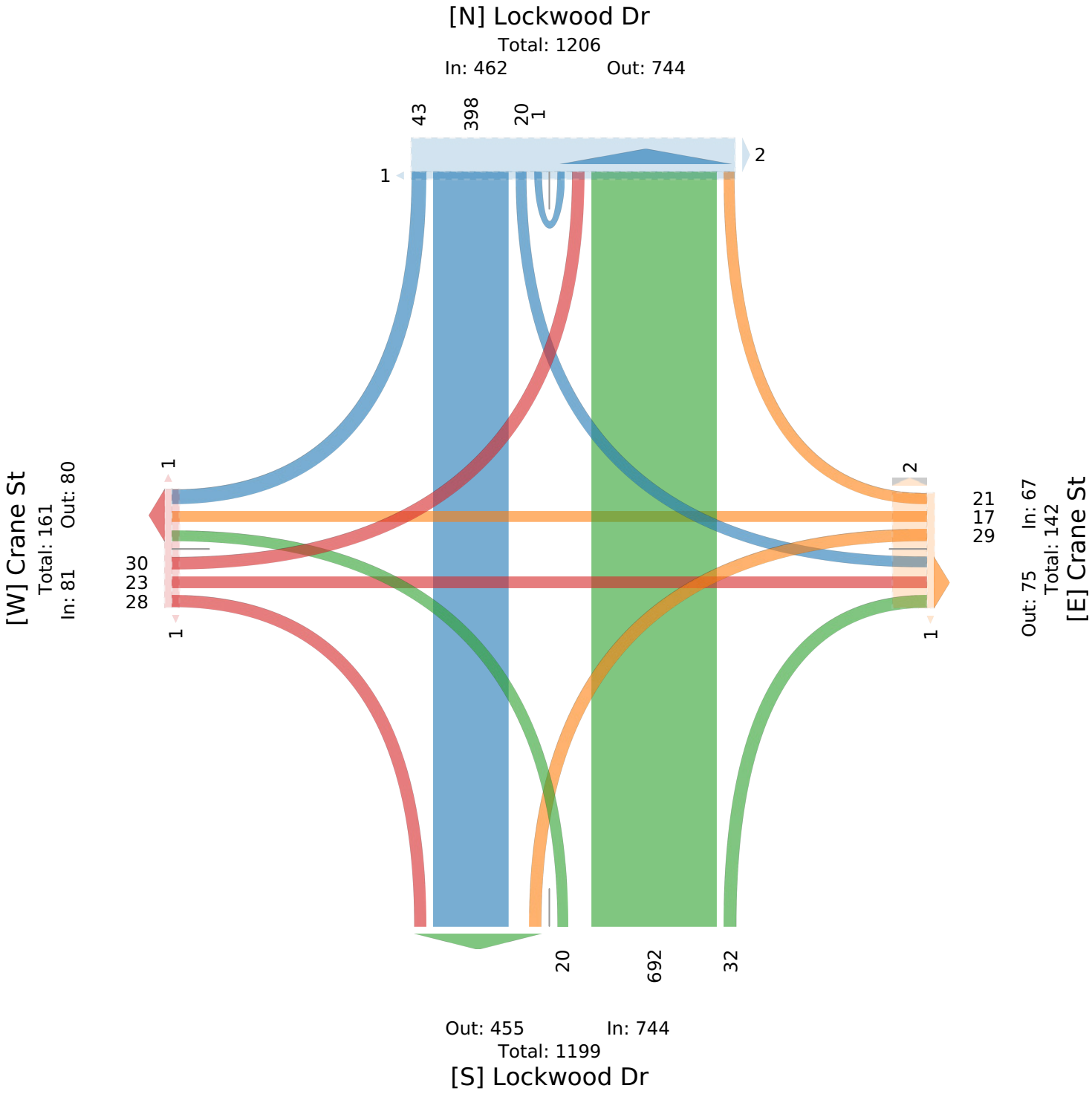
Leg	Lockwood Dr						Lockwood Dr						Crane St						Crane St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	5	184	10	0	**199**	0	4	91	12	0	**107**	0	7	5	7	0	**19**	0	7	4	4	0	**15**	2	**340**
4:30PM	4	163	5	0	**172**	0	5	102	11	0	**118**	2	4	6	8	0	**18**	1	10	4	4	0	**18**	1	**326**
4:45PM	3	174	9	0	**186**	0	5	90	8	0	**103**	0	10	4	6	0	**20**	0	7	3	9	0	**19**	0	**328**
5:00PM	8	171	8	0	**187**	0	6	115	12	1	**134**	1	9	8	7	0	**24**	1	5	6	4	0	**15**	0	**360**
Total	20	692	32	0	**744**	0	20	398	43	1	**462**	3	30	23	28	0	**81**	2	29	17	21	0	**67**	3	**1354**
% Approach	2.7%	93.0%	4.3%	0%	**-**	-	4.3%	86.1%	9.3%	0.2%	**-**	-	37.0%	28.4%	34.6%	0%	**-**	-	43.3%	25.4%	31.3%	0%	**-**	-	-
% Total	1.5%	51.1%	2.4%	0%	**54.9%**	-	1.5%	29.4%	3.2%	0.1%	**34.1%**	-	2.2%	1.7%	2.1%	0%	**6.0%**	-	2.1%	1.3%	1.6%	0%	**4.9%**	-	-
PHF	0.625	0.940	0.800	-	**0.935**	-	0.833	0.865	0.896	0.250	**0.862**	-	0.750	0.719	0.875	-	**0.844**	-	0.725	0.708	0.583	-	**0.882**	-	0.940
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	20	664	32	0	**716**	-	19	374	43	1	**437**	-	29	22	27	0	**78**	-	28	17	19	0	**64**	-	1295
% Lights	100%	96.0%	100%	0%	**96.2%**	-	95.0%	94.0%	100%	100%	**94.6%**	-	96.7%	95.7%	96.4%	0%	**96.3%**	-	96.6%	100%	90.5%	0%	**95.5%**	-	95.6%
Single-Unit Trucks	0	10	0	0	**10**	-	0	10	0	0	**10**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	22
% Single-Unit Trucks	0%	1.4%	0%	0%	**1.3%**	-	0%	2.5%	0%	0%	**2.2%**	-	0%	4.3%	0%	0%	**1.2%**	-	0%	0%	4.8%	0%	**1.5%**	-	1.6%
Articulated Trucks	0	11	0	0	**11**	-	1	8	0	0	**9**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	20
% Articulated Trucks	0%	1.6%	0%	0%	**1.5%**	-	5.0%	2.0%	0%	0%	**1.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.5%
Buses	0	7	0	0	**7**	-	0	6	0	0	**6**	-	1	0	1	0	**2**	-	1	0	1	0	**2**	-	17
% Buses	0%	1.0%	0%	0%	**0.9%**	-	0%	1.5%	0%	0%	**1.3%**	-	3.3%	0%	3.6%	0%	**2.5%**	-	3.4%	0%	4.8%	0%	**3.0%**	-	1.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crane St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867365, Location: 29.797, -95.316911

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Cavalcade St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

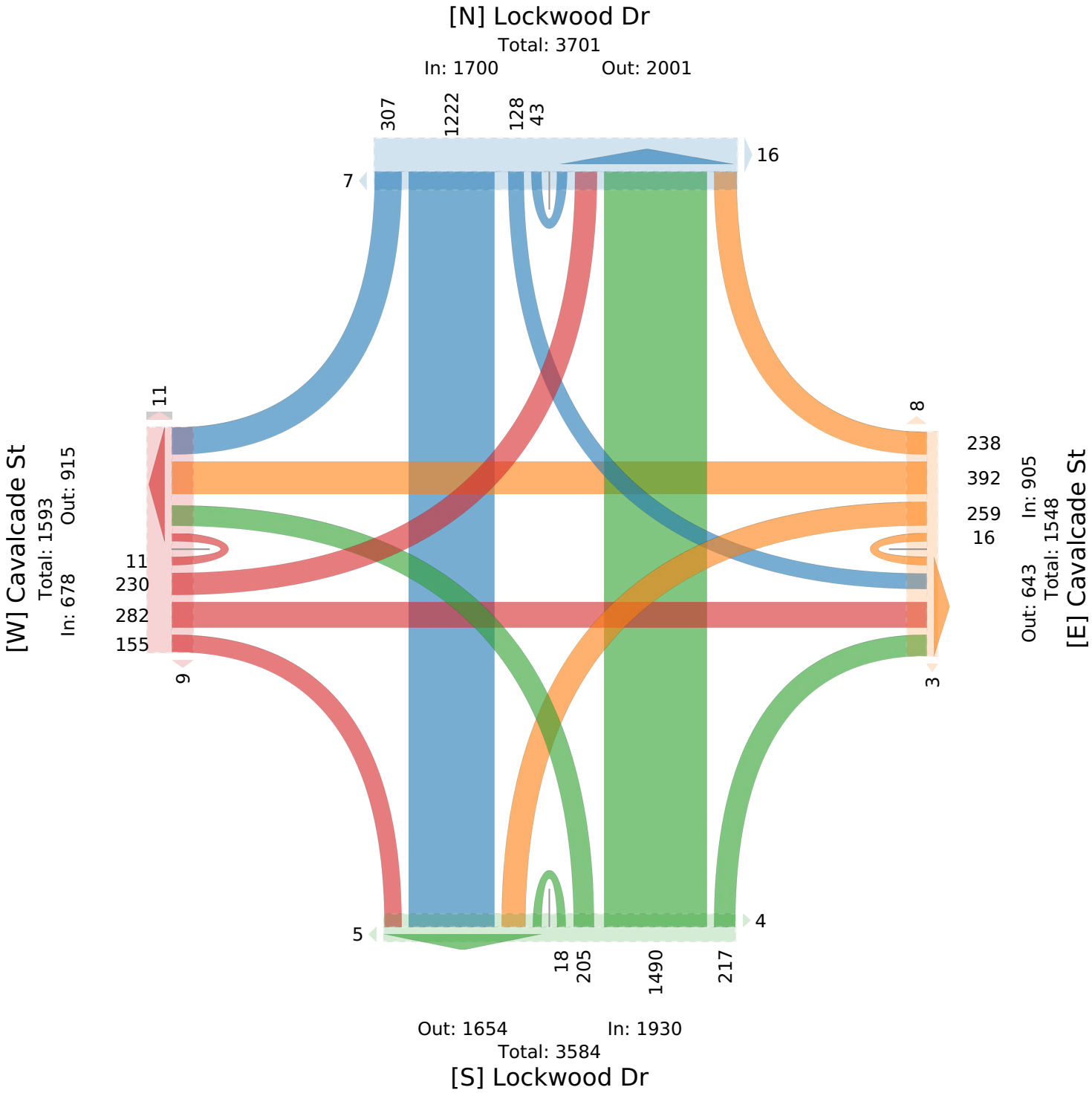
Leg	Lockwood Dr						Lockwood Dr						Cavalcade St						Cavalcade St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	44	6	0	**52**	0	1	57	7	0	**65**	0	7	6	6	0	**19**	1	13	12	8	2	**35**	0	**171**
7:15AM	5	31	12	0	**48**	0	6	67	12	1	**86**	1	10	6	5	0	**21**	2	18	16	7	0	**41**	3	**196**
7:30AM	1	65	15	0	**81**	0	7	72	17	2	**98**	0	7	9	2	0	**18**	0	21	26	20	0	**67**	0	**264**
7:45AM	13	61	11	0	**85**	1	3	81	17	3	**104**	1	12	13	7	2	**34**	1	13	27	6	1	**47**	0	**270**
Hourly Total	21	201	44	0	**266**	1	17	277	53	6	**353**	2	36	34	20	2	**92**	4	65	81	41	3	**190**	3	**901**
8:00AM	3	61	11	0	**75**	6	14	71	13	3	**101**	1	12	11	11	0	**34**	6	16	27	10	1	**54**	0	**264**
8:15AM	6	57	8	0	**71**	0	4	71	11	3	**89**	1	7	19	7	0	**33**	0	16	14	13	0	**43**	0	**236**
8:30AM	3	63	6	0	**72**	0	9	75	22	3	**109**	2	10	16	3	0	**29**	1	11	16	10	0	**37**	2	**247**
8:45AM	5	57	9	1	**72**	0	3	81	17	2	**103**	1	9	14	6	0	**29**	0	7	11	7	2	**27**	2	**231**
Hourly Total	17	238	34	1	**290**	6	30	298	63	11	**402**	5	38	60	27	0	**125**	7	50	68	40	3	**161**	4	**978**
4:00PM	20	171	20	3	**214**	0	10	68	22	3	**103**	1	15	36	12	0	**63**	1	24	40	18	0	**82**	0	**462**
4:15PM	28	150	21	1	**200**	0	9	73	24	2	**108**	1	28	26	16	2	**72**	2	21	29	22	1	**73**	0	**453**
4:30PM	26	139	17	0	**182**	0	8	93	31	1	**133**	1	27	34	21	1	**83**	1	20	35	19	0	**74**	1	**472**
4:45PM	25	130	15	3	**173**	0	8	75	34	4	**121**	4	24	26	12	2	**64**	1	13	26	17	2	**58**	1	**416**
Hourly Total	99	590	73	7	**769**	0	35	309	111	10	**465**	7	94	122	61	5	**282**	5	78	130	76	3	**287**	2	**1803**
5:00PM	28	153	18	5	**204**	1	11	104	23	4	**142**	3	19	20	11	0	**50**	1	23	35	23	1	**82**	0	**478**
5:15PM	16	112	18	2	**148**	1	13	90	19	6	**128**	0	11	22	13	1	**47**	1	15	30	22	3	**70**	0	**393**
5:30PM	11	103	14	2	**130**	0	9	76	17	3	**105**	5	17	12	14	3	**46**	2	18	26	17	0	**61**	2	**342**
5:45PM	13	93	16	1	**123**	0	13	68	21	3	**105**	1	15	12	9	0	**36**	0	10	22	19	3	**54**	0	**318**
Hourly Total	68	461	66	10	**605**	2	46	338	80	16	**480**	9	62	66	47	4	**179**	4	66	113	81	7	**267**	2	**1531**
Total	205	1490	217	18	**1930**	9	128	1222	307	43	**1700**	23	230	282	155	11	**678**	20	259	392	238	16	**905**	11	**5213**
% Approach	10.6%	77.2%	11.2%	0.9%	**-**	-	7.5%	71.9%	18.1%	2.5%	**-**	-	33.9%	41.6%	22.9%	1.6%	**-**	-	28.6%	43.3%	26.3%	1.8%	**-**	-	-
% Total	3.9%	28.6%	4.2%	0.3%	**37.0%**	-	2.5%	23.4%	5.9%	0.8%	**32.6%**	-	4.4%	5.4%	3.0%	0.2%	**13.0%**	-	5.0%	7.5%	4.6%	0.3%	**17.4%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.4%	0%	**0.1%**	-	0%
Lights	195	1418	209	18	**1840**	-	125	1154	302	43	**1624**	-	225	258	152	11	**646**	-	253	374	224	16	**867**	-	4977
% Lights	95.1%	95.2%	96.3%	100%	**95.3%**	-	97.7%	94.4%	98.4%	100%	**95.5%**	-	97.8%	91.5%	98.1%	100%	**95.3%**	-	97.7%	95.4%	94.1%	100%	**95.8%**	-	95.5%
Single-Unit Trucks	5	25	2	0	**32**	-	2	31	3	0	**36**	-	3	18	1	0	**22**	-	3	16	9	0	**28**	-	118
% Single-Unit Trucks	2.4%	1.7%	0.9%	0%	**1.7%**	-	1.6%	2.5%	1.0%	0%	**2.1%**	-	1.3%	6.4%	0.6%	0%	**3.2%**	-	1.2%	4.1%	3.8%	0%	**3.1%**	-	2.3%
Articulated Trucks	2	20	3	0	**25**	-	0	20	0	0	**20**	-	2	4	1	0	**7**	-	1	2	3	0	**6**	-	58
% Articulated Trucks	1.0%	1.3%	1.4%	0%	**1.3%**	-	0%	1.6%	0%	0%	**1.2%**	-	0.9%	1.4%	0.6%	0%	**1.0%**	-	0.4%	0.5%	1.3%	0%	**0.7%**	-	1.1%
Buses	3	27	3	0	**33**	-	1	16	2	0	**19**	-	0	2	1	0	**3**	-	2	0	1	0	**3**	-	58
% Buses	1.5%	1.8%	1.4%	0%	**1.7%**	-	0.8%	1.3%	0.7%	0%	**1.1%**	-	0%	0.7%	0.6%	0%	**0.4%**	-	0.8%	0%	0.4%	0%	**0.3%**	-	1.1%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	23	-	-	-	-	-	15	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	- 88.9%	-	-	-	-	-	- 100%	-	-	-	-	-	- 75.0%	-	-	-	-	-	- 100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	- 11.1%	-	-	-	-	-	0%	-	-	-	-	-	- 25.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Cavalcade St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Cavalcade St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

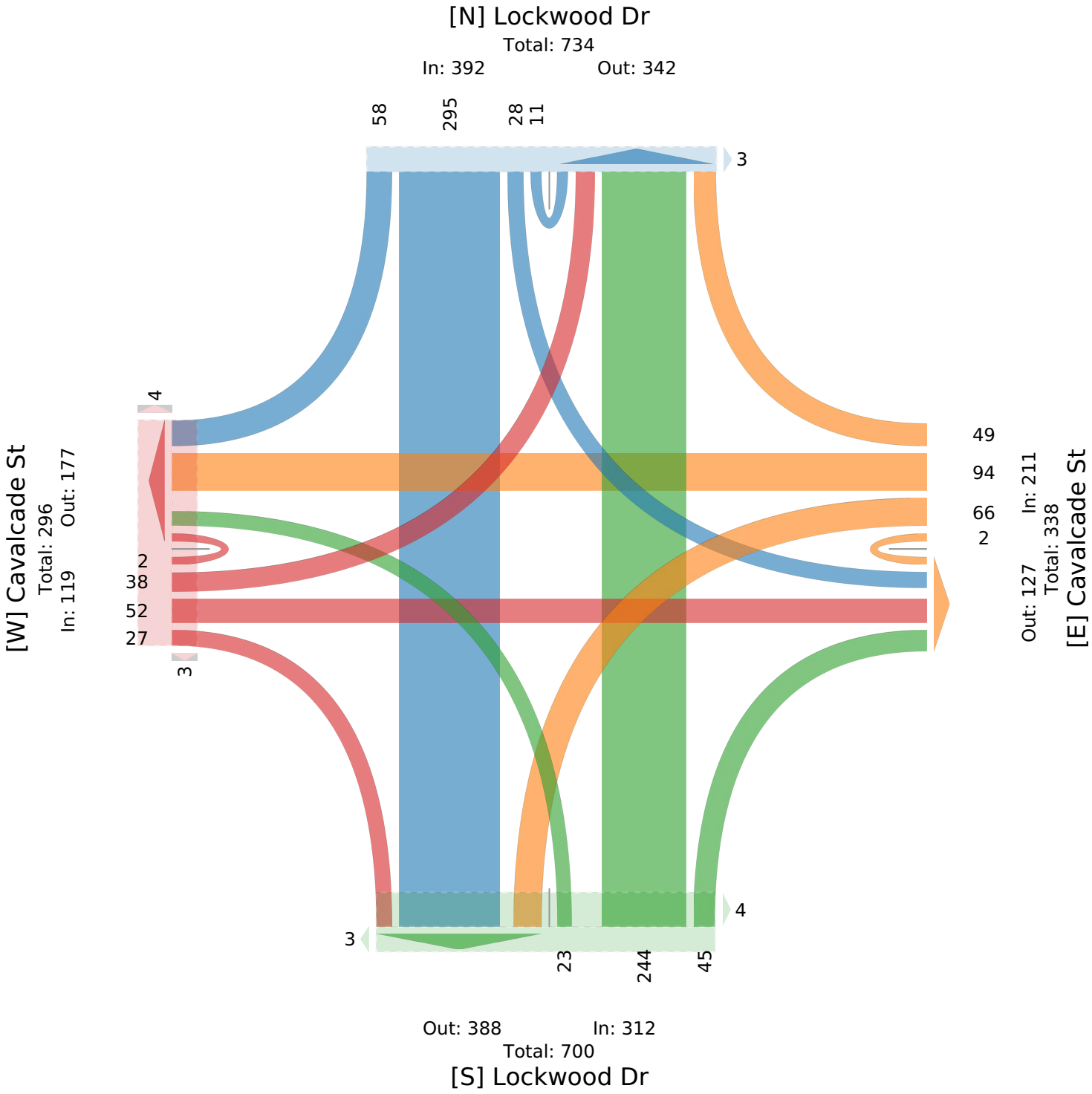
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Cavalcade St Eastbound						Cavalcade St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	1	65	15	0	**81**	0	7	72	17	2	**98**	0	7	9	2	0	**18**	0	21	26	20	0	**67**	0	**264**
7:45AM	13	61	11	0	**85**	1	3	81	17	3	**104**	1	12	13	7	2	**34**	1	13	27	6	1	**47**	0	**270**
8:00AM	3	61	11	0	**75**	6	14	71	13	3	**101**	1	12	11	11	0	**34**	6	16	27	10	1	**54**	0	**264**
8:15AM	6	57	8	0	**71**	0	4	71	11	3	**89**	1	7	19	7	0	**33**	0	16	14	13	0	**43**	0	**236**
Total	23	244	45	0	**312**	7	28	295	58	11	**392**	3	38	52	27	2	**119**	7	66	94	49	2	**211**	0	**1034**
% Approach	7.4%	78.2%	14.4%	0%	**-**	-	7.1%	75.3%	14.8%	2.8%	**-**	-	31.9%	43.7%	22.7%	1.7%	**-**	-	31.3%	44.5%	23.2%	0.9%	**-**	-	**-**
% Total	2.2%	23.6%	4.4%	0%	**30.2%**	-	2.7%	28.5%	5.6%	1.1%	**37.9%**	-	3.7%	5.0%	2.6%	0.2%	**11.5%**	-	6.4%	9.1%	4.7%	0.2%	**20.4%**	-	**-**
PHF	0.442	0.938	0.750	-	**0.918**	-	0.500	0.910	0.853	0.917	**0.942**	-	0.792	0.684	0.614	0.250	**0.875**	-	0.786	0.870	0.613	0.500	**0.787**	-	0.957
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	21	232	43	0	**296**	-	27	284	58	11	**380**	-	37	49	27	2	**115**	-	66	91	46	2	**205**	-	996
% Lights	91.3%	95.1%	95.6%	0%	**94.9%**	-	96.4%	96.3%	100%	100%	**96.9%**	-	97.4%	94.2%	100%	100%	**96.6%**	-	100%	96.8%	93.9%	100%	**97.2%**	-	96.3%
Single-Unit Trucks	1	5	0	0	**6**	-	1	5	0	0	**6**	-	0	3	0	0	**3**	-	0	2	2	0	**4**	-	19
% Single-Unit Trucks	4.3%	2.0%	0%	0%	**1.9%**	-	3.6%	1.7%	0%	0%	**1.5%**	-	0%	5.8%	0%	0%	**2.5%**	-	0%	2.1%	4.1%	0%	**1.9%**	-	1.8%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	1	1	0	**2**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.0%	0%	0%	**0.8%**	-	2.6%	0%	0%	0%	**0.8%**	-	0%	1.1%	2.0%	0%	**0.9%**	-	0.6%
Buses	1	7	2	0	**10**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	13
% Buses	4.3%	2.9%	4.4%	0%	**3.2%**	-	0%	1.0%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.3%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	6	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	85.7%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	14.3%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Cavalcade St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Cavalcade St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

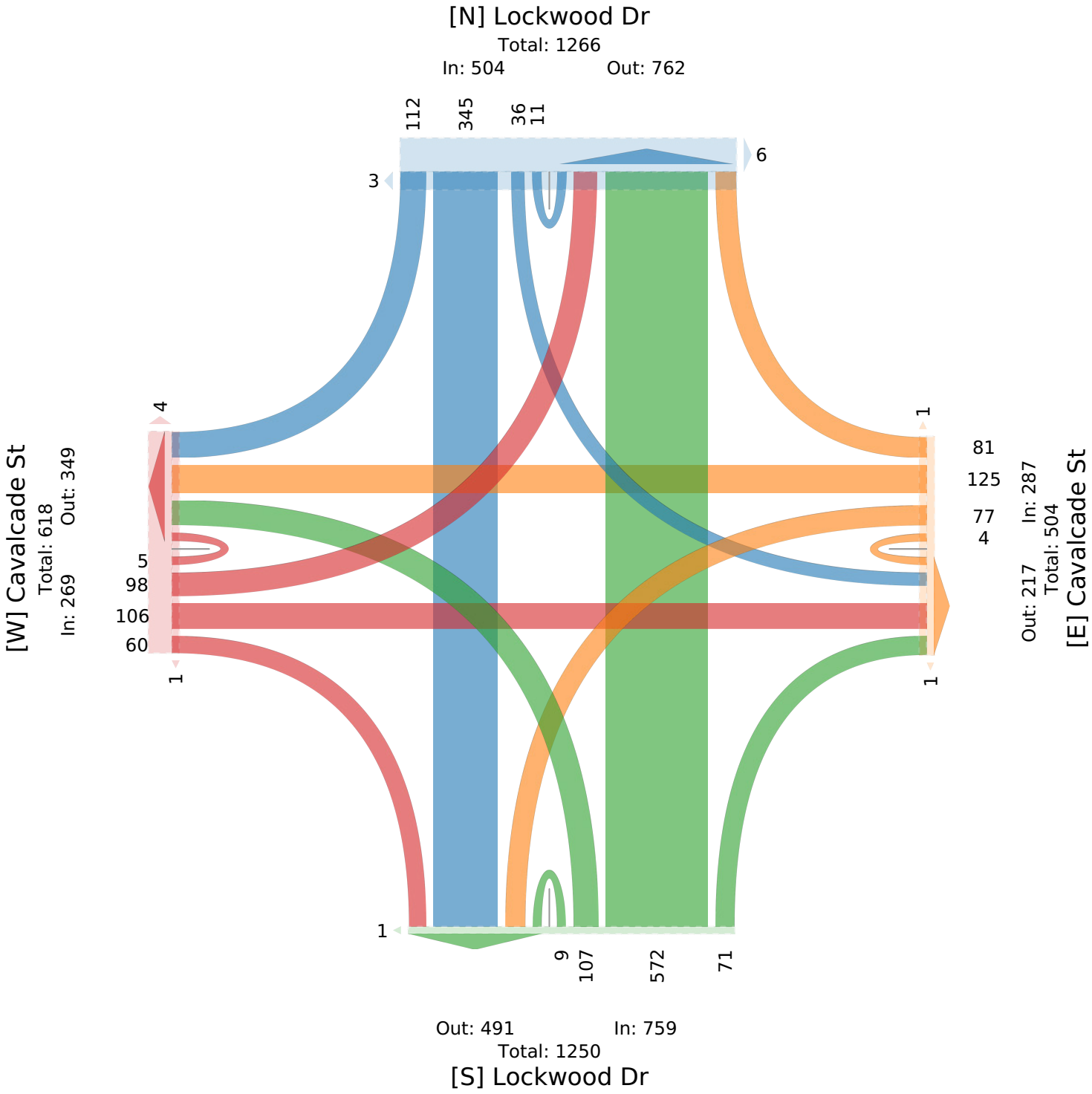
Leg	Lockwood Dr						Lockwood Dr						Cavalcade St						Cavalcade St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	28	150	21	1	**200**	0	9	73	24	2	**108**	1	28	26	16	2	**72**	2	21	29	22	1	**73**	0	**453**
4:30PM	26	139	17	0	**182**	0	8	93	31	1	**133**	1	27	34	21	1	**83**	1	20	35	19	0	**74**	1	**472**
4:45PM	25	130	15	3	**173**	0	8	75	34	4	**121**	4	24	26	12	2	**64**	1	13	26	17	2	**58**	1	**416**
5:00PM	28	153	18	5	**204**	1	11	104	23	4	**142**	3	19	20	11	0	**50**	1	23	35	23	1	**82**	0	**478**
Total	107	572	71	9	**759**	1	36	345	112	11	**504**	9	98	106	60	5	**269**	5	77	125	81	4	**287**	2	**1819**
% Approach	14.1%	75.4%	9.4%	1.2%	**-**	-	7.1%	68.5%	22.2%	2.2%	**-**	-	36.4%	39.4%	22.3%	1.9%	**-**	-	26.8%	43.6%	28.2%	1.4%	**-**	-	-
% Total	5.9%	31.4%	3.9%	0.5%	**41.7%**	-	2.0%	19.0%	6.2%	0.6%	**27.7%**	-	5.4%	5.8%	3.3%	0.3%	**14.8%**	-	4.2%	6.9%	4.5%	0.2%	**15.8%**	-	-
PHF	0.955	0.935	0.845	0.450	**0.930**	-	0.818	0.829	0.824	0.688	**0.887**	-	0.875	0.779	0.714	0.625	**0.810**	-	0.837	0.893	0.880	0.500	**0.875**	-	0.951
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	102	548	69	9	**728**	-	35	322	108	11	**476**	-	97	99	58	5	**259**	-	76	121	79	4	**280**	-	1743
% Lights	95.3%	95.8%	97.2%	100%	**95.9%**	-	97.2%	93.3%	96.4%	100%	**94.4%**	-	99.0%	93.4%	96.7%	100%	**96.3%**	-	98.7%	96.8%	97.5%	100%	**97.6%**	-	95.8%
Single-Unit Trucks	2	11	0	0	**13**	-	0	11	3	0	**14**	-	0	4	1	0	**5**	-	0	4	2	0	**6**	-	38
% Single-Unit Trucks	1.9%	1.9%	0%	0%	**1.7%**	-	0%	3.2%	2.7%	0%	**2.8%**	-	0%	3.8%	1.7%	0%	**1.9%**	-	0%	3.2%	2.5%	0%	**2.1%**	-	2.1%
Articulated Trucks	1	6	2	0	**9**	-	0	7	0	0	**7**	-	1	2	1	0	**4**	-	0	0	0	0	**0**	-	20
% Articulated Trucks	0.9%	1.0%	2.8%	0%	**1.2%**	-	0%	2.0%	0%	0%	**1.4%**	-	1.0%	1.9%	1.7%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Buses	2	7	0	0	**9**	-	1	5	1	0	**7**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	18
% Buses	1.9%	1.2%	0%	0%	**1.2%**	-	2.8%	1.4%	0.9%	0%	**1.4%**	-	0%	0.9%	0%	0%	**0.4%**	-	1.3%	0%	0%	0%	**0.3%**	-	1.0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	9	-	-	-	-	-	4	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Cavalcade St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867366, Location: 29.800392, -95.31697

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

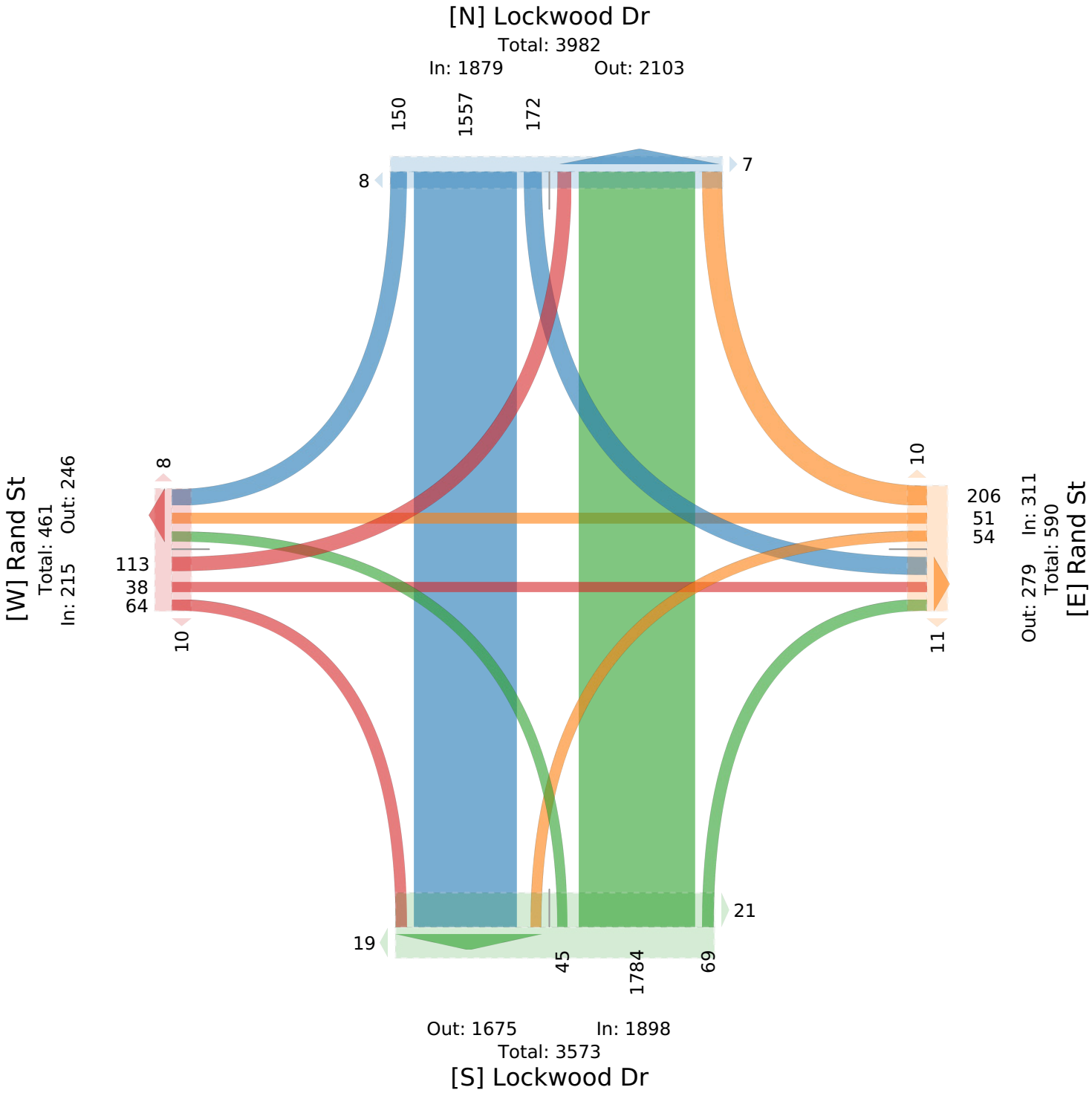
Leg	Lockwood Dr						Lockwood Dr						Rand St						Rand St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	4	61	2	0	**67**	4	6	53	8	0	**67**	0	6	0	5	0	**11**	1	2	2	11	0	**15**	1	**160**
7:15AM	2	40	1	0	**43**	1	7	79	15	0	**101**	1	11	2	1	0	**14**	0	2	3	12	0	**17**	1	**175**
7:30AM	2	79	7	0	**88**	4	12	96	24	0	**132**	1	12	1	2	0	**15**	4	3	1	10	0	**14**	0	**249**
7:45AM	4	68	3	0	**75**	4	10	88	14	0	**112**	0	9	4	6	0	**19**	1	4	2	23	0	**29**	0	**235**
Hourly Total	12	248	13	0	**273**	13	35	316	61	0	**412**	2	38	7	14	0	**59**	6	11	8	56	0	**75**	2	**819**
8:00AM	1	79	2	0	**82**	1	11	100	4	0	**115**	2	5	2	3	0	**10**	0	3	2	9	0	**14**	4	**221**
8:15AM	2	71	2	0	**75**	9	12	86	4	0	**102**	0	5	2	0	0	**7**	2	2	1	7	0	**10**	4	**194**
8:30AM	1	80	2	0	**83**	3	12	101	5	0	**118**	0	3	2	1	0	**6**	0	4	2	16	0	**22**	0	**229**
8:45AM	2	65	1	0	**68**	1	9	96	5	0	**110**	1	2	4	2	0	**8**	0	3	1	8	0	**12**	1	**198**
Hourly Total	6	295	7	0	**308**	14	44	383	18	0	**445**	3	15	10	6	0	**31**	2	12	6	40	0	**58**	9	**842**
4:00PM	5	193	9	0	**207**	3	13	101	9	0	**123**	0	5	5	4	0	**14**	0	3	4	11	0	**18**	0	**362**
4:15PM	5	184	5	0	**194**	2	12	105	7	0	**124**	2	7	2	7	0	**16**	3	2	4	14	0	**20**	3	**354**
4:30PM	3	165	6	0	**174**	1	7	119	13	0	**139**	0	10	2	4	0	**16**	0	6	7	13	0	**26**	0	**355**
4:45PM	2	167	3	0	**172**	2	11	112	8	0	**131**	2	1	0	9	0	**10**	1	4	5	20	0	**29**	1	**342**
Hourly Total	15	709	23	0	**747**	8	43	437	37	0	**517**	4	23	9	24	0	**56**	4	15	20	58	0	**93**	4	**1413**
5:00PM	2	176	7	0	**185**	0	13	123	14	0	**150**	2	16	6	5	0	**27**	4	5	7	14	0	**26**	1	**388**
5:15PM	3	135	1	0	**139**	3	16	116	9	0	**141**	1	8	1	8	0	**17**	0	3	5	14	0	**22**	2	**319**
5:30PM	3	115	9	0	**127**	2	9	93	7	0	**109**	1	7	2	4	0	**13**	1	4	4	10	0	**18**	1	**267**
5:45PM	4	106	9	0	**119**	0	12	89	4	0	**105**	2	6	3	3	0	**12**	1	4	1	14	0	**19**	2	**255**
Hourly Total	12	532	26	0	**570**	5	50	421	34	0	**505**	6	37	12	20	0	**69**	6	16	17	52	0	**85**	6	**1229**
Total	45	1784	69	0	**1898**	40	172	1557	150	0	**1879**	15	113	38	64	0	**215**	18	54	51	206	0	**311**	21	**4303**
% Approach	2.4%	94.0%	3.6%	0%	**-**	-	9.2%	82.9%	8.0%	0%	**-**	-	52.6%	17.7%	29.8%	0%	**-**	-	17.4%	16.4%	66.2%	0%	**-**	-	-
% Total	1.0%	41.5%	1.6%	0%	**44.1%**	-	4.0%	36.2%	3.5%	0%	**43.7%**	-	2.6%	0.9%	1.5%	0%	**5.0%**	-	1.3%	1.2%	4.8%	0%	**7.2%**	-	-
Motorcycles	0	1	0	0	**1**	-	1	2	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0.6%	0.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	42	1700	68	0	**1810**	-	170	1485	142	0	**1797**	-	102	36	63	0	**201**	-	53	51	206	0	**310**	-	4118
% Lights	93.3%	95.3%	98.6%	0%	**95.4%**	-	98.8%	95.4%	94.7%	0%	**95.6%**	-	90.3%	94.7%	98.4%	0%	**93.5%**	-	98.1%	100%	100%	0%	**99.7%**	-	95.7%
Single-Unit Trucks	1	33	1	0	**35**	-	0	31	1	0	**32**	-	1	1	1	0	**3**	-	1	0	0	0	**1**	-	71
% Single-Unit Trucks	2.2%	1.8%	1.4%	0%	**1.8%**	-	0%	2.0%	0.7%	0%	**1.7%**	-	0.9%	2.6%	1.6%	0%	**1.4%**	-	1.9%	0%	0%	0%	**0.3%**	-	1.7%
Articulated Trucks	0	24	0	0	**24**	-	0	21	0	0	**21**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	46
% Articulated Trucks	0%	1.3%	0%	0%	**1.3%**	-	0%	1.3%	0%	0%	**1.1%**	-	0%	2.6%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Buses	2	26	0	0	**28**	-	1	18	7	0	**26**	-	10	0	0	0	**10**	-	0	0	0	0	**0**	-	64
% Buses	4.4%	1.5%	0%	0%	**1.5%**	-	0.6%	1.2%	4.7%	0%	**1.4%**	-	8.8%	0%	0%	0%	**4.7%**	-	0%	0%	0%	0%	**0%**	-	1.5%
Pedestrians	-	-	-	-	-	39	-	-	-	-	-	14	-	-	-	-	-	16	-	-	-	-	-	19	
% Pedestrians	-	-	-	-	-	97.5%	-	-	-	-	-	93.3%	-	-	-	-	-	88.9%	-	-	-	-	-	90.5%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	2.5%	-	-	-	-	-	6.7%	-	-	-	-	-	11.1%	-	-	-	-	-	9.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

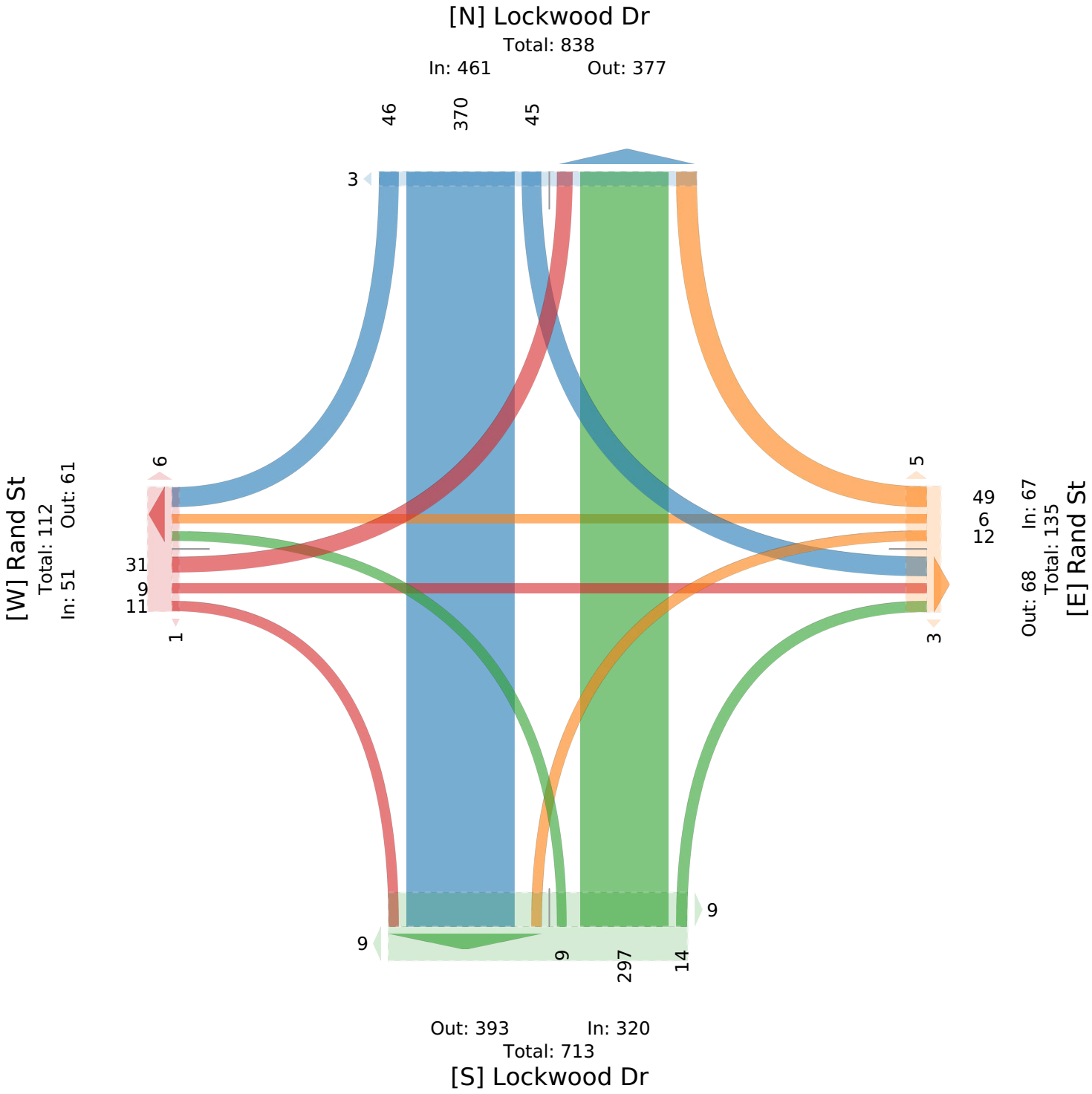
Leg	Lockwood Dr						Lockwood Dr						Rand St						Rand St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:30AM	2	79	7	0	**88**	4	12	96	24	0	**132**	1	12	1	2	0	**15**	4	3	1	10	0	**14**	0	**249**
7:45AM	4	68	3	0	**75**	4	10	88	14	0	**112**	0	9	4	6	0	**19**	1	4	2	23	0	**29**	0	**235**
8:00AM	1	79	2	0	**82**	1	11	100	4	0	**115**	2	5	2	3	0	**10**	0	3	2	9	0	**14**	4	**221**
8:15AM	2	71	2	0	**75**	9	12	86	4	0	**102**	0	5	2	0	0	**7**	2	2	1	7	0	**10**	4	**194**
Total	9	297	14	0	**320**	18	45	370	46	0	**461**	3	31	9	11	0	**51**	7	12	6	49	0	**67**	8	**899**
% Approach	2.8%	92.8%	4.4%	0%	**-**	-	9.8%	80.3%	10.0%	0%	**-**	-	60.8%	17.6%	21.6%	0%	**-**	-	17.9%	9.0%	73.1%	0%	**-**	-	-
% Total	1.0%	33.0%	1.6%	0%	**35.6%**	-	5.0%	41.2%	5.1%	0%	**51.3%**	-	3.4%	1.0%	1.2%	0%	**5.7%**	-	1.3%	0.7%	5.5%	0%	**7.5%**	-	-
PHF	0.563	0.940	0.500	-	**0.909**	-	0.938	0.925	0.479	-	**0.873**	-	0.646	0.563	0.458	-	**0.671**	-	0.750	0.750	0.533	-	**0.578**	-	0.903
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	9	281	13	0	**303**	-	44	360	45	0	**449**	-	28	7	11	0	**46**	-	12	6	49	0	**67**	-	865
% Lights	100%	94.6%	92.9%	0%	**94.7%**	-	97.8%	97.3%	97.8%	0%	**97.4%**	-	90.3%	77.8%	100%	0%	**90.2%**	-	100%	100%	100%	0%	**100%**	-	96.2%
Single-Unit Trucks	0	6	1	0	**7**	-	0	5	0	0	**5**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	13
% Single-Unit Trucks	0%	2.0%	7.1%	0%	**2.2%**	-	0%	1.4%	0%	0%	**1.1%**	-	0%	11.1%	0%	0%	**2.0%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Articulated Trucks	0	2	0	0	**2**	-	0	2	0	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	5
% Articulated Trucks	0%	0.7%	0%	0%	**0.6%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	11.1%	0%	0%	**2.0%**	-	0%	0%	0%	0%	**0%**	-	0.6%
Buses	0	8	0	0	**8**	-	1	2	1	0	**4**	-	3	0	0	0	**3**	-	0	0	0	0	**0**	-	15
% Buses	0%	2.7%	0%	0%	**2.5%**	-	2.2%	0.5%	2.2%	0%	**0.9%**	-	9.7%	0%	0%	0%	**5.9%**	-	0%	0%	0%	0%	**0%**	-	1.7%
Pedestrians	-	-	-	-	-	18	-	-	-	-	-	3	-	-	-	-	-	7	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

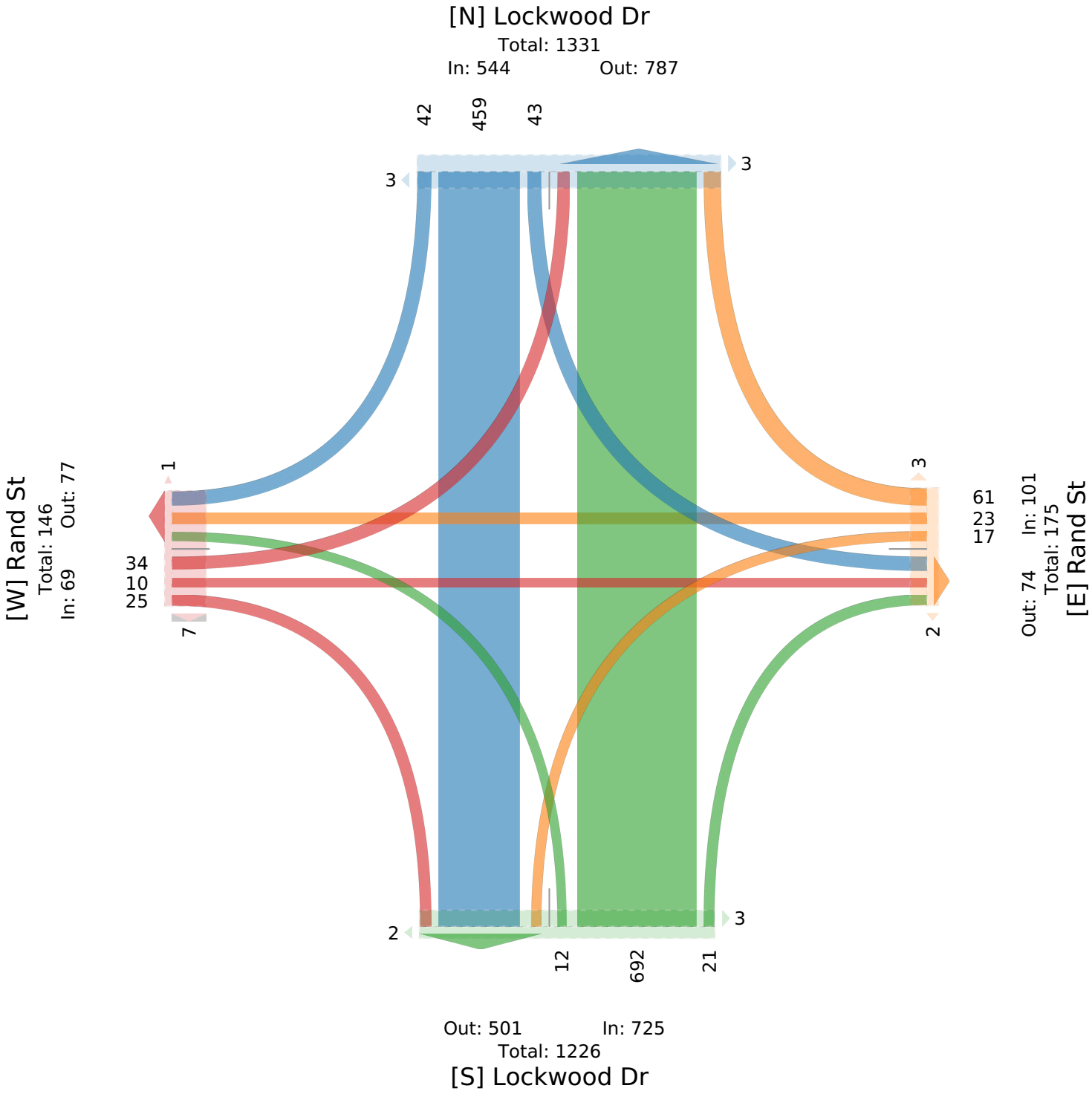
Leg	Lockwood Dr						Lockwood Dr						Rand St						Rand St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	5	184	5	0	**194**	2	12	105	7	0	**124**	2	7	2	7	0	**16**	3	2	4	14	0	**20**	3	**354**
4:30PM	3	165	6	0	**174**	1	7	119	13	0	**139**	0	10	2	4	0	**16**	0	6	7	13	0	**26**	0	**355**
4:45PM	2	167	3	0	**172**	2	11	112	8	0	**131**	2	1	0	9	0	**10**	1	4	5	20	0	**29**	1	**342**
5:00PM	2	176	7	0	**185**	0	13	123	14	0	**150**	2	16	6	5	0	**27**	4	5	7	14	0	**26**	1	**388**
Total	12	692	21	0	**725**	5	43	459	42	0	**544**	6	34	10	25	0	**69**	8	17	23	61	0	**101**	5	**1439**
% Approach	1.7%	95.4%	2.9%	0%	**-**	-	7.9%	84.4%	7.7%	0%	**-**	-	49.3%	14.5%	36.2%	0%	**-**	-	16.8%	22.8%	60.4%	0%	**-**	-	-
% Total	0.8%	48.1%	1.5%	0%	**50.4%**	-	3.0%	31.9%	2.9%	0%	**37.8%**	-	2.4%	0.7%	1.7%	0%	**4.8%**	-	1.2%	1.6%	4.2%	0%	**7.0%**	-	-
PHF	0.600	0.940	0.750	-	**0.934**	-	0.827	0.933	0.750	-	**0.907**	-	0.531	0.417	0.694	-	**0.639**	-	0.708	0.821	0.763	-	**0.871**	-	0.927
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	12	666	21	0	**699**	-	43	433	38	0	**514**	-	31	10	24	0	**65**	-	17	23	61	0	**101**	-	1379
% Lights	100%	96.2%	100%	0%	**96.4%**	-	100%	94.3%	90.5%	0%	**94.5%**	-	91.2%	100%	96.0%	0%	**94.2%**	-	100%	100%	100%	0%	**100%**	-	95.8%
Single-Unit Trucks	0	12	0	0	**12**	-	0	11	1	0	**12**	-	1	0	1	0	**2**	-	0	0	0	0	**0**	-	26
% Single-Unit Trucks	0%	1.7%	0%	0%	**1.7%**	-	0%	2.4%	2.4%	0%	**2.2%**	-	2.9%	0%	4.0%	0%	**2.9%**	-	0%	0%	0%	0%	**0%**	-	1.8%
Articulated Trucks	0	7	0	0	**7**	-	0	8	0	0	**8**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	15
% Articulated Trucks	0%	1.0%	0%	0%	**1.0%**	-	0%	1.7%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.0%
Buses	0	7	0	0	**7**	-	0	7	3	0	**10**	-	2	0	0	0	**2**	-	0	0	0	0	**0**	-	19
% Buses	0%	1.0%	0%	0%	**1.0%**	-	0%	1.5%	7.1%	0%	**1.8%**	-	5.9%	0%	0%	0%	**2.9%**	-	0%	0%	0%	0%	**0%**	-	1.3%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	5	-	-	-	-	-	7	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	83.3%	-	-	-	-	-	87.5%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	16.7%	-	-	-	-	-	12.5%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Rand St - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867367, Location: 29.803942, -95.317023

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at I 610 EBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

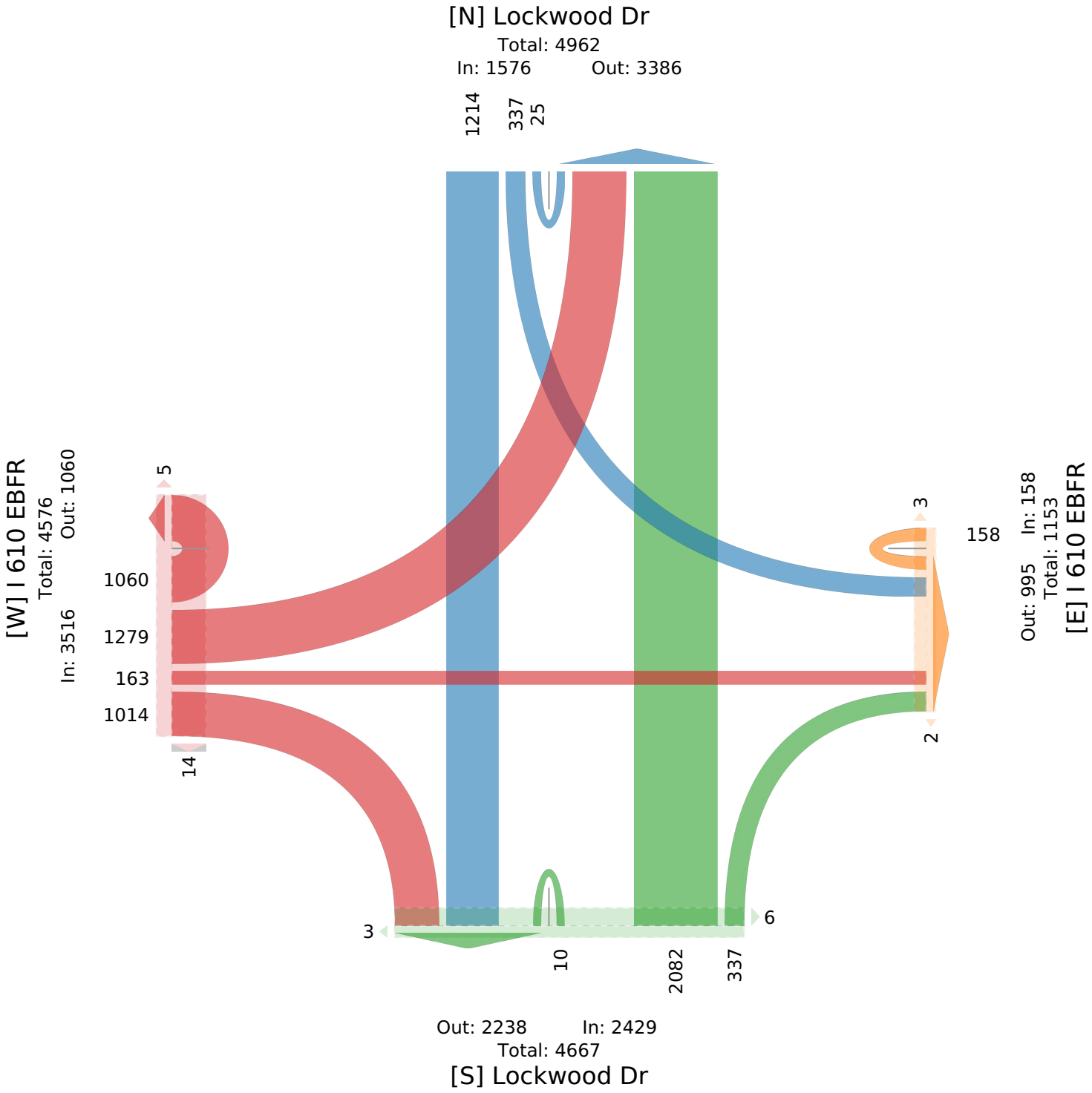
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						I 610 EBFR						I 610 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	0	77	12	0	**89**	0	21	49	0	0	**70**	0	103	10	45	33	**191**	0	0	0	0	7	**7**	0	**357**
7:15AM	0	71	26	0	**97**	2	15	71	0	1	**87**	0	142	8	66	40	**256**	0	0	0	0	10	**10**	2	**450**
7:30AM	0	114	37	1	**152**	0	21	57	0	1	**79**	0	115	7	73	38	**233**	0	0	0	0	11	**11**	0	**475**
7:45AM	0	109	20	1	**130**	4	28	74	0	1	**103**	0	122	8	61	34	**225**	1	0	0	0	17	**17**	0	**475**
Hourly Total	0	371	95	2	**468**	6	85	251	0	3	**339**	0	482	33	245	145	**905**	1	0	0	0	45	**45**	2	**1757**
8:00AM	0	85	16	0	**101**	2	22	71	0	0	**93**	0	99	7	61	37	**204**	0	0	0	0	13	**13**	0	**411**
8:15AM	0	81	14	0	**95**	0	18	59	0	0	**77**	0	97	8	56	38	**199**	1	0	0	0	12	**12**	0	**383**
8:30AM	0	103	13	1	**117**	0	20	80	0	1	**101**	0	63	5	59	37	**164**	0	0	0	0	4	**4**	0	**386**
8:45AM	0	80	12	0	**92**	0	11	55	0	0	**66**	0	65	6	57	39	**167**	1	0	0	0	3	**3**	0	**328**
Hourly Total	0	349	55	1	**405**	2	71	265	0	1	**337**	0	324	26	233	151	**734**	2	0	0	0	32	**32**	0	**1508**
4:00PM	0	192	28	0	**220**	1	21	90	0	5	**116**	0	65	14	55	143	**277**	2	0	0	0	12	**12**	0	**625**
4:15PM	0	183	20	0	**203**	0	23	88	0	2	**113**	0	67	11	52	162	**292**	1	0	0	0	9	**9**	1	**617**
4:30PM	0	191	29	2	**222**	0	23	91	0	1	**115**	0	68	21	60	130	**279**	4	0	0	0	13	**13**	1	**629**
4:45PM	0	177	31	1	**209**	0	23	83	0	3	**109**	0	65	17	78	137	**297**	3	0	0	0	10	**10**	0	**625**
Hourly Total	0	743	108	3	**854**	1	90	352	0	11	**453**	0	265	63	245	572	**1145**	10	0	0	0	44	**44**	2	**2496**
5:00PM	0	182	26	1	**209**	0	24	94	0	5	**123**	0	50	13	85	45	**193**	2	0	0	0	11	**11**	1	**536**
5:15PM	0	161	23	1	**185**	0	24	84	0	0	**108**	0	43	11	86	42	**182**	1	0	0	0	10	**10**	0	**485**
5:30PM	0	137	17	2	**156**	0	17	88	0	1	**106**	0	52	6	66	47	**171**	3	0	0	0	5	**5**	0	**438**
5:45PM	0	139	13	0	**152**	0	26	80	0	4	**110**	0	63	11	54	58	**186**	0	0	0	0	11	**11**	0	**459**
Hourly Total	0	619	79	4	**702**	0	91	346	0	10	**447**	0	208	41	291	192	**732**	6	0	0	0	37	**37**	1	**1918**
Total	0	2082	337	10	**2429**	9	337	1214	0	25	**1576**	0	1279	163	1014	1060	**3516**	19	0	0	0	158	**158**	5	**7679**
% Approach	0%	85.7%	13.9%	0.4%	**-**	-	21.4%	77.0%	0%	1.6%	**-**	-	36.4%	4.6%	28.8%	30.1%	**-**	-	0%	0%	0%	100%	**-**	-	-
% Total	0%	27.1%	4.4%	0.1%	**31.6%**	-	4.4%	15.8%	0%	0.3%	**20.5%**	-	16.7%	2.1%	13.2%	13.8%	**45.8%**	-	0%	0%	0%	2.1%	**2.1%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	1	1	**3**	-	0	0	0	0	**0**	-	5
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.6%	0.1%	0.1%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	0	1997	310	10	**2317**	-	324	1170	0	25	**1519**	-	1236	154	969	1020	**3379**	-	0	0	0	147	**147**	-	7362
% Lights	0%	95.9%	92.0%	100%	**95.4%**	-	96.1%	96.4%	0%	100%	**96.4%**	-	96.6%	94.5%	95.6%	96.2%	**96.1%**	-	0%	0%	0%	93.0%	**93.0%**	-	95.9%
Single-Unit Trucks	0	33	13	0	**46**	-	4	16	0	0	**20**	-	17	2	17	22	**58**	-	0	0	0	6	**6**	-	130
% Single-Unit Trucks	0%	1.6%	3.9%	0%	**1.9%**	-	1.2%	1.3%	0%	0%	**1.3%**	-	1.3%	1.2%	1.7%	2.1%	**1.6%**	-	0%	0%	0%	3.8%	**3.8%**	-	1.7%
Articulated Trucks	0	19	6	0	**25**	-	7	4	0	0	**11**	-	19	2	22	14	**57**	-	0	0	0	5	**5**	-	98
% Articulated Trucks	0%	0.9%	1.8%	0%	**1.0%**	-	2.1%	0.3%	0%	0%	**0.7%**	-	1.5%	1.2%	2.2%	1.3%	**1.6%**	-	0%	0%	0%	3.2%	**3.2%**	-	1.3%
Buses	0	32	8	0	**40**	-	2	23	0	0	**25**	-	7	4	5	3	**19**	-	0	0	0	0	**0**	-	84
% Buses	0%	1.5%	2.4%	0%	**1.6%**	-	0.6%	1.9%	0%	0%	**1.6%**	-	0.5%	2.5%	0.5%	0.3%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Pedestrians	-	-	-	-	-	9	-	-	-	-	-	0	-	-	-	-	-	17	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	89.5%	-	-	-	-	-	60.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	10.5%	-	-	-	-	-	40.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 EBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at I 610 EBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						I 610 EBFR						I 610 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	0	71	26	0	**97**	2	15	71	0	1	**87**	0	142	8	66	40	**256**	0	0	0	0	10	**10**	2	**450**
7:30AM	0	114	37	1	**152**	0	21	57	0	1	**79**	0	115	7	73	38	**233**	0	0	0	0	11	**11**	0	**475**
7:45AM	0	109	20	1	**130**	4	28	74	0	1	**103**	0	122	8	61	34	**225**	1	0	0	0	17	**17**	0	**475**
8:00AM	0	85	16	0	**101**	2	22	71	0	0	**93**	0	99	7	61	37	**204**	0	0	0	0	13	**13**	0	**411**
Total	0	379	99	2	**480**	8	86	273	0	3	**362**	0	478	30	261	149	**918**	1	0	0	0	51	**51**	2	**1811**
% Approach	0%	79.0%	20.6%	0.4%	**-**	-	23.8%	75.4%	0%	0.8%	**-**	-	52.1%	3.3%	28.4%	16.2%	**-**	-	0%	0%	0%	100%	**-**	-	-
% Total	0%	20.9%	5.5%	0.1%	**26.5%**	-	4.7%	15.1%	0%	0.2%	**20.0%**	-	26.4%	1.7%	14.4%	8.2%	**50.7%**	-	0%	0%	0%	2.8%	**2.8%**	-	-
PHF	-	0.831	0.669	0.500	**0.789**	-	0.768	0.922	-	0.750	**0.879**	-	0.842	0.938	0.894	0.931	**0.896**	-	-	-	-	0.750	**0.750**	-	0.953
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0.3%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	3.3%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	0	363	90	2	**455**	-	82	263	0	3	**348**	-	466	26	251	148	**891**	-	0	0	0	48	**48**	-	1742
% Lights	0%	95.8%	90.9%	100%	**94.8%**	-	95.3%	96.3%	0%	100%	**96.1%**	-	97.5%	86.7%	96.2%	99.3%	**97.1%**	-	0%	0%	0%	94.1%	**94.1%**	-	96.2%
Single-Unit Trucks	0	5	5	0	**10**	-	3	2	0	0	**5**	-	4	1	5	0	**10**	-	0	0	0	2	**2**	-	27
% Single-Unit Trucks	0%	1.3%	5.1%	0%	**2.1%**	-	3.5%	0.7%	0%	0%	**1.4%**	-	0.8%	3.3%	1.9%	0%	**1.1%**	-	0%	0%	0%	3.9%	**3.9%**	-	1.5%
Articulated Trucks	0	2	1	0	**3**	-	1	1	0	0	**2**	-	4	1	4	0	**9**	-	0	0	0	1	**1**	-	15
% Articulated Trucks	0%	0.5%	1.0%	0%	**0.6%**	-	1.2%	0.4%	0%	0%	**0.6%**	-	0.8%	3.3%	1.5%	0%	**1.0%**	-	0%	0%	0%	2.0%	**2.0%**	-	0.8%
Buses	0	8	3	0	**11**	-	0	6	0	0	**6**	-	4	1	1	1	**7**	-	0	0	0	0	**0**	-	24
% Buses	0%	2.1%	3.0%	0%	**2.3%**	-	0%	2.2%	0%	0%	**1.7%**	-	0.8%	3.3%	0.4%	0.7%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	1.3%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 EBFR - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

Provided by: C. J. Hensch & Associates Inc.
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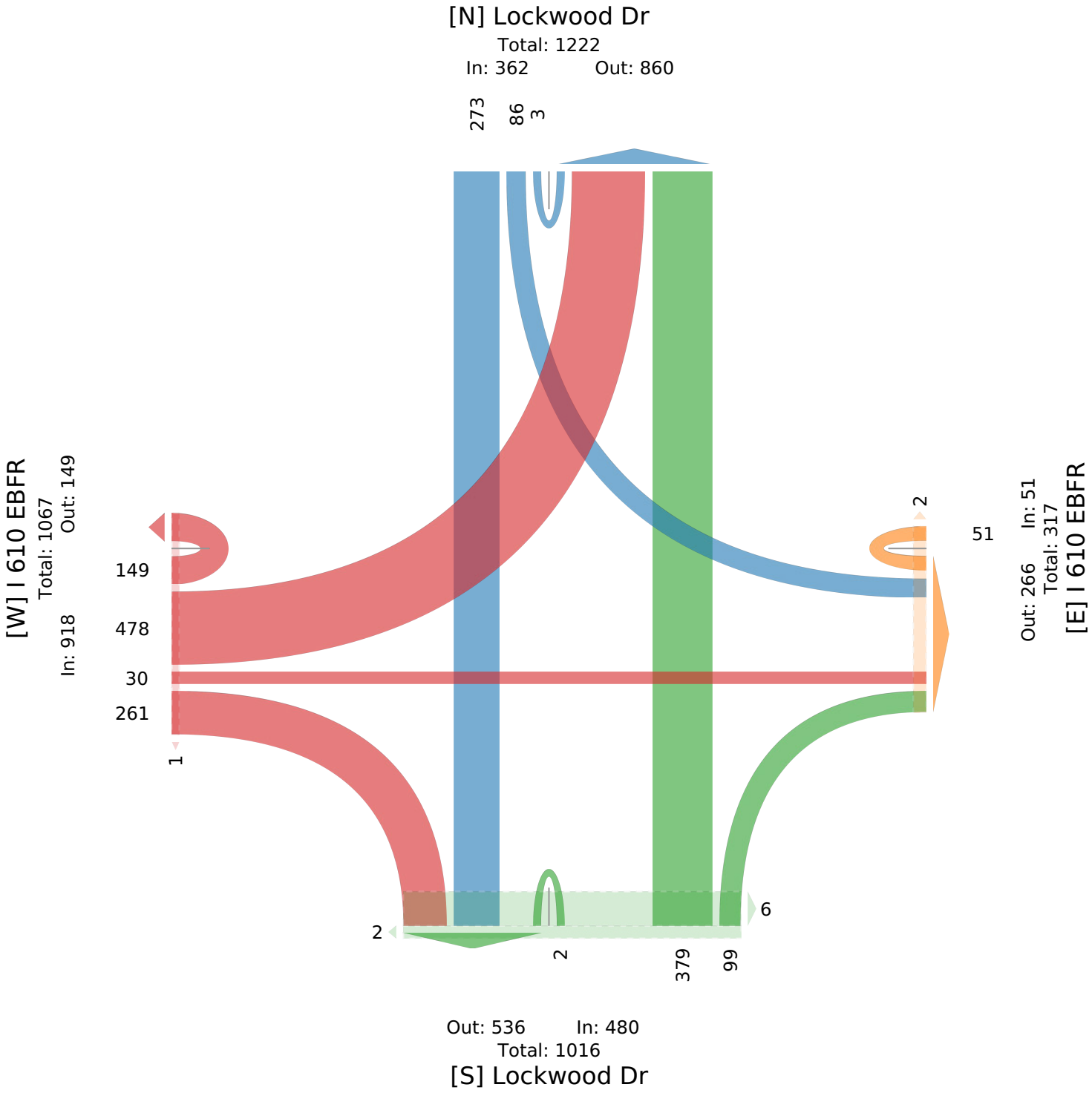


Lockwood Dr at I 610 EBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

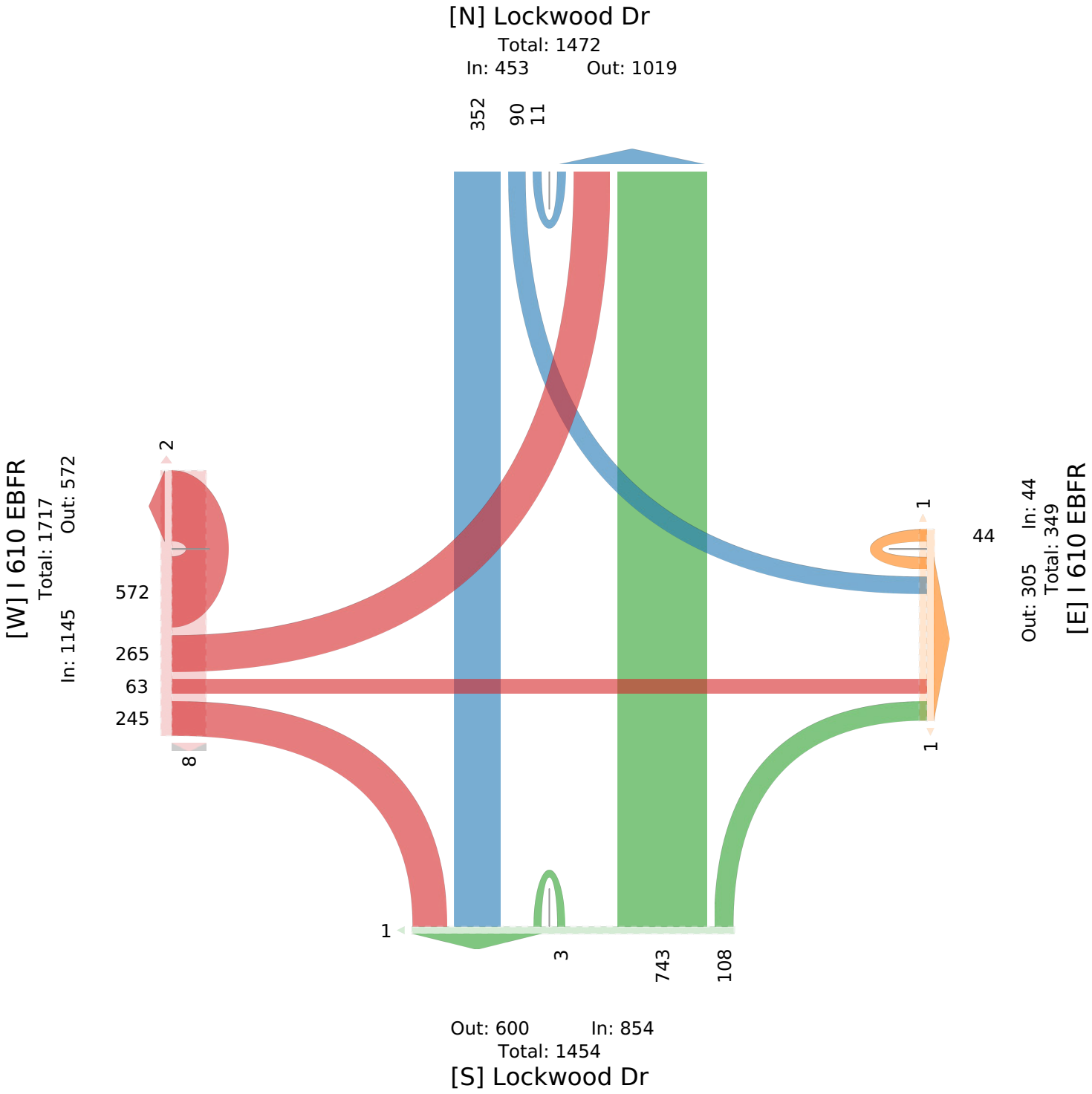
Leg	Lockwood Dr						Lockwood Dr						I 610 EBFR						I 610 EBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	0	192	28	0	**220**	1	21	90	0	5	**116**	0	65	14	55	143	**277**	2	0	0	0	12	**12**	0	**625**
4:15PM	0	183	20	0	**203**	0	23	88	0	2	**113**	0	67	11	52	162	**292**	1	0	0	0	9	**9**	1	**617**
4:30PM	0	191	29	2	**222**	0	23	91	0	1	**115**	0	68	21	60	130	**279**	4	0	0	0	13	**13**	1	**629**
4:45PM	0	177	31	1	**209**	0	23	83	0	3	**109**	0	65	17	78	137	**297**	3	0	0	0	10	**10**	0	**625**
Total	0	743	108	3	**854**	1	90	352	0	11	**453**	0	265	63	245	572	**1145**	10	0	0	0	44	**44**	2	**2496**
% Approach	0%	87.0%	12.6%	0.4%	**-**	-	19.9%	77.7%	0%	2.4%	**-**	-	23.1%	5.5%	21.4%	50.0%	**-**	-	0%	0%	0%	100%	**-**	-	-
% Total	0%	29.8%	4.3%	0.1%	**34.2%**	-	3.6%	14.1%	0%	0.4%	**18.1%**	-	10.6%	2.5%	9.8%	22.9%	**45.9%**	-	0%	0%	0%	1.8%	**1.8%**	-	-
PHF	-	0.967	0.871	0.375	**0.962**	-	0.978	0.967	-	0.550	**0.976**	-	0.974	0.750	0.785	0.883	**0.964**	-	-	-	-	0.846	**0.846**	-	0.992
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	720	99	3	**822**	-	86	340	0	11	**437**	-	250	60	230	551	**1091**	-	0	0	0	41	**41**	-	2391
% Lights	0%	96.9%	91.7%	100%	**96.3%**	-	95.6%	96.6%	0%	100%	**96.5%**	-	94.3%	95.2%	93.9%	96.3%	**95.3%**	-	0%	0%	0%	93.2%	**93.2%**	-	95.8%
Single-Unit Trucks	0	10	5	0	**15**	-	1	5	0	0	**6**	-	3	0	5	10	**18**	-	0	0	0	1	**1**	-	40
% Single-Unit Trucks	0%	1.3%	4.6%	0%	**1.8%**	-	1.1%	1.4%	0%	0%	**1.3%**	-	1.1%	0%	2.0%	1.7%	**1.6%**	-	0%	0%	0%	2.3%	**2.3%**	-	1.6%
Articulated Trucks	0	6	3	0	**9**	-	2	0	0	0	**2**	-	10	0	9	10	**29**	-	0	0	0	2	**2**	-	42
% Articulated Trucks	0%	0.8%	2.8%	0%	**1.1%**	-	2.2%	0%	0%	0%	**0.4%**	-	3.8%	0%	3.7%	1.7%	**2.5%**	-	0%	0%	0%	4.5%	**4.5%**	-	1.7%
Buses	0	7	1	0	**8**	-	1	7	0	0	**8**	-	2	3	1	1	**7**	-	0	0	0	0	**0**	-	23
% Buses	0%	0.9%	0.9%	0%	**0.9%**	-	1.1%	2.0%	0%	0%	**1.8%**	-	0.8%	4.8%	0.4%	0.2%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 EBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867368, Location: 29.808962, -95.31713

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

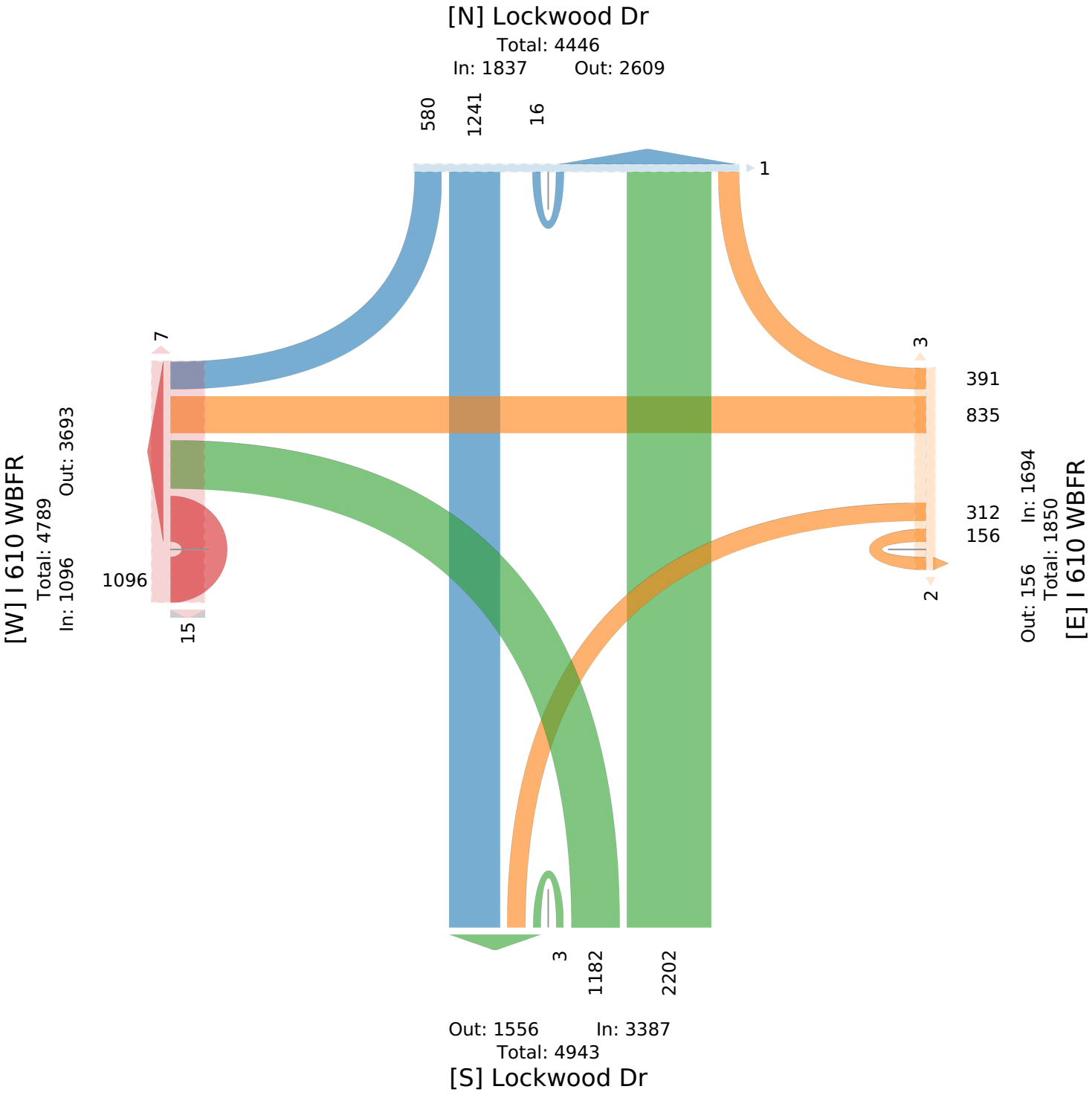
Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						I 610 WBFR Eastbound						I 610 WBFR Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	54	127	0	0	**181**	0	0	56	33	1	**90**	0	0	0	0	33	**33**	1	17	34	20	7	**78**	0	**382**
7:15AM	49	163	0	0	**212**	0	0	52	42	0	**94**	0	0	0	0	43	**43**	0	28	59	26	10	**123**	2	**472**
7:30AM	72	162	0	0	**234**	0	0	58	31	3	**92**	0	0	0	0	40	**40**	0	24	58	22	11	**115**	0	**481**
7:45AM	58	162	0	0	**220**	0	0	81	22	0	**103**	0	0	0	0	37	**37**	1	18	73	31	16	**138**	0	**498**
Hourly Total	233	614	0	0	**847**	0	0	247	128	4	**379**	0	0	0	0	153	**153**	2	87	224	99	44	**454**	2	**1833**
8:00AM	46	143	0	0	**189**	0	0	77	23	0	**100**	0	0	0	0	41	**41**	0	17	37	22	13	**89**	0	**419**
8:15AM	49	126	0	0	**175**	0	0	61	31	1	**93**	0	0	0	0	39	**39**	1	15	18	22	12	**67**	0	**374**
8:30AM	64	107	0	0	**171**	0	0	83	32	0	**115**	0	0	0	0	44	**44**	2	18	29	22	4	**73**	0	**403**
8:45AM	42	109	0	0	**151**	0	0	52	21	0	**73**	0	0	0	0	43	**43**	0	15	22	19	3	**59**	0	**326**
Hourly Total	201	485	0	0	**686**	0	0	273	107	1	**381**	0	0	0	0	167	**167**	3	65	106	85	32	**288**	0	**1522**
4:00PM	120	138	0	2	**260**	0	0	91	36	0	**127**	0	0	0	0	141	**141**	1	28	79	27	12	**146**	0	**674**
4:15PM	99	153	0	0	**252**	0	0	92	51	3	**146**	0	0	0	0	166	**166**	1	14	75	25	9	**123**	1	**687**
4:30PM	101	158	0	1	**260**	0	0	100	46	1	**147**	0	0	0	0	137	**137**	4	15	69	34	13	**131**	1	**675**
4:45PM	101	141	0	0	**242**	0	0	85	38	2	**125**	0	0	0	0	138	**138**	4	20	65	27	10	**122**	0	**627**
Hourly Total	421	590	0	3	**1014**	0	0	368	171	6	**545**	0	0	0	0	582	**582**	10	77	288	113	44	**522**	2	**2663**
5:00PM	99	146	0	0	**245**	0	0	107	49	0	**156**	0	0	0	0	46	**46**	3	17	76	19	11	**123**	1	**570**
5:15PM	94	111	0	0	**205**	0	0	86	48	3	**137**	1	0	0	0	42	**42**	1	17	56	24	10	**107**	0	**491**
5:30PM	68	119	0	0	**187**	0	0	84	41	1	**126**	0	0	0	0	48	**48**	2	24	48	31	5	**108**	0	**469**
5:45PM	66	137	0	0	**203**	0	0	76	36	1	**113**	0	0	0	0	58	**58**	1	25	37	20	10	**92**	0	**466**
Hourly Total	327	513	0	0	**840**	0	0	353	174	5	**532**	1	0	0	0	194	**194**	7	83	217	94	36	**430**	1	**1996**
Total	1182	2202	0	3	**3387**	0	0	1241	580	16	**1837**	1	0	0	0	1096	**1096**	22	312	835	391	156	**1694**	5	**8014**
% Approach	34.9%	65.0%	0%	0.1%	**-**	-	0%	67.6%	31.6%	0.9%	**-**	-	0%	0%	0%	100%	**-**	-	18.4%	49.3%	23.1%	9.2%	**-**	-	-
% Total	14.7%	27.5%	0%	0%	**42.3%**	-	0%	15.5%	7.2%	0.2%	**22.9%**	-	0%	0%	0%	13.7%	**13.7%**	-	3.9%	10.4%	4.9%	1.9%	**21.1%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	2	**2**	-	0	0	0	0	**0**	-	4
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0.2%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	1132	2123	0	3	**3258**	-	0	1199	552	16	**1767**	-	0	0	0	1050	**1050**	-	297	796	377	145	**1615**	-	7690
% Lights	95.8%	96.4%	0%	100%	**96.2%**	-	0%	96.6%	95.2%	100%	**96.2%**	-	0%	0%	0%	95.8%	**95.8%**	-	95.2%	95.3%	96.4%	92.9%	**95.3%**	-	96.0%
Single-Unit Trucks	23	30	0	0	**53**	-	0	14	15	0	**29**	-	0	0	0	28	**28**	-	7	18	8	6	**39**	-	149
% Single-Unit Trucks	1.9%	1.4%	0%	0%	**1.6%**	-	0%	1.1%	2.6%	0%	**1.6%**	-	0%	0%	0%	2.6%	**2.6%**	-	2.2%	2.2%	2.0%	3.8%	**2.3%**	-	1.9%
Articulated Trucks	19	20	0	0	**39**	-	0	6	7	0	**13**	-	0	0	0	14	**14**	-	6	18	6	5	**35**	-	101
% Articulated Trucks	1.6%	0.9%	0%	0%	**1.2%**	-	0%	0.5%	1.2%	0%	**0.7%**	-	0%	0%	0%	1.3%	**1.3%**	-	1.9%	2.2%	1.5%	3.2%	**2.1%**	-	1.3%
Buses	8	28	0	0	**36**	-	0	21	6	0	**27**	-	0	0	0	2	**2**	-	2	3	0	0	**5**	-	70
% Buses	0.7%	1.3%	0%	0%	**1.1%**	-	0%	1.7%	1.0%	0%	**1.5%**	-	0%	0%	0%	0.2%	**0.2%**	-	0.6%	0.4%	0%	0%	**0.3%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	20	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	90.9%	-	-	-	-	-	60.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	9.1%	-	-	-	-	-	40.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						I 610 WBFR						I 610 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	49	163	0	0	**212**	0	0	52	42	0	**94**	0	0	0	0	43	**43**	0	28	59	26	10	**123**	2	**472**
7:30AM	72	162	0	0	**234**	0	0	58	31	3	**92**	0	0	0	0	40	**40**	0	24	58	22	11	**115**	0	**481**
7:45AM	58	162	0	0	**220**	0	0	81	22	0	**103**	0	0	0	0	37	**37**	1	18	73	31	16	**138**	0	**498**
8:00AM	46	143	0	0	**189**	0	0	77	23	0	**100**	0	0	0	0	41	**41**	0	17	37	22	13	**89**	0	**419**
Total	225	630	0	0	**855**	0	0	268	118	3	**389**	0	0	0	0	161	**161**	1	87	227	101	50	**465**	2	**1870**
% Approach	26.3%	73.7%	0%	0%	**-**	-	0%	68.9%	30.3%	0.8%	**-**	-	0%	0%	0%	100%	**-**	-	18.7%	48.8%	21.7%	10.8%	**-**	-	**-**
% Total	12.0%	33.7%	0%	0%	**45.7%**	-	0%	14.3%	6.3%	0.2%	**20.8%**	-	0%	0%	0%	8.6%	**8.6%**	-	4.7%	12.1%	5.4%	2.7%	**24.9%**	-	**-**
PHF	0.781	0.966	-	-	**0.913**	-	-	0.827	0.702	0.250	**0.944**	-	-	-	-	0.936	**0.936**	-	0.777	0.777	0.815	0.781	**0.842**	-	0.939
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0.2%	0%	0%	**0.1%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	216	609	0	0	**825**	-	0	258	110	3	**371**	-	0	0	0	158	**158**	-	83	217	100	47	**447**	-	1801
% Lights	96.0%	96.7%	0%	0%	**96.5%**	-	0%	96.3%	93.2%	100%	**95.4%**	-	0%	0%	0%	98.1%	**98.1%**	-	95.4%	95.6%	99.0%	94.0%	**96.1%**	-	96.3%
Single-Unit Trucks	4	10	0	0	**14**	-	0	5	4	0	**9**	-	0	0	0	3	**3**	-	1	5	1	2	**9**	-	35
% Single-Unit Trucks	1.8%	1.6%	0%	0%	**1.6%**	-	0%	1.9%	3.4%	0%	**2.3%**	-	0%	0%	0%	1.9%	**1.9%**	-	1.1%	2.2%	1.0%	4.0%	**1.9%**	-	1.9%
Articulated Trucks	3	3	0	0	**6**	-	0	1	3	0	**4**	-	0	0	0	0	**0**	-	2	3	0	1	**6**	-	16
% Articulated Trucks	1.3%	0.5%	0%	0%	**0.7%**	-	0%	0.4%	2.5%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	2.3%	1.3%	0%	2.0%	**1.3%**	-	0.9%
Buses	2	7	0	0	**9**	-	0	3	1	0	**4**	-	0	0	0	0	**0**	-	1	2	0	0	**3**	-	16
% Buses	0.9%	1.1%	0%	0%	**1.1%**	-	0%	1.1%	0.8%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	1.1%	0.9%	0%	0%	**0.6%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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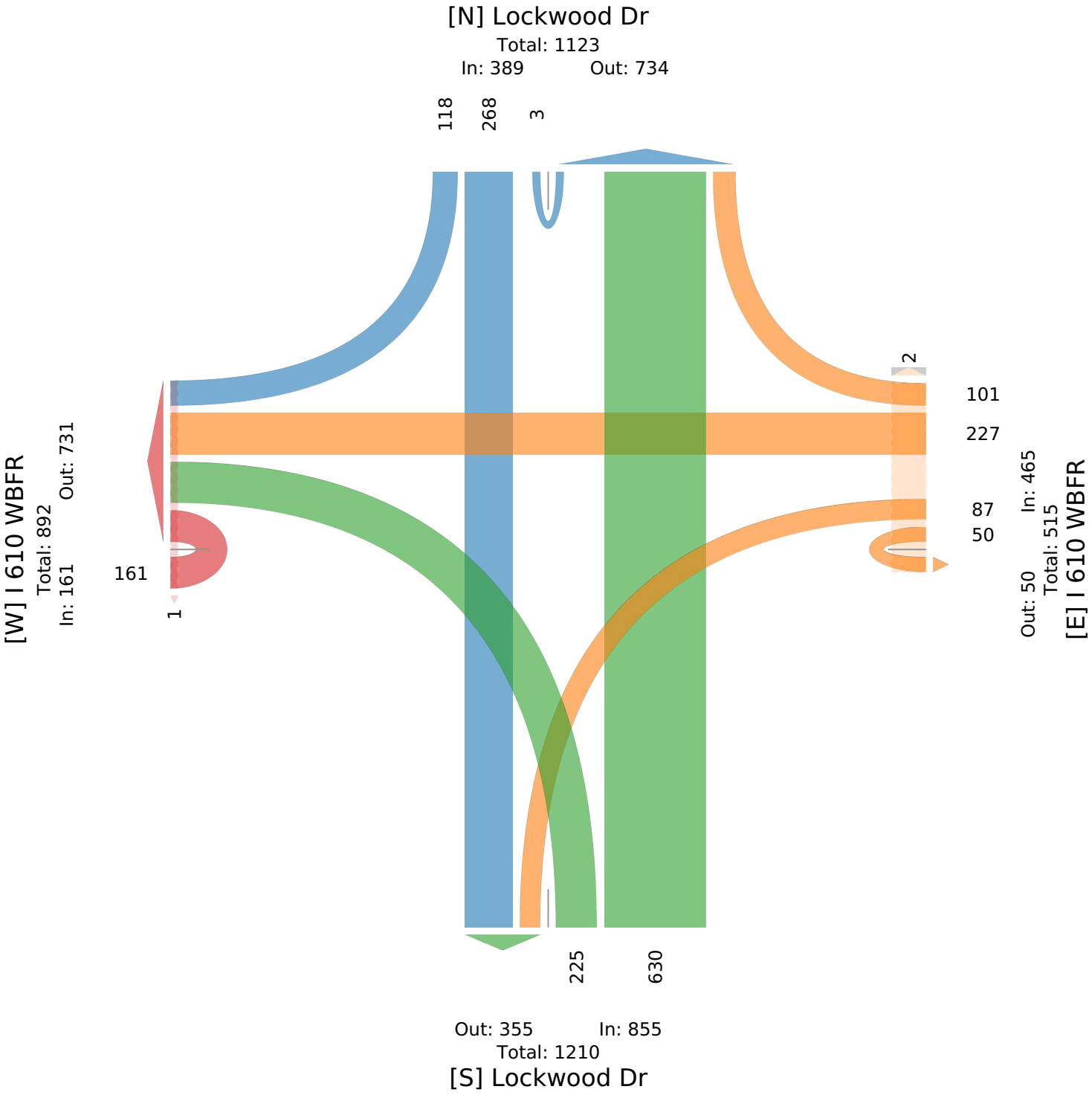


Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

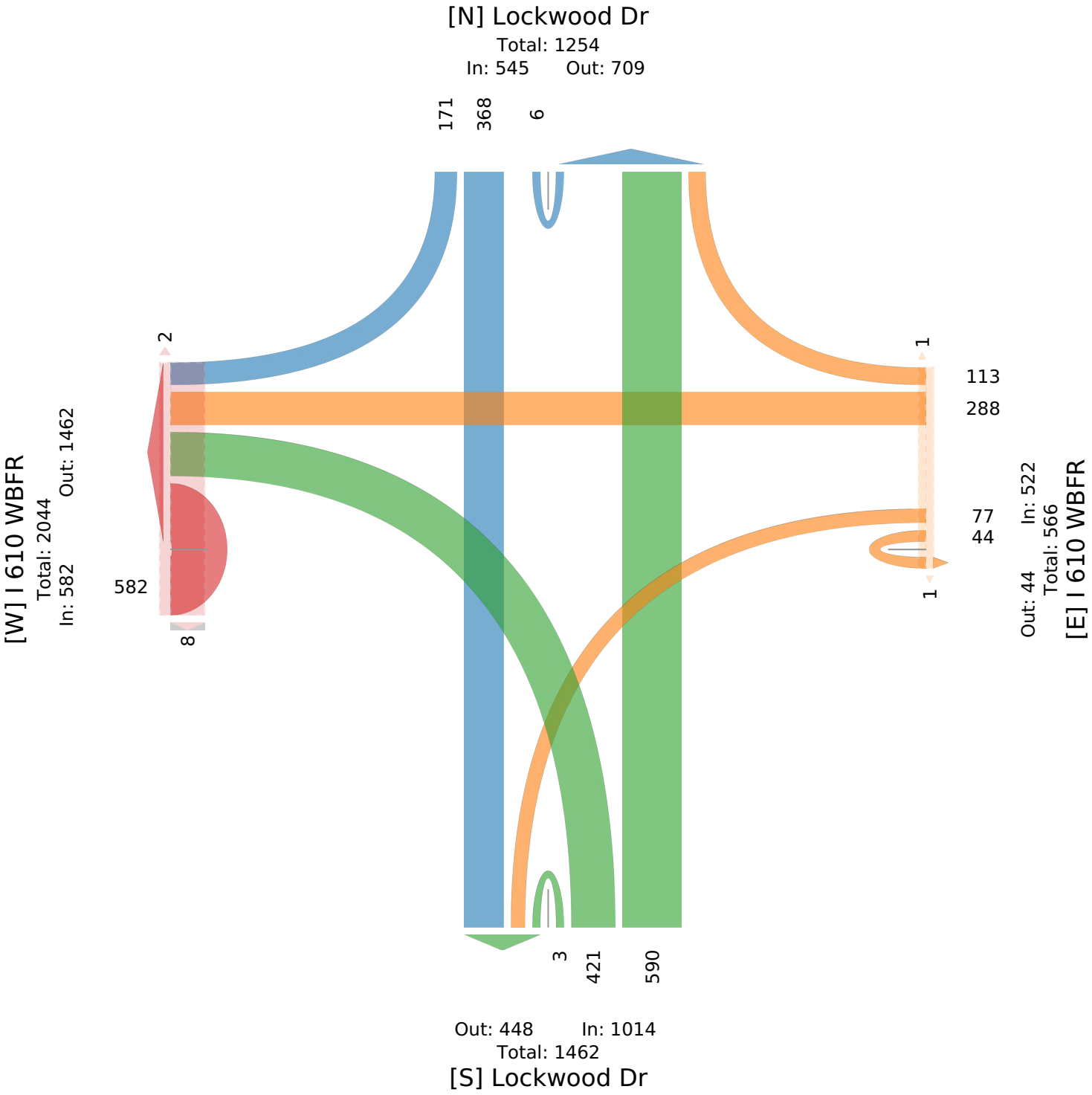
Leg	Lockwood Dr						Lockwood Dr						I 610 WBFR						I 610 WBFR						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	120	138	0	2	**260**	0	0	91	36	0	**127**	0	0	0	0	141	**141**	1	28	79	27	12	**146**	0	**674**
4:15PM	99	153	0	0	**252**	0	0	92	51	3	**146**	0	0	0	0	166	**166**	1	14	75	25	9	**123**	1	**687**
4:30PM	101	158	0	1	**260**	0	0	100	46	1	**147**	0	0	0	0	137	**137**	4	15	69	34	13	**131**	1	**675**
4:45PM	101	141	0	0	**242**	0	0	85	38	2	**125**	0	0	0	0	138	**138**	4	20	65	27	10	**122**	0	**627**
Total	421	590	0	3	**1014**	0	0	368	171	6	**545**	0	0	0	0	582	**582**	10	77	288	113	44	**522**	2	**2663**
% Approach	41.5%	58.2%	0%	0.3%	**-**	-	0%	67.5%	31.4%	1.1%	**-**	-	0%	0%	0%	100%	**-**	-	14.8%	55.2%	21.6%	8.4%	**-**	-	-
% Total	15.8%	22.2%	0%	0.1%	**38.1%**	-	0%	13.8%	6.4%	0.2%	**20.5%**	-	0%	0%	0%	21.9%	**21.9%**	-	2.9%	10.8%	4.2%	1.7%	**19.6%**	-	-
PHF	0.877	0.934	-	0.375	**0.975**	-	-	0.920	0.838	0.500	**0.927**	-	-	-	-	0.877	**0.877**	-	0.688	0.911	0.831	0.846	**0.894**	-	0.969
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	403	569	0	3	**975**	-	0	356	165	6	**527**	-	0	0	0	560	**560**	-	73	277	106	41	**497**	-	2559
% Lights	95.7%	96.4%	0%	100%	**96.2%**	-	0%	96.7%	96.5%	100%	**96.7%**	-	0%	0%	0%	96.2%	**96.2%**	-	94.8%	96.2%	93.8%	93.2%	**95.2%**	-	96.1%
Single-Unit Trucks	7	6	0	0	**13**	-	0	4	3	0	**7**	-	0	0	0	10	**10**	-	2	7	3	1	**13**	-	43
% Single-Unit Trucks	1.7%	1.0%	0%	0%	**1.3%**	-	0%	1.1%	1.8%	0%	**1.3%**	-	0%	0%	0%	1.7%	**1.7%**	-	2.6%	2.4%	2.7%	2.3%	**2.5%**	-	1.6%
Articulated Trucks	9	8	0	0	**17**	-	0	1	0	0	**1**	-	0	0	0	11	**11**	-	1	4	4	2	**11**	-	40
% Articulated Trucks	2.1%	1.4%	0%	0%	**1.7%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	1.9%	**1.9%**	-	1.3%	1.4%	3.5%	4.5%	**2.1%**	-	1.5%
Buses	2	7	0	0	**9**	-	0	7	3	0	**10**	-	0	0	0	1	**1**	-	1	0	0	0	**1**	-	21
% Buses	0.5%	1.2%	0%	0%	**0.9%**	-	0%	1.9%	1.8%	0%	**1.8%**	-	0%	0%	0%	0.2%	**0.2%**	-	1.3%	0%	0%	0%	**0.2%**	-	0.8%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	10	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at I 610 WBFR - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867369, Location: 29.809766, -95.317112

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Kelley St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

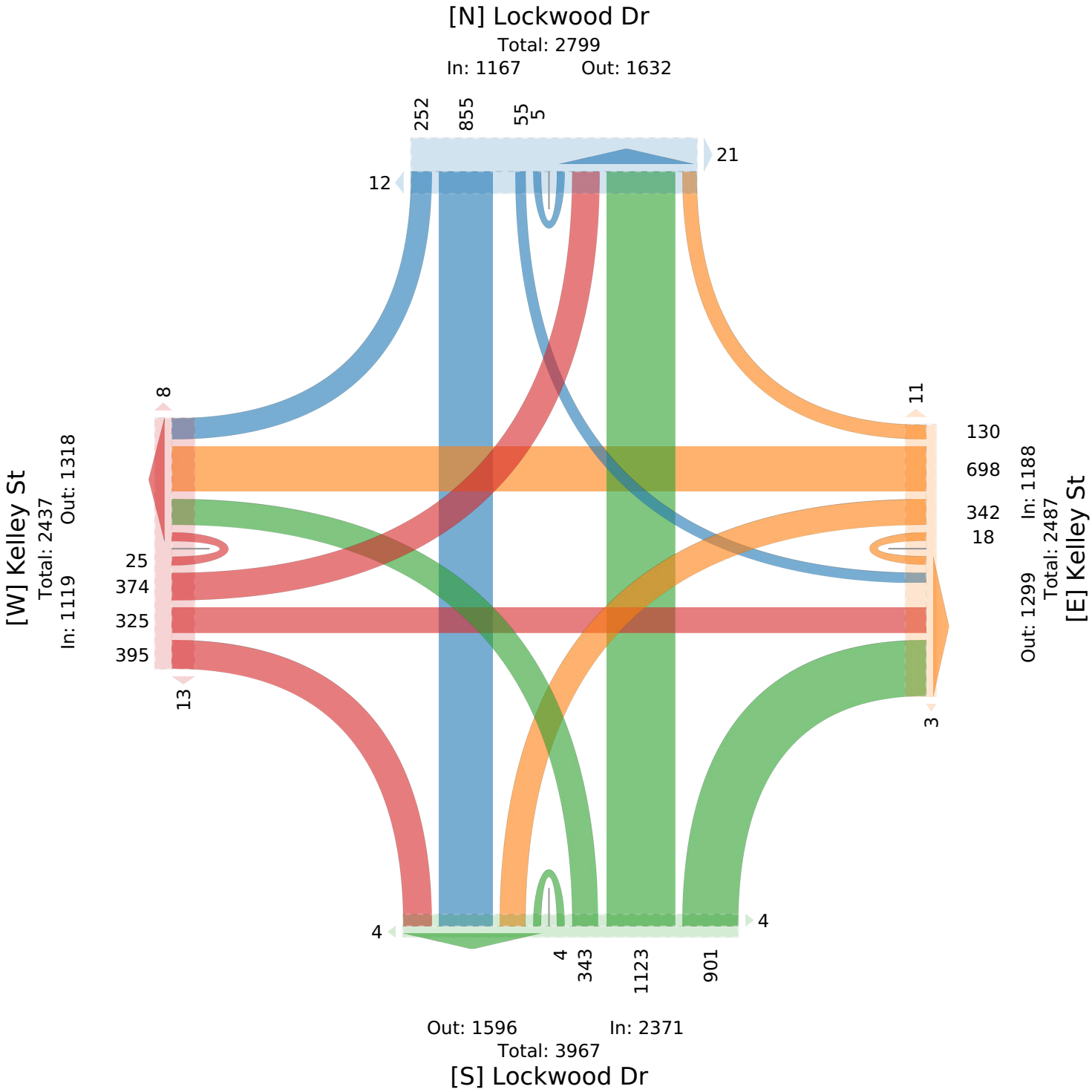
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Kelley St						Kelley St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	7	33	105	0	**145**	0	3	46	11	0	**60**	0	11	17	23	1	**52**	0	21	9	1	2	**33**	0	**290**
7:15AM	11	45	121	0	**177**	0	3	52	20	0	**75**	1	8	14	27	1	**50**	2	16	14	2	3	**35**	0	**337**
7:30AM	8	52	116	0	**176**	1	4	37	29	0	**70**	2	16	26	17	0	**59**	2	17	20	4	1	**42**	0	**347**
7:45AM	17	55	120	0	**192**	3	9	68	25	0	**102**	1	24	26	23	3	**76**	0	13	19	9	2	**43**	0	**413**
Hourly Total	43	185	462	0	**690**	4	19	203	85	0	**307**	4	59	83	90	5	**237**	4	67	62	16	8	**153**	0	**1387**
8:00AM	8	57	86	1	**152**	1	3	40	25	1	**69**	1	47	21	22	1	**91**	0	19	25	5	2	**51**	1	**363**
8:15AM	24	61	68	0	**153**	0	5	56	24	0	**85**	2	28	21	19	1	**69**	0	15	15	1	2	**33**	1	**340**
8:30AM	9	53	58	1	**121**	0	0	50	4	0	**54**	4	21	9	19	2	**51**	2	17	16	5	2	**40**	0	**266**
8:45AM	15	39	67	0	**121**	0	3	35	15	0	**53**	9	15	23	19	2	**59**	0	15	16	5	1	**37**	1	**270**
Hourly Total	56	210	279	2	**547**	1	11	181	68	1	**261**	16	111	74	79	6	**270**	2	66	72	16	7	**161**	3	**1239**
4:00PM	38	83	7	0	**128**	1	3	45	7	1	**56**	1	45	42	30	0	**117**	0	25	97	13	0	**135**	2	**436**
4:15PM	37	114	25	0	**176**	0	7	87	24	0	**118**	1	34	20	27	2	**83**	3	29	77	10	0	**116**	0	**493**
4:30PM	44	110	17	0	**171**	1	1	66	13	0	**80**	2	28	20	29	5	**82**	3	22	82	9	1	**114**	2	**447**
4:45PM	36	78	20	0	**134**	0	3	61	15	0	**79**	0	23	23	20	0	**66**	0	33	86	6	1	**126**	1	**405**
Hourly Total	155	385	69	0	**609**	2	14	259	59	1	**333**	4	130	105	106	7	**348**	6	109	342	38	2	**491**	5	**1781**
5:00PM	25	97	26	0	**148**	1	3	67	6	1	**77**	1	22	17	39	4	**82**	3	26	88	13	1	**128**	3	**435**
5:15PM	20	90	20	1	**131**	0	0	47	12	1	**60**	1	21	18	32	0	**71**	1	28	63	19	0	**110**	0	**372**
5:30PM	25	84	28	0	**137**	0	5	51	7	0	**63**	3	18	17	22	1	**58**	3	34	43	14	0	**91**	3	**349**
5:45PM	19	72	17	1	**109**	0	3	47	15	1	**66**	4	13	11	27	2	**53**	2	12	28	14	0	**54**	0	**282**
Hourly Total	89	343	91	2	**525**	1	11	212	40	3	**266**	9	74	63	120	7	**264**	9	100	222	60	1	**383**	6	**1438**
Total	343	1123	901	4	**2371**	8	55	855	252	5	**1167**	33	374	325	395	25	**1119**	21	342	698	130	18	**1188**	14	**5845**
% Approach	14.5%	47.4%	38.0%	0.2%	**-**	-	4.7%	73.3%	21.6%	0.4%	**-**	-	33.4%	29.0%	35.3%	2.2%	**-**	-	28.8%	58.8%	10.9%	1.5%	**-**	-	-
% Total	5.9%	19.2%	15.4%	0.1%	**40.6%**	-	0.9%	14.6%	4.3%	0.1%	**20.0%**	-	6.4%	5.6%	6.8%	0.4%	**19.1%**	-	5.9%	11.9%	2.2%	0.3%	**20.3%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%
Lights	315	1097	870	4	**2286**	-	45	827	244	5	**1121**	-	371	288	370	24	**1053**	-	333	657	120	18	**1128**	-	5588
% Lights	91.8%	97.7%	96.6%	100%	**96.4%**	-	81.8%	96.7%	96.8%	100%	**96.1%**	-	99.2%	88.6%	93.7%	96.0%	**94.1%**	-	97.4%	94.1%	92.3%	100%	**94.9%**	-	95.6%
Single-Unit Trucks	10	8	14	0	**32**	-	0	14	4	0	**18**	-	1	8	6	1	**16**	-	3	7	3	0	**13**	-	79
% Single-Unit Trucks	2.9%	0.7%	1.6%	0%	**1.3%**	-	0%	1.6%	1.6%	0%	**1.5%**	-	0.3%	2.5%	1.5%	4.0%	**1.4%**	-	0.9%	1.0%	2.3%	0%	**1.1%**	-	1.4%
Articulated Trucks	3	8	13	0	**24**	-	2	6	2	0	**10**	-	1	4	2	0	**7**	-	4	11	0	0	**15**	-	56
% Articulated Trucks	0.9%	0.7%	1.4%	0%	**1.0%**	-	3.6%	0.7%	0.8%	0%	**0.9%**	-	0.3%	1.2%	0.5%	0%	**0.6%**	-	1.2%	1.6%	0%	0%	**1.3%**	-	1.0%
Buses	15	10	4	0	**29**	-	8	7	2	0	**17**	-	1	25	17	0	**43**	-	2	22	7	0	**31**	-	120
% Buses	4.4%	0.9%	0.4%	0%	**1.2%**	-	14.5%	0.8%	0.8%	0%	**1.5%**	-	0.3%	7.7%	4.3%	0%	**3.8%**	-	0.6%	3.2%	5.4%	0%	**2.6%**	-	2.1%
Pedestrians	-	-	-	-	-	8	-	-	-	-	-	31	-	-	-	-	-	19	-	-	-	-	-	13	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	93.9%	-	-	-	-	-	90.5%	-	-	-	-	-	92.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	6.1%	-	-	-	-	-	9.5%	-	-	-	-	-	7.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Kelley St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Kelley St - TMC

Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

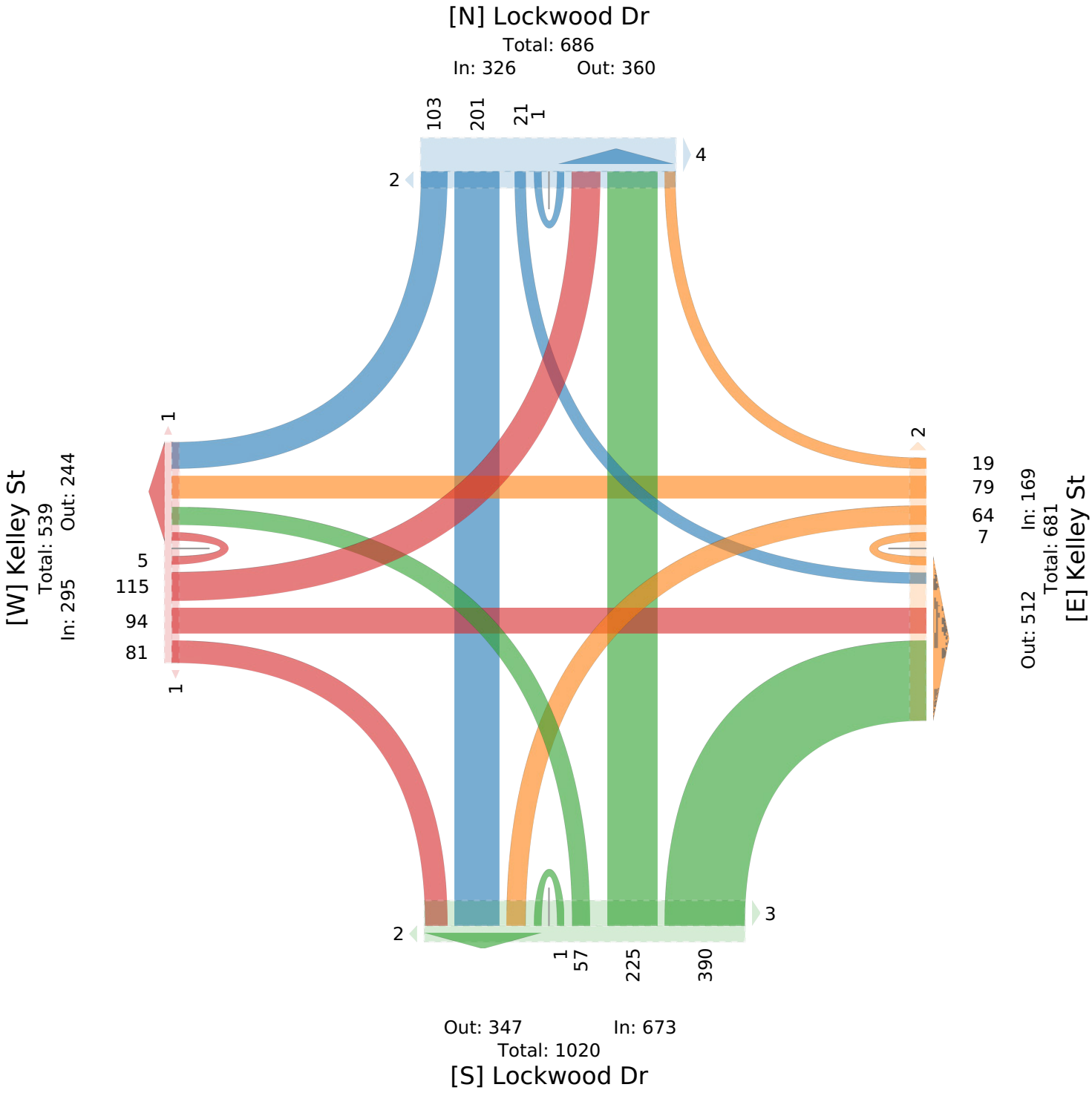
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Kelley St Eastbound						Kelley St Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:30AM	8	52	116	0	**176**	1	4	37	29	0	**70**	2	16	26	17	0	**59**	2	17	20	4	1	**42**	0	**347**
7:45AM	17	55	120	0	**192**	3	9	68	25	0	**102**	1	24	26	23	3	**76**	0	13	19	9	2	**43**	0	**413**
8:00AM	8	57	86	1	**152**	1	3	40	25	1	**69**	1	47	21	22	1	**91**	0	19	25	5	2	**51**	1	**363**
8:15AM	24	61	68	0	**153**	0	5	56	24	0	**85**	2	28	21	19	1	**69**	0	15	15	1	2	**33**	1	**340**
Total	57	225	390	1	**673**	5	21	201	103	1	**326**	6	115	94	81	5	**295**	2	64	79	19	7	**169**	2	**1463**
% Approach	8.5%	33.4%	57.9%	0.1%	**-**	-	6.4%	61.7%	31.6%	0.3%	**-**	-	39.0%	31.9%	27.5%	1.7%	**-**	-	37.9%	46.7%	11.2%	4.1%	**-**	-	-
% Total	3.9%	15.4%	26.7%	0.1%	**46.0%**	-	1.4%	13.7%	7.0%	0.1%	**22.3%**	-	7.9%	6.4%	5.5%	0.3%	**20.2%**	-	4.4%	5.4%	1.3%	0.5%	**11.6%**	-	-
PHF	0.594	0.922	0.813	0.250	**0.876**	-	0.583	0.739	0.888	0.250	**0.799**	-	0.612	0.904	0.880	0.417	**0.810**	-	0.842	0.790	0.528	0.875	**0.828**	-	0.886
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	50	221	385	1	**657**	-	19	195	99	1	**314**	-	115	84	77	4	**280**	-	59	73	16	7	**155**	-	1406
% Lights	87.7%	98.2%	98.7%	100%	**97.6%**	-	90.5%	97.0%	96.1%	100%	**96.3%**	-	100%	89.4%	95.1%	80.0%	**94.9%**	-	92.2%	92.4%	84.2%	100%	**91.7%**	-	96.1%
Single-Unit Trucks	2	2	4	0	**8**	-	0	4	2	0	**6**	-	0	3	1	1	**5**	-	2	1	1	0	**4**	-	23
% Single-Unit Trucks	3.5%	0.9%	1.0%	0%	**1.2%**	-	0%	2.0%	1.9%	0%	**1.8%**	-	0%	3.2%	1.2%	20.0%	**1.7%**	-	3.1%	1.3%	5.3%	0%	**2.4%**	-	1.6%
Articulated Trucks	0	1	0	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	4
% Articulated Trucks	0%	0.4%	0%	0%	**0.1%**	-	0%	0.5%	1.0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	1.6%	0%	0%	0%	**0.6%**	-	0.3%
Buses	5	1	1	0	**7**	-	2	0	1	0	**3**	-	0	7	3	0	**10**	-	2	5	2	0	**9**	-	29
% Buses	8.8%	0.4%	0.3%	0%	**1.0%**	-	9.5%	0%	1.0%	0%	**0.9%**	-	0%	7.4%	3.7%	0%	**3.4%**	-	3.1%	6.3%	10.5%	0%	**5.3%**	-	2.0%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Kelley St - TMC
Wed Sep 1, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Kelley St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

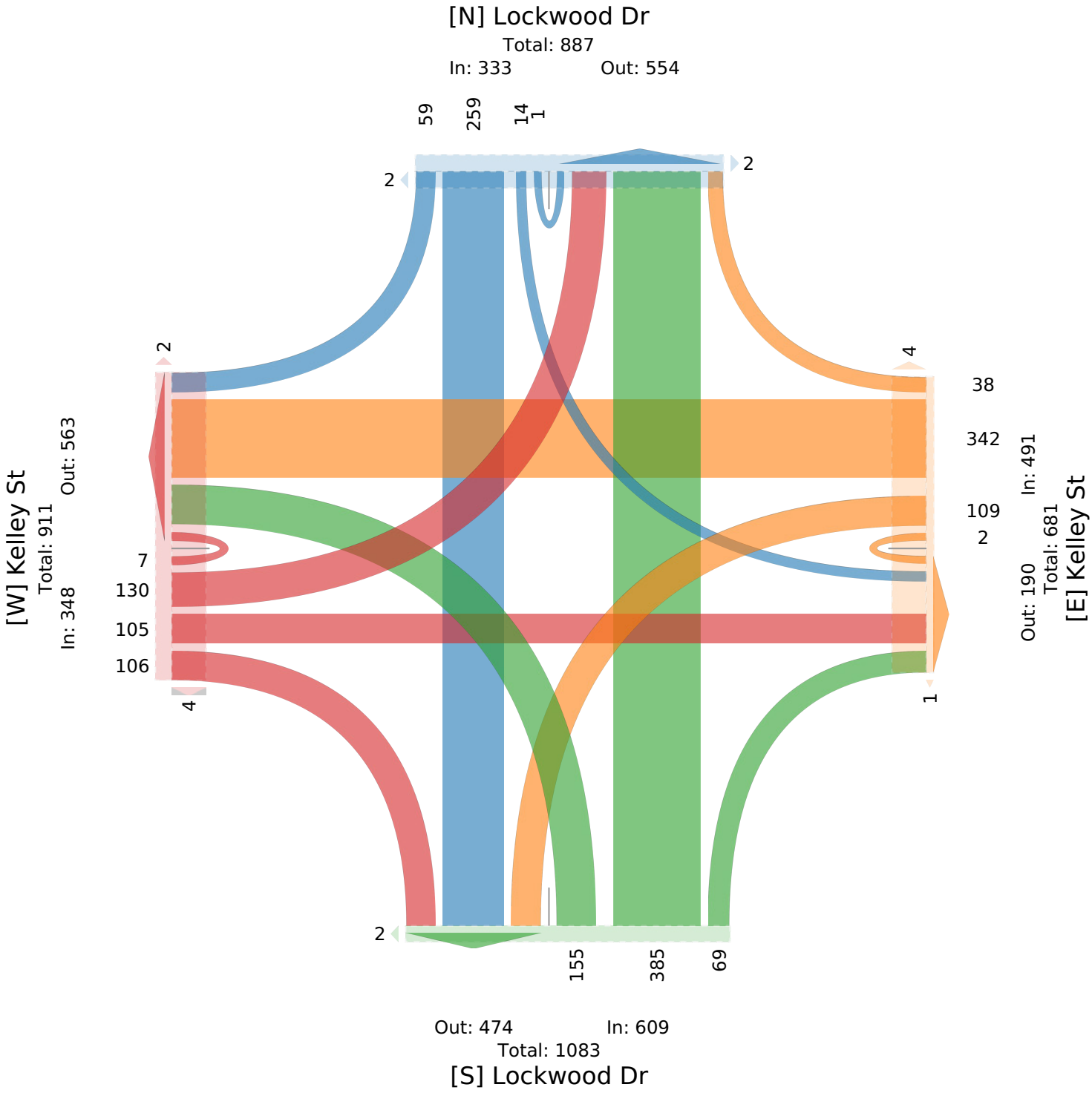
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Kelley St						Kelley St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:00PM	38	83	7	0	**128**	1	3	45	7	1	**56**	1	45	42	30	0	**117**	0	25	97	13	0	**135**	2	**436**
4:15PM	37	114	25	0	**176**	0	7	87	24	0	**118**	1	34	20	27	2	**83**	3	29	77	10	0	**116**	0	**493**
4:30PM	44	110	17	0	**171**	1	1	66	13	0	**80**	2	28	20	29	5	**82**	3	22	82	9	1	**114**	2	**447**
4:45PM	36	78	20	0	**134**	0	3	61	15	0	**79**	0	23	23	20	0	**66**	0	33	86	6	1	**126**	1	**405**
Total	155	385	69	0	**609**	2	14	259	59	1	**333**	4	130	105	106	7	**348**	6	109	342	38	2	**491**	5	**1781**
% Approach	25.5%	63.2%	11.3%	0%	**-**	-	4.2%	77.8%	17.7%	0.3%	**-**	-	37.4%	30.2%	30.5%	2.0%	**-**	-	22.2%	69.7%	7.7%	0.4%	**-**	-	**-**
% Total	8.7%	21.6%	3.9%	0%	**34.2%**	-	0.8%	14.5%	3.3%	0.1%	**18.7%**	-	7.3%	5.9%	6.0%	0.4%	**19.5%**	-	6.1%	19.2%	2.1%	0.1%	**27.6%**	-	**-**
PHF	0.881	0.844	0.690	-	**0.865**	-	0.500	0.744	0.615	0.250	**0.706**	-	0.722	0.625	0.883	0.350	**0.744**	-	0.826	0.881	0.731	0.500	**0.909**	-	0.903
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0.1%
Lights	145	377	65	0	**587**	-	11	252	59	1	**323**	-	130	95	100	7	**332**	-	108	326	37	2	**473**	-	1715
% Lights	93.5%	97.9%	94.2%	0%	**96.4%**	-	78.6%	97.3%	100%	100%	**97.0%**	-	100%	90.5%	94.3%	100%	**95.4%**	-	99.1%	95.3%	97.4%	100%	**96.3%**	-	96.3%
Single-Unit Trucks	4	2	0	0	**6**	-	0	3	0	0	**3**	-	0	1	1	0	**2**	-	1	3	0	0	**4**	-	15
% Single-Unit Trucks	2.6%	0.5%	0%	0%	**1.0%**	-	0%	1.2%	0%	0%	**0.9%**	-	0%	1.0%	0.9%	0%	**0.6%**	-	0.9%	0.9%	0%	0%	**0.8%**	-	0.8%
Articulated Trucks	3	3	4	0	**10**	-	0	1	0	0	**1**	-	0	2	1	0	**3**	-	0	5	0	0	**5**	-	19
% Articulated Trucks	1.9%	0.8%	5.8%	0%	**1.6%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	1.9%	0.9%	0%	**0.9%**	-	0%	1.5%	0%	0%	**1.0%**	-	1.1%
Buses	3	3	0	0	**6**	-	3	3	0	0	**6**	-	0	7	4	0	**11**	-	0	7	1	0	**8**	-	31
% Buses	1.9%	0.8%	0%	0%	**1.0%**	-	21.4%	1.2%	0%	0%	**1.8%**	-	0%	6.7%	3.8%	0%	**3.2%**	-	0%	2.0%	2.6%	0%	**1.6%**	-	1.7%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	4	-	-	-	-	-	6	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Kelley St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867370, Location: 29.813506, -95.317189

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

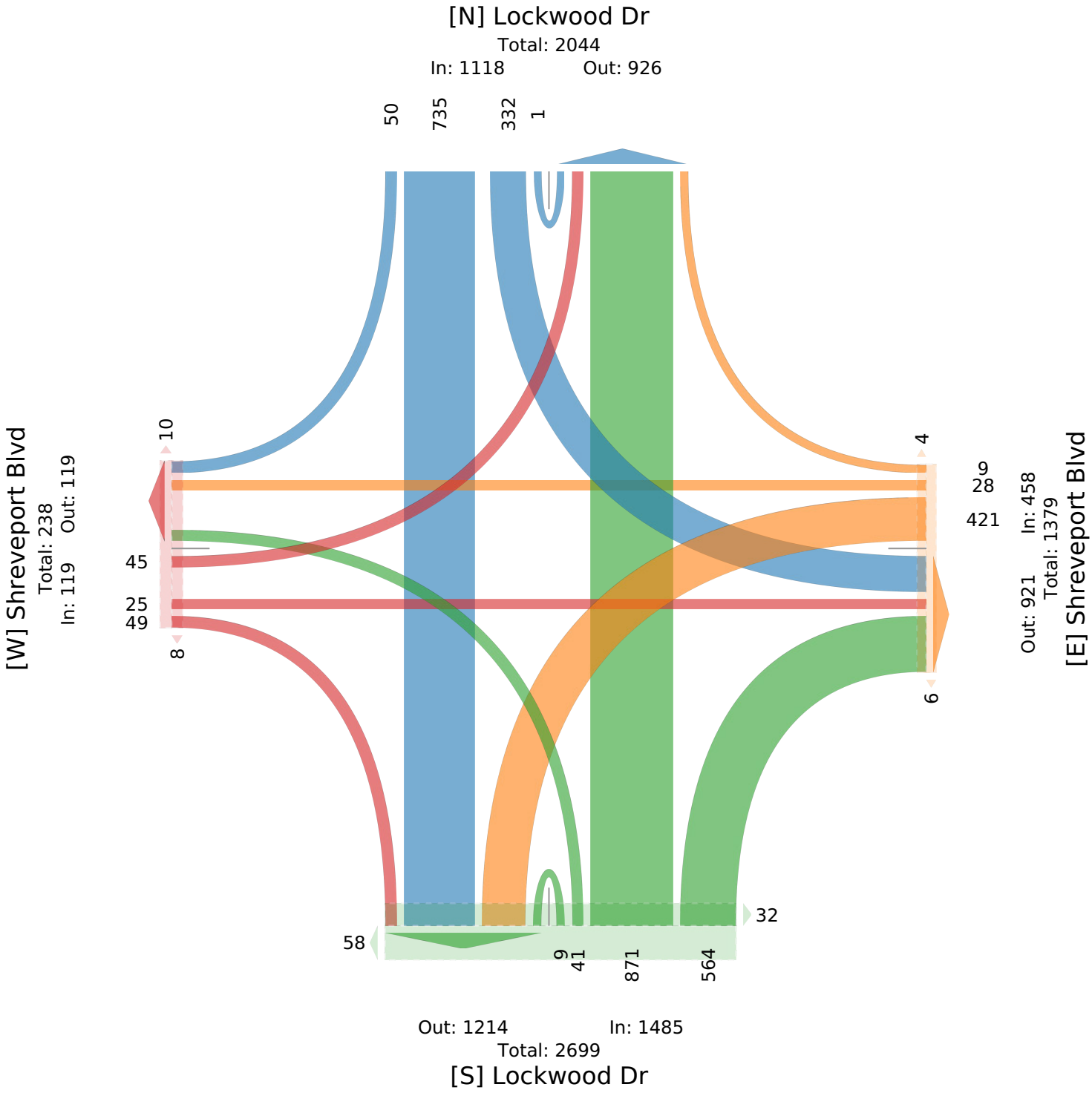
Leg	Lockwood Dr						Lockwood Dr						Shreveport Blvd						Shreveport Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 7:00AM	2	27	10	0	**39**	1	9	28	1	0	**38**	0	2	0	2	0	**4**	1	13	1	0	0	**14**	1	**95**
7:15AM	0	26	14	0	**40**	2	11	39	2	0	**52**	0	2	1	4	0	**7**	0	20	4	0	0	**24**	0	**123**
7:30AM	1	44	28	0	**73**	2	24	55	1	0	**80**	0	4	3	2	0	**9**	1	35	3	0	0	**38**	0	**200**
7:45AM	0	34	51	1	**86**	14	31	45	6	0	**82**	0	0	3	2	0	**5**	0	42	1	0	0	**43**	0	**216**
Hourly Total	3	131	103	1	**238**	19	75	167	10	0	**252**	0	8	7	10	0	**25**	2	110	9	0	0	**119**	1	**634**
8:00AM	2	47	66	1	**116**	3	39	43	3	0	**85**	0	0	2	5	0	**7**	0	43	2	2	0	**47**	0	**255**
8:15AM	2	45	76	0	**123**	10	37	51	1	0	**89**	0	5	0	3	0	**8**	0	41	2	3	0	**46**	0	**266**
8:30AM	3	51	39	0	**93**	10	26	29	2	0	**57**	0	3	2	2	0	**7**	0	23	3	0	0	**26**	0	**183**
8:45AM	2	16	17	0	**35**	10	15	40	2	0	**57**	0	1	0	3	0	**4**	0	12	1	0	0	**13**	6	**109**
Hourly Total	9	159	198	1	**367**	33	117	163	8	0	**288**	0	9	4	13	0	**26**	0	119	8	5	0	**132**	6	**813**
4:00PM	4	60	73	1	**138**	16	30	65	1	0	**96**	0	0	2	1	0	**3**	5	30	0	3	0	**33**	1	**270**
4:15PM	5	61	45	1	**112**	9	42	45	6	0	**93**	0	4	2	4	0	**10**	2	48	3	0	0	**51**	2	**266**
4:30PM	4	79	28	0	**111**	3	21	49	4	1	**75**	0	5	2	4	0	**11**	2	28	1	0	0	**29**	0	**226**
4:45PM	3	84	23	0	**110**	1	4	60	4	0	**68**	0	4	1	3	0	**8**	0	26	1	1	0	**28**	0	**214**
Hourly Total	16	284	169	2	**471**	29	97	219	15	1	**332**	0	13	7	12	0	**32**	9	132	5	4	0	**141**	3	**976**
5:00PM	3	68	23	2	**96**	4	14	52	5	0	**71**	0	6	1	4	0	**11**	3	16	4	0	0	**20**	0	**198**
5:15PM	4	84	26	1	**115**	1	10	50	4	0	**64**	0	2	1	3	0	**6**	0	18	0	0	0	**18**	0	**203**
5:30PM	4	85	25	0	**114**	3	8	41	5	0	**54**	0	5	3	5	0	**13**	4	14	2	0	0	**16**	0	**197**
5:45PM	2	60	20	2	**84**	1	11	43	3	0	**57**	0	2	2	2	0	**6**	0	12	0	0	0	**12**	0	**159**
Hourly Total	13	297	94	5	**409**	9	43	186	17	0	**246**	0	15	7	14	0	**36**	7	60	6	0	0	**66**	0	**757**
Total	41	871	564	9	**1485**	90	332	735	50	1	**1118**	0	45	25	49	0	**119**	18	421	28	9	0	**458**	10	**3180**
% Approach	2.8%	58.7%	38.0%	0.6%	**-**	-	29.7%	65.7%	4.5%	0.1%	**-**	-	37.8%	21.0%	41.2%	0%	**-**	-	91.9%	6.1%	2.0%	0%	**-**	-	-
% Total	1.3%	27.4%	17.7%	0.3%	**46.7%**	-	10.4%	23.1%	1.6%	0%	**35.2%**	-	1.4%	0.8%	1.5%	0%	**3.7%**	-	13.2%	0.9%	0.3%	0%	**14.4%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	2	0	0	**2**	-	1	0	0	0	**1**	-	0	0	1	0	**1**	-	5
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0.3%	0%	0%	**0.2%**	-	2.2%	0%	0%	0%	**0.8%**	-	0%	0%	11.1%	0%	**0.2%**	-	0.2%
Lights	40	835	549	9	**1433**	-	326	704	50	1	**1081**	-	44	25	49	0	**118**	-	406	28	7	0	**441**	-	3073
% Lights	97.6%	95.9%	97.3%	100%	**96.5%**	-	98.2%	95.8%	100%	100%	**96.7%**	-	97.8%	100%	100%	0%	**99.2%**	-	96.4%	100%	77.8%	0%	**96.3%**	-	96.6%
Single-Unit Trucks	1	15	11	0	**27**	-	1	14	0	0	**15**	-	0	0	0	0	**0**	-	7	0	0	0	**7**	-	49
% Single-Unit Trucks	2.4%	1.7%	2.0%	0%	**1.8%**	-	0.3%	1.9%	0%	0%	**1.3%**	-	0%	0%	0%	0%	**0%**	-	1.7%	0%	0%	0%	**1.5%**	-	1.5%
Articulated Trucks	0	10	1	0	**11**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	15
% Articulated Trucks	0%	1.1%	0.2%	0%	**0.7%**	-	0%	0.5%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Buses	0	10	3	0	**13**	-	5	11	0	0	**16**	-	0	0	0	0	**0**	-	8	0	1	0	**9**	-	38
% Buses	0%	1.1%	0.5%	0%	**0.9%**	-	1.5%	1.5%	0%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	1.9%	0%	11.1%	0%	**2.0%**	-	1.2%
Pedestrians	-	-	-	-	-	88	-	-	-	-	-	0	-	-	-	-	-	18	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	97.8%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	2.2%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

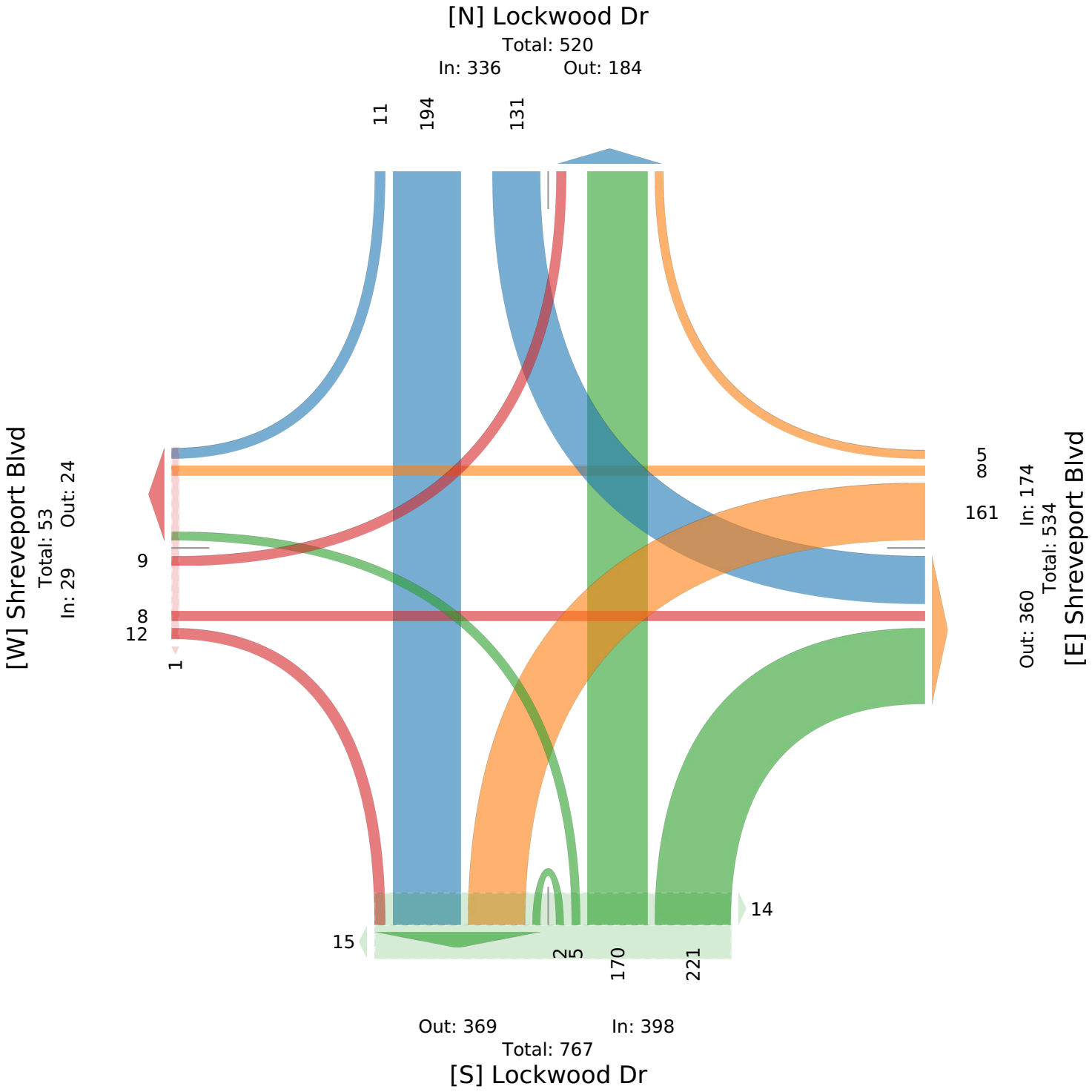
Leg	Lockwood Dr						Lockwood Dr						Shreveport Blvd						Shreveport Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-09 7:30AM	1	44	28	0	**73**	2	24	55	1	0	**80**	0	4	3	2	0	**9**	1	35	3	0	0	**38**	0	**200**
7:45AM	0	34	51	1	**86**	14	31	45	6	0	**82**	0	0	3	2	0	**5**	0	42	1	0	0	**43**	0	**216**
8:00AM	2	47	66	1	**116**	3	39	43	3	0	**85**	0	0	2	5	0	**7**	0	43	2	2	0	**47**	0	**255**
8:15AM	2	45	76	0	**123**	10	37	51	1	0	**89**	0	5	0	3	0	**8**	0	41	2	3	0	**46**	0	**266**
Total	5	170	221	2	**398**	29	131	194	11	0	**336**	0	9	8	12	0	**29**	1	161	8	5	0	**174**	0	**937**
% Approach	1.3%	42.7%	55.5%	0.5%	**-**	-	39.0%	57.7%	3.3%	0%	**-**	-	31.0%	27.6%	41.4%	0%	**-**	-	92.5%	4.6%	2.9%	0%	**-**	-	-
% Total	0.5%	18.1%	23.6%	0.2%	**42.5%**	-	14.0%	20.7%	1.2%	0%	**35.9%**	-	1.0%	0.9%	1.3%	0%	**3.1%**	-	17.2%	0.9%	0.5%	0%	**18.6%**	-	-
PHF	0.625	0.904	0.727	0.500	**0.809**	-	0.840	0.882	0.458	-	**0.944**	-	0.450	0.667	0.600	-	**0.806**	-	0.936	0.667	0.417	-	**0.926**	-	0.881
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	5	164	217	2	**388**	-	128	183	11	0	**322**	-	9	8	12	0	**29**	-	157	8	4	0	**169**	-	908
% Lights	100%	96.5%	98.2%	100%	**97.5%**	-	97.7%	94.3%	100%	0%	**95.8%**	-	100%	100%	100%	0%	**100%**	-	97.5%	100%	80.0%	0%	**97.1%**	-	96.9%
Single-Unit Trucks	0	3	4	0	**7**	-	1	6	0	0	**7**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	16
% Single-Unit Trucks	0%	1.8%	1.8%	0%	**1.8%**	-	0.8%	3.1%	0%	0%	**2.1%**	-	0%	0%	0%	0%	**0%**	-	1.2%	0%	0%	0%	**1.1%**	-	1.7%
Articulated Trucks	0	1	0	0	**1**	-	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.6%	0%	0%	**0.3%**	-	0%	1.5%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	0	2	0	0	**2**	-	2	2	0	0	**4**	-	0	0	0	0	**0**	-	2	0	1	0	**3**	-	9
% Buses	0%	1.2%	0%	0%	**0.5%**	-	1.5%	1.0%	0%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	1.2%	0%	20.0%	0%	**1.7%**	-	1.0%
Pedestrians	-	-	-	-	-	29	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

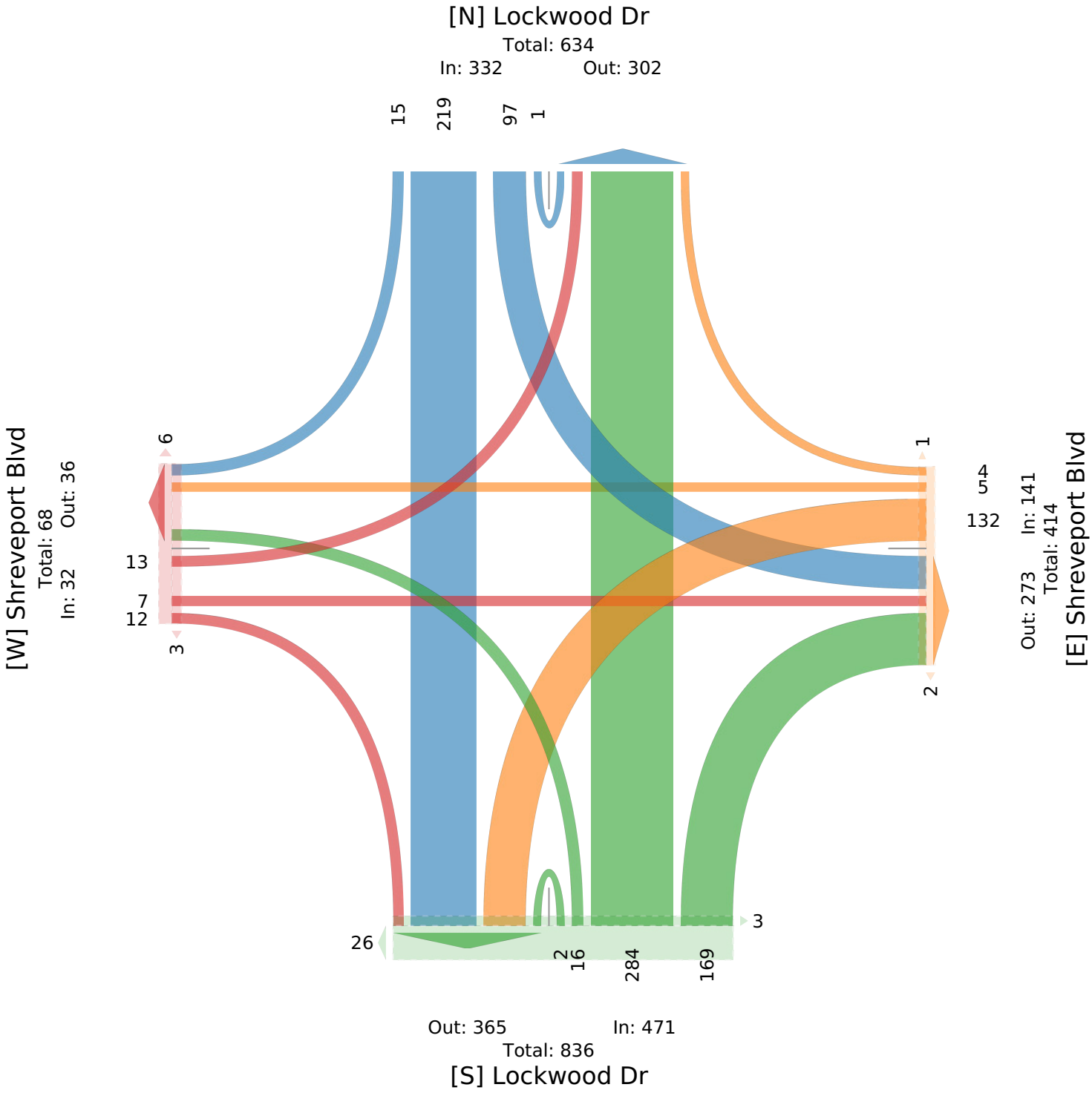
Leg	Lockwood Dr						Lockwood Dr						Shreveport Blvd						Shreveport Blvd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-09 4:00PM	4	60	73	1	**138**	16	30	65	1	0	**96**	0	0	2	1	0	**3**	5	30	0	3	0	**33**	1	**270**
4:15PM	5	61	45	1	**112**	9	42	45	6	0	**93**	0	4	2	4	0	**10**	2	48	3	0	0	**51**	2	**266**
4:30PM	4	79	28	0	**111**	3	21	49	4	1	**75**	0	5	2	4	0	**11**	2	28	1	0	0	**29**	0	**226**
4:45PM	3	84	23	0	**110**	1	4	60	4	0	**68**	0	4	1	3	0	**8**	0	26	1	1	0	**28**	0	**214**
Total	16	284	169	2	**471**	29	97	219	15	1	**332**	0	13	7	12	0	**32**	9	132	5	4	0	**141**	3	**976**
% Approach	3.4%	60.3%	35.9%	0.4%	**-**	-	29.2%	66.0%	4.5%	0.3%	**-**	-	40.6%	21.9%	37.5%	0%	**-**	-	93.6%	3.5%	2.8%	0%	**-**	-	-
% Total	1.6%	29.1%	17.3%	0.2%	**48.3%**	-	9.9%	22.4%	1.5%	0.1%	**34.0%**	-	1.3%	0.7%	1.2%	0%	**3.3%**	-	13.5%	0.5%	0.4%	0%	**14.4%**	-	-
PHF	0.800	0.845	0.579	0.500	**0.853**	-	0.577	0.842	0.625	0.250	**0.865**	-	0.650	0.875	0.750		**0.727**	-	0.688	0.417	0.333		**0.691**	-	0.904
Motorcycles	0	1	0	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	3
% Motorcycles	0%	0.4%	0%	0%	**0.2%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	25.0%	0%	**0.7%**	-	0.3%
Lights	16	271	164	2	**453**	-	96	211	15	1	**323**	-	13	7	12	0	**32**	-	131	5	3	0	**139**	-	947
% Lights	100%	95.4%	97.0%	100%	**96.2%**	-	99.0%	96.3%	100%	100%	**97.3%**	-	100%	100%	100%	0%	**100%**	-	99.2%	100%	75.0%	0%	**98.6%**	-	97.0%
Single-Unit Trucks	0	5	2	0	**7**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	12
% Single-Unit Trucks	0%	1.8%	1.2%	0%	**1.5%**	-	0%	2.3%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.2%
Articulated Trucks	0	3	1	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	1.1%	0.6%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	0	4	2	0	**6**	-	1	2	0	0	**3**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	10
% Buses	0%	1.4%	1.2%	0%	**1.3%**	-	1.0%	0.9%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0.8%	0%	0%	0%	**0.7%**	-	1.0%
Pedestrians	-	-	-	-	-	29	-	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Shreveport Blvd - TMC

Thu Sep 9, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867371, Location: 29.822307, -95.31858

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Bennington St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

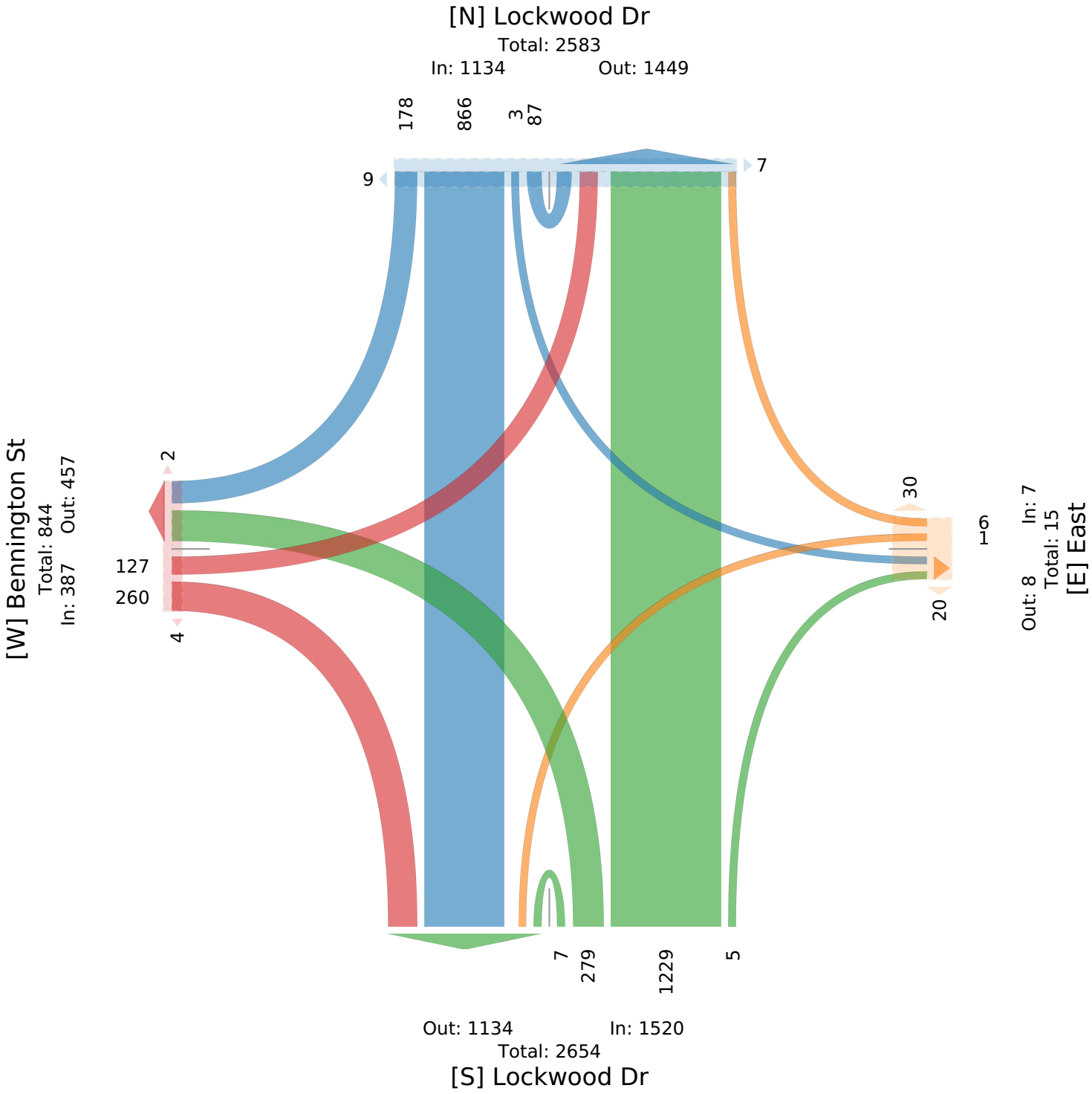
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Bennington St						East						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	7	35	0	0	**42**	0	0	43	10	3	**56**	1	7	0	5	0	**12**	1	0	0	0	0	**0**	0	**110**
7:15AM	14	41	0	1	**56**	0	0	42	28	17	**87**	0	17	0	13	0	**30**	0	0	0	0	0	**0**	0	**173**
7:30AM	4	23	0	0	**27**	0	0	28	23	20	**71**	6	10	0	12	0	**22**	0	0	0	0	0	**0**	4	**120**
7:45AM	20	79	0	0	**99**	0	0	88	34	16	**138**	8	15	0	21	0	**36**	0	0	0	0	0	**0**	7	**273**
Hourly Total	45	178	0	1	**224**	0	0	201	95	56	**352**	15	49	0	51	0	**100**	1	0	0	0	0	**0**	11	**676**
8:00AM	15	75	0	0	**90**	0	1	61	11	13	**86**	0	11	0	28	0	**39**	0	0	0	0	0	**0**	1	**215**
8:15AM	23	51	0	2	**76**	0	0	53	9	2	**64**	0	4	0	29	0	**33**	0	0	0	0	0	**0**	0	**173**
8:30AM	20	57	0	0	**77**	0	0	60	2	0	**62**	0	1	0	18	0	**19**	0	0	0	0	0	**0**	1	**158**
8:45AM	17	40	0	1	**58**	0	0	40	6	0	**46**	0	1	0	8	0	**9**	0	0	0	0	0	**0**	0	**113**
Hourly Total	75	223	0	3	**301**	0	1	214	28	15	**258**	0	17	0	83	0	**100**	0	0	0	0	0	**0**	2	**659**
4:00PM	13	113	2	0	**128**	0	0	70	8	1	**79**	0	6	0	25	0	**31**	0	0	0	0	0	**0**	5	**238**
4:15PM	55	154	1	1	**211**	0	0	59	8	2	**69**	1	17	0	19	0	**36**	1	0	0	1	0	**1**	17	**317**
4:30PM	29	142	0	0	**171**	0	0	57	5	3	**65**	0	15	0	17	0	**32**	1	0	0	1	0	**1**	5	**269**
4:45PM	16	96	1	1	**114**	0	1	62	7	2	**72**	0	4	0	16	0	**20**	0	0	0	1	0	**1**	2	**207**
Hourly Total	113	505	4	2	**624**	0	1	248	28	8	**285**	1	42	0	77	0	**119**	2	0	0	3	0	**3**	29	**1031**
5:00PM	13	95	0	0	**108**	0	1	50	7	1	**59**	0	7	0	14	0	**21**	1	0	0	2	0	**2**	4	**190**
5:15PM	10	81	1	0	**92**	0	0	53	9	0	**62**	0	4	0	9	0	**13**	0	1	0	0	0	**1**	3	**168**
5:30PM	10	91	0	1	**102**	0	0	53	3	5	**61**	0	6	0	16	0	**22**	1	0	0	1	0	**1**	1	**186**
5:45PM	13	56	0	0	**69**	0	0	47	8	2	**57**	0	2	0	10	0	**12**	1	0	0	0	0	**0**	0	**138**
Hourly Total	46	323	1	1	**371**	0	1	203	27	8	**239**	0	19	0	49	0	**68**	3	1	0	3	0	**4**	8	**682**
Total	279	1229	5	7	**1520**	0	3	866	178	87	**1134**	16	127	0	260	0	**387**	6	1	0	6	0	**7**	50	**3048**
% Approach	18.4%	80.9%	0.3%	0.5%	**-**	-	0.3%	76.4%	15.7%	7.7%	**-**	-	32.8%	0%	67.2%	0%	**-**	-	14.3%	0%	85.7%	0%	**-**	-	-
% Total	9.2%	40.3%	0.2%	0.2%	**49.9%**	-	0.1%	28.4%	5.8%	2.9%	**37.2%**	-	4.2%	0%	8.5%	0%	**12.7%**	-	0%	0%	0.2%	0%	**0.2%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.6%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	272	1198	5	6	**1481**	-	3	833	174	87	**1097**	-	123	0	253	0	**376**	-	1	0	6	0	**7**	-	2961
% Lights	97.5%	97.5%	100%	85.7%	**97.4%**	-	100%	96.2%	97.8%	100%	**96.7%**	-	96.9%	0%	97.3%	0%	**97.2%**	-	100%	0%	100%	0%	**100%**	-	97.1%
Single-Unit Trucks	2	15	0	0	**17**	-	0	15	1	0	**16**	-	2	0	1	0	**3**	-	0	0	0	0	**0**	-	36
% Single-Unit Trucks	0.7%	1.2%	0%	0%	**1.1%**	-	0%	1.7%	0.6%	0%	**1.4%**	-	1.6%	0%	0.4%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	1.2%
Articulated Trucks	2	5	0	1	**8**	-	0	6	0	0	**6**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	14
% Articulated Trucks	0.7%	0.4%	0%	14.3%	**0.5%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Buses	3	11	0	0	**14**	-	0	11	2	0	**13**	-	2	0	6	0	**8**	-	0	0	0	0	**0**	-	35
% Buses	1.1%	0.9%	0%	0%	**0.9%**	-	0%	1.3%	1.1%	0%	**1.1%**	-	1.6%	0%	2.3%	0%	**2.1%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	16	-	-	-	-	-	2	-	-	-	-	-	47	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-	-	-	-	-	94.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-	-	-	-	-	6.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Bennington St - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Bennington St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

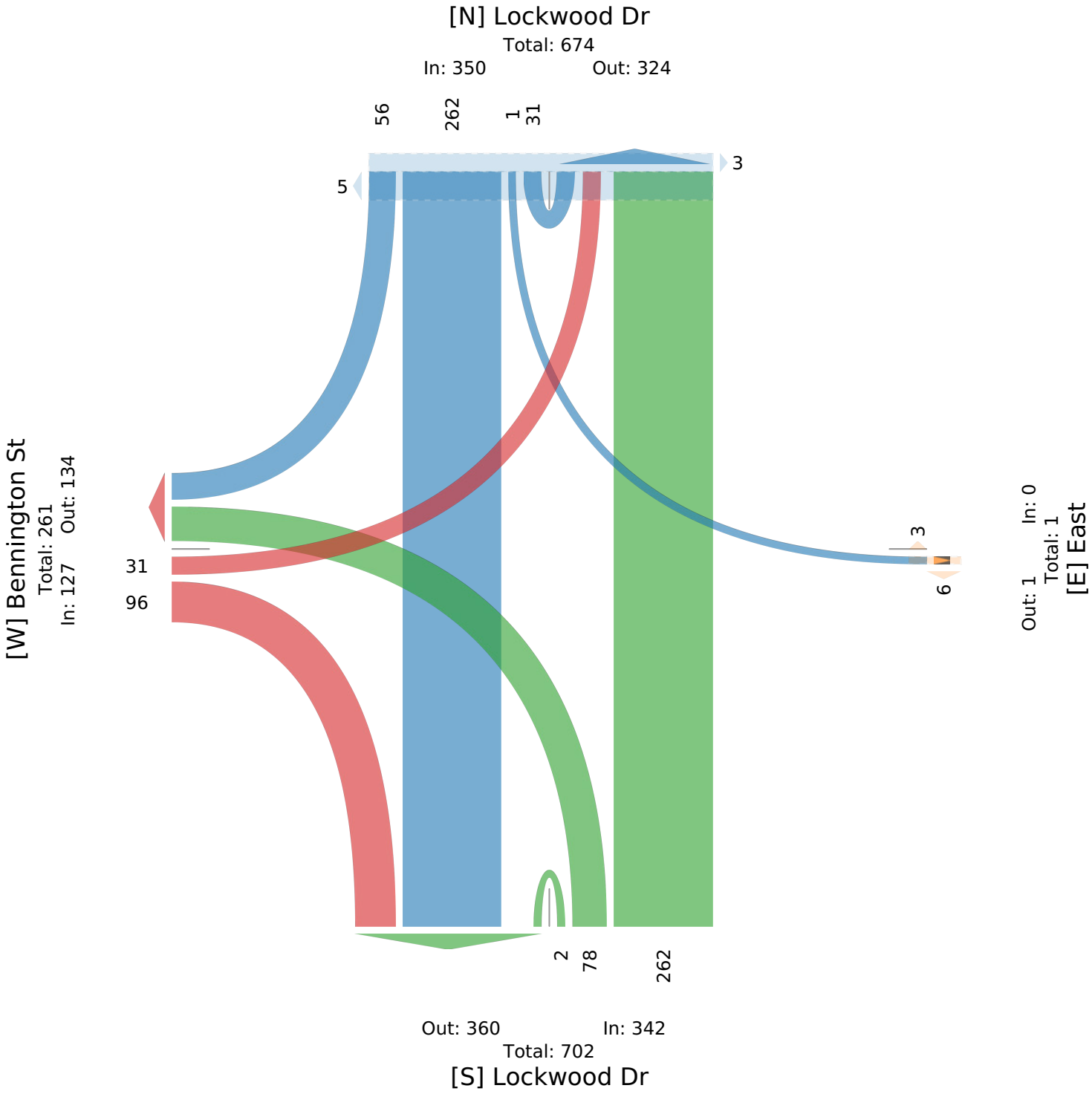
Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Bennington St Eastbound						East Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:45AM	20	79	0	0	**99**	0	0	88	34	16	**138**	8	15	0	21	0	**36**	0	0	0	0	0	**0**	7	**273**
8:00AM	15	75	0	0	**90**	0	1	61	11	13	**86**	0	11	0	28	0	**39**	0	0	0	0	0	**0**	1	**215**
8:15AM	23	51	0	2	**76**	0	0	53	9	2	**64**	0	4	0	29	0	**33**	0	0	0	0	0	**0**	0	**173**
8:30AM	20	57	0	0	**77**	0	0	60	2	0	**62**	0	1	0	18	0	**19**	0	0	0	0	0	**0**	1	**158**
Total	78	262	0	2	**342**	0	1	262	56	31	**350**	8	31	0	96	0	**127**	0	0	0	0	0	**0**	9	**819**
% Approach	22.8%	76.6%	0%	0.6%	**-**	-	0.3%	74.9%	16.0%	8.9%	**-**	-	24.4%	0%	75.6%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	9.5%	32.0%	0%	0.2%	**41.8%**	-	0.1%	32.0%	6.8%	3.8%	**42.7%**	-	3.8%	0%	11.7%	0%	**15.5%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	0.848	0.829	-	0.250	**0.864**	-	0.250	0.744	0.412	0.484	**0.634**	-	0.517	-	0.828	-	**0.814**	-	-	-	-	-	**-**	-	0.750
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.1%
Lights	78	254	0	2	**334**	-	1	249	56	31	**337**	-	29	0	94	0	**123**	-	0	0	0	0	**0**	-	794
% Lights	100%	96.9%	0%	100%	**97.7%**	-	100%	95.0%	100%	100%	**96.3%**	-	93.5%	0%	97.9%	0%	**96.9%**	-	0%	0%	0%	0%	**-**	-	96.9%
Single-Unit Trucks	0	6	0	0	**6**	-	0	7	0	0	**7**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	14
% Single-Unit Trucks	0%	2.3%	0%	0%	**1.8%**	-	0%	2.7%	0%	0%	**2.0%**	-	3.2%	0%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**-**	-	1.7%
Articulated Trucks	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.2%
Buses	0	2	0	0	**2**	-	0	3	0	0	**3**	-	1	0	2	0	**3**	-	0	0	0	0	**0**	-	8
% Buses	0%	0.8%	0%	0%	**0.6%**	-	0%	1.1%	0%	0%	**0.9%**	-	3.2%	0%	2.1%	0%	**2.4%**	-	0%	0%	0%	0%	**-**	-	1.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	8	-	-	-	-	-	0	-	-	-	-	-	8	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	88.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	11.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Bennington St - TMC

Wed Sep 1, 2021
AM Peak (7:45 AM - 8:45 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Bennington St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

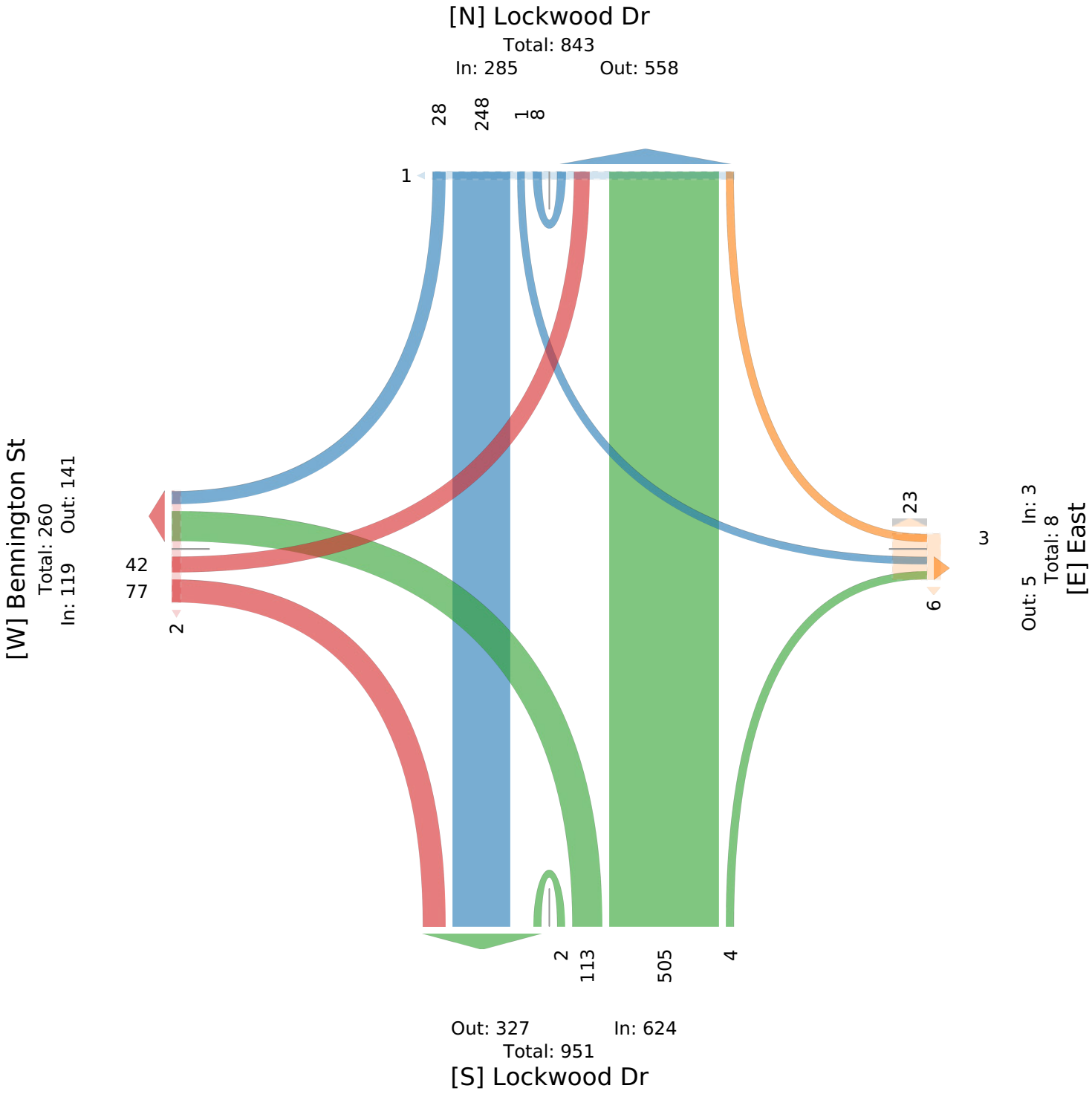
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Bennington St						East						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:00PM	13	113	2	0	**128**	0	0	70	8	1	**79**	0	6	0	25	0	**31**	0	0	0	0	0	**0**	5	**238**
4:15PM	55	154	1	1	**211**	0	0	59	8	2	**69**	1	17	0	19	0	**36**	1	0	0	1	0	**1**	17	**317**
4:30PM	29	142	0	0	**171**	0	0	57	5	3	**65**	0	15	0	17	0	**32**	1	0	0	1	0	**1**	5	**269**
4:45PM	16	96	1	1	**114**	0	1	62	7	2	**72**	0	4	0	16	0	**20**	0	0	0	1	0	**1**	2	**207**
Total	113	505	4	2	**624**	0	1	248	28	8	**285**	1	42	0	77	0	**119**	2	0	0	3	0	**3**	29	**1031**
% Approach	18.1%	80.9%	0.6%	0.3%	**-**	-	0.4%	87.0%	9.8%	2.8%	**-**	-	35.3%	0%	64.7%	0%	**-**	-	0%	0%	100%	0%	**-**	-	-
% Total	11.0%	49.0%	0.4%	0.2%	**60.5%**	-	0.1%	24.1%	2.7%	0.8%	**27.6%**	-	4.1%	0%	7.5%	0%	**11.5%**	-	0%	0%	0.3%	0%	**0.3%**	-	-
PHF	0.514	0.820	0.500	0.500	**0.739**	-	0.250	0.886	0.875	0.667	**0.902**	-	0.618	-	0.770	-	**0.826**	-	-	-	0.750	-	**0.750**	-	0.813
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	110	491	4	2	**607**	-	1	239	27	8	**275**	-	41	0	75	0	**116**	-	0	0	3	0	**3**	-	1001
% Lights	97.3%	97.2%	100%	100%	**97.3%**	-	100%	96.4%	96.4%	100%	**96.5%**	-	97.6%	0%	97.4%	0%	**97.5%**	-	0%	0%	100%	0%	**100%**	-	97.1%
Single-Unit Trucks	1	7	0	0	**8**	-	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	12
% Single-Unit Trucks	0.9%	1.4%	0%	0%	**1.3%**	-	0%	1.2%	0%	0%	**1.1%**	-	2.4%	0%	0%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	1.2%
Articulated Trucks	1	2	0	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0.9%	0.4%	0%	0%	**0.5%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	1	5	0	0	**6**	-	0	5	1	0	**6**	-	0	0	2	0	**2**	-	0	0	0	0	**0**	-	14
% Buses	0.9%	1.0%	0%	0%	**1.0%**	-	0%	2.0%	3.6%	0%	**2.1%**	-	0%	0%	2.6%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	27	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	93.1%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	6.9%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Bennington St - TMC
Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867372, Location: 29.823736, -95.31859

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

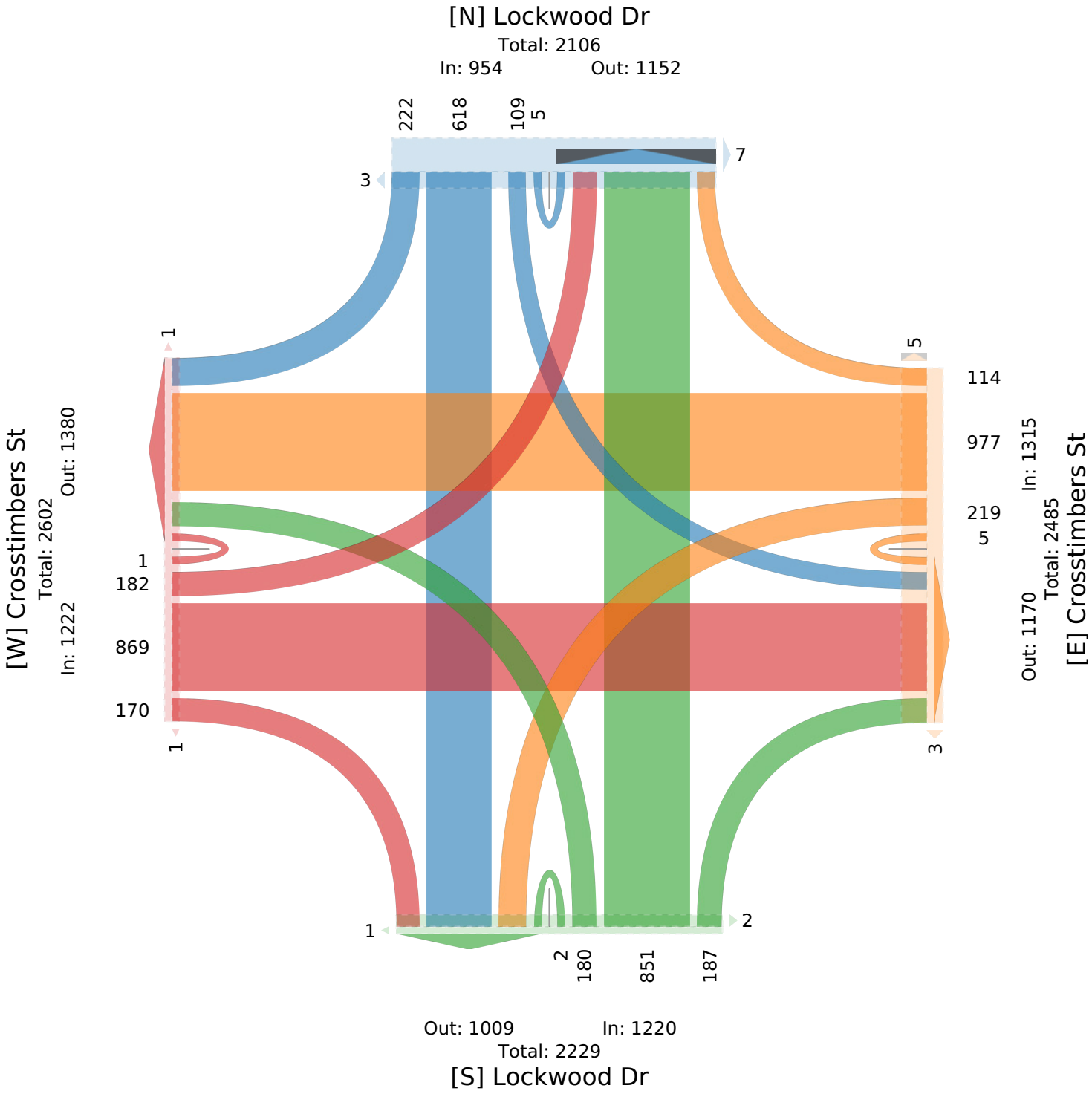
Leg	Lockwood Dr						Lockwood Dr						Crosstimbers St						Crosstimbers St						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	6	25	4	1	**36**	0	1	49	27	1	**78**	0	8	26	9	0	**43**	0	8	62	6	0	**76**	2	**233**
7:15AM	4	30	7	0	**41**	0	6	47	28	1	**82**	1	2	8	5	0	**15**	0	17	66	2	0	**85**	0	**223**
7:30AM	2	32	14	0	**48**	0	9	49	16	0	**74**	1	5	9	6	0	**20**	0	19	49	7	0	**75**	1	**217**
7:45AM	12	45	15	0	**72**	0	6	60	25	0	**91**	0	12	37	11	0	**60**	0	19	60	9	0	**88**	2	**311**
Hourly Total	24	132	40	1	**197**	0	22	205	96	2	**325**	2	27	80	31	0	**138**	0	63	237	24	0	**324**	5	**984**
8:00AM	16	50	17	0	**83**	1	5	29	11	0	**45**	0	11	50	12	0	**73**	0	18	53	4	0	**75**	2	**276**
8:15AM	8	34	5	0	**47**	0	5	30	10	1	**46**	1	3	47	14	0	**64**	0	10	47	0	2	**59**	0	**216**
8:30AM	13	28	7	0	**48**	0	6	29	11	0	**46**	0	10	38	15	0	**63**	0	11	37	0	1	**49**	0	**206**
8:45AM	4	28	9	0	**41**	0	9	31	11	0	**51**	1	5	28	7	0	**40**	0	8	37	4	0	**49**	0	**181**
Hourly Total	41	140	38	0	**219**	1	25	119	43	1	**188**	2	29	163	48	0	**240**	0	47	174	8	3	**232**	2	**879**
4:00PM	21	71	10	0	**102**	0	8	43	11	1	**63**	0	15	80	16	0	**111**	0	13	82	19	0	**114**	1	**390**
4:15PM	25	97	28	0	**150**	0	6	37	11	0	**54**	3	12	80	16	0	**108**	0	23	83	8	0	**114**	0	**426**
4:30PM	27	100	11	1	**139**	0	8	34	10	0	**52**	0	13	96	13	0	**122**	0	13	85	6	0	**104**	0	**417**
4:45PM	14	61	9	0	**84**	2	8	43	10	1	**62**	0	17	74	10	1	**102**	2	16	78	14	0	**108**	0	**356**
Hourly Total	87	329	58	1	**475**	2	30	157	42	2	**231**	3	57	330	55	1	**443**	2	65	328	47	0	**440**	1	**1589**
5:00PM	11	89	13	0	**113**	0	8	38	15	0	**61**	1	21	79	6	0	**106**	0	7	83	10	1	**101**	0	**381**
5:15PM	2	67	11	0	**80**	0	6	32	12	0	**50**	2	24	75	11	0	**110**	0	14	57	4	1	**76**	0	**316**
5:30PM	7	47	19	0	**73**	0	8	36	8	0	**52**	0	11	82	9	0	**102**	0	14	48	11	0	**73**	0	**300**
5:45PM	8	47	8	0	**63**	0	10	31	6	0	**47**	0	13	60	10	0	**83**	0	9	50	10	0	**69**	0	**262**
Hourly Total	28	250	51	0	**329**	0	32	137	41	0	**210**	3	69	296	36	0	**401**	0	44	238	35	2	**319**	0	**1259**
Total	180	851	187	2	**1220**	3	109	618	222	5	**954**	10	182	869	170	1	**1222**	2	219	977	114	5	**1315**	8	**4711**
% Approach	14.8%	69.8%	15.3%	0.2%	**-**	-	11.4%	64.8%	23.3%	0.5%	**-**	-	14.9%	71.1%	13.9%	0.1%	**-**	-	16.7%	74.3%	8.7%	0.4%	**-**	-	**-**
% Total	3.8%	18.1%	4.0%	0%	**25.9%**	-	2.3%	13.1%	4.7%	0.1%	**20.3%**	-	3.9%	18.4%	3.6%	0%	**25.9%**	-	4.6%	20.7%	2.4%	0.1%	**27.9%**	-	**-**
Motorcycles	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.2%	0.5%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	173	830	180	2	**1185**	-	105	594	214	5	**918**	-	173	823	162	1	**1159**	-	217	936	108	5	**1266**	-	4528
% Lights	96.1%	97.5%	96.3%	100%	**97.1%**	-	96.3%	96.1%	96.4%	100%	**96.2%**	-	95.1%	94.7%	95.3%	100%	**94.8%**	-	99.1%	95.8%	94.7%	100%	**96.3%**	-	96.1%
Single-Unit Trucks	5	10	3	0	**18**	-	3	7	3	0	**13**	-	5	19	6	0	**30**	-	1	27	3	0	**31**	-	92
% Single-Unit Trucks	2.8%	1.2%	1.6%	0%	**1.5%**	-	2.8%	1.1%	1.4%	0%	**1.4%**	-	2.7%	2.2%	3.5%	0%	**2.5%**	-	0.5%	2.8%	2.6%	0%	**2.4%**	-	2.0%
Articulated Trucks	0	3	0	0	**3**	-	0	4	0	0	**4**	-	0	19	2	0	**21**	-	0	10	3	0	**13**	-	41
% Articulated Trucks	0%	0.4%	0%	0%	**0.2%**	-	0%	0.6%	0%	0%	**0.4%**	-	0%	2.2%	1.2%	0%	**1.7%**	-	0%	1.0%	2.6%	0%	**1.0%**	-	0.9%
Buses	2	8	4	0	**14**	-	1	12	4	0	**17**	-	4	7	0	0	**11**	-	1	4	0	0	**5**	-	47
% Buses	1.1%	0.9%	2.1%	0%	**1.1%**	-	0.9%	1.9%	1.8%	0%	**1.8%**	-	2.2%	0.8%	0%	0%	**0.9%**	-	0.5%	0.4%	0%	0%	**0.4%**	-	1.0%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	9	-	-	-	-	-	2	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	90.0%	-	-	-	-	-	100%	-	-	-	-	-	62.5%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	10.0%	-	-	-	-	-	0%	-	-	-	-	-	37.5%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Crosstimbers St Eastbound						Crosstimbers St Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	4	30	7	0	**41**	0	6	47	28	1	**82**	1	2	8	5	0	**15**	0	17	66	2	0	**85**	0	**223**
7:30AM	2	32	14	0	**48**	0	9	49	16	0	**74**	1	5	9	6	0	**20**	0	19	49	7	0	**75**	1	**217**
7:45AM	12	45	15	0	**72**	0	6	60	25	0	**91**	0	12	37	11	0	**60**	0	19	60	9	0	**88**	2	**311**
8:00AM	16	50	17	0	**83**	1	5	29	11	0	**45**	0	11	50	12	0	**73**	0	18	53	4	0	**75**	2	**276**
Total	34	157	53	0	**244**	1	26	185	80	1	**292**	2	30	104	34	0	**168**	0	73	228	22	0	**323**	5	**1027**
% Approach	13.9%	64.3%	21.7%	0%	**-**	-	8.9%	63.4%	27.4%	0.3%	**-**	-	17.9%	61.9%	20.2%	0%	**-**	-	22.6%	70.6%	6.8%	0%	**-**	-	-
% Total	3.3%	15.3%	5.2%	0%	**23.8%**	-	2.5%	18.0%	7.8%	0.1%	**28.4%**	-	2.9%	10.1%	3.3%	0%	**16.4%**	-	7.1%	22.2%	2.1%	0%	**31.5%**	-	-
PHF	0.531	0.785	0.779	-	**0.735**	-	0.722	0.771	0.714	0.250	**0.802**	-	0.625	0.520	0.708	-	**0.575**	-	0.961	0.864	0.611	-	**0.918**	-	0.826
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	33	152	49	0	**234**	-	24	178	74	1	**277**	-	28	94	32	0	**154**	-	72	222	21	0	**315**	-	980
% Lights	97.1%	96.8%	92.5%	0%	**95.9%**	-	92.3%	96.2%	92.5%	100%	**94.9%**	-	93.3%	90.4%	94.1%	0%	**91.7%**	-	98.6%	97.4%	95.5%	0%	**97.5%**	-	95.4%
Single-Unit Trucks	1	3	3	0	**7**	-	2	1	3	0	**6**	-	2	5	1	0	**8**	-	0	3	1	0	**4**	-	25
% Single-Unit Trucks	2.9%	1.9%	5.7%	0%	**2.9%**	-	7.7%	0.5%	3.8%	0%	**2.1%**	-	6.7%	4.8%	2.9%	0%	**4.8%**	-	0%	1.3%	4.5%	0%	**1.2%**	-	2.4%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	4	1	0	**5**	-	0	2	0	0	**2**	-	10
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.6%	0%	0%	**1.0%**	-	0%	3.8%	2.9%	0%	**3.0%**	-	0%	0.9%	0%	0%	**0.6%**	-	1.0%
Buses	0	2	1	0	**3**	-	0	2	3	0	**5**	-	0	1	0	0	**1**	-	1	1	0	0	**2**	-	11
% Buses	0%	1.3%	1.9%	0%	**1.2%**	-	0%	1.1%	3.8%	0%	**1.7%**	-	0%	1.0%	0%	0%	**0.6%**	-	1.4%	0.4%	0%	0%	**0.6%**	-	1.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	40.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	60.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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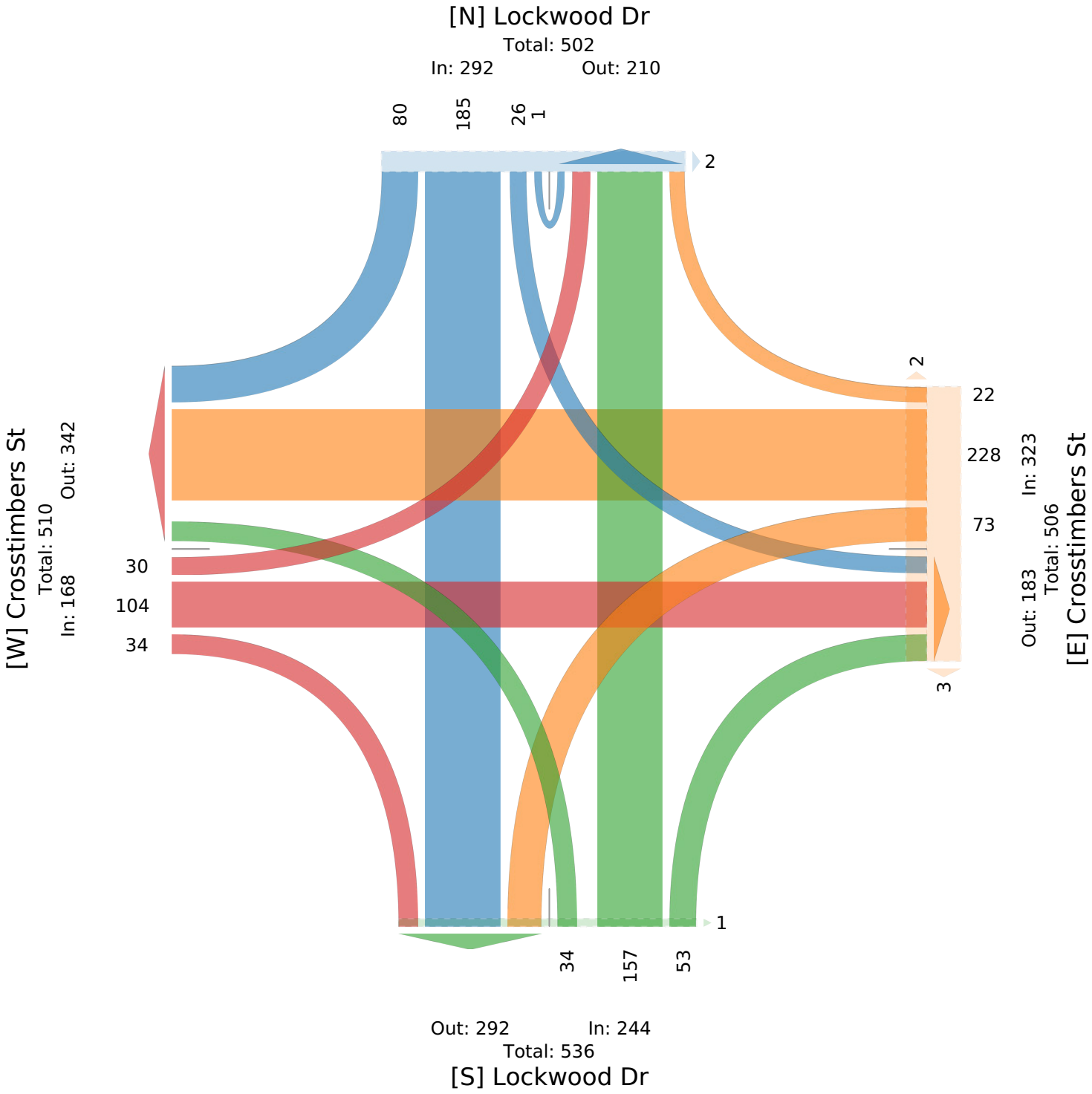


Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

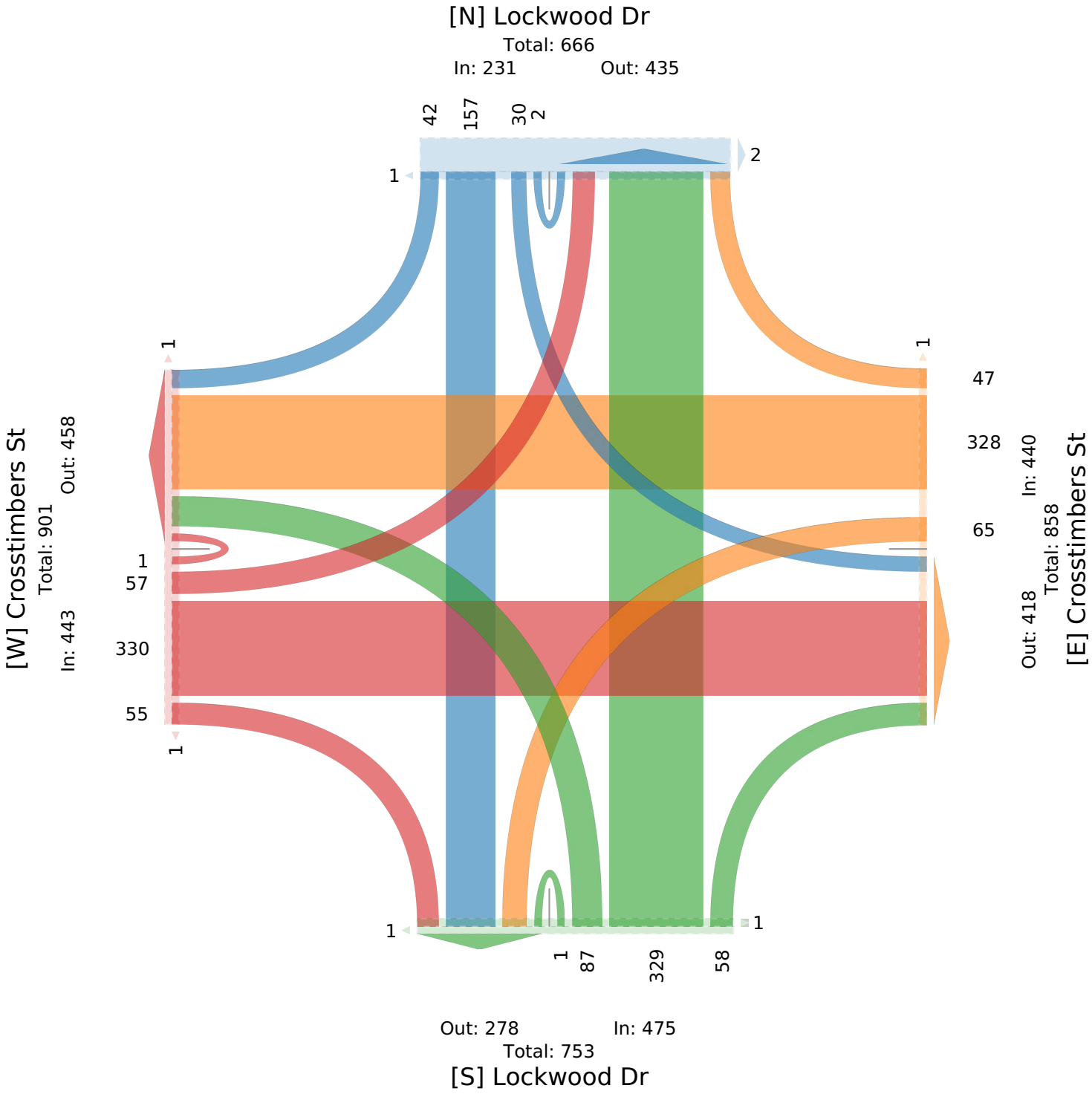
Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Crosstimbers St Eastbound						Crosstimbers St Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:00PM	21	71	10	0	**102**	0	8	43	11	1	**63**	0	15	80	16	0	**111**	0	13	82	19	0	**114**	1	**390**
4:15PM	25	97	28	0	**150**	0	6	37	11	0	**54**	3	12	80	16	0	**108**	0	23	83	8	0	**114**	0	**426**
4:30PM	27	100	11	1	**139**	0	8	34	10	0	**52**	0	13	96	13	0	**122**	0	13	85	6	0	**104**	0	**417**
4:45PM	14	61	9	0	**84**	2	8	43	10	1	**62**	0	17	74	10	1	**102**	2	16	78	14	0	**108**	0	**356**
Total	87	329	58	1	**475**	2	30	157	42	2	**231**	3	57	330	55	1	**443**	2	65	328	47	0	**440**	1	**1589**
% Approach	18.3%	69.3%	12.2%	0.2%	**-**	-	13.0%	68.0%	18.2%	0.9%	**-**	-	12.9%	74.5%	12.4%	0.2%	**-**	-	14.8%	74.5%	10.7%	0%	**-**	-	-
% Total	5.5%	20.7%	3.7%	0.1%	**29.9%**	-	1.9%	9.9%	2.6%	0.1%	**14.5%**	-	3.6%	20.8%	3.5%	0.1%	**27.9%**	-	4.1%	20.6%	3.0%	0%	**27.7%**	-	-
PHF	0.806	0.823	0.518	0.250	**0.792**	-	0.938	0.913	0.955	0.500	**0.917**	-	0.838	0.859	0.859	0.250	**0.908**	-	0.707	0.965	0.618	-	**0.965**	-	0.933
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	83	321	56	1	**461**	-	29	152	42	2	**225**	-	55	316	51	1	**423**	-	64	310	44	0	**418**	-	1527
% Lights	95.4%	97.6%	96.6%	100%	**97.1%**	-	96.7%	96.8%	100%	100%	**97.4%**	-	96.5%	95.8%	92.7%	100%	**95.5%**	-	98.5%	94.5%	93.6%	0%	**95.0%**	-	96.1%
Single-Unit Trucks	4	4	0	0	**8**	-	0	0	0	0	**0**	-	0	3	3	0	**6**	-	1	12	1	0	**14**	-	28
% Single-Unit Trucks	4.6%	1.2%	0%	0%	**1.7%**	-	0%	0%	0%	0%	**0%**	-	0%	0.9%	5.5%	0%	**1.4%**	-	1.5%	3.7%	2.1%	0%	**3.2%**	-	1.8%
Articulated Trucks	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	7	1	0	**8**	-	0	5	2	0	**7**	-	16
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	2.1%	1.8%	0%	**1.8%**	-	0%	1.5%	4.3%	0%	**1.6%**	-	1.0%
Buses	0	3	2	0	**5**	-	1	5	0	0	**6**	-	2	4	0	0	**6**	-	0	1	0	0	**1**	-	18
% Buses	0%	0.9%	3.4%	0%	**1.1%**	-	3.3%	3.2%	0%	0%	**2.6%**	-	3.5%	1.2%	0%	0%	**1.4%**	-	0%	0.3%	0%	0%	**0.2%**	-	1.1%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Crosstimbers St - TMC

Wed Sep 1, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867373, Location: 29.830929, -95.318815

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Weaver Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

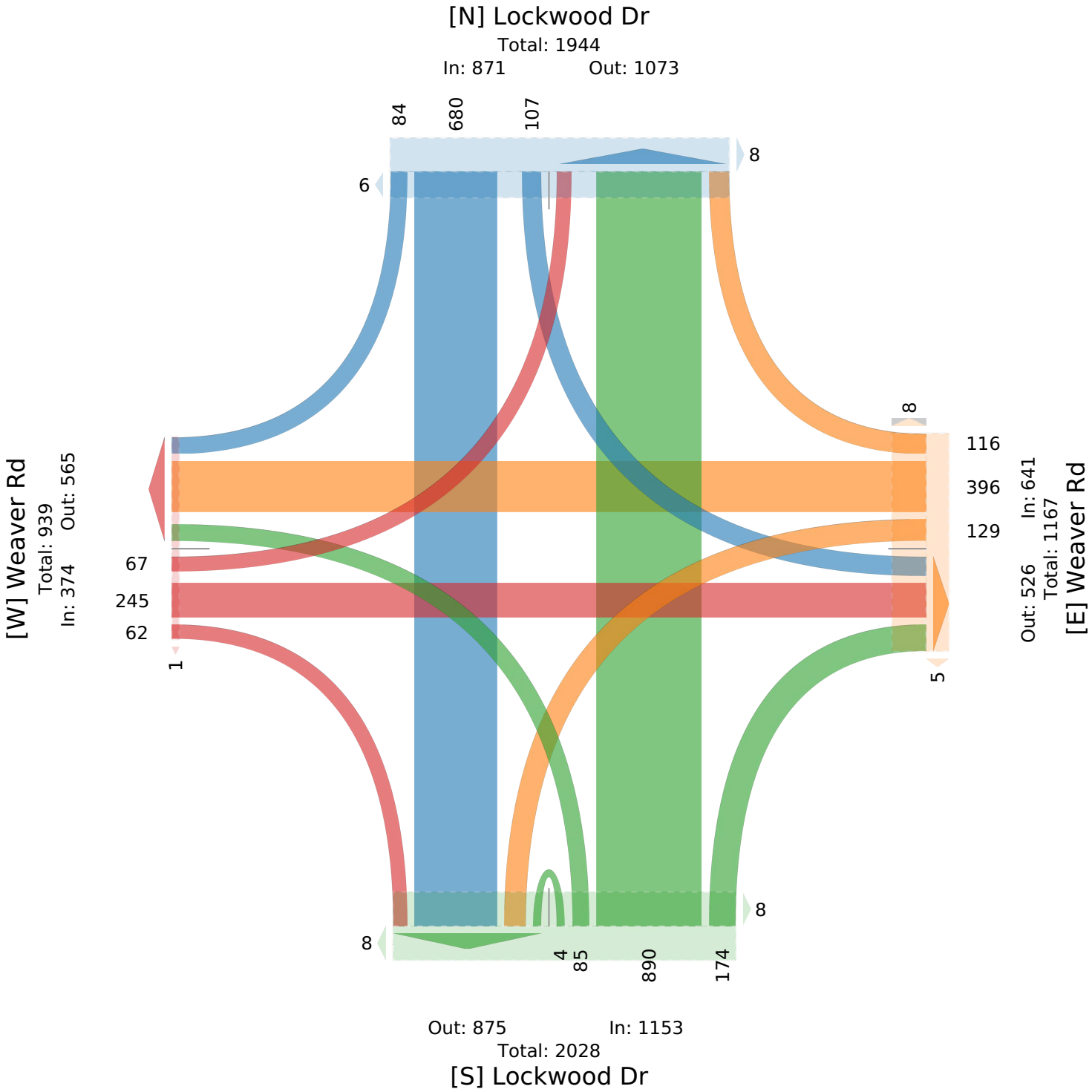
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Weaver Rd						Weaver Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	2	25	5	0	**32**	3	3	64	4	0	**71**	0	1	9	4	0	**14**	0	14	33	6	0	**53**	0	**170**
7:15AM	2	34	3	0	**39**	2	3	67	4	0	**74**	0	3	6	2	0	**11**	0	7	19	3	0	**29**	1	**153**
7:30AM	1	25	7	1	**34**	3	2	56	8	0	**66**	1	1	4	7	0	**12**	0	9	22	4	0	**35**	0	**147**
7:45AM	9	48	7	0	**64**	1	7	65	5	0	**77**	4	4	22	7	0	**33**	0	9	27	1	0	**37**	3	**211**
Hourly Total	14	132	22	1	**169**	9	15	252	21	0	**288**	5	9	41	20	0	**70**	0	39	101	14	0	**154**	4	**681**
8:00AM	6	48	13	1	**68**	0	4	32	5	0	**41**	0	1	8	3	0	**12**	0	7	23	7	0	**37**	0	**158**
8:15AM	3	32	9	0	**44**	0	7	20	7	0	**34**	1	5	17	4	0	**26**	0	11	18	0	0	**29**	0	**133**
8:30AM	1	32	6	0	**39**	0	7	27	4	0	**38**	0	4	16	4	0	**24**	0	7	22	9	0	**38**	0	**139**
8:45AM	3	36	6	0	**45**	0	4	43	6	0	**53**	0	7	11	5	0	**23**	0	4	15	3	0	**22**	1	**143**
Hourly Total	13	148	34	1	**196**	0	22	122	22	0	**166**	1	17	52	16	0	**85**	0	29	78	19	0	**126**	1	**573**
4:00PM	4	85	8	0	**97**	4	11	45	3	0	**59**	2	2	14	2	0	**18**	1	11	32	6	0	**49**	1	**223**
4:15PM	10	89	13	0	**112**	0	8	37	6	0	**51**	0	8	16	4	0	**28**	0	7	30	10	0	**47**	0	**238**
4:30PM	9	93	17	1	**120**	1	7	36	2	0	**45**	0	5	18	2	0	**25**	0	8	22	12	0	**42**	1	**232**
4:45PM	3	84	12	0	**99**	0	7	42	7	0	**56**	4	6	17	1	0	**24**	0	10	31	11	0	**52**	3	**231**
Hourly Total	26	351	50	1	**428**	5	33	160	18	0	**211**	6	21	65	9	0	**95**	1	36	115	39	0	**190**	5	**924**
5:00PM	7	91	12	0	**110**	0	10	41	2	0	**53**	2	2	20	5	0	**27**	0	6	28	12	0	**46**	0	**236**
5:15PM	12	65	22	0	**99**	1	7	34	7	0	**48**	0	5	19	4	0	**28**	0	6	24	12	0	**42**	0	**217**
5:30PM	8	54	9	1	**72**	0	10	32	9	0	**51**	0	7	27	7	0	**41**	0	6	19	13	0	**38**	2	**202**
5:45PM	5	49	25	0	**79**	1	10	39	5	0	**54**	0	6	21	1	0	**28**	0	7	31	7	0	**45**	1	**206**
Hourly Total	32	259	68	1	**360**	2	37	146	23	0	**206**	2	20	87	17	0	**124**	0	25	102	44	0	**171**	3	**861**
Total	85	890	174	4	**1153**	16	107	680	84	0	**871**	14	67	245	62	0	**374**	1	129	396	116	0	**641**	13	**3039**
% Approach	7.4%	77.2%	15.1%	0.3%	**-**	-	12.3%	78.1%	9.6%	0%	**-**	-	17.9%	65.5%	16.6%	0%	**-**	-	20.1%	61.8%	18.1%	0%	**-**	-	-
% Total	2.8%	29.3%	5.7%	0.1%	**37.9%**	-	3.5%	22.4%	2.8%	0%	**28.7%**	-	2.2%	8.1%	2.0%	0%	**12.3%**	-	4.2%	13.0%	3.8%	0%	**21.1%**	-	-
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	84	859	173	4	**1120**	-	105	650	84	0	**839**	-	66	229	60	0	**355**	-	125	381	113	0	**619**	-	2933
% Lights	98.8%	96.5%	99.4%	100%	**97.1%**	-	98.1%	95.6%	100%	0%	**96.3%**	-	98.5%	93.5%	96.8%	0%	**94.9%**	-	96.9%	96.2%	97.4%	0%	**96.6%**	-	96.5%
Single-Unit Trucks	0	16	1	0	**17**	-	1	12	0	0	**13**	-	0	4	0	0	**4**	-	1	2	2	0	**5**	-	39
% Single-Unit Trucks	0%	1.8%	0.6%	0%	**1.5%**	-	0.9%	1.8%	0%	0%	**1.5%**	-	0%	1.6%	0%	0%	**1.1%**	-	0.8%	0.5%	1.7%	0%	**0.8%**	-	1.3%
Articulated Trucks	0	5	0	0	**5**	-	1	4	0	0	**5**	-	0	3	0	0	**3**	-	0	4	1	0	**5**	-	18
% Articulated Trucks	0%	0.6%	0%	0%	**0.4%**	-	0.9%	0.6%	0%	0%	**0.6%**	-	0%	1.2%	0%	0%	**0.8%**	-	0%	1.0%	0.9%	0%	**0.8%**	-	0.6%
Buses	1	10	0	0	**11**	-	0	13	0	0	**13**	-	1	9	2	0	**12**	-	3	9	0	0	**12**	-	48
% Buses	1.2%	1.1%	0%	0%	**1.0%**	-	0%	1.9%	0%	0%	**1.5%**	-	1.5%	3.7%	3.2%	0%	**3.2%**	-	2.3%	2.3%	0%	0%	**1.9%**	-	1.6%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	10	-	-	-	-	-	1	-	-	-	-	-	13	
% Pedestrians	-	-	-	-	-	81.3%	-	-	-	-	-	71.4%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	18.8%	-	-	-	-	-	28.6%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Weaver Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Weaver Rd - TMC

Wed Sep 1, 2021
AM Peak (7 AM - 8 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Weaver Rd						Weaver Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	2	25	5	0	**32**	3	3	64	4	0	**71**	0	1	9	4	0	**14**	0	14	33	6	0	**53**	0	**170**
7:15AM	2	34	3	0	**39**	2	3	67	4	0	**74**	0	3	6	2	0	**11**	0	7	19	3	0	**29**	1	**153**
7:30AM	1	25	7	1	**34**	3	2	56	8	0	**66**	1	1	4	7	0	**12**	0	9	22	4	0	**35**	0	**147**
7:45AM	9	48	7	0	**64**	1	7	65	5	0	**77**	4	4	22	7	0	**33**	0	9	27	1	0	**37**	3	**211**
Total	14	132	22	1	**169**	9	15	252	21	0	**288**	5	9	41	20	0	**70**	0	39	101	14	0	**154**	4	**681**
% Approach	8.3%	78.1%	13.0%	0.6%	**-**	-	5.2%	87.5%	7.3%	0%	**-**	-	12.9%	58.6%	28.6%	0%	**-**	-	25.3%	65.6%	9.1%	0%	**-**	-	**-**
% Total	2.1%	19.4%	3.2%	0.1%	**24.8%**	-	2.2%	37.0%	3.1%	0%	**42.3%**	-	1.3%	6.0%	2.9%	0%	**10.3%**	-	5.7%	14.8%	2.1%	0%	**22.6%**	-	**-**
PHF	0.389	0.688	0.786	0.250	**0.660**	-	0.536	0.940	0.656	-	**0.935**	-	0.563	0.466	0.714	-	**0.530**	-	0.696	0.765	0.583	-	**0.726**	-	0.807
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	14	124	22	1	**161**	-	15	240	21	0	**276**	-	8	35	19	0	**62**	-	37	99	12	0	**148**	-	647
% Lights	100%	93.9%	100%	100%	**95.3%**	-	100%	95.2%	100%	0%	**95.8%**	-	88.9%	85.4%	95.0%	0%	**88.6%**	-	94.9%	98.0%	85.7%	0%	**96.1%**	-	95.0%
Single-Unit Trucks	0	6	0	0	**6**	-	0	5	0	0	**5**	-	0	1	0	0	**1**	-	1	0	1	0	**2**	-	14
% Single-Unit Trucks	0%	4.5%	0%	0%	**3.6%**	-	0%	2.0%	0%	0%	**1.7%**	-	0%	2.4%	0%	0%	**1.4%**	-	2.6%	0%	7.1%	0%	**1.3%**	-	2.1%
Articulated Trucks	0	0	0	0	**0**	-	0	3	0	0	**3**	-	0	2	0	0	**2**	-	0	1	1	0	**2**	-	7
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	1.2%	0%	0%	**1.0%**	-	0%	4.9%	0%	0%	**2.9%**	-	0%	1.0%	7.1%	0%	**1.3%**	-	1.0%
Buses	0	2	0	0	**2**	-	0	4	0	0	**4**	-	1	3	1	0	**5**	-	1	1	0	0	**2**	-	13
% Buses	0%	1.5%	0%	0%	**1.2%**	-	0%	1.6%	0%	0%	**1.4%**	-	11.1%	7.3%	5.0%	0%	**7.1%**	-	2.6%	1.0%	0%	0%	**1.3%**	-	1.9%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	77.8%	-	-	-	-	-	60.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	22.2%	-	-	-	-	-	40.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Weaver Rd - TMC
Wed Sep 1, 2021
AM Peak (7 AM - 8 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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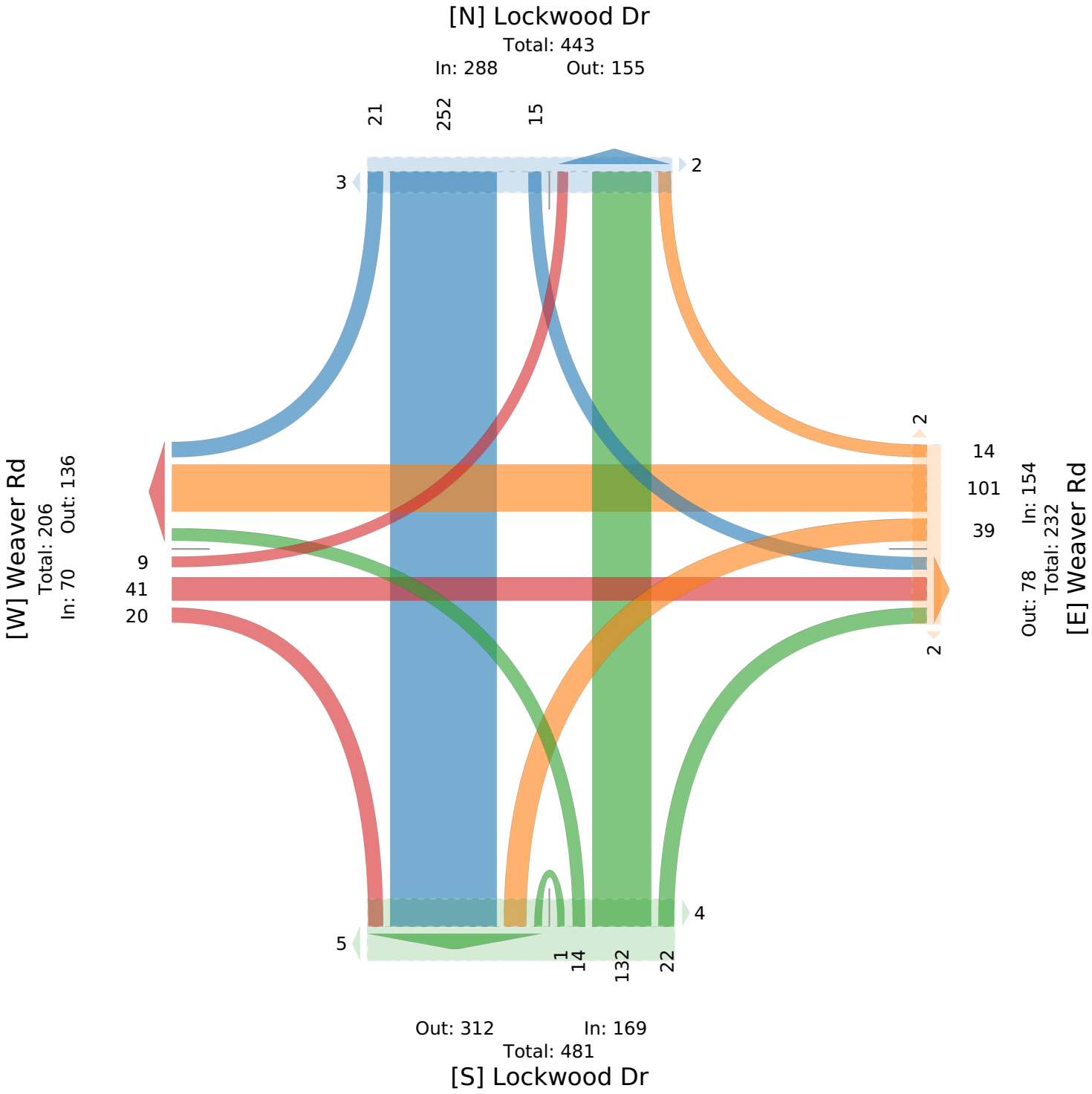

Lockwood Dr at Weaver Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Weaver Rd						Weaver Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	10	89	13	0	**112**	0	8	37	6	0	**51**	0	8	16	4	0	**28**	0	7	30	10	0	**47**	0	**238**
4:30PM	9	93	17	1	**120**	1	7	36	2	0	**45**	0	5	18	2	0	**25**	0	8	22	12	0	**42**	1	**232**
4:45PM	3	84	12	0	**99**	0	7	42	7	0	**56**	4	6	17	1	0	**24**	0	10	31	11	0	**52**	3	**231**
5:00PM	7	91	12	0	**110**	0	10	41	2	0	**53**	2	2	20	5	0	**27**	0	6	28	12	0	**46**	0	**236**
Total	29	357	54	1	**441**	1	32	156	17	0	**205**	6	21	71	12	0	**104**	0	31	111	45	0	**187**	4	**937**
% Approach	6.6%	81.0%	12.2%	0.2%	**-**	-	15.6%	76.1%	8.3%	0%	**-**	-	20.2%	68.3%	11.5%	0%	**-**	-	16.6%	59.4%	24.1%	0%	**-**	-	-
% Total	3.1%	38.1%	5.8%	0.1%	**47.1%**	-	3.4%	16.6%	1.8%	0%	**21.9%**	-	2.2%	7.6%	1.3%	0%	**11.1%**	-	3.3%	11.8%	4.8%	0%	**20.0%**	-	-
PHF	0.725	0.960	0.794	0.250	**0.919**	-	0.800	0.929	0.607	-	**0.915**	-	0.656	0.888	0.600	-	**0.929**	-	0.775	0.895	0.938	-	**0.899**	-	0.984
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	28	346	54	1	**429**	-	30	153	17	0	**200**	-	21	67	11	0	**99**	-	30	104	44	0	**178**	-	906
% Lights	96.6%	96.9%	100%	100%	**97.3%**	-	93.8%	98.1%	100%	0%	**97.6%**	-	100%	94.4%	91.7%	0%	**95.2%**	-	96.8%	93.7%	97.8%	0%	**95.2%**	-	96.7%
Single-Unit Trucks	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	1	0	0	**1**	-	0	2	1	0	**3**	-	8
% Single-Unit Trucks	0%	0.8%	0%	0%	**0.7%**	-	3.1%	0%	0%	0%	**0.5%**	-	0%	1.4%	0%	0%	**1.0%**	-	0%	1.8%	2.2%	0%	**1.6%**	-	0.9%
Articulated Trucks	0	3	0	0	**3**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	5
% Articulated Trucks	0%	0.8%	0%	0%	**0.7%**	-	3.1%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0.9%	0%	0%	**0.5%**	-	0.5%
Buses	1	5	0	0	**6**	-	0	3	0	0	**3**	-	0	3	1	0	**4**	-	1	4	0	0	**5**	-	18
% Buses	3.4%	1.4%	0%	0%	**1.4%**	-	0%	1.9%	0%	0%	**1.5%**	-	0%	4.2%	8.3%	0%	**3.8%**	-	3.2%	3.6%	0%	0%	**2.7%**	-	1.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Weaver Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867374, Location: 29.834189, -95.318882

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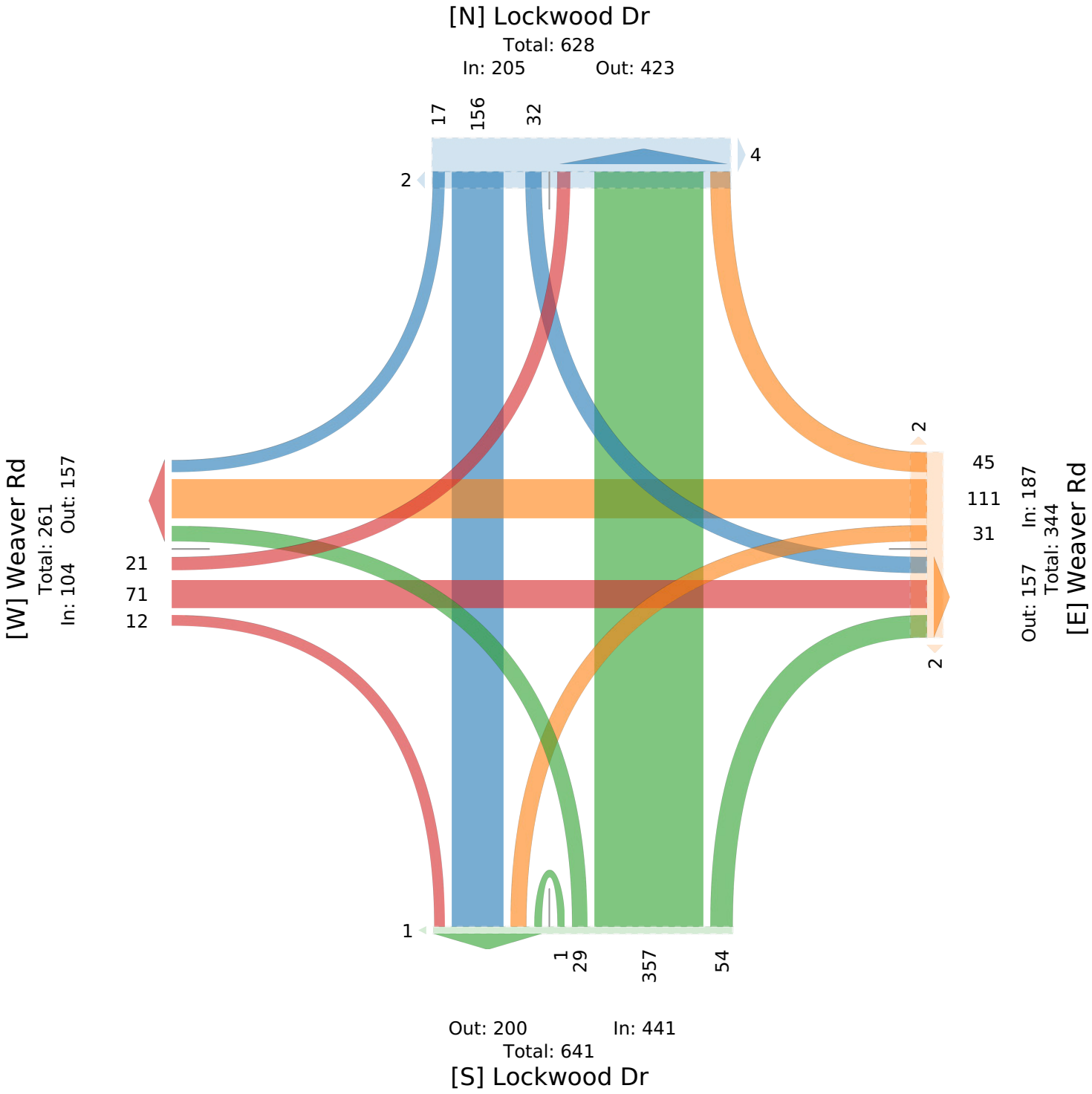
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Laura Koppe Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

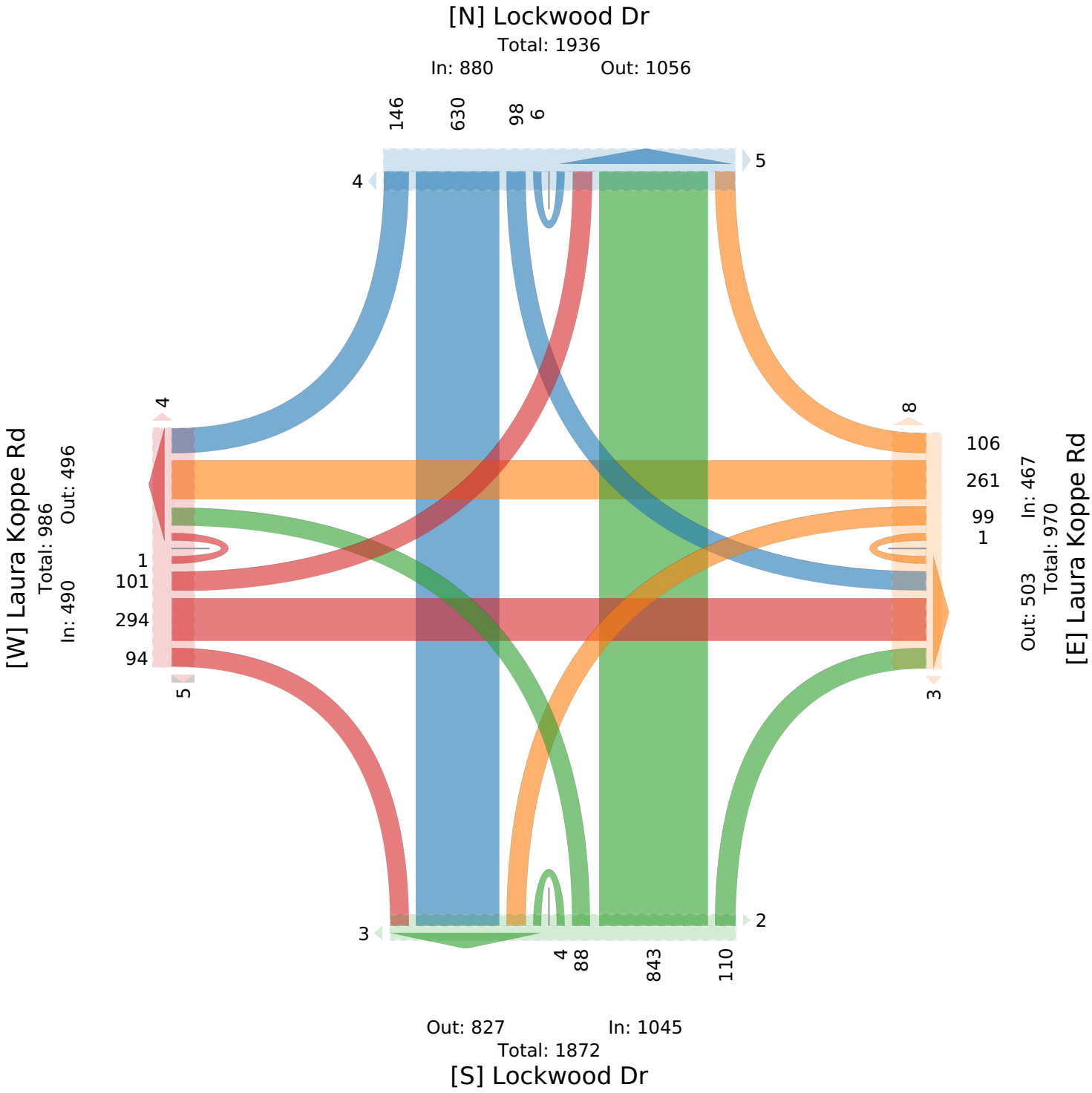
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Laura Koppe Rd						Laura Koppe Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	4	24	3	0	**31**	0	1	50	14	1	**66**	1	2	5	4	0	**11**	1	10	24	9	0	**43**	1	**151**
7:15AM	6	23	6	0	**35**	0	6	51	17	1	**75**	1	6	4	6	0	**16**	0	12	21	5	0	**38**	0	**164**
7:30AM	1	27	4	0	**32**	0	7	54	6	0	**67**	3	0	4	3	0	**7**	2	5	19	2	0	**26**	0	**132**
7:45AM	2	37	5	1	**45**	0	6	50	5	0	**61**	0	5	10	8	0	**23**	0	5	26	8	0	**39**	0	**168**
Hourly Total	13	111	18	1	**143**	0	20	205	42	2	**269**	5	13	23	21	0	**57**	3	32	90	24	0	**146**	1	**615**
8:00AM	4	41	4	0	**49**	1	3	34	10	0	**47**	0	3	15	2	0	**20**	2	3	15	3	0	**21**	2	**137**
8:15AM	1	29	2	1	**33**	0	7	27	9	0	**43**	0	4	15	7	0	**26**	0	5	14	4	0	**23**	1	**125**
8:30AM	3	34	11	1	**49**	0	5	32	3	1	**41**	0	7	17	2	0	**26**	0	8	11	5	1	**25**	0	**141**
8:45AM	3	40	3	0	**46**	0	3	38	10	0	**51**	0	5	14	4	0	**23**	0	4	19	8	0	**31**	0	**151**
Hourly Total	11	144	20	2	**177**	1	18	131	32	1	**182**	0	19	61	15	0	**95**	2	20	59	20	1	**100**	3	**554**
4:00PM	12	72	6	0	**90**	2	6	42	14	1	**63**	1	4	24	5	0	**33**	0	9	13	5	0	**27**	1	**213**
4:15PM	9	77	15	1	**102**	0	12	34	9	0	**55**	0	12	30	7	0	**49**	2	5	21	12	0	**38**	0	**244**
4:30PM	12	96	5	0	**113**	0	9	38	10	0	**57**	0	9	26	4	1	**40**	0	7	17	10	0	**34**	3	**244**
4:45PM	8	78	16	0	**102**	0	6	46	3	0	**55**	0	8	25	9	0	**42**	0	3	11	3	0	**17**	1	**216**
Hourly Total	41	323	42	1	**407**	2	33	160	36	1	**230**	1	33	105	25	1	**164**	2	24	62	30	0	**116**	5	**917**
5:00PM	10	74	10	0	**94**	1	10	29	8	1	**48**	1	9	26	12	0	**47**	1	4	13	10	0	**27**	1	**216**
5:15PM	8	69	7	0	**84**	0	7	33	11	0	**51**	1	8	21	6	0	**35**	0	9	8	9	0	**26**	0	**196**
5:30PM	4	64	6	0	**74**	0	5	31	9	0	**45**	0	8	31	9	0	**48**	1	6	12	4	0	**22**	1	**189**
5:45PM	1	58	7	0	**66**	1	5	41	8	1	**55**	1	11	27	6	0	**44**	0	4	17	9	0	**30**	0	**195**
Hourly Total	23	265	30	0	**318**	2	27	134	36	2	**199**	3	36	105	33	0	**174**	2	23	50	32	0	**105**	2	**796**
Total	88	843	110	4	**1045**	5	98	630	146	6	**880**	9	101	294	94	1	**490**	9	99	261	106	1	**467**	11	**2882**
% Approach	8.4%	80.7%	10.5%	0.4%	**-**	-	11.1%	71.6%	16.6%	0.7%	**-**	-	20.6%	60.0%	19.2%	0.2%	**-**	-	21.2%	55.9%	22.7%	0.2%	**-**	-	**-**
% Total	3.1%	29.3%	3.8%	0.1%	**36.3%**	-	3.4%	21.9%	5.1%	0.2%	**30.5%**	-	3.5%	10.2%	3.3%	0%	**17.0%**	-	3.4%	9.1%	3.7%	0%	**16.2%**	-	**-**
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	2	0	**2**	-	0	0	0	0	**0**	-	3
% Motorcycles	0%	0%	0%	0%	**0%**	-	1.0%	0%	0%	0%	**0.1%**	-	0%	0%	2.1%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	80	813	108	4	**1005**	-	94	605	144	6	**849**	-	98	287	90	1	**476**	-	97	249	105	1	**452**	-	2782
% Lights	90.9%	96.4%	98.2%	100%	**96.2%**	-	95.9%	96.0%	98.6%	100%	**96.5%**	-	97.0%	97.6%	95.7%	100%	**97.1%**	-	98.0%	95.4%	99.1%	100%	**96.8%**	-	96.5%
Single-Unit Trucks	7	13	1	0	**21**	-	3	6	2	0	**11**	-	2	2	1	0	**5**	-	2	5	1	0	**8**	-	45
% Single-Unit Trucks	8.0%	1.5%	0.9%	0%	**2.0%**	-	3.1%	1.0%	1.4%	0%	**1.3%**	-	2.0%	0.7%	1.1%	0%	**1.0%**	-	2.0%	1.9%	0.9%	0%	**1.7%**	-	1.6%
Articulated Trucks	1	6	1	0	**8**	-	0	6	0	0	**6**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	16
% Articulated Trucks	1.1%	0.7%	0.9%	0%	**0.8%**	-	0%	1.0%	0%	0%	**0.7%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0.4%	0%	0%	**0.2%**	-	0.6%
Buses	0	11	0	0	**11**	-	0	13	0	0	**13**	-	1	4	1	0	**6**	-	0	6	0	0	**6**	-	36
% Buses	0%	1.3%	0%	0%	**1.1%**	-	0%	2.1%	0%	0%	**1.5%**	-	1.0%	1.4%	1.1%	0%	**1.2%**	-	0%	2.3%	0%	0%	**1.3%**	-	1.2%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	8	-	-	-	-	-	9	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	60.0%	-	-	-	-	-	88.9%	-	-	-	-	-	100%	-	-	-	-	-	81.8%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	40.0%	-	-	-	-	-	11.1%	-	-	-	-	-	0%	-	-	-	-	-	18.2%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Laura Koppe Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Laura Koppe Rd - TMC

Wed Sep 1, 2021
AM Peak (7 AM - 8 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Laura Koppe Rd Eastbound						Laura Koppe Rd Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	4	24	3	0	**31**	0	1	50	14	1	**66**	1	2	5	4	0	**11**	1	10	24	9	0	**43**	1	**151**
7:15AM	6	23	6	0	**35**	0	6	51	17	1	**75**	1	6	4	6	0	**16**	0	12	21	5	0	**38**	0	**164**
7:30AM	1	27	4	0	**32**	0	7	54	6	0	**67**	3	0	4	3	0	**7**	2	5	19	2	0	**26**	0	**132**
7:45AM	2	37	5	1	**45**	0	6	50	5	0	**61**	0	5	10	8	0	**23**	0	5	26	8	0	**39**	0	**168**
Total	13	111	18	1	**143**	0	20	205	42	2	**269**	5	13	23	21	0	**57**	3	32	90	24	0	**146**	1	**615**
% Approach	9.1%	77.6%	12.6%	0.7%	**-**	-	7.4%	76.2%	15.6%	0.7%	**-**	-	22.8%	40.4%	36.8%	0%	**-**	-	21.9%	61.6%	16.4%	0%	**-**	-	**-**
% Total	2.1%	18.0%	2.9%	0.2%	**23.3%**	-	3.3%	33.3%	6.8%	0.3%	**43.7%**	-	2.1%	3.7%	3.4%	0%	**9.3%**	-	5.2%	14.6%	3.9%	0%	**23.7%**	-	**-**
PHF	0.542	0.750	0.750	0.250	**0.794**	-	0.714	0.949	0.618	0.500	**0.897**	-	0.542	0.575	0.656	-	**0.620**	-	0.667	0.865	0.667	-	**0.849**	-	0.915
Motorcycles	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	5.0%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Lights	10	104	18	1	**133**	-	18	196	42	2	**258**	-	12	20	20	0	**52**	-	32	86	24	0	**142**	-	585
% Lights	76.9%	93.7%	100%	100%	**93.0%**	-	90.0%	95.6%	100%	100%	**95.9%**	-	92.3%	87.0%	95.2%	0%	**91.2%**	-	100%	95.6%	100%	0%	**97.3%**	-	95.1%
Single-Unit Trucks	3	2	0	0	**5**	-	1	1	0	0	**2**	-	1	2	1	0	**4**	-	0	2	0	0	**2**	-	13
% Single-Unit Trucks	23.1%	1.8%	0%	0%	**3.5%**	-	5.0%	0.5%	0%	0%	**0.7%**	-	7.7%	8.7%	4.8%	0%	**7.0%**	-	0%	2.2%	0%	0%	**1.4%**	-	2.1%
Articulated Trucks	0	2	0	0	**2**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	7
% Articulated Trucks	0%	1.8%	0%	0%	**1.4%**	-	0%	2.0%	0%	0%	**1.5%**	-	0%	0%	0%	0%	**0%**	-	0%	1.1%	0%	0%	**0.7%**	-	1.1%
Buses	0	3	0	0	**3**	-	0	4	0	0	**4**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	9
% Buses	0%	2.7%	0%	0%	**2.1%**	-	0%	2.0%	0%	0%	**1.5%**	-	0%	4.3%	0%	0%	**1.8%**	-	0%	1.1%	0%	0%	**0.7%**	-	1.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Laura Koppe Rd - TMC
Wed Sep 1, 2021
AM Peak (7 AM - 8 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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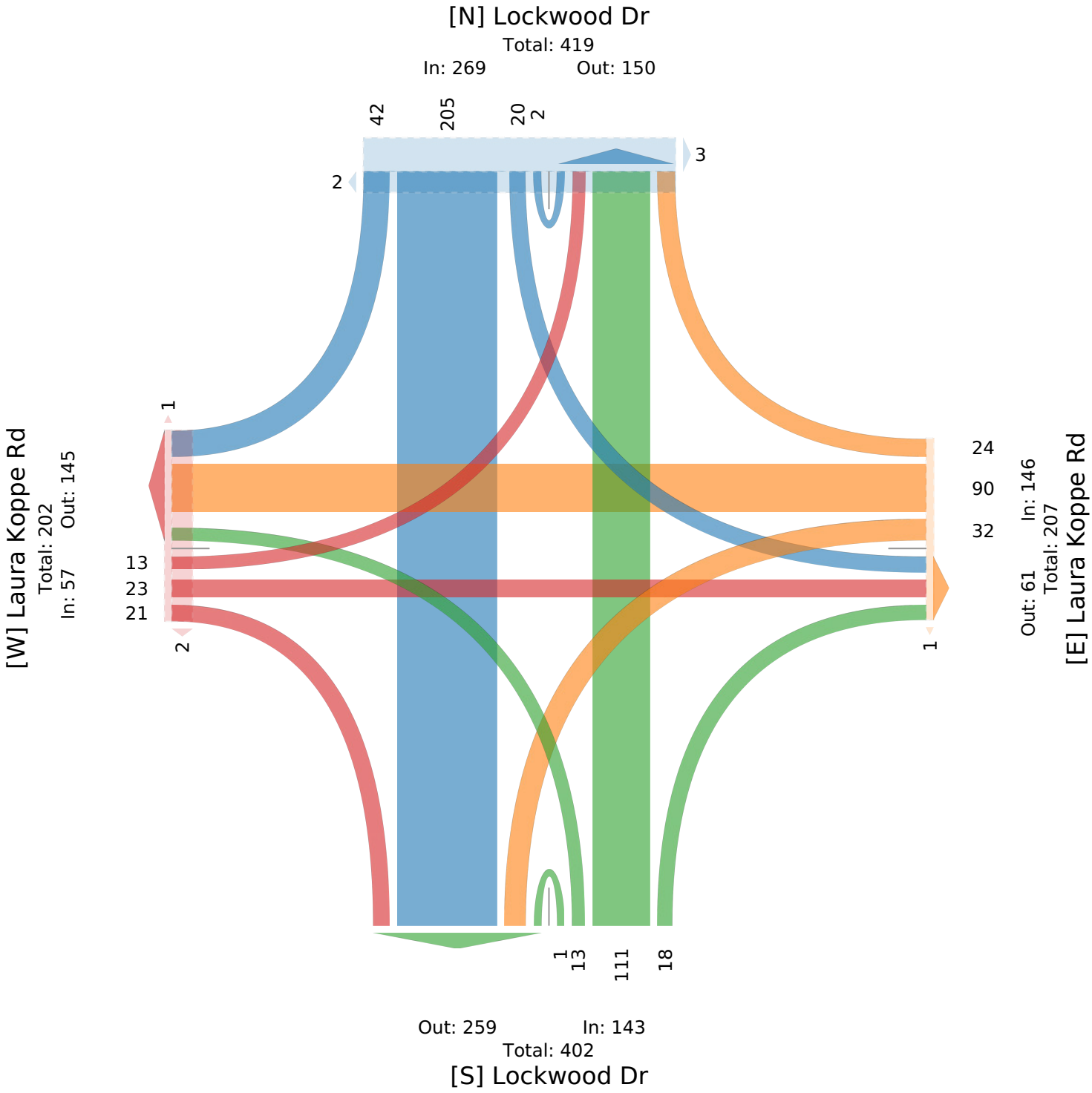

Lockwood Dr at Laura Koppe Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Laura Koppe Rd Eastbound						Laura Koppe Rd Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	9	77	15	1	**102**	0	12	34	9	0	**55**	0	12	30	7	0	**49**	2	5	21	12	0	**38**	0	**244**
4:30PM	12	96	5	0	**113**	0	9	38	10	0	**57**	0	9	26	4	1	**40**	0	7	17	10	0	**34**	3	**244**
4:45PM	8	78	16	0	**102**	0	6	46	3	0	**55**	0	8	25	9	0	**42**	0	3	11	3	0	**17**	1	**216**
5:00PM	10	74	10	0	**94**	1	10	29	8	1	**48**	1	9	26	12	0	**47**	1	4	13	10	0	**27**	1	**216**
Total	39	325	46	1	**411**	1	37	147	30	1	**215**	1	38	107	32	1	**178**	3	19	62	35	0	**116**	5	**920**
% Approach	9.5%	79.1%	11.2%	0.2%	**-**	-	17.2%	68.4%	14.0%	0.5%	**-**	-	21.3%	60.1%	18.0%	0.6%	**-**	-	16.4%	53.4%	30.2%	0%	**-**	-	-
% Total	4.2%	35.3%	5.0%	0.1%	**44.7%**	-	4.0%	16.0%	3.3%	0.1%	**23.4%**	-	4.1%	11.6%	3.5%	0.1%	**19.3%**	-	2.1%	6.7%	3.8%	0%	**12.6%**	-	-
PHF	0.813	0.846	0.719	0.250	**0.909**	-	0.771	0.799	0.750	0.250	**0.943**	-	0.792	0.892	0.667	0.250	**0.908**	-	0.679	0.738	0.729	-	**0.763**	-	0.943
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	3.1%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	39	314	44	1	**398**	-	36	145	30	1	**212**	-	38	106	30	1	**175**	-	18	59	34	0	**111**	-	896
% Lights	100%	96.6%	95.7%	100%	**96.8%**	-	97.3%	98.6%	100%	100%	**98.6%**	-	100%	99.1%	93.8%	100%	**98.3%**	-	94.7%	95.2%	97.1%	0%	**95.7%**	-	97.4%
Single-Unit Trucks	0	4	1	0	**5**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	1	1	1	0	**3**	-	9
% Single-Unit Trucks	0%	1.2%	2.2%	0%	**1.2%**	-	2.7%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	5.3%	1.6%	2.9%	0%	**2.6%**	-	1.0%
Articulated Trucks	0	2	1	0	**3**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	4
% Articulated Trucks	0%	0.6%	2.2%	0%	**0.7%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.4%
Buses	0	5	0	0	**5**	-	0	1	0	0	**1**	-	0	1	1	0	**2**	-	0	2	0	0	**2**	-	10
% Buses	0%	1.5%	0%	0%	**1.2%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0.9%	3.1%	0%	**1.1%**	-	0%	3.2%	0%	0%	**1.7%**	-	1.1%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Laura Koppe Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867375, Location: 29.840578, -95.318974

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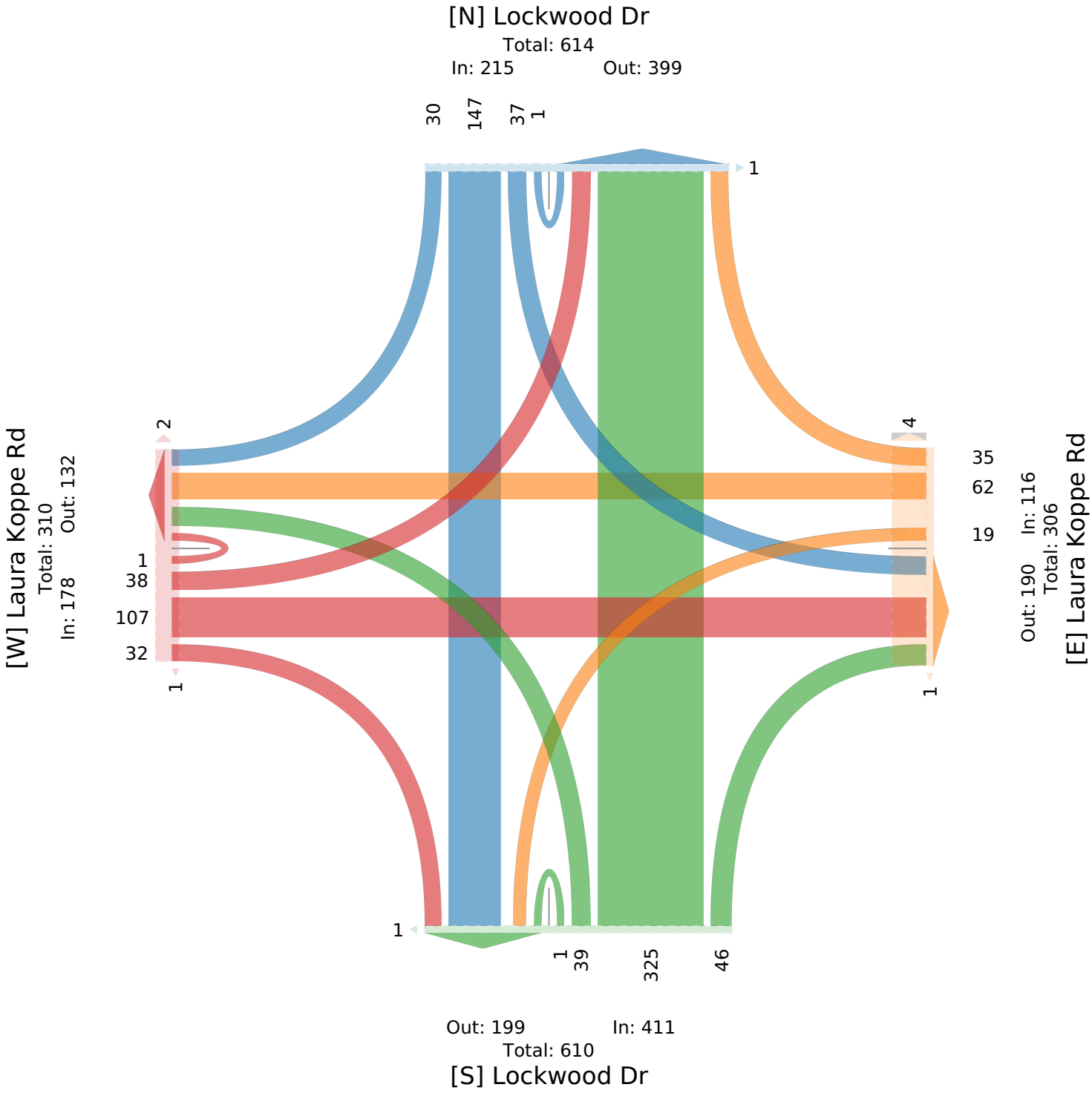


Lockwood Dr at Tidwell Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

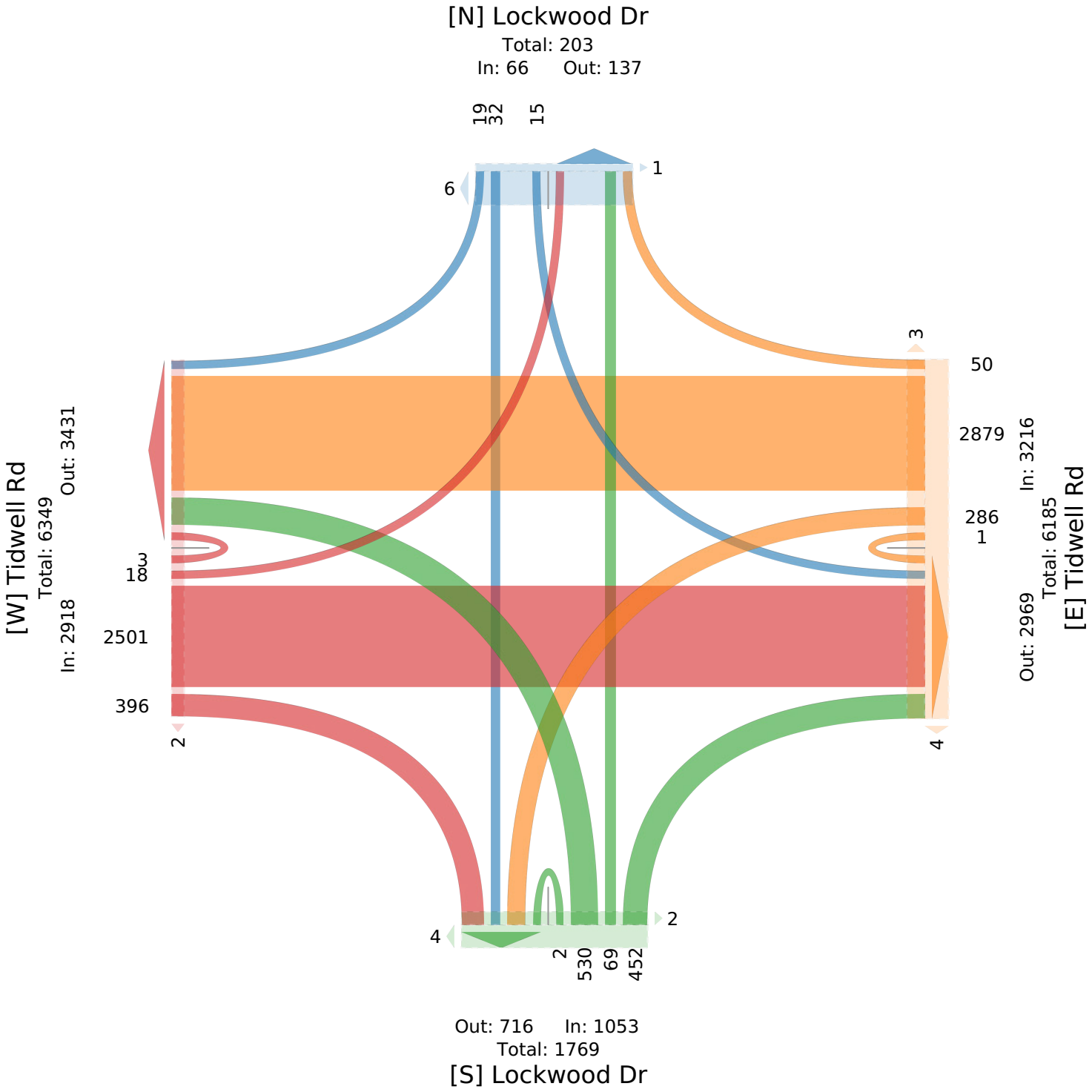
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	21	12	17	0	**50**	0	1	8	1	0	**10**	1	8	16	15	0	**39**	0	30	84	20	0	**134**	0	**233**
7:15AM	25	3	22	0	**50**	1	0	1	0	0	**1**	0	0	157	21	2	**180**	0	19	148	7	0	**174**	1	**405**
7:30AM	35	3	15	1	**54**	0	0	1	0	0	**1**	1	2	154	34	0	**190**	0	15	142	0	0	**157**	2	**402**
7:45AM	26	4	19	0	**49**	0	1	0	2	0	**3**	1	0	144	25	0	**169**	0	18	221	2	0	**241**	0	**462**
Hourly Total	107	22	73	1	**203**	1	2	10	3	0	**15**	3	10	471	95	2	**578**	0	82	595	29	0	**706**	3	**1502**
8:00AM	16	2	21	1	**40**	0	0	1	0	0	**1**	1	0	125	16	0	**141**	0	14	183	5	0	**202**	0	**384**
8:15AM	25	0	21	0	**46**	0	0	0	0	0	**0**	1	0	106	22	0	**128**	0	12	155	2	0	**169**	1	**343**
8:30AM	16	2	17	0	**35**	0	0	2	0	0	**2**	0	0	119	24	0	**143**	0	12	162	3	0	**177**	1	**357**
8:45AM	23	2	25	0	**50**	1	0	3	1	0	**4**	1	0	123	24	0	**147**	1	15	150	1	0	**166**	0	**367**
Hourly Total	80	6	84	1	**171**	1	0	6	1	0	**7**	3	0	473	86	0	**559**	1	53	650	11	0	**714**	2	**1451**
4:00PM	48	3	29	0	**80**	0	2	1	0	0	**3**	0	1	162	28	0	**191**	0	22	195	0	0	**217**	0	**491**
4:15PM	47	3	39	0	**89**	0	2	1	0	0	**3**	0	2	208	18	0	**228**	0	19	224	0	0	**243**	0	**563**
4:30PM	49	10	43	0	**102**	0	0	2	5	0	**7**	0	0	171	28	1	**200**	0	24	230	1	0	**255**	0	**564**
4:45PM	40	8	41	0	**89**	1	2	4	2	0	**8**	0	3	211	21	0	**235**	0	14	201	3	0	**218**	0	**550**
Hourly Total	184	24	152	0	**360**	1	6	8	7	0	**21**	0	6	752	95	1	**854**	0	79	850	4	0	**933**	0	**2168**
5:00PM	43	1	37	0	**81**	0	1	2	1	0	**4**	0	1	214	25	0	**240**	0	19	234	2	0	**255**	0	**580**
5:15PM	41	5	40	0	**86**	2	2	2	1	0	**5**	1	1	190	27	0	**218**	0	21	173	3	0	**197**	2	**506**
5:30PM	35	6	29	0	**70**	1	3	2	4	0	**9**	0	0	203	34	0	**237**	0	13	184	1	0	**198**	0	**514**
5:45PM	40	5	37	0	**82**	0	1	2	2	0	**5**	0	0	198	34	0	**232**	1	19	193	0	1	**213**	0	**532**
Hourly Total	159	17	143	0	**319**	3	7	8	8	0	**23**	1	2	805	120	0	**927**	1	72	784	6	1	**863**	2	**2132**
Total	530	69	452	2	**1053**	6	15	32	19	0	**66**	7	18	2501	396	3	**2918**	2	286	2879	50	1	**3216**	7	**7253**
% Approach	50.3%	6.6%	42.9%	0.2%	**-**	-	22.7%	48.5%	28.8%	0%	**-**	-	0.6%	85.7%	13.6%	0.1%	**-**	-	8.9%	89.5%	1.6%	0%	**-**	-	-
% Total	7.3%	1.0%	6.2%	0%	**14.5%**	-	0.2%	0.4%	0.3%	0%	**0.9%**	-	0.2%	34.5%	5.5%	0%	**40.2%**	-	3.9%	39.7%	0.7%	0%	**44.3%**	-	-
Motorcycles	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	1	1	0	**2**	-	2	1	0	0	**3**	-	6
% Motorcycles	0.2%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.3%	0%	**0.1%**	-	0.7%	0%	0%	0%	**0.1%**	-	0.1%
Lights	516	68	439	2	**1025**	-	14	32	18	0	**64**	-	17	2408	376	3	**2804**	-	274	2786	49	1	**3110**	-	7003
% Lights	97.4%	98.6%	97.1%	100%	**97.3%**	-	93.3%	100%	94.7%	0%	**97.0%**	-	94.4%	96.3%	94.9%	100%	**96.1%**	-	95.8%	96.8%	98.0%	100%	**96.7%**	-	96.6%
Single-Unit Trucks	4	0	7	0	**11**	-	0	0	1	0	**1**	-	1	35	9	0	**45**	-	4	38	1	0	**43**	-	100
% Single-Unit Trucks	0.8%	0%	1.5%	0%	**1.0%**	-	0%	0%	5.3%	0%	**1.5%**	-	5.6%	1.4%	2.3%	0%	**1.5%**	-	1.4%	1.3%	2.0%	0%	**1.3%**	-	1.4%
Articulated Trucks	4	0	1	0	**5**	-	1	0	0	0	**1**	-	0	16	1	0	**17**	-	1	8	0	0	**9**	-	32
% Articulated Trucks	0.8%	0%	0.2%	0%	**0.5%**	-	6.7%	0%	0%	0%	**1.5%**	-	0%	0.6%	0.3%	0%	**0.6%**	-	0.3%	0.3%	0%	0%	**0.3%**	-	0.4%
Buses	5	1	5	0	**11**	-	0	0	0	0	**0**	-	0	41	9	0	**50**	-	5	46	0	0	**51**	-	112
% Buses	0.9%	1.4%	1.1%	0%	**1.0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	2.3%	0%	**1.7%**	-	1.7%	1.6%	0%	0%	**1.6%**	-	1.5%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	5	-	-	-	-	-	2	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	71.4%	-	-	-	-	-	100%	-	-	-	-	-	85.7%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	28.6%	-	-	-	-	-	0%	-	-	-	-	-	14.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Tidwell Rd - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Tidwell Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

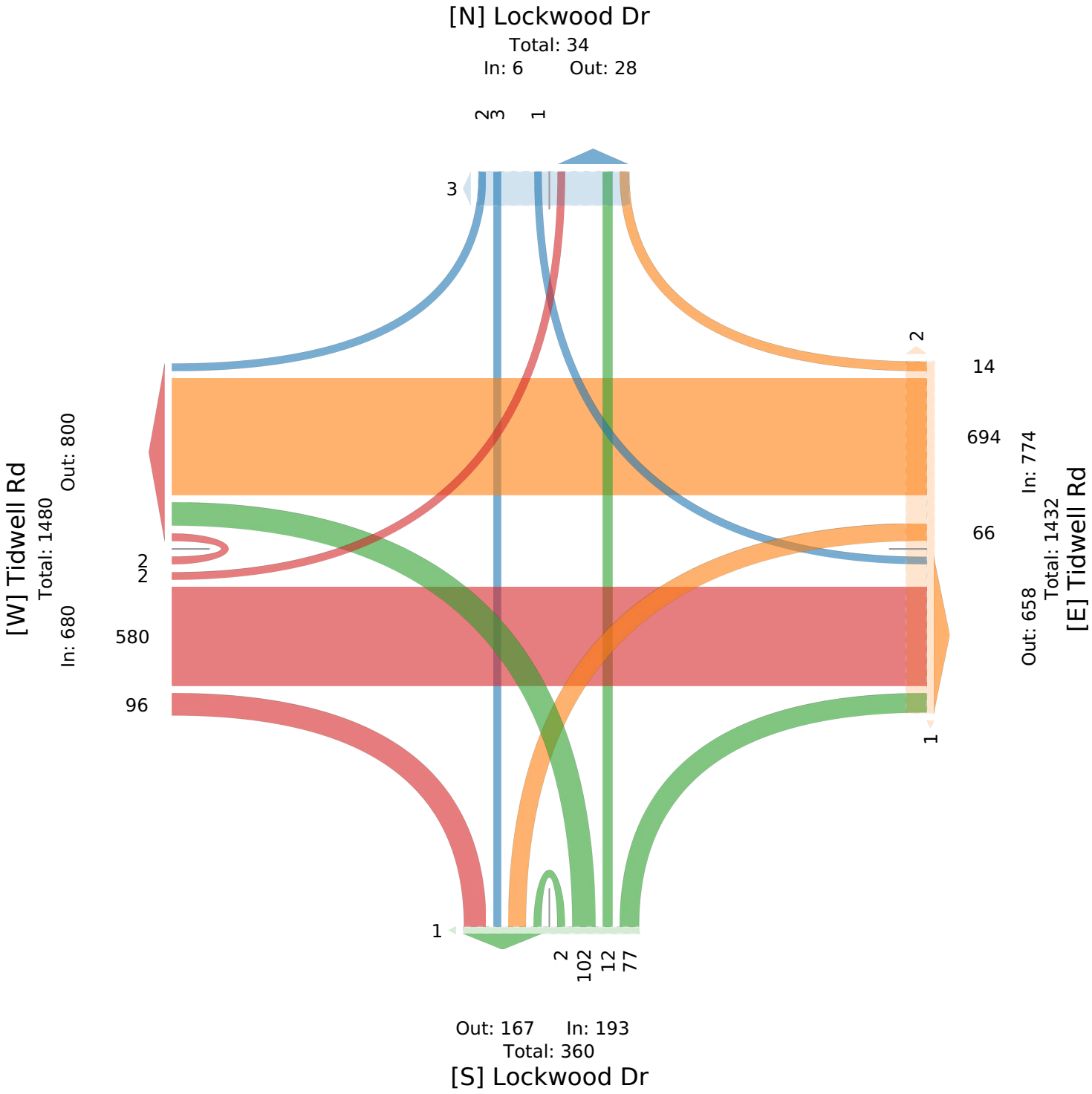
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Lockwood Dr Northbound						Lockwood Dr Southbound						Tidwell Rd Eastbound						Tidwell Rd Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	25	3	22	0	**50**	1	0	1	0	0	**1**	0	0	157	21	2	**180**	0	19	148	7	0	**174**	1	**405**
7:30AM	35	3	15	1	**54**	0	0	1	0	0	**1**	1	2	154	34	0	**190**	0	15	142	0	0	**157**	2	**402**
7:45AM	26	4	19	0	**49**	0	1	0	2	0	**3**	1	0	144	25	0	**169**	0	18	221	2	0	**241**	0	**462**
8:00AM	16	2	21	1	**40**	0	0	1	0	0	**1**	1	0	125	16	0	**141**	0	14	183	5	0	**202**	0	**384**
Total	102	12	77	2	**193**	1	1	3	2	0	**6**	3	2	580	96	2	**680**	0	66	694	14	0	**774**	3	**1653**
% Approach	52.8%	6.2%	39.9%	1.0%	**-**	-	16.7%	50.0%	33.3%	0%	**-**	-	0.3%	85.3%	14.1%	0.3%	**-**	-	8.5%	89.7%	1.8%	0%	**-**	-	-
% Total	6.2%	0.7%	4.7%	0.1%	**11.7%**	-	0.1%	0.2%	0.1%	0%	**0.4%**	-	0.1%	35.1%	5.8%	0.1%	**41.1%**	-	4.0%	42.0%	0.8%	0%	**46.8%**	-	-
PHF	0.729	0.750	0.875	0.500	**0.894**	-	0.250	0.750	0.250	-	**0.500**	-	0.250	0.924	0.706	0.250	**0.895**	-	0.868	0.785	0.500	-	**0.803**	-	0.894
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1	0	0	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	1.0%	0%	**0.1%**	-	1.5%	0%	0%	0%	**0.1%**	-	0.1%
Lights	99	12	75	2	**188**	-	0	3	1	0	**4**	-	2	556	89	2	**649**	-	63	664	13	0	**740**	-	1581
% Lights	97.1%	100%	97.4%	100%	**97.4%**	-	0%	100%	50.0%	0%	**66.7%**	-	100%	95.9%	92.7%	100%	**95.4%**	-	95.5%	95.7%	92.9%	0%	**95.6%**	-	95.6%
Single-Unit Trucks	2	0	2	0	**4**	-	0	0	1	0	**1**	-	0	10	4	0	**14**	-	1	8	1	0	**10**	-	29
% Single-Unit Trucks	2.0%	0%	2.6%	0%	**2.1%**	-	0%	0%	50.0%	0%	**16.7%**	-	0%	1.7%	4.2%	0%	**2.1%**	-	1.5%	1.2%	7.1%	0%	**1.3%**	-	1.8%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	5	1	0	**6**	-	0	3	0	0	**3**	-	10
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	100%	0%	0%	0%	**16.7%**	-	0%	0.9%	1.0%	0%	**0.9%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.6%
Buses	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	9	1	0	**10**	-	1	19	0	0	**20**	-	31
% Buses	1.0%	0%	0%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	1.0%	0%	**1.5%**	-	1.5%	2.7%	0%	0%	**2.6%**	-	1.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Tidwell Rd - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Lockwood Dr at Tidwell Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Lockwood Dr						Lockwood Dr						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	47	3	39	0	**89**	0	2	1	0	0	**3**	0	2	208	18	0	**228**	0	19	224	0	0	**243**	0	**563**
4:30PM	49	10	43	0	**102**	0	0	2	5	0	**7**	0	0	171	28	1	**200**	0	24	230	1	0	**255**	0	**564**
4:45PM	40	8	41	0	**89**	1	2	4	2	0	**8**	0	3	211	21	0	**235**	0	14	201	3	0	**218**	0	**550**
5:00PM	43	1	37	0	**81**	0	1	2	1	0	**4**	0	1	214	25	0	**240**	0	19	234	2	0	**255**	0	**580**
Total	179	22	160	0	**361**	1	5	9	8	0	**22**	0	6	804	92	1	**903**	0	76	889	6	0	**971**	0	**2257**
% Approach	49.6%	6.1%	44.3%	0%	**-**	-	22.7%	40.9%	36.4%	0%	**-**	-	0.7%	89.0%	10.2%	0.1%	**-**	-	7.8%	91.6%	0.6%	0%	**-**	-	-
% Total	7.9%	1.0%	7.1%	0%	**16.0%**	-	0.2%	0.4%	0.4%	0%	**1.0%**	-	0.3%	35.6%	4.1%	0%	**40.0%**	-	3.4%	39.4%	0.3%	0%	**43.0%**	-	-
PHF	0.913	0.550	0.930	-	**0.885**	-	0.625	0.563	0.400	-	**0.688**	-	0.500	0.939	0.821	0.250	**0.941**	-	0.792	0.950	0.500	-	**0.952**	-	0.973
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	1.3%	0%	0%	0%	**0.1%**	-	0.1%
Lights	173	22	156	0	**351**	-	5	9	8	0	**22**	-	5	780	88	1	**874**	-	75	868	6	0	**949**	-	2196
% Lights	96.6%	100%	97.5%	0%	**97.2%**	-	100%	100%	100%	0%	**100%**	-	83.3%	97.0%	95.7%	100%	**96.8%**	-	98.7%	97.6%	100%	0%	**97.7%**	-	97.3%
Single-Unit Trucks	2	0	1	0	**3**	-	0	0	0	0	**0**	-	1	9	1	0	**11**	-	0	9	0	0	**9**	-	23
% Single-Unit Trucks	1.1%	0%	0.6%	0%	**0.8%**	-	0%	0%	0%	0%	**0%**	-	16.7%	1.1%	1.1%	0%	**1.2%**	-	0%	1.0%	0%	0%	**0.9%**	-	1.0%
Articulated Trucks	2	0	0	0	**2**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	4
% Articulated Trucks	1.1%	0%	0%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.2%
Buses	2	0	3	0	**5**	-	0	0	0	0	**0**	-	0	13	3	0	**16**	-	0	11	0	0	**11**	-	32
% Buses	1.1%	0%	1.9%	0%	**1.4%**	-	0%	0%	0%	0%	**0%**	-	0%	1.6%	3.3%	0%	**1.8%**	-	0%	1.2%	0%	0%	**1.1%**	-	1.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Lockwood Dr at Tidwell Rd - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867376, Location: 29.848182, -95.319208

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
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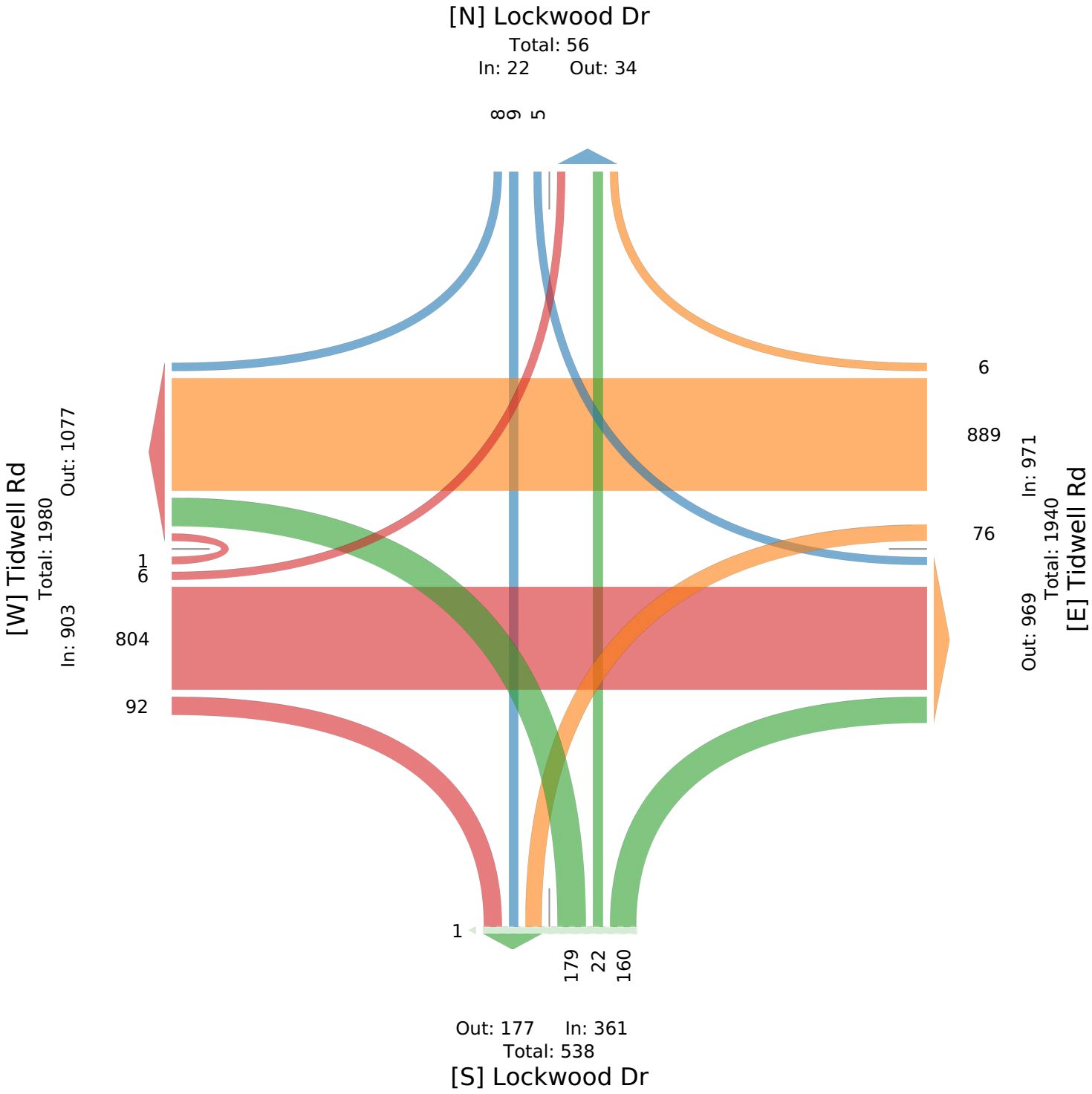


Tidwell Rd at Hirsch Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

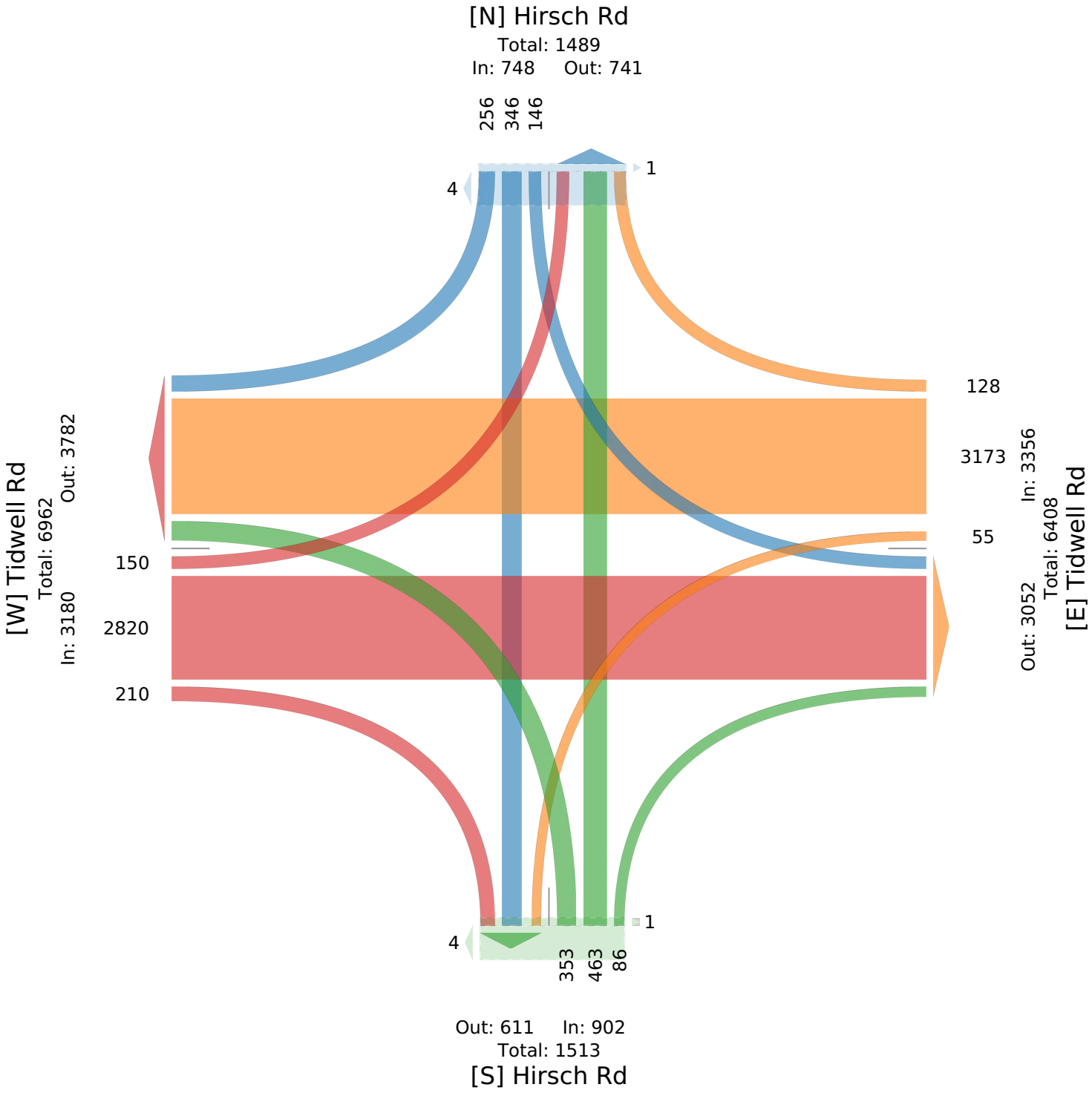
Leg	Hirsch Rd						Hirsch Rd						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	46	4	0	**50**	0	8	37	0	0	**45**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**95**
7:15AM	44	48	2	0	**94**	0	22	30	44	0	**96**	1	6	194	17	0	**217**	0	2	217	7	0	**226**	0	**633**
7:30AM	87	25	4	0	**116**	0	11	23	25	0	**59**	1	5	164	28	0	**197**	0	1	180	9	0	**190**	0	**562**
7:45AM	37	24	4	0	**65**	1	6	20	16	0	**42**	1	8	163	14	0	**185**	0	7	229	8	0	**244**	0	**536**
Hourly Total	168	143	14	0	**325**	1	47	110	85	0	**242**	3	19	521	59	0	**599**	0	10	626	24	0	**660**	0	**1826**
8:00AM	17	20	4	0	**41**	0	6	13	12	0	**31**	1	8	141	8	0	**157**	0	5	195	4	0	**204**	0	**433**
8:15AM	8	8	1	0	**17**	0	5	18	10	0	**33**	0	7	147	10	0	**164**	0	4	170	5	0	**179**	0	**393**
8:30AM	9	13	7	0	**29**	0	6	19	16	0	**41**	0	9	127	9	0	**145**	0	4	163	5	0	**172**	0	**387**
8:45AM	11	14	3	0	**28**	0	7	20	22	0	**49**	1	9	142	4	0	**155**	0	3	177	7	0	**187**	0	**419**
Hourly Total	45	55	15	0	**115**	0	24	70	60	0	**154**	2	33	557	31	0	**621**	0	16	705	21	0	**742**	0	**1632**
4:00PM	15	21	10	0	**46**	0	10	19	10	0	**39**	0	11	185	12	0	**208**	0	2	188	10	0	**200**	0	**493**
4:15PM	25	35	11	0	**71**	0	10	23	24	0	**57**	0	14	206	15	0	**235**	0	3	276	13	0	**292**	0	**655**
4:30PM	18	32	5	0	**55**	0	11	21	15	0	**47**	0	5	224	20	0	**249**	0	5	261	11	0	**277**	0	**628**
4:45PM	11	31	7	0	**49**	2	8	13	14	0	**35**	0	13	219	24	0	**256**	0	6	238	5	0	**249**	0	**589**
Hourly Total	69	119	33	0	**221**	2	39	76	63	0	**178**	0	43	834	71	0	**948**	0	16	963	39	0	**1018**	0	**2365**
5:00PM	17	29	5	0	**51**	1	8	22	9	0	**39**	0	10	237	17	0	**264**	0	4	258	7	0	**269**	0	**623**
5:15PM	17	35	4	0	**56**	0	12	19	12	0	**43**	0	12	232	8	0	**252**	0	3	203	11	0	**217**	0	**568**
5:30PM	19	40	5	0	**64**	1	6	25	10	0	**41**	0	9	225	9	0	**243**	0	2	198	15	0	**215**	0	**563**
5:45PM	18	42	10	0	**70**	0	10	24	17	0	**51**	0	24	214	15	0	**253**	0	4	220	11	0	**235**	0	**609**
Hourly Total	71	146	24	0	**241**	2	36	90	48	0	**174**	0	55	908	49	0	**1012**	0	13	879	44	0	**936**	0	**2363**
Total	353	463	86	0	**902**	5	146	346	256	0	**748**	5	150	2820	210	0	**3180**	0	55	3173	128	0	**3356**	0	**8186**
% Approach	39.1%	51.3%	9.5%	0%	**-**	-	19.5%	46.3%	34.2%	0%	**-**	-	4.7%	88.7%	6.6%	0%	**-**	-	1.6%	94.5%	3.8%	0%	**-**	-	-
% Total	4.3%	5.7%	1.1%	0%	**11.0%**	-	1.8%	4.2%	3.1%	0%	**9.1%**	-	1.8%	34.4%	2.6%	0%	**38.8%**	-	0.7%	38.8%	1.6%	0%	**41.0%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	2	0	0	**2**	-	5
% Motorcycles	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0.4%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0.1%	0%	0%	**0.1%**	-	0.1%
Lights	351	443	80	0	**874**	-	143	341	239	0	**723**	-	138	2727	200	0	**3065**	-	51	3073	126	0	**3250**	-	7912
% Lights	99.4%	95.7%	93.0%	0%	**96.9%**	-	97.9%	98.6%	93.4%	0%	**96.7%**	-	92.0%	96.7%	95.2%	0%	**96.4%**	-	92.7%	96.8%	98.4%	0%	**96.8%**	-	96.7%
Single-Unit Trucks	1	8	2	0	**11**	-	1	2	10	0	**13**	-	8	35	4	0	**47**	-	1	39	2	0	**42**	-	113
% Single-Unit Trucks	0.3%	1.7%	2.3%	0%	**1.2%**	-	0.7%	0.6%	3.9%	0%	**1.7%**	-	5.3%	1.2%	1.9%	0%	**1.5%**	-	1.8%	1.2%	1.6%	0%	**1.3%**	-	1.4%
Articulated Trucks	1	9	1	0	**11**	-	2	1	4	0	**7**	-	3	15	5	0	**23**	-	0	14	0	0	**14**	-	55
% Articulated Trucks	0.3%	1.9%	1.2%	0%	**1.2%**	-	1.4%	0.3%	1.6%	0%	**0.9%**	-	2.0%	0.5%	2.4%	0%	**0.7%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.7%
Buses	0	2	3	0	**5**	-	0	2	2	0	**4**	-	1	42	1	0	**44**	-	3	45	0	0	**48**	-	101
% Buses	0%	0.4%	3.5%	0%	**0.6%**	-	0%	0.6%	0.8%	0%	**0.5%**	-	0.7%	1.5%	0.5%	0%	**1.4%**	-	5.5%	1.4%	0%	0%	**1.4%**	-	1.2%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	20.0%	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	80.0%	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Hirsch Rd - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at Hirsch Rd - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

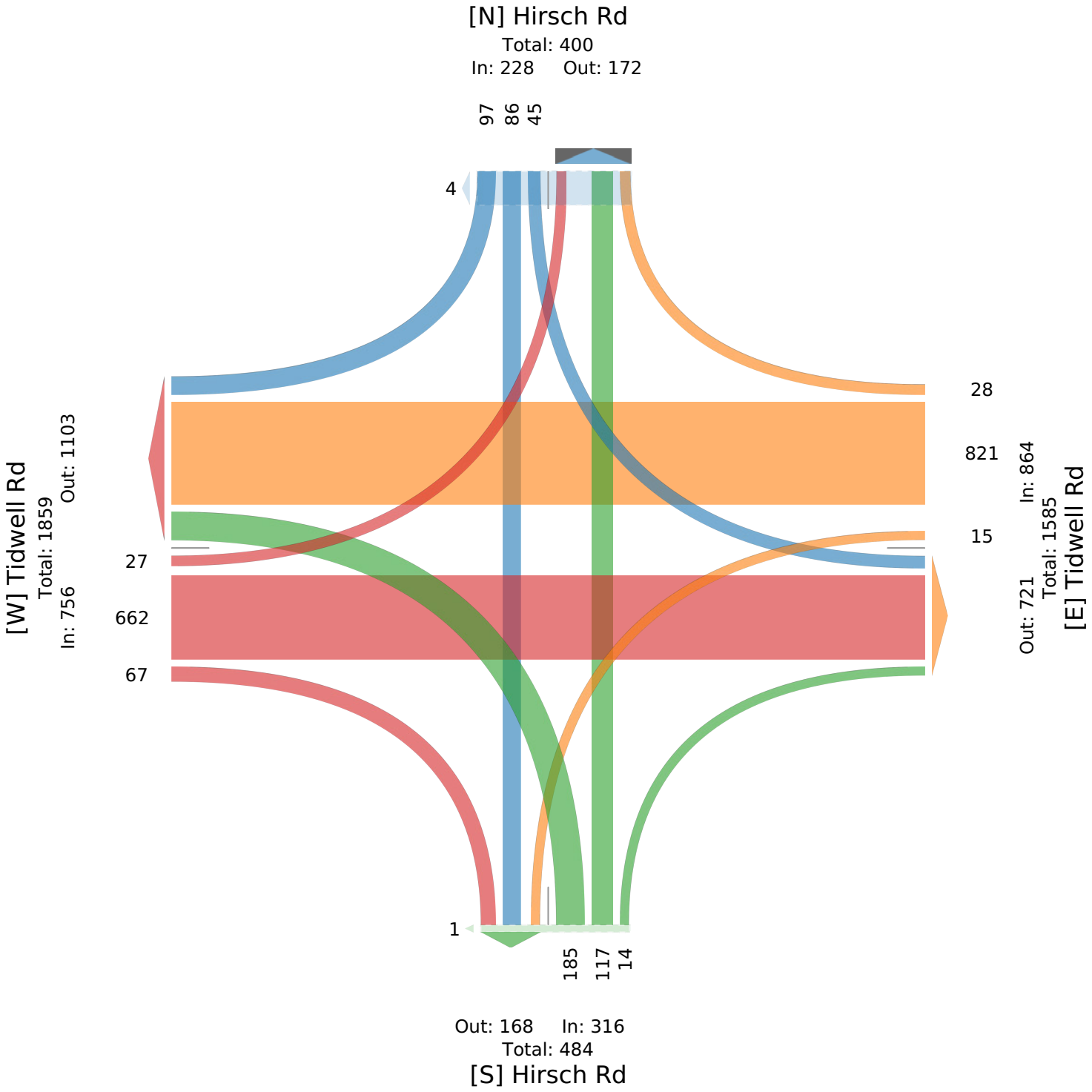
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Hirsch Rd						Hirsch Rd						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	44	48	2	0	**94**	0	22	30	44	0	**96**	1	6	194	17	0	**217**	0	2	217	7	0	**226**	0	**633**
7:30AM	87	25	4	0	**116**	0	11	23	25	0	**59**	1	5	164	28	0	**197**	0	1	180	9	0	**190**	0	**562**
7:45AM	37	24	4	0	**65**	1	6	20	16	0	**42**	1	8	163	14	0	**185**	0	7	229	8	0	**244**	0	**536**
8:00AM	17	20	4	0	**41**	0	6	13	12	0	**31**	1	8	141	8	0	**157**	0	5	195	4	0	**204**	0	**433**
Total	185	117	14	0	**316**	1	45	86	97	0	**228**	4	27	662	67	0	**756**	0	15	821	28	0	**864**	0	**2164**
% Approach	58.5%	37.0%	4.4%	0%	**-**	-	19.7%	37.7%	42.5%	0%	**-**	-	3.6%	87.6%	8.9%	0%	**-**	-	1.7%	95.0%	3.2%	0%	**-**	-	-
% Total	8.5%	5.4%	0.6%	0%	**14.6%**	-	2.1%	4.0%	4.5%	0%	**10.5%**	-	1.2%	30.6%	3.1%	0%	**34.9%**	-	0.7%	37.9%	1.3%	0%	**39.9%**	-	-
PHF	0.532	0.609	0.875	-	**0.681**	-	0.511	0.717	0.551	-	**0.594**	-	0.844	0.853	0.598	-	**0.871**	-	0.536	0.896	0.778	-	**0.885**	-	0.855
Motorcycles	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	2
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	1.0%	0%	**0.4%**	-	0%	0.2%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Lights	185	113	13	0	**311**	-	44	85	89	0	**218**	-	21	631	64	0	**716**	-	13	787	27	0	**827**	-	2072
% Lights	100%	96.6%	92.9%	0%	**98.4%**	-	97.8%	98.8%	91.8%	0%	**95.6%**	-	77.8%	95.3%	95.5%	0%	**94.7%**	-	86.7%	95.9%	96.4%	0%	**95.7%**	-	95.7%
Single-Unit Trucks	0	2	0	0	**2**	-	0	0	4	0	**4**	-	3	16	1	0	**20**	-	0	11	1	0	**12**	-	38
% Single-Unit Trucks	0%	1.7%	0%	0%	**0.6%**	-	0%	0%	4.1%	0%	**1.8%**	-	11.1%	2.4%	1.5%	0%	**2.6%**	-	0%	1.3%	3.6%	0%	**1.4%**	-	1.8%
Articulated Trucks	0	1	0	0	**1**	-	1	0	2	0	**3**	-	2	5	2	0	**9**	-	0	5	0	0	**5**	-	18
% Articulated Trucks	0%	0.9%	0%	0%	**0.3%**	-	2.2%	0%	2.1%	0%	**1.3%**	-	7.4%	0.8%	3.0%	0%	**1.2%**	-	0%	0.6%	0%	0%	**0.6%**	-	0.8%
Buses	0	1	1	0	**2**	-	0	1	1	0	**2**	-	1	9	0	0	**10**	-	2	18	0	0	**20**	-	34
% Buses	0%	0.9%	7.1%	0%	**0.6%**	-	0%	1.2%	1.0%	0%	**0.9%**	-	3.7%	1.4%	0%	0%	**1.3%**	-	13.3%	2.2%	0%	0%	**2.3%**	-	1.6%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Hirsch Rd - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at Hirsch Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

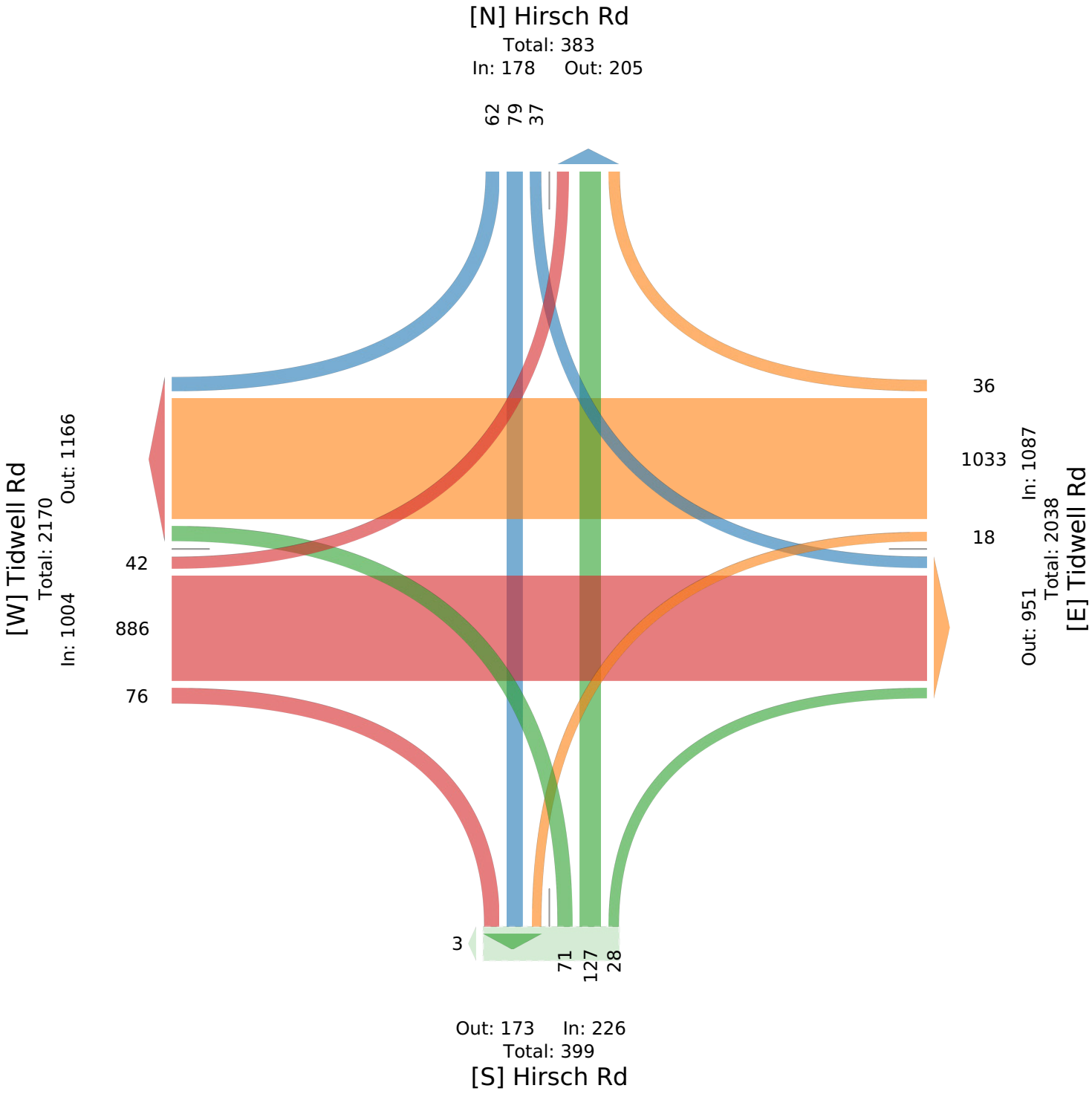
Leg	Hirsch Rd						Hirsch Rd						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:15PM	25	35	11	0	**71**	0	10	23	24	0	**57**	0	14	206	15	0	**235**	0	3	276	13	0	**292**	0	**655**
4:30PM	18	32	5	0	**55**	0	11	21	15	0	**47**	0	5	224	20	0	**249**	0	5	261	11	0	**277**	0	**628**
4:45PM	11	31	7	0	**49**	2	8	13	14	0	**35**	0	13	219	24	0	**256**	0	6	238	5	0	**249**	0	**589**
5:00PM	17	29	5	0	**51**	1	8	22	9	0	**39**	0	10	237	17	0	**264**	0	4	258	7	0	**269**	0	**623**
Total	71	127	28	0	**226**	3	37	79	62	0	**178**	0	42	886	76	0	**1004**	0	18	1033	36	0	**1087**	0	**2495**
% Approach	31.4%	56.2%	12.4%	0%	**-**	-	20.8%	44.4%	34.8%	0%	**-**	-	4.2%	88.2%	7.6%	0%	**-**	-	1.7%	95.0%	3.3%	0%	**-**	-	-
% Total	2.8%	5.1%	1.1%	0%	**9.1%**	-	1.5%	3.2%	2.5%	0%	**7.1%**	-	1.7%	35.5%	3.0%	0%	**40.2%**	-	0.7%	41.4%	1.4%	0%	**43.6%**	-	-
PHF	0.710	0.907	0.636	-	**0.796**	-	0.841	0.859	0.646	-	**0.781**	-	0.750	0.935	0.792	-	**0.951**	-	0.750	0.936	0.692	-	**0.931**	-	0.952
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	70	121	27	0	**218**	-	36	78	61	0	**175**	-	42	868	71	0	**981**	-	18	1008	36	0	**1062**	-	2436
% Lights	98.6%	95.3%	96.4%	0%	**96.5%**	-	97.3%	98.7%	98.4%	0%	**98.3%**	-	100%	98.0%	93.4%	0%	**97.7%**	-	100%	97.6%	100%	0%	**97.7%**	-	97.6%
Single-Unit Trucks	1	1	0	0	**2**	-	1	0	1	0	**2**	-	0	5	2	0	**7**	-	0	8	0	0	**8**	-	19
% Single-Unit Trucks	1.4%	0.8%	0%	0%	**0.9%**	-	2.7%	0%	1.6%	0%	**1.1%**	-	0%	0.6%	2.6%	0%	**0.7%**	-	0%	0.8%	0%	0%	**0.7%**	-	0.8%
Articulated Trucks	0	4	0	0	**4**	-	0	1	0	0	**1**	-	0	1	2	0	**3**	-	0	4	0	0	**4**	-	12
% Articulated Trucks	0%	3.1%	0%	0%	**1.8%**	-	0%	1.3%	0%	0%	**0.6%**	-	0%	0.1%	2.6%	0%	**0.3%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.5%
Buses	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	12	1	0	**13**	-	0	13	0	0	**13**	-	28
% Buses	0%	0.8%	3.6%	0%	**0.9%**	-	0%	0%	0%	0%	**0%**	-	0%	1.4%	1.3%	0%	**1.3%**	-	0%	1.3%	0%	0%	**1.2%**	-	1.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Hirsch Rd - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867377, Location: 29.8481, -95.323822

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 NBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867378, Location: 29.848717, -95.333041

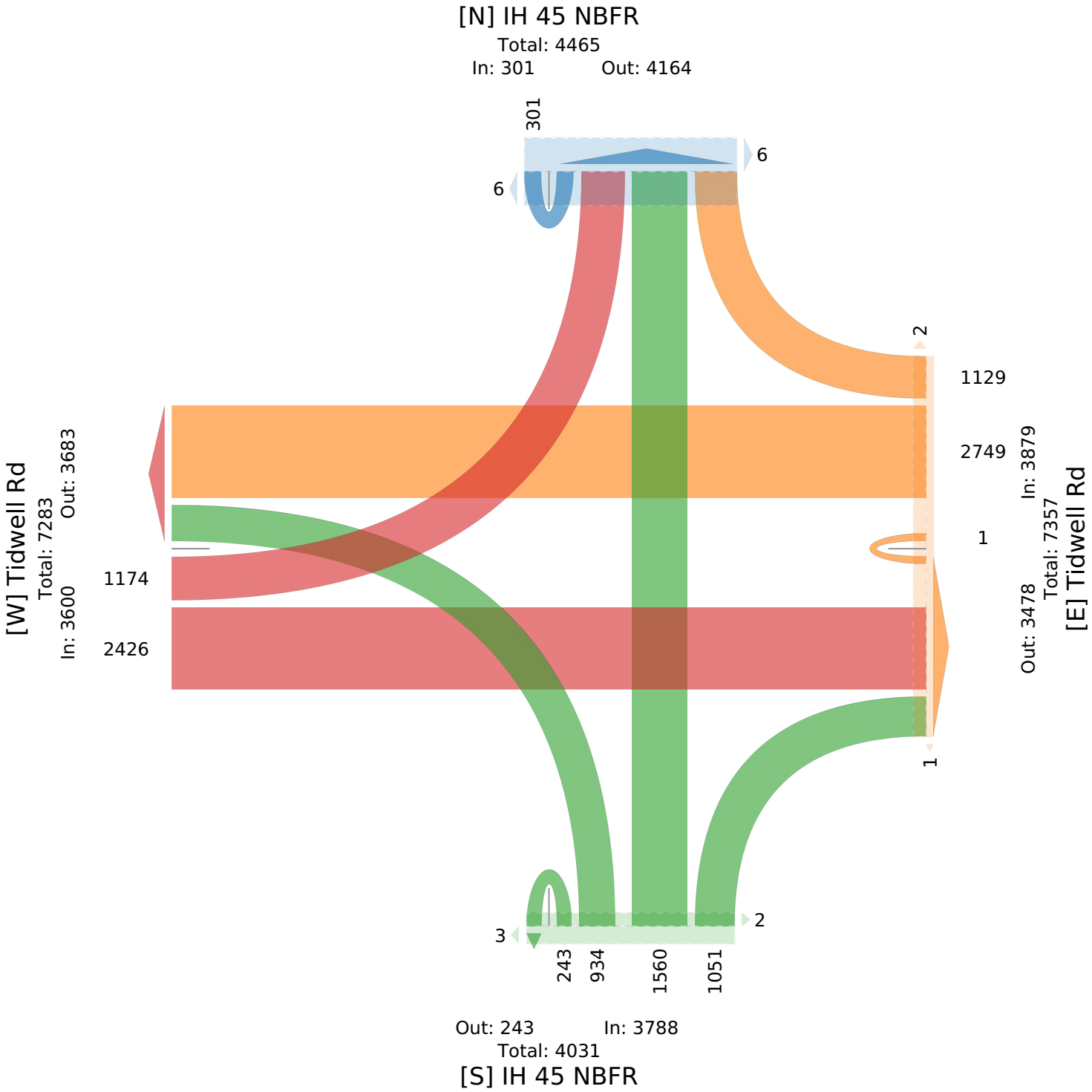
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	IH 45 NBFR						IH 45 NBFR						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	47	27	45	16	**135**	0	0	0	0	16	**16**	2	46	89	0	0	**135**	0	0	54	28	0	**82**	2	**368**
7:15AM	44	37	81	19	**181**	0	0	0	0	17	**17**	2	44	90	0	0	**134**	0	0	175	51	0	**226**	0	**558**
7:30AM	36	33	53	19	**141**	0	0	0	0	12	**12**	0	70	113	0	0	**183**	0	0	237	84	0	**321**	0	**657**
7:45AM	51	49	65	20	**185**	0	0	0	0	10	**10**	1	77	126	0	0	**203**	0	0	188	96	0	**284**	1	**682**
Hourly Total	178	146	244	74	**642**	0	0	0	0	55	**55**	5	237	418	0	0	**655**	0	0	654	259	0	**913**	3	**2265**
8:00AM	45	54	51	19	**169**	1	0	0	0	19	**19**	1	56	107	0	0	**163**	0	0	188	69	0	**257**	0	**608**
8:15AM	44	45	58	16	**163**	1	0	0	0	6	**6**	0	43	132	0	0	**175**	0	0	145	44	0	**189**	0	**533**
8:30AM	40	48	43	16	**147**	0	0	0	0	9	**9**	0	48	112	0	0	**160**	0	0	148	53	0	**201**	0	**517**
8:45AM	42	47	43	11	**143**	0	0	0	0	14	**14**	1	40	118	0	0	**158**	0	0	158	58	0	**216**	0	**531**
Hourly Total	171	194	195	62	**622**	2	0	0	0	48	**48**	2	187	469	0	0	**656**	0	0	639	224	0	**863**	0	**2189**
4:00PM	72	88	56	9	**225**	0	0	0	0	26	**26**	0	96	191	0	0	**287**	0	0	141	78	1	**220**	0	**758**
4:15PM	94	98	65	13	**270**	0	0	0	0	20	**20**	1	85	168	0	0	**253**	0	0	209	103	0	**312**	0	**855**
4:30PM	95	91	69	20	**275**	0	0	0	0	22	**22**	2	100	198	0	0	**298**	0	0	191	81	0	**272**	0	**867**
4:45PM	80	104	71	18	**273**	1	0	0	0	22	**22**	1	105	209	0	0	**314**	0	0	207	83	0	**290**	0	**899**
Hourly Total	341	381	261	60	**1043**	1	0	0	0	90	**90**	4	386	766	0	0	**1152**	0	0	748	345	1	**1094**	0	**3379**
5:00PM	50	180	91	10	**331**	0	0	0	0	19	**19**	1	108	200	0	0	**308**	0	0	192	90	0	**282**	0	**940**
5:15PM	58	198	80	8	**344**	0	0	0	0	24	**24**	0	84	212	0	0	**296**	0	0	176	60	0	**236**	0	**900**
5:30PM	71	199	87	16	**373**	0	0	0	0	39	**39**	0	84	187	0	0	**271**	0	0	160	70	0	**230**	0	**913**
5:45PM	65	262	93	13	**433**	2	0	0	0	26	**26**	0	88	174	0	0	**262**	0	0	180	81	0	**261**	0	**982**
Hourly Total	244	839	351	47	**1481**	2	0	0	0	108	**108**	1	364	773	0	0	**1137**	0	0	708	301	0	**1009**	0	**3735**
Total	934	1560	1051	243	**3788**	5	0	0	0	301	**301**	12	1174	2426	0	0	**3600**	0	0	2749	1129	1	**3879**	3	**11568**
% Approach	24.7%	41.2%	27.7%	6.4%	**-**	-	0%	0%	0%	100%	**-**	-	32.6%	67.4%	0%	0%	**-**	-	0%	70.9%	29.1%	0%	**-**	-	-
% Total	8.1%	13.5%	9.1%	2.1%	**32.7%**	-	0%	0%	0%	2.6%	**2.6%**	-	10.1%	21.0%	0%	0%	**31.1%**	-	0%	23.8%	9.8%	0%	**33.5%**	-	-
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	2	0	**3**	-	4
% Motorcycles	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.2%	0%	**0.1%**	-	0%
Lights	900	1526	1019	235	**3680**	-	0	0	0	297	**297**	-	1152	2349	0	0	**3501**	-	0	2657	1100	1	**3758**	-	11236
% Lights	96.4%	97.8%	97.0%	96.7%	**97.1%**	-	0%	0%	0%	98.7%	**98.7%**	-	98.1%	96.8%	0%	0%	**97.3%**	-	0%	96.7%	97.4%	100%	**96.9%**	-	97.1%
Single-Unit Trucks	15	20	16	5	**56**	-	0	0	0	1	**1**	-	11	30	0	0	**41**	-	0	37	13	0	**50**	-	148
% Single-Unit Trucks	1.6%	1.3%	1.5%	2.1%	**1.5%**	-	0%	0%	0%	0.3%	**0.3%**	-	0.9%	1.2%	0%	0%	**1.1%**	-	0%	1.3%	1.2%	0%	**1.3%**	-	1.3%
Articulated Trucks	15	8	6	3	**32**	-	0	0	0	1	**1**	-	3	14	0	0	**17**	-	0	17	6	0	**23**	-	73
% Articulated Trucks	1.6%	0.5%	0.6%	1.2%	**0.8%**	-	0%	0%	0%	0.3%	**0.3%**	-	0.3%	0.6%	0%	0%	**0.5%**	-	0%	0.6%	0.5%	0%	**0.6%**	-	0.6%
Buses	4	5	10	0	**19**	-	0	0	0	2	**2**	-	8	33	0	0	**41**	-	0	37	8	0	**45**	-	107
% Buses	0.4%	0.3%	1.0%	0%	**0.5%**	-	0%	0%	0%	0.7%	**0.7%**	-	0.7%	1.4%	0%	0%	**1.1%**	-	0%	1.3%	0.7%	0%	**1.2%**	-	0.9%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	10	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	60.0%	-	-	-	-	-	83.3%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	40.0%	-	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 NBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867378, Location: 29.848717, -95.333041

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 NBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867378, Location: 29.848717, -95.333041

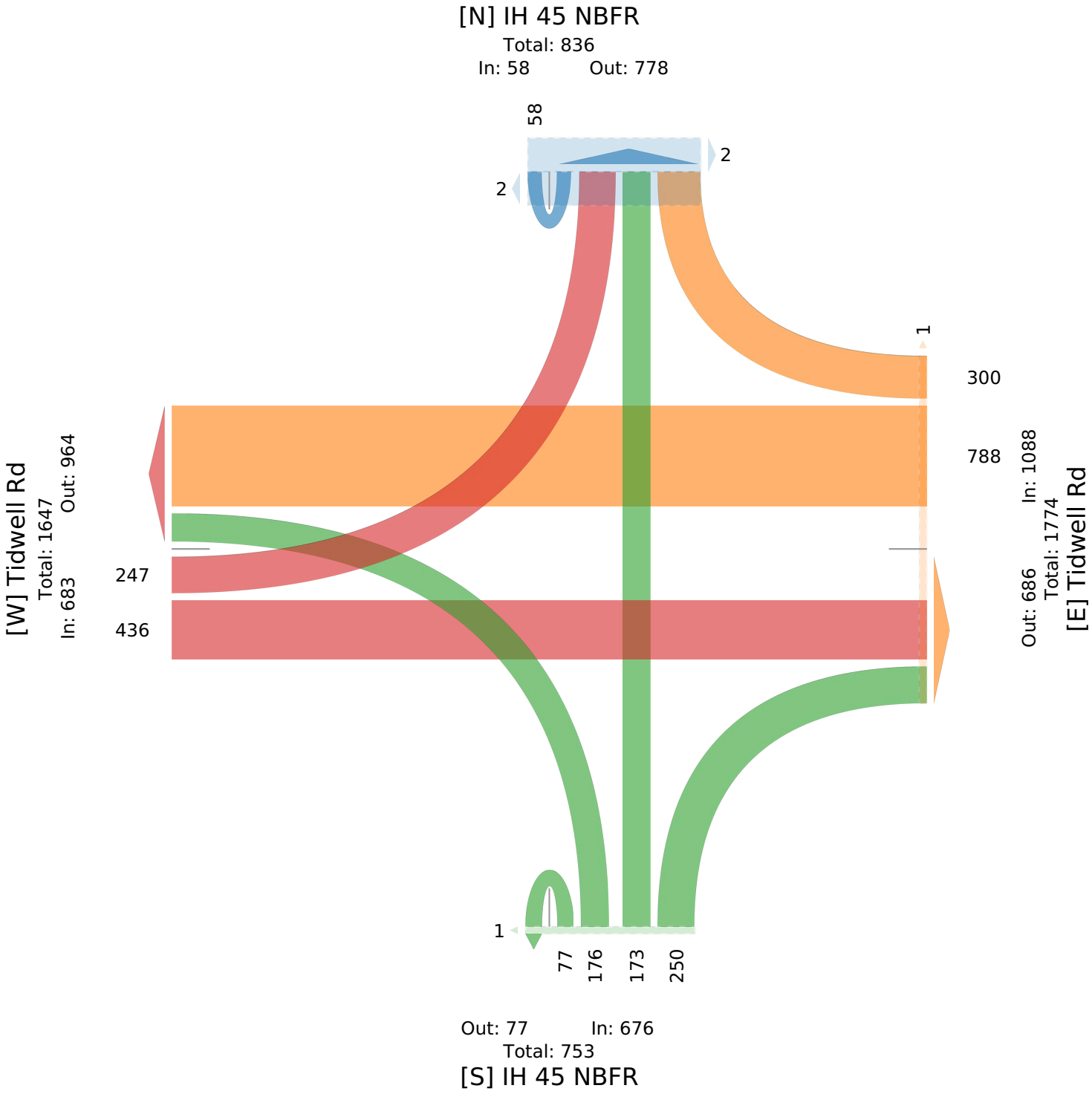
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	IH 45 NBFR						IH 45 NBFR						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	44	37	81	19	**181**	0	0	0	0	17	**17**	2	44	90	0	0	**134**	0	0	175	51	0	**226**	0	**558**
7:30AM	36	33	53	19	**141**	0	0	0	0	12	**12**	0	70	113	0	0	**183**	0	0	237	84	0	**321**	0	**657**
7:45AM	51	49	65	20	**185**	0	0	0	0	10	**10**	1	77	126	0	0	**203**	0	0	188	96	0	**284**	1	**682**
8:00AM	45	54	51	19	**169**	1	0	0	0	19	**19**	1	56	107	0	0	**163**	0	0	188	69	0	**257**	0	**608**
Total	176	173	250	77	**676**	1	0	0	0	58	**58**	4	247	436	0	0	**683**	0	0	788	300	0	**1088**	1	**2505**
% Approach	26.0%	25.6%	37.0%	11.4%	**-**	-	0%	0%	0%	100%	**-**	-	36.2%	63.8%	0%	0%	**-**	-	0%	72.4%	27.6%	0%	**-**	-	**-**
% Total	7.0%	6.9%	10.0%	3.1%	**27.0%**	-	0%	0%	0%	2.3%	**2.3%**	-	9.9%	17.4%	0%	0%	**27.3%**	-	0%	31.5%	12.0%	0%	**43.4%**	-	**-**
PHF	0.863	0.801	0.772	0.963	**0.914**	-	-	-	-	0.763	**0.763**	-	0.802	0.865	-	-	**0.841**	-	-	0.831	0.781	-	**0.847**	-	0.918
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	174	169	241	75	**659**	-	0	0	0	57	**57**	-	242	417	0	0	**659**	-	0	761	291	0	**1052**	-	2427
% Lights	98.9%	97.7%	96.4%	97.4%	**97.5%**	-	0%	0%	0%	98.3%	**98.3%**	-	98.0%	95.6%	0%	0%	**96.5%**	-	0%	96.6%	97.0%	0%	**96.7%**	-	96.9%
Single-Unit Trucks	0	2	4	2	**8**	-	0	0	0	0	**0**	-	1	10	0	0	**11**	-	0	10	3	0	**13**	-	32
% Single-Unit Trucks	0%	1.2%	1.6%	2.6%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0.4%	2.3%	0%	0%	**1.6%**	-	0%	1.3%	1.0%	0%	**1.2%**	-	1.3%
Articulated Trucks	0	2	2	0	**4**	-	0	0	0	1	**1**	-	1	3	0	0	**4**	-	0	4	2	0	**6**	-	15
% Articulated Trucks	0%	1.2%	0.8%	0%	**0.6%**	-	0%	0%	0%	1.7%	**1.7%**	-	0.4%	0.7%	0%	0%	**0.6%**	-	0%	0.5%	0.7%	0%	**0.6%**	-	0.6%
Buses	2	0	3	0	**5**	-	0	0	0	0	**0**	-	3	6	0	0	**9**	-	0	13	4	0	**17**	-	31
% Buses	1.1%	0%	1.2%	0%	**0.7%**	-	0%	0%	0%	0%	**0%**	-	1.2%	1.4%	0%	0%	**1.3%**	-	0%	1.6%	1.3%	0%	**1.6%**	-	1.2%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 NBFR - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867378, Location: 29.848717, -95.333041

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 NBFR - TMC

Wed Sep 1, 2021
PM Peak (5 PM - 6 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867378, Location: 29.848717, -95.333041

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	IH 45 NBFR Northbound						IH 45 NBFR Southbound						Tidwell Rd Eastbound						Tidwell Rd Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 5:00PM	50	180	91	10	**331**	0	0	0	0	19	**19**	1	108	200	0	0	**308**	0	0	192	90	0	**282**	0	**940**
5:15PM	58	198	80	8	**344**	0	0	0	0	24	**24**	0	84	212	0	0	**296**	0	0	176	60	0	**236**	0	**900**
5:30PM	71	199	87	16	**373**	0	0	0	0	39	**39**	0	84	187	0	0	**271**	0	0	160	70	0	**230**	0	**913**
5:45PM	65	262	93	13	**433**	2	0	0	0	26	**26**	0	88	174	0	0	**262**	0	0	180	81	0	**261**	0	**982**
Total	244	839	351	47	**1481**	2	0	0	0	108	**108**	1	364	773	0	0	**1137**	0	0	708	301	0	**1009**	0	**3735**
% Approach	16.5%	56.7%	23.7%	3.2%	**-**	-	0%	0%	0%	100%	**-**	-	32.0%	68.0%	0%	0%	**-**	-	0%	70.2%	29.8%	0%	**-**	-	-
% Total	6.5%	22.5%	9.4%	1.3%	**39.7%**	-	0%	0%	0%	2.9%	**2.9%**	-	9.7%	20.7%	0%	0%	**30.4%**	-	0%	19.0%	8.1%	0%	**27.0%**	-	-
PHF	0.859	0.801	0.944	0.734	**0.855**	-	-	-	-	0.692	**0.692**	-	0.843	0.912	-	-	**0.923**	-	-	0.922	0.836	-	**0.895**	-	0.951
Motorcycles	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	237	823	344	47	**1451**	-	0	0	0	107	**107**	-	356	755	0	0	**1111**	-	0	687	294	0	**981**	-	3650
% Lights	97.1%	98.1%	98.0%	100%	**98.0%**	-	0%	0%	0%	99.1%	**99.1%**	-	97.8%	97.7%	0%	0%	**97.7%**	-	0%	97.0%	97.7%	0%	**97.2%**	-	97.7%
Single-Unit Trucks	4	10	4	0	**18**	-	0	0	0	0	**0**	-	5	3	0	0	**8**	-	0	6	5	0	**11**	-	37
% Single-Unit Trucks	1.6%	1.2%	1.1%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	1.4%	0.4%	0%	0%	**0.7%**	-	0%	0.8%	1.7%	0%	**1.1%**	-	1.0%
Articulated Trucks	3	3	0	0	**6**	-	0	0	0	0	**0**	-	1	5	0	0	**6**	-	0	4	1	0	**5**	-	17
% Articulated Trucks	1.2%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0.3%	0.6%	0%	0%	**0.5%**	-	0%	0.6%	0.3%	0%	**0.5%**	-	0.5%
Buses	0	2	3	0	**5**	-	0	0	0	1	**1**	-	2	10	0	0	**12**	-	0	11	1	0	**12**	-	30
% Buses	0%	0.2%	0.9%	0%	**0.3%**	-	0%	0%	0%	0.9%	**0.9%**	-	0.5%	1.3%	0%	0%	**1.1%**	-	0%	1.6%	0.3%	0%	**1.2%**	-	0.8%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 NBFR - TMC

Wed Sep 1, 2021

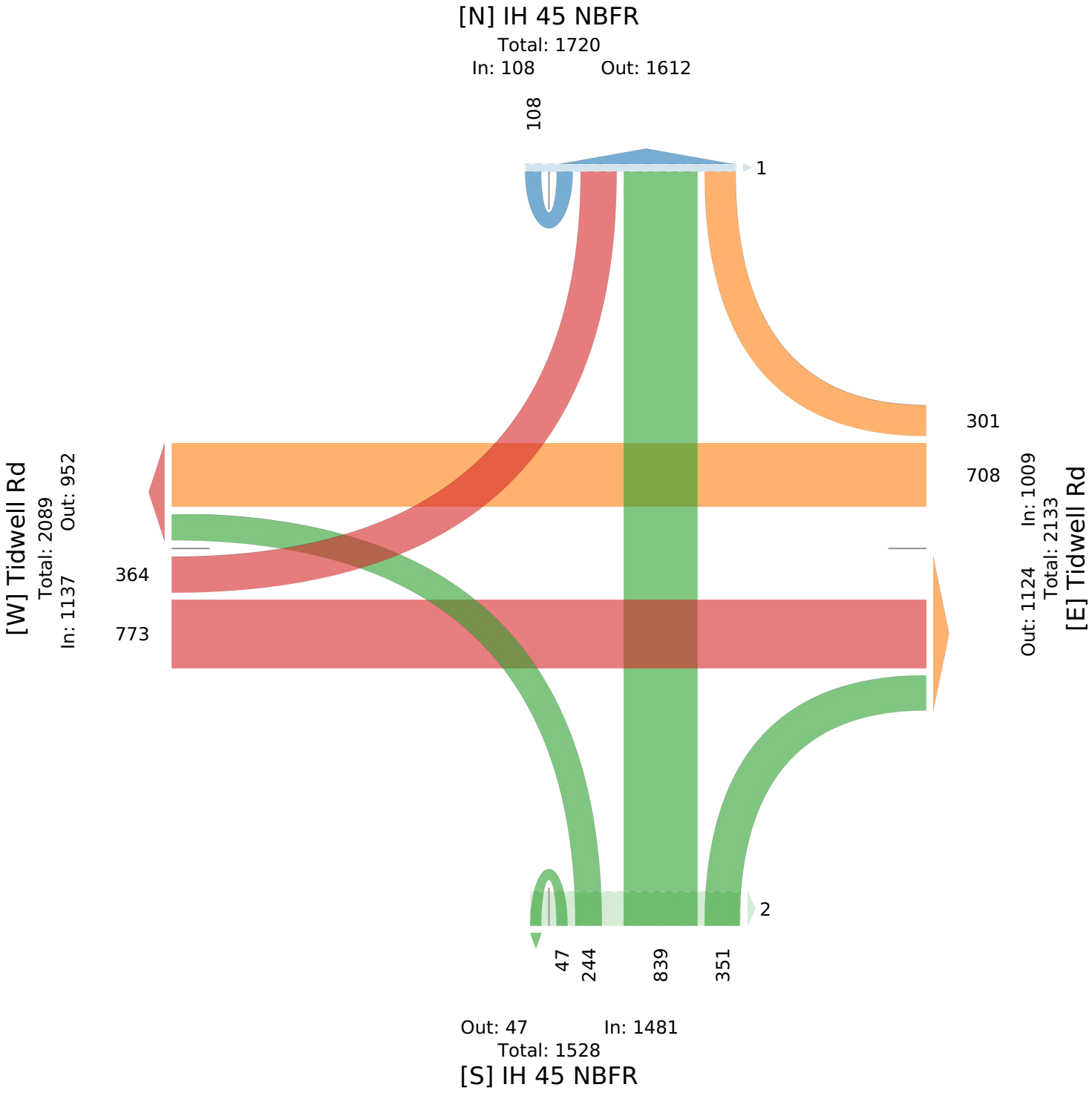
PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 867378, Location: 29.848717, -95.333041

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 SBFR - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

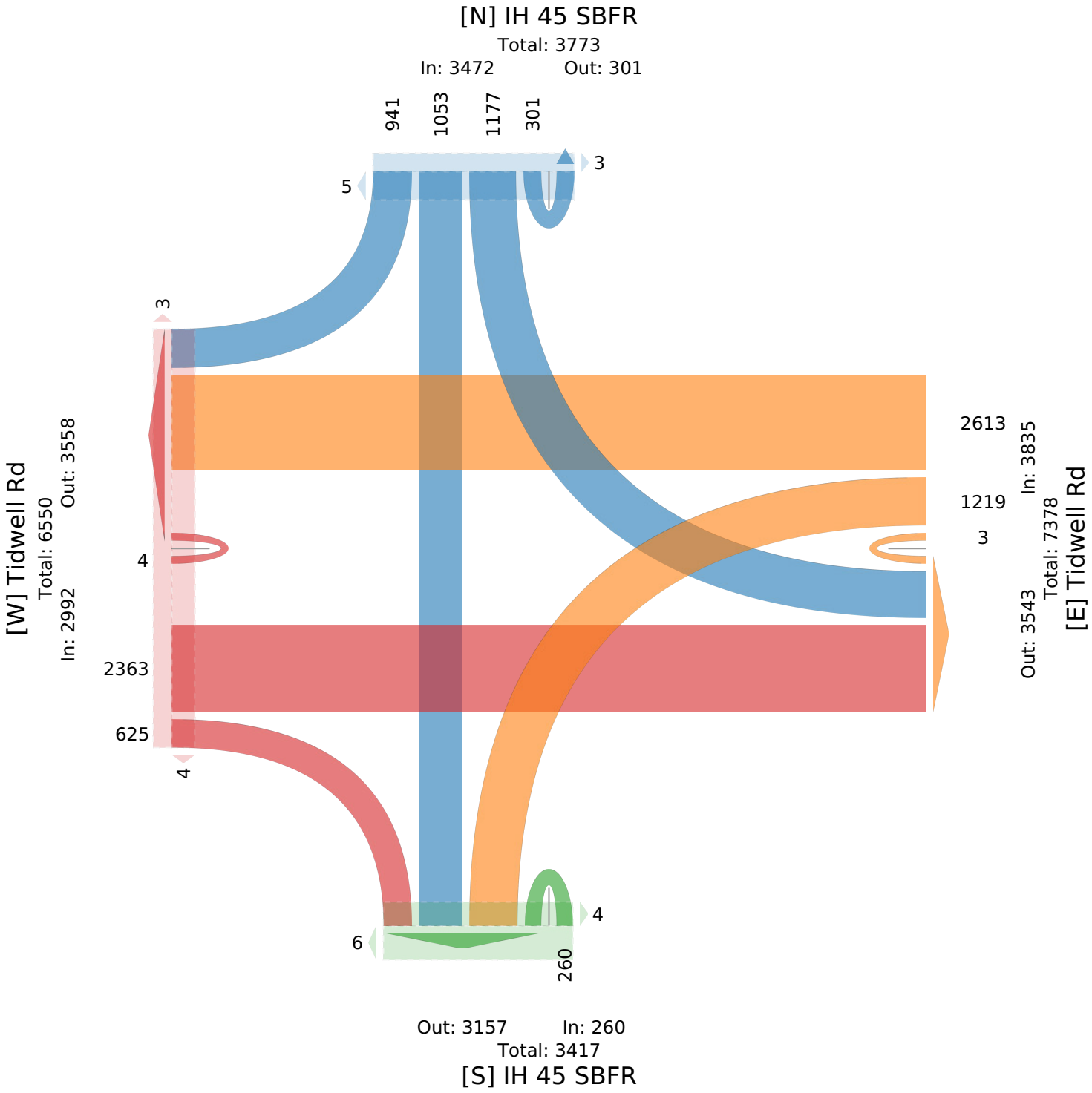
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	IH 45 SBFR						IH 45 SBFR						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:00AM	0	0	0	16	**16**	0	50	58	72	16	**196**	0	0	79	43	0	**122**	0	36	59	0	0	**95**	0	**429**
7:15AM	0	0	0	18	**18**	4	52	89	73	17	**231**	2	0	86	35	0	**121**	4	68	162	0	0	**230**	0	**600**
7:30AM	0	0	0	19	**19**	1	49	86	67	12	**214**	1	0	134	62	0	**196**	1	121	175	0	0	**296**	0	**725**
7:45AM	0	0	0	20	**20**	0	71	76	51	10	**208**	1	0	142	40	0	**182**	0	99	165	0	0	**264**	0	**674**
Hourly Total	0	0	0	73	**73**	5	222	309	263	55	**849**	4	0	441	180	0	**621**	5	324	561	0	0	**885**	0	**2428**
8:00AM	0	0	0	20	**20**	1	42	58	39	19	**158**	0	0	124	35	0	**159**	1	78	164	0	2	**244**	0	**581**
8:15AM	0	0	0	16	**16**	1	64	56	50	6	**176**	0	0	110	36	0	**146**	0	80	123	0	0	**203**	0	**541**
8:30AM	0	0	0	19	**19**	0	54	67	67	9	**197**	1	0	108	30	0	**138**	0	67	136	0	0	**203**	0	**557**
8:45AM	0	0	0	13	**13**	0	56	52	45	14	**167**	0	0	106	34	0	**140**	0	68	137	0	0	**205**	0	**525**
Hourly Total	0	0	0	68	**68**	2	216	233	201	48	**698**	1	0	448	135	0	**583**	1	293	560	0	2	**855**	0	**2204**
4:00PM	0	0	0	10	**10**	2	98	80	50	26	**254**	0	0	173	37	1	**211**	0	55	162	0	0	**217**	0	**692**
4:15PM	0	0	0	14	**14**	0	89	66	63	20	**238**	0	0	158	30	0	**188**	0	94	199	0	1	**294**	0	**734**
4:30PM	0	0	0	21	**21**	0	93	53	52	22	**220**	1	0	183	33	1	**217**	0	84	204	0	0	**288**	0	**746**
4:45PM	0	0	0	18	**18**	1	102	68	55	22	**247**	0	0	195	52	1	**248**	0	84	198	0	0	**282**	0	**795**
Hourly Total	0	0	0	63	**63**	3	382	267	220	90	**959**	1	0	709	152	3	**864**	0	317	763	0	1	**1081**	0	**2967**
5:00PM	0	0	0	13	**13**	0	93	56	54	19	**222**	2	0	199	57	0	**256**	0	79	184	0	0	**263**	0	**754**
5:15PM	0	0	0	8	**8**	0	107	49	70	24	**250**	0	0	179	40	0	**219**	0	79	174	0	0	**253**	0	**730**
5:30PM	0	0	0	20	**20**	0	75	67	60	39	**241**	0	0	204	32	1	**237**	1	50	191	0	0	**241**	0	**739**
5:45PM	0	0	0	15	**15**	0	82	72	73	26	**253**	0	0	183	29	0	**212**	0	77	180	0	0	**257**	0	**737**
Hourly Total	0	0	0	56	**56**	0	357	244	257	108	**966**	2	0	765	158	1	**924**	1	285	729	0	0	**1014**	0	**2960**
Total	0	0	0	260	**260**	10	1177	1053	941	301	**3472**	8	0	2363	625	4	**2992**	7	1219	2613	0	3	**3835**	0	**10559**
% Approach	0%	0%	0%	100%	**-**	-	33.9%	30.3%	27.1%	8.7%	**-**	-	0%	79.0%	20.9%	0.1%	**-**	-	31.8%	68.1%	0%	0.1%	**-**	-	-
% Total	0%	0%	0%	2.5%	**2.5%**	-	11.1%	10.0%	8.9%	2.9%	**32.9%**	-	0%	22.4%	5.9%	0%	**28.3%**	-	11.5%	24.7%	0%	0%	**36.3%**	-	-
Motorcycles	0	0	0	1	**1**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	3
% Motorcycles	0%	0%	0%	0.4%	**0.4%**	-	0%	0.1%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	0	0	251	**251**	-	1137	1030	915	297	**3379**	-	0	2303	589	4	**2896**	-	1186	2515	0	3	**3704**	-	10230
% Lights	0%	0%	0%	96.5%	**96.5%**	-	96.6%	97.8%	97.2%	98.7%	**97.3%**	-	0%	97.5%	94.2%	100%	**96.8%**	-	97.3%	96.2%	0%	100%	**96.6%**	-	96.9%
Single-Unit Trucks	0	0	0	5	**5**	-	21	10	13	1	**45**	-	0	19	13	0	**32**	-	20	40	0	0	**60**	-	142
% Single-Unit Trucks	0%	0%	0%	1.9%	**1.9%**	-	1.8%	0.9%	1.4%	0.3%	**1.3%**	-	0%	0.8%	2.1%	0%	**1.1%**	-	1.6%	1.5%	0%	0%	**1.6%**	-	1.3%
Articulated Trucks	0	0	0	3	**3**	-	12	3	7	1	**23**	-	0	7	14	0	**21**	-	6	23	0	0	**29**	-	76
% Articulated Trucks	0%	0%	0%	1.2%	**1.2%**	-	1.0%	0.3%	0.7%	0.3%	**0.7%**	-	0%	0.3%	2.2%	0%	**0.7%**	-	0.5%	0.9%	0%	0%	**0.8%**	-	0.7%
Buses	0	0	0	0	**0**	-	7	9	6	2	**24**	-	0	34	9	0	**43**	-	7	34	0	0	**41**	-	108
% Buses	0%	0%	0%	0%	**0%**	-	0.6%	0.9%	0.6%	0.7%	**0.7%**	-	0%	1.4%	1.4%	0%	**1.4%**	-	0.6%	1.3%	0%	0%	**1.1%**	-	1.0%
Pedestrians	-	-	-	-	-	7	-	-	-	-	-	6	-	-	-	-	-	7	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	70.0%	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	30.0%	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 SBFR - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 SBFR - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

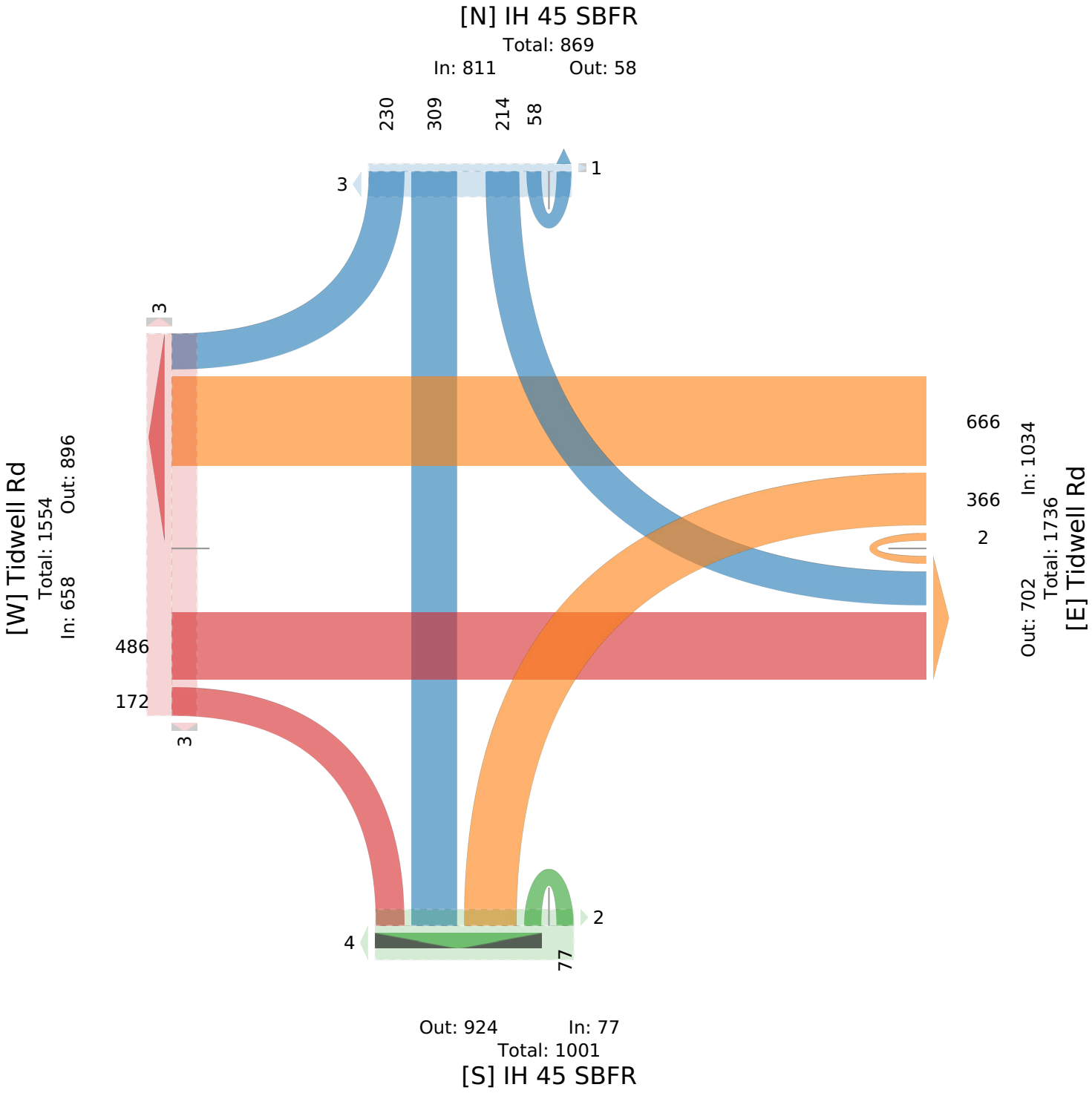
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	IH 45 SBFR						IH 45 SBFR						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 7:15AM	0	0	0	18	**18**	4	52	89	73	17	**231**	2	0	86	35	0	**121**	4	68	162	0	0	**230**	0	**600**
7:30AM	0	0	0	19	**19**	1	49	86	67	12	**214**	1	0	134	62	0	**196**	1	121	175	0	0	**296**	0	**725**
7:45AM	0	0	0	20	**20**	0	71	76	51	10	**208**	1	0	142	40	0	**182**	0	99	165	0	0	**264**	0	**674**
8:00AM	0	0	0	20	**20**	1	42	58	39	19	**158**	0	0	124	35	0	**159**	1	78	164	0	2	**244**	0	**581**
Total	0	0	0	77	**77**	6	214	309	230	58	**811**	4	0	486	172	0	**658**	6	366	666	0	2	**1034**	0	**2580**
% Approach	0%	0%	0%	100%	**-**	-	26.4%	38.1%	28.4%	7.2%	**-**	-	0%	73.9%	26.1%	0%	**-**	-	35.4%	64.4%	0%	0.2%	**-**	-	-
% Total	0%	0%	0%	3.0%	**3.0%**	-	8.3%	12.0%	8.9%	2.2%	**31.4%**	-	0%	18.8%	6.7%	0%	**25.5%**	-	14.2%	25.8%	0%	0.1%	**40.1%**	-	-
PHF	-	-	-	0.963	**0.963**	-	0.754	0.868	0.788	0.763	**0.878**	-	-	0.856	0.694	-	**0.839**	-	0.756	0.951	-	0.250	**0.873**	-	0.890
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	0	0	75	**75**	-	207	304	220	57	**788**	-	0	469	162	0	**631**	-	355	647	0	2	**1004**	-	2498
% Lights	0%	0%	0%	97.4%	**97.4%**	-	96.7%	98.4%	95.7%	98.3%	**97.2%**	-	0%	96.5%	94.2%	0%	**95.9%**	-	97.0%	97.1%	0%	100%	**97.1%**	-	96.8%
Single-Unit Trucks	0	0	0	2	**2**	-	4	2	3	0	**9**	-	0	5	2	0	**7**	-	4	7	0	0	**11**	-	29
% Single-Unit Trucks	0%	0%	0%	2.6%	**2.6%**	-	1.9%	0.6%	1.3%	0%	**1.1%**	-	0%	1.0%	1.2%	0%	**1.1%**	-	1.1%	1.1%	0%	0%	**1.1%**	-	1.1%
Articulated Trucks	0	0	0	0	**0**	-	2	1	2	1	**6**	-	0	3	5	0	**8**	-	4	0	0	0	**4**	-	18
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0.9%	0.3%	0.9%	1.7%	**0.7%**	-	0%	0.6%	2.9%	0%	**1.2%**	-	1.1%	0%	0%	0%	**0.4%**	-	0.7%
Buses	0	0	0	0	**0**	-	1	2	5	0	**8**	-	0	9	3	0	**12**	-	3	12	0	0	**15**	-	35
% Buses	0%	0%	0%	0%	**0%**	-	0.5%	0.6%	2.2%	0%	**1.0%**	-	0%	1.9%	1.7%	0%	**1.8%**	-	0.8%	1.8%	0%	0%	**1.5%**	-	1.4%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	3	-	-	-	-	-	6	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 SBFR - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at IH 45 SBFR - TMC

Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

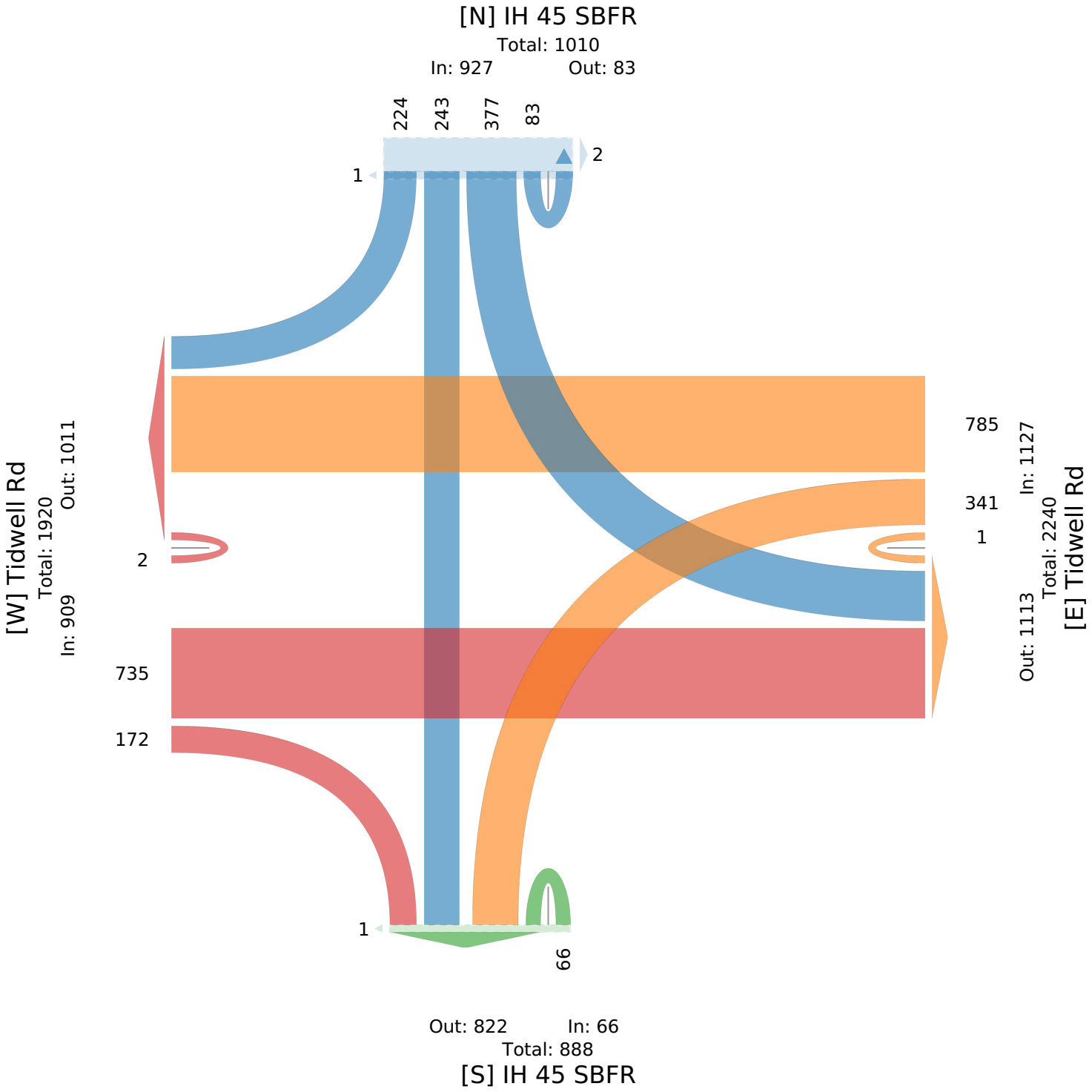
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	IH 45 SBFR						IH 45 SBFR						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 4:15PM	0	0	0	14	**14**	0	89	66	63	20	**238**	0	0	158	30	0	**188**	0	94	199	0	1	**294**	0	**734**
4:30PM	0	0	0	21	**21**	0	93	53	52	22	**220**	1	0	183	33	1	**217**	0	84	204	0	0	**288**	0	**746**
4:45PM	0	0	0	18	**18**	1	102	68	55	22	**247**	0	0	195	52	1	**248**	0	84	198	0	0	**282**	0	**795**
5:00PM	0	0	0	13	**13**	0	93	56	54	19	**222**	2	0	199	57	0	**256**	0	79	184	0	0	**263**	0	**754**
Total	0	0	0	66	**66**	1	377	243	224	83	**927**	3	0	735	172	2	**909**	0	341	785	0	1	**1127**	0	**3029**
% Approach	0%	0%	0%	100%	**-**	-	40.7%	26.2%	24.2%	9.0%	**-**	-	0%	80.9%	18.9%	0.2%	**-**	-	30.3%	69.7%	0%	0.1%	**-**	-	-
% Total	0%	0%	0%	2.2%	**2.2%**	-	12.4%	8.0%	7.4%	2.7%	**30.6%**	-	0%	24.3%	5.7%	0.1%	**30.0%**	-	11.3%	25.9%	0%	0%	**37.2%**	-	-
PHF	-	-	-	0.786	**0.786**	-	0.924	0.893	0.889	0.943	**0.938**	-	-	0.923	0.754	0.500	**0.888**	-	0.907	0.962	-	0.250	**0.958**	-	0.953
Motorcycles	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0.4%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	0	0	0	64	**64**	-	365	239	220	82	**906**	-	0	716	165	2	**883**	-	337	748	0	1	**1086**	-	2939
% Lights	0%	0%	0%	97.0%	**97.0%**	-	96.8%	98.4%	98.2%	98.8%	**97.7%**	-	0%	97.4%	95.9%	100%	**97.1%**	-	98.8%	95.3%	0%	100%	**96.4%**	-	97.0%
Single-Unit Trucks	0	0	0	1	**1**	-	6	0	3	0	**9**	-	0	7	3	0	**10**	-	2	16	0	0	**18**	-	38
% Single-Unit Trucks	0%	0%	0%	1.5%	**1.5%**	-	1.6%	0%	1.3%	0%	**1.0%**	-	0%	1.0%	1.7%	0%	**1.1%**	-	0.6%	2.0%	0%	0%	**1.6%**	-	1.3%
Articulated Trucks	0	0	0	1	**1**	-	4	1	1	0	**6**	-	0	2	1	0	**3**	-	0	13	0	0	**13**	-	23
% Articulated Trucks	0%	0%	0%	1.5%	**1.5%**	-	1.1%	0.4%	0.4%	0%	**0.6%**	-	0%	0.3%	0.6%	0%	**0.3%**	-	0%	1.7%	0%	0%	**1.2%**	-	0.8%
Buses	0	0	0	0	**0**	-	2	2	0	1	**5**	-	0	10	3	0	**13**	-	2	8	0	0	**10**	-	28
% Buses	0%	0%	0%	0%	**0%**	-	0.5%	0.8%	0%	1.2%	**0.5%**	-	0%	1.4%	1.7%	0%	**1.4%**	-	0.6%	1.0%	0%	0%	**0.9%**	-	0.9%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at IH 45 SBFR - TMC
Wed Sep 1, 2021
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867379, Location: 29.848696, -95.334217

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at Jensen Dr - TMC

Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

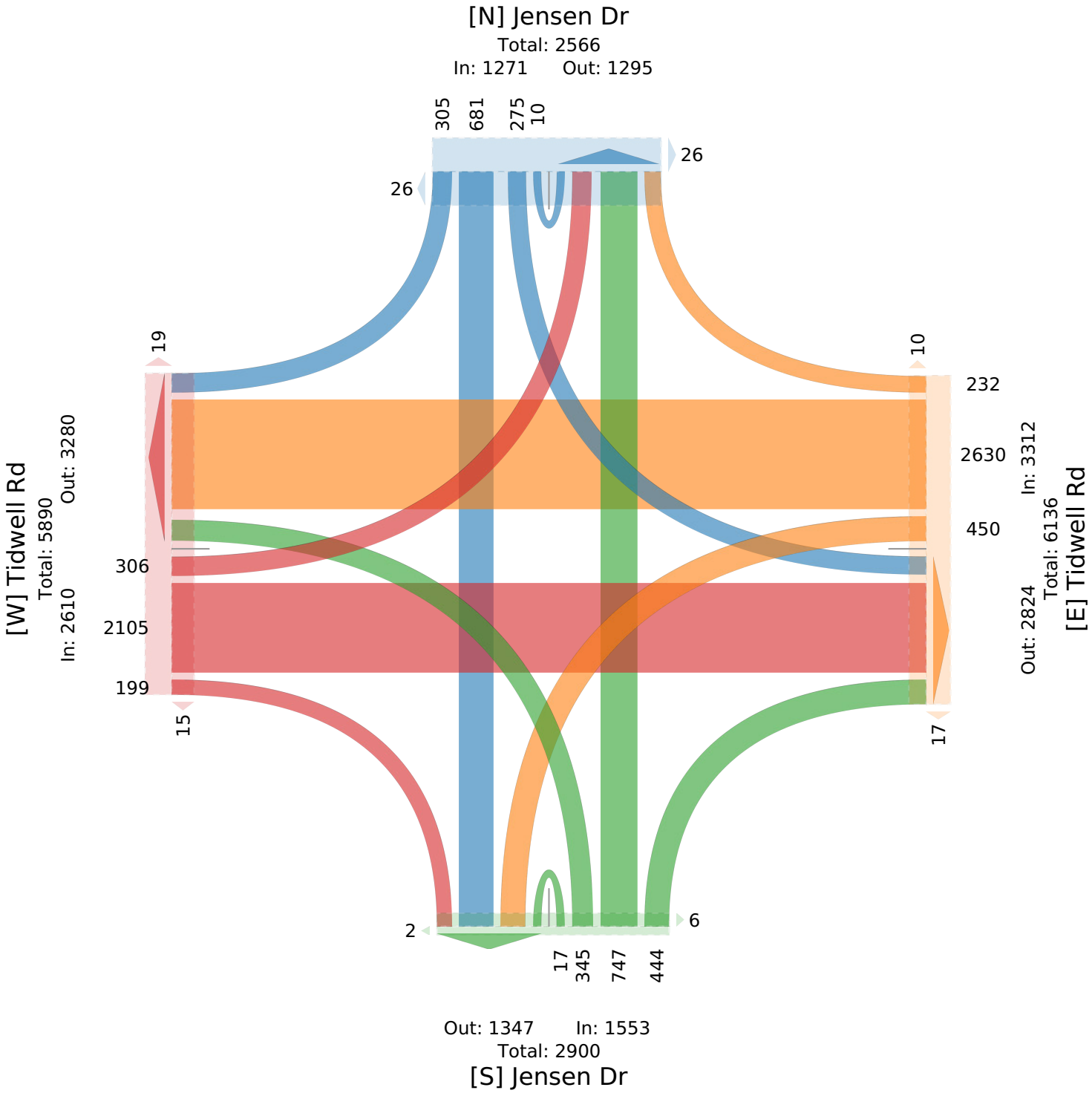
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Jensen Dr						Jensen Dr						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:00AM	15	14	8	0	**37**	0	9	40	27	0	**76**	2	6	100	7	0	**113**	1	21	105	13	0	**139**	1	**365**
7:15AM	12	18	16	0	**46**	0	22	59	22	0	**103**	3	14	99	16	0	**129**	2	20	172	11	0	**203**	2	**481**
7:30AM	15	31	20	0	**66**	0	17	53	27	2	**99**	0	16	136	15	0	**167**	3	33	203	9	0	**245**	3	**577**
7:45AM	23	39	28	0	**90**	0	12	57	25	1	**95**	4	14	130	22	0	**166**	2	37	156	11	0	**204**	3	**555**
Hourly Total	65	102	72	0	**239**	0	60	209	101	3	**373**	9	50	465	60	0	**575**	8	111	636	44	0	**791**	9	**1978**
8:00AM	17	22	32	0	**71**	0	10	31	18	0	**59**	6	14	100	14	0	**128**	3	30	150	9	0	**189**	2	**447**
8:15AM	15	34	24	0	**73**	0	14	45	8	0	**67**	4	19	94	16	0	**129**	0	20	131	10	0	**161**	0	**430**
8:30AM	15	45	21	1	**82**	0	16	27	15	1	**59**	3	12	102	8	0	**122**	1	26	135	16	0	**177**	2	**440**
8:45AM	13	36	22	1	**72**	2	17	29	10	1	**57**	3	14	96	13	0	**123**	4	29	147	11	0	**187**	1	**439**
Hourly Total	60	137	99	2	**298**	2	57	132	51	2	**242**	16	59	392	51	0	**502**	8	105	563	46	0	**714**	5	**1756**
4:00PM	24	61	37	0	**122**	1	18	28	11	1	**58**	7	19	137	15	0	**171**	1	20	175	15	0	**210**	2	**561**
4:15PM	28	77	29	1	**135**	0	21	45	25	1	**92**	5	26	116	13	0	**155**	4	27	166	12	0	**205**	2	**587**
4:30PM	31	70	37	1	**139**	1	13	42	22	0	**77**	3	21	156	11	0	**188**	3	30	207	16	0	**253**	3	**657**
4:45PM	25	67	35	5	**132**	1	23	47	20	0	**90**	1	23	181	6	0	**210**	3	31	184	24	0	**239**	1	**671**
Hourly Total	108	275	138	7	**528**	3	75	162	78	2	**317**	16	89	590	45	0	**724**	11	108	732	67	0	**907**	8	**2476**
5:00PM	33	51	45	1	**130**	1	24	49	22	1	**96**	3	32	180	10	0	**222**	2	40	165	19	0	**224**	1	**672**
5:15PM	34	56	19	3	**112**	0	22	46	19	0	**87**	2	22	164	13	0	**199**	1	32	171	19	0	**222**	2	**620**
5:30PM	26	74	30	2	**132**	0	19	43	17	1	**80**	2	28	159	11	0	**198**	0	24	173	22	0	**219**	2	**629**
5:45PM	19	52	41	2	**114**	2	18	40	17	1	**76**	4	26	155	9	0	**190**	4	30	190	15	0	**235**	0	**615**
Hourly Total	112	233	135	8	**488**	3	83	178	75	3	**339**	11	108	658	43	0	**809**	7	126	699	75	0	**900**	5	**2536**
Total	345	747	444	17	**1553**	8	275	681	305	10	**1271**	52	306	2105	199	0	**2610**	34	450	2630	232	0	**3312**	27	**8746**
% Approach	22.2%	48.1%	28.6%	1.1%	**-**	-	21.6%	53.6%	24.0%	0.8%	**-**	-	11.7%	80.7%	7.6%	0%	**-**	-	13.6%	79.4%	7.0%	0%	**-**	-	-
% Total	3.9%	8.5%	5.1%	0.2%	**17.8%**	-	3.1%	7.8%	3.5%	0.1%	**14.5%**	-	3.5%	24.1%	2.3%	0%	**29.8%**	-	5.1%	30.1%	2.7%	0%	**37.9%**	-	-
Motorcycles	2	1	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Motorcycles	0.6%	0.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	338	717	437	16	**1508**	-	260	655	299	10	**1224**	-	303	2027	196	0	**2526**	-	437	2538	217	0	**3192**	-	8450
% Lights	98.0%	96.0%	98.4%	94.1%	**97.1%**	-	94.5%	96.2%	98.0%	100%	**96.3%**	-	99.0%	96.3%	98.5%	0%	**96.8%**	-	97.1%	96.5%	93.5%	0%	**96.4%**	-	96.6%
Single-Unit Trucks	3	9	4	1	**17**	-	4	5	3	0	**12**	-	0	26	1	0	**27**	-	6	37	3	0	**46**	-	102
% Single-Unit Trucks	0.9%	1.2%	0.9%	5.9%	**1.1%**	-	1.5%	0.7%	1.0%	0%	**0.9%**	-	0%	1.2%	0.5%	0%	**1.0%**	-	1.3%	1.4%	1.3%	0%	**1.4%**	-	1.2%
Articulated Trucks	0	2	1	0	**3**	-	4	2	1	0	**7**	-	2	17	0	0	**19**	-	2	24	3	0	**29**	-	58
% Articulated Trucks	0%	0.3%	0.2%	0%	**0.2%**	-	1.5%	0.3%	0.3%	0%	**0.6%**	-	0.7%	0.8%	0%	0%	**0.7%**	-	0.4%	0.9%	1.3%	0%	**0.9%**	-	0.7%
Buses	2	18	2	0	**22**	-	7	19	2	0	**28**	-	1	35	2	0	**38**	-	5	31	9	0	**45**	-	133
% Buses	0.6%	2.4%	0.5%	0%	**1.4%**	-	2.5%	2.8%	0.7%	0%	**2.2%**	-	0.3%	1.7%	1.0%	0%	**1.5%**	-	1.1%	1.2%	3.9%	0%	**1.4%**	-	1.5%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	46	-	-	-	-	-	29	-	-	-	-	-	23	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	88.5%	-	-	-	-	-	85.3%	-	-	-	-	-	85.2%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	6	-	-	-	-	-	5	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	11.5%	-	-	-	-	-	14.7%	-	-	-	-	-	14.8%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Jensen Dr - TMC
Wed Sep 1, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at Jensen Dr - TMC

Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

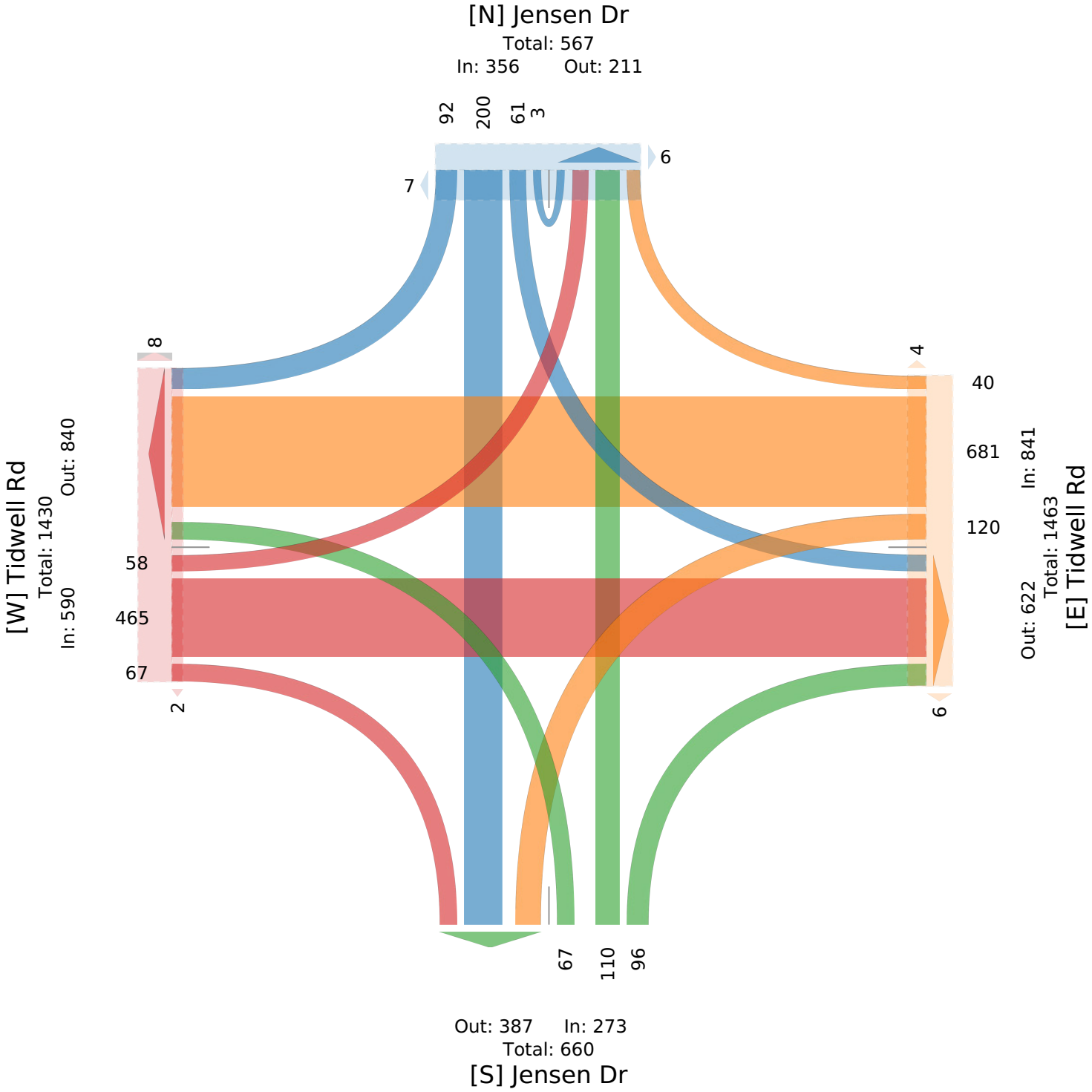
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Jensen Dr Northbound						Jensen Dr Southbound						Tidwell Rd Eastbound						Tidwell Rd Westbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-09-01 7:15AM	12	18	16	0	**46**	0	22	59	22	0	**103**	3	14	99	16	0	**129**	2	20	172	11	0	**203**	2	**481**
7:30AM	15	31	20	0	**66**	0	17	53	27	2	**99**	0	16	136	15	0	**167**	3	33	203	9	0	**245**	3	**577**
7:45AM	23	39	28	0	**90**	0	12	57	25	1	**95**	4	14	130	22	0	**166**	2	37	156	11	0	**204**	3	**555**
8:00AM	17	22	32	0	**71**	0	10	31	18	0	**59**	6	14	100	14	0	**128**	3	30	150	9	0	**189**	2	**447**
Total	67	110	96	0	**273**	0	61	200	92	3	**356**	13	58	465	67	0	**590**	10	120	681	40	0	**841**	10	**2060**
% Approach	24.5%	40.3%	35.2%	0%	**-**	-	17.1%	56.2%	25.8%	0.8%	**-**	-	9.8%	78.8%	11.4%	0%	**-**	-	14.3%	81.0%	4.8%	0%	**-**	-	-
% Total	3.3%	5.3%	4.7%	0%	**13.3%**	-	3.0%	9.7%	4.5%	0.1%	**17.3%**	-	2.8%	22.6%	3.3%	0%	**28.6%**	-	5.8%	33.1%	1.9%	0%	**40.8%**	-	-
PHF	0.728	0.705	0.750	-	**0.758**	-	0.693	0.847	0.852	0.375	**0.864**	-	0.906	0.855	0.761	-	**0.883**	-	0.811	0.839	0.909	-	**0.858**	-	0.893
Motorcycles	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Motorcycles	1.5%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	66	106	94	0	**266**	-	57	191	90	3	**341**	-	58	441	65	0	**564**	-	116	659	37	0	**812**	-	1983
% Lights	98.5%	96.4%	97.9%	0%	**97.4%**	-	93.4%	95.5%	97.8%	100%	**95.8%**	-	100%	94.8%	97.0%	0%	**95.6%**	-	96.7%	96.8%	92.5%	0%	**96.6%**	-	96.3%
Single-Unit Trucks	0	1	1	0	**2**	-	0	2	0	0	**2**	-	0	8	0	0	**8**	-	1	8	0	0	**9**	-	21
% Single-Unit Trucks	0%	0.9%	1.0%	0%	**0.7%**	-	0%	1.0%	0%	0%	**0.6%**	-	0%	1.7%	0%	0%	**1.4%**	-	0.8%	1.2%	0%	0%	**1.1%**	-	1.0%
Articulated Trucks	0	0	1	0	**1**	-	2	1	1	0	**4**	-	0	6	0	0	**6**	-	0	3	0	0	**3**	-	14
% Articulated Trucks	0%	0%	1.0%	0%	**0.4%**	-	3.3%	0.5%	1.1%	0%	**1.1%**	-	0%	1.3%	0%	0%	**1.0%**	-	0%	0.4%	0%	0%	**0.4%**	-	0.7%
Buses	0	3	0	0	**3**	-	2	6	1	0	**9**	-	0	10	2	0	**12**	-	3	11	3	0	**17**	-	41
% Buses	0%	2.7%	0%	0%	**1.1%**	-	3.3%	3.0%	1.1%	0%	**2.5%**	-	0%	2.2%	3.0%	0%	**2.0%**	-	2.5%	1.6%	7.5%	0%	**2.0%**	-	2.0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	13	-	-	-	-	-	8	-	-	-	-	-	9	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	80.0%	-	-	-	-	-	90.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	20.0%	-	-	-	-	-	10.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Jensen Dr - TMC
Wed Sep 1, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US



Tidwell Rd at Jensen Dr - TMC

Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Jensen Dr						Jensen Dr						Tidwell Rd						Tidwell Rd						
Direction	Northbound						Southbound						Eastbound						Westbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-09-01 4:30PM	31	70	37	1	**139**	1	13	42	22	0	**77**	3	21	156	11	0	**188**	3	30	207	16	0	**253**	3	**657**
4:45PM	25	67	35	5	**132**	1	23	47	20	0	**90**	1	23	181	6	0	**210**	3	31	184	24	0	**239**	1	**671**
5:00PM	33	51	45	1	**130**	1	24	49	22	1	**96**	3	32	180	10	0	**222**	2	40	165	19	0	**224**	1	**672**
5:15PM	34	56	19	3	**112**	0	22	46	19	0	**87**	2	22	164	13	0	**199**	1	32	171	19	0	**222**	2	**620**
Total	123	244	136	10	**513**	3	82	184	83	1	**350**	9	98	681	40	0	**819**	9	133	727	78	0	**938**	7	**2620**
% Approach	24.0%	47.6%	26.5%	1.9%	**-**	-	23.4%	52.6%	23.7%	0.3%	**-**	-	12.0%	83.2%	4.9%	0%	**-**	-	14.2%	77.5%	8.3%	0%	**-**	-	-
% Total	4.7%	9.3%	5.2%	0.4%	**19.6%**	-	3.1%	7.0%	3.2%	0%	**13.4%**	-	3.7%	26.0%	1.5%	0%	**31.3%**	-	5.1%	27.7%	3.0%	0%	**35.8%**	-	-
PHF	0.904	0.871	0.756	0.500	**0.923**	-	0.854	0.939	0.943	0.250	**0.911**	-	0.766	0.941	0.769	-	**0.922**	-	0.831	0.878	0.813	-	**0.927**	-	0.975
Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Motorcycles	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Lights	121	233	134	10	**498**	-	80	177	80	1	**338**	-	98	660	39	0	**797**	-	130	698	74	0	**902**	-	2535
% Lights	98.4%	95.5%	98.5%	100%	**97.1%**	-	97.6%	96.2%	96.4%	100%	**96.6%**	-	100%	96.9%	97.5%	0%	**97.3%**	-	97.7%	96.0%	94.9%	0%	**96.2%**	-	96.8%
Single-Unit Trucks	0	3	0	0	**3**	-	1	1	2	0	**4**	-	0	8	1	0	**9**	-	1	12	0	0	**13**	-	29
% Single-Unit Trucks	0%	1.2%	0%	0%	**0.6%**	-	1.2%	0.5%	2.4%	0%	**1.1%**	-	0%	1.2%	2.5%	0%	**1.1%**	-	0.8%	1.7%	0%	0%	**1.4%**	-	1.1%
Articulated Trucks	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	2	0	0	**2**	-	0	11	1	0	**12**	-	16
% Articulated Trucks	0%	0.8%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	1.5%	1.3%	0%	**1.3%**	-	0.6%
Buses	2	6	2	0	**10**	-	1	6	1	0	**8**	-	0	11	0	0	**11**	-	2	6	3	0	**11**	-	40
% Buses	1.6%	2.5%	1.5%	0%	**1.9%**	-	1.2%	3.3%	1.2%	0%	**2.3%**	-	0%	1.6%	0%	0%	**1.3%**	-	1.5%	0.8%	3.8%	0%	**1.2%**	-	1.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	6	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	33.3%	-	-	-	-	-	77.8%	-	-	-	-	-	66.7%	-	-	-	-	-	85.7%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	66.7%	-	-	-	-	-	22.2%	-	-	-	-	-	33.3%	-	-	-	-	-	14.3%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Tidwell Rd at Jensen Dr - TMC
Wed Sep 1, 2021
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Motorcycles, Lights, Single-Unit Trucks, Articulated Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 867380, Location: 29.848132, -95.342889

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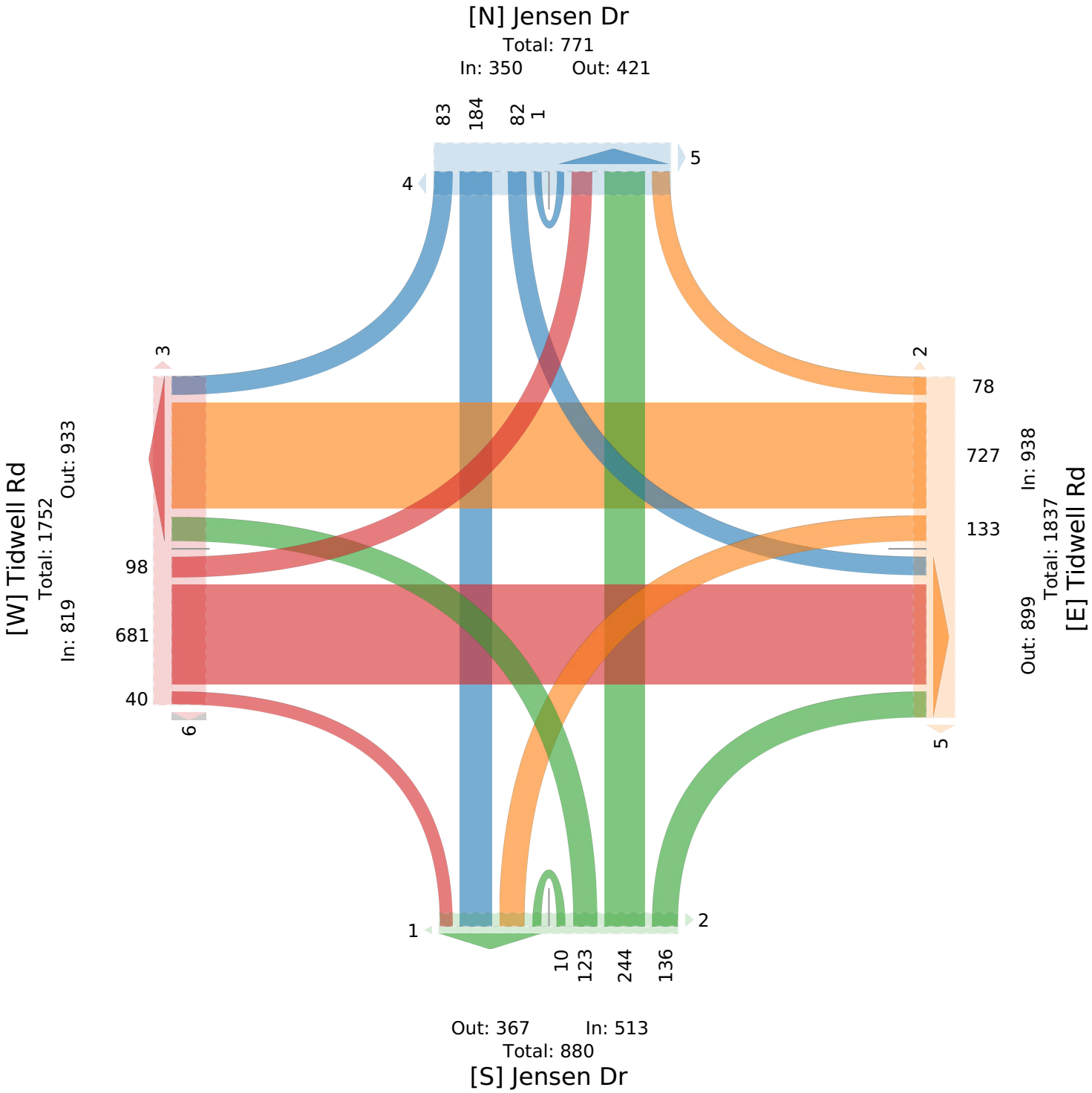


Leg	Ennis St							Ennis St						
Direction	Northbound							Southbound						
Start Time	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	
2022-03-24 06:00:00	2	2	1	0	**5**	0	0	0	1	5	0	**6**	1	
2022-03-24 06:15:00	0	0	3	0	**3**	0	0	0	1	1	0	**2**	0	
2022-03-24 06:30:00	4	0	0	0	**4**	0	0	0	0	2	0	**2**	0	
2022-03-24 06:45:00	2	2	4	0	**8**	1	0	3	0	0	0	**3**	0	
2022-03-24 07:00:00	2	3	4	0	**9**	0	0	0	0	1	0	**1**	0	
2022-03-24 07:15:00	1	8	9	0	**18**	0	0	3	8	2	0	**13**	0	
2022-03-24 07:30:00	8	13	11	0	**32**	0	2	2	11	1	0	**14**	0	
2022-03-24 07:45:00	9	9	9	0	**27**	0	0	2	5	2	0	**9**	0	
2022-03-24 08:00:00	9	8	8	0	**25**	0	0	3	4	1	0	**8**	0	
2022-03-24 08:15:00	3	4	12	0	**19**	0	0	1	0	1	0	**2**	0	
2022-03-24 08:30:00	5	5	11	0	**21**	1	0	1	3	3	0	**7**	0	
2022-03-24 08:45:00	2	4	11	0	**17**	2	0	1	3	3	0	**7**	0	
2022-03-24 09:00:00	0	5	11	0	**16**	0	0	0	2	3	0	**5**	0	
2022-03-24 09:15:00	0	3	10	0	**13**	0	0	3	5	1	0	**9**	0	
2022-03-24 09:30:00	4	7	10	0	**21**	0	0	0	1	4	0	**5**	0	
2022-03-24 09:45:00	5	4	6	0	**15**	1	0	1	3	0	0	**4**	0	
2022-03-24 10:00:00	3	3	7	0	**13**	0	0	0	2	1	0	**3**	0	
2022-03-24 10:15:00	1	0	8	0	**9**	1	0	1	4	4	0	**9**	0	
2022-03-24 10:30:00	3	4	7	0	**14**	0	0	2	3	3	0	**8**	0	
2022-03-24 10:45:00	5	6	9	0	**20**	0	1	1	6	3	0	**10**	0	
2022-03-24 11:00:00	4	9	6	0	**19**	0	0	0	2	4	0	**6**	0	
2022-03-24 11:15:00	2	4	18	0	**24**	0	0	2	2	2	0	**6**	0	
2022-03-24 11:30:00	6	4	10	0	**20**	0	0	2	2	2	0	**6**	0	
2022-03-24 11:45:00	3	5	10	0	**18**	0	0	0	1	2	0	**3**	0	
2022-03-24 12:00:00	8	2	7	0	**17**	0	0	0	1	3	0	**4**	0	
2022-03-24 12:15:00	5	9	8	0	**22**	0	0	0	1	3	0	**4**	0	
2022-03-24 12:30:00	4	2	6	0	**12**	0	1	4	5	1	0	**10**	0	
2022-03-24 12:45:00	4	4	2	0	**10**	0	0	1	2	4	0	**7**	0	
2022-03-24 13:00:00	4	5	13	0	**22**	0	0	3	7	3	0	**13**	0	
2022-03-24 13:15:00	8	4	8	0	**20**	0	0	3	5	3	0	**11**	0	
2022-03-24 13:30:00	7	11	8	0	**26**	0	0	2	1	9	0	**12**	0	
2022-03-24 13:45:00	4	7	3	0	**14**	0	0	0	2	4	0	**6**	0	
2022-03-24 14:00:00	3	4	9	0	**16**	0	0	2	3	6	0	**11**	1	
2022-03-24 14:15:00	5	10	15	0	**30**	0	0	1	3	5	0	**9**	0	
2022-03-24 14:30:00	7	3	11	0	**21**	1	0	1	6	2	0	**9**	0	
2022-03-24 14:45:00	5	11	12	0	**28**	0	0	2	3	8	0	**13**	0	
2022-03-24 15:00:00	8	9	13	0	**30**	0	0	2	5	7	0	**14**	0	
2022-03-24 15:15:00	6	13	11	0	**30**	0	0	1	4	3	0	**8**	0	
2022-03-24 15:30:00	14	17	23	0	**54**	0	0	2	7	4	0	**13**	0	
2022-03-24 15:45:00	10	10	18	0	**38**	0	0	2	8	4	0	**14**	0	
2022-03-24 16:00:00	6	14	21	0	**41**	1	3	8	8	5	0	**21**	0	
2022-03-24 16:15:00	8	11	26	0	**45**	1	2	3	9	5	0	**17**	0	
2022-03-24 16:30:00	10	11	25	0	**46**	0	0	2	4	1	0	**7**	1	
2022-03-24 16:45:00	10	7	33	0	**50**	0	0	3	6	2	0	**11**	0	
2022-03-24 17:00:00	10	12	27	0	**49**	0	0	2	7	2	0	**11**	0	
2022-03-24 17:15:00	14	12	19	0	**45**	0	0	0	7	6	0	**13**	0	
2022-03-24 17:30:00	15	13	24	0	**52**	0	5	3	5	3	0	**11**	0	
2022-03-24 17:45:00	5	12	21	0	**38**	0	0	1	4	3	0	**8**	0	
2022-03-24 18:00:00	10	9	23	0	**42**	0	0	0	6	8	0	**14**	0	
2022-03-24 18:15:00	7	7	12	0	**26**	0	0	6	5	6	0	**17**	0	
2022-03-24 18:30:00	6	7	16	0	**29**	1	0	3	5	0	0	**8**	0	
2022-03-24 18:45:00	1	5	10	0	**16**	1	0	4	5	3	0	**12**	0	
Grand Total	287	353	619	0	**1259**	11	14	89	203	164	0	**456**	3	
% Approach	22.8%	28.0%	49.2%	0.0%				19.5%	44.5%	36.0%	0.0%			
% Total	4.0%	4.9%	8.5%	0.0%	**17.4%**			1.2%	2.8%	2.3%	0.0%	**6.3%**		
Lights	277	344	610	0	**1231**			86	202	160	0	**448**		
% Lights	96.5%	97.5%	98.5%	0.0%	**97.8%**			96.6%	99.5%	97.6%	0.0%	**98.2%**		
Single-Unit Trucks	5	3	2	0	**10**			2	1	2	0	**5**		
% Single-Unit Trucks	1.7%	0.8%	0.3%	0.0%	**0.8%**			2.2%	0.5%	1.2%	0.0%	**1.1%**		
Articulated Trucks	1	0	2	0	**3**			1	0	0	0	**1**		
% Articulated Trucks	0.3%	0.0%	0.3%	0.0%	**0.2%**			1.1%	0.0%	0.0%	0.0%	**0.2%**		
Buses	4	6	5	0	**15**			0	0	2	0	**2**		
% Buses	1.4%	1.7%	0.8%	0.0%	**1.2%**			0.0%	0.0%	1.2%	0.0%	**0.4%**		
Pedestrians						6	12						3	
% Pedestrians						54.5%	85.7%						100.0%	
Bicycles on Crosswalk						5	2						0	
% Bicycles on Crosswalk						45.5%	14.3%						0.0%	

	Elgin St Eastbound							Elgin St Westbound							
Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
0	0	5	0	0	**5**	0	0	2	7	0	0	**9**	0	0	**25**
0	0	8	2	0	**10**	0	0	5	9	0	0	**14**	0	0	**29**
0	0	19	2	0	**21**	0	0	5	14	1	0	**20**	0	0	**47**
0	0	14	1	0	**15**	0	0	8	15	1	0	**24**	0	0	**50**
1	0	19	9	0	**28**	1	2	7	26	0	0	**33**	0	0	**71**
0	0	25	2	0	**27**	0	0	4	33	3	0	**40**	0	0	**98**
1	0	37	6	1	**44**	0	3	11	49	2	0	**62**	0	0	**152**
0	1	41	9	0	**51**	0	0	11	69	0	0	**80**	0	0	**167**
0	1	48	6	0	**55**	0	0	10	63	3	0	**76**	0	0	**164**
0	2	46	2	0	**50**	0	0	7	69	1	0	**77**	0	0	**148**
0	0	52	5	0	**57**	0	0	8	51	2	0	**61**	0	0	**146**
0	0	39	0	0	**39**	0	0	7	43	0	0	**50**	1	0	**113**
0	0	31	3	0	**34**	0	1	7	32	1	0	**40**	0	0	**95**
1	2	37	3	0	**42**	1	2	5	39	2	0	**46**	0	0	**110**
0	1	48	5	0	**54**	1	0	7	27	3	0	**37**	0	0	**117**
0	1	48	7	0	**56**	1	0	6	24	0	0	**30**	0	0	**105**
0	1	36	2	0	**39**	1	0	7	31	0	0	**38**	1	0	**93**
0	1	26	5	0	**32**	0	0	6	28	2	0	**36**	0	0	**86**
0	3	25	9	0	**37**	0	1	8	39	2	0	**49**	0	0	**108**
0	3	38	3	0	**44**	0	0	9	29	6	0	**44**	0	0	**118**
0	2	35	3	0	**40**	0	0	5	35	4	0	**44**	0	0	**109**
0	5	44	4	0	**53**	0	0	7	41	0	0	**48**	0	0	**131**
0	1	32	4	0	**37**	0	0	7	38	2	0	**47**	0	0	**110**
0	2	41	6	0	**49**	0	0	1	49	1	0	**51**	0	0	**121**
0	3	43	7	0	**53**	0	0	12	27	1	0	**40**	0	0	**114**
0	3	45	3	0	**51**	1	0	6	43	3	0	**52**	0	0	**129**
0	6	54	6	0	**66**	0	0	8	35	3	1	**47**	0	0	**135**
0	3	37	1	0	**41**	0	0	9	37	4	0	**50**	0	0	**108**
1	3	47	10	0	**60**	0	0	10	54	1	0	**65**	0	0	**160**
0	4	35	4	0	**43**	0	0	6	48	2	0	**56**	0	0	**130**
0	0	36	4	0	**40**	1	0	5	42	0	0	**47**	0	0	**125**
0	1	38	9	0	**48**	0	0	3	41	1	0	**45**	0	0	**113**
0	3	46	4	0	**53**	0	0	9	32	2	1	**44**	0	0	**124**
0	4	45	2	0	**51**	0	0	10	57	3	1	**71**	0	0	**161**
0	2	37	2	0	**41**	0	2	9	61	4	0	**74**	0	1	**145**
0	4	38	7	0	**49**	11	1	11	52	0	0	**63**	0	0	**153**
1	1	45	4	0	**50**	7	2	8	50	5	0	**63**	0	1	**157**
1	5	36	4	0	**45**	2	1	7	40	1	0	**48**	1	0	**131**
0	1	41	2	0	**44**	0	0	7	59	3	1	**70**	0	0	**181**
1	0	40	7	0	**47**	0	0	12	84	0	0	**96**	0	0	**195**
0	2	77	17	0	**96**	2	0	16	78	7	0	**101**	0	0	**259**
0	3	49	5	0	**57**	2	0	13	84	4	0	**101**	0	0	**220**
0	3	60	4	0	**67**	0	0	11	95	4	0	**110**	0	1	**230**
0	0	51	6	0	**57**	0	0	16	78	1	1	**96**	1	0	**214**
1	0	59	4	0	**63**	0	1	11	98	1	0	**110**	0	0	**233**
0	0	48	4	0	**52**	1	0	16	92	0	0	**108**	0	0	**218**
0	5	55	5	0	**65**	0	0	9	92	2	0	**103**	0	0	**231**
1	0	45	1	0	**46**	2	0	14	98	4	0	**116**	0	1	**208**
0	0	38	3	0	**41**	1	0	6	71	6	0	**83**	1	0	**180**
0	1	41	3	0	**45**	0	1	10	76	7	0	**93**	0	0	**181**
0	2	40	3	0	**45**	0	0	8	59	0	2	**69**	2	1	**151**
0	1	46	4	0	**51**	0	0	12	52	2	1	**67**	0	1	**146**
9	86	2066	233	1	**2386**	35	17	434	2595	107	8	**3144**	7	6	**7245**
	3.6%	86.6%	9.8%	0.0%				13.8%	82.5%	3.4%	0.3%				
	1.2%	28.5%	3.2%	0.0%	**32.9%**			6.0%	35.8%	1.5%	0.1%	**43.4%**			
	83	2031	222	1	**2337**			422	2546	105	8	**3081**			**7097**
	96.5%	98.3%	95.3%	100.0%	**97.9%**			97.2%	98.1%	98.1%	100.0%	**98.0%**			**98.0%**
	3	25	3	0	**31**			4	29	1	0	**34**			**80**
	3.5%	1.2%	1.3%	0.0%	**1.3%**			0.9%	1.1%	0.9%	0.0%	**1.1%**			**1.1%**
	0	0	0	0	**0**			3	1	1	0	**5**			**9**
	0.0%	0.0%	0.0%	0.0%	**0.0%**			0.7%	0.0%	0.9%	0.0%	**0.2%**			**0.1%**
	0	10	8	0	**18**			5	19	0	0	**24**			**59**
	0.0%	0.5%	3.4%	0.0%	**0.8%**			1.2%	0.7%	0.0%	0.0%	**0.8%**			**0.8%**
8						32	14						6	6	
88.9%						91.4%	82.4%						85.7%	100.0%	
1						3	3						1	0	
11.1%						8.6%	17.6%						14.3%	0.0%	

Leg	Ennis St							Ennis St						
Direction	Northbound							Southbound						
Start Time	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	
2022-03-24 06:00:00	1	3	0	0	**4**	0	0	0	5	0	0	**5**	0	
2022-03-24 06:15:00	0	3	0	0	**3**	0	0	0	4	1	0	**5**	0	
2022-03-24 06:30:00	0	7	0	0	**7**	0	0	0	11	0	0	**11**	0	
2022-03-24 06:45:00	0	13	0	0	**13**	0	0	0	9	3	0	**12**	0	
2022-03-24 07:00:00	3	20	0	0	**23**	0	0	0	19	3	0	**22**	0	
2022-03-24 07:15:00	5	28	0	0	**33**	0	0	0	21	3	0	**24**	0	
2022-03-24 07:30:00	3	52	1	0	**56**	0	0	0	42	1	0	**43**	1	
2022-03-24 07:45:00	1	53	0	0	**54**	0	0	0	25	4	0	**29**	1	
2022-03-24 08:00:00	5	47	1	0	**53**	0	1	0	30	1	0	**31**	1	
2022-03-24 08:15:00	7	42	0	0	**49**	0	0	0	21	1	0	**22**	1	
2022-03-24 08:30:00	5	43	0	0	**48**	0	0	0	14	3	0	**17**	0	
2022-03-24 08:45:00	6	44	0	0	**50**	0	0	0	23	4	0	**27**	0	
2022-03-24 09:00:00	4	31	0	0	**35**	0	0	0	28	4	0	**32**	0	
2022-03-24 09:15:00	2	37	0	0	**39**	0	0	0	29	1	0	**30**	0	
2022-03-24 09:30:00	1	37	0	0	**38**	0	0	1	21	3	0	**25**	1	
2022-03-24 09:45:00	6	35	0	0	**41**	0	0	0	28	1	0	**29**	0	
2022-03-24 10:00:00	3	27	0	0	**30**	0	0	0	27	3	0	**30**	0	
2022-03-24 10:15:00	4	34	0	0	**38**	0	0	0	25	2	0	**27**	1	
2022-03-24 10:30:00	3	42	1	0	**46**	0	0	0	30	5	0	**35**	0	
2022-03-24 10:45:00	6	55	0	0	**61**	1	3	0	43	7	0	**50**	4	
2022-03-24 11:00:00	4	45	0	1	**50**	0	2	0	38	4	0	**42**	4	
2022-03-24 11:15:00	2	29	0	0	**31**	0	0	0	39	2	0	**41**	0	
2022-03-24 11:30:00	5	24	0	0	**29**	0	0	0	29	1	0	**30**	0	
2022-03-24 11:45:00	3	38	0	0	**41**	0	0	0	20	6	0	**26**	0	
2022-03-24 12:00:00	5	30	1	1	**37**	1	0	0	34	12	0	**46**	0	
2022-03-24 12:15:00	7	43	0	0	**50**	1	1	0	41	6	0	**47**	1	
2022-03-24 12:30:00	5	49	0	0	**54**	2	0	1	41	8	0	**50**	0	
2022-03-24 12:45:00	2	36	1	0	**39**	2	2	0	37	3	0	**40**	3	
2022-03-24 13:00:00	4	36	1	0	**41**	0	0	0	36	4	0	**40**	1	
2022-03-24 13:15:00	4	53	0	0	**57**	0	1	0	36	3	0	**39**	1	
2022-03-24 13:30:00	2	38	0	0	**40**	0	0	1	29	3	0	**33**	2	
2022-03-24 13:45:00	4	29	0	0	**33**	0	0	0	41	2	0	**43**	0	
2022-03-24 14:00:00	3	29	0	0	**32**	0	0	0	40	3	0	**43**	4	
2022-03-24 14:15:00	2	28	0	1	**31**	0	1	0	39	10	0	**49**	2	
2022-03-24 14:30:00	4	37	0	0	**41**	0	4	0	37	8	0	**45**	0	
2022-03-24 14:45:00	2	33	1	0	**36**	0	0	1	40	4	0	**45**	1	
2022-03-24 15:00:00	7	42	0	0	**49**	0	1	0	50	6	0	**56**	0	
2022-03-24 15:15:00	6	40	0	1	**47**	1	0	0	42	2	0	**44**	0	
2022-03-24 15:30:00	7	54	0	0	**61**	1	0	0	42	7	0	**49**	0	
2022-03-24 15:45:00	9	71	1	0	**81**	0	0	0	44	3	0	**47**	2	
2022-03-24 16:00:00	6	57	0	0	**63**	0	0	0	55	7	1	**63**	1	
2022-03-24 16:15:00	7	68	0	0	**75**	0	0	0	50	7	0	**57**	0	
2022-03-24 16:30:00	5	57	0	0	**62**	0	1	0	44	6	0	**50**	0	
2022-03-24 16:45:00	8	70	0	0	**78**	1	0	0	45	7	0	**52**	0	
2022-03-24 17:00:00	7	63	0	0	**70**	3	0	1	51	6	0	**58**	1	
2022-03-24 17:15:00	4	71	0	0	**75**	1	1	0	48	9	0	**57**	0	
2022-03-24 17:30:00	1	69	0	0	**70**	2	1	0	50	5	0	**55**	0	
2022-03-24 17:45:00	10	50	0	0	**60**	1	0	0	39	11	0	**50**	0	
2022-03-24 18:00:00	9	34	0	0	**43**	0	0	1	43	6	0	**50**	0	
2022-03-24 18:15:00	3	33	0	0	**36**	0	0	0	31	8	0	**39**	0	
2022-03-24 18:30:00	4	33	0	0	**37**	0	0	0	33	6	0	**39**	0	
2022-03-24 18:45:00	1	39	0	0	**40**	0	1	0	24	6	0	**30**	0	
Grand Total	217	2081	8	4	**2310**	17	20	6	1723	231	1	**1961**	33	
% Approach	9.4%	90.1%	0.3%	0.2%				0.3%	87.9%	11.8%	0.1%			
% Total	4.3%	41.1%	0.2%	0.1%	**45.6%**			0.1%	34.0%	4.6%	0.0%	**38.7%**		
Lights	206	1976	8	4	**2194**			6	1631	227	1	**1865**		
% Lights	94.9%	95.0%	100.0%	100.0%	**95.0%**			100.0%	94.7%	98.3%	100.0%	**95.1%**		
Single-Unit Trucks	4	19	0	0	**23**			0	11	3	0	**14**		
% Single-Unit Trucks	1.8%	0.9%	0.0%	0.0%	**1.0%**			0.0%	0.6%	1.3%	0.0%	**0.7%**		
Articulated Trucks	5	2	0	0	**7**			0	3	0	0	**3**		
% Articulated Trucks	2.3%	0.1%	0.0%	0.0%	**0.3%**			0.0%	0.2%	0.0%	0.0%	**0.2%**		
Buses	2	84	0	0	**86**			0	78	1	0	**79**		
% Buses	0.9%	4.0%	0.0%	0.0%	**3.7%**			0.0%	4.5%	0.4%	0.0%	**4.0%**		
Pedestrians						17	20						33	
% Pedestrians						100.0%	100.0%						100.0%	
Bicycles on Crosswalk						0	0						0	
% Bicycles on Crosswalk						0.0%	0.0%						0.0%	

	Wheeler St Eastbound							Wheeler St Westbound							
Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	**9**
0	1	0	0	0	**1**	0	0	0	0	0	0	**0**	0	0	**9**
0	4	0	1	0	**5**	0	0	0	0	0	0	**0**	0	0	**23**
0	4	0	3	0	**7**	0	0	0	0	0	0	**0**	0	1	**32**
0	5	0	8	0	**13**	0	0	0	0	0	0	**0**	0	0	**58**
0	8	0	5	0	**13**	0	0	0	0	0	0	**0**	0	0	**70**
0	8	0	9	0	**17**	0	0	1	0	0	0	**1**	1	2	**117**
0	9	0	4	0	**13**	0	0	0	0	0	0	**0**	1	4	**96**
0	11	0	4	0	**15**	0	0	0	0	1	0	**1**	0	2	**100**
0	9	0	4	0	**13**	0	1	0	0	0	0	**0**	1	1	**84**
0	6	0	7	0	**13**	0	0	0	1	0	0	**1**	0	0	**79**
0	7	0	7	0	**14**	0	0	0	0	0	0	**0**	0	1	**91**
0	7	0	2	0	**9**	0	0	0	0	0	0	**0**	1	2	**76**
2	12	0	2	0	**14**	0	0	0	0	0	0	**0**	1	2	**83**
0	13	0	4	0	**17**	0	0	0	1	0	0	**1**	0	3	**81**
0	6	1	3	0	**10**	1	0	0	1	0	0	**1**	0	4	**81**
1	7	0	4	0	**11**	0	0	0	0	0	0	**0**	0	2	**71**
0	5	0	4	0	**9**	0	0	0	1	0	0	**1**	1	1	**75**
1	10	0	2	0	**12**	0	0	1	0	0	0	**1**	0	2	**94**
1	11	0	5	0	**16**	0	0	1	1	0	0	**2**	2	4	**129**
1	7	0	8	0	**15**	0	1	0	0	1	0	**1**	2	7	**108**
1	7	0	2	0	**9**	0	0	0	0	0	0	**0**	0	4	**81**
1	3	0	6	0	**9**	0	0	0	0	0	0	**0**	2	0	**68**
0	9	0	3	0	**12**	0	1	0	0	0	0	**0**	0	1	**79**
3	13	0	8	0	**21**	0	0	1	0	0	0	**1**	1	2	**105**
2	5	0	13	0	**18**	0	0	1	0	0	0	**1**	2	0	**116**
1	11	2	6	0	**19**	0	0	1	5	0	0	**6**	3	0	**129**
1	7	0	8	0	**15**	0	0	1	0	0	0	**1**	2	3	**95**
2	9	0	8	0	**17**	0	0	1	1	2	0	**4**	2	0	**102**
1	11	0	7	0	**18**	0	1	0	0	0	0	**0**	0	4	**114**
0	13	0	6	0	**19**	0	0	1	0	0	0	**1**	1	2	**93**
0	9	0	4	0	**13**	2	0	0	0	0	0	**0**	1	0	**89**
0	14	0	9	0	**23**	0	0	0	1	1	0	**2**	2	0	**100**
3	8	1	9	0	**18**	0	0	1	1	1	0	**3**	1	2	**101**
2	8	0	7	0	**15**	0	0	0	0	0	0	**0**	4	6	**101**
1	5	0	8	0	**13**	0	0	2	0	0	0	**2**	1	0	**96**
1	10	0	6	0	**16**	0	0	0	1	0	0	**1**	1	0	**122**
0	1	0	6	0	**7**	0	1	0	1	0	0	**1**	0	1	**99**
3	8	0	9	0	**17**	0	0	1	0	0	0	**1**	1	0	**128**
1	7	0	9	0	**16**	0	0	2	0	0	0	**2**	3	1	**146**
1	11	0	10	0	**21**	0	0	3	0	0	0	**3**	0	1	**150**
0	9	0	9	0	**18**	0	1	0	0	0	0	**0**	2	1	**150**
0	9	0	9	0	**18**	0	2	0	0	0	0	**0**	0	1	**130**
0	11	0	17	0	**28**	0	0	0	0	0	0	**0**	3	3	**158**
0	10	1	5	0	**16**	0	0	0	1	1	0	**2**	3	2	**146**
3	10	0	12	0	**22**	0	0	0	0	0	0	**0**	2	4	**154**
0	9	0	8	0	**17**	0	0	0	1	1	0	**2**	1	0	**144**
1	10	0	12	0	**22**	0	0	0	0	1	0	**1**	1	1	**133**
6	13	0	10	0	**23**	0	0	0	0	1	0	**1**	2	2	**117**
2	5	0	9	0	**14**	0	2	0	0	1	0	**1**	0	1	**90**
1	7	0	4	0	**11**	0	0	0	0	0	0	**0**	0	0	**87**
0	3	0	4	0	**7**	0	0	0	0	0	0	**0**	1	0	**77**
43	415	5	329	0	**749**	3	10	18	17	11	0	**46**	52	80	**5066**
	55.4%	0.7%	43.9%	0.0%				39.1%	37.0%	23.9%	0.0%				
	8.2%	0.1%	6.5%	0.0%	**14.8%**			0.4%	0.3%	0.2%	0.0%	**0.9%**			
	411	5	326	0	**742**			18	17	11	0	**46**			**4847**
	99.0%	100.0%	99.1%	0.0%	**99.1%**			100.0%	100.0%	100.0%	0.0%	**100.0%**			**95.7%**
	3	0	1	0	**4**			0	0	0	0	**0**			**41**
	0.7%	0.0%	0.3%	0.0%	**0.5%**			0.0%	0.0%	0.0%	0.0%	**0.0%**			**0.8%**
	0	0	0	0	**0**			0	0	0	0	**0**			**10**
	0.0%	0.0%	0.0%	0.0%	**0.0%**			0.0%	0.0%	0.0%	0.0%	**0.0%**			**0.2%**
	1	0	2	0	**3**			0	0	0	0	**0**			**168**
	0.2%	0.0%	0.6%	0.0%	**0.4%**			0.0%	0.0%	0.0%	0.0%	**0.0%**			**3.3%**
43						3	10						51	74	
100.0%						100.0%	100.0%						98.1%	92.5%	
0						0	0						1	6	
0.0%						0.0%	0.0%						1.9%	7.5%	

Leg	Ennis St							Ennis St				
Direction	Northbound							Southbound				
Start Time	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**
2022-03-24 06:00:00	0	2	1	0	**3**	0	0	2	3	0	0	**5**
2022-03-24 06:15:00	0	4	1	0	**5**	0	0	2	3	1	0	**6**
2022-03-24 06:30:00	0	3	6	0	**9**	0	0	0	10	0	0	**10**
2022-03-24 06:45:00	2	7	6	0	**15**	0	0	2	10	1	0	**13**
2022-03-24 07:00:00	1	8	11	0	**20**	0	1	1	12	0	0	**13**
2022-03-24 07:15:00	2	18	15	0	**35**	0	0	6	15	0	0	**21**
2022-03-24 07:30:00	1	35	22	0	**58**	0	0	7	34	0	0	**41**
2022-03-24 07:45:00	0	33	28	0	**61**	1	1	8	24	2	0	**34**
2022-03-24 08:00:00	2	21	38	0	**61**	0	1	6	21	1	0	**28**
2022-03-24 08:15:00	3	27	21	0	**51**	0	0	1	19	1	0	**21**
2022-03-24 08:30:00	2	23	27	1	**53**	0	0	10	7	0	0	**17**
2022-03-24 08:45:00	4	14	28	0	**46**	0	1	17	18	0	0	**35**
2022-03-24 09:00:00	2	13	27	0	**42**	0	0	19	19	0	0	**38**
2022-03-24 09:15:00	1	12	26	0	**39**	0	0	7	17	0	0	**24**
2022-03-24 09:30:00	0	17	35	0	**52**	1	0	14	15	0	0	**29**
2022-03-24 09:45:00	1	22	24	0	**47**	2	0	10	17	0	0	**27**
2022-03-24 10:00:00	0	14	25	0	**39**	0	0	4	19	1	0	**24**
2022-03-24 10:15:00	0	13	22	0	**35**	1	0	12	17	0	0	**29**
2022-03-24 10:30:00	4	20	25	0	**49**	0	1	9	24	1	0	**34**
2022-03-24 10:45:00	1	23	52	0	**76**	1	0	9	32	1	0	**42**
2022-03-24 11:00:00	0	21	33	1	**55**	0	0	10	23	2	0	**35**
2022-03-24 11:15:00	0	7	26	0	**33**	1	1	4	20	1	0	**25**
2022-03-24 11:30:00	0	12	17	1	**30**	1	0	8	15	1	0	**24**
2022-03-24 11:45:00	0	25	19	0	**44**	0	0	7	19	1	0	**27**
2022-03-24 12:00:00	2	19	28	0	**49**	2	0	10	19	3	0	**32**
2022-03-24 12:15:00	2	19	30	0	**51**	0	0	7	22	3	0	**32**
2022-03-24 12:30:00	1	14	44	0	**59**	0	1	13	19	1	0	**33**
2022-03-24 12:45:00	1	13	25	0	**39**	0	1	4	22	0	0	**26**
2022-03-24 13:00:00	0	23	26	0	**49**	0	0	5	26	1	0	**32**
2022-03-24 13:15:00	3	20	40	0	**63**	0	0	4	22	2	0	**28**
2022-03-24 13:30:00	1	17	30	0	**48**	0	1	7	24	1	0	**32**
2022-03-24 13:45:00	1	14	19	0	**34**	1	0	12	22	1	0	**35**
2022-03-24 14:00:00	3	17	29	0	**49**	3	1	10	30	2	0	**42**
2022-03-24 14:15:00	1	15	23	0	**39**	1	1	10	26	0	0	**36**
2022-03-24 14:30:00	0	29	17	0	**46**	0	1	8	19	1	0	**28**
2022-03-24 14:45:00	3	23	15	0	**41**	1	0	5	21	1	1	**28**
2022-03-24 15:00:00	1	29	18	0	**48**	1	0	5	28	3	0	**36**
2022-03-24 15:15:00	1	32	19	0	**52**	0	1	5	28	0	0	**33**
2022-03-24 15:30:00	2	41	18	1	**62**	0	0	5	24	4	1	**34**
2022-03-24 15:45:00	2	53	23	0	**78**	0	0	4	25	3	0	**32**
2022-03-24 16:00:00	2	49	20	0	**71**	0	0	11	34	5	0	**50**
2022-03-24 16:15:00	3	44	36	0	**83**	1	0	4	27	2	0	**33**
2022-03-24 16:30:00	1	43	20	0	**64**	0	0	1	23	3	0	**27**
2022-03-24 16:45:00	6	49	28	0	**83**	0	1	6	28	1	0	**35**
2022-03-24 17:00:00	3	53	17	0	**73**	0	1	3	32	0	0	**35**
2022-03-24 17:15:00	3	60	23	0	**86**	0	0	9	31	4	0	**44**
2022-03-24 17:30:00	0	51	25	1	**77**	0	0	5	32	1	0	**38**
2022-03-24 17:45:00	3	37	20	0	**60**	0	0	8	24	1	0	**33**
2022-03-24 18:00:00	0	38	14	0	**52**	0	0	2	28	0	0	**30**
2022-03-24 18:15:00	2	23	12	0	**37**	0	0	4	22	0	0	**26**
2022-03-24 18:30:00	1	23	13	0	**37**	0	0	5	27	1	0	**33**
2022-03-24 18:45:00	1	24	19	0	**44**	0	0	0	21	0	0	**21**
Grand Total	75	1266	1186	5	**2532**	18	15	347	1119	58	2	**1526**
% Approach	3.0%	50.0%	46.8%	0.2%				22.7%	73.3%	3.8%	0.1%	
% Total	1.2%	19.9%	18.6%	0.1%	**39.7%**			5.4%	17.6%	0.9%	0.0%	**23.9%**
Lights	74	1236	1101	5	**2416**			340	1093	56	1	**1490**
% Lights	98.7%	97.6%	92.8%	100.0%	**95.4%**			98.0%	97.7%	96.6%	50.0%	**97.6%**
Single-Unit Trucks	1	9	13	0	**23**			5	7	2	1	**15**
% Single-Unit Trucks	1.3%	0.7%	1.1%	0.0%	**0.9%**			1.4%	0.6%	3.4%	50.0%	**1.0%**
Articulated Trucks	0	1	1	0	**2**			0	3	0	0	**3**
% Articulated Trucks	0.0%	0.1%	0.1%	0.0%	**0.1%**			0.0%	0.3%	0.0%	0.0%	**0.2%**
Buses	0	20	71	0	**91**			2	16	0	0	**18**
% Buses	0.0%	1.6%	6.0%	0.0%	**3.6%**			0.6%	1.4%	0.0%	0.0%	**1.2%**
Pedestrians						14	8					
% Pedestrians						77.8%	53.3%					
Bicycles on Crosswalk						4	7					
% Bicycles on Crosswalk						22.2%	46.7%					

		Cleburne St Eastbound							Cleburne St Westbound							
Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
0	0	0	3	0	0	**3**	0	0	2	4	0	0	**6**	0	0	**17**
0	0	0	0	0	0	**0**	0	0	5	4	0	0	**9**	0	0	**20**
0	0	0	3	0	0	**3**	0	0	3	1	1	0	**5**	0	0	**27**
0	0	0	4	0	0	**4**	0	0	5	2	0	0	**7**	0	1	**39**
0	0	0	6	1	0	**7**	0	1	7	4	1	0	**12**	0	1	**52**
0	0	0	6	0	0	**6**	0	0	8	6	4	0	**18**	0	0	**80**
0	0	1	4	2	0	**7**	0	1	10	6	2	0	**18**	1	0	**124**
1	0	0	13	2	0	**15**	0	0	7	8	7	0	**22**	0	0	**132**
0	0	1	16	1	0	**18**	0	0	10	9	3	0	**22**	2	1	**129**
0	0	1	12	1	0	**14**	0	0	4	6	1	0	**11**	3	0	**97**
0	0	1	12	1	0	**14**	0	0	9	12	1	0	**22**	0	0	**106**
1	0	1	7	1	0	**9**	0	0	7	5	3	0	**15**	0	0	**105**
0	0	2	15	5	0	**22**	0	0	7	13	6	1	**27**	3	1	**129**
0	0	0	14	1	0	**15**	0	0	15	4	6	0	**25**	1	0	**103**
0	1	1	7	1	0	**9**	0	0	9	7	3	0	**19**	8	3	**109**
0	0	2	11	3	0	**16**	0	0	12	7	4	0	**23**	4	1	**113**
0	0	0	11	1	0	**12**	1	0	10	15	4	0	**29**	3	1	**104**
0	0	2	13	0	0	**15**	0	1	12	6	9	0	**27**	3	1	**106**
0	0	0	10	1	0	**11**	0	0	13	10	4	0	**27**	5	3	**121**
0	0	0	9	2	0	**11**	0	0	20	7	9	0	**36**	5	1	**165**
0	0	2	12	2	0	**16**	0	0	22	18	3	0	**43**	3	3	**149**
0	0	1	4	2	0	**7**	0	0	14	9	4	0	**27**	2	1	**92**
0	0	1	9	1	0	**11**	0	0	14	7	7	0	**28**	0	0	**93**
0	0	0	3	0	0	**3**	0	1	9	8	7	0	**24**	0	3	**98**
0	0	1	10	2	0	**13**	0	0	20	10	5	0	**35**	2	3	**129**
0	0	1	13	2	0	**16**	0	0	25	19	9	0	**53**	1	0	**152**
0	0	2	23	2	0	**27**	0	0	31	10	9	0	**50**	1	2	**169**
0	0	0	14	3	0	**17**	0	0	19	14	4	0	**37**	0	2	**119**
0	0	1	11	2	0	**14**	0	0	12	8	10	0	**30**	1	0	**125**
0	0	0	6	1	0	**7**	0	1	20	12	5	0	**37**	0	1	**135**
0	0	2	8	0	0	**10**	0	0	11	7	3	0	**21**	0	3	**111**
0	0	1	7	3	0	**11**	1	0	12	13	8	0	**33**	4	2	**113**
0	0	0	4	0	0	**4**	0	0	19	18	9	0	**46**	4	0	**141**
0	0	1	3	3	0	**7**	0	0	22	14	7	0	**43**	5	3	**125**
0	0	0	15	3	0	**18**	0	0	26	18	9	0	**53**	0	0	**145**
0	0	0	9	3	0	**12**	1	0	19	13	6	0	**38**	0	4	**119**
0	0	1	13	0	0	**14**	0	0	28	18	6	0	**52**	2	0	**150**
0	0	1	5	0	0	**6**	0	0	19	20	9	0	**48**	0	0	**139**
0	0	0	7	2	0	**9**	0	0	22	21	9	0	**52**	0	0	**157**
0	1	0	9	1	0	**10**	0	1	23	16	14	0	**53**	0	6	**173**
0	0	4	12	2	0	**18**	0	0	19	19	10	0	**48**	3	0	**187**
0	1	2	10	2	0	**14**	0	0	22	23	8	0	**53**	1	0	**183**
0	0	0	10	2	0	**12**	0	2	26	24	19	0	**69**	2	1	**172**
0	0	1	7	2	0	**10**	0	0	17	13	18	1	**49**	2	2	**177**
0	0	1	6	1	0	**8**	0	1	32	25	13	0	**70**	0	5	**186**
0	0	1	14	0	0	**15**	0	0	23	20	13	0	**56**	1	4	**201**
0	0	0	6	1	0	**7**	1	0	19	18	9	0	**46**	1	0	**168**
0	0	0	6	3	0	**9**	0	0	20	15	12	0	**47**	0	0	**149**
0	0	4	6	1	0	**11**	0	0	17	14	4	0	**35**	0	9	**128**
0	0	1	4	1	0	**6**	0	0	22	17	8	0	**47**	0	1	**116**
0	0	0	8	1	0	**9**	0	0	16	5	5	0	**26**	0	0	**105**
0	0	0	2	1	0	**3**	0	0	8	13	3	0	**24**	0	0	**92**
2	3	41	452	72	0	**565**	4	9	803	615	333	2	**1753**	73	69	**6376**
		7.3%	80.0%	12.7%	0.0%				45.8%	35.1%	19.0%	0.1%				
		0.6%	7.1%	1.1%	0.0%	**8.9%**			12.6%	9.6%	5.2%	0.0%	**27.5%**			
		39	440	71	0	**550**			732	605	327	2	**1666**			**6122**
		95.1%	97.3%	98.6%	0.0%	**97.3%**			91.2%	98.4%	98.2%	100.0%	**95.0%**			**96.0%**
		2	10	0	0	**12**			6	6	4	0	**16**			**66**
		4.9%	2.2%	0.0%	0.0%	**2.1%**			0.7%	1.0%	1.2%	0.0%	**0.9%**			**1.0%**
		0	0	0	0	**0**			1	0	0	0	**1**			**6**
		0.0%	0.0%	0.0%	0.0%	**0.0%**			0.1%	0.0%	0.0%	0.0%	**0.1%**			**0.1%**
		0	2	1	0	**3**			64	4	2	0	**70**			**182**
		0.0%	0.4%	1.4%	0.0%	**0.5%**			8.0%	0.7%	0.6%	0.0%	**4.0%**			**2.9%**
2	2						4	9						73	66	
100.0%	66.7%						100.0%	100.0%						100.0%	95.7%	
0	1						0	0						0	3	
0.0%	33.3%						0.0%	0.0%						0.0%	4.3%	

Leg	Ennis St							Ennis St						
Direction	Northbound							Southbound						
Start Time	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	
2022-03-24 06:00:00	0	2	0	0	**2**	1	0	0	2	0	0	**2**	0	
2022-03-24 06:15:00	0	4	0	0	**4**	0	0	0	5	2	0	**7**	0	
2022-03-24 06:30:00	1	0	0	0	**1**	0	0	0	7	0	0	**7**	0	
2022-03-24 06:45:00	0	5	0	0	**5**	0	0	0	6	1	0	**7**	0	
2022-03-24 07:00:00	0	5	0	0	**5**	3	2	2	11	0	0	**13**	0	
2022-03-24 07:15:00	2	15	2	0	**19**	0	0	0	14	0	0	**14**	0	
2022-03-24 07:30:00	5	29	4	0	**38**	6	3	0	28	3	0	**31**	0	
2022-03-24 07:45:00	12	13	4	0	**29**	3	1	2	21	3	0	**26**	0	
2022-03-24 08:00:00	5	20	2	0	**27**	0	0	1	17	3	0	**21**	0	
2022-03-24 08:15:00	6	16	2	0	**24**	0	3	1	8	3	0	**12**	0	
2022-03-24 08:30:00	4	18	0	0	**22**	1	0	1	12	3	0	**16**	0	
2022-03-24 08:45:00	3	13	2	0	**18**	0	0	1	12	0	0	**13**	0	
2022-03-24 09:00:00	1	13	2	0	**16**	0	0	1	14	1	0	**16**	0	
2022-03-24 09:15:00	1	13	2	0	**16**	3	0	2	9	1	0	**12**	0	
2022-03-24 09:30:00	2	17	0	0	**19**	0	1	2	11	1	0	**14**	0	
2022-03-24 09:45:00	0	13	2	0	**15**	0	0	1	13	2	0	**16**	0	
2022-03-24 10:00:00	0	9	4	0	**13**	1	0	0	11	1	0	**12**	1	
2022-03-24 10:15:00	2	8	2	0	**12**	0	0	1	9	2	0	**12**	0	
2022-03-24 10:30:00	2	16	2	0	**20**	0	0	1	25	3	0	**29**	0	
2022-03-24 10:45:00	1	17	1	0	**19**	0	0	2	15	1	0	**18**	0	
2022-03-24 11:00:00	1	13	2	0	**16**	1	0	0	14	0	0	**14**	0	
2022-03-24 11:15:00	0	17	1	0	**18**	0	0	2	12	1	0	**15**	0	
2022-03-24 11:30:00	0	18	0	0	**18**	0	0	1	12	0	0	**13**	0	
2022-03-24 11:45:00	0	17	1	0	**18**	0	0	1	9	0	0	**10**	0	
2022-03-24 12:00:00	3	14	2	0	**19**	1	0	0	15	2	0	**17**	0	
2022-03-24 12:15:00	2	24	4	0	**30**	0	0	0	12	2	0	**14**	0	
2022-03-24 12:30:00	1	16	3	0	**20**	0	0	2	14	2	0	**18**	1	
2022-03-24 12:45:00	2	8	3	0	**13**	0	0	1	13	0	0	**14**	0	
2022-03-24 13:00:00	0	21	3	0	**24**	0	0	0	25	2	0	**27**	0	
2022-03-24 13:15:00	1	13	2	0	**16**	0	0	0	15	0	0	**15**	0	
2022-03-24 13:30:00	1	18	2	0	**21**	0	0	3	12	0	0	**15**	0	
2022-03-24 13:45:00	1	14	5	0	**20**	0	0	3	13	0	0	**16**	0	
2022-03-24 14:00:00	2	15	2	0	**19**	0	0	1	14	2	0	**17**	0	
2022-03-24 14:15:00	1	24	4	0	**29**	1	0	0	18	2	0	**20**	0	
2022-03-24 14:30:00	6	23	2	0	**31**	0	1	2	16	2	0	**20**	0	
2022-03-24 14:45:00	7	23	11	0	**41**	1	8	0	21	2	0	**23**	0	
2022-03-24 15:00:00	4	22	9	0	**35**	0	1	1	15	1	0	**17**	0	
2022-03-24 15:15:00	3	23	6	0	**32**	0	0	1	18	2	0	**21**	0	
2022-03-24 15:30:00	1	47	1	0	**49**	0	0	1	13	2	0	**16**	1	
2022-03-24 15:45:00	4	34	2	0	**40**	0	0	0	27	3	0	**30**	0	
2022-03-24 16:00:00	3	30	3	0	**36**	0	0	2	35	1	0	**38**	1	
2022-03-24 16:15:00	3	39	4	0	**46**	0	2	1	27	3	0	**31**	0	
2022-03-24 16:30:00	2	38	3	0	**43**	2	1	2	16	2	0	**20**	0	
2022-03-24 16:45:00	4	43	3	0	**50**	0	0	1	22	2	0	**25**	0	
2022-03-24 17:00:00	2	43	7	0	**52**	1	0	2	17	0	0	**19**	0	
2022-03-24 17:15:00	1	43	2	0	**46**	0	0	0	25	2	0	**27**	0	
2022-03-24 17:30:00	2	47	2	0	**51**	4	3	1	9	1	0	**11**	0	
2022-03-24 17:45:00	2	34	0	0	**36**	1	0	0	12	0	0	**12**	0	
2022-03-24 18:00:00	1	36	6	0	**43**	2	0	0	13	0	0	**13**	0	
2022-03-24 18:15:00	1	23	1	0	**25**	0	0	1	14	1	0	**16**	1	
2022-03-24 18:30:00	1	25	1	0	**27**	0	0	0	17	0	0	**17**	0	
2022-03-24 18:45:00	0	14	2	0	**16**	1	0	0	17	3	0	**20**	0	
Grand Total	109	1065	130	0	**1304**	33	26	47	782	70	0	**899**	5	
% Approach	8.4%	81.7%	10.0%	0.0%				5.2%	87.0%	7.8%	0.0%			
% Total	3.3%	32.2%	3.9%	0.0%	**39.5%**			1.4%	23.7%	2.1%	0.0%	**27.2%**		
Lights	104	1047	128	0	**1279**			45	764	67	0	**876**		
% Lights	95.4%	98.3%	98.5%	0.0%	**98.1%**			95.7%	97.7%	95.7%	0.0%	**97.4%**		
Single-Unit Trucks	2	6	1	0	**9**			0	5	1	0	**6**		
% Single-Unit Trucks	1.8%	0.6%	0.8%	0.0%	**0.7%**			0.0%	0.6%	1.4%	0.0%	**0.7%**		
Articulated Trucks	0	1	1	0	**2**			2	2	0	0	**4**		
% Articulated Trucks	0.0%	0.1%	0.8%	0.0%	**0.2%**			4.3%	0.3%	0.0%	0.0%	**0.4%**		
Buses	3	11	0	0	**14**			0	11	2	0	**13**		
% Buses	2.8%	1.0%	0.0%	0.0%	**1.1%**			0.0%	1.4%	2.9%	0.0%	**1.4%**		
Pedestrians						31	24						3	
% Pedestrians						93.9%	92.3%						60.0%	
Bicycles on Crosswalk						2	2						2	
% Bicycles on Crosswalk						6.1%	7.7%						40.0%	

	Holman St Eastbound							Holman St Westbound							
Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
0	0	1	0	1	**2**	0	0	0	1	2	0	**3**	0	0	**9**
0	2	2	0	1	**5**	0	0	0	1	0	0	**1**	0	0	**17**
0	0	1	1	0	**2**	0	0	1	5	1	0	**7**	0	0	**17**
0	1	3	1	0	**5**	0	1	0	0	1	0	**1**	0	0	**18**
0	0	3	1	0	**4**	0	0	0	4	0	0	**4**	0	1	**26**
0	2	2	10	0	**14**	0	0	6	4	1	0	**11**	0	0	**58**
0	3	4	2	0	**9**	0	0	9	2	1	0	**12**	0	0	**90**
0	4	4	10	0	**18**	0	4	2	3	6	0	**11**	0	0	**84**
0	3	5	6	0	**14**	1	0	1	10	1	0	**12**	0	0	**74**
0	2	3	7	0	**12**	1	0	1	7	0	0	**8**	0	0	**56**
0	2	6	4	0	**12**	0	1	4	6	2	0	**12**	0	0	**62**
0	2	5	2	0	**9**	1	0	5	5	0	0	**10**	0	0	**50**
0	3	3	0	0	**6**	0	0	3	3	0	0	**6**	1	0	**44**
0	1	5	2	0	**8**	0	0	1	5	0	0	**6**	0	0	**42**
0	1	6	1	0	**8**	2	2	1	7	1	0	**9**	0	0	**50**
0	1	3	0	0	**4**	0	0	1	8	2	0	**11**	0	1	**46**
1	0	2	1	0	**3**	1	0	3	5	2	0	**10**	1	0	**38**
0	0	5	1	0	**6**	0	1	2	3	1	0	**6**	0	0	**36**
0	1	7	1	0	**9**	0	1	0	14	0	0	**14**	0	0	**72**
0	0	5	1	0	**6**	0	0	2	4	1	0	**7**	0	0	**50**
1	2	4	2	0	**8**	0	0	3	6	5	0	**14**	0	1	**52**
0	2	6	0	0	**8**	0	0	4	7	3	0	**14**	0	0	**55**
0	0	4	0	0	**4**	0	0	2	7	0	0	**9**	0	0	**44**
0	0	7	1	0	**8**	0	0	1	10	2	0	**13**	0	0	**49**
0	0	5	2	0	**7**	0	0	2	8	3	0	**13**	1	1	**56**
0	0	4	1	0	**5**	0	0	0	6	2	0	**8**	0	0	**57**
0	1	5	4	0	**10**	1	0	1	8	4	0	**13**	0	0	**61**
0	0	2	3	0	**5**	0	0	2	4	2	0	**8**	0	0	**40**
0	1	5	0	0	**6**	0	0	5	11	0	0	**16**	1	0	**73**
0	1	6	1	0	**8**	0	1	3	9	4	0	**16**	0	0	**55**
0	0	6	1	0	**7**	3	0	1	7	5	0	**13**	0	0	**56**
0	0	3	0	0	**3**	0	0	2	5	2	0	**9**	0	0	**48**
0	2	4	1	0	**7**	0	0	1	11	1	0	**13**	2	1	**56**
0	0	4	1	0	**5**	1	0	1	5	6	0	**12**	0	0	**66**
0	1	7	7	0	**15**	1	3	5	15	1	0	**21**	0	1	**87**
0	3	6	20	0	**29**	18	2	9	8	2	0	**19**	0	0	**112**
0	2	8	8	0	**18**	5	2	4	6	2	0	**12**	0	0	**82**
0	3	7	4	0	**14**	1	0	1	8	4	0	**13**	0	0	**80**
0	5	6	3	0	**14**	2	0	3	10	1	0	**14**	0	0	**93**
0	2	9	1	0	**12**	0	0	3	8	2	0	**13**	0	0	**95**
1	4	8	6	0	**18**	2	3	0	18	2	0	**20**	0	0	**112**
0	2	4	0	0	**6**	4	3	5	9	3	0	**17**	0	1	**100**
0	6	5	7	0	**18**	0	1	2	10	2	0	**14**	0	0	**95**
1	5	8	3	0	**16**	0	0	3	15	3	0	**21**	0	0	**112**
0	2	7	2	0	**11**	0	0	5	10	3	0	**18**	0	0	**100**
0	3	6	2	0	**11**	0	0	9	11	4	0	**24**	0	0	**108**
0	1	2	4	0	**7**	1	0	2	17	4	0	**23**	1	1	**92**
0	0	4	1	0	**5**	0	0	3	9	2	0	**14**	0	0	**67**
1	1	6	2	0	**9**	0	0	5	14	2	0	**21**	0	1	**86**
0	1	6	1	0	**8**	0	0	2	10	1	0	**13**	0	0	**62**
0	3	4	0	0	**7**	0	0	1	11	1	0	**13**	2	0	**64**
0	0	3	0	0	**3**	0	0	2	7	2	0	**11**	1	1	**50**
5	81	246	139	2	**468**	45	25	134	397	102	0	**633**	10	10	**3304**
	17.3%	52.6%	29.7%	0.4%				21.2%	62.7%	16.1%	0.0%				
	2.5%	7.4%	4.2%	0.1%	**14.2%**			4.1%	12.0%	3.1%	0.0%	**19.2%**			
	79	218	133	2	**432**			131	365	95	0	**591**			**3178**
	97.5%	88.6%	95.7%	100.0%	**92.3%**			97.8%	91.9%	93.1%	0.0%	**93.4%**			**96.2%**
	0	2	2	0	**4**			3	4	4	0	**11**			**30**
	0.0%	0.8%	1.4%	0.0%	**0.9%**			2.2%	1.0%	3.9%	0.0%	**1.7%**			**0.9%**
	0	0	0	0	**0**			0	0	2	0	**2**			**8**
	0.0%	0.0%	0.0%	0.0%	**0.0%**			0.0%	0.0%	2.0%	0.0%	**0.3%**			**0.2%**
	2	26	4	0	**32**			0	28	1	0	**29**			**88**
	2.5%	10.6%	2.9%	0.0%	**6.8%**			0.0%	7.1%	1.0%	0.0%	**4.6%**			**2.7%**
3						45	21						8	8	
60.0%						100.0%	84.0%						80.0%	80.0%	
2						0	4						2	2	
40.0%						0.0%	16.0%						20.0%	20.0%	

Leg	Royalton St						Westpark Dr						Westpark Dr						
Direction	Northbound						Eastbound						Westbound						
Start Time	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2022-04-19 00:00:00	5	2	0	**7**	0	0	9	1	0	**10**	0	0	2	10	0	**12**	0	0	**29**
2022-04-19 00:15:00	0	1	0	**1**	0	0	16	0	0	**16**	0	0	2	6	0	**8**	0	0	**25**
2022-04-19 00:30:00	2	0	0	**2**	0	0	15	0	0	**15**	0	0	1	4	0	**5**	0	0	**22**
2022-04-19 00:45:00	0	1	0	**1**	0	0	9	0	0	**9**	0	0	0	7	0	**7**	0	0	**17**
2022-04-19 01:00:00	1	0	0	**1**	0	0	6	0	0	**6**	0	0	0	3	0	**3**	0	0	**10**
2022-04-19 01:15:00	3	2	0	**5**	0	0	9	0	0	**9**	0	0	2	6	0	**8**	0	0	**22**
2022-04-19 01:30:00	2	0	0	**2**	0	0	8	1	0	**9**	0	0	1	8	0	**9**	0	0	**20**
2022-04-19 01:45:00	0	0	0	**0**	0	0	6	3	0	**9**	0	0	0	5	0	**5**	0	0	**14**
2022-04-19 02:00:00	1	1	0	**2**	0	0	2	0	0	**2**	0	0	0	7	0	**7**	0	0	**11**
2022-04-19 02:15:00	0	0	0	**0**	0	0	11	0	0	**11**	0	0	0	3	0	**3**	0	0	**14**
2022-04-19 02:30:00	0	2	0	**2**	0	0	6	1	0	**7**	0	0	0	2	0	**2**	0	0	**11**
2022-04-19 02:45:00	0	0	0	**0**	0	0	7	0	0	**7**	0	0	0	4	0	**4**	0	0	**11**
2022-04-19 03:00:00	3	1	0	**4**	0	0	3	1	0	**4**	0	0	1	5	0	**6**	0	0	**14**
2022-04-19 03:15:00	1	0	0	**1**	0	0	4	0	0	**4**	0	0	0	1	0	**1**	0	0	**6**
2022-04-19 03:30:00	1	1	0	**2**	0	0	3	0	0	**3**	0	0	1	1	0	**2**	0	0	**7**
2022-04-19 03:45:00	0	0	0	**0**	0	0	7	6	0	**13**	0	0	0	2	0	**2**	0	0	**15**
2022-04-19 04:00:00	0	1	0	**1**	0	0	8	3	0	**11**	0	0	1	1	0	**2**	0	0	**14**
2022-04-19 04:15:00	0	0	0	**0**	0	0	11	0	0	**11**	0	0	1	0	0	**1**	0	0	**12**
2022-04-19 04:30:00	1	1	0	**2**	0	0	16	1	0	**17**	0	0	0	4	0	**4**	0	0	**23**
2022-04-19 04:45:00	1	1	0	**2**	0	0	20	2	0	**22**	0	0	0	1	0	**1**	0	0	**25**
2022-04-19 05:00:00	1	2	0	**3**	0	0	23	1	0	**24**	0	0	0	3	0	**3**	0	0	**30**
2022-04-19 05:15:00	1	1	0	**2**	0	0	20	1	0	**21**	0	0	3	4	0	**7**	0	0	**30**
2022-04-19 05:30:00	1	1	0	**2**	0	0	38	5	0	**43**	0	0	0	4	0	**4**	0	0	**49**
2022-04-19 05:45:00	3	2	0	**5**	0	0	72	8	0	**80**	0	0	5	7	0	**12**	0	0	**97**
2022-04-19 06:00:00	5	7	0	**12**	0	0	86	12	0	**98**	0	0	0	8	0	**8**	0	0	**118**
2022-04-19 06:15:00	9	12	0	**21**	0	0	123	6	0	**129**	0	0	1	5	0	**6**	0	0	**156**
2022-04-19 06:30:00	9	15	0	**24**	0	0	135	10	0	**145**	0	0	3	9	0	**12**	0	0	**181**
2022-04-19 06:45:00	8	13	0	**21**	0	0	155	20	0	**175**	0	0	5	26	0	**31**	0	0	**227**
2022-04-19 07:00:00	14	22	0	**36**	0	0	156	15	0	**171**	0	0	0	25	0	**25**	0	0	**232**
2022-04-19 07:15:00	10	14	0	**24**	0	0	188	23	0	**211**	0	0	4	32	0	**36**	0	0	**271**
2022-04-19 07:30:00	26	25	0	**51**	0	0	219	30	0	**249**	0	0	2	43	0	**45**	0	0	**345**
2022-04-19 07:45:00	23	22	0	**45**	0	0	173	27	0	**200**	0	0	6	48	0	**54**	0	0	**299**
2022-04-19 08:00:00	35	18	0	**53**	0	0	188	22	0	**210**	0	0	6	52	0	**58**	0	0	**321**
2022-04-19 08:15:00	21	18	0	**39**	0	0	211	14	0	**225**	0	0	6	44	0	**50**	0	0	**314**
2022-04-19 08:30:00	30	17	0	**47**	0	0	178	30	0	**208**	0	0	6	43	0	**49**	0	0	**304**
2022-04-19 08:45:00	30	23	0	**53**	0	0	165	27	0	**192**	0	0	4	52	0	**56**	0	0	**301**
2022-04-19 09:00:00	14	12	0	**26**	0	0	141	29	0	**170**	0	0	5	45	0	**50**	0	0	**246**
2022-04-19 09:15:00	18	12	0	**30**	0	0	116	34	0	**150**	0	0	6	34	0	**40**	0	0	**220**
2022-04-19 09:30:00	16	14	0	**30**	0	0	133	30	0	**163**	0	0	4	44	0	**48**	0	0	**241**
2022-04-19 09:45:00	20	9	0	**29**	0	0	135	24	0	**159**	0	0	7	53	0	**60**	0	0	**248**
2022-04-19 10:00:00	18	11	0	**29**	0	0	103	42	0	**145**	0	0	8	38	0	**46**	0	0	**220**
2022-04-19 10:15:00	29	12	0	**41**	0	0	113	32	0	**145**	0	0	3	61	0	**64**	0	0	**250**
2022-04-19 10:30:00	23	13	0	**36**	0	0	139	36	0	**175**	0	0	2	48	0	**50**	0	0	**261**
2022-04-19 10:45:00	26	15	0	**41**	0	0	122	36	0	**158**	0	0	7	47	0	**54**	0	0	**253**
2022-04-19 11:00:00	31	20	0	**51**	0	0	115	41	0	**156**	0	0	9	55	0	**64**	0	0	**271**
2022-04-19 11:15:00	28	20	0	**48**	0	0	115	25	0	**140**	0	0	7	69	0	**76**	0	0	**264**
2022-04-19 11:30:00	22	11	0	**33**	0	0	128	34	0	**162**	0	0	3	55	0	**58**	0	0	**253**
2022-04-19 11:45:00	21	26	0	**47**	0	0	138	34	0	**172**	0	0	7	75	0	**82**	0	0	**301**
2022-04-19 12:00:00	28	12	0	**40**	0	0	127	33	0	**160**	0	0	7	71	0	**78**	0	0	**278**
2022-04-19 12:15:00	27	17	0	**44**	0	0	124	42	0	**166**	0	0	10	59	0	**69**	0	0	**279**
2022-04-19 12:30:00	21	23	0	**44**	0	0	120	47	1	**168**	0	0	5	78	0	**83**	0	0	**295**
2022-04-19 12:45:00	34	19	0	**53**	0	0	134	48	0	**182**	0	0	13	81	0	**94**	0	0	**329**
2022-04-19 13:00:00	30	24	0	**54**	0	0	136	35	0	**171**	0	0	8	76	0	**84**	0	0	**309**
2022-04-19 13:15:00	33	21	0	**54**	0	0	150	33	0	**183**	0	0	9	92	0	**101**	0	0	**338**
2022-04-19 13:30:00	33	16	0	**49**	0	0	140	33	0	**173**	0	0	7	86	0	**93**	0	0	**315**
2022-04-19 13:45:00	27	17	0	**44**	0	0	131	25	0	**156**	0	0	6	65	0	**71**	0	0	**271**
2022-04-19 14:00:00	32	9	0	**41**	0	0	134	37	0	**171**	0	0	14	65	0	**79**	0	0	**291**
2022-04-19 14:15:00	23	22	0	**45**	0	0	128	34	0	**162**	0	0	5	76	0	**81**	0	0	**288**
2022-04-19 14:30:00	41	21	0	**62**	0	0	137	44	0	**181**	0	0	12	74	0	**86**	0	0	**329**
2022-04-19 14:45:00	29	30	0	**59**	0	0	156	41	1	**198**	0	0	7	74	0	**81**	0	0	**338**
2022-04-19 15:00:00	46	30	0	**76**	0	0	117	29	0	**146**	0	0	9	98	0	**107**	0	0	**329**
2022-04-19 15:15:00	41	44	0	**85**	0	0	141	48	0	**189**	0	0	12	88	0	**100**	0	0	**374**
2022-04-19 15:30:00	49	46	0	**95**	0	0	174	30	0	**204**	0	0	11	113	0	**124**	0	0	**423**
2022-04-19 15:45:00	49	46	0	**95**	0	0	156	42	0	**198**	0	0	11	86	0	**97**	0	0	**390**
2022-04-19 16:00:00	34	42	1	**77**	0	0	125	40	0	**165**	0	0	13	105	1	**119**	0	0	**361**
2022-04-19 16:15:00	39	44	0	**83**	0	0	152	34	0	**186**	0	0	16	146	0	**162**	0	0	**431**
2022-04-19 16:30:00	51	47	0	**98**	0	0	175	33	0	**208**	0	0	13	135	0	**148**	0	0	**454**
2022-04-19 16:45:00	55	49	0	**104**	0	0	166	37	0	**203**	0	0	10	92	0	**102**	0	0	**409**
2022-04-19 17:00:00	58	38	0	**96**	0	0	175	27	0	**202**	0	0	17	115	0	**132**	0	0	**430**
2022-04-19 17:15:00	55	41	0	**96**	0	0	159	37	0	**196**	0	0	11	119	0	**130**	0	0	**422**
2022-04-19 17:30:00	36	31	0	**67**	0	0	173	39	0	**212**	0	0	10	134	0	**144**	0	0	**423**
2022-04-19 17:45:00	36	34	0	**70**	0	0	137	41	0	**178**	0	0	16	104	0	**120**	0	0	**368**
2022-04-19 18:00:00	42	22	0	**64**	0	0	153	41	0	**194**	0	0	10	111	0	**121**	0	0	**379**
2022-04-19 18:15:00	36	21	0	**57**	0	0	159	42	0	**201**	0	0	16	83	0	**99**	0	0	**357**
2022-04-19 18:30:00	28	17	0	**45**	0	0	147	29	0	**176**	0	0	8	79	0	**87**	0	0	**308**
2022-04-19 18:45:00	31	20	0	**51**	0	0	110	19	0	**129**	0	0	8	86	0	**94**	0	0	**274**
2022-04-19 19:00:00	31	15	0	**46**	0	0	122	39	0	**161**	0	0	5	78	0	**83**	0	0	**290**
2022-04-19 19:15:00	29	13	0	**42**	0	0	105	28	0	**133**	0	0	3	80	0	**83**	0	0	**258**
2022-04-19 19:30:00	31	11	0	**42**	0	0	89	24	0	**113**	0	0	5	64	0	**69**	0	0	**224**
2022-04-19 19:45:00	41	11	0	**52**	0	0	83	17	1	**101**	0	0	5	61	0	**66**	0	0	**219**
2022-04-19 20:00:00	22	11	0	**33**	0	0	72	7	0	**79**	0	0	7	62	0	**69**	0	0	**181**
2022-04-19 20:15:00	17	7	0	**24**	0	0	79	13	0	**92**	0	0	3	69	0	**72**	0	0	**188**
2022-04-19 20:30:00	12	10	0	**22**	0	0	66	7	0	**73**	0	0	1	55	0	**56**	0	0	**151**
2022-04-19 20:45:00	7	2	0	**9**	0	0	64	6	0	**70**	0	0	3	64	0	**67**	0	0	**146**
2022-04-19 21:00:00	8	8	0	**16**	0	0	63	2	0	**65**	0	0	3	41	0	**44**	0	0	**125**
2022-04-19 21:15:00	3	3	0	**6**	0	0	57	0	0	**57**	0	0	1	40	0	**41**	0	0	**104**
2022-04-19 21:30:00	5	2	0	**7**	0	0	58	3	0	**61**	0	0	2	45	0	**47**	0	0	**115**
2022-04-19 21:45:00	4	5	0	**9**	0	0	48	1	0	**49**	0	0	7	45	0	**52**	0	0	**110**
2022-04-19 22:00:00	2	0	0	**2**	0	0	47	1	0	**48**	0	0	4	56	0	**60**	0	0	**110**
2022-04-19 22:15:00	1	2	0	**3**	0	0	39	2	0	**41**	0	0	1	49	0	**50**	0	0	**94**
2022-04-19 22:30:00	0	2	0	**2**	0	0	31	0	0	**31**	0	0	1	56	0	**57**	0	0	**90**
2022-04-19 22:45:00	3	2	0	**5**	0	0	21	0	0	**21**	0	0	4	30	0	**34**	0	0	**60**
2022-04-19 23:00:00	3	1	0	**4**	0	0	22	2	0	**24**	0	0	2	32	0	**34**	0	0	**62**
2022-04-19 23:15:00	1	1	0	**2**	0	0	21	0	0	**21**	0	0	1	25	0	**26**	0	0	**49**
2022-04-19 23:30:00	2	4	0	**6**	0	0	16	1	0	**17**	0	0	1	28	0	**29**	0	0	**52**
2022-04-19 23:45:00	7	0	0	**7**	0	0	17	1	0	**18**	0	0	1	15	0	**16**	0	0	**41**
Grand Total	1786	1314	1	**3101**	0	0	8960	1841	3	**10804**	0	0	485	4695	1	**5181**	0	0	**19086**
% Approach	57.6%	42.4%	0.0%				82.9%	17.0%	0.0%				9.4%	90.6%	0.0%				
% Total	9.4%	6.9%	0.0%	**16.2%**			46.9%	9.6%	0.0%	**56.6%**			2.5%	24.6%	0.0%	**27.1%**			
Lights	1743	1261	0	**3004**			8846	1791	3	**10640**			440	4623	0	**5063**			**18707**
% Lights	97.6%	96.0%	0.0%	**96.9%**			98.7%	97.3%	100.0%	**98.5%**			90.7%	98.5%	0.0%	**97.7%**			**98.0%**
Single-Unit Trucks	24	17	0	**41**			71	25	0	**96**			5	52	0	**57**			**194**
% Single-Unit Trucks	1.3%	1.3%	0.0%	**1.3%**			0.8%	1.4%	0.0%	**0.9%**			1.0%	1.1%	0.0%	**1.1%**			**1.0%**
Articulated Trucks	14	2	1	**17**			27	21	0	**48**			7	10	1	**18**			**83**
% Articulated Trucks	0.8%	0.2%	100.0%	**0.5%**			0.3%	1.1%	0.0%	**0.4%**			1.4%	0.2%	100.0%	**0.3%**			**0.4%**
Buses	5	34	0	**39**			16	4	0	**20**			33	10	0	**43**			**102**
% Buses	0.3%	2.6%	0.0%	**1.3%**			0.2%	0.2%	0.0%	**0.2%**			6.8%	0.2%	0.0%	**0.8%**			**0.5%**
Pedestrians					0	0					0	0					0	0	
% Pedestrians					0.0%	0.0%					0.0%	0.0%					0.0%	0.0%	
Bicycles on Crosswalk					0	0					0	0					0	0	
% Bicycles on Crosswalk					0.0%	0.0%					0.0%	0.0%					0.0%	0.0%	

Leg	Munger St						Munger St				
Direction	Westbound						Eastbound				
Start Time	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**
2022-03-08 06:00:00	10	9	0	0	**19**	0	0	0	0	0	0	**0**
2022-03-08 06:15:00	6	10	0	0	**16**	0	0	0	0	0	0	**0**
2022-03-08 06:30:00	16	15	0	0	**31**	0	0	0	0	0	0	**0**
2022-03-08 06:45:00	9	22	0	0	**31**	0	0	0	0	0	0	**0**
2022-03-08 07:00:00	19	13	0	0	**32**	0	0	0	1	0	0	**1**
2022-03-08 07:15:00	19	23	0	0	**42**	0	0	0	2	1	0	**3**
2022-03-08 07:30:00	20	19	0	0	**39**	1	0	0	1	0	0	**1**
2022-03-08 07:45:00	51	21	0	0	**72**	0	0	0	3	0	0	**3**
2022-03-08 08:00:00	24	11	0	0	**35**	0	0	0	1	0	0	**1**
2022-03-08 08:15:00	24	10	0	0	**34**	0	0	0	0	0	0	**0**
2022-03-08 08:30:00	24	17	0	0	**41**	0	0	0	0	0	0	**0**
2022-03-08 08:45:00	15	11	0	0	**26**	0	0	0	0	0	0	**0**
2022-03-08 09:00:00	17	13	0	0	**30**	0	0	0	0	2	0	**2**
2022-03-08 09:15:00	13	8	0	0	**21**	1	0	0	0	0	0	**0**
2022-03-08 09:30:00	14	7	0	0	**21**	0	0	0	0	1	0	**1**
2022-03-08 09:45:00	15	8	0	0	**23**	0	0	0	0	1	0	**1**
2022-03-08 10:00:00	13	7	0	0	**20**	0	0	0	0	1	0	**1**
2022-03-08 10:15:00	7	6	0	0	**13**	0	0	0	0	1	0	**1**
2022-03-08 10:30:00	6	5	0	0	**11**	0	0	0	1	0	0	**1**
2022-03-08 10:45:00	9	8	0	0	**17**	0	0	0	0	0	0	**0**
2022-03-08 11:00:00	15	3	0	0	**18**	0	0	0	1	0	0	**1**
2022-03-08 11:15:00	9	10	0	0	**19**	1	0	0	0	0	0	**0**
2022-03-08 11:30:00	12	8	0	0	**20**	0	0	0	0	0	0	**0**
2022-03-08 11:45:00	11	22	0	0	**33**	0	0	0	1	0	0	**1**
2022-03-08 12:00:00	14	10	0	0	**24**	0	0	0	0	1	0	**1**
2022-03-08 12:15:00	13	12	0	0	**25**	0	0	0	1	0	0	**1**
2022-03-08 12:30:00	9	5	0	0	**14**	0	1	0	0	1	0	**1**
2022-03-08 12:45:00	6	11	0	0	**17**	0	0	0	0	2	0	**2**
2022-03-08 13:00:00	7	11	0	0	**18**	0	0	0	0	0	0	**0**
2022-03-08 13:15:00	6	5	0	0	**11**	0	0	0	0	0	0	**0**
2022-03-08 13:30:00	7	5	0	0	**12**	0	0	0	3	0	0	**3**
2022-03-08 13:45:00	9	8	0	0	**17**	0	0	0	0	0	0	**0**
2022-03-08 14:00:00	8	2	0	0	**10**	0	0	0	1	1	0	**2**
2022-03-08 14:15:00	9	14	0	0	**23**	0	0	0	0	2	0	**2**
2022-03-08 14:30:00	11	18	0	0	**29**	0	0	0	0	0	0	**0**
2022-03-08 14:45:00	5	10	0	0	**15**	0	0	0	1	0	0	**1**
2022-03-08 15:00:00	11	13	0	0	**24**	0	0	0	0	1	0	**1**
2022-03-08 15:15:00	6	10	0	0	**16**	0	0	0	1	2	0	**3**
2022-03-08 15:30:00	14	14	0	0	**28**	0	0	0	1	0	0	**1**
2022-03-08 15:45:00	11	11	0	0	**22**	0	0	0	1	1	0	**2**
2022-03-08 16:00:00	11	8	0	0	**19**	0	0	0	0	2	0	**2**
2022-03-08 16:15:00	5	14	0	0	**19**	0	0	0	0	1	0	**1**
2022-03-08 16:30:00	12	13	0	0	**25**	0	0	0	0	2	0	**2**
2022-03-08 16:45:00	8	6	0	0	**14**	0	0	0	0	0	0	**0**
2022-03-08 17:00:00	10	18	0	0	**28**	0	0	0	1	0	0	**1**
2022-03-08 17:15:00	5	10	0	0	**15**	0	0	0	0	0	0	**0**
2022-03-08 17:30:00	15	9	0	0	**24**	0	0	0	1	2	0	**3**
2022-03-08 17:45:00	9	8	0	0	**17**	1	0	0	0	0	0	**0**
2022-03-08 18:00:00	9	8	0	0	**17**	0	0	0	0	2	0	**2**
2022-03-08 18:15:00	12	8	0	0	**20**	0	0	0	0	1	0	**1**
2022-03-08 18:30:00	15	9	0	0	**24**	0	0	0	0	0	0	**0**
2022-03-08 18:45:00	10	9	0	0	**19**	0	0	0	0	0	0	**0**
Grand Total	645	565	0	0	**1210**	4	1	0	22	28	0	**50**
% Approach	53.3%	46.7%	0.0%	0.0%				0.0%	44.0%	56.0%	0.0%	
% Total	22.4%	19.6%	0.0%	0.0%	**41.9%**			0.0%	0.8%	1.0%	0.0%	**1.7%**
Lights	441	543	0	0	**984**			0	14	27	0	**41**
% Lights	68.4%	96.1%	0.0%	0.0%	**81.3%**			0.0%	63.6%	96.4%	0.0%	**82.0%**
Articulated Trucks	1	1	0	0	**2**			0	2	0	0	**2**
% Articulated Trucks	0.2%	0.2%	0.0%	0.0%	**0.2%**			0.0%	9.1%	0.0%	0.0%	**4.0%**
Buses and Single-Unit Trucks	203	21	0	0	**224**			0	6	1	0	**7**
% Buses and Single-Unit Trucks	31.5%	3.7%	0.0%	0.0%	**18.5%**			0.0%	27.3%	3.6%	0.0%	**14.0%**
Pedestrians						4	1					
% Pedestrians						100.0%	100.0%					
Bicycles on Crosswalk						0	0					
% Bicycles on Crosswalk						0.0%	0.0%					

		West Northbound							Ernestine St Southbound							
Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
0	0	0	0	0	0	**0**	0	0	4	4	0	0	**8**	0	0	**27**
0	0	0	0	0	0	**0**	0	0	6	7	0	0	**13**	0	0	**29**
0	0	0	0	0	0	**0**	0	0	3	5	0	0	**8**	0	0	**39**
0	0	0	0	0	0	**0**	0	0	6	12	0	0	**18**	0	0	**49**
0	0	0	0	0	0	**0**	0	0	14	11	0	0	**25**	0	0	**58**
0	0	0	0	0	0	**0**	0	0	22	18	0	0	**40**	0	0	**85**
0	0	0	0	0	0	**0**	0	0	16	56	0	0	**72**	0	0	**112**
0	0	0	0	0	0	**0**	0	0	16	46	0	0	**62**	0	0	**137**
0	0	0	0	0	0	**0**	0	0	10	42	0	0	**52**	0	0	**88**
0	0	0	0	0	0	**0**	0	0	5	14	0	0	**19**	0	0	**53**
0	0	0	0	0	0	**0**	0	0	3	23	1	0	**27**	0	0	**68**
0	0	0	0	0	0	**0**	0	0	5	10	0	0	**15**	0	0	**41**
0	0	0	0	0	0	**0**	0	0	8	12	0	0	**20**	0	0	**52**
0	0	0	0	0	0	**0**	0	0	8	21	0	0	**29**	0	0	**50**
0	0	0	0	0	0	**0**	0	0	6	17	0	0	**23**	0	0	**45**
0	0	0	0	0	0	**0**	0	0	2	29	1	0	**32**	0	0	**56**
0	0	0	0	0	0	**0**	0	0	8	23	1	0	**32**	0	0	**53**
0	0	0	0	0	0	**0**	0	0	14	19	6	0	**39**	0	0	**53**
1	0	0	0	0	0	**0**	0	0	28	39	1	0	**68**	0	0	**80**
0	0	0	0	0	0	**0**	0	0	1	19	0	0	**20**	0	0	**37**
0	0	0	0	0	0	**0**	0	0	9	22	1	0	**32**	0	0	**51**
0	0	0	0	0	0	**0**	0	0	9	31	2	0	**42**	0	0	**61**
0	0	0	0	0	0	**0**	0	0	6	20	0	0	**26**	0	0	**46**
0	0	0	0	0	0	**0**	0	0	6	28	2	0	**36**	0	0	**70**
0	0	0	0	0	0	**0**	0	0	7	14	1	0	**22**	0	0	**47**
0	0	0	0	0	0	**0**	0	0	4	12	0	0	**16**	0	0	**42**
0	0	0	0	0	0	**0**	0	0	2	11	0	0	**13**	0	0	**28**
0	0	0	0	0	0	**0**	0	0	7	17	0	0	**24**	0	0	**43**
0	0	0	0	0	0	**0**	0	0	4	13	1	0	**18**	0	0	**36**
0	0	0	0	0	0	**0**	0	0	7	7	0	0	**14**	0	0	**25**
0	0	0	0	0	0	**0**	0	0	7	9	0	0	**16**	0	0	**31**
0	0	0	0	0	0	**0**	0	0	9	16	0	0	**25**	0	0	**42**
0	0	0	0	0	0	**0**	0	0	13	17	2	0	**32**	0	0	**44**
0	0	0	0	0	0	**0**	0	0	8	19	0	0	**27**	0	0	**52**
0	0	0	0	0	0	**0**	0	0	10	19	0	0	**29**	0	0	**58**
0	0	0	0	0	0	**0**	0	0	26	18	0	0	**44**	0	0	**60**
0	0	0	0	0	0	**0**	0	0	17	27	0	0	**44**	0	0	**69**
0	0	0	0	0	0	**0**	0	0	16	16	0	0	**32**	0	0	**51**
0	0	0	0	0	0	**0**	0	0	21	28	0	0	**49**	0	0	**78**
0	0	0	0	0	0	**0**	0	0	19	28	0	0	**47**	0	0	**71**
0	0	0	0	0	0	**0**	0	0	28	24	0	0	**52**	0	0	**73**
0	0	0	0	0	0	**0**	0	0	20	29	0	0	**49**	0	0	**69**
0	0	0	0	0	0	**0**	0	0	25	20	0	0	**45**	0	0	**72**
0	0	0	0	0	0	**0**	0	0	16	14	0	0	**30**	0	0	**44**
0	0	0	0	0	0	**0**	0	0	13	8	3	0	**24**	0	1	**53**
0	0	0	0	0	0	**0**	0	0	14	17	0	0	**31**	0	0	**46**
0	0	0	0	0	0	**0**	0	0	12	16	0	0	**28**	0	0	**55**
0	0	0	0	0	0	**0**	0	0	12	23	1	0	**36**	0	0	**53**
0	0	0	0	0	0	**0**	0	0	13	25	2	0	**40**	0	0	**59**
0	0	0	0	0	0	**0**	0	0	12	13	1	0	**26**	0	0	**47**
0	0	0	0	0	0	**0**	0	0	14	9	2	0	**25**	0	0	**49**
0	0	0	0	0	0	**0**	0	0	11	18	0	0	**29**	0	0	**48**
1	0	0	0	0	0	**0**	0	0	582	1015	28	0	**1625**	0	1	**2885**
		0.0%	0.0%	0.0%	0.0%				35.8%	62.5%	1.7%	0.0%				
		0.0%	0.0%	0.0%	0.0%	**0.0%**			20.2%	35.2%	1.0%	0.0%	**56.3%**			
		0	0	0	0	**0**			391	956	21	0	**1368**			**2393**
		0.0%	0.0%	0.0%	0.0%				67.2%	94.2%	75.0%	0.0%	**84.2%**			**82.9%**
		0	0	0	0	**0**			3	3	0	0	**6**			**10**
		0.0%	0.0%	0.0%	0.0%				0.5%	0.3%	0.0%	0.0%	**0.4%**			**0.3%**
		0	0	0	0	**0**			188	56	7	0	**251**			**482**
		0.0%	0.0%	0.0%	0.0%				32.3%	5.5%	25.0%	0.0%	**15.4%**			**16.7%**
1	0						0	0						0	1	
100.0%	0.0%						0.0%	0.0%						0.0%	100.0%	
0	0						0	0						0	0	
0.0%	0.0%						0.0%	0.0%						0.0%	0.0%	

Leg	Alder Dr						Westpark Dr						Westpark Dr						
Direction	Northbound						Eastbound						Westbound						
Start Time	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2022-04-19 00:00:00	1	4	0	**5**	0	0	11	7	0	**18**	0	0	2	10	0	**12**	0	0	**35**
2022-04-19 00:15:00	0	2	0	**2**	0	0	14	5	0	**19**	0	0	4	5	0	**9**	0	0	**30**
2022-04-19 00:30:00	2	1	0	**3**	1	0	10	5	0	**15**	0	0	3	3	1	**7**	0	0	**25**
2022-04-19 00:45:00	1	2	0	**3**	0	0	8	2	0	**10**	0	0	2	3	0	**5**	0	0	**18**
2022-04-19 01:00:00	1	0	0	**1**	0	0	8	3	0	**11**	0	0	1	7	0	**8**	0	0	**20**
2022-04-19 01:15:00	1	0	0	**1**	0	0	7	2	0	**9**	0	0	0	4	0	**4**	0	0	**14**
2022-04-19 01:30:00	0	0	0	**0**	0	0	3	2	0	**5**	0	0	2	4	0	**6**	0	0	**11**
2022-04-19 01:45:00	1	2	0	**3**	0	0	4	2	0	**6**	0	0	1	3	0	**4**	0	0	**13**
2022-04-19 02:00:00	0	0	0	**0**	0	0	0	4	0	**4**	0	0	4	3	0	**7**	0	0	**11**
2022-04-19 02:15:00	0	0	0	**0**	0	1	9	3	0	**12**	0	1	3	3	0	**6**	0	0	**18**
2022-04-19 02:30:00	1	2	0	**3**	0	0	5	1	0	**6**	0	0	1	4	0	**5**	0	0	**14**
2022-04-19 02:45:00	0	3	0	**3**	0	0	5	3	0	**8**	0	0	0	2	0	**2**	0	0	**13**
2022-04-19 03:00:00	0	2	0	**2**	0	0	4	3	0	**7**	0	0	0	5	0	**5**	0	0	**14**
2022-04-19 03:15:00	0	1	0	**1**	0	0	2	3	0	**5**	0	0	0	6	0	**6**	0	0	**12**
2022-04-19 03:30:00	1	1	0	**2**	0	0	4	1	0	**5**	0	0	0	8	0	**8**	0	0	**15**
2022-04-19 03:45:00	0	2	0	**2**	0	1	7	0	0	**7**	0	0	1	10	0	**11**	0	0	**20**
2022-04-19 04:00:00	2	6	0	**8**	0	0	10	1	0	**11**	0	0	1	6	0	**7**	0	0	**26**
2022-04-19 04:15:00	5	2	0	**7**	0	0	10	1	0	**11**	0	0	2	3	0	**5**	0	0	**23**
2022-04-19 04:30:00	4	4	0	**8**	0	0	10	2	0	**12**	0	0	6	8	0	**14**	0	0	**34**
2022-04-19 04:45:00	2	7	0	**9**	0	0	14	5	0	**19**	0	0	6	4	0	**10**	0	0	**38**
2022-04-19 05:00:00	0	5	0	**5**	0	0	19	2	0	**21**	0	0	3	11	0	**14**	0	0	**40**
2022-04-19 05:15:00	5	9	0	**14**	0	0	20	2	0	**22**	0	0	1	7	0	**8**	0	0	**44**
2022-04-19 05:30:00	9	14	0	**23**	0	0	34	7	0	**41**	0	0	2	12	0	**14**	0	0	**78**
2022-04-19 05:45:00	9	18	0	**27**	0	0	51	7	0	**58**	0	0	4	11	1	**16**	0	0	**101**
2022-04-19 06:00:00	9	22	0	**31**	0	0	57	20	0	**77**	0	0	7	11	0	**18**	0	0	**126**
2022-04-19 06:15:00	12	29	0	**41**	0	0	87	20	0	**107**	0	0	7	11	0	**18**	0	0	**166**
2022-04-19 06:30:00	21	24	0	**45**	1	0	122	17	0	**139**	0	0	7	9	0	**16**	0	0	**200**
2022-04-19 06:45:00	13	28	0	**41**	0	0	139	22	0	**161**	0	0	11	17	0	**28**	0	0	**230**
2022-04-19 07:00:00	22	23	0	**45**	0	0	131	25	0	**156**	0	0	19	24	0	**43**	0	0	**244**
2022-04-19 07:15:00	30	42	0	**72**	0	0	195	56	0	**251**	0	0	17	30	0	**47**	0	0	**370**
2022-04-19 07:30:00	31	33	0	**64**	1	0	194	41	0	**235**	0	0	4	40	0	**44**	0	0	**343**
2022-04-19 07:45:00	42	21	0	**63**	1	0	196	50	0	**246**	1	0	7	35	0	**42**	0	0	**351**
2022-04-19 08:00:00	33	22	0	**55**	0	0	166	37	0	**203**	0	0	14	53	0	**67**	0	0	**325**
2022-04-19 08:15:00	20	22	0	**42**	0	1	207	22	0	**229**	0	0	3	41	0	**44**	0	0	**315**
2022-04-19 08:30:00	20	11	0	**31**	1	0	179	25	0	**204**	0	0	7	46	0	**53**	0	0	**288**
2022-04-19 08:45:00	19	16	0	**35**	0	1	156	18	0	**174**	0	0	8	57	0	**65**	0	0	**274**
2022-04-19 09:00:00	8	9	0	**17**	1	0	129	10	0	**139**	0	0	6	56	0	**62**	0	0	**218**
2022-04-19 09:15:00	13	17	0	**30**	1	0	104	10	0	**114**	0	0	11	36	0	**47**	0	0	**191**
2022-04-19 09:30:00	11	18	0	**29**	0	0	97	9	0	**106**	0	0	16	55	0	**71**	0	0	**206**
2022-04-19 09:45:00	9	13	0	**22**	0	2	85	9	0	**94**	0	0	13	43	0	**56**	0	0	**172**
2022-04-19 10:00:00	14	18	0	**32**	1	2	82	13	0	**95**	0	0	5	43	0	**48**	0	0	**175**
2022-04-19 10:15:00	16	8	0	**24**	0	0	113	12	0	**125**	0	0	2	66	0	**68**	0	0	**217**
2022-04-19 10:30:00	13	13	0	**26**	1	0	106	14	0	**120**	0	0	9	57	0	**66**	0	0	**212**
2022-04-19 10:45:00	12	17	0	**29**	0	0	96	16	0	**112**	0	0	11	50	0	**61**	0	0	**202**
2022-04-19 11:00:00	10	8	0	**18**	0	0	101	18	0	**119**	0	0	4	64	0	**68**	0	0	**205**
2022-04-19 11:15:00	12	14	0	**26**	0	0	97	17	0	**114**	0	0	17	63	0	**80**	0	0	**220**
2022-04-19 11:30:00	19	11	0	**30**	1	0	94	9	0	**103**	0	0	11	56	0	**67**	0	0	**200**
2022-04-19 11:45:00	12	14	0	**26**	0	0	102	11	0	**113**	0	0	13	71	0	**84**	0	0	**223**
2022-04-19 12:00:00	6	10	0	**16**	0	0	113	18	0	**131**	0	0	13	67	0	**80**	0	0	**227**
2022-04-19 12:15:00	11	14	0	**25**	1	2	127	6	0	**133**	0	0	9	59	1	**69**	0	0	**227**
2022-04-19 12:30:00	10	14	0	**24**	1	2	106	21	0	**127**	0	1	9	74	0	**83**	0	0	**234**
2022-04-19 12:45:00	13	17	0	**30**	0	0	120	13	0	**133**	1	0	7	88	0	**95**	0	0	**258**
2022-04-19 13:00:00	12	7	0	**19**	0	0	110	16	0	**126**	0	0	7	65	0	**72**	0	0	**217**
2022-04-19 13:15:00	6	14	0	**20**	0	1	117	14	0	**131**	0	1	7	78	0	**85**	0	0	**236**
2022-04-19 13:30:00	16	24	0	**40**	0	2	118	14	0	**132**	0	0	6	82	0	**88**	0	0	**260**
2022-04-19 13:45:00	10	13	0	**23**	0	0	104	14	0	**118**	0	0	10	68	1	**79**	0	0	**220**
2022-04-19 14:00:00	9	15	0	**24**	0	0	111	26	0	**137**	0	0	10	73	0	**83**	0	0	**244**
2022-04-19 14:15:00	7	15	0	**22**	1	0	109	26	0	**135**	0	0	13	63	0	**76**	0	0	**233**
2022-04-19 14:30:00	15	18	0	**33**	0	0	111	25	0	**136**	0	0	21	66	0	**87**	0	0	**256**
2022-04-19 14:45:00	13	10	0	**23**	0	0	130	23	0	**153**	0	0	10	63	0	**73**	0	0	**249**
2022-04-19 15:00:00	20	27	1	**48**	1	1	110	30	0	**140**	0	1	17	94	0	**111**	0	0	**299**
2022-04-19 15:15:00	23	23	0	**46**	0	1	134	49	0	**183**	0	0	20	75	0	**95**	0	0	**324**
2022-04-19 15:30:00	31	50	0	**81**	1	0	159	35	0	**194**	0	0	15	102	0	**117**	0	0	**392**
2022-04-19 15:45:00	39	24	0	**63**	0	0	152	26	0	**178**	0	1	24	88	0	**112**	0	0	**353**
2022-04-19 16:00:00	27	25	0	**52**	1	1	145	34	0	**179**	0	0	10	87	0	**97**	0	0	**328**
2022-04-19 16:15:00	29	28	0	**57**	1	0	136	64	0	**200**	0	0	19	133	0	**152**	0	0	**409**
2022-04-19 16:30:00	27	39	0	**66**	0	0	170	34	0	**204**	0	0	13	113	0	**126**	0	0	**396**
2022-04-19 16:45:00	37	33	0	**70**	1	0	148	50	0	**198**	0	0	10	97	0	**107**	0	0	**375**
2022-04-19 17:00:00	42	33	0	**75**	1	0	140	33	0	**173**	0	0	15	107	0	**122**	0	0	**370**
2022-04-19 17:15:00	33	32	0	**65**	0	0	149	36	0	**185**	0	0	14	117	0	**131**	0	0	**381**
2022-04-19 17:30:00	30	21	0	**51**	0	0	147	28	0	**175**	0	0	22	132	0	**154**	0	0	**380**
2022-04-19 17:45:00	25	14	0	**39**	0	0	129	44	0	**173**	0	0	29	97	0	**126**	0	0	**338**
2022-04-19 18:00:00	20	18	0	**38**	0	0	144	38	0	**182**	0	0	16	99	0	**115**	0	0	**335**
2022-04-19 18:15:00	19	9	0	**28**	0	0	129	28	0	**157**	0	0	19	84	0	**103**	0	0	**288**
2022-04-19 18:30:00	18	13	0	**31**	0	0	111	32	0	**143**	0	0	17	64	0	**81**	0	0	**255**
2022-04-19 18:45:00	16	16	0	**32**	0	1	86	24	0	**110**	0	0	13	74	0	**87**	0	0	**229**
2022-04-19 19:00:00	13	13	0	**26**	0	0	91	18	0	**109**	0	0	17	67	0	**84**	0	0	**219**
2022-04-19 19:15:00	15	8	0	**23**	0	1	91	27	0	**118**	0	0	12	68	0	**80**	0	0	**221**
2022-04-19 19:30:00	21	10	0	**31**	0	0	57	18	0	**75**	0	0	16	42	0	**58**	0	0	**164**
2022-04-19 19:45:00	6	9	0	**15**	0	0	58	9	0	**67**	0	2	11	56	0	**67**	0	0	**149**
2022-04-19 20:00:00	8	12	0	**20**	0	0	59	21	0	**80**	0	0	9	53	0	**62**	0	0	**162**
2022-04-19 20:15:00	8	8	0	**16**	0	0	59	15	0	**74**	0	0	11	51	0	**62**	0	0	**152**
2022-04-19 20:30:00	9	9	0	**18**	0	0	48	13	0	**61**	0	0	13	41	0	**54**	0	0	**133**
2022-04-19 20:45:00	8	9	0	**17**	0	0	58	14	0	**72**	0	0	12	48	0	**60**	0	0	**149**
2022-04-19 21:00:00	15	9	0	**24**	0	0	53	9	0	**62**	0	0	7	24	0	**31**	0	0	**117**
2022-04-19 21:15:00	6	8	0	**14**	2	0	37	15	0	**52**	0	0	6	28	0	**34**	0	0	**100**
2022-04-19 21:30:00	5	7	0	**12**	0	0	28	13	0	**41**	0	0	10	29	0	**39**	0	0	**92**
2022-04-19 21:45:00	10	9	0	**19**	1	1	36	9	0	**45**	0	0	6	28	0	**34**	0	0	**98**
2022-04-19 22:00:00	9	8	0	**17**	0	1	36	16	0	**52**	0	0	8	37	0	**45**	0	0	**114**
2022-04-19 22:15:00	10	2	0	**12**	0	0	29	10	0	**39**	0	0	5	34	0	**39**	0	0	**90**
2022-04-19 22:30:00	3	8	0	**11**	0	0	20	12	0	**32**	0	0	10	35	0	**45**	0	0	**88**
2022-04-19 22:45:00	5	2	0	**7**	0	0	21	12	0	**33**	0	0	8	23	0	**31**	0	0	**71**
2022-04-19 23:00:00	6	4	0	**10**	0	0	18	10	0	**28**	0	0	4	21	0	**25**	0	0	**63**
2022-04-19 23:15:00	7	1	0	**8**	0	0	19	13	0	**32**	0	0	4	21	0	**25**	0	0	**65**
2022-04-19 23:30:00	3	5	0	**8**	0	1	13	11	0	**24**	0	0	3	17	0	**20**	0	0	**52**
2022-04-19 23:45:00	2	4	0	**6**	0	0	18	6	0	**24**	0	0	1	10	0	**11**	0	0	**41**
Grand Total	1199	1261	1	**2461**	22	23	7718	1646	0	**9364**	2	7	846	4318	4	**5168**	0	0	**16993**
% Approach	48.7%	51.2%	0.0%				82.4%	17.6%	0.0%				16.4%	83.6%	0.1%				
% Total	7.1%	7.4%	0.0%	**14.5%**			45.4%	9.7%	0.0%	**55.1%**			5.0%	25.4%	0.0%	**30.4%**			
Lights	1164	1250	1	**2415**			7556	1622	0	**9178**			837	4043	3	**4883**			**16476**
% Lights	97.1%	99.1%	100.0%	**98.1%**			97.9%	98.5%	0.0%	**98.0%**			98.9%	93.6%	75.0%	**94.5%**			**97.0%**
Single-Unit Trucks	22	6	0	**28**			105	11	0	**116**			8	199	0	**207**			**351**
% Single-Unit Trucks	1.8%	0.5%	0.0%	**1.1%**			1.4%	0.7%	0.0%	**1.2%**			0.9%	4.6%	0.0%	**4.0%**			**2.1%**
Articulated Trucks	5	3	0	**8**			34	3	0	**37**			0	66	1	**67**			**112**
% Articulated Trucks	0.4%	0.2%	0.0%	**0.3%**			0.4%	0.2%	0.0%	**0.4%**			0.0%	1.5%	25.0%	**1.3%**			**0.7%**
Buses	8	2	0	**10**			23	10	0	**33**			1	10	0	**11**			**54**
% Buses	0.7%	0.2%	0.0%	**0.4%**			0.3%	0.6%	0.0%	**0.4%**			0.1%	0.2%	0.0%	**0.2%**			**0.3%**
Pedestrians					19	19					1	2					0	0	
% Pedestrians					86.4%	82.6%					50.0%	28.6%					0.0%	0.0%	
Bicycles on Crosswalk					3	4					1	5					0	0	
% Bicycles on Crosswalk					13.6%	17.4%					50.0%	71.4%					0.0%	0.0%	

Leg	Loop Central Dr						Westpark Dr						Westpark Dr						
Direction	Northbound						Eastbound						Westbound						
Start Time	Left	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Thru	Right	U-Turn	**App Total**	Peds CW	Peds CCW	Left	Thru	U-Turn	**App Total**	Peds CW	Peds CCW	**Int Total**
2022-04-19 00:00:00	0	0	0	**0**	0	0	6	0	0	**6**	0	0	0	10	0	**10**	0	0	**16**
2022-04-19 00:15:00	0	1	0	**1**	0	0	4	0	0	**4**	0	0	1	6	0	**7**	0	0	**12**
2022-04-19 00:30:00	0	0	0	**0**	0	0	6	0	0	**6**	0	0	1	10	0	**11**	0	0	**17**
2022-04-19 00:45:00	0	0	0	**0**	0	0	6	0	0	**6**	0	0	2	3	0	**5**	0	0	**11**
2022-04-19 01:00:00	0	0	0	**0**	0	0	4	1	0	**5**	0	0	0	8	0	**8**	0	0	**13**
2022-04-19 01:15:00	0	0	0	**0**	0	0	3	0	0	**3**	0	0	0	7	0	**7**	0	0	**10**
2022-04-19 01:30:00	1	0	0	**1**	0	0	2	0	0	**2**	0	0	0	4	0	**4**	0	0	**7**
2022-04-19 01:45:00	0	0	0	**0**	0	0	7	0	0	**7**	0	0	0	4	0	**4**	0	0	**11**
2022-04-19 02:00:00	0	0	0	**0**	0	0	2	0	0	**2**	0	0	0	4	0	**4**	0	0	**6**
2022-04-19 02:15:00	0	0	0	**0**	0	0	5	0	0	**5**	0	0	0	1	0	**1**	0	0	**6**
2022-04-19 02:30:00	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	5	0	**5**	0	0	**6**
2022-04-19 02:45:00	1	0	0	**1**	0	0	4	2	0	**6**	0	0	0	3	0	**3**	0	0	**10**
2022-04-19 03:00:00	0	0	0	**0**	0	0	6	0	0	**6**	0	0	0	4	0	**4**	0	0	**10**
2022-04-19 03:15:00	0	0	0	**0**	0	0	3	0	0	**3**	0	0	1	3	0	**4**	0	0	**7**
2022-04-19 03:30:00	0	2	0	**2**	0	0	4	1	0	**5**	0	0	0	3	0	**3**	0	0	**10**
2022-04-19 03:45:00	0	0	0	**0**	0	0	8	0	0	**8**	0	0	1	3	0	**4**	0	0	**12**
2022-04-19 04:00:00	0	0	0	**0**	0	0	4	0	0	**4**	0	0	1	2	0	**3**	0	0	**7**
2022-04-19 04:15:00	1	0	0	**1**	0	0	6	1	0	**7**	0	0	2	5	0	**7**	0	0	**15**
2022-04-19 04:30:00	0	0	0	**0**	0	0	9	0	0	**9**	0	0	0	6	0	**6**	0	0	**15**
2022-04-19 04:45:00	1	2	0	**3**	0	0	7	1	0	**8**	0	0	1	7	0	**8**	0	0	**19**
2022-04-19 05:00:00	0	0	0	**0**	0	0	21	1	0	**22**	0	0	1	4	0	**5**	0	0	**27**
2022-04-19 05:15:00	1	0	0	**1**	0	0	22	1	0	**23**	0	0	5	5	0	**10**	0	0	**34**
2022-04-19 05:30:00	0	2	0	**2**	0	0	28	4	0	**32**	0	0	1	9	0	**10**	0	0	**44**
2022-04-19 05:45:00	0	2	0	**2**	0	0	39	10	0	**49**	0	0	5	19	0	**24**	0	0	**75**
2022-04-19 06:00:00	1	0	0	**1**	0	0	76	8	0	**84**	0	0	4	27	0	**31**	0	0	**116**
2022-04-19 06:15:00	0	3	0	**3**	0	0	136	10	0	**146**	0	0	4	20	0	**24**	0	0	**173**
2022-04-19 06:30:00	2	5	1	**8**	0	0	151	17	0	**168**	0	0	9	26	0	**35**	0	0	**211**
2022-04-19 06:45:00	2	2	0	**4**	0	0	172	19	0	**191**	0	0	17	42	0	**59**	0	0	**254**
2022-04-19 07:00:00	1	3	0	**4**	0	0	162	14	0	**176**	0	0	12	58	0	**70**	0	0	**250**
2022-04-19 07:15:00	5	6	0	**11**	0	0	187	18	0	**205**	0	0	16	54	0	**70**	0	0	**286**
2022-04-19 07:30:00	2	9	0	**11**	0	0	187	25	0	**212**	0	0	17	84	0	**101**	0	0	**324**
2022-04-19 07:45:00	3	1	0	**4**	0	0	204	26	0	**230**	0	0	23	100	0	**123**	0	0	**357**
2022-04-19 08:00:00	5	11	0	**16**	0	0	185	27	0	**212**	0	0	25	86	0	**111**	0	0	**339**
2022-04-19 08:15:00	3	22	0	**25**	0	0	176	25	0	**201**	0	0	35	107	0	**142**	0	0	**368**
2022-04-19 08:30:00	9	25	0	**34**	0	0	181	17	0	**198**	0	0	18	75	0	**93**	0	0	**325**
2022-04-19 08:45:00	7	11	0	**18**	0	0	188	12	0	**200**	0	0	16	82	0	**98**	0	0	**316**
2022-04-19 09:00:00	3	20	0	**23**	0	0	169	21	0	**190**	0	0	18	84	1	**103**	0	0	**316**
2022-04-19 09:15:00	7	14	0	**21**	0	0	113	12	0	**125**	0	0	16	49	0	**65**	0	0	**211**
2022-04-19 09:30:00	9	10	0	**19**	0	0	133	12	0	**145**	0	0	12	74	0	**86**	0	0	**250**
2022-04-19 09:45:00	6	17	0	**23**	0	0	138	11	0	**149**	0	0	5	72	0	**77**	0	0	**249**
2022-04-19 10:00:00	8	11	0	**19**	0	0	112	17	0	**129**	0	0	7	65	0	**72**	0	0	**220**
2022-04-19 10:15:00	5	11	0	**16**	0	0	122	6	0	**128**	0	0	5	68	0	**73**	0	0	**217**
2022-04-19 10:30:00	8	11	0	**19**	0	0	134	4	0	**138**	0	0	10	96	0	**106**	0	0	**263**
2022-04-19 10:45:00	12	22	0	**34**	0	0	107	10	0	**117**	0	0	4	69	0	**73**	0	0	**224**
2022-04-19 11:00:00	22	32	0	**54**	0	0	122	12	0	**134**	0	0	14	89	0	**103**	0	0	**291**
2022-04-19 11:15:00	14	14	0	**28**	0	0	120	11	0	**131**	0	0	11	98	0	**109**	0	0	**268**
2022-04-19 11:30:00	11	23	0	**34**	0	0	119	13	0	**132**	0	0	13	105	0	**118**	0	0	**284**
2022-04-19 11:45:00	17	23	0	**40**	0	0	139	7	0	**146**	0	0	14	102	0	**116**	0	0	**302**
2022-04-19 12:00:00	26	26	0	**52**	0	0	93	10	0	**103**	0	0	15	117	0	**132**	0	0	**287**
2022-04-19 12:15:00	27	27	0	**54**	0	0	112	11	0	**123**	0	0	13	92	0	**105**	0	0	**282**
2022-04-19 12:30:00	23	23	0	**46**	0	0	127	12	0	**139**	0	0	22	114	0	**136**	0	0	**321**
2022-04-19 12:45:00	16	21	0	**37**	0	0	135	19	0	**154**	0	0	16	114	1	**131**	0	0	**322**
2022-04-19 13:00:00	20	21	0	**41**	0	0	116	9	0	**125**	0	0	7	113	0	**120**	0	0	**286**
2022-04-19 13:15:00	15	17	0	**32**	0	0	132	14	0	**146**	0	0	9	145	0	**154**	0	0	**332**
2022-04-19 13:30:00	14	24	0	**38**	0	0	120	9	0	**129**	0	0	10	114	0	**124**	0	0	**291**
2022-04-19 13:45:00	13	29	0	**42**	0	0	113	14	0	**127**	0	0	5	117	0	**122**	0	0	**291**
2022-04-19 14:00:00	19	15	0	**34**	0	0	135	6	0	**141**	0	0	2	145	0	**147**	0	0	**322**
2022-04-19 14:15:00	8	11	0	**19**	0	0	116	6	0	**122**	0	0	7	130	0	**137**	0	0	**278**
2022-04-19 14:30:00	9	19	0	**28**	0	0	108	5	0	**113**	0	0	3	123	0	**126**	0	0	**267**
2022-04-19 14:45:00	19	17	0	**36**	0	0	120	10	0	**130**	0	0	11	122	0	**133**	0	0	**299**
2022-04-19 15:00:00	27	10	0	**37**	0	0	116	8	0	**124**	0	0	2	130	0	**132**	0	0	**293**
2022-04-19 15:15:00	21	20	0	**41**	0	0	130	3	0	**133**	0	0	7	142	0	**149**	0	0	**323**
2022-04-19 15:30:00	31	21	0	**52**	0	0	125	10	0	**135**	0	0	9	196	0	**205**	0	0	**392**
2022-04-19 15:45:00	43	22	0	**65**	0	0	119	4	0	**123**	0	0	6	178	0	**184**	0	0	**372**
2022-04-19 16:00:00	47	41	0	**88**	0	0	112	7	0	**119**	0	0	8	212	0	**220**	0	0	**427**
2022-04-19 16:15:00	46	30	0	**76**	0	0	119	5	0	**124**	0	0	2	210	0	**212**	0	0	**412**
2022-04-19 16:30:00	39	36	0	**75**	0	0	138	7	0	**145**	0	0	3	227	0	**230**	0	0	**450**
2022-04-19 16:45:00	33	26	0	**59**	0	0	157	9	0	**166**	0	0	9	205	0	**214**	0	0	**439**
2022-04-19 17:00:00	54	59	0	**113**	0	0	124	3	0	**127**	0	0	8	217	0	**225**	0	0	**465**
2022-04-19 17:15:00	38	38	0	**76**	0	0	148	7	0	**155**	0	0	7	187	0	**194**	0	0	**425**
2022-04-19 17:30:00	26	25	0	**51**	0	0	145	7	0	**152**	0	0	4	203	0	**207**	0	0	**410**
2022-04-19 17:45:00	18	35	0	**53**	0	0	150	5	0	**155**	0	0	9	181	0	**190**	0	0	**398**
2022-04-19 18:00:00	30	21	0	**51**	0	0	150	4	0	**154**	0	0	5	154	0	**159**	0	0	**364**
2022-04-19 18:15:00	27	18	0	**45**	0	0	103	4	0	**107**	0	0	4	162	0	**166**	0	0	**318**
2022-04-19 18:30:00	15	12	0	**27**	0	0	116	6	0	**122**	0	0	3	112	0	**115**	0	0	**264**
2022-04-19 18:45:00	6	3	0	**9**	0	0	93	3	0	**96**	0	0	5	112	0	**117**	0	0	**222**
2022-04-19 19:00:00	9	9	0	**18**	0	0	68	1	0	**69**	0	0	2	87	0	**89**	0	0	**176**
2022-04-19 19:15:00	7	5	0	**12**	0	0	75	1	0	**76**	0	0	3	77	0	**80**	0	0	**168**
2022-04-19 19:30:00	4	5	0	**9**	0	0	50	6	0	**56**	0	0	3	67	0	**70**	0	0	**135**
2022-04-19 19:45:00	2	4	0	**6**	0	0	61	2	0	**63**	0	0	2	71	0	**73**	0	0	**142**
2022-04-19 20:00:00	0	2	0	**2**	0	0	63	1	0	**64**	0	0	3	71	0	**74**	0	0	**140**
2022-04-19 20:15:00	1	6	0	**7**	0	0	45	5	0	**50**	0	0	2	75	1	**78**	0	0	**135**
2022-04-19 20:30:00	0	4	0	**4**	0	0	52	3	0	**55**	0	0	0	60	0	**60**	0	0	**119**
2022-04-19 20:45:00	4	5	0	**9**	0	0	45	0	0	**45**	0	0	3	36	0	**39**	0	0	**93**
2022-04-19 21:00:00	0	1	0	**1**	0	0	54	1	0	**55**	0	0	2	48	0	**50**	0	0	**106**
2022-04-19 21:15:00	0	2	0	**2**	0	0	40	0	0	**40**	0	0	3	29	0	**32**	0	0	**74**
2022-04-19 21:30:00	2	2	0	**4**	0	0	43	2	0	**45**	0	0	3	29	0	**32**	0	0	**81**
2022-04-19 21:45:00	1	2	0	**3**	0	0	39	1	0	**40**	0	0	1	31	0	**32**	0	0	**75**
2022-04-19 22:00:00	1	1	0	**2**	0	0	29	4	0	**33**	0	0	1	45	0	**46**	0	0	**81**
2022-04-19 22:15:00	8	3	0	**11**	0	0	20	1	0	**21**	0	0	1	26	0	**27**	0	0	**59**
2022-04-19 22:30:00	0	1	0	**1**	0	0	14	1	0	**15**	0	0	0	28	0	**28**	0	0	**44**
2022-04-19 22:45:00	1	0	0	**1**	0	0	16	1	0	**17**	0	0	3	23	0	**26**	0	0	**44**
2022-04-19 23:00:00	0	0	0	**0**	0	0	14	0	0	**14**	0	0	0	19	0	**19**	0	0	**33**
2022-04-19 23:15:00	4	3	0	**7**	0	0	11	3	0	**14**	0	0	0	17	0	**17**	0	0	**38**
2022-04-19 23:30:00	0	1	0	**1**	0	0	19	1	0	**20**	0	0	1	17	0	**18**	0	0	**39**
2022-04-19 23:45:00	2	3	0	**5**	0	0	11	0	0	**11**	0	0	1	9	0	**10**	0	0	**26**
Grand Total	923	1041	1	**1965**	0	0	7981	627	0	**8608**	0	0	592	7006	3	**7601**	0	0	**18174**
% Approach	47.0%	53.0%	0.1%				92.7%	7.3%	0.0%				7.8%	92.2%	0.0%				
% Total	5.1%	5.7%	0.0%	**10.8%**			43.9%	3.4%	0.0%	**47.4%**			3.3%	38.5%	0.0%	**41.8%**			
Lights	908	1030	1	**1939**			7869	617	0	**8486**			580	6873	3	**7456**			**17881**
% Lights	98.4%	98.9%	100.0%	**98.7%**			98.6%	98.4%	0.0%	**98.6%**			98.0%	98.1%	100.0%	**98.1%**			**98.4%**
Single-Unit Trucks	11	10	0	**21**			53	9	0	**62**			8	59	0	**67**			**150**
% Single-Unit Trucks	1.2%	1.0%	0.0%	**1.1%**			0.7%	1.4%	0.0%	**0.7%**			1.4%	0.8%	0.0%	**0.9%**			**0.8%**
Articulated Trucks	3	1	0	**4**			11	1	0	**12**			4	21	0	**25**			**41**
% Articulated Trucks	0.3%	0.1%	0.0%	**0.2%**			0.1%	0.2%	0.0%	**0.1%**			0.7%	0.3%	0.0%	**0.3%**			**0.2%**
Buses	1	0	0	**1**			48	0	0	**48**			0	53	0	**53**			**102**
% Buses	0.1%	0.0%	0.0%	**0.1%**			0.6%	0.0%	0.0%	**0.6%**			0.0%	0.8%	0.0%	**0.7%**			**0.6%**
Pedestrians					0	0					0	0					0	0	
% Pedestrians					0.0%	0.0%					0.0%	0.0%					0.0%	0.0%	
Bicycles on Crosswalk					0	0					0	0					0	0	
% Bicycles on Crosswalk					0.0%	0.0%					0.0%	0.0%					0.0%	0.0%	

APPENDIX B – BACKGROUND PROJECTS INCLUDED IN THE TDM

Sponsor	Category	Segment	Description	Est. Construction Start Date
TxDOT	Highway	1	Upgrades include wider connectors, additional shoulders, increased vertical clearances and sight distances, additional detention ponds, and reduced weaving.	2017
Uptown Houston District	Local Street	1	Expansion from 4 to 6 lanes from Westheimer to I-69/US-59.	2027
Uptown Houston District	Local Street	1	Expansion from 6 to 8 lanes from Sage Rd to Chimney Rock Rd.	2027
METRO	Transit	1	New BRT busway from Missouri City P&R to Willowbrook Mall via Gessner; includes 40 stations.	2045
METRO	Transit	1	New transit center at Bellaire Blvd and Chimney Rock Rd to replace existing transit center at Bellaire and S Rice Ave.	2045
METRO	Transit	1	5.2-mile extension of Silver Line from Bellaire/Uptown Transit Center south to new Gulfton Transit Center; includes 3 stations.	2030
H-GAC	Highway	2	Convert existing 1-lane HOV facility to 2-lanes from Spur 527 to Beltway 8.	2040
Montrose TIRZ	Street	2	Reconstruct Montrose Blvd into a 4-lane roadway with a new storm sewer system that will provide additional in-line detention, wide pedestrian-friendly sidewalks, sidewalks on both sides, and replacement of public utilities; in partnership with METRO.	N/A
TxDOT	Highway	3	Reconstruct and widen I-69/US-59 from 6 to 10 main lanes between Spur 527 and SH-288.	2022
TxDOT	Highway	3	Reconstruct and widen I-69/US-59 from 8 to 12 main lanes and reconstruct I-69/SH-288 interchange.	2021
OST/Almeda TIRZ	Park	3	Add new outdoor performance stage and event lawn, construct public parking garage at Elgin St and Emancipation Ave, and enhance park facilities, infrastructure, splash pads and other park amenities as needed.	2020
Midtown TIRZ	Park	3	Create new park above I-69/US-59 following completion of NHHIP.	2023
University of Houston	Transit	3	Construct multimodal transportation center for UH at Wheeler Ave and Calhoun Rd.	2027
METRO	Transit	3	Replace Wheeler Station with new Wheeler Intermodal Terminal.	2024
Harris County	Facility	4	Construction of a parking lot facility at 701 Lockwood Dr, including access road, sidewalks, drainage, and a potential traffic signal.	2022
H-GAC	Highway	4	New 2-lane HOV facility on I-10 from I-610 to Garth Rd, including in-freeway bus station at Fifth Ward/Denver Harbor TC.	2040
H-GAC	Highway	5	Conversion of existing one-way reversible HOV lane to two-way all-day facility from Downtown to Townsen Park & Ride.	2040

APPENDIX C – EXISTING CONDITION MODEL CALIBRATION DATA

Existing AM Approach Volume Calibration

Intersection	Node	Northbound					Southbound					Eastbound					Westbound				
		Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	1241	872	11.35	700-2700	No	845	810	1.22	700-2700	Yes	660	581	3.17	<700	Yes	0	0	-	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	1461	1036	12.03	700-2700	No	684	702	0.68	<700	Yes	1357	1311	1.26	700-2700	Yes	1142	1203	1.78	700-2700	Yes
Westpark Dr at Hillcroft Ave	103	1384	1396	0.32	700-2700	Yes	1117	1121	0.12	700-2700	Yes	1647	1323	8.41	700-2700	No	1444	1277	4.53	700-2700	Yes
Westpark Dr at 14th St	104	122	113	0.83	<700	Yes	0	0	-	<700	Yes	1263	1102	4.68	700-2700	Yes	1207	1287	2.27	700-2700	Yes
Westpark Drive at I 69 SBFR	105	0	0	-	<700	Yes	1269	1279	0.28	700-2700	Yes	1220	1171	1.42	700-2700	Yes	562	614	2.14	<700	Yes
Westpark Drive at I 69 NBFR	106	692	679	0.50	<700	Yes	0	0	-	<700	Yes	1302	1261	1.15	700-2700	Yes	479	533	2.40	<700	Yes
Westpark Dr at Rampart St	107	371	317	2.91	<700	Yes	21	79	8.20	<700	Yes	977	993	0.51	700-2700	Yes	270	242	1.75	<700	Yes
Westpark Dr at Renwick Dr	108	610	602	0.32	<700	Yes	361	368	0.37	<700	Yes	957	854	3.42	700-2700	Yes	280	233	2.93	<700	Yes
Westpark Dr at Alder Dr	360	224	242	1.18	<700	Yes	0	0	-	<700	Yes	913	1114	6.31	700-2700	No	197	206	0.63	<700	Yes
Westpark Dr at Chimney Rock Rd	109	848	817	1.07	700-2700	Yes	828	751	2.74	700-2700	Yes	893	988	3.10	700-2700	Yes	288	349	3.42	<700	Yes
Westpark Dr at Royalton St	309	188	179	0.66	<700	Yes	0	0	-	<700	Yes	884	1271	11.79	700-2700	No	207	383	10.25	<700	No
Westpark Dr at S Rice Ave	110	767	832	2.30	700-2700	Yes	395	418	1.14	<700	Yes	1043	1117	2.25	700-2700	Yes	432	557	5.62	<700	No
Westpark Dr at Uptown Transit Ctr	382	15	18	0.74	<700	Yes	0	0	-	<700	Yes	778	1049	8.97	700-2700	No	483	570	3.79	<700	Yes
Westpark Dr at I 610 SBFR	111	0	0	-	<700	Yes	222	216	0.41	<700	Yes	2186	1910	6.10	700-2700	Yes	595	783	7.16	<700	No
Westpark Dr at I 610 NBFR	112	539	593	2.27	<700	Yes	0	0	-	<700	Yes	1655	1342	8.09	700-2700	No	533	693	6.46	<700	No
Westpark Dr at Loop Central Dr	394	56	60	0.53	<700	Yes	0	0	-	<700	Yes	855	881	0.88	700-2700	Yes	477	811	13.16	<700	No
Westpark Dr at Newcastle Dr	113	684	656	1.08	<700	Yes	177	247	4.81	<700	Yes	928	776	5.21	700-2700	No	534	643	4.49	<700	No
Westpark Dr at Weslayan St	114	959	971	0.39	700-2700	Yes	953	1029	2.41	700-2700	Yes	1066	886	5.76	700-2700	No	307	382	4.04	<700	Yes
Westpark Dr at Edloe St	115	646	662	0.63	<700	Yes	374	432	2.89	<700	Yes	606	631	1.01	<700	Yes	418	517	4.58	<700	Yes
I 69 Express Lanes at Edloe St	116	860	842	0.62	700-2700	Yes	418	445	1.30	<700	Yes	252	284	1.95	<700	Yes	0	0	-	<700	Yes
Richmond Ave at Edloe St	118	1025	1081	1.73	700-2700	Yes	429	505	3.52	<700	Yes	759	727	1.17	700-2700	Yes	616	592	0.98	<700	Yes
Richmond Ave at Buffalo Speedway	119	1074	1035	1.20	700-2700	Yes	500	528	1.24	<700	Yes	818	831	0.45	700-2700	Yes	714	650	2.45	700-2700	Yes
Richmond Ave at Eastside St	120	98	111	1.27	<700	Yes	302	307	0.29	<700	Yes	948	1030	2.61	700-2700	Yes	673	576	3.88	<700	Yes
Richmond Ave at Kirby Dr	121	1669	1712	1.05	700-2700	Yes	1349	1347	0.05	700-2700	Yes	671	696	0.96	<700	Yes	370	373	0.16	<700	Yes
Richmond Ave at Greenbriar St	122	71	96	2.74	<700	Yes	509	527	0.79	<700	Yes	443	497	2.49	<700	Yes	414	423	0.44	<700	Yes
Richmond Ave at Shepherd Dr	123	384	436	2.57	<700	Yes	415	462	2.24	<700	Yes	307	379	3.89	<700	Yes	442	461	0.89	<700	Yes
Richmond Ave at Hazard St	124	360	356	0.21	<700	Yes	133	126	0.62	<700	Yes	285	344	3.33	<700	Yes	469	455	0.65	<700	Yes
Richmond Dr at Woodhead St	125	224	263	2.50	<700	Yes	215	184	2.19	<700	Yes	492	533	1.81	<700	Yes	449	450	0.05	<700	Yes
Richmond Ave at Dunlavy St	126	160	177	1.31	<700	Yes	374	396	1.12	<700	Yes	547	571	1.02	<700	Yes	379	357	1.15	<700	Yes
Richmond Ave at Mandell St	127	148	192	3.37	<700	Yes	116	143	2.37	<700	Yes	532	528	0.17	<700	Yes	365	364	0.05	<700	Yes
Richmond Ave at Montrose Blvd	128	1153	1231	2.26	700-2700	Yes	896	1146	7.82	700-2700	No	515	662	6.06	<700	No	512	528	0.70	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	-	<700	Yes	347	381	1.78	<700	Yes	634	538	3.97	<700	Yes	723	771	1.76	700-2700	Yes
Richmond Ave at Spur 527 NBFR	130	198	209	0.77	<700	Yes	0	0	-	<700	Yes	456	524	3.07	<700	Yes	659	666	0.27	<700	Yes
Richmond Ave at Main St	131	391	358	1.71	<700	Yes	106	137	2.81	<700	Yes	365	448	4.12	<700	Yes	556	428	5.77	<700	No
Wheeler Ave at Fannin St	132	0	0	-	<700	Yes	984	979	0.16	700-2700	Yes	373	417	2.21	<700	Yes	432	279	8.11	<700	No
Wheeler Ave at San Jacinto St	133	409	427	0.88	<700	Yes	0	0	-	<700	Yes	466	451	0.70	<700	Yes	384	361	1.19	<700	Yes
Wheeler Ave at La Branch St	134	50	110	6.71	<700	Yes	32	83	6.73	<700	Yes	241	393	8.54	<700	No	316	358	2.29	<700	Yes
Wheeler Ave at Almeda Rd	135	344	409	3.35	<700	Yes	190	188	0.15	<700	Yes	208	287	5.02	<700	Yes	188	147	3.17	<700	Yes
Wheeler Ave at St Emanuel St	365	0	0	-	<700	Yes	0	0	-	<700	Yes	160	178	1.38	<700	Yes	314	237	4.64	<700	Yes
Wheeler Ave at Hutchins St	367	406	415	0.44	<700	Yes	14	30	3.41	<700	Yes	87	140	4.97	<700	Yes	117	153	3.10	<700	Yes
Wheeler Ave at Emancipation Ave	136	196	232	2.46	<700	Yes	164	184	1.52	<700	Yes	115	144	2.55	<700	Yes	55	128	7.63	<700	Yes
Ennis St at Wheeler St	266	212	211	0.07	<700	Yes	125	132	0.62	<700	Yes	58	73	1.85	<700	Yes	2	0	2.00	<700	Yes
Cleburne St at Ennis St	292	231	226	0.33	<700	Yes	124	159	2.94	<700	Yes	54	73	2.38	<700	Yes	73	88	1.67	<700	Yes
Ennis St at Alabama St	141	103	138	3.19	<700	Yes	94	100	0.61	<700	Yes	357	402	2.31	<700	Yes	172	214	3.02	<700	Yes
Ennis St at Holman St	306	118	114	0.37	<700	Yes	90	83	0.75	<700	Yes	53	57	0.54	<700	Yes	43	48	0.74	<700	Yes
Ennis St at Elgin St	249	103	93	1.01	<700	Yes	33	36	0.51	<700	Yes	199	239	2.70	<700	Yes	295	290	0.29	<700	Yes
Elgin St at Scott St	143	392	496	4.94	<700	No	558	644	3.51	<700	Yes	277	272	0.30	<700	Yes	335	374	2.07	<700	Yes
Elgin St at Cullen Blvd	144	232	255	1.47	<700	Yes	416	410	0.30	<700	Yes	239	155	5.98	<700	Yes	318	373	2.96	<700	Yes
Elgin St at UH Entrance 16	145	73	106	3.49	<700	Yes	60	70	1.24	<700	Yes	295	305	0.58	<700	Yes	473	502	1.31	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	-	<700	Yes	393	543	6.93	<700	No	145	195	3.83	<700	Yes	764	760	0.14	700-2700	Yes
Lockwood St at Spur 5 NBFR	147	206	252	3.04	<700	Yes	741	717	0.89	700-2700	Yes	0	0	-	<700	Yes	245	278	2.04	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	390	422	1.59	<700	Yes	275	506	11.69	<700	No	0	0	-	<700	Yes	1493	1667	4.38	700-2700	Yes
Ernestine St at Munger St	452	0	0	-	<700	Yes	226	446	12.00	<700	No	8	59	8.81	<700	Yes	188	208	1.42	<700	Yes
Lockwood Dr at Munger St	453	737	834	3.46	700-2700	Yes	0	0	-	<700	Yes	72	64	0.97	<700	Yes	167	290	8.14	<700	No
Ernestine St at Leeland St	149	0	0	-	<700	Yes	894	823	2.42	700-2700	Yes	209	257	3.14	<700	Yes	425	458	1.57	<700	Yes
Leeland St at Lockwood St	150	1159	1156	0.09	700-2700	Yes	0	0	-	<700	Yes	235	297	3.80	<700	Yes	206	332	7.68	<700	No
Ernestine St/Lockwood Dr at Polk St	151	677	596	3.21	<700	Yes	619	795	6.62	<700	No	244	275	1.92	<700	Yes	293	339	2.59	<700	Yes
Ernestine St/Lockwood Dr at McKinney St	152	662	677	0.58	<700	Yes	806	835	1.01	700-2700	Yes	58	77	2.31	<700	Yes	42	68	3.51	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	661	731	2.65	<700	Yes	741	792	1.84	700-2700	Yes	146	176	2.36	<700	Yes	331	416	4.40	<700	Yes
Lockwood Dr at Canal St	154	575	681	4.23	<700	No	576	563	0.54	<700	Yes	261	298	2.21	<700	Yes	268	335	3.86	<700	Yes
Lockwood Dr at Navigation Blvd	155	414	490	3.57	<700	Yes	627	631	0.16	<700	Yes	465	493	1.28	<700	Yes	629	625	0.16	<700	Yes
Lockwood Dr at Armour Dr	156	451	406	2.17	<700	Yes	637	625	0.48	<700	Yes	0	0	-	<700	Yes	52	85	3.99	<700	Yes
Lockwood Dr at Clinton Dr	157	398	370	1.43	<700	Yes	685	627	2.26	<700	Yes	159	192	2.49	<700	Yes	227	294	4.15	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	-	<700	Yes	939	715	7.79	700-2700	No	73	111	3.96	<700	Yes	119	153	2.92	<700	Yes
Lockwood Dr (NB) at Market St	159	430	498	3.16	<700	Yes	0	0	-	<700	Yes	120	77	4.33	<700	Yes	243	202	2.75	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	-	<700	Yes	814	778	1.28	700-2700	Yes	484	377	5.16	<700	No	0	0	-	<700	Yes

Existing AM Approach Volume Calibration

Lockwood Dr (NB) at I 10 EBFR	161	527	537	0.43	<700	Yes	0	0	-	<700	Yes	448	436	0.57	<700	Yes	0	0	-	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	-	<700	Yes	588	546	1.76	<700	Yes	0	0	-	<700	Yes	747	693	2.01	700-2700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	483	531	2.13	<700	Yes	0	0	-	<700	Yes	0	0	-	<700	Yes	702	603	3.88	700-2700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	-	<700	Yes	515	468	2.12	<700	Yes	212	250	2.50	<700	Yes	227	259	2.05	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	364	425	3.07	<700	Yes	0	0	-	<700	Yes	155	153	0.16	<700	Yes	218	222	0.27	<700	Yes
Lockwood Dr at Mulvey St	166	307	355	2.64	<700	Yes	508	480	1.26	<700	Yes	12	13	0.28	<700	Yes	10	25	3.59	<700	Yes
Lockwood Dr at Nichols St	567	288	368	4.42	<700	Yes	458	533	3.37	<700	Yes	26	18	1.71	<700	Yes	8	51	7.92	<700	Yes
Lockwood Dr at Sudan St	576	310	328	1.01	<700	Yes	490	544	2.37	<700	Yes	3	3	0.00	<700	Yes	16	19	0.72	<700	Yes
Lockwood Dr at Collingsworth St	167	300	405	5.59	<700	No	319	441	6.26	<700	No	134	169	2.84	<700	Yes	88	124	3.50	<700	Yes
Lockwood Dr at Crane St	168	285	323	2.18	<700	Yes	374	456	4.03	<700	Yes	80	136	5.39	<700	Yes	46	92	5.54	<700	Yes
Lockwood Dr at Cavalcade	169	289	344	3.09	<700	Yes	379	492	5.41	<700	No	105	157	4.54	<700	Yes	206	288	5.22	<700	Yes
Lockwood Dr at Rand St	170	287	377	4.94	<700	Yes	458	601	6.21	<700	No	58	90	3.72	<700	Yes	74	107	3.47	<700	Yes
Lockwood Dr at Pardee St	604	362	501	6.69	<700	No	502	709	8.41	<700	No	92	97	0.51	<700	Yes	15	16	0.25	<700	Yes
Lockwood Dr at I 610 EBFR	171	477	471	0.28	<700	Yes	351	472	5.96	<700	No	768	720	1.76	700-2700	Yes	0	0	-	<700	Yes
Lockwood Dr at I 610 WBFR	172	856	802	1.88	700-2700	Yes	385	458	3.56	<700	Yes	0	0	-	<700	Yes	415	483	3.21	<700	Yes
Lockwood Dr at Kelley St	173	696	730	1.27	<700	Yes	314	411	5.09	<700	Yes	271	361	5.06	<700	Yes	163	227	4.58	<700	Yes
Lockwood Dr at Shreveport Blvd	174	313	378	3.50	<700	Yes	299	286	0.76	<700	Yes	28	53	3.93	<700	Yes	152	155	0.24	<700	Yes
Lockwood Dr at Bennington St	175	271	258	0.80	<700	Yes	315	343	1.54	<700	Yes	127	56	7.42	<700	Yes	0	28	7.48	<700	Yes
Lockwood Dr at Denmark St	623	244	271	1.68	<700	Yes	305	322	0.96	<700	Yes	54	164	10.54	<700	No	59	65	0.76	<700	Yes
Lockwood Dr at Crosstimbers St	176	244	274	1.86	<700	Yes	290	291	0.06	<700	Yes	168	207	2.85	<700	Yes	323	423	5.18	<700	No
Lockwood Dr at Weaver Rd	177	203	271	4.42	<700	Yes	258	259	0.06	<700	Yes	68	93	2.79	<700	Yes	138	199	4.70	<700	Yes
Lockwood Dr at Keeland St	641	154	224	5.09	<700	Yes	185	262	5.15	<700	Yes	3	5	1.00	<700	Yes	5	20	4.24	<700	Yes
Lockwood Dr at Laura Koppe Rd	178	160	217	4.15	<700	Yes	248	249	0.06	<700	Yes	66	101	3.83	<700	Yes	124	173	4.02	<700	Yes
Lockwood Dr at Firnat St	659	135	203	5.23	<700	Yes	146	190	3.39	<700	Yes	7	91	12.00	<700	Yes	77	91	1.53	<700	Yes
Lockwood Dr at Tidwell Rd	179	191	245	3.66	<700	Yes	6	8	0.76	<700	Yes	677	713	1.37	<700	Yes	773	822	1.74	700-2700	Yes
Tidwell Rd at Hirsch Rd	180	316	309	0.40	<700	Yes	227	288	3.80	<700	Yes	755	768	0.47	700-2700	Yes	864	850	0.48	700-2700	Yes
Tidwell Rd at Friendly Rd	677	9	79	10.55	<700	Yes	49	130	8.56	<700	Yes	657	730	2.77	<700	Yes	907	1066	5.06	700-2700	No
Tidwell Rd at IH 45 NBFR	181	599	588	0.45	<700	Yes	0	0	-	<700	Yes	700	757	2.11	700-2700	Yes	1088	1025	1.94	700-2700	Yes
Tidwell Rd at IH 45 SBFR	182	0	0	-	<700	Yes	753	753	0.00	700-2700	Yes	658	659	0.04	<700	Yes	962	920	1.37	700-2700	Yes
Tidwell Rd at Edell St	689	7	65	9.67	<700	Yes	12	116	13.00	<700	No	690	638	2.02	<700	Yes	859	799	2.08	700-2700	Yes
Tidwell Rd at Jensen Dr	183	272	227	2.85	<700	Yes	353	416	3.21	<700	Yes	590	640	2.02	<700	Yes	841	766	2.65	700-2700	Yes
Total Approach Met						91					85					86					85
Total Approach Not Met						6					12					11					12

Approach Counts Meet Calibration	**347**	**89.43%**
Approach Counts Outside Calibration	**41**	**10.57%**
Totals	**388**	**100.00%**

Existing AM Movement Volume Comparison

	Node	N NBL				N NBT				NBR				S SBL				S SBT				S SBR				E EBL				E EBT				E EBR				W WBL				W WBT				W WBR			
Intersection		Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?	Count	Model	Cal Criteria	Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	2	0	<700	Yes	1241	872	700-2700	No	0	0	<700	Yes	0	0	<700	Yes	845	810	700-2700	Yes	0	0	<700	Yes	220	165	<700	Yes	0	0	<700	Yes	640	416	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	234	134	<700	No	922	663	700-2700	No	305	239	<700	Yes	160	182	<700	Yes	489	476	<700	Yes	35	44	<700	Yes	86	89	<700	Yes	1057	1040	700-2700	Yes	214	182	<700	Yes	145	150	<700	Yes	857	876	700-2700	Yes	143	177	<700	Yes
Westpark Dr at Hillcroft Ave	103	245	224	<700	Yes	1044	1063	700-2700	Yes	99	109	<700	Yes	157	148	<700	Yes	770	735	700-2700	Yes	297	238	<700	Yes	267	178	<700	Yes	1086	848	700-2700	No	294	297	<700	Yes	82	63	<700	Yes	1008	817	700-2700	No	354	397	<700	Yes
Westpark Dr at 14th St	104	49	0	<700	Yes	0	0	<700	Yes	73	113	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	2	0	<700	Yes	1180	1077	700-2700	Yes	83	0	<700	Yes	17	0	<700	Yes	1190	1287	700-2700	Yes	0	0	<700	Yes
Westpark Drive at I 69 SBFR	105	85	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	111	106	<700	Yes	304	317	<700	Yes	854	856	700-2700	Yes	1	0	<700	Yes	1191	1171	700-2700	Yes	29	0	<700	Yes	115	128	<700	Yes	447	486	<700	Yes	0	0	<700	Yes
Westpark Drive at I 69 NBFR	106	118	105	<700	Yes	283	313	<700	Yes	291	261	<700	Yes	126	0	<700	No	0	0	<700	Yes	0	0	<700	Yes	614	526	<700	Yes	688	735	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	444	507	<700	Yes	35	26	<700	Yes
Westpark Dr at Rampart St	107	224	298	<700	Yes	13	19	<700	Yes	134	0	<700	No	10	48	<700	Yes	7	6	<700	Yes	4	25	<700	Yes	3	23	<700	Yes	816	801	700-2700	Yes	158	169	<700	Yes	23	0	<700	Yes	236	210	<700	Yes	11	32	<700	Yes
Westpark Dr at Renwick Dr	108	84	70	<700	Yes	422	410	<700	Yes	104	122	<700	Yes	106	123	<700	Yes	238	232	<700	Yes	21	13	<700	Yes	102	96	<700	Yes	781	710	700-2700	Yes	74	48	<700	Yes	11	21	<700	Yes	183	161	<700	Yes	86	51	<700	Yes
Westpark Dr at Alder Dr	360	126	137	<700	Yes	0	0	<700	No	98	105	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	763	952	700-2700	No	150	162	<700	Yes	28	29	<700	Yes	169	177	<700	Yes	0	0	<700	Yes
Westpark Dr at Chimney Rock Rd	109	0	0	<700	Yes	741	689	700-2700	Yes	107	128	<700	Yes	265	276	<700	Yes	538	443	<700	Yes	27	32	<700	Yes	72	107	<700	Yes	736	784	700-2700	Yes	85	97	<700	Yes	42	38	<700	Yes	145	145	<700	Yes	101	166	<700	Yes
Westpark Dr at Royalton St	309	105	100	<700	Yes	0	0	<700	Yes	83	79	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	791	1172	700-2700	No	93	99	<700	Yes	20	21	<700	Yes	187	362	<700	No	0	0	<700	Yes
Westpark Dr at S Rice Ave	110	114	112	<700	Yes	496	484	<700	Yes	157	236	<700	Yes	77	104	<700	Yes	316	296	<700	Yes	2	18	<700	Yes	227	249	<700	Yes	665	694	<700	Yes	151	174	<700	Yes	79	130	<700	Yes	222	237	<700	Yes	132	190	<700	Yes
Westpark Dr at Uptown Transit Ctr	382	8	10	<700	Yes	0	0	<700	Yes	7	8	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	764	1033	700-2700	No	14	16	<700	Yes	5	6	<700	Yes	478	564	<700	Yes	0	0	<700	Yes
Westpark Dr at I 610 SBFR	111	0	0	<700	Yes	0	0	<700	Yes	25	0	<700	Yes	84	112	<700	Yes	113	104	<700	Yes	25	0	<700	Yes	0	0	<700	Yes	1571	1246	700-2700	No	615	664	<700	Yes	166	252	<700	Yes	429	531	<700	No	0	0	<700	Yes
Westpark Dr at I 610 NBFR	112	200	217	<700	Yes	308	335	<700	Yes	31	41	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	708	348	700-2700	No	947	926	700-2700	Yes	0	0	<700	Yes	0	0	<700	Yes	395	503	<700	No	0	138	190	<700	Yes
Westpark Dr at Loop Central Dr	394	13	13	<700	Yes	0	0	<700	Yes	43	47	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	752	770	700-2700	Yes	103	111	<700	Yes	100	110	<700	Yes	377	701	<700	No	0	0	<700	Yes
Westpark Dr at Newcastle Dr	113	187	183	<700	Yes	196	159	<700	Yes	301	314	<700	Yes	24	41	<700	Yes	55	62	<700	Yes	101	144	<700	Yes	82	91	<700	Yes	748	531	700-2700	Yes	99	154	<700	Yes	119	162	<700	Yes	343	372	<700	Yes	75	109	<700	Yes
Westpark Dr at Weslayan St	114	93	151	<700	Yes	795	719	700-2700	Yes	71	101	<700	Yes	28	48	<700	Yes	727	771	700-2700	Yes	199	210	<700	Yes	322	250	<700	Yes	609	494	<700	No	135	142	<700	Yes	49	55	<700	Yes	223	280	<700	Yes	35	47	<700	Yes
Westpark Dr at Edloe St	115	0	0	<700	Yes	611	606	<700	Yes	35	56	<700	Yes	64	92	<700	Yes	248	238	<700	Yes	63	102	<700	Yes	175	181	<700	Yes	380	396	<700	Yes	51	54	<700	Yes	48	51	<700	Yes	211	290	<700	Yes	159	176	<700	Yes
I 69 Express Lanes at Edloe St	116	0	0	<700	Yes	758	757	700-2700	Yes	102	85	<700	Yes	22	62	<700	Yes	396	383	<700	Yes	0	0	<700	Yes	147	168	<700	Yes	0	0	<700	Yes	105	0	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Richmond Ave at Edloe St	118	164	52	<700	No	621	783	<700	No	240	246	<700	Yes	48	56	<700	Yes	350	394	<700	Yes	31	55	<700	Yes	65	64	<700	Yes	569	503	<700	Yes	126	160	<700	Yes	67	75	<700	Yes	464	414	<700	Yes	85	103	<700	Yes
Richmond Ave at Buffalo Speedway	119	104	107	<700	Yes	548	538	<700	Yes	427	390	<700	Yes	50	71	<700	Yes	403	399	<700	Yes	47	58	<700	Yes	58	92	<700	Yes	614	592	<700	Yes	146	147	<700	Yes	204	160	<700	Yes	471	435	<700	Yes	41	55	<700	Yes
Richmond Ave at Eastside St	120	43	37	<700	Yes	10	12	<700	Yes	45	62	<700	Yes	78	76	<700	Yes	11	17	<700	Yes	213	214	<700	Yes	249	289	<700	Yes	662	685	<700	Yes	44	156	<700	No	29	22	<700	Yes	524	418	<700	No	131	136	<700	Yes
Richmond Ave at Kirby Dr	121	189	196	<700	Yes	1394	1435	700-2700	Yes	89	81	<700	Yes	73	66	<700	Yes	1062	1105	700-2700	Yes	214	176	<700	Yes	177	194	<700	Yes	328	358	<700	Yes	167	144	<700	Yes	91	69	<700	Yes	245	261	<700	Yes	37	43	<700	Yes
Richmond Ave at Greenbriar St	122	1	0	<700	Yes	55	62	<700	Yes	16	34	<700	Yes	16	17	<700	Yes	431	408	<700	Yes	62	102	<700	Yes	65	85	<700	Yes	325	337	<700	Yes	53	75	<700	Yes	128	124	<700	Yes	274	272	<700	Yes	12	13	<700	Yes
Richmond Ave at Shepherd Dr	123	0	0	<700	Yes	364	412	<700	Yes	20	24	<700	Yes	0	0	<700	Yes	381	418	<700	Yes	34	44	<700	Yes	47	54	<700	Yes	254	320	<700	Yes	6	5	<700	Yes	30	59	<700	Yes	387	378	<700	Yes	27	24	<700	Yes
Richmond Ave at Hazard St	124	17	37	<700	Yes	128	118	<700	Yes	215	201	<700	Yes	19	45	<700	Yes	69	49	<700	Yes	45	32	<700	Yes	18	21	<700	Yes	251	286	<700	Yes	17	21	<700	Yes	40	54	<700	Yes	396	373	<700	Yes	33	28	<700	Yes
Richmond Ave at Woodhead St	125	28	53	<700	Yes	111	95	<700	Yes	85	115	<700	Yes	40	0	<700	Yes	87	124	<700	Yes	88	60	<700	Yes	48	38	<700	Yes	409	453	<700	Yes	35	42	<700	Yes	64	68	<700	Yes	345	339	<700	Yes	40	43	<700	Yes
Richmond Ave at Dunlavy St	126	45	46	<700	Yes	90	105	<700	Yes	25	26	<700	Yes	84	95	<700	Yes	187	211	<700	Yes	104	90	<700	Yes	98	111	<700	Yes	428	429	<700	Yes	21	31	<700	Yes	10	18	<700	Yes	308	273	<700	Yes	61	66	<700	Yes
Richmond Ave at Mandell St	127	26	31	<700	Yes	78	92	<700	Yes	44	69	<700	Yes	19	34	<700	Yes	75	78	<700	Yes	22	31	<700	Yes	38	47	<700	Yes	480	451	<700	Yes	16	30	<700	Yes	27	42	<700	Yes	321	296	<700	Yes	17	26	<700	Yes
Richmond Ave at Montrose Blvd	128	116	143	<700	Yes	987	1024	700-2700	Yes	50	64	<700	Yes	140	169	<700	Yes	598	805	<700	No	158	172	<700	Yes	128	139	<700	Yes	272	342	<700	Yes	115	181	<700	Yes	113	123	<700	Yes	302	283	<700	Yes	97	120	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	63	42	<700	Yes	126	169	<700	Yes	158	170	<700	Yes	0	0	<700	Yes	393	301	<700	Yes	241	237	<700	Yes	386	349	<700	Yes	337	422	<700	Yes	0	0	<700	Yes
Richmond Ave at Spur 527 NBFR	130	15	105	<700	Yes	33	0	<700	Yes	0	0	<700	Yes	90	104	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	169	185	<700	Yes	287	339	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	648	666	<700	Yes	11	11	<700	Yes
Richmond Ave at Main St	131	270	241	<700	Yes	52	64	<700	Yes	69	53	<700	Yes	5	0	<700	Yes	90	9	<700	Yes	12	0	<700	Yes	13	15	<700	Yes	308	359	<700	Yes	46	74	<700	Yes	19	10	<700	Yes	521	408	<700	No	16	10	<700	Yes
Wheeler Ave at Fannin St	132	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	107	103	<700	Yes	700	696	700-2700	Yes	177	180	<700	Yes	0	0	<700	Yes	359	345	<700	Yes	14	72	<700	Yes	23	21	<700	Yes	411	258	<700	No	0	0	<700	Yes
Wheeler Ave at San Jacinto St	133	90	84	<700	Yes	299	323	<700	Yes	20	20	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	82	75	<700	Yes	384	376	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	326	296	<700	Yes	58	65	<700	Yes
Wheeler Ave at La Branch St	134	21	55	<700	Yes	25	25	<700	Yes	4	30	<700	Yes	0	46	<700	Yes	18	22	<700	Yes	14	15	<700	Yes	4	4	<700	Yes	219	367	<700	No	18	22	<700	Yes	3	0	<700	Yes	311	321	<700	Yes	2	32	<700	Yes
Wheeler Ave at Almeda Rd	135	113	209	<700	Yes	213	180	<700	Yes	18	20	<700	Yes	6	4	<700	Yes	164	154	<700	Yes	20	129	<700	No	8	4	<700	Yes	118	154	<700	Yes	82	129	<700	Yes	10	9	<700	Yes	158	122	<700	Yes	20	16	<700	Yes
Richmond Ave at St Emanuel St	365	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	87	131	<700	Yes	73	47	<700	Yes	30	1	<700	Yes	284	236	<700	Yes	0	0	<700	Yes
Wheeler Ave at Hutchins St	367	182	160	<700	Yes	199	236	<700	Yes	25	19	<700	Yes	1	8	<700	Yes	77	118	<700	Yes	13	22	<700	Yes	13	9	<700	Yes	74	131	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	115	131	<700	Yes	2	22	<700	Yes
Wheeler Ave at Emancipation Ave	136	8	9	<700	Yes	177	175	<700	Yes	11	48	<700	Yes	9	20	<700	Yes	117	93	<700	Yes	38	15	<700	Yes	27	36	<700	Yes	74	93	<700	Yes	14	15	<700	Yes	3	34	<700	Yes	43	76	<700	Yes	9	18	<700	Yes
Ennis St at Wheeler St	266	16	35	<700	Yes	194	176	<700	Yes	2	0	<700	Yes	0	0	<700	Yes	118	112	<700	Yes	7	20	<700	Yes	37	42	<700	Yes	95	107	<700	Yes	21	31	<700	Yes	1	0	<700	Yes	0	0	<700	Yes	1	0	<700	Yes
Cleburne St at Ennis St	292	6	6	<700	Yes	116	96	<700	Yes	109	124	<700	Yes	22	23	<700	Yes	98	132	<700	Yes	4	4	<700	Yes	3	3	<700	Yes	45	63	<700	Yes	6	7	<700	Yes	31	33	<700	Yes	29	41	<700	Yes	13	14	<700	Yes
Ennis St at Alabama St	141	46	63	<700	Yes	42	48	<700	Yes	25	27	<700	Yes	16	18	<700	Yes	63	48	<700	Yes	15	34	<700	Yes	25	35	<700	Yes	270	259	<700	Yes	62	108	<700	Yes	22	24	<700	Yes	132	170	<700	Yes	18	20	<700	Yes
Ennis St at Holman St	306	28	31	<700	Yes	78	61	<700	Yes	12	22	<700	Yes	4	5	<700	Yes	74	65	<700	Yes	12	13	<700	Yes	12	13	<700	Yes	16	17	<700	Yes	25	27	<700	Yes	13	15	<700	Yes	22	24	<700	Yes	8	9	<700	Yes
Ennis St at Elgin St	249	29	30	<700	Yes	34	30	<700	Yes	40	33	<700	Yes	8	9	<700	Yes	20	22	<700	Yes	5	5	<700	Yes	5	6	<700	Yes	172	208	<700	Yes	23	25	<700	Yes	39	44	<700	Yes	250	240	<700	Yes	6	6	<700	Yes
Elgin St at Scott St	143	40	52	<700	Yes	259	320	<700	Yes	94	124	<700	Yes	28	28	<700	Yes	525	593	<700	Yes	9	23	<700	Yes	43	49	<700	Yes	172	149	<700	Yes	62	74	<700	Yes	101	123	<700	Yes	211	220	<700	Yes	23	31	<700	Yes
Elgin St at Cullen Blvd	144	36	45	<700	Yes	99	107	<700	Yes	97	103	<700	Yes	165	100	<700	Yes	214	268	<700	Yes	37	42	<700	Yes	23	26	<700	Yes	188	188	<700	Yes	28	31	<700	Yes	108	125	<700	Yes	196	230	<700	Yes	14	18	<700	Yes
Elgin St at UH Entrance 16	145	25	30	<700	Yes	34	42	<700	Yes	14	34	<700	Yes	9	11	<700	Yes	42	48	<700	Yes	9	11	<700	Yes	18	42	<700	Yes	188	163	<700	Yes	89	100	<700	Yes	97	114	<700	Yes	363	364	<700	Yes	15	24	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	101	94	<700	Yes	117	244	<700	No	175	205	<700	Yes	1	0	<700	Yes	105	157	<700	Yes	40	38	<700	Yes	301	265	<700	Yes	481	495	<700	Yes	0	0	<700	Yes
Lockwood St at Spur 5 NBFR	147	11	11	<700	Yes	192	241	<700	Yes	0	0	<700	Yes	18	0	<700	Yes	738	712	700-2700	Yes	3	5	<700	Yes	23	26	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	51	45	<700	Yes	25	29	<700	Yes	176	204	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	0	0	<700	Yes	390	422	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	232	450	<700	No	43	56	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	425	475	<700	Yes	733	782	700-2700	Yes	335	410	<700	Yes
Ernestine St at Munger St	452	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	64	0	<700	Yes	162	446	<700	No	0	0	<700	Yes	0	0	<700	Yes	7	59	<700	Yes	1	0	<700	Yes	114	59	<700	Yes	74	149	<700	Yes	0	0	<700	Yes
Lockwood Dr at Munger St	453	33	29	<700	Yes	679	754	<700	Yes	25	51	<700	Yes	0	0	<700	Yes	0	0	<700	No	0	0	<700	Yes	27	5	<700	Yes	45	59	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	167	181	<700	Yes	0	0	<700	Yes
Ernestine St at Leeland St	149	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	98	95	<700	Yes	771	654	700-2700	No	25	74	<700	Yes	0	0	<700	Yes	129	162	<700	Yes	80	95	<700	Yes	258	191	<700	Yes	170	267	<700	Yes	0	0	<700	Yes
Leeland St at Lockwood St	150	265	270	<700	Yes	678	641	<700	Yes	216	245	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	41	46	<700	Yes	194	46	<700	No	0	0	<700	Yes	0	0	<700	Yes	55	151	<700	Yes	55	151	<700	Yes
Ernestine St/Lockwood Dr at Polk St	151	111	77	<700	Yes	510	442	<700	Yes	56	77	<700	Yes	112	172	<700	Yes	469	552	<700	Yes	38	71	<700	Yes	56	59	<700	Yes	165	189	<700	Yes	25	27	<700	Yes	115	83	<700	Yes	126	157	<700	Yes	92	99	<700	Yes
Ernestine St/Lockwood Dr at McKinney St	152	21	34	<700	Yes	634	637	<700	Yes	7	6	<700	Yes	7	8	<700	Yes	772	784	700-2700	Yes	27	43	<700	Yes	17	28	<700	Yes	21	23	<700	Yes	20	26	<700	Yes	9	23	<700	Yes	18	24	<700	Yes	15	21	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	59	77	<700	Yes	533	558	<700	Yes	69	96	<700	Yes	26	36	<700	Yes	694	723	<700	Yes	21	33	<700	Yes	26	30	<700	Yes	89	108	<700	Yes	36	38	<700	Yes	81	106	<700	Yes	208	242	<700	Yes	43	68	<700	Yes
Lockwood Dr at Canal St	154	167	192	<700	Yes	357	405	<700	Yes	52	84	<700	Yes	20	24	<700	Yes	535	519	<700	Yes	21	20	<700	Yes	13	12	<700	Yes	114	130	<700	Yes	134	156	<700	Yes	51	75	<700	Yes	156	182	<700	Yes	61	78	<700	Yes
Lockwood Dr at Navigation Blvd	155	82	86	<700	Yes	281	352	<700	Yes	51	52	<700	Yes	79	90	<700	Yes	431	430	<700	Yes	117	111	<700	Yes	116	128	<700	Yes	286	293	<700	Yes	63	72	<700	Yes	83	85	<700	Yes	488	461	<700	Yes	60	79	<700	Yes
Lockwood Dr at Armour Dr	156	0	0	<700	Yes	396	348	<700	Yes	55	58	<700	Yes	23	24	<700	Yes	615	601	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	37	50	<700	Yes	0	0	<700	Yes	15	35	<700	Yes
Lockwood Dr at Clinton Dr	157	39	29	<700	Yes	328	293	<700	Yes	31	48	<700	Yes	68	97	<700	Yes	581	515	<700	Yes	36	15	<700	Yes	15	20	<700	Yes	77	89	<700	Yes	67	83	<700	Yes	82	85	<700	Yes	136	140	<700	Yes	25	69	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	58	0	<700	Yes	802	651	700-2700	No	79	64	<700	Yes	0	0	<700	Yes	62	77	<700	Yes	11	34	<700	Yes	56	68	<700	Yes	63	85	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Market St	159	1	9	<700	Yes	386	450	<700	Yes	43	39	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	27	32	<700	Yes	93	45	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	118	144	<700	Yes	125	58	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	223	178	<700	Yes	591	600	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	225	258	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 EBFR	161	0	0	<700	Yes	318	317	<700	Yes	209	220	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	165	214	<700	Yes	283	222	<700	Yes	0	0	<700	Yes	343	326	<700	Yes	404	367	<700	Yes	0	0	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	471	452	<700	Yes	117	94	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	537	431	<700	No	165	172	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	210	262	<700	Yes	273	269	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	537	431	<700	No	165	172	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	39	7	<700	Yes	437	457	<700	Yes	39	4	<700	Yes	0	0	<700	Yes	116	146	<700	Yes	96	104	<700	Yes	52	0	<700	Yes	175	259	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	54	79	<700	Yes	260	284	<700	Yes	50	62	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	28	30	<700	Yes	127	123	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	173	182	<700	Yes	45	40	<700	Yes
		95				91				95				96				87				95				95				88				94				97				87				95			
		2				6				2				1				10				2				2				9				3				0				10				2			

Turning Movement Counts Meet Calibration	**1115**	**95.79%**

Existing AM Speed and Travel Time Calibration

	Travel Time Calibration to Tidwell TC				Speed Calibration to Tidwell TC			Travel Time Calbration to Westchase TC				Speed Calibration to Westchase TC			
	Field Visit Travel Time_EB	Model Total Travel Time_EB	Difference	15% Diff Criteria Met?	Field Visit - Speed_EB	Model Avg Speed_EB	Criteria Met?	Field Visit Travel Time_WB	Model Total Travel Time_WB	Difference	15% Diff Criteria Met?	Field Visit - Speed_WB	Model Avg Speed_WB	Criteria Met?	Segment Total Length
Segment 1	15.82	15.11	-0.71	**Yes**	15.64	18.88	**Yes**	13.12	13.76	0.64	**Yes**	18.86	19.48	**Yes**	4.12
Segment 2	16.07	15.51	-0.56	**Yes**	14.56	16.96	**Yes**	14.88	14.23	-0.65	**Yes**	15.72	21.40	**Yes**	3.90
Segment 3	11.90	11.97	0.07	**Yes**	17.61	20.50	**Yes**	13.15	14.22	1.07	**Yes**	15.94	19.79	**Yes**	3.49
Segment 4	11.35	10.80	-0.55	**Yes**	18.67	18.97	**Yes**	10.75	9.95	-0.80	**Yes**	19.71	19.22	**Yes**	3.53
Segment 5	16.38	16.58	0.20	**Yes**	23.55	23.72	**Yes**	15.47	15.36	-0.11	**Yes**	24.93	23.87	**Yes**	6.43
															21.48

EB = to Tidwell Transit Center
WB = to Westchase Transit Center

Existing PM Approach Volume Calibration

Intersection	Node	Northbound					Southbound					Eastbound					Westbound				
		Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	1388	1182	5.75	700-2700	Yes	1273	1192	2.31	700-2700	Yes	380	333	2.49	<700	Yes	0	0	-	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	1548	1316	6.13	700-2700	Yes	1094	1106	0.36	700-2700	Yes	920	915	0.17	700-2700	Yes	1481	1137	9.51	700-2700	No
Westpark Dr at Hillcroft Ave	103	1324	1195	3.63	700-2700	Yes	1274	1217	1.62	700-2700	Yes	1383	1330	1.44	700-2700	Yes	1531	1670	3.47	700-2700	Yes
Westpark Dr at 14th St	104	218	217	0.07	<700	Yes	0	0	-	<700	Yes	1080	1100	0.61	700-2700	Yes	1449	1426	0.61	700-2700	Yes
Westpark Drive at I 69 SBFR	105	0	0	-	<700	Yes	1813	1806	0.16	700-2700	Yes	1162	1050	3.37	700-2700	Yes	719	776	2.08	700-2700	Yes
Westpark Drive at I 69 NBFR	106	545	505	1.75	<700	Yes	0	0	-	<700	Yes	1266	1248	0.51	700-2700	Yes	641	701	2.32	<700	Yes
Westpark Dr at Rampart St	107	229	210	1.28	<700	Yes	20	41	3.80	<700	Yes	939	949	0.33	700-2700	Yes	573	568	0.21	<700	Yes
Westpark Dr at Renwick Dr	108	502	539	1.62	<700	Yes	589	621	1.30	<700	Yes	742	677	2.44	700-2700	Yes	614	641	1.08	<700	Yes
Westpark Dr at Alder Dr	360	245	266	1.31	<700	Yes	0	0	-	<700	Yes	781	939	5.39	700-2700	No	482	567	3.71	<700	Yes
Westpark Dr at Chimney Rock Rd	109	559	532	1.16	<700	Yes	909	878	1.04	700-2700	Yes	760	741	0.69	700-2700	Yes	726	656	2.66	700-2700	Yes
Westpark Dr at Royalton St	309	361	211	8.87	<700	No	0	0	-	<700	Yes	762	892	4.52	700-2700	No	530	907	14.06	<700	No
Westpark Dr at S Rice Ave	110	926	879	1.56	700-2700	Yes	655	645	0.39	<700	Yes	738	724	0.52	700-2700	Yes	1286	1198	2.50	700-2700	Yes
Westpark Dr at Uptown Transit Ctr	382	16	17	0.25	<700	Yes	0	0	-	<700	Yes	712	677	1.33	700-2700	Yes	1189	1251	1.78	700-2700	Yes
Westpark Dr at I 610 SBFR	111	0	0	-	<700	Yes	315	339	1.33	<700	Yes	1366	1301	1.78	700-2700	Yes	1501	1494	0.18	700-2700	Yes
Westpark Dr at I 610 NBFR	112	1089	1123	1.02	700-2700	Yes	0	0	-	<700	Yes	947	865	2.72	700-2700	Yes	1044	1021	0.72	700-2700	Yes
Westpark Dr at Loop Central Dr	394	298	277	1.24	<700	Yes	0	0	-	<700	Yes	554	576	0.93	<700	Yes	876	1048	5.55	700-2700	No
Westpark Dr at Newcastle Dr	113	474	545	3.15	<700	Yes	259	301	2.51	<700	Yes	796	549	9.52	700-2700	No	959	1011	1.66	700-2700	Yes
Westpark Dr at Weslayan St	114	825	852	0.93	700-2700	Yes	1230	1176	1.56	700-2700	Yes	775	697	2.88	700-2700	Yes	654	664	0.39	<700	Yes
Westpark Dr at Edloe St	115	490	519	1.29	<700	Yes	597	598	0.04	<700	Yes	450	459	0.42	<700	Yes	805	858	1.84	700-2700	Yes
I 69 Express Lanes at Edloe St	116	566	572	0.25	<700	Yes	754	685	2.57	700-2700	Yes	0	0	-	<700	Yes	79	92	1.41	<700	Yes
Richmond Ave at Edloe St	118	732	696	1.35	700-2700	Yes	598	585	0.53	<700	Yes	904	913	0.30	700-2700	Yes	997	959	1.22	700-2700	Yes
Richmond Ave at Buffalo Speedway	119	1023	1045	0.68	700-2700	Yes	610	610	0.00	<700	Yes	771	793	0.79	700-2700	Yes	1224	1049	5.19	700-2700	Yes
Richmond Ave at Eastside St	120	107	189	6.74	<700	Yes	338	344	0.32	<700	Yes	972	964	0.26	700-2700	Yes	901	914	0.43	700-2700	Yes
Richmond Ave at Kirby Dr	121	1609	1627	0.45	700-2700	Yes	1427	1355	1.93	700-2700	Yes	918	824	3.19	700-2700	Yes	558	453	4.67	<700	No
Richmond Ave at Greenbriar St	122	243	220	1.51	<700	Yes	447	470	1.07	<700	Yes	571	567	0.17	<700	Yes	450	487	1.71	<700	Yes
Richmond Ave at Shepherd Dr	123	399	441	2.05	<700	Yes	417	415	0.10	<700	Yes	228	251	1.49	<700	Yes	443	474	1.45	<700	Yes
Richmond Ave at Hazard St	124	426	367	2.96	<700	Yes	163	145	1.45	<700	Yes	253	295	2.54	<700	Yes	497	543	2.02	<700	Yes
Richmond Dr at Woodhead St	125	404	449	2.18	<700	Yes	162	137	2.04	<700	Yes	494	483	0.50	<700	Yes	517	566	2.11	<700	Yes
Richmond Ave at Dunlavy St	126	264	281	1.03	<700	Yes	313	288	1.44	<700	Yes	704	659	1.72	700-2700	Yes	552	606	2.24	<700	Yes
Richmond Ave at Mandell St	127	328	349	1.14	<700	Yes	144	178	2.68	<700	Yes	703	673	1.14	700-2700	Yes	482	591	4.71	<700	No
Richmond Ave at Montrose Blvd	128	762	839	2.72	700-2700	Yes	1099	1117	0.54	700-2700	Yes	547	625	3.22	<700	Yes	830	816	0.49	700-2700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	-	<700	Yes	310	344	1.88	<700	Yes	839	789	1.75	700-2700	Yes	738	845	3.80	700-2700	Yes
Richmond Ave at Spur 527 NBFR	130	225	277	3.28	<700	Yes	0	0	-	<700	Yes	652	680	1.08	<700	Yes	704	778	2.72	700-2700	Yes
Richmond Ave at Main St	131	618	686	2.66	<700	Yes	90	112	2.19	<700	Yes	437	548	5.00	<700	No	525	476	2.19	<700	Yes
Wheeler Ave at Fannin St	132	0	0	-	<700	Yes	602	587	0.62	<700	Yes	515	555	1.73	<700	Yes	392	377	0.76	<700	Yes
Wheeler Ave at San Jacinto St	133	955	978	0.74	700-2700	Yes	0	0	-	<700	Yes	623	609	0.56	<700	Yes	432	455	1.09	<700	Yes
Wheeler Ave at La Branch St	134	52	103	5.79	<700	Yes	25	32	1.31	<700	Yes	410	485	3.55	<700	Yes	331	428	4.98	<700	Yes
Wheeler Ave at Almeda Rd	135	384	574	8.68	<700	No	267	346	4.51	<700	Yes	377	363	0.73	<700	Yes	264	250	0.87	<700	Yes
Wheeler Ave at St Emanuel St	365	0	0	-	<700	Yes	0	0	-	<700	Yes	262	350	5.03	<700	Yes	252	358	6.07	<700	No
Wheeler Ave at Hutchins St	367	414	325	4.63	<700	Yes	13	33	4.17	<700	Yes	208	263	3.58	<700	Yes	127	307	12.22	<700	No
Wheeler Ave at Emancipation Ave	136	380	289	4.98	<700	Yes	234	239	0.33	<700	Yes	208	230	1.49	<700	Yes	75	270	14.85	<700	No
Ennis St at Wheeler St	266	293	257	2.17	<700	Yes	222	275	3.36	<700	Yes	83	152	6.37	<700	Yes	4	0	2.83	<700	Yes
Cleburne St at Ennis St	292	318	341	1.27	<700	Yes	152	246	6.66	<700	Yes	40	47	1.06	<700	Yes	220	158	4.51	<700	Yes
Ennis St at Alabama St	141	218	253	2.28	<700	Yes	101	165	5.55	<700	Yes	263	427	8.83	<700	No	293	292	0.06	<700	Yes
Ennis St at Holman St	306	199	278	5.12	<700	Yes	82	101	1.99	<700	Yes	45	49	0.58	<700	Yes	86	140	5.08	<700	Yes
Ennis St at Elgin St	249	196	218	1.53	<700	Yes	46	72	3.38	<700	Yes	237	299	3.79	<700	Yes	416	382	1.70	<700	Yes
Elgin St at Scott St	143	669	709	1.52	<700	Yes	429	509	3.69	<700	Yes	352	389	1.92	<700	Yes	387	493	5.05	<700	No
Elgin St at Cullen Blvd	144	414	461	2.25	<700	Yes	326	430	5.35	<700	No	282	249	2.03	<700	Yes	351	383	1.67	<700	Yes
Elgin St at UH Entrance 16	145	202	202	0.00	<700	Yes	57	127	7.30	<700	Yes	414	489	3.53	<700	Yes	249	263	0.88	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	-	<700	Yes	269	287	1.08	<700	Yes	721	701	0.75	700-2700	Yes	463	464	0.05	<700	Yes
Lockwood St at Spur 5 NBFR	147	764	689	2.78	700-2700	Yes	459	434	1.18	<700	Yes	0	0	-	<700	Yes	480	488	0.36	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	426	503	3.57	<700	Yes	121	308	12.77	<700	No	0	0	-	<700	Yes	1576	1822	5.97	700-2700	No
Ernestine St at Munger St	452	0	0	-	<700	Yes	179	277	6.49	<700	Yes	6	48	8.08	<700	Yes	77	117	4.06	<700	Yes
Lockwood Dr at Munger St	453	685	836	5.48	<700	No	0	0	-	<700	Yes	90	59	3.59	<700	Yes	42	47	0.75	<700	Yes
Ernestine St at Leeland St	149	0	0	-	<700	Yes	556	607	2.11	<700	Yes	230	308	4.76	<700	Yes	256	256	0.00	<700	Yes
Leeland St at Lockwood St	150	715	624	3.52	700-2700	Yes	0	0	-	<700	Yes	183	243	4.11	<700	Yes	294	376	4.48	<700	Yes
Ernestine St/Lockwood Dr at Polk St	151	635	566	2.82	<700	Yes	354	581	10.50	<700	No	257	320	3.71	<700	Yes	258	404	8.02	<700	No
Ernestine St/Lockwood Dr at McKinney St	152	548	636	3.62	<700	Yes	518	637	4.95	<700	No	46	59	1.79	<700	Yes	39	49	1.51	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	542	637	3.91	<700	Yes	547	698	6.05	<700	No	361	377	0.83	<700	Yes	307	317	0.57	<700	Yes
Lockwood Dr at Canal St	154	552	598	1.92	<700	Yes	454	530	3.43	<700	Yes	293	400	5.75	<700	No	211	270	3.80	<700	Yes
Lockwood Dr at Navigation Blvd	155	474	518	1.98	<700	Yes	431	522	4.17	<700	Yes	420	542	5.56	<700	No	551	579	1.18	<700	Yes
Lockwood Dr at Armour Dr	156	524	619	3.97	<700	Yes	395	441	2.25	<700	Yes	0	0	-	<700	Yes	58	76	2.20	<700	Yes
Lockwood Dr at Clinton Dr	157	647	667	0.78	<700	Yes	370	350	1.05	<700	Yes	141	183	3.30	<700	Yes	310	384	3.97	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	-	<700	Yes	658	655	0.12	<700	Yes	88	136	4.54	<700	Yes	14	41	5.15	<700	Yes
Lockwood Dr (NB) at Market St	159	817	783	1.20	700-2700	Yes	0	0	-	<700	Yes	131	158	2.25	<700	Yes	67	38	4.00	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	-	<700	Yes	640	671	1.21	<700	Yes	589	581	0.33	<700	Yes	0	0	-	<700	Yes

Existing PM Approach Volume Calibration

Lockwood Dr (NB) at I 10 EBFR	161	510	857	13.27	<700	No	0	0	-	<700	Yes	660	598	2.47	<700	Yes	0	0	-	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	-	<700	Yes	624	621	0.12	<700	Yes	0	0	-	<700	Yes	484	513	1.30	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	654	827	6.36	<700	No	0	0	-	<700	Yes	0	0	-	<700	Yes	454	458	0.19	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	-	<700	Yes	499	447	2.39	<700	Yes	312	376	3.45	<700	Yes	198	224	1.79	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	859	762	3.41	700-2700	Yes	0	0	-	<700	Yes	185	183	0.15	<700	Yes	160	178	1.38	<700	Yes
Lockwood Dr at Mulvey St	166	783	710	2.67	700-2700	Yes	476	450	1.21	<700	Yes	19	13	1.50	<700	Yes	5	23	4.81	<700	Yes
Lockwood Dr at Nichols St	567	730	718	0.45	700-2700	Yes	480	462	0.83	<700	Yes	21	25	0.83	<700	Yes	14	18	1.00	<700	Yes
Lockwood Dr at Sudan St	576	572	639	2.72	<700	Yes	482	484	0.09	<700	Yes	7	8	0.37	<700	Yes	16	17	0.25	<700	Yes
Lockwood Dr at Collingsworth St	167	812	963	5.07	700-2700	No	381	454	3.57	<700	Yes	209	291	5.19	<700	Yes	74	101	2.89	<700	Yes
Lockwood Dr at Crane St	168	744	804	2.16	700-2700	Yes	461	492	1.42	<700	Yes	81	142	5.78	<700	Yes	67	124	5.83	<700	Yes
Lockwood Dr at Cavalcade	169	750	812	2.22	700-2700	Yes	493	533	1.77	<700	Yes	264	269	0.31	<700	Yes	283	405	6.58	<700	No
Lockwood Dr at Rand St	170	725	789	2.33	700-2700	Yes	544	609	2.71	<700	Yes	69	103	3.67	<700	Yes	101	97	0.40	<700	Yes
Lockwood Dr at Pardee St	604	550	877	12.24	<700	No	598	696	3.85	<700	Yes	50	53	0.42	<700	Yes	19	21	0.45	<700	Yes
Lockwood Dr at I 610 EBFR	171	839	830	0.31	700-2700	Yes	439	500	2.82	<700	Yes	587	561	1.09	<700	Yes	0	0	-	<700	Yes
Lockwood Dr at I 610 WBFR	172	982	962	0.64	700-2700	Yes	568	551	0.72	<700	Yes	0	0	-	<700	Yes	456	500	2.01	<700	Yes
Lockwood Dr at Kelley St	173	629	487	6.01	<700	No	353	390	1.92	<700	Yes	302	377	4.07	<700	Yes	480	529	2.18	<700	Yes
Lockwood Dr at Shreveport Blvd	174	425	468	2.03	<700	Yes	305	350	2.49	<700	Yes	40	80	5.16	<700	Yes	127	129	0.18	<700	Yes
Lockwood Dr at Bennington St	175	602	375	10.27	<700	No	257	299	2.52	<700	Yes	109	168	5.01	<700	Yes	5	7	0.82	<700	Yes
Lockwood Dr at Denmark St	623	386	414	1.40	<700	Yes	223	289	4.13	<700	Yes	42	94	6.31	<700	Yes	39	42	0.47	<700	Yes
Lockwood Dr at Crosstimbers St	176	485	382	4.95	<700	No	228	233	0.33	<700	Yes	437	443	0.29	<700	Yes	426	440	0.67	<700	Yes
Lockwood Dr at Weaver Rd	177	440	395	2.20	<700	Yes	205	232	1.83	<700	Yes	104	105	0.10	<700	Yes	187	241	3.69	<700	Yes
Lockwood Dr at Keeland St	641	352	386	1.77	<700	Yes	221	234	0.86	<700	Yes	5	10	1.83	<700	Yes	2	8	2.68	<700	Yes
Lockwood Dr at Laura Koppe Rd	178	410	374	1.82	<700	Yes	214	239	1.66	<700	Yes	176	214	2.72	<700	Yes	116	127	1.00	<700	Yes
Lockwood Dr at Firnat St	659	372	321	2.74	<700	Yes	221	247	1.70	<700	Yes	24	84	8.16	<700	Yes	73	37	4.85	<700	Yes
Lockwood Dr at Tidwell Rd	179	361	298	3.47	<700	Yes	22	55	5.32	<700	Yes	901	997	3.12	700-2700	Yes	970	943	0.87	700-2700	Yes
Tidwell Rd at Hirsch Rd	180	226	236	0.66	<700	Yes	178	235	3.97	<700	Yes	1004	1055	1.59	700-2700	Yes	1087	1045	1.29	700-2700	Yes
Tidwell Rd at Friendly Rd	677	15	22	1.63	<700	Yes	82	88	0.65	<700	Yes	1101	1072	0.88	700-2700	Yes	1019	1176	4.74	700-2700	No
Tidwell Rd at IH 45 NBFR	181	1087	1002	2.63	700-2700	Yes	0	0	-	<700	Yes	1112	1099	0.39	700-2700	Yes	1156	1132	0.71	700-2700	Yes
Tidwell Rd at IH 45 SBFR	182	0	0	-	<700	Yes	843	839	0.14	700-2700	Yes	907	903	0.13	700-2700	Yes	1117	1041	2.31	700-2700	Yes
Tidwell Rd at Edell St	689	14	49	6.24	<700	Yes	11	24	3.11	<700	Yes	879	895	0.54	700-2700	Yes	937	927	0.33	700-2700	Yes
Tidwell Rd at Jensen Dr	183	528	565	1.58	<700	Yes	353	391	1.97	<700	Yes	775	795	0.71	700-2700	Yes	921	852	2.32	700-2700	Yes
Total Approach Met						87					92					90					84
Total Approach Not Met						10					5					7					13

Approach Counts Meet Calibration	**353**	**90.98%**
Approach Counts Outside Calibration	**35**	**9.02%**
Totals	**388**	**100.00%**

Existing PM Movement Volume Comparison

Intersection	Node	N NBL Count	N NBL Model	N NBL Cal Criteria	N NBL Met?	N NBT Count	N NBT Model	N NBT Cal Criteria	N NBT Met?	NBR Count	NBR Model	NBR Cal Criteria	NBR Met?	S SBL Count	S SBL Model	S SBL Cal Criteria	S SBL Met?	S SBT Count	S SBT Model	S SBT Cal Criteria	S SBT Met?	S SBR Count	S SBR Model	S SBR Cal Criteria	S SBR Met?	E EBL Count	E EBL Model	E EBL Cal Criteria	E EBL Met?	E EBT Count	E EBT Model	E EBT Cal Criteria	E EBT Met?	E EBR Count	E EBR Model	E EBR Cal Criteria	E EBR Met?	W WBL Count	W WBL Model	W WBL Cal Criteria	W WBL Met?	W WBT Count	W WBT Model	W WBT Cal Criteria	W WBT Met?	W WBR Count	W WBR Model	W WBR Cal Criteria	W WBR Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	1	0	<700	Yes	1388	1182	700-2700	Yes	0	0	<700	Yes	2	0	<700	Yes	1273	1192	700-2700	Yes	0	0	<700	Yes	160	137	<700	Yes	0	0	<700	Yes	220	196	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	358	254	<700	No	961	837	700-2700	Yes	229	225	<700	Yes	206	268	<700	Yes	822	768	700-2700	Yes	67	70	<700	Yes	61	60	<700	Yes	650	646	<700	Yes	209	209	<700	Yes	253	218	<700	Yes	1099	804	700-2700	No	138	115	<700	Yes
Westpark Dr at Hillcroft Ave	103	291	69	<700	No	981	994	700-2700	Yes	62	132	<700	Yes	164	148	<700	Yes	888	835	700-2700	Yes	224	234	<700	Yes	178	149	<700	Yes	867	858	700-2700	Yes	338	323	<700	Yes	97	101	<700	Yes	1163	1303	700-2700	Yes	271	266	<700	Yes
Westpark Dr at 14th St	104	136	157	<700	Yes	0	0	<700	Yes	82	60	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	5	0	<700	Yes	1053	983	700-2700	Yes	27	0	<700	Yes	24	28	<700	Yes	1426	1395	700-2700	Yes	0	0	<700	Yes
Westpark Drive at I 69 SBFR	105	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	169	203	<700	Yes	749	706	700-2700	Yes	895	897	700-2700	Yes	0	0	<700	Yes	1097	1049	700-2700	Yes	65	1	<700	Yes	181	228	<700	Yes	538	548	<700	Yes	0	0	<700	Yes
Westpark Drive at I 69 NBFR	106	87	88	<700	Yes	223	225	<700	Yes	235	192	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	566	493	<700	Yes	700	755	700-2700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	632	693	<700	Yes	9	8	<700	Yes
Westpark Dr at Rampart St	107	132	172	<700	Yes	6	9	<700	Yes	91	29	<700	Yes	2	8	<700	Yes	15	25	<700	Yes	3	8	<700	Yes	1	1	<700	Yes	646	649	<700	Yes	292	299	<700	Yes	70	0	<700	Yes	489	533	<700	Yes	14	35	<700	Yes
Westpark Dr at Renwick Dr	108	78	77	<700	Yes	357	371	<700	Yes	67	91	<700	Yes	146	160	<700	Yes	411	430	<700	Yes	33	31	<700	Yes	70	63	<700	Yes	568	490	<700	Yes	104	124	<700	Yes	51	51	<700	Yes	450	461	<700	Yes	113	129	<700	Yes
Westpark Dr at Alder Dr	360	120	130	<700	Yes	0	0	<700	Yes	125	136	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	599	740	<700	No	182	199	<700	Yes	52	56	<700	Yes	430	511	<700	Yes	0	0	<700	Yes
Westpark Dr at Chimney Rock Rd	109	0	0	<700	Yes	519	492	<700	Yes	40	40	<700	Yes	181	176	<700	Yes	645	602	<700	Yes	86	100	<700	Yes	100	90	<700	Yes	517	516	<700	Yes	143	135	<700	Yes	82	65	<700	Yes	432	409	<700	Yes	212	182	<700	Yes
Westpark Dr at Royalton St	309	180	101	<700	Yes	0	0	<700	Yes	182	110	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	618	736	<700	No	144	156	<700	Yes	53	57	<700	Yes	478	850	<700	No	0	0	<700	Yes
Westpark Dr at S Rice Ave	110	227	240	<700	Yes	513	541	<700	Yes	187	181	<700	Yes	124	140	<700	Yes	519	491	<700	Yes	13	14	<700	Yes	195	207	<700	Yes	375	346	<700	Yes	168	171	<700	Yes	199	223	<700	Yes	786	678	700-2700	Yes	301	297	<700	Yes
Westpark Dr at Uptown Transit Ctr	382	9	9	<700	Yes	0	0	<700	Yes	7	8	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	698	661	<700	Yes	14	16	<700	Yes	6	7	<700	Yes	1183	1244	700-2700	Yes	0	0	<700	Yes
Westpark Dr at I 610 SBFR	111	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	56	69	<700	Yes	0	0	<700	Yes	72	87	<700	Yes	0	0	<700	Yes	899	801	700-2700	Yes	467	500	<700	Yes	247	243	<700	Yes	1254	1251	700-2700	Yes	0	0	<700	Yes
Westpark Dr at I 610 NBFR	112	529	540	<700	Yes	487	502	<700	Yes	73	81	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	341	239	<700	No	614	605	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	972	937	700-2700	Yes	72	84	<700	Yes
Westpark Dr at Loop Central Dr	394	165	152	<700	Yes	0	0	<700	Yes	133	125	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	526	546	<700	Yes	28	30	<700	Yes	22	24	<700	Yes	854	1024	700-2700	No	0	0	<700	Yes
Westpark Dr at Newcastle Dr	113	94	124	<700	Yes	127	161	<700	Yes	253	260	<700	Yes	26	44	<700	Yes	95	106	<700	Yes	138	151	<700	Yes	55	0	<700	Yes	582	400	<700	No	159	149	<700	Yes	182	197	<700	Yes	723	758	700-2700	Yes	58	56	<700	Yes
Westpark Dr at Weslayan St	114	132	150	<700	Yes	639	636	<700	Yes	54	66	<700	Yes	12	18	<700	Yes	888	811	700-2700	Yes	332	347	<700	Yes	192	132	<700	Yes	404	379	<700	Yes	179	186	<700	Yes	102	97	<700	Yes	505	515	<700	Yes	47	52	<700	Yes
Westpark Dr at Edloe St	115	0	0	<700	Yes	441	454	<700	Yes	49	65	<700	Yes	82	83	<700	Yes	421	404	<700	Yes	100	111	<700	Yes	110	83	<700	Yes	295	315	<700	Yes	45	61	<700	Yes	99	108	<700	Yes	541	555	<700	Yes	165	195	<700	Yes
I 69 Express Lanes at Edloe St	116	61	80	<700	Yes	505	492	<700	Yes	0	0	<700	Yes	9	0	<700	Yes	640	566	<700	Yes	114	99	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	63	0	<700	Yes	0	0	<700	Yes	16	0	<700	Yes
Richmond Ave at Edloe St	118	181	145	<700	Yes	406	417	<700	Yes	145	134	<700	Yes	52	59	<700	Yes	497	472	<700	Yes	51	54	<700	Yes	74	78	<700	Yes	606	604	<700	Yes	231	231	<700	Yes	183	183	<700	Yes	756	703	700-2700	Yes	60	73	<700	Yes
Richmond Ave at Buffalo Speedway	119	227	240	<700	Yes	513	515	<700	Yes	284	290	<700	Yes	55	71	<700	Yes	474	451	<700	Yes	81	88	<700	Yes	82	78	<700	Yes	576	597	<700	Yes	121	118	<700	Yes	343	297	<700	Yes	754	642	700-2700	Yes	129	110	<700	Yes
Richmond Ave at Eastside St	120	34	53	<700	Yes	19	35	<700	Yes	54	101	<700	Yes	86	88	<700	Yes	24	22	<700	Yes	228	234	<700	Yes	167	149	<700	Yes	746	768	700-2700	Yes	67	155	<700	Yes	46	38	<700	Yes	763	764	700-2700	Yes	107	112	<700	Yes
Richmond Ave at Kirby Dr	121	177	175	<700	Yes	1352	1378	700-2700	Yes	84	74	<700	Yes	74	82	<700	Yes	1200	1114	700-2700	Yes	153	159	<700	Yes	260	220	<700	Yes	409	416	<700	Yes	250	184	<700	Yes	110	64	<700	Yes	347	340	<700	Yes	104	49	<700	Yes
Richmond Ave at Greenbriar St	122	1	0	<700	Yes	225	203	<700	Yes	18	17	<700	Yes	13	14	<700	Yes	330	330	<700	Yes	160	173	<700	Yes	104	126	<700	Yes	269	235	<700	Yes	142	159	<700	Yes	105	123	<700	Yes	315	325	<700	Yes	31	34	<700	Yes
Richmond Ave at Shepherd Dr	123	0	0	<700	Yes	353	380	<700	Yes	46	61	<700	Yes	0	0	<700	Yes	378	356	<700	Yes	39	59	<700	Yes	51	11	<700	Yes	176	186	<700	Yes	0	4	<700	Yes	28	52	<700	Yes	374	393	<700	Yes	41	29	<700	Yes
Richmond Ave at Hazard St	124	16	43	<700	Yes	184	127	<700	Yes	226	197	<700	Yes	36	53	<700	Yes	82	49	<700	Yes	45	43	<700	Yes	12	14	<700	Yes	213	231	<700	Yes	29	40	<700	Yes	67	99	<700	Yes	378	381	<700	Yes	53	63	<700	Yes
Richmond Ave at Woodhead St	125	24	38	<700	Yes	191	194	<700	Yes	189	217	<700	Yes	45	0	<700	Yes	77	91	<700	Yes	40	46	<700	Yes	24	27	<700	Yes	462	443	<700	Yes	10	13	<700	Yes	40	66	<700	Yes	455	455	<700	Yes	41	45	<700	Yes
Richmond Ave at Dunlavy St	126	21	34	<700	Yes	211	196	<700	Yes	32	51	<700	Yes	120	112	<700	Yes	113	113	<700	Yes	80	63	<700	Yes	126	121	<700	Yes	550	510	<700	Yes	28	28	<700	Yes	30	42	<700	Yes	400	433	<700	Yes	125	131	<700	Yes
Richmond Ave at Mandell St	127	70	89	<700	Yes	159	152	<700	Yes	100	108	<700	Yes	32	34	<700	Yes	82	99	<700	Yes	30	45	<700	Yes	40	50	<700	Yes	647	598	<700	Yes	16	25	<700	Yes	28	79	<700	Yes	429	473	<700	Yes	26	39	<700	Yes
Richmond Ave at Montrose Blvd	128	160	131	<700	Yes	529	609	<700	Yes	73	99	<700	Yes	35	35	<700	Yes	918	913	700-2700	Yes	86	79	<700	Yes	88	97	<700	Yes	320	369	<700	Yes	139	159	<700	Yes	200	171	<700	Yes	562	557	<700	Yes	69	88	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	35	35	<700	Yes	131	159	<700	Yes	144	150	<700	Yes	2	0	<700	Yes	617	648	<700	Yes	222	141	<700	Yes	368	367	<700	Yes	370	478	<700	Yes	0	0	<700	Yes
Richmond Ave at Spur 527 NBFR	130	65	68	<700	Yes	64	74	<700	Yes	116	135	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	242	<700	Yes	332	438	<700	No	0	0	<700	Yes	0	0	<700	Yes	693	778	<700	Yes	11	0	<700	Yes
Richmond Ave at Main St	131	417	431	<700	Yes	126	184	<700	Yes	75	71	<700	Yes	17	0	<700	Yes	62	9	<700	Yes	11	0	<700	Yes	23	43	<700	Yes	405	485	<700	Yes	9	20	<700	Yes	17	7	<700	Yes	497	446	<700	Yes	11	23	<700	Yes
Wheeler Ave at Fannin St	132	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	104	105	<700	Yes	351	355	<700	Yes	147	127	<700	Yes	0	0	<700	Yes	491	522	<700	Yes	24	33	<700	Yes	17	30	<700	Yes	376	347	<700	Yes	0	0	<700	Yes
Wheeler Ave at San Jacinto St	133	100	132	<700	Yes	820	808	700-2700	Yes	35	38	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	109	131	<700	Yes	514	478	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	316	356	<700	Yes	16	99	<700	Yes
Wheeler Ave at La Branch St	134	35	43	<700	Yes	24	40	<700	Yes	3	20	<700	Yes	1	4	<700	Yes	20	24	<700	Yes	4	4	<700	Yes	15	0	<700	Yes	376	465	<700	Yes	10	20	<700	Yes	3	0	<700	Yes	324	395	<700	Yes	4	10	<700	Yes
Wheeler Ave at Almeda Rd	135	80	186	<700	No	277	331	<700	Yes	27	57	<700	Yes	13	22	<700	Yes	237	195	<700	Yes	17	146	<700	No	28	22	<700	Yes	180	195	<700	Yes	170	146	<700	Yes	14	9	<700	Yes	235	218	<700	Yes	15	23	<700	Yes
Wheeler Ave at St Emanuel St	365	1	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	209	267	<700	Yes	53	83	<700	Yes	34	118	<700	Yes	201	240	<700	Yes	0	0	<700	Yes
Wheeler Ave at Hutchins St	367	111	52	<700	Yes	246	266	<700	Yes	57	7	<700	Yes	1	14	<700	Yes	0	0	<700	Yes	12	19	<700	Yes	20	30	<700	Yes	188	233	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	127	291	<700	No	0	16	<700	Yes
Wheeler Ave at Emancipation Ave	136	12	0	<700	Yes	358	221	<700	No	10	68	<700	Yes	13	19	<700	Yes	181	146	<700	Yes	40	0	<700	Yes	101	84	<700	Yes	89	146	<700	Yes	18	0	<700	Yes	6	9	<700	Yes	56	233	<700	No	13	28	<700	Yes
Ennis St at Wheeler St	266	20	16	<700	Yes	273	241	<700	Yes	0	0	<700	Yes	1	0	<700	Yes	194	186	<700	Yes	27	89	<700	Yes	46	86	<700	Yes	1	0	<700	Yes	42	66	<700	Yes	0	0	<700	Yes	2	0	<700	Yes	2	0	<700	Yes
Cleburne St at Ennis St	292	13	14	<700	Yes	213	234	<700	Yes	93	93	<700	Yes	23	31	<700	Yes	123	208	<700	Yes	6	7	<700	Yes	3	3	<700	Yes	33	39	<700	Yes	4	5	<700	Yes	92	67	<700	Yes	76	53	<700	Yes	53	38	<700	Yes
Ennis St at Alabama St	141	96	97	<700	Yes	98	129	<700	Yes	24	27	<700	Yes	6	7	<700	Yes	64	94	<700	Yes	31	64	<700	Yes	58	124	<700	Yes	153	155	<700	Yes	42	148	<700	No	27	29	<700	Yes	255	251	<700	Yes	11	12	<700	Yes
Ennis St at Holman St	306	9	10	<700	Yes	176	218	<700	Yes	14	50	<700	Yes	4	5	<700	Yes	73	92	<700	Yes	5	4	<700	Yes	11	12	<700	Yes	23	25	<700	Yes	11	12	<700	Yes	19	67	<700	Yes	53	58	<700	Yes	14	15	<700	Yes
Ennis St at Elgin St	249	49	24	<700	Yes	44	88	<700	Yes	103	106	<700	Yes	8	8	<700	Yes	25	50	<700	Yes	13	14	<700	Yes	5	5	<700	Yes	213	281	<700	Yes	19	13	<700	Yes	53	31	<700	Yes	360	346	<700	Yes	4	5	<700	Yes
Elgin St at Scott St	143	74	67	<700	Yes	512	529	<700	Yes	94	113	<700	Yes	40	38	<700	Yes	393	460	<700	Yes	7	11	<700	Yes	86	56	<700	Yes	194	213	<700	Yes	80	120	<700	Yes	118	115	<700	Yes	220	311	<700	Yes	49	67	<700	Yes
Elgin St at Cullen Blvd	144	68	68	<700	Yes	256	282	<700	Yes	124	111	<700	Yes	91	138	<700	Yes	150	169	<700	Yes	85	123	<700	Yes	72	53	<700	Yes	182	157	<700	Yes	28	39	<700	Yes	79	94	<700	Yes	202	200	<700	Yes	70	89	<700	Yes
Elgin St at UH Entrance 16	145	90	90	<700	Yes	9	16	<700	Yes	104	96	<700	Yes	30	33	<700	Yes	6	26	<700	Yes	21	68	<700	Yes	2	2	<700	Yes	335	403	<700	Yes	78	84	<700	Yes	41	38	<700	Yes	211	224	<700	Yes	1	1	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	154	124	<700	Yes	90	137	<700	Yes	25	26	<700	Yes	2	0	<700	Yes	610	568	<700	Yes	111	133	<700	Yes	233	201	<700	Yes	236	263	<700	Yes	0	0	<700	Yes
Lockwood St at Spur 5 NBFR	147	229	208	<700	Yes	535	481	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	455	430	<700	Yes	4	4	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	20	30	<700	Yes	71	131	<700	Yes	395	327	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	11	0	<700	Yes	422	503	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	106	284	<700	No	15	24	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	278	309	<700	Yes	1038	1181	700-2700	Yes	260	332	<700	Yes
Ernestine St at Munger St	452	0	0	<700	Yes	0	0	<700	Yes	89	0	<700	Yes	0	0	<700	Yes	87	277	<700	No	3	0	<700	Yes	0	0	<700	Yes	1	47	<700	Yes	5	1	<700	Yes	36	30	<700	Yes	41	87	<700	Yes	0	0	<700	Yes
Lockwood Dr at Munger St	453	35	77	<700	Yes	547	672	<700	No	103	87	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	12	11	<700	Yes	78	48	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	35	41	<700	Yes	0	0	<700	Yes
Ernestine St at Leeland St	149	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	59	59	<700	Yes	485	476	<700	Yes	59	72	<700	Yes	12	72	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	97	103	<700	Yes	159	153	<700	Yes	0	0	<700	Yes
Leeland St at Lockwood St	150	97	70	<700	Yes	538	503	<700	Yes	81	51	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	14	26	<700	Yes	169	26	<700	No	0	0	<700	Yes	177	182	<700	Yes	197	194	<700	Yes	117	194	<700	Yes
Ernestine St/Lockwood Dr at Polk St	151	77	109	<700	Yes	516	434	<700	Yes	42	23	<700	Yes	61	105	<700	Yes	249	403	<700	No	44	73	<700	Yes	67	75	<700	Yes	172	194	<700	Yes	18	51	<700	Yes	62	152	<700	Yes	139	187	<700	Yes	58	65	<700	Yes
Ernestine St/Lockwood Dr at McKinney St	152	53	60	<700	Yes	508	575	<700	Yes	3	1	<700	Yes	9	11	<700	Yes	491	609	<700	No	18	17	<700	Yes	12	18	<700	Yes	21	22	<700	Yes	13	19	<700	Yes	3	7	<700	Yes	27	29	<700	Yes	9	13	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	47	67	<700	Yes	457	525	<700	Yes	38	45	<700	Yes	72	89	<700	Yes	441	563	<700	No	37	46	<700	Yes	68	87	<700	Yes	224	228	<700	Yes	79	62	<700	Yes	70	79	<700	Yes	199	180	<700	Yes	51	58	<700	Yes
Lockwood Dr at Canal St	154	84	107	<700	Yes	425	431	<700	Yes	43	60	<700	Yes	24	28	<700	Yes	404	472	<700	Yes	26	30	<700	Yes	21	42	<700	Yes	158	203	<700	Yes	114	155	<700	Yes	50	74	<700	Yes	128	149	<700	Yes	35	47	<700	Yes
Lockwood Dr at Navigation Blvd	155	72	68	<700	Yes	366	413	<700	Yes	37	37	<700	Yes	70	79	<700	Yes	282	360	<700	Yes	80	83	<700	Yes	80	111	<700	Yes	263	323	<700	Yes	77	108	<700	Yes	81	104	<700	Yes	351	347	<700	Yes	119	128	<700	Yes
Lockwood Dr at Armour Dr	156	0	0	<700	Yes	498	581	<700	Yes	26	38	<700	Yes	7	7	<700	Yes	388	434	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	36	44	<700	Yes	0	0	<700	Yes	22	32	<700	Yes
Lockwood Dr at Clinton Dr	157	37	34	<700	Yes	563	585	<700	Yes	48	48	<700	Yes	31	48	<700	Yes	304	286	<700	Yes	35	16	<700	Yes	28	15	<700	Yes	56	74	<700	Yes	94	96	<700	Yes	39	67	<700	Yes	166	220	<700	Yes	106	97	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	<700	Yes	0	0	<700	Yes	51	49	<700	Yes	473	528	<700	Yes	134	78	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	80	111	<700	Yes	8	25	<700	Yes	5	23	<700	Yes	9	18	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Market St	159	5	4	<700	Yes	797	738	700-2700	Yes	15	41	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	99	124	<700	Yes	12	34	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	9	18	<700	Yes	58	0	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	238	212	<700	Yes	402	459	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	422	388	<700	Yes	167	193	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 EBFR	161	0	0	<700	Yes	316	523	<700	No	194	334	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	338	306	<700	Yes	322	292	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	164	198	<700	Yes	0	0	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	476	475	<700	Yes	148	146	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	320	315	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	259	315	<700	Yes	395	512	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	225	198	<700	Yes	229	260	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	67	14	<700	Yes	371	414	<700	Yes	61	19	<700	Yes	0	0	<700	Yes	118	169	<700	Yes	194	207	<700	Yes	98	0	<700	Yes	100	224	<700	No	0	0	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	76	81	<700	Yes	686	620	<700	Yes	97	61	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	79	55	<700	Yes	106	128	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	122	144	<700	Yes	38	34	<700	Yes
Lockwood Dr at Mulvey St	166	5	0	<700	Yes	772	698	700-2700	Yes	6	12	<700	Yes	5	6	<700	Yes	465	435	<700	Yes	6	9	<700	Yes	6	11	<700	Yes	2	2	<700	Y

Existing PM Speed and Travel Time Calibration

	Travel Time Calibration to Tidwell TC				Speed Calibration to Tidwell TC			Travel Time Calbration to Westchase TC				Speed Calibration to Westchase TC			
	Field Visit Travel Time_EB	Model Total Travel Time_EB	Difference	15% Diff Criteria Met?	Field Visit - Speed_EB	Model Avg Speed_EB	Criteria Met?	Field Visit Travel Time_WB	Model Total Travel Time_WB	Difference	15% Diff Criteria Met?	Field Visit - Speed_WB	Model Avg Speed_WB	Criteria Met?	Segment Total Length
Segment 1	12.07	12.50	0.43	**Yes**	20.50	21.58	**Yes**	14.68	15.63	0.95	**Yes**	16.86	20.30	**Yes**	4.12
Segment 2	16.37	18.01	1.64	**Yes**	14.29	17.88	**Yes**	15.50	15.22	-0.28	**Yes**	15.10	19.82	**Yes**	3.90
Segment 3	12.50	12.94	0.44	**Yes**	16.77	18.96	**Yes**	15.15	13.33	-1.82	**Yes**	13.83	18.99	**Yes**	3.49
Segment 4	8.67	8.49	-0.18	**Yes**	24.44	19.10	**Yes**	11.15	9.99	-1.16	**Yes**	19.01	19.64	**Yes**	3.53
Segment 5	18.53	17.59	-0.94	**Yes**	20.82	22.00	**Yes**	15.15	15.75	0.60	**Yes**	25.46	23.78	**Yes**	6.43
															21.48

EB = to Tidwell Transit Center
WB = to Westchase Transit Center

No Build 2030 AM Approach Volume Calibration

Intersection	Node	Northbound					Southbound					Eastbound					Westbound				
		Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	1454	870	17.13	700-2700	No	990	989	0.03	700-2700	Yes	774	574	7.70	700-2700	No	0	0	-	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	1713	1048	17.90	700-2700	No	802	877	2.59	700-2700	Yes	1590	1290	7.91	700-2700	No	1339	1306	0.91	700-2700	Yes
Westpark Dr at Hillcroft Ave	103	1622	1298	8.48	700-2700	No	1309	1179	3.69	700-2700	Yes	1930	1366	13.89	700-2700	No	1693	1348	8.85	700-2700	No
Westpark Dr at 14th St	104	144	151	0.58	<700	Yes	0	0	-	<700	Yes	1480	1070	11.48	700-2700	No	1414	1332	2.21	700-2700	Yes
Westpark Drive at I 69 SBFR	105	0	0	-	<700	Yes	1487	1355	3.50	700-2700	Yes	1429	1179	6.92	700-2700	No	659	652	0.27	<700	Yes
Westpark Drive at I 69 NBFR	106	812	826	0.49	700-2700	Yes	0	0	-	<700	Yes	1525	1293	6.18	700-2700	No	561	555	0.25	<700	Yes
Westpark Dr at Rampart St	107	436	302	6.98	<700	No	26	93	8.69	<700	Yes	1146	1021	3.80	700-2700	Yes	317	285	1.84	<700	Yes
Westpark Dr at Renwick Dr	108	716	660	2.13	700-2700	Yes	424	414	0.49	<700	Yes	1122	878	7.72	700-2700	No	329	287	2.39	<700	Yes
Westpark Dr at Alder Dr	360	263	284	1.27	<700	Yes	0	0	-	<700	Yes	1070	1204	3.97	700-2700	Yes	231	229	0.13	<700	Yes
Westpark Dr at Chimney Rock Rd	109	994	992	0.06	700-2700	Yes	970	844	4.18	700-2700	Yes	1047	1030	0.53	700-2700	Yes	339	415	3.91	<700	Yes
Westpark Dr at Royalton St	309	221	139	6.11	<700	Yes	0	0	-	<700	Yes	1036	1381	9.92	700-2700	No	243	459	11.53	<700	No
Westpark Dr at S Rice Ave	110	899	921	0.73	700-2700	Yes	465	513	2.17	<700	Yes	1222	1238	0.46	700-2700	Yes	507	668	6.64	<700	No
Westpark Dr at Uptown Transit Ctr	382	19	21	0.45	<700	Yes	0	0	-	<700	Yes	912	1101	5.96	700-2700	No	566	673	4.30	<700	No
Westpark Dr at I 610 SBFR	111	0	0	-	<700	Yes	262	238	1.52	<700	Yes	2561	1964	12.55	700-2700	No	698	871	6.18	<700	No
Westpark Dr at I 610 NBFR	112	633	794	6.03	<700	No	0	0	-	<700	Yes	1939	1324	15.23	700-2700	No	625	725	3.85	<700	No
Westpark Dr at Loop Central Dr	394	67	73	0.72	<700	Yes	0	0	-	<700	Yes	1002	902	3.24	700-2700	Yes	560	870	11.59	<700	No
Westpark Dr at Newcastle Dr	113	802	719	3.01	700-2700	Yes	209	284	4.78	<700	Yes	1087	779	10.08	700-2700	No	626	679	2.07	<700	Yes
Westpark Dr at Weslayan St	114	1056	1172	3.48	700-2700	Yes	1048	1116	2.07	700-2700	Yes	1173	917	7.92	700-2700	No	339	397	3.02	<700	Yes
Westpark Dr at Edloe St	115	711	658	2.03	700-2700	Yes	413	474	2.90	<700	Yes	668	636	1.25	<700	Yes	460	559	4.39	<700	Yes
I 69 Express Lanes at Edloe St	116	947	879	2.25	700-2700	Yes	461	477	0.74	<700	Yes	278	295	1.00	<700	Yes	0	0	-	<700	Yes
Richmond Ave at Edloe St	118	1128	1138	0.30	700-2700	Yes	473	524	2.28	<700	Yes	836	778	2.04	700-2700	Yes	678	703	0.95	<700	Yes
Richmond Ave at Buffalo Speedway	119	1182	1164	0.53	700-2700	Yes	550	558	0.34	<700	Yes	900	887	0.43	700-2700	Yes	786	778	0.29	700-2700	Yes
Richmond Ave at Eastside St	120	109	152	3.76	<700	Yes	334	317	0.94	<700	Yes	1043	1119	2.31	700-2700	Yes	740	666	2.79	700-2700	Yes
Richmond Ave at Kirby Dr	121	1836	1882	1.07	700-2700	Yes	1485	1516	0.80	700-2700	Yes	739	753	0.51	700-2700	Yes	408	418	0.49	<700	Yes
Richmond Ave at Greenbriar St	122	79	93	1.51	<700	Yes	561	605	1.82	<700	Yes	489	534	1.99	<700	Yes	457	456	0.05	<700	Yes
Richmond Ave at Shepherd Dr	123	423	509	3.98	<700	Yes	457	517	2.72	<700	Yes	339	428	4.54	<700	Yes	487	493	0.27	<700	Yes
Richmond Ave at Hazard St	124	397	306	4.85	<700	Yes	147	179	2.51	<700	Yes	314	399	4.50	<700	Yes	517	499	0.80	<700	Yes
Richmond Dr at Woodhead St	125	247	260	0.82	<700	Yes	237	215	1.46	<700	Yes	542	562	0.85	<700	Yes	495	490	0.23	<700	Yes
Richmond Ave at Dunlavy St	126	177	238	4.23	<700	Yes	413	364	2.49	<700	Yes	603	582	0.86	<700	Yes	418	407	0.54	<700	Yes
Richmond Ave at Mandell St	127	164	201	2.74	<700	Yes	129	170	3.35	<700	Yes	586	544	1.77	<700	Yes	402	395	0.35	<700	Yes
Richmond Ave at Montrose Blvd	128	1268	1151	3.36	700-2700	Yes	986	1115	3.98	700-2700	Yes	567	693	5.02	<700	No	564	540	1.02	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	-	<700	Yes	383	385	0.10	<700	Yes	697	551	5.84	<700	No	796	789	0.25	700-2700	Yes
Richmond Ave at Spur 527 NBFR	130	219	303	5.20	<700	Yes	0	0	-	<700	Yes	502	550	2.09	<700	Yes	726	656	2.66	700-2700	Yes
Richmond Ave at Main St	131	431	309	6.34	<700	No	0	10	4.47	<700	Yes	403	476	3.48	<700	Yes	612	407	9.08	<700	No
Wheeler Ave at Fannin St	132	0	0	-	<700	Yes	1065	1096	0.94	700-2700	Yes	405	442	1.80	<700	Yes	468	264	10.66	<700	No
Wheeler Ave at San Jacinto St	133	444	424	0.96	<700	Yes	0	0	-	<700	Yes	505	479	1.17	<700	Yes	416	329	4.51	<700	Yes
Wheeler Ave at La Branch St	134	56	86	3.56	<700	Yes	36	79	5.67	<700	Yes	262	419	8.51	<700	No	344	370	1.38	<700	Yes
Wheeler Ave at Almeda Rd	135	374	453	3.88	<700	Yes	207	187	1.42	<700	Yes	226	294	4.22	<700	Yes	204	167	2.72	<700	Yes
Wheeler Ave at St Emanuel St	365	0	0	-	<700	Yes	0	0	-	<700	Yes	174	187	0.97	<700	Yes	341	269	4.12	<700	Yes
Wheeler Ave at Hutchins St	367	441	425	0.77	<700	Yes	17	30	2.68	<700	Yes	95	157	5.52	<700	Yes	128	110	1.65	<700	Yes
Wheeler Ave at Emancipation Ave	136	213	262	3.18	<700	Yes	179	185	0.44	<700	Yes	126	164	3.16	<700	Yes	61	130	7.06	<700	Yes
Ennis St at Wheeler St	266	231	238	0.46	<700	Yes	136	134	0.17	<700	Yes	63	76	1.56	<700	Yes	4	0	2.83	<700	Yes
Cleburne St at Ennis St	292	251	241	0.64	<700	Yes	135	168	2.68	<700	Yes	60	75	1.83	<700	Yes	81	89	0.87	<700	Yes
Ennis St at Alabama St	141	113	163	4.26	<700	Yes	104	129	2.32	<700	Yes	388	413	1.25	<700	Yes	187	228	2.85	<700	Yes
Ennis St at Holman St	306	129	126	0.27	<700	Yes	98	114	1.55	<700	Yes	59	64	0.64	<700	Yes	48	55	0.98	<700	Yes
Ennis St at Elgin St	249	113	109	0.38	<700	Yes	37	41	0.64	<700	Yes	216	284	4.30	<700	Yes	321	349	1.53	<700	Yes
Elgin St at Scott St	143	425	532	4.89	<700	No	604	624	0.81	<700	Yes	301	295	0.35	<700	Yes	364	406	2.14	<700	Yes
Elgin St at Cullen Blvd	144	252	293	2.48	<700	Yes	451	447	0.19	<700	Yes	260	192	4.52	<700	Yes	345	410	3.35	<700	Yes
Elgin St at UH Entrance 16	145	81	118	3.71	<700	Yes	66	71	0.60	<700	Yes	321	325	0.22	<700	Yes	513	557	1.90	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	-	<700	Yes	427	556	5.82	<700	No	158	222	4.64	<700	Yes	826	818	0.28	700-2700	Yes
Lockwood St at Spur 5 NBFR	147	224	252	1.81	<700	Yes	802	782	0.71	700-2700	Yes	0	0	-	<700	Yes	267	284	1.02	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	422	435	0.63	<700	Yes	298	539	11.78	<700	No	0	0	-	<700	Yes	1616	1776	3.89	700-2700	Yes
Ernestine St at Munger St	452	0	0	-	<700	Yes	246	495	12.94	<700	No	10	86	10.97	<700	Yes	204	176	2.03	<700	Yes
Lockwood Dr at Munger St	453	798	892	3.23	700-2700	Yes	0	0	-	<700	Yes	79	91	1.30	<700	Yes	181	263	5.50	<700	Yes
Ernestine St at Leeland St	149	0	0	-	<700	Yes	968	920	1.56	700-2700	Yes	227	300	4.50	<700	Yes	460	499	1.78	<700	Yes
Leeland St at Lockwood St	150	1254	1246	0.23	700-2700	Yes	0	0	-	<700	Yes	255	336	4.71	<700	Yes	224	354	7.65	<700	No
Ernestine St/Lockwood Dr at Polk St	151	733	620	4.34	700-2700	No	671	829	5.77	<700	No	266	332	3.82	<700	Yes	319	442	6.31	<700	No
Ernestine St/Lockwood Dr at McKinney St	152	717	711	0.22	700-2700	Yes	873	866	0.24	700-2700	Yes	64	92	3.17	<700	Yes	47	64	2.28	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	716	765	1.80	700-2700	Yes	803	814	0.39	700-2700	Yes	159	197	2.85	<700	Yes	359	422	3.19	<700	Yes
Lockwood Dr at Canal St	154	623	695	2.80	<700	Yes	624	611	0.52	<700	Yes	284	293	0.53	<700	Yes	291	358	3.72	<700	Yes
Lockwood Dr at Navigation Blvd	155	449	495	2.12	<700	Yes	679	691	0.46	<700	Yes	505	541	1.57	<700	Yes	681	666	0.58	<700	Yes
Lockwood Dr at Armour Dr	156	489	563	3.23	<700	Yes	689	682	0.27	<700	Yes	0	0	-	<700	Yes	57	86	3.43	<700	Yes
Lockwood Dr at Clinton Dr	157	432	403	1.42	<700	Yes	742	713	1.08	700-2700	Yes	174	215	2.94	<700	Yes	248	325	4.55	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	-	<700	Yes	1016	804	7.03	700-2700	No	80	130	4.88	<700	Yes	130	189	4.67	<700	Yes
Lockwood Dr (NB) at Market St	159	467	540	3.25	<700	Yes	0	0	-	<700	Yes	131	97	3.18	<700	Yes	264	252	0.75	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	-	<700	Yes	881	901	0.67	700-2700	Yes	524	457	3.03	<700	Yes	0	0	-	<700	Yes

No Build 2030 AM Approach Volume Calibration

Lockwood Dr (NB) at I 10 EBFR	161	570	598	1.16	<700	Yes	0	0	-	<700	Yes	485	552	2.94	<700	Yes	0	0	-	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	-	<700	Yes	637	619	0.72	<700	Yes	0	0	-	<700	Yes	808	828	0.70	700-2700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	524	614	3.77	<700	Yes	0	0	-	<700	Yes	0	0	-	<700	Yes	760	712	1.77	700-2700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	-	<700	Yes	535	522	0.57	<700	Yes	221	283	3.91	<700	Yes	236	280	2.74	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	378	482	5.02	<700	No	0	0	-	<700	Yes	162	178	1.23	<700	Yes	227	239	0.79	<700	Yes
Lockwood Dr at Mulvey St	166	320	382	3.31	<700	Yes	528	533	0.22	<700	Yes	14	7	2.16	<700	Yes	13	13	0.00	<700	Yes
Lockwood Dr at Nichols St	567	301	378	4.18	<700	Yes	476	571	4.15	<700	Yes	29	16	2.74	<700	Yes	11	76	9.86	<700	Yes
Lockwood Dr at Sudan St	576	323	348	1.36	<700	Yes	510	587	3.29	<700	Yes	4	5	0.47	<700	Yes	19	20	0.23	<700	Yes
Lockwood Dr at Collingsworth St	167	312	417	5.50	<700	No	332	442	5.59	<700	No	140	210	5.29	<700	Yes	93	135	3.93	<700	Yes
Lockwood Dr at Crane St	168	297	325	1.59	<700	Yes	389	454	3.17	<700	Yes	84	115	3.11	<700	Yes	49	83	4.19	<700	Yes
Lockwood Dr at Cavalcade	169	300	345	2.51	<700	Yes	395	511	5.45	<700	No	110	163	4.54	<700	Yes	215	290	4.72	<700	Yes
Lockwood Dr at Rand St	170	299	389	4.85	<700	Yes	476	637	6.82	<700	No	62	87	2.90	<700	Yes	78	101	2.43	<700	Yes
Lockwood Dr at Pardee St	604	377	508	6.23	<700	No	522	746	8.90	<700	No	98	108	0.99	<700	Yes	18	19	0.23	<700	Yes
Lockwood Dr at I 610 EBFR	171	495	482	0.59	<700	Yes	365	548	8.57	<700	No	798	760	1.36	700-2700	Yes	0	0	-	<700	Yes
Lockwood Dr at I 610 WBFR	172	888	880	0.27	700-2700	Yes	400	531	6.07	<700	No	0	0	-	<700	Yes	432	522	4.12	<700	Yes
Lockwood Dr at Kelley St	173	722	745	0.85	700-2700	Yes	327	452	6.33	<700	No	283	409	6.77	<700	No	170	256	5.89	<700	Yes
Lockwood Dr at Shreveport Blvd	174	326	464	6.94	<700	No	311	295	0.92	<700	Yes	31	61	4.42	<700	Yes	160	165	0.39	<700	Yes
Lockwood Dr at Bennington St	175	281	296	0.88	<700	Yes	328	402	3.87	<700	Yes	132	55	7.96	<700	Yes	0	27	7.35	<700	Yes
Lockwood Dr at Denmark St	623	254	315	3.62	<700	Yes	318	312	0.34	<700	Yes	58	106	5.30	<700	Yes	63	69	0.74	<700	Yes
Lockwood Dr at Crosstimbers St	176	254	298	2.65	<700	Yes	301	283	1.05	<700	Yes	176	210	2.45	<700	Yes	336	394	3.04	<700	Yes
Lockwood Dr at Weaver Rd	177	212	274	3.98	<700	Yes	268	245	1.44	<700	Yes	72	80	0.92	<700	Yes	145	198	4.05	<700	Yes
Lockwood Dr at Keeland St	641	162	225	4.53	<700	Yes	192	244	3.52	<700	Yes	5	8	1.18	<700	Yes	7	19	3.33	<700	Yes
Lockwood Dr at Laura Koppe Rd	178	167	220	3.81	<700	Yes	258	238	1.27	<700	Yes	70	93	2.55	<700	Yes	129	187	4.61	<700	Yes
Lockwood Dr at Firnat St	659	142	214	5.40	<700	Yes	153	189	2.75	<700	Yes	10	102	12.29	<700	Yes	82	94	1.28	<700	Yes
Lockwood Dr at Tidwell Rd	179	199	236	2.51	<700	Yes	9	13	1.21	<700	Yes	703	726	0.86	700-2700	Yes	802	851	1.70	700-2700	Yes
Tidwell Rd at Hirsch Rd	180	329	353	1.30	<700	Yes	237	319	4.92	<700	Yes	783	753	1.08	700-2700	Yes	897	863	1.15	700-2700	Yes
Tidwell Rd at Friendly Rd	677	12	68	8.85	<700	Yes	53	110	6.31	<700	Yes	682	750	2.54	<700	Yes	942	1130	5.84	700-2700	No
Tidwell Rd at IH 45 NBFR	181	622	613	0.36	<700	Yes	0	0	-	<700	Yes	727	768	1.50	700-2700	Yes	1128	1091	1.11	700-2700	Yes
Tidwell Rd at IH 45 SBFR	182	0	0	-	<700	Yes	782	808	0.92	700-2700	Yes	683	638	1.75	<700	Yes	998	932	2.12	700-2700	Yes
Tidwell Rd at Edell St	689	10	54	7.78	<700	Yes	14	146	14.76	<700	No	717	629	3.39	700-2700	Yes	892	779	3.91	700-2700	Yes
Tidwell Rd at Jensen Dr	183	283	219	4.04	<700	Yes	368	405	1.88	<700	Yes	613	633	0.80	<700	Yes	873	794	2.74	700-2700	Yes
Total Approach Met						85					84					80					85
Total Approach Not Met						12					13					17					12

Approach Counts Meet Calibration	**334**	**86.08%**
Approach Counts Outside Calibration	**54**	**13.92%**
Totals	**388**	**100.00%**

No Build 2030 AM Movement Volume Comparison

Intersection	Node	N NBL Count	N NBL Model	N NBL Cal Criteria	N NBL Met?	N NBT Count	N NBT Model	N NBT Cal Criteria	N NBT Met?	NBR Count	NBR Model	NBR Cal Criteria	NBR Met?	S SBL Count	S SBL Model	S SBL Cal Criteria	S SBL Met?	S SBT Count	S SBT Model	S SBT Cal Criteria	S SBT Met?	S SBR Count	S SBR Model	S SBR Cal Criteria	S SBR Met?	E EBL Count	E EBL Model	E EBL Cal Criteria	E EBL Met?	E EBT Count	E EBT Model	E EBT Cal Criteria	E EBT Met?	E EBR Count	E EBR Model	E EBR Cal Criteria	E EBR Met?	W WBL Count	W WBL Model	W WBL Cal Criteria	W WBL Met?	W WBT Count	W WBT Model	W WBT Cal Criteria	W WBT Met?	W WBR Count	W WBR Model	W WBR Cal Criteria	W WBR Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	3	0	<700	Yes	1454	870	700-2700	No	0	0	<700	Yes	0	0	<700	Yes	990	989	700-2700	Yes	0	0	<700	Yes	258	175	<700	Yes	0	0	<700	Yes	516	399	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	275	132	<700	No	1080	683	700-2700	No	358	233	<700	No	188	193	<700	Yes	573	632	<700	Yes	41	52	<700	Yes	101	72	<700	Yes	1238	1020	700-2700	No	251	198	<700	Yes	171	157	<700	Yes	1004	965	700-2700	Yes	168	184	<700	Yes
Westpark Dr at Hillcroft Ave	103	288	229	<700	Yes	1223	971	700-2700	No	116	98	<700	Yes	185	142	<700	Yes	902	788	700-2700	Yes	231	249	<700	Yes	313	197	<700	No	1272	833	700-2700	No	345	336	<700	Yes	97	72	<700	Yes	1181	846	700-2700	No	415	430	<700	Yes
Westpark Dr at 14th St	104	58	0	<700	Yes	0	0	<700	Yes	86	151	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	3	0	<700	Yes	1382	1047	700-2700	No	98	0	<700	Yes	20	0	<700	Yes	1394	1331	700-2700	Yes	0	0	<700	Yes
Westpark Drive at I 69 SBFR	105	100	0	<700	No	0	0	<700	Yes	0	0	<700	Yes	130	132	<700	Yes	356	342	<700	Yes	1001	881	700-2700	Yes	2	0	<700	Yes	1395	1179	700-2700	No	34	0	<700	Yes	135	120	<700	Yes	524	532	<700	Yes	0	0	<700	Yes
Westpark Dr at I 69 NBFR	106	139	121	<700	Yes	332	417	<700	Yes	341	288	<700	Yes	148	0	<700	No	0	0	<700	Yes	0	0	<700	Yes	719	558	700-2700	No	806	735	700-2700	Yes	0	0	<700	Yes	0	0	<700	Yes	520	526	<700	Yes	41	29	<700	Yes
Westpark Dr at Rampart St	107	263	283	<700	Yes	16	19	<700	Yes	157	0	<700	No	12	57	<700	Yes	9	7	<700	Yes	5	29	<700	Yes	4	30	<700	Yes	956	811	700-2700	No	186	180	<700	Yes	27	0	<700	Yes	277	244	<700	Yes	13	41	<700	Yes
Westpark Dr at Renwick Dr	108	99	61	<700	Yes	495	457	<700	Yes	122	142	<700	Yes	125	137	<700	Yes	279	259	<700	Yes	25	18	<700	Yes	120	91	<700	No	915	732	700-2700	No	87	55	<700	Yes	13	14	<700	Yes	215	208	<700	Yes	101	65	<700	Yes
Westpark Dr at Alder Dr	360	148	159	<700	Yes	0	0	<700	No	115	125	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	894	1014	700-2700	Yes	176	190	<700	Yes	33	34	<700	Yes	198	195	<700	Yes	0	0	<700	Yes
Westpark Dr at Chimney Rock Rd	109	0	0	<700	Yes	868	831	700-2700	Yes	126	161	<700	Yes	311	301	<700	Yes	630	516	<700	No	32	27	<700	Yes	85	104	<700	Yes	862	827	700-2700	Yes	100	99	<700	Yes	50	44	<700	Yes	170	168	<700	Yes	119	203	<700	Yes
Westpark Dr at Royalton St	309	123	82	<700	Yes	0	0	<700	Yes	98	57	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	927	1266	700-2700	No	109	115	<700	Yes	24	28	<700	Yes	219	431	<700	No	0	0	<700	Yes
Westpark Dr at S Rice Ave	110	134	137	<700	Yes	581	522	<700	Yes	184	262	<700	Yes	91	106	<700	Yes	371	382	<700	Yes	3	25	<700	Yes	266	284	<700	Yes	779	736	700-2700	Yes	177	218	<700	Yes	94	155	<700	Yes	260	277	<700	Yes	155	236	<700	Yes
Westpark Dr at Uptown Transit Ctr	382	10	11	<700	Yes	0	0	<700	Yes	9	10	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	895	1083	700-2700	No	17	18	<700	Yes	6	7	<700	Yes	560	666	<700	No	0	0	<700	Yes
Westpark Dr at I 610 SBFR	111	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	99	128	<700	Yes	133	110	<700	Yes	30	0	<700	Yes	0	0	<700	Yes	1840	1203	700-2700	No	761	700-2700	Yes	195	260	<700	Yes	503	611	<700	No	0	0	<700	Yes
Westpark Dr at I 610 NBFR	112	235	279	<700	Yes	361	448	<700	Yes	37	67	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	830	371	700-2700	No	1109	885	700-2700	No	0	0	<700	Yes	463	519	<700	Yes	162	206	<700	Yes				
Westpark Dr at Loop Central Dr	394	16	17	<700	Yes	0	0	<700	Yes	51	56	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	881	771	700-2700	Yes	121	131	<700	Yes	118	130	<700	Yes	442	740	<700	No	0	0	<700	Yes
Westpark Dr at Newcastle Dr	113	219	183	<700	Yes	230	203	<700	Yes	353	333	<700	Yes	29	35	<700	Yes	65	71	<700	Yes	119	178	<700	Yes	97	94	<700	Yes	876	544	700-2700	No	116	141	<700	Yes	140	177	<700	Yes	402	375	<700	Yes	88	127	<700	Yes
Westpark Dr at Weslayan St	114	103	160	<700	Yes	874	899	700-2700	Yes	79	113	<700	Yes	32	58	<700	Yes	799	836	700-2700	Yes	219	222	<700	Yes	354	269	<700	Yes	670	470	<700	No	149	178	<700	Yes	54	53	<700	Yes	246	300	<700	Yes	39	44	<700	Yes
Westpark Dr at Edloe St	115	0	0	<700	Yes	672	612	<700	Yes	39	46	<700	Yes	72	96	<700	Yes	273	264	<700	Yes	70	114	<700	Yes	193	183	<700	Yes	418	388	<700	Yes	57	65	<700	Yes	53	68	<700	Yes	232	292	<700	Yes	175	199	<700	Yes
I 69 Express Lanes at Edloe St	116	0	0	<700	Yes	834	788	700-2700	No	113	91	<700	Yes	25	65	<700	Yes	436	412	<700	Yes	0	0	<700	Yes	162	145	<700	Yes	0	0	<700	Yes	116	0	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Richmond Ave at Edloe St	118	181	40	<700	No	683	813	<700	No	264	285	<700	Yes	53	69	<700	Yes	385	408	<700	Yes	35	47	<700	Yes	73	65	<700	Yes	626	538	<700	Yes	139	175	<700	Yes	74	81	<700	Yes	510	502	<700	Yes	94	120	<700	Yes
Richmond Ave at Buffalo Speedway	119	115	120	<700	Yes	603	596	<700	Yes	470	448	<700	Yes	55	58	<700	Yes	443	424	<700	Yes	52	76	<700	Yes	64	112	<700	Yes	675	615	<700	Yes	161	160	<700	Yes	518	511	<700	Yes	225	202	<700	Yes	46	65	<700	Yes
Richmond Ave at Eastside St	120	48	55	<700	Yes	11	12	<700	Yes	50	85	<700	Yes	86	66	<700	Yes	13	14	<700	Yes	235	237	<700	Yes	274	311	<700	Yes	728	752	700-2700	Yes	49	146	<700	Yes	33	23	<700	Yes	576	484	<700	Yes	144	159	<700	Yes
Richmond Ave at Kirby Dr	121	209	211	<700	Yes	1533	1587	700-2700	Yes	98	84	<700	Yes	81	81	<700	Yes	1168	1214	700-2700	Yes	236	221	<700	Yes	196	215	<700	Yes	361	382	<700	Yes	184	156	<700	Yes	101	79	<700	Yes	270	309	<700	Yes	41	30	<700	Yes
Richmond Ave at Greenbriar St	122	2	0	<700	Yes	61	57	<700	Yes	18	36	<700	Yes	18	19	<700	Yes	474	477	<700	Yes	69	109	<700	Yes	72	76	<700	Yes	358	382	<700	Yes	59	76	<700	Yes	141	124	<700	Yes	302	302	<700	Yes	14	15	<700	Yes
Richmond Ave at Shepherd Dr	123	0	0	<700	Yes	401	468	<700	Yes	22	41	<700	Yes	0	0	<700	Yes	419	473	<700	Yes	38	44	<700	Yes	52	67	<700	Yes	280	334	<700	Yes	7	7	<700	Yes	34	65	<700	Yes	426	402	<700	Yes	30	26	<700	Yes
Richmond Ave at Hazard St	124	19	32	<700	Yes	141	111	<700	Yes	237	163	<700	Yes	21	59	<700	Yes	76	72	<700	Yes	50	48	<700	Yes	21	20	<700	Yes	276	332	<700	Yes	19	33	<700	Yes	44	53	<700	Yes	436	408	<700	Yes	37	38	<700	Yes
Richmond Dr at Woodhead St	125	31	49	<700	Yes	122	97	<700	Yes	94	114	<700	Yes	44	0	<700	Yes	96	136	<700	Yes	97	79	<700	Yes	53	44	<700	Yes	450	468	<700	Yes	39	50	<700	Yes	71	70	<700	Yes	380	371	<700	Yes	44	49	<700	Yes
Richmond Ave at Dunlavy St	126	50	49	<700	Yes	99	156	<700	Yes	28	33	<700	Yes	94	82	<700	Yes	206	203	<700	Yes	115	79	<700	Yes	108	83	<700	Yes	471	468	<700	Yes	24	31	<700	Yes	11	20	<700	Yes	339	315	<700	Yes	68	72	<700	Yes
Richmond Ave at Mandell St	127	29	42	<700	Yes	86	91	<700	Yes	49	68	<700	Yes	21	37	<700	Yes	83	93	<700	Yes	25	40	<700	Yes	43	60	<700	Yes	528	456	<700	Yes	18	28	<700	Yes	30	41	<700	Yes	353	327	<700	Yes	19	27	<700	Yes
Richmond Ave at Montrose Blvd	128	128	172	<700	Yes	1085	933	700-2700	Yes	55	46	<700	Yes	154	184	<700	Yes	658	743	<700	Yes	174	188	<700	Yes	141	152	<700	Yes	299	342	<700	Yes	127	199	<700	Yes	125	132	<700	Yes	332	292	<700	Yes	107	112	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	70	53	<700	Yes	139	164	<700	Yes	174	168	<700	Yes	0	0	<700	Yes	432	294	<700	No	265	257	<700	Yes	425	350	<700	Yes	371	439	<700	Yes	0	0	<700	Yes
Richmond Ave at Spur 527 NBFR	130	81	133	<700	Yes	37	40	<700	Yes	99	130	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	186	203	<700	Yes	316	347	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	713	656	700-2700	Yes	13	0	<700	Yes
Richmond Ave at Main St	131	297	264	<700	Yes	58	-	<700	No	76	45	<700	Yes	7	0	<700	Yes	99	0	<700	Yes	14	0	<700	Yes	16	26	<700	Yes	339	391	<700	Yes	51	59	<700	Yes	21	9	<700	Yes	573	387	<700	No	18	11	<700	Yes
Wheeler Ave at Fannin St	132	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	116	110	<700	Yes	757	810	700-2700	Yes	192	176	<700	Yes	0	0	<700	Yes	389	370	<700	Yes	16	72	<700	Yes	26	16	<700	Yes	445	248	<700	No	0	0	<700	Yes
Wheeler Ave at San Jacinto St	133	98	41	<700	Yes	324	362	<700	Yes	22	21	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	89	83	<700	Yes	416	396	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	353	279	<700	Yes	63	50	<700	Yes
Wheeler Ave at La Branch St	134	23	41	<700	Yes	28	23	<700	Yes	5	22	<700	Yes	0	40	<700	Yes	20	23	<700	Yes	16	16	<700	Yes	5	5	<700	Yes	237	380	<700	No	0	23	<700	Yes	4	0	<700	Yes	337	333	<700	Yes	3	30	<700	Yes
Wheeler Ave at Almeda Rd	135	123	244	<700	No	231	191	<700	Yes	20	18	<700	Yes	7	6	<700	Yes	178	157	<700	Yes	22	131	<700	No	9	6	<700	Yes	128	157	<700	Yes	89	131	<700	Yes	11	7	<700	Yes	171	144	<700	Yes	22	16	<700	Yes
Wheeler Ave at St Emanuel St	365	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	95	147	<700	Yes	79	40	<700	Yes	33	2	<700	Yes	308	267	<700	Yes	0	0	<700	Yes
Wheeler Ave at Hutchins St	367	197	184	<700	Yes	216	220	<700	Yes	28	21	<700	Yes	2	7	<700	Yes	0	0	<700	Yes	15	23	<700	Yes	15	10	<700	Yes	80	147	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	125	86	<700	Yes	3	24	<700	Yes
Wheeler Ave at Emancipation Ave	136	9	10	<700	Yes	192	192	<700	Yes	12	60	<700	Yes	10	21	<700	Yes	127	115	<700	Yes	42	17	<700	Yes	30	32	<700	Yes	80	115	<700	Yes	16	17	<700	Yes	4	26	<700	Yes	47	85	<700	Yes	10	19	<700	Yes
Ennis St at Wheeler St	266	18	43	<700	Yes	210	195	<700	Yes	3	0	<700	Yes	28	31	<700	Yes	128	117	<700	Yes	8	17	<700	Yes	40	41	<700	Yes	292	285	<700	Yes	23	35	<700	Yes	2	0	<700	Yes	0	0	<700	Yes	2	0	<700	Yes
Cleburne St at Ennis St	292	7	7	<700	Yes	126	114	<700	Yes	118	120	<700	Yes	24	29	<700	Yes	106	134	<700	Yes	5	5	<700	Yes	4	4	<700	Yes	49	63	<700	Yes	7	8	<700	Yes	34	38	<700	Yes	32	36	<700	Yes	15	15	<700	Yes
Ennis St at Alabama St	141	39	77	<700	Yes	46	55	<700	Yes	28	31	<700	Yes	18	19	<700	Yes	69	72	<700	Yes	17	38	<700	Yes	28	35	<700	Yes	292	285	<700	Yes	68	93	<700	Yes	24	26	<700	Yes	143	180	<700	Yes	20	22	<700	Yes
Ennis St at Holman St	306	31	34	<700	Yes	85	72	<700	Yes	13	20	<700	Yes	5	5	<700	Yes	80	94	<700	Yes	13	15	<700	Yes	13	14	<700	Yes	18	20	<700	Yes	28	30	<700	Yes	15	17	<700	Yes	24	28	<700	Yes	9	10	<700	Yes
Ennis St at Elgin St	249	32	35	<700	Yes	37	46	<700	Yes	44	28	<700	Yes	9	8	<700	Yes	22	26	<700	Yes	6	7	<700	Yes	7	8	<700	Yes	186	248	<700	Yes	25	28	<700	Yes	43	68	<700	Yes	271	274	<700	Yes	7	7	<700	Yes
Elgin St at Scott St	143	45	69	<700	Yes	280	359	<700	Yes	102	104	<700	Yes	31	28	<700	Yes	568	572	<700	Yes	10	24	<700	Yes	47	38	<700	Yes	186	188	<700	Yes	68	69	<700	Yes	110	129	<700	Yes	229	245	<700	Yes	25	32	<700	Yes
Elgin St at Cullen Blvd	144	33	48	<700	Yes	108	140	<700	Yes	105	105	<700	Yes	179	86	<700	Yes	232	319	<700	Yes	40	42	<700	Yes	25	27	<700	Yes	204	135	<700	Yes	30	30	<700	Yes	117	127	<700	Yes	212	266	<700	Yes	16	17	<700	Yes
Elgin St at UH Entrance 16	145	28	30	<700	Yes	37	58	<700	Yes	16	30	<700	Yes	10	10	<700	Yes	46	50	<700	Yes	10	11	<700	Yes	20	46	<700	Yes	204	193	<700	Yes	97	86	<700	Yes	106	130	<700	Yes	393	403	<700	Yes	17	24	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	110	83	<700	Yes	127	265	<700	No	190	208	<700	Yes	2	0	<700	Yes	114	169	<700	Yes	44	53	<700	Yes	520	557	<700	Yes	0	0	<700	Yes	326	261	<700	Yes
Lockwood St at Spur 5 NBFR	147	7	7	<700	Yes	208	245	<700	Yes	0	0	<700	Yes	179	86	<700	Yes	798	777	700-2700	Yes	4	5	<700	Yes	25	27	<700	Yes	204	135	<700	Yes	30	30	<700	Yes	56	42	<700	Yes	28	34	<700	Yes	191	208	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	0	0	<700	Yes	422	435	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	251	494	<700	No	47	45	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	460	514	<700	Yes	793	807	700-2700	Yes	363	455	<700	Yes
Ernestine St at Munger St	452	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	70	1	<700	Yes	176	494	<700	No	0	0	<700	Yes	0	0	<700	Yes	8	86	<700	Yes	2	0	<700	Yes	124	46	<700	Yes	80	130	<700	Yes	0	0	<700	Yes
Lockwood Dr at Munger St	453	36	26	<700	Yes	734	826	700-2700	Yes	28	40	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	30	5	<700	Yes	49	86	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	181	148	<700	Yes	0	0	<700	Yes
Ernestine St at Leeland St	149	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	106	95	<700	Yes	834	737	700-2700	Yes	28	88	<700	Yes	0	0	<700	Yes	140	205	<700	Yes	87	95	<700	Yes	184	198	<700	Yes	280	198	<700	Yes	184	101	<700	No	0	0	<700	Yes
Leeland St at Lockwood St	150	287	298	<700	Yes	733	697	700-2700	Yes	234	251	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	45	43	<700	Yes	210	43	<700	No	0	0	<700	Yes	164	208	<700	Yes	96	140	<700	Yes	60	146	<700	Yes
Ernestine St/Lockwood Dr at Polk St	151	120	85	<700	Yes	552	450	<700	No	61	85	<700	Yes	122	152	<700	Yes	507	588	<700	Yes	42	89	<700	Yes	62	79	<700	Yes	179	214	<700	Yes	28	39	<700	Yes	125	134	<700	Yes	137	204	<700	Yes	57	104	<700	Yes
Ernestine St/Lockwood Dr at McKinney St	152	23	38	<700	Yes	686	663	<700	Yes	8	10	<700	Yes	8	10	<700	Yes	835	819	700-2700	Yes	30	37	<700	Yes	19	32	<700	Yes	23	37	<700	Yes	12	23	<700	Yes	10	15	<700	Yes	20	22	<700	Yes	17	27	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	64	76	<700	Yes	577	592	<700	Yes	75	97	<700	Yes	29	40	<700	Yes	751	744	700-2700	Yes	23	30	<700	Yes	29	35	<700	Yes	97	115	<700	Yes	39	47	<700	Yes	89	111	<700	Yes	225	254	<700	Yes	47	57	<700	Yes
Lockwood Dr at Canal St	154	182	195	<700	Yes	386	428	<700	Yes	57	72	<700	Yes	22	25	<700	Yes	579	559	<700	Yes	23	27	<700	Yes	15	21	<700	Yes	124	126	<700	Yes	145	146	<700	Yes	56	78	<700	Yes	169	194	<700	Yes	66	86	<700	Yes
Lockwood Dr at Navigation Blvd	155	89	75	<700	Yes	304	359	<700	Yes	56	61	<700	Yes	86	96	<700	Yes	466	487	<700	Yes	127	108	<700	Yes	126	149	<700	Yes	310	315	<700	Yes	69	77	<700	Yes	91	89	<700	Yes	528	478	<700	Yes	65	99	<700	Yes
Lockwood Dr at Armour Dr	156	0	0	<700	Yes	429	365	<700	Yes	60	198	<700	No	26	24	<700	Yes	665	658	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	40	56	<700	Yes	0	0	<700	Yes	17	30	<700	Yes
Lockwood Dr at Clinton Dr	157	43	35	<700	Yes	355	318	<700	Yes	34	50	<700	Yes	74	110	<700	Yes	629	589	<700	Yes	39	14	<700	Yes	17	18	<700	Yes	84	113	<700	Yes	73	84	<700	Yes	90	85	<700	Yes	148	162	<700	Yes	28	78	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	63	0	<700	Yes	867	725	700-2700	No	86	79	<700	Yes	0	0	<700	Yes	68	97	<700	Yes	12	33	<700	Yes	61	84	<700	Yes	69	105	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Market St	159	2	6	<700	Yes	418	487	<700	Yes	47	47	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	30	47	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	128	183	<700	Yes	136	69	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	242	230	<700	Yes	639	671	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	244	321	<700	Yes	280	136	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 EBFR	161	0	0	<700	Yes	344	352	<700	Yes	226	246	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	179	259	<700	Yes	306	293	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	371	182	<700	Yes	437	446	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	228	304	<700	Yes	296	310	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	581	526	<700	Yes	179	186	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	41	13	<700	Yes	453	504	<700	Yes	41	5	<700	Yes	0	0	<700	Yes	121	165	<700	Yes	100	118	<700	Yes	54	0	<700	Yes	182	280	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	56	85	<700	Yes	270	319	<700	Yes	52	78	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	30	22	<700	Yes	132	156	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	180	197	<700	Yes	47	42	<700	Yes
Lockwood Dr at Tidwell Rd	166	8	0	<700	Yes	309	373	<700	Yes	5	9	<700	Yes	5	6	<700	Yes	517	511	<700	Yes	8	16	<700	Yes	3	7	<700	Yes	0	0	<700	Yes	11

No Build 2030 PM Approach Volume Calibration

Intersection	Node	Northbound					Southbound					Eastbound					Westbound				
		Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?	Count	Model	GEH	Cal. Criteria	Criteria Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	1626	1155	12.63	700-2700	No	1491	1301	5.09	700-2700	Yes	446	358	4.39	<700	Yes	0	0	-	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	1815	1307	12.86	700-2700	No	1283	1217	1.87	700-2700	Yes	1079	942	4.31	700-2700	Yes	1735	1247	12.64	700-2700	No
Westpark Dr at Hillcroft Ave	103	1552	1408	3.74	700-2700	Yes	1493	1237	6.93	700-2700	No	1621	1317	7.93	700-2700	No	1794	1772	0.52	700-2700	Yes
Westpark Dr at 14th St	104	257	279	1.34	<700	Yes	0	0	-	<700	Yes	1266	1055	6.19	700-2700	No	1697	1588	2.69	700-2700	Yes
Westpark Drive at I 69 SBFR	105	0	0	-	<700	Yes	2125	2128	0.07	700-2700	Yes	1362	1082	8.01	700-2700	No	842	850	0.28	700-2700	Yes
Westpark Drive at I 69 NBFR	106	640	579	2.47	<700	Yes	0	0	-	<700	Yes	1483	1323	4.27	700-2700	Yes	752	754	0.07	700-2700	Yes
Westpark Dr at Rampart St	107	270	196	4.85	<700	Yes	25	42	2.94	<700	Yes	1101	1028	2.24	700-2700	Yes	672	623	1.93	<700	Yes
Westpark Dr at Renwick Dr	108	590	617	1.10	<700	Yes	691	744	1.98	<700	Yes	870	749	4.25	700-2700	Yes	720	746	0.96	700-2700	Yes
Westpark Dr at Alder Dr	360	288	288	0.00	<700	Yes	0	0	-	<700	Yes	916	1088	5.43	700-2700	No	565	612	1.94	<700	Yes
Westpark Dr at Chimney Rock Rd	109	655	671	0.62	<700	Yes	1066	1066	0.00	700-2700	Yes	892	849	1.46	700-2700	Yes	852	770	2.88	700-2700	Yes
Westpark Dr at Royalton St	309	424	170	14.74	<700	No	0	0	-	<700	Yes	893	998	3.41	700-2700	Yes	621	1009	13.59	<700	No
Westpark Dr at S Rice Ave	110	1085	1034	1.57	700-2700	Yes	769	741	1.02	700-2700	Yes	866	817	1.69	700-2700	Yes	1508	1187	8.74	700-2700	No
Westpark Dr at Uptown Transit Ctr	382	20	21	0.22	<700	Yes	0	0	-	<700	Yes	835	743	3.28	700-2700	Yes	1394	1247	4.05	700-2700	Yes
Westpark Dr at I 610 SBFR	111	0	0	-	<700	Yes	370	383	0.67	<700	Yes	1600	1404	5.06	700-2700	Yes	1759	1555	5.01	700-2700	Yes
Westpark Dr at I 610 NBFR	112	1277	1071	6.01	700-2700	No	0	0	-	<700	Yes	1109	955	4.79	700-2700	Yes	1224	1127	2.83	700-2700	Yes
Westpark Dr at Loop Central Dr	394	350	233	6.85	<700	No	0	0	-	<700	Yes	649	605	1.76	<700	Yes	1027	1184	4.72	700-2700	No
Westpark Dr at Newcastle Dr	113	557	661	4.21	<700	No	305	352	2.59	<700	Yes	934	571	13.23	700-2700	No	1124	1122	0.06	700-2700	Yes
Westpark Dr at Weslayan St	114	909	975	2.15	700-2700	Yes	1352	1316	0.99	700-2700	Yes	853	721	4.71	700-2700	No	720	743	0.85	700-2700	Yes
Westpark Dr at Edloe St	115	539	560	0.90	<700	Yes	657	652	0.20	<700	Yes	496	407	4.19	<700	Yes	886	923	1.23	700-2700	Yes
I 69 Express Lanes at Edloe St	116	623	668	1.77	<700	Yes	830	786	1.55	700-2700	Yes	0	0	-	<700	Yes	88	120	3.14	<700	Yes
Richmond Ave at Edloe St	118	806	800	0.21	700-2700	Yes	659	667	0.31	<700	Yes	994	1062	2.12	700-2700	Yes	1096	1038	1.78	700-2700	Yes
Richmond Ave at Buffalo Speedway	119	1126	1062	1.93	700-2700	Yes	672	657	0.58	<700	Yes	849	954	3.50	700-2700	Yes	1346	1131	6.11	700-2700	No
Richmond Ave at Eastside St	120	119	171	4.32	<700	Yes	373	394	1.07	<700	Yes	1069	1058	0.34	700-2700	Yes	992	920	2.33	700-2700	Yes
Richmond Ave at Kirby Dr	121	1770	1686	2.02	700-2700	Yes	1570	1521	1.25	700-2700	Yes	1010	837	5.69	700-2700	No	615	444	7.43	<700	No
Richmond Ave at Greenbriar St	122	268	265	0.18	<700	Yes	493	505	0.54	<700	Yes	629	629	0.00	<700	Yes	497	469	1.27	<700	Yes
Richmond Ave at Shepherd Dr	123	439	479	1.87	<700	Yes	459	458	0.05	<700	Yes	253	273	1.23	<700	Yes	489	473	0.73	<700	Yes
Richmond Ave at Hazard St	124	470	339	6.51	<700	No	181	168	0.98	<700	Yes	280	326	2.64	<700	Yes	548	555	0.30	<700	Yes
Richmond Dr at Woodhead St	125	445	414	1.50	<700	Yes	179	142	2.92	<700	Yes	544	498	2.02	<700	Yes	570	591	0.87	<700	Yes
Richmond Ave at Dunlavy St	126	292	290	0.12	<700	Yes	345	263	4.70	<700	Yes	775	655	4.49	700-2700	No	608	605	0.12	<700	Yes
Richmond Ave at Mandell St	127	361	366	0.26	<700	Yes	160	185	1.90	<700	Yes	774	697	2.84	700-2700	Yes	531	624	3.87	<700	Yes
Richmond Ave at Montrose Blvd	128	839	894	1.87	700-2700	Yes	1209	1243	0.97	700-2700	Yes	602	653	2.04	<700	Yes	913	794	4.07	700-2700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	-	<700	Yes	342	403	3.16	<700	Yes	923	875	1.60	700-2700	Yes	812	783	1.03	700-2700	Yes
Richmond Ave at Spur 527 NBFR	130	249	291	2.56	<700	Yes	0	0	-	<700	Yes	717	747	1.11	700-2700	Yes	775	711	2.35	700-2700	Yes
Richmond Ave at Main St	131	681	519	6.61	<700	No	0	10	4.47	<700	Yes	482	582	4.34	<700	No	579	468	4.85	<700	No
Wheeler Ave at Fannin St	132	0	0	-	<700	Yes	652	650	0.08	<700	Yes	557	595	1.58	<700	Yes	425	354	3.60	<700	Yes
Wheeler Ave at San Jacinto St	133	1034	1132	2.98	700-2700	Yes	0	0	-	<700	Yes	674	650	0.93	<700	Yes	468	448	0.93	<700	Yes
Wheeler Ave at La Branch St	134	58	122	6.75	<700	Yes	29	49	3.20	<700	Yes	445	542	4.37	<700	Yes	360	384	1.24	<700	Yes
Wheeler Ave at Almeda Rd	135	417	632	9.39	<700	No	291	393	5.52	<700	No	409	396	0.65	<700	Yes	288	170	7.80	<700	No
Wheeler Ave at St Emanuel St	365	0	0	-	<700	Yes	0	0	-	<700	Yes	284	373	4.91	<700	Yes	273	277	0.24	<700	Yes
Wheeler Ave at Hutchins St	367	448	338	5.55	<700	No	15	34	3.84	<700	Yes	226	290	3.98	<700	Yes	138	225	6.46	<700	Yes
Wheeler Ave at Emancipation Ave	136	411	321	4.70	<700	Yes	255	251	0.25	<700	Yes	227	266	2.48	<700	Yes	83	200	9.84	<700	No
Ennis St at Wheeler St	266	318	272	2.68	<700	Yes	242	289	2.88	<700	Yes	92	150	5.27	<700	Yes	6	0	3.46	<700	Yes
Cleburne St at Ennis St	292	345	350	0.27	<700	Yes	165	252	6.03	<700	Yes	45	63	2.45	<700	Yes	240	189	3.48	<700	Yes
Ennis St at Alabama St	141	236	259	1.46	<700	Yes	111	186	6.15	<700	Yes	286	417	6.99	<700	No	318	248	4.16	<700	Yes
Ennis St at Holman St	306	217	270	3.40	<700	Yes	90	110	2.00	<700	Yes	49	49	0.00	<700	Yes	95	159	5.68	<700	Yes
Ennis St at Elgin St	249	213	197	1.12	<700	Yes	52	71	2.42	<700	Yes	258	295	2.23	<700	Yes	452	424	1.34	<700	Yes
Elgin St at Scott St	143	725	763	1.39	700-2700	Yes	465	560	4.20	<700	Yes	382	386	0.20	<700	Yes	419	527	4.97	<700	No
Elgin St at Cullen Blvd	144	449	467	0.84	<700	Yes	354	439	4.27	<700	Yes	306	260	2.73	<700	Yes	381	418	1.85	<700	Yes
Elgin St at UH Entrance 16	145	220	197	1.59	<700	Yes	63	114	5.42	<700	Yes	450	522	3.27	<700	Yes	271	318	2.74	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	-	<700	Yes	293	290	0.18	<700	Yes	780	744	1.30	700-2700	Yes	502	514	0.53	<700	Yes
Lockwood St at Spur 5 NBFR	147	827	738	3.18	700-2700	Yes	497	480	0.77	<700	Yes	0	0	-	<700	Yes	520	547	1.17	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	462	589	5.54	<700	No	132	341	13.59	<700	No	0	0	-	<700	Yes	1706	1952	5.75	700-2700	Yes
Ernestine St at Munger St	452	0	0	-	<700	Yes	196	307	7.00	<700	No	8	77	10.58	<700	Yes	84	121	3.65	<700	Yes
Lockwood Dr at Munger St	453	742	967	7.70	700-2700	No	0	0	-	<700	Yes	98	87	1.14	<700	Yes	46	50	0.58	<700	Yes
Ernestine St at Leeland St	149	0	0	-	<700	Yes	602	596	0.25	<700	Yes	250	310	3.59	<700	Yes	277	293	0.95	<700	Yes
Leeland St at Lockwood St	150	774	693	2.99	700-2700	Yes	0	0	-	<700	Yes	199	246	3.15	<700	Yes	319	453	6.82	<700	No
Ernestine St/Lockwood Dr at Polk St	151	688	679	0.34	<700	Yes	384	618	10.45	<700	No	279	313	1.98	<700	Yes	280	413	7.14	<700	No
Ernestine St/Lockwood Dr at McKinney St	152	594	727	5.18	<700	No	561	688	5.08	<700	No	51	65	1.84	<700	Yes	44	63	2.60	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	588	724	5.31	<700	No	592	755	6.28	<700	No	392	401	0.45	<700	Yes	334	376	2.23	<700	Yes
Lockwood Dr at Canal St	154	598	672	2.94	<700	Yes	492	533	1.81	<700	Yes	318	425	5.55	<700	No	229	329	5.99	<700	No
Lockwood Dr at Navigation Blvd	155	513	546	1.43	<700	Yes	467	556	3.94	<700	Yes	456	543	3.89	<700	Yes	597	678	3.21	<700	Yes
Lockwood Dr at Armour Dr	156	568	840	10.25	<700	No	428	474	2.17	<700	Yes	0	0	-	<700	Yes	63	74	1.33	<700	Yes
Lockwood Dr at Clinton Dr	157	700	673	1.03	700-2700	Yes	401	411	0.50	<700	Yes	154	160	0.48	<700	Yes	337	399	3.23	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	-	<700	Yes	713	754	1.51	700-2700	Yes	96	140	4.05	<700	Yes	16	46	5.39	<700	Yes
Lockwood Dr (NB) at Market St	159	885	730	5.45	700-2700	No	0	0	-	<700	Yes	143	163	1.62	<700	Yes	73	39	4.54	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	-	<700	Yes	693	747	2.01	<700	Yes	638	629	0.36	<700	Yes	0	0	-	<700	Yes

No Build 2030 PM Approach Volume Calibration

Lockwood Dr (NB) at I 10 EBFR	161	552	811	9.92	<700	No	0	0	-	<700	Yes	715	620	3.68	700-2700	Yes	0	0	-	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	-	<700	Yes	675	675	0.00	<700	Yes	0	0	-	<700	Yes	524	545	0.91	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	707	819	4.05	700-2700	No	0	0	-	<700	Yes	0	0	-	<700	Yes	492	495	0.14	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	-	<700	Yes	519	504	0.66	<700	Yes	324	385	3.24	<700	Yes	206	213	0.48	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	891	764	4.41	700-2700	Yes	0	0	-	<700	Yes	192	204	0.85	<700	Yes	167	174	0.54	<700	Yes
Lockwood Dr at Mulvey St	166	813	708	3.81	700-2700	Yes	495	515	0.89	<700	Yes	22	14	1.89	<700	Yes	7	11	1.33	<700	Yes
Lockwood Dr at Nichols St	567	758	712	1.70	700-2700	Yes	499	551	2.27	<700	Yes	24	26	0.40	<700	Yes	17	16	0.25	<700	Yes
Lockwood Dr at Sudan St	576	595	636	1.65	<700	Yes	501	571	3.02	<700	Yes	10	10	0.00	<700	Yes	18	18	0.00	<700	Yes
Lockwood Dr at Collingsworth St	167	843	913	2.36	700-2700	Yes	397	505	5.09	<700	No	218	316	6.00	<700	Yes	78	120	4.22	<700	Yes
Lockwood Dr at Crane St	168	772	722	1.83	700-2700	Yes	479	536	2.53	<700	Yes	86	139	5.00	<700	Yes	71	125	5.45	<700	Yes
Lockwood Dr at Cavalcade	169	778	736	1.53	700-2700	Yes	513	575	2.66	<700	Yes	275	287	0.72	<700	Yes	294	366	3.96	<700	Yes
Lockwood Dr at Rand St	170	752	714	1.40	700-2700	Yes	565	630	2.66	<700	Yes	73	93	2.20	<700	Yes	106	143	3.32	<700	Yes
Lockwood Dr at Pardee St	604	572	815	9.23	<700	No	621	716	3.67	<700	Yes	54	54	0.00	<700	Yes	22	22	0.00	<700	Yes
Lockwood Dr at I 610 EBFR	171	870	779	3.17	700-2700	Yes	456	536	3.59	<700	Yes	609	563	1.90	<700	Yes	0	0	-	<700	Yes
Lockwood Dr at I 610 WBFR	172	1019	915	3.34	700-2700	Yes	589	597	0.33	<700	Yes	0	0	-	<700	Yes	474	511	1.67	<700	Yes
Lockwood Dr at Kelley St	173	654	494	6.68	<700	No	368	404	1.83	<700	Yes	314	399	4.50	<700	Yes	498	530	1.41	<700	Yes
Lockwood Dr at Shreveport Blvd	174	442	493	2.36	<700	Yes	317	331	0.78	<700	Yes	43	66	3.12	<700	Yes	133	160	2.23	<700	Yes
Lockwood Dr at Bennington St	175	626	379	11.02	<700	No	268	284	0.96	<700	Yes	114	182	5.59	<700	Yes	6	11	1.71	<700	Yes
Lockwood Dr at Denmark St	623	401	441	1.95	<700	Yes	233	282	3.05	<700	Yes	45	99	6.36	<700	Yes	42	42	0.00	<700	Yes
Lockwood Dr at Crosstimbers St	176	504	423	3.76	<700	Yes	238	262	1.52	<700	Yes	454	419	1.68	<700	Yes	443	441	0.10	<700	Yes
Lockwood Dr at Weaver Rd	177	457	410	2.26	<700	Yes	214	236	1.47	<700	Yes	109	136	2.44	<700	Yes	195	240	3.05	<700	Yes
Lockwood Dr at Keeland St	641	367	412	2.28	<700	Yes	230	236	0.39	<700	Yes	7	10	1.03	<700	Yes	4	8	1.63	<700	Yes
Lockwood Dr at Laura Koppe Rd	178	426	398	1.38	<700	Yes	224	238	0.92	<700	Yes	184	231	3.26	<700	Yes	122	146	2.07	<700	Yes
Lockwood Dr at Firnat St	659	387	335	2.74	<700	Yes	231	249	1.16	<700	Yes	27	94	8.61	<700	Yes	76	52	3.00	<700	Yes
Lockwood Dr at Tidwell Rd	179	375	308	3.63	<700	Yes	25	56	4.87	<700	Yes	935	1020	2.72	700-2700	Yes	1007	956	1.63	700-2700	Yes
Tidwell Rd at Hirsch Rd	180	236	288	3.21	<700	Yes	186	228	2.92	<700	Yes	1041	1089	1.47	700-2700	Yes	1128	1065	1.90	700-2700	Yes
Tidwell Rd at Friendly Rd	677	18	26	1.71	<700	Yes	87	73	1.57	<700	Yes	1142	1143	0.03	700-2700	Yes	1057	1188	3.91	700-2700	Yes
Tidwell Rd at IH 45 NBFR	181	1127	1032	2.89	700-2700	Yes	0	0	-	<700	Yes	1153	1168	0.44	700-2700	Yes	1198	1146	1.52	700-2700	Yes
Tidwell Rd at IH 45 SBFR	182	0	0	-	<700	Yes	875	906	1.04	700-2700	Yes	941	971	0.97	700-2700	Yes	1158	1056	3.07	700-2700	Yes
Tidwell Rd at Edell St	689	17	42	4.60	<700	Yes	13	37	4.80	<700	Yes	912	971	1.92	700-2700	Yes	972	943	0.94	700-2700	Yes
Tidwell Rd at Jensen Dr	183	549	609	2.49	<700	Yes	367	418	2.57	<700	Yes	804	839	1.22	700-2700	Yes	955	887	2.24	700-2700	Yes
Total Approach Met						76					89					86					84
Total Approach Not Met						21					8					11					13

Approach Counts Meet Calibration	**335**	**86.34%**
Approach Counts Outside Calibration	**53**	**13.66%**
Totals	**388**	**100.00%**

No Build 2030 PM Movement Volume Comparison

Intersection	Node	N NBL Count	N NBL Model	N NBL Cal Criteria	N NBL Met?	N NBT Count	N NBT Model	N NBT Cal Criteria	N NBT Met?	NBR Count	NBR Model	NBR Cal Criteria	NBR Met?	S SBL Count	S SBL Model	S SBL Cal Criteria	S SBL Met?	S SBT Count	S SBT Model	S SBT Cal Criteria	S SBT Met?	SBR Count	SBR Model	SBR Cal Criteria	SBR Met?	E EBL Count	E EBL Model	E EBL Cal Criteria	E EBL Met?	E EBT Count	E EBT Model	E EBT Cal Criteria	E EBT Met?	EBR Count	EBR Model	EBR Cal Criteria	EBR Met?	W WBL Count	W WBL Model	W WBL Cal Criteria	W WBL Met?	W WBT Count	W WBT Model	W WBT Cal Criteria	W WBT Met?	WBR Count	WBR Model	WBR Cal Criteria	WBR Met?
Eastbound Westpark Tollway Frontage Rd at Fondren Rd	101	2	0	<700	Yes	1626	1555	700-2700	No	0	0	<700	Yes	3	0	<700	Yes	1491	1301	700-2700	Yes	0	0	<700	Yes	188	150	<700	Yes	0	0	<700	Yes	258	208	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Westbound Westpark Tollway Frontage Rd at Fondren Rd	102	420	240	<700	No	1126	866	700-2700	No	269	201	<700	Yes	243	269	<700	Yes	963	865	700-2700	Yes	79	83	<700	Yes	72	64	<700	Yes	762	667	700-2700	Yes	245	211	<700	Yes	297	229	<700	Yes	1287	895	700-2700	No	162	123	<700	Yes
Westpark Dr at Hillcroft Ave	103	342	92	<700	No	1149	1182	700-2700	Yes	73	134	<700	Yes	193	154	<700	Yes	1040	834	700-2700	No	263	249	<700	Yes	209	147	<700	Yes	1016	837	700-2700	No	396	333	<700	Yes	114	89	<700	Yes	1362	1408	700-2700	Yes	318	275	<700	Yes
Westpark Dr at 14th St	104	160	175	<700	Yes	0	0	<700	Yes	97	104	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	6	0	<700	Yes	1234	960	700-2700	No	32	0	<700	Yes	29	48	<700	Yes	1670	1538	700-2700	Yes	0	0	<700	Yes
Westpark Drive at I 69 SBFR	105	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	198	249	<700	Yes	878	861	700-2700	Yes	1049	1018	700-2700	Yes	0	0	<700	Yes	1285	1082	700-2700	No	77	0	<700	Yes	212	258	<700	Yes	630	592	<700	Yes	0	0	<700	Yes
Westpark Drive at I 69 NBFR	106	102	110	<700	Yes	262	250	<700	Yes	276	219	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	663	522	<700	No	820	801	700-2700	Yes	0	0	<700	Yes	0	0	<700	Yes	741	740	700-2700	Yes	11	14	<700	Yes
Westpark Dr at Rampart St	107	155	156	<700	Yes	8	9	<700	Yes	107	31	<700	Yes	3	11	<700	Yes	18	17	<700	Yes	4	14	<700	Yes	2	2	<700	Yes	757	703	700-2700	Yes	342	323	<700	Yes	82	0	<700	Yes	573	590	<700	Yes	17	33	<700	Yes
Westpark Dr at Renwick Dr	108	92	79	<700	Yes	419	429	<700	Yes	79	109	<700	Yes	172	207	<700	Yes	482	511	<700	Yes	39	26	<700	Yes	82	69	<700	No	122	121	<700	Yes	60	66	<700	Yes	60	66	<700	Yes	527	515	<700	Yes	133	165	<700	Yes
Westpark Dr at Alder Dr	360	141	141	<700	Yes	0	0	<700	No	147	147	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	702	874	700-2700	No	214	214	<700	Yes	61	60	<700	Yes	504	552	<700	Yes	0	0	<700	Yes
Westpark Dr at Chimney Rock Rd	109	0	0	<700	Yes	608	634	<700	Yes	47	37	<700	Yes	213	192	<700	Yes	756	760	700-2700	Yes	101	114	<700	Yes	118	102	<700	Yes	606	603	<700	Yes	168	144	<700	Yes	97	88	<700	Yes	506	437	<700	Yes	249	245	<700	Yes
Westpark Dr at Royalton St	309	212	86	<700	No	0	0	<700	Yes	214	84	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	724	829	700-2700	Yes	169	169	<700	Yes	63	60	<700	Yes	560	949	<700	No	0	0	<700	Yes
Westpark Dr at S Rice Ave	110	267	241	<700	Yes	601	586	<700	Yes	219	207	<700	Yes	147	132	<700	Yes	608	594	<700	Yes	16	15	<700	Yes	229	238	<700	Yes	440	393	<700	Yes	197	186	<700	Yes	234	225	<700	Yes	921	690	700-2700	No	353	272	<700	Yes
Westpark Dr at Uptown Transit Ctr	382	11	11	<700	Yes	0	0	<700	Yes	9	10	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	818	725	700-2700	Yes	17	18	<700	Yes	8	7	<700	Yes	1386	1240	700-2700	Yes	0	0	<700	Yes
Westpark Dr at I 610 SBFR	111	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	66	72	<700	Yes	219	201	<700	Yes	85	110	<700	Yes	0	0	<700	Yes	1053	891	700-2700	No	547	513	<700	Yes	290	296	<700	Yes	1469	1259	700-2700	Yes	0	0	<700	Yes
Westpark Dr at I 610 NBFR	112	620	510	<700	No	571	473	<700	Yes	86	88	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	400	279	<700	No	719	653	700-2700	Yes	0	0	<700	Yes	0	0	<700	Yes	1139	1042	700-2700	Yes	85	85	<700	Yes
Westpark Dr at Loop Central Dr	394	194	132	<700	Yes	0	0	<700	Yes	156	101	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	616	571	<700	Yes	33	34	<700	Yes	26	26	<700	Yes	1001	1158	700-2700	No	0	0	<700	Yes
Westpark Dr at Newcastle Dr	113	111	156	<700	Yes	149	207	<700	Yes	31	42	<700	Yes	112	138	<700	Yes	162	172	<700	Yes	65	0	<700	Yes	682	386	<700	No	187	185	<700	Yes	214	204	<700	Yes	847	841	700-2700	Yes	68	77	<700	Yes
Westpark Dr at Weslayan St	114	146	177	<700	Yes	703	734	700-2700	Yes	60	64	<700	Yes	14	13	<700	Yes	976	939	700-2700	Yes	365	364	<700	Yes	212	175	<700	Yes	444	335	<700	No	197	211	<700	Yes	113	85	<700	Yes	555	603	<700	Yes	52	55	<700	Yes
Westpark Dr at Edloe St	115	0	0	<700	Yes	485	499	<700	Yes	54	61	<700	Yes	91	71	<700	Yes	463	457	<700	Yes	110	124	<700	Yes	121	95	<700	Yes	325	270	<700	Yes	50	42	<700	Yes	109	100	<700	Yes	595	636	<700	Yes	182	187	<700	Yes
I 69 Express Lanes at Edloe St	116	68	94	<700	Yes	555	572	<700	Yes	0	2	<700	Yes	10	1	<700	Yes	704	635	700-2700	Yes	126	131	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	70	0	<700	Yes	0	0	<700	Yes	18	19	<700	Yes
Richmond Ave at Edloe St	118	199	142	<700	Yes	447	475	<700	Yes	160	183	<700	Yes	58	77	<700	Yes	547	525	<700	Yes	57	65	<700	Yes	82	100	<700	Yes	666	692	<700	Yes	254	270	<700	Yes	202	183	<700	Yes	831	782	700-2700	Yes	66	73	<700	Yes
Richmond Ave at Buffalo Speedway	119	251	256	<700	Yes	564	509	<700	Yes	313	297	<700	Yes	61	76	<700	Yes	521	498	<700	Yes	90	83	<700	Yes	91	99	<700	Yes	634	691	<700	Yes	133	164	<700	Yes	378	325	<700	Yes	829	702	700-2700	No	142	104	<700	Yes
Richmond Ave at Eastside St	120	38	49	<700	Yes	21	15	<700	Yes	60	107	<700	Yes	95	86	<700	Yes	147	132	<700	Yes	251	275	<700	Yes	184	195	<700	Yes	820	799	700-2700	Yes	74	168	<700	Yes	52	18	<700	Yes	839	797	700-2700	Yes	118	105	<700	Yes
Richmond Ave at Kirby Dr	121	196	187	<700	Yes	1486	1408	700-2700	Yes	93	91	<700	Yes	82	97	<700	Yes	1319	1266	700-2700	Yes	169	158	<700	Yes	287	214	<700	Yes	450	442	<700	Yes	275	179	<700	Yes	122	80	<700	Yes	382	337	<700	Yes	115	27	<700	Yes
Richmond Ave at Greenbriar St	122	2	0	<700	Yes	248	243	<700	Yes	20	22	<700	Yes	15	15	<700	Yes	363	336	<700	Yes	115	154	<700	Yes	176	183	<700	Yes	296	248	<700	Yes	157	198	<700	Yes	117	125	<700	Yes	347	302	<700	Yes	35	35	<700	Yes
Richmond Ave at Shepherd Dr	123	0	0	<700	Yes	388	412	<700	Yes	51	67	<700	Yes	0	0	<700	Yes	416	402	<700	Yes	43	56	<700	Yes	57	12	<700	Yes	194	258	<700	Yes	2	3	<700	Yes	31	59	<700	Yes	412	382	<700	Yes	46	32	<700	Yes
Richmond Ave at Hazard St	124	18	29	<700	Yes	203	124	<700	Yes	249	186	<700	Yes	40	51	<700	Yes	91	60	<700	Yes	50	57	<700	Yes	15	17	<700	Yes	235	261	<700	Yes	32	41	<700	Yes	75	97	<700	Yes	416	382	<700	Yes	59	76	<700	Yes
Richmond Ave at Woodhead St	125	27	30	<700	Yes	210	191	<700	Yes	208	193	<700	Yes	50	0	<700	Yes	85	84	<700	Yes	44	58	<700	Yes	28	26	<700	Yes	508	460	<700	Yes	11	12	<700	Yes	44	62	<700	Yes	480	483	<700	Yes	46	46	<700	Yes
Richmond Ave at Dunlavy St	126	24	35	<700	Yes	232	194	<700	Yes	36	61	<700	Yes	132	110	<700	Yes	125	91	<700	Yes	88	62	<700	Yes	139	105	<700	Yes	605	527	<700	Yes	31	23	<700	Yes	34	36	<700	Yes	460	450	<700	Yes	138	119	<700	Yes
Richmond Ave at Mandell St	127	78	76	<700	Yes	175	163	<700	Yes	110	127	<700	Yes	36	52	<700	Yes	91	96	<700	Yes	33	37	<700	Yes	44	49	<700	Yes	712	622	700-2700	Yes	18	26	<700	Yes	32	91	<700	Yes	472	490	<700	Yes	29	43	<700	Yes
Richmond Ave at Montrose Blvd	128	176	161	<700	Yes	582	633	<700	Yes	81	100	<700	Yes	105	115	<700	Yes	1009	1036	700-2700	Yes	95	92	<700	Yes	97	99	<700	Yes	352	393	<700	Yes	153	161	<700	Yes	221	141	<700	Yes	618	584	<700	Yes	76	69	<700	Yes
Richmond Ave at Spur 527 SBFR	129	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	39	33	<700	Yes	144	184	<700	Yes	159	186	<700	Yes	3	0	<700	Yes	679	717	<700	Yes	244	158	<700	Yes	405	288	<700	No	407	495	<700	Yes	0	0	<700	Yes
Richmond Ave at Spur 527 NBFR	130	93	72	<700	Yes	71	75	<700	Yes	128	144	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	352	283	<700	Yes	365	464	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	762	711	700-2700	Yes	13	0	<700	Yes
Richmond Ave at Main St	131	459	439	<700	Yes	139	-	<700	No	83	80	<700	Yes	19	0	<700	Yes	69	0	<700	Yes	13	0	<700	Yes	26	45	<700	Yes	446	509	<700	Yes	10	28	<700	Yes	19	9	<700	Yes	547	439	<700	No	13	20	<700	Yes
Wheeler Ave at Fannin St	132	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	113	108	<700	Yes	380	395	<700	Yes	159	147	<700	Yes	0	0	<700	Yes	531	558	<700	Yes	26	37	<700	Yes	20	28	<700	Yes	407	326	<700	Yes	0	0	<700	Yes
Wheeler Ave at San Jacinto St	133	109	149	<700	Yes	887	938	700-2700	Yes	38	45	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	118	155	<700	Yes	556	495	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	342	337	<700	Yes	126	111	<700	Yes
Wheeler Ave at La Branch St	134	87	60	<700	Yes	26	45	<700	Yes	4	17	<700	Yes	2	6	<700	Yes	22	38	<700	Yes	5	5	<700	Yes	18	0	<700	Yes	407	511	<700	No	2	25	<700	Yes	4	0	<700	Yes	351	358	<700	Yes	8	5	<700	Yes
Wheeler Ave at Almeda Rd	135	87	218	<700	No	300	362	<700	Yes	30	52	<700	Yes	15	18	<700	Yes	257	222	<700	Yes	19	156	<700	No	32	18	<700	Yes	195	222	<700	Yes	184	156	<700	Yes	16	8	<700	Yes	255	141	<700	No	17	21	<700	Yes
Wheeler Ave at St Emanuel St	365	2	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	226	293	<700	Yes	58	80	<700	Yes	37	99	<700	Yes	236	178	<700	Yes	0	0	<700	Yes
Wheeler Ave at Hutchins St	367	120	54	<700	Yes	266	277	<700	Yes	62	7	<700	Yes	2	15	<700	Yes	0	0	<700	Yes	13	19	<700	Yes	22	22	<700	Yes	204	268	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	138	208	<700	Yes	0	17	<700	Yes
Wheeler Ave at Emancipation Ave	136	13	0	<700	Yes	387	232	<700	No	11	89	<700	Yes	15	20	<700	Yes	196	173	<700	Yes	44	0	<700	Yes	110	93	<700	Yes	97	173	<700	Yes	20	0	<700	Yes	7	7	<700	Yes	61	159	<700	Yes	15	34	<700	Yes
Ennis St at Wheeler St	266	22	19	<700	Yes	296	253	<700	Yes	0	0	<700	Yes	2	0	<700	Yes	210	194	<700	Yes	30	95	<700	Yes	44	84	<700	Yes	2	0	<700	Yes	46	66	<700	Yes	0	0	<700	Yes	3	0	<700	Yes	3	0	<700	Yes
Cleburne St at Ennis St	292	15	13	<700	Yes	231	234	<700	Yes	101	103	<700	Yes	25	27	<700	Yes	133	218	<700	Yes	7	7	<700	Yes	4	3	<700	Yes	36	55	<700	Yes	5	5	<700	Yes	101	70	<700	Yes	83	66	<700	Yes	58	53	<700	Yes
Ennis St at Alabama St	141	104	115	<700	Yes	106	119	<700	Yes	26	25	<700	Yes	7	7	<700	Yes	70	104	<700	Yes	34	75	<700	Yes	63	125	<700	Yes	177	151	<700	Yes	46	141	<700	Yes	30	18	<700	Yes	276	222	<700	Yes	12	8	<700	Yes
Ennis St at Holman St	306	10	10	<700	Yes	191	200	<700	Yes	16	60	<700	Yes	5	5	<700	Yes	79	99	<700	Yes	6	6	<700	Yes	12	12	<700	Yes	25	25	<700	Yes	12	12	<700	Yes	21	86	<700	Yes	58	57	<700	Yes	16	16	<700	Yes
Ennis St at Elgin St	249	53	18	<700	Yes	48	83	<700	Yes	112	96	<700	Yes	9	9	<700	Yes	28	47	<700	Yes	15	15	<700	Yes	6	6	<700	Yes	231	276	<700	Yes	21	13	<700	Yes	59	42	<700	Yes	390	377	<700	Yes	5	5	<700	Yes
Elgin St at Scott St	143	81	70	<700	Yes	554	584	<700	Yes	102	109	<700	Yes	44	38	<700	Yes	425	508	<700	Yes	8	14	<700	Yes	94	58	<700	Yes	210	218	<700	Yes	87	110	<700	Yes	128	132	<700	Yes	238	345	<700	No	53	50	<700	Yes
Elgin St at Cullen Blvd	144	37	50	<700	Yes	277	266	<700	Yes	135	151	<700	Yes	99	128	<700	Yes	163	179	<700	Yes	92	132	<700	Yes	78	58	<700	Yes	31	43	<700	Yes	31	43	<700	Yes	86	95	<700	Yes	219	227	<700	Yes	76	96	<700	Yes
Elgin St at UH Entrance 16	145	99	94	<700	Yes	10	9	<700	Yes	113	94	<700	Yes	33	33	<700	Yes	7	24	<700	Yes	23	57	<700	Yes	4	1	<700	Yes	363	436	<700	Yes	85	85	<700	Yes	45	50	<700	Yes	229	266	<700	Yes	2	2	<700	Yes
Elgin St at Spur 5 SBFR	146	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	167	124	<700	Yes	98	138	<700	Yes	28	28	<700	Yes	3	0	<700	Yes	660	618	<700	Yes	120	126	<700	Yes	253	196	<700	Yes	256	318	<700	Yes	0	0	<700	Yes
Lockwood St at Spur 5 NBFR	147	248	216	<700	Yes	579	522	<700	No	0	0	<700	Yes	7	0	<700	Yes	492	475	<700	Yes	5	5	<700	Yes	78	58	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	23	39	<700	Yes	77	122	<700	No	427	386	<700	Yes
IH 45 NBFR at S Lockwood Dr/Ernestine St	148	13	0	<700	Yes	457	589	<700	No	0	0	<700	Yes	0	0	<700	Yes	115	310	<700	No	17	31	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	301	348	<700	Yes	1123	1226	700-2700	Yes	282	378	<700	Yes
Ernestine St at Munger St	452	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	97	0	<700	Yes	95	307	<700	No	4	0	<700	Yes	0	0	<700	Yes	2	75	<700	Yes	6	2	<700	Yes	39	31	<700	Yes	45	90	<700	Yes	0	0	<700	Yes
Lockwood Dr at Munger St	453	38	79	<700	Yes	592	785	<700	No	112	103	<700	Yes	64	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	13	13	<700	Yes	85	74	<700	Yes	0	0	<700	Yes	38	42	<700	Yes	0	0	<700	Yes	8	0	<700	Yes
Ernestine St at Leeland St	149	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	64	63	<700	Yes	525	461	<700	Yes	13	72	<700	Yes	0	0	<700	Yes	136	199	<700	Yes	114	111	<700	Yes	105	118	<700	Yes	172	175	<700	Yes	0	0	<700	Yes
Leeland St at Lockwood St	150	106	64	<700	Yes	582	568	<700	Yes	88	61	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	16	27	<700	Yes	183	27	<700	No	0	0	<700	Yes	0	0	<700	Yes	127	236	<700	Yes	0	0	<700	No
Ernestine St/Lockwood Dr at Polk St	151	84	121	<700	Yes	558	531	<700	Yes	46	27	<700	Yes	66	123	<700	Yes	270	425	<700	No	48	70	<700	Yes	73	81	<700	Yes	186	197	<700	Yes	20	35	<700	Yes	68	134	<700	Yes	151	214	<700	Yes	63	65	<700	Yes
Ernestine St/Lockwood Dr at McKinney St	152	33	48	<700	Yes	550	672	<700	No	4	7	<700	Yes	10	13	<700	Yes	531	654	<700	No	20	21	<700	Yes	13	13	<700	Yes	23	34	<700	Yes	15	18	<700	Yes	4	4	<700	Yes	30	40	<700	Yes	10	19	<700	Yes
Lockwood Dr at Harrisburg Blvd	153	51	75	<700	Yes	495	600	<700	No	42	49	<700	Yes	79	93	<700	Yes	477	602	<700	No	40	60	<700	Yes	74	85	<700	Yes	243	238	<700	Yes	86	78	<700	Yes	77	91	<700	Yes	216	200	<700	Yes	56	85	<700	Yes
Lockwood Dr at Canal St	154	91	113	<700	Yes	460	484	<700	Yes	47	75	<700	Yes	26	22	<700	Yes	437	484	<700	Yes	29	27	<700	Yes	23	37	<700	Yes	171	220	<700	Yes	124	168	<700	Yes	55	88	<700	Yes	139	184	<700	Yes	38	57	<700	Yes
Lockwood Dr at Navigation Blvd	155	79	68	<700	Yes	396	439	<700	Yes	40	39	<700	Yes	77	105	<700	Yes	305	364	<700	Yes	87	87	<700	Yes	87	101	<700	Yes	285	333	<700	Yes	84	109	<700	Yes	88	115	<700	Yes	380	401	<700	Yes	129	162	<700	Yes
Lockwood Dr at Armour Dr	156	0	0	<700	Yes	539	587	<700	No	29	253	<700	No	8	10	<700	Yes	420	464	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	24	33	<700	Yes
Lockwood Dr at Clinton Dr	157	41	48	<700	Yes	609	568	<700	Yes	52	57	<700	Yes	34	64	<700	Yes	329	330	<700	Yes	38	17	<700	Yes	31	21	<700	Yes	61	58	<700	Yes	62	81	<700	Yes	44	58	<700	Yes	180	249	<700	Yes	115	92	<700	Yes
Lockwood Dr (SB) at Market St	158	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	56	48	<700	Yes	512	611	<700	Yes	145	95	<700	Yes	0	0	<700	Yes	87	114	<700	Yes	9	26	<700	Yes	6	27	<700	Yes	10	19	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at Market St	159	6	7	<700	Yes	862	690	700-2700	No	17	33	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	108	122	<700	Yes	15	41	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	10	39	<700	Yes	63	63	<700	Yes
Lockwood Dr (SB) at I 10 EBFR	160	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	258	208	<700	Yes	435	539	<700	No	0	0	<700	Yes	0	0	<700	Yes	457	417	<700	Yes	181	212	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 EBFR	161	0	0	<700	Yes	342	486	<700	No	210	325	<700	No	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	366	329	<700	Yes	349	291	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	244	218	<700	Yes	0	0	<700	Yes
Lockwood Dr (SB) at I 10 WBFR	162	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	515	530	<700	Yes	160	145	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	178	218	<700	Yes	346	327	<700	Yes	0	0	<700	Yes
Lockwood Dr (NB) at I 10 WBFR	163	280	328	<700	Yes	427	491	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	244	218	<700	Yes	248	277	<700	Yes
Lockwood Dr (SB) at Lyons Ave	164	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	70	19	<700	Yes	385	474	<700	Yes	64	11	<700	Yes	0	0	<700	Yes	123	185	<700	Yes	201	200	<700	Yes	102	0	<700	No	104	213	<700	No	0	0	<700	Yes
Lockwood Dr (NB) at Lyons Ave	165	79	75	<700	Yes	711	617	700-2700	Yes	101	72	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	82	62	<700	Yes	110	142	<700	Yes	0	0	<700	Yes	0	0	<700	Yes	127	138	<700	Yes	40	36	<700	Yes
Lockwood Dr at Mulvey St	166	6	0	<700	Yes	800	694	700-2700	Yes	7	14	<700	Yes	6	6	<700	Yes	482	501	<700	Yes	7	8	<700	Yes	7	13	<700	Yes	3	1	<700	Yes	12	0	<700	Yes	4	8

APPENDIX D – EXISTING CONDITION LOS RESULTS

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	2.6	0.2	2.2	2.9	10
135	Almeda Rd & Wheeler Ave	Actuated	4.9	0.4	4.4	5.4	10
292	Cleburne St & Ennis St	Actuated	1.1	0.1	1.0	1.3	10
176	Crosstimbers St & Lockwood Dr	Actuated	7.2	0.3	6.7	7.7	10
144	Cullen Blvd & Elgin St	Actuated	11.6	0.8	10.4	13.3	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	130.4	3.8	126.9	137.0	10
249	Elgin St & Ennis St	Actuated	2.6	0.1	2.3	2.8	10
143	Elgin St & Scott St	Actuated	13.1	0.6	12.0	14.3	10
146	Elgin St & Spur 5 SBFR	Actuated	4.7	0.1	4.4	4.9	10
145	Elgin St & UH Entrance	Actuated	2.5	0.2	2.3	2.7	10
136	Emancipation Ave & Wheeler Ave	Actuated	1.8	0.2	1.5	2.0	10
306	Ennis St & Holman St	Actuated	0.8	0.1	0.7	0.9	10
266	Ennis St & Wheeler Ave	Actuated	0.4	0.0	0.3	0.5	10
149	Ernestine St & Leeland St	Actuated	7.3	0.3	6.8	7.9	10
452	Ernestine St & Munger St	Stop	0.7	0.1	0.6	0.8	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	7.6	0.3	7.3	8.2	10
132	Fannin St & Wheeler Ave	Actuated	13.8	5.3	5.5	22.3	10
116	I-69 Express Lanes & Edloe St	Actuated	2.2	0.1	2.1	2.4	10
705	Jensen Dr & Turner Dr	Stop	0.0	0.0	0.0	0.1	10
173	Kelley St & Lockwood Dr	Actuated	15.4	1.3	13.3	17.8	10
134	LaBranch St & Wheeler Ave	Actuated	2.5	1.1	1.6	4.6	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	3.1	0.3	2.5	3.4	10
156	Lockwood Dr & Armour Dr	Actuated	6.1	0.4	5.6	6.6	10
154	Lockwood Dr & Canal St	Actuated	7.4	0.4	6.9	7.9	10
169	Lockwood Dr & Cavalcade St	Actuated	5.5	0.3	5.1	6.1	10
157	Lockwood Dr & Clinton Dr	Actuated	8.4	0.4	7.7	8.9	10
167	Lockwood Dr & Collingsworth St	Actuated	3.7	0.2	3.4	4.1	10
168	Lockwood Dr & Crane St	Actuated	2.9	0.2	2.7	3.2	10
659	Lockwood Dr & Firnat St	Stop	0.4	0.0	0.3	0.4	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	18.0	3.7	14.6	24.9	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	1.4	0.3	1.0	1.9	10
534	Lockwood Dr & Hershe St	Stop	0.2	0.0	0.1	0.2	10
171	Lockwood Dr & I-610 EBFR	Actuated	10.9	0.5	10.0	11.6	10
172	Lockwood Dr & I-610 WBFR	Actuated	10.0	0.4	9.4	10.5	10
641	Lockwood Dr & Keeland St	Stop	0.0	0.0	0.0	0.1	10
152	Lockwood Dr & McKinney St	Actuated	2.9	0.2	2.6	3.2	10
166	Lockwood Dr & Mulvey St	Actuated	1.8	0.1	1.6	2.0	10
453	Lockwood Dr & Munger St	Stop	2.2	0.5	1.5	3.1	10
155	Lockwood Dr & Navigation Blvd	Actuated	14.2	0.7	13.3	15.4	10
567	Lockwood Dr & Nichols St	Stop	0.4	0.1	0.4	0.8	10
604	Lockwood Dr & Pardee St	Stop	0.6	0.1	0.5	0.7	10
170	Lockwood Dr & Rand St	Actuated	2.3	0.2	2.0	2.6	10
174	Lockwood Dr & Shreveport Blvd	Actuated	4.2	0.3	3.9	4.6	10
576	Lockwood Dr & Sudan St	Stop	0.1	0.0	0.1	0.1	10
177	Lockwood Dr & Weaver Rd	Actuated	7.5	0.5	6.6	8.0	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	5.0	0.6	4.4	5.9	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	6.0	0.5	5.3	6.8	10
159	Lockwood Dr (NB) & Market St	Actuated	6.8	14.1	2.0	46.9	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	3.8	0.6	3.0	4.6	10

162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	7.8	1.2	5.2	9.6	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	3.7	0.2	3.4	3.9	10
158	Lockwood Dr (SB) & Market St	Actuated	2.5	0.2	2.2	2.7	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	5.3	1.7	3.0	8.6	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	0.6	0.1	0.5	0.7	10
623	Lockwood Dr, Denmark St & DenmarkSt	Stop	0.7	0.0	0.7	0.8	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	2.8	0.2	2.5	3.1	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	13.8	0.7	13.3	15.4	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	7.0	0.3	6.3	7.6	10
131	Main St, Richmond Ave & Wheeler Ave	Actuated	21.6	2.7	18.6	27.9	10
119	Richmond Ave & Buffalo Speedway	Actuated	39.9	2.5	36.5	43.8	10
126	Richmond Ave & Dunlavy St	Actuated	27.1	4.4	17.1	31.9	10
120	Richmond Ave & Eastside St	Actuated	9.5	0.8	8.5	11.2	10
118	Richmond Ave & Edloe St	Actuated	26.1	0.8	24.7	27.7	10
122	Richmond Ave & Greenbriar Dr	Actuated	14.0	0.9	12.4	15.4	10
124	Richmond Ave & Hazard St	Actuated	39.3	6.0	30.6	50.4	10
121	Richmond Ave & Kirby Dr	Actuated	37.5	2.2	33.1	40.5	10
127	Richmond Ave & Mandell St	Actuated	4.5	0.3	4.2	4.9	10
128	Richmond Ave & Montrose Blvd	Actuated	60.6	5.7	49.6	68.6	10
123	Richmond Ave & Shepherd Dr	Actuated	14.5	0.4	14.0	15.1	10
130	Richmond Ave & US 59 NBFR	Actuated	14.3	2.7	10.6	19.5	10
129	Richmond Ave & US 59 SBFR	Actuated	8.5	0.9	7.2	10.0	10
125	Richmond Ave & Woodhead St	Actuated	15.2	3.4	9.6	18.8	10
110	S Rice Ave & Westpark Dr	Actuated	48.2	5.8	38.9	58.1	10
133	San Jacinto St & Wheeler Ave	Actuated	12.6	5.1	6.2	19.4	10
689	Tidwell Rd & Edell St	Stop	0.7	0.1	0.6	1.0	10
677	Tidwell Rd & Friendly Rd	Stop	15.1	1.9	12.7	19.0	10
180	Tidwell Rd & Hirsch Rd	Actuated	7.4	0.5	6.6	8.4	10
181	Tidwell Rd & I-69 NBFR	Pretimed	10.1	1.1	9.1	12.9	10
182	Tidwell Rd & I-69 SBFR	Pretimed	8.6	0.2	8.4	9.2	10
183	Tidwell Rd & Jensen Dr	Actuated	12.5	0.5	11.8	13.5	10
179	Tidwell Rd & Lockwood Dr	Actuated	7.2	0.4	6.8	7.8	10
690	Turner Dr & Edell St	Stop	0.0	0.0	0.0	0.0	10
104	Westpark Dr & 14th St	Actuated	11.0	7.2	3.8	25.9	10
360	Westpark Dr & Alder Dr	Stop	1.2	0.2	1.1	1.5	10
109	Westpark Dr & Chimney Rock Rd	Actuated	40.2	7.8	30.8	51.9	10
115	Westpark Dr & Edloe St	Actuated	19.3	0.5	18.8	20.1	10
102	Westpark Dr & Fondren Rd	Actuated	128.3	12.1	112.1	154.0	10
103	Westpark Dr & Hillcroft Ave	Actuated	127.1	13.4	107.6	149.7	10
112	Westpark Dr & I-610 NBFR	Actuated	22.3	0.5	21.5	23.1	10
111	Westpark Dr & I-610 SBFR	Actuated	68.4	3.0	63.8	71.7	10
106	Westpark Dr & I-69 NBFR	Actuated	14.5	1.5	12.4	17.6	10
105	Westpark Dr & I-69 SBFR	Actuated	17.3	2.3	13.9	20.7	10
394	Westpark Dr & Loop Central Dr	Stop	0.6	0.0	0.5	0.6	10
113	Westpark Dr & Newcastle Dr	Actuated	31.6	3.2	25.8	36.7	10
107	Westpark Dr & Rampart St	Actuated	15.7	3.1	11.1	21.1	10
309	Westpark Dr & Royalton St	Stop	9.1	3.2	3.4	13.7	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	4.5	1.6	3.0	7.2	10
114	Westpark Dr & Weslayan St	Actuated	33.3	2.3	29.6	37.3	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	18.7	0.5	18.1	19.9	10
367	Wheeler Ave & Hutchins St	Stop	2.5	0.4	1.8	2.9	10

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	11.3	0.9	9.5	12.4	10
135	Almeda Rd & Wheeler Ave	Actuated	17.5	1.0	16.2	18.9	10
292	Cleburne St & Ennis St	Actuated	8.0	0.5	7.1	8.4	10
176	Crosstimbers St & Lockwood Dr	Actuated	22.9	0.6	22.2	23.9	10
144	Cullen Blvd & Elgin St	Actuated	35.1	2.1	31.8	39.4	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	203.2	7.6	193.2	216.3	10
249	Elgin St & Ennis St	Actuated	14.3	0.5	13.6	14.9	10
143	Elgin St & Scott St	Actuated	28.1	0.7	26.8	29.1	10
146	Elgin St & Spur 5 SBFR	Actuated	11.5	0.4	10.9	12.2	10
145	Elgin St & UH Entrance	Actuated	9.3	0.7	8.4	10.3	10
136	Emancipation Ave & Wheeler Ave	Actuated	9.5	0.6	8.3	10.3	10
306	Ennis St & Holman St	Actuated	9.7	0.6	8.3	10.4	10
266	Ennis St & Wheeler Ave	Actuated	3.5	0.4	2.9	4.1	10
149	Ernestine St & Leeland St	Actuated	16.7	0.5	15.6	17.1	10
452	Ernestine St & Munger St	Stop	3.5	0.4	2.9	4.0	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	10.8	0.3	10.4	11.3	10
132	Fannin St & Wheeler Ave	Actuated	29.8	11.1	12.1	46.5	10
116	I-69 Express Lanes & Edloe St	Actuated	5.0	0.2	4.8	5.4	10
705	Jensen Dr & Turner Dr	Stop	0.2	0.1	0.1	0.3	10
173	Kelley St & Lockwood Dr	Actuated	31.2	2.3	28.3	34.9	10
134	LaBranch St & Wheeler Ave	Actuated	9.4	4.3	6.1	18.1	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	15.9	1.5	13.3	18.2	10
156	Lockwood Dr & Armour Dr	Actuated	19.4	0.9	18.0	20.6	10
154	Lockwood Dr & Canal St	Actuated	14.5	0.7	13.4	15.5	10
169	Lockwood Dr & Cavalcade St	Actuated	15.5	0.5	14.4	16.2	10
157	Lockwood Dr & Clinton Dr	Actuated	19.7	0.7	18.4	20.7	10
167	Lockwood Dr & Collingsworth St	Actuated	11.4	0.6	10.4	12.3	10
168	Lockwood Dr & Crane St	Actuated	10.6	0.4	9.8	11.0	10
659	Lockwood Dr & Firnat St	Stop	2.2	0.2	1.9	2.4	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	31.0	6.3	24.7	42.9	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	4.3	0.9	3.0	5.8	10
534	Lockwood Dr & Hershe St	Stop	0.7	0.1	0.5	0.8	10
171	Lockwood Dr & I-610 EBFR	Actuated	23.6	0.9	22.4	24.7	10
172	Lockwood Dr & I-610 WBFR	Actuated	20.2	0.6	19.5	21.0	10
641	Lockwood Dr & Keeland St	Stop	0.3	0.1	0.1	0.5	10
152	Lockwood Dr & McKinney St	Actuated	6.4	0.4	5.7	7.0	10
166	Lockwood Dr & Mulvey St	Actuated	7.3	0.5	6.6	8.4	10
453	Lockwood Dr & Munger St	Stop	6.7	1.4	4.9	9.3	10
155	Lockwood Dr & Navigation Blvd	Actuated	22.6	0.8	21.7	24.1	10
567	Lockwood Dr & Nichols St	Stop	1.6	0.4	1.3	2.7	10
604	Lockwood Dr & Pardee St	Stop	1.7	0.1	1.5	1.9	10
170	Lockwood Dr & Rand St	Actuated	7.1	0.6	6.4	7.8	10
174	Lockwood Dr & Shreveport Blvd	Actuated	16.7	0.9	15.0	17.7	10
576	Lockwood Dr & Sudan St	Stop	0.4	0.1	0.3	0.5	10
177	Lockwood Dr & Weaver Rd	Actuated	33.9	1.0	32.3	35.4	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	17.6	1.4	16.2	19.8	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	18.5	1.2	16.7	20.4	10
159	Lockwood Dr (NB) & Market St	Actuated	30.5	62.8	9.0	209.2	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	10.9	1.5	8.7	13.0	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	21.3	2.9	15.4	25.7	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	13.0	0.4	12.3	13.6	10

158	Lockwood Dr (SB) & Market St	Actuated	8.5	0.4	8.2	9.3	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	23.6	7.6	13.2	37.9	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	3.1	0.3	2.5	3.6	10
623	Lockwood Dr, Denmark St & DenmarkSt	Stop	3.0	0.2	2.8	3.5	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	8.4	0.7	7.4	9.3	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	24.6	0.9	23.7	26.8	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	13.9	0.5	12.9	14.7	10
131	Main St, Richmond Ave & Wheeler Ave	Actuated	55.8	6.9	48.4	72.5	10
119	Richmond Ave & Buffalo Speedway	Actuated	46.2	2.5	42.3	50.0	10
126	Richmond Ave & Dunlavy St	Actuated	63.6	9.5	41.8	74.0	10
120	Richmond Ave & Eastside St	Actuated	16.3	1.4	14.7	19.1	10
118	Richmond Ave & Edloe St	Actuated	32.1	0.8	30.6	33.9	10
122	Richmond Ave & Greenbriar Dr	Actuated	31.3	1.6	28.5	33.3	10
124	Richmond Ave & Hazard St	Actuated	105.4	15.3	82.3	131.4	10
121	Richmond Ave & Kirby Dr	Actuated	32.3	1.6	29.0	34.3	10
127	Richmond Ave & Mandell St	Actuated	13.1	0.8	12.2	14.4	10
128	Richmond Ave & Montrose Blvd	Actuated	62.6	5.6	52.2	70.6	10
123	Richmond Ave & Shepherd Dr	Actuated	28.7	0.8	27.5	29.9	10
130	Richmond Ave & US 59 NBFR	Actuated	36.6	6.7	26.9	49.0	10
129	Richmond Ave & US 59 SBFR	Actuated	18.1	1.8	15.7	21.2	10
125	Richmond Ave & Woodhead St	Actuated	37.1	8.3	23.2	45.6	10
110	S Rice Ave & Westpark Dr	Actuated	58.2	7.1	47.3	70.7	10
133	San Jacinto St & Wheeler Ave	Actuated	37.1	15.8	17.2	60.3	10
689	Tidwell Rd & Edell St	Stop	1.7	0.2	1.4	2.2	10
677	Tidwell Rd & Friendly Rd	Stop	28.0	3.4	24.3	35.3	10
180	Tidwell Rd & Hirsch Rd	Actuated	12.5	0.7	11.5	13.8	10
181	Tidwell Rd & I-69 NBFR	Pretimed	15.8	1.8	14.5	20.7	10
182	Tidwell Rd & I-69 SBFR	Pretimed	13.8	0.3	13.4	14.3	10
183	Tidwell Rd & Jensen Dr	Actuated	22.8	0.5	22.2	23.9	10
179	Tidwell Rd & Lockwood Dr	Actuated	14.8	0.7	13.9	15.8	10
690	Turner Dr & Edell St	Stop	0.2	0.5	0.0	1.6	10
104	Westpark Dr & 14th St	Actuated	15.7	10.2	5.5	36.6	10
360	Westpark Dr & Alder Dr	Stop	2.8	0.3	2.4	3.4	10
109	Westpark Dr & Chimney Rock Rd	Actuated	48.7	8.8	37.7	61.5	10
115	Westpark Dr & Edloe St	Actuated	31.6	0.4	31.0	32.1	10
102	Westpark Dr & Fondren Rd	Actuated	108.3	10.3	94.5	130.4	10
103	Westpark Dr & Hillcroft Ave	Actuated	89.7	10.2	76.5	107.4	10
112	Westpark Dr & I-610 NBFR	Actuated	30.1	0.7	29.2	31.2	10
111	Westpark Dr & I-610 SBFR	Actuated	84.0	3.8	78.6	88.7	10
106	Westpark Dr & I-69 NBFR	Actuated	20.7	2.1	17.7	24.6	10
105	Westpark Dr & I-69 SBFR	Actuated	20.2	2.5	16.5	23.5	10
394	Westpark Dr & Loop Central Dr	Stop	1.2	0.1	1.1	1.3	10
113	Westpark Dr & Newcastle Dr	Actuated	49.0	4.4	39.8	55.2	10
107	Westpark Dr & Rampart St	Actuated	34.5	6.7	24.2	45.5	10
309	Westpark Dr & Royalton St	Stop	17.6	6.1	6.6	26.2	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	9.6	3.2	6.7	15.1	10
114	Westpark Dr & Weslayan St	Actuated	36.0	1.9	32.7	39.2	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	33.0	0.7	32.2	34.9	10
367	Wheeler Ave & Hutchins St	Stop	12.0	1.7	9.4	14.0	10

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	0.2	0.0	0.2	0.3	10
NW	Alabama St	197	1.0	0.1	0.8	1.2	10
SE	Alabama St	193	0.9	0.1	0.8	1.1	10
SW	Ennis St	740	0.4	0.1	0.3	0.5	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	2.0	0.3	1.7	2.6	10
NW	Wheeler Ave	176	1.1	0.2	0.9	1.4	10
S	Almeda Rd	174	0.7	0.1	0.6	0.8	10
SE	Wheeler Ave	77	1.1	0.2	0.9	1.5	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	0.1	0.0	0.1	0.2	10
NW	Cleburne St	733	0.5	0.0	0.4	0.6	10
SE	Cleburne St	731	0.4	0.1	0.3	0.5	10
SW	Ennis St	732	0.1	0.0	0.1	0.1	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	1.1	0.1	0.9	1.2	10
N	Lockwood Dr	321	2.2	0.2	2.0	2.7	10
S	Lockwood Dr	320	2.0	0.1	1.7	2.2	10
W	Crosstimbers St	322	1.8	0.2	1.5	2.1	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	3.0	0.4	2.5	3.6	10
NE	Cullen Blvd	207	0.9	0.1	0.8	1.1	10
S	Cullen Blvd	206	3.4	0.4	2.6	4.1	10
W	Elgin St	208	4.4	0.3	4.0	4.8	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	35.9	4.6	29.4	42.3	10
N	Fondren Rd	38	94.0	2.6	87.7	97.0	10
S	Fondren Rd	110	0.5	0.1	0.3	0.7	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	0.4	0.1	0.3	0.4	10
NW	Elgin St	701	1.3	0.1	1.1	1.4	10
SE	Elgin St	700	0.8	0.1	0.7	1.0	10
SW	Ennis St	195	0.2	0.0	0.1	0.2	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	2.8	0.3	2.4	3.3	10
N	Scott St	667	1.1	1.2	0.0	2.9	10
S	Scott St	671	3.8	0.3	3.3	4.2	10
SW	LRT Line	669	0.0	0.0	0.0	0.0	10
W	Elgin St	204	4.2	0.6	2.8	4.9	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	0.4	0.0	0.4	0.5	10
S	Spur 5 SBFR	214	2.6	0.1	2.5	2.8	10
SW	Elgin St	216	1.6	0.1	1.5	1.9	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	0.5	0.1	0.4	0.7	10
N	UH Entrance	211	1.0	0.1	0.9	1.1	10
SW	UH Entrance	210	0.8	0.1	0.6	0.9	10
W	Elgin St	212	0.2	0.0	0.2	0.3	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	0.4	0.1	0.3	0.5	10
NW	Wheeler Ave	766	0.6	0.1	0.5	0.7	10
SE	Wheeler Ave	423	0.7	0.1	0.6	0.8	10
SW	Emancipation Ave	177	0.1	0.1	0.1	0.2	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.4	0.1	0.2	0.4	10
NW	Holman St	742	0.1	0.0	0.1	0.2	10
SE	Holman St	741	0.1	0.0	0.1	0.2	10
SW	Ennis St	702	0.2	0.0	0.2	0.3	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.1	0.0	0.0	0.1	10
SE	Wheeler Ave	766	0.3	0.0	0.3	0.4	10
SW	Ennis St	726	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.3	0.2	1.1	1.6	10
SW	Ernestine St	411	3.5	0.2	3.2	3.7	10
W	Leeland St	227	2.5	0.1	2.4	2.8	10

ERNESTINE ST & MUNGER ST — NODE: 452

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	0.2	0.0	0.1	0.2	10
S	Ernestine St	685	0.1	0.0	0.1	0.2	10
W	Munger St	460	0.4	0.0	0.3	0.5	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	1.4	0.1	1.3	1.5	10
NW	I-45 NBFR	222	4.4	0.2	4.1	4.8	10
S	Ernestine St	221	1.7	0.1	1.6	2.0	10

FANNIN ST & WHEELER AVE — NODE: 132

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	6.0	3.0	1.2	10.1	10
SE	Wheeler Ave	169	2.6	0.1	2.4	2.7	10
SW	Fannin St	87	5.2	2.5	1.6	9.5	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	1.6	0.1	1.5	1.9	10
N	Edloe St	153	0.2	0.0	0.2	0.3	10
S	Edloe St	155	0.4	0.1	0.3	0.6	10
W	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR — NODE: 705

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.4	0.2	2.2	2.8	10
N	Lockwood Dr	308	8.9	1.2	6.8	11.2	10
S	Lockwood Dr	311	2.6	0.2	2.3	2.9	10
W	Kelley St	312	1.5	0.3	1.3	2.2	10

LABRANCH ST & WHEELER AVE — NODE: 134

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	1.0	0.2	0.8	1.5	10
NW	Wheeler Ave	77	0.5	0.8	0.0	2.0	10
SE	Wheeler Ave	86	0.3	0.1	0.2	0.4	10
SW	LaBranch St	78	0.7	0.1	0.5	1.0	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	0.7	0.1	0.6	0.8	10
N	Lockwood Dr	560	0.6	0.1	0.4	0.7	10
S	Lockwood Dr	327	0.2	0.0	0.1	0.3	10
W	Laura Koppe Rd	329	1.6	0.1	1.3	1.8	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	2.9	0.2	2.6	3.2	10
SW	Lockwood Dr	253	2.8	0.2	2.4	3.0	10
W	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST — NODE: 154

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	248	1.2	0.2	1.0	1.5	10
NE	Lockwood Dr	241	1.3	0.1	1.2	1.4	10
SW	Lockwood Dr	245	2.2	0.2	1.8	2.5	10
W	Canal St	247	2.7	0.2	2.4	3.0	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	0.9	0.1	0.8	1.2	10
N	Lockwood Dr	292	0.5	0.1	0.3	0.6	10
S	Lockwood Dr	296	2.6	0.2	2.3	2.9	10
W	Cavalcade St	298	1.6	0.1	1.5	1.8	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.5	0.1	1.3	1.7	10
NE	Lockwood Dr	257	2.9	0.2	2.7	3.2	10
S	Lockwood Dr	256	1.8	0.2	1.5	2.1	10
W	Clinton Dr	258	2.2	0.1	1.9	2.4	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	0.9	0.1	0.7	1.1	10
N	Lockwood Dr	533	1.4	0.1	1.2	1.6	10
SE	Lockwood Dr	288	0.4	0.1	0.3	0.5	10
W	Collingsworth St	290	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.0	0.1	0.9	1.2	10
N	Lockwood Dr	288	1.0	0.1	0.8	1.2	10
S	Lockwood Dr	292	0.2	0.0	0.1	0.2	10
W	Crane St	294	0.7	0.1	0.6	0.8	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.1	0.0	0.1	0.1	10
N	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
W	Firnat St	575	0.2	0.0	0.2	0.2	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	0.9	0.1	0.8	1.1	10
NE	Lockwood Dr	237	7.6	2.6	5.1	12.5	10
NW	Harrisburg Blvd	678	2.4	0.2	2.1	2.6	10
S	Lockwood Dr	241	7.0	1.2	5.9	9.2	10
SE	LRT Line	675	0.0	0.0	0.0	0.0	10
W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	1.0	0.3	0.6	1.5	10
NE	Lockwood Dr	253	0.3	0.0	0.3	0.4	10
SW	Lockwood Dr	257	0.1	0.0	0.1	0.1	10
W	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	478	0.1	0.0	0.0	0.1	10
W	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	6.0	0.4	5.6	6.6	10
N	Lockwood Dr	545	4.8	0.5	4.1	5.5	10
S	Lockwood Dr	304	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	0.8	0.1	0.5	1.1	10
S	Lockwood Dr	308	4.8	0.2	4.6	5.0	10
W	I-610 WBFR	309	4.4	0.3	4.1	4.8	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
W	Keeland St	561	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.5	0.1	0.3	0.6	10
N	Lockwood Dr	232	0.5	0.2	0.4	0.8	10
S	Lockwood Dr	237	1.6	0.1	1.4	1.8	10
W	McKinney St	239	0.3	0.1	0.2	0.5	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	478	0.8	0.1	0.7	0.9	10
S	Lockwood Dr	284	0.9	0.1	0.8	1.0	10
W	Mulvey St	286	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	0.2	0.1	0.2	0.4	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	1.9	0.5	1.3	2.8	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	3.4	0.2	3.1	3.9	10
NE	Lockwood Dr	245	3.2	0.3	2.8	3.6	10
SW	Lockwood Dr	249	3.3	0.3	2.9	3.7	10
W	Navigation Blvd	251	4.4	0.2	3.9	4.8	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	524	0.2	0.1	0.2	0.4	10
W	Nichols St	525	0.2	0.0	0.1	0.3	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.4	0.0	0.4	0.5	10
N	Lockwood Dr	300	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	545	0.1	0.0	0.1	0.1	10
W	Pardee St	546	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	0.8	0.1	0.6	0.9	10
N	Lockwood Dr	296	0.1	0.0	0.1	0.3	10
S	Lockwood Dr	300	0.8	0.1	0.7	0.9	10
W	Rand St	302	0.5	0.1	0.4	0.8	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	2.1	0.2	1.9	2.4	10
NE	Shreveport Blvd	316	0.3	0.1	0.2	0.4	10
S	Lockwood Dr	314	0.4	0.0	0.4	0.4	10
SW	Shreveport Blvd	315	1.4	0.1	1.2	1.6	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	533	0.0	0.0	0.0	0.1	10
W	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	0.8	0.1	0.6	1.1	10
N	Lockwood Dr	320	2.2	0.3	1.9	2.7	10
S	Lockwood Dr	324	2.1	0.1	1.9	2.3	10
W	Weaver Rd	325	2.4	0.2	2.0	2.6	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	0.9	0.0	0.8	1.0	10
N	Lockwood Dr (NB)	264	4.1	0.5	3.6	5.1	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	0.9	0.1	0.7	1.0	10
W	I-10 WBFR	276	5.2	0.5	4.3	5.9	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	499	5.2	14.1	0.5	45.2	10
W	Market St	266	1.6	0.2	1.3	1.9	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	3.0	0.5	2.4	3.6	10
S	Lockwood Dr (SB)	267	0.8	0.2	0.6	1.1	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	7.3	1.2	4.8	9.0	10
W	I-10 WBFR	273	0.6	0.0	0.5	0.6	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	1.2	0.1	1.1	1.4	10
S	Lockwood Dr	515	1.6	0.1	1.4	1.7	10
W	Lyons Ave	279	0.9	0.0	0.8	1.0	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	0.9	0.1	0.7	1.1	10
S	Lockwood Dr (SB)	260	1.4	0.2	1.1	1.7	10
W	Market St	262	0.2	0.0	0.2	0.3	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	0.2	0.0	0.1	0.3	10
N	Lockwood Dr (NB)	275	4.1	1.7	1.9	7.4	10
W	Lyons Ave	283	1.0	0.1	0.8	1.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	0.2	0.0	0.1	0.3	10
N	Lockwood Dr	314	0.1	0.0	0.1	0.1	10
S	Lockwood Dr	317	0.3	0.0	0.2	0.4	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	0.5	0.0	0.4	0.6	10
N	Lockwood Dr	317	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
W	DenmarkSt	549	0.2	0.0	0.1	0.2	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	0.7	0.1	0.5	0.8	10
NE	Elgin St	216	0.3	0.0	0.2	0.4	10
SW	Lockwood Dr	218	1.9	0.2	1.5	2.1	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	2.2	0.2	1.9	2.7	10
N	Lockwood Dr	229	2.5	0.1	2.3	2.7	10
S	Lockwood Dr	232	6.7	0.5	6.1	7.7	10
W	Polk St	234	2.4	0.3	2.1	2.8	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	1.0	0.1	0.8	1.1	10
N	Lockwood Dr	230	3.4	0.2	3.2	3.8	10
W	Telephone Rd	231	2.6	0.2	2.2	2.8	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	0.1	0.0	0.1	0.1	10
NE	Main St	168	3.0	1.2	2.0	5.3	10
NW	Wheeler Ave	169	10.3	2.0	6.8	13.0	10
S	LRT Line	674	0.0	0.0	0.0	0.0	10
SE	Richmond Ave	26	6.7	1.5	4.7	9.0	10
SW	Main St	70	1.5	0.2	1.1	1.8	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	11.6	0.9	10.7	13.4	10
N	Buffalo Speedway	37	10.4	2.0	7.7	13.3	10
S	Buffalo Speedway	36	5.2	0.4	4.4	5.9	10
W	Richmond Ave	12	12.7	1.1	11.1	14.2	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	0.7	0.1	0.5	1.0	10
N	Dunlavy St	57	5.1	1.3	3.4	7.5	10
S	Dunlavy St	56	20.9	3.5	12.6	24.7	10
W	Richmond Ave	165	0.5	0.1	0.4	0.8	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	4.6	0.4	4.0	4.9	10
N	Eastside St	40	1.4	0.4	0.9	2.2	10
S	Eastside St	39	2.3	0.3	2.0	2.9	10
W	Richmond Ave	54	1.2	0.2	1.0	1.7	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	5.5	0.4	4.8	6.0	10
N	Edloe St	155	5.3	0.4	4.7	5.9	10
S	Edloe St	5	3.2	0.4	2.8	4.0	10
W	Richmond Ave	9	12.0	0.4	11.5	12.8	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	4.3	0.4	3.6	4.9	10
N	Greenbriar Dr	47	0.7	0.1	0.5	0.9	10
S	Greenbriar Dr	46	6.4	0.7	5.4	7.5	10
W	Richmond Ave	160	2.6	0.2	2.4	2.8	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	1.2	0.1	1.0	1.3	10
N	Hazard St	51	21.7	3.7	14.0	27.1	10
S	Hazard St	50	15.7	6.3	6.9	25.0	10
W	Richmond Ave	162	0.7	0.1	0.6	0.8	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	8.3	1.0	6.5	9.7	10
N	Kirby Dr	158	13.8	1.2	11.9	15.2	10
S	Kirby Dr	44	13.5	1.2	12.4	16.3	10
W	Richmond Ave	64	1.9	0.2	1.6	2.2	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	0.3	0.0	0.2	0.3	10
N	Mandell St	59	2.3	0.2	2.1	2.6	10
S	Mandell St	58	1.8	0.3	1.4	2.2	10
W	Richmond Ave	23	0.1	0.0	0.1	0.2	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	6.0	0.3	5.7	6.8	10
N	Montrose Blvd	61	28.6	3.3	23.4	31.7	10
S	Montrose Blvd	60	19.7	3.3	13.8	24.1	10
W	Richmond Ave	166	6.4	1.3	5.2	9.7	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	1.4	0.1	1.2	1.6	10
N	Shepherd Dr	49	5.2	0.2	4.9	5.6	10
S	Shepherd Dr	48	5.6	0.3	5.1	5.9	10
W	Richmond Ave	20	2.2	0.1	2.0	2.5	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	0.6	0.9	0.1	2.9	10
NE	US 59 NBFR	69	1.5	0.1	1.3	1.7	10
W	Richmond Ave	26	12.2	2.4	8.1	15.1	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	5.5	1.0	4.0	7.2	10
SW	US 59 SBFR	65	2.8	0.2	2.5	3.3	10
W	Richmond Ave	167	0.1	0.0	0.1	0.2	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	0.7	0.2	0.6	1.1	10
N	Woodhead St	53	11.9	3.3	6.4	15.6	10
S	Woodhead St	52	1.7	0.2	1.4	2.2	10
W	Richmond Ave	163	0.9	0.1	0.7	1.1	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	27.1	5.5	19.7	37.1	10
N	S Rice Ave	138	11.8	1.8	10.0	15.6	10
S	S Rice Ave	137	5.5	0.4	5.0	6.1	10
W	Westpark Dr	770	3.8	0.5	3.2	4.4	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	2.8	0.8	1.8	4.2	10
NW	Wheeler Ave	86	8.2	4.8	2.8	15.3	10
SE	Wheeler Ave	172	1.6	0.5	1.1	2.8	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
N	Edell St	590	0.2	0.0	0.2	0.3	10
S	Edell St	589	0.5	0.1	0.4	0.6	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	0.6	0.1	0.5	0.7	10
N	Friendly Rd	585	4.2	1.6	1.9	7.3	10
S	Friendly Rd	584	10.3	0.5	9.5	11.0	10
W	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	1.7	0.2	1.3	1.9	10
N	Hirsch Rd	336	2.9	0.3	2.5	3.5	10
S	Hirsch Rd	335	2.3	0.1	2.0	2.5	10
W	Tidwell Rd	334	0.6	0.1	0.4	0.8	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	3.5	0.3	3.1	3.9	10
N	I-69 NBFR	340	2.4	0.2	2.2	2.7	10
W	Tidwell Rd	586	4.2	1.0	3.4	7.0	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	2.3	0.2	2.0	2.5	10
S	I-69 SBFR	649	2.7	0.1	2.5	2.8	10
W	Tidwell Rd	342	3.7	0.1	3.5	3.9	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	4.1	0.2	3.8	4.6	10
N	Jensen Dr	347	2.0	0.1	1.9	2.2	10
S	Jensen Dr	346	3.0	0.1	2.8	3.2	10
W	Tidwell Rd	348	3.3	0.3	2.7	3.8	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	2.3	0.2	2.0	2.5	10
N	Lockwood Dr	574	1.6	0.1	1.3	1.9	10
S	Lockwood Dr	331	0.1	0.0	0.1	0.2	10
W	Tidwell Rd	333	3.2	0.3	3.0	3.7	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	589	0.0	0.0	0.0	0.0	10
SE	Edell St	592	0.0	0.0	0.0	0.0	10
SW	Turner Dr	773	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	3.2	0.3	2.7	3.7	10
N	14th St	118	0.3	0.1	0.2	0.5	10
W	Westpark Dr	616	7.5	7.0	0.8	22.3	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	768	0.1	0.0	0.0	0.2	10
N	Alder Dr	767	1.1	0.1	0.9	1.3	10
W	Westpark Dr	133	0.1	0.0	0.1	0.2	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	19.6	6.0	11.5	27.6	10
N	Chimney Rock Rd	135	9.6	0.7	8.5	10.5	10
S	Chimney Rock Rd	134	8.9	2.2	5.7	11.9	10
W	Westpark Dr	136	2.0	0.2	1.6	2.3	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	4.4	0.4	3.9	5.0	10
N	Edloe St	29	6.9	0.4	6.3	7.5	10
S	Edloe St	153	3.3	0.3	2.8	3.9	10
W	Westpark Dr	154	4.7	0.3	4.1	5.1	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	89.1	6.1	75.1	96.8	10
N	Fondren Rd	110	3.6	0.4	3.0	4.1	10
S	Fondren Rd	112	15.1	3.6	11.9	24.4	10
W	Westpark Dr	113	20.6	7.1	16.0	39.5	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	24.8	4.2	20.3	33.2	10
N	Hillcroft Ave	3	35.9	2.9	31.0	40.7	10
S	Hillcroft Ave	115	34.7	9.5	19.6	48.3	10
W	Westpark Dr	116	31.7	5.0	23.9	37.5	10

WESTPARK DR & I-610 NBFR — NODE: 112

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	6.6	0.3	6.2	6.9	10
N	I-610 NBFR	145	8.7	0.3	8.1	9.2	10
W	Westpark Dr	772	7.0	0.3	6.2	7.5	10

WESTPARK DR & I-610 SBFR — NODE: 111

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	61.7	2.9	57.2	65.0	10
S	I-610 SBFR	141	2.8	0.2	2.6	3.3	10
W	Westpark Dr	143	3.9	0.3	3.5	4.3	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	8.1	1.4	6.1	10.9	10
NE	I-69 NBFR	126	3.3	0.2	2.8	3.6	10
W	Westpark Dr	127	3.2	0.1	3.0	3.4	10

WESTPARK DR & I-69 SBFR — NODE: 105

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	11.6	1.8	8.8	14.5	10
SW	I-69 SBFR	121	3.1	0.7	2.3	4.7	10
W	Westpark Dr	123	2.6	0.2	2.4	3.0	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	772	0.0	0.0	0.0	0.0	10
N	Loop Central Dr	771	0.3	0.0	0.2	0.3	10
W	Westpark Dr	146	0.3	0.0	0.3	0.4	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	5.5	0.3	5.1	6.1	10
N	Newcastle Dr	148	17.8	2.9	11.5	22.7	10
S	Newcastle Dr	147	2.0	0.2	1.8	2.4	10
W	Westpark Dr	149	6.3	1.2	5.2	8.7	10

WESTPARK DR & RAMPART ST — NODE: 107

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	2.4	0.1	2.2	2.6	10
N	Rampart St	129	12.2	3.1	7.7	17.4	10
S	Rampart St	128	0.7	0.1	0.5	0.8	10
W	Westpark Dr	130	0.4	0.1	0.3	0.5	10

WESTPARK DR & ROYALTON ST — NODE: 309

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	1.9	2.1	0.1	5.0	10
N	Royalton St	384	7.1	2.1	2.9	9.7	10
W	Westpark Dr	140	0.1	0.0	0.1	0.1	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	770	3.8	1.6	2.4	6.5	10
N	Uptown Transit Ctr	769	0.2	0.1	0.2	0.3	10
W	Westpark Dr	629	0.5	0.1	0.4	0.6	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	9.8	1.1	7.9	11.3	10
N	Weslayan St	151	8.8	1.3	6.9	10.9	10
S	Weslayan St	150	10.6	0.8	9.0	11.7	10
W	Westpark Dr	152	4.1	0.4	3.7	5.1	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	7.0	0.3	6.7	7.6	10
N	Renwick Dr	132	6.7	0.3	6.3	7.3	10
S	Fountain View Dr	131	3.6	0.3	3.3	4.1	10
W	Westpark Dr	768	1.4	0.1	1.2	1.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	1.6	0.4	0.9	2.0	10
NW	Wheeler Ave	423	0.4	0.1	0.3	0.5	10
SE	Wheeler Ave	421	0.5	0.0	0.4	0.6	10
SW	Hutchins St	422	0.1	0.0	0.0	0.1	10

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	6.3	0.9	5.1	7.5	10
NW	Alabama St	197	17.7	2.1	14.8	20.5	10
SE	Alabama St	193	8.7	0.9	7.4	10.2	10
SW	Ennis St	740	14.9	1.3	12.8	16.8	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	17.5	2.5	15.2	23.3	10
NW	Wheeler Ave	176	25.3	2.7	21.4	30.4	10
S	Almeda Rd	174	14.0	0.8	12.5	15.3	10
SE	Wheeler Ave	77	15.4	2.8	12.6	19.6	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	2.0	0.5	1.4	3.1	10
NW	Cleburne St	733	22.9	2.4	19.7	26.3	10
SE	Cleburne St	731	23.4	3.2	17.4	27.1	10
SW	Ennis St	732	1.9	0.5	1.3	2.9	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	20.6	1.6	17.4	22.7	10
N	Lockwood Dr	321	28.2	1.6	26.0	32.0	10
S	Lockwood Dr	320	26.1	1.5	22.4	28.1	10
W	Crosstimbers St	322	17.7	1.7	15.7	19.8	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	64.9	8.5	48.3	75.5	10
NE	Cullen Blvd	207	11.9	0.8	10.9	13.6	10
S	Cullen Blvd	206	30.3	3.4	26.2	35.1	10
W	Elgin St	208	44.7	1.8	41.9	47.1	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	212.4	28.6	170.1	250.7	10
N	Fondren Rd	38	383.6	16.0	345.0	405.4	10
S	Fondren Rd	110	2.3	0.5	1.3	3.2	10

ELGIN ST & ENNIS ST — NODE: 249

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	13.4	1.6	10.1	15.0	10
NW	Elgin St	701	16.3	0.9	14.3	17.3	10
SE	Elgin St	700	12.0	0.9	10.8	13.2	10
SW	Ennis St	195	16.4	3.0	11.2	21.1	10

ELGIN ST & SCOTT ST — NODE: 143

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	38.2	2.5	34.0	42.4	10
N	Scott St	667	10.8	6.5	3.5	22.5	10
S	Scott St	671	23.4	1.8	20.2	25.6	10
SW	LRT Line	669	19.5	2.5	16.2	23.9	10
W	Elgin St	204	44.1	3.8	38.7	50.1	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	7.7	0.6	6.6	8.7	10
S	Spur 5 SBFR	214	17.6	0.5	16.9	18.4	10
SW	Elgin St	216	8.2	0.6	7.4	9.5	10

ELGIN ST & UH ENTRANCE — NODE: 145

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	5.5	1.6	4.2	8.8	10
N	UH Entrance	211	33.5	2.7	29.5	37.3	10
SW	UH Entrance	210	39.8	4.3	30.3	45.4	10
W	Elgin St	212	1.9	0.3	1.3	2.3	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	5.7	0.6	5.1	6.9	10
NW	Wheeler Ave	766	17.6	1.7	14.2	19.9	10
SE	Wheeler Ave	423	17.8	1.5	15.7	20.2	10
SW	Emancipation Ave	177	2.6	1.0	1.5	4.4	10

ENNIS ST & HOLMAN ST — NODE: 306

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	11.0	1.5	8.2	12.6	10
NW	Holman St	742	9.5	1.5	7.1	11.5	10
SE	Holman St	741	7.0	1.1	5.6	8.9	10
SW	Ennis St	702	9.9	1.1	8.8	11.3	10

ENNIS ST & WHEELER AVE — NODE: 266

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	1.0	0.2	0.7	1.3	10
SE	Wheeler Ave	766	18.1	1.1	16.5	20.1	10
SW	Ennis St	726	0.1	0.1	0.0	0.2	10

ERNESTINE ST & LEELAND ST — NODE: 149

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	18.4	1.2	16.7	19.9	10
SW	Ernestine St	411	15.0	0.8	13.7	15.7	10
W	Leeland St	227	18.7	0.5	18.0	19.4	10

ERNESTINE ST & MUNGER ST — NODE: 452

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	8.6	1.1	7.3	10.6	10
S	Ernestine St	685	1.0	0.3	0.8	1.6	10
W	Munger St	460	7.2	0.6	6.2	8.3	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	12.2	0.9	11.2	13.6	10
NW	I-45 NBFR	222	9.7	0.3	9.2	10.4	10
S	Ernestine St	221	13.0	0.7	12.2	14.0	10

FANNIN ST & WHEELER AVE — NODE: 132

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	75.1	38.4	13.7	121.9	10
SE	Wheeler Ave	169	22.3	0.9	21.4	23.6	10
SW	Fannin St	87	19.6	8.9	6.4	34.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	20.4	1.6	18.9	24.7	10
N	Edloe St	153	1.0	0.2	0.8	1.2	10
S	Edloe St	155	3.1	0.6	2.7	4.5	10

JENSEN DR & TURNER DR — NODE: 705

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	14.7	10.0	7.3	39.3	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.1	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	6.4	2.0	3.8	9.8	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	24.0	1.4	21.9	26.4	10
N	Lockwood Dr	308	42.9	4.8	36.3	51.2	10
S	Lockwood Dr	311	21.6	1.2	19.9	23.2	10
W	Kelley St	312	22.6	5.3	19.6	37.1	10

LABRANCH ST & WHEELER AVE — NODE: 134

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	33.4	9.6	25.5	52.7	10
NW	Wheeler Ave	77	5.1	7.7	0.3	20.6	10
SE	Wheeler Ave	86	2.8	0.6	2.2	4.2	10
SW	LaBranch St	78	28.0	3.3	25.7	36.8	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	25.8	2.4	23.2	30.8	10
N	Lockwood Dr	560	10.8	1.7	8.0	13.3	10
S	Lockwood Dr	327	3.6	0.7	2.0	4.3	10
W	Laura Koppe Rd	329	32.9	1.3	30.2	35.3	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	25.9	1.1	24.3	27.5	10
SW	Lockwood Dr	253	15.5	1.1	13.8	16.4	10
W	Armour Dr	659	17.5	2.1	13.8	19.7	10

LOCKWOOD DR & CANAL ST — NODE: 154

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	248	15.7	1.4	13.9	18.0	10
NE	Lockwood Dr	241	7.3	0.3	6.8	7.8	10
SW	Lockwood Dr	245	13.6	1.2	11.7	15.1	10
W	Canal St	247	29.2	1.6	27.1	31.5	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	21.4	2.9	18.0	26.9	10
N	Lockwood Dr	292	4.7	0.9	3.4	5.9	10
S	Lockwood Dr	296	18.0	0.8	17.2	19.8	10
W	Cavalcade St	298	21.3	1.0	19.8	23.1	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	27.8	2.4	24.4	31.6	10
NE	Lockwood Dr	257	27.5	1.1	26.1	29.2	10
S	Lockwood Dr	256	10.0	0.8	8.6	11.3	10
W	Clinton Dr	258	26.0	1.2	23.8	27.5	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	17.0	1.8	13.4	19.7	10
N	Lockwood Dr	533	12.1	0.9	10.8	13.2	10
SE	Lockwood Dr	288	3.0	0.6	2.4	4.0	10
W	Collingsworth St	290	30.7	2.2	26.6	33.8	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	30.9	1.8	27.6	33.7	10
N	Lockwood Dr	288	10.8	0.8	9.3	11.8	10
S	Lockwood Dr	292	1.4	0.1	1.1	1.5	10
W	Crane St	294	32.5	2.1	28.4	35.9	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	5.1	0.4	4.3	5.6	10
N	Lockwood Dr	327	0.4	0.2	0.2	0.7	10
S	Lockwood Dr	574	0.0	0.0	0.0	0.1	10
W	Firnat St	575	7.9	1.1	6.5	9.4	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	18.6	1.6	16.4	21.5	10
NE	Lockwood Dr	237	37.7	12.7	24.8	61.1	10
NW	Harrisburg Blvd	678	20.9	1.7	18.4	24.3	10
S	Lockwood Dr	241	33.2	6.2	27.3	44.2	10
SE	LRT Line	675	22.6	2.1	20.5	27.8	10
W	LRT Line	676	4.3	2.3	2.0	9.5	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	41.6	11.0	27.3	64.6	10
NE	Lockwood Dr	253	2.8	0.3	2.3	3.3	10
SW	Lockwood Dr	257	0.4	0.1	0.3	0.6	10
W	Harvey Wilson Dr	497	39.7	13.5	16.6	56.3	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	8.4	2.2	6.1	13.1	10
N	Lockwood Dr	281	0.1	0.1	0.0	0.2	10
S	Lockwood Dr	478	0.5	0.1	0.3	0.7	10
W	Hershe St	513	9.0	2.8	4.5	12.3	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	29.9	0.9	28.6	31.5	10
N	Lockwood Dr	545	37.3	3.2	32.3	41.1	10
S	Lockwood Dr	304	0.9	0.3	0.5	1.3	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	3.4	0.5	2.3	4.5	10
S	Lockwood Dr	308	37.3	1.0	35.7	39.4	10
W	I-610 WBFR	309	32.1	2.3	29.0	34.4	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	4.2	2.4	1.0	8.7	10
N	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
W	Keeland St	561	6.1	2.0	4.1	9.9	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	21.9	2.2	19.1	25.2	10
N	Lockwood Dr	232	2.7	0.9	1.9	4.3	10
S	Lockwood Dr	237	7.1	0.7	6.4	8.3	10
W	McKinney St	239	20.6	2.9	16.9	25.1	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	19.2	8.7	5.6	30.5	10
N	Lockwood Dr	478	7.5	0.7	6.4	8.7	10
S	Lockwood Dr	284	6.5	0.5	5.5	7.4	10
W	Mulvey St	286	17.3	3.6	9.8	23.9	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	12.6	3.4	8.8	19.2	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	25.2	5.6	17.6	35.2	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	24.7	1.3	22.4	26.7	10
NE	Lockwood Dr	245	23.6	1.3	21.6	25.3	10
SW	Lockwood Dr	249	17.7	1.2	16.2	19.3	10
W	Navigation Blvd	251	25.3	1.2	24.0	27.5	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	8.7	2.0	6.0	12.1	10
N	Lockwood Dr	284	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	524	1.4	0.5	1.0	2.8	10
W	Nichols St	525	9.4	1.9	7.1	13.7	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	15.9	1.6	13.7	18.2	10
N	Lockwood Dr	300	0.3	0.1	0.2	0.4	10
S	Lockwood Dr	545	0.3	0.1	0.2	0.4	10
W	Pardee St	546	14.6	3.7	9.5	21.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	35.4	2.2	32.8	39.3	10
N	Lockwood Dr	296	1.4	0.5	0.9	2.4	10
S	Lockwood Dr	300	4.9	0.4	4.4	5.5	10
W	Rand St	302	19.0	4.4	13.1	26.5	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	17.4	1.3	15.1	19.0	10
NE	Shreveport Blvd	316	23.7	4.3	17.2	30.7	10
S	Lockwood Dr	314	5.1	0.6	4.3	6.2	10
SW	Shreveport Blvd	315	33.1	1.9	30.0	35.3	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	8.1	3.6	2.7	14.3	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	533	0.2	0.1	0.1	0.4	10
W	Sudan St	534	9.1	2.7	5.5	13.0	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	36.6	4.4	30.3	45.2	10
N	Lockwood Dr	320	31.4	2.2	28.3	35.5	10
S	Lockwood Dr	324	30.0	1.3	28.8	32.3	10
W	Weaver Rd	325	40.2	1.8	36.6	42.8	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	6.4	0.4	5.6	6.8	10
N	Lockwood Dr (NB)	264	27.7	2.6	24.9	32.2	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	5.9	0.4	5.2	6.6	10
W	I-10 WBFR	276	28.9	1.9	25.8	32.0	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	3.8	1.5	1.8	6.1	10
N	Lockwood Dr	499	37.5	101.4	3.8	326.1	10
W	Market St	266	25.9	2.4	22.9	31.1	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	26.9	3.4	22.5	31.4	10
S	Lockwood Dr (SB)	267	3.3	0.6	2.7	4.5	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	44.8	6.7	32.2	56.3	10
W	I-10 WBFR	273	2.7	0.2	2.4	2.9	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	16.0	1.3	14.4	18.4	10
S	Lockwood Dr	515	11.5	0.6	10.3	12.3	10
W	Lyons Ave	279	12.8	1.2	10.6	14.4	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	27.1	2.8	23.4	31.1	10
S	Lockwood Dr (SB)	260	6.6	0.6	5.8	7.5	10
W	Market St	262	4.2	0.9	3.1	5.8	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	3.6	0.8	2.8	5.5	10
N	Lockwood Dr (NB)	275	34.9	14.5	15.2	61.5	10
W	Lyons Ave	283	16.4	1.3	14.5	18.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	15.0	3.0	8.9	19.3	10
N	Lockwood Dr	314	0.8	0.2	0.6	1.1	10
S	Lockwood Dr	317	3.2	0.4	2.5	3.8	10
W	Driveway	318	3.3	0.8	2.2	4.6	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	9.7	0.7	8.9	11.0	10
N	Lockwood Dr	317	0.5	0.2	0.2	0.9	10
S	Lockwood Dr	321	0.0	0.1	0.0	0.1	10
W	DenmarkSt	549	10.2	1.2	6.9	11.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	9.1	1.0	7.4	10.0	10
NE	Elgin St	216	3.7	0.5	3.1	4.9	10
SW	Lockwood Dr	218	9.9	0.9	8.4	11.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	27.1	1.2	25.4	28.7	10
N	Lockwood Dr	229	15.1	0.6	14.1	15.9	10
S	Lockwood Dr	232	31.1	1.7	29.1	34.8	10
W	Polk St	234	24.1	2.3	21.2	27.6	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	11.9	0.9	10.0	13.0	10
N	Lockwood Dr	230	10.6	0.6	9.8	11.6	10
W	Telephone Rd	231	26.7	1.5	23.9	29.5	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	25.1	2.2	22.2	29.5	10
NE	Main St	168	28.8	11.0	19.2	50.5	10
NW	Wheeler Ave	169	88.8	18.1	56.4	108.3	10
S	LRT Line	674	0.2	0.6	0.0	1.8	10
SE	Richmond Ave	26	54.2	12.5	37.8	70.2	10
SW	Main St	70	41.7	6.5	31.2	52.9	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	52.3	4.0	47.0	59.4	10
N	Buffalo Speedway	37	34.2	5.4	26.7	42.3	10
S	Buffalo Speedway	36	36.9	1.7	34.0	39.2	10
W	Richmond Ave	12	63.8	4.4	58.4	69.6	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	4.3	0.6	3.4	5.6	10
N	Dunlavy St	57	93.2	26.2	65.7	139.0	10
S	Dunlavy St	56	190.4	32.3	114.9	229.6	10
W	Richmond Ave	165	5.1	1.2	3.8	7.5	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	16.0	1.5	13.5	17.8	10
N	Eastside St	40	38.3	8.8	28.1	59.5	10
S	Eastside St	39	27.6	2.5	24.4	32.8	10
W	Richmond Ave	54	6.7	1.1	5.7	9.5	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	28.6	1.1	26.6	29.9	10
N	Edloe St	155	17.7	1.0	15.7	18.9	10
S	Edloe St	5	22.9	2.8	20.2	29.0	10
W	Richmond Ave	9	67.7	1.6	64.3	69.6	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	30.1	1.8	27.4	32.8	10
N	Greenbriar Dr	47	26.8	2.3	21.5	29.5	10
S	Greenbriar Dr	46	42.2	3.5	37.5	46.6	10
W	Richmond Ave	160	20.4	0.7	19.5	21.6	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	11.8	0.9	10.1	12.8	10
N	Hazard St	51	230.0	42.9	149.4	303.0	10
S	Hazard St	50	418.2	212.1	141.3	734.1	10
W	Richmond Ave	162	5.1	0.6	4.1	5.7	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	41.9	5.1	32.6	49.2	10
N	Kirby Dr	158	29.5	2.3	25.7	32.4	10
S	Kirby Dr	44	35.4	2.0	32.7	39.4	10
W	Richmond Ave	64	16.9	1.2	14.7	18.8	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	1.8	0.2	1.6	2.2	10
N	Mandell St	59	42.6	2.1	40.6	46.5	10
S	Mandell St	58	45.0	5.6	35.1	54.0	10
W	Richmond Ave	23	1.1	0.2	0.7	1.4	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	32.3	1.3	30.8	35.6	10
N	Montrose Blvd	61	86.5	11.5	71.1	99.8	10
S	Montrose Blvd	60	63.4	10.0	47.1	75.8	10
W	Richmond Ave	166	45.1	8.9	39.2	68.3	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	13.0	1.0	11.1	14.1	10
N	Shepherd Dr	49	42.3	1.1	40.7	43.5	10
S	Shepherd Dr	48	43.1	2.5	38.5	46.5	10
W	Richmond Ave	20	16.0	1.0	14.6	17.2	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	3.8	5.6	0.6	19.0	10
NE	US 59 NBFR	69	26.9	2.9	24.0	31.0	10
W	Richmond Ave	26	65.0	13.2	42.7	78.2	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	35.7	5.9	28.5	44.8	10
SW	US 59 SBFR	65	28.2	1.7	26.4	32.1	10
W	Richmond Ave	167	0.6	0.1	0.5	0.8	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	4.4	1.2	3.7	7.7	10
N	Woodhead St	53	158.9	46.3	81.7	208.3	10
S	Woodhead St	52	32.4	2.7	28.4	37.0	10
W	Richmond Ave	163	7.2	0.9	5.8	8.2	10

S RICE AVE & WESTPARK DR — NODE: 110

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	82.1	15.6	60.9	110.8	10
N	S Rice Ave	138	54.3	6.3	48.5	67.3	10
S	S Rice Ave	137	45.0	3.6	40.0	50.6	10
W	Westpark Dr	770	23.8	2.4	20.6	27.3	10

SAN JACINTO ST & WHEELER AVE — NODE: 133

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	23.9	7.8	13.3	35.2	10
NW	Wheeler Ave	86	79.6	48.8	25.7	160.0	10
SE	Wheeler Ave	172	13.5	3.9	9.0	23.0	10

TIDWELL RD & EDELL ST — NODE: 689

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
N	Edell St	590	12.2	1.8	10.6	16.3	10
S	Edell St	589	15.1	1.7	12.9	18.6	10
W	Tidwell Rd	591	0.1	0.1	0.0	0.1	10

TIDWELL RD & FRIENDLY RD — NODE: 677

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	2.9	0.2	2.6	3.2	10
N	Friendly Rd	585	199.5	86.2	94.6	380.4	10
S	Friendly Rd	584	322.4	40.0	274.6	424.8	10
W	Tidwell Rd	338	0.1	0.1	0.0	0.2	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	8.2	0.8	6.3	9.2	10
N	Hirsch Rd	336	34.8	3.0	29.8	40.8	10
S	Hirsch Rd	335	28.4	1.4	25.6	30.3	10
W	Tidwell Rd	334	2.5	0.5	1.8	3.4	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	17.3	0.8	16.5	18.5	10
N	I-69 NBFR	340	15.0	0.5	14.2	15.8	10
W	Tidwell Rd	586	15.2	4.0	12.8	26.3	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	13.2	0.8	11.9	14.3	10
S	I-69 SBFR	649	12.6	0.3	12.0	13.0	10
W	Tidwell Rd	342	15.4	0.4	14.9	15.9	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	24.2	1.1	22.5	25.4	10
N	Jensen Dr	347	35.0	1.3	33.0	36.9	10
S	Jensen Dr	346	28.3	1.3	25.9	29.8	10
W	Tidwell Rd	348	15.6	0.9	13.9	16.9	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	11.6	0.8	10.1	13.1	10
N	Lockwood Dr	574	23.7	1.7	21.8	27.0	10
S	Lockwood Dr	331	34.5	5.9	20.2	41.7	10
W	Tidwell Rd	333	14.5	0.9	13.5	15.9	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	5.2		5.2	5.2	1
N	Edell St	589	0.0	0.0	0.0	0.0	10
SE	Edell St	592	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	10.3	0.9	8.8	11.9	10
N	14th St	118	10.5	1.4	8.3	13.6	10
W	Westpark Dr	616	20.6	19.2	2.3	60.3	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	768	0.2	0.2	0.0	0.5	10
N	Alder Dr	767	16.0	1.7	13.9	18.6	10
W	Westpark Dr	133	2.0	0.4	1.5	2.6	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	69.1	19.7	43.9	95.8	10
N	Chimney Rock Rd	135	41.7	2.2	38.2	44.4	10
S	Chimney Rock Rd	134	41.0	9.3	27.3	53.0	10
W	Westpark Dr	136	21.2	2.5	17.8	26.8	10

WESTPARK DR & EDLOE ST — NODE: 115

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	25.8	2.2	22.7	28.6	10
N	Edloe St	29	37.7	1.0	36.5	39.3	10
S	Edloe St	153	28.5	2.0	25.1	31.4	10
W	Westpark Dr	154	33.2	1.8	30.6	35.7	10

WESTPARK DR & FONDREN RD — NODE: 102

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	246.8	17.4	208.0	267.5	10
N	Fondren Rd	110	12.2	1.4	10.3	14.3	10
S	Fondren Rd	112	74.2	15.8	62.0	114.1	10
W	Westpark Dr	113	62.5	21.6	47.4	120.1	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	66.7	10.2	55.7	88.2	10
N	Hillcroft Ave	3	97.3	10.0	85.2	113.1	10
S	Hillcroft Ave	115	111.0	30.9	64.8	158.5	10
W	Westpark Dr	116	86.9	14.1	64.9	101.4	10

WESTPARK DR & I-610 NBFR — NODE: 112

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	17.7	1.0	16.3	19.0	10
N	I-610 NBFR	145	49.2	1.9	46.8	52.5	10
W	Westpark Dr	772	36.6	1.5	33.3	38.3	10

WESTPARK DR & I-610 SBFR — NODE: 111

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	113.9	5.9	104.9	121.4	10
S	I-610 SBFR	141	50.3	2.2	47.7	54.5	10
W	Westpark Dr	143	17.9	0.8	16.3	18.8	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	22.8	4.0	17.0	29.9	10
NE	I-69 NBFR	126	16.6	0.7	15.3	17.2	10
W	Westpark Dr	127	21.3	0.8	20.6	23.4	10

WESTPARK DR & I-69 SBFR — NODE: 105

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	35.6	5.1	27.5	43.1	10
SW	I-69 SBFR	121	8.7	2.0	6.6	13.2	10
W	Westpark Dr	123	15.3	0.9	14.0	17.0	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	772	0.0	0.0	0.0	0.0	10
N	Loop Central Dr	771	15.5	1.5	12.9	17.8	10
W	Westpark Dr	146	1.4	0.1	1.2	1.5	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	25.3	1.2	23.1	26.8	10
N	Newcastle Dr	148	96.8	16.7	61.6	123.6	10
S	Newcastle Dr	147	31.0	2.9	27.7	38.1	10
W	Westpark Dr	149	35.3	6.5	29.4	48.3	10

WESTPARK DR & RAMPART ST — NODE: 107

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	8.6	0.4	8.1	9.1	10
N	Rampart St	129	143.2	34.1	87.3	196.8	10
S	Rampart St	128	31.2	2.8	26.3	36.7	10
W	Westpark Dr	130	5.5	0.7	4.9	7.2	10

WESTPARK DR & ROYALTON ST — NODE: 309

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	5.2	5.5	0.4	13.5	10
N	Royalton St	384	149.6	47.8	52.3	198.5	10
W	Westpark Dr	140	1.0	0.2	0.8	1.5	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	770	12.7	5.2	8.6	21.5	10
N	Uptown Transit Ctr	769	48.3	12.2	34.4	66.7	10
W	Westpark Dr	629	2.8	0.5	2.1	3.6	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	39.3	4.2	31.3	44.4	10
N	Weslayan St	151	30.7	3.3	25.9	35.7	10
S	Weslayan St	150	37.1	2.0	32.9	39.7	10
W	Westpark Dr	152	39.4	4.2	33.5	49.0	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR — NODE: 108

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	29.5	1.1	28.1	31.8	10
N	Renwick Dr	132	40.0	1.1	38.3	41.3	10
S	Fountain View Dr	131	37.0	1.3	35.3	39.9	10
W	Westpark Dr	768	21.4	1.9	17.7	25.1	10

WHEELER AVE & HUTCHINS ST — NODE: 367

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	12.9	2.5	8.8	15.8	10
NW	Wheeler Ave	423	8.9	1.5	7.1	11.2	10
SE	Wheeler Ave	421	13.3	0.9	11.6	14.4	10
SW	Hutchins St	422	6.9	1.1	5.3	8.2	10

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	0.2	0.0	0.1	0.2	10
NEB TR	Ennis St	732	0.1	0.0	0.0	0.1	10
NWB L	Alabama St	197	0.0	0.0	0.0	0.0	10
NWB T	Alabama St	197	0.5	0.0	0.4	0.5	10
NWB TR	Alabama St	197	0.5	0.1	0.4	0.7	10
SEB L	Alabama St	193	0.1	0.0	0.1	0.1	10
SEB T	Alabama St	193	0.3	0.1	0.3	0.4	10
SEB TR	Alabama St	193	0.5	0.0	0.5	0.6	10
SWB LT	Ennis St	740	0.1	0.0	0.1	0.2	10
SWB TR	Ennis St	740	0.3	0.0	0.2	0.3	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	1.7	0.2	1.5	2.3	10
NB T	Almeda Rd	696	0.1	0.0	0.1	0.2	10
NB TR	Almeda Rd	696	0.1	0.0	0.1	0.2	10
NWB LTR	Wheeler Ave	176	1.1	0.2	0.9	1.4	10
SB L	Almeda Rd	174	0.2	0.0	0.1	0.2	10
SB T	Almeda Rd	174	0.3	0.0	0.2	0.3	10
SB TR	Almeda Rd	174	0.3	0.0	0.2	0.4	10
SEB LT	Wheeler Ave	77	0.5	0.1	0.3	0.6	10
SEB TR	Wheeler Ave	77	0.7	0.2	0.5	1.0	10

CLEBURNE ST & ENNIS ST — NODE: 292

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	0.1	0.0	0.0	0.1	10
NEB TR	Ennis St	726	0.1	0.0	0.0	0.1	10
NWB LTR	Cleburne St	733	0.5	0.0	0.4	0.6	10
SEB LTR	Cleburne St	731	0.4	0.1	0.3	0.5	10
SWB LT	Ennis St	732	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	732	0.0	0.0	0.0	0.1	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	0.4	0.1	0.3	0.5	10
EB T	Crosstimbers St	323	0.3	0.1	0.3	0.4	10
EB TR	Crosstimbers St	323	0.3	0.0	0.3	0.4	10
NB L	Lockwood Dr	321	0.5	0.1	0.4	0.7	10
NB T	Lockwood Dr	321	1.0	0.1	0.8	1.2	10
NB TR	Lockwood Dr	321	0.7	0.1	0.6	0.9	10
SB L	Lockwood Dr	320	0.6	0.1	0.5	0.8	10
SB T	Lockwood Dr	320	0.6	0.1	0.5	0.7	10
SB TR	Lockwood Dr	320	0.8	0.1	0.6	1.0	10
WB L	Crosstimbers St	322	1.0	0.2	0.8	1.3	10
WB T	Crosstimbers St	322	0.4	0.0	0.3	0.4	10
WB TR	Crosstimbers St	322	0.4	0.1	0.4	0.5	10

CULLEN BLVD & ELGIN ST — NODE: 144

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	0.6	0.1	0.5	0.8	10
EB T	Elgin St	204	1.1	0.1	1.0	1.4	10
EB TR	Elgin St	204	1.2	0.2	0.9	1.6	10
NEB L	Cullen Blvd	207	0.3	0.0	0.3	0.4	10
NEB T	Cullen Blvd	207	0.2	0.0	0.2	0.3	10
NEB TR	Cullen Blvd	207	0.3	0.1	0.3	0.4	10
SB L	Cullen Blvd	206	1.2	0.2	0.9	1.7	10
SB T	Cullen Blvd	206	1.0	0.2	0.8	1.3	10
SB TR	Cullen Blvd	206	1.2	0.2	1.0	1.5	10
WB L	Elgin St	208	1.7	0.1	1.5	2.0	10
WB T	Elgin St	208	1.6	0.2	1.3	1.9	10
WB TR	Elgin St	208	1.1	0.1	0.9	1.2	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	10.8	2.0	7.3	13.2	10
EB R	EB Westpark Tollway FR	111	25.0	3.2	22.1	30.6	10
NB T	Fondren Rd	38	94.0	2.6	87.7	97.0	10
SB T	Fondren Rd	110	0.5	0.1	0.3	0.7	10

ELGIN ST & ENNIS ST — NODE: 249

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	0.2	0.0	0.2	0.3	10
NEB TR	Ennis St	702	0.1	0.0	0.1	0.1	10
NWB L	Elgin St	701	0.3	0.0	0.2	0.3	10
NWB T	Elgin St	701	0.5	0.0	0.4	0.6	10
NWB TR	Elgin St	701	0.5	0.1	0.4	0.6	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.1	10
SEB T	Elgin St	700	0.4	0.1	0.3	0.5	10
SEB TR	Elgin St	700	0.4	0.1	0.3	0.5	10
SWB LTR	Ennis St	195	0.2	0.0	0.1	0.2	10

ELGIN ST & SCOTT ST — NODE: 143

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	0.6	0.1	0.5	0.7	10
EB T	Elgin St	701	1.0	0.1	0.9	1.4	10
EB TR	Elgin St	701	1.2	0.2	0.9	1.5	10
NB L	Scott St	198	0.8	0.1	0.6	0.9	10
NB T	LRT Line	667	0.3	0.4	0.0	1.0	10
NB TR	Scott St	198	0.8	0.2	0.5	1.0	10
SB L	Scott St	671	0.5	0.0	0.4	0.5	10
SB T	Scott St	671	1.7	0.2	1.4	1.9	10
SB TR	Scott St	671	1.7	0.1	1.5	1.8	10
SWB T	LRT Line	669	0.0	0.0	0.0	0.0	10
WB L	Elgin St	204	2.0	0.5	1.0	2.8	10
WB T	Elgin St	204	1.0	0.2	0.5	1.2	10
WB TR	Elgin St	204	1.2	0.2	1.0	1.4	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	0.0	0.0	0.0	0.0	10
NEB LT	Elgin St	212	0.0	0.0	0.0	0.1	10
NEB T	Elgin St	212	0.4	0.0	0.4	0.4	10
SB LT	Spur 5 SBFR	214	1.3	0.1	1.2	1.4	10
SB TR	Spur 5 SBFR	214	1.3	0.1	1.2	1.4	10
SWB L	Elgin St	216	1.0	0.1	0.8	1.1	10
SWB T	Elgin St	216	0.7	0.1	0.5	0.8	10

ELGIN ST & UH ENTRANCE — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.1	0.0	0.1	0.1	10
EB T	Elgin St	208	0.1	0.0	0.1	0.2	10
EB TR	Elgin St	208	0.2	0.1	0.2	0.4	10
NB LT	UH Entrance	211	0.9	0.1	0.8	1.1	10
NB R	UH Entrance	211	0.0	0.0	0.0	0.0	10
SWB LT	UH Entrance	210	0.8	0.1	0.6	0.9	10
SWB R	UH Entrance	210	0.0	0.0	0.0	0.0	10
WB L	Elgin St	212	0.1	0.0	0.1	0.2	10
WB T	Elgin St	212	0.1	0.0	0.1	0.1	10
WB TR	Elgin St	212	0.0	0.0	0.0	0.1	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.1	0.0	0.1	0.2	10
NEB TR	Emancipation Ave	711	0.3	0.1	0.2	0.4	10
NWB LT	Wheeler Ave	766	0.4	0.0	0.3	0.4	10
NWB TR	Wheeler Ave	766	0.2	0.1	0.2	0.3	10
SEB LT	Wheeler Ave	423	0.4	0.0	0.3	0.5	10
SEB TR	Wheeler Ave	423	0.3	0.0	0.2	0.4	10
SWB LT	Emancipation Ave	177	0.1	0.0	0.1	0.1	10
SWB TR	Emancipation Ave	177	0.0	0.0	0.0	0.1	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	0.2	0.0	0.1	0.2	10
NEB TR	Ennis St	740	0.2	0.0	0.1	0.2	10
NWB LTR	Holman St	742	0.1	0.0	0.1	0.2	10
SEB LTR	Holman St	741	0.1	0.0	0.1	0.2	10
SWB LT	Ennis St	702	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	702	0.2	0.0	0.2	0.3	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	0.0	0.0	0.0	0.1	10
NEB T	Ennis St	698	0.0	0.0	0.0	0.0	10
SEB L	Wheeler Ave	766	0.3	0.0	0.3	0.4	10
SEB R	Wheeler Ave	766	0.0	0.0	0.0	0.0	10
SWB T	Ennis St	726	0.0	0.0	0.0	0.0	10
SWB TR	Ennis St	726	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.7	0.1	0.5	0.8	10
EB TR	Leeland St	228	0.7	0.1	0.5	0.8	10
SWB LT	Ernestine St	411	1.3	0.1	1.2	1.5	10
SWB T	Ernestine St	411	1.2	0.1	1.1	1.3	10
SWB TR	Ernestine St	411	1.0	0.1	0.8	1.2	10
WB L	Leeland St	227	1.0	0.0	0.9	1.0	10
WB T	Leeland St	227	1.5	0.1	1.4	1.8	10

ERNESTINE ST & MUNGER ST — NODE: 452

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	0.2	0.0	0.1	0.2	10
SB LT	Ernestine St	685	0.0	0.0	0.0	0.1	10
SB T	Ernestine St	685	0.0	0.0	0.0	0.0	10
SB TR	Ernestine St	685	0.1	0.0	0.1	0.2	10
WB L	Munger St	460	0.1	0.0	0.1	0.1	10
WB T	Munger St	460	0.3	0.0	0.2	0.3	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	1.4	0.1	1.3	1.5	10
NWB L	I-45 NBFR	222	0.5	0.1	0.4	0.6	10
NWB LT	I-45 NBFR	222	1.3	0.1	1.1	1.3	10
NWB T	I-45 NBFR	222	1.1	0.1	1.0	1.1	10
NWB TR	I-45 NBFR	222	1.6	0.1	1.4	1.8	10
SB T	Ernestine St	221	0.6	0.1	0.5	0.7	10
SB TR	Ernestine St	221	1.1	0.1	1.1	1.3	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	2.7	1.2	0.7	4.2	10
NWB T	Wheeler Ave	172	3.3	1.9	0.5	5.9	10
SEB T	Wheeler Ave	169	1.4	0.1	1.3	1.5	10
SEB TR	Wheeler Ave	169	1.2	0.1	1.0	1.3	10
SWB L	Fannin St	87	0.3	0.1	0.2	0.4	10
SWB T	Fannin St	87	2.2	0.8	0.9	3.6	10
SWB TR	Fannin St	87	2.7	1.6	0.6	5.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.7	0.1	0.6	0.9	10
EB LR	I-69 Express Lanes	30	0.9	0.1	0.8	1.0	10
NB L	Edloe St	153	0.0	0.0	0.0	0.0	10
NB T	Edloe St	153	0.1	0.0	0.1	0.2	10
NB TR	Edloe St	153	0.1	0.0	0.1	0.1	10
SB L	Edloe St	155	0.2	0.1	0.1	0.4	10
SB T	Edloe St	155	0.1	0.0	0.1	0.2	10
SB TR	Edloe St	155	0.1	0.0	0.0	0.1	10
WB LR	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR **NODE: 705**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	0.0	0.0	0.0	0.0	10
WB R	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.3	0.2	1.1	1.6	10
EB T	Kelley St	313	0.4	0.0	0.3	0.5	10
EB TR	Kelley St	313	0.7	0.1	0.6	0.8	10
NB L	Lockwood Dr	308	0.5	0.1	0.3	0.6	10
NB T	Lockwood Dr	308	2.5	0.4	2.0	3.2	10
NB TR	Lockwood Dr	308	5.9	0.9	4.6	7.4	10
SB L	Lockwood Dr	311	0.2	0.1	0.2	0.3	10
SB T	Lockwood Dr	311	1.1	0.1	0.9	1.3	10
SB TR	Lockwood Dr	311	1.3	0.1	1.1	1.5	10
WB L	Kelley St	312	0.7	0.0	0.6	0.8	10
WB T	Kelley St	312	0.3	0.1	0.2	0.4	10
WB TR	Kelley St	312	0.5	0.3	0.3	1.3	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	1.0	0.2	0.8	1.5	10
NWB LT	Wheeler Ave	77	0.3	0.5	0.0	1.4	10
NWB TR	Wheeler Ave	77	0.2	0.3	0.0	0.8	10
SEB LT	Wheeler Ave	86	0.1	0.0	0.1	0.2	10
SEB TR	Wheeler Ave	86	0.2	0.0	0.1	0.3	10
SWB LTR	LaBranch St	78	0.7	0.1	0.5	1.0	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.2	0.0	0.2	0.3	10
EB TR	Laura Koppe Rd	330	0.5	0.1	0.3	0.5	10
NB L	Lockwood Dr	560	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	560	0.3	0.0	0.2	0.4	10
NB TR	Lockwood Dr	560	0.3	0.1	0.2	0.4	10
SB L	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	327	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	327	0.1	0.0	0.1	0.2	10
WB L	Laura Koppe Rd	329	0.6	0.1	0.4	0.8	10
WB TR	Laura Koppe Rd	329	1.0	0.1	0.9	1.3	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	249	0.0	0.0	0.0	0.1	10
NEB T	Lockwood Dr	249	2.9	0.2	2.6	3.1	10
SWB L	Lockwood Dr	253	0.1	0.0	0.1	0.2	10
SWB T	Lockwood Dr	253	2.7	0.2	2.2	2.9	10
WB LR	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	248	0.6	0.1	0.5	0.7	10
EB R	Canal St	248	0.1	0.0	0.1	0.2	10
EB T	Canal St	248	0.5	0.1	0.4	0.7	10
NEB L	Lockwood Dr	241	0.6	0.1	0.5	0.7	10
NEB T	Lockwood Dr	241	0.4	0.0	0.3	0.4	10
NEB TR	Lockwood Dr	241	0.4	0.0	0.3	0.5	10
SWB L	Lockwood Dr	245	0.1	0.0	0.0	0.1	10
SWB T	Lockwood Dr	245	1.0	0.1	0.8	1.1	10
SWB TR	Lockwood Dr	245	1.1	0.1	0.9	1.3	10
WB LT	Canal St	247	1.4	0.1	1.3	1.6	10
WB TR	Canal St	247	1.3	0.1	1.1	1.4	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	0.4	0.1	0.3	0.6	10
EB T	Cavalcade St	299	0.2	0.0	0.2	0.3	10
EB TR	Cavalcade St	299	0.3	0.1	0.2	0.4	10
NB L	Lockwood Dr	292	0.2	0.1	0.1	0.2	10
NB T	Lockwood Dr	292	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	292	0.2	0.0	0.1	0.2	10
SB L	Lockwood Dr	296	0.7	0.1	0.6	0.8	10
SB T	Lockwood Dr	296	0.8	0.1	0.7	0.9	10
SB TR	Lockwood Dr	296	1.0	0.1	0.8	1.2	10
WB L	Cavalcade St	298	0.6	0.1	0.5	0.6	10
WB T	Cavalcade St	298	0.5	0.1	0.4	0.6	10
WB TR	Cavalcade St	298	0.6	0.1	0.5	0.6	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.2	0.1	0.1	0.3	10
EB T	Clinton Dr	259	0.5	0.1	0.4	0.6	10
EB TR	Clinton Dr	259	0.7	0.1	0.6	0.9	10
NEB L	Lockwood Dr	257	0.3	0.0	0.2	0.3	10
NEB R	Lockwood Dr	257	0.1	0.0	0.0	0.2	10
NEB T	Lockwood Dr	257	2.6	0.1	2.4	2.9	10
SB L	Lockwood Dr	256	0.7	0.1	0.6	0.9	10
SB R	Lockwood Dr	256	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	256	1.1	0.1	0.9	1.2	10
WB L	Clinton Dr	258	0.9	0.1	0.8	1.1	10
WB R	Clinton Dr	258	0.1	0.0	0.1	0.1	10
WB T	Clinton Dr	258	1.2	0.1	0.9	1.4	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.3	0.0	0.3	0.4	10
EB T	Collingsworth St	291	0.1	0.0	0.1	0.2	10
EB TR	Collingsworth St	291	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	533	0.8	0.1	0.7	1.0	10
NB T	Lockwood Dr	533	0.2	0.0	0.2	0.3	10
NB TR	Lockwood Dr	533	0.3	0.0	0.3	0.4	10
SEB L	Lockwood Dr	288	0.1	0.0	0.1	0.2	10
SEB T	Lockwood Dr	288	0.1	0.0	0.1	0.1	10
SEB TR	Lockwood Dr	288	0.1	0.0	0.1	0.2	10
WB L	Collingsworth St	290	0.6	0.1	0.4	0.8	10
WB T	Collingsworth St	290	0.2	0.1	0.2	0.3	10
WB TR	Collingsworth St	290	0.3	0.0	0.2	0.4	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.0	0.1	0.9	1.2	10
NB L	Lockwood Dr	288	0.3	0.0	0.2	0.4	10
NB T	Lockwood Dr	288	0.3	0.0	0.3	0.4	10
NB TR	Lockwood Dr	288	0.4	0.1	0.3	0.5	10
SB L	Lockwood Dr	292	0.1	0.0	0.1	0.1	10
SB T	Lockwood Dr	292	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	292	0.0	0.0	0.0	0.1	10
WB LTR	Crane St	294	0.7	0.1	0.6	0.8	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.1	0.0	0.1	0.1	10
NB LT	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	0.2	0.0	0.2	0.2	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	0.3	0.0	0.3	0.4	10
EB R	Harrisburg Blvd	244	0.1	0.0	0.1	0.1	10
EB T	Harrisburg Blvd	244	0.5	0.1	0.5	0.7	10
NEB L	Lockwood Dr	237	1.7	0.5	1.2	2.4	10
NEB T	Lockwood Dr	237	2.8	1.0	1.8	4.4	10
NEB TR	Lockwood Dr	237	3.2	1.3	1.9	5.7	10
NWB L	Harrisburg Blvd	678	1.1	0.1	0.9	1.3	10
NWB R	Harrisburg Blvd	678	0.1	0.0	0.1	0.1	10
NWB T	Harrisburg Blvd	678	1.2	0.2	0.9	1.4	10
SB L	Lockwood Dr	241	0.4	0.1	0.2	0.5	10
SB T	Lockwood Dr	241	3.0	0.6	2.5	4.2	10
SB TR	Lockwood Dr	241	3.6	0.6	3.1	4.9	10
SEB T	LRT Line	675	0.0	0.0	0.0	0.0	10
WB T	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	1.0	0.3	0.6	1.5	10
NEB L	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NEB T	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NEB TR	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
SWB L	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
SWB T	Lockwood Dr	257	0.0	0.0	0.0	0.1	10
SWB TR	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
WB LTR	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	478	0.1	0.0	0.0	0.1	10
WB LTR	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	2.6	0.2	2.2	2.8	10
EB LT	I-610 EBFR	307	2.4	0.2	2.1	2.6	10
EB TR	I-610 EBFR	307	1.0	0.2	0.8	1.4	10
NB R	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	545	4.8	0.5	4.1	5.5	10
SB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	304	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	304	0.7	0.1	0.5	1.0	10
SB T	Lockwood Dr	308	4.8	0.2	4.5	5.0	10
WB L	I-610 WBFR	309	0.9	0.1	0.7	1.1	10
WB R	Lockwood Dr	308	0.0	0.0	0.0	0.0	10
WB T	I-610 WBFR	309	1.6	0.1	1.4	1.7	10
WB TR	I-610 WBFR	309	2.0	0.2	1.7	2.3	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	0.5	0.1	0.3	0.6	10
NB L	Lockwood Dr	232	0.1	0.0	0.1	0.1	10
NB T	Lockwood Dr	232	0.2	0.0	0.1	0.2	10
NB TR	Lockwood Dr	232	0.2	0.2	0.1	0.6	10
SB L	Lockwood Dr	237	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	237	0.8	0.1	0.7	0.9	10
SB TR	Lockwood Dr	237	0.7	0.1	0.6	0.9	10
WB LTR	McKinney St	239	0.3	0.1	0.2	0.5	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	478	0.2	0.1	0.1	0.4	10
NB T	Lockwood Dr	478	0.2	0.0	0.2	0.2	10
NB TR	Lockwood Dr	478	0.3	0.1	0.3	0.4	10
SB LT	Lockwood Dr	284	0.4	0.0	0.4	0.5	10
SB T	Lockwood Dr	284	0.4	0.0	0.3	0.5	10
SB TR	Lockwood Dr	284	0.1	0.0	0.1	0.1	10
WB LTR	Mulvey St	286	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.0	10
EB T	Munger St	460	0.2	0.1	0.2	0.4	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	0.5	0.2	0.2	0.7	10
WB T	Munger St	661	1.4	0.3	1.1	2.0	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.4	0.1	1.2	1.6	10
EB T	Navigation Blvd	252	0.9	0.1	0.8	1.1	10
EB TR	Navigation Blvd	252	1.1	0.1	0.9	1.3	10
NEB L	Lockwood Dr	245	1.1	0.2	0.8	1.4	10
NEB T	Lockwood Dr	245	1.0	0.1	0.9	1.1	10
NEB TR	Lockwood Dr	245	1.0	0.1	0.8	1.2	10
SWB L	Lockwood Dr	249	1.2	0.1	1.1	1.4	10
SWB R	Lockwood Dr	249	0.2	0.1	0.2	0.3	10
SWB T	Lockwood Dr	249	1.8	0.2	1.6	2.0	10
WB L	Navigation Blvd	251	0.9	0.1	0.7	1.0	10
WB T	Navigation Blvd	251	1.6	0.1	1.4	1.8	10
WB TR	Navigation Blvd	251	1.8	0.1	1.6	2.0	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	0.2	0.1	0.1	0.4	10
SB T	Lockwood Dr	524	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
WB LTR	Nichols St	525	0.2	0.0	0.1	0.3	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.4	0.0	0.4	0.5	10
NB LT	Lockwood Dr	300	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	545	0.1	0.0	0.0	0.1	10
WB LTR	Pardee St	546	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	0.8	0.1	0.6	0.9	10
NB LT	Lockwood Dr	296	0.1	0.0	0.1	0.1	10
NB TR	Lockwood Dr	296	0.1	0.0	0.0	0.1	10
SB LT	Lockwood Dr	300	0.4	0.0	0.4	0.5	10
SB TR	Lockwood Dr	300	0.4	0.0	0.3	0.5	10
WB LTR	Rand St	302	0.5	0.1	0.4	0.8	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	0.8	0.1	0.7	1.0	10
NB TR	Lockwood Dr	311	1.2	0.1	1.1	1.5	10
NEB LTR	Shreveport Blvd	316	0.3	0.1	0.2	0.4	10
SB L	Lockwood Dr	314	0.3	0.0	0.3	0.3	10
SB T	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SWB LTR	Shreveport Blvd	315	1.4	0.1	1.2	1.6	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
WB LTR	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.1	0.1	0.1	0.2	10
EB TR	Weaver Rd	326	0.7	0.1	0.5	1.0	10
NB L	Lockwood Dr	320	0.4	0.1	0.3	0.5	10
NB T	Lockwood Dr	320	0.9	0.1	0.8	1.1	10
NB TR	Lockwood Dr	320	0.9	0.1	0.8	1.0	10
SB L	Lockwood Dr	324	0.2	0.0	0.1	0.3	10
SB T	Lockwood Dr	324	0.9	0.1	0.8	1.0	10
SB TR	Lockwood Dr	324	0.9	0.1	0.8	1.1	10
WB L	Weaver Rd	325	0.9	0.1	0.8	1.0	10
WB TR	Weaver Rd	325	1.5	0.2	1.2	1.8	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.0	0.0	0.0	0.0	10
EB LT	I-10 EBFR	268	0.5	0.0	0.5	0.5	10
EB T	I-10 EBFR	268	0.3	0.0	0.3	0.4	10
NB T	Lockwood Dr (NB)	264	1.8	0.2	1.6	2.3	10
NB TR	Lockwood Dr (NB)	264	2.3	0.3	1.9	3.0	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	0.4	0.1	0.3	0.5	10
NB LT	Lockwood Dr (NB)	270	0.4	0.1	0.3	0.5	10
NB T	Lockwood Dr (NB)	270	0.1	0.0	0.1	0.1	10
WB T	I-10 WBFR	276	3.9	0.4	3.2	4.4	10
WB TR	I-10 WBFR	276	1.3	0.1	1.0	1.4	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.1	0.0	0.0	0.1	10
EB T	Market St	262	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	499	0.2	0.1	0.1	0.3	10
NB TR	Lockwood Dr	499	5.0	14.1	0.4	45.0	10
WB T	Market St	266	1.0	0.1	0.8	1.2	10
WB TR	Market St	266	0.6	0.1	0.5	0.7	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	2.5	0.4	2.0	3.0	10
EB TR	I-10 EBFR	269	0.5	0.1	0.4	0.7	10
SB L	Lockwood Dr (SB)	267	0.5	0.1	0.4	0.6	10
SB LT	Lockwood Dr (SB)	267	0.2	0.1	0.2	0.6	10
SB T	Lockwood Dr (SB)	267	0.1	0.0	0.0	0.1	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	4.4	0.7	3.0	5.6	10
SB TR	Lockwood Dr (SB)	272	2.9	0.5	1.7	3.4	10
WB L	I-10 WBFR	273	0.1	0.0	0.1	0.2	10
WB LT	I-10 WBFR	273	0.3	0.0	0.2	0.3	10
WB T	I-10 WBFR	273	0.1	0.0	0.1	0.2	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	1.2	0.1	1.1	1.4	10
SB L	Lockwood Dr	515	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	515	0.6	0.0	0.5	0.7	10
SB TR	Lockwood Dr	515	0.9	0.1	0.8	1.1	10
WB LT	Lyons Ave	279	0.9	0.0	0.8	1.0	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	0.5	0.1	0.4	0.6	10
EB TR	Market St	263	0.3	0.1	0.3	0.5	10
SB LT	Lockwood Dr (SB)	260	0.7	0.1	0.6	0.9	10
SB TR	Lockwood Dr (SB)	260	0.7	0.1	0.5	0.8	10
WB LT	Market St	262	0.1	0.0	0.1	0.2	10
WB T	Market St	262	0.1	0.0	0.0	0.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	0.2	0.0	0.1	0.3	10
NB L	Lockwood Dr (NB)	275	3.3	1.5	1.2	6.0	10
NB T	Lockwood Dr (NB)	275	0.3	0.1	0.2	0.5	10
NB TR	Lockwood Dr (NB)	275	0.5	0.3	0.3	1.2	10
WB TR	Lyons Ave	283	1.0	0.1	0.8	1.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.2	0.0	0.1	0.2	10
EB R	Bennington St	319	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	314	0.1	0.0	0.1	0.1	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	317	0.1	0.0	0.1	0.2	10
SB TR	Lockwood Dr	317	0.2	0.0	0.1	0.2	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	0.5	0.0	0.4	0.6	10
NB L	Lockwood Dr	317	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	DenmarkSt	549	0.2	0.0	0.1	0.2	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.3	0.0	0.3	0.4	10
NB TR	Spur 5 NBFR	219	0.4	0.1	0.3	0.4	10
NEB L	Elgin St	216	0.0	0.0	0.0	0.1	10
NEB T	Elgin St	216	0.2	0.0	0.2	0.3	10
SWB T	Lockwood Dr	218	0.8	0.1	0.6	1.1	10
SWB TR	Lockwood Dr	218	1.1	0.2	0.9	1.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.5	0.1	0.4	0.6	10
EB T	Polk St	235	0.8	0.1	0.6	1.0	10
EB TR	Polk St	235	1.0	0.1	0.8	1.2	10
NB L	Lockwood Dr	229	0.6	0.1	0.5	0.7	10
NB T	Lockwood Dr	229	1.1	0.1	1.0	1.1	10
NB TR	Lockwood Dr	229	0.8	0.1	0.6	1.0	10
SB L	Lockwood Dr	232	2.4	0.3	2.1	3.0	10
SB T	Lockwood Dr	232	3.0	0.2	2.7	3.3	10
SB TR	Lockwood Dr	232	1.3	0.1	1.2	1.6	10
WB L	Polk St	234	0.6	0.1	0.5	1.0	10
WB T	Polk St	234	0.7	0.1	0.6	0.9	10
WB TR	Polk St	234	1.0	0.1	0.9	1.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	0.3	0.1	0.2	0.5	10
EB T	Leeland St	227	0.7	0.1	0.5	0.8	10
NB LT	Lockwood Dr	230	1.4	0.1	1.3	1.6	10
NB T	Lockwood Dr	230	1.0	0.1	0.9	1.1	10
NB TR	Lockwood Dr	230	1.0	0.1	0.9	1.1	10
WB T	Telephone Rd	231	1.5	0.1	1.3	1.7	10
WB TR	Telephone Rd	231	1.1	0.1	0.9	1.2	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	0.1	0.0	0.1	0.1	10
NEB L	Main St	168	2.4	1.2	1.4	4.8	10
NEB R	Main St	168	0.1	0.0	0.1	0.2	10
NEB T	Main St	168	0.4	0.1	0.3	0.5	10
NWB L	Wheeler Ave	169	0.2	0.1	0.1	0.4	10
NWB T	Wheeler Ave	169	5.2	1.0	3.4	6.8	10
NWB TR	Wheeler Ave	169	5.0	1.0	3.3	6.1	10
SB T	LRT Line	674	0.0	0.0	0.0	0.0	10
SEB L	Richmond Ave	26	0.3	0.1	0.1	0.5	10
SEB T	Richmond Ave	26	2.9	0.8	2.0	4.0	10
SEB TR	Richmond Ave	26	3.4	0.8	2.1	4.5	10
SWB L	Main St	70	0.1	0.0	0.0	0.1	10
SWB TR	Main St	70	1.4	0.2	1.1	1.7	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	1.8	0.2	1.5	2.0	10
EB R	Richmond Ave	9	0.5	0.2	0.2	0.8	10
EB T	Richmond Ave	9	9.3	0.7	8.7	10.8	10
NB L	Buffalo Speedway	37	1.6	0.3	1.0	2.0	10
NB T	Buffalo Speedway	37	3.0	0.6	2.0	3.8	10
NB TR	Buffalo Speedway	37	5.8	1.2	4.3	7.5	10
SB L	Buffalo Speedway	36	0.9	0.1	0.7	1.0	10
SB T	Buffalo Speedway	36	2.0	0.2	1.6	2.3	10
SB TR	Buffalo Speedway	36	2.3	0.3	1.9	2.6	10
WB L	Richmond Ave	12	4.4	0.7	3.3	5.3	10
WB T	Richmond Ave	12	5.2	0.4	4.9	6.0	10
WB TR	Richmond Ave	12	3.0	0.1	2.8	3.3	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	0.3	0.1	0.2	0.4	10
EB T	Richmond Ave	163	0.2	0.0	0.1	0.3	10
EB TR	Richmond Ave	163	0.2	0.0	0.1	0.2	10
NB LTR	Dunlavy St	57	5.1	1.3	3.4	7.5	10
SB LTR	Dunlavy St	56	20.9	3.5	12.6	24.7	10
WB L	Richmond Ave	165	0.1	0.0	0.0	0.1	10
WB T	Richmond Ave	165	0.2	0.1	0.1	0.4	10
WB TR	Richmond Ave	165	0.2	0.1	0.1	0.3	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	1.5	0.2	1.2	1.7	10
EB T	Richmond Ave	12	2.1	0.2	1.7	2.3	10
EB TR	Richmond Ave	12	1.0	0.1	0.9	1.2	10
NB L	Eastside St	40	1.0	0.3	0.7	1.6	10
NB TR	Eastside St	40	0.4	0.1	0.3	0.6	10
SB L	Eastside St	39	1.2	0.1	1.0	1.4	10
SB TR	Eastside St	39	1.1	0.3	0.8	1.8	10
WB L	Richmond Ave	54	0.1	0.0	0.0	0.1	10
WB T	Richmond Ave	54	0.7	0.1	0.6	1.0	10
WB TR	Richmond Ave	54	0.4	0.1	0.3	0.6	10

RICHMOND AVE & EDLOE ST — NODE: 118

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	0.8	0.1	0.6	1.0	10
EB R	Richmond Ave	7	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	7	4.7	0.4	4.1	5.2	10
NB L	Edloe St	155	0.8	0.1	0.6	1.1	10
NB R	Edloe St	155	0.7	0.1	0.6	0.9	10
NB T	Edloe St	155	3.8	0.2	3.4	4.2	10
SB L	Edloe St	5	0.9	0.2	0.6	1.2	10
SB T	Edloe St	5	1.2	0.3	0.9	2.0	10
SB TR	Edloe St	5	1.1	0.1	0.9	1.3	10
WB L	Richmond Ave	9	1.9	0.1	1.7	2.1	10
WB T	Richmond Ave	9	6.2	0.3	5.6	6.5	10
WB TR	Richmond Ave	9	4.0	0.1	3.9	4.3	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	0.8	0.1	0.6	1.1	10
EB T	Richmond Ave	64	1.6	0.2	1.3	1.8	10
EB TR	Richmond Ave	64	1.9	0.2	1.6	2.2	10
NB TR	Greenbriar Dr	47	0.7	0.1	0.5	0.9	10
SB L	Greenbriar Dr	46	0.2	0.0	0.1	0.3	10
SB R	Greenbriar Dr	46	0.2	0.1	0.1	0.3	10
SB T	Greenbriar Dr	46	6.0	0.7	5.0	7.0	10
WB L	Richmond Ave	160	1.2	0.2	1.0	1.6	10
WB T	Richmond Ave	160	0.6	0.0	0.5	0.7	10
WB TR	Richmond Ave	160	0.7	0.1	0.6	0.8	10

RICHMOND AVE & HAZARD ST — NODE: 124

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	20	0.5	0.0	0.4	0.5	10
EB TR	Richmond Ave	20	0.6	0.1	0.5	0.7	10
NB LTR	Hazard St	51	21.7	3.7	14.0	27.1	10
SB LTR	Hazard St	50	15.7	6.3	6.9	25.0	10
WB L	Richmond Ave	162	0.1	0.0	0.1	0.2	10
WB T	Richmond Ave	162	0.3	0.0	0.3	0.3	10
WB TR	Richmond Ave	162	0.3	0.1	0.2	0.4	10

RICHMOND AVE & KIRBY DR — NODE: 121

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	4.1	0.9	2.6	5.5	10
EB T	Richmond Ave	54	2.2	0.1	2.1	2.4	10
EB TR	Richmond Ave	54	2.1	0.2	1.7	2.4	10
NB L	Kirby Dr	158	3.5	0.8	2.3	4.6	10
NB T	Kirby Dr	158	6.6	0.5	5.7	7.2	10
NB TR	Kirby Dr	158	3.7	0.3	3.1	4.1	10
SB L	Kirby Dr	44	1.2	0.3	0.9	2.0	10
SB T	Kirby Dr	44	7.8	0.5	7.1	8.8	10
SB TR	Kirby Dr	44	4.6	0.4	4.2	5.4	10
WB L	Richmond Ave	64	1.1	0.1	1.0	1.3	10
WB T	Richmond Ave	64	0.5	0.1	0.3	0.6	10
WB TR	Richmond Ave	64	0.3	0.1	0.2	0.3	10

RICHMOND AVE & MANDELL ST — NODE: 127

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	0.1	0.0	0.1	0.2	10
EB T	Richmond Ave	165	0.1	0.0	0.0	0.1	10
EB TR	Richmond Ave	165	0.1	0.0	0.1	0.1	10
NB LTR	Mandell St	59	2.3	0.2	2.1	2.6	10
SB LTR	Mandell St	58	1.8	0.3	1.4	2.2	10
WB L	Richmond Ave	23	0.1	0.0	0.1	0.1	10
WB T	Richmond Ave	23	0.0	0.0	0.0	0.1	10
WB TR	Richmond Ave	23	0.0	0.0	0.0	0.1	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	1.2	0.1	1.2	1.3	10
EB T	Richmond Ave	23	2.1	0.2	1.9	2.5	10
EB TR	Richmond Ave	23	2.7	0.2	2.5	3.1	10
NB L	Montrose Blvd	61	4.6	0.9	3.0	5.6	10
NB T	Montrose Blvd	61	10.4	1.2	8.4	11.8	10
NB TR	Montrose Blvd	61	13.5	1.5	11.3	15.0	10
SB L	Montrose Blvd	60	5.1	0.8	3.7	6.1	10
SB T	Montrose Blvd	60	5.8	1.0	4.1	7.6	10
SB TR	Montrose Blvd	60	8.8	1.5	6.0	10.9	10
WB L	Richmond Ave	166	2.2	0.9	1.5	4.5	10
WB T	Richmond Ave	166	1.7	0.2	1.4	2.0	10
WB TR	Richmond Ave	166	2.5	0.4	1.9	3.3	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	1.3	0.1	1.0	1.5	10
EB T	Richmond Ave	160	0.1	0.0	0.0	0.1	10
EB TR	Richmond Ave	160	0.1	0.1	0.0	0.2	10
NB T	Shepherd Dr	49	2.5	0.1	2.4	2.8	10
NB TR	Shepherd Dr	49	2.6	0.1	2.5	2.8	10
SB T	Shepherd Dr	48	2.8	0.2	2.5	3.0	10
SB TR	Shepherd Dr	48	2.8	0.1	2.7	3.0	10
WB L	Richmond Ave	20	0.8	0.1	0.6	1.0	10
WB T	Richmond Ave	20	0.8	0.1	0.7	1.0	10
WB TR	Richmond Ave	20	0.6	0.1	0.5	0.8	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.1	0.0	0.0	0.1	10
EB T	Richmond Ave	167	0.5	0.9	0.0	2.9	10
NEB LT	US 59 NBFR	69	1.0	0.1	0.8	1.2	10
NEB R	US 59 NBFR	69	0.1	0.0	0.1	0.1	10
NEB TR	US 59 NBFR	69	0.4	0.1	0.4	0.6	10
WB R	Richmond Ave	26	0.0	0.0	0.0	0.0	10
WB T	Richmond Ave	26	10.5	2.0	7.1	12.8	10
WB TR	Richmond Ave	26	1.7	0.4	1.0	2.3	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	1.7	0.3	1.4	2.1	10
EB TR	Richmond Ave	166	3.8	0.7	2.7	5.1	10
SWB LT	US 59 SBFR	65	1.4	0.1	1.3	1.7	10
SWB R	US 59 SBFR	65	0.3	0.0	0.3	0.4	10
SWB T	US 59 SBFR	65	1.1	0.1	0.9	1.3	10
WB L	Richmond Ave	167	0.1	0.0	0.1	0.2	10
WB T	Richmond Ave	167	0.0	0.0	0.0	0.0	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	0.2	0.0	0.1	0.3	10
EB T	Richmond Ave	162	0.3	0.2	0.2	0.7	10
EB TR	Richmond Ave	162	0.2	0.0	0.2	0.3	10
NB LTR	Woodhead St	53	11.9	3.3	6.4	15.6	10
SB LTR	Woodhead St	52	1.7	0.2	1.4	2.2	10
WB L	Richmond Ave	163	0.4	0.1	0.3	0.6	10
WB T	Richmond Ave	163	0.3	0.0	0.2	0.3	10
WB TR	Richmond Ave	163	0.3	0.0	0.2	0.3	10

S RICE AVE & WESTPARK DR — NODE: 110

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	11.2	1.9	9.6	15.0	10
EB T	Westpark Dr	140	6.8	2.0	4.0	9.6	10
EB TR	Westpark Dr	140	9.2	2.3	5.7	12.4	10
NB L	S Rice Ave	138	2.4	0.4	2.0	3.2	10
NB T	S Rice Ave	138	4.0	0.6	3.3	5.3	10
NB TR	S Rice Ave	138	5.4	0.8	4.6	7.1	10
SB L	S Rice Ave	137	2.0	0.4	1.6	2.6	10
SB R	S Rice Ave	137	0.0	0.0	0.0	0.1	10
SB T	S Rice Ave	137	3.4	0.3	3.1	3.9	10
WB L	Westpark Dr	770	1.3	0.2	1.0	1.5	10
WB T	Westpark Dr	770	1.2	0.1	1.0	1.4	10
WB TR	Westpark Dr	770	1.3	0.3	0.8	2.0	10

SAN JACINTO ST & WHEELER AVE — NODE: 133

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	1.2	0.6	0.7	2.5	10
NEB R	San Jacinto St	173	0.0	0.0	0.0	0.0	10
NEB T	San Jacinto St	173	1.5	0.3	1.1	2.0	10
NWB T	Wheeler Ave	86	4.1	2.4	1.3	7.6	10
NWB TR	Wheeler Ave	86	4.0	2.4	1.5	7.8	10
SEB LT	Wheeler Ave	172	0.9	0.2	0.6	1.4	10
SEB T	Wheeler Ave	172	0.8	0.3	0.5	1.4	10

TIDWELL RD & EDELL ST — NODE: 689

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	590	0.2	0.0	0.2	0.3	10
SB LTR	Edell St	589	0.5	0.1	0.4	0.6	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD — NODE: 677

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	586	0.1	0.0	0.1	0.2	10
EB TR	Tidwell Rd	586	0.4	0.0	0.4	0.5	10
NB LTR	Friendly Rd	585	4.2	1.6	1.9	7.3	10
SB LTR	Friendly Rd	584	10.3	0.5	9.5	11.0	10
WB L	Tidwell Rd	338	0.0	0.0	0.0	0.1	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.0	10

TIDWELL RD & HIRSCH RD — NODE: 180

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.2	0.1	0.1	0.3	10
EB T	Tidwell Rd	338	0.7	0.1	0.5	0.7	10
EB TR	Tidwell Rd	338	0.8	0.1	0.6	1.0	10
NB L	Hirsch Rd	336	1.7	0.3	1.3	2.3	10
NB R	Hirsch Rd	336	0.2	0.0	0.1	0.3	10
NB T	Hirsch Rd	336	1.0	0.1	0.8	1.2	10
SB L	Hirsch Rd	335	0.6	0.1	0.4	0.8	10
SB R	Hirsch Rd	335	1.0	0.1	0.9	1.1	10
SB T	Hirsch Rd	335	0.7	0.1	0.6	1.0	10
WB L	Tidwell Rd	334	0.1	0.0	0.0	0.1	10
WB T	Tidwell Rd	334	0.2	0.0	0.2	0.3	10
WB TR	Tidwell Rd	334	0.3	0.1	0.2	0.4	10

TIDWELL RD & I-69 NBFR — NODE: 181

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	0.6	0.2	0.4	0.8	10
EB LT	Tidwell Rd	342	0.9	0.1	0.8	1.0	10
EB T	Tidwell Rd	342	2.0	0.2	1.8	2.2	10
NB L	I-69 NBFR	340	0.6	0.1	0.5	0.7	10
NB LT	I-69 NBFR	340	0.6	0.1	0.5	0.7	10
NB R	I-69 NBFR	340	0.2	0.0	0.2	0.3	10
NB T	I-69 NBFR	340	0.3	0.0	0.3	0.4	10
NB TR	I-69 NBFR	340	0.7	0.0	0.6	0.8	10
WB T	Tidwell Rd	586	3.1	1.0	2.5	6.0	10
WB TR	Tidwell Rd	586	1.1	0.1	0.9	1.3	10

TIDWELL RD & I-69 SBFR — NODE: 182

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	591	2.2	0.2	2.0	2.5	10
SB L	I-69 SBFR	649	0.7	0.1	0.6	0.9	10
SB LT	I-69 SBFR	649	0.9	0.0	0.9	1.0	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.0	10
SB T	I-69 SBFR	649	1.1	0.0	1.0	1.1	10
WB L	Tidwell Rd	342	1.3	0.1	1.2	1.5	10
WB LT	Tidwell Rd	342	1.3	0.1	1.2	1.5	10
WB T	Tidwell Rd	342	1.0	0.1	0.9	1.2	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	0.8	0.1	0.6	0.9	10
EB T	Tidwell Rd	349	1.6	0.1	1.4	1.7	10
EB TR	Tidwell Rd	349	1.8	0.1	1.7	2.0	10
NB L	Jensen Dr	347	0.1	0.0	0.1	0.1	10
NB T	Jensen Dr	347	1.0	0.1	0.9	1.1	10
NB TR	Jensen Dr	347	1.0	0.1	0.8	1.1	10
SB L	Jensen Dr	346	1.5	0.2	1.2	1.7	10
SB T	Jensen Dr	346	0.7	0.1	0.6	0.8	10
SB TR	Jensen Dr	346	0.9	0.1	0.8	1.1	10
WB L	Tidwell Rd	348	1.0	0.1	0.7	1.2	10
WB T	Tidwell Rd	348	1.0	0.1	0.9	1.3	10
WB TR	Tidwell Rd	348	1.2	0.2	1.0	1.6	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	334	1.0	0.1	0.9	1.1	10
EB TR	Tidwell Rd	334	1.3	0.1	1.1	1.5	10
NB L	Lockwood Dr	574	1.2	0.1	1.0	1.4	10
NB T	Lockwood Dr	574	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	574	0.3	0.1	0.2	0.4	10
SB L	Lockwood Dr	331	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	331	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	331	0.0	0.0	0.0	0.1	10
WB L	Tidwell Rd	333	0.7	0.1	0.5	0.9	10
WB T	Tidwell Rd	333	1.2	0.1	1.1	1.4	10
WB TR	Tidwell Rd	333	1.3	0.1	1.2	1.5	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	589	0.0	0.0	0.0	0.0	10
SEB LTR	Edell St	592	0.0	0.0	0.0	0.0	10
SWB TR	Turner Dr	773	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	2.7	0.3	2.3	3.2	10
EB TR	Westpark Dr	116	0.4	0.1	0.4	0.6	10
NB L	14th St	118	0.0	0.0	0.0	0.0	10
NB R	14th St	118	0.3	0.1	0.2	0.5	10
WB L	Westpark Dr	616	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	616	7.5	7.0	0.8	22.3	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	768	0.0	0.0	0.0	0.1	10
EB TR	Westpark Dr	768	0.0	0.0	0.0	0.1	10
NB L	Alder Dr	767	0.8	0.1	0.7	1.0	10
NB R	Alder Dr	767	0.3	0.0	0.3	0.4	10
WB LT	Westpark Dr	133	0.1	0.0	0.1	0.1	10
WB T	Westpark Dr	133	0.0	0.0	0.0	0.0	10

WESTPARK DR & CHIMNEY ROCK RD — NODE: 109

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	3.1	0.6	2.1	3.8	10
EB T	Westpark Dr	133	7.6	2.5	4.3	10.9	10
EB TR	Westpark Dr	133	8.9	3.0	5.2	13.1	10
NB T	Chimney Rock Rd	135	4.6	0.3	4.1	5.0	10
NB TR	Chimney Rock Rd	135	5.0	0.3	4.4	5.5	10
SB L	Chimney Rock Rd	134	6.8	2.1	3.8	9.4	10
SB T	Chimney Rock Rd	134	1.0	0.2	0.8	1.3	10
SB TR	Chimney Rock Rd	134	1.1	0.1	0.9	1.3	10
WB L	Westpark Dr	136	0.6	0.1	0.4	0.7	10
WB T	Westpark Dr	136	0.4	0.1	0.3	0.6	10
WB TR	Westpark Dr	136	1.0	0.1	0.9	1.2	10

WESTPARK DR & EDLOE ST — NODE: 115

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	3.2	0.3	2.8	3.7	10
EB T	Westpark Dr	152	0.4	0.1	0.3	0.6	10
EB TR	Westpark Dr	152	0.8	0.1	0.6	1.1	10
NB R	Edloe St	29	0.1	0.0	0.1	0.2	10
NB T	Edloe St	29	6.8	0.4	6.2	7.4	10
SB LT	Edloe St	153	1.7	0.2	1.3	1.9	10
SB T	Edloe St	153	0.8	0.1	0.6	1.0	10
SB TR	Edloe St	153	0.9	0.1	0.7	1.1	10
WB LT	Westpark Dr	154	2.2	0.2	1.9	2.4	10
WB TR	Westpark Dr	154	2.5	0.2	2.3	2.7	10

WESTPARK DR & FONDREN RD — NODE: 102

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	5.3	0.8	4.0	6.2	10
EB T	Westpark Dr	114	51.8	3.5	44.3	56.5	10
EB TR	Westpark Dr	114	32.0	2.2	26.8	34.2	10
NB L	Fondren Rd	110	1.1	0.2	0.9	1.4	10
NB T	Fondren Rd	110	1.5	0.2	1.2	1.8	10
NB TR	Fondren Rd	110	0.9	0.1	0.7	1.1	10
SB L	Fondren Rd	112	8.7	3.3	5.7	16.9	10
SB T	Fondren Rd	112	4.1	0.3	3.5	4.5	10
SB TR	Fondren Rd	112	2.4	0.3	2.1	3.0	10
WB L	Westpark Dr	113	7.0	4.6	4.2	18.8	10
WB T	Westpark Dr	113	7.5	1.5	6.6	11.6	10
WB TR	Westpark Dr	113	6.0	1.2	5.1	9.1	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	6.0	1.4	4.1	7.4	10
EB T	Westpark Dr	113	10.5	1.8	8.2	14.3	10
EB TR	Westpark Dr	113	8.3	1.5	6.8	11.6	10
NB L	Hillcroft Ave	3	19.6	2.3	15.8	22.5	10
NB T	Hillcroft Ave	3	8.7	0.5	8.1	10.0	10
NB TR	Hillcroft Ave	3	7.5	0.5	6.9	8.5	10
SB L	Hillcroft Ave	115	11.3	3.4	6.6	15.8	10
SB T	Hillcroft Ave	115	12.3	3.2	7.2	16.3	10
SB TR	Hillcroft Ave	115	11.1	3.4	5.9	16.2	10
WB L	Westpark Dr	116	1.6	0.2	1.3	2.1	10
WB T	Westpark Dr	116	14.8	2.5	11.3	19.0	10
WB TR	Westpark Dr	116	15.3	2.6	10.7	17.9	10

WESTPARK DR & I-610 NBFR — NODE: 112

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	4.5	0.2	4.1	4.8	10
EB T	Westpark Dr	143	2.0	0.2	1.8	2.3	10
NB L	I-610 NBFR	145	2.4	0.1	2.2	2.6	10
NB LT	I-610 NBFR	145	3.2	0.1	3.0	3.4	10
NB TR	I-610 NBFR	145	3.1	0.2	2.9	3.3	10
WB T	Westpark Dr	772	3.8	0.2	3.4	4.2	10
WB TR	Westpark Dr	772	3.2	0.2	2.8	3.6	10

WESTPARK DR & I-610 SBFR — NODE: 111

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	1.0	0.3	0.7	1.4	10
EB T	Westpark Dr	629	60.7	2.7	56.5	63.9	10
SB L	I-610 SBFR	141	1.6	0.2	1.3	1.9	10
SB R	I-610 SBFR	141	0.0	0.0	0.0	0.0	10
SB T	I-610 SBFR	141	1.3	0.2	1.0	1.5	10
WB L	Westpark Dr	143	2.0	0.2	1.5	2.2	10
WB T	Westpark Dr	143	1.9	0.3	1.5	2.3	10

WESTPARK DR & I-69 NBFR — NODE: 106

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	1.6	0.3	1.0	2.0	10
EB LT	Westpark Dr	123	2.2	0.2	1.8	2.5	10
EB T	Westpark Dr	123	4.2	1.5	2.9	7.4	10
NEB L	I-69 NBFR	126	0.7	0.1	0.7	0.8	10
NEB R	I-69 NBFR	126	0.9	0.1	0.7	1.0	10
NEB T	I-69 NBFR	126	1.7	0.1	1.5	1.9	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	127	3.2	0.1	3.0	3.4	10

WESTPARK DR & I-69 SBFR — NODE: 105

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	616	11.6	1.8	8.8	14.5	10
SWB L	I-69 SBFR	121	0.4	0.1	0.3	0.5	10
SWB LT	I-69 SBFR	121	1.0	0.2	0.8	1.4	10
SWB R	I-69 SBFR	121	0.3	0.7	0.0	2.3	10
SWB T	I-69 SBFR	121	1.4	0.2	1.2	1.6	10
WB L	Westpark Dr	123	1.2	0.2	1.0	1.6	10
WB T	Westpark Dr	123	1.4	0.2	1.1	1.7	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	772	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	772	0.0	0.0	0.0	0.0	10
NB LR	Loop Central Dr	771	0.3	0.0	0.2	0.3	10
WB L	Westpark Dr	146	0.3	0.0	0.3	0.4	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	1.6	0.1	1.5	1.8	10
EB T	Westpark Dr	146	1.5	0.1	1.3	1.7	10
EB TR	Westpark Dr	146	2.3	0.2	2.2	2.7	10
NB L	Newcastle Dr	148	9.7	1.9	5.5	11.7	10
NB T	Newcastle Dr	148	2.3	0.4	1.5	3.1	10
NB TR	Newcastle Dr	148	5.8	0.9	4.4	7.9	10
SB LT	Newcastle Dr	147	0.9	0.0	0.9	1.0	10
SB TR	Newcastle Dr	147	1.1	0.2	0.9	1.4	10
WB L	Westpark Dr	149	3.2	1.1	2.0	5.4	10
WB T	Westpark Dr	149	1.3	0.1	1.2	1.5	10
WB TR	Westpark Dr	149	1.8	0.1	1.6	2.0	10

WESTPARK DR & RAMPART ST — NODE: 107

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	1.0	0.1	0.9	1.2	10
EB TR	Westpark Dr	127	1.3	0.1	1.2	1.5	10
NB LT	Rampart St	129	12.1	3.1	7.6	17.3	10
NB TR	Rampart St	129	0.2	0.0	0.1	0.2	10
SB LTR	Rampart St	128	0.7	0.1	0.5	0.8	10
WB LT	Westpark Dr	130	0.3	0.0	0.2	0.3	10
WB TR	Westpark Dr	130	0.1	0.0	0.1	0.2	10

WESTPARK DR & ROYALTON ST — NODE: 309

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	1.2	1.2	0.1	3.0	10
EB TR	Westpark Dr	136	0.7	0.8	0.0	2.0	10
NB LR	Royalton St	384	7.1	2.1	2.9	9.7	10
WB L	Westpark Dr	140	0.1	0.0	0.1	0.1	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.0	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	770	2.0	0.9	1.3	3.5	10
EB TR	Westpark Dr	770	1.8	0.7	1.2	3.0	10
NB LR	Uptown Transit Ctr	769	0.2	0.1	0.2	0.3	10
WB L	Westpark Dr	629	0.1	0.0	0.0	0.2	10
WB T	Westpark Dr	629	0.4	0.1	0.3	0.6	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	4.9	0.6	4.0	5.4	10
EB T	Westpark Dr	149	1.8	0.3	1.4	2.3	10
EB TR	Westpark Dr	149	3.1	0.5	2.3	4.0	10
NB L	Weslayan St	151	2.4	0.4	1.7	2.9	10
NB T	Weslayan St	151	2.7	0.4	2.1	3.4	10
NB TR	Weslayan St	151	3.6	0.6	2.8	4.6	10
SB L	Weslayan St	150	0.9	0.1	0.6	1.1	10
SB T	Weslayan St	150	4.6	0.3	3.9	5.0	10
SB TR	Weslayan St	150	5.2	0.4	4.5	5.8	10
WB L	Westpark Dr	152	1.2	0.1	1.0	1.4	10
WB T	Westpark Dr	152	1.3	0.2	1.2	1.9	10
WB TR	Westpark Dr	152	1.6	0.2	1.3	1.9	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	1.3	0.2	1.0	1.6	10
EB T	Westpark Dr	130	2.7	0.2	2.5	3.1	10
EB TR	Westpark Dr	130	3.0	0.2	2.7	3.2	10
NB L	Renwick Dr	132	1.1	0.2	0.9	1.4	10
NB T	Renwick Dr	132	2.6	0.1	2.3	2.8	10
NB TR	Renwick Dr	132	3.0	0.2	2.8	3.3	10
SB L	Fountain View Dr	131	1.7	0.1	1.4	1.8	10
SB T	Fountain View Dr	131	1.0	0.1	0.8	1.2	10
SB TR	Fountain View Dr	131	1.0	0.1	0.8	1.2	10
WB L	Westpark Dr	768	0.4	0.1	0.3	0.6	10
WB T	Westpark Dr	768	0.5	0.1	0.3	0.6	10
WB TR	Westpark Dr	768	0.5	0.1	0.4	0.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	0.6	0.1	0.4	0.7	10
NEB TR	Hutchins St	707	1.0	0.3	0.5	1.3	10
NWB T	Wheeler Ave	423	0.2	0.0	0.1	0.3	10
NWB TR	Wheeler Ave	423	0.2	0.0	0.1	0.2	10
SEB L	Wheeler Ave	421	0.0	0.0	0.0	0.0	10
SEB T	Wheeler Ave	421	0.5	0.0	0.4	0.5	10
SWB LR	Hutchins St	422	0.1	0.0	0.0	0.1	10

Project: UNC_Base
Scenario: 2021 Existing AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	8.1	0.8	7.1	9.1	10
NEB TR	Ennis St	732	3.8	1.1	2.2	5.2	10
NWB L	Alabama St	197	1.6	0.6	1.0	2.9	10
NWB T	Alabama St	197	22.0	1.6	19.6	24.8	10
NWB TR	Alabama St	197	18.3	3.4	14.6	23.9	10
SEB L	Alabama St	193	7.6	1.0	6.2	9.0	10
SEB T	Alabama St	193	8.8	1.4	7.1	11.3	10
SEB TR	Alabama St	193	8.8	0.8	7.8	10.2	10
SWB LT	Ennis St	740	11.7	1.6	9.9	13.9	10
SWB TR	Ennis St	740	17.2	1.4	14.7	19.0	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	28.8	3.6	25.8	37.7	10
NB T	Almeda Rd	696	5.7	1.2	3.2	7.1	10
NB TR	Almeda Rd	696	4.2	0.8	3.1	5.5	10
NWB LTR	Wheeler Ave	176	25.3	2.7	21.4	30.4	10
SB L	Almeda Rd	174	38.4	6.1	30.9	51.5	10
SB T	Almeda Rd	174	13.1	1.1	11.5	15.0	10
SB TR	Almeda Rd	174	11.1	1.3	9.2	13.8	10
SEB LT	Wheeler Ave	77	20.2	3.8	15.0	28.3	10
SEB TR	Wheeler Ave	77	13.4	3.3	10.2	20.0	10

CLEBURNE ST & ENNIS ST — NODE: 292

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	2.5	0.7	1.7	4.2	10
NEB TR	Ennis St	726	1.7	0.5	1.1	3.0	10
NWB LTR	Cleburne St	733	22.9	2.4	19.7	26.3	10
SEB LTR	Cleburne St	731	23.4	3.2	17.4	27.1	10
SWB LT	Ennis St	732	2.2	1.0	1.4	4.6	10
SWB TR	Ennis St	732	1.6	0.6	0.8	2.8	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	44.4	6.3	36.3	56.3	10
EB T	Crosstimbers St	323	16.5	1.8	13.4	18.9	10
EB TR	Crosstimbers St	323	14.1	1.6	11.9	16.4	10
NB L	Lockwood Dr	321	43.4	3.5	37.7	48.3	10
NB T	Lockwood Dr	321	34.1	2.0	32.1	37.8	10
NB TR	Lockwood Dr	321	19.2	2.5	15.6	22.9	10
SB L	Lockwood Dr	320	51.2	5.5	42.6	58.6	10
SB T	Lockwood Dr	320	24.9	3.2	18.6	29.5	10
SB TR	Lockwood Dr	320	19.3	2.2	13.7	21.4	10
WB L	Crosstimbers St	322	37.3	4.1	31.2	44.7	10
WB T	Crosstimbers St	322	11.8	1.1	10.5	13.7	10
WB TR	Crosstimbers St	322	9.7	1.1	8.5	11.5	10

CULLEN BLVD & ELGIN ST — NODE: 144

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	89.0	5.3	78.1	94.1	10
EB T	Elgin St	204	67.7	9.6	46.8	78.4	10
EB TR	Elgin St	204	55.2	9.5	38.3	69.7	10
NEB L	Cullen Blvd	207	27.6	3.2	23.1	33.0	10
NEB T	Cullen Blvd	207	12.3	1.1	10.3	14.2	10
NEB TR	Cullen Blvd	207	7.6	1.1	6.2	9.9	10
SB L	Cullen Blvd	206	49.4	4.0	44.7	57.0	10
SB T	Cullen Blvd	206	26.6	4.1	19.6	33.5	10
SB TR	Cullen Blvd	206	24.2	3.3	20.0	28.5	10
WB L	Elgin St	208	54.6	2.3	49.4	57.5	10
WB T	Elgin St	208	45.1	3.4	38.7	50.1	10
WB TR	Elgin St	208	34.4	2.2	30.8	37.1	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	231.5	29.2	189.1	275.3	10
EB R	EB Westpark Tollway FR	111	205.2	28.2	164.6	241.1	10
NB T	Fondren Rd	38	383.6	16.0	345.0	405.4	10
SB T	Fondren Rd	110	2.3	0.5	1.3	3.2	10

ELGIN ST & ENNIS ST — NODE: 249

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	18.1	2.3	12.5	20.1	10
NEB TR	Ennis St	702	8.5	1.3	5.7	10.0	10
NWB L	Elgin St	701	21.3	2.1	18.5	24.4	10
NWB T	Elgin St	701	14.8	1.3	12.9	16.7	10
NWB TR	Elgin St	701	16.0	1.5	13.4	17.6	10
SEB L	Elgin St	700	21.7	6.2	13.0	30.7	10
SEB T	Elgin St	700	12.7	1.3	10.9	14.5	10
SEB TR	Elgin St	700	10.9	1.1	9.0	12.3	10
SWB LTR	Ennis St	195	16.4	3.0	11.2	21.1	10

ELGIN ST & SCOTT ST — NODE: 143

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	55.8	6.9	47.1	70.8	10
EB T	Elgin St	701	39.3	3.7	32.5	46.2	10
EB TR	Elgin St	701	32.4	4.0	25.2	38.0	10
NB L	Scott St	198	53.0	6.1	40.4	59.6	10
NB T	LRT Line	667	9.1	5.1	3.5	20.4	10
NB TR	Scott St	198	11.5	2.5	7.6	16.5	10
SB L	Scott St	671	63.0	6.6	53.2	72.0	10
SB T	Scott St	671	21.6	1.8	18.3	24.2	10
SB TR	Scott St	671	21.3	1.8	18.4	24.3	10
SWB T	LRT Line	669	19.5	2.5	16.2	23.9	10
WB L	Elgin St	204	71.0	7.8	58.7	86.5	10
WB T	Elgin St	204	33.9	2.5	30.3	38.2	10
WB TR	Elgin St	204	31.6	3.3	26.7	37.0	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	1.2	0.3	0.7	1.8	10
NEB LT	Elgin St	212	12.6	4.6	4.9	22.7	10
NEB T	Elgin St	212	9.3	0.7	8.4	10.4	10
SB LT	Spur 5 SBFR	214	20.5	1.1	19.3	22.5	10
SB TR	Spur 5 SBFR	214	15.4	0.6	14.8	16.6	10
SWB L	Elgin St	216	14.6	1.3	13.0	18.0	10
SWB T	Elgin St	216	4.9	0.7	3.9	6.6	10

ELGIN ST & UH ENTRANCE — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	6.8	1.1	5.4	8.5	10
EB T	Elgin St	208	6.6	1.5	5.0	9.2	10
EB TR	Elgin St	208	4.8	2.1	3.2	9.6	10
NB LT	UH Entrance	211	46.6	2.4	42.7	48.9	10
NB R	UH Entrance	211	3.6	0.5	3.0	4.5	10
SWB LT	UH Entrance	210	46.3	5.0	35.3	53.1	10
SWB R	UH Entrance	210	3.9	1.0	3.0	6.4	10
WB L	Elgin St	212	4.3	1.1	2.8	6.4	10
WB T	Elgin St	212	1.1	0.2	0.7	1.3	10
WB TR	Elgin St	212	1.3	0.3	0.8	1.9	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	6.1	0.9	4.7	7.2	10
NEB TR	Emancipation Ave	711	5.5	0.9	4.6	7.2	10
NWB LT	Wheeler Ave	766	21.2	2.3	16.6	24.5	10
NWB TR	Wheeler Ave	766	13.4	2.5	10.0	18.4	10
SEB LT	Wheeler Ave	423	20.9	2.3	18.3	24.7	10
SEB TR	Wheeler Ave	423	14.8	1.4	12.8	17.6	10
SWB LT	Emancipation Ave	177	4.0	1.6	2.5	6.5	10
SWB TR	Emancipation Ave	177	1.7	0.7	0.8	2.8	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	12.7	2.1	9.5	16.0	10
NEB TR	Ennis St	740	9.9	1.7	7.0	12.4	10
NWB LTR	Holman St	742	9.5	1.5	7.1	11.5	10
SEB LTR	Holman St	741	7.0	1.1	5.6	8.9	10
SWB LT	Ennis St	702	7.7	2.3	4.9	11.5	10
SWB TR	Ennis St	702	10.4	1.2	8.9	12.6	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	1.5	0.3	1.0	1.9	10
NEB T	Ennis St	698	0.6	0.3	0.3	1.0	10
SEB L	Wheeler Ave	766	30.5	2.4	26.5	34.8	10
SEB R	Wheeler Ave	766	3.4	0.5	2.6	4.1	10
SWB T	Ennis St	726	0.1	0.1	0.0	0.3	10
SWB TR	Ennis St	726	0.1	0.1	0.0	0.4	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	22.6	2.0	19.5	25.7	10
EB TR	Leeland St	228	15.6	1.4	12.9	17.5	10
SWB LT	Ernestine St	411	17.1	1.1	15.9	19.2	10
SWB T	Ernestine St	411	14.7	1.1	12.9	16.0	10
SWB TR	Ernestine St	411	13.0	1.5	10.4	15.1	10
WB L	Leeland St	227	18.0	0.6	17.2	18.9	10
WB T	Leeland St	227	19.2	0.7	18.2	20.1	10

ERNESTINE ST & MUNGER ST — NODE: 452

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	8.6	1.1	7.3	10.6	10
SB LT	Ernestine St	685	0.9	0.2	0.6	1.3	10
SB TR	Ernestine St	685	1.1	0.5	0.7	2.3	10
WB L	Munger St	460	8.0	1.4	6.3	10.0	10
WB T	Munger St	460	6.9	0.8	5.6	7.7	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	12.2	0.9	11.2	13.6	10
NWB L	I-45 NBFR	222	9.3	1.0	7.7	10.6	10
NWB LT	I-45 NBFR	222	10.0	0.4	9.2	10.7	10
NWB T	I-45 NBFR	222	9.3	0.5	8.4	10.2	10
NWB TR	I-45 NBFR	222	10.0	0.5	9.4	11.0	10
SB T	Ernestine St	221	12.7	1.3	10.8	14.7	10
SB TR	Ernestine St	221	13.1	0.7	12.1	14.4	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	87.2	43.0	16.1	135.1	10
NWB T	Wheeler Ave	172	67.4	36.4	11.5	114.2	10
SEB T	Wheeler Ave	169	23.6	1.1	22.6	25.3	10
SEB TR	Wheeler Ave	169	20.8	1.4	18.7	23.0	10
SWB L	Fannin St	87	10.7	3.0	6.1	15.7	10
SWB T	Fannin St	87	12.4	4.0	5.9	18.7	10
SWB TR	Fannin St	87	44.6	28.5	7.5	97.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	27.9	3.5	22.9	33.8	10
EB LR	I-69 Express Lanes	30	16.8	1.3	15.6	19.8	10
NB T	Edloe St	153	0.9	0.2	0.7	1.2	10
NB TR	Edloe St	153	1.2	0.3	0.8	1.6	10
SB L	Edloe St	155	13.0	2.4	10.4	19.0	10
SB T	Edloe St	155	1.5	0.4	0.8	2.1	10
SB TR	Edloe St	155	1.5	0.3	1.0	2.0	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	14.7	10.0	7.3	39.3	10
NEB LT	Jensen Dr	346	0.1	0.0	0.0	0.1	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	1.5	0.9	0.0	3.3	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	11.0	3.4	6.4	16.9	10
WB R	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	43.1	5.4	37.1	54.1	10
EB T	Kelley St	313	20.8	2.5	18.3	26.1	10
EB TR	Kelley St	313	13.5	1.3	11.4	15.9	10
NB L	Lockwood Dr	308	29.8	4.0	23.3	35.7	10
NB T	Lockwood Dr	308	38.0	3.0	34.3	44.3	10
NB TR	Lockwood Dr	308	47.1	6.6	38.2	57.6	10
SB L	Lockwood Dr	311	15.9	2.9	11.4	20.4	10
SB T	Lockwood Dr	311	23.7	1.7	21.7	26.6	10
SB TR	Lockwood Dr	311	21.3	1.9	17.8	24.7	10
WB L	Kelley St	312	34.7	2.2	32.3	40.2	10
WB T	Kelley St	312	17.0	2.1	12.0	19.1	10
WB TR	Kelley St	312	17.7	12.1	11.3	51.7	10

LABRANCH ST & WHEELER AVE — NODE: 134

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	33.4	9.6	25.5	52.7	10
NWB LT	Wheeler Ave	77	7.0	10.9	0.2	30.5	10
NWB TR	Wheeler Ave	77	3.3	5.0	0.4	13.8	10
SEB LT	Wheeler Ave	86	3.0	0.8	1.6	4.7	10
SEB TR	Wheeler Ave	86	2.7	0.6	1.9	3.9	10
SWB LTR	LaBranch St	78	28.0	3.3	25.7	36.8	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	41.2	4.9	36.6	51.0	10
EB TR	Laura Koppe Rd	330	21.7	2.6	17.8	25.6	10
NB L	Lockwood Dr	560	11.1	3.9	6.8	19.6	10
NB T	Lockwood Dr	560	11.8	2.3	8.9	16.4	10
NB TR	Lockwood Dr	560	9.8	1.5	7.4	12.7	10
SB L	Lockwood Dr	327	5.0	1.3	2.8	6.4	10
SB T	Lockwood Dr	327	3.5	1.1	2.2	5.8	10
SB TR	Lockwood Dr	327	3.3	1.0	1.8	4.5	10
WB L	Laura Koppe Rd	329	40.1	2.4	35.8	42.5	10
WB TR	Laura Koppe Rd	329	29.6	2.2	26.3	33.8	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	249	2.3	0.9	1.1	3.8	10
NEB T	Lockwood Dr	249	29.5	1.1	27.8	31.0	10
SWB L	Lockwood Dr	253	13.9	2.6	9.6	18.2	10
SWB T	Lockwood Dr	253	15.6	1.1	13.8	16.4	10
WB LR	Armour Dr	659	17.5	2.1	13.8	19.7	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	248	32.4	2.4	28.5	35.9	10
EB R	Canal St	248	2.1	0.8	1.2	3.6	10
EB T	Canal St	248	28.2	3.5	22.8	32.1	10
NEB L	Lockwood Dr	241	11.5	0.9	10.3	12.9	10
NEB T	Lockwood Dr	241	6.1	0.7	5.1	7.6	10
NEB TR	Lockwood Dr	241	5.4	0.5	4.4	6.1	10
SWB L	Lockwood Dr	245	7.8	1.9	6.2	12.6	10
SWB T	Lockwood Dr	245	14.0	1.3	11.6	15.3	10
SWB TR	Lockwood Dr	245	13.8	1.4	11.4	15.8	10
WB LT	Canal St	247	34.8	3.2	30.7	41.9	10
WB TR	Canal St	247	24.8	1.6	22.3	27.1	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	31.8	4.1	25.4	37.0	10
EB T	Cavalcade St	299	22.4	3.5	18.4	29.2	10
EB TR	Cavalcade St	299	13.9	3.3	10.0	21.5	10
NB L	Lockwood Dr	292	15.1	3.8	8.6	18.8	10
NB T	Lockwood Dr	292	3.3	0.9	2.2	4.8	10
NB TR	Lockwood Dr	292	3.3	0.6	2.4	4.4	10
SB L	Lockwood Dr	296	36.1	2.5	32.7	40.5	10
SB T	Lockwood Dr	296	15.3	0.8	14.2	16.6	10
SB TR	Lockwood Dr	296	14.9	1.1	12.3	16.9	10
WB L	Cavalcade St	298	27.5	2.9	22.8	31.4	10
WB T	Cavalcade St	298	23.6	2.2	19.9	26.1	10
WB TR	Cavalcade St	298	16.3	1.3	14.5	18.0	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	45.7	4.1	39.2	52.0	10
EB T	Clinton Dr	259	33.3	2.8	29.5	36.5	10
EB TR	Clinton Dr	259	22.6	3.4	16.6	28.5	10
NEB L	Lockwood Dr	257	32.5	2.5	28.9	37.3	10
NEB R	Lockwood Dr	257	6.0	3.1	3.6	14.5	10
NEB T	Lockwood Dr	257	30.1	1.3	28.6	32.4	10
SB L	Lockwood Dr	256	24.6	2.9	21.5	28.9	10
SB R	Lockwood Dr	256	2.4	1.0	1.1	4.0	10
SB T	Lockwood Dr	256	7.2	0.5	6.1	7.7	10
WB L	Clinton Dr	258	40.4	2.3	36.0	43.2	10
WB R	Clinton Dr	258	4.7	0.5	3.6	5.5	10
WB T	Clinton Dr	258	28.0	2.0	24.4	31.1	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	48.7	4.5	40.3	56.0	10
EB T	Collingsworth St	291	38.1	5.3	31.1	45.3	10
EB TR	Collingsworth St	291	9.7	1.5	6.4	11.7	10
NB L	Lockwood Dr	533	40.0	3.5	32.2	45.2	10
NB T	Lockwood Dr	533	6.6	0.7	5.8	7.7	10
NB TR	Lockwood Dr	533	5.3	0.6	4.3	6.4	10
SEB L	Lockwood Dr	288	34.4	7.6	21.9	47.1	10
SEB T	Lockwood Dr	288	1.7	0.4	1.3	2.3	10
SEB TR	Lockwood Dr	288	2.2	0.6	1.4	3.2	10
WB L	Collingsworth St	290	41.9	2.9	37.0	45.7	10
WB T	Collingsworth St	290	30.9	3.9	23.7	35.2	10
WB TR	Collingsworth St	290	18.7	2.1	15.7	22.2	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	30.9	1.8	27.6	33.7	10
NB L	Lockwood Dr	288	47.4	6.1	39.9	59.2	10
NB T	Lockwood Dr	288	8.9	0.8	7.7	10.0	10
NB TR	Lockwood Dr	288	7.8	1.0	6.5	9.9	10
SB L	Lockwood Dr	292	41.7	10.0	28.5	53.8	10
SB T	Lockwood Dr	292	0.6	0.2	0.3	0.8	10
SB TR	Lockwood Dr	292	0.7	0.2	0.4	1.0	10
WB LTR	Crane St	294	32.5	2.1	28.4	35.9	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	5.1	0.4	4.3	5.6	10
NB LT	Lockwood Dr	327	0.6	0.3	0.3	1.0	10
NB TR	Lockwood Dr	327	0.1	0.1	0.0	0.2	10
SB LT	Lockwood Dr	574	0.1	0.1	0.0	0.2	10
SB TR	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	7.9	1.1	6.5	9.4	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	39.1	5.9	30.7	47.2	10
EB R	Harrisburg Blvd	244	6.0	1.1	4.6	8.1	10
EB T	Harrisburg Blvd	244	18.0	1.8	15.6	22.0	10
NEB L	Lockwood Dr	237	69.5	12.0	57.9	92.7	10
NEB T	Lockwood Dr	237	34.2	12.1	22.9	55.7	10
NEB TR	Lockwood Dr	237	32.7	13.2	18.8	58.2	10
NWB L	Harrisburg Blvd	678	39.2	3.0	35.6	44.8	10
NWB R	Harrisburg Blvd	678	5.3	0.9	3.6	6.4	10
NWB T	Harrisburg Blvd	678	16.8	2.0	13.5	20.0	10
SB L	Lockwood Dr	241	42.2	5.5	35.7	52.2	10
SB T	Lockwood Dr	241	31.4	6.5	24.8	43.9	10
SB TR	Lockwood Dr	241	34.1	6.6	28.7	47.5	10
SEB T	LRT Line	675	22.6	2.1	20.5	27.8	10
WB T	LRT Line	676	4.3	2.3	2.0	9.5	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	41.6	11.0	27.3	64.6	10
NEB L	Lockwood Dr	253	7.6	2.0	4.9	11.3	10
NEB T	Lockwood Dr	253	1.6	0.2	1.3	1.9	10
NEB TR	Lockwood Dr	253	3.7	0.7	2.8	5.1	10
SWB L	Lockwood Dr	257	4.3	0.8	3.5	5.5	10
SWB T	Lockwood Dr	257	0.5	0.3	0.2	0.9	10
SWB TR	Lockwood Dr	257	0.2	0.1	0.1	0.3	10
WB LTR	Harvey Wilson Dr	497	39.7	13.5	16.6	56.3	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	8.4	2.2	6.1	13.1	10
NB LT	Lockwood Dr	281	0.1	0.1	0.0	0.4	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	478	0.2	0.1	0.0	0.5	10
SB TR	Lockwood Dr	478	0.8	0.2	0.5	1.1	10
WB LTR	Hershe St	513	9.0	2.8	4.5	12.3	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	39.9	0.8	38.9	41.7	10
EB LT	I-610 EBFR	307	38.8	0.9	37.6	40.3	10
EB TR	I-610 EBFR	307	13.9	2.0	10.8	17.1	10
NB R	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	545	46.3	3.5	41.3	50.6	10
SB L	Lockwood Dr	304	0.7	0.4	0.0	1.2	10
SB T	Lockwood Dr	304	1.0	0.3	0.6	1.5	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.5	0.5	0.0	1.2	10
NB T	Lockwood Dr	304	4.5	0.7	3.0	5.6	10
SB T	Lockwood Dr	308	43.8	1.7	41.4	47.7	10
WB L	I-610 WBFR	309	35.6	3.3	30.5	41.3	10
WB R	Lockwood Dr	308	1.0	0.3	0.6	1.5	10
WB T	I-610 WBFR	309	35.3	2.3	32.5	40.6	10
WB TR	I-610 WBFR	309	28.8	3.2	24.6	33.5	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	4.2	2.4	1.0	8.7	10
NB LT	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	560	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	6.1	2.0	4.1	9.9	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	21.9	2.2	19.1	25.2	10
NB L	Lockwood Dr	232	12.3	1.2	10.6	14.7	10
NB T	Lockwood Dr	232	1.6	0.2	1.4	1.8	10
NB TR	Lockwood Dr	232	3.3	2.3	1.5	7.6	10
SB L	Lockwood Dr	237	16.4	2.2	13.0	20.7	10
SB T	Lockwood Dr	237	7.2	0.7	6.4	8.5	10
SB TR	Lockwood Dr	237	6.7	0.7	5.7	8.0	10
WB LTR	McKinney St	239	20.6	2.9	16.9	25.1	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	19.2	8.7	5.6	30.5	10
NB LT	Lockwood Dr	478	6.9	1.3	5.4	9.5	10
NB T	Lockwood Dr	478	7.9	1.0	7.0	10.0	10
NB TR	Lockwood Dr	478	7.5	1.1	6.1	9.2	10
SB LT	Lockwood Dr	284	7.1	0.7	5.9	8.1	10
SB T	Lockwood Dr	284	6.3	0.7	5.4	7.6	10
SB TR	Lockwood Dr	284	5.4	1.3	4.1	8.5	10
WB LTR	Mulvey St	286	17.3	3.6	9.8	23.9	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	6.4	6.4	0.8	22.4	10
EB T	Munger St	460	13.0	3.6	9.1	20.2	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	15.6	5.0	7.7	24.4	10
WB T	Munger St	661	31.7	5.9	23.3	42.0	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	40.9	2.3	37.7	43.6	10
EB T	Navigation Blvd	252	20.6	1.6	18.0	22.3	10
EB TR	Navigation Blvd	252	18.8	1.6	15.4	20.7	10
NEB L	Lockwood Dr	245	43.8	4.3	35.2	49.2	10
NEB T	Lockwood Dr	245	19.9	1.7	16.8	23.1	10
NEB TR	Lockwood Dr	245	18.0	1.8	14.5	19.8	10
SWB L	Lockwood Dr	249	43.5	4.0	36.6	48.3	10
SWB R	Lockwood Dr	249	7.1	1.3	6.2	9.4	10
SWB T	Lockwood Dr	249	14.4	1.0	12.9	16.2	10
WB L	Navigation Blvd	251	41.5	3.2	35.9	45.6	10
WB T	Navigation Blvd	251	23.3	1.7	20.8	25.9	10
WB TR	Navigation Blvd	251	22.9	1.7	20.2	25.8	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	8.7	2.0	6.0	12.1	10
NB LT	Lockwood Dr	284	0.1	0.1	0.0	0.3	10
NB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	2.1	1.0	1.4	4.7	10
SB T	Lockwood Dr	524	0.7	0.1	0.5	0.8	10
SB TR	Lockwood Dr	524	0.5	0.4	0.1	1.4	10
WB LTR	Nichols St	525	9.4	1.9	7.1	13.7	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	15.9	1.6	13.7	18.2	10
NB LT	Lockwood Dr	300	0.4	0.1	0.3	0.6	10
NB TR	Lockwood Dr	300	0.1	0.1	0.0	0.2	10
SB LT	Lockwood Dr	545	0.2	0.1	0.1	0.3	10
SB TR	Lockwood Dr	545	0.4	0.1	0.3	0.5	10
WB LTR	Pardee St	546	14.6	3.7	9.5	21.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	35.4	2.2	32.8	39.3	10
NB LT	Lockwood Dr	296	1.8	0.6	1.3	3.0	10
NB TR	Lockwood Dr	296	1.1	0.4	0.6	1.9	10
SB LT	Lockwood Dr	300	5.9	0.7	4.9	7.1	10
SB TR	Lockwood Dr	300	4.1	0.2	3.8	4.6	10
WB LTR	Rand St	302	19.0	4.4	13.1	26.5	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	20.6	1.7	18.3	23.6	10
NB TR	Lockwood Dr	311	15.8	1.3	13.0	17.4	10
NEB LTR	Shreveport Blvd	316	23.7	4.3	17.2	30.7	10
SB L	Lockwood Dr	314	29.5	3.9	23.6	36.4	10
SB T	Lockwood Dr	314	1.4	0.4	0.8	2.0	10
SB TR	Lockwood Dr	314	1.3	0.3	0.9	1.8	10
SWB LTR	Shreveport Blvd	315	33.1	1.9	30.0	35.3	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	8.1	3.6	2.7	14.3	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	533	0.2	0.1	0.1	0.4	10
SB T	Lockwood Dr	533	0.2	0.2	0.0	0.4	10
SB TR	Lockwood Dr	533	2.1	2.8	0.0	6.3	10
WB LTR	Sudan St	534	9.1	2.7	5.5	13.0	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	43.4	9.5	26.1	57.9	10
EB TR	Weaver Rd	326	35.4	4.2	29.1	43.5	10
NB L	Lockwood Dr	320	34.6	4.7	27.1	44.4	10
NB T	Lockwood Dr	320	34.4	2.2	30.8	37.3	10
NB TR	Lockwood Dr	320	27.9	2.0	24.0	31.3	10
SB L	Lockwood Dr	324	31.3	7.0	23.5	41.3	10
SB T	Lockwood Dr	324	33.4	2.3	30.3	38.3	10
SB TR	Lockwood Dr	324	27.0	2.1	23.6	29.6	10
WB L	Weaver Rd	325	40.6	2.7	34.5	43.2	10
WB TR	Weaver Rd	325	39.9	2.6	35.3	43.6	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.4	0.1	0.3	0.4	10
EB LT	I-10 EBFR	268	8.6	0.5	7.5	9.5	10
EB T	I-10 EBFR	268	12.8	0.8	11.7	14.0	10
NB T	Lockwood Dr (NB)	264	30.2	2.0	27.7	34.2	10
NB TR	Lockwood Dr (NB)	264	26.0	3.2	22.9	32.2	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	9.0	1.3	7.8	11.3	10
NB LT	Lockwood Dr (NB)	270	6.2	0.8	5.5	8.0	10
NB T	Lockwood Dr (NB)	270	2.4	0.5	1.6	3.0	10
WB T	I-10 WBFR	276	35.2	2.5	31.2	39.4	10
WB TR	I-10 WBFR	276	18.8	1.7	15.3	20.1	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	5.4	2.2	2.4	9.3	10
EB T	Market St	262	0.9	1.0	0.2	2.4	10
NB LT	Lockwood Dr	499	5.1	1.1	3.5	6.6	10
NB TR	Lockwood Dr	499	54.1	153.9	3.9	492.2	10
WB T	Market St	266	31.1	2.7	27.7	36.9	10
WB TR	Market St	266	20.3	2.6	16.6	24.5	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	34.8	4.6	28.6	41.3	10
EB TR	I-10 EBFR	269	12.8	2.0	10.1	15.1	10
SB L	Lockwood Dr (SB)	267	12.9	1.5	11.1	15.1	10
SB LT	Lockwood Dr (SB)	267	2.2	1.1	1.5	5.3	10
SB T	Lockwood Dr (SB)	267	0.8	0.4	0.2	1.4	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	45.3	6.7	34.5	56.9	10
SB TR	Lockwood Dr (SB)	272	44.2	7.4	28.9	55.3	10
WB L	I-10 WBFR	273	2.6	0.4	2.3	3.1	10
WB LT	I-10 WBFR	273	2.9	0.2	2.6	3.2	10
WB T	I-10 WBFR	273	2.5	0.2	2.1	2.9	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	16.0	1.3	14.4	18.4	10
SB L	Lockwood Dr	515	9.9	4.6	1.9	19.9	10
SB T	Lockwood Dr	515	11.1	0.6	10.3	11.7	10
SB TR	Lockwood Dr	515	11.9	1.1	9.6	14.0	10
WB LT	Lyons Ave	279	12.8	1.2	10.6	14.4	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	33.8	3.3	29.4	39.2	10
EB TR	Market St	263	20.6	4.0	16.4	27.4	10
SB LT	Lockwood Dr (SB)	260	6.7	0.7	6.0	7.7	10
SB TR	Lockwood Dr (SB)	260	6.5	0.7	5.5	7.4	10
WB LT	Market St	262	4.5	0.9	3.2	5.8	10
WB T	Market St	262	3.5	1.3	0.9	5.8	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	3.6	0.8	2.8	5.5	10
NB L	Lockwood Dr (NB)	275	149.6	63.3	60.5	265.5	10
NB T	Lockwood Dr (NB)	275	9.5	3.7	6.3	17.3	10
NB TR	Lockwood Dr (NB)	275	7.5	3.1	4.9	14.6	10
WB TR	Lyons Ave	283	16.4	1.3	14.5	18.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	41.3	6.4	31.5	49.1	10
EB R	Bennington St	319	5.0	0.7	3.9	6.2	10
NB L	Lockwood Dr	314	3.9	0.8	2.9	5.2	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	317	3.9	0.7	3.0	4.7	10
SB TR	Lockwood Dr	317	2.8	0.6	2.1	3.7	10
WB LTR	Driveway	318	3.3	0.8	2.2	4.6	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	9.7	0.7	8.9	11.0	10
NB L	Lockwood Dr	317	3.0	1.1	1.4	5.2	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	3.6	2.1	0.0	7.2	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	DenmarkSt	549	10.2	1.2	6.9	11.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	18.8	1.5	16.9	21.4	10
NB TR	Spur 5 NBFR	219	6.3	1.1	4.8	7.4	10
NEB L	Elgin St	216	12.6	3.2	7.8	17.3	10
NEB T	Elgin St	216	3.3	0.5	2.7	4.6	10
SWB T	Lockwood Dr	218	11.3	1.5	10.1	15.1	10
SWB TR	Lockwood Dr	218	9.1	1.0	7.3	10.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	25.5	2.1	22.6	29.6	10
EB T	Polk St	235	28.0	1.0	26.5	29.5	10
EB TR	Polk St	235	27.1	2.0	24.1	30.6	10
NB L	Lockwood Dr	229	30.9	1.5	27.8	32.9	10
NB T	Lockwood Dr	229	12.9	0.9	11.9	14.0	10
NB TR	Lockwood Dr	229	13.1	1.3	10.8	15.1	10
SB L	Lockwood Dr	232	57.5	6.7	46.0	64.6	10
SB T	Lockwood Dr	232	26.4	1.2	24.8	28.6	10
SB TR	Lockwood Dr	232	21.8	1.4	20.1	25.4	10
WB L	Polk St	234	23.5	4.0	19.5	33.8	10
WB T	Polk St	234	27.8	3.0	24.6	32.5	10
WB TR	Polk St	234	22.4	2.6	19.2	27.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	24.3	3.7	18.2	30.1	10
EB T	Leeland St	227	9.4	0.8	7.9	10.7	10
NB LT	Lockwood Dr	230	11.6	0.7	10.6	13.1	10
NB T	Lockwood Dr	230	11.7	0.6	10.6	12.7	10
NB TR	Lockwood Dr	230	8.8	0.8	7.4	9.6	10
WB T	Telephone Rd	231	35.0	1.8	31.3	37.4	10
WB TR	Telephone Rd	231	19.9	1.7	18.0	23.5	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	25.1	2.2	22.2	29.5	10
NEB L	Main St	168	34.6	15.7	21.0	66.8	10
NEB R	Main St	168	8.9	1.8	6.3	11.4	10
NEB T	Main St	168	22.6	3.9	17.6	29.4	10
NWB L	Wheeler Ave	169	86.6	24.7	52.7	120.5	10
NWB T	Wheeler Ave	169	135.0	40.7	68.8	195.3	10
NWB TR	Wheeler Ave	169	66.2	10.4	47.4	74.9	10
SB T	LRT Line	674	0.2	0.6	0.0	1.8	10
SEB L	Richmond Ave	26	69.0	18.2	51.7	103.8	10
SEB T	Richmond Ave	26	55.7	16.6	37.7	79.0	10
SEB TR	Richmond Ave	26	51.9	11.0	34.7	65.7	10
SWB L	Main St	70	58.7	22.2	25.1	84.7	10
SWB TR	Main St	70	41.2	6.4	31.1	52.6	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	66.0	5.9	57.5	76.1	10
EB R	Richmond Ave	9	14.0	4.1	5.0	19.0	10
EB T	Richmond Ave	9	59.6	5.0	53.8	69.1	10
NB L	Buffalo Speedway	37	53.5	10.9	31.7	71.1	10
NB T	Buffalo Speedway	37	24.3	3.3	19.1	28.3	10
NB TR	Buffalo Speedway	37	38.5	7.5	27.5	49.3	10
SB L	Buffalo Speedway	36	57.7	5.9	47.7	70.0	10
SB T	Buffalo Speedway	36	34.8	1.6	30.6	36.2	10
SB TR	Buffalo Speedway	36	34.1	3.3	29.2	39.1	10
WB L	Richmond Ave	12	84.4	10.0	70.6	97.7	10
WB T	Richmond Ave	12	56.0	3.5	51.1	61.6	10
WB TR	Richmond Ave	12	57.1	2.8	52.4	61.5	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	11.5	1.7	9.1	14.2	10
EB T	Richmond Ave	163	3.2	0.4	2.3	3.9	10
EB TR	Richmond Ave	163	2.6	0.5	2.0	3.5	10
NB LTR	Dunlavy St	57	93.2	26.2	65.7	139.0	10
SB LTR	Dunlavy St	56	190.4	32.3	114.9	229.6	10
WB L	Richmond Ave	165	16.7	5.5	8.7	25.1	10
WB T	Richmond Ave	165	4.9	1.6	2.8	8.1	10
WB TR	Richmond Ave	165	4.3	1.2	3.1	6.5	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	18.7	2.5	14.5	21.0	10
EB T	Richmond Ave	12	15.3	1.6	12.6	16.9	10
EB TR	Richmond Ave	12	14.4	1.0	13.3	16.4	10
NB L	Eastside St	40	77.0	24.1	57.1	133.9	10
NB TR	Eastside St	40	17.9	3.2	12.7	22.7	10
SB L	Eastside St	39	56.2	5.3	47.4	64.7	10
SB TR	Eastside St	39	17.9	3.7	14.8	25.9	10
WB L	Richmond Ave	54	10.7	2.0	7.0	13.6	10
WB T	Richmond Ave	54	7.5	1.3	6.1	10.6	10
WB TR	Richmond Ave	54	5.2	1.1	4.1	7.9	10

RICHMOND AVE & EDLOE ST — NODE: 118

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	50.5	5.4	44.1	63.4	10
EB R	Richmond Ave	7	1.6	0.2	1.2	1.9	10
EB T	Richmond Ave	7	35.0	1.7	32.3	36.9	10
NB L	Edloe St	155	63.9	6.0	50.1	70.9	10
NB R	Edloe St	155	10.5	1.5	8.7	12.8	10
NB T	Edloe St	155	17.3	0.8	16.1	18.1	10
SB L	Edloe St	5	54.7	6.5	45.7	66.0	10
SB T	Edloe St	5	19.7	5.7	16.3	35.7	10
SB TR	Edloe St	5	17.3	1.8	14.2	19.8	10
WB L	Richmond Ave	9	86.6	3.0	79.7	88.8	10
WB T	Richmond Ave	9	69.1	3.0	63.7	72.8	10
WB TR	Richmond Ave	9	59.9	1.8	56.2	62.3	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	35.9	2.0	33.8	41.0	10
EB T	Richmond Ave	64	29.9	2.1	26.2	33.4	10
EB TR	Richmond Ave	64	28.4	2.5	25.0	32.8	10
NB TR	Greenbriar Dr	47	26.8	2.3	21.5	29.5	10
SB L	Greenbriar Dr	46	45.2	7.6	31.0	53.8	10
SB R	Greenbriar Dr	46	7.2	1.9	4.9	10.0	10
SB T	Greenbriar Dr	46	50.5	4.5	44.4	56.7	10
WB L	Richmond Ave	160	30.1	2.1	27.2	33.4	10
WB T	Richmond Ave	160	15.4	1.0	13.7	16.9	10
WB TR	Richmond Ave	160	15.7	0.9	14.4	16.9	10

RICHMOND AVE & HAZARD ST — NODE: 124

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	10.1	1.3	7.8	11.6	10
EB T	Richmond Ave	20	12.6	0.7	10.9	13.3	10
EB TR	Richmond Ave	20	11.6	1.2	9.5	13.1	10
NB LTR	Hazard St	51	230.0	42.9	149.4	303.0	10
SB LTR	Hazard St	50	418.2	212.1	141.3	734.1	10
WB L	Richmond Ave	162	9.5	1.6	7.0	12.1	10
WB T	Richmond Ave	162	4.5	0.5	3.8	5.1	10
WB TR	Richmond Ave	162	4.8	0.7	3.9	5.6	10

RICHMOND AVE & KIRBY DR — NODE: 121

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	77.5	13.9	54.0	99.7	10
EB T	Richmond Ave	54	31.3	2.6	27.9	35.7	10
EB TR	Richmond Ave	54	27.1	2.7	22.2	31.7	10
NB L	Kirby Dr	158	63.5	10.2	50.2	81.1	10
NB T	Kirby Dr	158	25.1	1.9	21.8	27.7	10
NB TR	Kirby Dr	158	24.6	2.0	20.7	26.7	10
SB L	Kirby Dr	44	60.9	7.8	50.7	80.3	10
SB T	Kirby Dr	44	33.2	1.4	31.1	35.4	10
SB TR	Kirby Dr	44	35.5	2.6	31.7	40.4	10
WB L	Richmond Ave	64	54.6	3.2	48.4	58.3	10
WB T	Richmond Ave	64	8.8	1.5	5.9	10.6	10
WB TR	Richmond Ave	64	7.3	1.6	4.6	9.1	10

RICHMOND AVE & MANDELL ST — NODE: 127

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	8.2	1.1	6.6	10.3	10
EB T	Richmond Ave	165	1.1	0.3	0.8	1.5	10
EB TR	Richmond Ave	165	1.1	0.4	0.8	2.0	10
NB LTR	Mandell St	59	42.6	2.1	40.6	46.5	10
SB LTR	Mandell St	58	45.0	5.6	35.1	54.0	10
WB L	Richmond Ave	23	5.9	1.2	4.4	8.6	10
WB T	Richmond Ave	23	0.8	0.5	0.2	1.5	10
WB TR	Richmond Ave	23	0.3	0.3	0.0	0.9	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	30.9	1.3	29.5	32.6	10
EB T	Richmond Ave	23	33.8	1.7	31.2	37.4	10
EB TR	Richmond Ave	23	32.0	2.7	29.6	38.5	10
NB L	Montrose Blvd	61	102.0	14.5	74.3	120.8	10
NB T	Montrose Blvd	61	87.2	13.0	67.6	100.9	10
NB TR	Montrose Blvd	61	81.9	10.3	66.1	93.6	10
SB L	Montrose Blvd	60	110.4	14.2	88.6	125.1	10
SB T	Montrose Blvd	60	53.4	10.7	37.5	67.3	10
SB TR	Montrose Blvd	60	56.4	8.1	42.3	68.0	10
WB L	Richmond Ave	166	65.9	23.9	48.8	130.0	10
WB T	Richmond Ave	166	40.1	4.9	33.1	47.1	10
WB TR	Richmond Ave	166	37.9	5.6	31.2	49.5	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	76.2	2.6	72.9	80.0	10
EB T	Richmond Ave	160	1.5	0.6	0.6	2.8	10
EB TR	Richmond Ave	160	1.7	0.9	0.6	3.7	10
NB T	Shepherd Dr	49	42.9	1.8	40.4	45.3	10
NB TR	Shepherd Dr	49	41.8	1.0	40.3	43.5	10
SB T	Shepherd Dr	48	43.1	2.9	37.0	46.8	10
SB TR	Shepherd Dr	48	43.0	2.5	39.5	46.2	10
WB L	Richmond Ave	20	41.7	5.3	33.5	53.7	10
WB T	Richmond Ave	20	12.1	1.4	10.3	14.5	10
WB TR	Richmond Ave	20	11.9	1.3	10.1	13.9	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	1.2	0.4	0.8	1.8	10
EB T	Richmond Ave	167	5.1	8.3	0.4	27.7	10
NEB LT	US 59 NBFR	69	34.1	2.2	30.9	37.9	10
NEB R	US 59 NBFR	69	6.1	2.1	3.9	9.1	10
NEB TR	US 59 NBFR	69	36.8	7.2	27.1	49.0	10
WB R	Richmond Ave	26	6.6	2.5	4.4	10.9	10
WB T	Richmond Ave	26	76.7	15.4	50.8	92.5	10
WB TR	Richmond Ave	26	35.8	8.7	21.4	44.6	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	32.3	4.0	26.4	37.5	10
EB TR	Richmond Ave	166	37.5	7.3	28.0	49.3	10
SWB LT	US 59 SBFR	65	47.5	2.9	44.1	51.9	10
SWB R	US 59 SBFR	65	7.3	1.0	5.9	8.9	10
SWB T	US 59 SBFR	65	39.8	4.9	32.7	47.6	10
WB L	Richmond Ave	167	1.2	0.2	1.0	1.6	10
WB T	Richmond Ave	167	0.0	0.0	0.0	0.1	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	13.7	2.4	10.7	16.7	10
EB T	Richmond Ave	162	4.1	2.4	2.9	11.0	10
EB TR	Richmond Ave	162	3.0	0.5	2.4	3.9	10
NB LTR	Woodhead St	53	158.9	46.3	81.7	208.3	10
SB LTR	Woodhead St	52	32.4	2.7	28.4	37.0	10
WB L	Richmond Ave	163	23.5	4.1	17.2	28.1	10
WB T	Richmond Ave	163	4.9	0.6	3.5	5.5	10
WB TR	Richmond Ave	163	4.2	0.5	3.5	5.3	10

S RICE AVE & WESTPARK DR — NODE: 110

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	146.7	21.1	129.3	189.7	10
EB T	Westpark Dr	140	65.9	17.5	40.6	95.5	10
EB TR	Westpark Dr	140	60.5	15.0	37.7	80.4	10
NB L	S Rice Ave	138	87.6	8.1	76.0	102.8	10
NB T	S Rice Ave	138	46.2	5.0	40.4	54.5	10
NB TR	S Rice Ave	138	52.4	7.3	45.6	68.6	10
SB L	S Rice Ave	137	71.1	11.1	59.7	90.2	10
SB R	S Rice Ave	137	5.3	1.1	3.4	7.0	10
SB T	S Rice Ave	137	39.3	1.8	37.0	41.8	10
WB L	Westpark Dr	770	31.9	4.3	26.8	37.7	10
WB T	Westpark Dr	770	19.7	1.9	17.1	23.1	10
WB TR	Westpark Dr	770	22.3	4.3	15.5	29.4	10

SAN JACINTO ST & WHEELER AVE — NODE: 133

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	40.8	23.2	14.1	75.0	10
NEB R	San Jacinto St	173	4.0	1.4	1.5	5.3	10
NEB T	San Jacinto St	173	19.6	3.6	13.7	25.1	10
NWB T	Wheeler Ave	86	90.7	56.3	28.3	188.1	10
NWB TR	Wheeler Ave	86	70.8	43.5	23.7	140.8	10
SEB LT	Wheeler Ave	172	14.2	4.4	9.6	25.3	10
SEB T	Wheeler Ave	172	13.0	4.0	8.0	21.1	10

TIDWELL RD & EDELL ST — NODE: 689

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	590	12.2	1.8	10.6	16.3	10
SB LTR	Edell St	589	15.1	1.7	12.9	18.6	10
WB LT	Tidwell Rd	591	0.2	0.1	0.0	0.3	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.1	10

TIDWELL RD & FRIENDLY RD — NODE: 677

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	12.9	5.3	5.2	19.3	10
EB T	Tidwell Rd	586	1.7	0.3	1.4	2.3	10
EB TR	Tidwell Rd	586	3.5	0.2	3.1	3.7	10
NB LTR	Friendly Rd	585	199.5	86.2	94.6	380.4	10
SB LTR	Friendly Rd	584	322.4	40.0	274.6	424.8	10
WB L	Tidwell Rd	338	7.5	3.2	3.7	12.6	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.0	10

TIDWELL RD & HIRSCH RD — NODE: 180

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	20.9	4.1	14.0	26.9	10
EB T	Tidwell Rd	338	8.2	0.7	6.6	9.0	10
EB TR	Tidwell Rd	338	7.1	0.8	5.4	8.5	10
NB L	Hirsch Rd	336	43.0	6.1	35.1	54.9	10
NB R	Hirsch Rd	336	28.1	3.5	24.5	34.7	10
NB T	Hirsch Rd	336	27.0	2.3	23.5	31.5	10
SB L	Hirsch Rd	335	35.4	4.2	27.7	40.3	10
SB R	Hirsch Rd	335	26.4	2.4	23.9	30.9	10
SB T	Hirsch Rd	335	26.7	2.6	22.4	30.4	10
WB L	Tidwell Rd	334	14.1	3.9	6.0	20.4	10
WB T	Tidwell Rd	334	2.2	0.4	1.6	2.8	10
WB TR	Tidwell Rd	334	2.2	0.5	1.5	3.2	10

TIDWELL RD & I-69 NBFR — NODE: 181

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	13.3	2.6	10.2	17.2	10
EB LT	Tidwell Rd	342	15.2	1.3	13.2	16.7	10
EB T	Tidwell Rd	342	20.2	0.9	18.9	21.5	10
NB L	I-69 NBFR	340	19.6	1.0	17.6	20.7	10
NB LT	I-69 NBFR	340	17.8	1.2	15.1	19.4	10
NB R	I-69 NBFR	340	4.8	0.4	4.2	5.4	10
NB T	I-69 NBFR	340	18.0	2.6	14.0	21.6	10
NB TR	I-69 NBFR	340	20.8	1.0	19.5	22.5	10
WB T	Tidwell Rd	586	17.5	6.1	14.4	34.7	10
WB TR	Tidwell Rd	586	11.0	0.9	9.6	12.6	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.5	0.1	0.2	0.6	10
EB T	Tidwell Rd	591	16.4	1.0	14.8	17.6	10
SB L	I-69 SBFR	649	19.9	1.8	17.1	23.1	10
SB LT	I-69 SBFR	649	18.6	0.9	17.2	19.5	10
SB R	I-69 SBFR	649	0.1	0.1	0.0	0.2	10
SB T	I-69 SBFR	649	17.6	0.9	15.8	18.5	10
WB L	Tidwell Rd	342	22.5	1.1	21.0	24.1	10
WB LT	Tidwell Rd	342	14.8	1.2	13.1	16.5	10
WB T	Tidwell Rd	342	11.3	0.7	10.0	12.5	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	44.7	2.4	40.6	47.8	10
EB T	Tidwell Rd	349	22.5	1.1	21.1	24.3	10
EB TR	Tidwell Rd	349	21.4	0.9	20.2	23.1	10
NB L	Jensen Dr	347	54.2	11.1	36.5	70.8	10
NB T	Jensen Dr	347	34.9	1.9	31.8	36.8	10
NB TR	Jensen Dr	347	34.2	1.9	32.5	37.8	10
SB L	Jensen Dr	346	42.6	3.1	37.2	46.1	10
SB T	Jensen Dr	346	26.7	2.0	23.8	30.1	10
SB TR	Jensen Dr	346	18.7	2.4	15.7	23.0	10
WB L	Tidwell Rd	348	31.8	2.4	27.6	35.3	10
WB T	Tidwell Rd	348	12.9	1.3	11.2	14.9	10
WB TR	Tidwell Rd	348	12.4	1.2	10.8	15.0	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Tidwell Rd	334	11.4	0.9	9.9	12.4	10
EB TR	Tidwell Rd	334	11.8	1.3	10.2	13.8	10
NB L	Lockwood Dr	574	41.3	3.8	36.2	47.2	10
NB T	Lockwood Dr	574	35.2	7.3	19.9	41.8	10
NB TR	Lockwood Dr	574	8.9	1.2	7.2	11.4	10
SB L	Lockwood Dr	331	45.8	24.1	15.0	83.7	10
SB T	Lockwood Dr	331	33.3	9.7	22.9	56.9	10
SB TR	Lockwood Dr	331	35.2	17.5	0.0	64.4	10
WB L	Tidwell Rd	333	30.4	2.8	26.8	34.5	10
WB T	Tidwell Rd	333	12.9	0.9	11.4	14.1	10
WB TR	Tidwell Rd	333	12.7	0.5	12.2	13.7	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	5.2		5.2	5.2	1
NB LTR	Edell St	589	0.0	0.0	0.0	0.0	10
SEB LTR	Edell St	592	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	12.3	1.2	10.4	13.9	10
EB TR	Westpark Dr	116	5.1	0.6	4.2	6.5	10
NB R	14th St	118	10.5	1.4	8.3	13.6	10
WB L	Westpark Dr	616	112.3		112.3	112.3	1
WB T	Westpark Dr	616	20.6	19.2	2.3	60.3	10

WESTPARK DR & ALDER DR — NODE: 360

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	768	0.1	0.1	0.0	0.4	10
EB TR	Westpark Dr	768	0.2	0.2	0.0	0.5	10
NB L	Alder Dr	767	20.3	2.8	17.2	25.3	10
NB R	Alder Dr	767	10.4	1.2	8.9	12.1	10
WB LT	Westpark Dr	133	3.0	0.5	2.5	4.0	10
WB T	Westpark Dr	133	0.4	0.3	0.0	0.9	10

WESTPARK DR & CHIMNEY ROCK RD — NODE: 109

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	110.1	15.7	80.0	127.4	10
EB T	Westpark Dr	133	58.9	17.4	36.7	82.1	10
EB TR	Westpark Dr	133	70.3	23.1	43.2	103.5	10
NB T	Chimney Rock Rd	135	40.6	2.2	37.3	43.1	10
NB TR	Chimney Rock Rd	135	42.8	2.3	39.0	45.5	10
SB L	Chimney Rock Rd	134	82.9	20.9	52.0	109.4	10
SB T	Chimney Rock Rd	134	15.9	2.3	12.9	19.1	10
SB TR	Chimney Rock Rd	134	15.2	1.9	12.3	18.8	10
WB L	Westpark Dr	136	47.4	3.1	43.8	53.8	10
WB T	Westpark Dr	136	17.8	3.6	12.6	24.8	10
WB TR	Westpark Dr	136	17.2	2.8	14.5	22.9	10

WESTPARK DR & EDLOE ST — NODE: 115

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	68.4	4.8	61.3	75.3	10
EB T	Westpark Dr	152	9.7	1.9	6.7	13.7	10
EB TR	Westpark Dr	152	9.4	1.5	6.9	12.0	10
NB R	Edloe St	29	6.3	1.1	4.2	7.9	10
NB T	Edloe St	29	40.4	1.1	38.7	42.4	10
SB LT	Edloe St	153	42.1	4.1	34.6	47.0	10
SB T	Edloe St	153	25.7	3.2	20.0	30.9	10
SB TR	Edloe St	153	19.2	2.5	15.6	23.4	10
WB LT	Westpark Dr	154	41.5	2.9	37.6	46.3	10
WB TR	Westpark Dr	154	28.3	1.6	25.3	30.1	10

WESTPARK DR & FONDREN RD — NODE: 102

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	242.3	21.0	205.0	278.3	10
EB T	Westpark Dr	114	229.6	15.1	196.2	249.1	10
EB TR	Westpark Dr	114	282.0	23.3	231.6	308.8	10
NB L	Fondren Rd	110	30.2	4.0	23.5	36.2	10
NB T	Fondren Rd	110	8.8	1.4	7.0	10.6	10
NB TR	Fondren Rd	110	10.9	1.5	8.6	12.8	10
SB L	Fondren Rd	112	164.6	60.3	115.2	312.0	10
SB T	Fondren Rd	112	43.3	2.4	39.6	47.4	10
SB TR	Fondren Rd	112	42.1	2.5	38.4	46.1	10
WB L	Westpark Dr	113	176.9	105.5	105.3	451.9	10
WB T	Westpark Dr	113	43.5	9.5	36.9	69.3	10
WB TR	Westpark Dr	113	51.5	9.2	43.8	75.8	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	113.7	22.2	80.6	143.1	10
EB T	Westpark Dr	113	50.3	7.5	41.5	66.7	10
EB TR	Westpark Dr	113	75.1	12.1	62.4	104.0	10
NB L	Hillcroft Ave	3	321.3	37.0	272.8	374.3	10
NB T	Hillcroft Ave	3	51.0	4.4	45.7	61.0	10
NB TR	Hillcroft Ave	3	54.9	3.4	50.7	63.5	10
SB L	Hillcroft Ave	115	273.0	81.4	156.3	393.2	10
SB T	Hillcroft Ave	115	82.5	22.2	49.6	115.2	10
SB TR	Hillcroft Ave	115	91.1	27.3	50.7	131.5	10
WB L	Westpark Dr	116	68.6	9.1	55.8	80.3	10
WB T	Westpark Dr	116	67.2	11.0	51.1	82.9	10
WB TR	Westpark Dr	116	125.9	21.3	89.1	147.0	10

WESTPARK DR & I-610 NBFR — NODE: 112

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	24.8	1.2	23.2	26.2	10
EB T	Westpark Dr	143	10.8	1.0	9.3	11.9	10
NB L	I-610 NBFR	145	49.5	2.6	47.4	55.3	10
NB LT	I-610 NBFR	145	50.2	2.1	47.2	53.5	10
NB TR	I-610 NBFR	145	47.9	2.0	45.5	50.8	10
WB T	Westpark Dr	772	39.5	1.5	37.7	43.2	10
WB TR	Westpark Dr	772	33.7	2.4	29.2	36.6	10

WESTPARK DR & I-610 SBFR — NODE: 111

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	5.2	1.2	3.6	6.9	10
EB T	Westpark Dr	629	177.3	11.4	159.0	189.5	10
SB L	I-610 SBFR	141	52.6	2.6	48.8	56.1	10
SB T	I-610 SBFR	141	47.7	3.8	42.1	53.7	10
WB L	Westpark Dr	143	30.0	1.6	26.4	32.0	10
WB T	Westpark Dr	143	12.6	1.2	10.6	14.3	10

WESTPARK DR & I-69 NBFR — NODE: 106

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	16.7	2.6	11.0	20.0	10
EB LT	Westpark Dr	123	18.9	1.7	15.8	20.9	10
EB T	Westpark Dr	123	30.1	10.2	20.3	53.4	10
NEB L	I-69 NBFR	126	22.7	1.3	19.9	24.7	10
NEB R	I-69 NBFR	126	11.5	1.3	9.2	13.1	10
NEB T	I-69 NBFR	126	18.7	1.1	16.7	20.0	10
WB R	Westpark Dr	127	3.7	1.5	1.8	6.2	10
WB T	Westpark Dr	127	22.3	0.8	21.5	24.3	10

WESTPARK DR & I-69 SBFR — NODE: 105

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	616	35.6	5.1	27.5	43.1	10
SWB L	I-69 SBFR	121	29.0	3.9	24.9	35.7	10
SWB LT	I-69 SBFR	121	26.4	5.7	19.8	35.9	10
SWB R	I-69 SBFR	121	1.2	3.0	0.0	9.6	10
SWB T	I-69 SBFR	121	19.5	1.3	17.7	21.4	10
WB L	Westpark Dr	123	33.7	3.6	28.7	40.7	10
WB T	Westpark Dr	123	10.2	1.2	8.3	12.1	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	772	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	772	0.0	0.0	0.0	0.0	10
NB LR	Loop Central Dr	771	15.5	1.5	12.9	17.8	10
WB L	Westpark Dr	146	10.2	1.0	8.2	11.5	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	65.9	4.9	57.9	74.0	10
EB T	Westpark Dr	146	20.2	0.9	18.8	21.2	10
EB TR	Westpark Dr	146	20.1	1.5	17.5	23.2	10
NB L	Newcastle Dr	148	190.2	36.9	108.3	233.2	10
NB T	Newcastle Dr	148	73.2	12.2	50.1	97.2	10
NB TR	Newcastle Dr	148	57.5	9.6	42.2	78.5	10
SB LT	Newcastle Dr	147	47.7	1.5	45.8	50.7	10
SB TR	Newcastle Dr	147	23.9	3.9	18.6	32.6	10
WB L	Westpark Dr	149	70.0	20.4	49.1	110.7	10
WB T	Westpark Dr	149	23.1	1.9	20.7	26.3	10
WB TR	Westpark Dr	149	23.3	1.3	21.4	25.4	10

WESTPARK DR & RAMPART ST — NODE: 107

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	8.2	0.5	7.6	8.9	10
EB TR	Westpark Dr	127	8.9	0.5	8.2	9.7	10
NB LT	Rampart St	129	149.1	35.5	91.0	203.9	10
NB TR	Rampart St	129	38.6	6.1	28.0	48.6	10
SB LTR	Rampart St	128	31.2	2.8	26.3	36.7	10
WB LT	Westpark Dr	130	6.3	0.7	5.8	8.2	10
WB TR	Westpark Dr	130	4.2	0.9	3.3	5.7	10

WESTPARK DR & ROYALTON ST — NODE: 309

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	6.1	6.4	0.6	15.6	10
EB TR	Westpark Dr	136	4.1	4.6	0.1	11.3	10
NB LR	Royalton St	384	149.6	47.8	52.3	198.5	10
WB L	Westpark Dr	140	16.5	2.6	12.8	21.5	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.0	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	770	14.1	6.4	9.0	24.7	10
EB TR	Westpark Dr	770	11.4	4.2	8.0	18.7	10
NB LR	Uptown Transit Ctr	769	48.3	12.2	34.4	66.7	10
WB L	Westpark Dr	629	62.7	20.9	19.9	88.9	10
WB T	Westpark Dr	629	2.2	0.5	1.6	3.2	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	64.8	6.1	54.6	71.5	10
EB T	Westpark Dr	149	31.9	4.3	24.7	37.3	10
EB TR	Westpark Dr	149	26.6	3.7	19.4	32.4	10
NB L	Weslayan St	151	59.1	7.4	47.5	68.9	10
NB T	Weslayan St	151	29.8	3.9	24.3	35.7	10
NB TR	Weslayan St	151	23.6	2.5	21.1	27.3	10
SB L	Weslayan St	150	64.2	8.0	56.8	78.5	10
SB T	Weslayan St	150	34.3	1.9	30.8	36.5	10
SB TR	Weslayan St	150	37.2	2.6	33.0	41.4	10
WB L	Westpark Dr	152	79.6	6.5	72.4	90.9	10
WB T	Westpark Dr	152	33.0	4.7	27.9	44.7	10
WB TR	Westpark Dr	152	32.0	4.6	26.1	41.5	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR — NODE: 108

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	52.6	3.4	45.5	57.5	10
EB T	Westpark Dr	130	26.6	1.1	25.4	28.8	10
EB TR	Westpark Dr	130	27.2	1.7	25.0	29.8	10
NB L	Renwick Dr	132	59.3	5.6	48.1	68.7	10
NB T	Renwick Dr	132	38.8	1.6	35.8	41.1	10
NB TR	Renwick Dr	132	36.6	1.8	33.3	39.2	10
SB L	Fountain View Dr	131	52.0	2.7	48.0	55.7	10
SB T	Fountain View Dr	131	30.4	2.5	27.3	34.5	10
SB TR	Fountain View Dr	131	28.9	2.4	24.3	33.3	10
WB L	Westpark Dr	768	85.1	9.6	72.8	100.8	10
WB T	Westpark Dr	768	18.6	2.0	13.6	21.4	10
WB TR	Westpark Dr	768	14.7	2.4	11.5	19.4	10

WHEELER AVE & HUTCHINS ST — NODE: 367

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	[Unnamed Street]	707	11.0	1.3	8.7	12.5	10
NEB TR	[Unnamed Street]	707	14.3	3.7	7.9	18.9	10
NWB T	Wheeler Ave	423	10.3	2.0	6.9	13.5	10
NWB TR	Wheeler Ave	423	7.8	1.6	5.2	9.4	10
SEB L	Wheeler Ave	421	8.5	2.1	5.1	11.4	10
SEB T	Wheeler Ave	421	13.7	1.0	12.0	14.8	10
SWB LR	Hutchins St	422	6.9	1.1	5.3	8.2	10

Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	12.6	5.8	7.3	25.8	10
135	Almeda Rd & Wheeler Ave	Actuated	8.2	0.4	7.6	8.9	10
292	Cleburne St & Ennis St	Actuated	2.1	0.2	1.8	2.4	10
176	Crosstimbers St & Lockwood Dr	Actuated	9.7	0.2	9.2	9.9	10
144	Cullen Blvd & Elgin St	Actuated	12.8	0.5	12.2	13.9	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	122.0	6.2	111.4	130.9	10
249	Elgin St & Ennis St	Actuated	4.4	0.2	4.2	4.7	10
143	Elgin St & Scott St	Actuated	17.3	1.1	16.0	20.0	10
146	Elgin St & Spur 5 SBFR	Actuated	4.8	0.2	4.4	5.1	10
145	Elgin St & UH Entrance	Actuated	3.0	0.3	2.7	3.5	10
136	Emancipation Ave & Wheeler Ave	Actuated	3.9	0.2	3.6	4.2	10
306	Ennis St & Holman St	Actuated	1.7	0.1	1.6	1.9	10
266	Ennis St & Wheeler Ave	Actuated	1.2	0.1	1.0	1.3	10
149	Ernestine St & Leeland St	Actuated	3.1	0.3	2.7	3.5	10
452	Ernestine St & Munger St	Stop	0.3	0.1	0.3	0.5	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	9.8	0.4	9.1	10.5	10
132	Fannin St & Wheeler Ave	Actuated	8.5	0.7	7.8	10.0	10
116	I-69 Express Lanes & Edloe St	Actuated	3.7	0.4	3.2	4.3	10
705	Jensen Dr & Turner Dr	Stop	0.0	0.0	0.0	0.1	10
173	Kelley St & Lockwood Dr	Actuated	11.7	0.8	10.4	12.8	10
134	LaBranch St & Wheeler Ave	Actuated	1.5	0.2	1.3	1.8	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	4.6	0.3	4.2	5.1	10
156	Lockwood Dr & Armour Dr	Actuated	7.8	0.3	7.5	8.2	10
154	Lockwood Dr & Canal St	Actuated	8.4	0.6	7.2	9.2	10
169	Lockwood Dr & Cavalcade St	Actuated	9.0	0.8	8.2	11.1	10
157	Lockwood Dr & Clinton Dr	Actuated	9.6	2.4	8.6	16.5	10
167	Lockwood Dr & Collingsworth St	Actuated	11.5	1.4	9.3	13.3	10
168	Lockwood Dr & Crane St	Actuated	4.8	0.3	4.4	5.2	10
659	Lockwood Dr & Firnat St	Stop	0.5	0.1	0.4	0.7	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	19.0	1.7	17.3	21.6	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	4.4	0.8	3.6	5.9	10
534	Lockwood Dr & Hershe St	Stop	0.2	0.0	0.1	0.2	10
171	Lockwood Dr & I-610 EBFR	Actuated	15.0	1.6	13.2	17.4	10
172	Lockwood Dr & I-610 WBFR	Actuated	9.9	0.4	9.3	10.4	10
641	Lockwood Dr & Keeland St	Stop	0.0	0.0	0.0	0.1	10
152	Lockwood Dr & McKinney St	Actuated	3.6	0.2	3.4	3.9	10
166	Lockwood Dr & Mulvey St	Actuated	0.7	0.1	0.5	0.9	10
453	Lockwood Dr & Munger St	Stop	0.4	0.1	0.3	0.5	10
155	Lockwood Dr & Navigation Blvd	Actuated	14.9	0.4	14.3	15.7	10
567	Lockwood Dr & Nichols St	Stop	0.3	0.0	0.2	0.4	10
604	Lockwood Dr & Pardee St	Stop	0.8	0.3	0.6	1.4	10
170	Lockwood Dr & Rand St	Actuated	3.6	0.3	3.1	4.1	10
174	Lockwood Dr & Shreveport Blvd	Actuated	5.3	0.2	5.0	5.8	10
576	Lockwood Dr & Sudan St	Stop	0.2	0.0	0.1	0.2	10
177	Lockwood Dr & Weaver Rd	Actuated	11.1	1.4	9.6	14.3	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	9.3	1.1	8.2	11.3	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	3.8	0.1	3.6	4.0	10
159	Lockwood Dr (NB) & Market St	Actuated	3.8	0.8	3.1	5.9	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	7.2	1.6	5.6	9.7	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	7.3	0.9	5.8	8.9	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	4.2	0.4	3.7	5.0	10
158	Lockwood Dr (SB) & Market St	Actuated	2.2	0.2	2.0	2.4	10

165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	3.4	0.4	2.8	4.2	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	1.5	0.2	1.2	1.8	10
623	Lockwood Dr, Denmark St & DenmarkSt	Stop	0.4	0.1	0.3	0.5	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	5.5	0.2	5.0	5.9	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	14.0	0.5	13.4	14.6	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	5.1	0.3	4.8	5.6	10
131	Main St, Richmond Ave & Wheeler Ave	Actuated	27.7	3.7	22.9	34.8	10
119	Richmond Ave & Buffalo Speedway	Actuated	56.3	7.5	39.7	62.2	10
126	Richmond Ave & Dunlavy St	Actuated	35.8	2.3	31.0	38.2	10
120	Richmond Ave & Eastside St	Actuated	10.5	1.3	8.5	12.5	10
118	Richmond Ave & Edloe St	Actuated	42.0	2.5	38.6	45.6	10
122	Richmond Ave & Greenbriar Dr	Actuated	14.1	0.7	13.2	15.3	10
124	Richmond Ave & Hazard St	Actuated	53.4	7.8	42.1	64.3	10
121	Richmond Ave & Kirby Dr	Actuated	88.6	10.1	74.3	105.0	10
127	Richmond Ave & Mandell St	Actuated	26.7	2.0	23.8	30.6	10
128	Richmond Ave & Montrose Blvd	Actuated	53.2	1.8	50.4	57.4	10
123	Richmond Ave & Shepherd Dr	Actuated	11.2	0.7	10.1	12.0	10
130	Richmond Ave & US 59 NBFR	Actuated	9.5	0.9	7.8	11.2	10
129	Richmond Ave & US 59 SBFR	Actuated	34.9	3.0	31.3	38.9	10
125	Richmond Ave & Woodhead St	Actuated	11.6	1.6	9.1	14.1	10
110	S Rice Ave & Westpark Dr	Actuated	56.6	4.0	50.4	64.0	10
133	San Jacinto St & Wheeler Ave	Actuated	12.8	0.4	12.4	13.5	10
689	Tidwell Rd & Edell St	Stop	0.5	0.1	0.3	0.5	10
677	Tidwell Rd & Friendly Rd	Stop	10.3	0.9	9.1	11.7	10
180	Tidwell Rd & Hirsch Rd	Actuated	7.3	0.4	6.9	8.1	10
181	Tidwell Rd & I-69 NBFR	Pretimed	15.7	0.2	15.4	16.1	10
182	Tidwell Rd & I-69 SBFR	Pretimed	12.4	1.4	11.1	16.0	10
183	Tidwell Rd & Jensen Dr	Actuated	20.9	1.0	19.4	23.3	10
179	Tidwell Rd & Lockwood Dr	Actuated	13.0	1.5	10.3	15.7	10
690	Turner Dr & Edell St	Stop	0.0	0.0	0.0	0.0	10
104	Westpark Dr & 14th St	Actuated	13.9	1.9	10.8	16.5	10
360	Westpark Dr & Alder Dr	Stop	1.7	0.2	1.5	2.2	10
109	Westpark Dr & Chimney Rock Rd	Actuated	28.7	0.9	27.6	30.2	10
115	Westpark Dr & Edloe St	Actuated	18.5	1.0	17.4	20.1	10
102	Westpark Dr & Fondren Rd	Actuated	162.2	13.5	141.5	176.6	10
103	Westpark Dr & Hillcroft Ave	Actuated	111.5	9.6	92.4	122.4	10
112	Westpark Dr & I-610 NBFR	Actuated	44.9	6.4	32.3	54.2	10
111	Westpark Dr & I-610 SBFR	Actuated	16.9	1.3	14.8	18.3	10
106	Westpark Dr & I-69 NBFR	Actuated	12.8	0.9	11.6	14.4	10
105	Westpark Dr & I-69 SBFR	Actuated	17.0	2.1	15.4	22.2	10
394	Westpark Dr & Loop Central Dr	Stop	12.9	1.2	11.5	15.0	10
113	Westpark Dr & Newcastle Dr	Actuated	24.0	0.6	23.2	25.1	10
107	Westpark Dr & Rampart St	Actuated	6.3	1.3	5.1	9.4	10
309	Westpark Dr & Royalton St	Stop	15.3	0.5	14.5	15.9	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	15.3	9.9	1.7	29.1	10
114	Westpark Dr & Weslayan St	Actuated	42.7	4.1	39.0	50.9	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	23.8	2.6	21.4	28.5	10
367	Wheeler Ave & Hutchins St	Stop	23.5	1.7	20.8	25.1	10

Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	41.2	19.5	24.3	86.2	10
135	Almeda Rd & Wheeler Ave	Actuated	19.2	0.8	18.4	20.9	10

292	Cleburne St & Ennis St	Actuated	10.0	0.6	8.7	10.9	10
176	Crosstimbers St & Lockwood Dr	Actuated	23.0	0.5	22.2	23.6	10
144	Cullen Blvd & Elgin St	Actuated	31.5	1.0	30.4	33.4	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	159.0	9.2	144.2	175.5	10
249	Elgin St & Ennis St	Actuated	17.5	0.5	16.9	18.4	10
143	Elgin St & Scott St	Actuated	30.0	1.6	28.6	34.1	10
146	Elgin St & Spur 5 SBFR	Actuated	12.0	0.4	11.3	12.4	10
145	Elgin St & UH Entrance	Actuated	10.2	0.9	9.2	11.6	10
136	Emancipation Ave & Wheeler Ave	Actuated	13.3	0.6	12.5	14.3	10
306	Ennis St & Holman St	Actuated	11.3	0.5	10.6	11.9	10
266	Ennis St & Wheeler Ave	Actuated	6.3	0.6	5.5	7.2	10
149	Ernestine St & Leeland St	Actuated	10.0	0.8	8.9	11.0	10
452	Ernestine St & Munger St	Stop	1.2	0.2	1.0	1.6	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	13.5	0.4	12.8	14.1	10
132	Fannin St & Wheeler Ave	Actuated	19.8	1.7	18.2	23.3	10
116	I-69 Express Lanes & Edloe St	Actuated	9.5	0.9	8.2	10.9	10
705	Jensen Dr & Turner Dr	Stop	0.1	0.1	0.0	0.2	10
173	Kelley St & Lockwood Dr	Actuated	23.8	1.4	22.1	25.9	10
134	LaBranch St & Wheeler Ave	Actuated	5.2	0.4	4.6	5.8	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	17.0	0.5	16.3	18.1	10
156	Lockwood Dr & Armour Dr	Actuated	24.6	0.8	23.7	25.8	10
154	Lockwood Dr & Canal St	Actuated	16.6	1.0	14.8	18.1	10
169	Lockwood Dr & Cavalcade St	Actuated	17.1	1.3	15.6	20.3	10
157	Lockwood Dr & Clinton Dr	Actuated	21.6	5.7	19.2	37.7	10
167	Lockwood Dr & Collingsworth St	Actuated	23.3	2.9	18.9	27.2	10
168	Lockwood Dr & Crane St	Actuated	11.5	0.7	10.7	12.7	10
659	Lockwood Dr & Firnat St	Stop	2.8	0.5	2.1	3.6	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	32.9	2.5	30.7	37.0	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	12.4	2.2	10.2	16.6	10
534	Lockwood Dr & Hershe St	Stop	0.5	0.1	0.4	0.6	10
171	Lockwood Dr & I-610 EBFR	Actuated	29.5	2.9	26.3	34.1	10
172	Lockwood Dr & I-610 WBFR	Actuated	18.2	0.8	16.8	19.3	10
641	Lockwood Dr & Keeland St	Stop	0.2	0.1	0.1	0.3	10
152	Lockwood Dr & McKinney St	Actuated	9.3	0.3	8.5	9.7	10
166	Lockwood Dr & Mulvey St	Actuated	2.0	0.3	1.5	2.5	10
453	Lockwood Dr & Munger St	Stop	1.4	0.2	1.0	1.8	10
155	Lockwood Dr & Navigation Blvd	Actuated	24.5	0.6	23.3	25.1	10
567	Lockwood Dr & Nichols St	Stop	0.8	0.1	0.7	1.0	10
604	Lockwood Dr & Pardee St	Stop	1.8	0.7	1.3	3.1	10
170	Lockwood Dr & Rand St	Actuated	8.4	0.6	7.5	9.3	10
174	Lockwood Dr & Shreveport Blvd	Actuated	18.8	0.7	17.8	19.9	10
576	Lockwood Dr & Sudan St	Stop	0.5	0.1	0.3	0.6	10
177	Lockwood Dr & Weaver Rd	Actuated	40.2	4.4	35.8	50.6	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	23.9	2.5	21.6	28.3	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	10.8	0.3	10.0	11.2	10
159	Lockwood Dr (NB) & Market St	Actuated	14.6	2.8	12.0	21.7	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	20.6	4.1	16.0	27.0	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	23.8	2.9	19.6	29.4	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	15.0	1.6	13.0	17.7	10
158	Lockwood Dr (SB) & Market St	Actuated	9.3	0.6	8.4	10.2	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	11.0	1.5	8.9	13.7	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	6.6	0.6	5.5	7.4	10
623	Lockwood Dr, Denmark St & DenmarkSt	Stop	1.7	0.3	1.4	2.2	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	12.3	0.4	11.7	12.8	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	27.1	0.5	26.0	27.6	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	14.6	0.5	13.8	15.4	10
131	Main St, Richmond Ave & Wheeler Ave	Actuated	53.8	7.0	44.4	67.8	10
119	Richmond Ave & Buffalo Speedway	Actuated	56.9	8.0	39.9	62.7	10
126	Richmond Ave & Dunlavy St	Actuated	71.7	4.2	63.3	75.9	10
120	Richmond Ave & Eastside St	Actuated	15.7	1.9	12.6	18.5	10
118	Richmond Ave & Edloe St	Actuated	46.4	2.4	42.8	49.8	10
122	Richmond Ave & Greenbriar Dr	Actuated	28.6	1.1	26.6	29.9	10

124	Richmond Ave & Hazard St	Actuated	138.3	19.9	112.2	169.3	10
121	Richmond Ave & Kirby Dr	Actuated	74.7	8.2	62.0	87.3	10
127	Richmond Ave & Mandell St	Actuated	54.0	4.0	48.2	60.8	10
128	Richmond Ave & Montrose Blvd	Actuated	56.5	2.1	53.8	60.4	10
123	Richmond Ave & Shepherd Dr	Actuated	24.8	1.2	22.3	26.4	10
130	Richmond Ave & US 59 NBFR	Actuated	18.1	2.0	14.7	22.4	10
129	Richmond Ave & US 59 SBFR	Actuated	61.5	6.0	54.1	70.2	10
125	Richmond Ave & Woodhead St	Actuated	26.2	3.3	20.7	31.4	10
110	S Rice Ave & Westpark Dr	Actuated	59.9	4.5	53.0	67.6	10
133	San Jacinto St & Wheeler Ave	Actuated	22.3	0.3	21.9	22.9	10
689	Tidwell Rd & Edell St	Stop	0.9	0.1	0.6	1.0	10
677	Tidwell Rd & Friendly Rd	Stop	15.8	1.4	14.1	18.1	10
180	Tidwell Rd & Hirsch Rd	Actuated	10.0	0.5	9.5	11.0	10
181	Tidwell Rd & I-69 NBFR	Pretimed	17.2	0.3	16.9	17.7	10
182	Tidwell Rd & I-69 SBFR	Pretimed	15.9	1.7	14.5	20.5	10
183	Tidwell Rd & Jensen Dr	Actuated	28.5	1.2	26.5	30.9	10
179	Tidwell Rd & Lockwood Dr	Actuated	20.7	2.3	16.5	24.7	10
690	Turner Dr & Edell St	Stop	4.1		4.1	4.1	1
104	Westpark Dr & 14th St	Actuated	18.2	2.4	14.4	21.7	10
360	Westpark Dr & Alder Dr	Stop	3.5	0.5	3.0	4.5	10
109	Westpark Dr & Chimney Rock Rd	Actuated	35.9	1.1	34.6	38.0	10
115	Westpark Dr & Edloe St	Actuated	28.0	1.0	26.6	29.4	10
102	Westpark Dr & Fondren Rd	Actuated	126.5	11.1	110.3	140.1	10
103	Westpark Dr & Hillcroft Ave	Actuated	75.3	7.4	61.2	83.9	10
112	Westpark Dr & I-610 NBFR	Actuated	55.2	8.1	40.7	66.8	10
111	Westpark Dr & I-610 SBFR	Actuated	19.8	1.2	18.0	21.5	10
106	Westpark Dr & I-69 NBFR	Actuated	18.8	1.2	17.3	20.8	10
105	Westpark Dr & I-69 SBFR	Actuated	16.8	1.8	15.4	21.3	10
394	Westpark Dr & Loop Central Dr	Stop	25.3	2.3	23.2	29.9	10
113	Westpark Dr & Newcastle Dr	Actuated	36.9	0.7	36.3	38.6	10
107	Westpark Dr & Rampart St	Actuated	13.1	2.9	11.0	20.6	10
309	Westpark Dr & Royalton St	Stop	27.5	1.1	25.9	29.0	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	28.9	18.9	3.2	55.4	10
114	Westpark Dr & Weslayan St	Actuated	45.8	4.1	41.8	54.0	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	34.1	3.0	32.1	39.5	10
367	Wheeler Ave & Hutchins St	Stop	91.0	6.6	81.3	100.0	10

Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	2.3	1.6	1.0	6.1	10
NW	Alabama St	197	3.8	1.5	2.6	7.1	10
SE	Alabama St	193	4.9	2.8	2.4	11.7	10
SW	Ennis St	740	1.6	0.6	1.0	2.8	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	2.1	0.2	1.9	2.4	10
NW	Wheeler Ave	176	2.0	0.1	1.9	2.2	10
S	Almeda Rd	174	2.2	0.3	1.7	2.7	10
SE	Wheeler Ave	77	1.9	0.2	1.7	2.1	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	0.6	0.0	0.5	0.7	10
NW	Cleburne St	733	1.0	0.1	0.8	1.2	10
SE	Cleburne St	731	0.3	0.1	0.1	0.3	10
SW	Ennis St	732	0.3	0.1	0.2	0.4	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	2.6	0.2	2.3	2.8	10
N	Lockwood Dr	321	3.1	0.2	2.8	3.4	10
S	Lockwood Dr	320	1.7	0.1	1.6	1.8	10
W	Crosstimbers St	322	2.2	0.2	1.8	2.5	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	2.5	0.2	2.2	2.7	10
NE	Cullen Blvd	207	3.8	0.3	3.3	4.2	10
S	Cullen Blvd	206	3.8	0.3	3.2	4.2	10
W	Elgin St	208	2.7	0.2	2.4	3.2	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	35.3	4.5	26.1	40.9	10
N	Fondren Rd	38	85.4	4.8	73.6	91.1	10
S	Fondren Rd	110	1.4	0.2	1.1	1.7	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	0.7	0.1	0.5	0.9	10
NW	Elgin St	701	2.6	0.2	2.4	2.9	10
SE	Elgin St	700	0.9	0.1	0.7	1.0	10
SW	Ennis St	195	0.3	0.1	0.3	0.4	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	3.9	0.5	3.4	5.1	10
N	Scott St	667	1.0	1.0	0.0	2.2	10
S	Scott St	671	3.9	0.5	3.3	4.8	10
SW	LRT Line	669	0.0	0.0	0.0	0.1	10
W	Elgin St	204	7.5	0.4	6.9	8.3	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	2.2	0.1	2.1	2.4	10
S	Spur 5 SBFR	214	1.4	0.1	1.2	1.6	10
SW	Elgin St	216	1.1	0.1	1.0	1.3	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	0.4	0.1	0.3	0.5	10
N	UH Entrance	211	1.5	0.3	1.1	1.9	10
SW	UH Entrance	210	0.6	0.1	0.5	0.7	10
W	Elgin St	212	0.5	0.1	0.4	0.6	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	1.0	0.2	0.8	1.3	10
NW	Wheeler Ave	766	0.8	0.1	0.7	0.9	10
SE	Wheeler Ave	423	1.1	0.1	0.8	1.2	10
SW	Emancipation Ave	177	1.0	0.0	1.0	1.1	10

ENNIS ST & HOLMAN ST — NODE: 306

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.8	0.1	0.7	0.9	10
NW	Holman St	742	0.5	0.1	0.3	0.6	10
SE	Holman St	741	0.1	0.0	0.1	0.2	10
SW	Ennis St	702	0.4	0.1	0.3	0.5	10

ENNIS ST & WHEELER AVE — NODE: 266

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.3	0.1	0.2	0.4	10
SE	Wheeler Ave	766	0.7	0.1	0.6	0.9	10
SW	Ennis St	726	0.1	0.0	0.1	0.2	10

ERNESTINE ST & LEELAND ST — NODE: 149

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.5	0.1	1.3	1.6	10
SW	Ernestine St	411	1.1	0.1	1.0	1.3	10
W	Leeland St	227	0.5	0.1	0.4	0.6	10

ERNESTINE ST & MUNGER ST — NODE: 452

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	0.1	0.0	0.1	0.2	10
S	Ernestine St	685	0.1	0.0	0.1	0.2	10
W	Munger St	460	0.1	0.0	0.1	0.2	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	1.9	0.1	1.7	2.0	10
NW	I-45 NBFR	222	7.0	0.4	6.5	7.8	10
S	Ernestine St	221	0.9	0.1	0.7	1.1	10

FANNIN ST & WHEELER AVE — NODE: 132

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	3.3	0.4	2.8	4.3	10
SE	Wheeler Ave	169	3.1	0.2	2.6	3.5	10
SW	Fannin St	87	2.1	0.4	1.6	2.8	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
N	Edloe St	153	1.3	0.2	1.1	1.8	10
S	Edloe St	155	1.3	0.3	1.1	2.0	10
W	I-69 Express Lanes	31	1.1	0.2	0.8	1.5	10

JENSEN DR & TURNER DR — NODE: 705

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.7	0.6	2.0	3.8	10
N	Lockwood Dr	308	3.5	0.3	3.2	4.2	10
S	Lockwood Dr	311	2.8	0.2	2.4	3.4	10
W	Kelley St	312	2.7	0.3	2.3	3.2	10

LABRANCH ST & WHEELER AVE — NODE: 134

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	0.9	0.1	0.7	1.1	10
NW	Wheeler Ave	77	0.1	0.0	0.1	0.1	10
SE	Wheeler Ave	86	0.2	0.0	0.1	0.3	10
SW	LaBranch St	78	0.3	0.1	0.3	0.4	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	1.8	0.2	1.6	2.0	10
N	Lockwood Dr	560	1.2	0.1	1.0	1.4	10
S	Lockwood Dr	327	0.3	0.1	0.2	0.4	10
W	Laura Koppe Rd	329	1.3	0.1	1.1	1.4	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	5.9	0.2	5.4	6.2	10
SW	Lockwood Dr	253	1.5	0.2	1.2	1.9	10
W	Armour Dr	659	0.3	0.1	0.2	0.4	10

LOCKWOOD DR & CANAL ST — NODE: 154

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	248	2.2	0.2	1.8	2.6	10
NE	Lockwood Dr	241	2.0	0.2	1.7	2.4	10
SW	Lockwood Dr	245	1.6	0.1	1.3	1.8	10
W	Canal St	247	2.6	0.3	2.0	3.0	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	1.7	0.2	1.5	2.1	10
N	Lockwood Dr	292	2.6	0.6	2.0	4.3	10
S	Lockwood Dr	296	2.6	0.2	2.4	2.9	10
W	Cavalcade St	298	2.1	0.1	2.0	2.3	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.9	2.5	0.9	9.1	10
NE	Lockwood Dr	257	3.9	0.1	3.8	4.1	10
S	Lockwood Dr	256	1.1	0.1	1.0	1.2	10
W	Clinton Dr	258	2.7	0.1	2.5	3.0	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	2.0	0.2	1.8	2.2	10
N	Lockwood Dr	533	7.9	1.4	5.7	9.7	10
SE	Lockwood Dr	288	0.7	0.1	0.5	0.8	10
W	Collingsworth St	290	0.9	0.1	0.8	1.0	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.2	0.2	1.0	1.4	10
N	Lockwood Dr	288	2.0	0.2	1.8	2.3	10
S	Lockwood Dr	292	0.4	0.1	0.3	0.5	10
W	Crane St	294	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.3	0.1	0.2	0.4	10
N	Lockwood Dr	327	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
W	Firnat St	575	0.2	0.0	0.1	0.3	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	2.8	0.2	2.5	3.0	10
NE	Lockwood Dr	237	7.0	1.0	5.8	8.8	10
NW	Harrisburg Blvd	678	2.3	0.2	2.0	2.7	10
S	Lockwood Dr	241	6.9	1.0	5.7	8.5	10
SE	LRT Line	675	0.0	0.0	0.0	0.0	10
W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	3.4	0.8	2.6	4.9	10
NE	Lockwood Dr	253	0.8	0.1	0.8	1.0	10
SW	Lockwood Dr	257	0.1	0.1	0.1	0.3	10
W	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.1	0.0	0.1	0.1	10
N	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
W	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	5.5	0.3	4.9	5.9	10
N	Lockwood Dr	545	9.3	1.6	7.6	11.8	10
S	Lockwood Dr	304	0.2	0.1	0.1	0.3	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	0.5	0.1	0.3	0.5	10
S	Lockwood Dr	308	5.0	0.4	4.4	5.6	10
W	I-610 WBFR	309	4.4	0.2	4.0	4.7	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
W	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.4	0.0	0.3	0.4	10
N	Lockwood Dr	232	0.3	0.1	0.2	0.5	10
S	Lockwood Dr	237	2.6	0.1	2.5	2.8	10
W	McKinney St	239	0.3	0.0	0.2	0.4	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.2	0.1	0.1	0.3	10
N	Lockwood Dr	478	0.2	0.0	0.1	0.3	10
S	Lockwood Dr	284	0.1	0.0	0.1	0.2	10
W	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	0.2	0.1	0.1	0.4	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	3.5	0.2	3.2	3.7	10
NE	Lockwood Dr	245	3.7	0.3	3.3	4.2	10
SW	Lockwood Dr	249	3.5	0.3	3.2	4.1	10
W	Navigation Blvd	251	4.2	0.3	3.8	4.7	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.1	0.0	0.1	0.1	10
N	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	524	0.1	0.0	0.1	0.1	10
W	Nichols St	525	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.3	0.1	0.3	0.4	10
N	Lockwood Dr	300	0.3	0.3	0.1	0.8	10
S	Lockwood Dr	545	0.1	0.0	0.1	0.1	10
W	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	0.9	0.1	0.8	1.1	10
N	Lockwood Dr	296	0.4	0.0	0.3	0.5	10
S	Lockwood Dr	300	1.3	0.2	1.0	1.6	10
W	Rand St	302	0.9	0.2	0.6	1.2	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	2.8	0.2	2.5	3.2	10
NE	Shreveport Blvd	316	0.6	0.1	0.5	0.6	10
S	Lockwood Dr	314	0.8	0.1	0.7	0.9	10
SW	Shreveport Blvd	315	1.2	0.1	1.0	1.4	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	533	0.1	0.0	0.1	0.1	10
W	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	1.2	0.2	1.0	1.5	10
N	Lockwood Dr	320	3.8	0.2	3.2	4.1	10
S	Lockwood Dr	324	2.2	0.2	1.8	2.3	10
W	Weaver Rd	325	3.9	1.3	2.3	7.1	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	0.9	0.1	0.9	1.1	10
N	Lockwood Dr (NB)	264	8.4	1.1	7.3	10.3	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	1.6	0.1	1.5	1.7	10
W	I-10 WBFR	276	2.1	0.1	1.9	2.3	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.7	0.1	0.6	1.0	10
N	Lockwood Dr	499	2.7	0.7	2.1	4.6	10
W	Market St	266	0.4	0.1	0.3	0.5	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	6.2	1.5	4.7	8.6	10
S	Lockwood Dr (SB)	267	0.9	0.2	0.6	1.1	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	6.9	1.0	5.4	8.6	10
W	I-10 WBFR	273	0.4	0.0	0.3	0.4	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	2.2	0.5	1.7	3.0	10
S	Lockwood Dr	515	1.3	0.1	1.2	1.4	10
W	Lyons Ave	279	0.7	0.1	0.6	0.9	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	1.0	0.1	0.9	1.2	10
S	Lockwood Dr (SB)	260	1.0	0.1	0.9	1.2	10
W	Market St	262	0.1	0.0	0.1	0.2	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	0.3	0.1	0.2	0.5	10
N	Lockwood Dr (NB)	275	2.3	0.5	1.7	3.0	10
W	Lyons Ave	283	0.8	0.1	0.7	1.1	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	1.1	0.1	0.9	1.3	10
N	Lockwood Dr	314	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	317	0.4	0.1	0.3	0.5	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	0.3	0.1	0.2	0.4	10
N	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
W	DenmarkSt	549	0.1	0.0	0.1	0.2	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	1.7	0.2	1.4	1.9	10
NE	Elgin St	216	2.1	0.2	1.9	2.6	10
SW	Lockwood Dr	218	1.7	0.1	1.5	1.9	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	1.8	0.1	1.7	2.0	10
N	Lockwood Dr	229	3.8	0.3	3.5	4.4	10
S	Lockwood Dr	232	6.6	0.3	6.2	7.2	10
W	Polk St	234	1.8	0.2	1.6	2.1	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	0.6	0.1	0.5	0.7	10
N	Lockwood Dr	230	1.9	0.2	1.6	2.1	10
W	Telephone Rd	231	2.7	0.2	2.3	3.0	10

MAIN ST, RICHMOND AVE & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	0.1	0.0	0.1	0.1	10
NE	Main St	168	7.8	2.1	5.1	12.1	10
NW	Wheeler Ave	169	6.0	1.2	5.0	8.2	10
S	LRT Line	674	0.0	0.0	0.0	0.0	10
SE	Richmond Ave	26	12.3	1.4	9.6	14.1	10
SW	Main St	70	1.5	0.4	1.2	2.3	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	4.2	0.3	3.9	4.5	10
N	Buffalo Speedway	37	36.3	7.6	20.0	41.5	10
S	Buffalo Speedway	36	5.3	0.3	4.9	5.8	10
W	Richmond Ave	12	10.5	0.6	9.6	11.4	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	1.7	0.2	1.5	2.0	10
N	Dunlavy St	57	2.7	0.4	2.2	3.6	10
S	Dunlavy St	56	30.5	2.1	26.2	32.6	10
W	Richmond Ave	165	0.9	0.1	0.8	1.0	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	2.0	0.2	1.7	2.2	10
N	Eastside St	40	2.7	0.9	1.2	4.7	10
S	Eastside St	39	4.3	1.0	3.2	6.8	10
W	Richmond Ave	54	1.5	0.1	1.3	1.7	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	8.4	0.5	7.5	9.0	10
N	Edloe St	155	16.4	1.5	14.7	18.4	10
S	Edloe St	5	4.9	0.8	4.1	6.8	10
W	Richmond Ave	9	12.3	0.5	11.4	13.1	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	5.8	0.4	5.3	6.4	10
N	Greenbriar Dr	47	2.5	0.2	2.1	2.9	10
S	Greenbriar Dr	46	4.3	0.3	3.8	4.8	10
W	Richmond Ave	160	1.4	0.1	1.2	1.7	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	0.4	0.1	0.3	0.5	10
N	Hazard St	51	29.3	1.8	26.2	32.7	10
S	Hazard St	50	21.2	7.9	9.9	32.6	10
W	Richmond Ave	162	2.4	0.2	2.1	2.7	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	13.5	3.6	7.2	18.0	10
N	Kirby Dr	158	38.2	7.1	23.3	48.0	10
S	Kirby Dr	44	30.8	6.4	20.4	37.5	10
W	Richmond Ave	64	6.1	0.5	5.3	6.6	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	1.1	0.1	0.9	1.2	10
N	Mandell St	59	21.0	2.2	16.4	25.1	10
S	Mandell St	58	3.8	1.3	1.9	5.5	10
W	Richmond Ave	23	0.9	0.1	0.7	1.0	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	6.7	0.5	6.1	7.7	10
N	Montrose Blvd	61	8.4	0.9	7.2	9.6	10
S	Montrose Blvd	60	14.3	2.7	11.7	19.6	10
W	Richmond Ave	166	23.8	1.9	21.4	26.4	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	0.3	0.1	0.2	0.5	10
N	Shepherd Dr	49	5.0	0.3	4.5	5.5	10
S	Shepherd Dr	48	4.8	0.5	4.1	5.5	10
W	Richmond Ave	20	1.1	0.2	0.9	1.7	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	0.8	0.4	0.2	1.4	10
NE	US 59 NBFR	69	2.4	0.3	1.9	3.0	10
W	Richmond Ave	26	6.3	0.4	5.7	7.2	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	32.4	3.0	28.8	36.4	10
SW	US 59 SBFR	65	2.4	0.2	2.1	2.8	10
W	Richmond Ave	167	0.1	0.0	0.0	0.2	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	1.4	0.1	1.2	1.6	10
N	Woodhead St	53	8.3	1.6	5.6	11.0	10
S	Woodhead St	52	1.0	0.2	0.7	1.4	10
W	Richmond Ave	163	1.0	0.2	0.7	1.5	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	10.9	0.5	10.3	11.8	10
N	S Rice Ave	138	8.4	0.5	8.0	9.2	10
S	S Rice Ave	137	7.7	0.5	7.1	8.5	10
W	Westpark Dr	770	29.6	3.9	23.1	36.2	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	3.7	0.4	3.2	4.4	10
NW	Wheeler Ave	86	2.7	0.4	2.3	3.6	10
SE	Wheeler Ave	172	6.4	0.3	5.6	6.8	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.1	0.1	0.0	0.2	10
N	Edell St	590	0.2	0.0	0.1	0.2	10
S	Edell St	589	0.2	0.0	0.1	0.2	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	1.7	0.1	1.6	1.9	10
N	Friendly Rd	585	0.7	0.3	0.5	1.2	10
S	Friendly Rd	584	7.9	0.7	7.0	9.3	10
W	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	2.5	0.2	2.2	3.0	10
N	Hirsch Rd	336	2.2	0.1	2.0	2.3	10
S	Hirsch Rd	335	1.7	0.1	1.6	2.0	10
W	Tidwell Rd	334	0.8	0.1	0.7	1.0	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	5.2	0.3	4.8	5.7	10
N	I-69 NBFR	340	5.1	0.1	4.8	5.3	10
W	Tidwell Rd	586	5.5	0.3	5.0	5.8	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	4.1	0.2	3.6	4.3	10
S	I-69 SBFR	649	3.5	1.1	2.8	6.7	10
W	Tidwell Rd	342	4.8	0.4	4.2	5.4	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	6.5	0.3	6.2	7.2	10
N	Jensen Dr	347	5.7	0.7	4.7	6.6	10
S	Jensen Dr	346	3.3	0.2	3.1	3.7	10
W	Tidwell Rd	348	5.4	0.5	4.4	6.3	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	3.7	0.4	3.1	4.2	10
N	Lockwood Dr	574	5.2	1.3	3.3	8.1	10
S	Lockwood Dr	331	0.5	0.1	0.3	0.7	10
W	Tidwell Rd	333	3.7	0.2	3.5	3.9	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	589	0.0	0.0	0.0	0.0	10
SE	Edell St	592	0.0	0.0	0.0	0.0	10
SW	Turner Dr	773	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	8.8	1.6	6.5	11.4	10
N	14th St	118	2.5	0.4	1.9	3.2	10
W	Westpark Dr	616	2.7	0.3	2.3	3.2	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	768	0.0	0.0	0.0	0.0	10
N	Alder Dr	767	1.4	0.2	1.2	1.9	10
W	Westpark Dr	133	0.3	0.1	0.2	0.4	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	6.5	0.4	6.0	7.1	10
N	Chimney Rock Rd	135	5.9	0.3	5.5	6.3	10
S	Chimney Rock Rd	134	6.6	0.4	5.9	7.1	10
W	Westpark Dr	136	9.7	0.5	8.9	10.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	1.7	0.3	1.4	2.3	10
N	Edloe St	29	5.7	0.5	5.0	6.6	10
S	Edloe St	153	4.6	0.4	4.2	5.0	10
W	Westpark Dr	154	6.5	0.8	5.8	8.3	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	75.6	7.7	66.6	90.3	10
N	Fondren Rd	110	5.0	0.2	4.7	5.2	10
S	Fondren Rd	112	38.1	7.3	29.8	48.2	10
W	Westpark Dr	113	43.5	9.7	30.6	63.0	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	17.5	0.6	16.5	18.6	10
N	Hillcroft Ave	3	12.7	0.5	12.2	13.7	10
S	Hillcroft Ave	115	58.1	11.0	38.6	72.8	10
W	Westpark Dr	116	23.2	2.6	19.6	26.8	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	6.0	0.5	5.3	6.6	10
N	I-610 NBFR	145	28.9	5.9	17.7	38.0	10
W	Westpark Dr	772	10.0	0.8	8.9	11.9	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	10.2	0.9	8.7	11.2	10
S	I-610 SBFR	141	3.5	0.4	3.1	4.0	10
W	Westpark Dr	143	3.2	0.2	3.0	3.5	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	5.3	0.9	4.2	6.9	10
NE	I-69 NBFR	126	2.7	0.3	2.4	3.2	10
W	Westpark Dr	127	4.8	0.4	4.3	5.5	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	6.5	1.7	5.2	11.0	10
SW	I-69 SBFR	121	6.1	0.8	5.4	7.4	10
W	Westpark Dr	123	4.4	0.3	4.0	5.1	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	772	0.0	0.0	0.0	0.0	10
N	Loop Central Dr	771	12.9	1.2	11.5	14.9	10
W	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	4.1	0.5	3.4	4.7	10
N	Newcastle Dr	148	6.4	0.5	5.4	7.2	10
S	Newcastle Dr	147	3.0	0.2	2.7	3.5	10
W	Westpark Dr	149	10.6	0.4	10.0	11.2	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	1.8	0.1	1.6	1.9	10
N	Rampart St	129	2.5	0.5	2.2	3.8	10
S	Rampart St	128	0.4	0.1	0.3	0.5	10
W	Westpark Dr	130	1.6	1.3	1.0	5.4	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	0.0	0.0	0.0	0.0	10
N	Royalton St	384	15.1	0.5	14.3	15.7	10
W	Westpark Dr	140	0.2	0.0	0.2	0.2	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	770	0.1	0.0	0.0	0.1	10
N	Uptown Transit Ctr	769	0.2	0.0	0.1	0.3	10
W	Westpark Dr	629	15.0	9.9	1.5	28.9	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	11.6	2.1	9.8	17.5	10
N	Weslayan St	151	5.4	0.4	4.5	6.0	10
S	Weslayan St	150	9.1	0.4	8.7	9.7	10
W	Westpark Dr	152	16.6	3.2	13.5	23.9	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	6.7	0.5	5.9	7.3	10
N	Renwick Dr	132	6.9	2.4	5.3	11.5	10
S	Fountain View Dr	131	7.0	0.8	6.2	8.9	10
W	Westpark Dr	768	3.3	0.2	2.8	3.5	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	18.9	1.6	16.5	20.4	10
NW	Wheeler Ave	423	2.4	0.2	2.0	2.8	10
SE	Wheeler Ave	421	2.2	0.4	1.7	2.8	10
SW	Hutchins St	422	0.1	0.0	0.1	0.1	10

Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	35.4	22.7	16.8	86.1	10
NW	Alabama St	197	48.8	20.5	33.6	99.1	10
SE	Alabama St	193	42.3	25.6	21.4	104.7	10
SW	Ennis St	740	33.3	11.1	24.1	55.0	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	13.0	1.4	11.5	15.7	10
NW	Wheeler Ave	176	30.8	1.9	27.9	33.8	10
S	Almeda Rd	174	22.1	1.8	18.1	24.0	10
SE	Wheeler Ave	77	18.9	0.9	18.0	20.7	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	6.8	0.5	6.2	7.5	10
NW	Cleburne St	733	22.2	1.8	19.0	24.8	10
SE	Cleburne St	731	19.7	3.3	12.2	24.5	10
SW	Ennis St	732	4.6	0.6	3.7	5.4	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	22.5	1.1	20.2	23.9	10
N	Lockwood Dr	321	28.6	1.6	25.8	30.7	10
S	Lockwood Dr	320	26.0	1.2	24.3	28.3	10
W	Crosstimbers St	322	17.2	1.3	15.1	19.3	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	41.9	1.1	39.4	43.0	10
NE	Cullen Blvd	207	30.5	1.3	27.7	31.9	10
S	Cullen Blvd	206	33.2	1.8	30.1	35.3	10
W	Elgin St	208	25.2	2.2	22.6	28.7	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	368.5	57.5	267.3	479.0	10
N	Fondren Rd	38	263.3	16.5	221.7	282.8	10
S	Fondren Rd	110	3.9	0.5	3.3	4.9	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	11.9	1.4	10.0	15.0	10
NW	Elgin St	701	23.5	0.7	22.3	25.0	10
SE	Elgin St	700	12.3	1.2	10.6	15.0	10
SW	Ennis St	195	17.8	2.4	13.2	22.1	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	41.2	4.9	37.2	54.0	10
N	Scott St	667	7.5	2.6	2.7	10.9	10
S	Scott St	671	26.3	2.8	21.5	30.5	10
SW	LRT Line	669	28.0	27.1	16.0	105.0	10
W	Elgin St	204	56.0	3.1	50.2	61.5	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	11.9	0.4	11.1	12.3	10
S	Spur 5 SBFR	214	18.3	1.1	16.3	19.8	10
SW	Elgin St	216	8.5	0.5	7.8	9.2	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	3.3	0.4	2.5	3.8	10
N	UH Entrance	211	29.5	4.3	24.6	36.3	10
SW	UH Entrance	210	17.9	2.2	13.7	21.5	10
W	Elgin St	212	6.2	0.9	5.0	8.0	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	12.8	1.7	10.6	15.6	10
NW	Wheeler Ave	766	10.5	0.7	9.8	11.7	10
SE	Wheeler Ave	423	15.2	1.5	12.1	17.2	10
SW	Emancipation Ave	177	15.1	0.5	14.2	15.7	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	11.0	0.8	9.8	12.4	10
NW	Holman St	742	11.8	1.7	9.6	14.5	10
SE	Holman St	741	8.4	1.9	5.4	12.3	10
SW	Ennis St	702	12.7	1.1	10.7	14.1	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	4.6	0.6	3.5	5.4	10
SE	Wheeler Ave	766	16.8	1.6	13.8	19.9	10
SW	Ennis St	726	1.7	0.2	1.4	2.1	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	17.7	1.4	15.9	19.8	10
SW	Ernestine St	411	7.3	0.6	6.5	8.1	10
W	Leeland St	227	6.8	0.8	5.8	7.9	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	5.3	1.0	4.0	7.2	10
S	Ernestine St	685	0.4	0.2	0.2	0.9	10
W	Munger St	460	4.1	0.7	3.2	5.4	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	12.7	0.6	11.8	13.5	10
NW	I-45 NBFR	222	14.2	0.6	13.4	15.1	10
S	Ernestine St	221	11.1	0.9	9.5	12.3	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	31.2	3.3	28.8	38.9	10
SE	Wheeler Ave	169	20.3	1.1	18.3	22.6	10
SW	Fannin St	87	12.4	2.4	9.7	16.6	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Edloe St	153	8.2	1.3	6.7	11.5	10
S	Edloe St	155	6.5	1.2	5.5	9.5	10
W	I-69 Express Lanes	31	36.3	5.8	28.7	47.7	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	14.9	13.9	3.6	51.1	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	12.0	11.0	1.7	33.3	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	27.2	5.7	21.6	37.5	10
N	Lockwood Dr	308	24.3	1.6	22.1	27.8	10
S	Lockwood Dr	311	25.9	2.4	21.3	30.8	10
W	Kelley St	312	19.2	1.4	17.8	22.2	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	36.1	2.9	33.9	41.5	10
NW	Wheeler Ave	77	0.7	0.2	0.4	1.0	10
SE	Wheeler Ave	86	1.5	0.3	0.9	1.9	10
SW	LaBranch St	78	34.9	3.7	29.4	41.2	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	29.6	1.4	28.4	32.6	10
N	Lockwood Dr	560	12.0	1.2	10.1	13.3	10
S	Lockwood Dr	327	4.9	0.7	4.0	5.7	10
W	Laura Koppe Rd	329	30.4	1.1	29.0	32.2	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	34.3	1.1	32.6	35.7	10
SW	Lockwood Dr	253	12.3	1.1	10.7	14.2	10
W	Armour Dr	659	17.3	3.0	12.0	20.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	248	20.4	1.9	17.5	23.8	10
NE	Lockwood Dr	241	11.6	1.0	10.1	13.1	10
SW	Lockwood Dr	245	10.6	0.7	9.7	11.5	10
W	Canal St	247	33.2	2.5	29.0	37.2	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	23.2	1.7	21.0	26.9	10
N	Lockwood Dr	292	12.6	2.9	9.4	19.9	10
S	Lockwood Dr	296	17.5	1.1	16.4	20.0	10
W	Cavalcade St	298	21.1	1.2	19.2	23.5	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	41.6	58.0	18.1	206.6	10
NE	Lockwood Dr	257	20.3	0.5	19.5	21.1	10
S	Lockwood Dr	256	10.7	0.8	9.7	11.9	10
W	Clinton Dr	258	26.2	1.3	24.2	27.8	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	25.8	1.8	22.3	28.0	10
N	Lockwood Dr	533	31.4	5.5	23.0	37.8	10
SE	Lockwood Dr	288	5.0	0.7	3.9	6.2	10
W	Collingsworth St	290	29.8	1.6	27.0	32.2	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	31.9	2.7	29.3	37.4	10
N	Lockwood Dr	288	10.1	0.8	9.2	11.1	10
S	Lockwood Dr	292	3.0	0.3	2.4	3.5	10
W	Crane St	294	32.0	3.1	26.8	35.9	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	13.1	2.2	10.0	16.5	10
N	Lockwood Dr	327	0.3	0.1	0.2	0.7	10
S	Lockwood Dr	574	0.2	0.1	0.0	0.4	10
W	Firnat St	575	16.8	3.7	12.2	24.3	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	26.1	1.2	23.7	27.7	10
NE	Lockwood Dr	237	38.3	4.8	32.5	45.9	10
NW	Harrisburg Blvd	678	25.6	1.9	23.5	29.2	10
S	Lockwood Dr	241	35.0	4.0	30.0	41.4	10
SE	LRT Line	675	23.1	2.8	19.8	28.1	10
W	LRT Line	676	3.6	1.8	0.0	6.8	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	83.8	15.0	64.5	110.9	10
NE	Lockwood Dr	253	4.5	0.3	4.1	5.0	10
SW	Lockwood Dr	257	0.7	0.5	0.4	1.9	10
W	Harvey Wilson Dr	497	37.6	10.1	25.7	59.4	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	12.0	2.3	8.7	15.7	10
N	Lockwood Dr	281	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	478	0.3	0.1	0.1	0.5	10
W	Hershe St	513	10.0	4.1	5.6	18.6	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	33.3	1.2	31.2	35.0	10
N	Lockwood Dr	545	43.6	6.1	37.1	54.0	10
S	Lockwood Dr	304	1.5	0.6	0.9	2.3	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	1.9	0.3	1.3	2.2	10
S	Lockwood Dr	308	31.8	1.6	29.8	35.6	10
W	I-610 WBFR	309	33.6	1.6	30.9	35.7	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	5.8	2.4	2.3	10.4	10
N	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
W	Keeland St	561	7.8	1.6	5.6	10.4	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	21.7	1.3	18.9	23.4	10
N	Lockwood Dr	232	1.8	0.3	1.4	2.4	10
S	Lockwood Dr	237	15.1	0.4	14.5	15.8	10
W	McKinney St	239	20.9	2.4	16.9	23.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	39.6	4.5	31.3	47.1	10
N	Lockwood Dr	478	1.0	0.2	0.7	1.3	10
S	Lockwood Dr	284	1.0	0.3	0.6	1.5	10
W	Mulvey St	286	32.3	5.3	25.9	40.8	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	9.9	1.6	7.4	12.2	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	11.3	1.1	9.7	12.8	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	24.0	1.0	22.1	25.5	10
NE	Lockwood Dr	245	25.6	1.4	24.2	27.6	10
SW	Lockwood Dr	249	24.0	1.2	22.2	26.1	10
W	Navigation Blvd	251	24.3	1.3	22.3	26.7	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	11.2	2.9	7.7	16.4	10
N	Lockwood Dr	284	0.3	0.1	0.2	0.5	10
S	Lockwood Dr	524	0.7	0.1	0.5	0.9	10
W	Nichols St	525	12.0	2.9	8.4	18.1	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	21.1	3.8	16.9	28.3	10
N	Lockwood Dr	300	1.1	1.1	0.3	3.4	10
S	Lockwood Dr	545	0.5	0.1	0.4	0.7	10
W	Pardee St	546	20.9	4.7	13.0	27.3	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	36.5	2.6	32.7	39.6	10
N	Lockwood Dr	296	2.1	0.3	1.6	2.5	10
S	Lockwood Dr	300	7.8	1.1	6.2	9.5	10
W	Rand St	302	25.6	3.6	20.4	31.6	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	21.5	1.4	19.3	23.2	10
NE	Shreveport Blvd	316	28.8	3.0	24.7	31.9	10
S	Lockwood Dr	314	8.5	0.7	7.1	9.2	10
SW	Shreveport Blvd	315	30.8	3.3	26.9	35.9	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	13.7	5.3	6.9	20.3	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	533	0.8	0.1	0.5	1.0	10
W	Sudan St	534	5.8	2.1	3.2	9.7	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	35.9	3.4	29.0	39.8	10
N	Lockwood Dr	320	34.3	2.1	30.3	36.8	10
S	Lockwood Dr	324	32.5	1.6	29.0	33.9	10
W	Weaver Rd	325	60.3	16.7	41.1	104.3	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	5.8	0.2	5.4	6.1	10
N	Lockwood Dr (NB)	264	36.8	3.7	32.7	43.5	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	7.5	0.4	6.8	8.0	10
W	I-10 WBFR	276	16.2	0.8	15.1	18.0	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	17.7	2.5	14.9	22.0	10
N	Lockwood Dr	499	13.0	3.1	10.1	21.1	10
W	Market St	266	33.0	4.5	25.5	40.7	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	39.9	9.0	29.8	54.8	10
S	Lockwood Dr (SB)	267	4.9	0.9	3.2	5.8	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	40.7	4.8	33.7	50.4	10
W	I-10 WBFR	273	2.9	0.2	2.5	3.2	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	21.4	4.1	16.2	28.2	10
S	Lockwood Dr	515	10.8	0.5	9.8	11.5	10
W	Lyons Ave	279	12.8	1.3	11.1	14.7	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	29.5	3.1	25.3	35.6	10
S	Lockwood Dr (SB)	260	5.5	0.5	4.7	6.3	10
W	Market St	262	10.0	2.0	8.2	15.4	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	6.1	1.3	3.6	7.4	10
N	Lockwood Dr (NB)	275	10.7	2.2	7.8	14.6	10
W	Lyons Ave	283	17.1	1.7	15.1	20.6	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	22.7	2.2	19.2	25.9	10
N	Lockwood Dr	314	0.6	0.1	0.4	0.9	10
S	Lockwood Dr	317	4.7	0.9	3.2	5.7	10
W	Driveway	318	4.4	2.3	2.1	8.6	10

LOCKWOOD DR, DENMARK ST & DENMARKST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	10.3	2.2	7.4	13.8	10
N	Lockwood Dr	317	0.1	0.0	0.1	0.2	10
S	Lockwood Dr	321	0.1	0.1	0.0	0.1	10
W	DenmarkSt	549	10.4	2.1	7.6	12.8	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	12.5	1.1	11.2	14.3	10
NE	Elgin St	216	11.4	0.8	10.3	12.9	10
SW	Lockwood Dr	218	13.5	0.5	12.9	14.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	21.9	0.9	20.5	23.5	10
N	Lockwood Dr	229	22.7	1.3	21.3	25.3	10
S	Lockwood Dr	232	42.0	1.2	39.3	43.5	10
W	Polk St	234	16.1	1.2	14.5	18.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	9.4	0.9	8.2	11.2	10
N	Lockwood Dr	230	10.3	0.9	8.8	11.5	10
W	Telephone Rd	231	24.8	1.6	22.2	26.5	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	25.8	2.3	22.2	30.2	10
NE	Main St	168	42.0	11.3	29.5	68.2	10
NW	Wheeler Ave	169	42.7	7.7	36.4	58.3	10
S	LRT Line	674	0.0	0.0	0.0	0.0	10
SE	Richmond Ave	26	82.1	10.0	63.5	96.5	10
SW	Main St	70	44.9	7.9	37.9	62.8	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	17.7	1.0	16.5	19.4	10
N	Buffalo Speedway	37	127.2	28.3	68.6	150.2	10
S	Buffalo Speedway	36	30.8	1.6	28.7	34.1	10
W	Richmond Ave	12	35.4	1.0	33.5	36.7	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	10.0	1.2	8.7	11.8	10
N	Dunlavy St	57	36.4	4.6	31.3	47.6	10
S	Dunlavy St	56	377.7	45.3	320.6	466.0	10
W	Richmond Ave	165	5.0	0.6	4.1	5.6	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	7.2	0.6	6.3	8.0	10
N	Eastside St	40	59.4	20.5	27.8	101.7	10
S	Eastside St	39	40.6	9.3	30.2	64.2	10
W	Richmond Ave	54	6.3	0.3	5.8	6.8	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	32.1	1.3	29.4	34.0	10
N	Edloe St	155	81.3	8.5	68.4	90.6	10
S	Edloe St	5	28.6	4.3	24.4	38.7	10
W	Richmond Ave	9	45.5	1.5	42.8	47.8	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	35.7	1.6	32.9	37.9	10
N	Greenbriar Dr	47	38.7	2.7	36.1	44.1	10
S	Greenbriar Dr	46	34.8	1.7	30.7	36.8	10
W	Richmond Ave	160	10.0	0.9	8.9	11.7	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	4.8	0.7	4.0	5.9	10
N	Hazard St	51	342.9	39.6	286.9	417.4	10
S	Hazard St	50	421.4	192.8	172.3	756.2	10
W	Richmond Ave	162	14.8	1.0	13.2	16.7	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	58.3	14.2	33.9	76.2	10
N	Kirby Dr	158	87.3	15.4	53.5	108.2	10
S	Kirby Dr	44	78.0	16.0	52.2	96.1	10
W	Richmond Ave	64	49.3	2.1	44.7	51.3	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	5.8	0.4	5.3	6.8	10
N	Mandell St	59	209.5	21.7	171.7	256.1	10
S	Mandell St	58	80.0	25.0	45.3	116.4	10
W	Richmond Ave	23	5.3	0.6	4.3	5.9	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	38.4	2.3	35.0	42.6	10
N	Montrose Blvd	61	36.9	3.1	32.5	41.0	10
S	Montrose Blvd	60	45.3	7.9	37.2	61.2	10
W	Richmond Ave	166	105.8	10.1	92.1	121.3	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	4.7	1.5	2.1	6.4	10
N	Shepherd Dr	49	40.0	1.8	36.4	42.8	10
S	Shepherd Dr	48	40.6	2.5	36.9	45.2	10
W	Richmond Ave	20	7.7	1.8	6.4	12.8	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	4.1	2.1	1.1	7.5	10
NE	US 59 NBFR	69	34.4	3.8	28.6	41.7	10
W	Richmond Ave	26	24.4	2.1	21.8	29.2	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	138.7	19.6	118.6	169.1	10
SW	US 59 SBFR	65	24.3	1.7	20.4	25.7	10
W	Richmond Ave	167	0.3	0.2	0.1	0.7	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	10.9	0.5	10.3	11.8	10
N	Woodhead St	53	74.7	12.7	54.6	92.1	10
S	Woodhead St	52	28.5	4.9	22.5	37.6	10
W	Richmond Ave	163	5.8	1.2	4.2	8.5	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	55.0	2.0	52.0	57.2	10
N	S Rice Ave	138	35.8	1.2	34.5	37.8	10
S	S Rice Ave	137	40.6	1.2	38.8	42.3	10
W	Westpark Dr	770	91.8	13.9	68.7	114.5	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	13.4	1.3	11.6	15.6	10
NW	Wheeler Ave	86	20.6	2.8	17.5	27.6	10
SE	Wheeler Ave	172	38.3	2.2	33.3	41.1	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.4	0.2	0.1	0.7	10
N	Edell St	590	11.6	1.5	9.4	14.2	10
S	Edell St	589	17.4	3.0	11.3	22.7	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	5.8	0.2	5.5	6.1	10
N	Friendly Rd	585	89.9	36.8	56.0	164.3	10
S	Friendly Rd	584	315.2	63.7	246.7	427.3	10
W	Tidwell Rd	338	0.2	0.1	0.1	0.3	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	8.8	0.8	7.8	10.0	10
N	Hirsch Rd	336	29.6	1.6	26.5	31.9	10
S	Hirsch Rd	335	25.1	1.3	23.3	26.6	10
W	Tidwell Rd	334	2.7	0.4	2.3	3.3	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	16.9	0.5	16.1	17.8	10
N	I-69 NBFR	340	17.3	0.6	16.6	18.4	10
W	Tidwell Rd	586	17.5	0.6	16.7	18.6	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	15.6	0.7	14.3	16.4	10
S	I-69 SBFR	649	15.5	5.1	12.2	29.5	10
W	Tidwell Rd	342	16.6	1.1	14.8	17.8	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	29.3	1.0	28.4	31.6	10
N	Jensen Dr	347	34.9	3.4	30.5	40.5	10
S	Jensen Dr	346	31.4	1.5	29.3	32.9	10
W	Tidwell Rd	348	22.2	1.4	19.7	24.6	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	13.4	1.1	11.8	15.0	10
N	Lockwood Dr	574	63.5	15.4	42.1	100.5	10
S	Lockwood Dr	331	32.5	4.1	27.4	38.9	10
W	Tidwell Rd	333	14.1	0.5	13.2	14.8	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Edell St	589	4.1		4.1	4.1	1

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	29.4	5.3	21.8	37.9	10
N	14th St	118	37.6	4.4	33.3	45.2	10
W	Westpark Dr	616	6.6	0.6	6.0	7.8	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	768	0.0	0.0	0.0	0.0	10
N	Alder Dr	767	19.6	3.1	16.3	25.8	10
W	Westpark Dr	133	1.8	0.4	1.2	2.4	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	31.1	1.2	29.5	33.2	10
N	Chimney Rock Rd	135	39.2	1.7	36.4	41.7	10
S	Chimney Rock Rd	134	25.9	1.2	23.9	27.8	10
W	Westpark Dr	136	52.4	3.6	49.1	60.4	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	14.8	2.4	11.5	19.3	10
N	Edloe St	29	39.3	3.6	35.0	44.5	10
S	Edloe St	153	26.7	1.9	22.7	29.1	10
W	Westpark Dr	154	28.6	3.2	25.3	36.4	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	297.1	34.6	262.2	372.9	10
N	Fondren Rd	110	13.6	0.4	12.9	14.1	10
S	Fondren Rd	112	117.4	21.8	91.9	147.4	10
W	Westpark Dr	113	129.5	32.7	88.0	196.3	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	48.5	1.2	46.8	50.9	10
N	Hillcroft Ave	3	38.2	1.2	36.7	40.7	10
S	Hillcroft Ave	115	178.8	37.4	114.4	225.7	10
W	Westpark Dr	116	50.1	4.7	43.9	56.6	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	25.0	1.4	22.9	27.5	10
N	I-610 NBFR	145	97.2	20.1	60.3	127.9	10
W	Westpark Dr	772	36.1	2.9	32.7	42.6	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	28.6	2.2	24.5	31.7	10
S	I-610 SBFR	141	37.5	2.9	34.1	41.8	10
W	Westpark Dr	143	8.0	0.5	7.3	8.5	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	15.2	2.4	12.4	19.3	10
NE	I-69 NBFR	126	18.9	1.5	17.4	21.9	10
W	Westpark Dr	127	24.9	1.0	24.0	26.7	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	22.2	5.4	18.0	36.4	10
SW	I-69 SBFR	121	12.1	1.4	10.8	14.9	10
W	Westpark Dr	123	20.5	1.0	19.5	22.5	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	772	0.0	0.0	0.0	0.1	10
N	Loop Central Dr	771	173.6	22.1	147.4	200.5	10
W	Westpark Dr	146	0.1	0.0	0.1	0.1	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	28.3	2.4	25.5	31.6	10
N	Newcastle Dr	148	40.3	3.1	36.0	45.5	10
S	Newcastle Dr	147	34.8	1.7	31.8	37.4	10
W	Westpark Dr	149	40.1	1.1	39.2	43.1	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	6.9	0.5	6.3	7.6	10
N	Rampart St	129	46.2	5.2	41.3	59.8	10
S	Rampart St	128	33.8	5.6	26.7	43.9	10
W	Westpark Dr	130	10.5	9.3	6.1	36.8	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	0.0	0.0	0.0	0.0	10
N	Royalton St	384	241.6	14.8	211.2	260.5	10
W	Westpark Dr	140	0.7	0.1	0.6	0.8	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	770	0.3	0.1	0.2	0.4	10
N	Uptown Transit Ctr	769	43.9	9.8	23.2	57.8	10
W	Westpark Dr	629	44.8	30.0	4.3	86.9	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	62.2	10.1	55.3	88.4	10
N	Weslayan St	151	22.4	1.8	18.7	24.9	10
S	Weslayan St	150	28.3	1.0	27.1	30.0	10
W	Westpark Dr	152	90.4	14.6	76.8	123.7	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	34.9	1.3	32.4	36.6	10
N	Renwick Dr	132	45.3	13.1	37.8	70.1	10
S	Fountain View Dr	131	39.3	2.6	36.6	46.1	10
W	Westpark Dr	768	18.4	1.0	16.5	20.3	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	201.7	20.2	171.1	230.2	10
NW	Wheeler Ave	423	29.8	3.0	24.9	34.2	10
SE	Wheeler Ave	421	28.8	3.6	23.0	34.6	10
SW	Hutchins St	422	12.2	1.7	9.9	14.7	10



Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	1.5	1.0	0.8	4.0	10
NEB TR	Ennis St	732	0.8	0.6	0.3	2.1	10
NWB L	Alabama St	197	0.1	0.0	0.0	0.1	10
NWB T	Alabama St	197	1.8	0.7	1.3	3.5	10
NWB TR	Alabama St	197	1.8	0.7	1.3	3.5	10
SEB L	Alabama St	193	2.1	1.6	0.8	5.4	10
SEB T	Alabama St	193	0.9	0.5	0.5	2.2	10
SEB TR	Alabama St	193	1.9	0.8	1.1	4.1	10
SWB LT	Ennis St	740	0.5	0.2	0.4	1.0	10
SWB TR	Ennis St	740	1.0	0.4	0.6	1.8	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	1.4	0.2	1.2	1.7	10
NB T	Almeda Rd	696	0.3	0.0	0.3	0.4	10
NB TR	Almeda Rd	696	0.4	0.0	0.3	0.4	10
NWB LTR	Wheeler Ave	176	2.0	0.1	1.9	2.2	10
SB L	Almeda Rd	174	0.3	0.1	0.2	0.4	10
SB T	Almeda Rd	174	1.0	0.1	0.8	1.2	10
SB TR	Almeda Rd	174	0.9	0.1	0.7	1.2	10
SEB LT	Wheeler Ave	77	0.9	0.1	0.7	1.0	10
SEB TR	Wheeler Ave	77	1.0	0.1	0.9	1.2	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	0.4	0.0	0.3	0.4	10
NEB TR	Ennis St	726	0.2	0.0	0.2	0.3	10
NWB LTR	Cleburne St	733	1.0	0.1	0.8	1.2	10
SEB LTR	Cleburne St	731	0.3	0.1	0.1	0.3	10
SWB LT	Ennis St	732	0.2	0.0	0.1	0.2	10
SWB TR	Ennis St	732	0.1	0.0	0.1	0.2	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	1.0	0.1	0.8	1.2	10
EB T	Crosstimbers St	323	0.8	0.1	0.7	0.9	10
EB TR	Crosstimbers St	323	0.9	0.1	0.8	1.0	10
NB L	Lockwood Dr	321	0.7	0.1	0.5	0.9	10
NB T	Lockwood Dr	321	1.2	0.1	1.1	1.3	10
NB TR	Lockwood Dr	321	1.2	0.1	1.0	1.4	10
SB L	Lockwood Dr	320	0.6	0.0	0.5	0.6	10
SB T	Lockwood Dr	320	0.5	0.1	0.4	0.6	10
SB TR	Lockwood Dr	320	0.6	0.1	0.6	0.7	10
WB L	Crosstimbers St	322	0.8	0.2	0.6	1.0	10
WB T	Crosstimbers St	322	0.6	0.0	0.6	0.7	10
WB TR	Crosstimbers St	322	0.7	0.1	0.7	0.8	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	0.6	0.1	0.5	0.7	10
EB T	Elgin St	204	0.9	0.1	0.7	1.0	10
EB TR	Elgin St	204	1.1	0.1	0.8	1.3	10
NEB L	Cullen Blvd	207	0.5	0.1	0.4	0.5	10
NEB T	Cullen Blvd	207	1.5	0.1	1.4	1.7	10
NEB TR	Cullen Blvd	207	1.8	0.2	1.5	2.1	10
SB L	Cullen Blvd	206	1.3	0.1	1.1	1.5	10
SB T	Cullen Blvd	206	1.0	0.1	0.8	1.2	10
SB TR	Cullen Blvd	206	1.5	0.2	1.3	1.9	10
WB L	Elgin St	208	0.6	0.1	0.5	0.8	10
WB T	Elgin St	208	1.2	0.1	0.9	1.3	10
WB TR	Elgin St	208	0.9	0.1	0.8	1.2	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	16.6	2.2	11.9	20.1	10
EB R	EB Westpark Tollway FR	111	18.7	2.6	14.1	20.8	10
NB T	Fondren Rd	38	85.4	4.8	73.6	91.1	10
SB T	Fondren Rd	110	1.4	0.2	1.1	1.7	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	0.3	0.0	0.2	0.3	10
NEB TR	Ennis St	702	0.4	0.1	0.3	0.6	10
NWB L	Elgin St	701	0.3	0.1	0.3	0.4	10
NWB T	Elgin St	701	1.2	0.1	1.1	1.3	10
NWB TR	Elgin St	701	1.1	0.1	1.0	1.2	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.0	10
SEB T	Elgin St	700	0.4	0.1	0.3	0.5	10
SEB TR	Elgin St	700	0.4	0.0	0.4	0.5	10
SWB LTR	Ennis St	195	0.3	0.1	0.3	0.4	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	1.0	0.3	0.8	1.7	10
EB T	Elgin St	701	1.2	0.1	1.0	1.4	10
EB TR	Elgin St	701	1.8	0.2	1.5	2.1	10
NB L	Scott St	198	1.0	0.2	0.6	1.3	10
NB T	LRT Line	667	0.2	0.2	0.0	0.7	10
NB TR	Scott St	198	0.5	0.1	0.4	0.6	10
SB L	Scott St	671	0.7	0.2	0.4	1.0	10
SB T	Scott St	671	1.6	0.2	1.3	1.8	10
SB TR	Scott St	671	1.6	0.2	1.3	1.9	10
SWB T	LRT Line	669	0.0	0.0	0.0	0.1	10
WB L	Elgin St	204	2.7	0.3	2.1	3.2	10
WB T	Elgin St	204	2.4	0.2	2.2	2.6	10
WB TR	Elgin St	204	2.4	0.2	1.9	2.7	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	0.1	0.0	0.0	0.1	10
NEB LT	Elgin St	212	1.0	0.1	0.9	1.2	10
NEB T	Elgin St	212	1.1	0.1	0.9	1.3	10
SB LT	Spur 5 SBFR	214	1.0	0.1	0.9	1.1	10
SB TR	Spur 5 SBFR	214	0.5	0.1	0.3	0.6	10
SWB L	Elgin St	216	0.6	0.1	0.6	0.7	10
SWB T	Elgin St	216	0.5	0.1	0.4	0.6	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.0	0.0	0.0	0.0	10
EB T	Elgin St	208	0.2	0.0	0.1	0.2	10
EB TR	Elgin St	208	0.2	0.1	0.2	0.3	10
NB LT	UH Entrance	211	1.4	0.3	1.0	1.8	10
NB R	UH Entrance	211	0.1	0.0	0.1	0.2	10
SWB LT	UH Entrance	210	0.5	0.1	0.4	0.6	10
SWB R	UH Entrance	210	0.1	0.0	0.1	0.1	10
WB L	Elgin St	212	0.1	0.0	0.1	0.1	10
WB T	Elgin St	212	0.3	0.0	0.3	0.3	10
WB TR	Elgin St	212	0.1	0.0	0.1	0.2	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.3	0.1	0.3	0.5	10
NEB TR	Emancipation Ave	711	0.7	0.1	0.5	0.8	10
NWB LT	Wheeler Ave	766	0.4	0.0	0.3	0.5	10
NWB TR	Wheeler Ave	766	0.4	0.0	0.3	0.4	10
SEB LT	Wheeler Ave	423	0.7	0.1	0.6	0.9	10
SEB TR	Wheeler Ave	423	0.3	0.1	0.2	0.4	10
SWB LT	Emancipation Ave	177	0.5	0.0	0.5	0.6	10
SWB TR	Emancipation Ave	177	0.5	0.0	0.4	0.6	10

ENNIS ST & HOLMAN ST **NODE: 306**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	0.2	0.0	0.2	0.3	10
NEB TR	Ennis St	740	0.6	0.1	0.5	0.6	10
NWB LTR	Holman St	742	0.5	0.1	0.3	0.6	10
SEB LTR	Holman St	741	0.1	0.0	0.1	0.2	10
SWB LT	Ennis St	702	0.1	0.0	0.0	0.1	10
SWB TR	Ennis St	702	0.3	0.1	0.2	0.4	10

ENNIS ST & WHEELER AVE **NODE: 266**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	0.2	0.0	0.1	0.2	10
NEB T	Ennis St	698	0.1	0.0	0.1	0.2	10
SEB L	Wheeler Ave	766	0.7	0.1	0.5	0.8	10
SEB R	Wheeler Ave	766	0.1	0.0	0.1	0.1	10
SWB T	Ennis St	726	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	726	0.1	0.0	0.1	0.1	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.7	0.1	0.6	0.8	10
EB TR	Leeland St	228	0.8	0.1	0.7	0.9	10
SWB LT	Ernestine St	411	0.4	0.1	0.3	0.5	10
SWB T	Ernestine St	411	0.4	0.0	0.3	0.4	10
SWB TR	Ernestine St	411	0.3	0.0	0.3	0.4	10
WB L	Leeland St	227	0.1	0.0	0.1	0.1	10
WB T	Leeland St	227	0.4	0.1	0.4	0.5	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	0.1	0.0	0.1	0.2	10
SB LT	Ernestine St	685	0.0	0.0	0.0	0.2	10
SB T	Ernestine St	685	0.0	0.0	0.0	0.0	10
SB TR	Ernestine St	685	0.0	0.0	0.0	0.1	10
WB L	Munger St	460	0.0	0.0	0.0	0.1	10
WB T	Munger St	460	0.1	0.0	0.1	0.1	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	1.9	0.1	1.7	2.0	10
NWB L	I-45 NBFR	222	0.6	0.1	0.5	0.7	10
NWB LT	I-45 NBFR	222	1.5	0.1	1.4	1.7	10
NWB T	I-45 NBFR	222	1.9	0.1	1.7	2.1	10
NWB TR	I-45 NBFR	222	3.0	0.2	2.7	3.4	10
SB T	Ernestine St	221	0.3	0.0	0.2	0.3	10
SB TR	Ernestine St	221	0.7	0.1	0.5	0.8	10

FANNIN ST & WHEELER AVE **NODE: 132**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	1.6	0.3	1.4	2.1	10
NWB T	Wheeler Ave	172	1.7	0.2	1.5	2.2	10
SEB T	Wheeler Ave	169	1.9	0.2	1.7	2.3	10
SEB TR	Wheeler Ave	169	1.1	0.1	1.0	1.2	10
SWB L	Fannin St	87	0.4	0.1	0.4	0.5	10
SWB T	Fannin St	87	1.0	0.1	0.8	1.3	10
SWB TR	Fannin St	87	0.7	0.3	0.4	1.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
EB LR	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
NB L	Edloe St	153	1.0	0.2	0.7	1.6	10
NB T	Edloe St	153	0.2	0.0	0.1	0.2	10
NB TR	Edloe St	153	0.1	0.0	0.1	0.1	10
SB L	Edloe St	155	0.0	0.0	0.0	0.1	10
SB T	Edloe St	155	0.7	0.2	0.6	1.1	10
SB TR	Edloe St	155	0.5	0.1	0.4	0.8	10
WB LR	I-69 Express Lanes	31	1.1	0.2	0.8	1.5	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	0.0	0.0	0.0	0.1	10
WB R	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.8	0.6	1.2	2.9	10
EB T	Kelley St	313	0.3	0.0	0.3	0.4	10
EB TR	Kelley St	313	0.6	0.1	0.5	0.7	10
NB L	Lockwood Dr	308	1.1	0.1	0.9	1.2	10
NB T	Lockwood Dr	308	1.1	0.2	0.8	1.3	10
NB TR	Lockwood Dr	308	1.3	0.2	1.1	1.7	10
SB L	Lockwood Dr	311	0.2	0.0	0.1	0.3	10
SB T	Lockwood Dr	311	1.2	0.1	1.0	1.5	10
SB TR	Lockwood Dr	311	1.5	0.1	1.2	1.6	10
WB L	Kelley St	312	0.5	0.1	0.4	0.6	10
WB T	Kelley St	312	1.1	0.1	0.9	1.4	10
WB TR	Kelley St	312	1.1	0.1	1.0	1.3	10

LABRANCH ST & WHEELER AVE — NODE: 134

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	0.9	0.1	0.7	1.1	10
NWB LT	Wheeler Ave	77	0.0	0.0	0.0	0.1	10
NWB TR	Wheeler Ave	77	0.0	0.0	0.0	0.1	10
SEB LT	Wheeler Ave	86	0.1	0.0	0.1	0.1	10
SEB TR	Wheeler Ave	86	0.1	0.0	0.1	0.2	10
SWB LTR	LaBranch St	78	0.3	0.1	0.3	0.4	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.4	0.1	0.3	0.6	10
EB TR	Laura Koppe Rd	330	1.4	0.1	1.1	1.6	10
NB L	Lockwood Dr	560	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	560	0.5	0.1	0.4	0.6	10
NB TR	Lockwood Dr	560	0.6	0.1	0.5	0.7	10
SB L	Lockwood Dr	327	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	327	0.1	0.0	0.0	0.2	10
SB TR	Lockwood Dr	327	0.2	0.1	0.1	0.3	10
WB L	Laura Koppe Rd	329	0.6	0.1	0.4	0.7	10
WB TR	Laura Koppe Rd	329	0.7	0.1	0.5	0.9	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	249	0.1	0.0	0.0	0.1	10
NEB T	Lockwood Dr	249	5.8	0.2	5.4	6.1	10
SWB L	Lockwood Dr	253	0.0	0.0	0.0	0.1	10
SWB T	Lockwood Dr	253	1.5	0.2	1.2	1.9	10
WB LR	Armour Dr	659	0.3	0.1	0.2	0.4	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	248	1.0	0.1	0.9	1.3	10
EB R	Canal St	248	0.2	0.0	0.2	0.3	10
EB T	Canal St	248	0.9	0.1	0.8	1.0	10
NEB L	Lockwood Dr	241	0.6	0.1	0.4	0.7	10
NEB T	Lockwood Dr	241	0.7	0.1	0.6	0.9	10
NEB TR	Lockwood Dr	241	0.7	0.1	0.7	0.9	10
SWB L	Lockwood Dr	245	0.1	0.0	0.0	0.1	10
SWB T	Lockwood Dr	245	0.6	0.1	0.5	0.7	10
SWB TR	Lockwood Dr	245	0.9	0.1	0.8	1.1	10
WB LT	Canal St	247	1.5	0.2	1.2	1.9	10
WB TR	Canal St	247	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	0.8	0.1	0.6	1.0	10
EB T	Cavalcade St	299	0.3	0.1	0.3	0.5	10
EB TR	Cavalcade St	299	0.6	0.1	0.5	0.7	10
NB L	Lockwood Dr	292	1.2	0.4	0.8	2.1	10
NB T	Lockwood Dr	292	0.5	0.1	0.4	0.9	10
NB TR	Lockwood Dr	292	0.8	0.2	0.7	1.4	10
SB L	Lockwood Dr	296	0.6	0.1	0.5	0.8	10
SB T	Lockwood Dr	296	0.8	0.0	0.7	0.9	10
SB TR	Lockwood Dr	296	1.1	0.1	1.0	1.3	10
WB L	Cavalcade St	298	0.6	0.0	0.6	0.7	10
WB T	Cavalcade St	298	0.6	0.1	0.6	0.7	10
WB TR	Cavalcade St	298	0.8	0.1	0.7	0.9	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.3	0.1	0.2	0.3	10
EB T	Clinton Dr	259	0.3	0.1	0.2	0.5	10
EB TR	Clinton Dr	259	1.3	2.6	0.3	8.7	10
NEB L	Lockwood Dr	257	0.5	0.1	0.5	0.6	10
NEB R	Lockwood Dr	257	0.2	0.0	0.1	0.3	10
NEB T	Lockwood Dr	257	3.1	0.1	3.0	3.3	10
SB L	Lockwood Dr	256	0.5	0.1	0.4	0.7	10
SB R	Lockwood Dr	256	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	256	0.6	0.1	0.5	0.7	10
WB L	Clinton Dr	258	0.7	0.1	0.7	0.9	10
WB R	Clinton Dr	258	0.2	0.0	0.1	0.2	10
WB T	Clinton Dr	258	1.8	0.1	1.6	2.0	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.8	0.1	0.7	0.9	10
EB T	Collingsworth St	291	0.4	0.1	0.3	0.5	10
EB TR	Collingsworth St	291	0.8	0.1	0.6	1.0	10
NB L	Lockwood Dr	533	4.9	1.2	3.0	6.2	10
NB T	Lockwood Dr	533	0.9	0.1	0.6	1.1	10
NB TR	Lockwood Dr	533	2.0	0.4	1.6	2.9	10
SEB L	Lockwood Dr	288	0.3	0.1	0.2	0.4	10
SEB T	Lockwood Dr	288	0.2	0.0	0.2	0.3	10
SEB TR	Lockwood Dr	288	0.2	0.0	0.1	0.2	10
WB L	Collingsworth St	290	0.5	0.1	0.4	0.6	10
WB T	Collingsworth St	290	0.1	0.0	0.1	0.2	10
WB TR	Collingsworth St	290	0.2	0.0	0.2	0.3	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.2	0.2	1.0	1.4	10
NB L	Lockwood Dr	288	0.3	0.0	0.2	0.4	10
NB T	Lockwood Dr	288	0.8	0.1	0.7	1.0	10
NB TR	Lockwood Dr	288	0.9	0.1	0.8	1.1	10
SB L	Lockwood Dr	292	0.3	0.0	0.2	0.3	10
SB T	Lockwood Dr	292	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	292	0.1	0.0	0.1	0.1	10
WB LTR	Crane St	294	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.3	0.1	0.2	0.4	10
NB LT	Lockwood Dr	327	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	0.2	0.0	0.1	0.3	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	1.1	0.1	0.9	1.2	10
EB R	Harrisburg Blvd	244	0.4	0.0	0.3	0.5	10
EB T	Harrisburg Blvd	244	1.4	0.1	1.2	1.6	10
NEB L	Lockwood Dr	237	1.3	0.1	1.1	1.5	10
NEB T	Lockwood Dr	237	2.9	0.5	2.3	3.8	10
NEB TR	Lockwood Dr	237	2.9	0.5	2.3	4.0	10
NWB L	Harrisburg Blvd	678	1.0	0.1	0.8	1.2	10
NWB R	Harrisburg Blvd	678	0.3	0.1	0.2	0.4	10
NWB T	Harrisburg Blvd	678	1.0	0.2	0.7	1.3	10
SB L	Lockwood Dr	241	1.3	0.4	0.6	1.9	10
SB T	Lockwood Dr	241	2.5	0.3	2.2	3.1	10
SB TR	Lockwood Dr	241	3.1	0.4	2.7	3.9	10
SEB T	[Unnamed Street]	675	0.0	0.0	0.0	0.0	10
WB T	[Unnamed Street]	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	3.4	0.8	2.6	4.9	10
NEB L	Lockwood Dr	253	0.1	0.0	0.0	0.1	10
NEB T	Lockwood Dr	253	0.4	0.1	0.3	0.5	10
NEB TR	Lockwood Dr	253	0.4	0.0	0.3	0.4	10
SWB L	Lockwood Dr	257	0.1	0.0	0.0	0.1	10
SWB T	Lockwood Dr	257	0.0	0.1	0.0	0.2	10
SWB TR	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
WB LTR	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	0.1	0.0	0.1	0.1	10
NB LT	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
WB LTR	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	1.8	0.1	1.6	1.9	10
EB LT	I-610 EBFR	307	1.8	0.1	1.7	2.1	10
EB TR	I-610 EBFR	307	1.9	0.3	1.5	2.3	10
NB R	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	545	9.3	1.6	7.6	11.8	10
SB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	304	0.2	0.1	0.1	0.3	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	304	0.5	0.1	0.3	0.5	10
SB T	Lockwood Dr	308	4.9	0.3	4.3	5.5	10
WB L	I-610 WBFR	309	1.0	0.1	0.8	1.1	10
WB R	Lockwood Dr	308	0.1	0.0	0.1	0.1	10
WB T	I-610 WBFR	309	1.6	0.1	1.5	1.7	10
WB TR	I-610 WBFR	309	1.8	0.1	1.7	2.0	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	0.4	0.0	0.3	0.4	10
NB L	Lockwood Dr	232	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	232	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	232	0.1	0.0	0.1	0.1	10
SB L	Lockwood Dr	237	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	237	1.3	0.1	1.3	1.4	10
SB TR	Lockwood Dr	237	1.2	0.1	1.1	1.4	10
WB LTR	McKinney St	239	0.3	0.0	0.2	0.4	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	0.2	0.1	0.1	0.3	10
NB LT	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
WB LTR	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.0	10
EB T	Munger St	460	0.2	0.1	0.1	0.3	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	0.0	0.0	0.0	0.0	10
WB T	Munger St	661	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.2	0.1	1.1	1.3	10
EB T	Navigation Blvd	252	1.0	0.1	0.9	1.1	10
EB TR	Navigation Blvd	252	1.3	0.1	1.1	1.4	10
NEB L	Lockwood Dr	245	0.8	0.1	0.6	1.0	10
NEB T	Lockwood Dr	245	1.5	0.1	1.3	1.7	10
NEB TR	Lockwood Dr	245	1.5	0.1	1.3	1.7	10
SWB L	Lockwood Dr	249	1.3	0.1	1.2	1.4	10
SWB R	Lockwood Dr	249	0.2	0.0	0.1	0.2	10
SWB T	Lockwood Dr	249	2.0	0.2	1.8	2.5	10
WB L	Navigation Blvd	251	1.4	0.2	1.1	1.6	10
WB T	Navigation Blvd	251	1.2	0.1	1.1	1.5	10
WB TR	Navigation Blvd	251	1.6	0.1	1.5	1.9	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	0.1	0.0	0.1	0.1	10
NB LT	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	0.1	0.0	0.1	0.1	10
SB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
WB LTR	Nichols St	525	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.3	0.1	0.3	0.4	10
NB LT	Lockwood Dr	300	0.2	0.3	0.1	0.8	10
NB TR	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	545	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	545	0.1	0.0	0.0	0.1	10
WB LTR	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	0.9	0.1	0.8	1.1	10
NB LT	Lockwood Dr	296	0.2	0.0	0.2	0.3	10
NB TR	Lockwood Dr	296	0.2	0.0	0.2	0.3	10
SB LT	Lockwood Dr	300	0.7	0.1	0.5	1.0	10
SB TR	Lockwood Dr	300	0.6	0.1	0.4	0.8	10
WB LTR	Rand St	302	0.9	0.2	0.6	1.2	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	1.3	0.1	1.2	1.6	10
NB TR	Lockwood Dr	311	1.5	0.1	1.2	1.7	10
NEB LTR	Shreveport Blvd	316	0.6	0.1	0.5	0.6	10
SB L	Lockwood Dr	314	0.7	0.1	0.6	0.9	10
SB T	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SWB LTR	Shreveport Blvd	315	1.2	0.1	1.0	1.4	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	533	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	533	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
WB LTR	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.3	0.1	0.2	0.5	10
EB TR	Weaver Rd	326	1.0	0.1	0.8	1.2	10
NB L	Lockwood Dr	320	0.3	0.0	0.2	0.3	10
NB T	Lockwood Dr	320	1.6	0.1	1.4	1.8	10
NB TR	Lockwood Dr	320	1.9	0.2	1.6	2.1	10
SB L	Lockwood Dr	324	0.4	0.0	0.3	0.4	10
SB T	Lockwood Dr	324	0.9	0.1	0.8	1.0	10
SB TR	Lockwood Dr	324	0.9	0.1	0.8	1.1	10
WB L	Weaver Rd	325	0.6	0.2	0.5	1.0	10
WB TR	Weaver Rd	325	3.3	1.1	1.8	6.1	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.0	0.0	0.0	0.0	10
EB LT	I-10 EBFR	268	0.6	0.0	0.5	0.6	10
EB T	I-10 EBFR	268	0.4	0.0	0.3	0.4	10
NB T	Lockwood Dr (NB)	264	3.8	0.6	3.3	4.9	10
NB TR	Lockwood Dr (NB)	264	4.6	0.6	4.0	5.5	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	0.3	0.0	0.3	0.4	10
NB LT	Lockwood Dr (NB)	270	0.6	0.0	0.5	0.6	10
NB T	Lockwood Dr (NB)	270	0.7	0.0	0.7	0.8	10
WB T	I-10 WBFR	276	1.6	0.1	1.4	1.8	10
WB TR	I-10 WBFR	276	0.6	0.0	0.5	0.7	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.5	0.1	0.4	0.7	10
EB T	Market St	262	0.2	0.0	0.2	0.3	10
NB LT	Lockwood Dr	499	0.6	0.3	0.5	1.3	10
NB TR	Lockwood Dr	499	2.1	0.5	1.6	3.3	10
WB T	Market St	266	0.3	0.1	0.2	0.4	10
WB TR	Market St	266	0.1	0.0	0.0	0.1	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	5.1	1.3	3.7	7.1	10
EB TR	I-10 EBFR	269	1.1	0.3	0.8	1.6	10
SB L	Lockwood Dr (SB)	267	0.6	0.1	0.5	0.7	10
SB LT	Lockwood Dr (SB)	267	0.4	0.1	0.1	0.5	10
SB T	Lockwood Dr (SB)	267	0.0	0.0	0.0	0.1	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	4.0	0.5	3.2	4.8	10
SB TR	Lockwood Dr (SB)	272	2.9	0.5	2.2	3.8	10
WB L	I-10 WBFR	273	0.0	0.0	0.0	0.0	10
WB LT	I-10 WBFR	273	0.2	0.0	0.2	0.3	10
WB T	I-10 WBFR	273	0.2	0.0	0.1	0.2	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	2.2	0.5	1.7	3.0	10
SB L	Lockwood Dr	515	0.1	0.1	0.0	0.2	10
SB T	Lockwood Dr	515	0.4	0.0	0.3	0.5	10
SB TR	Lockwood Dr	515	0.8	0.0	0.8	0.9	10
WB LT	Lyons Ave	279	0.7	0.1	0.6	0.9	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	0.9	0.1	0.8	1.1	10
EB TR	Market St	263	0.1	0.0	0.0	0.1	10
SB LT	Lockwood Dr (SB)	260	0.5	0.1	0.4	0.6	10
SB TR	Lockwood Dr (SB)	260	0.5	0.0	0.4	0.5	10
WB LT	Market St	262	0.1	0.0	0.1	0.2	10
WB T	Market St	262	0.0	0.0	0.0	0.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	0.3	0.1	0.2	0.5	10
NB L	Lockwood Dr (NB)	275	1.1	0.5	0.6	2.0	10
NB T	Lockwood Dr (NB)	275	0.5	0.1	0.4	0.6	10
NB TR	Lockwood Dr (NB)	275	0.7	0.0	0.6	0.7	10
WB TR	Lyons Ave	283	0.8	0.1	0.7	1.1	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.9	0.1	0.7	1.1	10
EB R	Bennington St	319	0.1	0.0	0.1	0.1	10
NB L	Lockwood Dr	314	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	317	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	317	0.2	0.0	0.2	0.3	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, DENMARK ST & DENMARKST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	0.3	0.1	0.2	0.4	10
NB L	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	DenmarkSt	549	0.1	0.0	0.1	0.2	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.5	0.0	0.5	0.6	10
NB TR	Spur 5 NBFR	219	1.1	0.2	1.0	1.4	10
NEB L	Elgin St	216	0.9	0.1	0.8	1.3	10
NEB T	Elgin St	216	1.2	0.1	1.1	1.5	10
SWB T	Lockwood Dr	218	0.6	0.1	0.5	0.7	10
SWB TR	Lockwood Dr	218	1.1	0.1	1.0	1.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.4	0.1	0.4	0.5	10
EB T	Polk St	235	0.6	0.1	0.5	0.7	10
EB TR	Polk St	235	0.8	0.1	0.7	0.9	10
NB L	Lockwood Dr	229	0.4	0.1	0.4	0.6	10
NB T	Lockwood Dr	229	2.0	0.2	1.8	2.4	10
NB TR	Lockwood Dr	229	1.4	0.2	1.2	1.6	10
SB L	Lockwood Dr	232	1.2	0.2	1.0	1.5	10
SB T	Lockwood Dr	232	3.7	0.2	3.5	4.0	10
SB TR	Lockwood Dr	232	1.7	0.1	1.5	1.8	10
WB L	Polk St	234	0.6	0.1	0.5	0.7	10
WB T	Polk St	234	0.5	0.1	0.4	0.6	10
WB TR	Polk St	234	0.7	0.1	0.7	0.9	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	0.1	0.0	0.0	0.1	10
EB T	Leeland St	227	0.5	0.0	0.4	0.5	10
NB LT	Lockwood Dr	230	0.8	0.1	0.7	0.9	10
NB T	Lockwood Dr	230	0.6	0.1	0.5	0.7	10
NB TR	Lockwood Dr	230	0.5	0.1	0.3	0.6	10
WB T	Telephone Rd	231	1.4	0.1	1.2	1.6	10
WB TR	Telephone Rd	231	1.2	0.2	1.0	1.6	10

MAIN ST, RICHMOND AVE & WHEELER AVE — NODE: 131

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	0.1	0.0	0.1	0.1	10
NEB L	Main St	168	5.9	2.1	3.6	10.6	10
NEB R	Main St	168	0.5	0.0	0.4	0.6	10
NEB T	Main St	168	1.3	0.2	1.0	1.5	10
NWB L	Wheeler Ave	169	0.1	0.1	0.1	0.3	10
NWB T	Wheeler Ave	169	2.9	0.6	2.5	4.1	10
NWB TR	Wheeler Ave	169	3.0	0.6	2.5	4.2	10
SB T	LRT Line	674	0.0	0.0	0.0	0.0	10
SEB L	Richmond Ave	26	1.4	0.3	0.8	1.8	10
SEB T	Richmond Ave	26	6.1	0.7	4.9	7.2	10
SEB TR	Richmond Ave	26	4.7	0.5	3.8	5.5	10
SWB L	Main St	70	0.3	0.0	0.2	0.3	10
SWB TR	Main St	70	1.3	0.3	0.9	2.0	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	1.0	0.2	0.7	1.3	10
EB R	Richmond Ave	9	0.3	0.0	0.3	0.4	10
EB T	Richmond Ave	9	2.9	0.2	2.6	3.1	10
NB L	Buffalo Speedway	37	16.3	4.0	8.5	19.3	10
NB T	Buffalo Speedway	37	7.8	1.9	4.2	10.6	10
NB TR	Buffalo Speedway	37	12.3	2.7	6.4	14.9	10
SB L	Buffalo Speedway	36	1.2	0.2	1.0	1.4	10
SB T	Buffalo Speedway	36	2.0	0.2	1.6	2.2	10
SB TR	Buffalo Speedway	36	2.2	0.1	2.0	2.4	10
WB L	Richmond Ave	12	3.5	0.4	3.0	4.2	10
WB T	Richmond Ave	12	4.4	0.2	4.2	4.6	10
WB TR	Richmond Ave	12	2.6	0.2	2.4	3.0	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	0.7	0.2	0.5	0.9	10
EB T	Richmond Ave	163	0.5	0.1	0.4	0.6	10
EB TR	Richmond Ave	163	0.5	0.0	0.5	0.6	10
NB LTR	Dunlavy St	57	2.7	0.4	2.2	3.6	10
SB LTR	Dunlavy St	56	30.5	2.1	26.2	32.6	10
WB L	Richmond Ave	165	0.2	0.0	0.1	0.2	10
WB T	Richmond Ave	165	0.3	0.0	0.3	0.4	10
WB TR	Richmond Ave	165	0.4	0.1	0.3	0.5	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	0.9	0.2	0.6	1.2	10
EB T	Richmond Ave	12	0.7	0.1	0.6	0.9	10
EB TR	Richmond Ave	12	0.3	0.1	0.3	0.4	10
NB L	Eastside St	40	1.9	0.6	0.7	2.7	10
NB TR	Eastside St	40	0.8	0.5	0.5	1.9	10
SB L	Eastside St	39	1.6	0.3	1.3	2.4	10
SB TR	Eastside St	39	2.7	0.7	1.8	4.4	10
WB L	Richmond Ave	54	0.1	0.0	0.1	0.1	10
WB T	Richmond Ave	54	0.7	0.1	0.6	0.8	10
WB TR	Richmond Ave	54	0.8	0.1	0.7	0.9	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	1.2	0.2	1.0	1.5	10
EB R	Richmond Ave	7	0.4	0.2	0.2	0.7	10
EB T	Richmond Ave	7	6.8	0.4	6.0	7.3	10
NB L	Edloe St	155	13.7	1.5	12.1	15.7	10
NB R	Edloe St	155	0.4	0.1	0.3	0.4	10
NB T	Edloe St	155	2.4	0.2	2.2	2.9	10
SB L	Edloe St	5	1.1	0.2	0.9	1.4	10
SB T	Edloe St	5	2.0	0.5	1.6	3.0	10
SB TR	Edloe St	5	1.8	0.4	1.4	2.6	10
WB L	Richmond Ave	9	3.2	0.4	2.7	3.8	10
WB T	Richmond Ave	9	5.8	0.2	5.3	6.0	10
WB TR	Richmond Ave	9	3.3	0.1	3.2	3.5	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	2.6	0.2	2.3	3.0	10
EB T	Richmond Ave	64	0.9	0.1	0.7	1.2	10
EB TR	Richmond Ave	64	2.3	0.2	2.1	2.8	10
NB TR	Greenbriar Dr	47	2.5	0.2	2.1	2.9	10
SB L	Greenbriar Dr	46	0.2	0.0	0.1	0.3	10
SB R	Greenbriar Dr	46	0.2	0.1	0.1	0.3	10
SB T	Greenbriar Dr	46	3.9	0.3	3.6	4.4	10
WB L	Richmond Ave	160	1.0	0.1	0.8	1.3	10
WB T	Richmond Ave	160	0.2	0.0	0.1	0.2	10
WB TR	Richmond Ave	160	0.2	0.0	0.2	0.3	10

RICHMOND AVE & HAZARD ST — NODE: 124

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	0.0	0.0	0.0	0.0	10
EB T	Richmond Ave	20	0.2	0.0	0.2	0.3	10
EB TR	Richmond Ave	20	0.2	0.0	0.1	0.3	10
NB LTR	Hazard St	51	29.3	1.8	26.2	32.7	10
SB LTR	Hazard St	50	21.2	7.9	9.9	32.6	10
WB L	Richmond Ave	162	0.4	0.1	0.4	0.6	10
WB T	Richmond Ave	162	1.0	0.1	0.8	1.1	10
WB TR	Richmond Ave	162	1.0	0.1	0.9	1.1	10

RICHMOND AVE & KIRBY DR — NODE: 121

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	9.4	2.9	4.1	13.0	10
EB T	Richmond Ave	54	2.1	0.2	1.8	2.5	10
EB TR	Richmond Ave	54	2.0	0.5	1.4	2.8	10
NB L	Kirby Dr	158	4.9	0.7	4.1	6.3	10
NB T	Kirby Dr	158	20.9	4.0	12.0	26.2	10
NB TR	Kirby Dr	158	12.4	2.4	7.2	15.6	10
SB L	Kirby Dr	44	1.9	0.4	1.3	2.4	10
SB T	Kirby Dr	44	18.4	3.8	12.0	22.6	10
SB TR	Kirby Dr	44	10.6	2.2	6.9	12.7	10
WB L	Richmond Ave	64	1.5	0.3	1.0	1.8	10
WB T	Richmond Ave	64	3.0	0.3	2.6	3.5	10
WB TR	Richmond Ave	64	1.6	0.2	1.3	1.8	10

RICHMOND AVE & MANDELL ST — NODE: 127

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	0.2	0.0	0.2	0.3	10
EB T	Richmond Ave	165	0.4	0.0	0.4	0.5	10
EB TR	Richmond Ave	165	0.4	0.0	0.4	0.5	10
NB LTR	Mandell St	59	21.0	2.2	16.4	25.1	10
SB LTR	Mandell St	58	3.8	1.3	1.9	5.5	10
WB L	Richmond Ave	23	0.4	0.1	0.3	0.5	10
WB T	Richmond Ave	23	0.2	0.0	0.1	0.3	10
WB TR	Richmond Ave	23	0.3	0.0	0.2	0.3	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	0.9	0.1	0.8	1.1	10
EB T	Richmond Ave	23	2.3	0.2	2.0	2.7	10
EB TR	Richmond Ave	23	3.4	0.3	3.0	3.8	10
NB L	Montrose Blvd	61	2.6	0.4	2.0	3.2	10
NB T	Montrose Blvd	61	2.3	0.1	2.1	2.5	10
NB TR	Montrose Blvd	61	3.5	0.4	3.0	4.1	10
SB L	Montrose Blvd	60	1.7	0.4	1.3	2.5	10
SB T	Montrose Blvd	60	5.7	1.0	4.8	7.9	10
SB TR	Montrose Blvd	60	6.9	1.3	5.5	9.5	10
WB L	Richmond Ave	166	6.1	1.3	4.3	8.8	10
WB T	Richmond Ave	166	8.2	0.9	7.2	9.8	10
WB TR	Richmond Ave	166	9.6	1.1	8.1	11.1	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	0.3	0.1	0.1	0.4	10
EB T	Richmond Ave	160	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	160	0.0	0.0	0.0	0.0	10
NB T	Shepherd Dr	49	2.4	0.1	2.3	2.7	10
NB TR	Shepherd Dr	49	2.5	0.1	2.3	2.8	10
SB T	Shepherd Dr	48	2.4	0.3	2.0	2.8	10
SB TR	Shepherd Dr	48	2.4	0.3	2.0	2.7	10
WB L	Richmond Ave	20	0.7	0.1	0.6	0.8	10
WB T	Richmond Ave	20	0.2	0.2	0.1	0.7	10
WB TR	Richmond Ave	20	0.1	0.0	0.1	0.2	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.0	0.0	0.0	0.0	10
EB T	Richmond Ave	167	0.8	0.4	0.2	1.4	10
NEB LT	US 59 NBFR	69	1.1	0.1	0.9	1.3	10
NEB R	US 59 NBFR	69	0.3	0.1	0.1	0.4	10
NEB TR	US 59 NBFR	69	1.1	0.1	0.9	1.3	10
WB R	Richmond Ave	26	0.6	0.1	0.4	0.7	10
WB T	Richmond Ave	26	4.3	0.4	3.9	5.3	10
WB TR	Richmond Ave	26	1.5	0.2	1.2	1.6	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	19.4	1.7	17.3	22.3	10
EB TR	Richmond Ave	166	13.0	1.8	10.4	15.9	10
SWB LT	US 59 SBFR	65	1.0	0.1	0.8	1.2	10
SWB R	US 59 SBFR	65	0.5	0.0	0.4	0.5	10
SWB T	US 59 SBFR	65	0.9	0.1	0.8	1.1	10
WB L	Richmond Ave	167	0.1	0.0	0.0	0.1	10
WB T	Richmond Ave	167	0.0	0.0	0.0	0.1	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	162	0.6	0.1	0.5	0.7	10
EB TR	Richmond Ave	162	0.6	0.1	0.5	0.8	10
NB LTR	Woodhead St	53	8.3	1.6	5.6	11.0	10
SB LTR	Woodhead St	52	1.0	0.2	0.7	1.4	10
WB L	Richmond Ave	163	0.2	0.0	0.2	0.3	10
WB T	Richmond Ave	163	0.4	0.1	0.3	0.8	10
WB TR	Richmond Ave	163	0.4	0.1	0.3	0.5	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	3.2	0.4	2.6	3.8	10
EB T	Westpark Dr	140	3.3	0.1	3.1	3.6	10
EB TR	Westpark Dr	140	4.3	0.3	4.0	4.7	10
NB L	S Rice Ave	138	2.1	0.2	1.7	2.3	10
NB T	S Rice Ave	138	2.8	0.2	2.6	3.3	10
NB TR	S Rice Ave	138	3.6	0.2	3.2	3.9	10
SB L	S Rice Ave	137	2.3	0.2	1.9	2.7	10
SB R	S Rice Ave	137	0.0	0.0	0.0	0.1	10
SB T	S Rice Ave	137	5.4	0.4	5.0	6.1	10
WB L	Westpark Dr	770	9.5	1.8	5.9	12.4	10
WB T	Westpark Dr	770	12.0	1.2	10.0	13.8	10
WB TR	Westpark Dr	770	8.1	1.5	5.7	10.5	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	1.1	0.1	1.0	1.4	10
NEB R	San Jacinto St	173	0.1	0.0	0.1	0.2	10
NEB T	San Jacinto St	173	2.5	0.3	2.1	2.9	10
NWB T	Wheeler Ave	86	1.3	0.2	1.1	1.9	10
NWB TR	Wheeler Ave	86	1.4	0.2	1.2	1.7	10
SEB LT	Wheeler Ave	172	3.0	0.1	2.8	3.2	10
SEB T	Wheeler Ave	172	3.4	0.3	2.9	3.7	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.1	0.0	0.0	0.1	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.1	10
NB LTR	Edell St	590	0.2	0.0	0.1	0.2	10
SB LTR	Edell St	589	0.2	0.0	0.1	0.2	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	0.3	0.1	0.2	0.4	10
EB T	Tidwell Rd	586	0.3	0.0	0.3	0.4	10
EB TR	Tidwell Rd	586	1.1	0.1	0.9	1.2	10
NB LTR	Friendly Rd	585	0.7	0.3	0.5	1.2	10
SB LTR	Friendly Rd	584	7.9	0.7	7.0	9.3	10
WB L	Tidwell Rd	338	0.0	0.0	0.0	0.1	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.0	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.4	0.1	0.3	0.6	10
EB T	Tidwell Rd	338	0.9	0.1	0.8	1.0	10
EB TR	Tidwell Rd	338	1.2	0.1	1.1	1.3	10
NB L	Hirsch Rd	336	0.9	0.1	0.8	1.0	10
NB R	Hirsch Rd	336	0.1	0.0	0.1	0.1	10
NB T	Hirsch Rd	336	1.2	0.1	1.0	1.3	10
SB L	Hirsch Rd	335	0.7	0.1	0.6	0.9	10
SB R	Hirsch Rd	335	0.3	0.0	0.2	0.3	10
SB T	Hirsch Rd	335	0.7	0.1	0.7	0.9	10
WB L	Tidwell Rd	334	0.1	0.0	0.1	0.2	10
WB T	Tidwell Rd	334	0.3	0.0	0.2	0.4	10
WB TR	Tidwell Rd	334	0.4	0.1	0.3	0.5	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	0.6	0.1	0.5	0.9	10
EB LT	Tidwell Rd	342	1.5	0.1	1.3	1.8	10
EB T	Tidwell Rd	342	3.1	0.1	2.9	3.3	10
NB L	I-69 NBFR	340	1.1	0.1	1.0	1.2	10
NB LT	I-69 NBFR	340	1.4	0.1	1.2	1.4	10
NB R	I-69 NBFR	340	0.4	0.0	0.3	0.5	10
NB T	I-69 NBFR	340	1.1	0.1	1.1	1.2	10
NB TR	I-69 NBFR	340	1.1	0.1	1.0	1.2	10
WB T	Tidwell Rd	586	3.6	0.2	3.2	4.0	10
WB TR	Tidwell Rd	586	1.8	0.2	1.5	2.1	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.2	0.1	0.2	0.3	10
EB T	Tidwell Rd	591	3.8	0.2	3.4	4.1	10
SB L	I-69 SBFR	649	1.1	0.1	1.0	1.3	10
SB LT	I-69 SBFR	649	1.1	0.1	1.0	1.3	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.0	10
SB T	I-69 SBFR	649	1.3	1.1	0.8	4.6	10
WB L	Tidwell Rd	342	1.7	0.2	1.4	1.9	10
WB LT	Tidwell Rd	342	1.7	0.2	1.5	1.9	10
WB T	Tidwell Rd	342	1.5	0.2	1.2	1.8	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	1.3	0.2	1.0	1.7	10
EB T	Tidwell Rd	349	2.4	0.1	2.4	2.6	10
EB TR	Tidwell Rd	349	2.7	0.1	2.5	2.9	10
NB L	Jensen Dr	347	2.2	0.6	1.5	3.1	10
NB T	Jensen Dr	347	1.3	0.1	1.1	1.5	10
NB TR	Jensen Dr	347	2.1	0.2	1.9	2.6	10
SB L	Jensen Dr	346	1.2	0.2	0.9	1.4	10
SB T	Jensen Dr	346	0.9	0.1	0.6	1.1	10
SB TR	Jensen Dr	346	1.3	0.1	1.0	1.5	10
WB L	Tidwell Rd	348	0.2	0.1	0.1	0.3	10
WB T	Tidwell Rd	348	2.3	0.2	1.8	2.7	10
WB TR	Tidwell Rd	348	2.9	0.2	2.5	3.4	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	0.1	0.0	0.1	0.2	10
EB T	Tidwell Rd	334	1.6	0.1	1.4	1.8	10
EB TR	Tidwell Rd	334	2.0	0.3	1.6	2.4	10
NB L	Lockwood Dr	574	4.6	1.3	2.8	7.7	10
NB T	Lockwood Dr	574	0.1	0.1	0.0	0.2	10
NB TR	Lockwood Dr	574	0.5	0.1	0.3	0.6	10
SB L	Lockwood Dr	331	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	331	0.2	0.1	0.1	0.2	10
SB TR	Lockwood Dr	331	0.2	0.1	0.1	0.4	10
WB L	Tidwell Rd	333	0.6	0.1	0.5	0.7	10
WB T	Tidwell Rd	333	1.5	0.1	1.4	1.7	10
WB TR	Tidwell Rd	333	1.6	0.1	1.5	1.7	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	589	0.0	0.0	0.0	0.0	10
SEB LTR	Edell St	592	0.0	0.0	0.0	0.0	10
SWB TR	Turner Dr	773	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	7.2	1.3	5.3	9.4	10
EB TR	Westpark Dr	116	1.6	0.3	1.2	2.0	10
NB L	14th St	118	2.3	0.4	1.8	2.9	10
NB R	14th St	118	0.2	0.1	0.1	0.3	10
WB L	Westpark Dr	616	0.6	0.1	0.4	0.8	10
WB T	Westpark Dr	616	2.0	0.2	1.7	2.4	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	768	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	768	0.0	0.0	0.0	0.0	10
NB L	Alder Dr	767	1.1	0.2	0.9	1.6	10
NB R	Alder Dr	767	0.3	0.0	0.3	0.4	10
WB LT	Westpark Dr	133	0.2	0.1	0.2	0.4	10
WB T	Westpark Dr	133	0.0	0.0	0.0	0.1	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	2.0	0.3	1.6	2.7	10
EB T	Westpark Dr	133	2.1	0.2	1.8	2.3	10
EB TR	Westpark Dr	133	2.5	0.1	2.3	2.7	10
NB T	Chimney Rock Rd	135	2.9	0.1	2.7	3.1	10
NB TR	Chimney Rock Rd	135	3.0	0.2	2.8	3.2	10
SB L	Chimney Rock Rd	134	2.5	0.4	1.9	3.1	10
SB T	Chimney Rock Rd	134	2.0	0.1	1.7	2.2	10
SB TR	Chimney Rock Rd	134	2.2	0.1	1.9	2.4	10
WB L	Westpark Dr	136	2.2	0.4	1.8	2.7	10
WB T	Westpark Dr	136	3.1	0.2	2.8	3.5	10
WB TR	Westpark Dr	136	4.4	0.2	4.0	4.9	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	1.2	0.2	0.9	1.5	10
EB T	Westpark Dr	152	0.3	0.1	0.2	0.4	10
EB TR	Westpark Dr	152	0.3	0.1	0.2	0.5	10
NB R	Edloe St	29	0.1	0.0	0.1	0.1	10
NB T	Edloe St	29	5.6	0.6	4.8	6.5	10
SB LT	Edloe St	153	1.9	0.2	1.7	2.2	10
SB T	Edloe St	153	1.2	0.1	1.0	1.4	10
SB TR	Edloe St	153	1.5	0.1	1.3	1.7	10
WB LT	Westpark Dr	154	3.2	0.4	2.8	4.1	10
WB TR	Westpark Dr	154	3.3	0.4	2.8	4.2	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	4.6	1.0	3.4	5.8	10
EB T	Westpark Dr	114	44.0	5.0	38.6	53.3	10
EB TR	Westpark Dr	114	27.1	2.7	24.1	32.8	10
NB L	Fondren Rd	110	1.8	0.2	1.4	2.0	10
NB T	Fondren Rd	110	1.9	0.1	1.8	2.1	10
NB TR	Fondren Rd	110	1.3	0.1	1.2	1.4	10
SB L	Fondren Rd	112	19.9	4.6	15.0	27.6	10
SB T	Fondren Rd	112	10.6	1.9	8.3	13.4	10
SB TR	Fondren Rd	112	7.6	1.6	5.4	9.5	10
WB L	Westpark Dr	113	18.5	4.5	12.9	28.4	10
WB T	Westpark Dr	113	14.3	3.6	9.8	20.2	10
WB TR	Westpark Dr	113	10.7	2.3	7.9	14.4	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	3.3	0.4	2.9	4.0	10
EB T	Westpark Dr	113	8.3	0.4	7.9	8.9	10
EB TR	Westpark Dr	113	5.9	0.4	5.3	6.4	10
NB L	Hillcroft Ave	3	2.3	0.3	2.0	2.9	10
NB T	Hillcroft Ave	3	6.5	0.4	6.1	7.4	10
NB TR	Hillcroft Ave	3	3.9	0.2	3.6	4.2	10
SB L	Hillcroft Ave	115	21.3	3.5	13.4	25.1	10
SB T	Hillcroft Ave	115	18.2	3.7	13.0	23.9	10
SB TR	Hillcroft Ave	115	18.6	4.6	12.2	25.6	10
WB L	Westpark Dr	116	1.7	0.3	1.6	2.4	10
WB T	Westpark Dr	116	13.5	1.8	11.3	15.9	10
WB TR	Westpark Dr	116	8.0	0.9	6.7	9.3	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	5.5	0.4	5.0	6.2	10
EB T	Westpark Dr	143	0.5	0.1	0.3	0.7	10
NB L	I-610 NBFR	145	10.2	2.1	6.2	13.6	10
NB LT	I-610 NBFR	145	9.9	2.0	6.0	12.7	10
NB TR	I-610 NBFR	145	8.8	2.0	5.5	11.6	10
WB T	Westpark Dr	772	5.5	0.5	4.9	6.6	10
WB TR	Westpark Dr	772	4.5	0.4	4.0	5.3	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	629	10.2	0.9	8.7	11.2	10
SB L	I-610 SBFR	141	0.9	0.1	0.7	1.2	10
SB R	I-610 SBFR	141	0.1	0.0	0.0	0.1	10
SB T	I-610 SBFR	141	2.5	0.2	2.2	2.8	10
WB L	Westpark Dr	143	1.1	0.1	0.9	1.2	10
WB T	Westpark Dr	143	2.1	0.2	1.9	2.4	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	0.7	0.1	0.6	0.9	10
EB LT	Westpark Dr	123	1.5	0.4	1.1	2.6	10
EB T	Westpark Dr	123	3.0	0.7	2.5	4.6	10
NEB L	I-69 NBFR	126	1.0	0.2	0.8	1.4	10
NEB R	I-69 NBFR	126	0.5	0.1	0.4	0.6	10
NEB T	I-69 NBFR	126	1.2	0.1	0.9	1.4	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.0	10
WB T	Westpark Dr	127	4.8	0.4	4.3	5.5	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	616	6.5	1.7	5.2	11.0	10
SWB L	I-69 SBFR	121	0.9	0.2	0.7	1.4	10
SWB LT	I-69 SBFR	121	2.0	0.5	1.6	3.2	10
SWB R	I-69 SBFR	121	0.1	0.1	0.0	0.3	10
SWB T	I-69 SBFR	121	3.1	0.2	2.9	3.5	10
WB L	Westpark Dr	123	2.4	0.2	2.1	2.8	10
WB T	Westpark Dr	123	2.0	0.2	1.8	2.3	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	772	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	772	0.0	0.0	0.0	0.0	10
NB LR	Loop Central Dr	771	12.9	1.2	11.5	14.9	10
WB L	Westpark Dr	146	0.0	0.0	0.0	0.0	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	146	1.6	0.2	1.2	1.9	10
EB TR	Westpark Dr	146	2.5	0.3	2.1	2.9	10
NB L	Newcastle Dr	148	2.2	0.3	1.9	2.5	10
NB T	Newcastle Dr	148	1.4	0.2	1.1	1.6	10
NB TR	Newcastle Dr	148	2.7	0.2	2.4	3.1	10
SB LT	Newcastle Dr	147	1.4	0.1	1.1	1.6	10
SB TR	Newcastle Dr	147	1.6	0.1	1.5	1.8	10
WB L	Westpark Dr	149	2.1	0.2	1.9	2.5	10
WB T	Westpark Dr	149	4.1	0.2	3.8	4.3	10
WB TR	Westpark Dr	149	4.3	0.1	4.2	4.5	10

WESTPARK DR & RAMPART ST — NODE: 107

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	0.8	0.1	0.6	0.9	10
EB TR	Westpark Dr	127	1.0	0.1	0.9	1.2	10
NB LT	Rampart St	129	2.4	0.4	2.0	3.5	10
NB TR	Rampart St	129	0.1	0.1	0.1	0.3	10
SB LTR	[Unnamed Street]	128	0.4	0.1	0.3	0.5	10
WB LT	Westpark Dr	130	0.7	0.1	0.6	0.9	10
WB TR	Westpark Dr	130	0.9	1.3	0.3	4.7	10

WESTPARK DR & ROYALTON ST — NODE: 309

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	136	0.0	0.0	0.0	0.0	10
NB LR	Royalton St	384	15.1	0.5	14.3	15.7	10
WB L	Westpark Dr	140	0.2	0.0	0.1	0.2	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.1	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	770	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	770	0.0	0.0	0.0	0.0	10
NB LR	Uptown Transit Ctr	769	0.2	0.0	0.1	0.3	10
WB L	Westpark Dr	629	0.1	0.0	0.1	0.2	10
WB T	Westpark Dr	629	14.9	9.9	1.3	28.8	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	2.5	0.8	1.7	4.1	10
EB T	Westpark Dr	149	3.9	0.6	3.4	5.5	10
EB TR	Westpark Dr	149	5.2	1.0	4.4	7.9	10
NB L	Weslayan St	151	2.6	0.4	2.0	3.1	10
NB T	Weslayan St	151	1.1	0.1	0.9	1.3	10
NB TR	Weslayan St	151	1.7	0.1	1.4	1.8	10
SB L	Weslayan St	150	0.3	0.1	0.2	0.4	10
SB T	Weslayan St	150	3.9	0.2	3.7	4.3	10
SB TR	Weslayan St	150	4.9	0.3	4.5	5.3	10
WB L	Westpark Dr	152	3.3	0.9	2.4	5.1	10
WB T	Westpark Dr	152	6.2	1.1	5.2	8.6	10
WB TR	Westpark Dr	152	7.1	1.3	5.8	10.2	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	1.0	0.1	0.8	1.1	10
EB T	Westpark Dr	130	2.8	0.2	2.4	3.1	10
EB TR	Westpark Dr	130	2.9	0.3	2.5	3.3	10
NB L	Renwick Dr	132	1.1	0.2	0.9	1.3	10
NB T	Renwick Dr	132	3.2	2.2	2.0	7.3	10
NB TR	Renwick Dr	132	2.6	0.2	2.3	2.9	10
SB L	Fountain View Dr	131	2.4	0.4	2.0	3.3	10
SB T	Fountain View Dr	131	2.3	0.2	2.0	2.7	10
SB TR	Fountain View Dr	131	2.3	0.3	1.9	2.9	10
WB L	Westpark Dr	768	1.4	0.1	1.2	1.6	10
WB T	Westpark Dr	768	0.8	0.1	0.7	1.0	10
WB TR	Westpark Dr	768	1.1	0.1	0.9	1.3	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	0.6	0.1	0.5	0.7	10
NEB TR	Hutchins St	707	18.3	1.6	15.9	19.8	10
NWB T	Wheeler Ave	423	1.5	0.2	1.3	1.9	10
NWB TR	Wheeler Ave	423	0.8	0.1	0.6	0.9	10
SEB L	Wheeler Ave	421	0.1	0.0	0.1	0.1	10
SEB T	Wheeler Ave	421	2.1	0.4	1.6	2.7	10
SWB LR	Hutchins St	422	0.1	0.0	0.1	0.1	10

Project: UNC_Base
Scenario: 2021 Existing PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	43.8	29.7	22.1	111.5	10
NEB TR	Ennis St	732	25.9	16.1	10.2	60.4	10
NWB L	Alabama St	197	9.6	3.5	5.5	15.6	10
NWB T	Alabama St	197	54.5	21.4	37.0	106.8	10
NWB TR	Alabama St	197	51.8	22.7	35.6	105.3	10
SEB L	Alabama St	193	60.3	46.7	23.2	162.7	10
SEB T	Alabama St	193	35.6	19.1	20.1	85.8	10
SEB TR	Alabama St	193	33.7	16.5	20.9	77.2	10
SWB LT	Ennis St	740	30.5	8.8	22.1	50.4	10
SWB TR	Ennis St	740	35.1	13.3	23.9	57.9	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	25.1	2.0	21.4	28.7	10
NB T	Almeda Rd	696	8.0	1.4	5.7	11.0	10
NB TR	Almeda Rd	696	5.9	0.7	4.9	7.1	10
NWB LTR	Wheeler Ave	176	30.8	1.9	27.9	33.8	10
SB L	Almeda Rd	174	54.2	7.1	40.1	64.1	10
SB T	Almeda Rd	174	21.2	1.9	16.4	22.8	10
SB TR	Almeda Rd	174	19.3	1.9	15.9	22.1	10
SEB LT	Wheeler Ave	77	25.3	3.2	19.7	29.9	10
SEB TR	Wheeler Ave	77	15.6	1.2	14.4	18.1	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	8.8	1.1	7.2	10.6	10
NEB TR	Ennis St	726	5.0	0.2	4.5	5.3	10
NWB LTR	Cleburne St	733	22.2	1.8	19.0	24.8	10
SEB LTR	Cleburne St	731	19.7	3.3	12.2	24.5	10
SWB LT	Ennis St	732	5.7	1.1	4.0	7.1	10
SWB TR	Ennis St	732	3.9	0.5	3.0	4.6	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	46.1	4.3	37.8	52.3	10
EB T	Crosstimbers St	323	18.7	1.4	16.4	21.5	10
EB TR	Crosstimbers St	323	16.3	1.2	14.3	19.0	10
NB L	Lockwood Dr	321	44.9	2.3	42.4	49.6	10
NB T	Lockwood Dr	321	29.6	2.6	25.9	33.5	10
NB TR	Lockwood Dr	321	23.2	2.1	18.4	25.9	10
SB L	Lockwood Dr	320	47.3	4.8	40.5	54.2	10
SB T	Lockwood Dr	320	25.2	3.1	19.0	28.3	10
SB TR	Lockwood Dr	320	18.5	1.2	17.4	21.4	10
WB L	Crosstimbers St	322	36.4	4.0	31.2	42.8	10
WB T	Crosstimbers St	322	13.9	0.5	13.0	14.6	10
WB TR	Crosstimbers St	322	12.4	1.0	11.2	14.2	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	45.2	1.7	42.9	47.5	10
EB T	Elgin St	204	45.2	1.4	43.6	47.2	10
EB TR	Elgin St	204	38.0	1.9	33.8	40.4	10
NEB L	Cullen Blvd	207	32.9	3.7	27.6	38.6	10
NEB T	Cullen Blvd	207	34.0	1.7	30.5	37.0	10
NEB TR	Cullen Blvd	207	27.7	2.4	23.0	32.4	10
SB L	Cullen Blvd	206	37.6	4.2	31.7	43.4	10
SB T	Cullen Blvd	206	35.7	2.8	31.6	38.9	10
SB TR	Cullen Blvd	206	29.1	1.8	26.0	32.1	10
WB L	Elgin St	208	25.9	3.3	21.8	32.7	10
WB T	Elgin St	208	29.8	2.4	25.3	32.4	10
WB TR	Elgin St	208	21.0	4.0	16.4	28.3	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	412.0	59.3	300.5	520.9	10
EB R	EB Westpark Tollway FR	111	336.8	56.3	244.5	444.4	10
NB T	Fondren Rd	38	263.3	16.5	221.7	282.8	10
SB T	Fondren Rd	110	3.9	0.5	3.3	4.9	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	16.8	1.7	15.0	19.7	10
NEB TR	Ennis St	702	9.9	2.0	8.2	14.8	10
NWB L	Elgin St	701	30.6	2.4	26.7	34.4	10
NWB T	Elgin St	701	23.9	0.6	23.3	25.3	10
NWB TR	Elgin St	701	21.7	1.2	20.0	24.8	10
SEB L	Elgin St	700	16.4	5.2	9.6	23.7	10
SEB T	Elgin St	700	12.1	1.4	9.7	14.2	10
SEB TR	Elgin St	700	12.4	1.5	10.7	15.7	10
SWB LTR	Ennis St	195	17.8	2.4	13.2	22.1	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	65.2	10.3	55.0	92.9	10
EB T	Elgin St	701	41.9	4.4	37.4	52.9	10
EB TR	Elgin St	701	34.0	3.3	29.9	40.8	10
NB L	Scott St	198	52.4	8.1	40.6	64.3	10
NB T	LRT Line	667	5.4	1.1	2.7	7.9	10
NB TR	Scott St	198	5.3	0.6	4.7	6.6	10
SB L	Scott St	671	62.9	12.4	48.7	92.9	10
SB T	Scott St	671	23.8	2.7	19.6	27.5	10
SB TR	Scott St	671	23.3	3.0	17.5	26.1	10
SWB T	LRT Line	669	28.0	27.1	16.0	105.0	10
WB L	Elgin St	204	82.4	7.5	74.2	95.5	10
WB T	Elgin St	204	49.4	3.1	45.6	54.6	10
WB TR	Elgin St	204	45.8	4.0	41.3	55.1	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	1.5	0.3	1.1	1.9	10
NEB LT	Elgin St	212	17.7	1.0	16.4	19.8	10
NEB T	Elgin St	212	12.1	1.2	10.6	13.6	10
SB LT	Spur 5 SBFR	214	20.9	1.2	19.2	22.5	10
SB TR	Spur 5 SBFR	214	14.5	1.7	11.3	17.1	10
SWB L	Elgin St	216	12.3	0.4	11.7	13.0	10
SWB T	Elgin St	216	5.9	0.7	5.1	7.2	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	7.6	5.2	1.5	16.2	6
EB T	Elgin St	208	4.8	0.9	3.0	5.9	10
EB TR	Elgin St	208	2.7	0.5	1.8	3.5	10
NB LT	UH Entrance	211	49.7	5.7	41.2	57.2	10
NB R	UH Entrance	211	5.1	0.4	4.5	5.9	10
SWB LT	UH Entrance	210	33.9	4.6	27.0	40.5	10
SWB R	UH Entrance	210	4.8	0.6	4.2	6.2	10
WB L	Elgin St	212	6.8	1.8	4.7	10.2	10
WB T	Elgin St	212	5.8	0.8	4.5	7.1	10
WB TR	Elgin St	212	7.4	2.5	4.4	13.7	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	14.0	2.1	11.8	16.9	10
NEB TR	Emancipation Ave	711	12.2	1.5	10.1	14.8	10
NWB LT	Wheeler Ave	766	11.6	1.0	9.8	12.9	10
NWB TR	Wheeler Ave	766	9.6	0.8	8.3	10.6	10
SEB LT	Wheeler Ave	423	18.7	2.8	14.7	24.3	10
SEB TR	Wheeler Ave	423	10.7	1.2	8.3	12.0	10
SWB LT	Emancipation Ave	177	16.4	0.9	14.8	17.7	10
SWB TR	Emancipation Ave	177	13.9	0.8	12.5	15.6	10

ENNIS ST & HOLMAN ST **NODE: 306**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	12.1	1.0	11.1	13.8	10
NEB TR	Ennis St	740	10.6	0.9	8.9	11.9	10
NWB LTR	Holman St	742	11.8	1.7	9.6	14.5	10
SEB LTR	Holman St	741	8.4	1.9	5.4	12.3	10
SWB LT	Ennis St	702	10.3	2.5	7.1	16.3	10
SWB TR	Ennis St	702	13.5	1.2	12.2	15.7	10

ENNIS ST & WHEELER AVE **NODE: 266**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	4.8	0.6	3.6	5.6	10
NEB T	Ennis St	698	4.4	0.6	3.3	5.2	10
SEB L	Wheeler Ave	766	26.0	2.0	22.6	29.6	10
SEB R	Wheeler Ave	766	3.7	0.3	3.2	4.4	10
SWB T	Ennis St	726	1.5	0.4	1.1	2.3	10
SWB TR	Ennis St	726	1.8	0.3	1.5	2.4	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	21.7	1.9	18.8	24.1	10
EB TR	Leeland St	228	15.1	1.3	13.5	17.0	10
SWB LT	Ernestine St	411	8.4	1.2	6.3	9.6	10
SWB T	Ernestine St	411	7.0	0.7	5.9	7.8	10
SWB TR	Ernestine St	411	6.5	0.8	5.3	7.7	10
WB L	Leeland St	227	2.5	0.6	1.8	3.6	10
WB T	Leeland St	227	9.5	1.1	8.3	11.2	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	5.3	1.0	4.0	7.2	10
SB LT	Ernestine St	685	1.3	1.6	0.4	5.6	10
SB TR	Ernestine St	685	0.3	0.1	0.2	0.5	10
WB L	Munger St	460	5.3	1.0	3.9	7.3	10
WB T	Munger St	460	3.7	0.8	2.5	4.9	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	12.7	0.6	11.8	13.5	10
NWB L	I-45 NBFR	222	10.8	0.7	9.8	12.4	10
NWB LT	I-45 NBFR	222	11.0	0.5	10.4	12.0	10
NWB T	I-45 NBFR	222	12.9	0.7	11.6	13.8	10
NWB TR	I-45 NBFR	222	19.5	1.4	17.9	22.4	10
SB T	Ernestine St	221	10.6	1.2	8.8	11.8	10
SB TR	Ernestine St	221	11.4	0.9	9.7	12.6	10

FANNIN ST & WHEELER AVE **NODE: 132**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	32.2	3.5	29.4	38.8	10
NWB T	Wheeler Ave	172	30.3	3.5	27.5	39.1	10
SEB T	Wheeler Ave	169	24.2	1.7	21.3	27.8	10
SEB TR	Wheeler Ave	169	16.0	0.5	14.8	16.3	10
SWB L	Fannin St	87	15.2	1.3	12.9	17.4	10
SWB T	Fannin St	87	11.6	1.4	10.3	15.0	10
SWB TR	Fannin St	87	12.1	6.0	7.3	24.9	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Edloe St	153	46.1	8.2	33.7	65.5	10
NB T	Edloe St	153	2.0	0.3	1.5	2.5	10
NB TR	Edloe St	153	1.9	0.3	1.4	2.2	10
SB L	Edloe St	155	9.3	2.8	4.1	13.5	10
SB T	Edloe St	155	6.7	1.4	5.3	10.1	10
SB TR	Edloe St	155	6.2	1.2	4.5	8.9	10
WB LR	I-69 Express Lanes	31	36.3	5.8	28.7	47.7	10

JENSEN DR & TURNER DR **NODE: 705**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	14.9	13.9	3.6	51.1	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	2.1	2.2	0.0	6.0	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	17.1	14.7	2.5	46.0	10
WB R	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	56.0	13.7	44.2	78.5	10
EB T	Kelley St	313	19.0	1.7	15.8	22.2	10
EB TR	Kelley St	313	11.3	1.9	9.0	14.7	10
NB L	Lockwood Dr	308	27.6	1.6	25.5	29.9	10
NB T	Lockwood Dr	308	24.0	2.4	20.1	27.6	10
NB TR	Lockwood Dr	308	22.3	2.5	19.6	27.7	10
SB L	Lockwood Dr	311	20.4	3.8	15.7	24.4	10
SB T	Lockwood Dr	311	26.6	2.8	23.8	32.8	10
SB TR	Lockwood Dr	311	26.5	2.7	20.6	30.5	10
WB L	Kelley St	312	36.1	5.4	28.0	43.3	10
WB T	Kelley St	312	18.1	1.7	16.5	22.5	10
WB TR	Kelley St	312	17.1	0.9	16.1	18.8	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	36.1	2.9	33.9	41.5	10
NWB LT	Wheeler Ave	77	0.8	0.3	0.5	1.2	10
NWB TR	Wheeler Ave	77	0.6	0.3	0.3	1.0	10
SEB LT	Wheeler Ave	86	1.4	0.3	0.9	1.9	10
SEB TR	Wheeler Ave	86	1.6	0.4	0.8	2.3	10
SWB LTR	LaBranch St	78	34.9	3.7	29.4	41.2	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	35.8	3.4	29.0	40.3	10
EB TR	Laura Koppe Rd	330	28.1	1.6	25.7	30.7	10
NB L	Lockwood Dr	560	8.4	1.1	7.2	11.0	10
NB T	Lockwood Dr	560	13.0	1.6	10.6	15.2	10
NB TR	Lockwood Dr	560	12.1	1.4	9.5	13.5	10
SB L	Lockwood Dr	327	6.6	1.9	3.8	8.8	10
SB T	Lockwood Dr	327	4.0	2.1	1.4	8.0	10
SB TR	Lockwood Dr	327	5.0	1.1	3.3	6.6	10
WB L	Laura Koppe Rd	329	41.2	3.6	35.9	46.5	10
WB TR	Laura Koppe Rd	329	25.1	3.0	21.1	29.1	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	249	6.3	2.3	1.2	9.1	10
NEB T	Lockwood Dr	249	35.8	1.0	34.0	37.1	10
SWB L	Lockwood Dr	253	13.9	4.6	7.5	20.9	10
SWB T	Lockwood Dr	253	12.3	1.2	10.4	14.3	10
WB LR	Armour Dr	659	17.3	3.0	12.0	20.1	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	248	34.6	2.8	30.5	39.3	10
EB R	Canal St	248	5.4	1.5	3.6	9.2	10
EB T	Canal St	248	27.4	1.7	25.7	31.3	10
NEB L	Lockwood Dr	241	18.0	1.7	15.1	19.9	10
NEB T	Lockwood Dr	241	11.5	1.4	10.0	13.9	10
NEB TR	Lockwood Dr	241	9.2	0.6	8.7	10.7	10
SWB L	Lockwood Dr	245	7.6	1.0	6.2	9.4	10
SWB T	Lockwood Dr	245	10.8	1.1	9.0	12.2	10
SWB TR	Lockwood Dr	245	10.8	0.8	9.5	12.1	10
WB LT	Canal St	247	44.8	5.8	38.6	58.2	10
WB TR	Canal St	247	25.1	2.1	21.9	29.3	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	34.3	3.0	30.4	39.6	10
EB T	Cavalcade St	299	23.1	2.0	20.4	26.2	10
EB TR	Cavalcade St	299	15.5	1.8	12.9	19.3	10
NB L	Lockwood Dr	292	27.6	8.1	18.0	47.1	10
NB T	Lockwood Dr	292	8.6	1.8	6.7	13.1	10
NB TR	Lockwood Dr	292	8.4	1.7	7.0	12.9	10
SB L	Lockwood Dr	296	35.0	3.0	31.8	40.7	10
SB T	Lockwood Dr	296	16.2	1.2	14.7	18.4	10
SB TR	Lockwood Dr	296	14.4	1.2	13.2	17.0	10
WB L	Cavalcade St	298	27.1	1.7	24.7	30.5	10
WB T	Cavalcade St	298	22.5	2.0	19.9	27.2	10
WB TR	Cavalcade St	298	17.3	1.8	14.7	19.4	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	52.2	4.7	45.8	63.7	10
EB T	Clinton Dr	259	29.0	3.2	25.4	34.8	10
EB TR	Clinton Dr	259	42.0	80.5	9.9	270.9	10
NEB L	Lockwood Dr	257	42.2	5.2	35.7	53.5	10
NEB R	Lockwood Dr	257	14.8	2.8	10.5	19.8	10
NEB T	Lockwood Dr	257	19.1	0.5	18.2	20.0	10
SB L	Lockwood Dr	256	31.9	3.6	25.6	36.4	10
SB R	Lockwood Dr	256	3.3	0.8	2.2	4.6	10
SB T	Lockwood Dr	256	7.1	0.6	6.2	7.9	10
WB L	Clinton Dr	258	44.0	3.4	39.6	50.7	10
WB R	Clinton Dr	258	6.7	0.7	5.9	8.2	10
WB T	Clinton Dr	258	29.5	1.9	27.0	33.1	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	37.9	3.6	32.4	44.2	10
EB T	Collingsworth St	291	33.0	2.8	27.8	36.3	10
EB TR	Collingsworth St	291	17.8	2.8	14.4	21.5	10
NB L	Lockwood Dr	533	103.7	21.1	67.2	126.5	10
NB T	Lockwood Dr	533	17.1	2.5	13.8	22.0	10
NB TR	Lockwood Dr	533	13.7	1.7	12.3	17.0	10
SEB L	Lockwood Dr	288	32.0	6.2	22.6	40.2	10
SEB T	Lockwood Dr	288	3.2	0.4	2.6	3.7	10
SEB TR	Lockwood Dr	288	3.0	0.6	2.0	3.8	10
WB L	Collingsworth St	290	42.7	3.4	38.5	49.0	10
WB T	Collingsworth St	290	33.0	7.0	23.4	41.3	10
WB TR	Collingsworth St	290	17.0	2.6	14.1	20.6	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	31.9	2.7	29.3	37.4	10
NB L	Lockwood Dr	288	46.8	5.8	38.9	57.0	10
NB T	Lockwood Dr	288	9.7	1.1	8.6	11.2	10
NB TR	Lockwood Dr	288	8.3	0.8	7.4	9.6	10
SB L	Lockwood Dr	292	45.7	6.7	36.0	55.3	10
SB T	Lockwood Dr	292	1.2	0.2	0.9	1.6	10
SB TR	Lockwood Dr	292	1.0	0.3	0.6	1.5	10
WB LTR	Crane St	294	32.0	3.1	26.8	35.9	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	13.1	2.2	10.0	16.5	10
NB LT	Lockwood Dr	327	0.5	0.2	0.3	1.1	10
NB TR	Lockwood Dr	327	0.1	0.1	0.0	0.3	10
SB LT	Lockwood Dr	574	0.3	0.3	0.0	0.7	10
SB TR	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	16.8	3.7	12.2	24.3	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	51.1	2.6	47.3	55.3	10
EB R	Harrisburg Blvd	244	19.0	1.8	15.5	21.4	10
EB T	Harrisburg Blvd	244	20.6	1.5	17.9	23.2	10
NEB L	Lockwood Dr	237	75.3	6.8	65.1	87.4	10
NEB T	Lockwood Dr	237	36.4	5.7	28.7	45.8	10
NEB TR	Lockwood Dr	237	32.9	4.9	28.3	43.2	10
NWB L	Harrisburg Blvd	678	46.5	6.1	36.4	54.8	10
NWB R	Harrisburg Blvd	678	18.1	4.1	13.0	24.0	10
NWB T	Harrisburg Blvd	678	19.2	2.9	14.1	23.3	10
SB L	Lockwood Dr	241	49.6	13.2	36.4	75.7	10
SB T	Lockwood Dr	241	33.5	2.9	28.5	38.8	10
SB TR	Lockwood Dr	241	32.3	3.3	28.9	39.7	10
SEB T	[Unnamed Street]	675	23.1	2.8	19.8	28.1	10
WB T	[Unnamed Street]	676	3.6	1.8	0.0	6.8	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	83.8	15.0	64.5	110.9	10
NEB L	Lockwood Dr	253	5.4	0.9	3.6	6.6	10
NEB T	Lockwood Dr	253	3.6	0.4	2.8	4.0	10
NEB TR	Lockwood Dr	253	6.7	1.0	5.4	8.1	10
SWB L	Lockwood Dr	257	7.3	1.6	4.3	9.8	10
SWB T	Lockwood Dr	257	0.7	1.3	0.1	3.7	10
SWB TR	Lockwood Dr	257	0.1	0.1	0.0	0.2	10
WB LTR	Harvey Wilson Dr	497	37.6	10.1	25.7	59.4	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	12.0	2.3	8.7	15.7	10
NB LT	Lockwood Dr	281	0.1	0.1	0.0	0.2	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	478	0.3	0.2	0.1	0.7	10
SB TR	Lockwood Dr	478	0.2	0.1	0.1	0.4	10
WB LTR	Hershe St	513	10.0	4.1	5.6	18.6	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	43.1	1.7	40.3	46.2	10
EB LT	I-610 EBFR	307	42.8	2.2	40.2	47.2	10
EB TR	I-610 EBFR	307	23.4	2.5	20.2	27.9	10
NB R	Lockwood Dr	545	0.1	0.2	0.0	0.5	10
NB T	Lockwood Dr	545	50.5	6.7	42.9	62.4	10
SB L	Lockwood Dr	304	0.1	0.3	0.0	0.9	10
SB T	Lockwood Dr	304	1.9	0.7	1.2	3.1	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.1	0.1	0.0	0.3	10
NB T	Lockwood Dr	304	3.1	0.5	2.1	3.6	10
SB T	Lockwood Dr	308	48.4	2.0	46.4	53.4	10
WB L	I-610 WBFR	309	33.6	3.1	29.8	38.2	10
WB R	Lockwood Dr	308	1.6	0.6	0.8	2.3	10
WB T	I-610 WBFR	309	35.3	1.8	32.3	37.6	10
WB TR	I-610 WBFR	309	32.3	1.9	29.9	35.5	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	5.8	2.4	2.3	10.4	10
NB LT	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	7.8	1.6	5.6	10.4	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	21.7	1.3	18.9	23.4	10
NB L	Lockwood Dr	232	11.8	2.7	9.4	16.9	10
NB T	Lockwood Dr	232	1.0	0.3	0.6	1.5	10
NB TR	Lockwood Dr	232	1.0	0.3	0.7	1.8	10
SB L	Lockwood Dr	237	19.7	6.6	10.7	27.7	10
SB T	Lockwood Dr	237	15.4	0.6	14.3	16.0	10
SB TR	Lockwood Dr	237	14.7	0.5	13.9	15.7	10
WB LTR	McKinney St	239	20.9	2.4	16.9	23.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	39.6	4.5	31.3	47.1	10
NB LT	Lockwood Dr	478	1.1	0.3	0.8	1.8	10
NB T	Lockwood Dr	478	1.1	0.4	0.4	1.6	10
NB TR	Lockwood Dr	478	0.7	0.2	0.5	1.0	10
SB LT	Lockwood Dr	284	1.2	0.4	0.6	1.8	10
SB T	Lockwood Dr	284	0.9	0.3	0.4	1.4	10
SB TR	Lockwood Dr	284	1.0	0.6	0.3	2.0	10
WB LTR	Mulvey St	286	32.3	5.3	25.9	40.8	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	3.6	2.2	1.2	7.3	10
EB T	Munger St	460	10.9	1.7	8.3	12.9	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	0.5	0.6	0.0	2.1	10
WB T	Munger St	661	13.4	1.5	11.2	15.8	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	41.7	2.9	37.7	45.9	10
EB T	Navigation Blvd	252	20.4	1.1	18.8	22.1	10
EB TR	Navigation Blvd	252	18.8	1.3	17.0	21.9	10
NEB L	Lockwood Dr	245	35.9	2.9	31.0	41.3	10
NEB T	Lockwood Dr	245	24.7	1.8	22.6	27.0	10
NEB TR	Lockwood Dr	245	23.1	1.6	21.1	25.2	10
SWB L	Lockwood Dr	249	52.4	2.1	49.0	55.0	10
SWB R	Lockwood Dr	249	6.9	1.1	5.0	8.5	10
SWB T	Lockwood Dr	249	21.4	1.5	19.3	23.8	10
WB L	Navigation Blvd	251	41.2	2.1	37.1	44.7	10
WB T	Navigation Blvd	251	21.1	1.2	19.6	23.3	10
WB TR	Navigation Blvd	251	19.7	1.9	18.0	22.9	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	11.2	2.9	7.7	16.4	10
NB LT	Lockwood Dr	284	0.5	0.2	0.3	0.9	10
NB T	Lockwood Dr	284	0.1	0.1	0.0	0.3	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	524	1.2	0.2	0.9	1.5	10
SB T	Lockwood Dr	524	0.2	0.1	0.1	0.4	10
SB TR	Lockwood Dr	524	0.0	0.1	0.0	0.2	10
WB LTR	Nichols St	525	12.0	2.9	8.4	18.1	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	21.1	3.8	16.9	28.3	10
NB LT	Lockwood Dr	300	1.7	1.9	0.4	5.4	10
NB TR	Lockwood Dr	300	0.3	0.1	0.0	0.5	10
SB LT	Lockwood Dr	545	0.5	0.2	0.2	0.9	10
SB TR	Lockwood Dr	545	0.5	0.1	0.4	0.6	10
WB LTR	Pardee St	546	20.9	4.7	13.0	27.3	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	36.5	2.6	32.7	39.6	10
NB LT	Lockwood Dr	296	2.4	0.6	1.6	3.3	10
NB TR	Lockwood Dr	296	1.9	0.2	1.6	2.3	10
SB LT	Lockwood Dr	300	10.6	1.8	8.1	13.6	10
SB TR	Lockwood Dr	300	5.9	0.9	4.6	7.2	10
WB LTR	Rand St	302	25.6	3.6	20.4	31.6	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	21.5	1.4	19.4	23.4	10
NB TR	Lockwood Dr	311	21.5	1.9	18.0	23.5	10
NEB LTR	Shreveport Blvd	316	28.8	3.0	24.7	31.9	10
SB L	Lockwood Dr	314	31.3	3.4	26.5	36.3	10
SB T	Lockwood Dr	314	1.0	0.6	0.2	2.2	10
SB TR	Lockwood Dr	314	1.1	0.3	0.4	1.3	10
SWB LTR	Shreveport Blvd	315	30.8	3.3	26.9	35.9	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	13.7	5.3	6.9	20.3	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	533	0.5	0.2	0.3	0.9	10
SB T	Lockwood Dr	533	0.9	0.2	0.6	1.1	10
SB TR	Lockwood Dr	533	0.9	1.2	0.0	3.0	10
WB LTR	Sudan St	534	5.8	2.1	3.2	9.7	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	39.9	4.4	34.0	50.5	10
EB TR	Weaver Rd	326	34.9	4.1	27.9	39.2	10
NB L	Lockwood Dr	320	34.8	2.6	30.5	38.7	10
NB T	Lockwood Dr	320	35.5	2.3	32.5	39.7	10
NB TR	Lockwood Dr	320	33.3	3.0	28.0	36.7	10
SB L	Lockwood Dr	324	32.1	3.5	25.5	39.9	10
SB T	Lockwood Dr	324	33.7	2.3	30.1	36.9	10
SB TR	Lockwood Dr	324	31.6	3.8	23.8	36.5	10
WB L	Weaver Rd	325	47.9	10.2	36.2	71.8	10
WB TR	Weaver Rd	325	63.5	19.0	42.6	113.0	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.4	0.1	0.3	0.5	10
EB LT	I-10 EBFR	268	7.2	0.2	6.7	7.5	10
EB T	I-10 EBFR	268	10.8	0.6	10.0	11.5	10
NB T	Lockwood Dr (NB)	264	35.6	3.5	32.3	42.8	10
NB TR	Lockwood Dr (NB)	264	38.0	4.4	33.0	44.5	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	5.8	0.5	4.9	6.6	10
NB LT	Lockwood Dr (NB)	270	5.9	0.4	5.4	6.3	10
NB T	Lockwood Dr (NB)	270	11.1	0.6	10.2	12.2	10
WB T	I-10 WBFR	276	27.2	1.7	24.9	30.3	10
WB TR	I-10 WBFR	276	7.8	0.4	7.1	8.6	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	14.3	2.9	11.4	19.0	10
EB T	Market St	262	35.5	2.9	31.7	41.7	10
NB LT	Lockwood Dr	499	10.5	2.9	8.9	18.1	10
NB TR	Lockwood Dr	499	14.0	3.4	10.5	22.6	10
WB T	Market St	266	32.6	4.5	26.0	41.4	10
WB TR	Market St	266	35.9	10.3	22.3	53.2	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	54.4	13.7	41.2	77.3	10
EB TR	I-10 EBFR	269	18.3	3.9	12.9	23.7	10
SB L	Lockwood Dr (SB)	267	15.0	1.3	13.2	17.1	10
SB LT	Lockwood Dr (SB)	267	4.2	1.5	1.2	6.6	10
SB T	Lockwood Dr (SB)	267	0.5	0.2	0.4	0.9	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	40.8	4.2	34.1	48.6	10
SB TR	Lockwood Dr (SB)	272	40.7	6.1	32.2	52.9	10
WB L	I-10 WBFR	273	1.0	0.4	0.3	1.4	10
WB LT	I-10 WBFR	273	2.5	0.3	1.8	2.9	10
WB T	I-10 WBFR	273	6.5	0.5	5.8	7.6	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	21.4	4.1	16.2	28.2	10
SB L	Lockwood Dr	515	16.2	10.2	4.5	42.0	10
SB T	Lockwood Dr	515	9.9	0.7	8.9	11.0	10
SB TR	Lockwood Dr	515	10.9	0.8	9.3	12.0	10
WB LT	Lyons Ave	279	12.8	1.3	11.1	14.7	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	35.4	2.1	32.2	39.7	10
EB TR	Market St	263	9.9	4.2	5.2	18.7	10
SB LT	Lockwood Dr (SB)	260	5.9	0.8	4.8	7.0	10
SB TR	Lockwood Dr (SB)	260	5.1	0.6	4.4	5.9	10
WB LT	Market St	262	9.2	2.9	5.9	15.8	10
WB T	Market St	262	13.0	6.2	1.2	22.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	6.1	1.3	3.6	7.4	10
NB L	Lockwood Dr (NB)	275	59.1	22.5	31.8	104.9	10
NB T	Lockwood Dr (NB)	275	5.0	0.5	3.9	5.7	10
NB TR	Lockwood Dr (NB)	275	7.0	0.4	6.1	7.4	10
WB TR	Lyons Ave	283	17.1	1.7	15.1	20.6	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	40.5	2.6	36.6	44.7	10
EB R	Bennington St	319	5.3	0.4	4.6	5.9	10
NB L	Lockwood Dr	314	2.9	0.8	2.1	5.1	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	317	4.4	1.1	2.5	5.9	10
SB TR	Lockwood Dr	317	4.9	0.8	3.5	5.9	10
WB LTR	Driveway	318	4.4	2.3	2.1	8.6	10

LOCKWOOD DR, DENMARK ST & DENMARKST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	10.3	2.2	7.4	13.8	10
NB L	Lockwood Dr	317	2.2	0.5	1.3	2.8	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	2.4	1.9	0.0	4.9	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	DenmarkSt	549	10.4	2.1	7.6	12.8	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	17.0	0.9	15.9	18.3	10
NB TR	Spur 5 NBFR	219	11.2	1.5	9.8	13.6	10
NEB L	Elgin St	216	16.5	2.4	13.8	21.3	10
NEB T	Elgin St	216	9.1	0.6	8.4	10.3	10
SWB T	Lockwood Dr	218	10.7	0.7	9.3	11.5	10
SWB TR	Lockwood Dr	218	15.7	0.7	14.8	17.2	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	17.8	1.7	14.7	20.2	10
EB T	Polk St	235	24.8	1.6	21.8	27.6	10
EB TR	Polk St	235	22.7	1.5	20.6	25.3	10
NB L	Lockwood Dr	229	15.2	1.6	12.5	18.4	10
NB T	Lockwood Dr	229	26.4	1.6	24.4	29.9	10
NB TR	Lockwood Dr	229	21.7	1.5	20.0	23.9	10
SB L	Lockwood Dr	232	38.4	2.9	34.6	43.5	10
SB T	Lockwood Dr	232	45.1	1.2	42.4	46.2	10
SB TR	Lockwood Dr	232	38.5	2.2	35.2	42.4	10
WB L	Polk St	234	14.6	1.2	12.9	16.0	10
WB T	Polk St	234	18.8	2.2	13.5	21.5	10
WB TR	Polk St	234	16.0	1.3	14.4	19.0	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	16.1	7.4	7.3	30.5	10
EB T	Leeland St	227	8.7	0.8	7.4	9.5	10
NB LT	Lockwood Dr	230	10.8	0.8	9.9	12.4	10
NB T	Lockwood Dr	230	10.8	1.6	8.2	12.6	10
NB TR	Lockwood Dr	230	9.2	1.3	7.2	10.7	10
WB T	Telephone Rd	231	34.9	2.3	29.7	38.0	10
WB TR	Telephone Rd	231	18.6	2.1	15.8	22.1	10

MAIN ST, RICHMOND AVE & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	25.8	2.3	22.2	30.2	10
NEB L	Main St	168	49.7	17.1	32.5	89.6	10
NEB R	Main St	168	26.3	2.5	21.8	28.9	10
NEB T	Main St	168	28.3	3.0	24.2	31.9	10
NWB L	Wheeler Ave	169	52.4	23.7	30.7	94.7	10
NWB T	Wheeler Ave	169	42.2	7.5	36.3	56.6	10
NWB TR	Wheeler Ave	169	43.1	8.0	36.2	59.5	10
SB T	LRT Line	674	0.0	0.0	0.0	0.0	10
SEB L	Richmond Ave	26	127.1	17.8	103.3	160.9	10
SEB T	Richmond Ave	26	91.6	11.2	71.6	109.2	10
SEB TR	Richmond Ave	26	66.3	7.8	51.6	78.0	10
SWB L	Main St	70	52.7	8.4	37.9	66.5	10
SWB TR	Main St	70	43.5	8.5	35.1	62.2	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	35.7	5.3	29.1	44.2	10
EB R	Richmond Ave	9	9.2	1.0	7.9	10.5	10
EB T	Richmond Ave	9	16.7	1.0	15.0	18.3	10
NB L	Buffalo Speedway	37	236.9	58.2	130.3	278.9	10
NB T	Buffalo Speedway	37	110.9	25.7	59.3	133.5	10
NB TR	Buffalo Speedway	37	83.6	18.7	42.2	101.3	10
SB L	Buffalo Speedway	36	62.6	8.6	52.4	75.5	10
SB T	Buffalo Speedway	36	27.4	1.7	23.6	28.9	10
SB TR	Buffalo Speedway	36	26.6	1.9	24.0	29.5	10
WB L	Richmond Ave	12	40.8	2.8	37.7	46.6	10
WB T	Richmond Ave	12	33.5	0.9	32.2	35.0	10
WB TR	Richmond Ave	12	32.8	1.4	30.1	35.4	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	22.0	4.4	17.5	29.1	10
EB T	Richmond Ave	163	8.0	1.0	6.6	9.6	10
EB TR	Richmond Ave	163	7.0	0.5	6.3	7.9	10
NB LTR	Dunlavy St	57	36.4	4.6	31.3	47.6	10
SB LTR	Dunlavy St	56	377.7	45.3	320.6	466.0	10
WB L	Richmond Ave	165	19.8	3.5	13.7	25.8	10
WB T	Richmond Ave	165	3.8	0.4	3.0	4.3	10
WB TR	Richmond Ave	165	4.5	0.8	3.5	5.5	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	20.9	4.0	14.0	27.3	10
EB T	Richmond Ave	12	4.7	0.6	3.9	6.1	10
EB TR	Richmond Ave	12	4.4	0.7	3.6	5.4	10
NB L	Eastside St	40	138.5	35.3	69.8	184.4	10
NB TR	Eastside St	40	26.3	15.5	15.1	65.6	10
SB L	Eastside St	39	62.8	9.7	55.7	89.3	10
SB TR	Eastside St	39	33.6	9.0	22.4	55.7	10
WB L	Richmond Ave	54	9.5	1.7	6.9	11.9	10
WB T	Richmond Ave	54	4.6	0.4	4.1	5.3	10
WB TR	Richmond Ave	54	9.3	0.8	7.7	10.7	10

RICHMOND AVE & EDLOE ST — NODE: 118

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	49.6	3.8	44.5	56.9	10
EB R	Richmond Ave	7	6.0	2.8	3.4	11.0	10
EB T	Richmond Ave	7	39.4	1.3	36.1	40.9	10
NB L	Edloe St	155	346.7	38.4	301.0	398.7	10
NB R	Edloe St	155	8.2	1.2	5.8	9.7	10
NB T	Edloe St	155	19.9	1.3	18.5	22.9	10
SB L	Edloe St	5	56.8	3.9	48.6	61.8	10
SB T	Edloe St	5	27.9	7.0	21.1	42.8	10
SB TR	Edloe St	5	22.4	3.4	19.4	30.7	10
WB L	Richmond Ave	9	74.2	6.0	62.3	81.2	10
WB T	Richmond Ave	9	39.6	0.6	38.4	40.4	10
WB TR	Richmond Ave	9	40.5	1.2	39.1	42.8	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	54.2	2.9	50.7	58.8	10
EB T	Richmond Ave	64	31.9	1.8	29.7	35.4	10
EB TR	Richmond Ave	64	26.5	2.0	24.1	31.0	10
NB TR	Greenbriar Dr	47	38.7	2.7	36.1	44.1	10
SB L	Greenbriar Dr	46	45.3	7.4	35.7	59.3	10
SB R	Greenbriar Dr	46	6.2	1.3	4.1	7.7	10
SB T	Greenbriar Dr	46	45.5	2.3	40.4	48.3	10
WB L	Richmond Ave	160	27.6	2.7	23.9	30.8	10
WB T	Richmond Ave	160	3.6	0.6	2.3	4.3	10
WB TR	Richmond Ave	160	3.9	0.5	3.4	4.9	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	4.3	1.1	2.6	6.1	10
EB T	Richmond Ave	20	6.5	1.0	5.4	8.7	10
EB TR	Richmond Ave	20	3.9	0.9	2.3	5.7	10
NB LTR	Hazard St	51	342.9	39.6	286.9	417.4	10
SB LTR	Hazard St	50	421.4	192.8	172.3	756.2	10
WB L	Richmond Ave	162	14.0	1.8	11.7	16.8	10
WB T	Richmond Ave	162	17.3	1.0	15.6	18.8	10
WB TR	Richmond Ave	162	13.2	1.1	11.3	15.2	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	139.0	42.0	66.9	196.2	10
EB T	Richmond Ave	54	31.1	4.3	24.6	38.6	10
EB TR	Richmond Ave	54	20.5	3.7	16.0	27.7	10
NB L	Kirby Dr	158	104.3	15.3	81.4	128.3	10
NB T	Kirby Dr	158	79.4	14.2	47.0	97.9	10
NB TR	Kirby Dr	158	97.3	18.7	55.6	122.0	10
SB L	Kirby Dr	44	73.1	13.2	51.3	90.3	10
SB T	Kirby Dr	44	73.0	14.5	49.8	89.5	10
SB TR	Kirby Dr	44	90.0	20.4	57.3	113.1	10
WB L	Richmond Ave	64	79.7	8.0	62.6	90.6	10
WB T	Richmond Ave	64	46.0	1.0	43.8	47.3	10
WB TR	Richmond Ave	64	40.2	2.6	34.4	42.7	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	17.0	2.6	14.3	22.8	10
EB T	Richmond Ave	165	5.5	0.6	4.5	6.3	10
EB TR	Richmond Ave	165	4.6	0.4	4.1	5.4	10
NB LTR	Mandell St	59	209.5	21.7	171.7	256.1	10
SB LTR	Mandell St	58	80.0	25.0	45.3	116.4	10
WB L	Richmond Ave	23	20.1	1.3	18.0	21.8	10
WB T	Richmond Ave	23	3.1	0.6	1.9	3.8	10
WB TR	Richmond Ave	23	3.6	0.5	2.8	4.1	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	35.4	3.6	31.3	42.9	10
EB T	Richmond Ave	23	33.2	2.6	29.7	37.9	10
EB TR	Richmond Ave	23	44.3	2.7	39.3	49.0	10
NB L	Montrose Blvd	61	63.9	8.6	52.4	76.5	10
NB T	Montrose Blvd	61	29.4	1.8	27.3	31.9	10
NB TR	Montrose Blvd	61	32.1	2.2	28.3	34.4	10
SB L	Montrose Blvd	60	51.0	9.4	41.5	69.2	10
SB T	Montrose Blvd	60	42.8	7.3	36.2	58.2	10
SB TR	Montrose Blvd	60	46.3	8.2	37.1	63.0	10
WB L	Richmond Ave	166	129.1	16.6	114.5	171.9	10
WB T	Richmond Ave	166	96.0	11.2	79.8	113.1	10
WB TR	Richmond Ave	166	102.5	11.1	88.2	116.6	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	88.3	9.8	71.5	101.1	10
EB T	Richmond Ave	160	0.3	0.2	0.0	0.5	10
EB TR	Richmond Ave	160	0.6	0.3	0.2	0.9	10
NB T	Shepherd Dr	49	41.0	1.9	38.7	44.7	10
NB TR	Shepherd Dr	49	39.0	2.1	34.3	41.0	10
SB T	Shepherd Dr	48	41.9	1.8	38.8	45.0	10
SB TR	Shepherd Dr	48	39.4	3.3	35.4	45.4	10
WB L	Richmond Ave	20	49.0	3.6	45.4	57.1	10
WB T	Richmond Ave	20	3.1	2.9	1.8	11.2	10
WB TR	Richmond Ave	20	2.3	0.6	1.7	3.3	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.0	0.0	0.0	0.0	10
EB T	Richmond Ave	167	6.6	3.4	1.8	12.1	10
NEB LT	US 59 NBFR	69	41.4	3.8	34.8	45.7	10
NEB R	US 59 NBFR	69	13.2	5.5	6.9	21.5	10
NEB TR	US 59 NBFR	69	45.5	5.6	36.6	55.8	10
WB R	Richmond Ave	26	14.2	1.8	11.3	17.1	10
WB T	Richmond Ave	26	26.9	2.6	24.1	33.3	10
WB TR	Richmond Ave	26	24.7	1.5	22.3	27.2	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	132.6	15.5	115.8	153.3	10
EB TR	Richmond Ave	166	148.8	28.5	114.3	194.9	10
SWB LT	US 59 SBFR	65	39.5	4.3	33.2	45.8	10
SWB R	US 59 SBFR	65	9.6	0.8	8.3	10.6	10
SWB T	US 59 SBFR	65	35.9	2.1	31.2	38.0	10
WB L	Richmond Ave	167	0.6	0.3	0.3	1.0	10
WB T	Richmond Ave	167	0.1	0.2	0.0	0.5	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	18.4	2.9	11.0	21.3	10
EB T	Richmond Ave	162	10.7	0.9	8.9	11.6	10
EB TR	Richmond Ave	162	10.5	1.2	8.8	11.6	10
NB LTR	Woodhead St	53	74.7	12.7	54.6	92.1	10
SB LTR	Woodhead St	52	28.5	4.9	22.5	37.6	10
WB L	Richmond Ave	163	13.8	1.7	10.2	15.9	10
WB T	Richmond Ave	163	4.9	1.8	3.1	9.5	10
WB TR	Richmond Ave	163	4.8	0.8	3.6	6.0	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	59.1	4.5	54.1	65.8	10
EB T	Westpark Dr	140	54.1	1.4	52.8	57.2	10
EB TR	Westpark Dr	140	52.8	2.7	48.1	55.9	10
NB L	S Rice Ave	138	49.4	2.9	45.8	55.5	10
NB T	S Rice Ave	138	32.6	1.5	30.3	35.2	10
NB TR	S Rice Ave	138	33.1	1.7	30.6	35.3	10
SB L	S Rice Ave	137	60.3	4.4	53.2	67.1	10
SB R	S Rice Ave	137	7.5	1.2	5.9	9.3	10
SB T	S Rice Ave	137	36.7	1.5	34.8	38.9	10
WB L	Westpark Dr	770	152.4	28.5	95.6	198.3	10
WB T	Westpark Dr	770	73.7	8.7	60.4	87.4	10
WB TR	Westpark Dr	770	83.2	15.3	59.4	108.1	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	13.5	1.7	10.8	16.8	10
NEB R	San Jacinto St	173	11.8	3.0	7.0	17.1	10
NEB T	San Jacinto St	173	13.6	1.2	12.0	15.7	10
NWB T	Wheeler Ave	86	23.1	3.7	19.9	33.2	10
NWB TR	Wheeler Ave	86	18.7	2.2	15.6	23.3	10
SEB LT	Wheeler Ave	172	48.9	2.8	41.8	52.0	10
SEB T	Wheeler Ave	172	32.1	2.2	27.9	35.0	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.6	0.3	0.2	1.1	10
EB TR	Tidwell Rd	348	0.3	0.2	0.1	0.5	10
NB LTR	Edell St	590	11.6	1.5	9.4	14.2	10
SB LTR	Edell St	589	17.4	3.0	11.3	22.7	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	19.7	3.2	14.6	23.4	10
EB T	Tidwell Rd	586	3.0	0.2	2.7	3.3	10
EB TR	Tidwell Rd	586	6.3	0.4	5.5	6.7	10
NB LTR	Friendly Rd	585	89.9	36.8	56.0	164.3	10
SB LTR	Friendly Rd	584	315.2	63.7	246.7	427.3	10
WB L	Tidwell Rd	338	11.3	3.7	6.4	16.4	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.1	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	27.9	6.4	20.0	39.1	10
EB T	Tidwell Rd	338	7.3	0.7	6.5	8.4	10
EB TR	Tidwell Rd	338	8.0	0.6	7.1	8.8	10
NB L	Hirsch Rd	336	38.0	3.0	34.1	43.2	10
NB R	Hirsch Rd	336	11.2	2.5	8.3	16.7	10
NB T	Hirsch Rd	336	28.8	2.4	24.8	33.1	10
SB L	Hirsch Rd	335	39.1	2.2	35.0	42.5	10
SB R	Hirsch Rd	335	11.0	1.6	8.9	14.1	10
SB T	Hirsch Rd	335	27.5	1.6	25.2	30.8	10
WB L	Tidwell Rd	334	18.9	2.5	14.6	21.6	10
WB T	Tidwell Rd	334	2.2	0.3	1.7	2.6	10
WB TR	Tidwell Rd	334	2.6	0.4	2.1	3.3	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	11.9	1.8	9.7	15.0	10
EB LT	Tidwell Rd	342	16.3	0.9	14.5	17.7	10
EB T	Tidwell Rd	342	18.8	0.3	18.4	19.3	10
NB L	I-69 NBFR	340	20.6	0.8	19.5	21.7	10
NB LT	I-69 NBFR	340	19.6	1.0	17.7	21.3	10
NB R	I-69 NBFR	340	7.0	0.4	6.3	7.5	10
NB T	I-69 NBFR	340	19.5	1.0	18.4	21.4	10
NB TR	I-69 NBFR	340	20.0	1.3	17.9	21.9	10
WB T	Tidwell Rd	586	17.9	0.8	16.4	18.7	10
WB TR	Tidwell Rd	586	16.7	1.6	14.3	18.8	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	4.9	0.9	3.9	6.5	10
EB T	Tidwell Rd	591	17.9	0.8	16.5	18.8	10
SB L	I-69 SBFR	649	21.0	1.6	18.9	23.8	10
SB LT	I-69 SBFR	649	20.5	1.6	18.6	23.0	10
SB R	I-69 SBFR	649	0.1	0.1	0.0	0.2	10
SB T	I-69 SBFR	649	22.8	17.5	15.6	72.5	10
WB L	Tidwell Rd	342	26.4	1.6	24.0	29.3	10
WB LT	Tidwell Rd	342	16.0	1.7	13.8	18.9	10
WB T	Tidwell Rd	342	12.0	0.8	10.7	13.0	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	45.0	3.7	38.8	51.9	10
EB T	Tidwell Rd	349	26.6	1.3	24.6	28.2	10
EB TR	Tidwell Rd	349	27.2	1.2	25.3	29.0	10
NB L	Jensen Dr	347	51.5	10.5	37.6	70.0	10
NB T	Jensen Dr	347	31.2	2.7	24.9	33.6	10
NB TR	Jensen Dr	347	27.7	2.4	24.6	32.1	10
SB L	Jensen Dr	346	42.9	2.9	39.6	47.4	10
SB T	Jensen Dr	346	31.4	3.1	27.2	34.9	10
SB TR	Jensen Dr	346	25.2	2.2	20.8	27.5	10
WB L	Tidwell Rd	348	30.5	5.8	23.2	39.9	10
WB T	Tidwell Rd	348	20.7	1.5	18.0	22.8	10
WB TR	Tidwell Rd	348	23.0	1.7	20.4	25.4	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	41.6	8.3	25.2	56.0	10
EB T	Tidwell Rd	334	12.5	0.6	11.6	13.4	10
EB TR	Tidwell Rd	334	13.8	1.8	11.3	16.4	10
NB L	Lockwood Dr	574	87.2	22.1	56.7	140.6	10
NB T	Lockwood Dr	574	29.1	9.5	15.9	39.4	10
NB TR	Lockwood Dr	574	18.3	3.3	13.6	22.7	10
SB L	Lockwood Dr	331	42.6	10.9	24.9	60.0	10
SB T	Lockwood Dr	331	33.9	5.2	25.6	42.0	10
SB TR	Lockwood Dr	331	28.9	6.0	21.3	37.1	10
WB L	Tidwell Rd	333	30.3	2.3	26.7	33.5	10
WB T	Tidwell Rd	333	12.6	0.7	11.6	13.6	10
WB TR	Tidwell Rd	333	13.0	0.6	12.1	14.0	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Edell St	589	4.1		4.1	4.1	1

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	33.5	7.1	23.4	45.2	10
EB TR	Westpark Dr	116	18.9	2.1	16.1	21.8	10
NB L	14th St	118	53.6	4.7	48.9	61.8	10
NB R	14th St	118	8.3	2.0	5.6	11.2	10
WB L	Westpark Dr	616	61.5	6.3	52.6	73.5	10
WB T	Westpark Dr	616	5.2	0.6	4.4	6.0	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	768	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	768	0.0	0.0	0.0	0.0	10
NB L	Alder Dr	767	30.9	5.9	25.2	43.9	10
NB R	Alder Dr	767	8.8	0.9	7.3	9.9	10
WB LT	Westpark Dr	133	2.8	0.6	2.0	3.8	10
WB T	Westpark Dr	133	0.6	0.2	0.2	0.9	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	70.7	7.9	59.0	85.2	10
EB T	Westpark Dr	133	24.5	1.3	22.3	26.3	10
EB TR	Westpark Dr	133	25.5	1.2	23.7	27.5	10
NB T	Chimney Rock Rd	135	39.5	1.4	37.0	41.1	10
NB TR	Chimney Rock Rd	135	39.0	2.3	35.8	43.1	10
SB L	Chimney Rock Rd	134	50.5	6.0	41.0	57.8	10
SB T	Chimney Rock Rd	134	20.4	1.3	17.4	22.1	10
SB TR	Chimney Rock Rd	134	19.9	1.0	18.3	21.3	10
WB L	Westpark Dr	136	89.4	9.1	77.5	110.1	10
WB T	Westpark Dr	136	47.7	2.6	44.7	52.8	10
WB TR	Westpark Dr	136	46.1	2.5	44.1	52.2	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	51.2	10.0	38.0	70.8	10
EB T	Westpark Dr	152	6.1	1.5	4.9	10.0	10
EB TR	Westpark Dr	152	6.0	1.6	4.4	9.1	10
NB R	Edloe St	29	5.1	0.6	4.6	6.6	10
NB T	Edloe St	29	44.1	3.6	39.8	49.7	10
SB LT	Edloe St	153	32.6	2.8	28.7	36.4	10
SB T	Edloe St	153	25.2	2.1	20.9	28.4	10
SB TR	Edloe St	153	22.6	1.9	18.4	24.9	10
WB LT	Westpark Dr	154	31.6	3.2	28.7	39.1	10
WB TR	Westpark Dr	154	26.2	3.4	22.5	34.2	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	260.6	35.7	215.3	322.7	10
EB T	Westpark Dr	114	291.9	32.1	250.6	356.2	10
EB TR	Westpark Dr	114	313.1	42.1	277.5	412.7	10
NB L	Fondren Rd	110	25.1	1.8	21.2	27.4	10
NB T	Fondren Rd	110	9.5	0.3	9.0	10.0	10
NB TR	Fondren Rd	110	14.1	0.8	13.2	15.5	10
SB L	Fondren Rd	112	273.5	64.2	203.8	378.6	10
SB T	Fondren Rd	112	65.9	11.0	51.4	80.9	10
SB TR	Fondren Rd	112	84.0	16.7	64.2	106.4	10
WB L	Westpark Dr	113	306.2	71.7	207.6	464.6	10
WB T	Westpark Dr	113	88.1	26.0	58.6	137.3	10
WB TR	Westpark Dr	113	94.3	21.7	66.6	127.9	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	86.4	6.0	80.0	97.9	10
EB T	Westpark Dr	113	42.5	1.0	41.0	44.2	10
EB TR	Westpark Dr	113	46.5	2.9	42.0	50.4	10
NB L	Hillcroft Ave	3	92.4	12.9	80.7	119.3	10
NB T	Hillcroft Ave	3	33.2	1.1	32.2	35.2	10
NB TR	Hillcroft Ave	3	34.8	1.0	33.1	36.4	10
SB L	Hillcroft Ave	115	552.5	96.3	328.2	639.7	10
SB T	Hillcroft Ave	115	131.0	31.8	82.7	171.8	10
SB TR	Hillcroft Ave	115	126.3	31.4	87.4	174.2	10
WB L	Westpark Dr	116	61.2	4.1	57.7	70.3	10
WB T	Westpark Dr	116	45.5	4.4	40.6	51.9	10
WB TR	Westpark Dr	116	57.8	6.8	47.5	68.1	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	56.8	2.6	52.3	59.7	10
EB T	Westpark Dr	143	3.3	0.8	2.0	4.9	10
NB L	I-610 NBFR	145	114.5	23.3	69.4	151.2	10
NB LT	I-610 NBFR	145	100.2	22.0	59.0	134.4	10
NB TR	I-610 NBFR	145	80.5	16.5	53.6	103.8	10
WB T	Westpark Dr	772	37.5	3.3	33.9	45.5	10
WB TR	Westpark Dr	772	34.5	2.7	31.2	39.5	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	0.0	0.0	0.0	0.1	10
EB T	Westpark Dr	629	45.9	2.9	42.0	51.2	10
SB L	I-610 SBFR	141	46.6	3.8	41.0	52.8	10
SB R	I-610 SBFR	141	2.9	1.7	1.1	6.1	10
SB T	I-610 SBFR	141	51.2	3.3	47.8	57.0	10
WB L	Westpark Dr	143	15.6	1.2	13.8	18.0	10
WB T	Westpark Dr	143	6.4	0.5	5.6	7.1	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	9.4	1.3	7.5	11.3	10
EB LT	Westpark Dr	123	12.5	3.5	9.2	21.6	10
EB T	Westpark Dr	123	20.8	4.0	17.6	30.2	10
NEB L	I-69 NBFR	126	36.2	5.8	28.5	45.3	10
NEB R	I-69 NBFR	126	9.9	1.0	8.0	11.5	10
NEB T	I-69 NBFR	126	19.1	1.2	16.9	20.9	10
WB R	Westpark Dr	127	5.2	3.5	2.0	10.8	10
WB T	Westpark Dr	127	25.2	1.0	24.4	27.0	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0		0.0	0.0	1
EB T	Westpark Dr	616	22.2	5.4	18.0	36.4	10
SWB L	I-69 SBFR	121	26.9	4.4	23.5	35.9	10
SWB LT	I-69 SBFR	121	27.6	7.4	21.3	45.6	10
SWB R	I-69 SBFR	121	0.4	0.4	0.2	1.1	10
SWB T	I-69 SBFR	121	21.5	0.6	20.6	22.5	10
WB L	Westpark Dr	123	35.6	2.7	32.3	39.4	10
WB T	Westpark Dr	123	13.7	0.8	12.6	14.7	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	772	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	772	0.0	0.0	0.0	0.1	10
NB LR	Loop Central Dr	771	173.6	22.1	147.4	200.5	10
WB L	Westpark Dr	146	4.6	1.0	2.7	6.0	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	146	29.2	2.9	25.2	34.4	10
EB TR	Westpark Dr	146	27.8	2.7	25.4	32.0	10
NB L	Newcastle Dr	148	60.1	7.3	48.5	69.3	10
NB T	Newcastle Dr	148	42.4	1.9	39.1	44.7	10
NB TR	Newcastle Dr	148	31.2	2.7	28.1	36.5	10
SB LT	Newcastle Dr	147	44.1	4.4	33.9	48.4	10
SB TR	Newcastle Dr	147	29.6	1.6	27.1	32.8	10
WB L	Westpark Dr	149	47.2	2.3	43.1	51.0	10
WB T	Westpark Dr	149	40.2	1.5	38.9	43.6	10
WB TR	Westpark Dr	149	37.4	1.1	35.7	39.1	10

WESTPARK DR & RAMPART ST — NODE: 107

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	6.7	0.7	6.2	8.2	10
EB TR	Westpark Dr	127	7.0	0.5	6.1	7.5	10
NB LT	Rampart St	129	53.7	5.7	49.2	69.0	10
NB TR	Rampart St	129	13.0	4.5	6.8	22.4	10
SB LTR	Rampart St	128	33.8	5.6	26.7	43.9	10
WB LT	Westpark Dr	130	7.9	0.9	6.8	9.3	10
WB TR	Westpark Dr	130	14.0	21.9	5.0	76.1	10

WESTPARK DR & ROYALTON ST — NODE: 309

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	136	0.0	0.0	0.0	0.0	10
NB LR	Royalton St	384	241.6	14.8	211.2	260.5	10
WB L	Westpark Dr	140	10.0	1.6	7.7	13.5	10
WB T	Westpark Dr	140	0.1	0.1	0.0	0.2	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	770	0.3	0.1	0.2	0.4	10
EB TR	Westpark Dr	770	0.4	0.1	0.2	0.5	10
NB LR	Uptown Transit Ctr	769	43.9	9.8	23.2	57.8	10
WB L	Westpark Dr	629	83.6	15.3	60.8	109.0	10
WB T	Westpark Dr	629	44.6	30.2	3.7	86.9	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	60.1	15.1	46.1	93.4	10
EB T	Westpark Dr	149	62.8	7.7	58.4	83.4	10
EB TR	Westpark Dr	149	62.6	10.7	51.8	89.6	10
NB L	Weslayan St	151	64.1	6.9	55.5	77.4	10
NB T	Weslayan St	151	16.8	1.5	13.8	18.8	10
NB TR	Weslayan St	151	12.6	0.9	10.9	13.7	10
SB L	Weslayan St	150	65.4	9.5	47.7	82.5	10
SB T	Weslayan St	150	25.8	0.9	24.4	27.6	10
SB TR	Weslayan St	150	29.6	1.4	27.9	31.8	10
WB L	Westpark Dr	152	128.4	24.2	105.2	182.9	10
WB T	Westpark Dr	152	78.9	12.1	68.2	105.4	10
WB TR	Westpark Dr	152	89.5	13.8	76.3	122.0	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR — NODE: 108

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	60.4	4.4	53.2	66.8	10
EB T	Westpark Dr	130	33.0	1.6	29.4	35.1	10
EB TR	Westpark Dr	130	32.2	2.3	29.2	35.6	10
NB L	Renwick Dr	132	50.6	5.1	44.8	57.9	10
NB T	Renwick Dr	132	53.1	29.3	37.3	108.6	10
NB TR	Renwick Dr	132	36.7	1.5	34.2	38.7	10
SB L	Fountain View Dr	131	51.2	5.9	45.6	64.3	10
SB T	Fountain View Dr	131	35.7	2.0	33.3	39.1	10
SB TR	Fountain View Dr	131	34.5	2.3	32.1	39.9	10
WB L	Westpark Dr	768	84.1	6.0	74.6	91.0	10
WB T	Westpark Dr	768	10.5	1.5	9.1	13.0	10
WB TR	Westpark Dr	768	13.0	1.3	9.8	14.4	10

WHEELER AVE & HUTCHINS ST — NODE: 367

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	[Unnamed Street]	707	31.7	3.6	28.4	41.3	10
NEB TR	[Unnamed Street]	707	243.7	26.0	207.8	280.5	10
NWB T	Wheeler Ave	423	33.8	4.0	28.4	39.9	10
NWB TR	Wheeler Ave	423	24.3	2.5	19.8	29.1	10
SEB L	Wheeler Ave	421	17.6	2.2	15.5	22.5	10
SEB T	Wheeler Ave	421	29.8	3.9	23.3	35.8	10
SWB LR	Hutchins St	422	12.2	1.7	9.9	14.7	10

APPENDIX E – 2030 NO-BUILD LOS RESULTS

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	3.4	0.5	2.6	4.4	10
135	Almeda Rd & Wheeler Ave	Actuated	5.4	0.3	4.9	5.7	10
292	Cleburne St & Ennis St	Actuated	1.3	0.1	1.2	1.5	10
176	Crosstimbers St & Lockwood Dr	Actuated	7.5	0.3	7.0	8.0	10
144	Cullen Blvd & Elgin St	Actuated	13.5	1.0	11.9	15.3	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	136.5	2.6	132.2	142.2	10
249	Elgin St & Ennis St	Actuated	2.9	0.1	2.6	3.1	10
143	Elgin St & Scott St	Actuated	14.2	0.6	13.0	15.0	10
146	Elgin St & Spur 5 SBFR	Actuated	5.0	0.1	4.8	5.2	10
145	Elgin St & UH Entrance	Actuated	2.6	0.2	2.2	2.9	10
136	Emancipation Ave & Wheeler Ave	Actuated	1.9	0.1	1.8	2.2	10
306	Ennis St & Holman St	Actuated	1.0	0.1	0.8	1.0	10
266	Ennis St & Wheeler Ave	Actuated	0.4	0.1	0.3	0.6	10
149	Ernestine St & Leeland St	Actuated	7.9	0.3	7.4	8.2	10
452	Ernestine St & Munger St	Stop	0.8	0.1	0.6	0.9	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	8.3	0.4	7.8	8.8	10
132	Fannin St & Wheeler Ave	Actuated	11.7	1.7	8.5	14.5	10
116	I-69 Express Lanes & Edloe St	Actuated	2.7	0.2	2.3	2.9	10
705	Jensen Dr & Turner Dr	Stop	0.1	0.0	0.0	0.1	10
173	Kelley St & Lockwood Dr	Actuated	16.4	0.9	15.0	18.0	10
134	LaBranch St & Wheeler Ave	Actuated	1.9	0.1	1.8	2.1	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	3.2	0.2	2.8	3.5	10
156	Lockwood Dr & Armour Dr	Actuated	6.6	0.3	6.3	7.1	10
154	Lockwood Dr & Canal St	Actuated	8.4	0.5	7.6	9.3	10
169	Lockwood Dr & Cavalcade St	Actuated	5.7	0.2	5.3	6.0	10
157	Lockwood Dr & Clinton Dr	Actuated	9.2	0.5	8.4	10.1	10
167	Lockwood Dr & Collingsworth St	Actuated	4.1	0.4	3.5	4.6	10
168	Lockwood Dr & Crane St	Actuated	3.0	0.2	2.5	3.3	10
623	Lockwood Dr & Denmark St	Stop	0.6	0.1	0.5	0.8	10
659	Lockwood Dr & Firnat St	Stop	0.4	0.0	0.4	0.5	10
513	Lockwood Dr & Marron Park Way	Actuated	8.2	1.1	7.2	10.6	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	22.0	3.2	18.4	26.8	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	1.6	0.7	1.0	3.0	10
534	Lockwood Dr & Hershe St	Stop	0.2	0.0	0.1	0.2	10
171	Lockwood Dr & I-610 EBFR	Pretimed	11.8	1.6	10.6	16.0	10
172	Lockwood Dr & I-610 WBFR	Pretimed	10.4	0.5	9.6	11.2	10
641	Lockwood Dr & Keeland St	Stop	0.0	0.0	0.0	0.1	10
152	Lockwood Dr & McKinney St	Actuated	3.0	0.2	2.7	3.3	10
166	Lockwood Dr & Mulvey St	Actuated	1.9	0.1	1.7	2.2	10
453	Lockwood Dr & Munger St	Stop	3.6	1.3	2.3	6.0	10
155	Lockwood Dr & Navigation Blvd	Actuated	16.7	0.5	15.9	17.7	10
567	Lockwood Dr & Nichols St	Stop	0.5	0.1	0.3	0.6	10
604	Lockwood Dr & Pardee St	Stop	0.8	0.1	0.6	0.9	10
170	Lockwood Dr & Rand St	Actuated	2.7	0.2	2.4	3.0	10
174	Lockwood Dr & Shreveport Blvd	Actuated	4.5	0.2	4.1	4.9	10
576	Lockwood Dr & Sudan St	Stop	0.1	0.0	0.1	0.1	10
177	Lockwood Dr & Weaver Rd	Actuated	7.8	0.4	7.3	8.4	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	5.5	0.5	4.5	6.1	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	9.4	3.6	6.1	17.9	10

159	Lockwood Dr (NB) & Market St	Actuated	2.7	0.2	2.4	3.1	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	4.6	0.8	3.6	5.9	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	9.8	2.4	6.9	13.4	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	4.1	0.5	3.6	5.1	10
158	Lockwood Dr (SB) & Market St	Actuated	2.6	0.2	2.1	2.9	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	7.7	2.8	4.6	12.7	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	0.7	0.1	0.6	0.8	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	3.0	0.2	2.7	3.4	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	15.4	1.2	14.0	18.0	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	7.6	0.4	7.0	8.3	10
119	Richmond Ave & Buffalo Speedway	Actuated	47.3	3.7	40.6	54.2	10
126	Richmond Ave & Dunlavy St	Actuated	33.2	4.1	26.9	37.5	10
120	Richmond Ave & Eastside St	Actuated	11.2	1.0	9.8	12.4	10
118	Richmond Ave & Edloe St	Actuated	28.5	1.1	26.9	30.6	10
122	Richmond Ave & Greenbriar Dr	Actuated	19.4	3.9	14.6	24.2	10
124	Richmond Ave & Hazard St	Actuated	43.2	7.3	32.9	52.1	10
121	Richmond Ave & Kirby Dr	Actuated	47.3	3.4	41.9	54.7	10
127	Richmond Ave & Mandell St	Actuated	5.0	0.3	4.6	5.4	10
128	Richmond Ave & Montrose Blvd	Actuated	71.4	6.5	62.0	84.1	10
123	Richmond Ave & Shepherd Dr	Actuated	15.2	0.6	14.4	16.1	10
130	Richmond Ave & US 59 NBFR	Actuated	17.8	1.6	14.9	19.5	10
129	Richmond Ave & US 59 SBFR	Actuated	9.2	0.9	7.4	10.7	10
125	Richmond Ave & Woodhead St	Actuated	19.1	6.3	9.9	29.3	10
131	Richmond Ave, Main St & Wheeler Ave	Actuated	20.7	3.8	13.8	26.8	10
110	S Rice Ave & Westpark Dr	Actuated	74.9	7.1	65.2	88.3	10
133	San Jacinto St & Wheeler Ave	Actuated	8.5	1.1	6.7	10.4	10
689	Tidwell Rd & Edell St	Stop	0.9	0.2	0.7	1.4	10
677	Tidwell Rd & Friendly Rd	Stop	16.3	2.0	12.6	19.2	10
180	Tidwell Rd & Hirsch Rd	Actuated	8.2	0.7	6.8	9.3	10
181	Tidwell Rd & I-69 NBFR	Pretimed	10.4	0.4	9.6	11.0	10
182	Tidwell Rd & I-69 SBFR	Pretimed	9.1	0.4	8.5	9.8	10
183	Tidwell Rd & Jensen Dr	Actuated	13.4	0.6	12.6	14.2	10
179	Tidwell Rd & Lockwood Dr	Actuated	7.2	0.3	6.6	7.6	10
690	Turner Dr & Edell St	Stop	0.0	0.0	0.0	0.0	10
104	Westpark Dr & 14th St	Actuated	26.8	9.5	11.3	39.1	10
360	Westpark Dr & Alder Dr	Stop	6.3	3.4	2.3	13.0	10
109	Westpark Dr & Chimney Rock Rd	Actuated	60.9	7.6	47.3	70.9	10
115	Westpark Dr & Edloe St	Actuated	20.8	0.5	19.9	21.6	10
102	Westpark Dr & Fondren Rd	Actuated	159.8	7.1	147.2	170.9	10
103	Westpark Dr & Hillcroft Ave	Actuated	170.5	14.0	152.9	188.8	10
112	Westpark Dr & I-610 NBFR	Actuated	25.7	1.3	24.3	28.6	10
111	Westpark Dr & I-610 SBFR	Actuated	76.7	3.2	72.2	81.1	10
106	Westpark Dr & I-69 NBFR	Pretimed	16.4	1.4	14.6	19.1	10
105	Westpark Dr & I-69 SBFR	Pretimed	26.5	4.0	19.2	32.7	10
394	Westpark Dr & Loop Central Dr	Stop	0.8	0.1	0.8	1.0	10
113	Westpark Dr & Newcastle Dr	Actuated	43.0	4.2	36.4	49.1	10
107	Westpark Dr & Rampart St	Actuated	20.4	2.1	17.5	23.6	10
309	Westpark Dr & Royalton St	Stop	28.6	4.5	21.8	36.1	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	7.1	1.0	5.2	8.8	10
114	Westpark Dr & Weslayan St	Actuated	43.0	3.8	37.7	47.8	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	22.3	1.0	21.0	24.2	10
367	Wheeler Ave & Hutchins St	Stop	2.5	0.5	1.7	3.2	10

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	13.0	1.7	10.8	16.6	10
135	Almeda Rd & Wheeler Ave	Actuated	18.2	0.7	17.3	19.1	10
292	Cleburne St & Ennis St	Actuated	8.3	0.5	7.7	9.1	10
176	Crosstimbers St & Lockwood Dr	Actuated	22.8	1.1	21.2	24.8	10
144	Cullen Blvd & Elgin St	Actuated	37.3	2.6	33.2	40.8	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	203.1	4.6	198.2	214.6	10
249	Elgin St & Ennis St	Actuated	14.4	0.4	13.5	14.9	10
143	Elgin St & Scott St	Actuated	28.3	1.0	26.4	29.6	10
146	Elgin St & Spur 5 SBFR	Actuated	11.6	0.4	11.1	12.2	10
145	Elgin St & UH Entrance	Actuated	9.3	0.8	7.9	10.4	10
136	Emancipation Ave & Wheeler Ave	Actuated	9.8	0.6	8.9	11.0	10
306	Ennis St & Holman St	Actuated	9.9	0.5	9.0	10.4	10
266	Ennis St & Wheeler Ave	Actuated	3.5	0.5	2.7	4.2	10
149	Ernestine St & Leeland St	Actuated	17.1	0.5	16.2	17.7	10
452	Ernestine St & Munger St	Stop	3.8	0.3	3.5	4.4	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	11.1	0.5	10.5	11.8	10
132	Fannin St & Wheeler Ave	Actuated	23.7	3.0	18.0	28.0	10
116	I-69 Express Lanes & Edloe St	Actuated	5.7	0.4	4.9	6.2	10
705	Jensen Dr & Turner Dr	Stop	0.2	0.1	0.1	0.5	10
173	Kelley St & Lockwood Dr	Actuated	31.7	1.5	29.5	34.1	10
134	LaBranch St & Wheeler Ave	Actuated	7.2	0.4	6.7	7.8	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	15.9	0.8	14.7	17.3	10
156	Lockwood Dr & Armour Dr	Actuated	18.1	0.5	17.5	18.9	10
154	Lockwood Dr & Canal St	Actuated	15.5	0.7	14.4	16.5	10
169	Lockwood Dr & Cavalcade St	Actuated	15.2	0.5	14.3	16.1	10
157	Lockwood Dr & Clinton Dr	Actuated	20.4	0.7	19.6	22.0	10
167	Lockwood Dr & Collingsworth St	Actuated	12.1	1.2	10.6	13.8	10
168	Lockwood Dr & Crane St	Actuated	10.4	0.4	9.4	10.8	10
623	Lockwood Dr & Denmark St	Stop	2.6	0.2	2.3	3.2	10
659	Lockwood Dr & Firnat St	Stop	2.4	0.2	2.1	2.7	10
513	Lockwood Dr & Marron Park Way	Actuated	13.8	1.8	12.1	17.1	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	35.5	5.4	29.8	43.4	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	4.5	1.9	2.8	8.5	10
534	Lockwood Dr & Hershe St	Stop	0.7	0.1	0.5	0.8	10
171	Lockwood Dr & I-610 EBFR	Pretimed	23.9	3.2	21.9	32.3	10
172	Lockwood Dr & I-610 WBFR	Pretimed	20.1	0.6	19.2	21.0	10
641	Lockwood Dr & Keeland St	Stop	0.3	0.0	0.2	0.4	10
152	Lockwood Dr & McKinney St	Actuated	6.3	0.4	5.6	6.9	10
166	Lockwood Dr & Mulvey St	Actuated	7.2	0.2	6.9	7.6	10
453	Lockwood Dr & Munger St	Stop	10.5	3.5	6.6	17.3	10
155	Lockwood Dr & Navigation Blvd	Actuated	25.2	0.7	24.2	26.8	10
567	Lockwood Dr & Nichols St	Stop	1.6	0.3	1.1	2.1	10
604	Lockwood Dr & Pardee St	Stop	2.0	0.2	1.6	2.2	10
170	Lockwood Dr & Rand St	Actuated	7.7	0.6	6.8	8.7	10
174	Lockwood Dr & Shreveport Blvd	Actuated	16.8	0.9	15.3	18.7	10
576	Lockwood Dr & Sudan St	Stop	0.4	0.1	0.3	0.5	10
177	Lockwood Dr & Weaver Rd	Actuated	34.6	0.8	33.5	35.7	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	18.1	1.8	15.3	20.5	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	27.1	10.8	17.5	53.1	10
159	Lockwood Dr (NB) & Market St	Actuated	11.5	0.8	10.2	12.8	10

160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	12.6	1.9	10.1	15.9	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	25.1	5.9	17.7	33.8	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	13.7	1.3	12.3	16.4	10
158	Lockwood Dr (SB) & Market St	Actuated	8.6	0.6	7.0	9.2	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	32.2	12.0	19.1	54.3	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	3.2	0.3	2.6	3.7	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	8.5	0.5	7.6	9.3	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	25.7	1.6	24.0	29.5	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	14.2	0.6	13.3	15.4	10
119	Richmond Ave & Buffalo Speedway	Actuated	50.4	3.8	44.2	58.1	10
126	Richmond Ave & Dunlavy St	Actuated	76.1	9.5	63.0	87.2	10
120	Richmond Ave & Eastside St	Actuated	18.0	1.2	15.9	19.5	10
118	Richmond Ave & Edloe St	Actuated	32.2	0.9	31.3	33.8	10
122	Richmond Ave & Greenbriar Dr	Actuated	40.7	7.7	30.6	50.4	10
124	Richmond Ave & Hazard St	Actuated	113.0	18.1	86.9	135.8	10
121	Richmond Ave & Kirby Dr	Actuated	37.4	2.4	33.3	42.6	10
127	Richmond Ave & Mandell St	Actuated	13.9	0.8	12.9	15.0	10
128	Richmond Ave & Montrose Blvd	Actuated	71.0	5.8	62.4	80.6	10
123	Richmond Ave & Shepherd Dr	Actuated	28.7	1.0	27.6	30.6	10
130	Richmond Ave & US 59 NBFR	Actuated	42.4	3.5	35.4	46.0	10
129	Richmond Ave & US 59 SBFR	Actuated	18.9	1.9	15.0	21.9	10
125	Richmond Ave & Woodhead St	Actuated	45.2	15.1	23.0	69.4	10
131	Richmond Ave, Main St & Wheeler Ave	Actuated	54.6	9.4	37.0	70.0	10
110	S Rice Ave & Westpark Dr	Actuated	82.8	7.7	70.5	97.4	10
133	San Jacinto St & Wheeler Ave	Actuated	23.4	2.6	18.7	27.1	10
689	Tidwell Rd & Edell St	Stop	2.0	0.4	1.6	3.1	10
677	Tidwell Rd & Friendly Rd	Stop	29.3	3.7	22.6	34.8	10
180	Tidwell Rd & Hirsch Rd	Actuated	13.3	1.2	11.1	14.8	10
181	Tidwell Rd & I-69 NBFR	Pretimed	15.7	0.5	14.9	16.7	10
182	Tidwell Rd & I-69 SBFR	Pretimed	14.0	0.4	13.4	14.5	10
183	Tidwell Rd & Jensen Dr	Actuated	23.2	0.8	22.2	24.3	10
179	Tidwell Rd & Lockwood Dr	Actuated	14.4	0.6	13.4	15.3	10
690	Turner Dr & Edell St	Stop	6.1	0.3	5.9	6.3	2
104	Westpark Dr & 14th St	Actuated	37.6	14.6	15.2	59.0	10
360	Westpark Dr & Alder Dr	Stop	13.4	7.4	4.9	28.7	10
109	Westpark Dr & Chimney Rock Rd	Actuated	67.7	9.0	52.4	80.5	10
115	Westpark Dr & Edloe St	Actuated	32.2	0.9	30.8	33.4	10
102	Westpark Dr & Fondren Rd	Actuated	129.7	5.8	117.5	137.2	10
103	Westpark Dr & Hillcroft Ave	Actuated	116.6	10.6	102.6	132.8	10
112	Westpark Dr & I-610 NBFR	Actuated	32.8	1.6	30.9	36.0	10
111	Westpark Dr & I-610 SBFR	Actuated	86.9	4.4	81.3	93.0	10
106	Westpark Dr & I-69 NBFR	Pretimed	21.8	1.7	19.9	25.0	10
105	Westpark Dr & I-69 SBFR	Pretimed	29.0	4.6	20.7	34.7	10
394	Westpark Dr & Loop Central Dr	Stop	1.6	0.1	1.4	1.8	10
113	Westpark Dr & Newcastle Dr	Actuated	62.4	5.6	53.9	69.8	10
107	Westpark Dr & Rampart St	Actuated	42.0	4.4	36.1	49.4	10
309	Westpark Dr & Royalton St	Stop	54.4	9.3	41.0	69.5	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	14.3	2.0	10.4	18.1	10
114	Westpark Dr & Weslayan St	Actuated	43.4	3.3	38.8	48.3	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	35.1	1.1	33.2	36.8	10
367	Wheeler Ave & Hutchins St	Stop	11.9	2.4	8.6	15.1	10

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	0.3	0.1	0.2	0.5	10
NW	Alabama St	197	1.2	0.1	1.0	1.4	10
SE	Alabama St	193	1.3	0.3	0.9	1.8	10
SW	Ennis St	740	0.5	0.1	0.4	0.7	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	2.3	0.2	1.8	2.6	10
NW	Wheeler Ave	176	1.1	0.1	0.9	1.3	10
S	Almeda Rd	174	0.8	0.1	0.7	0.9	10
SE	Wheeler Ave	77	1.3	0.2	1.0	1.5	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	0.2	0.0	0.1	0.2	10
NW	Cleburne St	733	0.6	0.1	0.5	0.8	10
SE	Cleburne St	731	0.4	0.1	0.4	0.5	10
SW	Ennis St	732	0.1	0.0	0.1	0.2	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	1.2	0.1	1.0	1.3	10
N	Lockwood Dr	321	2.5	0.2	2.2	2.7	10
S	Lockwood Dr	320	2.1	0.2	1.7	2.4	10
W	Crosstimbers St	322	1.8	0.1	1.7	2.0	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	3.5	0.5	2.8	4.3	10
NE	Cullen Blvd	207	1.1	0.1	0.9	1.2	10
S	Cullen Blvd	206	4.1	0.4	3.7	4.8	10
W	Elgin St	208	4.9	0.3	4.3	5.5	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	42.4	2.4	39.3	47.1	10
N	Fondren Rd	38	93.4	1.2	92.1	95.6	10
S	Fondren Rd	110	0.7	0.2	0.5	1.0	10

ELGIN ST & ENNIS ST — NODE: 249

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	0.4	0.1	0.3	0.5	10
NW	Elgin St	701	1.3	0.1	1.2	1.6	10
SE	Elgin St	700	0.9	0.1	0.8	1.0	10
SW	Ennis St	195	0.2	0.0	0.2	0.3	10

ELGIN ST & SCOTT ST — NODE: 143

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	3.0	0.3	2.3	3.3	10
N	Scott St	667	0.0	0.0	0.0	0.0	10
NW	Scott St	198	2.3	0.3	1.8	2.7	10
S	Scott St	671	4.3	0.3	3.8	4.6	10
SW	LRT Line	669	0.0	0.0	0.0	0.1	10
W	Elgin St	204	4.6	0.4	3.8	5.2	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	0.4	0.1	0.4	0.6	10
S	Spur 5 SBFR	214	2.8	0.1	2.7	2.9	10
SW	Elgin St	216	1.7	0.1	1.6	1.9	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	0.5	0.1	0.4	0.7	10
N	UH Entrance	211	1.1	0.1	0.9	1.3	10
SW	UH Entrance	210	0.8	0.1	0.6	0.9	10
W	Elgin St	212	0.3	0.0	0.2	0.3	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	0.4	0.1	0.3	0.5	10
NW	Wheeler Ave	766	0.7	0.1	0.6	0.8	10
SE	Wheeler Ave	423	0.7	0.1	0.6	0.8	10
SW	Emancipation Ave	177	0.1	0.0	0.1	0.2	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.4	0.1	0.3	0.5	10
NW	Holman St	742	0.1	0.0	0.1	0.2	10
SE	Holman St	741	0.1	0.0	0.1	0.2	10
SW	Ennis St	702	0.3	0.0	0.2	0.3	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.1	0.0	0.0	0.1	10
SE	Wheeler Ave	766	0.4	0.1	0.3	0.5	10
SW	Ennis St	726	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.5	0.2	1.3	1.8	10
SW	Ernestine St	411	3.8	0.3	3.2	4.3	10
W	Leeland St	227	2.6	0.1	2.5	2.7	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	0.2	0.0	0.1	0.2	10
S	Ernestine St	685	0.2	0.0	0.1	0.2	10
W	Munger St	460	0.4	0.1	0.4	0.6	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	1.6	0.1	1.4	1.9	10

NW	I-45 NBFR	222	4.7	0.4	4.3	5.4	10
S	Ernestine St	221	1.9	0.2	1.7	2.3	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	4.2	1.1	2.4	6.3	10
SE	Wheeler Ave	169	3.2	0.2	2.8	3.4	10
SW	Fannin St	87	4.3	0.8	3.0	5.5	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	1.9	0.1	1.6	2.1	10
N	Edloe St	153	0.3	0.1	0.2	0.5	10
S	Edloe St	155	0.5	0.1	0.4	0.8	10
W	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.6	0.3	2.3	3.3	10
N	Lockwood Dr	308	9.6	0.9	8.2	11.1	10
S	Lockwood Dr	311	2.8	0.2	2.4	3.1	10
W	Kelley St	312	1.5	0.1	1.3	1.7	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	0.9	0.1	0.8	1.0	10
NW	Wheeler Ave	77	0.1	0.0	0.0	0.1	10
SE	Wheeler Ave	86	0.3	0.0	0.2	0.3	10
SW	LaBranch St	78	0.7	0.1	0.6	0.9	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	0.7	0.1	0.5	0.8	10
N	Lockwood Dr	328	0.7	0.1	0.5	0.8	10
S	Lockwood Dr	571	0.2	0.0	0.2	0.3	10
W	Laura Koppe Rd	329	1.7	0.1	1.6	2.0	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	254	3.3	0.2	3.1	3.6	10
SW	Lockwood Dr	253	3.0	0.2	2.7	3.4	10
W	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	772	1.3	0.2	1.1	1.6	10
NE	Lockwood Dr	241	1.5	0.1	1.3	1.7	10
SW	Lockwood Dr	245	2.6	0.3	2.4	3.3	10
W	Canal St	768	3.1	0.3	2.5	3.5	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	0.9	0.1	0.9	1.1	10
N	Lockwood Dr	292	0.4	0.1	0.3	0.5	10
S	Lockwood Dr	296	2.7	0.2	2.5	3.1	10
W	Cavalcade St	298	1.6	0.1	1.5	1.8	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.5	0.2	1.2	1.7	10
NE	Lockwood Dr	257	3.2	0.1	2.9	3.4	10
S	Lockwood Dr	256	2.3	0.2	1.9	2.6	10
W	Clinton Dr	258	2.3	0.3	2.0	2.9	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	0.9	0.1	0.9	1.2	10
N	Lockwood Dr	289	1.5	0.2	1.3	1.7	10
SE	Lockwood Dr	288	0.4	0.1	0.3	0.6	10
W	Collingsworth St	290	1.3	0.3	1.0	1.9	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.1	0.1	1.0	1.2	10
N	Lockwood Dr	288	1.0	0.1	0.8	1.2	10
S	Lockwood Dr	292	0.2	0.0	0.2	0.2	10
W	Crane St	294	0.8	0.1	0.6	0.9	10

LOCKWOOD DR & DENMARK ST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	0.4	0.1	0.3	0.5	10
N	Lockwood Dr	317	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
W	Denmark St	549	0.2	0.0	0.2	0.2	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.1	0.0	0.1	0.2	10
N	Lockwood Dr	571	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
W	Firnat St	575	0.2	0.0	0.2	0.3	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 513

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	2.4	0.1	2.3	2.7	10
SE	Marron Park Way	783	1.6	0.2	1.4	2.0	10
SW	Lockwood Dr	254	4.2	1.1	3.1	6.2	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	1.1	0.1	1.0	1.3	10
NE	Lockwood Dr	237	9.8	3.3	6.5	15.5	10
NW	Harrisburg Blvd	678	2.8	0.3	2.6	3.5	10
S	Lockwood Dr	241	8.2	1.4	7.1	11.8	10
SE	LRT Line	675	0.0	0.0	0.0	0.0	10

W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	1.1	0.6	0.5	2.5	10
NE	Lockwood Dr	253	0.3	0.0	0.2	0.3	10
SW	Lockwood Dr	257	0.1	0.1	0.1	0.2	10
W	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	478	0.1	0.0	0.1	0.1	10
W	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	6.2	0.6	5.5	7.1	10
N	Lockwood Dr	643	5.5	1.6	4.3	10.0	10
S	Lockwood Dr	304	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	0.8	0.2	0.5	1.2	10
S	Lockwood Dr	308	5.1	0.3	4.7	5.6	10
W	I-610 WBFR	309	4.6	0.2	4.3	4.9	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
W	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.6	0.1	0.4	0.8	10
N	Lockwood Dr	232	0.5	0.0	0.4	0.6	10
S	Lockwood Dr	237	1.6	0.2	1.4	1.9	10
W	McKinney St	239	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	478	0.7	0.1	0.6	0.9	10
S	Lockwood Dr	284	0.9	0.1	0.8	1.0	10
W	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	0.3	0.1	0.2	0.5	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	3.3	1.2	2.0	5.5	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	3.9	0.3	3.5	4.4	10
NE	Lockwood Dr	245	4.1	0.5	3.4	4.8	10
SW	Lockwood Dr	249	3.7	0.5	3.1	4.4	10
W	Navigation Blvd	251	5.1	0.3	4.6	5.6	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	524	0.2	0.0	0.2	0.3	10
W	Nichols St	525	0.2	0.1	0.1	0.4	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.6	0.1	0.5	0.7	10
N	Lockwood Dr	300	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	643	0.1	0.0	0.1	0.1	10
W	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	1.0	0.2	0.7	1.2	10
N	Lockwood Dr	296	0.2	0.0	0.1	0.3	10
S	Lockwood Dr	300	1.0	0.1	0.9	1.1	10
W	Rand St	302	0.6	0.1	0.5	0.7	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	2.2	0.2	1.9	2.5	10
NE	Shreveport Blvd	316	0.4	0.1	0.3	0.5	10
S	Lockwood Dr	314	0.4	0.1	0.3	0.5	10
SW	Shreveport Blvd	315	1.4	0.1	1.2	1.6	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	289	0.0	0.0	0.0	0.1	10
W	Sudan St	534	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	0.8	0.1	0.6	0.9	10
N	Lockwood Dr	320	2.3	0.2	2.1	2.6	10
S	Lockwood Dr	557	2.3	0.3	1.9	2.7	10
W	Weaver Rd	325	2.4	0.3	2.1	3.1	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	0.8	0.1	0.8	0.9	10
N	Lockwood Dr (NB)	264	4.6	0.5	3.7	5.3	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	1.5	0.4	1.1	2.4	10

W	I-10 WBFR	276	7.9	3.1	5.0	15.5	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.1	0.1	0.1	0.3	10
N	Lockwood Dr	499	0.9	0.1	0.7	1.1	10
W	Market St	266	1.8	0.1	1.5	1.9	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	3.6	0.8	2.7	4.9	10
S	Lockwood Dr (SB)	267	1.0	0.4	0.6	1.9	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	9.1	2.4	6.2	12.8	10
W	I-10 WBFR	273	0.6	0.1	0.6	0.8	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	1.4	0.3	1.1	1.9	10
S	Lockwood Dr	515	1.8	0.3	1.5	2.4	10
W	Lyons Ave	279	0.9	0.0	0.9	1.0	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	1.0	0.1	0.7	1.1	10
S	Lockwood Dr (SB)	260	1.5	0.1	1.3	1.7	10
W	Market St	262	0.2	0.0	0.1	0.3	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	0.2	0.0	0.2	0.3	10
N	Lockwood Dr (NB)	275	6.4	2.9	3.3	11.4	10
W	Lyons Ave	283	1.1	0.1	0.9	1.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	0.2	0.0	0.2	0.3	10
N	Lockwood Dr	314	0.1	0.0	0.1	0.1	10
S	Lockwood Dr	317	0.4	0.0	0.3	0.4	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	0.7	0.0	0.6	0.8	10
NE	Elgin St	216	0.3	0.0	0.2	0.3	10
SW	Lockwood Dr	218	2.0	0.2	1.8	2.4	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	2.2	0.2	1.9	2.6	10
N	Lockwood Dr	229	2.7	0.1	2.6	3.0	10
S	Lockwood Dr	232	7.9	1.0	7.0	10.3	10
W	Polk St	234	2.6	0.3	2.2	2.9	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	1.1	0.1	1.0	1.4	10
N	Lockwood Dr	230	3.7	0.2	3.4	3.9	10
W	Telephone Rd	231	2.8	0.2	2.5	3.1	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	12.8	1.0	11.2	14.2	10
N	Buffalo Speedway	37	14.8	3.2	10.7	21.8	10
S	Buffalo Speedway	36	5.8	0.6	5.0	6.7	10
W	Richmond Ave	12	14.0	1.6	11.6	17.4	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	0.6	0.1	0.4	0.7	10
N	Dunlavy St	57	6.4	3.1	2.8	10.8	10
S	Dunlavy St	56	25.6	4.5	16.3	32.0	10
W	Richmond Ave	165	0.6	0.1	0.4	0.7	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	5.8	0.7	5.0	6.6	10
N	Eastside St	40	1.6	0.2	1.4	2.0	10
S	Eastside St	39	2.6	0.4	2.1	3.3	10
W	Richmond Ave	54	1.2	0.1	1.0	1.5	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	6.3	0.3	6.0	6.8	10
N	Edloe St	155	6.2	0.3	5.7	6.6	10
S	Edloe St	5	3.6	0.3	3.2	4.2	10
W	Richmond Ave	9	12.4	0.6	11.6	13.4	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	5.1	0.4	4.7	5.8	10
N	Greenbriar Dr	47	0.8	0.1	0.6	0.9	10
S	Greenbriar Dr	46	10.8	3.8	6.1	15.9	10
W	Richmond Ave	160	2.7	0.1	2.6	2.9	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	1.2	0.1	1.1	1.4	10
N	Hazard St	51	24.4	3.2	19.7	28.6	10
S	Hazard St	50	16.9	5.8	11.2	26.3	10
W	Richmond Ave	162	0.7	0.1	0.5	0.8	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	12.1	2.5	8.4	16.4	10
N	Kirby Dr	158	17.3	1.9	14.6	19.7	10
S	Kirby Dr	44	15.7	0.9	14.4	17.2	10
W	Richmond Ave	64	2.2	0.2	1.8	2.5	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	0.4	0.1	0.3	0.5	10
N	Mandell St	59	2.5	0.3	2.1	2.8	10
S	Mandell St	58	2.0	0.3	1.4	2.4	10
W	Richmond Ave	23	0.2	0.0	0.1	0.3	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	6.6	0.4	6.0	7.2	10
N	Montrose Blvd	61	34.8	1.9	31.1	38.3	10
S	Montrose Blvd	60	22.4	4.8	14.6	31.2	10
W	Richmond Ave	166	7.6	1.3	6.6	10.8	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	1.4	0.1	1.3	1.6	10
N	Shepherd Dr	49	5.5	0.3	4.9	5.9	10
S	Shepherd Dr	48	5.9	0.4	5.4	6.6	10
W	Richmond Ave	20	2.3	0.2	2.2	2.6	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	0.2	0.1	0.1	0.5	10
NE	US 59 NBFR	69	2.3	0.3	1.9	2.7	10
W	Richmond Ave	26	15.3	1.7	12.2	16.9	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	5.9	0.8	4.8	7.3	10
SW	US 59 SBFR	65	3.2	0.6	2.5	4.5	10
W	Richmond Ave	167	0.1	0.1	0.1	0.3	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	0.6	0.0	0.6	0.7	10
N	Woodhead St	53	15.4	6.3	6.3	25.5	10
S	Woodhead St	52	1.9	0.2	1.7	2.4	10
W	Richmond Ave	163	1.2	0.1	1.0	1.3	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	0.1	0.0	0.1	0.1	10
NE	Main St	168	10.6	3.4	5.1	16.6	10
NW	Wheeler Ave	169	6.7	0.8	5.2	7.5	10
S	Main St	70	1.0	0.1	0.6	1.1	10
SE	Richmond Ave	26	2.4	0.5	1.6	3.3	10
SW	LRT Line	674	0.0	0.0	0.0	0.0	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	43.1	2.4	37.4	45.6	10
N	S Rice Ave	138	19.6	5.9	13.2	31.6	10
S	S Rice Ave	137	7.3	1.0	6.2	8.7	10
W	Westpark Dr	790	4.9	0.8	3.9	6.2	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

NE	San Jacinto St	173	2.6	0.3	2.3	3.4	10
NW	Wheeler Ave	86	4.6	1.0	3.2	5.9	10
SE	Wheeler Ave	172	1.3	0.4	1.0	2.3	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
N	Edell St	590	0.2	0.0	0.2	0.3	10
S	Edell St	589	0.6	0.2	0.5	1.1	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	341	0.6	0.1	0.5	0.7	10
N	Friendly Rd	585	5.2	1.9	2.0	8.2	10
S	Friendly Rd	584	10.5	0.3	9.8	10.9	10
W	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	1.7	0.1	1.5	1.9	10
N	Hirsch Rd	336	3.4	0.6	2.4	4.3	10
S	Hirsch Rd	335	2.4	0.2	2.2	2.7	10
W	Tidwell Rd	334	0.7	0.1	0.6	0.9	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	3.4	0.2	3.1	3.8	10
N	I-69 NBFR	340	2.5	0.2	2.4	3.0	10
W	Tidwell Rd	341	4.5	0.2	4.1	4.9	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	2.3	0.1	2.2	2.5	10
S	I-69 SBFR	649	2.8	0.2	2.4	3.1	10
W	Tidwell Rd	342	4.0	0.2	3.8	4.4	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	4.1	0.2	3.7	4.7	10
N	Jensen Dr	347	2.1	0.1	2.0	2.3	10
S	Jensen Dr	346	3.4	0.2	2.9	3.7	10
W	Tidwell Rd	348	3.7	0.3	3.1	4.2	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	2.2	0.2	1.8	2.4	10
N	Lockwood Dr	332	1.6	0.2	1.3	1.8	10
S	Lockwood Dr	331	0.1	0.0	0.1	0.2	10
W	Tidwell Rd	333	3.2	0.3	2.9	3.7	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	593	0.0	0.0	0.0	0.0	10
SE	Edell St	592	0.0	0.0	0.0	0.0	10
SW	Turner Dr	793	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST — NODE: 104

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	4.4	1.3	3.2	7.6	10
N	14th St	118	0.4	0.1	0.3	0.5	10
W	Westpark Dr	616	21.9	8.6	7.8	33.4	10

WESTPARK DR & ALDER DR — NODE: 360

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	788	2.9	2.6	0.1	7.8	10
N	Alder Dr	787	3.2	1.0	2.0	5.0	10
W	Westpark Dr	133	0.2	0.0	0.1	0.2	10

WESTPARK DR & CHIMNEY ROCK RD — NODE: 109

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	33.8	6.8	22.1	39.0	10
N	Chimney Rock Rd	135	13.4	1.6	11.2	16.6	10
S	Chimney Rock Rd	134	11.5	1.2	9.9	13.8	10
W	Westpark Dr	136	2.2	0.3	1.7	2.6	10

WESTPARK DR & EDLOE ST — NODE: 115

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	4.9	0.3	4.4	5.4	10
N	Edloe St	29	7.2	0.3	6.7	7.6	10
S	Edloe St	153	3.6	0.2	3.3	4.0	10
W	Westpark Dr	154	5.1	0.4	4.6	5.8	10

WESTPARK DR & FONDREN RD — NODE: 102

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	103.5	2.7	99.2	107.3	10
N	Fondren Rd	110	3.7	0.4	3.3	4.3	10
S	Fondren Rd	112	20.8	3.6	13.4	25.8	10
W	Westpark Dr	113	31.7	7.8	21.4	42.0	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	22.5	3.3	18.3	30.0	10
N	Hillcroft Ave	3	44.0	4.3	37.4	49.3	10
S	Hillcroft Ave	115	64.6	15.5	44.9	84.2	10
W	Westpark Dr	116	39.4	2.5	35.9	43.3	10

WESTPARK DR & I-610 NBFR — NODE: 112

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	6.7	0.3	6.4	7.3	10
N	I-610 NBFR	145	9.9	0.6	9.1	11.0	10
W	Westpark Dr	792	9.0	1.0	7.8	11.0	10

WESTPARK DR & I-610 SBFR — NODE: 111

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	69.1	3.3	64.7	73.5	10
S	I-610 SBFR	141	3.2	0.3	2.7	3.5	10
W	Westpark Dr	143	4.5	0.2	4.1	4.6	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	8.9	1.4	7.4	11.7	10

NE	I-69 NBFR	126	4.0	0.3	3.7	4.5	10
W	Westpark Dr	127	3.5	0.2	3.1	3.8	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	14.0	3.0	10.3	18.9	10
SW	I-69 SBFR	121	9.2	3.7	3.9	14.4	10
W	Westpark Dr	123	3.3	0.3	2.9	3.6	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	792	0.0	0.0	0.0	0.0	10
N	Loop Central Dr	791	0.4	0.0	0.4	0.5	10
W	Westpark Dr	146	0.4	0.0	0.4	0.5	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	5.5	0.4	5.1	6.3	10
N	Newcastle Dr	148	24.2	2.7	19.6	27.7	10
S	Newcastle Dr	147	2.5	0.3	2.2	3.1	10
W	Westpark Dr	149	10.7	3.0	7.2	17.3	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	2.6	0.2	2.4	2.9	10
N	Rampart St	129	16.5	2.0	13.8	19.8	10
S	Rampart St	128	0.8	0.1	0.7	1.0	10
W	Westpark Dr	130	0.5	0.1	0.4	0.7	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	15.2	4.2	7.4	22.6	10
N	Royalton St	384	13.2	1.4	10.8	15.1	10
W	Westpark Dr	140	0.2	0.0	0.1	0.2	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	790	6.2	1.0	4.4	7.9	10
N	Uptown Transit Ctr	789	0.2	0.0	0.2	0.3	10
W	Westpark Dr	629	0.7	0.2	0.5	1.0	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	10.8	2.6	7.9	14.7	10
N	Weslayan St	151	13.0	2.6	11.0	20.0	10
S	Weslayan St	150	14.5	0.7	13.5	15.7	10
W	Westpark Dr	152	4.8	0.5	4.2	5.5	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	7.8	0.4	7.1	8.5	10
N	Renwick Dr	132	8.3	0.8	7.0	9.7	10
S	Fountain View Dr	131	4.5	0.4	4.0	5.4	10
W	Westpark Dr	788	1.7	0.1	1.5	1.9	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	1.6	0.5	1.0	2.3	10
NW	Wheeler Ave	423	0.3	0.1	0.2	0.4	10
SE	Wheeler Ave	421	0.5	0.1	0.3	0.6	10
SW	Hutchins St	422	0.1	0.0	0.0	0.1	10

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	7.6	1.9	5.1	10.7	10
NW	Alabama St	197	18.9	1.8	16.0	22.1	10
SE	Alabama St	193	11.1	2.1	8.2	15.1	10
SW	Ennis St	740	16.4	1.8	14.3	19.7	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	19.3	1.8	15.9	21.4	10
NW	Wheeler Ave	176	23.4	1.8	21.6	27.8	10
S	Almeda Rd	174	14.5	1.1	12.1	15.5	10
SE	Wheeler Ave	77	16.1	2.0	13.5	19.1	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	2.5	0.3	2.0	2.8	10
NW	Cleburne St	733	22.9	2.3	20.7	28.7	10
SE	Cleburne St	731	21.3	1.5	19.0	23.3	10
SW	Ennis St	732	2.7	0.3	2.3	3.3	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	20.1	1.6	17.9	22.5	10
N	Lockwood Dr	321	29.3	1.3	27.4	31.0	10
S	Lockwood Dr	320	25.5	2.5	21.9	30.5	10
W	Crosstimbers St	322	17.0	0.9	15.7	18.7	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	68.5	8.3	56.0	80.8	10
NE	Cullen Blvd	207	13.0	1.0	11.1	14.3	10
S	Cullen Blvd	206	33.3	2.3	29.3	38.4	10
W	Elgin St	208	46.0	3.8	38.5	50.5	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	257.0	15.3	238.8	281.2	10
N	Fondren Rd	38	376.1	6.9	366.9	389.2	10

S	Fondren Rd	110	2.8	0.7	1.8	3.8	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	13.6	1.7	10.8	16.7	10
NW	Elgin St	701	15.8	0.9	14.8	17.3	10
SE	Elgin St	700	12.5	0.7	11.2	13.2	10
SW	Ennis St	195	18.2	2.0	15.2	20.5	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	36.2	2.8	30.2	39.0	10
N	Scott St	667	5.0	0.6	4.1	6.3	10
NW	Scott St	198	16.5	1.7	13.2	19.3	10
S	Scott St	671	25.0	1.9	21.6	27.3	10
SW	LRT Line	669	23.9	7.7	19.2	45.6	10
W	Elgin St	204	43.1	3.0	38.5	47.3	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	7.1	1.0	5.8	8.5	10
S	Spur 5 SBFR	214	17.9	0.4	17.4	18.6	10
SW	Elgin St	216	8.2	0.6	7.6	9.0	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	5.5	1.3	4.0	7.6	10
N	UH Entrance	211	35.9	4.2	27.6	40.9	10
SW	UH Entrance	210	39.6	3.8	32.7	43.4	10
W	Elgin St	212	1.9	0.4	1.4	2.5	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	5.9	0.9	4.9	7.3	10
NW	Wheeler Ave	766	18.5	1.5	15.6	21.0	10
SE	Wheeler Ave	423	17.9	1.9	14.7	20.4	10
SW	Emancipation Ave	177	2.6	0.5	1.7	3.2	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	11.8	1.0	10.2	12.8	10
NW	Holman St	742	9.4	1.6	7.5	11.8	10
SE	Holman St	741	7.0	1.1	5.9	9.4	10
SW	Ennis St	702	9.6	0.8	8.2	10.6	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	1.1	0.3	0.7	1.4	10
SE	Wheeler Ave	766	17.9	2.0	14.3	20.5	10
SW	Ennis St	726	0.2	0.2	0.0	0.6	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	19.4	1.3	17.0	20.8	10
SW	Ernestine St	411	15.4	1.0	13.5	17.0	10
W	Leeland St	227	18.8	0.6	17.9	19.5	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	9.0	1.2	7.0	10.4	10
S	Ernestine St	685	1.2	0.2	1.0	1.6	10
W	Munger St	460	8.1	1.0	6.7	10.1	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	13.1	0.7	12.0	14.1	10
NW	I-45 NBFR	222	9.8	0.8	9.0	11.0	10
S	Ernestine St	221	13.8	0.8	12.8	15.6	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	45.6	10.1	26.5	64.2	10
SE	Wheeler Ave	169	28.3	1.7	25.2	30.2	10
SW	Fannin St	87	14.9	2.6	10.9	18.9	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	22.3	1.7	19.5	24.2	10
N	Edloe St	153	1.2	0.4	0.9	2.1	10
S	Edloe St	155	3.7	0.8	2.9	5.7	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	11.6	3.1	8.3	19.1	10
NE	Jensen Dr	346	0.0	0.1	0.0	0.1	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	6.6	4.1	1.7	17.3	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	24.6	2.3	22.5	30.3	10
N	Lockwood Dr	308	44.3	3.5	38.7	49.5	10
S	Lockwood Dr	311	22.2	1.2	20.5	23.8	10
W	Kelley St	312	20.6	2.1	18.0	25.4	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	29.7	1.7	27.3	32.7	10
NW	Wheeler Ave	77	0.6	0.2	0.3	0.9	10
SE	Wheeler Ave	86	2.6	0.4	2.0	3.3	10
SW	LaBranch St	78	28.5	2.5	24.6	32.5	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	24.8	2.9	20.5	29.5	10
N	Lockwood Dr	328	11.2	1.3	9.8	14.5	10
S	Lockwood Dr	571	3.7	0.6	2.9	4.3	10
W	Laura Koppe Rd	329	32.3	1.4	31.0	35.5	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	254	21.1	0.9	20.0	22.6	10
SW	Lockwood Dr	253	15.6	0.6	14.9	16.8	10

W	Armour Dr	659	17.8	2.4	13.4	21.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	772	15.3	2.2	12.7	18.6	10
NE	Lockwood Dr	241	7.6	0.7	6.6	8.4	10
SW	Lockwood Dr	245	15.9	1.4	14.4	18.8	10
W	Canal St	768	29.9	1.5	28.0	31.8	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	21.2	1.9	17.4	24.1	10
N	Lockwood Dr	292	4.1	0.5	3.0	5.0	10
S	Lockwood Dr	296	17.9	0.9	17.0	19.3	10
W	Cavalcade St	298	20.7	1.5	18.2	22.4	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	26.1	1.3	23.8	27.4	10
NE	Lockwood Dr	257	28.7	1.4	26.9	31.3	10
S	Lockwood Dr	256	11.6	0.7	10.6	13.4	10
W	Clinton Dr	258	25.3	1.3	23.4	28.1	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	18.4	1.5	16.5	21.2	10
N	Lockwood Dr	289	12.5	1.1	10.6	14.1	10
SE	Lockwood Dr	288	3.1	0.9	2.1	4.8	10
W	Collingsworth St	290	34.7	8.0	28.4	49.7	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	30.4	2.2	27.3	33.4	10
N	Lockwood Dr	288	10.2	0.8	9.4	11.7	10
S	Lockwood Dr	292	1.4	0.1	1.2	1.6	10
W	Crane St	294	32.1	2.0	29.1	35.5	10

LOCKWOOD DR & DENMARK ST **NODE: 623**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	10.4	1.8	8.9	14.3	10
N	Lockwood Dr	317	0.6	0.2	0.4	1.0	10
S	Lockwood Dr	321	0.0	0.0	0.0	0.1	10
W	Denmark St	549	10.0	0.9	9.1	11.6	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	5.0	0.7	4.4	6.7	10
N	Lockwood Dr	571	0.5	0.1	0.4	0.6	10
S	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
W	Firnat St	575	8.6	1.0	7.6	10.6	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 513**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	12.0	0.7	11.2	13.4	10
SE	Marron Park Way	783	21.5	1.6	19.5	25.1	10
SW	Lockwood Dr	254	13.2	3.2	9.9	18.5	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	20.5	0.9	19.7	22.2	10
NE	Lockwood Dr	237	45.8	16.0	29.9	73.4	10
NW	Harrisburg Blvd	678	23.1	1.9	21.0	26.9	10
S	Lockwood Dr	241	36.5	6.0	33.0	52.4	10
SE	LRT Line	675	23.7	1.4	21.7	25.4	10
W	LRT Line	676	4.0	3.4	0.0	8.2	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	46.6	25.3	24.0	100.9	10
NE	Lockwood Dr	253	2.4	0.3	1.8	2.8	10
SW	Lockwood Dr	257	0.5	0.2	0.3	1.0	10
W	Harvey Wilson Dr	497	36.3	20.5	12.2	82.4	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	12.8	2.0	9.9	16.3	10
N	Lockwood Dr	281	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	478	0.6	0.2	0.4	0.9	10
W	Hershe St	513	9.0	2.4	5.1	13.7	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	28.9	1.8	26.7	32.9	10
N	Lockwood Dr	643	39.9	10.5	34.2	69.2	10
S	Lockwood Dr	304	0.8	0.2	0.5	1.2	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	3.3	0.7	2.1	4.5	10
S	Lockwood Dr	308	37.1	1.6	35.3	40.0	10
W	I-610 WBFR	309	31.6	1.3	30.3	34.3	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	5.2	1.1	3.1	7.0	10
N	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	328	0.0	0.0	0.0	0.1	10
W	Keeland St	561	5.6	0.7	4.8	7.1	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	23.0	2.8	18.0	27.1	10
N	Lockwood Dr	232	2.4	0.2	2.0	2.7	10
S	Lockwood Dr	237	6.9	0.6	5.9	7.7	10
W	McKinney St	239	22.9	3.6	18.5	30.5	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	23.4	6.3	9.9	31.8	10
N	Lockwood Dr	478	6.9	0.6	5.9	7.8	10
S	Lockwood Dr	284	6.6	0.3	6.2	7.0	10
W	Mulvey St	286	21.2	3.7	16.9	26.6	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	14.6	3.6	10.4	20.5	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	41.0	13.8	23.5	64.4	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	27.1	1.6	25.1	30.4	10
NE	Lockwood Dr	245	28.8	2.8	25.1	32.7	10
SW	Lockwood Dr	249	19.5	2.0	16.8	22.6	10
W	Navigation Blvd	251	26.8	1.4	24.4	28.7	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	8.3	2.9	5.2	14.6	10
N	Lockwood Dr	284	0.1	0.1	0.0	0.2	10
S	Lockwood Dr	524	1.3	0.3	1.0	1.9	10
W	Nichols St	525	11.2	5.0	6.2	20.5	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	19.8	2.8	15.2	23.1	10
N	Lockwood Dr	300	0.3	0.1	0.1	0.6	10
S	Lockwood Dr	643	0.4	0.1	0.2	0.6	10
W	Pardee St	546	14.8	4.7	9.4	24.8	10

LOCKWOOD DR & RAND ST — NODE: 170

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	38.5	5.0	32.7	46.7	10
N	Lockwood Dr	296	1.7	0.3	1.0	2.1	10
S	Lockwood Dr	300	5.2	0.5	4.7	6.3	10
W	Rand St	302	20.3	2.4	16.8	23.7	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	18.0	1.1	16.8	20.6	10
NE	Shreveport Blvd	316	24.6	2.8	20.2	29.4	10
S	Lockwood Dr	314	5.4	0.9	3.9	6.8	10
SW	Shreveport Blvd	315	32.2	1.3	30.3	34.2	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	9.1	5.1	2.3	18.8	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	289	0.2	0.1	0.1	0.4	10
W	Sudan St	534	9.6	1.9	6.7	12.3	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	33.1	2.1	29.6	35.3	10
N	Lockwood Dr	320	31.7	2.4	27.4	34.6	10
S	Lockwood Dr	557	32.1	2.1	27.8	34.3	10
W	Weaver Rd	325	41.8	3.9	37.4	48.5	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	5.9	0.4	5.3	6.5	10
N	Lockwood Dr (NB)	264	29.0	2.7	24.5	32.8	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	9.3	3.0	6.5	15.1	10
W	I-10 WBFR	276	42.0	17.8	27.4	86.4	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	4.3	2.6	1.9	10.7	10
N	Lockwood Dr	499	5.8	0.8	4.6	7.5	10
W	Market St	266	27.7	1.4	25.9	29.6	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	30.6	5.7	24.3	40.0	10
S	Lockwood Dr (SB)	267	4.1	1.4	2.3	7.7	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	53.7	12.2	39.0	72.1	10
W	I-10 WBFR	273	2.9	0.2	2.7	3.2	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	17.1	2.3	14.8	22.0	10
S	Lockwood Dr	515	12.5	1.9	10.7	16.2	10
W	Lyons Ave	279	12.4	0.5	11.7	12.9	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	27.7	2.6	23.1	30.7	10
S	Lockwood Dr (SB)	260	6.6	0.5	5.7	7.3	10
W	Market St	262	4.3	0.9	2.5	5.5	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	3.9	0.9	3.2	5.9	10
N	Lockwood Dr (NB)	275	51.7	23.3	27.1	92.6	10
W	Lyons Ave	283	16.1	1.1	14.3	17.6	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	15.3	3.4	8.6	20.1	10
N	Lockwood Dr	314	1.1	0.2	0.8	1.3	10
S	Lockwood Dr	317	3.1	0.3	2.7	3.6	10
W	Driveway	318	3.9	0.5	3.0	4.6	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	8.9	0.4	8.4	9.7	10
NE	Elgin St	216	3.6	0.5	2.7	4.2	10
SW	Lockwood Dr	218	10.2	1.0	8.8	11.8	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	26.0	1.4	23.4	27.8	10
N	Lockwood Dr	229	15.5	0.6	14.6	16.6	10
S	Lockwood Dr	232	34.6	4.1	30.1	44.5	10
W	Polk St	234	23.6	1.6	21.2	25.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	11.7	1.3	10.3	13.8	10
N	Lockwood Dr	230	10.8	0.5	10.2	11.7	10
W	Telephone Rd	231	27.6	1.1	25.2	29.3	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	52.0	3.4	45.4	56.7	10
N	Buffalo Speedway	37	44.8	8.9	34.6	65.5	10
S	Buffalo Speedway	36	37.6	2.1	34.6	40.2	10
W	Richmond Ave	12	66.3	8.0	57.8	85.6	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	4.0	0.6	2.8	4.8	10
N	Dunlavy St	57	104.4	48.4	50.7	189.2	10
S	Dunlavy St	56	232.1	42.0	152.0	298.7	10
W	Richmond Ave	165	5.6	1.0	4.1	6.8	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	18.7	1.8	16.5	20.9	10
N	Eastside St	40	40.4	5.0	32.6	49.7	10
S	Eastside St	39	29.4	4.4	24.3	38.3	10
W	Richmond Ave	54	6.4	0.8	5.6	8.1	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	29.7	0.8	28.3	31.1	10
N	Edloe St	155	18.7	0.9	17.6	20.3	10
S	Edloe St	5	22.9	1.7	21.3	25.6	10
W	Richmond Ave	9	66.3	1.4	64.0	67.9	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	34.6	2.2	32.5	38.0	10
N	Greenbriar Dr	47	27.3	2.0	23.0	29.4	10
S	Greenbriar Dr	46	64.0	21.0	38.5	92.4	10
W	Richmond Ave	160	20.5	0.6	19.5	21.2	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	12.0	0.8	11.2	13.3	10
N	Hazard St	51	262.2	27.2	225.3	303.5	10
S	Hazard St	50	383.4	172.1	224.7	705.7	10
W	Richmond Ave	162	4.8	0.7	3.4	5.8	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	58.5	12.0	41.1	78.9	10
N	Kirby Dr	158	33.5	3.3	28.6	37.9	10
S	Kirby Dr	44	37.3	1.5	35.3	40.0	10
W	Richmond Ave	64	18.4	1.2	16.1	20.3	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	2.4	0.4	1.9	3.1	10
N	Mandell St	59	42.2	4.6	35.4	48.8	10
S	Mandell St	58	45.8	6.8	34.9	58.8	10
W	Richmond Ave	23	1.5	0.4	1.0	2.2	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	33.8	1.0	31.9	35.4	10
N	Montrose Blvd	61	101.7	5.7	90.9	112.4	10
S	Montrose Blvd	60	70.9	14.7	49.0	95.0	10
W	Richmond Ave	166	49.7	7.2	42.1	66.9	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	12.5	1.0	10.8	13.8	10
N	Shepherd Dr	49	42.4	2.4	39.3	46.8	10
S	Shepherd Dr	48	41.8	2.2	38.4	44.7	10
W	Richmond Ave	20	16.3	0.9	15.0	18.0	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	1.3	0.8	0.5	3.1	10
NE	US 59 NBFR	69	32.9	2.8	29.2	37.2	10
W	[Unnamed Street]	26	78.9	8.2	65.1	87.9	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	37.9	5.5	29.0	45.9	10
SW	US 59 SBFR	65	28.5	4.7	23.4	39.2	10
W	Richmond Ave	167	0.7	0.3	0.5	1.4	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	4.1	0.2	3.8	4.4	10
N	Woodhead St	53	198.3	78.6	78.8	317.3	10
S	Woodhead St	52	33.0	2.6	29.7	38.8	10
W	Richmond Ave	163	8.5	0.6	7.6	9.3	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	23.6	0.8	22.8	25.5	10
NE	Main St	168	139.0	44.1	68.3	211.5	10
NW	Wheeler Ave	169	51.5	5.6	42.5	57.2	10
S	Main St	70	27.3	3.8	17.9	30.9	10
SE	Richmond Ave	26	18.4	3.9	11.9	24.7	10
SW	LRT Line	674	0.1	0.1	0.0	0.3	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Westpark Dr	140	131.7	8.7	109.3	139.1	10
N	S Rice Ave	138	78.4	21.7	57.3	124.7	10
S	S Rice Ave	137	50.5	5.7	44.1	58.1	10
W	Westpark Dr	790	26.4	3.9	21.8	32.3	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	19.7	2.0	18.1	24.9	10
NW	Wheeler Ave	86	40.1	8.2	29.8	50.4	10
SE	Wheeler Ave	172	11.3	3.2	8.3	18.9	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
N	Edell St	590	15.2	2.7	11.4	19.7	10
S	Edell St	589	18.0	4.7	12.8	30.7	10
W	Tidwell Rd	591	0.1	0.0	0.0	0.1	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	341	3.0	0.4	2.3	3.5	10
N	Friendly Rd	585	250.2	84.4	108.1	379.3	10
S	Friendly Rd	584	360.0	41.2	299.7	435.5	10
W	Tidwell Rd	338	0.1	0.1	0.1	0.3	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	8.4	0.6	7.5	9.3	10
N	Hirsch Rd	336	38.4	6.5	28.7	49.4	10
S	Hirsch Rd	335	27.8	1.4	25.9	29.6	10
W	Tidwell Rd	334	2.9	0.5	2.4	3.8	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	16.8	0.8	15.5	17.9	10
N	I-69 NBFR	340	14.9	0.4	14.5	15.7	10
W	Tidwell Rd	341	15.4	0.9	14.2	16.9	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	13.2	0.5	12.6	14.1	10
S	I-69 SBFR	649	12.6	0.6	11.7	13.3	10
W	Tidwell Rd	342	15.7	0.6	15.0	16.8	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	24.0	1.3	22.3	26.6	10
N	Jensen Dr	347	33.8	1.8	31.1	35.9	10
S	Jensen Dr	346	29.2	1.3	27.5	31.5	10
W	Tidwell Rd	348	16.4	1.4	15.0	18.4	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	11.1	1.1	9.4	12.2	10
N	Lockwood Dr	332	24.8	2.4	20.7	29.1	10
S	Lockwood Dr	331	35.8	4.8	29.0	44.4	10
W	Tidwell Rd	333	14.0	1.2	12.3	15.3	10

TURNER DR & EDELL ST — NODE: 690

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	6.1	0.3	5.9	6.3	2

WESTPARK DR & 14TH ST — NODE: 104

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	14.6	4.5	10.6	25.6	10
N	14th St	118	11.9	1.5	8.8	14.0	10
W	Westpark Dr	616	58.7	26.0	19.0	95.2	10

WESTPARK DR & ALDER DR — NODE: 360

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	788	8.8	7.9	0.2	24.4	10
N	Alder Dr	787	42.4	14.6	25.1	71.4	10
W	Westpark Dr	133	2.8	0.4	2.1	3.4	10

WESTPARK DR & CHIMNEY ROCK RD — NODE: 109

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	116.1	23.9	76.6	138.7	10
N	Chimney Rock Rd	135	50.4	5.9	44.1	63.0	10
S	Chimney Rock Rd	134	48.6	4.7	43.3	57.5	10
W	Westpark Dr	136	20.9	2.2	16.4	23.6	10

WESTPARK DR & EDLOE ST — NODE: 115

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	28.9	1.5	25.9	31.1	10
N	Edloe St	29	36.7	0.8	35.1	37.8	10
S	Edloe St	153	27.8	1.8	24.5	30.4	10
W	Westpark Dr	154	33.7	2.7	30.8	38.6	10

WESTPARK DR & FONDREN RD — NODE: 102

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	287.1	7.6	272.2	298.8	10
N	Fondren Rd	110	12.6	1.2	11.3	14.3	10
S	Fondren Rd	112	89.8	14.3	57.2	106.3	10
W	Westpark Dr	113	92.2	21.8	59.8	122.7	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	61.3	7.9	51.0	78.7	10
N	Hillcroft Ave	3	115.2	11.9	96.2	132.0	10
S	Hillcroft Ave	115	195.9	51.8	136.1	267.2	10
W	Westpark Dr	116	103.2	6.1	93.5	111.9	10

WESTPARK DR & I-610 NBFR — NODE: 112

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	18.3	1.1	17.3	20.2	10
N	I-610 NBFR	145	48.3	1.8	45.3	51.8	10
W	Westpark Dr	792	42.7	4.0	37.8	50.2	10

WESTPARK DR & I-610 SBFR — NODE: 111

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	120.5	6.7	112.2	130.0	10
S	I-610 SBFR	141	48.8	2.3	46.3	52.9	10
W	Westpark Dr	143	18.3	0.6	16.9	18.8	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	24.8	3.4	21.0	31.9	10
NE	I-69 NBFR	126	17.2	0.6	16.1	18.0	10
W	Westpark Dr	127	21.7	0.9	20.0	23.1	10

WESTPARK DR & I-69 SBFR — NODE: 105

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	42.8	8.7	32.2	57.8	10
SW	I-69 SBFR	121	23.9	11.3	9.2	40.8	10
W	Westpark Dr	123	17.2	1.2	15.2	18.7	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	792	0.0	0.0	0.0	0.1	10
N	Loop Central Dr	791	19.9	2.1	17.4	24.4	10
W	Westpark Dr	146	1.7	0.1	1.5	1.8	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	24.6	1.8	23.1	28.9	10
N	Newcastle Dr	148	126.0	12.1	108.5	144.3	10
S	Newcastle Dr	147	34.1	2.5	29.6	38.5	10
W	Westpark Dr	149	53.7	14.9	35.5	86.5	10

WESTPARK DR & RAMPART ST — NODE: 107

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	8.8	0.5	8.4	9.8	10
N	Rampart St	129	189.3	23.0	156.0	225.0	10
S	Rampart St	128	31.6	2.2	29.4	34.9	10
W	Westpark Dr	130	5.8	0.9	5.0	8.0	10

WESTPARK DR & ROYALTON ST — NODE: 309

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	41.4	11.7	19.3	62.5	10
N	Royalton St	384	345.8	45.1	253.2	396.7	10
W	Westpark Dr	140	1.4	0.3	1.1	1.8	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	790	20.4	3.3	14.2	26.5	10
N	Uptown Transit Ctr	789	42.5	3.5	38.7	49.5	10
W	Westpark Dr	629	3.6	0.8	2.8	5.1	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	43.4	9.9	34.0	58.4	10
N	Weslayan St	151	41.6	7.8	36.0	62.5	10
S	Weslayan St	150	45.6	1.9	43.3	49.2	10
W	Westpark Dr	152	42.6	3.8	37.3	48.6	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR — NODE: 108

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	31.4	1.3	28.7	32.9	10
N	Renwick Dr	132	42.8	2.8	38.5	47.9	10

S	Fountain View Dr	131	38.2	1.7	35.6	40.7	10
W	Westpark Dr	788	22.4	1.7	20.0	24.5	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	[Unnamed Street]	707	12.5	3.2	8.0	16.9	10
NW	Wheeler Ave	423	9.8	1.2	7.9	11.3	10
SE	Wheeler Ave	421	12.7	1.8	9.9	15.2	10
SW	Hutchins St	422	6.4	1.1	4.5	8.7	10

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	0.3	0.1	0.2	0.4	10
NEB TR	Ennis St	732	0.1	0.0	0.0	0.1	10
NWB L	Alabama St	197	0.0	0.0	0.0	0.0	10
NWB T	Alabama St	197	0.6	0.1	0.4	0.7	10
NWB TR	Alabama St	197	0.6	0.1	0.5	0.7	10
SEB L	Alabama St	193	0.1	0.0	0.1	0.1	10
SEB T	Alabama St	193	0.5	0.1	0.4	0.7	10
SEB TR	Alabama St	193	0.7	0.1	0.5	1.0	10
SWB LT	Ennis St	740	0.2	0.0	0.2	0.2	10
SWB TR	Ennis St	740	0.3	0.1	0.3	0.5	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	2.0	0.2	1.5	2.3	10
NB T	Almeda Rd	696	0.1	0.0	0.1	0.1	10
NB TR	Almeda Rd	696	0.2	0.0	0.1	0.2	10
NWB LTR	Wheeler Ave	176	1.1	0.1	0.9	1.3	10
SB L	Almeda Rd	174	0.2	0.0	0.1	0.2	10
SB T	Almeda Rd	174	0.3	0.0	0.2	0.4	10
SB TR	Almeda Rd	174	0.3	0.0	0.3	0.4	10
SEB LT	Wheeler Ave	77	0.5	0.1	0.4	0.6	10
SEB TR	Wheeler Ave	77	0.7	0.1	0.5	0.9	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	0.1	0.0	0.0	0.1	10
NEB TR	Ennis St	726	0.1	0.0	0.1	0.1	10
NWB LTR	Cleburne St	733	0.6	0.1	0.5	0.8	10
SEB LTR	Cleburne St	731	0.4	0.1	0.4	0.5	10
SWB LT	Ennis St	732	0.1	0.0	0.1	0.1	10

SWB TR	Ennis St	732	0.1	0.0	0.1	0.1	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	0.5	0.1	0.3	0.6	10
EB T	Crosstimbers St	323	0.3	0.0	0.3	0.4	10
EB TR	Crosstimbers St	323	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	321	0.6	0.1	0.5	0.7	10
NB T	Lockwood Dr	321	1.0	0.1	0.9	1.2	10
NB TR	Lockwood Dr	321	0.8	0.1	0.6	1.0	10
SB L	Lockwood Dr	320	0.6	0.1	0.5	0.8	10
SB T	Lockwood Dr	320	0.6	0.1	0.5	0.8	10
SB TR	Lockwood Dr	320	0.8	0.1	0.6	1.0	10
WB L	Crosstimbers St	322	0.9	0.1	0.8	1.0	10
WB T	Crosstimbers St	322	0.4	0.0	0.4	0.4	10
WB TR	Crosstimbers St	322	0.5	0.1	0.4	0.6	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	0.7	0.1	0.6	0.8	10
EB T	Elgin St	204	1.4	0.2	1.1	1.7	10
EB TR	Elgin St	204	1.4	0.3	1.0	2.0	10
NEB L	Cullen Blvd	207	0.3	0.1	0.3	0.5	10
NEB T	Cullen Blvd	207	0.3	0.0	0.3	0.4	10
NEB TR	Cullen Blvd	207	0.4	0.0	0.4	0.5	10
SB L	Cullen Blvd	206	1.3	0.2	1.0	1.6	10
SB T	Cullen Blvd	206	1.3	0.1	1.1	1.6	10
SB TR	Cullen Blvd	206	1.5	0.1	1.3	1.8	10
WB L	Elgin St	208	1.8	0.2	1.6	2.1	10
WB T	Elgin St	208	1.8	0.2	1.6	2.2	10
WB TR	Elgin St	208	1.2	0.2	1.0	1.6	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	13.4	1.1	12.3	14.8	10
EB R	EB Westpark Tollway FR	111	29.0	1.6	26.4	32.9	10
NB T	Fondren Rd	38	93.4	1.2	92.1	95.6	10
SB T	Fondren Rd	110	0.7	0.2	0.5	1.0	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	0.3	0.0	0.2	0.3	10
NEB TR	Ennis St	702	0.1	0.0	0.1	0.2	10
NWB L	Elgin St	701	0.3	0.0	0.3	0.3	10
NWB T	Elgin St	701	0.5	0.1	0.4	0.6	10
NWB TR	Elgin St	701	0.6	0.1	0.5	0.7	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.1	10
SEB T	Elgin St	700	0.4	0.1	0.3	0.5	10
SEB TR	Elgin St	700	0.4	0.0	0.4	0.5	10
SWB LTR	Ennis St	195	0.2	0.0	0.2	0.3	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	0.6	0.1	0.4	0.7	10
EB T	Elgin St	701	1.1	0.2	0.8	1.3	10
EB TR	Elgin St	701	1.3	0.2	1.0	1.6	10
NB T	LRT Line	667	0.0	0.0	0.0	0.0	10
NWB L	Scott St	198	0.7	0.1	0.5	0.9	10

NWB T	Scott St	198	0.8	0.1	0.6	0.9	10
NWB TR	Scott St	198	0.8	0.2	0.6	1.0	10
SB L	Scott St	671	0.5	0.1	0.4	0.6	10
SB T	Scott St	671	1.9	0.2	1.7	2.1	10
SB TR	Scott St	671	1.9	0.2	1.6	2.1	10
SWB T	LRT Line	669	0.0	0.0	0.0	0.1	10
WB L	Elgin St	204	2.4	0.3	1.7	2.7	10
WB T	Elgin St	204	1.1	0.1	1.0	1.4	10
WB TR	Elgin St	204	1.2	0.1	1.1	1.3	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	0.0	0.0	0.0	0.0	10
NEB LT	Elgin St	212	0.0	0.0	0.0	0.1	10
NEB T	Elgin St	212	0.4	0.1	0.3	0.5	10
SB LT	Spur 5 SBFR	214	1.4	0.0	1.3	1.5	10
SB TR	Spur 5 SBFR	214	1.4	0.1	1.3	1.5	10
SWB L	Elgin St	216	1.0	0.1	0.9	1.3	10
SWB T	Elgin St	216	0.7	0.1	0.5	0.9	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.1	0.0	0.1	0.1	10
EB T	Elgin St	208	0.2	0.0	0.1	0.2	10
EB TR	Elgin St	208	0.2	0.0	0.2	0.3	10
NB LT	UH Entrance	211	1.0	0.1	0.9	1.2	10
NB R	UH Entrance	211	0.0	0.0	0.0	0.1	10
SWB LT	UH Entrance	210	0.8	0.1	0.6	0.9	10
SWB R	UH Entrance	210	0.0	0.0	0.0	0.0	10
WB L	Elgin St	212	0.1	0.0	0.1	0.2	10
WB T	Elgin St	212	0.1	0.0	0.1	0.1	10
WB TR	Elgin St	212	0.0	0.0	0.0	0.1	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.1	0.0	0.1	0.2	10
NEB TR	Emancipation Ave	711	0.3	0.0	0.2	0.3	10
NWB LT	Wheeler Ave	766	0.4	0.1	0.3	0.5	10
NWB TR	Wheeler Ave	766	0.3	0.0	0.2	0.4	10
SEB LT	Wheeler Ave	423	0.4	0.0	0.3	0.4	10
SEB TR	Wheeler Ave	423	0.3	0.0	0.2	0.4	10
SWB LT	Emancipation Ave	177	0.1	0.0	0.1	0.1	10
SWB TR	Emancipation Ave	177	0.0	0.0	0.0	0.1	10

ENNIS ST & HOLMAN ST **NODE: 306**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	0.2	0.0	0.1	0.3	10
NEB TR	Ennis St	740	0.2	0.0	0.2	0.3	10
NWB LTR	Holman St	742	0.1	0.0	0.1	0.2	10
SEB LTR	Holman St	741	0.1	0.0	0.1	0.2	10
SWB LT	Ennis St	702	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	702	0.2	0.0	0.2	0.3	10

ENNIS ST & WHEELER AVE **NODE: 266**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	0.0	0.0	0.0	0.1	10
NEB T	Ennis St	698	0.0	0.0	0.0	0.1	10
SEB L	Wheeler Ave	766	0.3	0.1	0.2	0.4	10

SEB R	Wheeler Ave	766	0.0	0.0	0.0	0.0	10
SWB T	Ennis St	726	0.0	0.0	0.0	0.0	10
SWB TR	Ennis St	726	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.7	0.1	0.6	0.9	10
EB TR	Leeland St	228	0.8	0.1	0.7	0.9	10
SWB LT	Ernestine St	411	1.4	0.2	1.1	1.6	10
SWB T	Ernestine St	411	1.3	0.1	1.2	1.4	10
SWB TR	Ernestine St	411	1.1	0.1	0.9	1.3	10
WB L	Leeland St	227	1.0	0.1	0.9	1.1	10
WB T	Leeland St	227	1.6	0.1	1.5	1.7	10

ERNESTINE ST & MUNGER ST — NODE: 452

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	0.2	0.0	0.1	0.2	10
SB LT	Ernestine St	685	0.1	0.0	0.0	0.1	10
SB T	Ernestine St	685	0.0	0.0	0.0	0.0	10
SB TR	Ernestine St	685	0.1	0.0	0.1	0.1	10
WB L	Munger St	460	0.1	0.0	0.1	0.2	10
WB T	Munger St	460	0.3	0.1	0.3	0.5	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	1.6	0.1	1.4	1.9	10
NWB L	I-45 NBFR	222	0.5	0.1	0.5	0.7	10
NWB LT	I-45 NBFR	222	1.3	0.1	1.1	1.4	10
NWB T	I-45 NBFR	222	1.1	0.1	1.0	1.2	10
NWB TR	I-45 NBFR	222	1.8	0.2	1.5	2.1	10
SB T	Ernestine St	221	0.6	0.1	0.6	0.7	10
SB TR	Ernestine St	221	1.3	0.1	1.1	1.5	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	4.2	1.1	2.3	6.2	10
NWB T	Wheeler Ave	172	0.1	0.1	0.0	0.3	10
SEB T	Wheeler Ave	169	1.8	0.1	1.4	1.9	10
SEB TR	Wheeler Ave	169	1.4	0.1	1.2	1.7	10
SWB L	Fannin St	87	0.4	0.1	0.2	0.5	10
SWB T	Fannin St	87	2.5	0.4	1.7	3.2	10
SWB TR	Fannin St	87	1.5	0.5	1.1	2.6	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.8	0.1	0.7	0.9	10
EB LR	I-69 Express Lanes	30	1.1	0.1	1.0	1.3	10
NB L	Edloe St	153	0.0	0.0	0.0	0.0	10
NB T	Edloe St	153	0.2	0.1	0.1	0.4	10
NB TR	Edloe St	153	0.1	0.0	0.1	0.2	10
SB L	Edloe St	155	0.3	0.1	0.2	0.4	10
SB T	Edloe St	155	0.1	0.0	0.1	0.2	10
SB TR	Edloe St	155	0.1	0.0	0.1	0.1	10
WB LR	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NB R	Turner Dr	595	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.4	0.3	1.1	2.1	10
EB T	Kelley St	313	0.4	0.1	0.3	0.5	10
EB TR	Kelley St	313	0.7	0.1	0.6	0.8	10
NB L	Lockwood Dr	308	0.6	0.0	0.5	0.6	10
NB T	Lockwood Dr	308	2.6	0.3	2.1	3.1	10
NB TR	Lockwood Dr	308	6.4	0.7	5.1	7.4	10
SB L	Lockwood Dr	311	0.2	0.1	0.1	0.4	10
SB T	Lockwood Dr	311	1.2	0.1	1.1	1.3	10
SB TR	Lockwood Dr	311	1.4	0.1	1.2	1.5	10
WB L	Kelley St	312	0.7	0.1	0.6	0.9	10
WB T	Kelley St	312	0.3	0.0	0.3	0.4	10
WB TR	Kelley St	312	0.4	0.1	0.3	0.5	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	0.9	0.1	0.8	1.0	10
NWB LT	Wheeler Ave	77	0.0	0.0	0.0	0.1	10
NWB TR	Wheeler Ave	77	0.0	0.0	0.0	0.1	10
SEB LT	Wheeler Ave	86	0.1	0.0	0.1	0.1	10
SEB TR	Wheeler Ave	86	0.2	0.0	0.1	0.2	10
SWB LTR	LaBranch St	78	0.7	0.1	0.6	0.9	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.3	0.1	0.1	0.3	10
EB TR	Laura Koppe Rd	330	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	328	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	328	0.3	0.1	0.2	0.4	10
NB TR	Lockwood Dr	328	0.3	0.1	0.3	0.4	10
SB L	Lockwood Dr	571	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	571	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	571	0.1	0.0	0.1	0.2	10
WB L	Laura Koppe Rd	329	0.6	0.1	0.5	0.8	10
WB TR	Laura Koppe Rd	329	1.1	0.1	1.0	1.2	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	254	0.1	0.0	0.0	0.2	10
NEB T	Lockwood Dr	254	3.2	0.2	3.0	3.5	10
SWB L	Lockwood Dr	253	0.1	0.0	0.0	0.1	10
SWB LT	Lockwood Dr	253	1.2	0.1	1.1	1.4	10
SWB T	Lockwood Dr	253	1.7	0.1	1.5	2.0	10
WB LR	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LT	Canal St	772	0.6	0.0	0.6	0.7	10
EB R	Canal St	772	0.1	0.1	0.0	0.2	10
EB T	Canal St	772	0.6	0.2	0.4	0.8	10
NEB L	Lockwood Dr	241	0.7	0.1	0.6	0.8	10
NEB T	Lockwood Dr	241	0.4	0.0	0.3	0.5	10
NEB TR	Lockwood Dr	241	0.4	0.0	0.3	0.4	10
SWB L	Lockwood Dr	245	0.1	0.0	0.0	0.1	10
SWB T	Lockwood Dr	245	1.3	0.2	1.1	1.7	10
SWB TR	Lockwood Dr	245	1.2	0.2	1.0	1.6	10
WB LT	Canal St	768	1.6	0.1	1.4	1.8	10
WB TR	Canal St	768	1.5	0.2	1.2	1.8	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	0.5	0.1	0.4	0.6	10
EB T	Cavalcade St	299	0.2	0.0	0.1	0.2	10
EB TR	Cavalcade St	299	0.3	0.1	0.2	0.4	10
NB L	Lockwood Dr	292	0.2	0.0	0.1	0.2	10
NB T	Lockwood Dr	292	0.1	0.0	0.0	0.2	10
NB TR	Lockwood Dr	292	0.2	0.0	0.1	0.2	10
SB L	Lockwood Dr	296	0.8	0.1	0.5	0.9	10
SB T	Lockwood Dr	296	0.9	0.1	0.8	1.0	10
SB TR	Lockwood Dr	296	1.1	0.1	0.9	1.3	10
WB L	Cavalcade St	298	0.6	0.0	0.5	0.7	10
WB T	Cavalcade St	298	0.5	0.1	0.4	0.6	10
WB TR	Cavalcade St	298	0.6	0.1	0.5	0.7	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.2	0.1	0.2	0.3	10
EB T	Clinton Dr	259	0.5	0.1	0.4	0.6	10
EB TR	Clinton Dr	259	0.7	0.1	0.6	0.9	10
NEB L	Lockwood Dr	257	0.3	0.1	0.2	0.4	10
NEB R	Lockwood Dr	257	0.1	0.0	0.1	0.1	10
NEB T	Lockwood Dr	257	2.8	0.1	2.6	3.1	10
SB L	Lockwood Dr	256	0.9	0.1	0.8	1.1	10
SB R	Lockwood Dr	256	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	256	1.3	0.1	1.1	1.5	10
WB L	Clinton Dr	258	1.0	0.1	0.8	1.2	10
WB R	Clinton Dr	258	0.1	0.0	0.1	0.2	10
WB T	Clinton Dr	258	1.2	0.2	1.0	1.6	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.4	0.0	0.3	0.4	10
EB T	Collingsworth St	291	0.1	0.1	0.1	0.3	10
EB TR	Collingsworth St	291	0.4	0.1	0.4	0.5	10
NB L	Lockwood Dr	289	0.8	0.1	0.6	1.0	10
NB T	Lockwood Dr	289	0.2	0.0	0.2	0.4	10
NB TR	Lockwood Dr	289	0.4	0.1	0.3	0.5	10
SEB L	Lockwood Dr	288	0.1	0.0	0.1	0.2	10
SEB T	Lockwood Dr	288	0.1	0.0	0.0	0.2	10
SEB TR	Lockwood Dr	288	0.2	0.1	0.1	0.3	10
WB L	Collingsworth St	290	0.6	0.1	0.5	0.8	10
WB T	Collingsworth St	290	0.3	0.3	0.2	0.9	10
WB TR	Collingsworth St	290	0.3	0.0	0.2	0.4	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.1	0.1	1.0	1.2	10
NB L	Lockwood Dr	288	0.3	0.0	0.2	0.3	10
NB T	Lockwood Dr	288	0.3	0.1	0.2	0.4	10
NB TR	Lockwood Dr	288	0.4	0.1	0.3	0.5	10
SB L	Lockwood Dr	292	0.1	0.0	0.1	0.2	10
SB T	Lockwood Dr	292	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	292	0.0	0.0	0.0	0.1	10
WB LTR	Crane St	294	0.8	0.1	0.6	0.9	10

LOCKWOOD DR & DENMARK ST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	317	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	Denmark St	549	0.2	0.0	0.2	0.2	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.1	0.0	0.1	0.2	10
NB LT	Lockwood Dr	571	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	571	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	0.2	0.0	0.2	0.3	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 513**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	249	2.3	0.1	2.1	2.5	10
NEB T	Lockwood Dr	249	0.2	0.0	0.1	0.2	10
SEB L	Marron Park Way	783	1.3	0.2	1.1	1.7	10
SEB R	Marron Park Way	783	0.3	0.0	0.2	0.4	10
SWB T	Lockwood Dr	254	1.1	0.3	0.9	1.7	10
SWB TR	Lockwood Dr	254	3.1	0.8	2.3	4.5	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	0.4	0.0	0.3	0.5	10
EB R	Harrisburg Blvd	244	0.1	0.0	0.1	0.1	10
EB T	Harrisburg Blvd	244	0.7	0.1	0.6	0.8	10
NEB L	Lockwood Dr	237	2.0	0.6	1.3	2.9	10
NEB T	Lockwood Dr	237	3.6	1.2	2.2	5.7	10
NEB TR	Lockwood Dr	237	4.2	1.5	3.0	6.9	10
NWB L	Harrisburg Blvd	678	1.4	0.2	1.1	1.8	10
NWB R	Harrisburg Blvd	678	0.1	0.0	0.1	0.1	10
NWB T	Harrisburg Blvd	678	1.4	0.2	1.1	1.7	10
SB L	Lockwood Dr	241	0.4	0.0	0.3	0.5	10
SB T	Lockwood Dr	241	3.7	0.7	3.0	5.5	10
SB TR	Lockwood Dr	241	4.2	0.7	3.6	5.9	10
SEB T	LRT Line	675	0.0	0.0	0.0	0.0	10
WB T	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Harvey Wilson Dr	498	1.1	0.6	0.5	2.5	10
NEB L	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NEB T	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NEB TR	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
SWB L	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
SWB T	Lockwood Dr	257	0.1	0.1	0.0	0.2	10
SWB TR	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
WB LTR	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Hershe St	514	0.0	0.0	0.0	0.1	10
NB LT	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	478	0.1	0.0	0.1	0.1	10
WB LTR	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	2.6	0.2	2.3	2.9	10
EB LT	I-610 EBFR	307	2.4	0.2	2.2	2.7	10
EB TR	I-610 EBFR	307	1.2	0.3	0.8	1.6	10
NB R	Lockwood Dr	643	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	643	5.5	1.6	4.3	10.0	10
SB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	304	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	304	0.8	0.2	0.5	1.0	10
SB T	Lockwood Dr	308	5.0	0.3	4.6	5.6	10
WB L	I-610 WBFR	309	0.9	0.1	0.7	1.0	10
WB R	Lockwood Dr	308	0.0	0.0	0.0	0.0	10
WB T	I-610 WBFR	309	1.6	0.1	1.5	1.9	10
WB TR	I-610 WBFR	309	2.0	0.1	1.9	2.2	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	0.6	0.1	0.4	0.8	10
NB L	Lockwood Dr	232	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	232	0.2	0.0	0.1	0.3	10
NB TR	Lockwood Dr	232	0.2	0.0	0.1	0.2	10
SB L	Lockwood Dr	237	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	237	0.8	0.1	0.7	1.0	10
SB TR	Lockwood Dr	237	0.8	0.1	0.7	0.9	10
WB LTR	McKinney St	239	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	478	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	478	0.2	0.0	0.2	0.2	10
NB TR	Lockwood Dr	478	0.4	0.1	0.2	0.4	10
SB LT	Lockwood Dr	284	0.4	0.1	0.4	0.5	10
SB T	Lockwood Dr	284	0.4	0.0	0.4	0.5	10
SB TR	Lockwood Dr	284	0.1	0.0	0.1	0.1	10
WB LTR	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.1	10
EB T	Munger St	460	0.3	0.1	0.2	0.5	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	1.0	0.5	0.6	1.8	10
WB T	Munger St	661	2.3	0.8	1.5	3.7	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.5	0.2	1.3	1.8	10
EB T	Navigation Blvd	252	1.0	0.1	0.9	1.1	10
EB TR	Navigation Blvd	252	1.4	0.1	1.2	1.5	10
NEB L	Lockwood Dr	245	1.0	0.2	0.7	1.3	10
NEB T	Lockwood Dr	245	0.4	0.1	0.3	0.6	10
NEB TR	Lockwood Dr	245	2.7	0.4	2.1	3.3	10
SWB L	Lockwood Dr	249	1.5	0.2	1.3	1.9	10
SWB T	Lockwood Dr	249	1.0	0.2	0.8	1.3	10
SWB TR	Lockwood Dr	249	1.2	0.3	0.9	1.6	10
WB L	Navigation Blvd	251	1.0	0.2	0.8	1.3	10
WB T	Navigation Blvd	251	1.9	0.1	1.7	2.1	10
WB TR	Navigation Blvd	251	2.1	0.1	1.9	2.3	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	0.0	0.0	0.0	0.1	10
NB LT	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	0.2	0.0	0.1	0.2	10
SB T	Lockwood Dr	524	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
WB LTR	Nichols St	525	0.2	0.1	0.1	0.4	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.6	0.1	0.5	0.7	10
NB LT	Lockwood Dr	300	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	643	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	643	0.1	0.0	0.0	0.1	10
WB LTR	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Rand St	303	1.0	0.2	0.7	1.2	10
NB LT	Lockwood Dr	296	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	296	0.1	0.0	0.1	0.1	10
SB LT	Lockwood Dr	300	0.5	0.1	0.4	0.7	10
SB TR	Lockwood Dr	300	0.4	0.0	0.4	0.5	10
WB LTR	Rand St	302	0.6	0.1	0.5	0.7	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	0.9	0.1	0.8	1.0	10
NB TR	Lockwood Dr	311	1.3	0.2	1.1	1.6	10
NEB LTR	Shreveport Blvd	316	0.4	0.1	0.3	0.5	10
SB L	Lockwood Dr	314	0.3	0.1	0.2	0.4	10
SB T	Lockwood Dr	314	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SWB LTR	Shreveport Blvd	315	1.4	0.1	1.2	1.6	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	289	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	289	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	289	0.0	0.0	0.0	0.0	10
WB LTR	Sudan St	534	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.1	0.1	0.1	0.2	10
EB TR	Weaver Rd	326	0.6	0.1	0.4	0.7	10
NB L	Lockwood Dr	320	0.4	0.1	0.3	0.6	10
NB T	Lockwood Dr	320	0.9	0.1	0.8	1.1	10
NB TR	Lockwood Dr	320	1.0	0.1	0.8	1.2	10
SB L	Lockwood Dr	557	0.2	0.1	0.1	0.3	10
SB T	Lockwood Dr	557	1.0	0.2	0.8	1.3	10
SB TR	Lockwood Dr	557	1.0	0.1	0.9	1.2	10
WB L	Weaver Rd	325	0.9	0.2	0.7	1.2	10
WB TR	Weaver Rd	325	1.6	0.3	1.3	2.1	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.0	0.0	0.0	0.0	10
EB LT	I-10 EBFR	268	0.5	0.0	0.5	0.5	10
EB T	I-10 EBFR	268	0.3	0.1	0.2	0.4	10
NB T	Lockwood Dr (NB)	264	2.1	0.3	1.7	2.4	10
NB TR	Lockwood Dr (NB)	264	2.6	0.3	2.1	2.9	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	0.6	0.1	0.4	0.8	10
NB LT	Lockwood Dr (NB)	270	0.7	0.3	0.5	1.3	10
NB T	Lockwood Dr (NB)	270	0.2	0.1	0.1	0.5	10
WB T	I-10 WBFR	276	5.4	1.4	3.8	8.5	10
WB TR	I-10 WBFR	276	2.5	1.8	1.3	7.0	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.1	0.1	0.1	0.2	10
EB T	Market St	262	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	499	0.3	0.0	0.2	0.3	10
NB TR	Lockwood Dr	499	0.6	0.1	0.5	0.8	10
WB T	Market St	266	1.1	0.1	1.0	1.3	10
WB TR	Market St	266	0.6	0.1	0.6	0.7	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	3.1	0.8	2.2	4.3	10
EB TR	I-10 EBFR	269	0.5	0.1	0.4	0.6	10
SB L	Lockwood Dr (SB)	267	0.6	0.1	0.4	0.7	10
SB LT	Lockwood Dr (SB)	267	0.3	0.2	0.1	0.9	10
SB T	Lockwood Dr (SB)	267	0.1	0.1	0.1	0.3	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	5.4	1.3	3.6	7.3	10
SB TR	Lockwood Dr (SB)	272	3.7	1.1	2.4	5.5	10
WB L	I-10 WBFR	273	0.2	0.0	0.1	0.2	10
WB LT	I-10 WBFR	273	0.3	0.0	0.3	0.4	10
WB T	I-10 WBFR	273	0.1	0.0	0.1	0.2	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	1.4	0.3	1.1	1.9	10
SB L	Lockwood Dr	515	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	515	0.6	0.1	0.5	0.8	10
SB TR	Lockwood Dr	515	1.1	0.3	0.8	1.6	10
WB LT	Lyons Ave	279	0.9	0.0	0.9	1.0	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	0.6	0.1	0.4	0.7	10
EB TR	Market St	263	0.4	0.1	0.3	0.5	10
SB LT	Lockwood Dr (SB)	260	0.8	0.1	0.7	0.9	10
SB TR	Lockwood Dr (SB)	260	0.7	0.1	0.6	0.8	10
WB LT	Market St	262	0.2	0.0	0.1	0.2	10
WB T	Market St	262	0.1	0.0	0.0	0.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	0.2	0.0	0.2	0.3	10
NB L	Lockwood Dr (NB)	275	5.2	2.4	2.5	9.2	10
NB T	Lockwood Dr (NB)	275	0.4	0.1	0.2	0.6	10
NB TR	Lockwood Dr (NB)	275	0.8	0.4	0.5	1.7	10
WB TR	Lyons Ave	283	1.1	0.1	0.9	1.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.2	0.0	0.1	0.3	10
EB R	Bennington St	319	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	314	0.1	0.0	0.1	0.1	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10

SB LT	Lockwood Dr	317	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	317	0.2	0.0	0.2	0.3	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.3	0.0	0.3	0.4	10
NB TR	Spur 5 NBFR	219	0.4	0.0	0.3	0.5	10
NEB L	Elgin St	216	0.0	0.0	0.0	0.1	10
NEB T	Elgin St	216	0.2	0.0	0.2	0.3	10
SWB T	Lockwood Dr	218	0.9	0.2	0.7	1.2	10
SWB TR	Lockwood Dr	218	1.2	0.1	1.0	1.3	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.5	0.1	0.4	0.6	10
EB T	Polk St	235	0.8	0.1	0.7	1.0	10
EB TR	Polk St	235	1.0	0.1	0.8	1.1	10
NB L	Lockwood Dr	229	0.7	0.1	0.5	0.9	10
NB T	Lockwood Dr	229	1.2	0.1	1.0	1.3	10
NB TR	Lockwood Dr	229	0.9	0.1	0.8	1.0	10
SB L	Lockwood Dr	232	3.2	0.9	2.4	5.7	10
SB T	Lockwood Dr	232	3.1	0.2	2.8	3.4	10
SB TR	Lockwood Dr	232	1.5	0.2	1.4	1.8	10
WB L	Polk St	234	0.7	0.1	0.5	1.0	10
WB T	Polk St	234	0.8	0.1	0.7	0.9	10
WB TR	Polk St	234	1.1	0.2	0.9	1.4	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	0.3	0.1	0.2	0.5	10
EB T	Leeland St	227	0.8	0.1	0.7	1.0	10
NB LT	Lockwood Dr	230	1.5	0.1	1.4	1.7	10
NB T	Lockwood Dr	230	1.0	0.1	0.9	1.1	10
NB TR	Lockwood Dr	230	1.1	0.1	1.0	1.2	10
WB T	Telephone Rd	231	1.7	0.1	1.5	1.9	10
WB TR	Telephone Rd	231	1.2	0.1	1.0	1.3	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	2.0	0.3	1.6	2.3	10
EB R	Richmond Ave	9	0.7	0.2	0.4	0.8	10
EB T	Richmond Ave	9	10.2	0.8	9.1	11.4	10
NB L	Buffalo Speedway	37	2.1	0.4	1.4	2.8	10
NB T	Buffalo Speedway	37	4.3	1.0	2.9	6.2	10
NB TR	Buffalo Speedway	37	8.5	1.9	6.3	12.7	10
SB L	Buffalo Speedway	36	1.1	0.2	0.8	1.4	10
SB T	Buffalo Speedway	36	2.2	0.2	2.0	2.5	10
SB TR	Buffalo Speedway	36	2.5	0.3	2.2	3.0	10
WB L	Richmond Ave	12	5.2	1.1	4.0	7.8	10
WB T	Richmond Ave	12	5.6	0.5	4.7	6.2	10
WB TR	Richmond Ave	12	3.2	0.2	2.8	3.5	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	0.3	0.1	0.2	0.4	10
EB T	Richmond Ave	163	0.2	0.0	0.1	0.2	10
EB TR	Richmond Ave	163	0.2	0.0	0.1	0.2	10

NB LTR	Dunlavy St	57	6.4	3.1	2.8	10.8	10
SB LTR	Dunlavy St	56	25.6	4.5	16.3	32.0	10
WB L	Richmond Ave	165	0.1	0.0	0.0	0.1	10
WB T	Richmond Ave	165	0.3	0.1	0.2	0.4	10
WB TR	Richmond Ave	165	0.2	0.1	0.2	0.3	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	1.9	0.3	1.5	2.4	10
EB T	Richmond Ave	12	2.6	0.2	2.3	2.9	10
EB TR	Richmond Ave	12	1.3	0.2	1.1	1.5	10
NB L	Eastside St	40	1.2	0.2	0.8	1.5	10
NB TR	Eastside St	40	0.4	0.1	0.3	0.6	10
SB L	Eastside St	39	1.2	0.2	1.0	1.7	10
SB TR	Eastside St	39	1.5	0.3	0.9	2.0	10
WB L	Richmond Ave	54	0.1	0.0	0.0	0.1	10
WB T	Richmond Ave	54	0.8	0.1	0.6	1.0	10
WB TR	Richmond Ave	54	0.3	0.0	0.3	0.4	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	0.9	0.2	0.8	1.2	10
EB R	Richmond Ave	7	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	7	5.3	0.2	4.9	5.5	10
NB L	Edloe St	155	0.9	0.1	0.7	1.0	10
NB R	Edloe St	155	0.9	0.1	0.7	1.1	10
NB T	Edloe St	155	4.4	0.3	4.0	4.8	10
SB L	Edloe St	5	1.1	0.2	0.9	1.4	10
SB T	Edloe St	5	1.2	0.1	1.1	1.4	10
SB TR	Edloe St	5	1.3	0.1	1.1	1.4	10
WB L	Richmond Ave	9	2.0	0.2	1.8	2.3	10
WB T	Richmond Ave	9	6.2	0.4	5.8	6.7	10
WB TR	Richmond Ave	9	4.2	0.3	3.9	4.6	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	0.9	0.1	0.8	1.0	10
EB T	Richmond Ave	64	1.9	0.2	1.7	2.3	10
EB TR	Richmond Ave	64	2.3	0.2	2.2	2.7	10
NB TR	Greenbriar Dr	47	0.8	0.1	0.6	0.9	10
SB L	Greenbriar Dr	46	0.3	0.1	0.2	0.5	10
SB R	Greenbriar Dr	46	0.8	0.5	0.2	1.5	10
SB T	Greenbriar Dr	46	9.7	3.2	5.7	14.0	10
WB L	Richmond Ave	160	1.3	0.1	1.1	1.5	10
WB T	Richmond Ave	160	0.7	0.1	0.5	0.7	10
WB TR	Richmond Ave	160	0.8	0.1	0.7	0.9	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	20	0.5	0.0	0.5	0.6	10
EB TR	Richmond Ave	20	0.6	0.1	0.6	0.7	10
NB LTR	Hazard St	51	24.4	3.2	19.7	28.6	10
SB LTR	Hazard St	50	16.9	5.8	11.2	26.3	10
WB L	Richmond Ave	162	0.2	0.0	0.1	0.2	10
WB T	Richmond Ave	162	0.3	0.0	0.2	0.3	10
WB TR	Richmond Ave	162	0.3	0.0	0.2	0.3	10

RICHMOND AVE & KIRBY DR — NODE: 121

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	6.8	2.1	3.8	10.4	10
EB T	Richmond Ave	54	2.7	0.2	2.4	2.9	10
EB TR	Richmond Ave	54	2.7	0.4	2.1	3.3	10
NB L	Kirby Dr	158	5.0	1.1	3.3	6.4	10
NB T	Kirby Dr	158	7.8	0.5	7.1	8.4	10
NB TR	Kirby Dr	158	4.5	0.4	4.0	5.0	10
SB L	Kirby Dr	44	1.3	0.2	0.9	1.7	10
SB T	Kirby Dr	44	9.0	0.4	8.5	9.7	10
SB TR	Kirby Dr	44	5.4	0.3	5.0	5.9	10
WB L	Richmond Ave	64	1.3	0.2	1.1	1.7	10
WB T	Richmond Ave	64	0.6	0.1	0.5	0.8	10
WB TR	Richmond Ave	64	0.3	0.1	0.2	0.6	10

RICHMOND AVE & MANDELL ST — NODE: 127

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	0.1	0.0	0.1	0.2	10
EB T	Richmond Ave	165	0.1	0.0	0.1	0.2	10
EB TR	Richmond Ave	165	0.1	0.0	0.1	0.2	10
NB LTR	Mandell St	59	2.5	0.3	2.1	2.8	10
SB LTR	Mandell St	58	2.0	0.3	1.4	2.4	10
WB L	Richmond Ave	23	0.1	0.0	0.1	0.2	10
WB T	Richmond Ave	23	0.0	0.0	0.0	0.1	10
WB TR	Richmond Ave	23	0.0	0.0	0.0	0.0	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	1.3	0.1	1.2	1.5	10
EB T	Richmond Ave	23	2.2	0.1	2.1	2.5	10
EB TR	Richmond Ave	23	3.0	0.2	2.7	3.3	10
NB L	Montrose Blvd	61	5.1	0.5	4.1	5.7	10
NB T	Montrose Blvd	61	13.0	0.8	11.5	14.4	10
NB TR	Montrose Blvd	61	16.8	0.9	15.1	18.4	10
SB L	Montrose Blvd	60	6.1	1.1	4.7	8.1	10
SB T	Montrose Blvd	60	6.4	1.6	3.6	9.4	10
SB TR	Montrose Blvd	60	9.9	2.2	6.2	13.7	10
WB L	Richmond Ave	166	2.8	1.0	2.0	5.0	10
WB T	Richmond Ave	166	2.0	0.2	1.8	2.4	10
WB TR	Richmond Ave	166	2.8	0.3	2.4	3.5	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	1.3	0.1	1.2	1.5	10
EB T	Richmond Ave	160	0.1	0.0	0.0	0.1	10
EB TR	Richmond Ave	160	0.1	0.0	0.0	0.1	10
NB T	Shepherd Dr	49	2.7	0.2	2.4	2.9	10
NB TR	Shepherd Dr	49	2.8	0.2	2.5	3.0	10
SB T	Shepherd Dr	48	2.9	0.2	2.7	3.3	10
SB TR	Shepherd Dr	48	3.0	0.2	2.7	3.3	10
WB L	Richmond Ave	20	0.8	0.1	0.6	1.0	10
WB T	Richmond Ave	20	0.9	0.1	0.7	1.0	10
WB TR	Richmond Ave	20	0.7	0.1	0.6	0.8	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.1	0.0	0.1	0.1	10
EB T	Richmond Ave	167	0.1	0.1	0.0	0.4	10

NB R	US 59 NBFR	26	0.0	0.0	0.0	0.0	10
NEB LT	US 59 NBFR	69	1.2	0.1	1.0	1.4	10
NEB R	US 59 NBFR	69	0.0	0.0	0.0	0.0	10
NEB TR	US 59 NBFR	69	1.1	0.2	0.9	1.5	10
WB T	Richmond Ave	26	13.0	1.5	10.6	14.5	10
WB TR	Richmond Ave	26	2.3	0.3	1.6	2.7	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	2.6	0.4	2.0	3.4	10
EB TR	Richmond Ave	166	3.2	0.4	2.8	4.0	10
SWB LT	US 59 SBFR	65	1.5	0.3	1.2	2.3	10
SWB R	US 59 SBFR	65	0.4	0.1	0.3	0.6	10
SWB T	US 59 SBFR	65	1.2	0.3	0.9	1.8	10
WB L	Richmond Ave	167	0.1	0.1	0.1	0.3	10
WB T	Richmond Ave	167	0.0	0.0	0.0	0.0	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	0.2	0.0	0.1	0.2	10
EB T	Richmond Ave	162	0.2	0.0	0.2	0.3	10
EB TR	Richmond Ave	162	0.2	0.0	0.2	0.3	10
NB LTR	Woodhead St	53	15.4	6.3	6.3	25.5	10
SB LTR	Woodhead St	52	1.9	0.2	1.7	2.4	10
WB L	Richmond Ave	163	0.5	0.1	0.5	0.7	10
WB T	Richmond Ave	163	0.3	0.0	0.2	0.4	10
WB TR	Richmond Ave	163	0.3	0.0	0.3	0.4	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	0.1	0.0	0.1	0.1	10
NEB L	Main St	168	10.5	3.4	5.1	16.6	10
NEB R	Main St	168	0.0	0.0	0.0	0.1	10
NWB R	Wheeler Ave	169	0.1	0.1	0.1	0.3	10
NWB T	Wheeler Ave	169	6.5	0.8	5.2	7.4	10
SB R	Main St	70	1.0	0.1	0.6	1.1	10
SEB R	Richmond Ave	26	0.0	0.0	0.0	0.0	10
SEB T	Richmond Ave	26	2.4	0.5	1.6	3.3	10
SWB T	LRT Line	674	0.0	0.0	0.0	0.0	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	15.2	1.2	12.8	16.7	10
EB T	Westpark Dr	140	12.4	0.6	10.9	12.9	10
EB TR	Westpark Dr	140	15.6	0.9	13.8	16.8	10
NB L	S Rice Ave	138	3.9	1.0	2.8	5.8	10
NB T	S Rice Ave	138	6.8	2.3	4.1	11.2	10
NB TR	S Rice Ave	138	8.9	2.7	5.9	14.6	10
SB L	S Rice Ave	137	3.2	0.9	2.1	4.4	10
SB R	S Rice Ave	137	0.0	0.0	0.0	0.1	10
SB T	S Rice Ave	137	4.1	0.3	3.8	4.8	10
WB L	Westpark Dr	790	1.8	0.5	1.2	2.7	10
WB T	Westpark Dr	790	1.3	0.1	1.1	1.5	10
WB TR	Westpark Dr	790	1.8	0.5	1.2	2.6	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	1.0	0.1	0.8	1.3	10

NEB R	San Jacinto St	173	0.0	0.0	0.0	0.1	10
NEB T	San Jacinto St	173	1.6	0.3	1.3	2.1	10
NWB T	Wheeler Ave	86	3.9	0.8	2.8	5.0	10
NWB TR	Wheeler Ave	86	0.7	0.3	0.4	1.1	10
SEB LT	Wheeler Ave	172	0.7	0.1	0.6	1.0	10
SEB T	Wheeler Ave	172	0.6	0.3	0.4	1.3	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	590	0.2	0.0	0.2	0.3	10
SB LTR	Edell St	589	0.6	0.2	0.5	1.1	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	341	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	341	0.1	0.0	0.1	0.1	10
EB TR	Tidwell Rd	341	0.5	0.1	0.4	0.6	10
NB LTR	Friendly Rd	585	5.2	1.9	2.0	8.2	10
SB LTR	Friendly Rd	584	10.5	0.3	9.8	10.9	10
WB L	Tidwell Rd	338	0.0	0.0	0.0	0.1	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.0	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.2	0.0	0.2	0.3	10
EB T	Tidwell Rd	338	0.7	0.1	0.6	0.8	10
EB TR	Tidwell Rd	338	0.8	0.1	0.7	1.0	10
NB L	Hirsch Rd	336	2.0	0.4	1.5	2.7	10
NB R	Hirsch Rd	336	0.2	0.0	0.1	0.2	10
NB T	Hirsch Rd	336	1.2	0.5	0.8	2.4	10
SB L	Hirsch Rd	335	0.6	0.1	0.4	0.7	10
SB R	Hirsch Rd	335	1.1	0.1	0.8	1.3	10
SB T	Hirsch Rd	335	0.8	0.1	0.7	1.0	10
WB L	Tidwell Rd	334	0.1	0.0	0.0	0.2	10
WB T	Tidwell Rd	334	0.3	0.1	0.2	0.4	10
WB TR	Tidwell Rd	334	0.3	0.0	0.3	0.4	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	0.5	0.1	0.4	0.7	10
EB LT	Tidwell Rd	342	0.9	0.1	0.8	1.2	10
EB T	Tidwell Rd	342	2.0	0.1	1.8	2.1	10
NB L	I-69 NBFR	340	0.6	0.1	0.5	0.7	10
NB LT	I-69 NBFR	340	0.7	0.1	0.6	1.0	10
NB R	I-69 NBFR	340	0.2	0.0	0.2	0.3	10
NB T	I-69 NBFR	340	0.3	0.0	0.3	0.4	10
NB TR	I-69 NBFR	340	0.7	0.1	0.6	0.7	10
WB T	Tidwell Rd	341	3.2	0.2	2.9	3.7	10
WB TR	Tidwell Rd	341	1.2	0.1	1.1	1.5	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

EB T	Tidwell Rd	591	2.3	0.1	2.1	2.5	10
SB L	I-69 SBFR	649	0.8	0.1	0.6	0.9	10
SB LT	I-69 SBFR	649	1.0	0.1	0.8	1.1	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.0	10
SB T	I-69 SBFR	649	1.1	0.1	0.9	1.3	10
WB L	Tidwell Rd	342	1.5	0.1	1.3	1.8	10
WB LT	Tidwell Rd	342	1.4	0.1	1.4	1.6	10
WB T	Tidwell Rd	342	1.1	0.1	1.0	1.3	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	0.9	0.1	0.7	1.0	10
EB T	Tidwell Rd	349	1.6	0.1	1.4	1.8	10
EB TR	Tidwell Rd	349	1.7	0.1	1.6	1.9	10
NB L	Jensen Dr	347	0.1	0.0	0.1	0.1	10
NB T	Jensen Dr	347	1.0	0.1	0.9	1.1	10
NB TR	Jensen Dr	347	1.1	0.1	0.9	1.1	10
SB L	Jensen Dr	346	1.8	0.2	1.4	2.1	10
SB T	Jensen Dr	346	0.7	0.1	0.5	0.8	10
SB TR	Jensen Dr	346	1.0	0.1	0.9	1.1	10
WB L	Tidwell Rd	348	1.1	0.2	0.8	1.4	10
WB T	Tidwell Rd	348	1.2	0.1	1.0	1.3	10
WB TR	Tidwell Rd	348	1.4	0.1	1.2	1.6	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	334	0.9	0.1	0.7	1.1	10
EB TR	Tidwell Rd	334	1.2	0.1	1.0	1.4	10
NB L	Lockwood Dr	332	1.2	0.1	1.0	1.4	10
NB T	Lockwood Dr	332	0.1	0.0	0.0	0.2	10
NB TR	Lockwood Dr	332	0.3	0.1	0.2	0.4	10
SB L	Lockwood Dr	331	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	331	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	331	0.0	0.0	0.0	0.1	10
WB L	Tidwell Rd	333	0.7	0.1	0.6	0.8	10
WB T	Tidwell Rd	333	1.2	0.2	1.0	1.6	10
WB TR	Tidwell Rd	333	1.3	0.1	1.2	1.5	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	593	0.0	0.0	0.0	0.0	10
SEB LTR	Turner Dr	592	0.0	0.0	0.0	0.0	10
SWB TR	Turner Dr	793	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	3.9	1.2	2.7	6.8	10
EB TR	Westpark Dr	116	0.6	0.1	0.5	0.9	10
NB L	14th St	118	0.0	0.0	0.0	0.0	10
NB R	14th St	118	0.4	0.1	0.3	0.5	10
WB L	Westpark Dr	616	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	616	21.9	8.6	7.7	33.3	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	788	1.6	1.4	0.0	4.2	10

EB TR	Westpark Dr	788	1.3	1.2	0.0	3.7	10
NB L	Alder Dr	787	2.2	0.6	1.5	3.3	10
NB R	Alder Dr	787	1.0	0.7	0.4	2.4	10
WB LT	Westpark Dr	133	0.2	0.0	0.1	0.2	10
WB T	Westpark Dr	133	0.0	0.0	0.0	0.0	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	4.4	0.7	3.2	5.6	10
EB T	Westpark Dr	133	13.9	3.0	8.6	16.6	10
EB TR	Westpark Dr	133	15.4	3.2	9.7	17.8	10
NB T	Chimney Rock Rd	135	6.5	1.0	5.4	8.6	10
NB TR	Chimney Rock Rd	135	7.0	0.7	5.8	8.1	10
SB L	Chimney Rock Rd	134	9.2	1.1	7.9	11.3	10
SB T	Chimney Rock Rd	134	1.1	0.1	1.0	1.3	10
SB TR	Chimney Rock Rd	134	1.2	0.1	1.1	1.4	10
WB L	Westpark Dr	136	0.6	0.1	0.4	0.8	10
WB T	Westpark Dr	136	0.5	0.1	0.4	0.6	10
WB TR	Westpark Dr	136	1.1	0.2	0.7	1.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	3.6	0.3	3.0	4.0	10
EB T	Westpark Dr	152	0.4	0.1	0.3	0.5	10
EB TR	Westpark Dr	152	0.9	0.1	0.7	1.0	10
NB R	Edloe St	29	0.1	0.0	0.1	0.1	10
NB T	Edloe St	29	7.1	0.3	6.6	7.5	10
SB LT	Edloe St	153	1.8	0.1	1.5	2.0	10
SB T	Edloe St	153	0.9	0.1	0.8	1.1	10
SB TR	Edloe St	153	0.9	0.2	0.8	1.2	10
WB LT	Westpark Dr	154	2.4	0.3	2.1	2.8	10
WB TR	Westpark Dr	154	2.7	0.2	2.4	3.1	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	6.1	0.4	5.4	6.8	10
EB T	Westpark Dr	114	60.8	1.6	58.1	63.3	10
EB TR	Westpark Dr	114	36.6	1.6	34.9	39.3	10
NB L	Fondren Rd	110	1.2	0.2	0.9	1.4	10
NB T	Fondren Rd	110	1.6	0.2	1.2	1.9	10
NB TR	Fondren Rd	110	1.0	0.1	0.9	1.1	10
SB L	Fondren Rd	112	12.8	3.3	5.5	17.6	10
SB T	Fondren Rd	112	4.8	0.3	4.5	5.4	10
SB TR	Fondren Rd	112	3.2	0.3	2.9	3.8	10
WB L	Westpark Dr	113	12.2	3.4	5.9	16.5	10
WB T	Westpark Dr	113	11.2	3.3	7.2	16.1	10
WB TR	Westpark Dr	113	8.3	1.9	6.1	10.9	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	5.9	1.3	3.9	8.0	10
EB T	Westpark Dr	113	9.4	1.3	8.2	12.6	10
EB TR	Westpark Dr	113	7.2	1.0	6.2	9.4	10
NB L	Hillcroft Ave	3	23.0	2.3	19.7	27.0	10
NB T	Hillcroft Ave	3	11.5	1.5	9.6	13.7	10
NB TR	Hillcroft Ave	3	9.5	1.0	7.9	10.6	10
SB L	Hillcroft Ave	115	14.6	2.9	11.1	19.3	10
SB T	Hillcroft Ave	115	28.1	7.1	19.2	37.1	10

SB TR	Hillcroft Ave	115	22.0	5.7	14.6	29.8	10
WB L	Westpark Dr	116	2.0	0.3	1.4	2.6	10
WB T	Westpark Dr	116	19.2	2.7	14.9	23.0	10
WB TR	Westpark Dr	116	18.2	1.5	15.8	19.6	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	4.7	0.2	4.4	5.0	10
EB T	Westpark Dr	143	2.1	0.2	1.7	2.4	10
NB L	I-610 NBFR	145	2.7	0.2	2.4	3.0	10
NB LT	I-610 NBFR	145	3.6	0.2	3.2	4.0	10
NB TR	I-610 NBFR	145	3.6	0.3	3.3	4.1	10
WB T	Westpark Dr	792	4.7	0.6	4.1	6.0	10
WB TR	Westpark Dr	792	4.3	0.4	3.8	5.2	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	2.1	0.3	1.6	2.8	10
EB T	Westpark Dr	629	67.0	3.2	63.1	71.7	10
SB L	I-610 SBFR	141	1.8	0.1	1.6	2.0	10
SB R	I-610 SBFR	141	0.0	0.0	0.0	0.0	10
SB T	I-610 SBFR	141	1.4	0.1	1.1	1.6	10
WB L	Westpark Dr	143	2.0	0.1	1.9	2.3	10
WB T	Westpark Dr	143	2.4	0.2	2.1	2.7	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	1.8	0.5	1.2	2.6	10
EB LT	Westpark Dr	123	2.7	0.4	2.1	3.4	10
EB T	Westpark Dr	123	4.4	0.7	3.7	5.7	10
NEB L	I-69 NBFR	126	0.9	0.1	0.8	1.0	10
NEB R	I-69 NBFR	126	1.0	0.1	0.8	1.3	10
NEB T	I-69 NBFR	126	2.2	0.2	1.8	2.4	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.0	10
WB T	Westpark Dr	127	3.5	0.2	3.1	3.8	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	616	14.0	3.0	10.3	18.9	10
SWB L	I-69 SBFR	121	0.8	1.0	0.3	3.5	10
SWB LT	I-69 SBFR	121	1.5	0.9	0.9	3.9	10
SWB R	I-69 SBFR	121	5.3	4.4	0.5	11.6	10
SWB T	I-69 SBFR	121	1.6	0.3	1.2	2.2	10
WB L	Westpark Dr	123	1.7	0.2	1.2	1.9	10
WB T	Westpark Dr	123	1.6	0.2	1.3	1.8	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	792	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	792	0.0	0.0	0.0	0.0	10
NB LR	Loop Central Dr	791	0.4	0.0	0.4	0.5	10
WB L	Westpark Dr	146	0.4	0.0	0.4	0.5	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Westpark Dr	146	1.8	0.2	1.6	2.2	10
EB T	Westpark Dr	146	1.4	0.1	1.3	1.5	10
EB TR	Westpark Dr	146	2.3	0.3	1.9	2.7	10
NB L	Newcastle Dr	148	13.3	1.6	11.5	16.6	10
NB T	Newcastle Dr	148	3.3	0.8	2.2	4.3	10
NB TR	Newcastle Dr	148	7.7	1.9	4.9	10.3	10
SB LT	Newcastle Dr	147	1.1	0.1	0.9	1.3	10
SB TR	Newcastle Dr	147	1.4	0.2	1.2	1.8	10
WB L	Westpark Dr	149	6.6	2.9	2.9	12.9	10
WB T	Westpark Dr	149	1.6	0.2	1.4	2.0	10
WB TR	Westpark Dr	149	2.5	0.3	2.2	2.9	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	1.1	0.1	1.0	1.2	10
EB TR	Westpark Dr	127	1.5	0.1	1.4	1.7	10
NB LT	Rampart St	129	16.3	2.0	13.6	19.4	10
NB TR	Rampart St	129	0.2	0.1	0.1	0.4	10
SB LTR	[Unnamed Street]	128	0.8	0.1	0.7	1.0	10
WB LT	Westpark Dr	130	0.3	0.1	0.2	0.5	10
WB TR	Westpark Dr	130	0.2	0.0	0.1	0.2	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	8.6	2.2	4.2	12.0	10
EB TR	Westpark Dr	136	6.6	2.0	3.2	10.6	10
NB LR	Royalton St	384	13.2	1.4	10.8	15.1	10
WB L	Westpark Dr	140	0.2	0.0	0.1	0.2	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.0	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	790	3.4	0.5	2.4	4.3	10
EB TR	Westpark Dr	790	2.8	0.5	1.9	3.6	10
NB LR	Uptown Transit Ctr	789	0.2	0.0	0.2	0.3	10
WB L	Westpark Dr	629	0.1	0.0	0.1	0.2	10
WB T	Westpark Dr	629	0.6	0.2	0.4	0.9	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	4.9	1.3	3.4	6.8	10
EB T	Westpark Dr	149	2.1	0.5	1.6	3.1	10
EB TR	Westpark Dr	149	3.7	0.9	2.6	5.2	10
NB L	Weslayan St	151	3.8	0.7	3.1	5.6	10
NB T	Weslayan St	151	3.7	0.6	3.0	5.2	10
NB TR	Weslayan St	151	5.5	1.3	4.6	9.2	10
SB L	Weslayan St	150	0.9	0.1	0.7	1.0	10
SB T	Weslayan St	150	6.2	0.4	5.7	7.0	10
SB TR	Weslayan St	150	7.3	0.4	6.8	8.0	10
WB L	Westpark Dr	152	1.5	0.3	1.0	1.9	10
WB T	Westpark Dr	152	1.5	0.1	1.3	1.7	10
WB TR	Westpark Dr	152	1.8	0.1	1.5	1.9	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	1.6	0.2	1.2	2.0	10
EB T	Westpark Dr	130	3.0	0.2	2.7	3.3	10
EB TR	Westpark Dr	130	3.2	0.2	2.8	3.5	10

NB L	Renwick Dr	132	1.5	0.4	1.1	2.1	10
NB T	Renwick Dr	132	3.1	0.3	2.6	3.4	10
NB TR	Renwick Dr	132	3.7	0.3	3.2	4.2	10
SB L	Fountain View Dr	131	2.2	0.3	1.9	2.8	10
SB T	Fountain View Dr	131	1.2	0.1	1.0	1.3	10
SB TR	Fountain View Dr	131	1.2	0.1	1.1	1.4	10
WB L	Westpark Dr	788	0.5	0.1	0.4	0.6	10
WB T	Westpark Dr	788	0.5	0.1	0.4	0.6	10
WB TR	Westpark Dr	788	0.6	0.1	0.5	0.7	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	0.6	0.2	0.4	0.9	10
NEB TR	Hutchins St	707	1.1	0.3	0.6	1.6	10
NWB T	Wheeler Ave	423	0.1	0.0	0.1	0.2	10
NWB TR	Wheeler Ave	423	0.2	0.0	0.1	0.2	10
SEB L	Wheeler Ave	421	0.0	0.0	0.0	0.0	10
SEB T	Wheeler Ave	421	0.5	0.1	0.3	0.6	10
SWB LR	Hutchins St	422	0.1	0.0	0.0	0.1	10

Project: UNC_Base
Scenario: 2030 No Build AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 07:30:00 - 08:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	9.9	2.3	7.2	13.7	10
NEB TR	Ennis St	732	4.5	1.3	2.6	6.3	10
NWB L	Alabama St	197	2.1	0.9	0.8	3.8	10
NWB T	Alabama St	197	22.4	2.1	20.1	26.9	10
NWB TR	Alabama St	197	20.0	2.5	16.2	24.7	10
SEB L	Alabama St	193	8.2	1.8	5.9	11.8	10
SEB T	Alabama St	193	11.2	2.1	8.5	14.7	10
SEB TR	Alabama St	193	11.4	2.2	7.9	15.8	10
SWB LT	Ennis St	740	13.1	1.7	10.7	15.6	10
SWB TR	Ennis St	740	19.0	2.0	16.5	22.5	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	32.8	3.5	26.2	38.2	10
NB T	Almeda Rd	696	5.5	0.7	4.8	6.8	10
NB TR	Almeda Rd	696	4.4	0.6	3.5	5.2	10
NWB LTR	Wheeler Ave	176	23.4	1.8	21.6	27.8	10
SB L	Almeda Rd	174	46.3	7.2	35.8	57.3	10
SB T	Almeda Rd	174	13.1	1.5	9.8	16.0	10
SB TR	Almeda Rd	174	11.8	1.3	10.2	14.1	10
SEB LT	Wheeler Ave	77	21.2	2.1	18.1	23.3	10
SEB TR	Wheeler Ave	77	13.6	2.1	11.4	16.9	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	2.9	0.4	2.2	3.4	10
NEB TR	Ennis St	726	2.3	0.4	1.5	2.9	10
NWB LTR	Cleburne St	733	22.9	2.3	20.7	28.7	10
SEB LTR	Cleburne St	731	21.3	1.5	19.0	23.3	10
SWB LT	Ennis St	732	3.0	0.5	2.5	4.1	10
SWB TR	Ennis St	732	2.4	0.2	2.0	2.6	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	44.1	3.9	38.8	49.9	10
EB T	Crosstimbers St	323	15.4	1.6	13.0	18.6	10
EB TR	Crosstimbers St	323	13.9	1.5	12.6	16.7	10
NB L	Lockwood Dr	321	43.8	3.9	39.1	49.4	10
NB T	Lockwood Dr	321	34.8	2.7	30.3	39.2	10
NB TR	Lockwood Dr	321	20.6	2.7	15.8	24.1	10
SB L	Lockwood Dr	320	49.6	6.9	37.6	60.3	10
SB T	Lockwood Dr	320	23.5	3.1	19.4	28.9	10
SB TR	Lockwood Dr	320	19.2	2.4	14.1	22.2	10
WB L	Crosstimbers St	322	33.9	2.6	31.4	40.1	10
WB T	Crosstimbers St	322	11.4	1.1	10.2	13.4	10
WB TR	Crosstimbers St	322	10.9	1.5	8.8	13.8	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	91.1	4.5	80.4	95.0	10
EB T	Elgin St	204	71.8	7.9	58.5	82.1	10
EB TR	Elgin St	204	59.0	11.4	43.1	77.7	10
NEB L	Cullen Blvd	207	25.2	2.2	22.3	28.9	10
NEB T	Cullen Blvd	207	14.2	1.4	11.2	15.8	10
NEB TR	Cullen Blvd	207	9.0	1.0	7.5	10.2	10
SB L	Cullen Blvd	206	49.5	3.4	44.2	53.8	10
SB T	Cullen Blvd	206	30.6	2.4	27.4	35.4	10
SB TR	Cullen Blvd	206	27.8	3.2	23.1	33.7	10
WB L	Elgin St	208	54.6	3.4	49.2	60.5	10
WB T	Elgin St	208	47.0	5.5	38.2	57.3	10
WB TR	Elgin St	208	36.1	4.2	28.7	41.9	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	276.4	17.2	255.3	301.0	10
EB R	EB Westpark Tollway FR	111	248.9	14.9	227.9	273.4	10
NB T	Fondren Rd	38	376.1	6.9	366.9	389.2	10
SB T	Fondren Rd	110	2.8	0.7	1.8	3.8	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	19.6	2.5	16.2	22.8	10
NEB TR	Ennis St	702	8.1	2.0	4.3	10.5	10
NWB L	Elgin St	701	21.3	1.2	20.3	24.3	10
NWB T	Elgin St	701	13.8	1.0	13.0	16.5	10
NWB TR	Elgin St	701	15.4	1.4	13.6	17.2	10
SEB L	Elgin St	700	21.1	7.3	10.3	30.7	10
SEB T	Elgin St	700	13.1	1.1	11.6	14.6	10
SEB TR	Elgin St	700	11.4	0.7	10.5	12.9	10
SWB LTR	Ennis St	195	18.2	2.0	15.2	20.5	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	49.7	6.1	40.0	57.7	10
EB T	Elgin St	701	38.6	4.3	30.9	43.7	10
EB TR	Elgin St	701	30.6	2.7	25.0	34.6	10
NB T	LRT Line	667	5.0	0.6	4.1	6.3	10
NWB L	Scott St	198	48.0	8.0	38.7	60.7	10
NWB T	Scott St	198	14.4	1.4	11.5	16.2	10
NWB TR	Scott St	198	11.7	1.7	8.8	13.8	10
SB L	Scott St	671	59.7	9.8	46.4	75.0	10
SB T	Scott St	671	22.8	2.1	19.5	25.9	10
SB TR	Scott St	671	24.0	2.4	20.2	27.5	10
SWB T	LRT Line	669	23.9	7.7	19.2	45.6	10
WB L	Elgin St	204	72.0	8.3	56.9	84.2	10
WB T	Elgin St	204	32.3	2.1	29.3	36.1	10
WB TR	Elgin St	204	28.8	1.1	27.4	30.1	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	1.4	0.5	0.7	2.1	10
NEB LT	Elgin St	212	11.3	2.0	9.4	15.6	10
NEB T	Elgin St	212	8.5	1.1	7.1	10.6	10
SB LT	Spur 5 SBFR	214	21.2	0.8	20.1	22.3	10
SB TR	Spur 5 SBFR	214	15.5	0.8	14.4	16.8	10
SWB L	Elgin St	216	14.7	1.4	12.9	16.9	10
SWB T	Elgin St	216	4.9	0.6	4.1	6.0	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	8.1	2.5	5.0	12.1	10
EB T	Elgin St	208	6.6	1.8	4.6	9.6	10
EB TR	Elgin St	208	4.5	1.0	3.4	5.8	10
NB LT	UH Entrance	211	50.8	4.6	39.7	56.8	10
NB R	UH Entrance	211	3.7	0.5	2.8	4.2	10
SWB LT	UH Entrance	210	45.9	4.5	38.1	50.7	10
SWB R	UH Entrance	210	3.6	0.8	2.6	5.0	10
WB L	Elgin St	212	4.8	1.3	3.5	7.4	10
WB T	Elgin St	212	1.0	0.2	0.7	1.4	10
WB TR	Elgin St	212	1.4	0.4	0.9	2.0	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	6.3	1.5	3.9	8.6	10
NEB TR	Emancipation Ave	711	5.7	0.8	4.7	6.9	10
NWB LT	Wheeler Ave	766	21.4	2.1	18.9	24.5	10
NWB TR	Wheeler Ave	766	15.4	2.4	12.5	19.5	10
SEB LT	Wheeler Ave	423	20.4	2.1	16.7	23.1	10
SEB TR	Wheeler Ave	423	15.5	2.0	12.6	18.1	10
SWB LT	Emancipation Ave	177	4.1	1.0	2.4	5.2	10
SWB TR	Emancipation Ave	177	1.6	0.6	1.0	2.6	10

ENNIS ST & HOLMAN ST **NODE: 306**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	12.2	1.7	9.9	15.6	10
NEB TR	Ennis St	740	11.4	1.6	9.8	14.0	10
NWB LTR	Holman St	742	9.4	1.6	7.5	11.8	10
SEB LTR	Holman St	741	7.0	1.1	5.9	9.4	10
SWB LT	Ennis St	702	7.4	1.3	5.5	10.1	10
SWB TR	Ennis St	702	10.3	1.0	8.9	11.6	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	1.6	0.3	1.2	2.2	10
NEB T	Ennis St	698	0.8	0.3	0.3	1.2	10
SEB L	Wheeler Ave	766	29.8	3.1	22.9	33.8	10
SEB R	Wheeler Ave	766	3.6	0.3	2.8	3.8	10
SWB T	Ennis St	726	0.1	0.1	0.0	0.3	10
SWB TR	Ennis St	726	0.2	0.3	0.0	1.0	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	22.6	2.5	19.0	25.4	10
EB TR	Leeland St	228	16.9	0.6	15.7	17.8	10
SWB LT	Ernestine St	411	17.5	1.6	14.2	19.1	10
SWB T	Ernestine St	411	15.4	1.1	14.4	17.7	10
SWB TR	Ernestine St	411	13.2	1.2	11.4	15.4	10
WB L	Leeland St	227	17.9	0.9	16.6	19.0	10
WB T	Leeland St	227	19.4	0.7	18.1	20.0	10

ERNESTINE ST & MUNGER ST — NODE: 452

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	9.0	1.2	7.0	10.4	10
SB LT	Ernestine St	685	1.3	0.4	0.7	1.9	10
SB TR	Ernestine St	685	1.1	0.2	0.9	1.5	10
WB L	Munger St	460	8.2	1.5	6.0	10.6	10
WB T	Munger St	460	8.0	1.2	6.8	10.5	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	13.1	0.7	12.0	14.1	10
NWB L	I-45 NBFR	222	8.8	0.9	7.6	10.4	10
NWB LT	I-45 NBFR	222	9.6	0.8	8.1	10.8	10
NWB T	I-45 NBFR	222	8.8	0.7	8.0	9.8	10
NWB TR	I-45 NBFR	222	11.0	1.2	9.2	12.6	10
SB T	Ernestine St	221	13.2	1.0	12.1	15.5	10
SB TR	Ernestine St	221	14.1	0.9	12.5	15.7	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	59.6	18.6	29.5	99.8	10
NWB T	Wheeler Ave	172	3.6	2.5	1.1	7.9	10
SEB T	Wheeler Ave	169	30.6	2.1	26.6	33.0	10
SEB TR	Wheeler Ave	169	25.7	1.6	22.3	27.7	10
SWB L	Fannin St	87	12.7	2.5	8.5	17.3	10
SWB T	Fannin St	87	13.1	1.8	9.9	15.6	10
SWB TR	Fannin St	87	20.2	7.0	14.0	36.2	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	29.1	2.0	25.9	32.4	10
EB LR	I-69 Express Lanes	30	19.1	1.8	16.3	21.7	10
NB T	Edloe St	153	1.2	0.5	0.7	2.5	10
NB TR	Edloe St	153	1.4	0.3	0.8	1.8	10
SB L	Edloe St	155	15.4	3.4	11.5	23.3	10
SB T	Edloe St	155	1.8	0.4	1.4	2.8	10
SB TR	Edloe St	155	2.0	0.7	1.4	3.7	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	11.6	3.1	8.3	19.1	10
NB R	Turner Dr	595	0.1	0.2	0.0	0.5	10
NEB LT	Jensen Dr	346	0.1	0.1	0.0	0.2	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	1.5	0.6	1.0	2.7	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	11.3	6.9	3.1	28.8	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	45.2	5.4	39.3	54.8	10
EB T	Kelley St	313	20.5	2.9	15.5	23.9	10
EB TR	Kelley St	313	14.0	1.2	12.4	15.6	10
NB L	Lockwood Dr	308	32.4	3.3	25.9	37.4	10
NB T	Lockwood Dr	308	37.9	1.8	33.5	39.9	10
NB TR	Lockwood Dr	308	49.4	5.4	40.1	57.6	10
SB L	Lockwood Dr	311	17.7	4.2	10.2	23.8	10
SB T	Lockwood Dr	311	24.3	1.6	22.0	26.7	10
SB TR	Lockwood Dr	311	21.5	1.3	19.8	23.5	10
WB L	Kelley St	312	33.5	3.0	30.3	41.1	10
WB T	Kelley St	312	17.6	2.7	14.1	22.6	10
WB TR	Kelley St	312	13.9	2.4	11.0	18.2	10

LABRANCH ST & WHEELER AVE — NODE: 134

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	29.7	1.7	27.3	32.7	10
NWB LT	Wheeler Ave	77	0.7	0.2	0.4	1.0	10
NWB TR	Wheeler Ave	77	0.6	0.2	0.2	0.8	10
SEB LT	Wheeler Ave	86	2.7	0.6	1.8	4.1	10
SEB TR	Wheeler Ave	86	2.5	0.5	1.9	3.4	10
SWB LTR	LaBranch St	78	28.5	2.5	24.6	32.5	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	45.4	6.7	30.3	52.3	10
EB TR	Laura Koppe Rd	330	19.4	3.3	14.7	23.9	10
NB L	Lockwood Dr	328	11.9	3.6	6.3	16.4	10
NB T	Lockwood Dr	328	13.2	1.6	10.4	15.1	10
NB TR	Lockwood Dr	328	9.6	2.2	7.9	15.1	10
SB L	Lockwood Dr	571	4.7	0.9	3.4	6.1	10
SB T	Lockwood Dr	571	3.5	0.8	2.4	5.0	10
SB TR	Lockwood Dr	571	3.7	0.8	2.6	5.0	10
WB L	Laura Koppe Rd	329	38.4	4.2	34.1	48.4	10
WB TR	Laura Koppe Rd	329	29.6	0.7	28.4	30.8	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	254	1.6	0.7	0.6	3.0	10
NEB T	Lockwood Dr	254	31.0	0.8	29.7	31.9	10
SWB L	Lockwood Dr	253	12.3	2.6	7.6	15.5	10
SWB LT	Lockwood Dr	253	16.2	0.9	14.8	17.5	10
SWB T	Lockwood Dr	253	15.4	0.4	14.8	16.4	10
WB LR	Armour Dr	659	17.8	2.4	13.4	21.1	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	772	31.4	4.2	25.2	36.9	10
EB R	Canal St	772	2.4	1.3	0.7	4.3	10
EB T	Canal St	772	27.6	5.2	20.3	35.2	10
NEB L	Lockwood Dr	241	12.3	1.5	10.4	14.4	10
NEB T	Lockwood Dr	241	6.2	0.6	5.0	6.9	10
NEB TR	Lockwood Dr	241	5.3	0.6	4.3	6.0	10
SWB L	Lockwood Dr	245	9.0	2.6	6.4	15.3	10
SWB T	Lockwood Dr	245	17.0	1.8	14.4	19.9	10
SWB TR	Lockwood Dr	245	15.4	1.3	13.6	18.4	10
WB LT	Canal St	768	36.0	2.5	33.3	40.6	10
WB TR	Canal St	768	25.3	1.7	22.6	28.0	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	31.3	3.2	26.4	36.7	10
EB T	Cavalcade St	299	20.8	2.5	16.7	23.7	10
EB TR	Cavalcade St	299	13.9	2.1	12.5	19.2	10
NB L	Lockwood Dr	292	15.3	2.3	12.0	18.2	10
NB T	Lockwood Dr	292	2.5	1.0	1.1	4.8	10
NB TR	Lockwood Dr	292	2.7	0.7	1.5	3.6	10
SB L	Lockwood Dr	296	35.7	3.8	28.0	41.0	10
SB T	Lockwood Dr	296	15.1	1.3	13.9	17.5	10
SB TR	Lockwood Dr	296	15.0	1.2	13.2	17.3	10
WB L	Cavalcade St	298	26.8	1.7	24.8	31.0	10
WB T	Cavalcade St	298	23.4	1.6	20.5	25.5	10
WB TR	Cavalcade St	298	15.6	2.2	11.8	18.2	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	49.3	5.3	36.2	53.9	10
EB T	Clinton Dr	259	29.7	3.6	26.9	38.9	10
EB TR	Clinton Dr	259	21.3	1.8	18.3	23.5	10
NEB L	Lockwood Dr	257	34.8	3.8	29.0	40.7	10
NEB R	Lockwood Dr	257	5.8	1.0	4.5	7.4	10
NEB T	Lockwood Dr	257	31.0	1.5	29.5	34.1	10
SB L	Lockwood Dr	256	29.7	2.2	26.8	32.0	10
SB R	Lockwood Dr	256	3.0	1.3	1.3	4.9	10
SB T	Lockwood Dr	256	8.2	0.6	7.6	9.5	10
WB L	Clinton Dr	258	42.3	3.4	38.1	48.8	10
WB R	Clinton Dr	258	5.3	0.5	4.8	6.2	10
WB T	Clinton Dr	258	26.8	1.3	24.9	28.7	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	52.0	5.5	43.2	62.1	10
EB T	Collingsworth St	291	38.8	7.7	28.5	51.6	10
EB TR	Collingsworth St	291	10.6	1.4	7.9	12.5	10
NB L	Lockwood Dr	289	41.0	2.8	37.7	47.5	10
NB T	Lockwood Dr	289	7.0	0.9	5.5	8.5	10
NB TR	Lockwood Dr	289	6.1	0.8	4.9	7.7	10
SEB L	Lockwood Dr	288	32.3	6.3	24.1	44.7	10
SEB T	Lockwood Dr	288	1.7	0.5	0.5	2.3	10
SEB TR	Lockwood Dr	288	2.6	1.3	1.5	5.4	10
WB L	Collingsworth St	290	42.9	2.5	39.0	47.6	10
WB T	Collingsworth St	290	49.2	41.6	26.5	128.2	10

WB TR	Collingsworth St	290	19.7	2.2	15.6	23.3	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	30.4	2.2	27.3	33.4	10
NB L	Lockwood Dr	288	45.5	6.0	35.7	52.3	10
NB T	Lockwood Dr	288	8.1	1.4	6.1	10.4	10
NB TR	Lockwood Dr	288	7.3	1.2	5.3	9.3	10
SB L	Lockwood Dr	292	46.2	8.1	35.8	59.9	10
SB T	Lockwood Dr	292	0.6	0.2	0.2	1.0	10
SB TR	Lockwood Dr	292	0.6	0.2	0.3	0.7	10
WB LTR	Crane St	294	32.1	2.0	29.1	35.5	10

LOCKWOOD DR & DENMARK ST — NODE: 623

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	10.4	1.8	8.9	14.3	10
NB L	Lockwood Dr	317	3.8	1.2	2.2	6.0	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	2.9	2.8	0.1	7.7	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	Denmark St	549	10.0	0.9	9.1	11.6	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	5.0	0.7	4.4	6.7	10
NB LT	Lockwood Dr	571	0.8	0.2	0.6	1.1	10
NB TR	Lockwood Dr	571	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	332	0.0	0.1	0.0	0.1	10
SB TR	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	8.6	1.0	7.6	10.6	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 513

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	249	27.8	1.4	25.9	30.4	10
NEB T	Lockwood Dr	249	1.2	0.3	0.9	1.7	10
SEB L	Marron Park Way	783	36.6	3.0	33.7	43.6	10
SEB R	Marron Park Way	783	7.1	0.8	5.7	8.5	10
SWB T	Lockwood Dr	254	9.5	2.0	7.5	12.8	10
SWB TR	Lockwood Dr	254	15.3	4.0	11.0	22.0	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	41.4	4.9	36.1	50.0	10
EB R	Harrisburg Blvd	244	5.9	1.7	3.8	9.5	10
EB T	Harrisburg Blvd	244	20.0	0.8	19.1	21.1	10
NEB L	Lockwood Dr	237	75.7	18.2	54.9	105.5	10
NEB T	Lockwood Dr	237	42.1	15.3	26.0	68.2	10
NEB TR	Lockwood Dr	237	41.3	15.7	27.7	68.9	10
NWB L	Harrisburg Blvd	678	42.3	4.9	37.2	50.9	10
NWB R	Harrisburg Blvd	678	5.7	0.9	4.9	7.4	10
NWB T	Harrisburg Blvd	678	18.4	1.4	16.7	21.4	10
SB L	Lockwood Dr	241	42.9	7.6	32.4	60.5	10
SB T	Lockwood Dr	241	35.5	6.2	31.4	52.0	10
SB TR	Lockwood Dr	241	36.9	5.9	32.6	52.2	10
SEB T	LRT Line	675	23.7	1.4	21.7	25.4	10
WB T	LRT Line	676	4.0	3.4	0.0	8.2	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	46.6	25.3	24.0	100.9	10
NEB L	Lockwood Dr	253	6.8	0.7	5.3	7.5	10
NEB T	Lockwood Dr	253	1.2	0.3	0.7	1.6	10
NEB TR	Lockwood Dr	253	4.0	0.7	2.5	5.0	10
SWB L	Lockwood Dr	257	3.9	1.3	1.6	5.8	10
SWB T	Lockwood Dr	257	0.7	0.6	0.2	2.1	10
SWB TR	Lockwood Dr	257	0.2	0.1	0.1	0.3	10
WB LTR	Harvey Wilson Dr	497	36.3	20.5	12.2	82.4	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Hershe St	514	12.8	2.0	9.9	16.3	10
NB LT	Lockwood Dr	281	0.2	0.1	0.0	0.4	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	478	0.3	0.1	0.1	0.5	10
SB TR	Lockwood Dr	478	0.9	0.2	0.6	1.4	10
WB LTR	Hershe St	513	9.0	2.4	5.1	13.7	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	38.9	1.3	37.8	41.3	10
EB LT	I-610 EBFR	307	36.6	1.8	34.6	39.5	10
EB TR	I-610 EBFR	307	14.4	3.0	11.2	19.6	10
NB R	Lockwood Dr	643	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	643	49.8	12.5	43.7	85.1	10
SB L	Lockwood Dr	304	0.2	0.4	0.0	1.1	10
SB T	Lockwood Dr	304	1.0	0.2	0.6	1.3	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.4	0.4	0.0	1.4	10
NB T	Lockwood Dr	304	4.4	0.9	2.9	5.8	10
SB T	Lockwood Dr	308	43.1	1.4	41.2	45.6	10
WB L	I-610 WBFR	309	36.1	2.7	31.9	40.0	10
WB R	Lockwood Dr	308	1.2	0.5	0.6	2.4	10
WB T	I-610 WBFR	309	34.7	2.7	30.2	38.6	10
WB TR	I-610 WBFR	309	28.1	1.3	26.4	31.1	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	5.2	1.1	3.1	7.0	10
NB LT	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	328	0.0	0.1	0.0	0.3	10
SB TR	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	5.6	0.7	4.8	7.1	10

LOCKWOOD DR & MCKINNEY ST — NODE: 152

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	23.0	2.8	18.0	27.1	10
NB L	Lockwood Dr	232	13.9	3.0	10.1	19.5	10
NB T	Lockwood Dr	232	1.8	0.3	1.1	2.1	10
NB TR	Lockwood Dr	232	2.0	0.3	1.5	2.5	10
SB L	Lockwood Dr	237	14.1	5.9	5.7	21.7	10

SB T	Lockwood Dr	237	6.9	0.7	5.7	8.3	10
SB TR	Lockwood Dr	237	6.7	0.4	6.1	7.2	10
WB LTR	McKinney St	239	22.9	3.6	18.5	30.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	23.4	6.3	9.9	31.8	10
NB LT	Lockwood Dr	478	6.8	1.3	4.7	8.8	10
NB T	Lockwood Dr	478	7.1	0.9	6.3	9.2	10
NB TR	Lockwood Dr	478	6.7	0.8	5.2	7.6	10
SB LT	Lockwood Dr	284	7.5	0.7	5.9	8.5	10
SB T	Lockwood Dr	284	6.0	0.4	5.2	6.6	10
SB TR	Lockwood Dr	284	5.5	0.8	4.1	6.6	10
WB LTR	Mulvey St	286	21.2	3.7	16.9	26.6	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	10.3	9.6	0.8	28.1	10
EB T	Munger St	460	14.9	3.8	10.9	21.6	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	29.4	13.7	15.3	53.2	10
WB T	Munger St	661	49.8	13.6	29.8	71.7	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	43.5	2.9	40.0	48.7	10
EB T	Navigation Blvd	252	22.0	1.7	19.5	24.6	10
EB TR	Navigation Blvd	252	21.7	1.2	19.7	24.1	10
NEB L	Lockwood Dr	245	40.0	3.5	34.5	45.9	10
NEB T	Lockwood Dr	245	17.0	3.5	12.9	21.1	10
NEB TR	Lockwood Dr	245	29.0	4.2	24.6	35.5	10
SWB L	Lockwood Dr	249	51.0	5.1	47.0	62.3	10
SWB T	Lockwood Dr	249	13.4	1.3	11.7	16.2	10
SWB TR	Lockwood Dr	249	13.7	2.5	10.8	17.3	10
WB L	Navigation Blvd	251	42.7	3.8	35.4	49.2	10
WB T	Navigation Blvd	251	24.8	1.2	22.7	26.3	10
WB TR	Navigation Blvd	251	24.5	1.7	21.0	26.8	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	8.3	2.9	5.2	14.6	10
NB LT	Lockwood Dr	284	0.3	0.2	0.0	0.6	10
NB T	Lockwood Dr	284	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	1.9	0.2	1.5	2.2	10
SB T	Lockwood Dr	524	0.8	0.4	0.5	1.8	10
SB TR	Lockwood Dr	524	0.4	0.3	0.0	1.1	10
WB LTR	Nichols St	525	11.2	5.0	6.2	20.5	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	19.8	2.8	15.2	23.1	10
NB LT	Lockwood Dr	300	0.4	0.2	0.1	0.7	10
NB TR	Lockwood Dr	300	0.2	0.1	0.0	0.4	10
SB LT	Lockwood Dr	643	0.2	0.2	0.1	0.6	10
SB TR	Lockwood Dr	643	0.4	0.1	0.3	0.5	10
WB LTR	Pardee St	546	14.8	4.7	9.4	24.8	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	38.5	5.0	32.7	46.7	10
NB LT	Lockwood Dr	296	2.2	0.5	1.1	2.7	10
NB TR	Lockwood Dr	296	1.3	0.3	0.8	1.6	10
SB LT	Lockwood Dr	300	6.4	0.7	5.3	7.9	10
SB TR	Lockwood Dr	300	4.3	0.5	3.8	5.3	10
WB LTR	Rand St	302	20.3	2.4	16.8	23.7	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	20.9	0.5	20.1	21.8	10
NB TR	Lockwood Dr	311	16.4	1.6	14.4	20.0	10
NEB LTR	Shreveport Blvd	316	24.6	2.8	20.2	29.4	10
SB L	Lockwood Dr	314	32.3	5.2	27.5	44.3	10
SB T	Lockwood Dr	314	1.5	0.5	0.8	2.1	10
SB TR	Lockwood Dr	314	1.2	0.4	0.4	1.7	10
SWB LTR	Shreveport Blvd	315	32.2	1.3	30.3	34.2	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	9.1	5.1	2.3	18.8	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	289	0.2	0.2	0.1	0.5	10
SB T	Lockwood Dr	289	0.2	0.1	0.1	0.5	10
SB TR	Lockwood Dr	289	0.2	0.7	0.0	2.1	10
WB LTR	Sudan St	534	9.6	1.9	6.7	12.3	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	37.1	7.9	17.4	43.0	10
EB TR	Weaver Rd	326	32.1	1.7	29.4	34.7	10
NB L	Lockwood Dr	320	35.6	6.1	25.8	43.1	10
NB T	Lockwood Dr	320	35.4	2.2	31.5	40.2	10
NB TR	Lockwood Dr	320	27.7	4.5	22.0	33.4	10
SB L	Lockwood Dr	557	31.1	6.5	24.9	46.7	10
SB T	Lockwood Dr	557	34.9	2.8	28.5	37.6	10
SB TR	Lockwood Dr	557	30.0	3.4	22.5	34.2	10
WB L	Weaver Rd	325	41.8	4.3	36.6	49.1	10
WB TR	Weaver Rd	325	41.7	4.0	36.7	49.3	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.4	0.0	0.4	0.5	10
EB LT	I-10 EBFR	268	8.3	0.5	7.5	9.0	10
EB T	I-10 EBFR	268	12.0	1.4	10.6	14.1	10
NB T	Lockwood Dr (NB)	264	31.4	2.7	27.8	34.9	10
NB TR	Lockwood Dr (NB)	264	27.3	2.9	22.4	31.3	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	11.4	1.2	9.0	13.4	10
NB LT	Lockwood Dr (NB)	270	12.5	7.8	6.9	30.8	10
NB T	Lockwood Dr (NB)	270	4.3	2.6	2.2	9.1	10

WB T	I-10 WBFR	276	45.3	11.5	33.7	71.4	10
WB TR	I-10 WBFR	276	37.0	30.0	17.6	115.6	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	6.1	3.3	2.9	13.4	10
EB T	Market St	262	1.0	1.5	0.0	5.0	10
NB LT	Lockwood Dr	499	5.7	0.6	4.7	6.5	10
NB TR	Lockwood Dr	499	5.8	1.0	4.6	8.0	10
WB T	Market St	266	35.1	3.3	31.6	40.3	10
WB TR	Market St	266	20.3	1.9	17.7	24.5	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	39.8	8.1	30.4	52.7	10
EB TR	I-10 EBFR	269	13.0	1.3	10.4	15.0	10
SB L	Lockwood Dr (SB)	267	14.7	1.9	11.5	17.0	10
SB LT	Lockwood Dr (SB)	267	2.6	1.8	1.2	7.7	10
SB T	Lockwood Dr (SB)	267	1.3	1.0	0.5	3.6	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	52.3	10.3	37.6	67.2	10
SB TR	Lockwood Dr (SB)	272	55.9	15.5	37.9	79.9	10
WB L	I-10 WBFR	273	3.2	0.3	2.7	3.7	10
WB LT	I-10 WBFR	273	2.9	0.2	2.6	3.3	10
WB T	I-10 WBFR	273	2.7	0.3	2.2	3.1	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	17.1	2.3	14.8	22.0	10
SB L	Lockwood Dr	515	13.0	6.2	5.9	24.0	10
SB T	Lockwood Dr	515	11.3	1.1	10.3	13.1	10
SB TR	Lockwood Dr	515	13.3	3.0	10.5	19.5	10
WB LT	Lyons Ave	279	12.4	0.5	11.7	12.9	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	33.4	3.9	25.8	39.8	10
EB TR	Market St	263	22.2	3.8	15.0	27.0	10
SB LT	Lockwood Dr (SB)	260	6.7	0.7	5.8	7.8	10
SB TR	Lockwood Dr (SB)	260	6.4	0.5	5.5	7.3	10
WB LT	Market St	262	5.0	1.2	2.5	6.8	10
WB T	Market St	262	3.0	1.0	2.1	5.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	3.9	0.9	3.2	5.9	10
NB L	Lockwood Dr (NB)	275	232.0	103.7	114.0	396.8	10
NB T	Lockwood Dr (NB)	275	16.2	12.7	7.6	44.3	10
NB TR	Lockwood Dr (NB)	275	10.7	4.4	6.5	19.1	10
WB TR	Lyons Ave	283	16.1	1.1	14.3	17.6	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	40.1	8.1	22.9	51.7	10
EB R	Bennington St	319	5.2	0.7	4.4	6.3	10

NB L	Lockwood Dr	314	5.4	0.6	4.5	6.2	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	317	3.7	0.7	3.0	4.7	10
SB TR	Lockwood Dr	317	2.8	0.3	2.5	3.3	10
WB LTR	Driveway	318	3.9	0.5	3.0	4.6	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	18.2	1.7	16.3	21.2	10
NB TR	Spur 5 NBFR	219	6.2	0.6	5.3	7.4	10
NEB L	Elgin St	216	10.8	1.9	8.4	13.5	10
NEB T	Elgin St	216	3.3	0.6	2.4	4.1	10
SWB T	Lockwood Dr	218	12.0	2.3	9.9	16.2	10
SWB TR	Lockwood Dr	218	9.2	0.7	8.1	10.7	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	24.3	1.7	21.9	26.7	10
EB T	Polk St	235	27.2	1.4	24.9	28.8	10
EB TR	Polk St	235	25.9	2.0	22.5	28.3	10
NB L	Lockwood Dr	229	31.1	3.5	25.6	36.7	10
NB T	Lockwood Dr	229	13.8	0.7	12.5	14.7	10
NB TR	Lockwood Dr	229	12.7	1.0	11.6	14.4	10
SB L	Lockwood Dr	232	70.5	15.6	53.9	107.9	10
SB T	Lockwood Dr	232	26.8	1.0	24.8	27.8	10
SB TR	Lockwood Dr	232	23.3	1.2	21.6	25.6	10
WB L	Polk St	234	22.0	2.7	16.8	27.0	10
WB T	Polk St	234	27.8	1.6	25.9	30.2	10
WB TR	Polk St	234	22.2	2.6	19.1	27.0	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	22.0	4.5	17.3	31.7	10
EB T	Leeland St	227	9.6	1.3	8.0	12.1	10
NB LT	Lockwood Dr	230	11.7	0.6	11.1	13.0	10
NB T	Lockwood Dr	230	12.0	0.7	11.1	13.2	10
NB TR	Lockwood Dr	230	9.0	0.6	8.3	10.1	10
WB T	Telephone Rd	231	36.5	1.4	34.9	39.6	10
WB TR	Telephone Rd	231	20.4	1.3	18.0	22.3	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	66.9	7.9	57.4	76.4	10
EB R	Richmond Ave	9	14.4	3.3	8.1	17.9	10
EB T	Richmond Ave	9	59.8	3.2	54.3	64.1	10
NB L	Buffalo Speedway	37	62.5	10.3	49.8	84.3	10
NB T	Buffalo Speedway	37	30.6	6.5	22.3	45.0	10
NB TR	Buffalo Speedway	37	53.5	11.4	38.7	79.3	10
SB L	Buffalo Speedway	36	60.2	8.4	50.8	77.8	10
SB T	Buffalo Speedway	36	35.0	1.9	32.2	38.3	10
SB TR	Buffalo Speedway	36	34.4	2.5	30.9	38.4	10
WB L	Richmond Ave	12	91.1	15.8	75.7	131.0	10
WB T	Richmond Ave	12	56.7	4.8	50.8	66.0	10
WB TR	Richmond Ave	12	57.8	5.0	51.4	68.2	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Richmond Ave	163	10.8	2.5	7.2	14.5	10
EB T	Richmond Ave	163	2.9	0.5	2.0	3.5	10
EB TR	Richmond Ave	163	2.3	0.5	1.7	3.4	10
NB LTR	Dunlavy St	57	104.4	48.4	50.7	189.2	10
SB LTR	Dunlavy St	56	232.1	42.0	152.0	298.7	10
WB L	Richmond Ave	165	12.7	4.7	5.2	18.8	10
WB T	Richmond Ave	165	5.6	1.5	3.7	7.9	10
WB TR	Richmond Ave	165	4.9	1.0	3.1	6.1	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	22.8	3.3	18.6	27.0	10
EB T	Richmond Ave	12	17.6	1.4	15.9	19.6	10
EB TR	Richmond Ave	12	16.4	1.2	14.5	17.9	10
NB L	Eastside St	40	85.1	12.7	61.6	105.8	10
NB TR	Eastside St	40	17.2	2.6	11.4	20.7	10
SB L	Eastside St	39	56.6	8.1	48.3	73.5	10
SB TR	Eastside St	39	21.1	4.2	14.4	26.1	10
WB L	Richmond Ave	54	10.2	2.7	5.8	14.0	10
WB T	Richmond Ave	54	7.5	1.2	6.0	9.3	10
WB TR	Richmond Ave	54	4.5	0.7	3.6	6.1	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	50.8	2.8	46.9	55.5	10
EB R	Richmond Ave	7	2.3	0.5	1.5	2.8	10
EB T	Richmond Ave	7	35.6	1.2	33.8	37.9	10
NB L	Edloe St	155	65.7	4.5	58.9	73.6	10
NB R	Edloe St	155	11.5	1.1	9.3	13.5	10
NB T	Edloe St	155	18.4	1.2	16.8	20.1	10
SB L	Edloe St	5	55.0	6.0	48.0	64.6	10
SB T	Edloe St	5	19.0	1.5	16.4	21.1	10
SB TR	Edloe St	5	17.6	1.4	15.5	19.3	10
WB L	Richmond Ave	9	86.7	4.1	80.7	92.0	10
WB T	Richmond Ave	9	66.9	2.0	62.0	69.1	10
WB TR	Richmond Ave	9	58.9	1.7	57.2	62.7	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	38.5	2.4	36.2	43.5	10
EB T	Richmond Ave	64	34.9	3.1	32.0	40.8	10
EB TR	Richmond Ave	64	33.1	2.4	30.4	38.8	10
NB TR	Greenbriar Dr	47	27.3	2.0	23.0	29.4	10
SB L	Greenbriar Dr	46	60.7	17.6	37.7	85.2	10
SB R	Greenbriar Dr	46	23.1	15.4	6.5	44.5	10
SB T	Greenbriar Dr	46	74.4	22.2	48.7	105.3	10
WB L	Richmond Ave	160	31.0	2.4	28.3	34.3	10
WB T	Richmond Ave	160	15.3	1.3	12.4	17.6	10
WB TR	Richmond Ave	160	15.9	1.2	14.7	18.3	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	9.4	1.3	7.8	12.1	10
EB T	Richmond Ave	20	12.9	1.0	11.3	14.6	10
EB TR	Richmond Ave	20	11.8	1.0	10.8	13.6	10
NB LTR	Hazard St	51	262.2	27.2	225.3	303.5	10
SB LTR	Hazard St	50	383.4	172.1	224.7	705.7	10
WB L	Richmond Ave	162	10.6	1.7	7.5	13.4	10

WB T	Richmond Ave	162	4.1	0.7	3.0	5.2	10
WB TR	Richmond Ave	162	4.2	0.7	2.7	5.4	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	119.2	35.2	68.8	176.0	10
EB T	Richmond Ave	54	38.3	4.0	32.7	43.8	10
EB TR	Richmond Ave	54	33.2	3.8	27.6	39.8	10
NB L	Kirby Dr	158	80.9	15.4	56.8	103.9	10
NB T	Kirby Dr	158	27.2	1.8	24.7	29.8	10
NB TR	Kirby Dr	158	26.7	1.5	24.6	29.0	10
SB L	Kirby Dr	44	64.7	8.1	54.5	78.5	10
SB T	Kirby Dr	44	34.3	1.0	33.2	36.1	10
SB TR	Kirby Dr	44	39.1	2.0	36.1	42.2	10
WB L	Richmond Ave	64	52.6	6.8	44.6	66.5	10
WB T	Richmond Ave	64	10.3	1.7	7.8	13.9	10
WB TR	Richmond Ave	64	9.1	2.6	6.9	15.9	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	10.2	2.5	7.0	15.1	10
EB T	Richmond Ave	165	1.6	0.3	1.3	2.3	10
EB TR	Richmond Ave	165	1.6	0.5	1.1	2.7	10
NB LTR	Mandell St	59	42.2	4.6	35.4	48.8	10
SB LTR	Mandell St	58	45.8	6.8	34.9	58.8	10
WB L	Richmond Ave	23	7.4	2.4	4.2	12.0	10
WB T	Richmond Ave	23	1.1	0.4	0.6	1.6	10
WB TR	Richmond Ave	23	0.5	0.2	0.3	0.8	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	31.2	2.4	28.1	35.6	10
EB T	Richmond Ave	23	34.4	0.8	33.2	35.7	10
EB TR	Richmond Ave	23	34.6	1.7	31.6	37.2	10
NB L	Montrose Blvd	61	119.6	10.3	103.4	130.9	10
NB T	Montrose Blvd	61	99.1	6.7	86.5	110.3	10
NB TR	Montrose Blvd	61	99.3	5.7	91.1	110.1	10
SB L	Montrose Blvd	60	119.1	19.7	94.3	158.8	10
SB T	Montrose Blvd	60	60.9	15.9	38.5	85.1	10
SB TR	Montrose Blvd	60	62.0	12.5	40.6	82.1	10
WB L	Richmond Ave	166	78.1	19.8	59.0	121.0	10
WB T	Richmond Ave	166	42.4	4.2	36.8	52.6	10
WB TR	Richmond Ave	166	39.9	3.5	36.0	45.7	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	76.9	3.0	71.1	81.2	10
EB T	Richmond Ave	160	1.4	0.4	1.0	2.2	10
EB TR	Richmond Ave	160	1.1	0.5	0.5	2.2	10
NB T	Shepherd Dr	49	42.2	2.5	38.4	46.7	10
NB TR	Shepherd Dr	49	42.6	2.3	40.1	46.8	10
SB T	Shepherd Dr	48	41.9	2.1	38.8	44.9	10
SB TR	Shepherd Dr	48	41.7	2.3	38.0	44.6	10
WB L	Richmond Ave	20	45.1	6.7	36.1	58.2	10
WB T	Richmond Ave	20	12.5	0.6	11.3	13.3	10
WB TR	Richmond Ave	20	12.2	1.0	10.6	14.4	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	1.7	0.6	0.8	2.5	10
EB T	Richmond Ave	167	1.1	1.4	0.0	4.3	10
NB R	US 59 NBFR	26	5.7	1.9	3.2	9.2	10
NEB LT	US 59 NBFR	69	33.4	1.9	29.7	36.8	10
NEB R	US 59 NBFR	69	3.5	1.2	1.9	5.3	10
NEB TR	US 59 NBFR	69	33.5	5.7	27.3	42.0	10
WB T	Richmond Ave	26	92.4	10.2	75.4	104.0	10
WB TR	Richmond Ave	26	46.7	4.2	37.3	51.6	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	36.8	4.8	29.3	44.7	10
EB TR	Richmond Ave	166	38.8	6.5	28.8	47.1	10
SWB LT	US 59 SBFR	65	47.4	8.6	35.0	63.8	10
SWB R	US 59 SBFR	65	8.3	1.1	7.1	10.8	10
SWB T	US 59 SBFR	65	40.9	8.3	31.2	58.0	10
WB L	Richmond Ave	167	1.5	0.6	1.0	3.1	10
WB T	Richmond Ave	167	0.0	0.1	0.0	0.1	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	15.0	3.1	10.9	20.4	10
EB T	Richmond Ave	162	3.5	0.4	2.9	4.1	10
EB TR	Richmond Ave	162	2.9	0.4	2.5	3.5	10
NB LTR	Woodhead St	53	198.3	78.6	78.8	317.3	10
SB LTR	Woodhead St	52	33.0	2.6	29.7	38.8	10
WB L	Richmond Ave	163	25.6	2.4	20.9	27.4	10
WB T	Richmond Ave	163	5.5	0.5	4.8	6.8	10
WB TR	Richmond Ave	163	5.2	0.6	4.3	6.3	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	23.6	0.8	22.8	25.5	10
NEB L	Main St	168	143.4	45.6	70.0	217.4	10
NEB R	Main St	168	12.9	4.6	4.0	19.2	10
NWB R	Wheeler Ave	169	15.1	3.0	11.7	20.4	10
NWB T	Wheeler Ave	169	53.9	6.6	43.1	60.2	10
SB R	Main St	70	27.3	3.8	17.9	30.9	10
SEB R	Richmond Ave	26	1.1	0.3	0.7	1.7	10
SEB T	Richmond Ave	26	22.1	4.8	14.2	29.2	10
SWB T	LRT Line	674	0.1	0.1	0.0	0.3	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	195.6	14.0	167.5	211.9	10
EB T	Westpark Dr	140	120.5	10.1	93.1	128.7	10
EB TR	Westpark Dr	140	106.0	6.0	92.3	112.7	10
NB L	S Rice Ave	138	118.3	25.6	90.9	177.3	10
NB T	S Rice Ave	138	64.5	19.6	45.0	105.8	10
NB TR	S Rice Ave	138	79.8	23.2	54.1	127.1	10
SB L	S Rice Ave	137	97.6	20.6	75.4	126.7	10
SB R	S Rice Ave	137	5.7	1.4	2.6	7.2	10
SB T	S Rice Ave	137	38.9	2.5	36.5	45.2	10
WB L	Westpark Dr	790	37.0	8.4	28.9	54.7	10
WB T	Westpark Dr	790	18.4	1.7	15.9	19.9	10
WB TR	Westpark Dr	790	27.4	7.2	17.9	39.4	10

SAN JACINTO ST & WHEELER AVE — NODE: 133

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	20.9	2.5	17.5	25.9	10
NEB R	San Jacinto St	173	3.9	1.0	2.8	5.8	10
NEB T	San Jacinto St	173	20.4	2.4	18.4	26.1	10
NWB T	Wheeler Ave	86	62.4	16.6	40.4	88.3	10
NWB TR	Wheeler Ave	86	14.0	4.0	9.0	20.0	10
SEB LT	Wheeler Ave	172	12.1	2.9	8.7	18.5	10
SEB T	Wheeler Ave	172	10.6	3.7	6.1	19.1	10

TIDWELL RD & EDELL ST — NODE: 689

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	590	15.2	2.7	11.4	19.7	10
SB LTR	Edell St	589	18.0	4.7	12.8	30.7	10
WB LT	Tidwell Rd	591	0.1	0.1	0.0	0.3	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD — NODE: 677

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	341	11.2	6.8	3.7	27.5	10
EB T	Tidwell Rd	341	1.7	0.2	1.3	2.1	10
EB TR	Tidwell Rd	341	3.6	0.5	2.7	4.2	10
NB LTR	Friendly Rd	585	250.2	84.4	108.1	379.3	10
SB LTR	Friendly Rd	584	360.0	41.2	299.7	435.5	10
WB L	Tidwell Rd	338	7.9	2.9	4.9	13.3	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.1	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD — NODE: 180

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	21.6	3.8	15.8	26.2	10
EB T	Tidwell Rd	338	8.1	0.9	6.9	9.2	10
EB TR	Tidwell Rd	338	7.3	0.5	6.6	8.6	10
NB L	Hirsch Rd	336	47.7	7.5	37.6	60.3	10
NB R	Hirsch Rd	336	24.8	3.9	18.6	30.6	10
NB T	Hirsch Rd	336	30.3	11.3	19.9	61.1	10
SB L	Hirsch Rd	335	34.2	3.7	30.0	40.5	10
SB R	Hirsch Rd	335	27.4	1.6	25.5	29.6	10
SB T	Hirsch Rd	335	24.8	1.8	21.8	27.6	10
WB L	Tidwell Rd	334	13.8	3.9	7.5	19.0	10
WB T	Tidwell Rd	334	2.8	0.7	1.6	3.8	10
WB TR	Tidwell Rd	334	2.6	0.4	2.2	3.3	10

TIDWELL RD & I-69 NBFR — NODE: 181

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	11.8	2.1	8.7	16.0	10
EB LT	Tidwell Rd	342	15.2	1.1	14.2	17.6	10
EB T	Tidwell Rd	342	20.1	1.0	18.4	21.8	10
NB L	I-69 NBFR	340	19.1	1.4	17.1	20.8	10
NB LT	I-69 NBFR	340	19.2	1.3	17.1	21.9	10
NB R	I-69 NBFR	340	4.8	0.4	4.0	5.4	10
NB T	I-69 NBFR	340	17.3	1.7	15.5	20.5	10
NB TR	I-69 NBFR	340	20.1	1.6	16.8	22.0	10
WB T	Tidwell Rd	341	16.9	1.0	15.6	18.8	10
WB TR	Tidwell Rd	341	12.5	0.9	11.2	14.2	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.6	0.2	0.3	1.0	10
EB T	Tidwell Rd	591	16.9	0.6	15.8	17.6	10
SB L	I-69 SBFR	649	19.9	1.6	16.3	21.6	10
SB LT	I-69 SBFR	649	19.0	1.3	16.1	20.3	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.1	10
SB T	I-69 SBFR	649	17.2	1.1	15.3	18.7	10
WB L	Tidwell Rd	342	23.5	1.5	20.7	25.9	10
WB LT	Tidwell Rd	342	15.4	0.8	14.2	17.1	10
WB T	Tidwell Rd	342	10.9	0.5	10.2	12.0	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	45.5	4.5	36.7	51.9	10
EB T	Tidwell Rd	349	22.1	1.4	19.9	24.3	10
EB TR	Tidwell Rd	349	20.8	0.8	19.6	22.4	10
NB L	Jensen Dr	347	51.4	13.1	34.3	73.9	10
NB T	Jensen Dr	347	32.3	1.9	29.9	35.8	10
NB TR	Jensen Dr	347	34.5	2.0	31.7	37.7	10
SB L	Jensen Dr	346	46.1	3.6	39.8	52.3	10
SB T	Jensen Dr	346	25.0	1.8	21.6	27.3	10
SB TR	Jensen Dr	346	18.6	1.2	16.9	21.2	10
WB L	Tidwell Rd	348	33.3	2.9	28.9	36.6	10
WB T	Tidwell Rd	348	13.5	1.2	11.8	15.1	10
WB TR	Tidwell Rd	348	13.5	1.4	11.5	16.5	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Tidwell Rd	334	10.9	1.3	8.7	12.5	10
EB TR	Tidwell Rd	334	11.3	1.4	8.8	13.7	10
NB L	Lockwood Dr	332	41.2	4.2	35.5	50.7	10
NB T	Lockwood Dr	332	39.2	9.3	21.1	55.5	10
NB TR	Lockwood Dr	332	8.6	1.8	5.2	11.9	10
SB L	Lockwood Dr	331	39.1	11.7	21.1	49.9	10
SB T	Lockwood Dr	331	35.1	7.8	24.7	47.4	10
SB TR	Lockwood Dr	331	38.4	17.2	20.7	78.9	10
WB L	Tidwell Rd	333	32.6	1.3	29.9	34.6	10
WB T	Tidwell Rd	333	12.2	1.3	10.1	14.2	10
WB TR	Tidwell Rd	333	12.0	1.2	10.3	13.4	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	6.1	0.3	5.9	6.3	2

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	18.1	6.4	12.5	34.0	10
EB TR	Westpark Dr	116	6.4	1.1	5.4	8.6	10
NB R	14th St	118	11.9	1.5	8.8	14.0	10
WB L	Westpark Dr	616	135.1	49.8	76.6	189.4	4
WB T	Westpark Dr	616	58.6	26.0	18.9	95.1	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	788	10.3	9.2	0.1	28.0	10
EB TR	Westpark Dr	788	7.5	6.7	0.2	21.2	10

NB L	Alder Dr	787	51.2	14.7	34.3	79.6	10
NB R	Alder Dr	787	31.0	21.5	12.5	75.8	10
WB LT	Westpark Dr	133	4.4	0.6	3.2	5.6	10
WB T	Westpark Dr	133	0.6	0.3	0.1	1.0	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	158.2	22.4	122.4	188.2	10
EB T	Westpark Dr	133	104.5	22.7	67.9	126.2	10
EB TR	Westpark Dr	133	119.0	26.3	74.1	146.8	10
NB T	Chimney Rock Rd	135	47.3	5.5	42.4	60.2	10
NB TR	Chimney Rock Rd	135	53.7	6.5	45.8	66.2	10
SB L	Chimney Rock Rd	134	109.6	12.0	94.5	133.1	10
SB T	Chimney Rock Rd	134	15.5	1.1	13.8	16.9	10
SB TR	Chimney Rock Rd	134	14.7	1.2	13.3	16.6	10
WB L	Westpark Dr	136	47.5	7.4	37.5	61.1	10
WB T	Westpark Dr	136	17.6	2.0	14.8	20.3	10
WB TR	Westpark Dr	136	17.0	3.6	10.8	23.1	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	72.8	3.5	67.5	77.8	10
EB T	Westpark Dr	152	10.7	1.2	8.5	12.0	10
EB TR	Westpark Dr	152	10.7	0.8	9.8	12.3	10
NB R	Edloe St	29	6.9	0.8	5.6	8.3	10
NB T	Edloe St	29	39.0	0.8	37.2	39.9	10
SB LT	Edloe St	153	41.4	3.5	33.5	44.6	10
SB T	Edloe St	153	26.3	2.6	22.4	30.7	10
SB TR	Edloe St	153	17.8	2.8	14.8	23.4	10
WB LT	Westpark Dr	154	42.4	5.4	36.0	49.8	10
WB TR	Westpark Dr	154	28.6	1.7	26.4	32.1	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	280.7	11.1	257.6	299.1	10
EB T	Westpark Dr	114	267.2	6.8	252.1	275.3	10
EB TR	Westpark Dr	114	329.2	13.3	307.5	352.8	10
NB L	Fondren Rd	110	32.0	4.4	24.7	37.5	10
NB T	Fondren Rd	110	8.9	1.1	7.1	10.3	10
NB TR	Fondren Rd	110	12.0	0.6	11.4	13.3	10
SB L	Fondren Rd	112	243.4	60.3	104.1	316.6	10
SB T	Fondren Rd	112	44.3	1.9	42.6	47.8	10
SB TR	Fondren Rd	112	45.6	2.8	42.1	52.6	10
WB L	Westpark Dr	113	293.0	83.0	150.5	387.6	10
WB T	Westpark Dr	113	61.4	16.7	43.5	86.7	10
WB TR	Westpark Dr	113	69.1	14.6	51.8	90.6	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	111.7	22.4	76.1	151.3	10
EB T	Westpark Dr	113	46.4	5.2	40.7	58.6	10
EB TR	Westpark Dr	113	64.2	8.4	51.7	82.7	10
NB L	Hillcroft Ave	3	370.0	37.5	312.8	437.3	10
NB T	Hillcroft Ave	3	64.2	8.2	52.8	74.8	10
NB TR	Hillcroft Ave	3	67.1	6.6	56.1	73.6	10
SB L	Hillcroft Ave	115	343.2	78.2	255.5	478.0	10
SB T	Hillcroft Ave	115	174.1	53.4	114.4	253.5	10
SB TR	Hillcroft Ave	115	174.8	43.6	123.1	240.7	10

WB L	Westpark Dr	116	81.3	7.0	72.4	93.6	10
WB T	Westpark Dr	116	81.5	7.0	73.0	92.1	10
WB TR	Westpark Dr	116	148.9	12.9	128.1	168.4	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	25.8	1.5	24.3	28.2	10
EB T	Westpark Dr	143	11.1	1.2	9.5	12.8	10
NB L	I-610 NBFR	145	48.3	2.9	43.7	53.6	10
NB LT	I-610 NBFR	145	48.9	1.9	46.2	51.7	10
NB TR	I-610 NBFR	145	47.6	2.1	44.4	50.7	10
WB T	Westpark Dr	792	44.4	3.6	39.8	52.4	10
WB TR	Westpark Dr	792	41.1	4.6	35.9	50.5	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	8.6	1.4	7.1	11.5	10
EB T	Westpark Dr	629	200.8	13.6	185.2	219.9	10
SB L	I-610 SBFR	141	51.6	2.3	48.7	56.0	10
SB T	I-610 SBFR	141	45.7	3.3	42.7	54.1	10
WB L	Westpark Dr	143	29.1	1.4	26.7	31.4	10
WB T	Westpark Dr	143	13.9	0.9	12.6	15.1	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	18.4	3.9	13.7	24.5	10
EB LT	Westpark Dr	123	22.8	3.2	17.8	29.1	10
EB T	Westpark Dr	123	30.9	3.9	26.1	39.6	10
NEB L	I-69 NBFR	126	24.0	2.0	19.9	25.9	10
NEB R	I-69 NBFR	126	11.5	1.1	9.2	13.9	10
NEB T	I-69 NBFR	126	19.1	0.8	17.7	20.5	10
WB R	Westpark Dr	127	3.2	1.5	0.8	5.6	10
WB T	Westpark Dr	127	22.7	0.9	21.3	24.2	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	616	42.8	8.7	32.2	57.8	10
SWB L	I-69 SBFR	121	47.8	47.5	23.4	174.7	10
SWB LT	I-69 SBFR	121	34.9	28.8	19.2	113.5	10
SWB R	I-69 SBFR	121	22.2	19.7	1.7	52.0	10
SWB T	I-69 SBFR	121	19.3	1.7	16.4	21.6	10
WB L	Westpark Dr	123	37.8	3.2	30.3	41.0	10
WB T	Westpark Dr	123	10.9	1.2	9.1	12.3	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	792	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	792	0.0	0.1	0.0	0.2	10
NB LR	Loop Central Dr	791	19.9	2.1	17.4	24.4	10
WB L	Westpark Dr	146	11.5	0.7	10.5	12.7	10
WB T	Westpark Dr	146	0.0	0.0	0.0	0.0	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	62.5	5.8	56.9	74.7	10
EB T	Westpark Dr	146	19.2	1.3	16.8	21.1	10
EB TR	Westpark Dr	146	18.8	2.1	16.0	22.2	10

NB L	Newcastle Dr	148	244.0	28.6	213.7	307.2	10
NB T	Newcastle Dr	148	92.4	11.7	74.7	110.9	10
NB TR	Newcastle Dr	148	74.1	13.8	50.8	90.4	10
SB LT	Newcastle Dr	147	50.8	3.9	44.1	55.1	10
SB TR	Newcastle Dr	147	26.9	3.3	21.4	32.6	10
WB L	Westpark Dr	149	124.2	52.8	62.3	240.8	10
WB T	Westpark Dr	149	27.8	1.9	25.6	31.4	10
WB TR	Westpark Dr	149	28.4	2.4	25.5	32.9	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	8.3	0.5	7.8	8.9	10
EB TR	Westpark Dr	127	9.3	0.6	8.5	10.7	10
NB LT	Rampart St	129	198.2	24.4	161.8	237.2	10
NB TR	Rampart St	129	42.9	11.8	27.5	61.9	10
SB LTR	Rampart St	128	31.6	2.2	29.4	34.9	10
WB LT	Westpark Dr	130	6.5	1.1	5.3	8.6	10
WB TR	Westpark Dr	130	5.0	1.0	3.8	7.1	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	46.4	12.2	21.7	65.5	10
EB TR	Westpark Dr	136	36.4	11.5	16.9	59.4	10
NB LR	Royalton St	384	345.8	45.1	253.2	396.7	10
WB L	Westpark Dr	140	21.3	3.4	17.2	26.6	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.0	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	790	24.4	3.7	16.9	31.8	10
EB TR	Westpark Dr	790	17.0	3.0	11.8	22.0	10
NB LR	Uptown Transit Ctr	789	42.5	3.5	38.7	49.5	10
WB L	Westpark Dr	629	58.8	16.3	30.2	84.3	10
WB T	Westpark Dr	629	3.0	0.9	2.1	4.7	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	68.7	14.5	55.2	89.4	10
EB T	Westpark Dr	149	36.6	10.0	26.3	53.1	10
EB TR	Westpark Dr	149	31.5	6.8	24.9	42.8	10
NB L	Weslayan St	151	80.8	12.4	70.2	113.3	10
NB T	Weslayan St	151	43.3	11.8	34.3	74.8	10
NB TR	Weslayan St	151	30.7	5.5	27.5	45.8	10
SB L	Weslayan St	150	65.8	5.9	58.4	77.0	10
SB T	Weslayan St	150	40.7	2.2	37.7	44.5	10
SB TR	Weslayan St	150	48.7	2.3	45.3	53.0	10
WB L	Westpark Dr	152	85.2	8.5	70.1	97.9	10
WB T	Westpark Dr	152	34.7	2.6	30.2	37.9	10
WB TR	Westpark Dr	152	35.0	2.8	30.9	39.2	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	54.5	4.6	44.3	62.5	10
EB T	Westpark Dr	130	28.8	1.2	25.7	29.9	10
EB TR	Westpark Dr	130	27.7	1.2	25.4	29.1	10
NB L	Renwick Dr	132	68.7	11.1	58.0	88.2	10
NB T	Renwick Dr	132	40.6	2.7	37.5	44.5	10
NB TR	Renwick Dr	132	38.5	1.7	34.8	41.1	10

SB L	Fountain View Dr	131	55.2	3.7	49.1	61.0	10
SB T	Fountain View Dr	131	30.3	1.4	28.3	32.7	10
SB TR	Fountain View Dr	131	29.2	1.2	26.3	30.6	10
WB L	Westpark Dr	788	95.6	7.0	80.5	102.0	10
WB T	Westpark Dr	788	17.9	3.2	14.1	22.2	10
WB TR	Westpark Dr	788	15.8	2.2	13.1	19.4	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	[Unnamed Street]	707	10.2	2.3	7.5	14.1	10
NEB TR	[Unnamed Street]	707	14.2	4.3	8.0	19.5	10
NWB T	Wheeler Ave	423	12.0	2.0	9.8	16.5	10
NWB TR	Wheeler Ave	423	8.4	1.4	6.4	10.4	10
SEB L	Wheeler Ave	421	7.8	2.2	4.5	10.8	10
SEB T	Wheeler Ave	421	13.1	1.8	9.9	15.5	10
SWB LR	Hutchins St	422	6.4	1.1	4.5	8.7	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	29.9	10.4	17.2	44.9	10
135	Almeda Rd & Wheeler Ave	Actuated	8.7	0.6	8.0	9.5	10
292	Cleburne St & Ennis St	Actuated	2.6	0.5	2.2	3.5	10
176	Crosstimbers St & Lockwood Dr	Actuated	10.2	0.4	9.7	11.3	10
144	Cullen Blvd & Elgin St	Actuated	14.1	0.5	13.4	15.3	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	134.8	1.7	132.0	136.7	10
249	Elgin St & Ennis St	Actuated	4.7	0.3	4.3	5.2	10
143	Elgin St & Scott St	Actuated	18.7	0.7	17.7	19.9	10
146	Elgin St & Spur 5 SBFR	Actuated	5.3	0.2	5.2	5.7	10
145	Elgin St & UH Entrance	Actuated	3.4	0.3	3.1	3.8	10
136	Emancipation Ave & Wheeler Ave	Actuated	3.9	0.3	3.5	4.4	10
306	Ennis St & Holman St	Actuated	1.8	0.1	1.6	2.0	10
266	Ennis St & Wheeler Ave	Actuated	1.2	0.1	1.0	1.4	10
149	Ernestine St & Leeland St	Actuated	3.5	0.2	3.2	3.8	10
452	Ernestine St & Munger St	Stop	0.4	0.0	0.3	0.4	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	12.6	1.0	11.2	14.3	10
132	Fannin St & Wheeler Ave	Actuated	8.2	0.5	7.8	9.5	10
116	I-69 Express Lanes & Edloe St	Actuated	4.5	0.9	4.0	6.8	10
705	Jensen Dr & Turner Dr	Stop	0.0	0.0	0.0	0.1	10
173	Kelley St & Lockwood Dr	Actuated	12.1	0.4	11.6	12.9	10
134	LaBranch St & Wheeler Ave	Actuated	1.6	0.2	1.3	2.0	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	4.7	0.3	4.3	5.1	10
156	Lockwood Dr & Armour Dr	Actuated	8.9	0.3	8.5	9.4	10
154	Lockwood Dr & Canal St	Actuated	10.7	0.4	10.3	11.6	10
169	Lockwood Dr & Cavalcade St	Actuated	9.4	0.4	8.5	9.9	10
157	Lockwood Dr & Clinton Dr	Actuated	9.3	0.4	8.8	9.8	10
167	Lockwood Dr & Collingsworth St	Actuated	12.6	3.0	10.0	17.9	10
168	Lockwood Dr & Crane St	Actuated	4.8	0.3	4.2	5.3	10
623	Lockwood Dr & Denmark St	Stop	0.5	0.0	0.4	0.6	10
659	Lockwood Dr & Firnat St	Stop	0.6	0.1	0.4	0.7	10
513	Lockwood Dr & Marron Park Way	Actuated	16.3	0.5	15.5	17.1	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	22.0	1.9	19.3	25.2	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	5.1	0.7	3.4	5.9	10
534	Lockwood Dr & Hershe St	Stop	0.1	0.0	0.1	0.2	10
171	Lockwood Dr & I-610 EBFR	Pretimed	17.6	4.1	13.0	24.0	10
172	Lockwood Dr & I-610 WBFR	Pretimed	10.5	0.7	9.3	11.4	10
641	Lockwood Dr & Keeland St	Stop	0.1	0.0	0.0	0.1	10
152	Lockwood Dr & McKinney St	Actuated	3.9	0.1	3.7	4.1	10
166	Lockwood Dr & Mulvey St	Actuated	0.7	0.1	0.6	0.9	10
453	Lockwood Dr & Munger St	Stop	0.5	0.0	0.4	0.5	10
155	Lockwood Dr & Navigation Blvd	Actuated	18.9	1.9	16.9	21.8	10
567	Lockwood Dr & Nichols St	Stop	0.4	0.1	0.3	0.5	10
604	Lockwood Dr & Pardee St	Stop	1.0	0.6	0.6	2.1	10
170	Lockwood Dr & Rand St	Actuated	3.7	0.2	3.4	4.1	10
174	Lockwood Dr & Shreveport Blvd	Actuated	5.7	0.3	5.3	6.1	10
576	Lockwood Dr & Sudan St	Stop	0.2	0.0	0.1	0.3	10
177	Lockwood Dr & Weaver Rd	Actuated	12.4	1.7	10.8	15.9	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	9.2	1.1	8.2	11.8	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	4.2	0.2	3.9	4.5	10

159	Lockwood Dr (NB) & Market St	Actuated	3.5	0.6	2.9	4.6	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	9.9	1.4	8.2	12.1	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	8.8	0.9	7.1	10.0	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	4.8	0.7	4.0	6.3	10
158	Lockwood Dr (SB) & Market St	Actuated	2.5	0.3	2.1	3.1	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	4.0	1.4	2.5	6.0	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	1.5	0.1	1.3	1.7	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	6.2	0.5	5.5	6.7	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	15.2	0.4	14.6	15.9	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	5.7	0.3	5.2	6.1	10
119	Richmond Ave & Buffalo Speedway	Actuated	65.8	4.2	59.5	72.6	10
126	Richmond Ave & Dunlavy St	Actuated	44.2	3.5	39.9	48.8	10
120	Richmond Ave & Eastside St	Actuated	18.7	7.1	10.2	32.4	10
118	Richmond Ave & Edloe St	Actuated	44.8	2.9	42.4	51.8	10
122	Richmond Ave & Greenbriar Dr	Actuated	15.8	1.0	14.6	17.9	10
124	Richmond Ave & Hazard St	Actuated	58.7	4.1	53.2	67.2	10
121	Richmond Ave & Kirby Dr	Actuated	125.3	6.0	113.5	132.3	10
127	Richmond Ave & Mandell St	Actuated	31.1	1.5	28.7	33.4	10
128	Richmond Ave & Montrose Blvd	Actuated	68.6	7.4	55.4	80.1	10
123	Richmond Ave & Shepherd Dr	Actuated	11.9	0.5	11.1	12.5	10
130	Richmond Ave & US 59 NBFR	Actuated	11.2	3.7	8.7	21.5	10
129	Richmond Ave & US 59 SBFR	Actuated	40.9	2.4	37.4	46.1	10
125	Richmond Ave & Woodhead St	Actuated	21.9	4.6	12.7	28.0	10
131	Richmond Ave, Main St & Wheeler Ave	Actuated	14.1	1.2	12.4	16.6	10
110	S Rice Ave & Westpark Dr	Actuated	80.9	11.3	70.7	109.1	10
133	San Jacinto St & Wheeler Ave	Actuated	13.8	0.6	12.6	14.9	10
689	Tidwell Rd & Edell St	Stop	0.5	0.1	0.3	0.6	10
677	Tidwell Rd & Friendly Rd	Stop	11.2	1.5	8.6	13.3	10
180	Tidwell Rd & Hirsch Rd	Actuated	7.2	0.4	6.8	8.1	10
181	Tidwell Rd & I-69 NBFR	Pretimed	16.0	0.6	15.4	16.9	10
182	Tidwell Rd & I-69 SBFR	Pretimed	12.3	0.5	11.7	13.1	10
183	Tidwell Rd & Jensen Dr	Actuated	21.3	1.0	19.9	22.8	10
179	Tidwell Rd & Lockwood Dr	Actuated	13.7	1.7	12.2	17.6	10
690	Turner Dr & Edell St	Stop	0.0	0.0	0.0	0.0	10
104	Westpark Dr & 14th St	Actuated	29.0	7.5	17.9	41.1	10
360	Westpark Dr & Alder Dr	Stop	4.9	1.2	2.9	6.4	10
109	Westpark Dr & Chimney Rock Rd	Actuated	33.3	1.1	32.1	35.5	10
115	Westpark Dr & Edloe St	Actuated	21.7	1.1	20.5	23.3	10
102	Westpark Dr & Fondren Rd	Actuated	232.1	20.9	195.8	251.6	10
103	Westpark Dr & Hillcroft Ave	Actuated	166.3	11.4	149.0	188.6	10
112	Westpark Dr & I-610 NBFR	Actuated	70.7	9.3	60.6	90.8	10
111	Westpark Dr & I-610 SBFR	Actuated	22.8	2.0	20.0	26.1	10
106	Westpark Dr & I-69 NBFR	Pretimed	16.5	1.3	13.2	18.4	10
105	Westpark Dr & I-69 SBFR	Pretimed	22.5	3.2	17.8	28.4	10
394	Westpark Dr & Loop Central Dr	Stop	15.2	2.6	12.7	22.2	10
113	Westpark Dr & Newcastle Dr	Actuated	29.3	1.6	27.6	32.6	10
107	Westpark Dr & Rampart St	Actuated	7.3	0.8	6.4	8.6	10
309	Westpark Dr & Royalton St	Stop	16.4	0.3	15.8	16.8	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	33.2	9.3	19.7	54.8	10
114	Westpark Dr & Weslayan St	Actuated	63.2	10.1	54.2	86.7	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	26.3	1.3	24.2	27.6	10
367	Wheeler Ave & Hutchins St	Stop	24.0	1.7	22.2	26.4	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Stop	96.0	36.4	53.6	147.0	10
135	Almeda Rd & Wheeler Ave	Actuated	20.0	1.4	18.4	22.0	10
292	Cleburne St & Ennis St	Actuated	11.5	2.2	9.8	15.8	10
176	Crosstimbers St & Lockwood Dr	Actuated	23.1	0.7	22.0	24.6	10
144	Cullen Blvd & Elgin St	Actuated	32.2	0.7	31.2	33.7	10
101	EB Westpark Tollway FR & Fondren Rd	Actuated	173.8	4.3	167.3	180.0	10
709	Edell St & Turner Dr	Stop	1.3		1.3	1.3	1
249	Elgin St & Ennis St	Actuated	17.5	0.6	16.5	18.7	10
143	Elgin St & Scott St	Actuated	30.3	0.7	29.1	31.7	10
146	Elgin St & Spur 5 SBFR	Actuated	12.4	0.4	11.8	13.0	10
145	Elgin St & UH Entrance	Actuated	10.9	0.8	10.1	12.1	10
136	Emancipation Ave & Wheeler Ave	Actuated	13.5	0.7	12.5	14.6	10
306	Ennis St & Holman St	Actuated	11.5	0.4	11.0	12.2	10
266	Ennis St & Wheeler Ave	Actuated	6.1	0.4	5.7	6.8	10
149	Ernestine St & Leeland St	Actuated	10.2	0.6	9.7	11.2	10
452	Ernestine St & Munger St	Stop	1.3	0.1	1.2	1.4	10
148	Ernestine St, Lockwood Dr & I-45 NBFR	Actuated	15.9	1.0	14.8	17.7	10
132	Fannin St & Wheeler Ave	Actuated	19.8	0.9	18.9	22.1	10
116	I-69 Express Lanes & Edloe St	Actuated	10.4	2.0	9.1	15.5	10
705	Jensen Dr & Turner Dr	Stop	0.2	0.1	0.1	0.2	10
173	Kelley St & Lockwood Dr	Actuated	23.6	0.5	22.8	24.3	10
134	LaBranch St & Wheeler Ave	Actuated	5.7	0.5	5.0	6.7	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	16.7	0.6	16.0	17.5	10
156	Lockwood Dr & Armour Dr	Actuated	23.2	0.6	22.1	24.0	10
154	Lockwood Dr & Canal St	Actuated	20.1	0.7	19.3	21.6	10
169	Lockwood Dr & Cavalcade St	Actuated	17.1	0.6	15.7	17.9	10
157	Lockwood Dr & Clinton Dr	Actuated	20.5	0.7	19.6	21.8	10
167	Lockwood Dr & Collingsworth St	Actuated	24.9	5.5	19.8	35.3	10
168	Lockwood Dr & Crane St	Actuated	11.3	0.7	10.0	12.2	10
623	Lockwood Dr & Denmark St	Stop	2.0	0.2	1.8	2.4	10
659	Lockwood Dr & Firnat St	Stop	2.9	0.5	2.2	3.7	10
513	Lockwood Dr & Marron Park Way	Actuated	25.0	0.8	24.0	25.9	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	36.0	2.9	31.9	41.1	10
514	Lockwood Dr & Harvey Wilson Dr	Stop	14.3	2.1	9.8	16.6	10
534	Lockwood Dr & Hershe St	Stop	0.4	0.1	0.3	0.5	10
171	Lockwood Dr & I-610 EBFR	Pretimed	33.4	7.4	25.6	45.2	10
172	Lockwood Dr & I-610 WBFR	Pretimed	18.8	1.1	17.3	20.0	10
641	Lockwood Dr & Keeland St	Stop	0.3	0.1	0.2	0.4	10
152	Lockwood Dr & McKinney St	Actuated	9.4	0.3	8.9	9.8	10
166	Lockwood Dr & Mulvey St	Actuated	2.0	0.2	1.7	2.5	10
453	Lockwood Dr & Munger St	Stop	1.6	0.2	1.3	1.8	10
155	Lockwood Dr & Navigation Blvd	Actuated	29.4	2.8	26.4	33.6	10
567	Lockwood Dr & Nichols St	Stop	1.0	0.2	0.7	1.4	10
604	Lockwood Dr & Pardee St	Stop	2.3	1.3	1.3	4.7	10
170	Lockwood Dr & Rand St	Actuated	8.4	0.6	7.7	9.3	10
174	Lockwood Dr & Shreveport Blvd	Actuated	19.0	0.8	18.1	20.2	10
576	Lockwood Dr & Sudan St	Stop	0.6	0.1	0.4	0.8	10
177	Lockwood Dr & Weaver Rd	Actuated	42.8	6.2	38.1	56.1	10
161	Lockwood Dr (NB) & I-10 EBFR	Pretimed	22.4	2.1	20.4	27.5	10
163	Lockwood Dr (NB) & I-10 WBFR	Pretimed	11.4	0.4	10.8	11.9	10

159	Lockwood Dr (NB) & Market St	Actuated	12.9	2.0	11.0	16.6	10
160	Lockwood Dr (SB) & I-10 EBFR	Pretimed	26.0	3.9	20.8	33.5	10
162	Lockwood Dr (SB) & I-10 WBFR	Pretimed	26.2	1.7	22.6	28.2	10
164	Lockwood Dr (SB) & Lyons Ave	Actuated	16.2	2.3	13.9	21.7	10
158	Lockwood Dr (SB) & Market St	Actuated	9.9	1.3	8.3	12.2	10
165	Lockwood Dr NB, Lockwood Dr & Lyons Ave	Actuated	12.7	4.4	8.1	19.2	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	6.2	0.5	5.6	6.7	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	12.9	0.8	11.9	13.9	10
151	Lockwood Dr, Ernestine St & Polk St	Actuated	27.8	0.5	27.1	28.9	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	15.2	0.7	13.9	16.1	10
119	Richmond Ave & Buffalo Speedway	Actuated	62.8	4.2	56.8	68.8	10
126	Richmond Ave & Dunlavy St	Actuated	85.3	6.7	76.2	93.9	10
120	Richmond Ave & Eastside St	Actuated	26.0	9.9	14.4	44.8	10
118	Richmond Ave & Edloe St	Actuated	46.1	2.5	43.6	51.5	10
122	Richmond Ave & Greenbriar Dr	Actuated	30.0	1.5	28.1	33.2	10
124	Richmond Ave & Hazard St	Actuated	146.8	10.4	135.6	171.8	10
121	Richmond Ave & Kirby Dr	Actuated	101.8	4.4	93.9	106.6	10
127	Richmond Ave & Mandell St	Actuated	61.1	3.0	56.4	65.6	10
128	Richmond Ave & Montrose Blvd	Actuated	71.1	8.0	57.4	82.9	10
123	Richmond Ave & Shepherd Dr	Actuated	24.7	0.5	24.0	25.3	10
130	Richmond Ave & US 59 NBFR	Actuated	22.4	7.1	17.8	42.0	10
129	Richmond Ave & US 59 SBFR	Actuated	75.8	5.8	68.9	86.2	10
125	Richmond Ave & Woodhead St	Actuated	46.5	9.4	27.2	58.8	10
131	Richmond Ave, Main St & Wheeler Ave	Actuated	31.1	2.5	27.3	35.6	10
110	S Rice Ave & Westpark Dr	Actuated	76.4	10.5	66.0	102.1	10
133	San Jacinto St & Wheeler Ave	Actuated	23.7	1.0	22.1	24.8	10
689	Tidwell Rd & Edell St	Stop	0.8	0.2	0.5	1.0	10
677	Tidwell Rd & Friendly Rd	Stop	16.9	2.3	12.7	19.6	10
180	Tidwell Rd & Hirsch Rd	Actuated	9.8	0.5	9.3	11.1	10
181	Tidwell Rd & I-69 NBFR	Pretimed	17.3	0.4	16.9	17.9	10
182	Tidwell Rd & I-69 SBFR	Pretimed	15.4	0.4	14.8	16.1	10
183	Tidwell Rd & Jensen Dr	Actuated	28.3	1.0	26.8	29.6	10
179	Tidwell Rd & Lockwood Dr	Actuated	21.3	2.3	19.0	26.5	10
690	Turner Dr & Edell St	Stop	0.0	0.0	0.0	0.0	5
104	Westpark Dr & 14th St	Actuated	35.1	8.9	22.0	49.6	10
360	Westpark Dr & Alder Dr	Stop	9.0	2.1	5.4	12.0	10
109	Westpark Dr & Chimney Rock Rd	Actuated	36.8	0.7	36.0	38.1	10
115	Westpark Dr & Edloe St	Actuated	29.7	1.5	27.8	32.0	10
102	Westpark Dr & Fondren Rd	Actuated	176.6	18.0	145.7	192.5	10
103	Westpark Dr & Hillcroft Ave	Actuated	104.9	7.5	92.4	119.1	10
112	Westpark Dr & I-610 NBFR	Actuated	81.5	11.0	70.5	105.6	10
111	Westpark Dr & I-610 SBFR	Actuated	24.5	2.0	21.4	27.6	10
106	Westpark Dr & I-69 NBFR	Pretimed	22.4	1.5	18.5	24.5	10
105	Westpark Dr & I-69 SBFR	Pretimed	20.0	2.5	16.2	24.4	10
394	Westpark Dr & Loop Central Dr	Stop	27.8	5.1	23.4	41.8	10
113	Westpark Dr & Newcastle Dr	Actuated	39.9	1.9	37.9	44.2	10
107	Westpark Dr & Rampart St	Actuated	14.0	1.3	12.6	16.0	10
309	Westpark Dr & Royalton St	Stop	27.4	0.6	26.3	28.3	10
382	Westpark Dr & Uptown Transit Ctr	Actuated	59.6	16.9	36.2	98.9	10
114	Westpark Dr & Weslayan St	Actuated	61.6	9.1	51.9	81.7	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	34.1	0.9	32.9	35.3	10
367	Wheeler Ave & Hutchins St	Stop	93.1	7.4	85.0	102.9	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	7.8	3.6	3.4	13.5	10
NW	Alabama St	197	10.3	4.9	5.6	18.0	10
SE	Alabama St	193	9.5	3.6	5.1	14.3	10
SW	Ennis St	740	2.3	0.7	1.7	3.9	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	2.1	0.2	1.8	2.3	10
NW	Wheeler Ave	176	1.6	0.1	1.4	1.8	10
S	Almeda Rd	174	2.2	0.2	1.9	2.6	10
SE	Wheeler Ave	77	2.9	0.5	2.3	3.8	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	1.0	0.5	0.6	2.1	10
NW	Cleburne St	733	1.0	0.1	0.8	1.2	10
SE	Cleburne St	731	0.3	0.0	0.2	0.3	10
SW	Ennis St	732	0.3	0.0	0.3	0.4	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	2.7	0.2	2.5	3.0	10
N	Lockwood Dr	321	3.1	0.2	2.8	3.5	10
S	Lockwood Dr	320	2.0	0.1	1.8	2.2	10
W	Crosstimbers St	322	2.5	0.3	2.0	2.8	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	2.8	0.2	2.5	3.2	10
NE	Cullen Blvd	207	4.0	0.3	3.6	4.4	10
S	Cullen Blvd	206	4.1	0.4	3.6	4.8	10
W	Elgin St	208	3.1	0.2	2.7	3.3	10

EB WESTPARK TOLLWAY FR & FONDREN RD — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	42.5	1.3	40.6	45.5	10
N	Fondren Rd	38	90.6	2.1	87.1	92.7	10
S	Fondren Rd	110	1.8	0.2	1.5	2.1	10

ELGIN ST & ENNIS ST — NODE: 249

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	0.7	0.1	0.5	0.8	10
NW	Elgin St	701	2.8	0.2	2.5	3.0	10
SE	Elgin St	700	1.0	0.1	0.8	1.1	10

SW	Ennis St	195	0.4	0.1	0.3	0.5	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	4.1	0.2	3.7	4.5	10
N	LRT Line	667	0.0	0.0	0.0	0.0	10
NW	Scott St	198	2.2	0.3	1.8	2.7	10
S	Scott St	671	4.3	0.4	3.9	5.0	10
SW	LRT Line	669	0.1	0.1	0.0	0.3	10
W	Elgin St	204	8.0	0.3	7.6	8.4	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	2.5	0.2	2.4	2.9	10
S	Spur 5 SBFR	214	1.6	0.1	1.5	1.7	10
SW	Elgin St	216	1.2	0.1	1.1	1.3	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	0.6	0.1	0.4	0.7	10
N	UH Entrance	211	1.6	0.1	1.5	1.8	10
SW	UH Entrance	210	0.6	0.1	0.6	0.7	10
W	Elgin St	212	0.6	0.1	0.5	0.8	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	1.1	0.1	0.9	1.3	10
NW	Wheeler Ave	766	0.6	0.1	0.5	0.8	10
SE	Wheeler Ave	423	1.1	0.2	0.8	1.5	10
SW	Emancipation Ave	177	1.1	0.1	1.0	1.2	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.8	0.1	0.7	0.9	10
NW	Holman St	742	0.4	0.0	0.4	0.5	10
SE	Holman St	741	0.1	0.0	0.1	0.2	10
SW	Ennis St	702	0.4	0.0	0.3	0.5	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.3	0.0	0.3	0.4	10
SE	Wheeler Ave	766	0.7	0.1	0.6	0.8	10
SW	Ennis St	726	0.1	0.0	0.1	0.1	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.7	0.1	1.5	2.0	10
SW	Ernestine St	411	1.3	0.1	1.2	1.4	10
W	Leeland St	227	0.5	0.1	0.4	0.6	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	0.1	0.0	0.1	0.1	10
S	Ernestine St	685	0.1	0.0	0.1	0.1	10
W	Munger St	460	0.2	0.0	0.2	0.2	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	2.0	0.1	1.9	2.1	10
NW	I-45 NBFR	222	9.5	1.0	8.0	11.2	10
S	Ernestine St	221	1.0	0.1	0.9	1.1	10

FANNIN ST & WHEELER AVE — NODE: 132

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	3.4	0.3	3.0	4.1	10
SE	Wheeler Ave	169	2.9	0.2	2.7	3.2	10
SW	Fannin St	87	1.9	0.2	1.6	2.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
N	Edloe St	153	1.4	0.2	1.0	1.8	10
S	Edloe St	155	1.9	0.9	1.3	4.3	10
W	I-69 Express Lanes	31	1.3	0.2	1.0	1.6	10

JENSEN DR & TURNER DR — NODE: 705

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.7	0.4	2.1	3.3	10
N	Lockwood Dr	308	3.4	0.2	3.1	3.8	10
S	Lockwood Dr	311	3.0	0.3	2.6	3.5	10
W	Kelley St	312	3.0	0.1	2.8	3.2	10

LABRANCH ST & WHEELER AVE — NODE: 134

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	0.9	0.1	0.8	1.2	10
NW	Wheeler Ave	77	0.1	0.0	0.0	0.1	10
SE	Wheeler Ave	86	0.2	0.1	0.1	0.3	10
SW	LaBranch St	78	0.4	0.0	0.3	0.4	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	1.8	0.2	1.6	2.0	10
N	Lockwood Dr	328	1.2	0.2	1.0	1.5	10
S	Lockwood Dr	571	0.4	0.1	0.3	0.5	10
W	Laura Koppe Rd	329	1.3	0.2	1.0	1.5	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	254	6.9	0.3	6.6	7.3	10
SW	Lockwood Dr	253	1.6	0.1	1.4	1.8	10
W	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST — NODE: 154

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	772	2.5	0.3	2.0	2.9	10

NE	Lockwood Dr	241	3.0	0.2	2.7	3.3	10
SW	Lockwood Dr	245	2.4	0.2	2.0	2.6	10
W	Canal St	768	2.9	0.4	2.4	3.8	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	1.9	0.1	1.8	2.2	10
N	Lockwood Dr	292	2.6	0.5	2.1	3.4	10
S	Lockwood Dr	296	2.7	0.2	2.4	3.0	10
W	Cavalcade St	298	2.2	0.1	2.1	2.3	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.2	0.1	1.0	1.4	10
NE	Lockwood Dr	257	4.2	0.4	3.9	5.1	10
S	Lockwood Dr	256	1.2	0.2	0.8	1.5	10
W	Clinton Dr	258	2.8	0.3	2.5	3.2	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	2.1	0.1	2.0	2.5	10
N	Lockwood Dr	289	8.8	2.9	6.4	14.0	10
SE	Lockwood Dr	288	0.8	0.1	0.6	1.1	10
W	Collingsworth St	290	0.9	0.1	0.8	1.0	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.3	0.1	1.0	1.4	10
N	Lockwood Dr	288	2.0	0.2	1.7	2.4	10
S	Lockwood Dr	292	0.4	0.1	0.3	0.5	10
W	Crane St	294	1.2	0.1	0.9	1.3	10

LOCKWOOD DR & DENMARK ST **NODE: 623**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	0.3	0.0	0.2	0.4	10
N	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
W	Denmark St	549	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.3	0.1	0.2	0.4	10
N	Lockwood Dr	571	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
W	Firnat St	575	0.2	0.1	0.2	0.4	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 513**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	3.3	0.4	2.5	3.8	10
SE	Marron Park Way	783	11.1	0.2	10.9	11.4	10
SW	Lockwood Dr	254	1.9	0.2	1.7	2.1	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	3.2	0.4	2.7	4.0	10
NE	Lockwood Dr	237	8.7	1.5	6.2	10.4	10

NW	Harrisburg Blvd	678	2.5	0.3	2.1	3.0	10
S	Lockwood Dr	241	7.5	0.4	6.9	8.3	10
SE	LRT Line	675	0.0	0.0	0.0	0.0	10
W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	4.4	0.8	2.6	5.2	10
NE	Lockwood Dr	253	0.6	0.0	0.6	0.7	10
SW	Lockwood Dr	257	0.1	0.0	0.1	0.1	10
W	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
W	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	5.7	0.6	4.9	6.6	10
N	Lockwood Dr	643	11.7	4.0	7.0	18.2	10
S	Lockwood Dr	304	0.2	0.1	0.1	0.3	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	0.5	0.1	0.4	0.7	10
S	Lockwood Dr	308	5.3	0.4	4.7	5.9	10
W	I-610 WBFR	309	4.7	0.3	4.2	5.1	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
W	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.4	0.1	0.3	0.5	10
N	Lockwood Dr	232	0.3	0.0	0.3	0.4	10
S	Lockwood Dr	237	2.8	0.1	2.6	3.0	10
W	McKinney St	239	0.4	0.1	0.2	0.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.2	0.1	0.2	0.3	10
N	Lockwood Dr	478	0.2	0.0	0.2	0.3	10
S	Lockwood Dr	284	0.1	0.0	0.1	0.2	10
W	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	0.3	0.1	0.2	0.4	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10

W	Munger St	661	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	4.0	0.3	3.6	4.5	10
NE	Lockwood Dr	245	7.1	2.1	4.9	10.4	10
SW	Lockwood Dr	249	3.1	0.2	2.7	3.5	10
W	Navigation Blvd	251	4.7	0.3	4.3	5.3	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.1	0.1	0.1	0.3	10
N	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	524	0.1	0.0	0.1	0.2	10
W	Nichols St	525	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.4	0.1	0.3	0.5	10
N	Lockwood Dr	300	0.4	0.5	0.1	1.3	10
S	Lockwood Dr	643	0.1	0.0	0.1	0.2	10
W	Pardee St	546	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	0.9	0.1	0.7	1.1	10
N	Lockwood Dr	296	0.5	0.0	0.4	0.6	10
S	Lockwood Dr	300	1.4	0.2	1.2	1.7	10
W	Rand St	302	0.9	0.1	0.9	1.1	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	2.8	0.2	2.4	3.1	10
NE	Shreveport Blvd	316	0.6	0.1	0.5	0.8	10
S	Lockwood Dr	314	0.9	0.1	0.7	1.1	10
SW	Shreveport Blvd	315	1.3	0.2	1.1	1.5	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	289	0.1	0.0	0.1	0.2	10
W	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	1.3	0.1	1.1	1.5	10
N	Lockwood Dr	320	3.7	0.3	3.2	4.2	10
S	Lockwood Dr	557	2.2	0.2	1.8	2.4	10
W	Weaver Rd	325	5.2	1.7	3.8	8.7	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	0.9	0.0	0.9	1.0	10
N	Lockwood Dr (NB)	264	8.2	1.1	7.3	10.8	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	1.8	0.1	1.8	1.9	10
W	I-10 WBFR	276	2.3	0.2	2.1	2.6	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.8	0.1	0.7	1.0	10
N	Lockwood Dr	499	2.2	0.6	1.6	3.3	10
W	Market St	266	0.4	0.1	0.3	0.5	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	8.8	1.4	7.2	11.1	10
S	Lockwood Dr (SB)	267	1.1	0.1	0.9	1.2	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	8.3	0.8	6.7	9.4	10
W	I-10 WBFR	273	0.5	0.0	0.4	0.5	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	2.7	0.7	1.9	4.2	10
S	Lockwood Dr	515	1.5	0.2	1.3	1.8	10
W	Lyons Ave	279	0.7	0.1	0.6	0.9	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	1.1	0.2	0.9	1.5	10
S	Lockwood Dr (SB)	260	1.2	0.2	1.0	1.7	10
W	Market St	262	0.1	0.0	0.1	0.2	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	0.4	0.1	0.2	0.5	10
N	Lockwood Dr (NB)	275	2.8	1.4	1.5	4.8	10
W	Lyons Ave	283	0.8	0.1	0.7	1.0	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	1.0	0.1	0.9	1.2	10
N	Lockwood Dr	314	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	317	0.4	0.0	0.3	0.5	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	1.8	0.2	1.5	2.1	10
NE	Elgin St	216	2.6	0.3	2.2	3.1	10
SW	Lockwood Dr	218	1.8	0.1	1.6	2.0	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	1.9	0.2	1.7	2.3	10

N	Lockwood Dr	229	4.1	0.3	3.8	4.8	10
S	Lockwood Dr	232	7.3	0.2	6.9	7.7	10
W	Polk St	234	2.0	0.2	1.6	2.2	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	0.7	0.1	0.6	0.8	10
N	Lockwood Dr	230	2.0	0.1	1.8	2.1	10
W	Telephone Rd	231	3.0	0.3	2.6	3.4	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	4.4	0.3	4.1	4.8	10
N	Buffalo Speedway	37	44.0	3.8	38.3	50.1	10
S	Buffalo Speedway	36	6.1	0.4	5.3	6.9	10
W	Richmond Ave	12	11.2	0.3	10.8	11.8	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	1.9	0.2	1.7	2.5	10
N	Dunlavy St	57	3.4	0.2	3.0	3.7	10
S	Dunlavy St	56	38.0	3.4	33.7	42.4	10
W	Richmond Ave	165	1.0	0.1	0.8	1.2	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	2.3	0.2	1.9	2.7	10
N	Eastside St	40	7.0	5.5	2.1	19.0	10
S	Eastside St	39	7.7	2.3	4.0	11.4	10
W	Richmond Ave	54	1.7	0.1	1.4	1.9	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	9.3	0.7	8.1	10.8	10
N	Edloe St	155	16.3	0.9	15.0	17.8	10
S	Edloe St	5	5.8	0.5	5.2	6.7	10
W	Richmond Ave	9	13.4	1.4	11.8	16.6	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	6.4	0.6	5.9	7.5	10
N	Greenbriar Dr	47	2.9	0.3	2.2	3.3	10
S	Greenbriar Dr	46	5.0	0.5	4.5	6.3	10
W	Richmond Ave	160	1.5	0.1	1.3	1.7	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	0.4	0.1	0.4	0.5	10
N	Hazard St	51	30.8	0.7	30.1	32.0	10
S	Hazard St	50	25.0	3.6	20.4	32.2	10
W	Richmond Ave	162	2.5	0.2	2.2	2.9	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	15.0	4.4	10.2	22.5	10
N	Kirby Dr	158	60.3	4.2	49.4	63.9	10

S	Kirby Dr	44	43.6	2.7	38.0	47.6	10
W	Richmond Ave	64	6.4	0.2	6.2	6.7	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	1.1	0.1	1.0	1.2	10
N	Mandell St	59	24.9	1.4	22.6	26.9	10
S	Mandell St	58	4.2	0.7	3.1	5.1	10
W	Richmond Ave	23	0.9	0.1	0.7	1.0	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	10.6	4.6	5.7	21.2	10
N	Montrose Blvd	61	10.4	2.2	8.6	14.9	10
S	Montrose Blvd	60	20.1	4.7	13.6	28.5	10
W	Richmond Ave	166	27.5	1.9	24.6	30.5	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	0.4	0.1	0.3	0.5	10
N	Shepherd Dr	49	5.3	0.3	4.8	5.7	10
S	Shepherd Dr	48	5.2	0.4	4.4	5.5	10
W	Richmond Ave	20	1.1	0.1	0.9	1.3	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	1.6	3.6	0.2	11.8	10
NE	US 59 NBFR	69	3.0	0.3	2.7	3.4	10
W	Richmond Ave	26	6.5	0.6	5.5	7.6	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	38.0	2.6	34.0	43.3	10
SW	US 59 SBFR	65	2.8	0.2	2.5	3.1	10
W	Richmond Ave	167	0.1	0.2	0.1	0.7	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	1.7	0.1	1.6	1.8	10
N	Woodhead St	53	18.1	4.6	8.9	24.3	10
S	Woodhead St	52	1.0	0.1	0.8	1.2	10
W	Richmond Ave	163	1.1	0.1	0.9	1.2	10

RICHMOND AVE, MAIN ST & WHEELER AVE — NODE: 131

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	0.1	0.0	0.1	0.1	10
NE	Main St	168	4.1	1.3	2.8	7.3	10
NW	Wheeler Ave	169	4.4	0.3	3.9	4.7	10
S	Main St	70	0.2	0.0	0.1	0.3	10
SE	Richmond Ave	26	5.3	0.6	4.4	6.0	10
SW	LRT Line	674	0.0	0.0	0.0	0.0	10

S RICE AVE & WESTPARK DR — NODE: 110

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	14.2	2.1	12.0	18.7	10
N	S Rice Ave	138	23.0	12.1	11.3	51.4	10

S	S Rice Ave	137	9.3	1.0	8.1	10.8	10
W	Westpark Dr	790	34.3	2.3	31.4	39.5	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	5.9	0.5	5.3	7.2	10
NW	Wheeler Ave	86	3.6	0.5	2.8	4.1	10
SE	Wheeler Ave	172	4.3	0.4	3.8	5.0	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.1	0.0	0.0	0.1	10
N	Edell St	590	0.2	0.1	0.1	0.3	10
S	Edell St	589	0.2	0.1	0.1	0.3	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	341	1.8	0.2	1.6	2.2	10
N	Friendly Rd	585	1.0	0.7	0.3	2.0	10
S	Friendly Rd	584	8.3	1.0	6.6	9.4	10
W	Tidwell Rd	338	0.1	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	2.5	0.2	2.3	2.8	10
N	Hirsch Rd	336	2.1	0.1	2.0	2.2	10
S	Hirsch Rd	335	1.7	0.2	1.6	2.1	10
W	Tidwell Rd	334	0.9	0.2	0.7	1.2	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	5.2	0.3	4.9	5.9	10
N	I-69 NBFR	340	5.1	0.2	4.7	5.5	10
W	Tidwell Rd	341	5.7	0.4	5.1	6.2	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	4.0	0.3	3.7	4.4	10
S	I-69 SBFR	649	3.3	0.1	3.2	3.5	10
W	Tidwell Rd	342	5.0	0.5	4.4	5.8	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	6.6	0.5	5.9	7.6	10
N	Jensen Dr	347	5.4	0.5	4.7	6.1	10
S	Jensen Dr	346	3.5	0.4	2.9	4.1	10
W	Tidwell Rd	348	5.8	0.5	5.0	6.7	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	3.8	0.4	3.2	4.4	10
N	Lockwood Dr	332	5.4	1.5	3.9	8.4	10
S	Lockwood Dr	331	0.4	0.1	0.3	0.5	10
W	Tidwell Rd	333	4.1	0.4	3.4	4.8	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	593	0.0	0.0	0.0	0.0	10
SE	Edell St	592	0.0	0.0	0.0	0.0	10
SW	Turner Dr	793	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	15.7	2.8	10.3	19.1	10
N	14th St	118	3.5	1.1	2.8	6.4	10
W	Westpark Dr	616	9.8	6.4	4.5	20.1	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	788	0.1	0.4	0.0	1.4	10
N	Alder Dr	787	4.3	1.1	2.5	5.9	10
W	Westpark Dr	133	0.4	0.1	0.3	0.5	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	8.1	0.6	7.1	9.0	10
N	Chimney Rock Rd	135	7.2	0.3	6.8	7.8	10
S	Chimney Rock Rd	134	8.1	0.5	7.3	8.9	10
W	Westpark Dr	136	9.9	0.4	9.1	10.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	1.8	0.3	1.5	2.4	10
N	Edloe St	29	6.2	0.3	5.6	6.5	10
S	Edloe St	153	5.1	0.3	4.5	5.5	10
W	Westpark Dr	154	8.6	1.0	7.0	10.0	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	92.2	5.4	86.1	101.9	10
N	Fondren Rd	110	5.0	0.2	4.8	5.4	10
S	Fondren Rd	112	79.4	9.9	61.9	89.8	10
W	Westpark Dr	113	55.6	16.2	30.3	77.9	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	19.2	1.2	17.6	20.8	10
N	Hillcroft Ave	3	18.5	1.6	16.4	21.9	10
S	Hillcroft Ave	115	93.8	9.9	78.4	111.9	10
W	Westpark Dr	116	34.8	3.0	30.7	39.7	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	7.3	0.3	6.8	7.9	10
N	I-610 NBFR	145	42.3	2.8	37.4	46.7	10
W	Westpark Dr	792	21.0	8.1	13.4	41.3	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	13.6	1.4	11.4	16.8	10

S	I-610 SBFR	141	4.6	1.1	3.8	7.6	10
W	Westpark Dr	143	4.5	1.2	3.3	7.6	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	6.8	0.9	5.2	7.8	10
NE	I-69 NBFR	126	3.9	1.0	2.9	6.4	10
W	Westpark Dr	127	5.8	0.4	4.8	6.4	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	7.5	1.2	5.7	9.4	10
SW	I-69 SBFR	121	9.5	1.7	7.8	13.7	10
W	Westpark Dr	123	5.6	1.3	4.4	9.0	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	792	0.0	0.0	0.0	0.1	10
N	Loop Central Dr	791	14.4	0.8	12.7	15.8	10
W	Westpark Dr	146	0.9	2.5	0.0	7.9	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	4.3	0.4	3.7	4.6	10
N	Newcastle Dr	148	8.7	1.0	7.5	10.6	10
S	Newcastle Dr	147	3.7	0.3	3.2	4.2	10
W	Westpark Dr	149	12.6	0.7	11.9	14.2	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	2.1	0.2	1.9	2.4	10
N	Rampart St	129	3.2	0.4	2.7	4.0	10
S	Rampart St	128	0.4	0.1	0.3	0.6	10
W	Westpark Dr	130	1.7	0.7	1.0	3.2	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	0.0	0.0	0.0	0.1	10
N	Royalton St	384	16.2	0.3	15.5	16.5	10
W	Westpark Dr	140	0.2	0.0	0.2	0.3	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	790	0.1	0.0	0.1	0.1	10
N	Uptown Transit Ctr	789	0.3	0.0	0.2	0.3	10
W	Westpark Dr	629	32.9	9.3	19.4	54.5	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	14.5	3.6	11.0	23.5	10
N	Weslayan St	151	8.6	2.5	6.4	13.5	10
S	Weslayan St	150	12.9	1.1	11.5	15.3	10
W	Westpark Dr	152	27.2	7.2	16.3	36.8	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Westpark Dr	130	7.6	0.7	6.8	8.6	10
N	Renwick Dr	132	6.7	0.5	6.0	7.5	10
S	Fountain View Dr	131	8.1	0.6	7.6	9.3	10
W	Westpark Dr	788	3.8	0.4	3.2	4.5	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	19.2	1.7	17.0	21.6	10
NW	Wheeler Ave	423	2.0	0.5	1.3	2.9	10
SE	Wheeler Ave	421	2.7	0.3	2.3	3.3	10
SW	Hutchins St	422	0.1	0.0	0.1	0.1	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	108.8	55.3	46.9	220.1	10
NW	Alabama St	197	133.9	65.8	70.4	235.5	10
SE	Alabama St	193	82.8	32.9	42.9	124.4	10
SW	Ennis St	740	47.5	14.6	33.5	85.2	10

ALMEDA RD & WHEELER AVE **NODE: 135**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	12.2	0.8	10.4	13.0	10
NW	Wheeler Ave	176	28.9	2.1	25.3	32.5	10
S	Almeda Rd	174	21.0	1.9	18.2	24.8	10
SE	Wheeler Ave	77	26.5	3.9	21.7	34.2	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	10.2	5.1	7.2	21.2	10
NW	Cleburne St	733	20.0	2.0	15.0	22.7	10
SE	Cleburne St	731	19.1	1.9	16.4	23.3	10
SW	Ennis St	732	4.9	0.4	4.4	5.6	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	22.0	1.3	20.6	24.2	10
N	Lockwood Dr	321	27.3	1.3	25.3	29.1	10
S	Lockwood Dr	320	27.5	1.8	23.6	29.6	10
W	Crosstimbers St	322	18.1	1.5	15.3	20.1	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	41.0	1.2	39.1	43.1	10
NE	Cullen Blvd	207	31.1	1.7	29.4	34.9	10
S	Cullen Blvd	206	33.1	1.7	31.7	36.7	10

W	Elgin St	208	27.1	2.1	23.6	29.7	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	466.6	28.6	435.9	512.2	10
N	Fondren Rd	38	282.2	10.4	267.3	303.5	10
S	Fondren Rd	110	4.8	0.6	4.0	5.6	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	12.3	1.2	10.5	14.9	10
NW	Elgin St	701	23.7	0.7	22.0	24.5	10
SE	Elgin St	700	12.1	0.7	11.2	13.9	10
SW	Ennis St	195	16.8	2.0	14.0	21.7	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	40.1	1.5	38.6	42.8	10
N	LRT Line	667	5.5	1.8	3.1	9.0	10
NW	Scott St	198	10.8	1.1	9.1	12.9	10
S	Scott St	671	26.4	2.2	24.2	30.2	10
SW	LRT Line	669	39.1	57.1	18.2	201.2	10
W	Elgin St	204	55.5	1.9	52.7	58.2	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	12.4	0.7	11.4	13.5	10
S	Spur 5 SBFR	214	18.8	1.0	17.3	20.1	10
SW	Elgin St	216	8.5	0.5	7.9	9.2	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	3.9	0.8	2.8	5.1	10
N	UH Entrance	211	30.0	2.9	26.6	36.4	10
SW	UH Entrance	210	17.5	1.2	15.4	19.3	10
W	Elgin St	212	7.7	1.0	6.3	9.1	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	13.4	1.1	11.9	15.2	10
NW	Wheeler Ave	766	10.5	0.6	9.7	11.6	10
SE	Wheeler Ave	423	14.3	1.7	12.1	18.5	10
SW	Emancipation Ave	177	15.1	0.4	14.5	15.9	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	11.4	0.5	10.6	12.1	10
NW	Holman St	742	11.0	1.0	9.6	12.2	10
SE	Holman St	741	9.8	1.7	8.0	12.7	10
SW	Ennis St	702	13.0	1.1	11.5	15.2	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	4.8	0.4	4.2	5.5	10
SE	Wheeler Ave	766	16.5	0.8	15.0	17.5	10
SW	Ennis St	726	1.4	0.2	1.2	1.7	10

ERNESTINE ST & LEELAND ST — NODE: 149

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	18.9	1.5	16.9	21.2	10
SW	Ernestine St	411	7.6	0.3	7.1	8.1	10
W	Leeland St	227	6.1	0.7	5.1	7.3	10

ERNESTINE ST & MUNGER ST — NODE: 452

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	461	5.6	1.0	4.2	7.2	10
S	Ernestine St	685	0.3	0.0	0.3	0.4	10
W	Munger St	460	5.0	0.5	4.4	5.7	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	13.2	0.5	12.3	13.6	10
NW	I-45 NBFR	222	17.5	1.4	15.7	20.1	10
S	Ernestine St	221	11.2	0.7	10.2	12.3	10

FANNIN ST & WHEELER AVE — NODE: 132

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	35.9	2.2	32.9	41.0	10
SE	Wheeler Ave	169	21.1	1.1	19.9	23.0	10
SW	Fannin St	87	10.3	0.9	8.8	12.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Edloe St	153	7.4	1.3	5.6	10.1	10
S	Edloe St	155	8.5	4.2	5.7	19.9	10
W	I-69 Express Lanes	31	39.8	5.4	33.2	46.5	10

JENSEN DR & TURNER DR — NODE: 705

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	11.6	4.5	6.8	21.7	10
NE	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SW	Jensen Dr	656	0.0	0.0	0.0	0.0	10
W	Turner Dr	595	11.3	4.3	3.3	20.5	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	25.1	2.8	20.5	28.9	10
N	Lockwood Dr	308	23.6	1.1	22.2	25.7	10
S	Lockwood Dr	311	26.2	2.0	22.6	29.2	10
W	Kelley St	312	20.2	0.8	19.2	22.0	10

LABRANCH ST & WHEELER AVE — NODE: 134

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	35.2	2.8	31.8	41.5	10
NW	Wheeler Ave	77	0.7	0.2	0.4	1.1	10
SE	Wheeler Ave	86	1.4	0.4	0.9	2.2	10
SW	LaBranch St	78	37.6	5.5	30.6	47.9	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	28.7	1.7	26.9	32.2	10
N	Lockwood Dr	328	11.3	1.5	8.8	13.3	10

S	Lockwood Dr	571	5.5	1.0	4.2	7.0	10
W	Laura Koppe Rd	329	30.7	2.0	28.3	34.2	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	254	29.9	0.5	29.3	30.8	10
SW	Lockwood Dr	253	12.5	1.0	10.4	13.7	10
W	Armour Dr	659	16.0	2.8	11.9	19.3	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	772	22.6	2.1	18.5	25.3	10
NE	Lockwood Dr	241	16.3	0.6	15.0	17.0	10
SW	Lockwood Dr	245	14.9	1.2	12.5	16.3	10
W	Canal St	768	35.2	3.4	32.1	43.1	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	23.9	1.6	21.9	26.2	10
N	Lockwood Dr	292	12.4	1.9	10.1	15.2	10
S	Lockwood Dr	296	17.3	1.0	15.4	18.3	10
W	Cavalcade St	298	21.0	0.7	19.9	21.9	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	22.9	1.7	20.3	25.2	10
NE	Lockwood Dr	257	22.6	1.9	20.6	27.8	10
S	Lockwood Dr	256	10.4	1.2	8.6	12.5	10
W	Clinton Dr	258	25.9	1.6	24.1	28.6	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	25.9	1.3	24.4	28.9	10
N	Lockwood Dr	289	34.2	10.7	24.9	55.1	10
SE	Lockwood Dr	288	5.8	0.9	4.5	7.6	10
W	Collingsworth St	290	30.9	2.2	27.7	34.1	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	32.3	3.3	26.9	37.5	10
N	Lockwood Dr	288	9.6	0.9	8.3	11.4	10
S	Lockwood Dr	292	2.9	0.4	2.3	3.6	10
W	Crane St	294	33.0	2.0	29.9	36.8	10

LOCKWOOD DR & DENMARK ST **NODE: 623**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	12.1	1.8	9.1	14.6	10
N	Lockwood Dr	317	0.1	0.0	0.1	0.2	10
S	Lockwood Dr	321	0.1	0.1	0.0	0.2	10
W	Denmark St	549	12.7	1.3	11.4	15.1	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	12.2	2.4	9.3	16.3	10
N	Lockwood Dr	571	0.3	0.2	0.1	0.6	10
S	Lockwood Dr	332	0.2	0.1	0.1	0.6	10

W	Firnat St	575	16.6	3.6	10.9	23.6	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 513**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	249	13.9	1.8	10.3	15.8	10
SE	Marron Park Way	783	46.8	0.5	46.1	47.9	10
SW	Lockwood Dr	254	10.8	0.8	9.6	11.8	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harrisburg Blvd	244	28.2	3.1	25.6	36.4	10
NE	Lockwood Dr	237	45.1	7.3	32.7	54.6	10
NW	Harrisburg Blvd	678	26.0	1.9	22.4	29.0	10
S	Lockwood Dr	241	36.6	1.6	34.3	39.3	10
SE	LRT Line	675	23.5	1.7	20.0	26.1	10
W	LRT Line	676	3.4	2.5	0.7	8.9	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	106.2	15.8	71.0	122.3	10
NE	Lockwood Dr	253	3.4	0.2	3.2	3.7	10
SW	Lockwood Dr	257	0.5	0.1	0.4	0.7	10
W	Harvey Wilson Dr	497	45.8	9.3	29.5	64.6	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	19.5	5.1	11.8	26.1	10
N	Lockwood Dr	281	0.1	0.1	0.0	0.1	10
S	Lockwood Dr	478	0.1	0.1	0.0	0.2	10
W	Hershe St	513	12.2	2.6	8.4	18.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	33.7	1.9	31.1	36.2	10
N	Lockwood Dr	643	53.3	18.2	32.8	82.1	10
S	Lockwood Dr	304	1.4	0.5	0.5	2.1	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	1.8	0.4	1.5	2.5	10
S	Lockwood Dr	308	32.9	2.2	29.8	35.6	10
W	I-610 WBFR	309	34.2	1.2	32.0	35.4	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	7.2	2.9	4.2	13.0	10
N	Lockwood Dr	557	0.0	0.0	0.0	0.1	10
S	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
W	Keeland St	561	8.5	2.4	4.6	11.4	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	22.9	2.0	20.2	26.0	10
N	Lockwood Dr	232	1.8	0.2	1.4	2.1	10
S	Lockwood Dr	237	14.9	0.6	14.2	15.6	10
W	McKinney St	239	22.4	4.0	17.2	26.6	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	44.7	6.8	33.9	56.8	10
N	Lockwood Dr	478	1.0	0.2	0.9	1.5	10
S	Lockwood Dr	284	1.0	0.2	0.8	1.3	10
W	Mulvey St	286	31.7	5.3	21.4	38.2	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Munger St	460	12.6	2.0	9.2	15.9	10
NE	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
W	Munger St	661	11.8	3.2	7.9	16.2	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	26.1	1.4	23.4	28.2	10
NE	Lockwood Dr	245	47.4	12.7	32.9	66.3	10
SW	Lockwood Dr	249	20.7	1.6	17.8	22.9	10
W	Navigation Blvd	251	24.8	1.4	23.1	28.3	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	16.2	6.2	9.7	30.4	10
N	Lockwood Dr	284	0.2	0.1	0.1	0.4	10
S	Lockwood Dr	524	0.8	0.2	0.5	1.2	10
W	Nichols St	525	14.8	6.5	8.1	25.2	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	24.9	5.2	20.3	33.4	10
N	Lockwood Dr	300	1.7	2.2	0.3	5.6	10
S	Lockwood Dr	643	0.6	0.2	0.4	1.0	10
W	Pardee St	546	23.4	6.9	16.1	33.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	34.1	3.5	30.1	40.7	10
N	Lockwood Dr	296	2.3	0.2	2.0	2.8	10
S	Lockwood Dr	300	8.0	1.0	6.6	9.3	10
W	Rand St	302	26.0	2.0	22.5	29.7	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	311	21.0	1.4	18.6	23.3	10
NE	Shreveport Blvd	316	28.7	3.2	23.9	35.2	10
S	Lockwood Dr	314	9.2	1.0	7.1	10.4	10
SW	Shreveport Blvd	315	32.3	3.1	28.1	36.9	10

LOCKWOOD DR & SUDAN ST — NODE: 576

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	14.6	6.2	6.0	23.3	10
N	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
S	Lockwood Dr	289	0.8	0.3	0.4	1.3	10
W	Sudan St	534	7.8	2.2	5.7	12.5	10

LOCKWOOD DR & WEAVER RD — NODE: 177

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	35.6	2.8	29.6	39.8	10
N	Lockwood Dr	320	32.1	2.0	29.3	34.9	10
S	Lockwood Dr	557	31.8	1.9	27.6	34.2	10
W	Weaver Rd	325	75.1	20.9	56.1	116.3	10

LOCKWOOD DR (NB) & I-10 EBFR — NODE: 161

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	5.3	0.1	5.2	5.5	10
N	Lockwood Dr (NB)	264	35.6	3.6	32.7	44.8	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	8.1	0.2	7.8	8.6	10
W	I-10 WBFR	276	16.8	0.9	15.2	18.0	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	18.4	2.6	14.9	22.4	10
N	Lockwood Dr	499	10.5	2.5	7.6	15.4	10
W	Market St	266	33.7	3.1	27.2	37.8	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	51.4	8.0	42.3	67.0	10
S	Lockwood Dr (SB)	267	5.0	0.3	4.5	5.5	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	44.7	3.5	39.1	51.1	10
W	I-10 WBFR	273	3.2	0.2	2.9	3.7	10

LOCKWOOD DR (SB) & LYONS AVE — NODE: 164

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	24.5	6.0	17.9	38.1	10
S	Lockwood Dr	515	11.0	1.4	9.6	13.9	10
W	Lyons Ave	279	12.3	1.5	10.9	14.8	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	30.3	3.1	25.7	36.0	10
S	Lockwood Dr (SB)	260	6.1	1.2	5.2	9.1	10
W	Market St	262	9.9	2.3	5.5	14.6	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	279	6.9	1.4	4.5	9.0	10
N	Lockwood Dr (NB)	275	13.1	6.4	7.2	22.7	10
W	Lyons Ave	283	16.9	1.4	14.8	19.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	21.5	2.0	18.0	24.2	10
N	Lockwood Dr	314	0.6	0.1	0.4	0.8	10

S	Lockwood Dr	317	4.6	0.5	3.8	5.2	10
W	Driveway	318	4.7	3.0	2.2	12.8	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	12.8	0.9	11.7	15.0	10
NE	Elgin St	216	12.7	1.4	11.0	14.7	10
SW	Lockwood Dr	218	13.3	1.0	11.7	14.6	10

LOCKWOOD DR, ERNESTINE ST & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	21.5	1.2	19.1	23.3	10
N	Lockwood Dr	229	23.3	1.4	21.6	26.6	10
S	Lockwood Dr	232	43.3	1.0	42.0	45.0	10
W	Polk St	234	17.0	1.3	14.6	18.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	10.1	1.2	8.0	11.8	10
N	Lockwood Dr	230	10.4	0.4	9.4	10.7	10
W	Telephone Rd	231	26.3	1.7	23.4	29.2	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	9	17.1	1.0	16.2	19.1	10
N	Buffalo Speedway	37	152.3	17.7	127.7	177.6	10
S	Buffalo Speedway	36	32.3	1.4	29.4	34.8	10
W	Richmond Ave	12	36.1	0.7	34.9	37.1	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	10.1	1.3	9.3	13.6	10
N	Dunlavy St	57	41.8	3.1	38.2	49.4	10
S	Dunlavy St	56	507.5	69.9	395.9	585.7	10
W	Richmond Ave	165	5.4	0.7	4.3	6.5	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	12	7.7	0.6	6.6	8.8	10
N	Eastside St	40	145.8	126.0	37.3	447.0	10
S	Eastside St	39	65.3	19.4	37.5	96.8	10
W	Richmond Ave	54	6.7	0.6	5.6	7.3	10

RICHMOND AVE & EDLOE ST — NODE: 118

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	32.8	1.5	30.5	36.1	10
N	Edloe St	155	74.2	5.3	66.4	85.4	10
S	Edloe St	5	31.5	2.7	28.3	36.1	10
W	Richmond Ave	9	46.8	4.3	42.6	57.0	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	37.1	2.0	35.1	40.2	10
N	Greenbriar Dr	47	39.9	3.0	33.5	42.5	10
S	Greenbriar Dr	46	36.1	3.4	32.7	44.2	10
W	Richmond Ave	160	10.7	0.9	9.0	11.5	10

RICHMOND AVE & HAZARD ST — NODE: 124

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	4.6	0.6	4.0	5.5	10
N	Hazard St	51	331.5	36.4	283.2	410.1	10
S	Hazard St	50	510.9	109.2	308.8	664.2	10
W	Richmond Ave	162	15.0	1.0	13.6	16.7	10

RICHMOND AVE & KIRBY DR — NODE: 121

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	60.6	17.6	41.6	90.2	10
N	Kirby Dr	158	134.3	8.6	114.0	141.8	10
S	Kirby Dr	44	107.4	7.5	91.6	117.6	10
W	Richmond Ave	64	50.0	1.8	47.8	53.0	10

RICHMOND AVE & MANDELL ST — NODE: 127

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	5.7	0.4	5.1	6.0	10
N	Mandell St	59	270.7	24.4	235.1	316.9	10
S	Mandell St	58	74.9	13.0	57.0	89.7	10
W	Richmond Ave	23	5.1	0.6	4.3	5.8	10

RICHMOND AVE & MONTROSE BLVD — NODE: 128

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	66.9	31.6	35.0	133.5	10
N	Montrose Blvd	61	42.1	7.7	35.9	58.8	10
S	Montrose Blvd	60	59.6	12.9	41.5	81.9	10
W	Richmond Ave	166	124.2	11.4	106.4	141.0	10

RICHMOND AVE & SHEPHERD DR — NODE: 123

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	5.0	1.1	3.6	6.6	10
N	Shepherd Dr	49	40.1	1.0	38.5	41.4	10
S	Shepherd Dr	48	40.1	1.6	37.6	42.4	10
W	Richmond Ave	20	7.3	0.7	6.5	8.4	10

RICHMOND AVE & US 59 NBFR — NODE: 130

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	9.0	19.1	0.9	63.1	10
NE	US 59 NBFR	69	43.2	2.7	39.4	47.3	10
W	Richmond Ave	26	25.8	1.9	22.3	28.6	10

RICHMOND AVE & US 59 SBFR — NODE: 129

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	190.4	24.3	159.4	243.0	10
SW	US 59 SBFR	65	24.8	0.8	23.8	26.1	10
W	Richmond Ave	167	0.6	0.8	0.3	3.0	10

RICHMOND AVE & WOODHEAD ST — NODE: 125

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	12.2	0.5	11.4	13.2	10
N	Woodhead St	53	148.7	32.3	82.0	187.3	10
S	Woodhead St	52	26.4	2.9	22.2	30.1	10
W	Richmond Ave	163	6.1	0.6	4.8	6.8	10

RICHMOND AVE, MAIN ST & WHEELER AVE — NODE: 131

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Line	673	23.8	0.9	22.3	25.3	10
NE	Main St	168	27.5	8.3	18.9	46.3	10
NW	Wheeler Ave	169	34.2	1.0	32.8	35.5	10
S	Main St	70	7.3	1.5	4.4	9.0	10
SE	Richmond Ave	26	37.4	3.8	31.5	42.2	10
SW	LRT Line	674	0.1	0.1	0.0	0.3	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	64.3	7.3	54.4	78.5	10
N	S Rice Ave	138	80.4	45.0	40.1	190.2	10
S	S Rice Ave	137	42.4	2.8	38.4	46.9	10
W	Westpark Dr	790	104.2	8.6	97.2	123.8	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	19.4	1.5	17.1	21.8	10
NW	Wheeler Ave	86	29.7	3.6	23.0	33.5	10
SE	Wheeler Ave	172	27.5	2.2	24.2	30.6	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	0.3	0.2	0.1	0.5	10
N	Edell St	590	11.0	2.0	8.5	13.5	10
S	Edell St	589	21.0	5.0	14.1	28.5	10
W	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	341	6.0	0.5	5.5	7.0	10
N	Friendly Rd	585	128.6	72.3	41.8	226.0	10
S	Friendly Rd	584	358.7	103.7	216.3	520.2	10
W	Tidwell Rd	338	0.2	0.0	0.1	0.3	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	8.7	0.6	7.9	9.8	10
N	Hirsch Rd	336	28.2	1.4	27.0	31.3	10
S	Hirsch Rd	335	24.0	1.8	22.5	27.1	10
W	Tidwell Rd	334	3.0	0.5	2.3	3.9	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	16.8	0.6	15.9	18.0	10
N	I-69 NBFR	340	17.3	0.4	16.6	17.7	10
W	Tidwell Rd	341	17.7	0.9	16.7	19.2	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	591	15.2	0.7	14.2	16.1	10
S	I-69 SBFR	649	14.1	0.5	13.3	14.7	10
W	Tidwell Rd	342	16.5	1.2	15.4	18.8	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Tidwell Rd	349	29.4	1.7	26.9	32.4	10
N	Jensen Dr	347	32.3	2.7	28.2	37.4	10
S	Jensen Dr	346	31.0	1.9	27.8	34.4	10
W	Tidwell Rd	348	23.3	1.6	20.8	25.8	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	334	13.7	1.2	12.3	15.5	10
N	Lockwood Dr	332	65.0	17.2	47.5	99.6	10
S	Lockwood Dr	331	30.7	3.3	27.8	37.7	10
W	Tidwell Rd	333	15.2	1.1	13.4	16.8	10

TURNER DR & EDELL ST **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Edell St	593	0.0	0.0	0.0	0.0	5

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	52.2	9.3	34.3	62.5	10
N	14th St	118	45.0	8.8	40.3	68.4	10
W	Westpark Dr	616	21.9	14.1	9.9	45.4	10

WESTPARK DR & ALDER DR **NODE: 360**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	788	0.5	1.4	0.0	4.4	10
N	Alder Dr	787	56.1	14.9	31.9	78.8	10
W	Westpark Dr	133	2.3	0.4	1.8	3.1	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	34.6	2.3	31.5	38.6	10
N	Chimney Rock Rd	135	40.8	1.8	37.8	43.7	10
S	Chimney Rock Rd	134	27.8	1.4	26.0	29.7	10
W	Westpark Dr	136	48.5	1.4	46.2	51.4	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	14.5	1.9	12.2	18.7	10
N	Edloe St	29	37.3	2.3	33.5	39.9	10
S	Edloe St	153	26.7	1.6	23.3	28.5	10
W	Westpark Dr	154	34.6	3.4	29.0	38.8	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	359.4	22.5	332.3	404.4	10
N	Fondren Rd	110	13.9	0.6	13.1	14.9	10
S	Fondren Rd	112	232.4	30.8	178.7	269.1	10
W	Westpark Dr	113	157.9	48.8	83.7	217.0	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	113	52.2	3.1	48.4	56.9	10
N	Hillcroft Ave	3	47.2	3.8	41.2	54.5	10
S	Hillcroft Ave	115	292.4	37.0	236.6	351.8	10
W	Westpark Dr	116	69.0	6.2	61.9	79.5	10

WESTPARK DR & I-610 NBFR — NODE: 112

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	28.2	1.0	26.5	29.6	10
N	I-610 NBFR	145	139.1	9.6	123.3	154.7	10
W	Westpark Dr	792	70.0	28.9	43.6	142.7	10

WESTPARK DR & I-610 SBFR — NODE: 111

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	34.1	2.9	30.1	40.8	10
S	I-610 SBFR	141	42.9	10.2	35.7	70.0	10
W	Westpark Dr	143	10.7	3.1	8.1	18.7	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	18.6	2.2	14.8	20.9	10
NE	I-69 NBFR	126	23.7	5.1	18.6	35.4	10
W	Westpark Dr	127	27.9	1.9	23.7	30.5	10

WESTPARK DR & I-69 SBFR — NODE: 105

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	616	24.4	3.6	19.3	30.2	10
SW	I-69 SBFR	121	16.1	2.6	13.4	22.5	10
W	Westpark Dr	123	23.8	5.1	19.3	37.8	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 394

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	792	0.1	0.2	0.0	0.5	10
N	Loop Central Dr	791	216.8	28.7	171.7	276.6	10
W	Westpark Dr	146	2.7	7.9	0.1	25.3	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	27.9	1.5	25.9	30.5	10
N	Newcastle Dr	148	48.4	5.3	42.7	57.3	10
S	Newcastle Dr	147	36.9	2.2	33.3	40.2	10
W	Westpark Dr	149	41.8	2.2	39.6	47.5	10

WESTPARK DR & RAMPART ST — NODE: 107

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	7.5	0.4	6.8	8.0	10
N	Rampart St	129	52.0	7.0	45.2	69.4	10
S	Rampart St	128	32.5	7.6	23.9	40.6	10
W	Westpark Dr	130	10.0	3.6	6.7	18.0	10

WESTPARK DR & ROYALTON ST — NODE: 309

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	0.1	0.1	0.0	0.3	10
N	Royalton St	384	323.6	31.2	278.9	363.4	10
W	Westpark Dr	140	0.9	0.1	0.7	1.0	10

WESTPARK DR & UPTOWN TRANSIT CTR — NODE: 382

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	790	0.3	0.1	0.2	0.4	10
N	Uptown Transit Ctr	789	46.0	6.3	34.7	54.4	10
W	Westpark Dr	629	95.8	28.8	59.3	165.4	10

WESTPARK DR & WESLAYAN ST — NODE: 114

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	74.5	17.2	55.9	114.3	10
N	Weslayan St	151	32.1	9.1	24.8	50.9	10
S	Weslayan St	150	35.7	2.4	32.0	39.6	10
W	Westpark Dr	152	134.7	35.6	82.2	185.0	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR — NODE: 108

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	36.5	1.9	34.1	39.1	10
N	Renwick Dr	132	39.7	2.1	36.4	42.7	10
S	Fountain View Dr	131	40.5	2.0	37.9	44.5	10
W	Westpark Dr	788	19.9	1.8	16.5	23.0	10

WHEELER AVE & HUTCHINS ST — NODE: 367

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	200.6	19.8	172.0	227.6	10
NW	Wheeler Ave	423	28.0	6.6	21.1	41.1	10
SE	Wheeler Ave	421	32.6	2.9	28.7	37.8	10
SW	Hutchins St	422	12.6	1.1	10.0	14.2	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	5.2	2.1	2.4	8.3	10
NEB TR	Ennis St	732	2.5	1.5	1.0	5.3	10
NWB L	Alabama St	197	0.1	0.1	0.0	0.2	10
NWB T	Alabama St	197	5.1	2.4	2.9	8.9	10
NWB TR	Alabama St	197	5.1	2.6	2.5	9.3	10
SEB L	Alabama St	193	4.4	1.9	1.7	7.8	10
SEB T	Alabama St	193	1.7	0.8	0.9	3.0	10
SEB TR	Alabama St	193	3.3	1.3	1.9	5.4	10
SWB LT	Ennis St	740	0.8	0.3	0.6	1.5	10
SWB TR	Ennis St	740	1.5	0.4	1.1	2.5	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	1.3	0.1	1.0	1.5	10
NB T	Almeda Rd	696	0.4	0.1	0.2	0.4	10
NB TR	Almeda Rd	696	0.4	0.0	0.3	0.4	10
NWB LTR	Wheeler Ave	176	1.6	0.1	1.4	1.8	10
SB L	Almeda Rd	174	0.3	0.1	0.2	0.4	10

SB T	Almeda Rd	174	1.0	0.1	0.9	1.2	10
SB TR	Almeda Rd	174	0.9	0.1	0.7	1.0	10
SEB LT	Wheeler Ave	77	1.3	0.2	1.0	1.5	10
SEB TR	Wheeler Ave	77	1.6	0.3	1.2	2.3	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	0.7	0.4	0.4	1.7	10
NEB TR	Ennis St	726	0.3	0.1	0.2	0.6	10
NWB LTR	Cleburne St	733	1.0	0.1	0.8	1.2	10
SEB LTR	Cleburne St	731	0.3	0.0	0.2	0.3	10
SWB LT	Ennis St	732	0.2	0.0	0.1	0.2	10
SWB TR	Ennis St	732	0.1	0.0	0.1	0.2	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	1.0	0.1	0.7	1.1	10
EB T	Crosstimbers St	323	0.8	0.1	0.7	0.9	10
EB TR	Crosstimbers St	323	0.9	0.1	0.8	1.0	10
NB L	Lockwood Dr	321	0.7	0.1	0.6	0.8	10
NB T	Lockwood Dr	321	1.2	0.1	1.1	1.4	10
NB TR	Lockwood Dr	321	1.2	0.2	1.0	1.5	10
SB L	Lockwood Dr	320	0.7	0.1	0.5	0.8	10
SB T	Lockwood Dr	320	0.5	0.1	0.4	0.6	10
SB TR	Lockwood Dr	320	0.7	0.1	0.6	0.8	10
WB L	Crosstimbers St	322	0.9	0.1	0.7	1.2	10
WB T	Crosstimbers St	322	0.7	0.1	0.6	0.8	10
WB TR	Crosstimbers St	322	0.8	0.1	0.6	0.9	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	0.7	0.1	0.6	0.8	10
EB T	Elgin St	204	0.9	0.1	0.7	1.0	10
EB TR	Elgin St	204	1.2	0.1	1.1	1.4	10
NEB L	Cullen Blvd	207	0.5	0.1	0.4	0.6	10
NEB T	Cullen Blvd	207	1.5	0.1	1.3	1.7	10
NEB TR	Cullen Blvd	207	2.0	0.2	1.8	2.2	10
SB L	Cullen Blvd	206	1.4	0.2	1.2	1.6	10
SB T	Cullen Blvd	206	1.1	0.1	0.9	1.3	10
SB TR	Cullen Blvd	206	1.7	0.2	1.4	2.0	10
WB L	Elgin St	208	0.7	0.1	0.6	0.8	10
WB T	Elgin St	208	1.3	0.1	1.1	1.5	10
WB TR	Elgin St	208	1.1	0.2	0.9	1.3	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	20.4	0.9	19.4	22.1	10
EB R	EB Westpark Tollway FR	111	22.1	1.1	20.9	23.4	10
NB T	Fondren Rd	38	90.6	2.1	87.1	92.7	10
SB T	Fondren Rd	110	1.8	0.2	1.5	2.1	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	0.3	0.1	0.2	0.4	10
NEB TR	Ennis St	702	0.4	0.1	0.3	0.5	10
NWB L	Elgin St	701	0.3	0.0	0.3	0.4	10
NWB T	Elgin St	701	1.2	0.1	1.1	1.4	10

NWB TR	Elgin St	701	1.2	0.1	1.1	1.3	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.1	10
SEB T	Elgin St	700	0.4	0.0	0.4	0.5	10
SEB TR	Elgin St	700	0.5	0.1	0.4	0.6	10
SWB LTR	Ennis St	195	0.4	0.1	0.3	0.5	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	0.9	0.1	0.7	1.1	10
EB T	Elgin St	701	1.3	0.1	1.2	1.5	10
EB TR	Elgin St	701	1.9	0.1	1.6	2.1	10
NB T	LRT Line	667	0.0	0.0	0.0	0.0	10
NWB L	Scott St	198	1.1	0.2	0.9	1.4	10
NWB T	Scott St	198	0.5	0.1	0.3	0.7	10
NWB TR	Scott St	198	0.6	0.1	0.4	0.8	10
SB L	Scott St	671	0.7	0.1	0.6	0.9	10
SB T	Scott St	671	1.8	0.2	1.5	2.2	10
SB TR	Scott St	671	1.8	0.2	1.7	2.2	10
SWB T	LRT Line	669	0.1	0.1	0.0	0.3	10
WB L	Elgin St	204	3.0	0.2	2.5	3.3	10
WB T	Elgin St	204	2.4	0.1	2.4	2.8	10
WB TR	Elgin St	204	2.6	0.2	2.4	2.9	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	0.1	0.0	0.0	0.1	10
NEB LT	Elgin St	212	1.2	0.1	1.0	1.3	10
NEB T	Elgin St	212	1.3	0.1	1.1	1.6	10
SB LT	Spur 5 SBFR	214	1.1	0.1	1.0	1.2	10
SB TR	Spur 5 SBFR	214	0.5	0.1	0.5	0.6	10
SWB L	Elgin St	216	0.7	0.1	0.7	0.8	10
SWB T	Elgin St	216	0.5	0.1	0.4	0.6	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.0	0.0	0.0	0.0	10
EB T	Elgin St	208	0.3	0.1	0.2	0.4	10
EB TR	Elgin St	208	0.3	0.1	0.2	0.4	10
NB LT	UH Entrance	211	1.5	0.1	1.3	1.7	10
NB R	UH Entrance	211	0.1	0.0	0.1	0.2	10
SWB LT	UH Entrance	210	0.5	0.0	0.5	0.6	10
SWB R	UH Entrance	210	0.1	0.0	0.1	0.1	10
WB L	Elgin St	212	0.1	0.0	0.1	0.2	10
WB T	Elgin St	212	0.4	0.0	0.3	0.5	10
WB TR	Elgin St	212	0.2	0.0	0.1	0.2	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.3	0.1	0.2	0.4	10
NEB TR	Emancipation Ave	711	0.8	0.1	0.6	0.9	10
NWB LT	Wheeler Ave	766	0.3	0.0	0.3	0.4	10
NWB TR	Wheeler Ave	766	0.3	0.1	0.2	0.4	10
SEB LT	Wheeler Ave	423	0.7	0.2	0.5	1.1	10
SEB TR	Wheeler Ave	423	0.4	0.0	0.3	0.5	10
SWB LT	Emancipation Ave	177	0.6	0.0	0.5	0.6	10
SWB TR	Emancipation Ave	177	0.6	0.1	0.5	0.7	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	0.3	0.0	0.2	0.3	10
NEB TR	Ennis St	740	0.6	0.1	0.5	0.7	10
NWB LTR	Holman St	742	0.4	0.0	0.4	0.5	10
SEB LTR	Holman St	741	0.1	0.0	0.1	0.2	10
SWB LT	Ennis St	702	0.1	0.0	0.0	0.1	10
SWB TR	Ennis St	702	0.3	0.0	0.3	0.4	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	0.2	0.0	0.2	0.3	10
NEB T	Ennis St	698	0.1	0.0	0.1	0.2	10
SEB L	Wheeler Ave	766	0.6	0.1	0.5	0.8	10
SEB R	Wheeler Ave	766	0.1	0.0	0.1	0.1	10
SWB T	Ennis St	726	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	726	0.1	0.0	0.1	0.1	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.8	0.1	0.7	0.9	10
EB TR	Leeland St	228	0.9	0.1	0.8	1.0	10
SWB LT	Ernestine St	411	0.5	0.1	0.4	0.5	10
SWB T	Ernestine St	411	0.4	0.0	0.3	0.5	10
SWB TR	Ernestine St	411	0.4	0.0	0.4	0.5	10
WB L	Leeland St	227	0.1	0.0	0.0	0.1	10
WB T	Leeland St	227	0.4	0.1	0.3	0.5	10

ERNESTINE ST & MUNGER ST — NODE: 452

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	0.1	0.0	0.1	0.1	10
SB LT	Ernestine St	685	0.0	0.0	0.0	0.1	10
SB T	Ernestine St	685	0.0	0.0	0.0	0.0	10
SB TR	Ernestine St	685	0.0	0.0	0.0	0.1	10
WB L	Munger St	460	0.1	0.0	0.0	0.1	10
WB T	Munger St	460	0.1	0.0	0.1	0.2	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	2.0	0.1	1.9	2.1	10
NWB L	I-45 NBFR	222	0.7	0.1	0.6	0.8	10
NWB LT	I-45 NBFR	222	1.9	0.2	1.7	2.2	10
NWB T	I-45 NBFR	222	2.6	0.3	2.1	3.1	10
NWB TR	I-45 NBFR	222	4.3	0.5	3.6	5.2	10
SB T	Ernestine St	221	0.3	0.0	0.2	0.4	10
SB TR	Ernestine St	221	0.7	0.1	0.6	0.8	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	3.0	0.3	2.7	3.6	10
NWB T	Wheeler Ave	172	0.4	0.1	0.3	0.5	10
SEB T	Wheeler Ave	169	1.7	0.1	1.6	1.9	10
SEB TR	Wheeler Ave	169	1.2	0.1	1.1	1.3	10
SWB L	Fannin St	87	0.3	0.1	0.3	0.4	10
SWB T	Fannin St	87	0.9	0.1	0.8	1.2	10
SWB TR	Fannin St	87	0.6	0.1	0.5	0.9	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
EB LR	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
NB L	Edloe St	153	1.0	0.2	0.7	1.3	10
NB T	Edloe St	153	0.3	0.1	0.2	0.5	10
NB TR	Edloe St	153	0.1	0.0	0.1	0.2	10
SB L	Edloe St	155	0.0	0.0	0.0	0.1	10
SB T	Edloe St	155	0.8	0.2	0.7	1.1	10
SB TR	Edloe St	155	1.0	0.9	0.5	3.5	10
WB LR	I-69 Express Lanes	31	1.3	0.2	1.0	1.6	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NB R	Turner Dr	595	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.8	0.4	1.3	2.4	10
EB T	Kelley St	313	0.3	0.1	0.2	0.4	10
EB TR	Kelley St	313	0.5	0.1	0.4	0.7	10
NB L	Lockwood Dr	308	1.0	0.1	0.9	1.2	10
NB T	Lockwood Dr	308	1.1	0.1	0.9	1.3	10
NB TR	Lockwood Dr	308	1.3	0.1	1.2	1.6	10
SB L	Lockwood Dr	311	0.2	0.0	0.2	0.2	10
SB T	Lockwood Dr	311	1.3	0.1	1.0	1.5	10
SB TR	Lockwood Dr	311	1.6	0.2	1.3	1.8	10
WB L	Kelley St	312	0.5	0.0	0.4	0.6	10
WB T	Kelley St	312	1.2	0.1	1.1	1.3	10
WB TR	Kelley St	312	1.3	0.1	1.1	1.7	10

LABRANCH ST & WHEELER AVE — NODE: 134

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	0.9	0.1	0.8	1.2	10
NWB LT	Wheeler Ave	77	0.1	0.0	0.0	0.1	10
NWB TR	Wheeler Ave	77	0.0	0.0	0.0	0.0	10
SEB LT	Wheeler Ave	86	0.1	0.0	0.1	0.1	10
SEB TR	Wheeler Ave	86	0.1	0.0	0.1	0.2	10
SWB LTR	LaBranch St	78	0.4	0.0	0.3	0.4	10

LAURA KOPPE RD & LOCKWOOD DR — NODE: 178

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.4	0.0	0.4	0.5	10
EB TR	Laura Koppe Rd	330	1.4	0.2	1.2	1.7	10
NB L	Lockwood Dr	328	0.2	0.0	0.1	0.2	10
NB T	Lockwood Dr	328	0.5	0.1	0.4	0.6	10
NB TR	Lockwood Dr	328	0.6	0.1	0.5	0.7	10
SB L	Lockwood Dr	571	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	571	0.1	0.0	0.1	0.2	10

SB TR	Lockwood Dr	571	0.2	0.1	0.2	0.3	10
WB L	Laura Koppe Rd	329	0.6	0.1	0.4	0.7	10
WB TR	Laura Koppe Rd	329	0.7	0.1	0.6	0.9	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	254	0.4	0.1	0.3	0.5	10
NEB T	Lockwood Dr	254	6.6	0.2	6.3	6.9	10
SWB L	Lockwood Dr	253	0.0	0.0	0.0	0.1	10
SWB LT	Lockwood Dr	253	0.7	0.1	0.5	0.8	10
SWB T	Lockwood Dr	253	0.9	0.1	0.8	1.1	10
WB LR	Armour Dr	659	0.4	0.1	0.3	0.5	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	772	1.2	0.1	1.1	1.3	10
EB R	Canal St	772	0.3	0.1	0.1	0.4	10
EB T	Canal St	772	1.0	0.2	0.8	1.2	10
NEB L	Lockwood Dr	241	1.3	0.1	1.2	1.5	10
NEB T	Lockwood Dr	241	0.9	0.1	0.8	1.0	10
NEB TR	Lockwood Dr	241	0.8	0.1	0.7	1.0	10
SWB L	Lockwood Dr	245	0.4	0.1	0.3	0.5	10
SWB T	Lockwood Dr	245	0.9	0.1	0.7	1.0	10
SWB TR	Lockwood Dr	245	1.1	0.1	0.9	1.2	10
WB LT	Canal St	768	1.6	0.3	1.3	2.2	10
WB TR	Canal St	768	1.3	0.2	1.0	1.5	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	1.0	0.1	0.9	1.2	10
EB T	Cavalcade St	299	0.4	0.1	0.3	0.5	10
EB TR	Cavalcade St	299	0.5	0.1	0.4	0.6	10
NB L	Lockwood Dr	292	1.2	0.3	0.9	1.6	10
NB T	Lockwood Dr	292	0.5	0.1	0.4	0.8	10
NB TR	Lockwood Dr	292	0.9	0.1	0.8	1.1	10
SB L	Lockwood Dr	296	0.6	0.1	0.5	0.8	10
SB T	Lockwood Dr	296	0.9	0.1	0.7	1.0	10
SB TR	Lockwood Dr	296	1.2	0.1	1.0	1.4	10
WB L	Cavalcade St	298	0.6	0.0	0.5	0.6	10
WB T	Cavalcade St	298	0.7	0.1	0.5	0.7	10
WB TR	Cavalcade St	298	0.9	0.1	0.8	1.0	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.3	0.0	0.2	0.3	10
EB T	Clinton Dr	259	0.4	0.1	0.3	0.4	10
EB TR	Clinton Dr	259	0.5	0.1	0.5	0.7	10
NEB L	Lockwood Dr	257	0.4	0.1	0.4	0.6	10
NEB R	Lockwood Dr	257	0.4	0.4	0.2	1.4	10
NEB T	Lockwood Dr	257	3.4	0.2	3.2	3.7	10
SB L	Lockwood Dr	256	0.5	0.1	0.3	0.6	10
SB R	Lockwood Dr	256	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	256	0.6	0.1	0.5	0.8	10
WB L	Clinton Dr	258	0.8	0.1	0.6	1.0	10
WB R	Clinton Dr	258	0.2	0.0	0.2	0.2	10
WB T	Clinton Dr	258	1.8	0.3	1.5	2.2	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.8	0.0	0.7	0.8	10
EB T	Collingsworth St	291	0.5	0.0	0.4	0.6	10
EB TR	Collingsworth St	291	0.8	0.1	0.7	1.2	10
NB L	Lockwood Dr	289	5.5	2.4	3.5	10.3	10
NB T	Lockwood Dr	289	1.1	0.1	0.9	1.2	10
NB TR	Lockwood Dr	289	2.2	0.6	1.7	3.4	10
SEB L	Lockwood Dr	288	0.3	0.1	0.3	0.4	10
SEB T	Lockwood Dr	288	0.2	0.0	0.2	0.3	10
SEB TR	Lockwood Dr	288	0.3	0.1	0.1	0.5	10
WB L	Collingsworth St	290	0.6	0.1	0.5	0.6	10
WB T	Collingsworth St	290	0.1	0.0	0.0	0.2	10
WB TR	Collingsworth St	290	0.2	0.0	0.2	0.3	10

LOCKWOOD DR & CRANE ST — NODE: 168

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.3	0.1	1.0	1.4	10
NB L	Lockwood Dr	288	0.3	0.0	0.2	0.3	10
NB T	Lockwood Dr	288	0.8	0.1	0.6	1.0	10
NB TR	Lockwood Dr	288	0.9	0.1	0.8	1.1	10
SB L	Lockwood Dr	292	0.3	0.0	0.2	0.3	10
SB T	Lockwood Dr	292	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	292	0.1	0.0	0.0	0.1	10
WB LTR	Crane St	294	1.2	0.1	0.9	1.3	10

LOCKWOOD DR & DENMARK ST — NODE: 623

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	0.3	0.0	0.2	0.4	10
NB L	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	Denmark St	549	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.3	0.1	0.2	0.4	10
NB LT	Lockwood Dr	571	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	571	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	332	0.0	0.0	0.0	0.0	10
WB LTR	Firnat St	575	0.2	0.1	0.2	0.4	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 513

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	249	2.7	0.4	2.0	3.2	10
NEB T	Lockwood Dr	249	0.6	0.1	0.5	0.7	10
SEB L	Marron Park Way	783	9.6	0.0	9.5	9.6	10
SEB R	Marron Park Way	783	1.5	0.2	1.3	1.9	10
SWB T	Lockwood Dr	254	0.9	0.1	0.8	1.0	10
SWB TR	Lockwood Dr	254	1.0	0.1	0.9	1.2	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Harrisburg Blvd	244	1.3	0.3	1.0	2.2	10
EB R	Harrisburg Blvd	244	0.5	0.1	0.4	0.6	10
EB T	Harrisburg Blvd	244	1.4	0.2	1.0	1.7	10
NEB L	Lockwood Dr	237	1.5	0.2	1.2	1.8	10
NEB T	Lockwood Dr	237	3.6	0.6	2.5	4.5	10
NEB TR	Lockwood Dr	237	3.7	0.9	2.4	4.9	10
NWB L	Harrisburg Blvd	678	1.1	0.2	0.8	1.3	10
NWB R	Harrisburg Blvd	678	0.3	0.1	0.3	0.4	10
NWB T	Harrisburg Blvd	678	1.1	0.1	1.0	1.4	10
SB L	Lockwood Dr	241	1.3	0.3	1.0	1.7	10
SB T	Lockwood Dr	241	2.9	0.1	2.6	3.1	10
SB TR	Lockwood Dr	241	3.3	0.2	2.8	3.5	10
SEB T	LRT Line	675	0.0	0.0	0.0	0.0	10
WB T	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	4.4	0.8	2.6	5.2	10
NEB L	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NEB T	Lockwood Dr	253	0.3	0.0	0.2	0.4	10
NEB TR	Lockwood Dr	253	0.3	0.0	0.2	0.3	10
SWB L	Lockwood Dr	257	0.0	0.0	0.0	0.1	10
SWB T	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
SWB TR	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
WB LTR	Harvey Wilson Dr	497	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Hershe St	514	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
WB LTR	Hershe St	513	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	1.8	0.2	1.6	2.1	10
EB LT	I-610 EBFR	307	1.9	0.2	1.6	2.2	10
EB TR	I-610 EBFR	307	2.0	0.3	1.6	2.5	10
NB R	Lockwood Dr	643	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	643	11.7	4.0	7.0	18.1	10
SB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	304	0.2	0.1	0.1	0.3	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	304	0.5	0.1	0.4	0.7	10
SB T	Lockwood Dr	308	5.3	0.4	4.7	5.8	10
WB L	I-610 WBFR	309	1.2	0.1	1.0	1.4	10
WB R	Lockwood Dr	308	0.1	0.0	0.0	0.1	10
WB T	I-610 WBFR	309	1.7	0.2	1.5	1.8	10
WB TR	I-610 WBFR	309	1.9	0.2	1.6	2.2	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Keeland St	562	0.0	0.0	0.0	0.1	10
NB LT	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	232	0.2	0.0	0.1	0.3	10
NB T	Lockwood Dr	232	0.1	0.0	0.1	0.1	10
NB TR	Lockwood Dr	232	0.1	0.0	0.1	0.1	10
SB L	Lockwood Dr	237	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	237	1.4	0.1	1.3	1.6	10
SB TR	Lockwood Dr	237	1.3	0.1	1.2	1.4	10
WB LTR	McKinney St	239	0.4	0.1	0.2	0.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	0.2	0.1	0.2	0.3	10
NB LT	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
WB LTR	Mulvey St	286	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.0	10
EB T	Munger St	460	0.3	0.1	0.2	0.4	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	0.0	0.0	0.0	0.0	10
WB T	Munger St	661	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.3	0.2	1.0	1.6	10
EB T	Navigation Blvd	252	1.2	0.1	1.1	1.4	10
EB TR	Navigation Blvd	252	1.5	0.1	1.3	1.7	10
NEB L	Lockwood Dr	245	0.8	0.2	0.5	1.3	10
NEB T	Lockwood Dr	245	1.0	0.5	0.5	1.7	10
NEB TR	Lockwood Dr	245	5.3	1.6	3.6	8.1	10
SWB L	Lockwood Dr	249	1.2	0.1	1.0	1.4	10
SWB T	Lockwood Dr	249	0.8	0.1	0.7	1.0	10
SWB TR	Lockwood Dr	249	1.1	0.1	0.9	1.3	10
WB L	Navigation Blvd	251	1.4	0.1	1.3	1.6	10
WB T	Navigation Blvd	251	1.4	0.1	1.3	1.6	10
WB TR	Navigation Blvd	251	1.8	0.2	1.6	2.2	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	0.1	0.1	0.1	0.3	10
NB LT	Lockwood Dr	284	0.0	0.0	0.0	0.1	10

NB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	0.1	0.0	0.1	0.2	10
SB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
WB LTR	Nichols St	525	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.4	0.1	0.3	0.5	10
NB LT	Lockwood Dr	300	0.3	0.4	0.0	1.1	10
NB TR	Lockwood Dr	300	0.1	0.1	0.0	0.2	10
SB LT	Lockwood Dr	643	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	643	0.1	0.0	0.0	0.1	10
WB LTR	Pardee St	546	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & RAND ST **NODE: 170**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	0.9	0.1	0.7	1.1	10
NB LT	Lockwood Dr	296	0.2	0.0	0.2	0.3	10
NB TR	Lockwood Dr	296	0.2	0.0	0.2	0.3	10
SB LT	Lockwood Dr	300	0.8	0.1	0.7	1.0	10
SB TR	Lockwood Dr	300	0.6	0.1	0.5	0.7	10
WB LTR	Rand St	302	0.9	0.1	0.9	1.1	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	1.4	0.1	1.1	1.6	10
NB TR	Lockwood Dr	311	1.5	0.1	1.3	1.6	10
NEB LTR	Shreveport Blvd	316	0.6	0.1	0.5	0.8	10
SB L	Lockwood Dr	314	0.9	0.1	0.7	1.0	10
SB T	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SWB LTR	Shreveport Blvd	315	1.3	0.2	1.1	1.5	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.0	0.0	0.0	0.1	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	289	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	289	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	289	0.0	0.0	0.0	0.0	10
WB LTR	Sudan St	534	0.0	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.3	0.1	0.2	0.4	10
EB TR	Weaver Rd	326	1.0	0.1	0.8	1.3	10
NB L	Lockwood Dr	320	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	320	1.6	0.1	1.5	1.8	10
NB TR	Lockwood Dr	320	1.9	0.2	1.6	2.2	10
SB L	Lockwood Dr	557	0.4	0.1	0.4	0.5	10
SB T	Lockwood Dr	557	0.9	0.1	0.8	1.1	10
SB TR	Lockwood Dr	557	0.8	0.1	0.6	1.0	10
WB L	Weaver Rd	325	1.0	0.4	0.8	2.0	10

WB TR	Weaver Rd	325	4.2	1.4	3.1	6.8	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.0	0.0	0.0	0.0	10
EB LT	I-10 EBFR	268	0.6	0.0	0.6	0.6	10
EB T	I-10 EBFR	268	0.3	0.0	0.3	0.4	10
NB T	Lockwood Dr (NB)	264	3.7	0.5	3.3	5.0	10
NB TR	Lockwood Dr (NB)	264	4.5	0.6	3.9	5.8	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	0.4	0.0	0.4	0.5	10
NB LT	Lockwood Dr (NB)	270	0.6	0.0	0.6	0.7	10
NB T	Lockwood Dr (NB)	270	0.8	0.1	0.7	0.9	10
WB T	I-10 WBFR	276	1.7	0.2	1.5	2.0	10
WB TR	I-10 WBFR	276	0.6	0.1	0.5	0.7	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.6	0.1	0.5	0.7	10
EB T	Market St	262	0.3	0.0	0.2	0.3	10
NB LT	Lockwood Dr	499	0.5	0.1	0.3	0.7	10
NB TR	Lockwood Dr	499	1.7	0.5	1.2	2.7	10
WB T	Market St	266	0.4	0.1	0.2	0.4	10
WB TR	Market St	266	0.1	0.0	0.0	0.1	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	7.3	1.2	5.9	9.7	10
EB TR	I-10 EBFR	269	1.5	0.3	1.2	2.1	10
SB L	Lockwood Dr (SB)	267	0.7	0.1	0.6	0.8	10
SB LT	Lockwood Dr (SB)	267	0.3	0.0	0.2	0.3	10
SB T	Lockwood Dr (SB)	267	0.0	0.0	0.0	0.1	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	4.9	0.5	3.9	5.3	10
SB TR	Lockwood Dr (SB)	272	3.4	0.4	2.8	4.1	10
WB L	I-10 WBFR	273	0.0	0.0	0.0	0.1	10
WB LT	I-10 WBFR	273	0.3	0.0	0.2	0.3	10
WB T	I-10 WBFR	273	0.2	0.0	0.2	0.2	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	2.7	0.7	1.9	4.2	10
SB L	Lockwood Dr	515	0.1	0.1	0.0	0.3	10
SB T	Lockwood Dr	515	0.4	0.0	0.4	0.5	10
SB TR	Lockwood Dr	515	0.9	0.2	0.8	1.3	10
WB LT	Lyons Ave	279	0.7	0.1	0.6	0.9	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	1.0	0.2	0.8	1.5	10
EB TR	Market St	263	0.1	0.0	0.0	0.1	10
SB LT	Lockwood Dr (SB)	260	0.7	0.1	0.5	1.0	10

SB TR	Lockwood Dr (SB)	260	0.6	0.1	0.5	0.8	10
WB LT	Market St	262	0.1	0.0	0.0	0.2	10
WB T	Market St	262	0.0	0.0	0.0	0.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	0.4	0.1	0.2	0.5	10
NB L	Lockwood Dr (NB)	275	1.5	1.2	0.5	3.4	10
NB T	Lockwood Dr (NB)	275	0.6	0.1	0.4	0.8	10
NB TR	Lockwood Dr (NB)	275	0.8	0.2	0.6	1.0	10
WB TR	Lyons Ave	283	0.8	0.1	0.7	1.0	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.9	0.1	0.8	1.1	10
EB R	Bennington St	319	0.1	0.0	0.1	0.2	10
NB L	Lockwood Dr	314	0.1	0.0	0.0	0.1	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	317	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	317	0.2	0.0	0.2	0.3	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.6	0.1	0.5	0.7	10
NB TR	Spur 5 NBFR	219	1.2	0.1	1.0	1.4	10
NEB L	Elgin St	216	1.2	0.3	0.7	1.7	10
NEB T	Elgin St	216	1.4	0.2	1.2	1.7	10
SWB T	Lockwood Dr	218	0.6	0.1	0.5	0.7	10
SWB TR	Lockwood Dr	218	1.1	0.1	1.0	1.4	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.4	0.1	0.3	0.6	10
EB T	Polk St	235	0.6	0.1	0.6	0.8	10
EB TR	Polk St	235	0.8	0.1	0.7	1.0	10
NB L	Lockwood Dr	229	0.5	0.0	0.4	0.5	10
NB T	Lockwood Dr	229	2.1	0.2	1.8	2.5	10
NB TR	Lockwood Dr	229	1.5	0.2	1.3	2.0	10
SB L	Lockwood Dr	232	1.3	0.2	1.1	1.7	10
SB T	Lockwood Dr	232	4.0	0.1	3.8	4.2	10
SB TR	Lockwood Dr	232	1.9	0.1	1.8	2.1	10
WB L	Polk St	234	0.7	0.1	0.6	0.8	10
WB T	Polk St	234	0.5	0.1	0.4	0.6	10
WB TR	Polk St	234	0.8	0.1	0.6	0.9	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	0.1	0.1	0.1	0.3	10
EB T	Leeland St	227	0.6	0.1	0.4	0.7	10
NB LT	Lockwood Dr	230	0.8	0.1	0.7	0.9	10
NB T	Lockwood Dr	230	0.6	0.1	0.5	0.7	10
NB TR	Lockwood Dr	230	0.5	0.1	0.4	0.6	10
WB T	Telephone Rd	231	1.6	0.2	1.3	1.8	10
WB TR	Telephone Rd	231	1.4	0.1	1.2	1.7	10

RICHMOND AVE & BUFFALO SPEEDWAY — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	9	1.0	0.1	0.9	1.3	10
EB R	Richmond Ave	9	0.3	0.0	0.3	0.4	10
EB T	Richmond Ave	9	3.0	0.2	2.8	3.4	10
NB L	Buffalo Speedway	37	18.6	3.6	12.9	23.9	10
NB T	Buffalo Speedway	37	10.5	1.8	8.7	13.7	10
NB TR	Buffalo Speedway	37	15.0	1.5	12.8	17.4	10
SB L	Buffalo Speedway	36	1.3	0.1	1.1	1.5	10
SB T	Buffalo Speedway	36	2.2	0.2	1.9	2.6	10
SB TR	Buffalo Speedway	36	2.6	0.2	2.3	2.8	10
WB L	Richmond Ave	12	3.7	0.3	3.3	4.0	10
WB T	Richmond Ave	12	4.8	0.2	4.5	5.2	10
WB TR	Richmond Ave	12	2.7	0.1	2.6	2.9	10

RICHMOND AVE & DUNLAVY ST — NODE: 126

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	0.7	0.1	0.6	0.9	10
EB T	Richmond Ave	163	0.6	0.2	0.5	1.0	10
EB TR	Richmond Ave	163	0.5	0.1	0.5	0.6	10
NB LTR	Dunlavy St	57	3.4	0.2	3.0	3.7	10
SB LTR	Dunlavy St	56	38.0	3.4	33.7	42.4	10
WB L	Richmond Ave	165	0.2	0.0	0.2	0.3	10
WB T	Richmond Ave	165	0.4	0.0	0.3	0.4	10
WB TR	Richmond Ave	165	0.4	0.1	0.2	0.5	10

RICHMOND AVE & EASTSIDE ST — NODE: 120

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	1.1	0.2	0.8	1.3	10
EB T	Richmond Ave	12	0.8	0.1	0.6	1.0	10
EB TR	Richmond Ave	12	0.4	0.1	0.3	0.5	10
NB L	Eastside St	40	3.7	2.3	1.3	8.9	10
NB TR	Eastside St	40	3.3	3.3	0.7	10.1	10
SB L	Eastside St	39	2.7	0.8	1.6	3.9	10
SB TR	Eastside St	39	5.0	1.6	2.5	7.5	10
WB L	Richmond Ave	54	0.1	0.0	0.1	0.2	10
WB T	Richmond Ave	54	0.8	0.1	0.7	0.9	10
WB TR	Richmond Ave	54	0.8	0.1	0.6	1.0	10

RICHMOND AVE & EDLOE ST — NODE: 118

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	1.4	0.3	1.1	2.0	10
EB R	Richmond Ave	7	0.5	0.1	0.3	0.7	10
EB T	Richmond Ave	7	7.4	0.4	6.6	8.1	10
NB L	Edloe St	155	13.0	0.8	11.8	14.3	10
NB R	Edloe St	155	0.5	0.1	0.3	0.7	10
NB T	Edloe St	155	2.9	0.2	2.5	3.2	10
SB L	Edloe St	5	1.3	0.2	1.1	1.5	10
SB T	Edloe St	5	2.4	0.3	2.1	3.1	10
SB TR	Edloe St	5	2.1	0.2	1.9	2.4	10
WB L	Richmond Ave	9	3.9	1.1	2.9	6.7	10
WB T	Richmond Ave	9	6.0	0.3	5.6	6.5	10
WB TR	Richmond Ave	9	3.5	0.2	3.2	3.8	10

RICHMOND AVE & GREENBRIAR DR — NODE: 122

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	2.8	0.4	2.2	3.4	10

EB T	Richmond Ave	64	1.1	0.1	0.9	1.4	10
EB TR	Richmond Ave	64	2.5	0.2	2.3	2.9	10
NB TR	Greenbriar Dr	47	2.9	0.3	2.2	3.3	10
SB L	Greenbriar Dr	46	0.2	0.0	0.1	0.3	10
SB R	Greenbriar Dr	46	0.3	0.0	0.2	0.4	10
SB T	Greenbriar Dr	46	4.5	0.5	4.0	5.8	10
WB L	Richmond Ave	160	1.1	0.1	1.0	1.3	10
WB T	Richmond Ave	160	0.2	0.0	0.1	0.2	10
WB TR	Richmond Ave	160	0.2	0.0	0.2	0.3	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	0.0	0.0	0.0	0.1	10
EB T	Richmond Ave	20	0.2	0.0	0.2	0.3	10
EB TR	Richmond Ave	20	0.2	0.0	0.1	0.2	10
NB LTR	Hazard St	51	30.8	0.7	30.1	32.0	10
SB LTR	Hazard St	50	25.0	3.6	20.4	32.2	10
WB L	Richmond Ave	162	0.5	0.1	0.4	0.6	10
WB T	Richmond Ave	162	1.0	0.1	0.9	1.2	10
WB TR	Richmond Ave	162	1.0	0.1	0.9	1.1	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	10.2	3.4	6.4	15.9	10
EB T	Richmond Ave	54	2.3	0.3	1.8	2.8	10
EB TR	Richmond Ave	54	2.5	0.8	1.7	3.9	10
NB L	Kirby Dr	158	7.1	0.6	6.5	8.3	10
NB T	Kirby Dr	158	33.2	2.5	27.0	36.3	10
NB TR	Kirby Dr	158	20.0	1.5	16.0	21.0	10
SB L	Kirby Dr	44	2.3	0.2	2.0	2.7	10
SB T	Kirby Dr	44	26.4	1.6	22.9	29.1	10
SB TR	Kirby Dr	44	14.9	1.0	12.9	16.5	10
WB L	Richmond Ave	64	1.5	0.2	1.3	1.8	10
WB T	Richmond Ave	64	3.3	0.2	3.0	3.7	10
WB TR	Richmond Ave	64	1.6	0.1	1.5	1.8	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	0.2	0.1	0.1	0.3	10
EB T	Richmond Ave	165	0.4	0.1	0.4	0.5	10
EB TR	Richmond Ave	165	0.4	0.0	0.4	0.5	10
NB LTR	Mandell St	59	24.9	1.4	22.6	26.9	10
SB LTR	Mandell St	58	4.2	0.7	3.1	5.1	10
WB L	Richmond Ave	23	0.4	0.1	0.3	0.4	10
WB T	Richmond Ave	23	0.2	0.0	0.2	0.3	10
WB TR	Richmond Ave	23	0.3	0.1	0.2	0.4	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	0.8	0.2	0.4	1.0	10
EB T	Richmond Ave	23	4.5	2.6	1.8	9.8	10
EB TR	Richmond Ave	23	5.3	2.2	3.0	10.9	10
NB L	Montrose Blvd	61	3.4	1.1	2.4	5.9	10
NB T	Montrose Blvd	61	2.7	0.3	2.4	3.4	10
NB TR	Montrose Blvd	61	4.3	0.9	3.3	6.2	10
SB L	Montrose Blvd	60	2.1	0.6	1.3	3.5	10
SB T	Montrose Blvd	60	8.1	1.8	5.4	11.4	10

SB TR	Montrose Blvd	60	9.8	2.4	6.5	13.7	10
WB L	Richmond Ave	166	5.9	0.8	5.1	7.3	10
WB T	Richmond Ave	166	10.2	1.1	8.5	12.2	10
WB TR	Richmond Ave	166	11.5	1.0	9.9	13.0	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	0.3	0.1	0.2	0.5	10
EB T	Richmond Ave	160	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	160	0.0	0.0	0.0	0.1	10
NB T	Shepherd Dr	49	2.6	0.1	2.3	2.8	10
NB TR	Shepherd Dr	49	2.7	0.2	2.5	3.0	10
SB T	Shepherd Dr	48	2.5	0.2	2.2	2.7	10
SB TR	Shepherd Dr	48	2.6	0.2	2.2	2.9	10
WB L	Richmond Ave	20	0.8	0.1	0.6	0.9	10
WB T	Richmond Ave	20	0.2	0.0	0.1	0.3	10
WB TR	Richmond Ave	20	0.1	0.0	0.1	0.2	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.0	0.0	0.0	0.0	10
EB T	Richmond Ave	167	1.6	3.6	0.2	11.8	10
NB R	US 59 NBFR	26	0.5	0.1	0.3	0.6	10
NEB LT	US 59 NBFR	69	1.3	0.1	1.1	1.4	10
NEB R	US 59 NBFR	69	0.0	0.0	0.0	0.0	10
NEB TR	US 59 NBFR	69	1.7	0.2	1.5	2.0	10
WB T	Richmond Ave	26	4.4	0.4	3.8	5.3	10
WB TR	Richmond Ave	26	1.6	0.2	1.3	1.8	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	29.9	1.7	26.5	32.8	10
EB TR	Richmond Ave	166	8.1	1.6	6.1	10.9	10
SWB LT	US 59 SBFR	65	1.2	0.1	1.1	1.3	10
SWB R	US 59 SBFR	65	0.5	0.1	0.4	0.6	10
SWB T	US 59 SBFR	65	1.1	0.1	0.9	1.2	10
WB L	Richmond Ave	167	0.1	0.0	0.1	0.1	10
WB T	Richmond Ave	167	0.1	0.2	0.0	0.6	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	0.1	0.0	0.1	0.2	10
EB T	Richmond Ave	162	0.8	0.1	0.8	0.9	10
EB TR	Richmond Ave	162	0.7	0.0	0.7	0.8	10
NB LTR	Woodhead St	53	18.1	4.6	8.9	24.3	10
SB LTR	Woodhead St	52	1.0	0.1	0.8	1.2	10
WB L	Richmond Ave	163	0.3	0.1	0.2	0.4	10
WB T	Richmond Ave	163	0.4	0.1	0.3	0.5	10
WB TR	Richmond Ave	163	0.4	0.0	0.3	0.5	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	0.1	0.0	0.1	0.1	10
NEB L	Main St	168	4.1	1.3	2.8	7.3	10
NEB R	Main St	168	0.0	0.0	0.0	0.0	10
NWB R	Wheeler Ave	169	0.0	0.0	0.0	0.1	10
NWB T	Wheeler Ave	169	4.4	0.2	3.9	4.7	10

SB R	Main St	70	0.2	0.0	0.1	0.3	10
SEB R	Richmond Ave	26	0.0	0.0	0.0	0.0	10
SEB T	Richmond Ave	26	5.3	0.6	4.4	6.0	10
SWB T	LRT Line	674	0.0	0.0	0.0	0.0	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	4.5	1.1	3.1	6.6	10
EB T	Westpark Dr	140	4.2	0.6	3.5	5.4	10
EB TR	Westpark Dr	140	5.6	0.7	4.8	7.2	10
NB L	S Rice Ave	138	7.8	4.6	3.0	18.8	10
NB T	S Rice Ave	138	6.4	2.7	3.7	11.9	10
NB TR	S Rice Ave	138	8.8	4.9	4.6	20.7	10
SB L	S Rice Ave	137	2.5	0.6	1.9	3.3	10
SB R	S Rice Ave	137	0.1	0.0	0.0	0.1	10
SB T	S Rice Ave	137	6.8	0.5	6.1	7.5	10
WB L	Westpark Dr	790	10.7	1.7	9.0	14.4	10
WB T	Westpark Dr	790	13.6	0.9	12.1	14.6	10
WB TR	Westpark Dr	790	10.0	0.7	8.9	11.3	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	1.7	0.2	1.4	2.1	10
NEB R	San Jacinto St	173	0.3	0.1	0.1	0.3	10
NEB T	San Jacinto St	173	4.0	0.3	3.7	4.7	10
NWB T	Wheeler Ave	86	2.9	0.4	2.2	3.3	10
NWB TR	Wheeler Ave	86	0.7	0.1	0.5	0.9	10
SEB LT	Wheeler Ave	172	2.2	0.2	2.0	2.5	10
SEB T	Wheeler Ave	172	2.1	0.3	1.7	2.6	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.1	0.0	0.0	0.1	10
EB TR	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	590	0.2	0.1	0.1	0.3	10
SB LTR	Edell St	589	0.2	0.1	0.1	0.3	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	341	0.3	0.1	0.2	0.5	10
EB T	Tidwell Rd	341	0.4	0.0	0.3	0.4	10
EB TR	Tidwell Rd	341	1.1	0.1	0.9	1.3	10
NB LTR	Friendly Rd	585	1.0	0.7	0.3	2.0	10
SB LTR	Friendly Rd	584	8.3	1.0	6.6	9.4	10
WB L	Tidwell Rd	338	0.1	0.0	0.0	0.1	10
WB T	Tidwell Rd	338	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.0	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.5	0.1	0.4	0.5	10
EB T	Tidwell Rd	338	0.9	0.1	0.8	1.1	10
EB TR	Tidwell Rd	338	1.2	0.1	1.0	1.3	10
NB L	Hirsch Rd	336	0.9	0.1	0.7	1.1	10
NB R	Hirsch Rd	336	0.1	0.0	0.1	0.1	10

NB T	Hirsch Rd	336	1.1	0.1	1.0	1.2	10
SB L	Hirsch Rd	335	0.7	0.1	0.6	1.0	10
SB R	Hirsch Rd	335	0.3	0.1	0.2	0.4	10
SB T	Hirsch Rd	335	0.7	0.1	0.6	0.9	10
WB L	Tidwell Rd	334	0.1	0.1	0.1	0.2	10
WB T	Tidwell Rd	334	0.4	0.1	0.2	0.6	10
WB TR	Tidwell Rd	334	0.4	0.1	0.3	0.6	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	0.6	0.1	0.5	0.8	10
EB LT	Tidwell Rd	342	1.5	0.1	1.4	1.7	10
EB T	Tidwell Rd	342	3.1	0.2	2.8	3.5	10
NB L	I-69 NBFR	340	1.1	0.1	1.0	1.2	10
NB LT	I-69 NBFR	340	1.4	0.1	1.2	1.5	10
NB R	I-69 NBFR	340	0.4	0.0	0.4	0.5	10
NB T	I-69 NBFR	340	1.2	0.1	1.0	1.3	10
NB TR	I-69 NBFR	340	1.1	0.1	0.9	1.2	10
WB T	Tidwell Rd	341	3.8	0.3	3.3	4.3	10
WB TR	Tidwell Rd	341	1.8	0.2	1.5	2.2	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	0.2	0.0	0.1	0.3	10
EB T	Tidwell Rd	591	3.8	0.2	3.5	4.2	10
SB L	I-69 SBFR	649	1.1	0.1	1.0	1.2	10
SB LT	I-69 SBFR	649	1.2	0.1	1.1	1.3	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.0	10
SB T	I-69 SBFR	649	1.0	0.1	0.9	1.1	10
WB L	Tidwell Rd	342	1.8	0.2	1.4	2.1	10
WB LT	Tidwell Rd	342	1.7	0.2	1.5	2.1	10
WB T	Tidwell Rd	342	1.5	0.2	1.2	1.9	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	1.4	0.1	1.3	1.7	10
EB T	Tidwell Rd	349	2.4	0.2	2.1	3.0	10
EB TR	Tidwell Rd	349	2.7	0.2	2.4	2.9	10
NB L	Jensen Dr	347	2.1	0.4	1.4	3.0	10
NB T	Jensen Dr	347	1.3	0.1	1.2	1.6	10
NB TR	Jensen Dr	347	1.9	0.2	1.5	2.3	10
SB L	Jensen Dr	346	1.3	0.2	1.0	1.7	10
SB T	Jensen Dr	346	1.0	0.1	0.8	1.2	10
SB TR	Jensen Dr	346	1.3	0.2	0.9	1.5	10
WB L	Tidwell Rd	348	0.2	0.0	0.2	0.3	10
WB T	Tidwell Rd	348	2.4	0.3	2.0	2.8	10
WB TR	Tidwell Rd	348	3.2	0.3	2.6	3.7	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	0.1	0.0	0.1	0.2	10
EB T	Tidwell Rd	334	1.7	0.2	1.4	2.0	10
EB TR	Tidwell Rd	334	2.0	0.3	1.7	2.4	10
NB L	Lockwood Dr	332	4.8	1.6	3.4	7.9	10
NB T	Lockwood Dr	332	0.1	0.1	0.0	0.2	10
NB TR	Lockwood Dr	332	0.5	0.1	0.3	0.6	10
SB L	Lockwood Dr	331	0.1	0.0	0.1	0.1	10

SB T	Lockwood Dr	331	0.2	0.1	0.1	0.3	10
SB TR	Lockwood Dr	331	0.2	0.0	0.1	0.2	10
WB L	Tidwell Rd	333	0.7	0.2	0.4	1.1	10
WB T	Tidwell Rd	333	1.7	0.2	1.3	1.9	10
WB TR	Tidwell Rd	333	1.7	0.2	1.5	2.1	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LTR	Edell St	593	0.0	0.0	0.0	0.0	10
SEB LTR	Edell St	592	0.0	0.0	0.0	0.0	10
SWB TR	Turner Dr	793	0.0	0.0	0.0	0.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	11.9	2.4	8.5	15.8	10
EB TR	Westpark Dr	116	3.8	1.1	1.8	5.2	10
NB L	14th St	118	3.2	1.1	2.6	6.0	10
NB R	14th St	118	0.3	0.0	0.3	0.4	10
WB L	Westpark Dr	616	0.9	0.2	0.6	1.4	10
WB T	Westpark Dr	616	8.9	6.2	3.7	18.7	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	788	0.1	0.4	0.0	1.3	10
EB TR	Westpark Dr	788	0.0	0.0	0.0	0.0	10
NB L	Alder Dr	787	3.5	0.8	2.2	4.5	10
NB R	Alder Dr	787	0.8	0.3	0.4	1.4	10
WB LT	Westpark Dr	133	0.3	0.1	0.3	0.4	10
WB T	Westpark Dr	133	0.1	0.0	0.0	0.1	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	2.4	0.4	1.8	3.0	10
EB T	Westpark Dr	133	2.6	0.2	2.5	3.0	10
EB TR	Westpark Dr	133	3.1	0.2	2.8	3.4	10
NB T	Chimney Rock Rd	135	3.6	0.1	3.4	3.9	10
NB TR	Chimney Rock Rd	135	3.7	0.2	3.4	3.9	10
SB L	Chimney Rock Rd	134	2.9	0.5	2.4	3.5	10
SB T	Chimney Rock Rd	134	2.5	0.1	2.3	2.7	10
SB TR	Chimney Rock Rd	134	2.6	0.2	2.5	3.0	10
WB L	Westpark Dr	136	2.1	0.3	1.7	2.6	10
WB T	Westpark Dr	136	3.2	0.2	3.0	3.6	10
WB TR	Westpark Dr	136	4.6	0.3	4.2	5.0	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	1.1	0.2	0.8	1.5	10
EB T	Westpark Dr	152	0.3	0.0	0.3	0.4	10
EB TR	Westpark Dr	152	0.4	0.1	0.3	0.5	10
NB R	Edloe St	29	0.1	0.0	0.1	0.2	10
NB T	Edloe St	29	6.1	0.3	5.4	6.4	10
SB LT	Edloe St	153	2.0	0.1	1.8	2.2	10
SB T	Edloe St	153	1.4	0.1	1.2	1.5	10
SB TR	Edloe St	153	1.7	0.2	1.3	2.1	10
WB LT	Westpark Dr	154	4.3	0.5	3.5	4.9	10
WB TR	Westpark Dr	154	4.3	0.5	3.5	5.0	10

WESTPARK DR & FONDREN RD — NODE: 102

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	5.2	0.8	4.2	6.6	10
EB T	Westpark Dr	114	53.2	2.9	48.7	58.6	10
EB TR	Westpark Dr	114	33.7	2.4	30.7	38.4	10
NB L	Fondren Rd	110	1.8	0.2	1.6	2.1	10
NB T	Fondren Rd	110	2.0	0.1	1.9	2.2	10
NB TR	Fondren Rd	110	1.2	0.1	1.1	1.3	10
SB L	Fondren Rd	112	32.0	4.2	25.8	38.4	10
SB T	Fondren Rd	112	29.3	4.5	21.9	36.0	10
SB TR	Fondren Rd	112	18.1	2.6	14.3	21.8	10
WB L	Westpark Dr	113	22.3	6.8	10.8	28.4	10
WB T	Westpark Dr	113	19.1	6.1	11.0	29.2	10
WB TR	Westpark Dr	113	14.2	4.0	8.5	20.3	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	3.3	0.2	3.1	3.8	10
EB T	Westpark Dr	113	9.6	0.9	8.3	11.0	10
EB TR	Westpark Dr	113	6.3	0.4	5.6	6.9	10
NB L	Hillcroft Ave	3	4.0	0.9	2.5	5.8	10
NB T	Hillcroft Ave	3	8.9	0.6	8.2	9.7	10
NB TR	Hillcroft Ave	3	5.6	0.4	5.2	6.4	10
SB L	Hillcroft Ave	115	25.1	2.7	19.5	28.6	10
SB T	Hillcroft Ave	115	32.0	3.8	25.6	39.8	10
SB TR	Hillcroft Ave	115	36.7	5.1	29.4	43.5	10
WB L	Westpark Dr	116	2.8	0.4	2.5	3.6	10
WB T	Westpark Dr	116	20.8	2.2	17.9	24.6	10
WB TR	Westpark Dr	116	11.2	0.9	10.0	12.9	10

WESTPARK DR & I-610 NBFR — NODE: 112

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	143	6.9	0.3	6.3	7.4	10
EB T	Westpark Dr	143	0.5	0.1	0.4	0.6	10
NB L	I-610 NBFR	145	15.0	1.1	13.4	17.1	10
NB LT	I-610 NBFR	145	14.1	1.0	12.4	15.2	10
NB TR	I-610 NBFR	145	13.2	0.8	11.5	14.4	10
WB T	Westpark Dr	792	11.7	4.7	7.3	23.5	10
WB TR	Westpark Dr	792	9.4	3.4	6.1	17.8	10

WESTPARK DR & I-610 SBFR — NODE: 111

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	0.0	0.0	0.0	0.1	10
EB T	Westpark Dr	629	13.6	1.4	11.4	16.7	10
SB L	I-610 SBFR	141	1.0	0.1	0.8	1.2	10
SB R	I-610 SBFR	141	0.2	0.3	0.1	1.0	10
SB T	I-610 SBFR	141	3.4	0.9	2.6	5.7	10
WB L	Westpark Dr	143	1.0	0.2	0.8	1.3	10
WB T	Westpark Dr	143	3.5	1.3	2.4	6.8	10

WESTPARK DR & I-69 NBFR — NODE: 106

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	1.0	0.2	0.7	1.1	10
EB LT	Westpark Dr	123	1.9	0.3	1.4	2.3	10
EB T	Westpark Dr	123	3.9	0.5	3.1	4.6	10
NEB L	I-69 NBFR	126	1.8	1.0	0.8	4.1	10

NEB R	I-69 NBFR	126	0.7	0.1	0.6	0.9	10
NEB T	I-69 NBFR	126	1.4	0.1	1.2	1.6	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	127	5.8	0.4	4.7	6.4	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	616	7.5	1.2	5.7	9.4	10
SWB L	I-69 SBFR	121	1.5	0.6	1.0	3.2	10
SWB LT	I-69 SBFR	121	2.5	0.5	2.0	3.7	10
SWB R	I-69 SBFR	121	1.4	0.8	0.3	2.3	10
SWB T	I-69 SBFR	121	4.1	0.4	3.6	4.8	10
WB L	Westpark Dr	123	2.8	0.3	2.2	3.2	10
WB T	Westpark Dr	123	2.8	1.3	1.8	6.2	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	792	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	792	0.0	0.0	0.0	0.1	10
NB LR	Loop Central Dr	791	14.4	0.8	12.7	15.8	10
WB L	Westpark Dr	146	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	146	0.8	2.5	0.0	7.9	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	0.0	0.0	0.0	0.0	10
EB T	Westpark Dr	146	1.6	0.1	1.4	1.8	10
EB TR	Westpark Dr	146	2.7	0.3	2.3	3.0	10
NB L	Newcastle Dr	148	3.6	0.7	2.8	4.8	10
NB T	Newcastle Dr	148	1.8	0.2	1.5	2.0	10
NB TR	Newcastle Dr	148	3.4	0.3	3.0	4.0	10
SB LT	Newcastle Dr	147	1.5	0.2	1.2	1.8	10
SB TR	Newcastle Dr	147	2.1	0.2	1.9	2.4	10
WB L	Westpark Dr	149	2.8	0.2	2.4	3.2	10
WB T	Westpark Dr	149	4.8	0.4	4.3	5.9	10
WB TR	Westpark Dr	149	5.1	0.3	4.7	5.9	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	0.8	0.1	0.8	0.9	10
EB TR	Westpark Dr	127	1.3	0.2	1.1	1.5	10
NB LT	Rampart St	129	3.0	0.4	2.5	3.8	10
NB TR	Rampart St	129	0.2	0.1	0.1	0.3	10
SB LTR	Rampart St	128	0.4	0.1	0.3	0.6	10
WB LT	Westpark Dr	130	1.2	0.6	0.7	2.7	10
WB TR	Westpark Dr	130	0.5	0.1	0.3	0.7	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	0.0	0.0	0.0	0.1	10
EB TR	Westpark Dr	136	0.0	0.0	0.0	0.0	10
NB LR	Royalton St	384	16.2	0.3	15.5	16.5	10
WB L	Westpark Dr	140	0.2	0.0	0.2	0.3	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.0	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	790	0.0	0.0	0.0	0.1	10
EB TR	Westpark Dr	790	0.0	0.0	0.0	0.0	10
NB LR	Uptown Transit Ctr	789	0.3	0.0	0.2	0.3	10
WB L	Westpark Dr	629	0.2	0.0	0.1	0.2	10
WB T	Westpark Dr	629	32.7	9.3	19.2	54.3	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	3.7	1.4	2.0	6.9	10
EB T	Westpark Dr	149	4.4	0.8	3.5	6.3	10
EB TR	Westpark Dr	149	6.4	1.6	4.7	10.3	10
NB L	Weslayan St	151	4.4	1.5	3.1	7.3	10
NB T	Weslayan St	151	1.2	0.2	0.8	1.5	10
NB TR	Weslayan St	151	3.0	1.0	2.0	5.0	10
SB L	Weslayan St	150	0.3	0.1	0.2	0.4	10
SB T	Weslayan St	150	5.5	0.5	5.0	6.5	10
SB TR	Weslayan St	150	7.1	0.7	6.3	8.4	10
WB L	Westpark Dr	152	5.0	1.6	3.0	7.3	10
WB T	Westpark Dr	152	10.3	2.7	6.1	13.4	10
WB TR	Westpark Dr	152	11.9	3.1	7.1	16.2	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	1.2	0.4	0.7	1.7	10
EB T	Westpark Dr	130	3.1	0.2	2.8	3.3	10
EB TR	Westpark Dr	130	3.3	0.2	2.9	3.7	10
NB L	Renwick Dr	132	1.2	0.1	1.1	1.5	10
NB T	Renwick Dr	132	2.6	0.2	2.3	2.8	10
NB TR	Renwick Dr	132	2.9	0.3	2.5	3.3	10
SB L	Fountain View Dr	131	2.8	0.4	2.4	3.7	10
SB T	Fountain View Dr	131	2.6	0.2	2.4	3.1	10
SB TR	Fountain View Dr	131	2.7	0.2	2.5	3.0	10
WB L	Westpark Dr	788	1.6	0.2	1.2	2.0	10
WB T	Westpark Dr	788	0.9	0.1	0.8	1.2	10
WB TR	Westpark Dr	788	1.3	0.2	1.0	1.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	0.6	0.1	0.4	0.8	10
NEB TR	Hutchins St	707	18.6	1.6	16.4	21.0	10
NWB T	Wheeler Ave	423	1.4	0.4	0.8	2.2	10
NWB TR	Wheeler Ave	423	0.6	0.1	0.4	0.7	10
SEB L	Wheeler Ave	421	0.1	0.0	0.1	0.2	10
SEB T	Wheeler Ave	421	2.6	0.3	2.2	3.1	10
SWB LR	Hutchins St	422	0.1	0.0	0.1	0.1	10

Project: UNC_Base
Scenario: 2030 No Build PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 16:30:00 - 17:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	732	138.4	63.9	59.3	251.9	10
NEB TR	Ennis St	732	75.8	48.0	30.9	183.6	10
NWB L	Alabama St	197	17.5	5.7	7.7	26.8	10
NWB T	Alabama St	197	144.8	67.6	78.6	244.0	10
NWB TR	Alabama St	197	139.6	67.3	71.9	246.0	10
SEB L	Alabama St	193	131.2	57.8	48.3	222.0	10
SEB T	Alabama St	193	66.8	30.9	35.7	113.5	10
SEB TR	Alabama St	193	60.8	25.7	34.4	94.5	10
SWB LT	Ennis St	740	42.8	12.6	30.3	74.8	10
SWB TR	Ennis St	740	50.5	16.4	35.4	93.0	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	23.6	2.1	19.5	26.9	10
NB T	Almeda Rd	696	7.8	1.3	5.6	10.1	10
NB TR	Almeda Rd	696	5.8	0.4	5.3	6.3	10
NWB LTR	Wheeler Ave	176	28.9	2.1	25.3	32.5	10
SB L	Almeda Rd	174	52.0	8.3	43.0	65.3	10
SB T	Almeda Rd	174	20.6	1.7	18.3	24.3	10
SB TR	Almeda Rd	174	18.0	1.7	14.7	20.8	10
SEB LT	Wheeler Ave	77	34.1	4.3	27.2	40.9	10
SEB TR	Wheeler Ave	77	22.4	4.8	16.5	33.5	10

CLEBURNE ST & ENNIS ST — NODE: 292

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	726	15.1	10.7	9.6	41.2	10
NEB TR	Ennis St	726	6.2	1.8	5.2	10.7	10
NWB LTR	Cleburne St	733	20.0	2.0	15.0	22.7	10
SEB LTR	Cleburne St	731	19.1	1.9	16.4	23.3	10
SWB LT	Ennis St	732	5.6	1.0	4.4	7.3	10
SWB TR	Ennis St	732	4.2	0.6	3.6	5.6	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	44.1	5.2	36.7	51.5	10
EB T	Crosstimbers St	323	17.8	1.8	14.9	19.9	10
EB TR	Crosstimbers St	323	16.7	1.2	14.4	18.4	10
NB L	Lockwood Dr	321	42.6	1.9	39.1	45.3	10
NB T	Lockwood Dr	321	28.9	1.9	25.1	30.8	10
NB TR	Lockwood Dr	321	21.9	1.9	19.4	25.3	10
SB L	Lockwood Dr	320	52.8	4.8	41.9	57.6	10
SB T	Lockwood Dr	320	24.1	2.5	18.8	28.3	10
SB TR	Lockwood Dr	320	20.3	1.6	18.3	23.1	10
WB L	Crosstimbers St	322	38.2	2.4	34.7	43.5	10
WB T	Crosstimbers St	322	15.2	1.6	12.4	18.2	10
WB TR	Crosstimbers St	322	12.5	1.4	10.4	14.3	10

CULLEN BLVD & ELGIN ST — NODE: 144

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	44.0	1.9	41.8	48.7	10
EB T	Elgin St	204	43.6	1.0	42.2	45.5	10
EB TR	Elgin St	204	37.7	1.4	35.3	39.2	10
NEB L	Cullen Blvd	207	33.4	2.3	29.0	36.7	10
NEB T	Cullen Blvd	207	33.2	2.1	29.9	35.7	10
NEB TR	Cullen Blvd	207	29.2	2.3	27.1	34.4	10
SB L	Cullen Blvd	206	37.7	2.3	35.2	43.0	10
SB T	Cullen Blvd	206	35.8	1.3	34.4	37.7	10
SB TR	Cullen Blvd	206	28.8	2.8	25.7	35.0	10
WB L	Elgin St	208	26.8	3.1	22.5	30.8	10
WB T	Elgin St	208	30.3	1.2	27.6	32.3	10
WB TR	Elgin St	208	24.5	3.8	17.9	28.8	10

EB WESTPARK TOLLWAY FR & FONDREN RD **NODE: 101**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	504.2	23.7	474.0	537.3	10
EB R	EB Westpark Tollway FR	111	437.0	32.5	402.4	490.7	10
NB T	Fondren Rd	38	282.2	10.4	267.3	303.5	10
SB T	Fondren Rd	110	4.8	0.6	4.0	5.6	10

EDELL ST & TURNER DR **NODE: 709**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Edell St	589	1.3		1.3	1.3	1

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	702	17.6	2.7	13.1	22.2	10
NEB TR	Ennis St	702	9.9	1.5	7.6	11.5	10
NWB L	Elgin St	701	30.5	1.4	28.7	33.2	10
NWB T	Elgin St	701	24.2	1.3	22.0	25.4	10
NWB TR	Elgin St	701	21.9	0.8	20.7	23.3	10
SEB L	Elgin St	700	20.6	8.5	8.4	36.1	10
SEB T	Elgin St	700	12.0	1.0	11.0	13.9	10
SEB TR	Elgin St	700	11.9	0.9	10.2	13.3	10
SWB LTR	Ennis St	195	16.8	2.0	14.0	21.7	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	57.1	4.3	52.4	63.8	10
EB T	Elgin St	701	41.5	3.0	37.6	46.0	10
EB TR	Elgin St	701	34.4	2.2	32.1	38.7	10
NB T	LRT Line	667	5.5	1.8	3.1	9.0	10
NWB L	Scott St	198	56.6	6.0	46.7	63.8	10
NWB T	Scott St	198	5.9	1.2	4.2	7.4	10
NWB TR	Scott St	198	5.7	1.0	4.3	7.9	10
SB L	Scott St	671	61.6	5.3	52.3	71.2	10
SB T	Scott St	671	23.7	3.1	20.7	30.2	10
SB TR	Scott St	671	23.5	2.4	21.0	27.8	10
SWB T	LRT Line	669	39.1	57.1	18.2	201.2	10
WB L	Elgin St	204	82.9	4.3	76.1	87.9	10
WB T	Elgin St	204	48.3	2.0	45.7	51.4	10
WB TR	Elgin St	204	45.1	1.9	42.0	48.3	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	212	1.9	0.5	1.2	2.5	10

NEB LT	Elgin St	212	18.7	0.7	17.5	20.1	10
NEB T	Elgin St	212	12.4	1.3	10.7	15.2	10
SB LT	Spur 5 SBFR	214	21.2	1.5	19.2	23.1	10
SB TR	Spur 5 SBFR	214	15.2	1.0	13.4	16.4	10
SWB L	Elgin St	216	12.2	0.8	11.3	13.6	10
SWB T	Elgin St	216	5.7	0.7	5.2	7.3	10

ELGIN ST & UH ENTRANCE **NODE: 145**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	11.4	3.8	5.5	17.3	7
EB T	Elgin St	208	6.0	1.4	4.0	8.1	10
EB TR	Elgin St	208	3.0	0.5	2.2	3.9	10
NB LT	UH Entrance	211	50.7	3.6	46.8	58.2	10
NB R	UH Entrance	211	4.7	0.8	3.5	6.0	10
SWB LT	UH Entrance	210	33.6	2.3	30.7	38.4	10
SWB R	UH Entrance	210	4.7	0.7	4.0	6.5	10
WB L	Elgin St	212	8.0	1.7	5.6	10.2	10
WB T	Elgin St	212	7.0	1.0	5.6	8.2	10
WB TR	Elgin St	212	9.4	1.3	7.7	10.7	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	14.0	1.6	11.5	16.7	10
NEB TR	Emancipation Ave	711	13.1	0.9	11.8	14.5	10
NWB LT	Wheeler Ave	766	12.0	0.7	11.0	13.1	10
NWB TR	Wheeler Ave	766	9.3	1.1	7.6	11.2	10
SEB LT	Wheeler Ave	423	16.8	3.1	13.5	24.3	10
SEB TR	Wheeler Ave	423	11.3	0.7	10.3	12.9	10
SWB LT	Emancipation Ave	177	17.0	0.7	16.0	18.1	10
SWB TR	Emancipation Ave	177	13.6	0.9	12.2	14.8	10

ENNIS ST & HOLMAN ST **NODE: 306**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	740	12.3	0.9	11.2	13.8	10
NEB TR	Ennis St	740	11.0	0.6	10.3	11.8	10
NWB LTR	Holman St	742	11.0	1.0	9.6	12.2	10
SEB LTR	Holman St	741	9.8	1.7	8.0	12.7	10
SWB LT	Ennis St	702	11.3	2.0	7.3	14.0	10
SWB TR	Ennis St	702	13.4	1.2	11.4	15.6	10

ENNIS ST & WHEELER AVE **NODE: 266**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Ennis St	698	5.1	0.4	4.3	5.8	10
NEB T	Ennis St	698	4.4	0.4	3.8	5.0	10
SEB L	Wheeler Ave	766	25.2	1.7	23.0	28.8	10
SEB R	Wheeler Ave	766	3.8	0.5	3.2	4.6	10
SWB T	Ennis St	726	1.2	0.3	0.7	1.5	10
SWB TR	Ennis St	726	1.6	0.2	1.3	1.8	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	21.6	1.9	19.1	24.6	10
EB TR	Leeland St	228	17.0	1.3	15.3	18.9	10
SWB LT	Ernestine St	411	8.7	0.9	6.8	9.8	10
SWB T	Ernestine St	411	6.9	0.5	5.7	7.4	10
SWB TR	Ernestine St	411	7.3	0.4	6.8	7.8	10
WB L	Leeland St	227	2.4	0.8	1.7	4.1	10

WB T	Leeland St	227	8.3	0.9	7.0	9.9	10

ERNESTINE ST & MUNGER ST **NODE: 452**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Munger St	461	5.6	1.0	4.2	7.2	10
SB LT	Ernestine St	685	1.1	0.4	0.6	1.8	10
SB TR	Ernestine St	685	0.2	0.1	0.1	0.3	10
WB L	Munger St	460	6.4	0.7	5.0	7.2	10
WB T	Munger St	460	4.4	0.8	3.3	5.7	10

ERNESTINE ST, LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	13.2	0.5	12.3	13.6	10
NWB L	I-45 NBFR	222	11.4	0.7	9.8	12.1	10
NWB LT	I-45 NBFR	222	12.4	0.8	11.2	13.4	10
NWB T	I-45 NBFR	222	15.4	1.3	13.4	17.3	10
NWB TR	I-45 NBFR	222	27.1	3.3	22.5	33.4	10
SB T	Ernestine St	221	11.2	1.2	9.0	12.8	10
SB TR	Ernestine St	221	11.2	0.9	9.9	13.1	10

FANNIN ST & WHEELER AVE **NODE: 132**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB LT	Wheeler Ave	172	38.2	2.9	34.1	44.9	10
NWB T	Wheeler Ave	172	25.0	0.7	23.7	25.7	10
SEB T	Wheeler Ave	169	22.6	1.4	21.2	24.6	10
SEB TR	Wheeler Ave	169	19.3	1.1	18.3	21.3	10
SWB L	Fannin St	87	10.7	1.5	7.8	13.2	10
SWB T	Fannin St	87	9.7	1.0	8.8	11.9	10
SWB TR	Fannin St	87	10.9	1.5	9.2	14.2	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Edloe St	153	43.5	6.3	36.0	54.6	10
NB T	Edloe St	153	2.5	0.8	1.6	4.4	10
NB TR	Edloe St	153	2.0	0.4	1.1	2.6	10
SB L	Edloe St	155	8.9	2.3	5.1	13.1	10
SB T	Edloe St	155	7.2	1.4	5.8	9.7	10
SB TR	Edloe St	155	10.3	9.6	5.3	37.3	10
WB LR	I-69 Express Lanes	31	39.8	5.4	33.2	46.5	10

JENSEN DR & TURNER DR **NODE: 705**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	11.6	4.5	6.8	21.7	10
NB R	Turner Dr	595	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB R	Jensen Dr	346	0.0	0.0	0.0	0.0	10
NEB T	Jensen Dr	346	0.0	0.0	0.0	0.0	10
SWB L	Jensen Dr	656	5.1	1.9	3.1	7.8	10
SWB T	Jensen Dr	656	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	656	0.0	0.0	0.0	0.0	10
WB LT	Turner Dr	595	16.1	5.5	5.0	27.3	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	50.8	7.0	39.0	62.3	10
EB T	Kelley St	313	18.2	2.6	14.3	23.5	10
EB TR	Kelley St	313	10.3	1.4	8.6	12.6	10

NB L	Lockwood Dr	308	24.8	1.7	23.2	28.4	10
NB T	Lockwood Dr	308	24.8	1.7	22.8	28.1	10
NB TR	Lockwood Dr	308	21.9	1.3	20.4	24.9	10
SB L	Lockwood Dr	311	20.3	3.1	15.6	24.7	10
SB T	Lockwood Dr	311	26.7	1.8	24.4	30.0	10
SB TR	Lockwood Dr	311	26.8	2.8	22.0	31.4	10
WB L	Kelley St	312	36.4	2.6	31.9	40.7	10
WB T	Kelley St	312	18.9	1.1	16.8	20.0	10
WB TR	Kelley St	312	18.3	2.3	16.7	24.5	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	35.2	2.8	31.8	41.5	10
NWB LT	Wheeler Ave	77	0.9	0.3	0.7	1.6	10
NWB TR	Wheeler Ave	77	0.5	0.2	0.2	0.7	10
SEB LT	Wheeler Ave	86	1.5	0.5	0.9	2.4	10
SEB TR	Wheeler Ave	86	1.3	0.4	0.8	2.1	10
SWB LTR	LaBranch St	78	37.6	5.5	30.6	47.9	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	38.0	2.6	33.1	41.3	10
EB TR	Laura Koppe Rd	330	26.6	2.4	24.3	31.7	10
NB L	Lockwood Dr	328	10.7	1.8	7.6	13.4	10
NB T	Lockwood Dr	328	11.5	1.4	9.1	14.0	10
NB TR	Lockwood Dr	328	11.4	1.8	8.9	13.7	10
SB L	Lockwood Dr	571	7.2	1.7	4.3	9.3	10
SB T	Lockwood Dr	571	4.4	1.4	2.9	6.7	10
SB TR	Lockwood Dr	571	5.8	1.2	4.1	7.4	10
WB L	Laura Koppe Rd	329	44.3	3.4	38.8	47.7	10
WB TR	Laura Koppe Rd	329	24.7	2.1	22.9	28.7	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	254	4.9	0.7	4.0	6.2	10
NEB T	Lockwood Dr	254	41.3	0.6	40.2	42.2	10
SWB L	Lockwood Dr	253	16.8	4.5	10.4	23.8	10
SWB LT	Lockwood Dr	253	12.7	1.5	10.4	14.9	10
SWB T	Lockwood Dr	253	12.3	1.3	10.3	14.5	10
WB LR	Armour Dr	659	16.0	2.8	11.9	19.3	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	772	37.3	2.5	33.6	40.3	10
EB R	Canal St	772	6.4	2.2	2.9	9.7	10
EB T	Canal St	772	29.6	3.1	25.9	35.0	10
NEB L	Lockwood Dr	241	37.8	1.5	35.9	40.2	10
NEB T	Lockwood Dr	241	12.7	0.6	12.1	13.8	10
NEB TR	Lockwood Dr	241	10.4	0.8	8.8	11.9	10
SWB L	Lockwood Dr	245	43.3	4.2	33.8	48.7	10
SWB T	Lockwood Dr	245	13.1	1.8	10.4	15.1	10
SWB TR	Lockwood Dr	245	13.1	1.1	10.6	14.4	10
WB LT	Canal St	768	46.8	6.3	39.8	60.4	10
WB TR	Canal St	768	26.9	2.5	22.5	30.5	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Cavalcade St	299	37.2	2.8	32.6	41.9	10
EB T	Cavalcade St	299	22.7	3.1	18.1	26.9	10
EB TR	Cavalcade St	299	14.5	1.8	12.8	17.3	10
NB L	Lockwood Dr	292	25.4	5.0	17.7	33.2	10
NB T	Lockwood Dr	292	8.7	1.8	6.6	11.7	10
NB TR	Lockwood Dr	292	8.7	0.7	7.8	10.2	10
SB L	Lockwood Dr	296	35.5	4.8	29.7	43.2	10
SB T	Lockwood Dr	296	15.7	1.4	13.7	18.3	10
SB TR	Lockwood Dr	296	14.4	1.4	12.5	16.4	10
WB L	Cavalcade St	298	27.1	1.9	24.1	29.2	10
WB T	Cavalcade St	298	22.0	1.0	20.0	23.5	10
WB TR	Cavalcade St	298	17.7	1.1	15.7	19.4	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	49.0	5.8	42.5	60.6	10
EB T	Clinton Dr	259	30.2	4.1	24.8	37.8	10
EB TR	Clinton Dr	259	15.8	1.3	14.3	18.8	10
NEB L	Lockwood Dr	257	41.2	5.3	34.1	49.1	10
NEB R	Lockwood Dr	257	23.6	20.4	15.2	81.5	10
NEB T	Lockwood Dr	257	21.2	0.7	19.9	22.1	10
SB L	Lockwood Dr	256	28.3	2.9	24.2	31.5	10
SB R	Lockwood Dr	256	4.3	1.3	2.1	6.6	10
SB T	Lockwood Dr	256	7.4	0.9	6.2	8.9	10
WB L	Clinton Dr	258	46.4	6.3	34.0	57.2	10
WB R	Clinton Dr	258	6.6	0.3	6.1	7.0	10
WB T	Clinton Dr	258	29.1	1.6	27.0	31.8	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	38.9	2.1	34.5	41.1	10
EB T	Collingsworth St	291	33.6	1.9	30.2	37.0	10
EB TR	Collingsworth St	291	17.7	2.0	15.5	22.6	10
NB L	Lockwood Dr	289	116.1	47.1	75.7	208.6	10
NB T	Lockwood Dr	289	18.0	3.0	12.5	22.1	10
NB TR	Lockwood Dr	289	14.9	2.3	12.3	19.9	10
SEB L	Lockwood Dr	288	39.5	6.1	31.6	51.4	10
SEB T	Lockwood Dr	288	3.1	0.5	2.5	4.1	10
SEB TR	Lockwood Dr	288	4.3	2.3	2.1	9.2	10
WB L	Collingsworth St	290	44.4	4.8	36.4	50.2	10
WB T	Collingsworth St	290	29.8	5.0	23.0	37.6	10
WB TR	Collingsworth St	290	17.7	2.6	13.5	21.2	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	32.3	3.3	26.9	37.5	10
NB L	Lockwood Dr	288	45.2	4.6	38.9	52.5	10
NB T	Lockwood Dr	288	9.3	1.1	7.2	11.1	10
NB TR	Lockwood Dr	288	7.9	0.9	6.9	9.7	10
SB L	Lockwood Dr	292	47.9	5.3	38.4	55.4	10
SB T	Lockwood Dr	292	1.0	0.3	0.6	1.4	10
SB TR	Lockwood Dr	292	1.1	0.3	0.6	1.8	10
WB LTR	Crane St	294	33.0	2.0	29.9	36.8	10

LOCKWOOD DR & DENMARK ST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	12.1	1.8	9.1	14.6	10

NB L	Lockwood Dr	317	2.1	0.6	1.4	3.3	10
NB T	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	317	0.0	0.0	0.0	0.0	10
SB L	Lockwood Dr	321	3.0	1.9	0.2	6.4	10
SB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
WB LTR	Denmark St	549	12.7	1.3	11.4	15.1	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	12.2	2.4	9.3	16.3	10
NB LT	Lockwood Dr	571	0.5	0.3	0.1	0.9	10
NB TR	Lockwood Dr	571	0.1	0.1	0.0	0.2	10
SB LT	Lockwood Dr	332	0.4	0.2	0.2	1.0	10
SB TR	Lockwood Dr	332	0.0	0.0	0.0	0.1	10
WB LTR	Firnat St	575	16.6	3.6	10.9	23.6	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 513**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	249	41.3	4.9	31.3	46.7	10
NEB T	Lockwood Dr	249	3.3	0.4	2.8	3.9	10
SEB L	Marron Park Way	783	81.4	0.6	80.4	82.2	10
SEB R	Marron Park Way	783	12.7	1.0	11.6	14.5	10
SWB T	Lockwood Dr	254	12.0	0.9	10.9	13.5	10
SWB TR	Lockwood Dr	254	9.9	0.9	8.7	11.3	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Harrisburg Blvd	244	54.4	11.2	45.7	84.3	10
EB R	Harrisburg Blvd	244	21.9	1.6	19.6	24.8	10
EB T	Harrisburg Blvd	244	20.8	2.1	17.7	23.2	10
NEB L	Lockwood Dr	237	84.0	8.0	68.0	91.5	10
NEB T	Lockwood Dr	237	42.1	5.9	31.6	48.0	10
NEB TR	Lockwood Dr	237	40.3	9.3	25.7	54.1	10
NWB L	Harrisburg Blvd	678	43.7	4.5	36.6	49.7	10
NWB R	Harrisburg Blvd	678	19.1	1.7	16.6	21.2	10
NWB T	Harrisburg Blvd	678	20.4	2.1	17.7	24.5	10
SB L	Lockwood Dr	241	49.4	6.8	40.3	61.9	10
SB T	Lockwood Dr	241	36.2	1.6	33.6	39.3	10
SB TR	Lockwood Dr	241	33.4	1.5	31.4	35.4	10
SEB T	LRT Line	675	23.5	1.7	20.0	26.1	10
WB T	LRT Line	676	3.4	2.5	0.7	8.9	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Harvey Wilson Dr	498	106.2	15.8	71.0	122.3	10
NEB L	Lockwood Dr	253	5.7	1.2	4.2	8.3	10
NEB T	Lockwood Dr	253	2.3	0.3	1.9	2.9	10
NEB TR	Lockwood Dr	253	5.4	0.7	4.2	6.2	10
SWB L	Lockwood Dr	257	7.0	1.7	4.0	9.8	10
SWB T	Lockwood Dr	257	0.2	0.1	0.0	0.4	10
SWB TR	Lockwood Dr	257	0.1	0.1	0.1	0.3	10
WB LTR	Harvey Wilson Dr	497	45.8	9.3	29.5	64.6	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Hershe St	514	19.5	5.1	11.8	26.1	10

NB LT	Lockwood Dr	281	0.1	0.0	0.0	0.2	10
NB TR	Lockwood Dr	281	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	478	0.1	0.1	0.0	0.2	10
SB TR	Lockwood Dr	478	0.2	0.1	0.0	0.3	10
WB LTR	Hershe St	513	12.2	2.6	8.4	18.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	42.5	2.0	40.0	46.2	10
EB LT	I-610 EBFR	307	42.1	1.7	39.2	44.3	10
EB TR	I-610 EBFR	307	24.6	2.7	20.3	28.4	10
NB R	Lockwood Dr	643	0.8	1.2	0.0	3.1	10
NB T	Lockwood Dr	643	62.8	21.4	38.8	97.2	10
SB L	Lockwood Dr	304	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	304	1.9	0.7	0.6	2.9	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.1	0.1	0.0	0.3	10
NB T	Lockwood Dr	304	3.0	0.5	2.4	4.0	10
SB T	Lockwood Dr	308	49.1	2.7	45.0	52.4	10
WB L	I-610 WBFR	309	37.5	2.5	32.2	41.1	10
WB R	Lockwood Dr	308	1.5	0.4	0.6	2.0	10
WB T	I-610 WBFR	309	34.9	2.2	30.6	37.8	10
WB TR	I-610 WBFR	309	32.0	2.7	28.2	35.5	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	7.2	2.9	4.2	13.0	10
NB LT	Lockwood Dr	557	0.0	0.1	0.0	0.1	10
NB TR	Lockwood Dr	557	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	328	0.0	0.0	0.0	0.0	10
WB LTR	Keeland St	561	8.5	2.4	4.6	11.4	10

LOCKWOOD DR & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	McKinney St	240	22.9	2.0	20.2	26.0	10
NB L	Lockwood Dr	232	11.4	1.8	8.9	14.7	10
NB T	Lockwood Dr	232	0.9	0.2	0.7	1.2	10
NB TR	Lockwood Dr	232	1.0	0.2	0.8	1.3	10
SB L	Lockwood Dr	237	22.1	5.2	9.5	29.5	10
SB T	Lockwood Dr	237	15.3	0.8	14.5	16.5	10
SB TR	Lockwood Dr	237	14.3	0.6	13.0	15.2	10
WB LTR	McKinney St	239	22.4	4.0	17.2	26.6	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Mulvey St	287	44.7	6.8	33.9	56.8	10
NB LT	Lockwood Dr	478	1.2	0.3	0.9	1.7	10
NB T	Lockwood Dr	478	1.1	0.2	0.7	1.4	10
NB TR	Lockwood Dr	478	0.8	0.3	0.5	1.4	10
SB LT	Lockwood Dr	284	1.1	0.3	0.7	1.6	10
SB T	Lockwood Dr	284	0.9	0.2	0.5	1.2	10
SB TR	Lockwood Dr	284	1.1	0.7	0.1	2.3	10
WB LTR	Mulvey St	286	31.7	5.3	21.4	38.2	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	5.4	1.6	2.8	7.3	10
EB T	Munger St	460	13.9	2.4	10.1	17.8	10
NEB LT	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
WB R	Munger St	661	1.4	2.3	0.0	7.0	10
WB T	Munger St	661	14.1	3.5	9.8	19.5	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	44.6	2.8	40.5	47.8	10
EB T	Navigation Blvd	252	22.5	1.2	20.1	24.9	10
EB TR	Navigation Blvd	252	21.0	1.4	18.5	23.1	10
NEB L	Lockwood Dr	245	36.6	6.2	30.8	52.5	10
NEB T	Lockwood Dr	245	28.6	9.2	19.7	47.1	10
NEB TR	Lockwood Dr	245	56.5	18.6	35.8	86.7	10
SWB L	Lockwood Dr	249	48.1	4.7	40.7	55.4	10
SWB T	Lockwood Dr	249	15.8	1.9	12.4	19.7	10
SWB TR	Lockwood Dr	249	14.6	2.0	11.4	17.5	10
WB L	Navigation Blvd	251	41.2	1.2	38.5	43.1	10
WB T	Navigation Blvd	251	21.7	1.7	20.0	25.4	10
WB TR	Navigation Blvd	251	20.7	1.8	18.4	25.1	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	16.2	6.2	9.7	30.4	10
NB LT	Lockwood Dr	284	0.5	0.1	0.3	0.7	10
NB T	Lockwood Dr	284	0.1	0.1	0.0	0.2	10
NB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	524	1.5	0.5	0.9	2.6	10
SB T	Lockwood Dr	524	0.3	0.1	0.1	0.4	10
SB TR	Lockwood Dr	524	0.2	0.2	0.0	0.6	10
WB LTR	Nichols St	525	14.8	6.5	8.1	25.2	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	24.9	5.2	20.3	33.4	10
NB LT	Lockwood Dr	300	2.5	3.4	0.3	8.8	10
NB TR	Lockwood Dr	300	0.6	0.7	0.1	1.9	10
SB LT	Lockwood Dr	643	0.6	0.2	0.4	1.1	10
SB TR	Lockwood Dr	643	0.6	0.2	0.4	1.0	10
WB LTR	Pardee St	546	23.4	6.9	16.1	33.1	10

LOCKWOOD DR & RAND ST — NODE: 170

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	34.1	3.5	30.1	40.7	10
NB LT	Lockwood Dr	296	2.6	0.3	2.3	3.1	10
NB TR	Lockwood Dr	296	2.2	0.4	1.7	2.9	10
SB LT	Lockwood Dr	300	10.9	1.4	9.2	13.3	10
SB TR	Lockwood Dr	300	5.9	0.8	4.7	6.7	10
WB LTR	Rand St	302	26.0	2.0	22.5	29.7	10

LOCKWOOD DR & SHREVEPORT BLVD — NODE: 174

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr	311	20.7	1.7	17.4	23.6	10
NB TR	Lockwood Dr	311	21.3	1.6	19.5	24.1	10

NEB LTR	Shreveport Blvd	316	28.7	3.2	23.9	35.2	10
SB L	Lockwood Dr	314	34.1	1.8	31.5	37.7	10
SB T	Lockwood Dr	314	1.1	0.5	0.5	2.1	10
SB TR	Lockwood Dr	314	1.1	0.4	0.5	1.6	10
SWB LTR	Shreveport Blvd	315	32.3	3.1	28.1	36.9	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	14.6	6.2	6.0	23.3	10
NB LT	Lockwood Dr	524	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
SB LT	Lockwood Dr	289	0.6	0.3	0.3	1.0	10
SB T	Lockwood Dr	289	0.9	0.4	0.5	1.6	10
SB TR	Lockwood Dr	289	0.6	0.9	0.0	1.9	10
WB LTR	Sudan St	534	7.8	2.2	5.7	12.5	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	39.3	5.9	32.2	47.5	10
EB TR	Weaver Rd	326	34.8	3.4	28.6	41.2	10
NB L	Lockwood Dr	320	30.0	5.9	22.2	40.8	10
NB T	Lockwood Dr	320	34.4	1.7	32.8	37.9	10
NB TR	Lockwood Dr	320	30.5	2.5	26.5	34.1	10
SB L	Lockwood Dr	557	34.7	4.4	28.7	42.0	10
SB T	Lockwood Dr	557	34.0	2.6	30.8	40.0	10
SB TR	Lockwood Dr	557	28.5	3.0	23.1	33.0	10
WB L	Weaver Rd	325	60.6	16.0	47.9	99.4	10
WB TR	Weaver Rd	325	79.5	22.4	57.4	122.3	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.4	0.0	0.4	0.4	10
EB LT	I-10 EBFR	268	6.6	0.3	6.2	6.9	10
EB T	I-10 EBFR	268	9.8	0.7	8.8	10.7	10
NB T	Lockwood Dr (NB)	264	34.4	3.1	32.0	41.8	10
NB TR	Lockwood Dr (NB)	264	36.7	4.4	33.2	47.8	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr (NB)	270	6.8	0.5	5.7	7.4	10
NB LT	Lockwood Dr (NB)	270	6.2	0.3	5.9	6.8	10
NB T	Lockwood Dr (NB)	270	12.0	0.8	10.5	13.3	10
WB T	I-10 WBFR	276	27.7	1.1	26.0	29.2	10
WB TR	I-10 WBFR	276	8.0	1.0	6.6	9.2	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	14.8	2.4	11.5	18.7	10
EB T	Market St	262	37.0	2.5	33.1	40.0	10
NB LT	Lockwood Dr	499	8.1	1.3	5.9	10.0	10
NB TR	Lockwood Dr	499	11.5	3.1	8.3	17.9	10
WB T	Market St	266	33.9	4.0	25.6	40.5	10
WB TR	Market St	266	33.4	10.6	14.6	49.0	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB T	I-10 EBFR	269	71.0	12.8	56.4	96.2	10
EB TR	I-10 EBFR	269	22.2	3.1	16.5	27.9	10
SB L	Lockwood Dr (SB)	267	17.6	0.7	16.2	18.7	10
SB LT	Lockwood Dr (SB)	267	3.0	0.3	2.4	3.5	10
SB T	Lockwood Dr (SB)	267	0.5	0.2	0.2	0.8	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	45.0	3.1	39.8	49.0	10
SB TR	Lockwood Dr (SB)	272	44.4	5.0	38.1	54.2	10
WB L	I-10 WBFR	273	1.3	0.5	0.6	2.2	10
WB LT	I-10 WBFR	273	3.0	0.2	2.7	3.3	10
WB T	I-10 WBFR	273	6.0	0.5	5.3	7.1	10

LOCKWOOD DR (SB) & LYONS AVE **NODE: 164**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB TR	Lyons Ave	280	24.5	6.0	17.9	38.1	10
SB L	Lockwood Dr	515	17.7	11.3	7.8	46.2	10
SB T	Lockwood Dr	515	9.9	0.7	9.2	11.4	10
SB TR	Lockwood Dr	515	11.2	2.1	9.1	16.4	10
WB LT	Lyons Ave	279	12.3	1.5	10.9	14.8	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	36.2	3.0	31.8	41.9	10
EB TR	Market St	263	8.9	3.1	4.6	13.5	10
SB LT	Lockwood Dr (SB)	260	6.8	1.8	5.3	11.6	10
SB TR	Lockwood Dr (SB)	260	5.6	0.9	4.6	7.2	10
WB LT	Market St	262	9.8	2.9	4.6	13.3	10
WB T	Market St	262	9.7	7.3	0.4	19.1	10

LOCKWOOD DR NB, LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Lyons Ave	279	6.9	1.4	4.5	9.0	10
NB L	Lockwood Dr (NB)	275	73.6	53.5	25.5	154.8	10
NB T	Lockwood Dr (NB)	275	5.9	1.6	4.3	8.6	10
NB TR	Lockwood Dr (NB)	275	7.8	1.1	6.0	9.5	10
WB TR	Lyons Ave	283	16.9	1.4	14.8	19.2	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	39.1	3.6	32.6	44.1	10
EB R	Bennington St	319	5.5	0.6	4.4	6.5	10
NB L	Lockwood Dr	314	3.0	0.6	2.2	3.9	10
NB T	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	314	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	317	4.2	0.7	2.4	4.8	10
SB TR	Lockwood Dr	317	5.0	0.6	4.4	5.8	10
WB LTR	Driveway	318	4.7	3.0	2.2	12.8	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	17.9	1.1	15.3	19.2	10
NB TR	Spur 5 NBFR	219	11.2	1.1	9.8	13.8	10
NEB L	Elgin St	216	18.9	4.3	13.4	24.7	10
NEB T	Elgin St	216	9.8	1.0	8.2	11.7	10
SWB T	Lockwood Dr	218	10.7	1.0	8.8	12.2	10

SWB TR	Lockwood Dr	218	15.4	1.4	13.4	17.7	10

LOCKWOOD DR, ERNESTINE ST & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	17.3	1.9	15.0	20.6	10
EB T	Polk St	235	24.0	2.3	19.0	28.1	10
EB TR	Polk St	235	22.5	1.0	21.0	23.9	10
NB L	Lockwood Dr	229	15.4	0.7	14.1	16.4	10
NB T	Lockwood Dr	229	26.5	1.7	23.2	29.2	10
NB TR	Lockwood Dr	229	23.0	2.1	19.9	27.5	10
SB L	Lockwood Dr	232	40.9	3.8	36.7	49.8	10
SB T	Lockwood Dr	232	45.7	0.7	44.5	46.6	10
SB TR	Lockwood Dr	232	40.4	1.8	38.3	43.8	10
WB L	Polk St	234	15.3	1.0	14.2	17.5	10
WB T	Polk St	234	20.5	1.8	16.6	23.0	10
WB TR	Polk St	234	16.6	2.1	13.1	18.8	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	18.6	6.1	8.7	26.9	10
EB T	Leeland St	227	9.1	1.1	7.0	10.4	10
NB LT	Lockwood Dr	230	11.0	0.7	9.5	11.9	10
NB T	Lockwood Dr	230	11.2	1.0	9.6	12.4	10
NB TR	Lockwood Dr	230	8.6	1.0	6.8	10.2	10
WB T	Telephone Rd	231	36.2	2.6	32.8	41.9	10
WB TR	Telephone Rd	231	20.1	2.0	17.7	23.7	10

RICHMOND AVE & BUFFALO SPEEDWAY **NODE: 119**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	[Unnamed Street]	9	37.0	3.7	32.5	42.9	10
EB R	[Unnamed Street]	9	8.7	1.0	7.5	9.9	10
EB T	[Unnamed Street]	9	15.9	1.0	14.9	18.4	10
NB L	Buffalo Speedway	37	262.8	47.8	188.8	334.4	10
NB T	Buffalo Speedway	37	141.6	18.7	116.6	178.3	10
NB TR	Buffalo Speedway	37	103.4	11.1	88.3	122.0	10
SB L	Buffalo Speedway	36	64.5	5.5	51.2	71.0	10
SB T	Buffalo Speedway	36	28.5	1.6	25.5	31.5	10
SB TR	Buffalo Speedway	36	28.3	1.0	26.7	29.7	10
WB L	Richmond Ave	12	42.4	1.6	40.4	44.7	10
WB T	Richmond Ave	12	34.6	0.9	33.3	36.4	10
WB TR	Richmond Ave	12	32.0	0.8	31.1	33.5	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	22.4	1.9	19.1	25.9	10
EB T	Richmond Ave	163	8.6	2.3	6.3	14.7	10
EB TR	Richmond Ave	163	6.6	0.7	5.7	7.5	10
NB LTR	Dunlavy St	57	41.8	3.1	38.2	49.4	10
SB LTR	Dunlavy St	56	507.5	69.9	395.9	585.7	10
WB L	Richmond Ave	165	23.2	3.4	17.8	28.8	10
WB T	Richmond Ave	165	4.1	0.5	3.3	4.8	10
WB TR	Richmond Ave	165	4.7	1.3	2.9	6.8	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	12	22.1	2.6	18.0	26.0	10
EB T	Richmond Ave	12	4.8	0.8	3.9	6.2	10

EB TR	Richmond Ave	12	4.9	0.7	3.3	5.9	10
NB L	Eastside St	40	247.4	167.1	108.1	655.8	10
NB TR	Eastside St	40	100.2	105.7	17.6	348.7	10
SB L	Eastside St	39	88.3	23.5	62.7	128.8	10
SB TR	Eastside St	39	57.2	18.0	29.9	86.0	10
WB L	Richmond Ave	54	10.3	2.0	7.3	13.7	10
WB T	Richmond Ave	54	5.0	0.4	4.3	5.6	10
WB TR	Richmond Ave	54	9.7	1.3	8.0	11.9	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	50.9	4.4	44.4	60.4	10
EB R	Richmond Ave	7	7.0	1.5	4.7	9.0	10
EB T	Richmond Ave	7	39.9	1.5	37.3	42.4	10
NB L	Edloe St	155	335.0	21.2	304.2	383.7	10
NB R	Edloe St	155	9.2	1.6	7.1	12.1	10
NB T	Edloe St	155	21.9	1.4	19.9	24.0	10
SB L	Edloe St	5	56.5	3.7	52.2	62.6	10
SB T	Edloe St	5	31.9	4.5	27.4	41.2	10
SB TR	Edloe St	5	24.6	2.1	21.3	27.3	10
WB L	Richmond Ave	9	75.6	19.4	57.7	123.8	10
WB T	Richmond Ave	9	40.2	1.2	38.5	41.8	10
WB TR	Richmond Ave	9	40.9	0.7	39.9	42.3	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	56.7	3.3	51.0	62.4	10
EB T	Richmond Ave	64	33.9	3.1	30.3	40.2	10
EB TR	Richmond Ave	64	27.7	2.0	25.0	29.9	10
NB TR	Greenbriar Dr	47	39.9	3.0	33.5	42.5	10
SB L	Greenbriar Dr	46	52.1	12.1	31.0	73.2	10
SB R	Greenbriar Dr	46	7.1	1.1	6.1	9.8	10
SB T	Greenbriar Dr	46	46.0	3.7	42.5	54.0	10
WB L	Richmond Ave	160	30.5	3.0	25.8	35.2	10
WB T	Richmond Ave	160	3.6	0.7	2.5	5.0	10
WB TR	Richmond Ave	160	3.8	0.5	3.3	4.6	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	20	4.0	0.6	3.3	5.0	10
EB T	Richmond Ave	20	6.6	0.8	5.8	8.0	10
EB TR	Richmond Ave	20	3.3	0.8	2.6	4.8	10
NB LTR	Hazard St	51	331.5	36.4	283.2	410.1	10
SB LTR	Hazard St	50	510.9	109.2	308.8	664.2	10
WB L	Richmond Ave	162	15.6	1.5	14.0	18.5	10
WB T	Richmond Ave	162	17.7	1.3	16.0	20.0	10
WB TR	Richmond Ave	162	12.8	0.9	11.1	14.3	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	147.4	52.2	91.0	243.7	10
EB T	Richmond Ave	54	32.4	7.4	24.4	44.1	10
EB TR	Richmond Ave	54	23.5	5.4	16.6	31.5	10
NB L	Kirby Dr	158	149.4	8.6	136.6	168.8	10
NB T	Kirby Dr	158	122.9	8.4	103.2	132.2	10
NB TR	Kirby Dr	158	152.4	10.9	125.6	163.8	10
SB L	Kirby Dr	44	92.0	8.1	79.5	104.1	10

SB T	Kirby Dr	44	101.3	6.8	86.4	112.2	10
SB TR	Kirby Dr	44	124.0	9.9	104.2	136.2	10
WB L	Richmond Ave	64	81.5	7.3	69.7	90.0	10
WB T	Richmond Ave	64	46.8	1.8	44.1	49.7	10
WB TR	Richmond Ave	64	41.1	1.7	39.6	44.5	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	15.8	2.4	11.8	18.7	10
EB T	Richmond Ave	165	5.4	0.7	4.2	6.6	10
EB TR	Richmond Ave	165	4.4	0.4	3.9	5.0	10
NB LTR	Mandell St	59	270.7	24.4	235.1	316.9	10
SB LTR	Mandell St	58	74.9	13.0	57.0	89.7	10
WB L	Richmond Ave	23	18.4	2.1	15.6	22.1	10
WB T	Richmond Ave	23	3.1	0.4	2.6	4.0	10
WB TR	Richmond Ave	23	3.5	0.8	2.6	4.8	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	36.3	4.0	29.0	42.8	10
EB T	Richmond Ave	23	66.6	39.0	29.0	142.3	10
EB TR	Richmond Ave	23	75.9	32.5	40.6	146.8	10
NB L	Montrose Blvd	61	76.1	16.5	62.9	113.9	10
NB T	Montrose Blvd	61	32.7	5.5	27.6	44.1	10
NB TR	Montrose Blvd	61	36.0	4.8	31.3	45.1	10
SB L	Montrose Blvd	60	69.6	19.0	45.1	115.1	10
SB T	Montrose Blvd	60	55.5	11.7	38.5	76.4	10
SB TR	Montrose Blvd	60	61.4	13.4	41.5	80.9	10
WB L	Richmond Ave	166	140.6	11.5	122.0	157.7	10
WB T	Richmond Ave	166	116.4	12.9	95.8	136.8	10
WB TR	Richmond Ave	166	124.0	12.4	106.3	143.7	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	85.5	15.3	58.6	99.1	10
EB T	Richmond Ave	160	0.5	0.3	0.0	1.0	10
EB TR	Richmond Ave	160	0.9	0.4	0.3	1.6	10
NB T	Shepherd Dr	49	41.0	0.8	39.0	42.0	10
NB TR	Shepherd Dr	49	39.3	1.6	36.8	41.4	10
SB T	Shepherd Dr	48	40.6	1.6	38.7	42.8	10
SB TR	Shepherd Dr	48	39.7	1.7	36.5	42.0	10
WB L	Richmond Ave	20	51.8	3.0	47.6	56.9	10
WB T	Richmond Ave	20	2.7	0.5	2.1	3.7	10
WB TR	Richmond Ave	20	1.9	0.4	1.1	2.5	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.0	0.1	0.0	0.2	10
EB T	Richmond Ave	167	14.3	31.3	1.3	103.1	10
NB R	US 59 NBFR	26	11.7	2.6	7.1	15.0	10
NEB LT	US 59 NBFR	69	42.3	2.6	36.7	45.2	10
NEB R	US 59 NBFR	69	4.6	1.5	2.4	7.3	10
NEB TR	US 59 NBFR	69	45.9	4.7	40.4	53.2	10
WB T	Richmond Ave	26	29.1	1.8	25.9	32.9	10
WB TR	Richmond Ave	26	27.7	2.8	23.2	31.3	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	194.6	22.4	163.7	243.4	10
EB TR	Richmond Ave	166	175.5	35.3	127.1	241.6	10
SWB LT	US 59 SBFR	65	40.2	2.6	36.8	44.4	10
SWB R	US 59 SBFR	65	9.7	1.0	7.6	10.8	10
SWB T	US 59 SBFR	65	36.3	2.5	33.3	41.2	10
WB L	Richmond Ave	167	0.8	0.2	0.6	1.2	10
WB T	Richmond Ave	167	0.5	1.4	0.0	4.6	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	22.1	3.9	13.9	27.1	10
EB T	Richmond Ave	162	12.3	0.8	11.0	13.8	10
EB TR	Richmond Ave	162	11.1	0.7	9.7	12.5	10
NB LTR	Woodhead St	53	148.7	32.3	82.0	187.3	10
SB LTR	Woodhead St	52	26.4	2.9	22.2	30.1	10
WB L	Richmond Ave	163	15.1	1.9	11.9	19.1	10
WB T	Richmond Ave	163	4.9	0.9	3.5	6.2	10
WB TR	Richmond Ave	163	5.2	0.6	4.1	6.0	10

RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Line	673	23.8	0.9	22.3	25.3	10
NEB L	Main St	168	27.7	8.4	19.1	46.9	10
NEB R	Main St	168	3.6	3.5	0.0	11.7	10
NWB R	Wheeler Ave	169	4.6	1.9	1.5	6.3	10
NWB T	Wheeler Ave	169	35.6	0.9	34.2	36.7	10
SB R	Main St	70	7.3	1.5	4.4	9.0	10
SEB R	Richmond Ave	26	0.8	0.5	0.4	1.9	10
SEB T	Richmond Ave	26	39.0	3.9	33.0	44.2	10
SWB T	LRT Line	674	0.1	0.1	0.0	0.3	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	72.4	12.2	55.1	93.3	10
EB T	Westpark Dr	140	59.3	5.5	52.6	71.4	10
EB TR	Westpark Dr	140	62.3	6.9	53.9	75.5	10
NB L	S Rice Ave	138	119.9	68.2	54.8	282.6	10
NB T	S Rice Ave	138	73.5	40.9	36.0	169.6	10
NB TR	S Rice Ave	138	65.7	35.6	35.8	155.1	10
SB L	S Rice Ave	137	64.0	11.0	52.9	81.0	10
SB R	S Rice Ave	137	9.7	1.6	6.6	11.1	10
SB T	S Rice Ave	137	38.6	1.6	36.1	40.5	10
WB L	Westpark Dr	790	173.0	27.1	147.6	231.8	10
WB T	Westpark Dr	790	80.1	4.6	71.4	88.5	10
WB TR	Westpark Dr	790	101.9	6.9	93.7	114.2	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	19.2	1.9	16.9	22.0	10
NEB R	San Jacinto St	173	17.5	2.7	11.8	21.2	10
NEB T	San Jacinto St	173	19.6	1.3	17.5	21.9	10
NWB T	Wheeler Ave	86	47.1	8.0	33.9	56.1	10
NWB TR	Wheeler Ave	86	11.5	1.1	10.2	13.1	10
SEB LT	Wheeler Ave	172	36.6	2.9	33.1	40.9	10
SEB T	Wheeler Ave	172	21.9	2.1	18.5	24.8	10

TIDWELL RD & EDELL ST — NODE: 689

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Tidwell Rd	348	0.4	0.2	0.1	0.7	10
EB TR	Tidwell Rd	348	0.2	0.1	0.0	0.3	10
NB LTR	Edell St	590	11.0	2.0	8.5	13.5	10
SB LTR	Edell St	589	21.0	5.0	14.1	28.5	10
WB LT	Tidwell Rd	591	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	591	0.0	0.0	0.0	0.0	10

TIDWELL RD & FRIENDLY RD — NODE: 677

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	341	19.2	4.4	13.7	25.6	10
EB T	Tidwell Rd	341	3.1	0.4	2.6	3.5	10
EB TR	Tidwell Rd	341	6.6	0.6	5.6	7.5	10
NB LTR	Friendly Rd	585	128.6	72.3	41.8	226.0	10
SB LTR	Friendly Rd	584	358.7	103.7	216.3	520.2	10
WB L	Tidwell Rd	338	13.2	2.8	7.1	17.2	10
WB T	Tidwell Rd	338	0.0	0.1	0.0	0.1	10
WB TR	Tidwell Rd	338	0.0	0.0	0.0	0.1	10

TIDWELL RD & HIRSCH RD — NODE: 180

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	28.7	3.7	21.9	32.9	10
EB T	Tidwell Rd	338	7.4	0.5	6.6	8.3	10
EB TR	Tidwell Rd	338	7.7	0.6	6.8	8.7	10
NB L	Hirsch Rd	336	35.9	2.8	31.8	41.1	10
NB R	Hirsch Rd	336	9.9	1.5	7.0	12.2	10
NB T	Hirsch Rd	336	28.2	1.7	26.2	31.1	10
SB L	Hirsch Rd	335	36.6	2.7	33.0	41.4	10
SB R	Hirsch Rd	335	11.5	2.3	8.0	14.4	10
SB T	Hirsch Rd	335	25.7	2.5	22.9	30.8	10
WB L	Tidwell Rd	334	19.2	5.9	10.4	28.7	10
WB T	Tidwell Rd	334	2.5	0.8	1.6	4.6	10
WB TR	Tidwell Rd	334	2.7	0.6	1.8	4.1	10

TIDWELL RD & I-69 NBFR — NODE: 181

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	11.3	2.0	8.2	14.3	10
EB LT	Tidwell Rd	342	16.4	0.8	14.8	17.3	10
EB T	Tidwell Rd	342	19.0	0.8	18.0	20.6	10
NB L	I-69 NBFR	340	20.1	0.9	18.6	21.3	10
NB LT	I-69 NBFR	340	19.9	1.4	17.7	22.2	10
NB R	I-69 NBFR	340	7.2	0.4	6.4	7.8	10
NB T	I-69 NBFR	340	19.6	1.0	18.3	20.9	10
NB TR	I-69 NBFR	340	20.1	1.1	18.5	22.1	10
WB T	Tidwell Rd	341	18.2	0.8	16.4	19.2	10
WB TR	Tidwell Rd	341	16.7	1.8	14.2	19.9	10

TIDWELL RD & I-69 SBFR — NODE: 182

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	591	4.5	0.8	3.1	5.7	10
EB T	Tidwell Rd	591	17.6	0.7	16.4	18.3	10
SB L	I-69 SBFR	649	21.4	1.6	19.4	24.2	10
SB LT	I-69 SBFR	649	20.3	1.0	18.7	21.8	10
SB R	I-69 SBFR	649	0.1	0.1	0.0	0.2	10
SB T	I-69 SBFR	649	17.3	0.9	15.6	18.3	10
WB L	Tidwell Rd	342	26.6	1.8	23.7	29.6	10

WB LT	Tidwell Rd	342	16.0	1.6	14.7	19.5	10
WB T	Tidwell Rd	342	11.6	1.1	10.1	13.6	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	44.5	2.5	40.9	48.1	10
EB T	Tidwell Rd	349	26.8	2.2	23.6	30.5	10
EB TR	Tidwell Rd	349	27.0	1.5	24.3	29.2	10
NB L	Jensen Dr	347	48.0	7.0	36.4	64.4	10
NB T	Jensen Dr	347	29.9	1.5	28.1	32.0	10
NB TR	Jensen Dr	347	24.7	2.8	18.8	29.1	10
SB L	Jensen Dr	346	42.4	3.4	38.5	50.9	10
SB T	Jensen Dr	346	30.4	2.6	25.3	33.5	10
SB TR	Jensen Dr	346	24.9	2.5	20.5	29.2	10
WB L	Tidwell Rd	348	30.6	4.4	21.7	37.3	10
WB T	Tidwell Rd	348	21.4	1.4	19.4	23.9	10
WB TR	Tidwell Rd	348	24.7	2.3	20.9	27.9	10

TIDWELL RD & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	334	42.1	8.9	26.1	54.0	10
EB T	Tidwell Rd	334	12.9	0.9	11.3	14.6	10
EB TR	Tidwell Rd	334	13.8	1.7	12.0	16.5	10
NB L	Lockwood Dr	332	88.8	24.9	63.3	142.1	10
NB T	Lockwood Dr	332	33.0	10.4	10.5	43.9	10
NB TR	Lockwood Dr	332	18.0	3.9	10.6	22.3	10
SB L	Lockwood Dr	331	40.3	11.2	22.6	65.7	10
SB T	Lockwood Dr	331	35.7	5.8	25.7	41.2	10
SB TR	Lockwood Dr	331	24.2	5.4	18.0	32.1	10
WB L	Tidwell Rd	333	31.3	3.8	24.2	38.8	10
WB T	Tidwell Rd	333	13.6	1.1	11.2	14.9	10
WB TR	Tidwell Rd	333	13.7	1.2	12.1	15.6	10

TURNER DR & EDELL ST **NODE: 690**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LTR	Edell St	593	0.0	0.0	0.0	0.0	5

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	68.3	15.2	39.8	84.9	10
EB TR	Westpark Dr	116	29.9	4.9	20.7	36.2	10
NB L	14th St	118	63.2	12.8	55.8	97.1	10
NB R	14th St	118	11.4	1.3	9.3	13.1	10
WB L	Westpark Dr	616	75.5	13.9	62.5	102.0	10
WB T	Westpark Dr	616	20.5	14.0	8.5	43.6	10

WESTPARK DR & ALDER DR **NODE: 360**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	788	0.9	2.9	0.0	9.2	10
EB TR	Westpark Dr	788	0.0	0.0	0.0	0.1	10
NB L	Alder Dr	787	93.7	22.8	55.2	127.0	10
NB R	Alder Dr	787	20.9	8.7	9.3	34.8	10
WB LT	Westpark Dr	133	3.7	0.6	2.8	4.8	10
WB T	Westpark Dr	133	0.8	0.3	0.4	1.2	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Westpark Dr	133	78.3	8.5	65.7	90.1	10
EB T	Westpark Dr	133	27.2	1.7	24.9	29.9	10
EB TR	Westpark Dr	133	29.0	1.6	26.7	32.4	10
NB T	Chimney Rock Rd	135	40.8	1.8	38.0	44.0	10
NB TR	Chimney Rock Rd	135	40.7	2.0	37.6	43.4	10
SB L	Chimney Rock Rd	134	55.4	5.3	49.1	62.8	10
SB T	Chimney Rock Rd	134	22.2	1.3	20.6	24.1	10
SB TR	Chimney Rock Rd	134	21.0	0.9	19.3	22.8	10
WB L	Westpark Dr	136	85.3	5.8	80.6	98.9	10
WB T	Westpark Dr	136	46.7	1.3	44.7	48.8	10
WB TR	Westpark Dr	136	41.6	1.9	39.0	44.2	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	43.3	8.0	33.1	58.2	10
EB T	Westpark Dr	152	6.9	0.9	5.8	9.1	10
EB TR	Westpark Dr	152	7.5	1.0	5.3	9.2	10
NB R	Edloe St	29	5.3	0.6	4.6	6.2	10
NB T	Edloe St	29	41.8	2.5	37.7	44.5	10
SB LT	Edloe St	153	31.7	2.0	28.6	35.2	10
SB T	Edloe St	153	24.5	1.9	20.9	27.0	10
SB TR	Edloe St	153	23.9	3.3	17.7	27.7	10
WB LT	Westpark Dr	154	38.1	3.6	31.3	42.7	10
WB TR	Westpark Dr	154	31.7	3.3	26.6	35.9	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	302.3	31.9	267.8	349.9	10
EB T	Westpark Dr	114	349.1	19.2	317.8	390.2	10
EB TR	Westpark Dr	114	389.0	31.8	351.3	444.4	10
NB L	Fondren Rd	110	26.1	2.0	24.0	29.5	10
NB T	Fondren Rd	110	9.9	0.5	9.2	10.8	10
NB TR	Fondren Rd	110	13.7	0.9	12.1	15.0	10
SB L	Fondren Rd	112	441.1	63.1	347.2	553.3	10
SB T	Fondren Rd	112	166.5	25.9	120.8	195.2	10
SB TR	Fondren Rd	112	194.0	28.1	156.4	232.3	10
WB L	Westpark Dr	113	354.9	110.1	171.8	459.8	10
WB T	Westpark Dr	113	111.7	38.4	60.6	169.6	10
WB TR	Westpark Dr	113	119.8	33.3	72.1	162.6	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	113	89.3	3.9	82.6	96.1	10
EB T	Westpark Dr	113	48.6	4.7	41.7	55.2	10
EB TR	Westpark Dr	113	47.6	2.2	44.3	51.6	10
NB L	Hillcroft Ave	3	139.1	24.8	94.0	192.4	10
NB T	Hillcroft Ave	3	38.2	2.3	35.6	42.3	10
NB TR	Hillcroft Ave	3	42.7	2.3	40.3	46.8	10
SB L	Hillcroft Ave	115	664.9	64.8	519.5	737.7	10
SB T	Hillcroft Ave	115	239.7	36.4	177.7	306.0	10
SB TR	Hillcroft Ave	115	245.4	33.7	195.4	291.6	10
WB L	Westpark Dr	116	88.2	7.7	79.4	106.1	10
WB T	Westpark Dr	116	62.9	6.2	56.1	73.6	10
WB TR	Westpark Dr	116	79.0	7.3	70.1	92.0	10

WESTPARK DR & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LT	Westpark Dr	143	64.8	2.6	61.2	68.9	10
EB T	Westpark Dr	143	3.1	0.4	2.5	3.9	10
NB L	I-610 NBFR	145	169.7	14.3	147.7	191.6	10
NB LT	I-610 NBFR	145	144.6	10.3	126.9	160.2	10
NB TR	I-610 NBFR	145	111.9	8.8	100.1	123.8	10
WB T	Westpark Dr	792	71.9	30.4	44.8	149.4	10
WB TR	Westpark Dr	792	67.8	27.2	42.2	134.8	10

WESTPARK DR & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	629	0.1	0.2	0.0	0.5	10
EB T	Westpark Dr	629	56.0	4.8	50.5	68.0	10
SB L	I-610 SBFR	141	49.1	4.5	42.6	56.1	10
SB R	I-610 SBFR	141	8.2	10.6	2.3	36.9	10
SB T	I-610 SBFR	141	58.0	12.8	47.4	91.0	10
WB L	Westpark Dr	143	13.4	1.7	10.8	15.7	10
WB T	Westpark Dr	143	10.1	3.8	7.4	20.1	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	11.1	1.6	8.5	13.1	10
EB LT	Westpark Dr	123	15.2	2.3	11.3	17.7	10
EB T	Westpark Dr	123	25.7	2.9	20.7	29.3	10
NEB L	I-69 NBFR	126	58.3	31.3	29.5	132.0	10
NEB R	I-69 NBFR	126	11.3	1.3	9.2	12.6	10
NEB T	I-69 NBFR	126	19.6	1.3	17.7	21.6	10
WB R	Westpark Dr	127	9.0	2.8	6.1	14.9	10
WB T	Westpark Dr	127	28.2	1.9	23.9	30.8	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Westpark Dr	616	0.0		0.0	0.0	1
EB T	Westpark Dr	616	24.5	3.6	19.3	30.2	10
SWB L	I-69 SBFR	121	37.4	12.8	27.7	71.4	10
SWB LT	I-69 SBFR	121	33.4	9.6	25.4	58.4	10
SWB R	I-69 SBFR	121	4.6	2.6	1.0	7.5	10
SWB T	I-69 SBFR	121	23.5	1.2	21.7	25.0	10
WB L	Westpark Dr	123	37.0	3.0	31.3	41.0	10
WB T	Westpark Dr	123	17.4	7.3	11.9	37.7	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 394**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	792	0.0	0.0	0.0	0.0	10
EB TR	Westpark Dr	792	0.1	0.2	0.0	0.6	10
NB LR	Loop Central Dr	791	216.8	28.7	171.7	276.6	10
WB L	Westpark Dr	146	6.3	2.2	3.1	10.0	10
WB T	Westpark Dr	146	2.6	8.1	0.0	25.7	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	146	28.3	1.3	26.3	29.8	10
EB TR	Westpark Dr	146	27.7	2.0	24.7	30.9	10
NB L	Newcastle Dr	148	82.2	14.7	68.6	105.8	10
NB T	Newcastle Dr	148	44.5	2.6	41.2	48.3	10
NB TR	Newcastle Dr	148	34.7	2.9	31.7	40.2	10
SB LT	Newcastle Dr	147	41.9	2.6	38.2	47.2	10
SB TR	Newcastle Dr	147	34.0	2.5	29.8	37.7	10

WB L	Westpark Dr	149	47.5	2.7	42.9	52.3	10
WB T	Westpark Dr	149	43.2	4.0	39.3	53.6	10
WB TR	Westpark Dr	149	38.1	2.4	35.4	44.5	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	6.8	0.4	6.2	7.3	10
EB TR	Westpark Dr	127	7.9	0.8	7.1	9.0	10
NB LT	Rampart St	129	59.0	8.6	50.8	79.8	10
NB TR	Rampart St	129	18.6	5.7	7.8	25.2	10
SB LTR	Rampart St	128	32.5	7.6	23.9	40.6	10
WB LT	Westpark Dr	130	12.0	6.1	7.7	26.4	10
WB TR	Westpark Dr	130	7.1	1.3	5.2	9.0	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	0.1	0.2	0.0	0.6	10
EB TR	Westpark Dr	136	0.0	0.0	0.0	0.0	10
NB LR	Royalton St	384	323.6	31.2	278.9	363.4	10
WB L	Westpark Dr	140	13.2	2.1	10.1	16.1	10
WB T	Westpark Dr	140	0.0	0.0	0.0	0.1	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 382**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	790	0.3	0.1	0.2	0.4	10
EB TR	Westpark Dr	790	0.3	0.0	0.3	0.4	10
NB LR	Uptown Transit Ctr	789	46.0	6.3	34.7	54.4	10
WB L	Westpark Dr	629	87.5	11.9	71.9	106.3	10
WB T	Westpark Dr	629	95.8	29.0	59.1	165.7	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	85.2	28.2	49.9	140.4	10
EB T	Westpark Dr	149	71.8	14.3	56.1	104.9	10
EB TR	Westpark Dr	149	71.3	14.6	55.4	106.8	10
NB L	Weslayan St	151	93.7	28.8	67.9	152.3	10
NB T	Weslayan St	151	22.8	6.6	16.9	40.0	10
NB TR	Weslayan St	151	17.8	5.0	14.1	29.9	10
SB L	Weslayan St	150	63.6	7.6	50.1	80.0	10
SB T	Weslayan St	150	30.3	1.8	28.0	32.9	10
SB TR	Weslayan St	150	40.6	3.2	35.3	45.7	10
WB L	Westpark Dr	152	179.5	40.5	124.5	235.7	10
WB T	Westpark Dr	152	118.6	32.7	71.8	167.7	10
WB TR	Westpark Dr	152	136.7	36.5	80.5	182.9	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	67.7	14.5	47.7	93.6	10
EB T	Westpark Dr	130	33.6	1.2	31.7	36.0	10
EB TR	Westpark Dr	130	33.5	1.4	30.5	35.2	10
NB L	Renwick Dr	132	49.9	2.4	46.5	53.6	10
NB T	Renwick Dr	132	39.6	2.3	36.3	43.6	10
NB TR	Renwick Dr	132	36.6	2.6	32.6	39.7	10
SB L	Fountain View Dr	131	52.3	5.4	47.5	66.2	10
SB T	Fountain View Dr	131	36.2	1.5	33.1	38.4	10
SB TR	Fountain View Dr	131	36.3	1.9	33.5	39.5	10
WB L	Westpark Dr	788	86.9	8.7	73.2	96.5	10

WB T	Westpark Dr	788	11.8	1.5	9.5	14.0	10
WB TR	Westpark Dr	788	13.6	1.4	11.8	15.7	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	30.2	3.9	25.1	37.1	10
NEB TR	Hutchins St	707	245.3	25.1	214.0	282.1	10
NWB T	Wheeler Ave	423	33.1	10.1	20.9	53.3	10
NWB TR	Wheeler Ave	423	20.8	2.6	16.0	23.9	10
SEB L	Wheeler Ave	421	18.6	2.1	14.8	21.1	10
SEB T	Wheeler Ave	421	33.8	3.2	29.9	39.8	10
SWB LR	Hutchins St	422	12.6	1.1	10.0	14.2	10

APPENDIX F – 2030 BUILD LOS RESULTS

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Actuated	5.9	0.4	5.4	6.4	10
135	Almeda Rd & Wheeler Ave	Actuated	28.3	4.8	22.5	36.7	10
101	BRT Alignment, Fondren Rd & EB Westpark Tollway FR	Actuated	149.0	3.7	142.4	155.0	10
119	Buffalo Speedway & Richmond Ave	Actuated	45.7	6.0	39.7	60.3	10
292	Cleburne St & Ennis St	Actuated	2.1	0.3	1.6	2.7	10
176	Crosstimbers St & Lockwood Dr	Actuated	7.3	0.3	6.7	7.9	10
144	Cullen Blvd & Elgin St	Actuated	13.5	1.1	11.9	15.9	10
249	Elgin St & Ennis St	Actuated	3.5	0.3	3.0	4.0	10
353	Elgin St & Garage 5	Actuated	2.2	0.2	2.0	2.7	10
143	Elgin St & Scott St	Actuated	18.5	2.2	15.4	21.4	10
146	Elgin St & Spur 5 SBFR	Actuated	6.8	0.4	6.1	7.4	10
145	Elgin St, UH Entrance 17 & UH Entrance 18	Actuated	6.0	0.6	4.7	6.8	10
136	Emancipation Ave & Wheeler Ave	Actuated	5.2	1.8	3.0	8.5	10
306	Ennis St & Holman St	Actuated	1.2	0.2	1.0	1.5	10
266	Ennis St & Wheeler Ave	Actuated	0.9	0.1	0.8	1.2	10
690	Epsom Rd, Turner Dr, Edell St, Tidwell TC 2 Dr & Tidwell TC 4 Dr	Actuated	0.0	0.0	0.0	0.1	10
149	Ernestine St & Leeland St	Actuated	9.1	0.7	7.8	10.1	10
399	Ernestine St & Munger St	Stop	0.2	0.1	0.2	0.3	10
132	Fannin St & Wheeler Ave	Actuated	19.5	2.0	17.6	22.9	10
116	I-69 Express Lanes & Edloe St	Actuated	6.3	0.6	5.5	7.4	10
705	Jensen Dr & Turner Dr	Actuated	0.3	0.1	0.3	0.5	10
173	Kelley St & Lockwood Dr	Actuated	15.2	2.7	11.3	20.7	10
134	LaBranch St & Wheeler Ave	Actuated	22.0	2.5	18.2	26.4	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	3.5	0.2	3.3	4.1	10
156	Lockwood Dr & Armour Dr	Stop	0.2	0.1	0.1	0.4	10
154	Lockwood Dr & Canal St	Actuated	24.4	4.2	18.9	32.5	10
169	Lockwood Dr & Cavalcade St	Actuated	8.2	0.8	7.2	9.3	10
157	Lockwood Dr & Clinton Dr	Actuated	11.2	0.6	10.3	12.0	10
167	Lockwood Dr & Collingsworth St	Actuated	7.3	0.9	6.4	9.6	10
168	Lockwood Dr & Crane St	Actuated	3.0	0.5	2.4	4.0	10
659	Lockwood Dr & Firnat St	Actuated	2.0	0.2	1.8	2.4	10
197	Lockwood Dr & Marron Park Way	Actuated	31.9	1.4	28.3	32.9	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	29.3	4.8	22.3	37.2	10
514	Lockwood Dr & Harvey Wilson Dr	Actuated	6.9	1.1	5.7	9.1	10
534	Lockwood Dr & Hershe St	Actuated	0.8	0.1	0.7	0.9	10
148	Lockwood Dr & I-45 NBFR	Actuated	19.9	5.4	13.3	29.6	10
171	Lockwood Dr & I-610 EBFR	Actuated	12.2	0.8	11.2	13.2	10
172	Lockwood Dr & I-610 WBFR	Actuated	10.0	0.3	9.6	10.5	10
641	Lockwood Dr & Keeland St	Actuated	1.0	0.1	0.8	1.2	10
165	Lockwood Dr & Lyons Ave	Actuated	9.0	0.9	8.0	10.3	10
166	Lockwood Dr & Mulvey St	Stop	0.1	0.0	0.0	0.1	10
453	Lockwood Dr & Munger St	Actuated	7.1	0.8	5.9	8.7	10
155	Lockwood Dr & Navigation Blvd	Actuated	24.0	1.5	22.2	26.6	10
567	Lockwood Dr & Nichols St	Actuated	1.1	0.2	0.9	1.4	10
604	Lockwood Dr & Pardee St	Actuated	4.0	0.8	3.3	5.7	10
151	Lockwood Dr & Polk St	Actuated	21.9	2.3	18.1	25.5	10
170	Lockwood Dr & Rand St	Actuated	6.0	0.2	5.6	6.3	10

174	Lockwood Dr & Shreveport Blvd	Actuated	2.5	0.2	2.2	2.7	10
576	Lockwood Dr & Sudan St	Actuated	1.7	0.4	1.1	2.4	10
177	Lockwood Dr & Weaver Rd	Actuated	4.5	0.2	4.2	4.9	10
161	Lockwood Dr (NB) & I-10 EBFR	Actuated	7.1	1.0	5.7	8.9	10
163	Lockwood Dr (NB) & I-10 WBFR	Actuated	7.2	0.4	6.7	8.0	10
159	Lockwood Dr (NB) & Market St	Actuated	6.5	0.7	5.4	7.7	10
160	Lockwood Dr (SB) & I-10 EBFR	Actuated	5.3	1.0	4.5	7.3	10
162	Lockwood Dr (SB) & I-10 WBFR	Actuated	5.8	1.2	4.7	8.8	10
158	Lockwood Dr (SB) & Market St	Actuated	10.2	0.6	9.0	11.2	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	0.7	0.1	0.6	0.9	10
623	Lockwood Dr, BRT Alignment & Denmark St	Actuated	3.5	0.3	3.2	4.0	10
152	Lockwood Dr, BRT Alignment & McKinney St	Stop	2.4	1.5	0.4	5.5	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	5.1	0.4	4.6	5.9	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	34.1	3.1	28.9	39.2	10
131	LRT Red Line, Richmond Ave, Main St & Wheeler Ave	Actuated	39.6	4.3	31.0	45.6	10
126	Richmond Ave & Dunlavy St	Actuated	50.3	6.3	39.3	62.5	10
120	Richmond Ave & Eastside St	Actuated	39.8	5.9	28.8	49.7	10
118	Richmond Ave & Edloe St	Actuated	31.2	3.4	27.7	40.0	10
122	Richmond Ave & Greenbriar Dr	Actuated	17.0	0.9	15.4	18.5	10
124	Richmond Ave & Hazard St	Stop	13.1	6.1	2.8	23.0	10
121	Richmond Ave & Kirby Dr	Actuated	108.1	8.8	93.4	123.6	10
127	Richmond Ave & Mandell St	Actuated	63.6	7.0	56.1	76.1	10
128	Richmond Ave & Montrose Blvd	Actuated	141.0	8.4	127.2	151.9	10
123	Richmond Ave & Shepherd Dr	Actuated	22.6	3.7	18.2	29.3	10
130	Richmond Ave & US 59 NBFR	Actuated	39.6	3.0	32.7	42.8	10
129	Richmond Ave & US 59 SBFR	Actuated	41.4	12.6	33.6	76.5	10
125	Richmond Ave & Woodhead St	Actuated	38.1	3.1	33.0	44.2	10
110	S Rice Ave & Westpark Dr	Actuated	128.3	14.6	112.6	156.6	10
133	San Jacinto St & Wheeler Ave	Actuated	26.6	4.7	20.7	35.9	10
689	Tidwell Rd & Edell St	Actuated	7.7	1.6	5.4	10.1	10
180	Tidwell Rd & Hirsch Rd	Actuated	11.4	0.9	10.0	12.7	10
181	Tidwell Rd & I-69 NBFR	Actuated	19.4	1.5	17.3	22.9	10
182	Tidwell Rd & I-69 SBFR	Actuated	15.8	1.0	14.7	17.6	10
183	Tidwell Rd & Jensen Dr	Actuated	17.7	0.6	16.3	18.5	10
677	Tidwell Rd, BRT Alignment & Friendly Rd	Actuated	17.6	0.9	16.1	19.4	10
179	Tidwell Rd, BRT Alignment & Lockwood Dr	Actuated	7.3	0.5	6.4	7.8	10
104	Westpark Dr & 14th St	Actuated	26.4	4.5	19.6	32.1	10
99558	Westpark Dr & Alder Dr	Actuated	31.6	7.7	23.5	46.1	10
109	Westpark Dr & Chimney Rock Rd	Actuated	86.6	8.2	78.8	102.8	10
115	Westpark Dr & Edloe St	Actuated	36.2	1.6	34.3	39.7	10
102	Westpark Dr & Fondren Rd	Actuated	189.7	12.4	173.8	212.8	10
103	Westpark Dr & Hillcroft Ave	Actuated	176.5	10.6	157.2	192.5	10
106	Westpark Dr & I-69 NBFR	Actuated	13.3	1.0	12.2	15.6	10
105	Westpark Dr & I-69 SBFR	Actuated	20.2	4.5	13.7	29.6	10
99561	Westpark Dr & Loop Central Dr	Actuated	8.3	1.8	6.4	11.3	10
113	Westpark Dr & Newcastle Dr	Actuated	45.9	3.7	41.5	52.4	10
107	Westpark Dr & Rampart St	Actuated	18.7	1.4	15.7	20.6	10
309	Westpark Dr & Royalton St	Actuated	15.2	2.9	12.1	20.9	10
99553	Westpark Dr & Uptown Transit Ctr	Actuated	8.2	4.1	3.4	17.5	10
114	Westpark Dr & Weslayan St	Actuated	84.1	17.5	58.5	110.6	10
112	Westpark Dr, BRT Alignment & I-610 NBFR	Actuated	25.4	2.5	23.2	30.2	10
111	Westpark Dr, BRT Alignment, Silver Line Alignment & I-610 SBFR	Actuated	88.6	2.5	83.6	92.9	10

108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	40.7	7.0	30.0	53.2	10
367	Wheeler Ave & Hutchins St	Actuated	8.9	3.2	3.8	13.2	10
365	Wheeler Ave & St Emanuel St	Actuated	4.5	1.6	2.2	6.4	10

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Actuated	23.2	1.0	21.9	25.1	10
135	Almeda Rd & Wheeler Ave	Actuated	144.9	28.2	104.6	195.7	10
101	BRT Alignment, Fondren Rd & EB Westpark Tollway FR	Actuated	237.5	6.0	230.7	248.6	10
119	Buffalo Speedway & Richmond Ave	Actuated	51.5	7.0	45.6	69.0	10
292	Cleburne St & Ennis St	Actuated	13.0	1.7	10.7	15.9	10
176	Crosstimbers St & Lockwood Dr	Actuated	23.7	0.9	22.4	25.5	10
144	Cullen Blvd & Elgin St	Actuated	35.4	2.5	31.9	41.0	10
249	Elgin St & Ennis St	Actuated	17.7	1.3	15.2	19.3	10
353	Elgin St & Garage 5	Actuated	5.3	0.6	4.7	6.9	10
143	Elgin St & Scott St	Actuated	36.0	3.6	30.8	41.3	10
146	Elgin St & Spur 5 SBFR	Actuated	16.5	0.6	15.4	17.6	10
145	Elgin St, UH Entrance 17 & UH Entrance 18	Actuated	21.1	1.7	18.4	24.0	10
136	Emancipation Ave & Wheeler Ave	Actuated	27.5	9.4	16.1	43.9	10
306	Ennis St & Holman St	Actuated	14.2	1.7	12.2	18.3	10
266	Ennis St & Wheeler Ave	Actuated	7.4	1.0	6.2	9.1	10
690	Epsom Rd, Turner Dr, Edell St, Tidwell TC 2 Dr & Tidwell TC 4 Dr	Actuated	4.5	0.9	3.6	6.3	10
149	Ernestine St & Leeland St	Actuated	23.3	1.5	20.7	25.6	10
399	Ernestine St & Munger St	Stop	0.9	0.2	0.7	1.2	10
132	Fannin St & Wheeler Ave	Actuated	50.8	6.8	43.1	65.4	10
116	I-69 Express Lanes & Edloe St	Actuated	15.3	1.1	13.9	17.2	10
705	Jensen Dr & Turner Dr	Actuated	1.9	0.5	1.4	3.0	10
173	Kelley St & Lockwood Dr	Actuated	32.6	5.6	24.8	43.4	10
134	LaBranch St & Wheeler Ave	Actuated	144.4	17.1	120.2	168.9	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	17.9	1.0	17.0	19.5	10
156	Lockwood Dr & Armour Dr	Stop	0.5	0.2	0.3	0.9	10
154	Lockwood Dr & Canal St	Actuated	46.8	6.8	39.2	61.2	10
169	Lockwood Dr & Cavalcade St	Actuated	24.6	1.9	22.3	27.0	10
157	Lockwood Dr & Clinton Dr	Actuated	24.9	1.1	23.3	26.2	10
167	Lockwood Dr & Collingsworth St	Actuated	23.4	2.7	20.6	30.3	10
168	Lockwood Dr & Crane St	Actuated	12.1	1.9	9.7	16.0	10
659	Lockwood Dr & Firnat St	Actuated	12.7	1.0	11.2	14.9	10
197	Lockwood Dr & Marron Park Way	Actuated	55.9	1.1	53.6	57.0	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	55.1	12.4	39.5	81.5	10
514	Lockwood Dr & Harvey Wilson Dr	Actuated	18.4	2.8	15.0	24.6	10
534	Lockwood Dr & Hershe St	Actuated	3.4	0.3	2.8	3.8	10
148	Lockwood Dr & I-45 NBFR	Actuated	27.7	7.1	20.0	41.2	10
171	Lockwood Dr & I-610 EBFR	Actuated	28.8	1.5	26.9	30.6	10
172	Lockwood Dr & I-610 WBFR	Actuated	21.8	0.8	20.9	22.8	10
641	Lockwood Dr & Keeland St	Actuated	7.3	1.1	6.4	9.0	10
165	Lockwood Dr & Lyons Ave	Actuated	22.8	2.2	20.2	26.8	10

166	Lockwood Dr & Mulvey St	Stop	0.3	0.1	0.1	0.5	10
453	Lockwood Dr & Munger St	Actuated	17.8	2.2	14.6	21.5	10
155	Lockwood Dr & Navigation Blvd	Actuated	36.8	3.2	33.2	43.2	10
567	Lockwood Dr & Nichols St	Actuated	4.2	0.5	3.6	5.2	10
604	Lockwood Dr & Pardee St	Actuated	11.8	2.0	9.8	16.1	10
151	Lockwood Dr & Polk St	Actuated	44.2	5.4	35.6	55.4	10
170	Lockwood Dr & Rand St	Actuated	19.0	0.7	17.9	20.5	10
174	Lockwood Dr & Shreveport Blvd	Actuated	10.3	0.6	9.3	11.1	10
576	Lockwood Dr & Sudan St	Actuated	6.9	1.4	4.5	9.4	10
177	Lockwood Dr & Weaver Rd	Actuated	21.1	0.9	19.7	22.8	10
161	Lockwood Dr (NB) & I-10 EBFR	Actuated	25.1	3.1	20.5	31.4	10
163	Lockwood Dr (NB) & I-10 WBFR	Actuated	22.4	1.4	20.6	24.8	10
159	Lockwood Dr (NB) & Market St	Actuated	29.3	3.5	23.8	36.5	10
160	Lockwood Dr (SB) & I-10 EBFR	Actuated	16.1	2.8	13.7	21.7	10
162	Lockwood Dr (SB) & I-10 WBFR	Actuated	15.9	3.2	13.2	24.4	10
158	Lockwood Dr (SB) & Market St	Actuated	36.5	1.6	33.4	39.2	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	3.6	0.3	3.2	4.1	10
623	Lockwood Dr, BRT Alignment & Denmark St	Actuated	15.6	1.3	14.1	17.5	10
152	Lockwood Dr, BRT Alignment & McKinney St	Stop	7.4	5.1	1.0	18.7	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	14.9	0.9	13.4	16.6	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	58.8	7.6	48.3	71.2	10
131	LRT Red Line, Richmond Ave, Main St & Wheeler Ave	Actuated	163.2	16.7	127.1	183.8	10
126	Richmond Ave & Dunlavy St	Actuated	137.7	18.4	104.0	169.3	10
120	Richmond Ave & Eastside St	Actuated	69.6	9.9	50.9	86.5	10
118	Richmond Ave & Edloe St	Actuated	35.4	4.0	31.5	45.7	10
122	Richmond Ave & Greenbriar Dr	Actuated	38.3	1.9	36.0	41.1	10
124	Richmond Ave & Hazard St	Stop	37.2	17.8	7.4	67.8	10
121	Richmond Ave & Kirby Dr	Actuated	88.1	7.4	75.2	100.8	10
127	Richmond Ave & Mandell St	Actuated	176.7	21.1	153.3	213.0	10
128	Richmond Ave & Montrose Blvd	Actuated	162.1	9.7	148.2	182.4	10
123	Richmond Ave & Shepherd Dr	Actuated	44.1	7.0	36.9	56.0	10
130	Richmond Ave & US 59 NBFR	Actuated	130.6	11.5	107.7	150.5	10
129	Richmond Ave & US 59 SBFR	Actuated	115.2	40.1	94.4	227.1	10
125	Richmond Ave & Woodhead St	Actuated	97.7	8.6	85.0	115.6	10
110	S Rice Ave & Westpark Dr	Actuated	151.2	19.1	133.5	189.4	10
133	San Jacinto St & Wheeler Ave	Actuated	116.5	20.3	91.3	142.8	10
689	Tidwell Rd & Edell St	Actuated	17.1	3.6	12.0	22.8	10
180	Tidwell Rd & Hirsch Rd	Actuated	18.4	1.3	16.7	20.1	10
181	Tidwell Rd & I-69 NBFR	Actuated	28.8	1.9	26.6	33.5	10
182	Tidwell Rd & I-69 SBFR	Actuated	23.9	1.2	22.3	26.1	10
183	Tidwell Rd & Jensen Dr	Actuated	31.0	1.0	28.8	32.4	10
677	Tidwell Rd, BRT Alignment & Friendly Rd	Actuated	29.3	1.6	26.9	31.6	10
179	Tidwell Rd, BRT Alignment & Lockwood Dr	Actuated	14.5	1.0	12.8	15.7	10
104	Westpark Dr & 14th St	Actuated	38.3	6.5	28.6	46.8	10
99558	Westpark Dr & Alder Dr	Actuated	74.0	18.9	54.2	107.0	10
109	Westpark Dr & Chimney Rock Rd	Actuated	98.2	9.6	88.1	119.1	10
115	Westpark Dr & Edloe St	Actuated	57.9	2.2	54.4	61.9	10
102	Westpark Dr & Fondren Rd	Actuated	164.0	10.3	148.2	182.2	10
103	Westpark Dr & Hillcroft Ave	Actuated	124.3	7.0	111.5	134.9	10
106	Westpark Dr & I-69 NBFR	Actuated	18.5	1.4	16.9	21.3	10
105	Westpark Dr & I-69 SBFR	Actuated	22.8	5.1	15.7	33.7	10
99561	Westpark Dr & Loop Central Dr	Actuated	13.4	2.9	10.4	18.3	10
113	Westpark Dr & Newcastle Dr	Actuated	59.5	4.8	53.4	69.0	10
107	Westpark Dr & Rampart St	Actuated	40.1	2.6	35.8	45.7	10

309	Westpark Dr & Royalton St	Actuated	27.9	5.1	22.4	38.3	10
99553	Westpark Dr & Uptown Transit Ctr	Actuated	17.5	8.8	7.6	37.6	10
114	Westpark Dr & Weslayan St	Actuated	82.1	17.2	58.1	111.9	10
112	Westpark Dr, BRT Alignment & I-610 NBFR	Actuated	27.5	2.7	25.2	32.2	10
111	Westpark Dr, BRT Alignment, Silver Line Alignment & I-610 SBFR	Actuated	99.1	3.2	92.9	104.8	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	65.8	11.6	48.2	85.7	10
367	Wheeler Ave & Hutchins St	Actuated	52.8	19.8	20.1	75.9	10
365	Wheeler Ave & St Emanuel St	Actuated	43.2	16.7	18.6	63.1	10

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	0.7	0.3	0.3	1.3	10
NW	Alabama St	197	1.2	0.2	1.0	1.5	10
SE	Alabama St	193	3.4	0.4	2.8	3.9	10
SW	Ennis St	740	0.5	0.2	0.3	1.0	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	7.9	2.5	3.6	12.8	10
NW	Wheeler Ave	176	4.7	1.4	3.0	7.0	10
S	Almeda Rd	174	11.3	3.5	6.4	17.9	10
SE	Wheeler Ave	77	4.4	0.8	3.4	5.6	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	44.5	3.5	37.8	49.9	10
N	Fondren Rd	38	103.4	2.3	100.8	107.3	10
NE	BRT Alignment	768	0.2	0.1	0.1	0.3	10
S	Fondren Rd	110	0.9	0.1	0.7	1.0	10
W	BRT Alignment	774	0.0	0.0	0.0	0.0	10

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	10	15.3	4.0	12.6	25.9	10
N	Buffalo Speedway	37	15.7	2.3	12.5	19.5	10
S	Buffalo Speedway	36	5.1	0.4	4.4	5.8	10
W	Richmond Ave	11	9.6	0.8	8.7	11.4	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	0.5	0.2	0.2	0.8	10

NW	Cleburne St	733	0.5	0.1	0.4	0.6	10
SE	Cleburne St	731	0.4	0.1	0.3	0.5	10
SW	Ennis St	732	0.7	0.2	0.4	1.1	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	1.3	0.1	1.2	1.5	10
N	Lockwood Dr	321	1.7	0.1	1.6	2.0	10
S	Lockwood Dr	320	2.2	0.2	2.0	2.6	10
W	Crosstimbers St	322	2.0	0.2	1.7	2.4	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	2.9	0.3	2.6	3.5	10
NE	Cullen Blvd	207	1.5	0.2	1.2	1.7	10
S	Cullen Blvd	206	4.8	0.6	3.6	5.8	10
W	Elgin St	208	4.3	0.4	4.0	5.1	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	0.8	0.2	0.6	1.1	10
NW	Elgin St	701	1.4	0.3	1.0	2.0	10
SE	Elgin St	700	0.9	0.3	0.7	1.7	10
SW	Ennis St	195	0.3	0.1	0.2	0.5	10

ELGIN ST & GARAGE 5 **NODE: 353**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	0.9	0.1	0.8	1.0	10
N	Garage 5	409	0.2	0.0	0.2	0.3	10
W	Elgin St	637	1.1	0.2	0.9	1.4	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	4.0	1.0	2.8	6.1	10
N	LRT Line	667	0.0	0.0	0.0	0.0	10
NW	Scott St	693	3.1	0.5	2.6	3.9	10
S	LRT Line	669	0.0	0.0	0.0	0.0	10
SE	Scott St	671	5.3	0.6	4.4	6.3	10
W	Elgin St	204	6.0	1.1	4.9	8.7	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	637	1.0	0.1	0.7	1.2	10
S	Spur 5 SBFR	214	2.9	0.3	2.6	3.3	10
SW	Elgin St	216	3.0	0.3	2.5	3.4	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	1.0	0.2	0.7	1.3	10
N	UH Entrance 18	211	1.2	0.1	0.9	1.3	10
S	UH Entrance 17	210	0.8	0.2	0.6	1.0	10
W	Elgin St	212	3.0	0.6	2.3	3.9	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	0.8	0.1	0.6	0.9	10
NW	Wheeler Ave	724	2.2	1.7	0.6	5.6	10

SE	Wheeler Ave	423	1.5	0.1	1.3	1.6	10
SW	Emancipation Ave	177	0.7	0.4	0.3	1.7	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.4	0.1	0.3	0.5	10
NW	Holman St	742	0.2	0.0	0.1	0.2	10
SE	Holman St	741	0.2	0.0	0.1	0.2	10
SW	Ennis St	702	0.5	0.2	0.3	0.8	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.1	0.0	0.1	0.2	10
SE	Wheeler Ave	724	0.6	0.1	0.5	0.8	10
SW	Ennis St	726	0.2	0.0	0.2	0.3	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	589	0.0	0.0	0.0	0.0	10
SE	Epsom Rd	592	0.0	0.0	0.0	0.0	10
SW	Tidwell TC 2 Dr	802	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.0	0.1	0.8	1.2	10
N	Ernestine St	683	3.0	0.7	1.9	4.3	10
SW	Ernestine St	411	3.2	0.1	3.2	3.4	10
W	Leeland St	227	1.9	0.3	1.4	2.4	10

ERNESTINE ST & MUNGER ST **NODE: 399**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Ernestine St	687	0.0	0.0	0.0	0.0	10
S	Ernestine St	683	0.0	0.0	0.0	0.0	10
W	Munger St	460	0.2	0.0	0.2	0.3	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	6.6	0.8	5.2	7.8	10
SE	Wheeler Ave	169	3.7	0.5	3.0	4.5	10
SW	Fannin St	87	9.2	2.1	6.1	12.5	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	1.9	0.2	1.6	2.3	10
N	Edloe St	153	2.5	0.3	2.0	3.2	10
S	Edloe St	155	1.9	0.2	1.6	2.1	10
W	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	604	0.1	0.0	0.1	0.2	10
SW	Jensen Dr	599	0.2	0.0	0.1	0.2	10
W	Turner Dr	595	0.1	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.4	0.3	2.0	2.8	10
N	Lockwood Dr	308	4.4	0.4	3.7	5.3	10
S	Lockwood Dr	725	6.9	2.2	4.1	11.0	10
W	Kelley St	312	1.5	0.1	1.3	1.7	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	5.8	1.4	4.1	8.1	10
NW	Wheeler Ave	77	11.3	2.2	8.2	15.3	10
SE	Wheeler Ave	86	0.8	0.1	0.6	0.9	10
SW	LaBranch St	78	4.1	1.8	1.5	6.5	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	0.6	0.1	0.5	0.7	10
N	Lockwood Dr	560	0.6	0.2	0.4	1.0	10
S	Lockwood Dr	327	0.8	0.1	0.6	1.0	10
W	Laura Koppe Rd	329	1.5	0.2	1.3	1.8	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	658	0.1	0.1	0.0	0.3	10
SW	Lockwood Dr	253	0.0	0.0	0.0	0.1	10
W	Armour Dr	659	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	640	3.9	1.0	2.8	6.2	10
NE	Lockwood Dr	246	6.9	2.4	4.3	12.0	10
SW	Lockwood Dr	245	10.3	1.2	8.0	12.1	10
W	Canal St	826	3.4	0.7	2.8	4.5	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	1.2	0.2	0.9	1.5	10
N	Lockwood Dr	292	2.3	0.2	2.0	2.5	10
S	Lockwood Dr	296	2.2	0.4	1.8	2.9	10
W	Cavalcade St	298	2.5	0.4	2.0	3.2	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.6	0.2	1.3	1.8	10
NE	Lockwood Dr	257	2.9	0.3	2.4	3.4	10
S	Lockwood Dr	256	4.0	0.4	3.3	4.7	10
W	Clinton Dr	258	2.7	0.2	2.3	3.0	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	0.9	0.1	0.6	1.0	10
N	Lockwood Dr	533	3.4	0.9	2.4	5.8	10
SE	Lockwood Dr	288	1.9	0.3	1.5	2.3	10
W	Collingsworth St	290	1.0	0.1	0.9	1.2	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.1	0.1	0.8	1.3	10

N	Lockwood Dr	288	0.5	0.1	0.3	0.7	10
S	Lockwood Dr	292	0.7	0.4	0.3	1.6	10
W	Crane St	294	0.7	0.1	0.5	0.9	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.2	0.1	0.1	0.3	10
N	Lockwood Dr	327	0.9	0.1	0.7	1.1	10
S	Lockwood Dr	574	0.4	0.1	0.2	0.6	10
W	Firnat St	575	0.6	0.1	0.4	0.7	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 197**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	492	7.3	0.6	6.0	8.1	10
SE	Marron Park Way	843	2.6	0.3	2.2	3.0	10
SW	Lockwood Dr	658	22.0	0.7	20.1	22.8	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	LRT Line	675	0.0	0.0	0.0	0.1	10
NE	Lockwood Dr	786	8.7	1.7	6.4	11.4	10
NW	Harrisburg Blvd	678	4.7	1.7	3.5	9.2	10
S	Lockwood Dr	241	12.5	2.5	9.1	15.6	10
SE	Harrisburg Blvd	244	3.5	0.5	2.5	4.5	10
W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	253	3.4	0.8	2.4	5.0	10
SW	Lockwood Dr	257	3.0	0.5	2.3	4.0	10
W	Harvey Wilson Dr	497	0.4	0.0	0.4	0.5	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.2	0.0	0.1	0.2	10
N	Lockwood Dr	512	0.2	0.0	0.1	0.3	10
S	Lockwood Dr	478	0.4	0.1	0.3	0.5	10
W	Hershe St	513	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	1.7	0.5	1.1	2.5	10
NW	I-45 NBFR	222	17.0	5.3	10.2	26.9	10
SW	Lockwood Dr	224	1.2	0.1	1.1	1.4	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	5.7	0.4	5.2	6.3	10
N	Lockwood Dr	545	5.3	0.6	4.5	6.7	10
S	Lockwood Dr	304	1.2	0.2	0.9	1.5	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	1.0	0.1	0.9	1.2	10
S	Lockwood Dr	308	3.5	0.2	3.3	3.9	10
W	I-610 WBFR	309	5.5	0.3	5.0	6.2	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	324	0.6	0.1	0.4	0.8	10
S	Lockwood Dr	560	0.2	0.1	0.1	0.4	10
W	Keeland St	561	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	3.2	0.8	2.1	4.6	10
N	Lockwood Dr (NB)	275	2.5	0.2	2.2	2.9	10
S	Lockwood Dr	515	1.7	0.1	1.5	2.0	10
W	Lyons Ave	283	1.6	0.2	1.3	1.9	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	478	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
W	Mulvey St	286	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	855	1.0	0.2	0.9	1.4	10
S	Munger St	460	0.3	0.1	0.3	0.5	10
SW	Lockwood Dr	230	4.0	0.8	2.9	5.6	10
W	Munger St	661	1.7	0.2	1.4	2.2	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	5.4	0.6	4.5	6.5	10
NE	Lockwood Dr	245	3.8	0.5	3.1	4.9	10
SW	Lockwood Dr	492	6.7	0.7	5.5	8.1	10
W	Navigation Blvd	251	8.2	1.0	6.8	9.7	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	284	0.4	0.1	0.3	0.5	10
S	Lockwood Dr	524	0.7	0.1	0.5	0.8	10
W	Nichols St	525	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.7	0.1	0.5	0.8	10
N	Lockwood Dr	300	1.8	0.4	1.4	2.6	10
S	Lockwood Dr	545	1.4	0.4	1.0	2.3	10
W	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	3.1	0.4	2.6	3.7	10
N	Lockwood Dr	229	4.5	0.8	3.9	6.6	10
S	Lockwood Dr	238	10.6	2.8	5.3	15.0	10
W	Polk St	234	3.6	0.3	3.1	4.1	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	0.9	0.1	0.7	1.1	10
N	Lockwood Dr	296	1.3	0.1	1.1	1.4	10
S	Lockwood Dr	300	3.3	0.2	2.9	3.6	10
W	Rand St	302	0.5	0.1	0.4	0.7	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	725	0.2	0.1	0.2	0.4	10
NE	Shreveport Blvd	316	0.4	0.0	0.3	0.5	10
S	Lockwood Dr	795	0.4	0.1	0.3	0.6	10
SW	Shreveport Blvd	315	1.5	0.1	1.3	1.6	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	524	0.9	0.3	0.5	1.2	10
S	Lockwood Dr	533	0.6	0.2	0.4	1.0	10
W	Sudan St	534	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	0.3	0.0	0.3	0.4	10
N	Lockwood Dr	320	1.9	0.1	1.7	2.1	10
S	Lockwood Dr	324	1.2	0.2	0.9	1.6	10
W	Weaver Rd	325	1.0	0.1	0.9	1.2	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	0.6	0.1	0.4	0.8	10
N	Lockwood Dr (NB)	264	6.5	0.9	5.1	8.2	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	1.5	0.2	1.2	1.7	10
W	I-10 WBFR	276	5.7	0.4	5.2	6.4	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	499	3.3	0.7	2.5	5.0	10
W	Market St	266	3.2	0.7	2.6	4.3	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	4.0	0.6	3.3	5.2	10
S	Lockwood Dr (SB)	267	1.3	0.5	0.8	2.2	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	4.9	1.2	3.9	8.0	10
W	I-10 WBFR	273	0.9	0.1	0.8	1.0	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Market St	263	1.3	0.2	1.1	1.8	10
S	Lockwood Dr (SB)	260	8.4	0.5	7.4	9.6	10
W	Market St	262	0.4	0.1	0.4	0.5	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	0.2	0.1	0.1	0.3	10
N	Lockwood Dr	795	0.1	0.0	0.1	0.1	10
S	Lockwood Dr	796	0.4	0.1	0.3	0.5	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST **NODE: 623**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	1.0	0.2	0.7	1.2	10
N	BRT Alignment	806	0.1	0.0	0.0	0.1	10
NW	Lockwood Dr	796	0.8	0.2	0.6	1.0	10
S	Lockwood Dr	321	1.1	0.1	1.0	1.4	10
W	Denmark St	549	0.5	0.1	0.4	0.6	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.2	0.2	0.1	0.7	10
N	Lockwood Dr	238	0.9	0.9	0.0	2.6	10
S	Lockwood Dr	237	1.2	0.9	0.1	3.4	10
SW	BRT Alignment	785	0.0	0.0	0.0	0.0	10
W	McKinney St	239	0.1	0.1	0.1	0.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	0.8	0.1	0.7	0.9	10
NE	Elgin St	216	0.6	0.2	0.4	0.9	10
SW	Lockwood Dr	218	3.6	0.4	2.9	4.4	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	3.8	0.9	2.7	5.1	10
N	Lockwood Dr	230	16.2	2.2	13.3	20.6	10
S	Lockwood Dr	229	10.2	2.6	7.7	16.3	10
W	Telephone Rd	231	3.9	0.4	3.1	4.6	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Red Line	673	0.1	0.1	0.1	0.3	10
NE	Main St	168	8.7	2.0	5.2	10.7	10
NW	Wheeler Ave	169	13.4	1.1	11.7	15.0	10
S	Main St	70	13.7	1.8	9.3	15.5	10
SE	Richmond Ave	26	3.7	1.4	1.7	5.9	10
SW	LRT Red Line	674	0.0	0.0	0.0	0.0	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	9.7	1.6	7.3	12.5	10
N	Dunlavy St	57	11.0	2.7	5.4	13.9	10
S	Dunlavy St	56	27.8	4.7	21.6	37.2	10
W	Richmond Ave	165	1.9	0.3	1.5	2.5	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	11	28.1	5.2	19.0	37.1	10
N	Eastside St	40	2.2	0.2	1.9	2.4	10
S	Eastside St	39	3.1	0.7	2.0	4.1	10
W	Richmond Ave	54	6.5	0.8	5.2	8.2	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	7.1	1.4	6.3	10.9	10
N	Edloe St	155	10.3	1.5	7.9	12.8	10
S	Edloe St	5	5.3	0.7	4.7	6.9	10
W	Richmond Ave	10	8.5	0.7	7.4	9.4	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	7.6	0.8	6.4	8.5	10
N	Greenbriar Dr	47	0.5	0.1	0.4	0.7	10
S	Greenbriar Dr	46	2.5	0.2	2.1	2.9	10
W	Richmond Ave	160	6.4	0.5	5.6	7.3	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	2.3	1.9	0.4	6.0	10
N	Hazard St	51	9.5	5.1	1.8	16.0	10
S	Hazard St	50	0.7	0.5	0.3	2.1	10
W	Richmond Ave	162	0.6	1.0	0.0	2.4	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	52.6	8.1	39.2	64.6	10
N	Kirby Dr	158	32.6	6.6	25.0	43.7	10
S	Kirby Dr	44	15.8	1.1	13.3	17.2	10
W	Richmond Ave	64	7.0	1.0	5.6	8.6	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	12.1	1.9	8.6	15.3	10
N	Mandell St	59	30.0	1.9	26.5	32.2	10
S	Mandell St	864	16.6	7.3	8.9	32.2	10
W	Richmond Ave	23	5.0	1.9	3.8	10.2	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	47.1	3.7	38.9	51.1	10
N	Montrose Blvd	61	26.6	2.9	21.1	30.9	10
S	Montrose Blvd	60	32.9	4.3	24.9	39.5	10
W	Richmond Ave	166	34.5	3.2	29.2	38.2	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	3.6	0.3	3.1	4.2	10
N	Shepherd Dr	49	4.5	0.5	3.9	5.4	10
S	Shepherd Dr	48	4.9	0.7	3.7	5.8	10
W	Richmond Ave	20	9.7	3.9	5.3	15.8	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Richmond Ave	167	2.7	0.6	1.9	3.6	10
NE	US 59 NBFR	69	11.8	1.8	8.9	14.3	10
W	Richmond Ave	26	25.2	1.6	21.4	26.8	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	19.3	0.8	17.9	20.7	10
SW	US 59 SBFR	65	12.9	2.7	9.3	19.1	10
W	Richmond Ave	167	9.2	12.7	4.5	45.3	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	8.9	1.7	6.7	11.2	10
N	Woodhead St	53	25.9	3.1	18.9	30.0	10
S	Woodhead St	52	1.5	0.2	1.2	1.8	10
W	Richmond Ave	163	1.7	0.2	1.3	2.2	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	25.3	2.7	20.9	29.3	10
N	S Rice Ave	138	74.4	11.7	61.0	93.5	10
S	S Rice Ave	137	8.6	0.7	7.6	9.8	10
W	Westpark Dr	781	19.9	2.9	15.8	24.1	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	12.2	2.8	8.6	15.8	10
NW	Wheeler Ave	86	12.1	2.9	8.2	17.7	10
SE	Wheeler Ave	172	2.3	0.4	1.8	2.9	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	2.8	0.6	1.9	3.5	10
N	Edell St	590	0.3	0.1	0.2	0.5	10
S	Edell St	589	0.5	0.1	0.4	0.6	10
W	Tidwell Rd	652	4.0	1.1	2.2	6.0	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	2.8	0.4	2.2	3.4	10
N	Hirsch Rd	336	2.4	0.2	2.0	2.9	10
S	Hirsch Rd	335	2.3	0.3	1.9	2.9	10
W	Tidwell Rd	334	3.9	0.6	3.4	5.1	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	9.2	0.8	8.3	10.7	10
N	I-69 NBFR	340	4.4	0.2	4.0	4.7	10
W	Tidwell Rd	586	5.8	0.9	4.5	7.8	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	652	5.0	0.5	4.2	5.9	10
S	I-69 SBFR	649	5.3	0.3	5.0	5.9	10
W	Tidwell Rd	342	5.5	0.7	4.5	6.7	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	4.2	0.4	3.5	4.6	10
N	Jensen Dr	347	2.5	0.2	2.1	2.9	10
S	Jensen Dr	604	4.7	0.6	3.9	5.5	10
W	Tidwell Rd	348	6.4	0.6	5.5	7.4	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	3.2	0.3	2.7	3.8	10
N	Friendly Rd	585	1.5	0.5	1.1	2.6	10
W	Tidwell Rd	338	3.2	0.4	2.6	3.8	10
S	Friendly Rd	584	9.7	0.7	8.4	10.7	10
W	BRT Alignment	797	0.0	0.0	0.0	0.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	BRT Alignment	797	0.1	0.0	0.1	0.2	10
N	Lockwood Dr	574	1.4	0.2	1.1	1.6	10
NE	Tidwell Rd	334	3.6	0.3	3.0	4.1	10
S	Lockwood Dr	331	0.1	0.1	0.1	0.2	10
W	Tidwell Rd	333	1.9	0.2	1.7	2.3	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	2.1	0.3	1.9	2.6	10
N	14th St	118	0.4	0.1	0.3	0.7	10
W	Westpark Dr	119	23.9	4.7	16.5	29.8	10

WESTPARK DR & ALDER DR **NODE: 99558**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	778	23.9	5.5	17.5	34.1	10
N	Alder Dr	718	6.8	2.3	3.9	11.1	10
W	Westpark Dr	133	0.9	0.1	0.7	1.0	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	47.6	2.7	44.2	51.7	10
N	Chimney Rock Rd	135	20.3	7.1	14.7	38.4	10
S	Chimney Rock Rd	134	13.1	1.1	11.6	14.8	10
W	Westpark Dr	136	5.6	0.8	4.6	7.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	7.8	1.0	6.4	9.9	10
N	Edloe St	29	16.8	0.9	15.5	18.3	10
S	Edloe St	153	5.5	0.4	4.9	6.3	10
W	Westpark Dr	154	6.1	0.3	5.6	6.4	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	119.8	1.3	117.9	122.0	10
N	Fondren Rd	110	2.2	0.1	2.1	2.4	10
S	Fondren Rd	112	28.9	5.0	20.6	36.3	10
W	Westpark Dr	117	38.8	9.8	24.3	57.4	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Westpark Dr	117	37.5	8.5	27.8	55.5	10
N	Hillcroft Ave	3	69.2	5.0	63.1	75.9	10
S	Hillcroft Ave	115	26.4	4.4	20.5	35.2	10
W	Westpark Dr	116	43.4	3.9	37.2	48.4	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	5.0	0.7	4.3	6.2	10
NE	I-69 NBFR	126	5.2	0.6	4.4	6.4	10
W	Westpark Dr	127	3.1	0.3	2.5	3.6	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	119	6.1	0.5	5.2	6.9	10
SW	I-69 SBFR	121	10.1	3.2	5.1	13.6	10
W	Westpark Dr	123	3.9	2.3	2.7	10.4	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	784	6.1	1.8	4.5	9.1	10
N	Loop Central Dr	803	0.4	0.1	0.3	0.6	10
W	Westpark Dr	146	1.7	0.2	1.5	2.0	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	12.4	3.2	8.1	17.6	10
N	Newcastle Dr	148	25.5	2.7	20.6	30.0	10
S	Newcastle Dr	147	2.9	0.6	2.3	4.1	10
W	Westpark Dr	149	5.2	0.5	4.8	6.2	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	3.2	0.8	2.4	4.8	10
N	Rampart St	129	13.4	0.8	11.2	14.1	10
S	Rampart St	128	1.4	0.4	0.9	2.2	10
W	Westpark Dr	130	0.6	0.2	0.4	1.0	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	5.8	0.5	4.8	6.3	10
N	Royalton St	384	8.4	2.8	5.5	13.7	10
W	Westpark Dr	140	1.1	0.2	0.8	1.5	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	781	2.8	0.4	2.2	3.6	10
N	Uptown Transit Ctr	769	0.3	0.1	0.2	0.6	10
W	Westpark Dr	629	5.0	3.9	0.4	14.0	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	42.2	17.7	18.7	72.6	10
N	Weslayan St	151	15.4	2.4	11.7	18.4	10
S	Weslayan St	150	17.6	2.1	15.0	21.6	10
W	Westpark Dr	152	8.8	2.5	6.1	14.0	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	6.8	0.5	6.3	7.7	10
N	I-610 NBFR	145	8.7	0.3	8.4	9.2	10
NE	BRT Alignment	821	0.1	0.0	0.1	0.1	10
W	Westpark Dr	784	9.8	2.4	7.8	14.9	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	75.8	2.6	71.8	79.8	10
NE	BRT Alignment	845	0.2	0.1	0.1	0.4	10
S	Silver Line Alignment	783	0.2	0.0	0.1	0.2	10
SE	I-610 SBFR	141	5.4	1.7	3.9	9.7	10
SW	Westpark Dr	143	6.9	0.5	6.3	7.8	10
W	BRT Alignment	844	0.1	0.0	0.0	0.1	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	18.1	5.6	10.2	28.8	10
N	Renwick Dr	132	13.3	2.6	10.4	16.9	10
S	Fountain View Dr	131	6.3	1.1	4.7	8.0	10
W	Westpark Dr	778	3.1	0.4	2.3	3.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	3.7	2.2	1.0	7.1	10
NW	Wheeler Ave	423	3.5	2.1	0.8	7.2	10
SE	Wheeler Ave	421	1.0	0.1	0.8	1.2	10
SW	Hutchins St	422	0.8	0.6	0.1	1.8	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	421	4.2	1.5	2.1	6.3	10
SE	Wheeler Ave	176	0.3	0.3	0.1	1.1	10

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	17.1	6.0	7.6	29.7	10
NW	Alabama St	197	22.0	1.7	19.4	25.1	10
SE	Alabama St	193	28.4	2.1	24.9	31.3	10
SW	Ennis St	740	14.5	5.9	9.1	29.9	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	137.2	52.3	57.1	250.8	10
NW	Wheeler Ave	176	270.7	114.6	166.9	539.2	10
S	Almeda Rd	174	232.4	64.7	144.6	350.0	10
SE	Wheeler Ave	77	62.5	9.2	51.4	76.8	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	253.5	17.3	215.5	281.0	10
N	Fondren Rd	38	513.6	12.2	494.5	534.4	10
NE	BRT Alignment	768	68.5	22.3	45.0	105.5	10
S	Fondren Rd	110	3.5	0.4	2.9	4.0	10
W	BRT Alignment	774	37.9	15.1	22.3	60.2	6

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	10	72.0	22.2	58.1	132.8	10
N	Buffalo Speedway	37	52.2	7.8	42.4	65.9	10
S	Buffalo Speedway	36	33.2	2.3	30.4	37.5	10
W	Richmond Ave	11	44.0	2.8	40.0	49.7	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	7.5	2.3	2.8	10.5	10
NW	Cleburne St	733	21.4	2.5	17.9	26.3	10
SE	Cleburne St	731	20.6	2.8	17.5	25.5	10
SW	Ennis St	732	13.6	4.1	9.2	20.7	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	26.4	1.6	24.1	28.3	10
N	Lockwood Dr	321	23.0	1.7	21.2	25.2	10
S	Lockwood Dr	320	26.6	1.4	23.8	28.3	10
W	Crosstimbers St	322	20.4	1.7	18.4	23.8	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	41.1	3.1	37.5	48.6	10
NE	Cullen Blvd	207	18.0	2.1	15.5	21.5	10
S	Cullen Blvd	206	40.0	4.0	31.9	45.1	10
W	Elgin St	208	39.6	4.2	33.6	45.7	10

ELGIN ST & ENNIS ST — NODE: 249

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	29.0	5.6	23.3	40.2	10
NW	Elgin St	701	16.4	2.7	11.9	21.0	10
SE	Elgin St	700	12.7	3.6	10.0	22.4	10
SW	Ennis St	195	26.6	5.8	16.7	36.4	10

ELGIN ST & GARAGE 5 — NODE: 353

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	7.1	0.6	6.6	8.6	10
N	Garage 5	409	8.1	1.0	6.0	9.3	10
W	Elgin St	637	4.1	0.7	3.5	5.8	10

ELGIN ST & SCOTT ST — NODE: 143

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	47.5	9.7	34.5	68.8	10
N	LRT Line	667	5.5	1.5	3.6	8.8	10
NW	Scott St	693	24.1	3.4	20.3	29.9	10
S	LRT Line	669	22.0	1.7	19.6	24.9	10
SE	Scott St	671	31.0	2.8	26.2	35.0	10
W	Elgin St	204	47.9	7.8	38.4	64.9	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	637	14.8	2.3	11.0	19.3	10
S	Spur 5 SBFR	214	20.6	1.0	19.1	22.1	10
SW	Elgin St	216	14.4	0.9	12.9	16.0	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	10.9	1.2	8.8	12.3	10
N	UH Entrance 18	211	40.2	4.2	33.6	44.6	10
S	UH Entrance 17	210	43.4	7.0	37.0	58.6	10
W	Elgin St	212	21.2	3.3	17.4	27.3	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	12.6	1.2	10.2	14.1	10
NW	Wheeler Ave	724	68.2	49.4	18.4	162.8	10
SE	Wheeler Ave	423	30.9	1.9	27.4	33.8	10
SW	Emancipation Ave	177	16.2	8.3	7.0	37.7	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	13.5	2.3	9.9	17.5	10
NW	Holman St	742	15.0	2.3	10.9	18.7	10
SE	Holman St	741	11.4	1.2	9.8	13.1	10
SW	Ennis St	702	15.8	4.6	9.9	26.1	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	1.9	0.6	1.0	2.9	10
SE	Wheeler Ave	724	24.9	4.2	19.3	31.7	10
SW	Ennis St	726	5.9	0.8	4.8	7.0	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	1.3	2.0	0.0	4.9	9
N	Edell St	589	9.4	9.5	0.0	23.5	8
SE	Epsom Rd	592	12.1	3.5	5.5	18.2	10
SW	Tidwell TC 2 Dr	802	2.8	0.4	2.4	3.6	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	15.4	1.3	12.8	16.9	10
N	Ernestine St	683	66.9	12.4	52.7	92.9	10
SW	Ernestine St	411	16.9	0.5	16.2	17.6	10
W	Leeland St	227	21.0	1.6	18.3	23.5	10

ERNESTINE ST & MUNGER ST **NODE: 399**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

N	Ernestine St	687	0.0	0.0	0.0	0.0	10
S	Ernestine St	683	0.0	0.0	0.0	0.0	10
W	Munger St	460	6.9	1.3	5.4	8.9	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	218.4	52.8	153.4	306.2	10
SE	Wheeler Ave	169	45.4	4.4	38.7	53.7	10
SW	Fannin St	87	34.1	9.2	22.2	52.5	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	23.0	2.3	19.8	27.4	10
N	Edloe St	153	11.9	1.4	9.6	14.8	10
S	Edloe St	155	16.0	1.3	14.3	18.5	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	6.5	3.4	2.2	12.3	10
NE	Jensen Dr	604	1.8	0.6	1.0	3.1	10
SW	Jensen Dr	599	1.5	0.4	1.0	2.4	10
W	Turner Dr	595	8.6	1.0	7.0	9.9	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	26.7	2.9	20.6	31.8	10
N	Lockwood Dr	308	22.7	1.9	20.2	26.8	10
S	Lockwood Dr	725	56.5	15.2	37.5	85.2	10
W	Kelley St	312	24.8	1.7	22.6	27.2	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	476.2	103.3	347.5	679.2	10
NW	Wheeler Ave	77	351.7	108.5	222.4	611.9	10
SE	Wheeler Ave	86	8.6	1.3	6.6	10.5	10
SW	LaBranch St	78	256.6	133.0	74.6	445.4	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	25.6	2.4	21.2	29.2	10
N	Lockwood Dr	560	11.5	3.6	7.5	20.4	10
S	Lockwood Dr	327	10.5	1.5	8.6	13.1	10
W	Laura Koppe Rd	329	32.7	1.9	28.8	35.3	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	658	0.6	0.5	0.1	1.4	10
SW	Lockwood Dr	253	0.0	0.1	0.0	0.4	10
W	Armour Dr	659	5.0	1.3	2.7	6.4	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	640	53.8	12.4	41.1	81.3	10
NE	Lockwood Dr	246	37.1	11.5	26.6	62.4	10
SW	Lockwood Dr	245	56.1	4.8	50.4	62.7	10
W	Canal St	826	41.1	5.8	33.3	50.1	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	30.7	3.9	23.8	37.8	10
N	Lockwood Dr	292	25.4	1.7	21.8	27.4	10
S	Lockwood Dr	296	16.8	2.1	14.3	21.1	10
W	Cavalcade St	298	33.9	4.4	27.3	40.4	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	31.0	1.8	28.1	33.2	10
NE	Lockwood Dr	257	26.9	2.8	22.7	31.9	10
S	Lockwood Dr	256	19.0	1.7	15.9	21.5	10
W	Clinton Dr	258	33.6	2.8	29.7	38.4	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	19.9	1.6	16.2	21.9	10
N	Lockwood Dr	533	27.6	6.9	18.9	44.4	10
SE	Lockwood Dr	288	17.2	2.3	13.1	19.6	10
W	Collingsworth St	290	32.6	2.1	27.7	35.2	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	34.3	3.9	29.1	39.8	10
N	Lockwood Dr	288	6.2	1.4	3.9	8.1	10
S	Lockwood Dr	292	6.5	3.0	3.0	13.3	10
W	Crane St	294	33.8	3.9	29.6	41.4	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	8.0	2.4	4.7	11.3	10
N	Lockwood Dr	327	16.1	2.1	13.8	19.6	10
S	Lockwood Dr	574	6.5	1.5	4.4	9.8	10
W	Firnat St	575	27.7	3.1	20.7	32.3	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 197

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	492	33.3	2.0	29.8	36.1	10
SE	Marron Park Way	843	35.4	2.9	33.1	42.1	10
SW	Lockwood Dr	658	79.3	2.9	75.5	84.1	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	LRT Line	675	27.2	1.7	23.7	29.7	10
NE	Lockwood Dr	787	58.8	13.2	40.3	79.7	10
NW	Harrisburg Blvd	678	49.0	25.0	34.7	118.4	10
S	Lockwood Dr	241	69.7	19.5	44.3	105.7	10
SE	Harrisburg Blvd	244	32.9	3.7	29.1	39.6	10
W	LRT Line	676	2.8	1.4	1.2	5.9	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	51.7	15.6	32.5	79.1	10
N	Lockwood Dr	253	22.8	5.2	16.2	33.0	10
SW	Lockwood Dr	257	14.9	2.2	11.8	19.2	10
W	Harvey Wilson Dr	497	19.5	1.7	17.1	22.3	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	29.9	5.7	22.2	39.7	10
N	Lockwood Dr	512	1.8	0.3	1.4	2.3	10
S	Lockwood Dr	478	2.9	0.5	2.3	3.7	10
W	Hershe St	513	38.7	6.7	31.5	49.1	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	14.9	4.2	10.4	22.2	10
NW	I-45 NBFR	222	35.9	10.7	24.8	57.0	10
SW	Lockwood Dr	224	9.4	0.5	8.7	10.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	32.4	1.7	29.7	34.7	10
N	Lockwood Dr	545	42.2	4.4	36.2	52.0	10
S	Lockwood Dr	304	9.9	1.3	7.4	12.3	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	4.8	0.6	4.1	6.0	10
S	Lockwood Dr	308	28.8	1.3	26.3	30.7	10
W	I-610 WBFR	309	43.2	2.2	40.5	46.7	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	44.9	16.3	15.6	71.7	10
N	Lockwood Dr	324	10.2	2.6	6.9	14.9	10
S	Lockwood Dr	560	3.0	1.0	1.3	4.8	10
W	Keeland St	561	33.1	4.7	24.6	41.2	10

LOCKWOOD DR & LYONS AVE **NODE: 165**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	43.6	10.5	30.5	65.1	10
N	Lockwood Dr (NB)	275	20.6	1.4	18.0	22.4	10
S	Lockwood Dr	515	12.9	1.0	10.7	14.3	10
W	Lyons Ave	283	24.7	2.6	20.3	28.5	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	6.4	3.5	3.0	14.6	10
N	Lockwood Dr	478	0.5	0.2	0.2	1.0	10
S	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
W	Mulvey St	286	3.5	0.8	2.7	4.7	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	855	6.0	1.5	4.9	10.0	10
S	Munger St	460	17.4	3.8	12.6	24.6	10
SW	Lockwood Dr	230	29.4	5.0	21.1	39.3	10
W	Munger St	661	23.2	2.7	19.8	28.2	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	40.2	3.1	35.5	45.0	10
NE	Lockwood Dr	245	25.0	3.4	19.9	30.8	10

SW	Lockwood Dr	492	33.0	3.9	27.4	39.3	10
W	Navigation Blvd	251	49.4	6.1	40.4	58.8	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	14.5	5.9	6.3	22.2	10
N	Lockwood Dr	284	3.6	0.7	2.9	4.7	10
S	Lockwood Dr	524	4.6	0.8	3.5	5.9	10
W	Nichols St	525	1.8	0.7	0.7	2.7	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	29.9	1.8	27.6	32.7	10
N	Lockwood Dr	300	14.2	2.6	11.2	19.8	10
S	Lockwood Dr	545	7.6	1.9	5.5	11.6	10
W	Pardee St	546	18.4	3.0	13.5	24.7	10

LOCKWOOD DR & POLK ST **NODE: 151**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	37.1	4.1	31.1	44.9	10
N	Lockwood Dr	229	31.3	9.2	26.2	57.3	10
S	Lockwood Dr	238	65.3	20.0	43.1	114.4	10
W	Polk St	234	35.9	3.1	31.3	41.4	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	40.7	3.6	36.4	48.6	10
N	Lockwood Dr	296	12.5	1.2	10.5	14.7	10
S	Lockwood Dr	300	20.0	1.0	18.5	21.8	10
W	Rand St	302	19.9	3.3	15.4	25.3	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	725	1.9	0.5	1.3	3.3	10
NE	Shreveport Blvd	316	27.0	2.8	23.8	31.7	10
S	Lockwood Dr	795	4.9	1.1	3.4	6.8	10
SW	Shreveport Blvd	315	38.4	2.3	33.4	41.9	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	40.0	22.1	18.5	92.4	10
N	Lockwood Dr	524	10.4	2.4	5.9	13.8	10
S	Lockwood Dr	533	3.9	1.3	2.6	6.6	10
W	Sudan St	534	29.6	7.7	22.1	45.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	16.9	2.0	13.3	19.7	10
N	Lockwood Dr	320	29.4	1.3	27.0	31.3	10
S	Lockwood Dr	324	16.6	2.2	12.5	20.1	10
W	Weaver Rd	325	18.9	2.3	15.8	22.2	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	4.4	0.5	3.4	5.2	10
N	Lockwood Dr (NB)	264	45.9	5.8	38.5	56.6	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	9.8	1.0	8.3	11.0	10
W	I-10 WBFR	276	34.4	2.1	31.4	36.6	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	2.3	0.4	1.5	2.8	10
N	Lockwood Dr	499	23.5	5.6	18.7	38.0	10
W	Market St	266	53.8	9.8	43.0	71.7	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	41.9	4.7	36.8	50.5	10
S	Lockwood Dr (SB)	267	5.5	2.0	3.3	9.0	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	29.9	7.0	24.3	48.1	10
W	I-10 WBFR	273	4.4	0.2	4.2	4.8	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	41.0	3.4	36.1	46.1	10
S	Lockwood Dr (SB)	260	44.6	2.4	40.4	48.9	10
W	Market St	262	7.6	0.9	6.2	9.3	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	15.6	3.2	10.2	22.9	10
N	Lockwood Dr	795	1.4	0.2	1.0	1.7	10
S	Lockwood Dr	796	3.5	0.7	2.4	4.4	10
W	Driveway	318	3.9	0.8	2.9	5.1	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	22.9	2.6	19.5	26.7	10
N	BRT Alignment	806	51.0	18.2	24.4	87.6	10
NW	Lockwood Dr	796	10.1	2.1	7.6	13.2	10
S	Lockwood Dr	321	13.1	1.3	11.5	15.8	10
W	Denmark St	549	33.4	2.8	29.0	36.7	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST — NODE: 152

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	21.2	11.0	10.9	47.8	10
N	Lockwood Dr	238	6.0	7.4	0.0	23.0	10
S	Lockwood Dr	237	7.4	7.3	0.5	26.2	10
SW	BRT Alignment	859	0.0	0.0	0.0	0.0	10
W	McKinney St	239	15.7	8.6	7.8	37.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	11.6	1.5	9.6	14.9	10
NE	Elgin St	216	8.7	2.0	5.5	11.3	10
SW	Lockwood Dr	218	18.3	1.3	17.1	21.7	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	52.2	9.6	39.4	69.4	10
N	Lockwood Dr	230	66.3	17.5	50.1	98.4	10
S	Lockwood Dr	229	59.0	14.3	44.2	93.8	10
W	Telephone Rd	231	44.3	5.6	38.5	56.3	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Red Line	673	38.1	30.3	22.5	118.3	10
NE	Main St	168	558.8	186.5	296.1	801.6	10
NW	Wheeler Ave	169	195.5	31.6	141.4	236.9	10
S	Main St	70	350.0	61.0	254.7	479.2	10
SE	Richmond Ave	26	32.6	11.2	17.3	50.1	10
SW	LRT Red Line	674	0.3	0.5	0.0	1.5	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	69.8	14.7	48.2	95.2	10
N	Dunlavy St	57	188.9	67.3	79.3	281.1	10
S	Dunlavy St	56	1,176.3	135.9	1,053.2	1,528.0	10
W	Richmond Ave	165	13.2	2.1	10.5	16.9	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	11	115.6	23.0	75.0	160.6	10
N	Eastside St	40	53.6	5.3	43.4	62.6	10
S	Eastside St	39	33.8	8.1	22.7	48.1	10
W	Richmond Ave	54	33.2	4.4	28.8	42.6	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	35.8	7.2	31.7	55.9	10
N	Edloe St	155	31.5	4.7	24.9	39.6	10
S	Edloe St	5	33.7	4.5	29.8	45.0	10
W	Richmond Ave	10	43.1	2.9	39.5	48.2	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	56.5	4.6	48.2	62.0	10
N	Greenbriar Dr	47	18.3	2.5	15.0	22.9	10
S	Greenbriar Dr	46	15.4	1.3	12.9	17.2	10
W	Richmond Ave	160	53.4	3.6	49.9	59.8	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	21.9	18.7	4.1	56.6	10
N	Hazard St	51	131.9	71.9	22.1	236.8	10
S	Hazard St	50	18.1	14.3	9.6	55.9	10
W	Richmond Ave	162	4.2	7.1	0.0	17.7	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	281.5	50.3	210.4	370.5	10
N	Kirby Dr	158	64.3	12.3	50.3	85.3	10
S	Kirby Dr	44	37.9	2.1	32.9	40.4	10
W	Richmond Ave	64	60.8	4.4	52.3	66.3	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	104.4	20.0	71.6	138.9	10
N	Mandell St	59	577.6	92.5	452.1	728.2	10
S	Mandell St	864	411.9	201.6	188.0	822.1	10
W	Richmond Ave	23	33.3	12.2	25.2	66.8	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	343.8	35.9	292.3	400.0	10
N	Montrose Blvd	61	72.0	6.9	56.7	79.2	10
S	Montrose Blvd	60	122.0	16.8	95.7	147.0	10
W	Richmond Ave	166	368.3	26.3	333.9	429.5	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	37.9	3.4	33.4	45.1	10
N	Shepherd Dr	49	34.9	3.2	30.3	39.6	10
S	Shepherd Dr	48	34.3	3.5	30.0	40.1	10
W	Richmond Ave	20	65.3	27.0	36.8	111.0	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	17.2	4.2	13.1	23.4	10
NE	US 59 NBFR	69	284.3	37.1	228.4	326.7	10
W	Richmond Ave	26	236.6	21.4	200.6	268.6	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	128.9	8.8	114.6	144.4	10
SW	US 59 SBFR	65	165.0	36.4	103.2	217.2	10
W	Richmond Ave	167	71.0	100.9	29.7	357.9	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	54.4	12.3	38.2	70.9	10
N	Woodhead St	53	456.4	64.9	387.0	548.2	10
S	Woodhead St	52	40.7	4.8	34.9	49.5	10
W	Richmond Ave	163	13.3	2.1	10.6	18.2	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	75.4	9.1	66.6	89.6	10
N	S Rice Ave	138	363.5	70.2	280.4	479.5	10
S	S Rice Ave	137	61.2	4.2	55.6	68.9	10
W	Westpark Dr	781	119.9	17.2	95.6	147.5	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	116.5	29.2	83.9	166.1	10
NW	Wheeler Ave	86	476.3	166.6	278.7	786.7	10
SE	Wheeler Ave	172	23.6	3.5	19.4	30.0	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	16.2	3.4	11.9	20.3	10
N	Edell St	590	21.9	3.9	16.5	27.7	10

S	Edell St	589	13.8	1.9	11.0	16.2	10
W	Tidwell Rd	652	17.9	5.1	10.4	26.4	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	12.3	1.3	9.9	14.1	10
N	Hirsch Rd	336	28.1	2.8	23.5	33.5	10
S	Hirsch Rd	335	28.2	3.7	23.5	34.0	10
W	Tidwell Rd	334	17.1	2.0	15.1	21.6	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	45.6	3.0	41.7	51.5	10
N	I-69 NBFR	340	26.5	1.1	25.3	28.8	10
W	Tidwell Rd	586	18.9	2.5	15.5	25.1	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	652	28.5	2.4	23.8	31.4	10
S	I-69 SBFR	649	24.2	1.2	22.8	26.4	10
W	Tidwell Rd	342	20.6	2.5	16.7	25.5	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	24.8	1.9	20.8	27.6	10
N	Jensen Dr	347	40.6	1.7	39.2	43.9	10
S	Jensen Dr	604	40.0	3.8	34.0	44.7	10
W	Tidwell Rd	348	28.4	2.4	24.5	32.2	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	15.4	1.5	12.5	17.9	10
N	Friendly Rd	585	61.9	19.1	44.8	99.9	10
W	Tidwell Rd	338	10.9	1.0	9.7	12.8	10
S	Friendly Rd	584	129.8	11.7	111.9	146.6	10
W	BRT Alignment	797	8.2	6.0	2.6	24.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	BRT Alignment	797	50.9	6.4	39.9	59.7	10
N	Lockwood Dr	574	23.2	2.4	19.0	26.0	10
NE	Tidwell Rd	334	17.1	1.5	15.0	19.4	10
S	Lockwood Dr	331	40.5	11.6	22.9	57.0	10
W	Tidwell Rd	333	8.7	0.6	7.8	9.7	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	7.4	1.0	6.5	9.5	10
N	14th St	118	11.3	2.4	8.0	16.0	10
W	Westpark Dr	119	64.7	12.7	44.3	81.1	10

WESTPARK DR & ALDER DR **NODE: 99558**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	778	80.0	19.7	60.7	112.8	10
N	Alder Dr	718	104.5	35.4	61.5	167.6	10
W	Westpark Dr	133	13.8	2.0	11.1	16.5	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	168.8	8.5	153.6	179.4	10
N	Chimney Rock Rd	135	76.9	27.5	57.2	148.5	10
S	Chimney Rock Rd	134	56.2	4.8	50.2	62.9	10
W	Westpark Dr	136	54.3	6.9	44.9	69.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	37.7	4.2	33.7	47.6	10
N	Edloe St	29	103.3	6.6	92.7	112.8	10
S	Edloe St	153	52.4	2.7	48.0	55.9	10
W	Westpark Dr	154	40.3	1.4	37.8	42.4	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	350.1	6.8	337.4	359.0	10
N	Fondren Rd	110	8.7	0.4	8.3	9.6	10
S	Fondren Rd	112	129.6	20.1	94.1	156.1	10
W	Westpark Dr	117	114.0	29.6	69.2	170.0	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	117	112.7	26.3	82.4	165.9	10
N	Hillcroft Ave	3	198.0	16.1	181.5	228.9	10
S	Hillcroft Ave	115	70.4	10.3	59.4	93.3	10
W	Westpark Dr	116	119.5	9.0	104.3	130.2	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	13.9	1.8	11.9	17.0	10
NE	I-69 NBFR	126	23.7	2.8	20.9	28.9	10
W	Westpark Dr	127	22.3	2.8	17.8	28.5	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	119	19.2	1.3	16.5	21.1	10
SW	I-69 SBFR	121	24.9	8.0	12.6	33.6	10
W	Westpark Dr	123	24.4	13.5	17.1	62.4	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	784	17.8	5.3	12.5	26.5	10
N	Loop Central Dr	803	27.1	6.0	16.9	36.3	10
W	Westpark Dr	146	6.8	0.6	5.9	7.8	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	39.4	9.8	26.5	54.0	10
N	Newcastle Dr	148	132.9	14.7	114.1	161.5	10
S	Newcastle Dr	147	38.1	7.7	30.5	58.0	10
W	Westpark Dr	149	27.1	2.0	24.6	31.4	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	10.8	2.5	8.4	15.9	10
N	Rampart St	129	213.5	15.6	186.2	242.3	10

S	Rampart St	128	53.7	13.8	37.1	78.1	10
W	Westpark Dr	130	8.0	2.3	4.5	12.3	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	15.5	1.5	13.0	17.6	10
N	Royalton St	384	140.4	42.2	84.4	209.0	10
W	Westpark Dr	140	9.5	2.0	7.0	12.9	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	781	9.6	1.3	8.1	12.4	10
N	Uptown Transit Ctr	769	76.9	18.3	49.6	102.7	10
W	Westpark Dr	629	29.1	22.7	2.5	80.9	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	140.4	64.4	61.4	262.2	10
N	Weslayan St	151	50.2	8.1	38.0	60.8	10
S	Weslayan St	150	57.2	7.8	47.0	72.4	10
W	Westpark Dr	152	85.5	24.0	57.2	132.9	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	13.2	0.9	12.2	15.2	10
N	I-610 NBFR	145	47.3	1.5	44.6	49.8	10
NE	BRT Alignment	821	43.5	5.9	31.4	51.1	10
W	Westpark Dr	784	44.2	10.2	35.5	65.4	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	126.5	4.2	120.4	133.6	10
NE	BRT Alignment	845	41.4	15.2	22.3	66.6	10
S	Silver Line Alignment	783	58.0	7.0	47.7	68.1	10
SE	I-610 SBFR	141	84.5	21.8	65.3	140.5	10
SW	Westpark Dr	143	31.4	2.6	27.8	36.1	10
W	BRT Alignment	844	28.5	6.5	20.4	37.6	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	75.9	24.7	42.9	125.9	10
N	Renwick Dr	132	68.5	12.2	55.7	86.7	10
S	Fountain View Dr	131	55.6	7.2	44.5	67.6	10
W	Westpark Dr	778	41.0	4.6	31.7	47.8	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	41.5	24.3	14.1	75.6	10
NW	Wheeler Ave	423	107.2	64.4	26.7	204.9	10
SE	Wheeler Ave	421	21.7	2.3	18.6	25.3	10
SW	Hutchins St	422	156.2	150.4	7.7	439.5	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	421	86.6	35.4	32.9	127.6	10
SE	Wheeler Ave	176	5.4	6.1	1.5	22.3	10

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	732	0.2	0.0	0.2	0.3	10
NEB T	Ennis St	732	0.5	0.3	0.1	1.1	10
NWB L	Alabama St	197	0.1	0.0	0.0	0.2	10
NWB T	Alabama St	197	0.6	0.1	0.5	0.7	10
NWB TR	Alabama St	197	0.6	0.1	0.5	0.7	10
SEB L	Alabama St	193	0.3	0.0	0.3	0.4	10
SEB T	Alabama St	193	1.3	0.1	1.0	1.5	10
SEB TR	Alabama St	193	1.8	0.3	1.5	2.2	10
SWB LTR	Ennis St	740	0.2	0.0	0.1	0.2	10
SWB T	Ennis St	740	0.3	0.2	0.1	0.9	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	7.6	2.5	3.5	12.5	10
NB T	Almeda Rd	696	0.0	0.0	0.0	0.1	10
NB TR	Almeda Rd	696	0.2	0.1	0.1	0.3	10
NWB L	Wheeler Ave	176	0.8	0.4	0.2	1.4	10
NWB T	Wheeler Ave	176	0.2	0.2	0.1	0.7	10
NWB TR	Wheeler Ave	176	3.7	1.3	2.5	5.7	10
SB L	Almeda Rd	174	0.9	0.6	0.3	2.1	10
SB T	Almeda Rd	174	6.9	2.8	3.9	11.8	10
SB TR	Almeda Rd	174	3.5	1.3	2.0	5.0	10
SEB L	Wheeler Ave	77	0.2	0.0	0.2	0.3	10
SEB T	Wheeler Ave	77	0.1	0.1	0.0	0.2	10
SEB TR	Wheeler Ave	77	4.1	0.8	3.1	5.3	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	6.7	1.1	4.7	8.2	10
EB R	EB Westpark Tollway FR	111	37.8	2.7	32.1	42.6	10
NB T	Fondren Rd	38	103.4	2.3	100.8	107.3	10
NEB T	BRT Alignment	768	0.2	0.1	0.1	0.3	10
SB T	Fondren Rd	110	0.9	0.1	0.7	1.0	10
WB T	BRT Alignment	774	0.0	0.0	0.0	0.0	10

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	10	1.9	0.4	1.4	2.9	10
EB T	Richmond Ave	10	5.9	1.2	4.8	8.9	10
EB TR	Richmond Ave	10	7.5	2.5	5.8	14.2	10
NB L	Buffalo Speedway	37	2.0	0.3	1.4	2.3	10

NB T	Buffalo Speedway	37	5.4	0.7	4.5	6.4	10
NB TR	Buffalo Speedway	37	8.4	1.5	6.1	11.2	10
SB L	Buffalo Speedway	36	1.2	0.2	0.9	1.5	10
SB T	Buffalo Speedway	36	1.8	0.2	1.6	2.1	10
SB TR	Buffalo Speedway	36	2.1	0.2	1.8	2.4	10
WB L	Richmond Ave	11	3.2	0.4	2.5	3.7	10
WB T	Richmond Ave	11	3.2	0.3	2.7	3.8	10
WB TR	Richmond Ave	11	3.2	0.4	2.8	3.9	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	726	0.4	0.1	0.2	0.6	10
NEB T	Ennis St	726	0.1	0.1	0.0	0.3	10
NWB LTR	Cleburne St	733	0.5	0.1	0.4	0.6	10
SEB LTR	Cleburne St	731	0.4	0.1	0.3	0.5	10
SWB LTR	Ennis St	732	0.3	0.1	0.2	0.6	10
SWB T	Ennis St	732	0.3	0.2	0.0	0.8	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	0.5	0.1	0.4	0.6	10
EB T	Crosstimbers St	323	0.4	0.1	0.3	0.5	10
EB TR	Crosstimbers St	323	0.5	0.1	0.4	0.6	10
NB L	Lockwood Dr	321	0.5	0.1	0.4	0.6	10
NB T	Lockwood Dr	321	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	321	1.2	0.1	1.1	1.4	10
SB L	Lockwood Dr	320	0.4	0.1	0.3	0.5	10
SB T	Lockwood Dr	320	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	320	1.7	0.2	1.4	2.1	10
WB L	Crosstimbers St	322	0.9	0.1	0.7	1.0	10
WB T	Crosstimbers St	322	0.5	0.1	0.5	0.7	10
WB TR	Crosstimbers St	322	0.6	0.1	0.4	0.8	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	1.2	0.1	1.0	1.4	10
EB T	Elgin St	204	0.9	0.2	0.6	1.3	10
EB TR	Elgin St	204	0.9	0.1	0.7	1.1	10
NEB L	Cullen Blvd	207	0.4	0.1	0.3	0.5	10
NEB T	Cullen Blvd	207	0.4	0.1	0.3	0.5	10
NEB TR	Cullen Blvd	207	0.6	0.1	0.5	0.9	10
SB L	Cullen Blvd	206	1.4	0.1	1.2	1.6	10
SB T	Cullen Blvd	206	1.6	0.3	1.1	2.0	10
SB TR	Cullen Blvd	206	1.8	0.3	1.3	2.4	10
WB L	Elgin St	208	1.2	0.3	1.0	1.7	10
WB T	Elgin St	208	1.5	0.2	1.2	1.8	10
WB TR	Elgin St	208	1.6	0.1	1.4	1.8	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	702	0.7	0.2	0.6	1.1	10
NEB R	Ennis St	702	0.1	0.0	0.1	0.1	10
NWB L	Elgin St	701	0.2	0.0	0.2	0.3	10
NWB TR	Elgin St	701	1.2	0.3	0.8	1.7	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.0	10
SEB TR	Elgin St	700	0.9	0.3	0.7	1.7	10
SWB L	Ennis St	195	0.1	0.0	0.0	0.1	10
SWB TR	Ennis St	195	0.3	0.1	0.2	0.5	10

ELGIN ST & GARAGE 5 — NODE: 353

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Elgin St	212	0.2	0.0	0.2	0.3	10
EB TR	Elgin St	212	0.6	0.1	0.6	0.8	10
NB R	Garage 5	409	0.2	0.0	0.2	0.3	10
WB L	Elgin St	637	1.0	0.1	0.8	1.2	10
WB T	Elgin St	637	0.1	0.1	0.0	0.4	10

ELGIN ST & SCOTT ST — NODE: 143

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	0.6	0.2	0.3	0.9	10
EB T	Elgin St	701	0.1	0.0	0.0	0.1	10
EB TR	Elgin St	701	3.3	0.9	2.2	5.2	10
NB T	LRT Line	667	0.0	0.0	0.0	0.0	10
NWB L	Scott St	693	1.2	0.3	0.9	1.7	10
NWB T	Scott St	693	0.9	0.1	0.8	1.2	10
NWB TR	Scott St	693	1.0	0.2	0.7	1.2	10
SB T	LRT Line	669	0.0	0.0	0.0	0.0	10
SEB L	Scott St	671	0.5	0.1	0.4	0.6	10
SEB T	Scott St	671	2.4	0.3	2.0	2.9	10
SEB TR	Scott St	671	2.4	0.3	1.9	2.8	10
WB L	Elgin St	204	3.7	0.9	2.6	5.7	10
WB T	Elgin St	204	1.1	0.3	0.7	1.6	10
WB TR	Elgin St	204	1.1	0.4	0.7	1.8	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	637	0.1	0.0	0.1	0.2	10
EB T	Elgin St	637	0.9	0.1	0.6	1.2	10
SB LT	Spur 5 SBFR	214	1.4	0.1	1.2	1.6	10
SB TR	Spur 5 SBFR	214	1.5	0.2	1.3	1.7	10
SWB L	Elgin St	216	1.2	0.1	1.1	1.4	10
SWB T	Elgin St	216	1.8	0.3	1.4	2.3	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.5	0.1	0.4	0.6	10
EB T	Elgin St	208	0.3	0.1	0.2	0.4	10
EB TR	Elgin St	208	0.3	0.1	0.1	0.4	10
NB L	UH Entrance 18	211	0.4	0.1	0.2	0.5	10
NB TR	UH Entrance 18	211	0.8	0.1	0.6	0.9	10
SB L	UH Entrance 17	210	0.1	0.1	0.0	0.2	10
SB TR	UH Entrance 17	210	0.6	0.2	0.5	0.9	10
WB L	Elgin St	212	1.7	0.3	1.3	2.2	10
WB T	Elgin St	212	0.7	0.2	0.5	1.1	10
WB TR	Elgin St	212	0.6	0.2	0.4	1.0	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.3	0.1	0.2	0.4	10
NEB TR	Emancipation Ave	711	0.5	0.1	0.4	0.7	10
NWB LTR	Wheeler Ave	724	2.1	1.7	0.5	5.4	10
NWB T	Wheeler Ave	724	0.1	0.0	0.1	0.1	10
SEB LTR	Wheeler Ave	423	1.3	0.1	1.1	1.5	10
SEB T	Wheeler Ave	423	0.2	0.0	0.1	0.2	10
SWB LT	Emancipation Ave	177	0.3	0.0	0.2	0.4	10
SWB TR	Emancipation Ave	177	0.5	0.4	0.2	1.5	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	740	0.2	0.1	0.1	0.3	10
NEB T	Ennis St	740	0.1	0.1	0.1	0.2	10
NWB LTR	Holman St	742	0.2	0.0	0.1	0.2	10
SEB LTR	Holman St	741	0.2	0.0	0.1	0.2	10
SWB LTR	Ennis St	702	0.3	0.1	0.2	0.4	10
SWB T	Ennis St	702	0.2	0.1	0.1	0.5	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Ennis St	698	0.0	0.0	0.0	0.1	10
NEB T	Ennis St	698	0.1	0.0	0.1	0.2	10
SEB L	Wheeler Ave	724	0.1	0.0	0.1	0.1	10
SEB LR	Wheeler Ave	724	0.5	0.1	0.3	0.8	10
SWB R	Ennis St	726	0.1	0.0	0.1	0.2	10
SWB TR	Ennis St	726	0.1	0.0	0.1	0.2	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR — NODE: 690

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Turner Dr	595	0.0	0.0	0.0	0.0	10
EB T	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LT	Edell St	589	0.0	0.0	0.0	0.0	10
SEB TR	Epsom Rd	592	0.0	0.0	0.0	0.0	10
SWB T	Tidwell TC 2 Dr	802	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.5	0.1	0.4	0.6	10
EB TR	Leeland St	228	0.6	0.1	0.4	0.6	10
NB L	Ernestine St	683	3.0	0.7	1.9	4.2	10
NB R	Ernestine St	683	0.0	0.0	0.0	0.0	10
SWB L	Ernestine St	411	0.1	0.0	0.1	0.2	10
SWB TR	Ernestine St	411	3.1	0.1	3.0	3.3	10
WB L	Leeland St	227	0.9	0.2	0.6	1.3	10
WB T	Leeland St	227	1.0	0.1	0.8	1.1	10

ERNESTINE ST & MUNGER ST — NODE: 399

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB TR	Ernestine St	687	0.0	0.0	0.0	0.0	10
SB L	Ernestine St	683	0.0	0.0	0.0	0.0	10
SB T	Ernestine St	683	0.0	0.0	0.0	0.0	10
WB L	Munger St	460	0.2	0.0	0.1	0.3	10
WB R	Munger St	460	0.0	0.0	0.0	0.1	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	172	0.1	0.0	0.0	0.1	10
NWB T	Wheeler Ave	172	6.5	0.8	5.1	7.6	10
SEB R	Wheeler Ave	169	0.0	0.0	0.0	0.0	10
SEB T	Wheeler Ave	169	0.1	0.0	0.1	0.1	10
SEB TR	Wheeler Ave	169	3.6	0.5	3.0	4.5	10
SWB L	Fannin St	87	0.4	0.2	0.3	0.9	10
SWB R	Fannin St	87	5.9	2.4	2.6	9.3	10
SWB T	Fannin St	87	2.9	0.3	2.3	3.3	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.8	0.1	0.7	1.0	10
EB LR	I-69 Express Lanes	30	1.1	0.2	0.8	1.3	10
NB L	Edloe St	153	0.0	0.0	0.0	0.0	10
NB T	Edloe St	153	0.0	0.0	0.0	0.1	10
NB TR	Edloe St	153	2.5	0.3	1.9	3.2	10
SB L	Edloe St	155	0.7	0.1	0.6	0.9	10
SB T	Edloe St	155	0.3	0.0	0.2	0.3	10
SB TR	Edloe St	155	0.8	0.1	0.7	1.0	10
WB LR	I-69 Express Lanes	31	0.0	0.0	0.0	0.0	10

JENSEN DR & TURNER DR **NODE: 705**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	604	0.0	0.0	0.0	0.1	10
NEB R	Jensen Dr	604	0.0	0.0	0.0	0.0	10
NEB TR	Jensen Dr	604	0.1	0.0	0.0	0.1	10
SWB L	Jensen Dr	599	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	599	0.1	0.0	0.1	0.2	10
WB L	Turner Dr	595	0.0	0.0	0.0	0.0	10
WB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.3	0.2	1.0	1.6	10
EB T	Kelley St	313	0.4	0.1	0.3	0.5	10
EB TR	Kelley St	313	0.7	0.1	0.5	1.0	10
NB L	Lockwood Dr	308	0.7	0.1	0.5	1.0	10
NB R	Lockwood Dr	308	1.1	0.1	0.9	1.2	10
NB T	Lockwood Dr	308	2.6	0.3	2.2	3.4	10
SB L	Lockwood Dr	725	1.3	0.4	0.8	2.1	10
SB T	Lockwood Dr	725	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	725	5.5	1.9	3.2	8.8	10
WB L	Kelley St	312	0.7	0.1	0.6	1.0	10
WB T	Kelley St	312	0.3	0.0	0.3	0.4	10
WB TR	Kelley St	312	0.4	0.1	0.3	0.5	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	5.8	1.4	4.1	8.1	10
NWB T	Wheeler Ave	77	0.0	0.0	0.0	0.1	10
NWB TR	Wheeler Ave	77	11.3	2.2	8.2	15.3	10
SEB T	Wheeler Ave	86	0.0	0.0	0.0	0.0	10
SEB TR	Wheeler Ave	86	0.8	0.1	0.6	0.9	10
SWB LTR	LaBranch St	78	4.1	1.8	1.5	6.5	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.2	0.1	0.2	0.3	10
EB TR	Laura Koppe Rd	330	0.4	0.1	0.3	0.5	10
NB L	Lockwood Dr	560	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	560	0.4	0.2	0.2	0.7	10
SB L	Lockwood Dr	327	0.3	0.1	0.2	0.4	10
SB T	Lockwood Dr	327	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	327	0.5	0.1	0.4	0.5	10
WB L	Laura Koppe Rd	329	0.5	0.1	0.4	0.7	10
WB TR	Laura Koppe Rd	329	1.0	0.1	0.9	1.1	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	658	0.0	0.0	0.0	0.0	10
NEB T	Lockwood Dr	658	0.1	0.1	0.0	0.3	10
SWB T	Lockwood Dr	253	0.0	0.0	0.0	0.1	10
WB R	Armour Dr	659	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	640	1.5	0.4	1.0	2.4	10
EB TR	Canal St	640	2.3	0.6	1.8	3.8	10
NEB L	Lockwood Dr	246	4.3	1.1	2.7	6.8	10
NEB T	Lockwood Dr	246	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	246	2.6	1.3	1.6	5.3	10
SWB L	Lockwood Dr	245	3.4	0.7	2.4	4.7	10
SWB T	Lockwood Dr	245	0.1	0.0	0.1	0.2	10
SWB TR	Lockwood Dr	245	6.8	0.9	5.0	7.9	10
WB L	Canal St	826	1.0	0.2	0.7	1.3	10
WB TR	Canal St	826	2.4	0.5	1.7	3.2	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	0.6	0.1	0.3	0.8	10
EB T	Cavalcade St	299	0.3	0.1	0.2	0.4	10
EB TR	Cavalcade St	299	0.4	0.1	0.2	0.5	10
NB L	Lockwood Dr	292	0.3	0.1	0.2	0.5	10
NB T	Lockwood Dr	292	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	292	1.9	0.1	1.7	2.1	10
SB L	Lockwood Dr	296	0.6	0.2	0.5	1.1	10
SB T	Lockwood Dr	296	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	296	1.5	0.3	1.1	2.1	10
WB L	Cavalcade St	298	0.8	0.2	0.6	1.1	10
WB T	Cavalcade St	298	0.7	0.1	0.6	0.9	10
WB TR	Cavalcade St	298	1.0	0.2	0.7	1.3	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.3	0.1	0.2	0.3	10
EB T	Clinton Dr	259	0.6	0.1	0.4	0.8	10
EB TR	Clinton Dr	259	0.7	0.1	0.5	0.9	10
NEB L	Lockwood Dr	257	0.4	0.1	0.3	0.5	10
NEB T	Lockwood Dr	257	1.1	0.1	1.0	1.4	10
NEB TR	Lockwood Dr	257	1.3	0.2	1.0	1.8	10
SB L	Lockwood Dr	256	2.1	0.4	1.7	3.0	10
SB T	Lockwood Dr	256	0.8	0.1	0.6	1.0	10
SB TR	Lockwood Dr	256	1.1	0.1	0.9	1.4	10
WB L	Clinton Dr	258	1.3	0.2	1.0	1.7	10
WB R	Clinton Dr	258	0.2	0.0	0.1	0.2	10
WB T	Clinton Dr	258	1.2	0.2	1.0	1.5	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.3	0.1	0.2	0.4	10
EB T	Collingsworth St	291	0.1	0.0	0.1	0.2	10
EB TR	Collingsworth St	291	0.5	0.1	0.3	0.6	10
NB L	Lockwood Dr	533	2.5	0.9	1.6	4.7	10
NB T	Lockwood Dr	533	0.0	0.0	0.0	0.0	10

NB TR	Lockwood Dr	533	0.9	0.1	0.8	1.1	10
SEB L	Lockwood Dr	288	0.1	0.0	0.0	0.1	10
SEB T	Lockwood Dr	288	0.0	0.0	0.0	0.1	10
SEB TR	Lockwood Dr	288	1.8	0.3	1.4	2.2	10
WB L	Collingsworth St	290	0.6	0.1	0.5	0.6	10
WB T	Collingsworth St	290	0.2	0.1	0.1	0.3	10
WB TR	Collingsworth St	290	0.3	0.0	0.2	0.3	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.1	0.1	0.8	1.3	10
NB L	Lockwood Dr	288	0.2	0.0	0.1	0.2	10
NB T	Lockwood Dr	288	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	288	0.3	0.1	0.2	0.5	10
SB L	Lockwood Dr	292	0.1	0.0	0.0	0.1	10
SB T	Lockwood Dr	292	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	292	0.7	0.4	0.3	1.5	10
WB LTR	Crane St	294	0.7	0.1	0.5	0.9	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.2	0.1	0.1	0.3	10
NB L	Lockwood Dr	327	0.5	0.1	0.4	0.6	10
NB T	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	327	0.4	0.1	0.3	0.6	10
SB L	Lockwood Dr	574	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	574	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	574	0.3	0.1	0.2	0.5	10
WB LTR	Firnat St	575	0.6	0.1	0.4	0.7	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 197**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	492	3.4	0.2	3.1	3.7	10
NEB T	Lockwood Dr	492	3.9	0.5	2.7	4.6	10
SEB L	Marron Park Way	843	1.9	0.2	1.5	2.3	10
SEB R	Marron Park Way	843	0.7	0.1	0.5	1.0	10
SWB L	Lockwood Dr	658	0.8	0.4	0.4	2.0	10
SWB T	Lockwood Dr	658	0.0	0.0	0.0	0.0	10
SWB TR	Lockwood Dr	658	21.1	1.1	18.1	22.1	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	LRT Line	675	0.0	0.0	0.0	0.1	10
NEB L	Lockwood Dr	787	1.3	0.4	0.7	1.9	10
NEB TR	Lockwood Dr	787	0.1	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	787	7.3	1.4	5.1	9.5	10
NWB L	Harrisburg Blvd	678	1.8	0.9	1.0	4.0	10
NWB T	Harrisburg Blvd	678	1.4	0.5	1.1	2.8	10
NWB TR	Harrisburg Blvd	678	1.4	0.4	1.1	2.5	10
SB L	Lockwood Dr	241	3.7	0.6	2.9	4.7	10
SB L	Lockwood Dr	241	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	241	8.7	2.0	5.7	11.5	10
SEB L	Harrisburg Blvd	244	1.0	0.3	0.6	1.5	10
SEB T	Harrisburg Blvd	244	1.2	0.2	0.9	1.7	10
SEB TR	Harrisburg Blvd	244	1.3	0.2	1.0	1.9	10
WB T	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Harvey Wilson Dr	498	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	253	3.0	0.8	2.0	4.4	10
NB T	Lockwood Dr	253	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	253	0.5	0.1	0.4	0.6	10
SWB L	Lockwood Dr	257	1.1	0.2	0.8	1.4	10
SWB T	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
SWB TR	Lockwood Dr	257	1.9	0.3	1.5	2.6	10
WB L	Harvey Wilson Dr	497	0.3	0.0	0.3	0.4	10
WB R	Harvey Wilson Dr	497	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	0.2	0.0	0.1	0.2	10
NB LT	Lockwood Dr	512	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	512	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	512	0.0	0.0	0.0	0.1	10
SB LT	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
SB T	Lockwood Dr	478	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
WB LTR	Hershe St	513	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	1.7	0.5	1.1	2.5	10
NWB L	I-45 NBFR	222	2.3	0.6	1.5	3.7	10
NWB LT	I-45 NBFR	222	2.9	0.9	1.9	4.7	10
NWB T	I-45 NBFR	222	3.7	1.2	2.4	6.1	10
NWB TR	I-45 NBFR	222	8.1	2.7	4.3	12.4	10
SWB T	Lockwood Dr	224	0.0	0.0	0.0	0.0	10
SWB TR	Lockwood Dr	224	1.2	0.1	1.1	1.4	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	2.4	0.2	2.1	2.7	10
EB LT	I-610 EBFR	307	2.3	0.2	2.1	2.6	10
EB TR	I-610 EBFR	307	1.0	0.2	0.6	1.3	10
NB R	Lockwood Dr	545	0.2	0.1	0.1	0.4	10
NB T	Lockwood Dr	545	5.1	0.6	4.4	6.3	10
SB LT	Lockwood Dr	304	0.5	0.1	0.4	0.7	10
SB T	Lockwood Dr	304	0.7	0.1	0.5	0.9	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.0	0.0	0.0	0.1	10
NB LT	Lockwood Dr	304	0.4	0.1	0.3	0.5	10
NB T	Lockwood Dr	304	0.5	0.1	0.5	0.7	10
SB T	Lockwood Dr	308	3.4	0.2	3.2	3.7	10
WB L	I-610 WBFR	309	0.7	0.1	0.6	0.8	10
WB LT	I-610 WBFR	309	2.1	0.1	2.0	2.5	10
WB R	Lockwood Dr	308	0.1	0.0	0.1	0.2	10
WB TR	I-610 WBFR	309	2.6	0.2	2.4	3.0	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	0.0	0.0	0.0	0.1	10
NB L	Lockwood Dr	324	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	324	0.0	0.0	0.0	0.0	10

NB TR	Lockwood Dr	324	0.5	0.1	0.4	0.8	10
SB L	Lockwood Dr	560	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	560	0.2	0.1	0.1	0.3	10
WB LTR	Keeland St	561	0.2	0.0	0.1	0.2	10

LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Lyons Ave	280	3.2	0.8	2.1	4.6	10
NB LT	Lockwood Dr (NB)	275	1.3	0.1	1.1	1.4	10
NB T	Lockwood Dr (NB)	275	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr (NB)	275	1.1	0.1	1.0	1.3	10
SB LT	Lockwood Dr	515	0.7	0.1	0.5	0.8	10
SB T	Lockwood Dr	515	0.2	0.0	0.2	0.2	10
SB TR	Lockwood Dr	515	0.8	0.1	0.7	1.0	10
WB L	Lyons Ave	283	0.0	0.0	0.0	0.1	10
WB TR	Lyons Ave	283	1.5	0.2	1.2	1.8	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Mulvey St	287	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	478	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
WB R	Mulvey St	286	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.0	10
EB T	Munger St	460	0.3	0.1	0.3	0.5	10
NEB L	Lockwood Dr	855	0.1	0.0	0.0	0.2	10
NEB T	Lockwood Dr	855	0.0	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	855	0.9	0.1	0.8	1.2	10
SB R	Munger St	460	0.0	0.0	0.0	0.0	10
SWB L	Lockwood Dr	230	0.6	0.1	0.5	0.8	10
SWB T	Lockwood Dr	230	0.0	0.0	0.0	0.1	10
SWB TR	Lockwood Dr	230	3.4	0.7	2.4	4.8	10
WB L	Munger St	661	0.3	0.0	0.3	0.4	10
WB TR	Munger St	661	1.4	0.3	1.1	1.9	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.9	0.2	1.5	2.3	10
EB T	Navigation Blvd	252	1.6	0.3	1.3	2.2	10
EB TR	Navigation Blvd	252	1.9	0.3	1.4	2.4	10
NEB L	Lockwood Dr	245	1.2	0.2	0.9	1.7	10
NEB T	Lockwood Dr	245	0.1	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	245	2.5	0.5	1.8	3.5	10
SWB L	Lockwood Dr	492	2.8	0.5	2.3	3.8	10
SWB R	Lockwood Dr	492	0.2	0.0	0.1	0.2	10
SWB T	Lockwood Dr	492	3.7	0.4	2.9	4.4	10
WB L	Navigation Blvd	251	1.3	0.2	1.1	1.8	10
WB T	Navigation Blvd	251	3.2	0.5	2.4	3.9	10
WB TR	Navigation Blvd	251	3.6	0.5	3.0	4.4	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Nichols St	526	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	284	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	284	0.1	0.0	0.0	0.1	10
NB TR	Lockwood Dr	284	0.2	0.0	0.1	0.2	10
SB LT	Lockwood Dr	524	0.3	0.1	0.2	0.4	10
SB T	Lockwood Dr	524	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	524	0.2	0.1	0.1	0.3	10
WB LTR	Nichols St	525	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.7	0.1	0.5	0.8	10
NB L	Lockwood Dr	300	0.1	0.0	0.1	0.3	10
NB T	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	300	1.7	0.4	1.3	2.4	10
SB L	Lockwood Dr	545	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	545	1.3	0.4	0.9	2.2	10
WB LTR	Pardee St	546	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.8	0.2	0.6	1.1	10
EB T	Polk St	235	1.0	0.2	0.8	1.3	10
EB TR	Polk St	235	1.4	0.3	1.0	2.1	10
NB L	Lockwood Dr	229	1.3	0.4	1.0	2.2	10
NB T	Lockwood Dr	229	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	229	3.2	0.5	2.5	4.3	10
SB L	Lockwood Dr	238	5.0	1.3	2.8	7.4	10
SB T	Lockwood Dr	238	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	238	5.6	1.6	2.4	7.5	10
WB L	Polk St	234	1.4	0.2	1.1	1.7	10
WB T	Polk St	234	1.0	0.1	0.8	1.1	10
WB TR	Polk St	234	1.3	0.2	1.0	1.5	10

LOCKWOOD DR & RAND ST **NODE: 170**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	0.9	0.1	0.7	1.1	10
NB L	Lockwood Dr	296	0.1	0.0	0.0	0.2	10
NB T	Lockwood Dr	296	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	296	1.2	0.1	0.9	1.3	10
SB L	Lockwood Dr	300	0.9	0.1	0.8	1.0	10
SB T	Lockwood Dr	300	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	300	2.4	0.2	2.1	2.6	10
WB LTR	Rand St	302	0.5	0.1	0.4	0.7	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	725	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	725	0.2	0.1	0.1	0.4	10
NEB LT	Shreveport Blvd	316	0.2	0.1	0.1	0.3	10
NEB TR	Shreveport Blvd	316	0.1	0.0	0.1	0.2	10
SB L	Lockwood Dr	795	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	795	0.3	0.1	0.2	0.5	10
SWB LT	Shreveport Blvd	315	1.4	0.1	1.1	1.5	10
SWB TR	Shreveport Blvd	315	0.1	0.1	0.0	0.2	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.0	0.0	0.0	0.1	10
NB L	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	0.9	0.3	0.5	1.2	10
SB L	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	533	0.6	0.2	0.4	1.0	10
WB LTR	Sudan St	534	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.1	0.0	0.0	0.1	10
EB TR	Weaver Rd	326	0.3	0.0	0.2	0.3	10
NB L	Lockwood Dr	320	0.5	0.1	0.3	0.6	10
NB T	Lockwood Dr	320	0.1	0.0	0.0	0.1	10
NB TR	Lockwood Dr	320	1.4	0.2	1.2	1.8	10
SB L	Lockwood Dr	324	0.3	0.1	0.2	0.4	10
SB T	Lockwood Dr	324	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	324	0.9	0.1	0.7	1.2	10
WB L	Weaver Rd	325	0.4	0.1	0.3	0.5	10
WB TR	Weaver Rd	325	0.6	0.1	0.5	0.7	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.1	0.0	0.1	0.1	10
EB LT	I-10 EBFR	268	0.3	0.0	0.2	0.4	10
EB T	I-10 EBFR	268	0.3	0.0	0.2	0.3	10
NB T	Lockwood Dr (NB)	264	3.1	0.5	2.3	4.1	10
NB TR	Lockwood Dr (NB)	264	3.4	0.5	2.7	4.1	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr (NB)	270	1.2	0.1	1.0	1.4	10
NB T	Lockwood Dr (NB)	270	0.3	0.1	0.2	0.5	10
WB T	I-10 WBFR	276	4.2	0.4	3.9	4.9	10
WB TR	I-10 WBFR	276	1.4	0.1	1.3	1.8	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.1	0.0	0.0	0.1	10
EB T	Market St	262	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	499	1.4	0.3	1.0	2.2	10
NB T	Lockwood Dr	499	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	499	1.8	0.4	1.4	2.7	10
WB T	Market St	266	2.1	0.5	1.5	3.1	10
WB TR	Market St	266	1.1	0.2	0.8	1.3	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	3.5	0.5	2.7	4.6	10
EB TR	I-10 EBFR	269	0.6	0.1	0.4	0.7	10
SB LT	Lockwood Dr (SB)	267	0.5	0.4	0.2	1.5	10
SB T	Lockwood Dr (SB)	267	0.8	0.3	0.5	1.5	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	3.4	0.8	2.7	5.5	10

SB TR	Lockwood Dr (SB)	272	1.5	0.4	1.1	2.5	10
WB L	I-10 WBFR	273	0.1	0.0	0.1	0.2	10
WB LT	I-10 WBFR	273	0.4	0.0	0.4	0.4	10
WB T	I-10 WBFR	273	0.3	0.0	0.3	0.4	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	0.8	0.2	0.6	1.3	10
EB TR	Market St	263	0.5	0.1	0.3	0.5	10
SB LT	Lockwood Dr (SB)	260	3.9	0.3	3.4	4.4	10
SB T	Lockwood Dr (SB)	260	0.2	0.0	0.2	0.2	10
SB TR	Lockwood Dr (SB)	260	4.3	0.3	3.9	5.0	10
WB LT	Market St	262	0.4	0.1	0.3	0.5	10
WB T	Market St	262	0.0	0.0	0.0	0.1	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.2	0.1	0.1	0.3	10
EB R	Bennington St	319	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	795	0.1	0.0	0.0	0.1	10
NB TR	Lockwood Dr	795	0.0	0.0	0.0	0.1	10
SB LTR	Lockwood Dr	796	0.4	0.1	0.3	0.5	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	1.0	0.2	0.7	1.2	10
NB T	BRT Alignment	806	0.1	0.0	0.0	0.1	10
NWB LTR	Lockwood Dr	796	0.8	0.2	0.6	1.0	10
SB LTR	Lockwood Dr	321	1.0	0.1	0.8	1.2	10
SB T	Lockwood Dr	321	0.2	0.0	0.1	0.2	10
WB LTR	Denmark St	549	0.5	0.1	0.4	0.6	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	McKinney St	240	0.2	0.2	0.1	0.7	10
NB T	Lockwood Dr	238	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	238	0.9	0.9	0.0	2.6	10
SB TR	Lockwood Dr	237	1.2	0.9	0.1	3.4	10
SWB T	BRT Alignment	785	0.0	0.0	0.0	0.0	10
WB R	McKinney St	239	0.1	0.1	0.1	0.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.4	0.1	0.3	0.5	10
NB TR	Spur 5 NBFR	219	0.4	0.1	0.4	0.6	10
NEB L	Elgin St	216	0.0	0.0	0.0	0.0	10
NEB T	Elgin St	216	0.6	0.2	0.4	0.9	10
SWB T	Lockwood Dr	218	1.2	0.1	1.0	1.3	10
SWB TR	Lockwood Dr	218	2.4	0.3	1.9	3.2	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	1.6	0.7	0.8	2.7	10
EB T	Leeland St	227	1.0	0.1	0.8	1.2	10
EB TR	Leeland St	227	1.2	0.2	1.0	1.5	10
NB L	Lockwood Dr	230	3.1	0.5	2.4	4.0	10
NB T	Lockwood Dr	230	0.0	0.0	0.0	0.0	10

NB TR	Lockwood Dr	230	13.1	2.2	10.7	18.2	10
SB L	Lockwood Dr	229	1.7	0.3	1.4	2.5	10
SB T	Lockwood Dr	229	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	229	8.5	2.3	6.3	13.8	10
WB L	Telephone Rd	231	1.1	0.2	0.9	1.5	10
WB T	Telephone Rd	231	1.0	0.1	0.9	1.2	10
WB TR	Telephone Rd	231	1.7	0.3	1.3	2.2	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Red Line	673	0.1	0.1	0.1	0.3	10
NEB L	Main St	168	8.7	2.0	5.2	10.7	10
NEB R	Main St	168	0.0	0.0	0.0	0.0	10
NWB T	Wheeler Ave	169	7.5	0.5	6.8	8.3	10
NWB TR	Wheeler Ave	169	5.9	0.7	4.9	7.1	10
SB R	Main St	70	13.7	1.8	9.3	15.5	10
SEB R	Richmond Ave	26	0.1	0.0	0.0	0.1	10
SEB T	Richmond Ave	26	3.6	1.4	1.7	5.8	10
SWB T	LRT Red Line	674	0.0	0.0	0.0	0.0	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	1.8	0.3	1.4	2.2	10
EB T	Richmond Ave	163	0.0	0.0	0.0	0.1	10
EB TR	Richmond Ave	163	7.9	1.5	5.7	10.3	10
NB LTR	Dunlavy St	57	11.0	2.7	5.4	13.9	10
SB LTR	Dunlavy St	56	27.8	4.7	21.6	37.2	10
WB L	Richmond Ave	165	0.6	0.2	0.3	0.9	10
WB T	Richmond Ave	165	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	165	1.3	0.3	0.8	1.8	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	11	13.6	3.7	9.2	21.6	10
EB T	Richmond Ave	11	5.5	1.8	3.2	8.7	10
EB TR	Richmond Ave	11	9.0	1.8	6.5	12.6	10
NB L	Eastside St	40	1.0	0.2	0.6	1.3	10
NB TR	Eastside St	40	1.2	0.1	1.0	1.5	10
SB L	Eastside St	39	1.4	0.3	0.9	2.0	10
SB TR	Eastside St	39	1.7	0.4	1.0	2.1	10
WB L	Richmond Ave	54	1.2	0.3	0.9	1.9	10
WB T	Richmond Ave	54	2.4	0.3	2.0	3.0	10
WB TR	Richmond Ave	54	3.0	0.4	2.2	3.6	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	1.1	0.2	0.8	1.4	10
EB R	Richmond Ave	7	0.1	0.0	0.0	0.1	10
EB T	Richmond Ave	7	6.0	1.2	5.3	9.4	10
NB L	Edloe St	155	1.7	0.6	1.3	2.7	10
NB R	Edloe St	155	0.1	0.0	0.1	0.2	10
NB T	Edloe St	155	3.8	0.6	2.8	5.2	10
NB TR	Edloe St	155	4.7	0.8	3.5	6.2	10
SB L	Edloe St	5	2.1	0.7	1.3	3.8	10
SB T	Edloe St	5	1.5	0.1	1.3	1.7	10
SB TR	Edloe St	5	1.7	0.1	1.5	1.8	10
WB L	Richmond Ave	10	1.9	0.2	1.7	2.2	10
WB T	Richmond Ave	10	3.2	0.2	2.9	3.6	10

WB TR	Richmond Ave	10	3.5	0.3	2.9	3.9	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	1.3	0.1	1.1	1.5	10
EB T	Richmond Ave	64	0.1	0.0	0.1	0.2	10
EB TR	Richmond Ave	64	6.2	0.8	5.2	7.0	10
NB LTR	Greenbriar Dr	47	0.5	0.1	0.4	0.7	10
SB LT	Greenbriar Dr	46	1.2	0.1	1.0	1.5	10
SB R	Greenbriar Dr	46	0.1	0.0	0.1	0.2	10
SB T	Greenbriar Dr	46	1.2	0.1	1.0	1.3	10
WB L	Richmond Ave	160	2.8	0.4	2.2	3.6	10
WB T	Richmond Ave	160	0.1	0.0	0.0	0.1	10
WB TR	Richmond Ave	160	3.5	0.5	3.0	4.5	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	20	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	20	2.3	1.9	0.4	6.0	10
NB R	Hazard St	51	9.5	5.1	1.8	16.0	10
SB R	Hazard St	50	0.7	0.5	0.3	2.1	10
WB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	162	0.6	1.0	0.0	2.4	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	27.3	3.6	21.3	33.4	10
EB T	Richmond Ave	54	8.9	1.8	6.1	11.9	10
EB TR	Richmond Ave	54	16.4	3.4	11.8	23.1	10
NB L	Kirby Dr	158	8.1	1.6	6.1	10.6	10
NB T	Kirby Dr	158	15.4	3.3	11.5	20.6	10
NB TR	Kirby Dr	158	9.1	2.0	6.8	12.5	10
SB L	Kirby Dr	44	1.4	0.1	1.2	1.6	10
SB T	Kirby Dr	44	8.9	0.7	7.4	9.6	10
SB TR	Kirby Dr	44	5.5	0.5	4.5	6.2	10
WB L	Richmond Ave	64	1.3	0.2	0.9	1.6	10
WB T	Richmond Ave	64	2.7	0.4	2.0	3.4	10
WB TR	Richmond Ave	64	3.0	0.5	2.4	3.8	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	1.0	0.1	0.8	1.2	10
EB T	Richmond Ave	165	0.1	0.0	0.1	0.1	10
EB TR	Richmond Ave	165	11.0	1.9	7.7	14.2	10
NB LTR	Mandell St	59	30.0	1.9	26.5	32.2	10
SB LTR	Mandell St	864	16.6	7.3	8.9	32.2	10
WB L	Richmond Ave	23	1.8	0.7	1.1	3.4	10
WB T	Richmond Ave	23	0.0	0.0	0.0	0.1	10
WB TR	Richmond Ave	23	3.2	1.3	2.4	6.7	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	7.0	1.6	4.8	9.7	10
EB T	Richmond Ave	23	0.2	0.0	0.1	0.2	10
EB TR	Richmond Ave	23	39.9	3.8	33.6	44.0	10
NB L	Montrose Blvd	61	3.9	0.8	2.9	5.2	10
NB T	Montrose Blvd	61	9.2	1.6	6.5	11.8	10
NB TR	Montrose Blvd	61	13.4	1.4	9.9	14.8	10

SB L	Montrose Blvd	60	9.0	1.5	6.6	10.7	10
SB T	Montrose Blvd	60	9.8	2.2	6.1	13.2	10
SB TR	Montrose Blvd	60	14.1	2.4	9.2	18.3	10
WB L	Richmond Ave	166	17.2	1.9	13.7	20.3	10
WB T	Richmond Ave	166	0.1	0.0	0.1	0.2	10
WB TR	Richmond Ave	166	17.2	1.8	15.2	20.3	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	1.3	0.2	1.0	1.6	10
EB T	Richmond Ave	160	0.1	0.0	0.1	0.1	10
EB TR	Richmond Ave	160	2.2	0.3	1.8	2.9	10
NB T	Shepherd Dr	49	2.2	0.2	2.0	2.5	10
NB TR	Shepherd Dr	49	2.3	0.3	1.9	2.8	10
SB T	Shepherd Dr	48	2.4	0.3	1.8	2.9	10
SB TR	Shepherd Dr	48	2.5	0.3	1.9	2.9	10
WB L	Richmond Ave	20	5.2	1.8	3.0	8.6	10
WB T	Richmond Ave	20	0.1	0.0	0.0	0.1	10
WB TR	Richmond Ave	20	4.5	2.3	1.7	8.2	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	2.2	0.6	1.4	3.3	10
EB T	Richmond Ave	167	0.5	0.4	0.3	1.4	10
NEB LT	US 59 NBFR	69	9.6	1.6	7.2	11.9	10
NEB R	US 59 NBFR	69	0.1	0.0	0.0	0.1	10
NEB TR	US 59 NBFR	69	2.1	0.4	1.6	2.7	10
WB R	Richmond Ave	26	1.5	0.6	0.6	2.6	10
WB T	Richmond Ave	26	10.2	0.7	9.2	11.4	10
WB TR	Richmond Ave	26	13.6	1.5	11.0	16.1	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	3.1	0.6	2.4	4.3	10
EB TR	Richmond Ave	166	16.3	0.4	15.5	16.8	10
SWB LT	US 59 SBFR	65	1.9	0.4	1.3	2.5	10
SWB R	US 59 SBFR	65	9.4	2.3	6.1	14.5	10
SWB T	US 59 SBFR	65	1.6	0.3	1.1	2.2	10
WB L	Richmond Ave	167	0.6	0.2	0.3	0.9	10
WB T	Richmond Ave	167	8.6	12.7	3.7	44.6	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	2.7	0.3	2.0	3.1	10
EB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	162	6.2	1.6	4.1	8.4	10
NB LTR	Woodhead St	53	25.9	3.1	18.9	30.0	10
SB LTR	Woodhead St	52	1.5	0.2	1.2	1.8	10
WB L	Richmond Ave	163	0.8	0.2	0.6	1.2	10
WB T	Richmond Ave	163	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	163	0.9	0.2	0.6	1.2	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	7.5	1.9	5.3	12.3	10
EB T	Westpark Dr	140	9.0	1.3	7.2	11.1	10
EB TR	Westpark Dr	140	8.8	1.2	7.1	10.7	10
NB L	S Rice Ave	138	10.7	2.8	6.9	16.2	10

NB T	S Rice Ave	138	31.0	5.7	24.3	39.5	10
NB TR	S Rice Ave	138	32.8	5.1	27.5	42.8	10
SB L	S Rice Ave	137	2.6	0.5	2.0	3.6	10
SB R	S Rice Ave	137	0.0	0.0	0.0	0.1	10
SB T	S Rice Ave	137	3.0	0.2	2.6	3.3	10
SB TR	S Rice Ave	137	3.0	0.2	2.6	3.2	10
WB L	Westpark Dr	781	11.8	2.8	8.3	16.1	10
WB T	Westpark Dr	781	4.5	0.3	3.9	5.0	10
WB TR	Westpark Dr	781	3.6	0.4	2.8	4.4	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	10.2	2.7	6.7	13.7	10
NEB R	San Jacinto St	173	0.0	0.0	0.0	0.1	10
NEB T	San Jacinto St	173	2.0	0.2	1.7	2.3	10
NWB T	Wheeler Ave	86	0.0	0.0	0.0	0.1	10
NWB TR	Wheeler Ave	86	12.1	2.9	8.2	17.7	10
SEB LT	Wheeler Ave	172	2.1	0.3	1.7	2.8	10
SEB T	Wheeler Ave	172	0.1	0.0	0.1	0.2	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB T	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	2.8	0.6	1.9	3.5	10
NB LTR	Edell St	590	0.3	0.1	0.2	0.5	10
SB LTR	Edell St	589	0.5	0.1	0.4	0.6	10
WB L	Tidwell Rd	652	0.0	0.0	0.0	0.1	10
WB T	Tidwell Rd	652	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	652	4.0	1.1	2.2	5.9	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.4	0.1	0.3	0.5	10
EB T	Tidwell Rd	338	1.1	0.2	0.8	1.3	10
EB TR	Tidwell Rd	338	1.3	0.2	1.0	1.7	10
NB L	Hirsch Rd	336	1.5	0.2	1.1	2.1	10
NB T	Hirsch Rd	336	0.4	0.1	0.3	0.5	10
NB TR	Hirsch Rd	336	0.5	0.1	0.4	0.6	10
SB L	Hirsch Rd	335	0.7	0.2	0.5	1.2	10
SB T	Hirsch Rd	335	0.6	0.1	0.5	0.7	10
SB TR	Hirsch Rd	335	1.1	0.2	0.8	1.5	10
WB L	Tidwell Rd	334	0.3	0.0	0.2	0.4	10
WB T	Tidwell Rd	334	1.6	0.3	1.3	2.1	10
WB TR	Tidwell Rd	334	2.0	0.3	1.7	2.7	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	2.7	0.4	2.4	3.3	10
EB LT	Tidwell Rd	342	4.1	0.4	3.4	4.6	10
EB T	Tidwell Rd	342	2.5	0.2	2.2	2.8	10
NB L	I-69 NBFR	340	1.1	0.1	1.0	1.4	10
NB LT	I-69 NBFR	340	1.2	0.1	1.1	1.4	10
NB R	I-69 NBFR	340	0.3	0.0	0.3	0.4	10
NB T	I-69 NBFR	340	0.6	0.1	0.5	0.7	10
NB TR	I-69 NBFR	340	1.1	0.1	1.0	1.2	10
WB T	Tidwell Rd	586	3.2	0.4	2.5	4.1	10
WB TR	Tidwell Rd	586	2.6	0.5	2.0	3.7	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	652	0.0	0.0	0.0	0.1	10
EB T	Tidwell Rd	652	4.9	0.5	4.2	5.8	10
SB L	I-69 SBFR	649	1.5	0.2	1.3	1.8	10
SB LT	I-69 SBFR	649	1.7	0.1	1.6	2.0	10
SB R	I-69 SBFR	649	0.0	0.0	0.0	0.1	10
SB T	I-69 SBFR	649	2.0	0.1	1.8	2.3	10
WB L	Tidwell Rd	342	2.0	0.3	1.6	2.6	10
WB LT	Tidwell Rd	342	2.3	0.3	1.9	2.9	10
WB T	Tidwell Rd	342	1.2	0.1	1.0	1.4	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	0.9	0.2	0.6	1.2	10
EB TR	Tidwell Rd	349	3.3	0.4	2.7	3.9	10
NB L	Jensen Dr	347	0.1	0.0	0.0	0.1	10
NB T	Jensen Dr	347	1.2	0.1	1.0	1.3	10
NB TR	Jensen Dr	347	1.2	0.1	1.0	1.5	10
SB L	Jensen Dr	604	2.4	0.5	1.5	3.1	10
SB TR	Jensen Dr	604	2.3	0.2	2.1	2.6	10
WB L	Tidwell Rd	348	1.9	0.3	1.5	2.4	10
WB R	Tidwell Rd	348	0.0	0.0	0.0	0.1	10
WB TR	Tidwell Rd	348	4.4	0.5	3.7	5.4	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	0.1	0.0	0.0	0.1	10
EB T	Tidwell Rd	586	1.4	0.2	1.1	1.7	10
EB TR	Tidwell Rd	586	1.8	0.2	1.5	2.1	10
NB LTR	Friendly Rd	585	1.5	0.5	1.1	2.6	10
WB L	Tidwell Rd	338	0.2	0.1	0.1	0.3	10
WB T	Tidwell Rd	338	1.4	0.1	1.2	1.6	10
WB TR	Tidwell Rd	338	1.6	0.2	1.4	2.0	10
SB TR	Friendly Rd	584	9.7	0.7	8.4	10.7	10
WB T	BRT Alignment	797	0.0	0.0	0.0	0.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	BRT Alignment	797	0.1	0.0	0.1	0.2	10
NB L	Lockwood Dr	574	0.0	0.0	0.0	0.1	10
NB R	Lockwood Dr	574	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	574	1.2	0.1	0.9	1.4	10
NEB LT	Tidwell Rd	334	1.7	0.2	1.3	1.9	10
NEB TR	Tidwell Rd	334	1.9	0.2	1.7	2.2	10
SB L	Lockwood Dr	331	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	331	0.1	0.1	0.1	0.2	10
WB L	Tidwell Rd	333	0.8	0.1	0.6	1.0	10
WB T	Tidwell Rd	333	0.6	0.0	0.5	0.7	10
WB TR	Tidwell Rd	333	0.6	0.1	0.5	0.8	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	1.5	0.2	1.3	1.8	10
EB TR	Westpark Dr	116	0.6	0.1	0.5	0.9	10
NB L	14th St	118	0.0	0.0	0.0	0.0	10
NB R	14th St	118	0.4	0.1	0.3	0.7	10

WB L	Westpark Dr	119	0.1	0.2	0.0	0.6	10
WB T	Westpark Dr	119	23.8	4.6	16.5	29.5	10

WESTPARK DR & ALDER DR **NODE: 99558**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	778	12.3	2.8	8.9	17.5	10
EB TR	Westpark Dr	778	11.6	2.7	8.6	16.5	10
NB LR	Alder Dr	718	6.8	2.3	3.9	11.1	10
WB LT	Westpark Dr	133	0.6	0.1	0.5	0.7	10
WB T	Westpark Dr	133	0.3	0.1	0.2	0.3	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	5.8	0.5	5.2	6.7	10
EB T	Westpark Dr	133	20.3	1.1	18.9	21.8	10
EB TR	Westpark Dr	133	21.5	1.4	19.8	23.7	10
NB T	Chimney Rock Rd	135	9.2	3.3	6.5	17.6	10
NB TR	Chimney Rock Rd	135	11.1	3.8	8.2	20.8	10
SB L	Chimney Rock Rd	134	9.6	1.0	8.0	11.4	10
SB T	Chimney Rock Rd	134	1.7	0.2	1.5	2.2	10
SB TR	Chimney Rock Rd	134	1.8	0.2	1.4	2.2	10
WB L	Westpark Dr	136	1.1	0.4	0.7	1.9	10
WB T	Westpark Dr	136	1.6	0.3	1.2	2.1	10
WB TR	Westpark Dr	136	3.0	0.4	2.5	3.7	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	2.6	0.5	1.9	3.5	10
EB TR	Westpark Dr	152	5.1	0.8	3.6	6.4	10
NB L	Edloe St	29	0.6	0.1	0.4	0.8	10
NB R	Edloe St	29	0.2	0.1	0.1	0.3	10
NB T	Edloe St	29	16.1	0.9	14.7	17.5	10
SB L	Edloe St	153	1.7	0.4	1.4	2.5	10
SB R	Edloe St	153	0.1	0.0	0.1	0.2	10
SB TR	Edloe St	153	3.7	0.3	3.4	4.4	10
WB L	Westpark Dr	154	1.0	0.1	0.8	1.2	10
WB T	Westpark Dr	154	2.1	0.2	1.8	2.4	10
WB TR	Westpark Dr	154	3.0	0.2	2.7	3.3	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	5.6	0.7	4.6	6.8	10
EB T	Westpark Dr	114	70.7	1.3	68.7	72.3	10
EB TR	Westpark Dr	114	43.5	0.9	42.4	45.2	10
NB L	Fondren Rd	110	0.5	0.1	0.4	0.5	10
NB T	Fondren Rd	110	1.1	0.1	0.9	1.3	10
NB TR	Fondren Rd	110	0.6	0.1	0.5	0.8	10
SB L	Fondren Rd	112	16.3	4.7	9.1	22.7	10
SB T	Fondren Rd	112	7.6	0.6	6.5	8.4	10
SB TR	Fondren Rd	112	4.9	0.5	4.1	5.6	10
WB L	Westpark Dr	117	17.4	4.2	9.2	25.0	10
WB T	Westpark Dr	117	12.1	4.1	8.9	21.2	10
WB TR	Westpark Dr	117	9.3	2.9	6.2	14.8	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	117	12.8	4.2	8.0	20.1	10
EB T	Westpark Dr	117	14.4	2.8	11.1	20.6	10

EB TR	Westpark Dr	117	10.3	2.0	8.4	14.8	10
NB L	Hillcroft Ave	3	25.7	2.5	20.2	28.2	10
NB T	Hillcroft Ave	3	22.2	2.8	17.7	25.6	10
NB TR	Hillcroft Ave	3	21.3	1.9	18.3	24.0	10
SB L	Hillcroft Ave	115	6.5	1.3	5.2	9.2	10
SB T	Hillcroft Ave	115	11.1	1.6	8.4	14.3	10
SB TR	Hillcroft Ave	115	8.8	1.5	6.7	11.7	10
WB L	Westpark Dr	116	2.8	0.5	2.1	3.9	10
WB T	Westpark Dr	116	23.6	3.2	17.6	27.3	10
WB TR	Westpark Dr	116	17.0	1.3	15.7	20.2	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	1.4	0.2	1.2	1.7	10
EB LT	Westpark Dr	123	1.6	0.2	1.3	1.9	10
EB T	Westpark Dr	123	2.0	0.3	1.6	2.6	10
NEB L	I-69 NBFR	126	0.8	0.1	0.7	1.1	10
NEB R	I-69 NBFR	126	1.5	0.4	1.1	2.3	10
NEB T	I-69 NBFR	126	2.9	0.3	2.5	3.6	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	127	3.0	0.3	2.5	3.6	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	119	6.1	0.5	5.2	6.9	10
SWB L	I-69 SBFR	121	0.7	0.1	0.6	0.8	10
SWB LT	I-69 SBFR	121	1.6	0.1	1.5	1.7	10
SWB R	I-69 SBFR	121	5.1	3.2	0.4	8.8	10
SWB T	I-69 SBFR	121	2.7	0.1	2.5	2.9	10
WB L	Westpark Dr	123	2.4	0.2	2.0	2.8	10
WB T	Westpark Dr	123	1.6	2.4	0.7	8.3	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	784	3.2	0.9	2.3	4.7	10
EB TR	Westpark Dr	784	3.0	0.9	2.1	4.5	10
NB LR	Loop Central Dr	803	0.4	0.1	0.3	0.6	10
WB L	Westpark Dr	146	1.5	0.1	1.3	1.7	10
WB T	Westpark Dr	146	0.2	0.0	0.2	0.3	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	3.2	0.6	2.7	4.7	10
EB T	Westpark Dr	146	3.8	1.1	2.4	5.5	10
EB TR	Westpark Dr	146	5.3	1.6	2.9	7.9	10
NB L	Newcastle Dr	148	13.3	1.6	11.3	16.0	10
NB T	Newcastle Dr	148	3.2	0.6	2.4	3.9	10
NB TR	Newcastle Dr	148	9.0	1.1	7.0	10.9	10
SB LT	Newcastle Dr	147	1.3	0.6	1.0	3.0	10
SB TR	Newcastle Dr	147	1.6	0.3	1.1	2.2	10
WB L	Westpark Dr	149	2.4	0.2	2.2	2.7	10
WB T	Westpark Dr	149	1.2	0.2	1.1	1.5	10
WB TR	Westpark Dr	149	1.5	0.2	1.3	2.0	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	1.5	0.3	1.2	2.2	10
EB TR	Westpark Dr	127	1.7	0.4	1.2	2.7	10

NB LT	Rampart St	129	13.2	0.8	11.0	14.0	10
NB TR	Rampart St	129	0.1	0.0	0.1	0.2	10
SB LTR	Rampart St	128	1.4	0.4	0.9	2.2	10
WB LT	Westpark Dr	130	0.4	0.1	0.2	0.7	10
WB TR	Westpark Dr	130	0.2	0.1	0.1	0.4	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	3.1	0.3	2.6	3.4	10
EB TR	Westpark Dr	136	2.7	0.3	2.2	3.0	10
NB LR	Royalton St	384	8.4	2.8	5.5	13.7	10
WB L	Westpark Dr	140	0.4	0.1	0.3	0.6	10
WB T	Westpark Dr	140	0.7	0.2	0.4	1.0	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	781	1.5	0.2	1.1	2.0	10
EB TR	Westpark Dr	781	1.3	0.2	1.1	1.6	10
NB LR	Uptown Transit Ctr	769	0.3	0.1	0.2	0.6	10
WB L	Westpark Dr	629	0.1	0.1	0.0	0.4	10
WB T	Westpark Dr	629	4.9	3.8	0.3	13.6	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	15.0	5.4	8.3	24.2	10
EB T	Westpark Dr	149	10.0	5.2	3.2	19.6	10
EB TR	Westpark Dr	149	17.2	7.6	7.1	28.7	10
NB L	Weslayan St	151	5.0	0.9	3.7	6.8	10
NB T	Weslayan St	151	4.1	0.7	3.3	5.6	10
NB TR	Weslayan St	151	6.3	1.1	4.8	7.7	10
SB L	Weslayan St	150	0.9	0.2	0.6	1.3	10
SB T	Weslayan St	150	7.8	1.0	6.5	9.7	10
SB TR	Weslayan St	150	8.9	0.9	7.9	10.7	10
WB L	Westpark Dr	152	1.4	0.4	1.0	2.2	10
WB T	Westpark Dr	152	3.7	1.0	2.4	5.6	10
WB TR	Westpark Dr	152	3.8	1.1	2.4	6.1	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	143	1.9	0.5	1.3	3.0	10
EB T	Westpark Dr	143	4.9	0.2	4.6	5.2	10
NB L	I-610 NBFR	145	2.1	0.1	2.0	2.3	10
NB LT	I-610 NBFR	145	3.3	0.1	3.1	3.5	10
NB TR	I-610 NBFR	145	3.3	0.2	3.0	3.6	10
NEB T	BRT Alignment	821	0.1	0.0	0.1	0.1	10
WB T	Westpark Dr	784	4.8	1.3	3.6	7.6	10
WB TR	Westpark Dr	784	5.0	1.0	3.9	7.3	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	629	48.5	3.0	42.9	52.1	10
EB TR	Westpark Dr	629	27.3	0.7	26.5	28.9	10
NEB LT	BRT Alignment	845	0.2	0.1	0.1	0.4	10
SB R	Silver Line Alignment	783	0.2	0.0	0.1	0.2	10
SEB LT	I-610 SBFR	141	4.0	1.5	2.6	8.0	10
SEB T	I-610 SBFR	141	1.5	0.2	1.2	1.8	10
SWB L	Westpark Dr	143	4.8	0.6	4.0	5.8	10
SWB T	Westpark Dr	143	2.1	0.1	2.0	2.3	10

WB R	I-610 SBFR	141	0.0	0.0	0.0	0.0	10
WB T	BRT Alignment	844	0.1	0.0	0.0	0.1	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	2.5	0.5	1.7	3.1	10
EB T	Westpark Dr	130	7.5	2.6	4.1	12.6	10
EB TR	Westpark Dr	130	8.1	2.6	4.4	13.4	10
NB L	Renwick Dr	132	2.1	0.5	1.6	3.1	10
NB T	Renwick Dr	132	4.9	1.1	3.7	6.7	10
NB TR	Renwick Dr	132	6.3	1.5	4.6	8.8	10
SB L	Fountain View Dr	131	3.5	1.2	2.0	5.6	10
SB T	Fountain View Dr	131	1.3	0.2	1.1	1.6	10
SB TR	Fountain View Dr	131	1.4	0.2	1.2	1.7	10
WB L	Westpark Dr	778	0.5	0.1	0.3	0.7	10
WB T	Westpark Dr	778	1.2	0.2	1.0	1.4	10
WB TR	Westpark Dr	778	1.4	0.2	1.1	1.7	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	2.4	1.5	0.4	4.7	10
NEB TR	Hutchins St	707	1.3	0.8	0.6	3.0	10
NWB T	Wheeler Ave	423	0.1	0.0	0.1	0.1	10
NWB TR	Wheeler Ave	423	3.4	2.1	0.7	7.1	10
SEB L	Wheeler Ave	421	0.1	0.0	0.0	0.1	10
SEB T	Wheeler Ave	421	0.9	0.1	0.7	1.1	10
SWB LR	Hutchins St	422	0.8	0.6	0.1	1.8	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	421	0.3	0.2	0.1	0.6	10
NWB T	Wheeler Ave	421	4.0	1.5	1.8	5.8	10
SEB T	Wheeler Ave	176	0.0	0.0	0.0	0.0	10
SEB TR	Wheeler Ave	176	0.3	0.3	0.1	1.1	10

Project: UNC_Build
Scenario: Build 2030 AM
Run(s): Batch (10 runs)
Simulated: Various
Time: 08:30:00 - 09:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	732	5.8	1.0	4.5	6.9	10
NEB T	Ennis St	732	205.4	99.4	53.2	386.6	10
NWB L	Alabama St	197	16.6	7.0	8.4	32.9	10
NWB T	Alabama St	197	24.2	1.9	20.2	26.0	10
NWB TR	Alabama St	197	21.5	2.0	18.2	24.4	10
SEB L	Alabama St	193	35.5	3.8	29.2	43.2	10
SEB T	Alabama St	193	27.0	1.5	25.1	29.1	10
SEB TR	Alabama St	193	28.5	3.4	23.5	35.0	10
SWB LTR	Ennis St	740	4.9	1.1	3.2	6.7	10

SWB T	Ennis St	740	118.3	64.8	44.5	278.8	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	315.6	128.8	126.5	578.2	10
NB T	Almeda Rd	696	7.8	4.0	2.5	14.2	10
NB TR	Almeda Rd	696	7.9	2.2	3.2	10.2	10
NWB L	Wheeler Ave	176	272.0	144.7	113.6	544.6	10
NWB T	Wheeler Ave	176	87.8	63.9	39.6	250.1	10
NWB TR	Wheeler Ave	176	312.3	160.0	152.7	687.7	10
SB L	Almeda Rd	174	220.9	112.0	87.8	406.1	10
SB T	Almeda Rd	174	204.5	82.6	102.3	370.5	10
SB TR	Almeda Rd	174	318.5	68.3	218.4	434.1	10
SEB L	Wheeler Ave	77	97.9	35.4	69.4	189.8	10
SEB T	Wheeler Ave	77	37.0	23.7	9.2	85.5	10
SEB TR	Wheeler Ave	77	62.5	9.4	51.2	76.9	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	132.1	16.4	106.0	153.8	10
EB R	EB Westpark Tollway FR	111	302.1	19.2	258.6	332.3	10
NB T	Fondren Rd	38	513.6	12.2	494.5	534.4	10
NEB T	BRT Alignment	768	68.5	22.3	45.0	105.5	10
SB T	Fondren Rd	110	3.5	0.4	2.9	4.0	10
WB T	BRT Alignment	774	37.9	15.1	22.3	60.2	6

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	10	71.1	15.7	56.3	108.6	10
EB T	Richmond Ave	10	72.3	20.6	55.8	127.2	10
EB TR	Richmond Ave	10	72.1	25.7	58.6	143.2	10
NB L	Buffalo Speedway	37	62.9	6.7	51.2	72.6	10
NB T	Buffalo Speedway	37	39.9	4.5	35.0	47.1	10
NB TR	Buffalo Speedway	37	62.3	13.6	43.7	86.4	10
SB L	Buffalo Speedway	36	66.0	8.5	52.7	78.9	10
SB T	Buffalo Speedway	36	29.8	2.5	26.9	34.9	10
SB TR	Buffalo Speedway	36	28.2	1.7	25.6	31.2	10
WB L	Richmond Ave	11	57.3	3.9	52.0	62.4	10
WB T	Richmond Ave	11	39.6	3.3	35.3	45.7	10
WB TR	Richmond Ave	11	39.2	3.2	33.3	45.2	10

CLEBURNE ST & ENNIS ST — NODE: 292

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	726	5.5	1.6	2.2	7.9	10
NEB T	Ennis St	726	58.0	36.1	15.1	119.6	10
NWB LTR	Cleburne St	733	21.4	2.5	17.9	26.3	10
SEB LTR	Cleburne St	731	20.6	2.8	17.5	25.5	10
SWB LTR	Ennis St	732	7.3	2.1	4.7	10.8	10
SWB T	Ennis St	732	112.8	76.2	14.6	271.7	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	45.5	3.2	41.7	51.0	10
EB T	Crosstimbers St	323	24.1	1.9	20.0	26.1	10
EB TR	Crosstimbers St	323	20.2	2.5	17.2	24.9	10
NB L	Lockwood Dr	321	43.3	4.6	37.5	54.5	10
NB T	Lockwood Dr	321	31.2	8.5	18.3	45.9	10
NB TR	Lockwood Dr	321	19.1	1.5	17.0	21.2	10

SB L	Lockwood Dr	320	35.2	4.5	28.8	42.2	10
SB T	Lockwood Dr	320	39.5	5.3	29.4	46.6	10
SB TR	Lockwood Dr	320	24.6	1.8	20.9	26.6	10
WB L	Crosstimbers St	322	34.3	2.6	30.5	38.3	10
WB T	Crosstimbers St	322	17.2	2.0	14.9	21.6	10
WB TR	Crosstimbers St	322	14.6	2.0	10.6	17.5	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	51.2	4.1	46.0	57.2	10
EB T	Elgin St	204	38.6	6.5	31.3	53.3	10
EB TR	Elgin St	204	33.9	4.1	29.5	42.2	10
NEB L	Cullen Blvd	207	30.5	4.6	23.5	39.7	10
NEB T	Cullen Blvd	207	19.4	2.8	15.0	25.2	10
NEB TR	Cullen Blvd	207	13.7	2.3	10.1	17.6	10
SB L	Cullen Blvd	206	52.0	4.3	45.6	59.5	10
SB T	Cullen Blvd	206	38.2	5.5	27.0	45.7	10
SB TR	Cullen Blvd	206	35.4	4.7	26.6	43.7	10
WB L	Elgin St	208	37.1	5.9	29.9	49.1	10
WB T	Elgin St	208	40.9	5.6	33.3	49.1	10
WB TR	Elgin St	208	40.4	5.4	33.8	50.5	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	702	28.2	6.3	21.2	40.5	10
NEB R	Ennis St	702	39.1	8.7	21.0	50.5	10
NWB L	Elgin St	701	12.9	1.5	10.7	15.1	10
NWB TR	Elgin St	701	17.3	3.2	12.2	22.7	10
SEB L	Elgin St	700	9.9	5.4	2.9	19.1	10
SEB TR	Elgin St	700	12.8	3.8	10.1	23.0	10
SWB L	Ennis St	195	22.3	12.0	1.6	39.8	10
SWB TR	Ennis St	195	27.1	7.2	17.3	40.9	10

ELGIN ST & GARAGE 5 **NODE: 353**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Elgin St	212	7.7	1.0	5.9	8.7	10
EB TR	Elgin St	212	6.9	0.7	6.2	8.8	10
NB R	Garage 5	409	8.1	1.0	6.0	9.3	10
WB L	Elgin St	637	8.3	0.8	7.2	9.7	10
WB T	Elgin St	637	0.7	0.8	0.1	2.9	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	52.4	10.6	30.5	64.3	10
EB T	Elgin St	701	29.0	10.0	16.4	45.8	10
EB TR	Elgin St	701	47.2	10.7	32.3	71.1	10
NB T	LRT Line	667	5.5	1.5	3.6	8.8	10
NWB L	Scott St	693	65.6	10.2	51.3	83.9	10
NWB T	Scott St	693	17.9	3.2	14.0	23.3	10
NWB TR	Scott St	693	16.6	2.9	13.1	22.2	10
SB T	LRT Line	669	22.0	1.7	19.6	24.9	10
SEB L	Scott St	671	80.0	12.7	67.2	99.6	10
SEB T	Scott St	671	29.3	3.1	23.7	33.4	10
SEB TR	Scott St	671	28.9	2.8	23.6	33.4	10
WB L	Elgin St	204	71.2	15.7	46.6	100.6	10
WB T	Elgin St	204	33.2	8.9	20.9	45.3	10
WB TR	Elgin St	204	29.1	8.7	17.0	40.6	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	637	6.5	1.3	4.7	8.6	10
EB T	Elgin St	637	17.1	2.7	12.8	22.4	10
SB LT	Spur 5 SBFR	214	23.2	1.4	20.8	25.7	10
SB TR	Spur 5 SBFR	214	18.7	1.3	16.5	20.3	10
SWB L	Elgin St	216	19.5	0.6	18.2	20.4	10
SWB T	Elgin St	216	12.2	1.2	10.2	14.5	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	43.8	5.9	36.6	55.9	10
EB T	Elgin St	208	9.7	1.8	6.7	12.4	10
EB TR	Elgin St	208	5.0	1.1	2.6	6.5	10
NB L	UH Entrance 18	211	51.3	8.7	34.9	59.7	10
NB TR	UH Entrance 18	211	36.6	3.8	29.1	40.8	10
SB L	UH Entrance 17	210	52.7	10.5	38.9	68.9	10
SB TR	UH Entrance 17	210	41.8	7.7	34.2	57.5	10
WB L	Elgin St	212	53.5	6.3	44.6	66.9	10
WB T	Elgin St	212	12.3	3.8	7.3	18.6	10
WB TR	Elgin St	212	12.0	4.4	7.3	20.5	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	15.5	3.7	10.8	23.1	10
NEB TR	Emancipation Ave	711	11.5	1.3	9.2	14.4	10
NWB LTR	Wheeler Ave	724	71.5	54.5	17.1	176.4	10
NWB T	Wheeler Ave	724	36.1	2.6	33.1	40.9	10
SEB LTR	Wheeler Ave	423	29.0	2.0	26.0	32.4	10
SEB T	Wheeler Ave	423	62.0	10.0	51.7	79.5	10
SWB LT	Emancipation Ave	177	12.4	2.1	7.4	15.1	10
SWB TR	Emancipation Ave	177	20.8	17.3	6.6	66.1	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	740	9.1	1.9	6.3	11.5	10
NEB T	Ennis St	740	59.1	21.1	35.6	99.3	10
NWB LTR	Holman St	742	15.0	2.3	10.9	18.7	10
SEB LTR	Holman St	741	11.4	1.2	9.8	13.1	10
SWB LTR	Ennis St	702	9.6	1.8	5.8	11.9	10
SWB T	Ennis St	702	77.9	43.9	36.5	184.8	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Ennis St	698	3.4	1.4	1.2	5.7	10
NEB T	Ennis St	698	1.6	0.6	0.9	2.8	10
SEB L	Wheeler Ave	724	28.1	7.5	19.5	40.4	10
SEB LR	Wheeler Ave	724	24.4	4.9	19.2	32.5	10
SWB R	Ennis St	726	53.0	10.3	36.0	65.8	10
SWB TR	Ennis St	726	2.4	0.7	1.4	3.7	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR — NODE: 690

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Turner Dr	595	0.0	0.0	0.0	0.0	4
EB T	Turner Dr	595	1.6	2.4	0.0	4.9	9
NB LT	Edell St	589	9.4	9.5	0.0	23.5	8
SEB TR	Epsom Rd	592	12.1	3.5	5.5	18.2	10
SWB T	Tidwell TC 2 Dr	802	2.8	0.4	2.4	3.6	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	16.9	1.5	14.0	19.1	10
EB TR	Leeland St	228	14.4	1.3	11.9	16.1	10
NB L	Ernestine St	683	70.1	12.6	55.6	96.6	10
NB R	Ernestine St	683	8.5	2.7	5.0	13.3	10
SWB L	Ernestine St	411	14.1	3.2	9.5	19.9	10
SWB TR	Ernestine St	411	17.1	0.5	16.2	17.9	10
WB L	Leeland St	227	30.3	4.3	23.1	37.9	10
WB T	Leeland St	227	16.2	0.5	15.0	16.8	10

ERNESTINE ST & MUNGER ST — NODE: 399

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB TR	Ernestine St	687	0.0	0.0	0.0	0.0	10
SB L	Ernestine St	683	1.7	2.9	0.0	9.3	10
SB T	Ernestine St	683	0.0	0.0	0.0	0.0	10
WB L	Munger St	460	8.9	1.7	6.5	11.5	10
WB R	Munger St	460	2.4	0.8	1.2	3.8	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	172	33.8	16.8	3.4	57.2	10
NWB T	Wheeler Ave	172	229.5	56.8	159.1	324.9	10
SEB R	Wheeler Ave	169	12.9	12.6	2.0	28.6	5
SEB T	Wheeler Ave	169	35.1	6.6	26.5	44.2	10
SEB TR	Wheeler Ave	169	45.8	4.4	39.1	54.3	10
SWB L	Fannin St	87	15.3	5.6	11.7	29.9	10
SWB R	Fannin St	87	146.6	64.1	58.1	259.8	10
SWB T	Fannin St	87	14.2	1.9	10.7	16.4	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	29.7	2.9	25.3	33.7	10
EB LR	I-69 Express Lanes	30	19.8	2.5	16.3	24.0	10
NB L	Edloe St	153	1.9		1.9	1.9	1
NB T	Edloe St	153	8.4	3.9	3.5	16.3	10
NB TR	Edloe St	153	12.0	1.4	9.6	14.8	10
SB L	Edloe St	155	35.4	3.3	30.8	41.0	10
SB T	Edloe St	155	9.9	1.3	7.8	11.5	10
SB TR	Edloe St	155	12.7	1.6	10.3	16.0	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	6.5	3.4	2.2	12.3	10
NEB LT	Jensen Dr	604	1.5	0.3	1.0	2.0	10
NEB R	Jensen Dr	604	13.7	6.0	7.4	29.3	10
NEB TR	Jensen Dr	604	1.9	0.9	0.8	4.0	10
SWB L	Jensen Dr	599	10.2	2.5	7.7	14.7	10
SWB TR	Jensen Dr	599	1.4	0.4	0.9	2.2	10
WB L	Turner Dr	595	12.1	2.0	9.9	15.4	10
WB LTR	Turner Dr	595	5.6	1.3	3.7	8.5	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	48.0	4.3	39.6	54.7	10
EB T	Kelley St	313	21.4	3.1	17.6	26.2	10
EB TR	Kelley St	313	15.5	3.4	12.2	24.6	10

NB L	Lockwood Dr	308	46.9	6.8	36.1	59.8	10
NB R	Lockwood Dr	308	10.4	0.7	9.5	11.4	10
NB T	Lockwood Dr	308	34.2	3.6	29.8	42.6	10
SB L	Lockwood Dr	725	65.5	14.3	43.0	96.1	10
SB T	Lockwood Dr	725	24.9	5.2	19.0	32.2	10
SB TR	Lockwood Dr	725	55.7	16.2	36.5	84.8	10
WB L	Kelley St	312	42.3	3.1	38.3	47.7	10
WB T	Kelley St	312	20.2	2.7	16.5	25.2	10
WB TR	Kelley St	312	16.3	2.0	13.3	20.2	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	476.2	103.3	347.5	679.2	10
NWB T	Wheeler Ave	77	5.4	7.6	0.8	26.3	10
NWB TR	Wheeler Ave	77	384.8	127.9	238.4	688.3	10
SEB T	Wheeler Ave	86	4.1	1.7	1.7	6.8	10
SEB TR	Wheeler Ave	86	8.7	1.4	6.6	10.7	10
SWB LTR	LaBranch St	78	256.6	133.0	74.6	445.4	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	42.0	4.7	33.9	50.5	10
EB TR	Laura Koppe Rd	330	21.0	2.7	16.7	25.1	10
NB L	Lockwood Dr	560	41.4	6.5	33.4	55.6	10
NB T	Lockwood Dr	560	17.1	11.8	0.0	39.0	10
NB TR	Lockwood Dr	560	8.1	3.6	3.5	16.9	10
SB L	Lockwood Dr	327	35.4	6.2	25.8	46.1	10
SB T	Lockwood Dr	327	8.6	4.8	2.9	16.6	10
SB TR	Lockwood Dr	327	7.5	1.1	5.9	8.9	10
WB L	Laura Koppe Rd	329	39.9	3.6	31.8	45.0	10
WB TR	Laura Koppe Rd	329	29.9	2.3	25.7	33.2	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	658	0.0	0.0	0.0	0.1	10
NEB T	Lockwood Dr	658	0.9	0.7	0.1	2.1	10
SWB T	Lockwood Dr	253	0.0	0.1	0.0	0.4	10
WB R	Armour Dr	659	5.0	1.3	2.7	6.4	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	640	65.4	19.1	45.7	101.1	10
EB TR	Canal St	640	48.3	11.7	38.9	75.6	10
NEB L	Lockwood Dr	246	57.1	11.6	43.1	81.3	10
NEB T	Lockwood Dr	246	5.8	4.8	0.0	12.8	10
NEB TR	Lockwood Dr	246	23.9	11.4	15.1	48.6	10
SWB L	Lockwood Dr	245	82.3	13.7	66.9	113.0	10
SWB T	Lockwood Dr	245	44.7	5.8	35.7	53.8	10
SWB TR	Lockwood Dr	245	48.7	4.9	40.5	57.1	10
WB L	Canal St	826	48.6	6.1	37.8	56.3	10
WB TR	Canal St	826	38.7	6.6	28.0	48.6	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	42.9	7.2	32.0	58.1	10
EB T	Cavalcade St	299	35.0	7.9	20.3	50.0	10
EB TR	Cavalcade St	299	19.9	3.5	13.7	24.0	10
NB L	Lockwood Dr	292	37.0	9.6	20.7	54.4	10

NB T	Lockwood Dr	292	27.6	8.0	10.0	38.4	10
NB TR	Lockwood Dr	292	24.0	1.4	21.2	25.9	10
SB L	Lockwood Dr	296	34.1	7.0	29.2	51.4	10
SB T	Lockwood Dr	296	19.1	6.1	11.1	27.9	10
SB TR	Lockwood Dr	296	13.9	2.2	10.9	18.1	10
WB L	Cavalcade St	298	40.7	8.1	33.0	58.7	10
WB T	Cavalcade St	298	36.2	4.8	29.2	46.7	10
WB TR	Cavalcade St	298	28.7	5.3	21.0	39.7	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	57.4	4.6	50.1	65.1	10
EB T	Clinton Dr	259	38.0	3.7	31.1	41.7	10
EB TR	Clinton Dr	259	23.8	2.2	20.0	27.3	10
NEB L	Lockwood Dr	257	49.2	3.7	42.5	53.7	10
NEB T	Lockwood Dr	257	25.4	2.8	21.6	30.9	10
NEB TR	Lockwood Dr	257	24.7	3.7	20.2	31.4	10
SB L	Lockwood Dr	256	36.2	4.2	29.7	43.9	10
SB T	Lockwood Dr	256	12.0	1.3	9.9	14.0	10
SB TR	Lockwood Dr	256	12.6	1.6	10.3	16.1	10
WB L	Clinton Dr	258	57.5	5.5	49.8	67.1	10
WB R	Clinton Dr	258	8.8	1.0	7.6	10.7	10
WB T	Clinton Dr	258	31.6	3.1	27.6	36.0	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	45.4	5.6	37.8	57.5	10
EB T	Collingsworth St	291	38.6	8.2	24.5	48.9	10
EB TR	Collingsworth St	291	13.3	1.4	10.5	15.3	10
NB L	Lockwood Dr	533	64.2	16.8	45.8	105.7	10
NB T	Lockwood Dr	533	13.3	4.5	3.1	21.4	10
NB TR	Lockwood Dr	533	10.8	1.3	9.0	12.8	10
SEB L	Lockwood Dr	288	22.5	7.3	11.3	32.4	10
SEB T	Lockwood Dr	288	14.9	3.9	8.6	20.4	10
SEB TR	Lockwood Dr	288	17.1	2.4	13.1	19.8	10
WB L	Collingsworth St	290	45.5	5.1	32.3	50.2	10
WB T	Collingsworth St	290	30.5	3.9	25.5	37.4	10
WB TR	Collingsworth St	290	21.0	1.8	18.7	23.2	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	34.3	3.9	29.1	39.8	10
NB L	Lockwood Dr	288	37.9	5.1	30.4	46.7	10
NB T	Lockwood Dr	288	2.3	3.4	0.0	9.4	10
NB TR	Lockwood Dr	288	4.2	1.3	2.6	6.3	10
SB L	Lockwood Dr	292	39.2	11.1	28.4	58.5	10
SB T	Lockwood Dr	292	7.6	3.8	0.2	12.2	10
SB TR	Lockwood Dr	292	6.1	3.0	2.8	13.0	10
WB LTR	Crane St	294	33.8	3.9	29.6	41.4	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	8.0	2.4	4.7	11.3	10
NB L	Lockwood Dr	327	38.2	4.1	31.8	43.6	10
NB T	Lockwood Dr	327	10.7	7.8	2.2	25.3	10
NB TR	Lockwood Dr	327	9.3	2.4	6.8	13.4	10
SB L	Lockwood Dr	574	26.2	13.9	3.0	49.3	9
SB T	Lockwood Dr	574	9.9	4.6	1.8	15.4	10

SB TR	Lockwood Dr	574	6.0	1.6	4.0	9.2	10
WB LTR	Firnat St	575	27.7	3.1	20.7	32.3	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 197**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	492	48.1	2.9	42.8	54.3	10
NEB T	Lockwood Dr	492	26.2	2.3	22.7	29.7	10
SEB L	Marron Park Way	843	50.4	3.8	45.3	58.0	10
SEB R	Marron Park Way	843	19.3	2.7	14.9	23.1	10
SWB L	Lockwood Dr	658	72.0	20.5	46.8	111.6	10
SWB T	Lockwood Dr	658	11.0	2.4	7.6	14.4	10
SWB TR	Lockwood Dr	658	80.1	2.9	77.2	85.9	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	LRT Line	675	27.2	1.7	23.7	29.7	10
NEB L	Lockwood Dr	787	99.9	26.0	75.1	150.6	10
NEB T	Lockwood Dr	787	31.6	6.2	22.3	39.9	10
NEB TR	Lockwood Dr	787	55.2	12.2	37.1	72.6	10
NWB L	Harrisburg Blvd	678	97.9	75.6	45.6	304.1	10
NWB T	Harrisburg Blvd	678	39.7	17.6	31.4	89.5	10
NWB TR	Harrisburg Blvd	678	35.2	13.6	26.1	73.3	10
SB L	Lockwood Dr	241	108.4	24.3	77.8	145.5	10
SB T	Lockwood Dr	241	23.8	4.4	19.3	32.0	10
SB TR	Lockwood Dr	241	61.4	19.3	35.7	98.2	10
SEB L	Harrisburg Blvd	244	50.2	7.1	39.3	62.9	10
SEB T	Harrisburg Blvd	244	30.3	3.1	26.4	37.5	10
SEB TR	Harrisburg Blvd	244	28.2	5.0	23.8	38.0	10
WB T	LRT Line	676	2.8	1.4	1.2	5.9	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Harvey Wilson Dr	498	51.7	15.6	32.5	79.1	10
NB L	Lockwood Dr	253	63.2	14.2	43.6	87.0	10
NB T	Lockwood Dr	253	4.6	4.1	0.0	9.8	10
NB TR	Lockwood Dr	253	4.7	0.6	3.9	5.7	10
SWB L	Lockwood Dr	257	39.0	4.5	34.8	47.1	10
SWB T	Lockwood Dr	257	7.6	2.9	4.9	13.4	10
SWB TR	Lockwood Dr	257	11.2	1.9	8.6	14.7	10
WB L	Harvey Wilson Dr	497	40.1	3.6	36.1	46.4	10
WB R	Harvey Wilson Dr	497	7.6	0.9	6.0	9.0	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	29.9	5.7	22.2	39.7	10
NB LT	Lockwood Dr	512	0.6	0.2	0.3	0.8	10
NB T	Lockwood Dr	512	70.3	1.5	67.5	72.2	10
NB TR	Lockwood Dr	512	0.7	0.3	0.3	1.3	10
SB LT	Lockwood Dr	478	1.7	0.4	1.1	2.5	10
SB T	Lockwood Dr	478	57.0	9.2	35.9	66.8	10
SB TR	Lockwood Dr	478	1.8	0.4	1.2	2.4	10
WB LTR	Hershe St	513	38.7	6.7	31.5	49.1	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	14.9	4.2	10.4	22.2	10
NWB L	I-45 NBFR	222	23.8	6.5	16.6	38.9	10
NWB LT	I-45 NBFR	222	24.8	6.7	18.3	39.3	10

NWB T	I-45 NBFR	222	28.9	8.3	19.6	46.8	10
NWB TR	I-45 NBFR	222	61.8	21.8	37.4	97.2	10
SWB T	Lockwood Dr	224	6.8	3.1	3.6	14.4	10
SWB TR	Lockwood Dr	224	9.5	0.5	8.8	10.1	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	42.6	2.8	38.0	47.0	10
EB LT	I-610 EBFR	307	42.2	1.8	39.6	45.2	10
EB TR	I-610 EBFR	307	15.5	3.1	9.1	19.4	10
NB R	Lockwood Dr	545	8.7	3.6	3.3	16.4	10
NB T	Lockwood Dr	545	50.2	4.8	44.9	59.9	10
SB LT	Lockwood Dr	304	8.3	1.1	6.3	10.7	10
SB T	Lockwood Dr	304	11.4	1.8	8.5	14.0	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	1.2	0.2	0.9	1.6	10
NB LT	Lockwood Dr	304	4.4	0.9	3.4	5.5	10
NB T	Lockwood Dr	304	6.7	0.7	5.8	8.3	10
SB T	Lockwood Dr	308	32.8	1.8	29.9	35.3	10
WB L	I-610 WBFR	309	43.3	4.1	36.3	49.6	10
WB LT	I-610 WBFR	309	46.7	2.5	43.5	51.1	10
WB R	Lockwood Dr	308	6.8	1.8	4.8	10.6	10
WB TR	I-610 WBFR	309	40.8	2.9	37.3	45.1	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	44.9	16.3	15.6	71.7	10
NB L	Lockwood Dr	324	17.3	19.7	0.0	55.1	9
NB T	Lockwood Dr	324	6.5	6.0	0.0	19.6	10
NB TR	Lockwood Dr	324	10.3	2.6	7.2	14.8	10
SB L	Lockwood Dr	560	8.8	12.9	0.0	33.8	10
SB T	Lockwood Dr	560	2.3	1.9	0.0	5.6	10
SB TR	Lockwood Dr	560	3.0	1.0	1.2	5.0	10
WB LTR	Keeland St	561	33.1	4.7	24.6	41.2	10

LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Lyons Ave	280	43.6	10.5	30.5	65.1	10
NB LT	Lockwood Dr (NB)	275	20.6	1.7	17.2	23.1	10
NB T	Lockwood Dr (NB)	275	76.9	1.0	75.6	78.4	10
NB TR	Lockwood Dr (NB)	275	18.8	1.3	17.1	20.7	10
SB LT	Lockwood Dr	515	11.5	1.6	8.5	13.2	10
SB T	Lockwood Dr	515	85.4	0.7	84.3	86.5	10
SB TR	Lockwood Dr	515	11.3	0.9	9.8	12.6	10
WB L	Lyons Ave	283	28.8	11.8	4.9	42.0	10
WB TR	Lyons Ave	283	24.5	2.6	20.2	28.6	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Mulvey St	287	6.4	3.5	3.0	14.6	10
NB T	Lockwood Dr	478	0.4	0.3	0.1	1.1	10
NB TR	Lockwood Dr	478	0.6	0.4	0.2	1.5	10
SB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.1	10
WB R	Mulvey St	286	3.5	0.8	2.7	4.7	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.6	2.0	0.0	6.3	10
EB T	Munger St	460	19.6	4.3	13.7	28.3	10
NEB L	Lockwood Dr	855	27.5	8.3	15.3	46.0	10
NEB T	Lockwood Dr	855	13.6	6.8	3.4	25.5	10
NEB TR	Lockwood Dr	855	5.5	1.2	4.6	8.9	10
SB R	Munger St	460	1.3	1.4	0.0	4.0	10
SWB L	Lockwood Dr	230	34.2	5.0	25.5	40.6	10
SWB T	Lockwood Dr	230	14.2	5.3	7.3	23.0	10
SWB TR	Lockwood Dr	230	29.1	5.4	20.0	39.8	10
WB L	Munger St	661	25.8	3.9	22.9	35.5	10
WB TR	Munger St	661	22.7	3.4	18.6	29.4	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	55.3	6.5	44.7	64.7	10
EB T	Navigation Blvd	252	36.3	4.4	30.0	43.5	10
EB TR	Navigation Blvd	252	33.9	3.2	27.0	37.5	10
NEB L	Lockwood Dr	245	47.8	5.6	37.7	56.8	10
NEB T	Lockwood Dr	245	26.6	4.3	19.6	32.9	10
NEB TR	Lockwood Dr	245	20.2	3.7	14.3	26.9	10
SWB L	Lockwood Dr	492	71.2	10.5	60.7	95.1	10
SWB R	Lockwood Dr	492	9.2	2.3	4.5	12.8	10
SWB T	Lockwood Dr	492	25.9	3.3	19.9	30.9	10
WB L	Navigation Blvd	251	63.3	8.6	54.3	77.8	10
WB T	Navigation Blvd	251	45.2	5.6	34.7	52.6	10
WB TR	Navigation Blvd	251	49.3	6.7	40.7	59.7	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	14.5	5.9	6.3	22.2	10
NB LT	Lockwood Dr	284	3.1	0.8	2.1	4.5	10
NB T	Lockwood Dr	284	50.1	15.3	26.1	79.8	10
NB TR	Lockwood Dr	284	2.6	0.5	2.1	3.3	10
SB LT	Lockwood Dr	524	3.7	0.7	2.8	5.2	10
SB T	Lockwood Dr	524	62.8	8.4	50.8	76.3	10
SB TR	Lockwood Dr	524	3.0	0.8	1.9	4.3	10
WB LTR	Nichols St	525	1.8	0.7	0.7	2.7	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	29.9	1.8	27.6	32.7	10
NB L	Lockwood Dr	300	51.2	6.4	41.9	60.6	10
NB T	Lockwood Dr	300	12.7	5.8	2.5	21.0	10
NB TR	Lockwood Dr	300	13.4	2.6	10.6	19.1	10
SB L	Lockwood Dr	545	37.3	17.7	10.7	60.4	9
SB T	Lockwood Dr	545	5.9	3.8	0.0	11.4	10
SB TR	Lockwood Dr	545	7.4	1.9	5.2	11.6	10
WB LTR	Pardee St	546	18.4	3.0	13.5	24.7	10

LOCKWOOD DR & POLK ST — NODE: 151

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	34.4	3.5	30.5	40.9	10
EB T	Polk St	235	38.5	4.4	32.1	47.1	10
EB TR	Polk St	235	37.4	6.5	27.9	52.7	10
NB L	Lockwood Dr	229	42.3	15.4	32.4	84.9	10
NB T	Lockwood Dr	229	18.5	6.5	8.0	28.4	10

NB TR	Lockwood Dr	229	28.5	7.7	22.9	49.8	10
SB L	Lockwood Dr	238	97.5	21.4	71.9	149.3	10
SB T	Lockwood Dr	238	29.6	3.7	23.2	35.5	10
SB TR	Lockwood Dr	238	51.2	18.2	31.4	95.4	10
WB L	Polk St	234	38.7	3.9	31.4	44.4	10
WB T	Polk St	234	38.1	3.5	33.6	43.6	10
WB TR	Polk St	234	31.9	4.6	27.0	40.5	10

LOCKWOOD DR & RAND ST **NODE: 170**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	40.7	3.6	36.4	48.6	10
NB L	Lockwood Dr	296	38.8	13.1	16.9	63.7	10
NB T	Lockwood Dr	296	14.4	6.4	4.7	25.7	10
NB TR	Lockwood Dr	296	12.0	1.4	9.4	14.1	10
SB L	Lockwood Dr	300	40.8	1.7	37.3	43.5	10
SB T	Lockwood Dr	300	12.6	3.5	4.5	18.2	10
SB TR	Lockwood Dr	300	16.8	0.9	15.3	18.8	10
WB LTR	Rand St	302	19.9	3.3	15.4	25.3	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	725	9.8	4.3	4.6	17.8	9
NB TR	Lockwood Dr	725	1.9	0.5	1.2	3.2	10
NEB LT	Shreveport Blvd	316	35.7	4.5	27.6	43.5	10
NEB TR	Shreveport Blvd	316	19.0	3.4	14.3	25.1	10
SB L	Lockwood Dr	795	8.3	1.6	6.0	11.0	10
SB TR	Lockwood Dr	795	4.4	1.2	2.7	6.5	10
SWB LT	Shreveport Blvd	315	39.8	2.5	35.4	43.1	10
SWB TR	Shreveport Blvd	315	25.4	7.5	17.6	41.2	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	40.0	22.1	18.5	92.4	10
NB L	Lockwood Dr	524	6.9	10.4	0.0	31.3	9
NB T	Lockwood Dr	524	6.7	5.5	0.1	15.7	10
NB TR	Lockwood Dr	524	10.5	2.4	6.0	14.0	10
SB L	Lockwood Dr	533	0.3	1.0	0.0	3.1	10
SB T	Lockwood Dr	533	3.1	2.1	0.0	7.9	10
SB TR	Lockwood Dr	533	3.9	1.4	2.7	6.7	10
WB LTR	Sudan St	534	29.6	7.7	22.1	45.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	21.5	5.7	7.3	28.3	10
EB TR	Weaver Rd	326	15.9	2.3	12.5	19.4	10
NB L	Lockwood Dr	320	48.3	9.9	31.9	66.0	10
NB T	Lockwood Dr	320	45.4	9.9	26.1	57.2	10
NB TR	Lockwood Dr	320	25.7	2.1	23.0	28.9	10
SB L	Lockwood Dr	324	38.8	6.4	28.1	49.8	10
SB T	Lockwood Dr	324	12.6	4.4	5.8	19.7	10
SB TR	Lockwood Dr	324	14.2	1.9	10.8	17.4	10
WB L	Weaver Rd	325	21.6	3.6	16.6	28.1	10
WB TR	Weaver Rd	325	17.5	1.9	15.1	21.2	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	1.4	0.3	1.1	1.9	10
EB LT	I-10 EBFR	268	5.5	0.7	4.2	6.3	10

EB T	I-10 EBFR	268	7.4	1.2	5.2	9.3	10
NB T	Lockwood Dr (NB)	264	48.3	6.7	40.0	61.2	10
NB TR	Lockwood Dr (NB)	264	43.9	5.3	37.2	52.7	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr (NB)	270	11.5	1.0	9.6	13.2	10
NB T	Lockwood Dr (NB)	270	6.4	1.8	3.1	10.0	10
WB T	I-10 WBFR	276	39.9	2.8	36.6	44.6	10
WB TR	I-10 WBFR	276	24.4	2.6	22.1	31.0	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	3.4	0.5	2.3	4.0	10
EB T	Market St	262	0.3	0.2	0.0	0.6	10
NB LT	Lockwood Dr	499	23.9	5.3	18.6	37.3	10
NB T	Lockwood Dr	499	60.4	13.8	47.5	92.2	10
NB TR	Lockwood Dr	499	22.4	6.1	17.7	38.1	10
WB T	Market St	266	75.1	18.7	52.7	108.9	10
WB TR	Market St	266	34.6	4.0	29.2	39.8	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	49.8	5.7	43.4	61.7	10
EB TR	I-10 EBFR	269	21.4	3.1	17.9	26.6	10
SB LT	Lockwood Dr (SB)	267	3.6	2.8	1.6	10.9	10
SB T	Lockwood Dr (SB)	267	8.0	3.1	4.9	14.3	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	34.9	8.3	28.0	56.9	10
SB TR	Lockwood Dr (SB)	272	22.7	5.6	17.1	36.1	10
WB L	I-10 WBFR	273	2.7	0.6	2.1	3.9	10
WB LT	I-10 WBFR	273	4.4	0.3	4.0	5.0	10
WB T	I-10 WBFR	273	5.8	0.6	5.0	6.7	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	53.1	7.6	42.8	67.3	10
EB TR	Market St	263	29.0	3.8	23.3	35.9	10
SB LT	Lockwood Dr (SB)	260	43.7	2.2	39.5	46.7	10
SB T	Lockwood Dr (SB)	260	65.3	0.6	64.3	66.3	10
SB TR	Lockwood Dr (SB)	260	44.9	3.0	40.5	50.7	10
WB LT	Market St	262	10.1	1.3	8.3	12.2	10
WB T	Market St	262	2.2	1.2	0.8	4.5	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	44.1	7.7	27.7	55.9	10
EB R	Bennington St	319	5.4	0.8	4.5	7.1	10
NB L	Lockwood Dr	795	4.2	0.9	1.9	5.3	10
NB TR	Lockwood Dr	795	0.7	0.1	0.5	0.9	10
SB LTR	Lockwood Dr	796	3.5	0.7	2.4	4.4	10
WB LTR	Driveway	318	3.9	0.8	2.9	5.1	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Denmark St	550	22.9	2.6	19.5	26.7	10
NB T	BRT Alignment	806	51.0	18.2	24.4	87.6	10
NWB LTR	Lockwood Dr	796	10.1	2.1	7.6	13.2	10
SB LTR	Lockwood Dr	321	11.6	1.3	9.9	14.3	10
SB T	Lockwood Dr	321	59.5	2.6	55.2	63.8	10
WB LTR	Denmark St	549	33.4	2.8	29.0	36.7	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	McKinney St	240	21.2	11.0	10.9	47.8	10
NB T	Lockwood Dr	238	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	238	6.1	7.5	0.0	23.4	10
SB TR	Lockwood Dr	237	7.4	7.3	0.5	26.2	10
SWB T	BRT Alignment	859	0.0	0.0	0.0	0.0	10
WB R	McKinney St	239	15.7	8.6	7.8	37.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	21.5	2.4	18.8	24.5	10
NB TR	Spur 5 NBFR	219	8.2	1.7	6.9	12.5	10
NEB L	Elgin St	216	4.7	1.4	2.7	6.7	10
NEB T	Elgin St	216	8.9	2.1	5.5	11.6	10
SWB T	Lockwood Dr	218	15.7	0.9	14.8	17.8	10
SWB TR	Lockwood Dr	218	19.9	2.0	17.8	25.2	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	102.4	33.5	58.9	164.4	10
EB T	Leeland St	227	42.6	2.6	37.9	45.5	10
EB TR	Leeland St	227	36.4	3.7	30.1	41.4	10
NB L	Lockwood Dr	230	75.8	13.3	61.2	104.0	10
NB T	Lockwood Dr	230	9.5	4.6	2.6	16.6	10
NB TR	Lockwood Dr	230	65.0	18.6	47.6	100.7	10
SB L	Lockwood Dr	229	67.5	10.3	53.3	90.6	10
SB T	Lockwood Dr	229	17.6	5.2	11.7	27.5	10
SB TR	Lockwood Dr	229	58.4	15.6	41.9	96.0	10
WB L	Telephone Rd	231	61.2	7.8	49.4	75.1	10
WB T	Telephone Rd	231	43.2	1.7	41.1	46.3	10
WB TR	Telephone Rd	231	38.3	10.1	30.4	64.7	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Red Line	673	38.1	30.3	22.5	118.3	10
NEB L	Main St	168	572.9	195.4	303.8	818.9	10
NEB R	Main St	168	19.8	26.9	0.0	74.8	7
NWB T	Wheeler Ave	169	133.9	16.4	104.4	154.2	10
NWB TR	Wheeler Ave	169	487.6	153.7	270.3	746.5	10
SB R	Main St	70	350.0	61.0	254.7	479.2	10
SEB R	Richmond Ave	26	2.6	0.8	1.7	4.6	10
SEB T	Richmond Ave	26	43.5	15.0	23.0	67.5	10
SWB T	LRT Red Line	674	0.3	0.5	0.0	1.5	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	68.1	12.5	52.5	87.1	10
EB T	Richmond Ave	163	4.1	6.2	0.0	19.4	10
EB TR	Richmond Ave	163	71.7	16.2	47.1	100.2	10
NB LTR	Dunlavy St	57	188.9	67.3	79.3	281.1	10

SB LTR	Dunlavy St	56	1,176.3	135.9	1,053.2	1,528.0	10
WB L	Richmond Ave	165	70.8	7.4	60.3	87.7	10
WB T	Richmond Ave	165	1.6	1.5	0.0	4.8	10
WB TR	Richmond Ave	165	10.1	2.3	6.0	13.6	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	11	183.4	43.5	123.0	266.8	10
EB T	Richmond Ave	11	109.6	30.6	64.4	156.9	10
EB TR	Richmond Ave	11	76.2	20.7	51.1	120.1	10
NB L	Eastside St	40	66.9	10.7	53.7	86.9	10
NB TR	Eastside St	40	46.1	7.2	37.2	59.3	10
SB L	Eastside St	39	71.1	16.3	53.0	105.7	10
SB TR	Eastside St	39	23.5	6.4	13.7	31.2	10
WB L	Richmond Ave	54	66.5	17.9	45.2	109.0	10
WB T	Richmond Ave	54	28.0	3.3	24.0	34.5	10
WB TR	Richmond Ave	54	31.5	4.7	25.3	41.4	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	62.9	5.9	55.1	74.6	10
EB R	Richmond Ave	7	1.7	0.5	1.0	2.6	10
EB T	Richmond Ave	7	44.2	10.9	38.2	74.8	10
NB L	Edloe St	155	79.8	18.7	64.9	112.2	10
NB R	Edloe St	155	50.2	12.9	28.3	71.8	10
NB T	Edloe St	155	26.1	3.7	20.5	32.9	10
NB TR	Edloe St	155	29.5	5.9	21.8	43.2	10
SB L	Edloe St	5	106.0	36.6	76.0	200.0	10
SB T	Edloe St	5	23.4	1.6	21.2	26.1	10
SB TR	Edloe St	5	23.1	1.7	21.0	26.0	10
WB L	Richmond Ave	10	72.3	5.5	63.3	80.4	10
WB T	Richmond Ave	10	39.2	2.2	36.7	42.7	10
WB TR	Richmond Ave	10	38.1	3.7	33.1	44.4	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	48.3	4.5	41.8	54.9	10
EB T	Richmond Ave	64	40.4	11.8	29.3	63.1	10
EB TR	Richmond Ave	64	58.9	5.4	50.1	66.2	10
NB LTR	Greenbriar Dr	47	18.3	2.5	15.0	22.9	10
SB LT	Greenbriar Dr	46	17.8	1.6	15.3	21.1	10
SB R	Greenbriar Dr	46	4.4	1.0	2.8	5.9	10
SB T	Greenbriar Dr	46	18.2	1.7	15.4	20.6	10
WB L	Richmond Ave	160	68.9	7.1	61.6	85.2	10
WB T	Richmond Ave	160	35.9	10.7	16.6	51.4	10
WB TR	Richmond Ave	160	45.6	3.3	41.5	52.7	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	20	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	20	22.4	19.2	4.2	58.3	10
NB R	Hazard St	51	131.9	71.9	22.1	236.8	10
SB R	Hazard St	50	18.1	14.3	9.6	55.9	10
WB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	162	4.3	7.2	0.0	17.9	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB L	Richmond Ave	54	455.4	63.3	354.9	546.3	10
EB T	Richmond Ave	54	203.2	57.7	126.1	321.3	10
EB TR	Richmond Ave	54	198.7	39.3	148.7	278.1	10
NB L	Kirby Dr	158	143.5	30.4	111.9	192.4	10
NB T	Kirby Dr	158	55.9	11.5	42.4	74.4	10
NB TR	Kirby Dr	158	52.1	10.3	39.9	69.2	10
SB L	Kirby Dr	44	67.1	4.4	59.3	74.2	10
SB T	Kirby Dr	44	34.8	1.7	31.0	36.6	10
SB TR	Kirby Dr	44	39.4	3.4	31.8	43.8	10
WB L	Richmond Ave	64	58.8	7.6	45.6	68.3	10
WB T	Richmond Ave	64	60.8	5.7	52.2	67.4	10
WB TR	Richmond Ave	64	61.8	3.9	55.8	68.5	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	98.6	23.4	61.2	144.8	10
EB T	Richmond Ave	165	28.3	6.3	17.9	38.7	10
EB TR	Richmond Ave	165	107.0	20.6	74.2	140.7	10
NB LTR	Mandell St	59	577.6	92.5	452.1	728.2	10
SB LTR	Mandell St	58	411.9	201.6	188.0	822.1	10
WB L	Richmond Ave	23	82.8	37.1	50.3	176.2	10
WB T	Richmond Ave	23	13.8	8.2	5.8	29.5	10
WB TR	Richmond Ave	23	25.3	9.6	20.0	51.6	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	163.8	29.5	124.8	213.0	10
EB T	Richmond Ave	23	62.9	7.0	50.2	71.7	10
EB TR	Richmond Ave	23	434.9	59.8	332.8	535.8	10
NB L	Montrose Blvd	61	88.0	9.7	72.9	103.9	10
NB T	Montrose Blvd	61	70.6	8.6	54.9	82.2	10
NB TR	Montrose Blvd	61	69.0	7.2	53.9	78.6	10
SB L	Montrose Blvd	60	217.8	37.9	164.5	265.2	10
SB T	Montrose Blvd	60	127.2	21.6	96.5	159.3	10
SB TR	Montrose Blvd	60	93.5	12.5	69.2	115.4	10
WB L	Richmond Ave	166	408.6	38.2	361.0	496.6	10
WB T	Richmond Ave	166	44.8	13.7	20.7	69.9	10
WB TR	Richmond Ave	166	350.1	19.5	326.0	390.2	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	83.3	6.4	68.5	90.1	10
EB T	Richmond Ave	160	28.7	5.7	20.3	36.1	10
EB TR	Richmond Ave	160	28.7	3.8	23.6	34.5	10
NB T	Shepherd Dr	49	34.8	3.1	30.7	39.7	10
NB TR	Shepherd Dr	49	35.0	3.4	29.9	41.3	10
SB T	Shepherd Dr	48	33.8	3.6	29.1	39.6	10
SB TR	Shepherd Dr	48	34.8	3.5	30.2	40.7	10
WB L	Richmond Ave	20	127.3	35.5	86.3	195.3	10
WB T	Richmond Ave	20	31.9	19.7	5.8	68.6	10
WB TR	Richmond Ave	20	42.3	22.5	15.5	75.8	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	33.8	9.2	21.1	48.4	10
EB T	Richmond Ave	167	5.1	3.6	3.0	14.5	10
NEB LT	US 59 NBFR	69	741.1	112.5	579.0	885.9	10
NEB R	US 59 NBFR	69	12.6	4.9	6.8	20.9	10

NEB TR	US 59 NBFR	69	89.5	16.7	66.7	112.8	10
WB R	Richmond Ave	26	320.8	92.6	168.3	445.3	10
WB T	Richmond Ave	26	149.1	12.1	132.2	168.7	10
WB TR	Richmond Ave	26	404.9	53.6	349.9	499.1	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	129.4	19.6	100.4	160.9	10
EB TR	Richmond Ave	166	128.7	7.9	117.1	144.3	10
SWB LT	US 59 SBFR	65	65.1	10.6	51.2	82.7	10
SWB R	US 59 SBFR	65	366.7	97.5	214.1	506.7	10
SWB T	US 59 SBFR	65	67.2	10.4	52.0	85.9	10
WB L	Richmond Ave	167	11.9	3.8	6.2	17.5	10
WB T	Richmond Ave	167	111.7	173.6	43.8	605.3	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	64.0	8.4	52.5	80.6	10
EB T	Richmond Ave	162	4.9	4.9	0.0	14.5	10
EB TR	Richmond Ave	162	52.0	14.6	31.7	70.2	10
NB LTR	Woodhead St	53	456.4	64.9	387.0	548.2	10
SB LTR	Woodhead St	52	40.7	4.8	34.9	49.5	10
WB L	Richmond Ave	163	45.9	9.4	35.8	70.1	10
WB T	Richmond Ave	163	0.0	0.1	0.0	0.2	10
WB TR	Richmond Ave	163	8.5	1.9	5.6	10.7	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	89.5	25.1	65.3	155.5	10
EB T	Westpark Dr	140	73.3	10.5	61.0	92.3	10
EB TR	Westpark Dr	140	68.4	10.1	57.4	85.5	10
NB L	S Rice Ave	138	407.7	102.9	309.3	571.6	10
NB T	S Rice Ave	138	295.7	58.1	222.4	381.8	10
NB TR	S Rice Ave	138	444.7	102.9	344.6	637.2	10
SB L	S Rice Ave	137	82.3	10.0	62.8	99.8	10
SB R	S Rice Ave	137	6.5	1.4	4.0	8.6	10
SB T	S Rice Ave	137	57.7	3.6	52.0	63.1	10
SB TR	S Rice Ave	137	58.1	4.0	51.2	63.1	10
WB L	Westpark Dr	781	313.2	73.7	204.2	439.3	10
WB T	Westpark Dr	781	69.6	4.2	62.6	77.7	10
WB TR	Westpark Dr	781	56.6	5.5	46.0	67.3	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	551.3	170.1	374.4	913.5	10
NEB R	San Jacinto St	173	6.3	2.0	4.0	10.9	10
NEB T	San Jacinto St	173	25.3	2.5	23.2	31.7	10
NWB T	Wheeler Ave	86	11.3	6.3	3.9	23.1	10
NWB TR	Wheeler Ave	86	536.8	205.9	302.4	914.6	10
SEB LT	Wheeler Ave	172	22.6	3.3	18.9	29.3	10
SEB T	Wheeler Ave	172	57.7	12.6	37.3	75.0	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Tidwell Rd	348	6.5	2.0	3.7	10.6	10
EB TR	Tidwell Rd	348	16.3	3.4	12.0	20.5	10
NB LTR	Edell St	590	21.9	3.9	16.5	27.7	10
SB LTR	Edell St	589	13.8	1.9	11.0	16.2	10

WB L	Tidwell Rd	652	33.1	20.4	0.0	67.8	10
WB T	Tidwell Rd	652	10.1	10.9	0.0	26.0	10
WB TR	Tidwell Rd	652	17.8	5.1	10.3	26.3	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	38.3	5.0	30.8	45.1	10
EB T	Tidwell Rd	338	10.8	1.2	8.1	12.5	10
EB TR	Tidwell Rd	338	11.2	1.5	8.9	13.3	10
NB L	Hirsch Rd	336	35.6	3.5	29.2	42.6	10
NB T	Hirsch Rd	336	22.7	2.6	18.0	26.8	10
NB TR	Hirsch Rd	336	19.4	1.8	16.0	22.5	10
SB L	Hirsch Rd	335	50.2	14.2	36.9	82.3	10
SB T	Hirsch Rd	335	32.6	2.4	28.9	35.7	10
SB TR	Hirsch Rd	335	20.8	3.5	16.0	28.5	10
WB L	Tidwell Rd	334	51.3	6.4	39.6	61.1	10
WB T	Tidwell Rd	334	15.5	1.6	13.2	19.2	10
WB TR	Tidwell Rd	334	16.9	2.4	13.8	22.0	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	58.0	4.7	51.9	65.8	10
EB LT	Tidwell Rd	342	58.9	4.9	53.2	68.0	10
EB T	Tidwell Rd	342	28.6	2.1	26.2	31.7	10
NB L	I-69 NBFR	340	37.1	4.0	30.5	46.6	10
NB LT	I-69 NBFR	340	34.5	1.9	32.2	37.5	10
NB R	I-69 NBFR	340	6.3	0.6	5.5	7.1	10
NB T	I-69 NBFR	340	31.7	2.9	26.1	35.6	10
NB TR	I-69 NBFR	340	36.9	2.6	34.2	41.2	10
WB T	Tidwell Rd	586	18.7	1.9	16.0	23.2	10
WB TR	Tidwell Rd	586	19.2	3.5	15.0	27.5	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	652	1.2	0.6	0.7	2.9	10
EB T	Tidwell Rd	652	35.8	3.1	29.4	39.3	10
SB L	I-69 SBFR	649	42.2	4.6	36.8	51.4	10
SB LT	I-69 SBFR	649	34.6	1.9	31.7	37.8	10
SB R	I-69 SBFR	649	0.5	0.2	0.1	0.8	10
SB T	I-69 SBFR	649	31.6	0.8	30.3	33.2	10
WB L	Tidwell Rd	342	27.9	3.8	21.6	35.4	10
WB LT	Tidwell Rd	342	24.0	3.8	18.8	30.4	10
WB T	Tidwell Rd	342	11.9	1.2	10.4	14.0	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	52.9	5.9	44.1	61.1	10
EB TR	Tidwell Rd	349	21.6	2.1	18.0	24.0	10
NB L	Jensen Dr	347	53.0	18.2	16.3	77.7	10
NB T	Jensen Dr	347	39.8	2.4	37.0	44.7	10
NB TR	Jensen Dr	347	41.0	1.7	38.8	43.3	10
SB L	Jensen Dr	604	60.4	10.0	44.2	75.4	10
SB TR	Jensen Dr	604	29.4	1.1	27.9	31.1	10
WB L	Tidwell Rd	348	55.1	6.2	46.4	64.2	10
WB R	Tidwell Rd	348	57.0	12.0	38.8	71.7	10
WB TR	Tidwell Rd	348	23.4	2.3	19.7	27.0	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	46.6	19.1	3.6	67.2	9
EB T	Tidwell Rd	586	15.7	1.9	12.6	18.6	10
EB TR	Tidwell Rd	586	14.8	1.3	12.2	16.9	10
NB LTR	Friendly Rd	585	61.9	19.1	44.8	99.9	10
WB L	Tidwell Rd	338	39.5	4.4	32.9	45.6	10
WB T	Tidwell Rd	338	10.5	0.7	9.3	11.5	10
WB TR	Tidwell Rd	338	10.4	1.2	9.4	11.5	10
SB TR	Friendly Rd	584	129.8	11.7	111.9	146.6	10
WB T	BRT Alignment	797	8.2	6.0	2.6	24.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	BRT Alignment	797	50.9	6.4	39.9	59.7	10
NB L	Lockwood Dr	574	49.1	16.9	21.8	71.2	10
NB R	Lockwood Dr	574	6.0	1.5	3.8	7.8	10
NB T	Lockwood Dr	574	38.3	3.3	32.6	42.4	10
NEB LT	Tidwell Rd	334	17.6	1.9	14.3	19.7	10
NEB TR	Tidwell Rd	334	16.7	1.5	15.0	19.2	10
SB L	Lockwood Dr	331	35.1	17.0	0.0	58.3	9
SB TR	Lockwood Dr	331	41.8	13.2	21.1	58.4	10
WB L	Tidwell Rd	333	38.8	3.8	31.4	43.4	10
WB T	Tidwell Rd	333	5.8	0.3	5.5	6.3	10
WB TR	Tidwell Rd	333	5.8	0.7	4.7	7.2	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	6.7	1.0	5.7	8.3	10
EB TR	Westpark Dr	116	9.6	1.5	7.8	13.3	10
NB R	14th St	118	11.3	2.4	8.0	16.0	10
WB L	Westpark Dr	119	184.3	41.4	123.1	232.6	6
WB T	Westpark Dr	119	64.6	12.6	44.3	80.4	10

WESTPARK DR & ALDER DR **NODE: 99558**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	778	86.9	21.0	65.8	124.3	10
EB TR	Westpark Dr	778	73.8	18.5	54.5	103.4	10
NB LR	Alder Dr	718	104.5	35.4	61.5	167.6	10
WB LT	Westpark Dr	133	18.3	3.6	13.2	24.9	10
WB T	Westpark Dr	133	8.9	1.8	5.6	11.4	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	205.7	8.8	190.9	220.6	10
EB T	Westpark Dr	133	153.3	8.2	139.0	164.9	10
EB TR	Westpark Dr	133	177.1	10.3	160.7	193.7	10
NB T	Chimney Rock Rd	135	66.0	24.3	47.8	129.6	10
NB TR	Chimney Rock Rd	135	89.2	31.3	64.1	169.5	10
SB L	Chimney Rock Rd	134	118.2	14.1	97.1	143.3	10
SB T	Chimney Rock Rd	134	23.5	2.8	20.0	28.5	10
SB TR	Chimney Rock Rd	134	22.6	2.2	18.4	26.4	10
WB L	Westpark Dr	136	80.9	16.9	57.5	117.4	10
WB T	Westpark Dr	136	50.8	6.7	39.8	66.4	10
WB TR	Westpark Dr	136	50.1	6.8	40.8	61.4	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	50.9	7.8	41.0	63.9	10

EB TR	Westpark Dr	152	33.2	4.5	26.2	42.0	10
NB L	Edloe St	29	51.1	6.7	34.4	57.7	10
NB R	Edloe St	29	14.0	3.9	8.0	20.6	10
NB T	Edloe St	29	116.3	7.0	105.6	125.9	10
SB L	Edloe St	153	71.7	12.0	59.2	97.9	10
SB R	Edloe St	153	46.1	17.3	22.2	86.1	10
SB TR	Edloe St	153	46.6	2.6	42.2	49.9	10
WB L	Westpark Dr	154	63.0	4.2	56.0	71.4	10
WB T	Westpark Dr	154	39.9	2.2	37.1	44.9	10
WB TR	Westpark Dr	154	36.2	2.4	32.3	38.5	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	283.9	11.7	264.9	303.1	10
EB T	Westpark Dr	114	328.3	6.0	317.0	335.0	10
EB TR	Westpark Dr	114	406.6	14.7	381.1	426.1	10
NB L	Fondren Rd	110	15.1	1.3	13.0	16.9	10
NB T	Fondren Rd	110	7.2	0.5	6.3	8.1	10
NB TR	Fondren Rd	110	9.0	1.1	7.8	11.4	10
SB L	Fondren Rd	112	321.7	83.3	179.0	437.7	10
SB T	Fondren Rd	112	70.3	3.4	65.0	76.0	10
SB TR	Fondren Rd	112	77.9	8.3	66.8	93.7	10
WB L	Westpark Dr	117	449.2	105.9	227.2	633.1	10
WB T	Westpark Dr	117	69.8	23.7	47.7	123.6	10
WB TR	Westpark Dr	117	72.3	23.2	49.9	117.1	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	117	243.1	75.2	153.6	370.5	10
EB T	Westpark Dr	117	79.0	15.9	60.7	112.3	10
EB TR	Westpark Dr	117	105.1	20.5	84.9	153.1	10
NB L	Hillcroft Ave	3	454.0	47.4	366.5	531.3	10
NB T	Hillcroft Ave	3	151.1	18.0	126.9	186.4	10
NB TR	Hillcroft Ave	3	145.8	11.8	129.9	163.6	10
SB L	Hillcroft Ave	115	125.4	24.8	95.2	181.8	10
SB T	Hillcroft Ave	115	57.5	7.1	48.6	73.6	10
SB TR	Hillcroft Ave	115	67.9	10.2	55.4	88.3	10
WB L	Westpark Dr	116	117.7	11.9	93.9	132.9	10
WB T	Westpark Dr	116	104.7	11.2	82.9	115.1	10
WB TR	Westpark Dr	116	148.6	10.7	134.5	171.3	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	16.0	2.1	14.2	19.8	10
EB LT	Westpark Dr	123	12.1	1.4	9.7	14.5	10
EB T	Westpark Dr	123	14.2	2.3	11.4	17.6	10
NEB L	I-69 NBFR	126	27.2	2.9	22.8	31.7	10
NEB R	I-69 NBFR	126	17.6	4.2	13.4	26.3	10
NEB T	I-69 NBFR	126	27.6	3.3	24.3	35.2	10
WB R	Westpark Dr	127	3.7	2.6	0.6	8.7	10
WB T	Westpark Dr	127	23.5	3.0	18.8	30.1	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	119	19.2	1.3	16.5	21.1	10
SWB L	I-69 SBFR	121	33.5	2.8	29.0	38.1	10
SWB LT	I-69 SBFR	121	35.6	1.7	33.1	38.1	10
SWB R	I-69 SBFR	121	19.8	12.2	1.7	33.6	10

SWB T	I-69 SBFR	121	33.7	1.7	31.1	37.3	10
WB L	Westpark Dr	123	73.5	4.5	66.0	80.1	10
WB T	Westpark Dr	123	11.9	17.5	5.4	61.6	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	784	17.9	5.2	13.0	27.2	10
EB TR	Westpark Dr	784	17.6	5.4	11.9	26.7	10
NB LR	Loop Central Dr	803	27.1	6.0	16.9	36.3	10
WB L	Westpark Dr	146	47.9	4.8	39.8	55.8	10
WB T	Westpark Dr	146	1.0	0.2	0.8	1.3	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	75.5	12.0	61.0	96.9	10
EB T	Westpark Dr	146	32.4	10.3	20.0	47.9	10
EB TR	Westpark Dr	146	34.7	9.2	20.8	45.8	10
NB L	Newcastle Dr	148	242.8	27.9	210.9	290.6	10
NB T	Newcastle Dr	148	107.5	13.2	86.5	130.7	10
NB TR	Newcastle Dr	148	83.9	10.9	71.8	108.0	10
SB LT	Newcastle Dr	147	59.9	31.8	45.2	149.9	10
SB TR	Newcastle Dr	147	29.3	4.6	22.0	37.7	10
WB L	Westpark Dr	149	46.3	2.3	44.0	51.2	10
WB T	Westpark Dr	149	19.9	2.4	16.5	24.5	10
WB TR	Westpark Dr	149	20.0	2.4	17.2	24.1	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	11.2	2.5	9.4	16.0	10
EB TR	Westpark Dr	127	10.5	2.5	7.6	15.8	10
NB LT	Rampart St	129	220.5	16.7	192.0	248.2	10
NB TR	Rampart St	129	54.2	16.5	32.6	77.5	10
SB LTR	Rampart St	128	53.7	13.8	37.1	78.1	10
WB LT	Westpark Dr	130	8.8	2.5	5.0	13.5	10
WB TR	Westpark Dr	130	6.9	2.3	4.0	10.8	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	15.9	1.4	13.5	17.9	10
EB TR	Westpark Dr	136	15.1	1.6	12.4	17.4	10
NB LR	Royalton St	384	140.4	42.2	84.4	209.0	10
WB L	Westpark Dr	140	68.1	16.2	50.4	97.4	10
WB T	Westpark Dr	140	6.4	1.6	3.8	9.1	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	781	9.7	1.5	7.8	12.8	10
EB TR	Westpark Dr	781	9.6	1.2	8.2	12.0	10
NB LR	Uptown Transit Ctr	769	76.9	18.3	49.6	102.7	10
WB L	Westpark Dr	629	101.4	63.2	52.1	216.9	9
WB T	Westpark Dr	629	28.7	22.5	1.8	79.6	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	162.2	67.1	80.7	297.9	10
EB T	Westpark Dr	149	129.5	71.2	48.8	281.6	10
EB TR	Westpark Dr	149	131.5	62.2	52.7	228.4	10
NB L	Weslayan St	151	107.6	16.7	85.0	144.7	10

NB T	Weslayan St	151	39.7	7.7	29.1	49.8	10
NB TR	Weslayan St	151	40.1	6.9	30.9	52.5	10
SB L	Weslayan St	150	63.1	7.4	50.0	75.3	10
SB T	Weslayan St	150	52.8	7.7	42.0	66.6	10
SB TR	Weslayan St	150	61.0	8.5	51.3	79.0	10
WB L	Westpark Dr	152	91.1	23.8	62.8	136.6	10
WB T	Westpark Dr	152	81.0	21.1	54.5	119.9	10
WB TR	Westpark Dr	152	88.3	28.5	56.7	145.8	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	143	16.8	4.0	13.1	26.9	10
EB T	Westpark Dr	143	12.2	0.4	11.6	12.8	10
NB L	I-610 NBFR	145	47.8	2.1	44.6	51.0	10
NB LT	I-610 NBFR	145	48.7	2.0	45.8	52.3	10
NB TR	I-610 NBFR	145	45.8	1.8	42.6	47.7	10
NEB T	BRT Alignment	821	43.5	5.9	31.4	51.1	10
WB T	Westpark Dr	784	41.1	11.3	30.7	62.9	10
WB TR	Westpark Dr	784	47.8	9.3	37.8	68.2	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	629	123.0	8.1	107.8	133.1	10
EB TR	Westpark Dr	629	133.2	5.6	124.3	145.5	10
NEB LT	BRT Alignment	845	41.4	15.2	22.3	66.6	10
SB R	Silver Line Alignment	783	58.0	7.0	47.7	68.1	10
SEB LT	I-610 SBFR	141	99.4	34.0	70.3	188.8	10
SEB T	I-610 SBFR	141	60.3	5.0	52.2	69.8	10
SWB L	Westpark Dr	143	86.3	10.2	70.9	108.6	10
SWB T	Westpark Dr	143	13.0	0.5	12.3	13.8	10
WB T	BRT Alignment	844	28.5	6.5	20.4	37.6	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	90.7	20.7	61.6	128.0	10
EB T	Westpark Dr	130	77.4	27.4	40.5	132.6	10
EB TR	Westpark Dr	130	71.2	24.1	40.4	122.9	10
NB L	Renwick Dr	132	98.8	12.5	81.4	126.2	10
NB T	Renwick Dr	132	60.6	9.1	50.4	76.1	10
NB TR	Renwick Dr	132	68.2	16.9	49.8	95.1	10
SB L	Fountain View Dr	131	97.0	28.6	63.4	147.3	10
SB T	Fountain View Dr	131	36.3	4.0	30.1	41.6	10
SB TR	Fountain View Dr	131	35.8	3.9	30.3	41.3	10
WB L	Westpark Dr	778	91.2	17.4	67.0	112.7	10
WB T	Westpark Dr	778	38.7	5.4	30.5	45.6	10
WB TR	Westpark Dr	778	35.7	3.9	28.7	39.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	74.7	50.2	13.7	142.7	10
NEB TR	Hutchins St	707	22.8	12.9	11.2	46.1	10
NWB T	Wheeler Ave	423	36.9	2.6	34.3	40.7	10
NWB TR	Wheeler Ave	423	114.1	71.1	26.0	222.7	10
SEB L	Wheeler Ave	421	25.6	8.4	11.2	38.3	10
SEB T	Wheeler Ave	421	21.5	2.2	17.9	24.4	10
SWB LR	Hutchins St	422	156.2	150.4	7.7	439.5	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	421	57.5	33.2	28.9	130.6	10
NWB T	Wheeler Ave	421	89.6	38.5	32.0	136.6	10
SEB T	Wheeler Ave	176	2.0	2.2	0.0	6.3	10
SEB TR	Wheeler Ave	176	5.6	6.5	1.4	23.6	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Total Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Actuated	4.4	0.3	3.9	4.9	10
135	Almeda Rd & Wheeler Ave	Actuated	43.9	8.5	32.7	54.2	10
101	BRT Alignment, Fondren Rd & EB Westpark Tollway FR	Actuated	139.5	6.7	128.2	147.0	10
119	Buffalo Speedway & Richmond Ave	Actuated	76.4	9.7	66.3	94.6	10
292	Cleburne St & Ennis St	Actuated	2.6	0.2	2.3	2.9	10
176	Crosstimbers St & Lockwood Dr	Actuated	10.9	0.6	10.1	11.7	10
144	Cullen Blvd & Elgin St	Actuated	16.6	2.4	13.8	22.3	10
249	Elgin St & Ennis St	Actuated	4.4	0.6	3.5	5.5	10
353	Elgin St & Garage 5	Actuated	4.1	0.4	3.6	4.8	10
143	Elgin St & Scott St	Actuated	20.6	2.0	18.1	25.0	10
146	Elgin St & Spur 5 SBFR	Actuated	10.5	0.7	9.6	12.1	10
145	Elgin St, UH Entrance 17 & UH Entrance 18	Actuated	5.8	0.5	4.8	6.4	10
136	Emancipation Ave & Wheeler Ave	Actuated	7.6	3.2	4.9	13.6	10
306	Ennis St & Holman St	Actuated	2.2	0.2	2.1	2.7	10
266	Ennis St & Wheeler Ave	Actuated	1.6	0.1	1.3	1.7	10
690	Epsom Rd, Turner Dr, Edell St, Tidwell TC 2 Dr & Tidwell TC 4 Dr	Actuated	0.0	0.0	0.0	0.1	10
149	Ernestine St & Leeland St	Actuated	3.3	0.2	3.0	3.7	10
399	Ernestine St & Munger St	Stop	0.0	0.0	0.0	0.0	10
132	Fannin St & Wheeler Ave	Actuated	21.7	1.9	18.7	23.8	10
116	I-69 Express Lanes & Edloe St	Actuated	25.7	5.7	17.9	34.4	10
705	Jensen Dr & Turner Dr	Actuated	0.3	0.1	0.2	0.5	10
173	Kelley St & Lockwood Dr	Actuated	19.7	4.5	16.6	30.7	10
134	LaBranch St & Wheeler Ave	Actuated	20.6	4.7	14.9	28.7	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	6.0	0.4	5.5	6.6	10
156	Lockwood Dr & Armour Dr	Stop	0.2	0.1	0.1	0.4	10
154	Lockwood Dr & Canal St	Actuated	28.9	3.3	23.5	34.8	10
169	Lockwood Dr & Cavalcade St	Actuated	12.5	1.4	10.4	15.1	10
157	Lockwood Dr & Clinton Dr	Actuated	15.2	2.3	13.3	21.1	10
167	Lockwood Dr & Collingsworth St	Actuated	18.6	2.2	16.1	23.0	10
168	Lockwood Dr & Crane St	Actuated	5.5	0.5	5.1	6.8	10
659	Lockwood Dr & Firnat St	Actuated	2.9	0.3	2.4	3.4	10
197	Lockwood Dr & Marron Park Way	Actuated	21.3	0.8	20.5	22.6	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	29.3	4.8	22.3	37.2	10
514	Lockwood Dr & Harvey Wilson Dr	Actuated	6.7	0.6	5.7	8.0	10
534	Lockwood Dr & Hershe St	Actuated	1.5	0.1	1.3	1.8	10
148	Lockwood Dr & I-45 NBFR	Actuated	17.2	3.1	14.0	25.0	10
171	Lockwood Dr & I-610 EBFR	Actuated	16.4	0.7	15.4	17.4	10
172	Lockwood Dr & I-610 WBFR	Actuated	11.2	0.8	9.7	12.6	10
641	Lockwood Dr & Keeland St	Actuated	1.6	0.2	1.3	1.9	10
165	Lockwood Dr & Lyons Ave	Actuated	21.3	3.4	14.1	26.4	10
166	Lockwood Dr & Mulvey St	Stop	0.1	0.0	0.1	0.1	10
453	Lockwood Dr & Munger St	Actuated	4.2	0.6	3.4	5.6	10
155	Lockwood Dr & Navigation Blvd	Actuated	21.9	1.1	20.3	23.7	10
567	Lockwood Dr & Nichols St	Actuated	1.9	0.2	1.6	2.1	10
604	Lockwood Dr & Pardee St	Actuated	5.8	0.4	5.0	6.3	10
151	Lockwood Dr & Polk St	Actuated	21.9	2.3	18.1	25.5	10
170	Lockwood Dr & Rand St	Actuated	9.5	0.6	8.7	10.6	10

174	Lockwood Dr & Shreveport Blvd	Actuated	2.7	0.2	2.1	3.0	10
576	Lockwood Dr & Sudan St	Actuated	2.0	0.3	1.5	2.5	10
177	Lockwood Dr & Weaver Rd	Actuated	5.5	0.2	5.0	5.8	10
161	Lockwood Dr (NB) & I-10 EBFR	Actuated	8.0	0.5	7.0	8.8	10
163	Lockwood Dr (NB) & I-10 WBFR	Actuated	4.4	0.4	3.9	5.4	10
159	Lockwood Dr (NB) & Market St	Actuated	8.8	2.0	6.6	12.4	10
160	Lockwood Dr (SB) & I-10 EBFR	Actuated	6.9	0.6	5.9	7.6	10
162	Lockwood Dr (SB) & I-10 WBFR	Actuated	8.5	1.2	6.2	10.0	10
158	Lockwood Dr (SB) & Market St	Actuated	6.5	0.8	5.6	8.3	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	1.7	0.2	1.4	2.1	10
623	Lockwood Dr, BRT Alignment & Denmark St	Actuated	2.0	0.2	1.7	2.4	10
152	Lockwood Dr, BRT Alignment & McKinney St	Stop	2.4	1.5	0.4	5.5	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	9.9	0.8	9.1	11.4	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	12.1	0.9	11.0	13.6	10
131	LRT Red Line, Richmond Ave, Main St & Wheeler Ave	Actuated	43.4	3.3	38.2	50.5	10
126	Richmond Ave & Dunlavy St	Actuated	50.3	6.3	39.3	62.5	10
120	Richmond Ave & Eastside St	Actuated	24.0	5.0	18.5	36.1	10
118	Richmond Ave & Edloe St	Actuated	70.2	11.4	55.9	91.7	10
122	Richmond Ave & Greenbriar Dr	Actuated	17.9	1.3	15.8	20.2	10
124	Richmond Ave & Hazard St	Stop	22.7	3.5	18.1	29.6	10
121	Richmond Ave & Kirby Dr	Actuated	76.2	11.1	63.6	95.9	10
127	Richmond Ave & Mandell St	Actuated	63.6	7.0	56.1	76.1	10
128	Richmond Ave & Montrose Blvd	Actuated	125.3	6.0	119.2	136.7	10
123	Richmond Ave & Shepherd Dr	Actuated	20.0	2.3	18.0	25.9	10
130	Richmond Ave & US 59 NBFR	Actuated	28.3	2.1	25.7	32.2	10
129	Richmond Ave & US 59 SBFR	Actuated	27.2	1.6	25.0	29.5	10
125	Richmond Ave & Woodhead St	Actuated	38.1	3.1	33.0	44.2	10
110	S Rice Ave & Westpark Dr	Actuated	134.9	13.5	111.1	151.8	10
133	San Jacinto St & Wheeler Ave	Actuated	46.9	4.5	42.2	52.9	10
689	Tidwell Rd & Edell St	Actuated	18.3	4.7	9.0	25.4	10
180	Tidwell Rd & Hirsch Rd	Actuated	19.4	2.1	16.0	23.0	10
181	Tidwell Rd & I-69 NBFR	Actuated	30.4	2.1	27.2	33.0	10
182	Tidwell Rd & I-69 SBFR	Actuated	22.9	2.9	19.1	26.8	10
183	Tidwell Rd & Jensen Dr	Actuated	60.9	4.8	52.0	67.0	10
677	Tidwell Rd, BRT Alignment & Friendly Rd	Actuated	8.2	0.8	7.3	9.7	10
179	Tidwell Rd, BRT Alignment & Lockwood Dr	Actuated	11.2	0.7	10.2	12.6	10
104	Westpark Dr & 14th St	Actuated	29.9	10.6	15.9	48.3	10
99558	Westpark Dr & Alder Dr	Actuated	11.0	1.6	9.0	13.4	10
109	Westpark Dr & Chimney Rock Rd	Actuated	69.0	7.5	56.4	77.6	10
115	Westpark Dr & Edloe St	Actuated	30.8	3.6	27.3	39.6	10
102	Westpark Dr & Fondren Rd	Actuated	275.4	27.0	226.6	315.2	10
103	Westpark Dr & Hillcroft Ave	Actuated	199.0	10.3	180.8	213.5	10
106	Westpark Dr & I-69 NBFR	Actuated	16.5	0.8	15.0	17.9	10
105	Westpark Dr & I-69 SBFR	Actuated	33.5	6.7	27.2	49.5	10
99561	Westpark Dr & Loop Central Dr	Actuated	12.0	1.2	10.4	14.7	10
113	Westpark Dr & Newcastle Dr	Actuated	24.5	2.3	21.1	27.9	10
107	Westpark Dr & Rampart St	Actuated	11.7	2.4	7.7	14.8	10
309	Westpark Dr & Royalton St	Actuated	27.8	3.5	24.3	34.6	10
99553	Westpark Dr & Uptown Transit Ctr	Actuated	14.5	3.5	7.6	19.7	10
114	Westpark Dr & Weslayan St	Actuated	49.2	6.5	40.8	63.8	10
112	Westpark Dr, BRT Alignment & I-610 NBFR	Actuated	29.3	2.6	24.1	32.3	10
111	Westpark Dr, BRT Alignment, Silver Line Alignment & I-610 SBFR	Actuated	41.2	4.5	30.1	45.5	10

108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	41.6	2.5	39.0	47.1	10
367	Wheeler Ave & Hutchins St	Actuated	8.2	3.9	3.5	14.9	10
365	Wheeler Ave & St Emanuel St	Actuated	5.3	3.3	1.1	11.6	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service - Avg Control Delay

Node ID	Intersection	Control Type	Average	Std Dev	Minimum	Maximum	# Samples
141	Alabama St & Ennis St	Actuated	13.5	0.9	12.2	15.1	10
135	Almeda Rd & Wheeler Ave	Actuated	106.5	24.2	70.1	139.5	10
101	BRT Alignment, Fondren Rd & EB Westpark Tollway FR	Actuated	208.8	9.9	192.3	223.4	10
119	Buffalo Speedway & Richmond Ave	Actuated	73.5	10.1	61.5	92.1	10
292	Cleburne St & Ennis St	Actuated	11.4	0.8	10.4	12.9	10
176	Crosstimbers St & Lockwood Dr	Actuated	27.0	1.1	25.2	28.9	10
144	Cullen Blvd & Elgin St	Actuated	37.0	4.8	30.7	48.4	10
249	Elgin St & Ennis St	Actuated	16.1	1.8	13.3	19.2	10
353	Elgin St & Garage 5	Actuated	9.6	1.1	8.2	11.0	10
143	Elgin St & Scott St	Actuated	34.6	3.4	30.3	41.9	10
146	Elgin St & Spur 5 SBFR	Actuated	25.5	1.3	23.8	28.1	10
145	Elgin St, UH Entrance 17 & UH Entrance 18	Actuated	19.2	1.4	16.0	20.8	10
136	Emancipation Ave & Wheeler Ave	Actuated	27.2	11.0	17.8	46.8	10
306	Ennis St & Holman St	Actuated	13.7	0.9	12.0	15.3	10
266	Ennis St & Wheeler Ave	Actuated	8.6	0.7	7.1	9.3	10
690	Epsom Rd, Turner Dr, Edell St, Tidwell TC 2 Dr & Tidwell TC 4 Dr	Actuated	5.4	1.4	3.1	7.8	10
149	Ernestine St & Leeland St	Actuated	16.0	0.6	15.1	16.8	10
399	Ernestine St & Munger St	Stop	0.1	0.1	0.0	0.2	10
132	Fannin St & Wheeler Ave	Actuated	53.7	4.5	46.9	58.6	10
116	I-69 Express Lanes & Edloe St	Actuated	66.4	15.7	45.7	89.8	10
705	Jensen Dr & Turner Dr	Actuated	1.3	0.3	1.1	2.1	10
173	Kelley St & Lockwood Dr	Actuated	41.8	9.4	35.0	64.8	10
134	LaBranch St & Wheeler Ave	Actuated	78.0	20.2	50.5	111.7	10
178	Laura Koppe Rd & Lockwood Dr	Actuated	22.6	1.1	21.2	24.7	10
156	Lockwood Dr & Armour Dr	Stop	0.5	0.2	0.2	1.0	10
154	Lockwood Dr & Canal St	Actuated	56.7	6.2	46.2	67.7	10
169	Lockwood Dr & Cavalcade St	Actuated	25.3	2.3	21.9	29.5	10
157	Lockwood Dr & Clinton Dr	Actuated	33.8	4.7	28.8	45.4	10
167	Lockwood Dr & Collingsworth St	Actuated	39.3	4.4	34.3	48.3	10
168	Lockwood Dr & Crane St	Actuated	14.5	1.4	12.8	17.5	10
659	Lockwood Dr & Firnat St	Actuated	15.1	1.0	13.2	16.6	10
197	Lockwood Dr & Marron Park Way	Actuated	35.5	1.0	34.4	37.3	10
153	Lockwood Dr & Harrisburg Blvd	Actuated	55.1	12.4	39.5	81.5	10
514	Lockwood Dr & Harvey Wilson Dr	Actuated	18.0	1.5	15.9	21.8	10
534	Lockwood Dr & Hershe St	Actuated	4.2	0.4	3.5	5.0	10
148	Lockwood Dr & I-45 NBFR	Actuated	22.6	3.9	18.5	32.3	10
171	Lockwood Dr & I-610 EBFR	Actuated	34.4	1.0	32.7	36.1	10
172	Lockwood Dr & I-610 WBFR	Actuated	21.6	1.6	18.8	24.3	10
641	Lockwood Dr & Keeland St	Actuated	9.0	0.9	6.9	10.4	10
165	Lockwood Dr & Lyons Ave	Actuated	41.2	6.6	27.2	52.1	10

166	Lockwood Dr & Mulvey St	Stop	0.3	0.0	0.2	0.3	10
453	Lockwood Dr & Munger St	Actuated	12.8	1.7	10.4	16.1	10
155	Lockwood Dr & Navigation Blvd	Actuated	34.9	1.1	33.3	36.5	10
567	Lockwood Dr & Nichols St	Actuated	5.3	0.4	4.6	6.1	10
604	Lockwood Dr & Pardee St	Actuated	14.4	0.8	12.9	15.4	10
151	Lockwood Dr & Polk St	Actuated	44.2	5.4	35.6	55.4	10
170	Lockwood Dr & Rand St	Actuated	23.7	1.2	22.3	26.0	10
174	Lockwood Dr & Shreveport Blvd	Actuated	9.8	0.7	8.1	10.7	10
576	Lockwood Dr & Sudan St	Actuated	6.1	1.0	4.3	7.6	10
177	Lockwood Dr & Weaver Rd	Actuated	20.6	0.5	19.4	21.2	10
161	Lockwood Dr (NB) & I-10 EBFR	Actuated	20.7	1.0	18.8	22.0	10
163	Lockwood Dr (NB) & I-10 WBFR	Actuated	12.7	0.9	11.6	14.7	10
159	Lockwood Dr (NB) & Market St	Actuated	35.7	7.3	28.3	49.4	10
160	Lockwood Dr (SB) & I-10 EBFR	Actuated	20.4	1.7	17.1	22.2	10
162	Lockwood Dr (SB) & I-10 WBFR	Actuated	26.3	3.3	20.0	30.6	10
158	Lockwood Dr (SB) & Market St	Actuated	30.8	3.0	26.9	37.0	10
175	Lockwood Dr, Bennington St & Driveway	Actuated	7.6	0.9	6.1	9.3	10
623	Lockwood Dr, BRT Alignment & Denmark St	Actuated	9.0	0.8	8.0	10.5	10
152	Lockwood Dr, BRT Alignment & McKinney St	Stop	7.4	5.1	1.0	18.7	10
147	Lockwood Dr, Elgin St & Spur 5 NBFR	Actuated	21.9	1.7	19.9	24.7	10
150	Lockwood Dr, Telephone Rd & Leeland St	Actuated	27.7	2.0	25.0	31.3	10
131	LRT Red Line, Richmond Ave, Main St & Wheeler Ave	Actuated	102.7	9.3	92.9	121.8	10
126	Richmond Ave & Dunlavy St	Actuated	137.7	18.4	104.0	169.3	10
120	Richmond Ave & Eastside St	Actuated	34.6	7.0	26.9	50.8	10
118	Richmond Ave & Edloe St	Actuated	77.6	13.5	62.4	102.1	10
122	Richmond Ave & Greenbriar Dr	Actuated	35.9	2.7	32.9	41.5	10
124	Richmond Ave & Hazard St	Stop	63.7	10.3	47.3	78.8	10
121	Richmond Ave & Kirby Dr	Actuated	59.5	8.8	48.3	77.1	10
127	Richmond Ave & Mandell St	Actuated	176.7	21.1	153.3	213.0	10
128	Richmond Ave & Montrose Blvd	Actuated	148.5	7.8	140.3	165.2	10
123	Richmond Ave & Shepherd Dr	Actuated	41.7	5.3	37.6	55.3	10
130	Richmond Ave & US 59 NBFR	Actuated	62.3	5.4	56.4	72.6	10
129	Richmond Ave & US 59 SBFR	Actuated	59.8	5.0	54.3	67.2	10
125	Richmond Ave & Woodhead St	Actuated	97.7	8.6	85.0	115.6	10
110	S Rice Ave & Westpark Dr	Actuated	127.3	12.7	105.8	146.0	10
133	San Jacinto St & Wheeler Ave	Actuated	88.3	8.7	79.2	103.5	10
689	Tidwell Rd & Edell St	Actuated	34.3	8.7	17.2	47.8	10
180	Tidwell Rd & Hirsch Rd	Actuated	26.7	2.6	23.2	31.2	10
181	Tidwell Rd & I-69 NBFR	Actuated	32.8	1.7	30.1	34.9	10
182	Tidwell Rd & I-69 SBFR	Actuated	29.2	3.7	24.7	34.9	10
183	Tidwell Rd & Jensen Dr	Actuated	86.2	6.1	74.8	95.5	10
677	Tidwell Rd, BRT Alignment & Friendly Rd	Actuated	12.0	1.2	10.6	14.2	10
179	Tidwell Rd, BRT Alignment & Lockwood Dr	Actuated	17.5	0.9	16.2	19.3	10
104	Westpark Dr & 14th St	Actuated	36.1	13.0	19.8	59.5	10
99558	Westpark Dr & Alder Dr	Actuated	20.1	2.6	16.4	23.8	10
109	Westpark Dr & Chimney Rock Rd	Actuated	75.3	9.0	61.3	86.3	10
115	Westpark Dr & Edloe St	Actuated	45.9	5.8	41.4	61.4	10
102	Westpark Dr & Fondren Rd	Actuated	233.0	23.4	193.8	267.1	10
103	Westpark Dr & Hillcroft Ave	Actuated	131.1	5.8	122.0	138.6	10
106	Westpark Dr & I-69 NBFR	Actuated	22.1	0.8	20.6	23.5	10
105	Westpark Dr & I-69 SBFR	Actuated	30.0	5.8	24.5	44.0	10
99561	Westpark Dr & Loop Central Dr	Actuated	20.8	1.9	18.0	24.9	10
113	Westpark Dr & Newcastle Dr	Actuated	33.3	3.0	28.7	37.7	10
107	Westpark Dr & Rampart St	Actuated	21.8	4.5	14.7	27.7	10

309	Westpark Dr & Royalton St	Actuated	43.5	5.5	37.1	53.7	10
99553	Westpark Dr & Uptown Transit Ctr	Actuated	24.4	5.8	13.1	33.2	10
114	Westpark Dr & Weslayan St	Actuated	48.8	6.3	40.8	62.4	10
112	Westpark Dr, BRT Alignment & I-610 NBFR	Actuated	32.7	3.0	26.9	36.3	10
111	Westpark Dr, BRT Alignment, Silver Line Alignment & I-610 SBFR	Actuated	45.2	5.0	32.6	50.1	10
108	Westpark Dr, Fountain View Dr & Renwick Dr	Actuated	53.5	2.9	49.1	58.4	10
367	Wheeler Ave & Hutchins St	Actuated	29.1	13.7	12.7	51.8	10
365	Wheeler Ave & St Emanuel St	Actuated	32.8	21.7	6.7	78.2	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	1.2	0.2	0.8	1.5	10
NW	Alabama St	197	1.2	0.1	1.0	1.3	10
SE	Alabama St	193	1.5	0.1	1.4	1.8	10
SW	Ennis St	740	0.5	0.1	0.4	0.7	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	17.3	2.8	13.6	21.0	10
NW	Wheeler Ave	176	12.9	4.5	5.3	19.1	10
S	Almeda Rd	174	9.9	4.7	6.1	21.4	10
SE	Wheeler Ave	77	3.7	0.8	2.7	5.5	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	38.2	6.5	27.9	47.1	10
N	Fondren Rd	38	100.1	2.0	97.4	103.9	10
NE	BRT Alignment	768	0.1	0.1	0.0	0.3	10
S	Fondren Rd	110	1.0	0.1	0.9	1.1	10
W	BRT Alignment	774	0.0	0.0	0.0	0.1	10

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	10	13.2	2.0	9.4	16.1	10
N	Buffalo Speedway	37	39.1	8.5	27.6	51.2	10
S	Buffalo Speedway	36	7.5	0.8	6.5	8.8	10
W	Richmond Ave	11	16.5	3.0	14.1	23.4	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	0.7	0.1	0.6	0.8	10

NW	Cleburne St	733	1.0	0.1	0.8	1.1	10
SE	Cleburne St	731	0.3	0.0	0.2	0.3	10
SW	Ennis St	732	0.7	0.2	0.4	0.9	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	2.7	0.2	2.3	3.1	10
N	Lockwood Dr	321	3.8	0.4	3.4	4.4	10
S	Lockwood Dr	320	1.8	0.2	1.6	2.1	10
W	Crosstimbers St	322	2.6	0.4	2.3	3.3	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	3.9	0.9	2.7	5.9	10
NE	Cullen Blvd	207	4.7	0.8	3.5	5.8	10
S	Cullen Blvd	206	3.9	0.4	3.4	4.4	10
W	Elgin St	208	4.1	0.9	3.2	6.4	10

ELGIN ST & ENNIS ST **NODE: 249**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	1.1	0.2	0.9	1.4	10
NW	Elgin St	701	1.7	0.2	1.4	2.1	10
SE	Elgin St	700	1.3	0.4	0.9	2.0	10
SW	Ennis St	195	0.3	0.0	0.2	0.3	10

ELGIN ST & GARAGE 5 **NODE: 353**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	1.1	0.2	0.9	1.5	10
N	Garage 5	409	2.1	0.1	1.9	2.3	10
W	Elgin St	637	0.9	0.2	0.6	1.4	10

ELGIN ST & SCOTT ST **NODE: 143**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	4.3	0.6	3.3	4.8	10
N	LRT Line	667	0.0	0.0	0.0	0.0	10
NW	Scott St	693	4.8	0.7	3.8	6.5	10
S	LRT Line	669	0.0	0.0	0.0	0.0	10
SE	Scott St	671	5.7	0.6	5.1	7.3	10
W	Elgin St	204	5.8	0.9	4.5	7.2	10

ELGIN ST & SPUR 5 SBFR **NODE: 146**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	637	6.1	0.4	5.5	6.6	10
S	Spur 5 SBFR	214	1.1	0.2	0.9	1.4	10
SW	Elgin St	216	3.3	0.5	2.7	4.3	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 **NODE: 145**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	1.5	0.3	1.0	1.9	10
N	UH Entrance 18	211	1.8	0.3	1.4	2.4	10
S	UH Entrance 17	210	0.7	0.1	0.6	0.9	10
W	Elgin St	212	1.7	0.2	1.4	2.0	10

EMANCIPATION AVE & WHEELER AVE **NODE: 136**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	1.1	0.1	0.9	1.2	10
NW	Wheeler Ave	724	2.9	2.5	1.0	6.8	10

SE	Wheeler Ave	423	2.7	1.0	2.0	5.3	10
SW	Emancipation Ave	177	1.0	0.1	0.9	1.1	10

ENNIS ST & HOLMAN ST **NODE: 306**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	0.8	0.1	0.6	1.0	10
NW	Holman St	742	0.9	0.1	0.8	1.0	10
SE	Holman St	741	0.2	0.1	0.1	0.3	10
SW	Ennis St	702	0.4	0.1	0.3	0.6	10

ENNIS ST & WHEELER AVE **NODE: 266**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	0.2	0.0	0.1	0.3	10
SE	Wheeler Ave	724	1.0	0.1	0.9	1.1	10
SW	Ennis St	726	0.4	0.1	0.3	0.5	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR **NODE: 690**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	0.0	0.0	0.0	0.0	10
N	Edell St	589	0.0	0.0	0.0	0.0	10
SE	Epsom Rd	592	0.0	0.0	0.0	0.0	10
SW	Tidwell TC 2 Dr	802	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST **NODE: 149**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	1.1	0.1	1.0	1.2	10
N	Ernestine St	683	0.1	0.0	0.1	0.2	10
SW	Ernestine St	411	0.5	0.1	0.4	0.6	10
W	Leeland St	227	1.5	0.2	1.2	1.9	10

ERNESTINE ST & MUNGER ST **NODE: 399**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Ernestine St	687	0.0	0.0	0.0	0.0	10
S	Ernestine St	683	0.0	0.0	0.0	0.0	10
W	Munger St	460	0.0	0.0	0.0	0.0	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	6.8	0.3	6.3	7.3	10
SE	Wheeler Ave	169	6.2	0.5	5.6	7.1	10
SW	Fannin St	87	8.6	1.8	5.9	11.0	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
N	Edloe St	153	2.7	0.8	2.1	4.4	10
S	Edloe St	155	17.3	4.6	9.2	23.0	10
W	I-69 Express Lanes	31	5.7	1.7	2.7	8.4	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	0.0	0.0	0.0	0.0	10
NE	Jensen Dr	604	0.1	0.0	0.1	0.3	10
SW	Jensen Dr	599	0.1	0.0	0.1	0.2	10
W	Turner Dr	595	0.0	0.0	0.0	0.1	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	2.9	0.3	2.6	3.6	10
N	Lockwood Dr	308	4.8	0.6	3.9	5.8	10
S	Lockwood Dr	725	8.6	4.7	5.2	20.1	10
W	Kelley St	312	3.4	0.2	3.1	3.8	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	3.9	2.7	1.6	9.8	10
NW	Wheeler Ave	77	15.5	2.6	11.3	19.5	10
SE	Wheeler Ave	86	0.7	0.2	0.5	1.1	10
SW	LaBranch St	78	0.4	0.1	0.3	0.7	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	1.7	0.2	1.5	2.0	10
N	Lockwood Dr	560	2.4	0.2	2.2	2.9	10
S	Lockwood Dr	327	0.6	0.2	0.4	1.1	10
W	Laura Koppe Rd	329	1.2	0.1	0.9	1.5	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	658	0.2	0.1	0.1	0.4	10
SW	Lockwood Dr	253	0.0	0.0	0.0	0.0	10
W	Armour Dr	659	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	640	14.8	2.8	9.7	18.8	10
NE	Lockwood Dr	246	5.9	1.1	4.3	7.9	10
SW	Lockwood Dr	245	5.9	0.4	5.3	6.4	10
W	Canal St	826	2.3	0.1	2.1	2.5	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	1.8	0.2	1.5	2.1	10
N	Lockwood Dr	292	5.1	1.0	3.8	7.5	10
S	Lockwood Dr	296	3.2	0.4	2.4	3.8	10
W	Cavalcade St	298	2.4	0.2	2.0	2.7	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	1.1	0.2	0.8	1.4	10
NE	Lockwood Dr	257	4.2	0.4	3.4	4.8	10
S	Lockwood Dr	256	7.0	2.0	4.7	12.0	10
W	Clinton Dr	258	2.9	0.2	2.6	3.2	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	2.1	0.1	1.8	2.2	10
N	Lockwood Dr	533	12.3	2.2	9.8	16.8	10
SE	Lockwood Dr	288	3.4	0.4	2.9	4.0	10
W	Collingsworth St	290	0.9	0.1	0.7	1.0	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	1.2	0.2	0.8	1.4	10

N	Lockwood Dr	288	1.7	0.4	1.2	2.6	10
S	Lockwood Dr	292	1.5	0.2	1.3	1.9	10
W	Crane St	294	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	0.6	0.1	0.4	0.9	10
N	Lockwood Dr	327	1.3	0.2	1.0	1.6	10
S	Lockwood Dr	574	0.6	0.1	0.4	0.7	10
W	Firnat St	575	0.4	0.1	0.3	0.6	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 197**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	492	4.9	0.2	4.5	5.2	10
SE	Marron Park Way	843	12.2	0.2	11.9	12.6	10
SW	Lockwood Dr	658	4.2	0.7	3.5	5.2	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	LRT Line	675	0.0	0.0	0.0	0.1	10
NE	Lockwood Dr	787	8.7	1.7	6.4	11.4	10
NW	Harrisburg Blvd	678	4.7	1.7	3.5	9.2	10
S	Lockwood Dr	241	12.5	2.5	9.1	15.6	10
SE	Harrisburg Blvd	244	3.5	0.5	2.5	4.5	10
W	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	253	4.7	0.6	3.9	6.2	10
SW	Lockwood Dr	257	1.3	0.2	1.1	1.5	10
W	Harvey Wilson Dr	497	0.6	0.1	0.5	0.7	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	0.2	0.0	0.1	0.2	10
N	Lockwood Dr	512	0.8	0.1	0.6	0.9	10
S	Lockwood Dr	478	0.5	0.1	0.4	0.6	10
W	Hershe St	513	0.1	0.0	0.0	0.2	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	3.6	1.3	2.1	6.9	10
NW	I-45 NBFR	222	12.2	1.8	10.0	16.6	10
SW	Lockwood Dr	224	1.4	0.1	1.2	1.6	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	5.0	0.4	4.3	5.5	10
N	Lockwood Dr	545	9.9	0.6	9.1	11.2	10
S	Lockwood Dr	304	1.5	0.2	1.2	1.8	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	0.8	0.2	0.6	1.2	10
S	Lockwood Dr	308	5.9	0.8	4.5	7.5	10
W	I-610 WBFR	309	4.5	0.3	4.0	4.9	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	324	1.3	0.1	1.1	1.6	10
S	Lockwood Dr	560	0.2	0.1	0.1	0.3	10
W	Keeland St	561	0.1	0.0	0.0	0.2	10

LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	14.0	3.2	6.9	18.4	10
N	Lockwood Dr (NB)	275	3.5	0.3	3.0	3.9	10
S	Lockwood Dr	515	2.0	0.2	1.7	2.3	10
W	Lyons Ave	283	1.8	0.2	1.5	2.2	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	0.0	0.0	0.0	0.0	10
N	Lockwood Dr	478	0.1	0.0	0.0	0.1	10
S	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
W	Mulvey St	286	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	855	0.8	0.1	0.7	1.0	10
S	Munger St	460	0.3	0.0	0.2	0.4	10
SW	Lockwood Dr	230	2.8	0.6	2.0	4.1	10
W	Munger St	661	0.3	0.0	0.2	0.4	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	5.1	0.4	4.8	5.8	10
NE	Lockwood Dr	245	2.9	0.4	2.1	3.8	10
SW	Lockwood Dr	492	7.0	0.5	6.3	7.9	10
W	Navigation Blvd	251	6.9	0.6	6.1	8.0	10

LOCKWOOD DR & NICHOLS ST — NODE: 567

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	0.2	0.1	0.1	0.2	10
N	Lockwood Dr	284	1.1	0.1	1.0	1.3	10
S	Lockwood Dr	524	0.6	0.1	0.5	0.7	10
W	Nichols St	525	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & PARDEE ST — NODE: 604

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	0.4	0.0	0.4	0.5	10
N	Lockwood Dr	300	3.9	0.3	3.4	4.5	10
S	Lockwood Dr	545	1.4	0.2	1.0	1.7	10
W	Pardee St	546	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & POLK ST — NODE: 151

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	3.1	0.4	2.6	3.7	10
N	Lockwood Dr	229	4.5	0.8	3.9	6.6	10
S	Lockwood Dr	238	10.6	2.8	5.3	15.0	10
W	Polk St	234	3.6	0.3	3.1	4.1	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	0.8	0.2	0.6	1.2	10
N	Lockwood Dr	296	4.5	0.5	4.0	5.6	10
S	Lockwood Dr	300	3.3	0.3	2.8	3.8	10
W	Rand St	302	0.9	0.1	0.8	1.0	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	725	0.3	0.1	0.2	0.4	10
NE	Shreveport Blvd	316	0.6	0.0	0.5	0.6	10
S	Lockwood Dr	795	0.4	0.1	0.3	0.6	10
SW	Shreveport Blvd	315	1.4	0.2	0.9	1.5	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	0.1	0.0	0.0	0.1	10
N	Lockwood Dr	524	1.5	0.3	1.1	2.0	10
S	Lockwood Dr	533	0.4	0.1	0.2	0.6	10
W	Sudan St	534	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	1.0	0.1	0.8	1.3	10
N	Lockwood Dr	320	1.6	0.2	1.3	1.8	10
S	Lockwood Dr	324	1.0	0.1	0.8	1.3	10
W	Weaver Rd	325	1.9	0.1	1.7	2.1	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	1.1	0.1	1.0	1.2	10
N	Lockwood Dr (NB)	264	6.9	0.5	6.0	7.7	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	1.6	0.2	1.4	2.0	10
W	I-10 WBFR	276	2.8	0.3	2.3	3.4	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.0	0.0	0.0	0.1	10
N	Lockwood Dr	499	8.2	2.0	6.0	11.8	10
W	Market St	266	0.5	0.1	0.4	0.7	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	5.3	0.5	4.7	6.1	10
S	Lockwood Dr (SB)	267	1.6	0.5	1.1	2.4	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	7.8	1.2	5.7	9.4	10
W	I-10 WBFR	273	0.6	0.1	0.5	0.7	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Market St	263	1.6	0.5	1.1	2.8	10
S	Lockwood Dr (SB)	260	4.6	0.3	4.1	5.3	10
W	Market St	262	0.2	0.1	0.1	0.4	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	1.0	0.1	0.8	1.3	10
N	Lockwood Dr	795	0.2	0.0	0.2	0.2	10
S	Lockwood Dr	796	0.4	0.1	0.3	0.6	10
W	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST **NODE: 623**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	0.9	0.2	0.7	1.2	10
N	BRT Alignment	806	0.1	0.0	0.0	0.1	10
NW	Lockwood Dr	796	0.5	0.1	0.4	0.7	10
S	Lockwood Dr	321	0.2	0.0	0.2	0.3	10
W	Denmark St	549	0.3	0.1	0.2	0.5	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	0.2	0.2	0.1	0.7	10
N	Lockwood Dr	238	0.9	0.9	0.0	2.6	10
S	Lockwood Dr	237	1.2	0.9	0.1	3.4	10
SW	BRT Alignment	785	0.0	0.0	0.0	0.0	10
W	McKinney St	239	0.1	0.1	0.1	0.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	1.3	0.1	1.1	1.5	10
NE	Elgin St	216	5.4	0.8	4.5	6.9	10
SW	Lockwood Dr	218	3.3	0.2	3.0	3.5	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	2.6	0.4	2.2	3.5	10
N	Lockwood Dr	230	3.8	0.3	3.4	4.5	10
S	Lockwood Dr	229	2.2	0.4	1.8	3.1	10
W	Telephone Rd	231	3.4	0.2	3.1	3.8	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Red Line	673	0.2	0.1	0.1	0.4	10
NE	Main St	168	12.8	1.9	9.8	16.6	10
NW	Wheeler Ave	169	11.0	1.0	10.0	13.0	10
S	Main St	70	0.8	0.3	0.5	1.3	10
SE	Richmond Ave	26	18.7	1.1	17.1	20.4	10
SW	LRT Red Line	674	0.0	0.0	0.0	0.1	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	9.7	1.6	7.3	12.5	10
N	Dunlavy St	57	11.0	2.7	5.4	13.9	10
S	Dunlavy St	56	27.8	4.7	21.6	37.2	10
W	Richmond Ave	165	1.9	0.3	1.5	2.5	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	11	7.7	0.7	6.8	8.9	10
N	Eastside St	40	4.7	3.3	2.2	12.8	10
S	Eastside St	39	5.7	1.5	3.7	8.7	10
W	Richmond Ave	54	5.8	0.7	5.1	7.5	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	15.6	6.9	7.8	28.3	10
N	Edloe St	155	28.4	1.9	25.3	30.5	10
S	Edloe St	5	9.7	2.7	5.3	14.2	10
W	Richmond Ave	10	16.6	3.0	12.6	21.6	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	6.8	1.2	5.8	9.8	10
N	Greenbriar Dr	47	3.1	0.5	2.5	4.1	10
S	Greenbriar Dr	46	4.1	0.3	3.7	4.6	10
W	Richmond Ave	160	3.8	0.3	3.4	4.3	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	7.1	3.1	3.2	11.6	10
N	Hazard St	51	15.0	3.6	10.1	21.2	10
S	Hazard St	50	0.5	0.1	0.3	0.6	10
W	Richmond Ave	162	0.1	0.3	0.0	0.9	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	25.0	7.6	16.8	41.3	10
N	Kirby Dr	158	24.0	4.4	18.2	33.1	10
S	Kirby Dr	44	21.0	1.9	18.7	25.0	10
W	Richmond Ave	64	6.2	0.5	5.5	6.9	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	12.1	1.9	8.6	15.3	10
N	Mandell St	59	30.0	1.9	26.5	32.2	10
S	Mandell St	58	16.6	7.3	8.9	32.2	10
W	Richmond Ave	23	5.0	1.9	3.8	10.2	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	58.8	4.6	52.6	66.8	10
N	Montrose Blvd	61	15.1	3.2	10.0	21.9	10
S	Montrose Blvd	60	34.6	2.7	29.8	38.8	10
W	Richmond Ave	166	16.9	1.7	13.9	19.6	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	3.3	1.1	2.3	5.5	10
N	Shepherd Dr	49	5.5	0.5	4.8	6.3	10
S	Shepherd Dr	48	5.4	0.5	4.9	6.2	10
W	Richmond Ave	20	5.9	1.4	4.6	9.6	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Richmond Ave	167	1.1	0.3	0.8	1.7	10
NE	US 59 NBFR	69	8.8	1.9	6.7	12.6	10
W	Richmond Ave	26	18.4	1.0	17.3	19.9	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	23.0	1.3	21.1	24.9	10
SW	US 59 SBFR	65	3.7	0.3	3.2	4.4	10
W	Richmond Ave	167	0.4	0.3	0.2	1.1	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	8.9	1.7	6.7	11.2	10
N	Woodhead St	53	25.9	3.1	18.9	30.0	10
S	Woodhead St	52	1.5	0.2	1.2	1.8	10
W	Richmond Ave	163	1.7	0.2	1.3	2.2	10

S RICE AVE & WESTPARK DR **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	27.2	6.7	16.0	36.9	10
N	S Rice Ave	138	61.4	9.6	48.5	78.4	10
S	S Rice Ave	137	17.4	1.2	15.4	18.9	10
W	Westpark Dr	781	28.9	1.8	26.7	32.2	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	23.7	3.0	20.6	27.6	10
NW	Wheeler Ave	86	17.1	1.5	15.2	19.7	10
SE	Wheeler Ave	172	6.1	0.5	5.4	6.7	10

TIDWELL RD & EDELL ST **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	3.5	0.8	2.6	4.6	10
N	Edell St	590	0.2	0.1	0.2	0.4	10
S	Edell St	589	0.2	0.0	0.1	0.3	10
W	Tidwell Rd	652	14.4	4.4	6.2	21.8	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	8.3	0.5	7.3	9.1	10
N	Hirsch Rd	336	2.0	0.1	1.7	2.2	10
S	Hirsch Rd	335	2.5	0.3	2.1	3.0	10
W	Tidwell Rd	334	6.6	1.9	4.8	9.8	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	10.7	0.7	9.7	11.7	10
N	I-69 NBFR	340	8.8	0.3	8.3	9.4	10
W	Tidwell Rd	586	11.0	1.6	7.9	12.8	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	652	4.7	0.7	3.4	6.1	10
S	I-69 SBFR	649	11.1	2.3	8.5	14.8	10
W	Tidwell Rd	342	7.2	1.0	5.5	8.6	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	7.8	1.8	6.2	12.1	10
N	Jensen Dr	347	10.7	4.0	7.2	17.8	10
S	Jensen Dr	604	5.9	0.9	4.4	7.2	10
W	Tidwell Rd	348	36.5	5.2	24.9	43.4	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	4.6	0.4	3.9	5.1	10
N	Friendly Rd	585	0.2	0.0	0.1	0.3	10
W	Tidwell Rd	338	1.5	0.3	1.3	2.2	10
S	Friendly Rd	584	1.8	0.4	1.4	2.7	10
W	BRT Alignment	797	0.0	0.0	0.0	0.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	BRT Alignment	797	0.1	0.0	0.1	0.2	10
N	Lockwood Dr	574	3.1	0.3	2.6	3.7	10
NE	Tidwell Rd	334	4.7	0.4	4.0	5.4	10
S	Lockwood Dr	331	0.6	0.1	0.5	0.9	10
W	Tidwell Rd	333	2.7	0.2	2.3	3.1	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	6.0	1.4	4.5	9.4	10
N	14th St	118	5.3	1.6	3.3	8.8	10
W	Westpark Dr	119	18.6	10.1	6.9	36.3	10

WESTPARK DR & ALDER DR **NODE: 99558**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	778	5.0	1.0	3.4	6.4	10
N	Alder Dr	718	3.9	0.4	3.2	4.6	10
W	Westpark Dr	133	2.1	0.4	1.8	2.8	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	23.8	3.7	20.3	30.9	10
N	Chimney Rock Rd	135	8.8	1.3	7.1	11.2	10
S	Chimney Rock Rd	134	9.4	0.4	8.5	9.9	10
W	Westpark Dr	136	27.0	8.3	16.5	39.6	10

WESTPARK DR & EDLOE ST **NODE: 115**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	4.2	0.4	3.7	5.0	10
N	Edloe St	29	5.4	0.7	4.5	6.9	10
S	Edloe St	153	8.4	0.4	7.8	9.0	10
W	Westpark Dr	154	12.9	2.6	10.3	19.1	10

WESTPARK DR & FONDREN RD **NODE: 102**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	28.7	3.8	25.0	38.0	10
N	Fondren Rd	110	2.8	0.1	2.6	2.9	10
S	Fondren Rd	112	118.2	13.0	87.8	134.0	10
W	Westpark Dr	117	125.7	20.0	105.8	155.7	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

E	Westpark Dr	117	26.4	0.9	24.6	27.4	10
N	Hillcroft Ave	3	63.9	6.0	51.5	71.8	10
S	Hillcroft Ave	115	67.7	7.0	53.3	77.4	10
W	Westpark Dr	116	41.0	3.5	34.2	44.4	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	8.3	0.7	7.4	9.3	10
NE	I-69 NBFR	126	2.7	0.5	2.1	3.7	10
W	Westpark Dr	127	5.5	0.7	4.8	6.6	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	119	10.9	1.6	9.2	14.4	10
SW	I-69 SBFR	121	18.4	5.8	14.0	32.7	10
W	Westpark Dr	123	4.1	0.5	3.2	4.7	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	784	4.3	0.7	3.4	6.0	10
N	Loop Central Dr	803	3.3	0.3	2.9	3.5	10
W	Westpark Dr	146	4.5	0.8	3.3	5.7	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	3.5	0.4	2.7	4.0	10
N	Newcastle Dr	148	7.1	1.2	5.9	9.9	10
S	Newcastle Dr	147	5.2	1.0	3.8	6.8	10
W	Westpark Dr	149	8.7	1.1	7.0	9.9	10

WESTPARK DR & RAMPART ST **NODE: 107**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	2.5	0.2	2.2	2.7	10
N	Rampart St	129	6.6	2.0	3.4	9.4	10
S	Rampart St	128	0.5	0.1	0.3	0.7	10
W	Westpark Dr	130	2.0	0.6	0.9	2.8	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	4.9	1.7	3.5	9.6	10
N	Royalton St	384	17.6	1.0	15.6	18.9	10
W	Westpark Dr	140	5.3	2.6	2.8	10.0	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	781	2.7	0.4	2.1	3.2	10
N	Uptown Transit Ctr	769	0.3	0.1	0.1	0.5	10
W	Westpark Dr	629	11.4	3.5	4.6	16.8	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	12.4	2.6	8.6	16.7	10
N	Weslayan St	151	9.2	2.2	7.1	14.5	10
S	Weslayan St	150	15.8	1.0	14.4	17.7	10
W	Westpark Dr	152	11.7	2.8	8.8	17.0	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	7.7	1.6	5.8	10.8	10
N	I-610 NBFR	145	13.7	0.9	12.7	15.1	10
NE	BRT Alignment	821	0.1	0.0	0.1	0.2	10
W	Westpark Dr	784	7.9	1.6	5.6	10.6	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	30.3	4.8	19.4	35.8	10
NE	BRT Alignment	845	0.2	0.1	0.2	0.3	10
S	Silver Line Alignment	783	0.2	0.1	0.1	0.3	10
SE	I-610 SBFR	141	5.0	0.7	3.7	5.7	10
SW	Westpark Dr	143	5.5	0.5	4.7	6.2	10
W	BRT Alignment	844	0.0	0.0	0.0	0.0	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	9.9	1.0	8.1	11.6	10
N	Renwick Dr	132	9.5	0.7	8.0	10.5	10
S	Fountain View Dr	131	11.4	0.9	9.7	12.7	10
W	Westpark Dr	778	10.8	2.4	7.2	14.0	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	2.7	1.3	1.1	4.6	10
NW	Wheeler Ave	423	3.6	2.7	0.9	8.8	10
SE	Wheeler Ave	421	1.7	0.1	1.4	1.9	10
SW	Hutchins St	422	0.3	0.1	0.0	0.4	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	421	3.8	2.0	0.5	7.2	10
SE	Wheeler Ave	176	1.5	2.0	0.2	6.3	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Approach - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	732	16.6	2.7	12.6	20.9	10
NW	Alabama St	197	14.1	0.8	12.5	15.2	10
SE	Alabama St	193	12.8	0.9	11.8	14.5	10
SW	Ennis St	740	10.0	2.7	6.7	15.3	10

ALMEDA RD & WHEELER AVE — NODE: 135

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Almeda Rd	696	127.3	35.0	74.3	170.7	10
NW	Wheeler Ave	176	205.7	90.7	70.5	352.7	10
S	Almeda Rd	174	94.9	43.7	57.0	198.5	10
SE	Wheeler Ave	77	35.6	8.8	26.4	56.3	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	EB Westpark Tollway FR	111	333.9	62.1	228.2	435.1	10
N	Fondren Rd	38	455.1	15.4	433.8	483.9	10
NE	BRT Alignment	768	51.3	24.9	14.9	99.5	10
S	Fondren Rd	110	3.1	0.1	2.9	3.3	10
W	BRT Alignment	774	128.9	52.6	101.1	222.6	5

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	10	58.1	8.1	44.7	71.1	10
N	Buffalo Speedway	37	125.9	27.6	84.4	166.3	10
S	Buffalo Speedway	36	40.6	3.5	35.5	47.0	10
W	Richmond Ave	11	52.1	9.5	45.1	74.0	10

CLEBURNE ST & ENNIS ST — NODE: 292

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	726	7.2	0.8	6.1	8.5	10
NW	Cleburne St	733	20.6	1.9	16.7	23.0	10
SE	Cleburne St	731	19.8	2.5	16.5	23.7	10
SW	Ennis St	732	9.6	2.6	5.3	12.8	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crosstimbers St	323	24.5	1.4	22.0	26.4	10
N	Lockwood Dr	321	36.3	2.2	32.7	40.1	10
S	Lockwood Dr	320	25.8	1.5	23.1	27.8	10
W	Crosstimbers St	322	22.0	2.6	19.4	27.9	10

CULLEN BLVD & ELGIN ST — NODE: 144

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	204	46.5	10.5	30.3	68.2	10
NE	Cullen Blvd	207	35.9	5.1	27.9	43.8	10
S	Cullen Blvd	206	31.3	1.9	28.6	34.4	10
W	Elgin St	208	37.5	8.1	29.8	58.4	10

ELGIN ST & ENNIS ST — NODE: 249

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	702	19.4	2.8	14.9	22.8	10
NW	Elgin St	701	14.3	1.7	12.5	17.5	10
SE	Elgin St	700	16.3	4.1	12.2	26.0	10
SW	Ennis St	195	16.6	1.5	14.3	19.8	10

ELGIN ST & GARAGE 5 — NODE: 353

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	212	7.1	1.2	5.6	9.4	10
N	Garage 5	409	14.9	1.1	13.3	16.6	10
W	Elgin St	637	7.0	1.8	5.1	10.0	10

ELGIN ST & SCOTT ST — NODE: 143

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	701	40.6	4.5	32.8	46.8	10
N	LRT Line	667	5.3	1.3	3.2	7.6	10
NW	Scott St	693	25.3	3.8	20.6	34.8	10
S	LRT Line	669	22.1	2.5	18.4	26.7	10
SE	Scott St	671	37.3	4.1	32.5	47.8	10
W	Elgin St	204	39.9	5.7	31.7	46.0	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	637	30.9	1.8	28.2	33.3	10
S	Spur 5 SBFR	214	13.3	1.2	11.4	15.3	10
SW	Elgin St	216	24.9	2.7	21.0	30.9	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 — NODE: 145

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Elgin St	208	10.8	1.8	7.0	13.0	10
N	UH Entrance 18	211	36.0	3.4	32.3	42.9	10
S	UH Entrance 17	210	21.5	3.0	18.2	26.0	10
W	Elgin St	212	21.9	2.1	17.9	24.8	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Emancipation Ave	711	13.0	1.1	11.8	14.7	10
NW	Wheeler Ave	724	47.9	42.6	14.9	123.8	10
SE	Wheeler Ave	423	43.0	13.9	33.5	80.3	10
SW	Emancipation Ave	177	13.3	0.9	12.3	15.1	10

ENNIS ST & HOLMAN ST — NODE: 306

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	740	9.7	1.7	7.5	13.3	10
NW	Holman St	742	22.8	1.7	20.3	25.0	10
SE	Holman St	741	17.1	3.1	11.5	22.9	10
SW	Ennis St	702	11.6	2.6	8.1	15.3	10

ENNIS ST & WHEELER AVE — NODE: 266

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Ennis St	698	2.9	0.7	1.7	4.4	10
SE	Wheeler Ave	724	25.5	1.4	23.0	27.7	10
SW	Ennis St	726	4.6	1.0	3.4	6.0	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR — NODE: 690

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	595	7.5	3.2	1.3	13.3	10
N	Edell St	589	37.2		37.2	37.2	1
SW	Tidwell TC 2 Dr	802	3.7	1.0	2.0	4.7	10

ERNESTINE ST & LEELAND ST — NODE: 149

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	228	15.4	1.0	14.0	17.0	10
N	Ernestine St	683	10.9	3.5	5.3	18.4	10
SW	Ernestine St	411	9.9	1.0	8.6	12.2	10
W	Leeland St	227	22.7	2.5	19.2	27.3	10

ERNESTINE ST & MUNGER ST — NODE: 399

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

N	Ernestine St	687	0.0	0.0	0.0	0.0	10
S	Ernestine St	683	0.0	0.0	0.0	0.0	10
W	Munger St	460	3.4	1.5	1.0	6.2	10

FANNIN ST & WHEELER AVE **NODE: 132**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	172	57.6	4.4	52.4	66.2	10
SE	Wheeler Ave	169	62.8	6.9	54.2	76.9	10
SW	Fannin St	87	46.3	8.6	33.7	56.0	10

I-69 EXPRESS LANES & EDLOE ST **NODE: 116**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Edloe St	153	18.6	6.6	13.9	33.1	10
S	Edloe St	155	82.4	22.1	43.7	112.1	10
W	I-69 Express Lanes	31	190.6	56.8	88.7	270.8	10

JENSEN DR & TURNER DR **NODE: 705**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Turner Dr	606	4.3	1.8	2.4	8.7	10
NE	Jensen Dr	604	1.2	0.3	0.9	2.0	10
SW	Jensen Dr	599	1.1	0.3	0.7	1.7	10
W	Turner Dr	595	10.0	1.1	8.0	11.5	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Kelley St	313	31.1	3.2	27.4	37.9	10
N	Lockwood Dr	308	36.0	3.8	31.3	42.3	10
S	Lockwood Dr	725	77.3	40.9	47.2	180.9	10
W	Kelley St	312	25.7	1.3	23.4	27.3	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	LaBranch St	79	147.6	88.5	61.0	320.7	10
NW	Wheeler Ave	77	170.3	46.4	100.0	249.0	10
SE	Wheeler Ave	86	5.4	1.5	3.7	8.6	10
SW	LaBranch St	78	44.7	14.0	30.7	77.6	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Laura Koppe Rd	330	29.6	2.8	24.3	33.4	10
N	Lockwood Dr	560	24.6	1.9	22.0	28.1	10
S	Lockwood Dr	327	9.1	2.6	5.7	13.9	10
W	Laura Koppe Rd	329	31.9	2.7	27.5	35.9	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	658	0.6	0.4	0.2	1.4	10
SW	Lockwood Dr	253	0.0	0.0	0.0	0.0	10
W	Armour Dr	659	8.2	2.5	4.1	13.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Canal St	640	162.2	27.1	107.6	197.9	10
NE	Lockwood Dr	246	33.3	5.6	24.8	43.7	10
SW	Lockwood Dr	245	33.6	1.7	31.1	37.3	10
W	Canal St	826	34.2	1.6	31.1	36.7	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Cavalcade St	299	26.1	1.4	24.6	29.0	10
N	Lockwood Dr	292	26.7	4.4	21.0	35.1	10
S	Lockwood Dr	296	23.0	2.4	18.8	26.1	10
W	Cavalcade St	298	25.4	1.8	22.1	27.8	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Clinton Dr	259	25.3	2.9	21.0	31.6	10
NE	Lockwood Dr	257	23.2	1.8	19.4	25.6	10
S	Lockwood Dr	256	53.3	14.6	34.6	87.4	10
W	Clinton Dr	258	30.8	1.2	28.5	32.7	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Collingsworth St	291	28.6	1.5	26.6	31.2	10
N	Lockwood Dr	533	48.3	7.8	39.0	64.5	10
SE	Lockwood Dr	288	28.3	2.7	22.7	32.6	10
W	Collingsworth St	290	32.2	2.9	27.2	37.0	10

LOCKWOOD DR & CRANE ST — NODE: 168

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Crane St	295	35.5	4.3	30.7	43.5	10
N	Lockwood Dr	288	9.2	2.1	6.8	14.0	10
S	Lockwood Dr	292	11.6	1.3	10.2	14.0	10
W	Crane St	294	35.6	4.1	30.8	43.0	10

LOCKWOOD DR & FIRNAT ST — NODE: 659

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Firnat St	576	30.5	3.9	22.5	36.0	10
N	Lockwood Dr	327	14.6	1.8	12.1	18.3	10
S	Lockwood Dr	574	7.9	1.3	6.2	9.8	10
W	Firnat St	575	35.0	5.2	27.7	42.8	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 197

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	492	20.5	0.8	19.3	21.8	10
SE	Marron Park Way	843	76.5	2.6	73.0	81.4	10
SW	Lockwood Dr	658	20.9	2.7	18.1	24.9	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	LRT Line	675	27.2	1.7	23.7	29.7	10
NE	Lockwood Dr	787	58.8	13.2	40.3	79.7	10
NW	Harrisburg Blvd	678	49.0	25.0	34.7	118.4	10
S	Lockwood Dr	241	69.7	19.5	44.3	105.7	10
SE	Harrisburg Blvd	244	32.9	3.7	29.1	39.6	10
W	LRT Line	676	2.8	1.4	1.2	5.9	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Harvey Wilson Dr	498	41.6	17.6	10.1	60.1	10
N	Lockwood Dr	253	22.7	3.0	19.2	30.1	10
SW	Lockwood Dr	257	10.5	1.1	8.8	12.2	10
W	Harvey Wilson Dr	497	15.3	1.2	13.0	17.2	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Hershe St	514	30.9	7.0	17.9	40.4	10
N	Lockwood Dr	512	3.8	0.4	3.1	4.6	10
S	Lockwood Dr	478	3.4	0.5	2.6	4.1	10
W	Hershe St	513	31.3	10.6	13.4	45.8	10

LOCKWOOD DR & I-45 NBFR — NODE: 148

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	218	25.6	9.1	15.3	47.5	10
NW	I-45 NBFR	222	23.5	3.4	19.5	31.6	10
SW	Lockwood Dr	224	14.0	0.7	12.9	15.4	10

LOCKWOOD DR & I-610 EBFR — NODE: 171

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-610 EBFR	307	33.9	1.8	30.6	36.7	10
N	Lockwood Dr	545	49.4	2.2	46.7	54.3	10
S	Lockwood Dr	304	11.7	1.0	9.5	13.4	10

LOCKWOOD DR & I-610 WBFR — NODE: 172

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	304	3.2	0.6	2.6	4.6	10
S	Lockwood Dr	308	38.3	4.9	30.8	46.6	10
W	I-610 WBFR	309	36.3	1.6	33.9	38.8	10

LOCKWOOD DR & KEELAND ST — NODE: 641

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Keeland St	562	22.0	10.2	4.0	40.6	10
N	Lockwood Dr	324	12.8	1.5	9.8	15.0	10
S	Lockwood Dr	560	2.3	1.0	1.1	4.5	10
W	Keeland St	561	32.9	11.1	15.1	53.4	10

LOCKWOOD DR & LYONS AVE — NODE: 165

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Lyons Ave	280	153.9	36.1	79.4	212.6	10
N	Lockwood Dr (NB)	275	16.8	1.1	14.3	18.6	10
S	Lockwood Dr	515	13.7	1.2	11.9	15.2	10
W	Lyons Ave	283	25.4	2.2	22.0	28.1	10

LOCKWOOD DR & MULVEY ST — NODE: 166

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Mulvey St	287	5.0	1.5	3.1	8.0	10
N	Lockwood Dr	478	0.3	0.1	0.2	0.5	10
S	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
W	Mulvey St	286	5.7	2.9	3.3	12.6	10

LOCKWOOD DR & MUNGER ST — NODE: 453

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Lockwood Dr	855	4.3	0.3	3.8	4.7	10
S	Munger St	460	14.9	1.8	12.0	17.9	10
SW	Lockwood Dr	230	28.6	4.6	21.9	36.9	10
W	Munger St	661	20.8	2.0	17.8	23.9	10

LOCKWOOD DR & NAVIGATION BLVD — NODE: 155

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Navigation Blvd	252	37.1	1.3	35.7	39.3	10
NE	Lockwood Dr	245	18.6	2.5	14.5	24.0	10

SW	Lockwood Dr	492	42.3	2.2	39.5	46.0	10
W	Navigation Blvd	251	40.9	2.4	37.7	45.2	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Nichols St	526	29.6	8.4	15.0	42.2	10
N	Lockwood Dr	284	5.7	0.6	4.9	6.7	10
S	Lockwood Dr	524	4.0	0.3	3.4	4.5	10
W	Nichols St	525	3.1	1.5	1.7	6.3	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Pardee St	547	34.5	4.2	28.9	43.9	10
N	Lockwood Dr	300	18.9	1.3	16.7	21.1	10
S	Lockwood Dr	545	7.6	1.2	5.9	9.2	10
W	Pardee St	546	27.0	8.0	17.0	42.4	10

LOCKWOOD DR & POLK ST **NODE: 151**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Polk St	235	37.1	4.1	31.1	44.9	10
N	Lockwood Dr	229	31.3	9.2	26.2	57.3	10
S	Lockwood Dr	238	65.3	20.0	43.1	114.4	10
W	Polk St	234	35.9	3.1	31.3	41.4	10

LOCKWOOD DR & RAND ST **NODE: 170**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Rand St	303	35.0	4.8	30.6	43.7	10
N	Lockwood Dr	296	24.4	2.3	21.2	29.4	10
S	Lockwood Dr	300	20.5	1.5	18.4	23.3	10
W	Rand St	302	27.3	1.8	23.9	29.6	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr	725	2.4	0.4	1.8	2.9	10
NE	Shreveport Blvd	316	29.7	2.5	26.4	34.7	10
S	Lockwood Dr	795	4.7	0.8	3.8	6.6	10
SW	Shreveport Blvd	315	37.2	3.1	32.5	42.1	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Sudan St	535	38.8	12.8	25.3	71.6	10
N	Lockwood Dr	524	8.9	1.7	6.6	11.3	10
S	Lockwood Dr	533	2.4	0.6	1.4	3.6	10
W	Sudan St	534	12.5	3.6	5.8	18.6	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Weaver Rd	326	31.5	3.4	25.6	37.2	10
N	Lockwood Dr	320	15.3	1.2	13.0	16.5	10
S	Lockwood Dr	324	14.8	1.7	12.3	17.8	10
W	Weaver Rd	325	30.3	1.5	28.6	33.3	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	268	5.8	0.3	5.3	6.2	10
N	Lockwood Dr (NB)	264	34.0	1.5	31.4	35.8	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Lockwood Dr (NB)	270	7.0	0.5	6.4	8.3	10
W	I-10 WBFR	276	24.0	2.0	20.5	26.7	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	262	0.9	0.3	0.4	1.4	10
N	Lockwood Dr	499	41.1	8.9	32.1	57.8	10
W	Market St	266	48.2	5.4	38.3	56.2	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	I-10 EBFR	269	41.0	3.6	36.9	47.0	10
S	Lockwood Dr (SB)	267	7.6	2.3	5.4	11.5	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
S	Lockwood Dr (SB)	272	41.4	5.4	31.6	49.1	10
W	I-10 WBFR	273	4.7	0.3	4.0	5.2	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Market St	263	48.5	13.0	38.4	78.6	10
S	Lockwood Dr (SB)	260	30.2	1.6	27.3	32.3	10
W	Market St	262	8.6	1.8	6.9	12.6	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Bennington St	319	23.4	2.4	18.8	26.2	10
N	Lockwood Dr	795	2.1	0.2	1.7	2.5	10
S	Lockwood Dr	796	5.5	1.1	3.7	7.5	10
W	Driveway	318	9.3	5.7	4.7	19.6	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST — NODE: 623

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Denmark St	550	37.0	4.9	31.9	46.8	10
N	BRT Alignment	806	54.1	14.2	24.3	72.8	10
NW	Lockwood Dr	796	4.9	0.7	3.7	5.8	10
S	Lockwood Dr	321	2.8	0.4	2.1	3.3	10
W	Denmark St	549	34.4	5.2	23.6	42.4	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST — NODE: 152

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	McKinney St	240	21.2	11.0	10.9	47.8	10
N	Lockwood Dr	238	6.0	7.4	0.0	23.0	10
S	Lockwood Dr	237	7.4	7.3	0.5	26.2	10
SW	BRT Alignment	785	0.0	0.0	0.0	0.0	10
W	McKinney St	239	15.7	8.6	7.8	37.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR — NODE: 147

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	Spur 5 NBFR	219	9.5	0.6	8.5	10.4	10
NE	Elgin St	216	27.7	3.9	23.4	34.9	10
SW	Lockwood Dr	218	26.1	1.0	24.4	28.3	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST — NODE: 150

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Leeland St	227	39.5	4.2	34.8	47.2	10
N	Lockwood Dr	230	23.5	1.9	21.1	26.3	10
S	Lockwood Dr	229	20.8	3.6	16.9	28.2	10
W	Telephone Rd	231	34.3	1.7	32.0	36.8	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
N	LRT Red Line	673	73.6	36.4	24.2	154.6	10
NE	Main St	168	99.0	18.6	78.0	134.6	10
NW	Wheeler Ave	169	73.0	8.6	61.3	90.6	10
S	Main St	70	30.8	10.7	20.7	55.5	10
SE	Richmond Ave	26	168.1	12.6	145.9	184.8	10
SW	LRT Red Line	674	3.0	8.2	0.0	26.3	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	163	69.8	14.7	48.2	95.2	10
N	Dunlavy St	57	188.9	67.3	79.3	281.1	10
S	Dunlavy St	56	1,176.3	135.9	1,053.2	1,528.0	10
W	Richmond Ave	165	13.2	2.1	10.5	16.9	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	11	29.5	2.3	26.0	32.5	10
N	Eastside St	40	93.6	66.9	44.9	261.4	10
S	Eastside St	39	50.0	12.7	33.5	73.2	10
W	Richmond Ave	54	21.9	2.6	19.4	28.3	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	7	63.7	29.5	31.6	116.5	10
N	Edloe St	155	155.8	10.8	133.3	170.0	10
S	Edloe St	5	53.7	13.8	32.3	78.6	10
W	Richmond Ave	10	55.7	9.5	44.0	69.6	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	64	41.3	7.0	35.8	59.3	10
N	Greenbriar Dr	47	44.3	5.3	37.2	52.8	10
S	Greenbriar Dr	46	30.3	1.7	28.1	33.2	10
W	Richmond Ave	160	30.1	2.0	26.8	32.7	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	20	72.4	31.8	29.9	118.2	10
N	Hazard St	51	231.9	58.7	150.2	318.4	10
S	Hazard St	50	12.5	1.9	9.2	15.6	10
W	Richmond Ave	162	0.7	1.8	0.0	5.8	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	54	101.3	32.6	68.2	176.0	10
N	Kirby Dr	158	49.8	9.5	39.1	69.6	10
S	Kirby Dr	44	48.8	3.9	42.0	56.9	10
W	Richmond Ave	64	50.6	2.8	47.4	55.0	10

RICHMOND AVE & MANDELL ST — **NODE: 127**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	165	104.4	20.0	71.6	138.9	10
N	Mandell St	59	577.6	92.5	452.1	728.2	10
S	Mandell St	58	411.9	201.6	188.0	822.1	10
W	Richmond Ave	23	33.3	12.2	25.2	66.8	10

RICHMOND AVE & MONTROSE BLVD — **NODE: 128**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	23	412.7	45.3	361.1	485.4	10
N	Montrose Blvd	61	62.8	12.3	43.0	87.1	10
S	Montrose Blvd	60	120.3	9.6	101.4	138.2	10
W	Richmond Ave	166	97.2	11.3	76.7	111.0	10

RICHMOND AVE & SHEPHERD DR — **NODE: 123**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	160	49.1	15.9	35.5	78.7	10
N	Shepherd Dr	49	42.3	2.9	39.2	48.6	10
S	Shepherd Dr	48	40.8	2.4	37.8	43.8	10
W	Richmond Ave	20	38.4	9.7	31.6	64.4	10

RICHMOND AVE & US 59 NBFR — **NODE: 130**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	167	8.1	2.1	5.1	12.3	10
NE	US 59 NBFR	69	147.1	32.2	113.7	197.6	10
W	Richmond Ave	26	73.3	7.4	66.0	87.6	10

RICHMOND AVE & US 59 SBFR — **NODE: 129**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	166	143.0	15.1	124.4	165.7	10
SW	US 59 SBFR	65	37.4	2.7	32.4	42.5	10
W	Richmond Ave	167	2.2	1.6	0.9	5.9	10

RICHMOND AVE & WOODHEAD ST — **NODE: 125**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Richmond Ave	162	54.4	12.3	38.2	70.9	10
N	Woodhead St	53	456.4	64.9	387.0	548.2	10
S	Woodhead St	52	40.7	4.8	34.9	49.5	10
W	Richmond Ave	163	13.3	2.1	10.6	18.2	10

S RICE AVE & WESTPARK DR — **NODE: 110**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	140	126.7	32.4	75.3	174.4	10
N	S Rice Ave	138	242.8	40.8	192.6	310.0	10
S	S Rice Ave	137	86.6	3.9	79.7	92.1	10
W	Westpark Dr	781	74.0	4.2	68.7	81.7	10

SAN JACINTO ST & WHEELER AVE — **NODE: 133**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	San Jacinto St	173	78.4	9.4	66.5	94.5	10
NW	Wheeler Ave	86	164.9	29.2	118.2	222.7	10
SE	Wheeler Ave	172	49.7	5.4	43.2	59.0	10

TIDWELL RD & EDELL ST — **NODE: 689**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	348	13.4	2.5	10.2	16.9	10
N	Edell St	590	15.3	3.6	11.9	21.1	10

S	Edell St	589	19.9	2.5	16.1	23.6	10
W	Tidwell Rd	652	57.9	17.4	24.8	86.0	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	338	28.4	1.5	26.2	30.4	10
N	Hirsch Rd	336	26.6	1.4	24.2	28.1	10
S	Hirsch Rd	335	37.5	3.7	34.2	46.2	10
W	Tidwell Rd	334	22.5	6.1	16.8	33.5	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	342	34.5	1.3	32.1	36.2	10
N	I-69 NBFR	340	29.6	0.8	28.7	31.5	10
W	Tidwell Rd	586	34.2	4.5	25.4	38.7	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	652	17.9	2.6	13.2	23.2	10
S	I-69 SBFR	649	51.2	12.1	39.3	75.3	10
W	Tidwell Rd	342	23.5	3.0	18.8	27.4	10

TIDWELL RD & JENSEN DR **NODE: 183**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	349	34.4	6.8	27.8	50.0	10
N	Jensen Dr	347	66.8	24.7	44.2	110.2	10
S	Jensen Dr	604	54.6	8.6	41.5	65.5	10
W	Tidwell Rd	348	171.4	24.8	119.4	204.0	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Tidwell Rd	586	14.9	1.3	12.7	16.4	10
N	Friendly Rd	585	29.7	3.8	23.5	34.1	10
W	Tidwell Rd	338	4.8	0.9	3.8	6.9	10
S	Friendly Rd	584	42.2	7.4	34.1	59.5	10
W	BRT Alignment	797	6.8	7.0	0.0	18.6	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	BRT Alignment	797	51.4	6.7	40.6	61.9	10
N	Lockwood Dr	574	39.2	3.7	34.5	45.9	10
NE	Tidwell Rd	334	16.9	1.2	14.4	18.5	10
S	Lockwood Dr	331	46.2	10.2	36.6	72.0	10
W	Tidwell Rd	333	10.1	0.9	8.7	11.7	10

WESTPARK DR & 14TH ST **NODE: 104**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	116	19.1	4.4	14.6	29.9	10
N	14th St	118	73.9	23.4	48.4	119.9	10
W	Westpark Dr	119	42.0	23.0	16.1	84.3	10

WESTPARK DR & ALDER DR **NODE: 99558**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	778	16.5	3.1	11.1	20.4	10
N	Alder Dr	718	53.2	5.9	43.8	61.0	10
W	Westpark Dr	133	12.3	1.9	10.6	15.8	10

WESTPARK DR & CHIMNEY ROCK RD — NODE: 109

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	133	99.2	13.3	88.1	126.1	10
N	Chimney Rock Rd	135	49.7	5.0	44.1	59.9	10
S	Chimney Rock Rd	134	32.2	1.4	30.1	34.3	10
W	Westpark Dr	136	129.1	40.5	77.1	183.5	10

WESTPARK DR & EDLOE ST — NODE: 115

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	152	33.9	2.9	29.7	38.7	10
N	Edloe St	29	38.6	5.5	34.5	52.5	10
S	Edloe St	153	50.1	1.9	47.4	53.3	10
W	Westpark Dr	154	53.6	12.9	44.4	88.4	10

WESTPARK DR & FONDREN RD — NODE: 102

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	114	81.4	11.6	70.4	110.4	10
N	Fondren Rd	110	10.6	0.6	10.0	11.9	10
S	Fondren Rd	112	440.2	53.8	315.9	502.3	10
W	Westpark Dr	117	425.9	83.2	332.0	552.5	10

WESTPARK DR & HILLCROFT AVE — NODE: 103

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	117	67.7	2.3	63.0	70.0	10
N	Hillcroft Ave	3	203.8	17.9	171.6	230.2	10
S	Hillcroft Ave	115	196.9	18.1	161.3	222.1	10
W	Westpark Dr	116	87.1	7.6	74.7	97.4	10

WESTPARK DR & I-69 NBFR — NODE: 106

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	123	21.0	1.4	19.2	23.6	10
NE	I-69 NBFR	126	20.3	3.7	15.2	28.0	10
W	Westpark Dr	127	25.3	2.7	22.8	29.9	10

WESTPARK DR & I-69 SBFR — NODE: 105

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	119	32.6	4.6	27.7	42.9	10
SW	I-69 SBFR	121	32.6	10.3	24.8	58.6	10
W	Westpark Dr	123	19.2	1.7	16.0	21.8	10

WESTPARK DR & LOOP CENTRAL DR — NODE: 99561

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	784	25.5	3.8	21.3	34.6	10
N	Loop Central Dr	803	35.5	2.3	31.6	38.9	10
W	Westpark Dr	146	14.1	2.5	10.5	17.7	10

WESTPARK DR & NEWCASTLE DR — NODE: 113

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	146	22.0	2.9	16.6	26.3	10
N	Newcastle Dr	148	38.3	5.5	32.6	50.9	10
S	Newcastle Dr	147	52.2	8.7	39.7	65.6	10
W	Westpark Dr	149	30.0	3.8	23.8	33.9	10

WESTPARK DR & RAMPART ST — NODE: 107

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	127	8.6	0.6	7.6	9.3	10
N	Rampart St	129	110.1	30.1	61.8	155.8	10

S	Rampart St	128	41.1	6.6	31.4	50.9	10
W	Westpark Dr	130	11.5	3.1	5.6	15.1	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	136	18.2	6.4	12.7	34.9	10
N	Royalton St	384	291.0	29.5	258.3	335.8	10
W	Westpark Dr	140	17.4	8.5	8.8	33.5	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	781	14.1	1.6	12.0	16.2	10
N	Uptown Transit Ctr	769	72.1	11.2	53.2	88.5	10
W	Westpark Dr	629	28.9	8.9	11.9	42.5	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	149	60.9	12.2	45.4	80.8	10
N	Weslayan St	151	35.9	8.1	28.5	54.8	10
S	Weslayan St	150	44.8	2.6	41.6	49.4	10
W	Westpark Dr	152	60.4	14.3	48.6	89.6	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	143	31.1	6.8	24.1	45.0	10
N	I-610 NBFR	145	40.5	2.7	37.5	44.5	10
NE	BRT Alignment	821	38.8	12.4	16.8	58.2	10
W	Westpark Dr	784	25.3	5.2	17.6	34.2	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	629	83.9	13.0	53.9	98.4	10
NE	BRT Alignment	845	47.7	10.2	35.2	66.6	10
S	Silver Line Alignment	783	69.0	38.3	18.8	117.7	10
SE	I-610 SBFR	141	46.6	5.3	37.3	52.4	10
SW	Westpark Dr	143	12.6	1.1	10.7	14.4	10
W	BRT Alignment	844	1.6	0.8	0.6	3.4	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
E	Westpark Dr	130	46.6	4.2	37.6	51.6	10
N	Renwick Dr	132	56.6	3.8	49.0	62.9	10
S	Fountain View Dr	131	56.7	2.7	51.7	60.3	10
W	Westpark Dr	778	55.0	11.6	36.1	71.1	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NE	Hutchins St	707	17.5	8.2	7.4	28.6	10
NW	Wheeler Ave	423	68.7	50.7	14.7	159.2	10
SE	Wheeler Ave	421	24.3	1.5	22.0	26.5	10
SW	Hutchins St	422	31.9	15.4	6.1	56.9	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Direction	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NW	Wheeler Ave	421	54.6	30.3	6.4	103.2	10
SE	Wheeler Ave	176	17.0	23.3	1.7	73.8	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Total Control Delay

ALABAMA ST & ENNIS ST — NODE: 141

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	732	0.8	0.2	0.5	1.3	10
NEB T	Ennis St	732	0.4	0.2	0.2	0.9	10
NWB L	Alabama St	197	0.1	0.0	0.0	0.1	10
NWB T	Alabama St	197	0.5	0.0	0.5	0.6	10
NWB TR	Alabama St	197	0.6	0.1	0.5	0.6	10
SEB L	Alabama St	193	0.8	0.1	0.7	1.1	10
SEB T	Alabama St	193	0.2	0.0	0.2	0.3	10
SEB TR	Alabama St	193	0.5	0.1	0.3	0.6	10
SWB LTR	Ennis St	740	0.3	0.0	0.2	0.4	10
SWB T	Ennis St	740	0.2	0.1	0.0	0.4	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	15.7	2.8	11.5	19.6	10
NB T	Almeda Rd	696	0.3	0.1	0.1	0.4	10
NB TR	Almeda Rd	696	1.3	0.3	0.9	1.8	10
NWB L	Wheeler Ave	176	2.3	0.4	1.4	2.8	10
NWB T	Wheeler Ave	176	0.2	0.1	0.1	0.3	10
NWB TR	Wheeler Ave	176	10.5	4.2	3.8	16.2	10
SB L	Almeda Rd	174	0.7	0.3	0.3	1.3	10
SB T	Almeda Rd	174	4.8	2.2	3.0	10.1	10
SB TR	Almeda Rd	174	4.4	2.2	2.6	10.1	10
SEB L	Wheeler Ave	77	0.3	0.1	0.2	0.5	10
SEB T	Wheeler Ave	77	0.1	0.0	0.0	0.1	10
SEB TR	Wheeler Ave	77	3.4	0.8	2.4	5.2	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	25.8	5.3	19.2	36.0	10
EB R	EB Westpark Tollway FR	111	12.4	4.3	7.7	22.8	10
NB T	Fondren Rd	38	100.1	2.0	97.4	103.9	10
NEB T	BRT Alignment	768	0.1	0.1	0.0	0.3	10
SB T	Fondren Rd	110	1.0	0.1	0.9	1.1	10
WB T	BRT Alignment	774	0.0	0.0	0.0	0.1	10

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	10	1.4	0.4	1.0	1.9	10
EB T	Richmond Ave	10	5.0	0.7	3.5	6.0	10
EB TR	Richmond Ave	10	6.7	1.1	4.7	8.2	10
NB L	Buffalo Speedway	37	14.3	2.8	9.7	18.5	10

NB T	Buffalo Speedway	37	10.4	2.8	7.4	15.6	10
NB TR	Buffalo Speedway	37	14.4	3.6	10.3	20.6	10
SB L	Buffalo Speedway	36	1.7	0.4	1.2	2.4	10
SB T	Buffalo Speedway	36	2.7	0.2	2.4	3.0	10
SB TR	Buffalo Speedway	36	3.2	0.2	2.7	3.5	10
WB L	Richmond Ave	11	5.4	0.5	4.5	6.1	10
WB T	Richmond Ave	11	5.5	1.4	4.5	8.7	10
WB TR	Richmond Ave	11	5.6	1.4	4.4	8.6	10

CLEBURNE ST & ENNIS ST **NODE: 292**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	726	0.6	0.1	0.5	0.7	10
NEB T	Ennis St	726	0.1	0.1	0.0	0.3	10
NWB LTR	Cleburne St	733	1.0	0.1	0.8	1.1	10
SEB LTR	Cleburne St	731	0.3	0.0	0.2	0.3	10
SWB LTR	Ennis St	732	0.5	0.1	0.3	0.7	10
SWB T	Ennis St	732	0.1	0.1	0.0	0.3	10

CROSSTIMBERS ST & LOCKWOOD DR **NODE: 176**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	0.8	0.1	0.7	1.2	10
EB T	Crosstimbers St	323	0.9	0.1	0.7	1.1	10
EB TR	Crosstimbers St	323	1.0	0.1	0.8	1.2	10
NB L	Lockwood Dr	321	0.7	0.1	0.5	0.9	10
NB T	Lockwood Dr	321	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	321	3.1	0.3	2.7	3.6	10
SB L	Lockwood Dr	320	0.5	0.1	0.3	0.6	10
SB T	Lockwood Dr	320	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	320	1.3	0.1	1.1	1.5	10
WB L	Crosstimbers St	322	0.8	0.2	0.6	1.1	10
WB T	Crosstimbers St	322	0.8	0.1	0.7	1.2	10
WB TR	Crosstimbers St	322	1.0	0.3	0.8	1.6	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	2.7	0.7	1.6	4.0	10
EB T	Elgin St	204	0.6	0.1	0.4	0.9	10
EB TR	Elgin St	204	0.7	0.1	0.6	1.0	10
NEB L	Cullen Blvd	207	0.6	0.1	0.4	0.8	10
NEB T	Cullen Blvd	207	1.8	0.3	1.2	2.3	10
NEB TR	Cullen Blvd	207	2.3	0.4	1.8	2.8	10
SB L	Cullen Blvd	206	1.4	0.1	1.2	1.6	10
SB T	Cullen Blvd	206	1.0	0.1	0.8	1.2	10
SB TR	Cullen Blvd	206	1.5	0.2	1.2	1.9	10
WB L	Elgin St	208	1.3	0.6	0.8	2.8	10
WB T	Elgin St	208	1.3	0.3	1.0	1.8	10
WB TR	Elgin St	208	1.5	0.2	1.2	1.9	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	702	1.1	0.2	0.7	1.3	10
NEB R	Ennis St	702	0.1	0.0	0.1	0.1	10
NWB L	Elgin St	701	0.3	0.0	0.2	0.3	10
NWB TR	Elgin St	701	1.4	0.2	1.2	1.8	10
SEB L	Elgin St	700	0.0	0.0	0.0	0.0	10
SEB TR	Elgin St	700	1.2	0.4	0.9	2.0	10
SWB L	Ennis St	195	0.0	0.0	0.0	0.1	10
SWB TR	Ennis St	195	0.3	0.0	0.2	0.3	10

ELGIN ST & GARAGE 5 — NODE: 353

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Elgin St	212	0.4	0.1	0.3	0.6	10
EB TR	Elgin St	212	0.7	0.1	0.6	0.9	10
NB R	Garage 5	409	2.1	0.1	1.9	2.3	10
WB L	Elgin St	637	0.9	0.2	0.6	1.4	10
WB T	Elgin St	637	0.0	0.0	0.0	0.0	10

ELGIN ST & SCOTT ST — NODE: 143

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	1.0	0.2	0.8	1.4	10
EB T	Elgin St	701	0.1	0.0	0.0	0.1	10
EB TR	Elgin St	701	3.2	0.5	2.4	3.8	10
NB T	LRT Line	667	0.0	0.0	0.0	0.0	10
NWB L	Scott St	693	1.5	0.3	1.1	2.0	10
NWB T	Scott St	693	1.6	0.3	1.3	2.3	10
NWB TR	Scott St	693	1.7	0.3	1.4	2.6	10
SB T	LRT Line	669	0.0	0.0	0.0	0.0	10
SEB L	Scott St	671	1.0	0.2	0.7	1.4	10
SEB T	Scott St	671	2.3	0.3	2.0	2.9	10
SEB TR	Scott St	671	2.4	0.3	2.0	2.9	10
WB L	Elgin St	204	2.6	0.7	1.8	3.7	10
WB T	Elgin St	204	1.7	0.2	1.3	2.0	10
WB TR	Elgin St	204	1.6	0.3	1.1	1.9	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	637	0.5	0.1	0.3	0.6	10
EB T	Elgin St	637	5.6	0.4	4.9	6.1	10
SB LT	Spur 5 SBFR	214	0.7	0.1	0.6	0.9	10
SB TR	Spur 5 SBFR	214	0.4	0.1	0.3	0.6	10
SWB L	Elgin St	216	1.2	0.3	0.7	1.5	10
SWB T	Elgin St	216	2.1	0.4	1.5	3.0	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	0.0	0.0	0.0	0.1	10
EB T	Elgin St	208	0.7	0.1	0.4	0.8	10
EB TR	Elgin St	208	0.8	0.2	0.5	1.1	10
NB L	UH Entrance 18	211	1.6	0.3	1.2	2.1	10
NB TR	UH Entrance 18	211	0.3	0.1	0.2	0.4	10
SB L	UH Entrance 17	210	0.3	0.1	0.2	0.4	10
SB TR	UH Entrance 17	210	0.4	0.1	0.3	0.5	10
WB L	Elgin St	212	0.6	0.1	0.5	0.9	10
WB T	Elgin St	212	0.6	0.1	0.5	0.8	10
WB TR	Elgin St	212	0.4	0.1	0.3	0.5	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	0.3	0.0	0.3	0.4	10
NEB TR	Emancipation Ave	711	0.7	0.1	0.6	0.8	10
NWB LTR	Wheeler Ave	724	2.8	2.5	0.9	6.8	10
NWB T	Wheeler Ave	724	0.1	0.0	0.1	0.1	10
SEB LTR	Wheeler Ave	423	2.6	1.0	1.8	5.2	10
SEB T	Wheeler Ave	423	0.1	0.0	0.1	0.2	10
SWB LT	Emancipation Ave	177	0.5	0.1	0.4	0.6	10
SWB TR	Emancipation Ave	177	0.5	0.1	0.4	0.6	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	740	0.6	0.1	0.5	0.8	10
NEB T	Ennis St	740	0.2	0.1	0.1	0.3	10
NWB LTR	Holman St	742	0.9	0.1	0.8	1.0	10
SEB LTR	Holman St	741	0.2	0.1	0.1	0.3	10
SWB LTR	Ennis St	702	0.2	0.0	0.2	0.3	10
SWB T	Ennis St	702	0.2	0.1	0.1	0.3	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Ennis St	698	0.0	0.0	0.0	0.1	10
NEB T	Ennis St	698	0.2	0.0	0.1	0.2	10
SEB L	Wheeler Ave	724	0.0	0.0	0.0	0.0	10
SEB LR	Wheeler Ave	724	1.0	0.1	0.9	1.1	10
SWB R	Ennis St	726	0.2	0.0	0.1	0.2	10
SWB TR	Ennis St	726	0.2	0.0	0.1	0.3	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR — NODE: 690

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Turner Dr	595	0.0	0.0	0.0	0.0	10
EB T	Turner Dr	595	0.0	0.0	0.0	0.0	10
NB LT	Edell St	589	0.0	0.0	0.0	0.0	10
SEB TR	Epsom Rd	592	0.0	0.0	0.0	0.0	10
SWB T	Tidwell TC 2 Dr	802	0.0	0.0	0.0	0.0	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	0.5	0.1	0.5	0.7	10
EB TR	Leeland St	228	0.6	0.1	0.5	0.7	10
NB L	Ernestine St	683	0.1	0.0	0.0	0.2	10
NB R	Ernestine St	683	0.0	0.0	0.0	0.0	10
SWB L	Ernestine St	411	0.2	0.0	0.1	0.3	10
SWB TR	Ernestine St	411	0.3	0.0	0.3	0.4	10
WB L	Leeland St	227	0.9	0.2	0.7	1.3	10
WB T	Leeland St	227	0.6	0.1	0.5	0.7	10

ERNESTINE ST & MUNGER ST — NODE: 399

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB TR	Ernestine St	687	0.0	0.0	0.0	0.0	10
SB L	Ernestine St	683	0.0	0.0	0.0	0.0	10
SB T	Ernestine St	683	0.0	0.0	0.0	0.0	10
WB L	Munger St	460	0.0	0.0	0.0	0.0	10
WB R	Munger St	460	0.0	0.0	0.0	0.0	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	172	1.1	0.5	0.6	2.0	10
NWB T	Wheeler Ave	172	5.8	0.4	5.3	6.4	10
SEB R	Wheeler Ave	169	0.0	0.0	0.0	0.0	10
SEB T	Wheeler Ave	169	0.1	0.0	0.1	0.1	10
SEB TR	Wheeler Ave	169	6.1	0.5	5.5	7.0	10
SWB L	Fannin St	87	3.5	1.1	2.0	4.9	10
SWB R	Fannin St	87	2.0	0.8	0.9	3.0	10
SWB T	Fannin St	87	3.2	0.4	2.6	3.7	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
EB LR	I-69 Express Lanes	30	0.0	0.0	0.0	0.0	10
NB L	Edloe St	153	0.9	0.1	0.7	1.1	10
NB T	Edloe St	153	0.0	0.0	0.0	0.1	10
NB TR	Edloe St	153	1.8	0.8	1.1	3.6	10
SB L	Edloe St	155	1.8	0.6	0.9	2.7	10
SB T	Edloe St	155	3.5	1.2	1.5	5.1	10
SB TR	Edloe St	155	12.1	2.9	6.8	16.0	10
WB LR	I-69 Express Lanes	31	5.7	1.7	2.7	8.4	10

JENSEN DR & TURNER DR **NODE: 705**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	0.0	0.0	0.0	0.0	10
NEB LT	Jensen Dr	604	0.1	0.0	0.0	0.1	10
NEB R	Jensen Dr	604	0.0	0.0	0.0	0.0	10
NEB TR	Jensen Dr	604	0.1	0.0	0.1	0.1	10
SWB L	Jensen Dr	599	0.0	0.0	0.0	0.0	10
SWB TR	Jensen Dr	599	0.1	0.0	0.1	0.2	10
WB L	Turner Dr	595	0.0	0.0	0.0	0.0	10
WB LTR	Turner Dr	595	0.0	0.0	0.0	0.0	10

KELLEY ST & LOCKWOOD DR **NODE: 173**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	1.8	0.3	1.5	2.6	10
EB T	Kelley St	313	0.4	0.0	0.3	0.5	10
EB TR	Kelley St	313	0.7	0.1	0.6	0.9	10
NB L	Lockwood Dr	308	1.7	0.2	1.4	2.2	10
NB R	Lockwood Dr	308	0.1	0.0	0.1	0.1	10
NB T	Lockwood Dr	308	3.1	0.5	2.2	4.1	10
SB L	Lockwood Dr	725	0.7	0.3	0.4	1.3	10
SB T	Lockwood Dr	725	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	725	7.8	4.4	4.5	18.8	10
WB L	Kelley St	312	0.5	0.1	0.5	0.6	10
WB T	Kelley St	312	1.4	0.1	1.3	1.5	10
WB TR	Kelley St	312	1.5	0.1	1.3	1.7	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	3.9	2.7	1.6	9.8	10
NWB T	Wheeler Ave	77	0.0	0.0	0.0	0.0	10
NWB TR	Wheeler Ave	77	15.5	2.6	11.2	19.5	10
SEB T	Wheeler Ave	86	0.0	0.0	0.0	0.0	10
SEB TR	Wheeler Ave	86	0.7	0.2	0.5	1.1	10
SWB LTR	LaBranch St	78	0.4	0.1	0.3	0.7	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	0.4	0.1	0.3	0.6	10
EB TR	Laura Koppe Rd	330	1.3	0.1	1.0	1.5	10
NB L	Lockwood Dr	560	0.7	0.1	0.5	0.9	10
NB T	Lockwood Dr	560	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	560	1.7	0.2	1.6	2.3	10
SB L	Lockwood Dr	327	0.3	0.1	0.1	0.4	10
SB T	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	327	0.4	0.1	0.2	0.7	10
WB L	Laura Koppe Rd	329	0.5	0.1	0.4	0.7	10
WB TR	Laura Koppe Rd	329	0.7	0.1	0.4	0.8	10

LOCKWOOD DR & ARMOUR DR — NODE: 156

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	658	0.0	0.0	0.0	0.0	10
NEB T	Lockwood Dr	658	0.2	0.1	0.1	0.4	10
SWB T	Lockwood Dr	253	0.0	0.0	0.0	0.0	10
WB R	Armour Dr	659	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & CANAL ST — NODE: 154

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	640	5.9	1.0	3.8	7.3	10
EB TR	Canal St	640	8.9	1.8	5.9	11.5	10
NEB L	Lockwood Dr	246	3.3	0.6	2.4	4.4	10
NEB T	Lockwood Dr	246	0.0	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	246	2.5	0.6	1.6	3.5	10
SWB L	Lockwood Dr	245	2.1	0.2	1.8	2.4	10
SWB T	Lockwood Dr	245	0.1	0.0	0.1	0.1	10
SWB TR	Lockwood Dr	245	3.6	0.4	3.0	4.5	10
WB L	Canal St	826	0.8	0.1	0.7	0.9	10
WB TR	Canal St	826	1.5	0.1	1.4	1.7	10

LOCKWOOD DR & CAVALCADE ST — NODE: 169

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	0.8	0.1	0.8	1.0	10
EB T	Cavalcade St	299	0.4	0.1	0.2	0.5	10
EB TR	Cavalcade St	299	0.6	0.1	0.4	0.7	10
NB L	Lockwood Dr	292	2.0	0.3	1.6	2.5	10
NB T	Lockwood Dr	292	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	292	3.1	0.9	2.1	5.1	10
SB L	Lockwood Dr	296	0.5	0.1	0.4	0.7	10
SB T	Lockwood Dr	296	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	296	2.6	0.4	1.9	3.1	10
WB L	Cavalcade St	298	0.7	0.1	0.5	0.8	10
WB T	Cavalcade St	298	0.7	0.1	0.6	0.8	10
WB TR	Cavalcade St	298	0.9	0.1	0.8	1.1	10

LOCKWOOD DR & CLINTON DR — NODE: 157

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	0.3	0.1	0.2	0.3	10
EB T	Clinton Dr	259	0.3	0.1	0.2	0.4	10
EB TR	Clinton Dr	259	0.5	0.1	0.4	0.7	10
NEB L	Lockwood Dr	257	0.6	0.1	0.4	0.9	10
NEB T	Lockwood Dr	257	1.7	0.2	1.3	2.0	10
NEB TR	Lockwood Dr	257	1.9	0.3	1.5	2.4	10
SB L	Lockwood Dr	256	6.0	2.0	3.6	10.9	10
SB T	Lockwood Dr	256	0.3	0.1	0.2	0.5	10
SB TR	Lockwood Dr	256	0.7	0.1	0.5	0.9	10
WB L	Clinton Dr	258	0.6	0.1	0.5	0.7	10
WB R	Clinton Dr	258	0.2	0.0	0.2	0.3	10
WB T	Clinton Dr	258	2.0	0.2	1.8	2.5	10

LOCKWOOD DR & COLLINGSWORTH ST — NODE: 167

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	0.9	0.1	0.7	1.0	10
EB T	Collingsworth St	291	0.4	0.1	0.3	0.6	10
EB TR	Collingsworth St	291	0.8	0.1	0.6	0.9	10
NB L	Lockwood Dr	533	4.0	0.6	3.2	5.2	10
NB T	Lockwood Dr	533	0.0	0.0	0.0	0.1	10

NB TR	Lockwood Dr	533	8.3	1.8	6.2	11.6	10
SEB L	Lockwood Dr	288	0.2	0.0	0.1	0.2	10
SEB T	Lockwood Dr	288	0.1	0.0	0.0	0.1	10
SEB TR	Lockwood Dr	288	3.2	0.3	2.7	3.7	10
WB L	Collingsworth St	290	0.5	0.0	0.5	0.6	10
WB T	Collingsworth St	290	0.1	0.0	0.1	0.2	10
WB TR	Collingsworth St	290	0.2	0.1	0.1	0.3	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	1.2	0.2	0.8	1.4	10
NB L	Lockwood Dr	288	0.2	0.1	0.1	0.3	10
NB T	Lockwood Dr	288	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	288	1.5	0.4	1.1	2.4	10
SB L	Lockwood Dr	292	0.2	0.1	0.1	0.3	10
SB T	Lockwood Dr	292	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	292	1.3	0.1	1.2	1.6	10
WB LTR	Crane St	294	1.1	0.1	0.9	1.3	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	0.6	0.1	0.4	0.9	10
NB L	Lockwood Dr	327	0.5	0.1	0.4	0.7	10
NB T	Lockwood Dr	327	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	327	0.7	0.1	0.5	0.9	10
SB L	Lockwood Dr	574	0.2	0.0	0.2	0.3	10
SB T	Lockwood Dr	574	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	574	0.3	0.1	0.2	0.5	10
WB LTR	Firnat St	575	0.4	0.1	0.3	0.6	10

LOCKWOOD DR & MARRON PARK WAY **NODE: 197**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	492	1.8	0.1	1.5	1.9	10
NEB T	Lockwood Dr	492	3.1	0.3	2.7	3.7	10
SEB L	Marron Park Way	843	7.3	0.3	6.8	7.7	10
SEB R	Marron Park Way	843	4.9	0.2	4.5	5.4	10
SWB L	Lockwood Dr	658	0.1	0.0	0.1	0.1	10
SWB T	Lockwood Dr	658	0.1	0.0	0.0	0.1	10
SWB TR	Lockwood Dr	658	4.1	0.7	3.3	5.1	10

LOCKWOOD DR & HARRISBURG BLVD **NODE: 153**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	LRT Line	675	0.0	0.0	0.0	0.1	10
NEB L	Lockwood Dr	787	1.3	0.4	0.7	1.9	10
NEB T	Lockwood Dr	787	0.1	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	787	7.3	1.4	5.1	9.5	10
NWB L	Harrisburg Blvd	678	1.8	0.9	1.0	4.0	10
NWB T	Harrisburg Blvd	678	1.4	0.5	1.1	2.8	10
NWB TR	Harrisburg Blvd	678	1.4	0.4	1.1	2.5	10
SB L	Lockwood Dr	241	3.7	0.6	2.9	4.7	10
SB T	Lockwood Dr	241	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	241	8.7	2.0	5.7	11.5	10
SEB L	Harrisburg Blvd	244	1.0	0.3	0.6	1.5	10
SEB T	Harrisburg Blvd	244	1.2	0.2	0.9	1.7	10
SEB TR	Harrisburg Blvd	244	1.3	0.2	1.0	1.9	10
WB T	LRT Line	676	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & HARVEY WILSON DR **NODE: 514**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Harvey Wilson Dr	498	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	253	2.1	0.6	1.3	3.5	10
NB T	Lockwood Dr	253	0.1	0.0	0.1	0.1	10
NB TR	Lockwood Dr	253	2.5	0.2	2.3	2.8	10
SWB L	Lockwood Dr	257	0.3	0.1	0.2	0.4	10
SWB T	Lockwood Dr	257	0.0	0.0	0.0	0.0	10
SWB TR	Lockwood Dr	257	1.0	0.1	0.8	1.2	10
WB L	Harvey Wilson Dr	497	0.3	0.0	0.2	0.4	10
WB R	Harvey Wilson Dr	497	0.3	0.1	0.2	0.5	10

LOCKWOOD DR & HERSHE ST **NODE: 534**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	0.2	0.0	0.1	0.2	10
NB LT	Lockwood Dr	512	0.4	0.0	0.3	0.4	10
NB T	Lockwood Dr	512	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	512	0.3	0.0	0.2	0.4	10
SB LT	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
SB T	Lockwood Dr	478	0.2	0.0	0.2	0.2	10
SB TR	Lockwood Dr	478	0.1	0.0	0.1	0.2	10
WB LTR	Hershe St	513	0.1	0.0	0.0	0.2	10

LOCKWOOD DR & I-45 NBFR **NODE: 148**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	3.6	1.3	2.1	6.9	10
NWB L	I-45 NBFR	222	1.1	0.1	1.0	1.3	10
NWB LT	I-45 NBFR	222	2.4	0.3	2.1	3.3	10
NWB T	I-45 NBFR	222	3.4	0.5	2.9	4.6	10
NWB TR	I-45 NBFR	222	5.3	1.0	4.0	7.7	10
SWB T	Lockwood Dr	224	0.0	0.0	0.0	0.1	10
SWB TR	Lockwood Dr	224	1.4	0.1	1.2	1.5	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	1.6	0.1	1.5	1.8	10
EB LT	I-610 EBFR	307	1.7	0.1	1.5	1.8	10
EB TR	I-610 EBFR	307	1.7	0.3	1.1	2.2	10
NB R	Lockwood Dr	545	0.6	0.2	0.4	0.9	10
NB T	Lockwood Dr	545	9.3	0.6	8.5	10.6	10
SB LT	Lockwood Dr	304	0.7	0.1	0.5	0.8	10
SB T	Lockwood Dr	304	0.8	0.1	0.6	1.0	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	0.1	0.0	0.0	0.1	10
NB LT	Lockwood Dr	304	0.3	0.2	0.2	0.7	10
NB T	Lockwood Dr	304	0.4	0.1	0.3	0.5	10
SB T	Lockwood Dr	308	5.2	0.6	4.1	6.5	10
WB L	I-610 WBFR	309	0.7	0.1	0.6	0.9	10
WB LT	I-610 WBFR	309	1.8	0.1	1.7	2.0	10
WB R	Lockwood Dr	308	0.7	0.2	0.4	1.1	10
WB TR	I-610 WBFR	309	2.0	0.2	1.8	2.3	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	324	0.0	0.0	0.0	0.1	10
NB T	Lockwood Dr	324	0.0	0.0	0.0	0.0	10

NB TR	Lockwood Dr	324	1.3	0.1	1.1	1.6	10
SB L	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB T	Lockwood Dr	560	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	560	0.2	0.1	0.1	0.3	10
WB LTR	Keeland St	561	0.1	0.0	0.0	0.2	10

LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Lyons Ave	280	14.0	3.2	6.9	18.4	10
NB LT	Lockwood Dr (NB)	275	1.7	0.1	1.5	1.8	10
NB T	Lockwood Dr (NB)	275	0.2	0.0	0.1	0.2	10
NB TR	Lockwood Dr (NB)	275	1.7	0.2	1.4	2.0	10
SB LT	Lockwood Dr	515	0.8	0.1	0.6	1.0	10
SB T	Lockwood Dr	515	0.2	0.0	0.2	0.3	10
SB TR	Lockwood Dr	515	1.0	0.1	0.8	1.1	10
WB L	Lyons Ave	283	0.9	0.1	0.8	1.1	10
WB TR	Lyons Ave	283	0.9	0.1	0.8	1.1	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Mulvey St	287	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	478	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
WB R	Mulvey St	286	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.0	0.0	0.0	0.0	10
EB T	Munger St	460	0.3	0.0	0.2	0.4	10
NEB L	Lockwood Dr	855	0.0	0.0	0.0	0.0	10
NEB T	Lockwood Dr	855	0.0	0.0	0.0	0.1	10
NEB TR	Lockwood Dr	855	0.8	0.1	0.7	0.9	10
SB R	Munger St	460	0.0	0.0	0.0	0.0	10
SWB L	Lockwood Dr	230	0.1	0.0	0.1	0.2	10
SWB T	Lockwood Dr	230	0.0	0.0	0.0	0.1	10
SWB TR	Lockwood Dr	230	2.6	0.6	1.8	3.9	10
WB L	Munger St	661	0.2	0.0	0.1	0.3	10
WB TR	Munger St	661	0.1	0.0	0.1	0.1	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	1.3	0.1	1.1	1.5	10
EB T	Navigation Blvd	252	1.7	0.1	1.5	2.0	10
EB TR	Navigation Blvd	252	2.1	0.2	1.9	2.3	10
NEB L	Lockwood Dr	245	0.9	0.1	0.7	1.0	10
NEB T	Lockwood Dr	245	0.0	0.0	0.0	0.0	10
NEB TR	Lockwood Dr	245	2.0	0.4	1.5	2.8	10
SWB L	Lockwood Dr	492	2.8	0.5	2.3	3.6	10
SWB R	Lockwood Dr	492	0.2	0.0	0.2	0.3	10
SWB T	Lockwood Dr	492	4.0	0.2	3.7	4.5	10
WB L	Navigation Blvd	251	1.6	0.2	1.3	1.9	10
WB T	Navigation Blvd	251	2.4	0.3	2.0	3.0	10
WB TR	Navigation Blvd	251	3.0	0.4	2.5	3.7	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples

EB LTR	Nichols St	526	0.2	0.1	0.1	0.2	10
NB LT	Lockwood Dr	284	0.5	0.1	0.4	0.6	10
NB T	Lockwood Dr	284	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	284	0.4	0.1	0.3	0.6	10
SB LT	Lockwood Dr	524	0.2	0.0	0.2	0.3	10
SB T	Lockwood Dr	524	0.2	0.0	0.2	0.2	10
SB TR	Lockwood Dr	524	0.2	0.0	0.1	0.2	10
WB LTR	Nichols St	525	0.0	0.0	0.0	0.0	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	0.4	0.0	0.4	0.5	10
NB L	Lockwood Dr	300	0.1	0.0	0.1	0.2	10
NB T	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	300	3.7	0.3	3.3	4.3	10
SB L	Lockwood Dr	545	0.1	0.0	0.0	0.2	10
SB T	Lockwood Dr	545	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	545	1.2	0.2	1.0	1.5	10
WB LTR	Pardee St	546	0.1	0.0	0.1	0.2	10

LOCKWOOD DR & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	0.8	0.2	0.6	1.1	10
EB T	Polk St	235	1.0	0.2	0.8	1.3	10
EB TR	Polk St	235	1.4	0.3	1.0	2.1	10
NB L	Lockwood Dr	229	1.3	0.4	1.0	2.2	10
NB T	Lockwood Dr	229	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	229	3.2	0.5	2.5	4.3	10
SB L	Lockwood Dr	238	5.0	1.3	2.8	7.4	10
SB T	Lockwood Dr	238	0.1	0.0	0.1	0.1	10
SB TR	Lockwood Dr	238	5.6	1.6	2.4	7.5	10
WB L	Polk St	234	1.4	0.2	1.1	1.7	10
WB T	Polk St	234	1.0	0.1	0.8	1.1	10
WB TR	Polk St	234	1.3	0.2	1.0	1.5	10

LOCKWOOD DR & RAND ST **NODE: 170**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	0.8	0.2	0.6	1.2	10
NB L	Lockwood Dr	296	0.1	0.0	0.0	0.2	10
NB T	Lockwood Dr	296	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	296	4.4	0.5	3.9	5.5	10
SB L	Lockwood Dr	300	0.7	0.1	0.5	0.9	10
SB T	Lockwood Dr	300	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	300	2.5	0.2	2.1	2.8	10
WB LTR	Rand St	302	0.9	0.1	0.8	1.0	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	725	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	725	0.3	0.1	0.2	0.3	10
NEB LT	Shreveport Blvd	316	0.5	0.0	0.4	0.5	10
NEB TR	Shreveport Blvd	316	0.1	0.0	0.1	0.2	10
SB L	Lockwood Dr	795	0.2	0.0	0.1	0.2	10
SB TR	Lockwood Dr	795	0.3	0.1	0.1	0.4	10
SWB LT	Shreveport Blvd	315	1.3	0.2	0.9	1.4	10
SWB TR	Shreveport Blvd	315	0.1	0.0	0.0	0.2	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	0.1	0.0	0.0	0.1	10
NB L	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB T	Lockwood Dr	524	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	524	1.5	0.3	1.1	2.0	10
SB L	Lockwood Dr	533	0.0	0.0	0.0	0.1	10
SB T	Lockwood Dr	533	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	533	0.4	0.1	0.2	0.6	10
WB LTR	Sudan St	534	0.1	0.0	0.0	0.1	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	0.3	0.1	0.2	0.4	10
EB TR	Weaver Rd	326	0.7	0.1	0.6	0.9	10
NB L	Lockwood Dr	320	0.3	0.0	0.3	0.4	10
NB T	Lockwood Dr	320	0.0	0.0	0.0	0.1	10
NB TR	Lockwood Dr	320	1.3	0.2	1.0	1.5	10
SB L	Lockwood Dr	324	0.4	0.0	0.3	0.4	10
SB T	Lockwood Dr	324	0.0	0.0	0.0	0.1	10
SB TR	Lockwood Dr	324	0.6	0.1	0.5	0.9	10
WB L	Weaver Rd	325	0.5	0.1	0.4	0.7	10
WB TR	Weaver Rd	325	1.4	0.2	1.1	1.6	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	0.1	0.0	0.1	0.2	10
EB LT	I-10 EBFR	268	0.5	0.0	0.4	0.5	10
EB T	I-10 EBFR	268	0.5	0.0	0.4	0.5	10
NB T	Lockwood Dr (NB)	264	3.0	0.3	2.5	3.5	10
NB TR	Lockwood Dr (NB)	264	3.9	0.3	3.5	4.4	10

LOCKWOOD DR (NB) & I-10 WBFR **NODE: 163**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr (NB)	270	1.0	0.1	1.0	1.2	10
NB T	Lockwood Dr (NB)	270	0.6	0.1	0.5	0.8	10
WB T	I-10 WBFR	276	2.3	0.3	1.8	2.8	10
WB TR	I-10 WBFR	276	0.5	0.1	0.4	0.6	10

LOCKWOOD DR (NB) & MARKET ST **NODE: 159**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	0.0	0.0	0.0	0.1	10
EB T	Market St	262	0.0	0.0	0.0	0.0	10
NB LT	Lockwood Dr	499	2.7	0.6	1.9	3.7	10
NB T	Lockwood Dr	499	0.1	0.0	0.1	0.2	10
NB TR	Lockwood Dr	499	5.4	1.4	4.0	8.1	10
WB T	Market St	266	0.4	0.1	0.3	0.5	10
WB TR	Market St	266	0.1	0.0	0.0	0.2	10

LOCKWOOD DR (SB) & I-10 EBFR **NODE: 160**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	4.5	0.5	3.9	5.4	10
EB TR	I-10 EBFR	269	0.8	0.1	0.7	0.9	10
SB LT	Lockwood Dr (SB)	267	0.7	0.1	0.5	0.8	10
SB T	Lockwood Dr (SB)	267	0.9	0.5	0.5	1.7	10

LOCKWOOD DR (SB) & I-10 WBFR **NODE: 162**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	4.8	0.8	3.4	5.9	10

SB TR	Lockwood Dr (SB)	272	3.0	0.4	2.3	3.6	10
WB L	I-10 WBFR	273	0.0	0.0	0.0	0.1	10
WB LT	I-10 WBFR	273	0.3	0.0	0.2	0.4	10
WB T	I-10 WBFR	273	0.3	0.0	0.2	0.3	10

LOCKWOOD DR (SB) & MARKET ST **NODE: 158**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	1.6	0.5	1.1	2.7	10
EB TR	Market St	263	0.1	0.0	0.1	0.1	10
SB LT	Lockwood Dr (SB)	260	2.1	0.2	1.8	2.3	10
SB T	Lockwood Dr (SB)	260	0.1	0.0	0.1	0.2	10
SB TR	Lockwood Dr (SB)	260	2.4	0.2	2.2	2.8	10
WB LT	Market St	262	0.2	0.1	0.1	0.3	10
WB T	Market St	262	0.0	0.0	0.0	0.1	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY **NODE: 175**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	0.9	0.1	0.6	1.1	10
EB R	Bennington St	319	0.1	0.0	0.1	0.2	10
NB L	Lockwood Dr	795	0.1	0.0	0.1	0.1	10
NB TR	Lockwood Dr	795	0.1	0.0	0.1	0.2	10
SB LTR	Lockwood Dr	796	0.4	0.1	0.3	0.6	10
WB LTR	Driveway	318	0.0	0.0	0.0	0.0	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST **NODE: 623**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	0.9	0.2	0.7	1.2	10
NB T	BRT Alignment	806	0.1	0.0	0.0	0.1	10
NWB LTR	Lockwood Dr	796	0.5	0.1	0.4	0.7	10
SB LTR	Lockwood Dr	321	0.1	0.0	0.1	0.2	10
SB T	Lockwood Dr	321	0.1	0.0	0.1	0.1	10
WB LTR	Denmark St	549	0.3	0.1	0.2	0.5	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	McKinney St	240	0.2	0.2	0.1	0.7	10
NB T	Lockwood Dr	238	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	238	0.9	0.9	0.0	2.6	10
SB TR	Lockwood Dr	237	1.2	0.9	0.1	3.4	10
SWB T	BRT Alignment	785	0.0	0.0	0.0	0.0	10
WB R	McKinney St	239	0.1	0.1	0.1	0.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	0.4	0.1	0.3	0.5	10
NB TR	Spur 5 NBFR	219	0.9	0.1	0.8	1.0	10
NEB L	Elgin St	216	0.7	0.2	0.5	1.1	10
NEB T	Elgin St	216	4.6	0.8	3.9	6.1	10
SWB T	Lockwood Dr	218	1.5	0.1	1.2	1.7	10
SWB TR	Lockwood Dr	218	1.8	0.1	1.6	2.1	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	0.9	0.3	0.6	1.4	10
EB T	Leeland St	227	0.9	0.2	0.6	1.1	10
EB TR	Leeland St	227	0.9	0.1	0.7	1.0	10
NB L	Lockwood Dr	230	0.4	0.1	0.3	0.5	10
NB T	Lockwood Dr	230	0.0	0.0	0.0	0.1	10

NB TR	Lockwood Dr	230	3.4	0.3	3.0	4.0	10
SB L	Lockwood Dr	229	0.7	0.1	0.6	0.9	10
SB T	Lockwood Dr	229	0.1	0.0	0.0	0.1	10
SB TR	Lockwood Dr	229	1.5	0.4	1.1	2.3	10
WB L	Telephone Rd	231	1.1	0.3	0.7	1.8	10
WB T	Telephone Rd	231	0.7	0.1	0.6	0.8	10
WB TR	Telephone Rd	231	1.6	0.1	1.4	1.9	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Red Line	673	0.2	0.1	0.1	0.4	10
NEB L	Main St	168	9.5	1.0	7.8	10.7	10
NEB R	Main St	168	3.3	1.5	1.1	5.9	10
NWB T	Wheeler Ave	169	5.5	0.5	4.9	6.4	10
NWB TR	Wheeler Ave	169	5.5	0.5	5.0	6.7	10
SB R	Main St	70	0.8	0.3	0.5	1.3	10
SEB R	Richmond Ave	26	2.7	0.5	1.9	3.9	10
SEB T	Richmond Ave	26	15.9	0.8	15.0	17.3	10
SWB T	LRT Red Line	674	0.0	0.0	0.0	0.1	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	1.8	0.3	1.4	2.2	10
EB T	Richmond Ave	163	0.0	0.0	0.0	0.1	10
EB TR	Richmond Ave	163	7.9	1.5	5.7	10.3	10
NB LTR	Dunlavy St	57	11.0	2.7	5.4	13.9	10
SB LTR	Dunlavy St	56	27.8	4.7	21.6	37.2	10
WB L	Richmond Ave	165	0.6	0.2	0.3	0.9	10
WB T	Richmond Ave	165	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	165	1.3	0.3	0.8	1.8	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	11	3.0	0.3	2.6	3.4	10
EB T	Richmond Ave	11	2.1	0.2	1.8	2.5	10
EB TR	Richmond Ave	11	2.6	0.3	2.2	3.2	10
NB L	Eastside St	40	2.7	1.5	1.4	6.3	10
NB TR	Eastside St	40	2.0	1.8	0.7	6.5	10
SB L	Eastside St	39	1.9	0.4	1.2	2.3	10
SB TR	Eastside St	39	3.9	1.2	2.5	6.5	10
WB L	Richmond Ave	54	0.5	0.1	0.3	0.7	10
WB T	Richmond Ave	54	2.6	0.4	2.1	3.4	10
WB TR	Richmond Ave	54	2.8	0.3	2.4	3.5	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	2.2	0.7	1.3	3.4	10
EB R	Richmond Ave	7	1.8	1.3	0.1	3.9	10
EB T	Richmond Ave	7	11.6	5.4	6.1	21.2	10
NB L	Edloe St	155	19.0	1.2	17.1	20.9	10
NB R	Edloe St	155	0.2	0.0	0.2	0.3	10
NB T	Edloe St	155	4.0	0.5	3.1	4.7	10
NB TR	Edloe St	155	5.2	0.4	4.5	5.8	10
SB L	Edloe St	5	2.2	0.7	1.0	3.2	10
SB T	Edloe St	5	3.8	1.4	2.1	6.1	10
SB TR	Edloe St	5	3.7	1.1	2.3	5.7	10
WB L	Richmond Ave	10	6.4	1.7	4.5	8.9	10
WB T	Richmond Ave	10	4.9	0.7	4.0	6.0	10

WB TR	Richmond Ave	10	5.3	0.9	4.1	7.0	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	2.6	0.6	1.9	3.9	10
EB T	Richmond Ave	64	0.1	0.0	0.0	0.1	10
EB TR	Richmond Ave	64	4.1	0.8	3.4	6.4	10
NB LTR	Greenbriar Dr	47	3.1	0.5	2.5	4.1	10
SB LT	Greenbriar Dr	46	1.9	0.1	1.7	2.1	10
SB R	Greenbriar Dr	46	0.2	0.0	0.2	0.3	10
SB T	Greenbriar Dr	46	2.0	0.2	1.8	2.3	10
WB L	Richmond Ave	160	1.6	0.3	1.3	2.0	10
WB T	Richmond Ave	160	0.1	0.0	0.0	0.1	10
WB TR	Richmond Ave	160	2.2	0.3	1.7	2.7	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	20	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	20	7.1	3.1	3.2	11.6	10
NB R	Hazard St	51	15.0	3.6	10.1	21.2	10
SB R	Hazard St	50	0.5	0.1	0.3	0.6	10
WB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	162	0.1	0.3	0.0	0.9	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	9.5	3.3	5.6	16.6	10
EB T	Richmond Ave	54	7.2	2.3	3.9	11.5	10
EB TR	Richmond Ave	54	8.2	2.8	4.5	13.2	10
NB L	Kirby Dr	158	6.7	2.4	3.7	11.7	10
NB T	Kirby Dr	158	10.5	1.2	8.9	12.5	10
NB TR	Kirby Dr	158	6.7	1.0	5.2	8.9	10
SB L	Kirby Dr	44	3.4	1.0	2.0	5.5	10
SB T	Kirby Dr	44	11.0	0.6	10.4	12.3	10
SB TR	Kirby Dr	44	6.6	0.4	6.2	7.5	10
WB L	Richmond Ave	64	0.9	0.1	0.7	1.1	10
WB T	Richmond Ave	64	2.6	0.2	2.2	2.9	10
WB TR	Richmond Ave	64	2.8	0.3	2.4	3.2	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	1.0	0.1	0.8	1.2	10
EB T	Richmond Ave	165	0.1	0.0	0.1	0.1	10
EB TR	Richmond Ave	165	11.0	1.9	7.7	14.2	10
NB LTR	Mandell St	59	30.0	1.9	26.5	32.2	10
SB LTR	Mandell St	864	16.6	7.3	8.9	32.2	10
WB L	Richmond Ave	23	1.8	0.7	1.1	3.4	10
WB T	Richmond Ave	23	0.0	0.0	0.0	0.1	10
WB TR	Richmond Ave	23	3.2	1.3	2.4	6.7	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	16.4	1.4	14.8	19.8	10
EB T	Richmond Ave	23	0.1	0.0	0.0	0.1	10
EB TR	Richmond Ave	23	42.3	3.8	37.4	49.1	10
NB L	Montrose Blvd	61	4.1	0.6	3.1	5.2	10
NB T	Montrose Blvd	61	4.5	1.3	2.9	7.4	10
NB TR	Montrose Blvd	61	6.5	1.4	4.0	9.3	10

SB L	Montrose Blvd	60	3.6	0.7	2.7	4.9	10
SB T	Montrose Blvd	60	13.8	1.3	10.8	15.2	10
SB TR	Montrose Blvd	60	17.2	1.3	14.9	18.7	10
WB L	Richmond Ave	166	3.5	0.8	2.1	4.8	10
WB T	Richmond Ave	166	0.1	0.0	0.0	0.1	10
WB TR	Richmond Ave	166	13.3	1.8	10.4	16.4	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	0.1	0.0	0.0	0.2	10
EB T	Richmond Ave	160	0.1	0.0	0.1	0.1	10
EB TR	Richmond Ave	160	3.1	1.1	2.1	5.2	10
NB T	Shepherd Dr	49	2.7	0.3	2.4	3.0	10
NB TR	Shepherd Dr	49	2.8	0.3	2.4	3.5	10
SB T	Shepherd Dr	48	2.6	0.3	2.3	3.0	10
SB TR	Shepherd Dr	48	2.8	0.2	2.4	3.1	10
WB L	Richmond Ave	20	2.8	0.6	2.2	4.4	10
WB T	Richmond Ave	20	0.1	0.0	0.0	0.1	10
WB TR	Richmond Ave	20	3.0	0.8	2.3	5.1	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	0.1	0.1	0.0	0.4	10
EB T	Richmond Ave	167	1.1	0.3	0.7	1.6	10
NEB LT	US 59 NBFR	69	2.7	0.5	1.9	3.3	10
NEB R	US 59 NBFR	69	0.5	0.2	0.2	1.0	10
NEB TR	US 59 NBFR	69	5.7	1.5	4.1	8.7	10
WB R	Richmond Ave	26	5.7	0.4	4.9	6.3	10
WB T	Richmond Ave	26	5.9	0.2	5.6	6.2	10
WB TR	Richmond Ave	26	6.8	0.6	6.1	8.1	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	6.4	0.6	5.3	7.5	10
EB TR	Richmond Ave	166	16.6	1.7	14.1	18.6	10
SWB LT	US 59 SBFR	65	1.7	0.2	1.4	2.0	10
SWB R	US 59 SBFR	65	0.6	0.2	0.3	0.8	10
SWB T	US 59 SBFR	65	1.5	0.1	1.3	1.7	10
WB L	Richmond Ave	167	0.0	0.0	0.0	0.0	10
WB T	Richmond Ave	167	0.4	0.3	0.2	1.1	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	2.7	0.3	2.0	3.1	10
EB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	162	6.2	1.6	4.1	8.4	10
NB LTR	Woodhead St	53	25.9	3.1	18.9	30.0	10
SB LTR	Woodhead St	52	1.5	0.2	1.2	1.8	10
WB L	Richmond Ave	163	0.8	0.2	0.6	1.2	10
WB T	Richmond Ave	163	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	163	0.9	0.2	0.6	1.2	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	12.2	4.0	6.9	19.7	10
EB T	Westpark Dr	140	7.5	1.8	4.5	11.2	10
EB TR	Westpark Dr	140	7.5	1.7	4.6	10.6	10
NB L	S Rice Ave	138	24.5	5.5	16.8	34.8	10

NB T	S Rice Ave	138	19.0	3.9	13.4	26.5	10
NB TR	S Rice Ave	138	17.9	2.6	14.5	21.9	10
SB L	S Rice Ave	137	5.0	1.0	3.8	6.8	10
SB R	S Rice Ave	137	0.0	0.0	0.0	0.1	10
SB T	S Rice Ave	137	6.2	0.8	4.4	7.1	10
SB TR	S Rice Ave	137	6.1	0.8	4.4	7.1	10
WB L	Westpark Dr	781	10.8	1.3	8.9	12.6	10
WB T	Westpark Dr	781	10.6	1.1	8.9	13.1	10
WB TR	Westpark Dr	781	7.5	0.9	6.3	9.2	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	17.2	2.9	13.9	21.0	10
NEB R	San Jacinto St	173	0.1	0.0	0.1	0.2	10
NEB T	San Jacinto St	173	6.4	0.6	5.6	7.3	10
NWB T	Wheeler Ave	86	0.2	0.0	0.1	0.2	10
NWB TR	Wheeler Ave	86	16.9	1.5	15.1	19.5	10
SEB LT	Wheeler Ave	172	6.0	0.4	5.3	6.5	10
SEB T	Wheeler Ave	172	0.2	0.0	0.1	0.2	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	348	0.1	0.0	0.1	0.1	10
EB T	Tidwell Rd	348	0.0	0.0	0.0	0.0	10
EB TR	Tidwell Rd	348	3.4	0.7	2.5	4.5	10
NB LTR	Edell St	590	0.2	0.1	0.2	0.4	10
SB LTR	Edell St	589	0.2	0.0	0.1	0.3	10
WB L	Tidwell Rd	652	0.3	0.2	0.1	0.7	10
WB T	Tidwell Rd	652	0.0	0.0	0.0	0.0	10
WB TR	Tidwell Rd	652	14.1	4.2	6.1	21.3	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	0.9	0.2	0.6	1.1	10
EB T	Tidwell Rd	338	3.6	0.2	3.2	3.9	10
EB TR	Tidwell Rd	338	3.9	0.3	3.4	4.4	10
NB L	Hirsch Rd	336	0.9	0.1	0.7	1.1	10
NB T	Hirsch Rd	336	0.5	0.1	0.4	0.7	10
NB TR	Hirsch Rd	336	0.6	0.1	0.5	0.7	10
SB L	Hirsch Rd	335	1.2	0.3	0.8	1.7	10
SB T	Hirsch Rd	335	0.5	0.1	0.3	0.6	10
SB TR	Hirsch Rd	335	0.8	0.1	0.6	1.1	10
WB L	Tidwell Rd	334	0.3	0.1	0.2	0.4	10
WB T	Tidwell Rd	334	2.7	0.8	2.0	4.2	10
WB TR	Tidwell Rd	334	3.6	1.1	2.7	5.7	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	3.3	0.3	2.8	3.8	10
EB LT	Tidwell Rd	342	5.0	0.4	4.5	5.7	10
EB T	Tidwell Rd	342	2.4	0.2	1.9	2.8	10
NB L	I-69 NBFR	340	1.9	0.1	1.8	2.2	10
NB LT	I-69 NBFR	340	2.3	0.1	2.0	2.5	10
NB R	I-69 NBFR	340	0.6	0.1	0.4	0.7	10
NB T	I-69 NBFR	340	2.0	0.1	1.9	2.2	10
NB TR	I-69 NBFR	340	1.9	0.1	1.8	2.1	10
WB T	Tidwell Rd	586	5.2	0.6	4.0	6.0	10
WB TR	Tidwell Rd	586	5.7	1.0	3.9	6.8	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	652	0.2	0.1	0.1	0.3	10
EB T	Tidwell Rd	652	4.5	0.7	3.3	5.8	10
SB L	I-69 SBFR	649	3.9	0.8	2.7	5.4	10
SB LT	I-69 SBFR	649	3.2	0.8	2.2	4.9	10
SB R	I-69 SBFR	649	2.0	2.1	0.0	7.6	10
SB T	I-69 SBFR	649	1.9	0.2	1.5	2.1	10
WB L	Tidwell Rd	342	1.5	0.3	1.2	2.1	10
WB LT	Tidwell Rd	342	2.9	0.3	2.4	3.4	10
WB T	Tidwell Rd	342	2.7	0.7	1.7	3.9	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	1.8	0.2	1.3	2.1	10
EB TR	Tidwell Rd	349	6.0	1.8	4.4	10.2	10
NB L	Jensen Dr	347	5.2	2.5	2.8	10.1	10
NB T	Jensen Dr	347	2.0	0.6	1.4	3.4	10
NB TR	Jensen Dr	347	3.5	1.1	2.3	5.4	10
SB L	Jensen Dr	604	1.6	0.2	1.3	1.9	10
SB TR	Jensen Dr	604	4.3	0.9	2.9	5.4	10
WB L	Tidwell Rd	348	1.5	0.4	1.0	2.3	10
WB R	Tidwell Rd	348	0.1	0.0	0.0	0.1	10
WB TR	Tidwell Rd	348	34.9	5.0	23.9	41.5	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	0.8	0.1	0.7	1.0	10
EB T	Tidwell Rd	586	1.6	0.2	1.3	1.8	10
EB TR	Tidwell Rd	586	2.2	0.2	1.9	2.6	10
NB LTR	Friendly Rd	585	0.2	0.0	0.1	0.3	10
WB L	Tidwell Rd	338	0.1	0.0	0.1	0.1	10
WB T	Tidwell Rd	338	0.6	0.2	0.5	1.0	10
WB TR	Tidwell Rd	338	0.8	0.2	0.6	1.1	10
SB TR	Friendly Rd	584	1.8	0.4	1.4	2.7	10
WB T	BRT Alignment	797	0.0	0.0	0.0	0.0	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	BRT Alignment	797	0.1	0.0	0.1	0.2	10
NB L	Lockwood Dr	574	0.1	0.0	0.0	0.1	10
NB R	Lockwood Dr	574	0.3	0.1	0.2	0.6	10
NB T	Lockwood Dr	574	2.7	0.3	2.2	3.1	10
NEB LT	Tidwell Rd	334	2.2	0.2	1.9	2.5	10
NEB TR	Tidwell Rd	334	2.4	0.3	2.1	2.9	10
SB L	Lockwood Dr	331	0.1	0.0	0.1	0.2	10
SB TR	Lockwood Dr	331	0.4	0.1	0.3	0.7	10
WB L	Tidwell Rd	333	0.9	0.2	0.7	1.5	10
WB T	Tidwell Rd	333	0.9	0.1	0.8	1.1	10
WB TR	Tidwell Rd	333	0.9	0.1	0.8	1.0	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	4.4	1.1	3.5	7.0	10
EB TR	Westpark Dr	116	1.6	0.4	1.1	2.5	10
NB L	14th St	118	5.1	1.6	3.0	8.6	10
NB R	14th St	118	0.2	0.0	0.1	0.3	10

WB L	Westpark Dr	119	1.1	0.3	0.7	1.7	10
WB T	Westpark Dr	119	17.6	9.8	6.0	34.7	10

WESTPARK DR & ALDER DR **NODE: 99558**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	778	2.5	0.5	1.7	3.3	10
EB TR	Westpark Dr	778	2.4	0.5	1.7	3.1	10
NB LR	Alder Dr	718	3.9	0.4	3.2	4.6	10
WB LT	Westpark Dr	133	1.2	0.2	1.0	1.6	10
WB T	Westpark Dr	133	0.9	0.2	0.7	1.2	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	5.9	1.0	4.2	7.8	10
EB T	Westpark Dr	133	9.1	1.6	7.4	12.1	10
EB TR	Westpark Dr	133	8.8	1.6	7.3	12.2	10
NB T	Chimney Rock Rd	135	4.2	0.6	3.4	5.3	10
NB TR	Chimney Rock Rd	135	4.6	0.7	3.7	5.8	10
SB L	Chimney Rock Rd	134	3.1	0.3	2.6	3.5	10
SB T	Chimney Rock Rd	134	3.1	0.2	2.8	3.4	10
SB TR	Chimney Rock Rd	134	3.2	0.2	2.9	3.5	10
WB L	Westpark Dr	136	5.0	2.0	2.6	7.8	10
WB T	Westpark Dr	136	9.1	2.7	5.6	13.5	10
WB TR	Westpark Dr	136	12.9	3.7	8.0	18.8	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	1.4	0.3	1.0	1.7	10
EB TR	Westpark Dr	152	2.9	0.3	2.5	3.3	10
NB L	Edloe St	29	0.4	0.1	0.3	0.6	10
NB R	Edloe St	29	0.1	0.0	0.1	0.2	10
NB T	Edloe St	29	4.9	0.7	4.1	6.3	10
SB L	Edloe St	153	1.8	0.4	1.2	2.6	10
SB R	Edloe St	153	0.2	0.0	0.2	0.3	10
SB TR	Edloe St	153	6.4	0.3	6.0	6.9	10
WB L	Westpark Dr	154	1.9	0.2	1.5	2.3	10
WB T	Westpark Dr	154	5.0	1.2	4.0	7.9	10
WB TR	Westpark Dr	154	6.0	1.3	4.7	9.0	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	1.8	0.4	1.3	2.5	10
EB T	Westpark Dr	114	16.7	2.4	14.9	22.8	10
EB TR	Westpark Dr	114	10.2	1.3	8.7	13.1	10
NB L	Fondren Rd	110	0.8	0.1	0.7	0.9	10
NB T	Fondren Rd	110	1.2	0.1	1.0	1.3	10
NB TR	Fondren Rd	110	0.8	0.1	0.7	1.0	10
SB L	Fondren Rd	112	41.8	5.1	29.9	47.8	10
SB T	Fondren Rd	112	45.2	5.3	33.6	51.9	10
SB TR	Fondren Rd	112	31.2	3.2	24.3	35.5	10
WB L	Westpark Dr	117	41.5	4.2	36.4	49.3	10
WB T	Westpark Dr	117	43.0	9.0	34.6	57.7	10
WB TR	Westpark Dr	117	41.2	8.3	29.4	56.0	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	117	2.3	0.5	1.8	3.4	10
EB T	Westpark Dr	117	15.2	0.7	13.3	16.1	10

EB TR	Westpark Dr	117	9.0	0.4	8.6	9.7	10
NB L	Hillcroft Ave	3	24.5	2.8	21.9	29.6	10
NB T	Hillcroft Ave	3	20.8	2.6	15.2	23.1	10
NB TR	Hillcroft Ave	3	18.6	2.1	14.5	20.9	10
SB L	Hillcroft Ave	115	19.6	1.5	16.8	21.2	10
SB T	Hillcroft Ave	115	26.2	3.9	18.9	32.3	10
SB TR	Hillcroft Ave	115	21.9	2.7	16.7	25.7	10
WB L	Westpark Dr	116	4.0	0.8	3.0	5.7	10
WB T	Westpark Dr	116	24.5	2.3	20.2	27.2	10
WB TR	Westpark Dr	116	12.5	0.9	11.0	13.7	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	2.3	0.2	2.1	2.7	10
EB LT	Westpark Dr	123	2.5	0.3	2.1	3.0	10
EB T	Westpark Dr	123	3.4	0.3	2.9	3.8	10
NEB L	I-69 NBFR	126	0.0	0.0	0.0	0.0	10
NEB R	I-69 NBFR	126	0.9	0.2	0.7	1.3	10
NEB T	I-69 NBFR	126	1.8	0.5	1.3	3.0	10
WB R	Westpark Dr	127	0.0	0.0	0.0	0.1	10
WB T	Westpark Dr	127	5.5	0.7	4.8	6.5	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	119	10.9	1.6	9.2	14.4	10
SWB L	I-69 SBFR	121	2.2	0.4	1.9	3.1	10
SWB LT	I-69 SBFR	121	4.1	0.6	3.5	5.1	10
SWB R	I-69 SBFR	121	3.3	4.1	0.5	14.6	10
SWB T	I-69 SBFR	121	8.9	1.4	7.0	12.0	10
WB L	Westpark Dr	123	3.2	0.4	2.6	3.8	10
WB T	Westpark Dr	123	0.9	0.2	0.6	1.3	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	784	2.3	0.4	1.7	3.2	10
EB TR	Westpark Dr	784	2.0	0.3	1.6	2.8	10
NB LR	Loop Central Dr	803	3.3	0.3	2.9	3.5	10
WB L	Westpark Dr	146	0.4	0.1	0.2	0.5	10
WB T	Westpark Dr	146	4.1	0.8	3.1	5.5	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	0.3	0.1	0.3	0.5	10
EB T	Westpark Dr	146	1.3	0.2	1.0	1.5	10
EB TR	Westpark Dr	146	1.9	0.3	1.4	2.2	10
NB L	Newcastle Dr	148	3.5	1.0	2.0	5.7	10
NB T	Newcastle Dr	148	1.1	0.1	1.0	1.3	10
NB TR	Newcastle Dr	148	2.5	0.3	2.1	3.1	10
SB LT	Newcastle Dr	147	2.3	0.6	1.6	3.4	10
SB TR	Newcastle Dr	147	2.8	0.4	2.2	3.4	10
WB L	Westpark Dr	149	3.7	0.3	3.1	4.3	10
WB T	Westpark Dr	149	2.3	0.4	1.7	2.8	10
WB TR	Westpark Dr	149	2.7	0.5	1.8	3.3	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	1.0	0.1	0.9	1.2	10
EB TR	Westpark Dr	127	1.4	0.1	1.2	1.6	10

NB LT	Rampart St	129	6.4	1.9	3.2	9.2	10
NB TR	Rampart St	129	0.2	0.1	0.1	0.4	10
SB LTR	Rampart St	128	0.5	0.1	0.3	0.7	10
WB LT	Westpark Dr	130	1.1	0.3	0.6	1.6	10
WB TR	Westpark Dr	130	0.9	0.3	0.4	1.5	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	2.8	1.0	2.0	5.5	10
EB TR	Westpark Dr	136	2.2	0.7	1.5	4.1	10
NB LR	Royalton St	384	17.6	1.0	15.6	18.9	10
WB L	Westpark Dr	140	1.1	0.2	0.9	1.4	10
WB T	Westpark Dr	140	4.2	2.5	1.7	8.6	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	781	1.6	0.2	1.2	1.9	10
EB TR	Westpark Dr	781	1.2	0.2	0.9	1.3	10
NB LR	Uptown Transit Ctr	769	0.3	0.1	0.1	0.5	10
WB L	Westpark Dr	629	0.2	0.1	0.0	0.3	10
WB T	Westpark Dr	629	11.3	3.5	4.6	16.6	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	3.5	0.5	2.9	4.3	10
EB T	Westpark Dr	149	3.6	0.9	2.4	5.0	10
EB TR	Westpark Dr	149	5.4	1.4	3.3	8.0	10
NB L	Weslayan St	151	4.4	1.6	2.6	7.9	10
NB T	Weslayan St	151	1.7	0.3	1.2	2.1	10
NB TR	Weslayan St	151	3.2	0.7	2.6	5.1	10
SB L	Weslayan St	150	0.3	0.1	0.2	0.5	10
SB T	Weslayan St	150	6.9	0.5	6.2	7.7	10
SB TR	Weslayan St	150	8.6	0.6	7.7	9.6	10
WB L	Westpark Dr	152	1.7	0.3	1.3	2.2	10
WB T	Westpark Dr	152	4.9	1.2	3.6	7.1	10
WB TR	Westpark Dr	152	5.2	1.4	3.7	7.9	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	143	5.7	1.7	3.4	8.7	10
EB T	Westpark Dr	143	2.0	0.2	1.7	2.4	10
NB L	I-610 NBFR	145	4.6	0.4	4.2	5.3	10
NB LT	I-610 NBFR	145	4.6	0.3	4.3	5.1	10
NB TR	I-610 NBFR	145	4.4	0.2	4.1	4.9	10
NEB T	BRT Alignment	821	0.1	0.0	0.1	0.2	10
WB T	Westpark Dr	784	4.4	0.9	3.1	6.2	10
WB TR	Westpark Dr	784	3.4	0.8	2.5	4.6	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	629	9.9	2.5	7.0	15.3	10
EB TR	Westpark Dr	629	20.4	3.4	12.4	24.7	10
NEB LT	BRT Alignment	845	0.2	0.1	0.2	0.3	10
SB R	Silver Line Alignment	783	0.2	0.1	0.1	0.3	10
SEB LT	I-610 SBFR	141	3.0	0.4	2.3	3.5	10
SEB T	I-610 SBFR	141	2.0	0.3	1.4	2.3	10
SWB L	Westpark Dr	143	2.3	0.4	1.7	2.9	10
SWB T	Westpark Dr	143	3.2	0.4	2.5	3.7	10

WB R	I-610 SBFR	141	0.0	0.0	0.0	0.1	10
WB T	BRT Alignment	844	0.0	0.0	0.0	0.0	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	1.7	0.4	1.1	2.4	10
EB T	Westpark Dr	130	4.1	0.4	3.4	4.8	10
EB TR	Westpark Dr	130	4.2	0.5	3.3	4.9	10
NB L	Renwick Dr	132	1.7	0.4	1.2	2.7	10
NB T	Renwick Dr	132	3.5	0.2	3.1	3.9	10
NB TR	Renwick Dr	132	4.3	0.3	3.7	4.5	10
SB L	Fountain View Dr	131	3.9	0.5	3.0	4.5	10
SB T	Fountain View Dr	131	3.7	0.3	3.1	4.1	10
SB TR	Fountain View Dr	131	3.8	0.3	3.1	4.2	10
WB L	Westpark Dr	778	4.3	1.6	2.1	6.7	10
WB T	Westpark Dr	778	2.8	0.3	2.4	3.3	10
WB TR	Westpark Dr	778	3.7	0.7	2.7	4.6	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	1.6	1.2	0.2	3.2	10
NEB TR	Hutchins St	707	1.1	0.2	0.9	1.4	10
NWB T	Wheeler Ave	423	0.1	0.0	0.1	0.2	10
NWB TR	Wheeler Ave	423	3.5	2.7	0.7	8.6	10
SEB L	Wheeler Ave	421	0.2	0.0	0.2	0.3	10
SEB T	Wheeler Ave	421	1.5	0.1	1.2	1.6	10
SWB LR	Hutchins St	422	0.3	0.1	0.0	0.4	10

WHEELER AVE & ST EMANUEL ST **NODE: 365**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	421	0.3	0.1	0.2	0.6	10
NWB T	Wheeler Ave	421	3.6	2.0	0.2	6.6	10
SEB T	Wheeler Ave	176	0.0	0.0	0.0	0.0	10
SEB TR	Wheeler Ave	176	1.5	2.0	0.2	6.3	10

Project: UNC_Build
Scenario: Build 2030 PM
Run(s): Batch (10 runs)
Simulated: Various
Time: 17:30:00 - 18:30:00
Interval: Summary
Selection: --

Intersection Level of Service by Lane Group - Avg Control Delay

ALABAMA ST & ENNIS ST **NODE: 141**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	732	11.5	2.4	7.9	15.5	10
NEB T	Ennis St	732	174.2	84.3	70.5	366.5	10
NWB L	Alabama St	197	8.1	3.2	2.1	12.9	10
NWB T	Alabama St	197	15.0	1.0	13.4	16.1	10
NWB TR	Alabama St	197	14.4	1.0	12.5	15.8	10
SEB L	Alabama St	193	22.4	2.3	18.2	26.1	10
SEB T	Alabama St	193	11.0	1.4	8.7	13.3	10
SEB TR	Alabama St	193	7.6	1.0	6.2	9.3	10
SWB LTR	Ennis St	740	6.6	0.8	5.1	7.8	10

SWB T	Ennis St	740	76.0	65.6	14.1	224.7	10

ALMEDA RD & WHEELER AVE — NODE: 135

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Almeda Rd	696	320.3	97.8	160.3	468.6	10
NB T	Almeda Rd	696	29.5	13.7	18.6	64.9	10
NB TR	Almeda Rd	696	16.9	3.9	10.7	23.0	10
NWB L	Wheeler Ave	176	128.3	38.8	59.5	187.6	10
NWB T	Wheeler Ave	176	56.5	29.3	25.9	114.7	10
NWB TR	Wheeler Ave	176	246.0	117.6	76.7	450.8	10
SB L	Almeda Rd	174	125.2	68.4	66.0	279.4	10
SB T	Almeda Rd	174	86.7	39.5	53.9	175.9	10
SB TR	Almeda Rd	174	101.8	48.6	57.4	225.2	10
SEB L	Wheeler Ave	77	52.5	12.7	35.3	73.4	10
SEB T	Wheeler Ave	77	25.7	8.8	11.1	45.0	10
SEB TR	Wheeler Ave	77	35.0	9.1	24.8	56.2	10

BRT ALIGNMENT, FONDREN RD & EB WESTPARK TOLLWAY FR — NODE: 101

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	EB Westpark Tollway FR	111	598.4	122.5	416.7	815.9	10
EB R	EB Westpark Tollway FR	111	170.8	46.1	106.1	265.7	10
NB T	Fondren Rd	38	455.1	15.4	433.8	483.9	10
NEB T	BRT Alignment	768	51.3	24.9	14.9	99.5	10
SB T	Fondren Rd	110	3.1	0.1	2.9	3.3	10
WB T	BRT Alignment	774	128.9	52.6	101.1	222.6	5

BUFFALO SPEEDWAY & RICHMOND AVE — NODE: 119

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	10	54.2	6.6	45.8	63.9	10
EB T	Richmond Ave	10	53.7	7.0	41.3	65.3	10
EB TR	Richmond Ave	10	63.0	10.2	47.4	78.5	10
NB L	Buffalo Speedway	37	179.0	38.3	117.2	236.9	10
NB T	Buffalo Speedway	37	120.7	29.9	82.1	164.2	10
NB TR	Buffalo Speedway	37	99.6	24.3	67.9	139.1	10
SB L	Buffalo Speedway	36	80.2	12.6	62.6	105.6	10
SB T	Buffalo Speedway	36	35.4	2.4	31.1	39.3	10
SB TR	Buffalo Speedway	36	35.8	2.4	31.0	38.6	10
WB L	Richmond Ave	11	58.9	2.8	54.3	63.5	10
WB T	Richmond Ave	11	50.1	13.4	38.9	81.5	10
WB TR	Richmond Ave	11	48.8	12.5	38.7	75.9	10

CLEBURNE ST & ENNIS ST — NODE: 292

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	726	6.4	0.8	5.4	7.7	10
NEB T	Ennis St	726	47.4	41.7	14.3	151.3	10
NWB LTR	Cleburne St	733	20.6	1.9	16.7	23.0	10
SEB LTR	Cleburne St	731	19.8	2.5	16.5	23.7	10
SWB LTR	Ennis St	732	7.9	1.9	4.5	11.0	10
SWB T	Ennis St	732	52.7	33.6	13.6	123.9	10

CROSSTIMBERS ST & LOCKWOOD DR — NODE: 176

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Crosstimbers St	323	44.8	4.6	39.8	55.2	10
EB T	Crosstimbers St	323	21.1	2.2	18.0	24.5	10
EB TR	Crosstimbers St	323	19.8	1.7	17.5	22.6	10
NB L	Lockwood Dr	321	49.4	6.2	38.4	56.9	10
NB T	Lockwood Dr	321	1.6	5.0	0.0	15.9	10
NB TR	Lockwood Dr	321	34.7	2.2	31.9	38.6	10

SB L	Lockwood Dr	320	41.5	2.8	36.3	46.2	10
SB T	Lockwood Dr	320	7.8	3.2	3.6	12.2	10
SB TR	Lockwood Dr	320	23.3	1.8	20.8	26.2	10
WB L	Crosstimbers St	322	41.7	5.8	31.7	53.2	10
WB T	Crosstimbers St	322	18.3	1.8	16.2	22.4	10
WB TR	Crosstimbers St	322	17.7	4.2	15.2	28.9	10

CULLEN BLVD & ELGIN ST **NODE: 144**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	204	82.9	18.9	53.0	119.5	10
EB T	Elgin St	204	26.8	5.6	21.3	40.8	10
EB TR	Elgin St	204	22.2	4.8	16.2	32.8	10
NEB L	Cullen Blvd	207	38.3	7.0	30.4	54.0	10
NEB T	Cullen Blvd	207	38.6	6.2	27.1	47.3	10
NEB TR	Cullen Blvd	207	33.5	4.6	27.6	39.7	10
SB L	Cullen Blvd	206	36.7	2.2	31.5	39.0	10
SB T	Cullen Blvd	206	33.5	3.8	24.4	36.8	10
SB TR	Cullen Blvd	206	26.6	3.1	21.5	32.7	10
WB L	Elgin St	208	59.2	23.7	37.9	121.9	10
WB T	Elgin St	208	30.1	6.0	23.5	41.3	10
WB TR	Elgin St	208	33.7	5.2	27.2	41.7	10

ELGIN ST & ENNIS ST **NODE: 249**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	702	18.4	2.9	13.3	21.5	10
NEB R	Ennis St	702	45.8	9.0	30.5	58.4	10
NWB L	Elgin St	701	17.1	2.4	13.0	21.7	10
NWB TR	Elgin St	701	13.9	2.0	12.0	17.3	10
SEB L	Elgin St	700	14.7	7.7	2.9	30.9	10
SEB TR	Elgin St	700	16.3	4.2	12.1	26.4	10
SWB L	Ennis St	195	21.8	7.3	10.9	30.2	10
SWB TR	Ennis St	195	16.0	1.4	13.3	18.1	10

ELGIN ST & GARAGE 5 **NODE: 353**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Elgin St	212	8.4	2.0	5.2	11.2	10
EB TR	Elgin St	212	6.4	1.0	5.0	8.5	10
NB R	Garage 5	409	14.9	1.1	13.3	16.6	10
WB L	Elgin St	637	18.7	4.6	13.9	26.6	10
WB T	Elgin St	637	0.1	0.1	0.0	0.3	10

ELGIN ST & SCOTT ST **NODE: 143**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	701	64.0	13.2	51.8	93.2	10
EB T	Elgin St	701	25.8	10.6	10.5	38.9	10
EB TR	Elgin St	701	36.9	4.5	29.6	43.3	10
NB T	LRT Line	667	5.3	1.3	3.2	7.6	10
NWB L	Scott St	693	74.2	12.6	58.8	92.7	10
NWB T	Scott St	693	19.3	3.6	15.7	28.5	10
NWB TR	Scott St	693	19.7	4.2	16.3	30.3	10
SB T	LRT Line	669	22.1	2.5	18.4	26.7	10
SEB L	Scott St	671	88.2	21.4	67.9	143.2	10
SEB T	Scott St	671	33.3	4.1	28.4	43.0	10
SEB TR	Scott St	671	33.4	4.0	27.7	42.1	10
WB L	Elgin St	204	69.1	18.7	51.8	108.5	10
WB T	Elgin St	204	31.9	4.2	22.3	35.9	10
WB TR	Elgin St	204	28.5	5.2	22.6	35.8	10

ELGIN ST & SPUR 5 SBFR — NODE: 146

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Elgin St	637	12.3	1.6	9.6	14.9	10
EB T	Elgin St	637	35.3	1.9	32.2	38.1	10
SB LT	Spur 5 SBFR	214	14.9	1.5	12.9	16.8	10
SB TR	Spur 5 SBFR	214	11.0	1.5	8.6	14.0	10
SWB L	Elgin St	216	21.4	4.5	11.6	27.8	10
SWB T	Elgin St	216	27.3	4.3	19.8	35.1	10

ELGIN ST, UH ENTRANCE 17 & UH ENTRANCE 18 — NODE: 145

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Elgin St	208	48.0	27.1	3.2	78.1	10
EB T	Elgin St	208	13.8	1.9	9.3	15.7	10
EB TR	Elgin St	208	9.0	2.1	5.7	11.6	10
NB L	UH Entrance 18	211	58.7	5.3	50.8	70.5	10
NB TR	UH Entrance 18	211	10.9	3.6	6.5	16.5	10
SB L	UH Entrance 17	210	37.3	5.6	28.5	45.2	10
SB TR	UH Entrance 17	210	16.1	2.9	12.3	21.2	10
WB L	Elgin St	212	54.0	6.9	45.3	65.6	10
WB T	Elgin St	212	16.8	2.5	13.2	20.7	10
WB TR	Elgin St	212	15.4	2.5	10.0	17.6	10

EMANCIPATION AVE & WHEELER AVE — NODE: 136

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	Emancipation Ave	711	13.8	2.4	11.4	18.6	10
NEB TR	Emancipation Ave	711	12.7	1.0	10.7	14.5	10
NWB LTR	Wheeler Ave	724	48.4	44.3	13.8	127.7	10
NWB T	Wheeler Ave	724	35.4	7.3	28.3	53.7	10
SEB LTR	Wheeler Ave	423	42.3	14.4	32.0	81.1	10
SEB T	Wheeler Ave	423	59.8	2.1	57.4	64.8	10
SWB LT	Emancipation Ave	177	13.8	1.8	11.6	16.9	10
SWB TR	Emancipation Ave	177	12.9	1.9	11.6	17.8	10

ENNIS ST & HOLMAN ST — NODE: 306

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	Ennis St	740	7.5	1.1	5.8	9.3	10
NEB T	Ennis St	740	83.2	32.4	20.4	133.7	10
NWB LTR	Holman St	742	22.8	1.7	20.3	25.0	10
SEB LTR	Holman St	741	17.1	3.1	11.5	22.9	10
SWB LTR	Ennis St	702	7.2	1.1	5.9	9.0	10
SWB T	Ennis St	702	64.2	25.2	32.3	109.2	10

ENNIS ST & WHEELER AVE — NODE: 266

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Ennis St	698	5.0	4.9	0.5	16.9	10
NEB T	Ennis St	698	2.8	0.6	1.7	3.7	10
SEB L	Wheeler Ave	724	9.7	4.1	5.4	15.8	10
SEB LR	Wheeler Ave	724	26.5	1.5	23.5	28.5	10
SWB R	Ennis St	726	58.5	12.1	36.2	75.6	10
SWB TR	Ennis St	726	2.7	0.6	1.9	3.5	10

EPSOM RD, TURNER DR, EDELL ST, TIDWELL TC 2 DR & TIDWELL TC 4 DR — NODE: 690

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Turner Dr	595	1.2	0.9	0.0	2.5	10
EB T	Turner Dr	595	15.9	6.5	1.6	24.2	10
NB LT	Edell St	589	37.2		37.2	37.2	1
SWB T	Tidwell TC 2 Dr	802	3.7	1.0	2.0	4.7	10

ERNESTINE ST & LEELAND ST — NODE: 149

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Leeland St	228	16.9	1.5	14.8	19.3	10
EB TR	Leeland St	228	14.4	1.2	12.2	16.1	10
NB L	Ernestine St	683	16.0	5.1	7.0	26.9	10
NB R	Ernestine St	683	3.0	0.8	1.9	4.3	10
SWB L	Ernestine St	411	13.1	2.3	10.5	17.2	10
SWB TR	Ernestine St	411	8.7	1.1	7.3	10.7	10
WB L	Leeland St	227	30.1	4.3	25.5	39.9	10
WB T	Leeland St	227	16.6	2.1	14.1	21.3	10

ERNESTINE ST & MUNGER ST — NODE: 399

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB TR	Ernestine St	687	0.0	0.0	0.0	0.0	10
SB T	Ernestine St	683	0.0	0.0	0.0	0.0	10
WB L	Munger St	460	5.6	3.1	0.5	10.2	10
WB R	Munger St	460	1.4	0.4	0.9	1.9	10

FANNIN ST & WHEELER AVE — NODE: 132

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	172	154.2	57.8	79.8	290.3	10
NWB T	Wheeler Ave	172	51.9	6.1	42.1	62.9	10
SEB R	Wheeler Ave	169	4.3	5.0	0.1	16.7	10
SEB T	Wheeler Ave	169	32.4	5.1	24.1	41.1	10
SEB TR	Wheeler Ave	169	64.9	7.4	56.0	79.9	10
SWB L	Fannin St	87	109.7	38.3	62.2	186.0	10
SWB R	Fannin St	87	49.2	17.4	26.5	74.9	10
SWB T	Fannin St	87	28.1	3.2	23.7	34.0	10

I-69 EXPRESS LANES & EDLOE ST — NODE: 116

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Edloe St	153	43.0	3.8	38.1	49.0	10
NB T	Edloe St	153	9.6	6.5	0.0	18.1	10
NB TR	Edloe St	153	14.8	7.9	9.4	32.5	10
SB L	Edloe St	155	94.3	32.1	46.9	146.0	10
SB T	Edloe St	155	67.4	21.5	33.1	92.3	10
SB TR	Edloe St	155	86.4	21.6	46.7	115.9	10
WB LR	I-69 Express Lanes	31	190.6	56.8	88.7	270.8	10

JENSEN DR & TURNER DR — NODE: 705

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Turner Dr	606	4.3	1.8	2.4	8.7	10
NEB LT	Jensen Dr	604	1.1	0.5	0.7	2.1	10
NEB R	Jensen Dr	604	13.7	2.5	11.0	17.8	10
NEB TR	Jensen Dr	604	1.0	0.3	0.8	1.7	10
SWB L	Jensen Dr	599	10.8	3.5	5.9	16.7	9
SWB TR	Jensen Dr	599	1.1	0.3	0.6	1.6	10
WB L	Turner Dr	595	11.2	1.1	9.5	12.6	10
WB LTR	Turner Dr	595	7.3	2.3	4.3	11.1	10

KELLEY ST & LOCKWOOD DR — NODE: 173

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Kelley St	313	56.2	8.9	44.7	71.1	10
EB T	Kelley St	313	24.4	3.4	19.1	28.4	10
EB TR	Kelley St	313	15.9	1.6	13.8	18.9	10
NB L	Lockwood Dr	308	44.7	2.7	41.5	50.3	10
NB R	Lockwood Dr	308	4.4	0.5	3.7	5.2	10
NB T	Lockwood Dr	308	40.6	5.8	32.9	51.4	10

SB L	Lockwood Dr	725	69.3	31.2	45.5	139.2	10
SB T	Lockwood Dr	725	24.0	6.1	16.6	36.9	10
SB TR	Lockwood Dr	725	79.5	42.9	46.8	188.7	10
WB L	Kelley St	312	42.0	3.9	36.0	47.4	10
WB T	Kelley St	312	24.5	1.6	22.0	27.2	10
WB TR	Kelley St	312	23.5	1.5	20.5	25.2	10

LABRANCH ST & WHEELER AVE **NODE: 134**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LTR	LaBranch St	79	147.6	88.5	61.0	320.7	10
NWB T	Wheeler Ave	77	6.4	2.3	2.5	8.7	10
NWB TR	Wheeler Ave	77	175.4	48.3	102.2	258.0	10
SEB T	Wheeler Ave	86	3.0	1.9	0.0	6.1	10
SEB TR	Wheeler Ave	86	5.4	1.5	3.7	8.7	10
SWB LTR	LaBranch St	78	44.7	14.0	30.7	77.6	10

LAURA KOPPE RD & LOCKWOOD DR **NODE: 178**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Laura Koppe Rd	330	35.6	4.4	29.5	42.6	10
EB TR	Laura Koppe Rd	330	27.9	2.8	22.1	31.6	10
NB L	Lockwood Dr	560	49.4	6.7	36.5	58.4	10
NB T	Lockwood Dr	560	28.4	5.7	18.2	37.5	10
NB TR	Lockwood Dr	560	20.7	1.9	18.2	25.1	10
SB L	Lockwood Dr	327	28.4	6.0	16.5	35.6	10
SB T	Lockwood Dr	327	6.6	3.6	2.0	13.3	10
SB TR	Lockwood Dr	327	6.2	2.2	3.5	10.2	10
WB L	Laura Koppe Rd	329	42.7	5.9	32.5	50.2	10
WB TR	Laura Koppe Rd	329	26.9	3.9	18.1	31.4	10

LOCKWOOD DR & ARMOUR DR **NODE: 156**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB R	Lockwood Dr	658	0.1	0.1	0.0	0.4	10
NEB T	Lockwood Dr	658	0.9	0.5	0.3	2.0	10
SWB T	Lockwood Dr	253	0.0	0.0	0.0	0.0	10
WB R	Armour Dr	659	8.2	2.5	4.1	13.1	10

LOCKWOOD DR & CANAL ST **NODE: 154**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Canal St	640	196.2	32.9	122.9	234.5	10
EB TR	Canal St	640	145.7	26.1	99.8	180.0	10
NEB L	Lockwood Dr	246	60.0	7.8	47.0	72.1	10
NEB T	Lockwood Dr	246	18.6	3.5	12.9	24.5	10
NEB TR	Lockwood Dr	246	21.1	4.5	13.9	29.4	10
SWB L	Lockwood Dr	245	48.8	3.1	42.3	53.0	10
SWB T	Lockwood Dr	245	39.5	1.9	36.5	42.3	10
SWB TR	Lockwood Dr	245	28.4	2.3	24.7	33.7	10
WB L	Canal St	826	43.8	2.9	39.8	49.9	10
WB TR	Canal St	826	30.8	2.0	27.6	34.3	10

LOCKWOOD DR & CAVALCADE ST **NODE: 169**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Cavalcade St	299	36.7	3.3	31.6	40.7	10
EB T	Cavalcade St	299	26.7	4.0	21.2	32.3	10
EB TR	Cavalcade St	299	18.0	2.4	14.5	22.2	10
NB L	Lockwood Dr	292	49.4	5.2	42.2	59.6	10
NB T	Lockwood Dr	292	12.2	5.7	4.9	20.6	10
NB TR	Lockwood Dr	292	20.6	5.0	14.7	30.6	10
SB L	Lockwood Dr	296	33.0	5.1	21.8	39.8	10

SB T	Lockwood Dr	296	17.0	8.5	5.6	36.4	10
SB TR	Lockwood Dr	296	21.8	2.6	17.2	25.1	10
WB L	Cavalcade St	298	33.4	3.6	25.8	36.9	10
WB T	Cavalcade St	298	27.2	2.1	24.1	30.6	10
WB TR	Cavalcade St	298	20.8	2.4	18.5	25.0	10

LOCKWOOD DR & CLINTON DR **NODE: 157**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Clinton Dr	259	51.6	6.3	42.7	63.1	10
EB T	Clinton Dr	259	34.1	6.4	25.7	43.2	10
EB TR	Clinton Dr	259	18.2	3.3	14.7	23.9	10
NEB L	Lockwood Dr	257	51.0	5.1	42.7	59.6	10
NEB T	Lockwood Dr	257	21.9	2.0	18.0	24.6	10
NEB TR	Lockwood Dr	257	21.0	2.1	17.5	24.4	10
SB L	Lockwood Dr	256	134.0	45.8	76.9	243.3	10
SB T	Lockwood Dr	256	12.3	2.4	8.5	15.9	10
SB TR	Lockwood Dr	256	10.8	1.7	7.6	13.6	10
WB L	Clinton Dr	258	46.5	4.9	39.2	55.8	10
WB R	Clinton Dr	258	10.0	1.4	7.5	11.3	10
WB T	Clinton Dr	258	36.2	2.2	32.9	39.9	10

LOCKWOOD DR & COLLINGSWORTH ST **NODE: 167**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Collingsworth St	291	46.4	3.9	40.6	52.6	10
EB T	Collingsworth St	291	34.6	4.2	27.8	39.2	10
EB TR	Collingsworth St	291	18.8	2.1	16.1	22.9	10
NB L	Lockwood Dr	533	61.9	6.7	52.3	75.0	10
NB T	Lockwood Dr	533	25.9	7.7	9.6	34.8	10
NB TR	Lockwood Dr	533	43.9	8.6	33.0	61.2	10
SEB L	Lockwood Dr	288	21.7	4.2	15.5	28.5	10
SEB T	Lockwood Dr	288	29.1	7.4	10.8	37.2	10
SEB TR	Lockwood Dr	288	28.8	2.9	22.6	32.9	10
WB L	Collingsworth St	290	47.8	3.2	41.9	52.0	10
WB T	Collingsworth St	290	33.9	7.4	24.7	48.2	10
WB TR	Collingsworth St	290	17.2	5.2	9.0	27.5	10

LOCKWOOD DR & CRANE ST **NODE: 168**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Crane St	295	35.5	4.3	30.7	43.5	10
NB L	Lockwood Dr	288	38.0	7.3	27.0	48.9	10
NB T	Lockwood Dr	288	3.7	3.7	0.0	10.1	10
NB TR	Lockwood Dr	288	8.5	2.3	6.4	13.7	10
SB L	Lockwood Dr	292	34.1	6.9	26.3	43.6	10
SB T	Lockwood Dr	292	6.0	3.5	0.9	10.7	10
SB TR	Lockwood Dr	292	10.8	1.1	9.7	12.6	10
WB LTR	Crane St	294	35.6	4.1	30.8	43.0	10

LOCKWOOD DR & FIRNAT ST **NODE: 659**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Firnat St	576	30.5	3.9	22.5	36.0	10
NB L	Lockwood Dr	327	36.3	5.0	25.6	42.9	10
NB T	Lockwood Dr	327	14.5	6.7	6.6	25.5	10
NB TR	Lockwood Dr	327	10.1	1.3	8.0	12.8	10
SB L	Lockwood Dr	574	33.0	5.1	27.2	42.9	10
SB T	Lockwood Dr	574	10.2	4.4	5.8	19.3	10
SB TR	Lockwood Dr	574	5.4	1.2	3.5	6.8	10
WB LTR	Firnat St	575	35.0	5.2	27.7	42.8	10

LOCKWOOD DR & MARRON PARK WAY — NODE: 197

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Lockwood Dr	492	44.2	3.3	40.2	49.0	10
NEB T	Lockwood Dr	492	15.6	1.3	13.8	18.2	10
SEB L	Marron Park Way	843	90.3	3.5	84.3	96.7	10
SEB R	Marron Park Way	843	62.3	2.1	58.4	65.6	10
SWB L	Lockwood Dr	658	30.4	4.3	22.8	37.7	10
SWB T	Lockwood Dr	658	19.0	5.6	11.6	27.8	10
SWB TR	Lockwood Dr	658	20.8	2.8	17.9	25.0	10

LOCKWOOD DR & HARRISBURG BLVD — NODE: 153

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	LRT Line	675	29.2	1.7	23.7	29.7	10
NEB L	Lockwood Dr	787	99.9	26.0	75.1	150.6	10
NEB L	Lockwood Dr	787	31.6	6.2	22.3	39.9	10
NEB TR	Lockwood Dr	787	55.2	12.2	37.1	72.6	10
NWB L	Harrisburg Blvd	678	97.9	75.6	45.6	304.1	10
NWB T	Harrisburg Blvd	678	39.7	17.6	31.4	89.5	10
NWB TR	Harrisburg Blvd	678	35.2	13.6	26.1	73.3	10
SB L	Lockwood Dr	241	108.4	24.3	77.8	145.5	10
SB L	Lockwood Dr	241	23.8	4.4	19.3	32.0	10
SB TR	Lockwood Dr	241	61.4	19.3	35.7	98.2	10
SEB L	Harrisburg Blvd	244	50.2	7.1	39.3	62.9	10
SEB T	Harrisburg Blvd	244	30.3	3.1	26.4	37.5	10
SEB TR	Harrisburg Blvd	244	28.2	5.0	23.8	38.0	10
WB T	LRT Line	676	2.8	1.4	1.2	5.9	10

LOCKWOOD DR & HARVEY WILSON DR — NODE: 514

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LR	Harvey Wilson Dr	498	41.6	17.6	10.1	60.1	10
NB L	Lockwood Dr	253	46.6	11.9	32.4	71.9	10
NB T	Lockwood Dr	253	29.4	3.4	24.3	35.0	10
NB TR	Lockwood Dr	253	15.8	0.8	14.7	17.0	10
SWB L	Lockwood Dr	257	44.6	8.2	33.0	57.8	10
SWB T	Lockwood Dr	257	8.3	2.5	4.7	11.7	10
SWB TR	Lockwood Dr	257	8.8	0.8	7.2	9.8	10
WB L	Harvey Wilson Dr	497	40.4	6.4	33.2	53.1	10
WB R	Harvey Wilson Dr	497	9.8	1.6	7.4	12.6	10

LOCKWOOD DR & HERSHE ST — NODE: 534

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Hershe St	514	30.9	7.0	17.9	40.4	10
NB LT	Lockwood Dr	512	3.6	0.5	3.1	4.5	10
NB T	Lockwood Dr	512	72.2	1.7	70.0	74.9	10
NB TR	Lockwood Dr	512	2.7	0.5	1.8	3.5	10
SB LT	Lockwood Dr	478	2.0	0.5	1.1	2.7	10
SB T	Lockwood Dr	478	77.9	0.7	77.1	79.6	10
SB TR	Lockwood Dr	478	2.0	0.6	1.1	2.6	10
WB LTR	Hershe St	513	31.3	10.6	13.4	45.8	10

LOCKWOOD DR & I-45 NBFR — NODE: 148

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB T	Lockwood Dr	218	25.6	9.1	15.3	47.5	10
NWB L	I-45 NBFR	222	14.8	1.6	12.7	17.6	10
NWB LT	I-45 NBFR	222	16.9	1.4	15.7	20.4	10
NWB T	I-45 NBFR	222	21.3	2.5	18.4	27.6	10
NWB TR	I-45 NBFR	222	37.1	9.1	26.1	57.1	10
SWB T	Lockwood Dr	224	11.2	5.1	0.9	17.0	10

SWB TR	Lockwood Dr	224	14.1	0.7	13.0	15.4	10

LOCKWOOD DR & I-610 EBFR **NODE: 171**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-610 EBFR	307	45.1	2.4	40.1	48.8	10
EB LT	I-610 EBFR	307	42.1	2.8	38.5	47.5	10
EB TR	I-610 EBFR	307	23.5	3.4	16.5	28.6	10
NB R	Lockwood Dr	545	22.2	4.8	14.5	31.0	10
NB T	Lockwood Dr	545	53.6	2.6	50.6	58.7	10
SB LT	Lockwood Dr	304	10.9	1.1	8.7	12.1	10
SB T	Lockwood Dr	304	12.5	1.4	10.2	15.2	10

LOCKWOOD DR & I-610 WBFR **NODE: 172**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	304	1.1	0.3	0.6	1.7	10
NB LT	Lockwood Dr	304	3.0	1.5	1.7	7.0	10
NB T	Lockwood Dr	304	4.8	0.7	3.7	6.2	10
SB T	Lockwood Dr	308	50.2	5.9	42.3	60.3	10
WB L	I-610 WBFR	309	35.1	3.8	29.9	41.7	10
WB LT	I-610 WBFR	309	38.1	1.8	36.3	42.2	10
WB R	Lockwood Dr	308	14.3	3.9	8.7	20.5	10
WB TR	I-610 WBFR	309	35.2	2.7	31.3	41.7	10

LOCKWOOD DR & KEELAND ST **NODE: 641**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Keeland St	562	22.0	10.2	4.0	40.6	10
NB L	Lockwood Dr	324	13.6	11.4	0.0	36.4	10
NB T	Lockwood Dr	324	3.8	3.4	0.0	11.4	10
NB TR	Lockwood Dr	324	12.9	1.5	10.0	15.3	10
SB L	Lockwood Dr	560	4.1	10.7	0.0	28.4	7
SB T	Lockwood Dr	560	1.9	3.4	0.0	11.0	10
SB TR	Lockwood Dr	560	2.3	1.0	1.1	4.2	10
WB LTR	Keeland St	561	32.9	11.1	15.1	53.4	10

LOCKWOOD DR & LYONS AVE **NODE: 165**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Lyons Ave	280	153.9	36.1	79.4	212.6	10
NB LT	Lockwood Dr (NB)	275	15.8	1.0	13.6	17.2	10
NB T	Lockwood Dr (NB)	275	79.5	11.9	55.1	93.2	10
NB TR	Lockwood Dr (NB)	275	16.7	1.8	14.2	20.5	10
SB LT	Lockwood Dr	515	12.9	1.2	11.4	14.5	10
SB T	Lockwood Dr	515	83.9	0.8	82.9	85.7	10
SB TR	Lockwood Dr	515	11.8	1.5	9.5	13.8	10
WB L	Lyons Ave	283	34.1	1.9	31.5	36.7	10
WB TR	Lyons Ave	283	20.2	2.4	16.8	23.1	10

LOCKWOOD DR & MULVEY ST **NODE: 166**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Mulvey St	287	5.0	1.5	3.1	8.0	10
NB T	Lockwood Dr	478	0.4	0.1	0.2	0.7	10
NB TR	Lockwood Dr	478	0.3	0.1	0.1	0.5	10
SB T	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
SB TR	Lockwood Dr	284	0.0	0.0	0.0	0.0	10
WB R	Mulvey St	286	5.7	2.9	3.3	12.6	10

LOCKWOOD DR & MUNGER ST **NODE: 453**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Munger St	460	0.1	0.1	0.0	0.3	10

EB T	Munger St	460	16.7	1.6	14.3	19.5	10
NEB L	Lockwood Dr	855	23.0	13.2	9.0	52.8	9
NEB T	Lockwood Dr	855	10.2	6.7	0.0	23.3	10
NEB TR	Lockwood Dr	855	4.1	0.3	3.7	4.6	10
SB R	Munger St	460	1.1	2.2	0.0	6.4	8
SWB L	Lockwood Dr	230	35.6	5.7	23.7	44.0	10
SWB T	Lockwood Dr	230	18.3	4.7	10.3	24.4	10
SWB TR	Lockwood Dr	230	28.6	5.0	21.4	37.5	10
WB L	Munger St	661	23.4	3.2	18.3	27.1	10
WB TR	Munger St	661	16.5	4.0	13.6	27.3	10

LOCKWOOD DR & NAVIGATION BLVD **NODE: 155**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Navigation Blvd	252	49.0	2.5	45.6	54.2	10
EB T	Navigation Blvd	252	34.9	1.8	32.5	37.3	10
EB TR	Navigation Blvd	252	33.5	1.5	31.5	36.3	10
NEB L	Lockwood Dr	245	40.7	4.8	34.6	52.2	10
NEB T	Lockwood Dr	245	0.5	1.1	0.0	3.5	10
NEB TR	Lockwood Dr	245	15.4	2.6	11.4	21.3	10
SWB L	Lockwood Dr	492	71.5	7.6	61.4	81.4	10
SWB R	Lockwood Dr	492	14.6	1.2	12.6	16.2	10
SWB T	Lockwood Dr	492	36.0	1.3	34.0	38.0	10
WB L	Navigation Blvd	251	50.5	3.8	45.8	58.7	10
WB T	Navigation Blvd	251	36.8	3.5	33.0	41.9	10
WB TR	Navigation Blvd	251	40.1	3.9	34.3	48.0	10

LOCKWOOD DR & NICHOLS ST **NODE: 567**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Nichols St	526	29.6	8.4	15.0	42.2	10
NB LT	Lockwood Dr	284	5.6	0.5	4.9	6.4	10
NB T	Lockwood Dr	284	77.6	0.7	76.6	79.3	10
NB TR	Lockwood Dr	284	4.5	0.9	3.3	5.9	10
SB LT	Lockwood Dr	524	3.1	0.4	2.4	3.5	10
SB T	Lockwood Dr	524	72.2	7.5	62.4	83.1	10
SB TR	Lockwood Dr	524	2.4	0.4	1.7	3.0	10
WB LTR	Nichols St	525	3.1	1.5	1.7	6.3	10

LOCKWOOD DR & PARDEE ST **NODE: 604**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Pardee St	547	34.5	4.2	28.9	43.9	10
NB L	Lockwood Dr	300	43.2	7.4	29.0	55.5	10
NB T	Lockwood Dr	300	10.3	6.3	1.2	22.3	10
NB TR	Lockwood Dr	300	18.5	1.3	16.4	20.8	10
SB L	Lockwood Dr	545	36.8	9.0	25.2	57.2	10
SB T	Lockwood Dr	545	4.5	1.7	1.8	7.8	10
SB TR	Lockwood Dr	545	7.1	1.2	5.7	8.8	10
WB LTR	Pardee St	546	27.0	8.0	17.0	42.4	10

LOCKWOOD DR & POLK ST **NODE: 151**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Polk St	235	34.4	3.5	30.5	40.9	10
EB T	Polk St	235	38.5	4.4	32.1	47.1	10
EB TR	Polk St	235	37.4	6.5	27.9	52.7	10
NB L	Lockwood Dr	229	42.3	15.4	32.4	84.9	10
NB T	Lockwood Dr	229	18.5	6.5	8.0	28.4	10
NB TR	Lockwood Dr	229	28.5	7.7	22.9	49.8	10
SB L	Lockwood Dr	238	97.5	21.4	71.9	149.3	10
SB T	Lockwood Dr	238	29.6	3.7	23.2	35.5	10

SB TR	Lockwood Dr	238	51.2	18.2	31.4	95.4	10
WB L	Polk St	234	38.7	3.9	31.4	44.4	10
WB T	Polk St	234	38.1	3.5	33.6	43.6	10
WB TR	Polk St	234	31.9	4.6	27.0	40.5	10

LOCKWOOD DR & RAND ST **NODE: 170**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Rand St	303	35.0	4.8	30.6	43.7	10
NB L	Lockwood Dr	296	28.8	6.0	19.5	38.4	10
NB T	Lockwood Dr	296	17.6	7.4	6.7	27.5	10
NB TR	Lockwood Dr	296	24.3	2.3	21.2	29.4	10
SB L	Lockwood Dr	300	40.3	5.2	30.6	51.4	10
SB T	Lockwood Dr	300	9.3	4.4	3.6	14.0	10
SB TR	Lockwood Dr	300	18.1	1.3	16.1	20.0	10
WB LTR	Rand St	302	27.3	1.8	23.9	29.6	10

LOCKWOOD DR & SHREVEPORT BLVD **NODE: 174**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB L	Lockwood Dr	725	8.0	1.8	4.6	10.2	10
NB TR	Lockwood Dr	725	2.2	0.4	1.5	2.8	10
NEB LT	Shreveport Blvd	316	38.1	2.5	34.5	41.9	10
NEB TR	Shreveport Blvd	316	14.6	4.2	8.8	23.4	10
SB L	Lockwood Dr	795	8.2	1.3	6.4	10.6	10
SB TR	Lockwood Dr	795	3.6	1.2	2.2	6.1	10
SWB LT	Shreveport Blvd	315	38.6	3.6	32.8	43.7	10
SWB TR	Shreveport Blvd	315	25.0	8.9	7.9	37.0	10

LOCKWOOD DR & SUDAN ST **NODE: 576**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Sudan St	535	38.8	12.8	25.3	71.6	10
NB L	Lockwood Dr	524	12.0	13.0	0.0	37.0	8
NB T	Lockwood Dr	524	4.3	3.6	0.0	12.4	10
NB TR	Lockwood Dr	524	8.9	1.7	6.6	11.4	10
SB L	Lockwood Dr	533	2.6	4.3	0.0	13.4	10
SB T	Lockwood Dr	533	1.7	2.6	0.0	8.8	10
SB TR	Lockwood Dr	533	2.4	0.6	1.5	3.7	10
WB LTR	Sudan St	534	12.5	3.6	5.8	18.6	10

LOCKWOOD DR & WEAVER RD **NODE: 177**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Weaver Rd	326	48.3	8.1	33.6	56.4	10
EB TR	Weaver Rd	326	27.6	2.8	24.1	33.2	10
NB L	Lockwood Dr	320	52.0	4.2	43.6	57.3	10
NB T	Lockwood Dr	320	15.4	13.4	5.2	50.9	10
NB TR	Lockwood Dr	320	12.9	1.2	10.7	14.5	10
SB L	Lockwood Dr	324	33.6	3.1	30.5	39.4	10
SB T	Lockwood Dr	324	12.2	4.7	7.5	20.9	10
SB TR	Lockwood Dr	324	11.3	1.6	9.0	14.5	10
WB L	Weaver Rd	325	38.0	4.1	32.0	46.6	10
WB TR	Weaver Rd	325	28.0	2.0	25.6	32.2	10

LOCKWOOD DR (NB) & I-10 EBFR **NODE: 161**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	I-10 EBFR	268	2.2	0.3	1.5	2.7	10
EB LT	I-10 EBFR	268	6.6	0.5	5.8	7.3	10
EB T	I-10 EBFR	268	10.1	0.7	8.5	11.0	10
NB T	Lockwood Dr (NB)	264	31.4	2.2	26.9	35.0	10
NB TR	Lockwood Dr (NB)	264	36.4	1.8	34.1	39.5	10

LOCKWOOD DR (NB) & I-10 WBFR — NODE: 163

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Lockwood Dr (NB)	270	6.9	0.5	6.3	8.2	10
NB T	Lockwood Dr (NB)	270	7.1	0.7	5.9	8.5	10
WB T	I-10 WBFR	276	41.5	3.2	35.4	46.1	10
WB TR	I-10 WBFR	276	8.6	0.5	7.8	9.2	10

LOCKWOOD DR (NB) & MARKET ST — NODE: 159

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Market St	262	1.0	0.3	0.5	1.6	10
EB T	Market St	262	0.5	1.5	0.0	4.8	10
NB LT	Lockwood Dr	499	34.9	6.5	27.9	45.3	10
NB T	Lockwood Dr	499	56.6	10.4	34.1	69.4	10
NB TR	Lockwood Dr	499	44.9	11.0	34.2	65.9	10
WB T	Market St	266	49.1	5.1	41.9	58.6	10
WB TR	Market St	266	43.6	13.2	18.5	65.9	10

LOCKWOOD DR (SB) & I-10 EBFR — NODE: 160

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	I-10 EBFR	269	47.9	4.7	42.7	55.0	10
EB TR	I-10 EBFR	269	22.8	2.1	20.0	26.6	10
SB LT	Lockwood Dr (SB)	267	5.2	0.7	4.2	6.5	10
SB T	Lockwood Dr (SB)	267	11.5	6.2	5.9	21.7	10

LOCKWOOD DR (SB) & I-10 WBFR — NODE: 162

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
SB T	Lockwood Dr (SB)	272	43.6	7.1	31.7	54.9	10
SB TR	Lockwood Dr (SB)	272	38.5	3.7	31.5	43.0	10
WB L	I-10 WBFR	273	1.8	0.7	0.8	3.1	10
WB LT	I-10 WBFR	273	4.6	0.4	3.7	5.0	10
WB T	I-10 WBFR	273	6.6	0.5	6.0	7.3	10

LOCKWOOD DR (SB) & MARKET ST — NODE: 158

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Market St	263	60.4	16.6	46.2	96.5	10
EB TR	Market St	263	9.6	2.2	6.4	13.3	10
SB LT	Lockwood Dr (SB)	260	29.2	1.5	26.5	30.8	10
SB T	Lockwood Dr (SB)	260	48.7	4.3	38.2	52.8	10
SB TR	Lockwood Dr (SB)	260	30.5	1.8	27.4	33.8	10
WB LT	Market St	262	9.5	1.7	7.8	13.3	10
WB T	Market St	262	2.8	4.0	0.0	10.3	10

LOCKWOOD DR, BENNINGTON ST & DRIVEWAY — NODE: 175

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Bennington St	319	42.1	4.8	33.3	48.5	10
EB R	Bennington St	319	6.3	0.6	5.5	7.2	10
NB L	Lockwood Dr	795	4.6	0.9	3.4	6.2	10
NB TR	Lockwood Dr	795	1.5	0.2	1.2	1.9	10
SB LTR	Lockwood Dr	796	5.5	1.1	3.7	7.5	10
WB LTR	Driveway	318	9.3	5.7	4.7	19.6	10

LOCKWOOD DR, BRT ALIGNMENT & DENMARK ST — NODE: 623

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LTR	Denmark St	550	37.0	4.9	31.9	46.8	10
NB T	BRT Alignment	806	54.1	14.2	24.3	72.8	10
NWB LTR	Lockwood Dr	796	4.9	0.7	3.7	5.8	10

SB LTR	Lockwood Dr	321	1.5	0.4	1.0	2.0	10
SB T	Lockwood Dr	321	39.9	2.0	35.8	42.0	10
WB LTR	Denmark St	549	34.4	5.2	23.6	42.4	10

LOCKWOOD DR, BRT ALIGNMENT & MCKINNEY ST **NODE: 152**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	McKinney St	240	21.2	11.0	10.9	47.8	10
NB T	Lockwood Dr	238	0.0	0.0	0.0	0.0	10
NB TR	Lockwood Dr	238	6.1	7.5	0.0	23.4	10
SB TR	Lockwood Dr	237	7.4	7.3	0.5	26.2	10
SWB T	BRT Alignment	785	0.0	0.0	0.0	0.0	10
WB R	McKinney St	239	15.7	8.6	7.8	37.3	10

LOCKWOOD DR, ELGIN ST & SPUR 5 NBFR **NODE: 147**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB LT	Spur 5 NBFR	219	12.5	1.4	10.9	15.0	10
NB TR	Spur 5 NBFR	219	8.6	0.5	7.7	9.2	10
NEB L	Elgin St	216	12.5	3.5	8.9	19.4	10
NEB T	Elgin St	216	34.6	4.9	29.3	44.4	10
SWB T	Lockwood Dr	218	25.2	1.7	22.1	28.2	10
SWB TR	Lockwood Dr	218	26.8	1.3	25.1	28.5	10

LOCKWOOD DR, TELEPHONE RD & LEELAND ST **NODE: 150**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Leeland St	227	51.6	12.6	41.1	75.5	10
EB T	Leeland St	227	38.5	4.3	32.5	47.5	10
EB TR	Leeland St	227	32.3	1.5	29.5	34.3	10
NB L	Lockwood Dr	230	39.0	4.9	31.4	44.7	10
NB T	Lockwood Dr	230	17.4	5.4	9.1	25.7	10
NB TR	Lockwood Dr	230	22.6	1.9	19.8	25.4	10
SB L	Lockwood Dr	229	49.2	3.4	43.1	55.7	10
SB T	Lockwood Dr	229	18.9	10.8	6.5	33.9	10
SB TR	Lockwood Dr	229	16.2	3.9	12.1	25.1	10
WB L	Telephone Rd	231	49.3	4.9	41.7	57.4	10
WB T	Telephone Rd	231	37.0	2.5	34.3	41.9	10
WB TR	Telephone Rd	231	27.5	2.3	24.9	30.8	10

LRT RED LINE, RICHMOND AVE, MAIN ST & WHEELER AVE **NODE: 131**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NB T	LRT Red Line	673	73.6	36.4	24.2	154.6	10
NEB L	Main St	168	89.8	13.3	69.1	111.1	10
NEB R	Main St	168	137.4	55.7	57.4	219.6	10
NWB T	Wheeler Ave	169	60.3	6.1	51.9	73.1	10
NWB TR	Wheeler Ave	169	93.1	17.1	74.7	128.5	10
SB R	Main St	70	30.8	10.7	20.7	55.5	10
SEB R	Richmond Ave	26	77.6	7.2	71.0	94.5	10
SEB T	Richmond Ave	26	210.4	23.2	172.9	238.5	10
SWB T	LRT Red Line	674	3.0	8.2	0.0	26.3	10

RICHMOND AVE & DUNLAVY ST **NODE: 126**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	163	98.9	22.7	73.1	153.5	10
EB T	Richmond Ave	163	11.4	6.7	0.0	18.3	10
EB TR	Richmond Ave	163	134.8	24.1	102.5	166.9	10
NB LTR	Dunlavy St	57	297.5	67.7	196.7	391.5	10
SB LTR	Dunlavy St	56	773.8	209.5	422.8	1,130.8	10
WB L	Richmond Ave	165	143.4	89.5	51.2	306.8	10
WB T	Richmond Ave	165	13.4	10.0	1.9	29.0	10

WB TR	Richmond Ave	165	34.5	4.3	28.1	41.5	10

RICHMOND AVE & EASTSIDE ST **NODE: 120**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	11	63.8	3.9	58.6	69.9	10
EB T	Richmond Ave	11	22.0	2.0	18.8	25.2	10
EB TR	Richmond Ave	11	22.1	2.0	18.0	25.3	10
NB L	Eastside St	40	172.3	85.2	99.8	373.3	10
NB TR	Eastside St	40	58.2	56.1	21.4	202.0	10
SB L	Eastside St	39	71.2	14.6	46.8	93.1	10
SB TR	Eastside St	39	43.6	12.6	29.6	68.4	10
WB L	Richmond Ave	54	44.3	7.9	30.6	54.8	10
WB T	Richmond Ave	54	21.4	3.1	17.7	29.0	10
WB TR	Richmond Ave	54	20.4	2.4	18.0	25.9	10

RICHMOND AVE & EDLOE ST **NODE: 118**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	7	88.2	27.4	60.2	144.3	10
EB R	Richmond Ave	7	32.5	22.3	2.1	68.7	10
EB T	Richmond Ave	7	70.8	35.0	37.2	132.8	10
NB L	Edloe St	155	498.8	39.8	438.5	568.0	10
NB R	Edloe St	155	89.9	10.0	76.6	106.1	10
NB T	Edloe St	155	59.3	5.8	51.8	69.4	10
NB TR	Edloe St	155	69.4	5.7	57.8	76.2	10
SB L	Edloe St	5	98.9	21.1	60.3	122.0	10
SB T	Edloe St	5	46.9	15.3	29.4	74.7	10
SB TR	Edloe St	5	48.0	14.6	29.2	76.2	10
WB L	Richmond Ave	10	125.5	31.4	84.9	163.7	10
WB T	Richmond Ave	10	43.5	7.0	34.7	55.6	10
WB TR	Richmond Ave	10	39.5	4.7	34.0	48.7	10

RICHMOND AVE & GREENBRIAR DR **NODE: 122**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	64	50.0	10.1	40.0	69.5	10
EB T	Richmond Ave	64	34.7	14.5	7.0	55.7	10
EB TR	Richmond Ave	64	37.3	7.4	32.4	56.6	10
NB LTR	Greenbriar Dr	47	44.3	5.3	37.2	52.8	10
SB LT	Greenbriar Dr	46	41.6	2.8	38.2	46.8	10
SB R	Greenbriar Dr	46	5.8	1.0	4.1	7.6	10
SB T	Greenbriar Dr	46	37.6	3.0	33.7	44.4	10
WB L	Richmond Ave	160	45.6	6.4	37.6	53.2	10
WB T	Richmond Ave	160	23.2	4.9	16.7	32.6	10
WB TR	Richmond Ave	160	24.3	2.3	20.5	27.2	10

RICHMOND AVE & HAZARD ST **NODE: 124**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	20	0.0	0.0	0.0	0.0	10
EB TR	Richmond Ave	20	74.2	32.6	30.5	121.4	10
NB R	Hazard St	51	231.9	58.7	150.2	318.4	10
SB R	Hazard St	50	12.5	1.9	9.2	15.6	10
WB T	Richmond Ave	162	0.0	0.0	0.0	0.0	10
WB TR	Richmond Ave	162	0.7	1.9	0.0	5.9	10

RICHMOND AVE & KIRBY DR **NODE: 121**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	54	112.3	39.0	70.5	203.7	10
EB T	Richmond Ave	54	96.9	33.8	50.9	169.5	10
EB TR	Richmond Ave	54	94.2	31.9	53.4	154.6	10

NB L	Kirby Dr	158	131.7	40.4	79.0	220.8	10
NB T	Kirby Dr	158	38.7	5.6	32.4	49.6	10
NB TR	Kirby Dr	158	42.3	5.1	35.4	52.1	10
SB L	Kirby Dr	44	121.2	28.7	76.7	184.2	10
SB T	Kirby Dr	44	41.2	2.2	36.8	44.4	10
SB TR	Kirby Dr	44	48.9	2.4	45.5	53.8	10
WB L	Richmond Ave	64	45.2	3.3	39.9	50.3	10
WB T	Richmond Ave	64	51.0	2.9	47.8	56.1	10
WB TR	Richmond Ave	64	52.2	3.7	47.0	58.3	10

RICHMOND AVE & MANDELL ST **NODE: 127**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	165	131.6	24.3	98.9	170.8	10
EB T	Richmond Ave	165	31.6	11.6	17.9	51.8	10
EB TR	Richmond Ave	165	161.6	26.7	135.9	204.4	10
NB L	Mandell St	59	92.0	21.5	66.1	124.7	10
NB TR	Mandell St	59	270.5	69.6	160.0	369.3	10
SB L	Mandell St	58	125.7	49.4	71.0	230.1	10
SB TR	Mandell St	58	58.2	5.2	50.0	68.2	10
WB L	Richmond Ave	23	99.3	26.0	64.6	138.2	10
WB T	Richmond Ave	23	48.5	11.0	26.6	63.3	10
WB TR	Richmond Ave	23	45.3	8.2	35.2	59.0	10

RICHMOND AVE & MONTROSE BLVD **NODE: 128**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	23	342.7	41.6	299.9	421.4	10
EB T	Richmond Ave	23	35.9	10.1	19.6	58.9	10
EB TR	Richmond Ave	23	459.2	52.2	400.1	541.1	10
NB L	Montrose Blvd	61	96.3	12.7	71.2	115.6	10
NB T	Montrose Blvd	61	52.7	11.5	36.6	74.3	10
NB TR	Montrose Blvd	61	57.6	13.8	36.6	87.0	10
SB L	Montrose Blvd	60	134.5	27.9	102.8	194.1	10
SB T	Montrose Blvd	60	113.2	10.0	95.5	133.9	10
SB TR	Montrose Blvd	60	124.2	10.1	106.9	138.8	10
WB L	Richmond Ave	166	95.1	17.2	75.7	124.7	10
WB T	Richmond Ave	166	22.8	9.5	13.4	40.9	10
WB TR	Richmond Ave	166	98.9	12.4	77.8	115.7	10

RICHMOND AVE & SHEPHERD DR **NODE: 123**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	160	28.9	11.5	14.1	51.4	10
EB T	Richmond Ave	160	41.7	8.2	29.8	53.4	10
EB TR	Richmond Ave	160	50.5	16.9	35.9	82.4	10
NB T	Shepherd Dr	49	40.5	3.0	36.1	45.6	10
NB TR	Shepherd Dr	49	44.6	7.0	40.1	64.2	10
SB T	Shepherd Dr	48	40.6	2.6	37.5	44.7	10
SB TR	Shepherd Dr	48	41.0	2.3	38.1	43.7	10
WB L	Richmond Ave	20	67.6	18.7	54.4	116.6	10
WB T	Richmond Ave	20	26.9	6.3	13.3	34.1	10
WB TR	Richmond Ave	20	27.6	7.3	22.6	47.1	10

RICHMOND AVE & US 59 NBFR **NODE: 130**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	167	1.6	3.1	0.1	10.4	10
EB T	Richmond Ave	167	11.9	3.2	7.7	18.2	10
NEB LT	US 59 NBFR	69	76.9	15.7	56.5	95.9	10
NEB R	US 59 NBFR	69	28.6	13.1	14.5	53.2	10
NEB TR	US 59 NBFR	69	641.3	275.2	328.8	1,140.6	10

WB R	Richmond Ave	26	72.0	10.2	61.4	92.1	10
WB T	Richmond Ave	26	67.2	4.7	61.6	76.4	10
WB TR	Richmond Ave	26	80.9	8.8	71.8	99.4	10

RICHMOND AVE & US 59 SBFR **NODE: 129**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Richmond Ave	166	121.3	11.2	98.4	134.6	10
EB TR	Richmond Ave	166	153.3	16.5	132.0	179.9	10
SWB LT	US 59 SBFR	65	60.7	5.6	48.2	68.4	10
SWB R	US 59 SBFR	65	12.5	3.0	8.0	17.8	10
SWB T	US 59 SBFR	65	53.5	3.8	47.5	59.8	10
WB L	Richmond Ave	167	0.2	0.1	0.0	0.3	10
WB T	Richmond Ave	167	3.7	2.7	1.4	10.0	10

RICHMOND AVE & WOODHEAD ST **NODE: 125**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Richmond Ave	162	96.1	9.6	80.7	110.9	10
EB T	Richmond Ave	162	5.3	7.6	0.0	20.6	10
EB TR	Richmond Ave	162	115.5	23.2	83.5	156.9	10
NB L	Woodhead St	53	382.4	87.4	269.9	537.2	10
NB TR	Woodhead St	53	476.9	74.1	387.8	609.7	10
SB TR	Woodhead St	52	47.8	7.0	39.1	61.1	10
WB L	Richmond Ave	163	45.8	5.8	36.8	52.6	10
WB T	Richmond Ave	163	32.6	20.2	0.0	71.1	10
WB TR	Richmond Ave	163	17.1	4.7	9.4	25.6	10

S RICE AVE & WESTPARK DR **NODE: 110**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	140	216.6	71.1	114.2	342.4	10
EB T	Westpark Dr	140	102.3	27.5	63.2	152.5	10
EB TR	Westpark Dr	140	88.7	19.2	57.1	126.7	10
NB L	S Rice Ave	138	358.7	81.6	256.3	517.3	10
NB T	S Rice Ave	138	208.7	38.7	154.6	288.1	10
NB TR	S Rice Ave	138	190.3	25.5	155.2	241.3	10
SB L	S Rice Ave	137	137.2	24.5	107.4	191.9	10
SB R	S Rice Ave	137	8.7	1.8	7.0	12.3	10
SB T	S Rice Ave	137	77.7	6.1	66.0	86.7	10
SB TR	S Rice Ave	137	76.0	7.7	63.2	88.2	10
WB L	Westpark Dr	781	150.1	16.8	120.5	171.9	10
WB T	Westpark Dr	781	54.4	4.6	46.5	64.0	10
WB TR	Westpark Dr	781	61.1	7.0	50.4	73.6	10

SAN JACINTO ST & WHEELER AVE **NODE: 133**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB LT	San Jacinto St	173	277.1	60.5	185.9	394.4	10
NEB R	San Jacinto St	173	9.2	2.4	5.8	13.3	10
NEB T	San Jacinto St	173	28.3	2.0	25.8	32.2	10
NWB T	Wheeler Ave	86	56.2	9.0	44.1	68.3	10
NWB TR	Wheeler Ave	86	167.9	30.3	119.5	228.2	10
SEB LT	Wheeler Ave	172	49.3	5.4	42.8	59.0	10
SEB T	Wheeler Ave	172	71.7	11.1	59.9	97.0	10

TIDWELL RD & EDELL ST **NODE: 689**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	348	29.8	10.9	18.3	54.7	10
EB T	Tidwell Rd	348	5.1	2.6	2.3	8.8	10
EB TR	Tidwell Rd	348	13.3	2.5	10.1	16.8	10
NB LTR	Edell St	590	15.3	3.6	11.9	21.1	10

SB LTR	Edell St	589	19.9	2.5	16.1	23.6	10
WB L	Tidwell Rd	652	96.0	22.8	62.7	143.4	10
WB T	Tidwell Rd	652	6.1	5.2	0.0	14.0	10
WB TR	Tidwell Rd	652	57.5	17.4	24.6	85.9	10

TIDWELL RD & HIRSCH RD **NODE: 180**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	338	53.5	4.6	46.8	62.4	10
EB T	Tidwell Rd	338	26.3	1.4	23.8	27.8	10
EB TR	Tidwell Rd	338	27.5	1.5	25.4	29.5	10
NB L	Hirsch Rd	336	35.6	3.3	31.0	42.6	10
NB T	Hirsch Rd	336	23.8	2.5	19.8	27.1	10
NB TR	Hirsch Rd	336	21.0	2.0	18.0	23.7	10
SB L	Hirsch Rd	335	64.6	7.9	53.4	79.9	10
SB T	Hirsch Rd	335	32.2	3.7	26.6	38.9	10
SB TR	Hirsch Rd	335	24.0	2.9	20.8	28.4	10
WB L	Tidwell Rd	334	45.4	4.1	38.4	53.7	10
WB T	Tidwell Rd	334	19.2	4.1	14.6	27.7	10
WB TR	Tidwell Rd	334	25.0	9.6	17.4	45.9	10

TIDWELL RD & I-69 NBFR **NODE: 181**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	342	55.6	2.6	50.7	59.0	10
EB LT	Tidwell Rd	342	48.4	4.0	43.9	56.0	10
EB T	Tidwell Rd	342	16.5	1.2	14.0	18.3	10
NB L	I-69 NBFR	340	35.7	1.7	34.2	39.0	10
NB LT	I-69 NBFR	340	35.3	2.5	32.6	41.4	10
NB R	I-69 NBFR	340	9.7	0.8	8.0	10.8	10
NB T	I-69 NBFR	340	34.0	1.5	32.2	37.3	10
NB TR	I-69 NBFR	340	34.5	1.0	32.5	35.6	10
WB T	Tidwell Rd	586	29.8	2.8	24.2	32.7	10
WB TR	Tidwell Rd	586	39.5	6.9	26.7	46.9	10

TIDWELL RD & I-69 SBFR **NODE: 182**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	Tidwell Rd	652	4.5	1.3	2.4	7.0	10
EB T	Tidwell Rd	652	20.7	2.8	15.9	26.6	10
SB L	I-69 SBFR	649	98.8	22.0	72.0	133.9	10
SB LT	I-69 SBFR	649	52.2	10.6	38.3	73.7	10
SB R	I-69 SBFR	649	37.6	42.0	0.7	146.3	10
SB T	I-69 SBFR	649	31.3	1.7	27.6	34.4	10
WB L	Tidwell Rd	342	20.0	2.7	16.1	25.2	10
WB LT	Tidwell Rd	342	24.3	1.8	22.8	27.8	10
WB T	Tidwell Rd	342	25.6	7.8	14.8	40.2	10

TIDWELL RD & JENSEN DR **NODE: 183**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	349	54.6	3.3	49.9	59.8	10
EB TR	Tidwell Rd	349	31.0	7.7	23.6	48.5	10
NB L	Jensen Dr	347	123.2	53.4	67.4	219.8	10
NB T	Jensen Dr	347	48.1	17.2	34.6	85.3	10
NB TR	Jensen Dr	347	45.3	13.4	32.2	70.6	10
SB L	Jensen Dr	604	52.9	4.2	46.0	58.4	10
SB TR	Jensen Dr	604	55.2	11.4	39.5	69.2	10
WB L	Tidwell Rd	348	146.8	27.6	100.3	182.9	10
WB R	Tidwell Rd	348	58.2	5.3	50.6	68.1	10
WB TR	Tidwell Rd	348	173.2	25.0	120.1	205.7	10

TIDWELL RD, BRT ALIGNMENT & FRIENDLY RD **NODE: 677**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Tidwell Rd	586	44.0	4.0	37.5	49.5	10
EB T	Tidwell Rd	586	12.4	1.5	10.0	14.1	10
EB TR	Tidwell Rd	586	13.5	1.2	11.5	14.8	10
NB LTR	Friendly Rd	585	29.7	3.8	23.5	34.1	10
WB L	Tidwell Rd	338	38.7	5.7	32.1	52.6	10
WB T	Tidwell Rd	338	4.2	0.9	3.3	6.5	10
WB TR	Tidwell Rd	338	4.7	1.1	3.6	6.7	10
SB TR	Friendly Rd	584	42.2	7.4	34.1	59.5	10
WB T	BRT Alignment	797	6.8	7.0	0.0	18.6	10

TIDWELL RD, BRT ALIGNMENT & LOCKWOOD DR **NODE: 179**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB R	BRT Alignment	797	51.4	6.7	40.6	61.9	10
NB L	Lockwood Dr	574	56.0	15.9	37.1	87.2	10
NB R	Lockwood Dr	574	17.1	4.1	11.9	26.3	10
NB T	Lockwood Dr	574	46.2	4.6	40.1	53.4	10
NEB LT	Tidwell Rd	334	17.3	1.1	15.2	18.5	10
NEB TR	Tidwell Rd	334	16.5	1.5	13.7	18.9	10
SB L	Lockwood Dr	331	51.8	7.4	38.0	61.1	10
SB TR	Lockwood Dr	331	45.0	11.4	32.3	74.1	10
WB L	Tidwell Rd	333	48.0	6.5	38.6	61.5	10
WB T	Tidwell Rd	333	7.5	0.6	6.6	8.3	10
WB TR	Tidwell Rd	333	6.8	0.6	6.1	7.7	10

WESTPARK DR & 14TH ST **NODE: 104**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	116	18.9	4.7	14.8	30.4	10
EB TR	Westpark Dr	116	19.6	4.0	13.7	28.4	10
NB L	14th St	118	111.8	37.7	72.4	180.9	10
NB R	14th St	118	7.9	1.7	5.4	10.5	10
WB L	Westpark Dr	119	89.0	19.5	62.5	122.0	10
WB T	Westpark Dr	119	40.7	23.1	14.6	83.0	10

WESTPARK DR & ALDER DR **NODE: 99558**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	778	17.8	3.4	11.9	22.9	10
EB TR	Westpark Dr	778	15.3	3.1	10.4	19.8	10
NB LR	Alder Dr	718	53.2	5.9	43.8	61.0	10
WB LT	Westpark Dr	133	15.6	3.5	11.9	22.4	10
WB T	Westpark Dr	133	9.9	1.7	7.6	13.4	10

WESTPARK DR & CHIMNEY ROCK RD **NODE: 109**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	133	164.7	15.2	145.4	189.6	10
EB T	Westpark Dr	133	83.8	11.5	72.3	106.8	10
EB TR	Westpark Dr	133	92.1	17.5	75.1	128.3	10
NB T	Chimney Rock Rd	135	47.4	4.5	42.8	57.1	10
NB TR	Chimney Rock Rd	135	52.1	5.8	45.3	62.6	10
SB L	Chimney Rock Rd	134	55.2	4.0	49.3	61.8	10
SB T	Chimney Rock Rd	134	27.2	1.4	25.1	29.5	10
SB TR	Chimney Rock Rd	134	26.5	1.6	24.0	28.4	10
WB L	Westpark Dr	136	205.3	67.3	116.7	298.1	10
WB T	Westpark Dr	136	121.9	45.9	65.9	191.7	10
WB TR	Westpark Dr	136	117.8	31.1	72.5	165.4	10

WESTPARK DR & EDLOE ST **NODE: 115**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	152	51.2	8.4	41.1	66.1	10
EB TR	Westpark Dr	152	29.1	2.4	26.3	34.0	10
NB L	Edloe St	29	62.7	6.9	49.6	73.1	10
NB R	Edloe St	29	6.4	0.9	4.8	7.5	10
NB T	Edloe St	29	43.1	7.1	37.3	60.9	10
SB L	Edloe St	153	72.0	11.7	57.4	90.7	10
SB R	Edloe St	153	101.9	15.7	68.6	120.0	10
SB TR	Edloe St	153	45.4	1.8	43.6	49.1	10
WB L	Westpark Dr	154	72.7	9.3	62.4	95.7	10
WB T	Westpark Dr	154	49.5	12.4	40.7	83.5	10
WB TR	Westpark Dr	154	52.9	14.8	40.4	91.2	10

WESTPARK DR & FONDREN RD **NODE: 102**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	114	78.9	7.7	68.6	89.0	10
EB T	Westpark Dr	114	78.2	11.7	69.5	108.5	10
EB TR	Westpark Dr	114	88.0	13.4	71.4	118.8	10
NB L	Fondren Rd	110	19.4	1.1	17.3	21.3	10
NB T	Fondren Rd	110	8.2	1.0	6.8	9.6	10
NB TR	Fondren Rd	110	10.3	1.6	8.5	12.8	10
SB L	Fondren Rd	112	926.8	111.1	657.1	1,029.6	10
SB T	Fondren Rd	112	339.9	48.7	236.8	405.7	10
SB TR	Fondren Rd	112	345.4	34.2	268.1	391.9	10
WB L	Westpark Dr	117	929.6	109.2	790.5	1,083.1	10
WB T	Westpark Dr	117	359.9	88.2	251.6	481.5	10
WB TR	Westpark Dr	117	315.6	74.8	213.6	434.3	10

WESTPARK DR & HILLCROFT AVE **NODE: 103**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	117	70.2	11.2	59.4	98.5	10
EB T	Westpark Dr	117	65.3	3.7	56.0	68.8	10
EB TR	Westpark Dr	117	71.4	3.7	66.4	77.4	10
NB L	Hillcroft Ave	3	576.3	77.6	474.0	751.4	10
NB T	Hillcroft Ave	3	153.7	16.6	122.0	173.3	10
NB TR	Hillcroft Ave	3	137.2	13.1	111.7	150.6	10
SB L	Hillcroft Ave	115	408.3	29.6	355.2	446.1	10
SB T	Hillcroft Ave	115	155.0	18.8	122.1	183.6	10
SB TR	Hillcroft Ave	115	172.4	21.2	133.0	201.3	10
WB L	Westpark Dr	116	128.2	22.0	108.3	177.6	10
WB T	Westpark Dr	116	79.9	7.8	67.3	90.8	10
WB TR	Westpark Dr	116	94.1	7.5	84.5	108.1	10

WESTPARK DR & I-69 NBFR **NODE: 106**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	123	24.2	2.0	21.4	27.8	10
EB LT	Westpark Dr	123	19.7	2.4	16.9	23.8	10
EB T	Westpark Dr	123	20.3	1.8	17.7	23.3	10
NEB R	I-69 NBFR	126	14.7	3.5	10.7	19.6	10
NEB T	I-69 NBFR	126	25.3	6.9	18.7	42.2	10
WB R	Westpark Dr	127	8.3	5.4	1.0	19.1	10
WB T	Westpark Dr	127	25.6	2.7	23.1	30.1	10

WESTPARK DR & I-69 SBFR **NODE: 105**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	119	32.6	4.6	27.7	42.9	10
SWB L	I-69 SBFR	121	51.2	7.1	44.6	66.0	10
SWB LT	I-69 SBFR	121	54.9	7.7	47.1	69.1	10

SWB R	I-69 SBFR	121	11.6	15.2	1.8	53.7	10
SWB T	I-69 SBFR	121	54.0	8.4	43.7	72.8	10
WB L	Westpark Dr	123	73.0	6.0	64.6	84.1	10
WB T	Westpark Dr	123	5.3	1.2	3.7	7.6	10

WESTPARK DR & LOOP CENTRAL DR **NODE: 99561**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	784	26.3	4.3	21.5	36.4	10
EB TR	Westpark Dr	784	24.7	3.4	21.0	32.7	10
NB LR	Loop Central Dr	803	35.5	2.3	31.6	38.9	10
WB L	Westpark Dr	146	52.6	10.8	37.2	70.4	10
WB T	Westpark Dr	146	13.3	2.5	10.1	17.3	10

WESTPARK DR & NEWCASTLE DR **NODE: 113**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	146	60.7	9.0	52.9	83.3	10
EB T	Westpark Dr	146	17.6	2.8	13.7	22.9	10
EB TR	Westpark Dr	146	23.3	3.1	16.9	27.0	10
NB L	Newcastle Dr	148	79.9	19.8	51.9	126.3	10
NB T	Newcastle Dr	148	31.6	2.8	27.3	36.2	10
NB TR	Newcastle Dr	148	23.6	2.6	20.9	28.7	10
SB LT	Newcastle Dr	147	70.9	14.6	53.6	100.9	10
SB TR	Newcastle Dr	147	42.8	6.8	33.2	53.8	10
WB L	Westpark Dr	149	68.8	4.9	61.2	77.2	10
WB T	Westpark Dr	149	21.4	4.3	14.6	27.4	10
WB TR	Westpark Dr	149	20.9	3.5	14.7	25.7	10

WESTPARK DR & RAMPART ST **NODE: 107**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB LT	Westpark Dr	127	8.4	0.7	7.6	9.4	10
EB TR	Westpark Dr	127	8.8	0.7	7.5	9.6	10
NB LT	Rampart St	129	128.4	33.5	74.6	179.3	10
NB TR	Rampart St	129	20.0	7.7	11.8	35.6	10
SB LTR	Rampart St	128	41.1	6.6	31.4	50.9	10
WB LT	Westpark Dr	130	11.9	3.0	6.0	17.0	10
WB TR	Westpark Dr	130	11.1	4.4	5.2	20.8	10

WESTPARK DR & ROYALTON ST **NODE: 309**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	136	20.2	7.7	14.6	40.8	10
EB TR	Westpark Dr	136	16.2	5.3	10.7	29.3	10
NB LR	Royalton St	384	291.0	29.5	258.3	335.8	10
WB L	Westpark Dr	140	72.7	8.3	60.1	86.6	10
WB T	Westpark Dr	140	14.5	8.7	5.8	30.5	10

WESTPARK DR & UPTOWN TRANSIT CTR **NODE: 99553**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	781	15.2	1.8	13.0	17.8	10
EB TR	Westpark Dr	781	12.8	1.4	10.7	14.9	10
NB LR	Uptown Transit Ctr	769	72.1	11.2	53.2	88.5	10
WB L	Westpark Dr	629	87.2	37.8	26.4	141.7	10
WB T	Westpark Dr	629	28.7	8.8	11.8	42.1	10

WESTPARK DR & WESLAYAN ST **NODE: 114**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	149	71.9	6.9	63.3	80.9	10
EB T	Westpark Dr	149	54.8	13.6	38.0	74.4	10
EB TR	Westpark Dr	149	59.5	14.8	40.1	88.3	10

NB L	Weslayan St	151	99.3	33.8	66.4	176.4	10
NB T	Weslayan St	151	25.6	4.1	20.1	34.5	10
NB TR	Weslayan St	151	21.4	2.8	19.4	28.7	10
SB L	Weslayan St	150	70.2	9.9	55.1	87.9	10
SB T	Weslayan St	150	38.7	1.8	36.5	42.4	10
SB TR	Weslayan St	150	50.3	3.7	46.2	55.8	10
WB L	Westpark Dr	152	57.4	7.8	48.8	72.6	10
WB T	Westpark Dr	152	59.2	14.7	44.7	88.0	10
WB TR	Westpark Dr	152	62.8	16.6	47.3	97.3	10

WESTPARK DR, BRT ALIGNMENT & I-610 NBFR **NODE: 112**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	143	75.5	18.6	49.7	108.2	10
EB T	Westpark Dr	143	11.6	1.5	9.7	14.0	10
NB L	I-610 NBFR	145	46.3	5.0	40.4	54.9	10
NB LT	I-610 NBFR	145	40.5	2.7	37.4	44.4	10
NB TR	I-610 NBFR	145	35.8	1.6	33.0	38.8	10
NEB T	BRT Alignment	821	38.8	12.4	16.8	58.2	10
WB T	Westpark Dr	784	26.4	5.6	18.1	37.1	10
WB TR	Westpark Dr	784	24.1	4.9	16.9	30.7	10

WESTPARK DR, BRT ALIGNMENT, SILVER LINE ALIGNMENT & I-610 SBFR **NODE: 111**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB T	Westpark Dr	629	44.7	11.4	33.0	72.1	10
EB TR	Westpark Dr	629	146.8	26.9	82.4	183.9	10
NEB LT	BRT Alignment	845	47.7	10.2	35.2	66.6	10
SB R	Silver Line Alignment	783	69.0	38.3	18.8	117.7	10
SEB LT	I-610 SBFR	141	68.4	7.5	57.2	78.8	10
SEB T	I-610 SBFR	141	55.1	5.9	45.4	65.1	10
SWB L	Westpark Dr	143	38.1	4.7	31.8	44.0	10
SWB T	Westpark Dr	143	8.5	1.0	6.7	9.8	10
WB R	I-610 SBFR	141	1.1	0.8	0.2	3.1	10
WB T	BRT Alignment	844	1.6	0.8	0.6	3.4	10

WESTPARK DR, FOUNTAIN VIEW DR & RENWICK DR **NODE: 108**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
EB L	Westpark Dr	130	87.6	11.9	68.4	103.8	10
EB T	Westpark Dr	130	42.7	4.3	34.3	47.8	10
EB TR	Westpark Dr	130	42.4	3.9	33.4	46.9	10
NB L	Renwick Dr	132	69.7	12.1	53.5	98.6	10
NB T	Renwick Dr	132	54.6	3.3	48.6	58.8	10
NB TR	Renwick Dr	132	54.0	4.1	48.1	61.0	10
SB L	Fountain View Dr	131	72.4	5.5	65.9	80.5	10
SB T	Fountain View Dr	131	50.8	3.1	45.8	54.5	10
SB TR	Fountain View Dr	131	51.1	2.9	45.6	54.8	10
WB L	Westpark Dr	778	231.2	61.8	123.2	322.8	10
WB T	Westpark Dr	778	37.6	6.1	29.0	45.6	10
WB TR	Westpark Dr	778	35.6	5.3	26.5	41.2	10

WHEELER AVE & HUTCHINS ST **NODE: 367**

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NEB L	Hutchins St	707	65.8	47.6	8.3	136.3	10
NEB TR	Hutchins St	707	8.5	1.2	7.1	10.7	10
NWB T	Wheeler Ave	423	51.4	1.6	47.1	53.2	10
NWB TR	Wheeler Ave	423	69.6	53.2	12.8	164.3	10
SEB L	Wheeler Ave	421	35.9	4.9	29.0	45.3	10
SEB T	Wheeler Ave	421	23.2	1.7	20.5	25.6	10
SWB LR	Hutchins St	422	31.9	15.4	6.1	56.9	10

WHEELER AVE & ST EMANUEL ST

NODE: 365

Lane Group	Street Name	Superlink ID	Average	Std Dev	Minimum	Maximum	# Samples
NWB L	Wheeler Ave	421	59.3	11.9	42.1	81.4	10
NWB T	Wheeler Ave	421	54.3	32.0	3.0	105.6	10
SEB T	Wheeler Ave	176	0.3	0.7	0.0	1.9	10
SEB TR	Wheeler Ave	176	17.4	23.9	1.7	75.8	10

APPENDIX G – TRANSMODELER WHITE PAPER

HOUSTON OFFICE
5100 Westheimer Road | Suite 219
Houston, TX 77056
Office 713.588.4500
Fax 512.821.2085
TBPE Firm Registration No. 812

MEMORANDUM

DATE: March 30, 2021
TO: David Leard, ACIP (HNTB)
CC: Steven Granson (HNTB)
FROM: Mark Ingram, PE, PTOE (ATG)
RE: TransModeler Whitepaper

The purpose of this document is to compare Synchro and TransModeler's traffic analysis capabilities to evaluate Bus Rapid Transit (BRT) Operations for the Houston METRO University Line project.

Currently, ATG is scoped to use Synchro to evaluate existing, no-build, and 3 build alternatives. Synchro, while an effective analysis tool, does not have robust, transit features such as semi-exclusive lanes and transit signal priority. As a result, we are proposing a new analysis software approach which consists of utilizing TransModeler in lieu of Synchro.

TransModeler has the capability to evaluate the corridor at an intersection level, like Synchro, while also provides us a more comprehensive tool for operational analysis of corridor segments which comprise of multiple modes of transportation (including transit). All measures of effectiveness (MOE) that could be obtained from Synchro would also be available for TransModeler, and most importantly, there will be no additional level of effort required to complete the analysis using TransModeler over Synchro.

Project Description

The University Corridor is defined as a METRORapid Bus Rapid Transit (BRT) line in the Westpark, Richmond, and Lockwood corridors from the Westchase Park & Ride to the Tidwell Transit Center. It connects to the Wheeler Transit Center, operating east to the University of Houston/Texas Southern University (UH/TSU) campuses. East of UH/TSU, the line operates in the north-south Lockwood corridor, terminating at the Tidwell Transit Center. The alignment is currently proposed to be center-running in semi-exclusive lanes, along with nearly four miles of elevated structure over Buffalo and Hunting bayous, Beltway 8, and several major streets. The line is currently proposed to feature 41 stations.

Alternative Analysis

The alternatives for this project will be developed with the goal of decreasing travel time and increasing the reliability of the University BRT line throughout the corridor. The project team will evaluate vehicular traffic operations and bus operations for a semi-exclusive bus lane for a majority of the corridor, in addition to different operational treatments at signalized intersections. This could include, but is not limited to, transit signal priority (TSP) and queue jumping. Other alternatives may include mixed operations or exclusive transit lanes at some locations.

Measure of Effectiveness

During this planning level phase, three alternatives will be developed, and their performance will be compared using different measures of effectiveness (MOE) to assess transportation impacts for the environmental assessment study. The MOEs will be selected during the development of the Methodology and Assumptions report. Before the MOEs can be selected, the analysis software must be determined. It is important to consider the long-term needs of the project when selecting the appropriate software as some MOEs may not be available once software is selected.

The measure of effectiveness available for each software are comparable, as shown in **Table 1**.

Table 1. Measure of Effectiveness comparison

Measure of Effectiveness	Synchro	TransModeler
Intersection – Volume to Capacity (V/C) Ratio	X	X
Intersection – Approach Delay/LOS	X	X
Intersection – Overall Delay/LOS	X	X
Intersection – Queue Lengths	X	X
Arterial – Segment Volume to Capacity (V/C) Ratio	X	X
Arterial – Segment Speed/LOS	X	X
Arterial – Segment Travel Time	X	X
Arterial – Transit Travel Time		X
Arterial – Transit Average Speed		X

** The table above does not show all of the MOEs Included for each software*

Synchro vs. TransModeler

Though the MOEs available for each software are comparable, the ability to model different transportation facilities and operational features such as exclusive busways, semi-exclusive bus lanes, transit signal priority, and queue jumping is where TransModeler will provide the most benefit. TransModeler has Public Transit features built into the program allowing for a more detailed evaluation of the proposed alternatives.

Synchro does not have the direct ability to evaluate different transit operational strategies; therefore, engineering judgment for model assumptions and adjustment will be required due to the lack of built-in features within Synchro as compared to TransModeler. We have experience in applying engineering judgment in this capacity but feel applying TransModeler would be more transparent in the overall analysis process.

TransModeler

TransModeler Public Transit Features

"TransModeler is a multimodal simulator. With TransModeler, you can simulate bus and rail transit systems with frequency or schedule-based service." – TransModeler

- Simulate BRT, exclusive bus lanes, signal priority, and queue jumping
- Report schedule adherence and reliability measures



Figure 1. Screen capture of TransModeler public transit stop

Additional TransModeler Benefits for University Line BRT

- TransModeler automatically creates many elements of the road network; therefore will not require an additional level of effort when comparing directly with Synchro for the same corridor analysis.
- Managing 100 + potential study intersections is easier with GIS architecture that integrates traffic simulation models with a geographic information system (GIS) that has been extended to store, maintain, and analyze transportation and traffic data.
- TransModeler's multi-resolution traffic model can be used to evaluate alternatives at a system level (corridor) but will allow the flexibility to drill down to the segment and intersection level to evaluate different strategies at critical locations
- TransModeler multi-resolution MOE hierarchy: System (Corridor) → Segment → Intersection
- Ability to test different operational strategies: TSP, queue-jumping strategies, BRT vs. mixed operations, signal coordination
- Intersection level-of-service reports consistent with Highway Capacity Manual definitions.
- Define arterial and corridor segments with interactive graphical editing tools to customize segment and corridor level-of-service reports consistent with Highway Capacity Manual definitions.
- Generate clean and easy to read reports, maps, and charts for inclusion in reports and presentation slides
- HD Backgrounds, which will prove to be extremely helpful with both client and public interactions (Highly anticipated for this project)

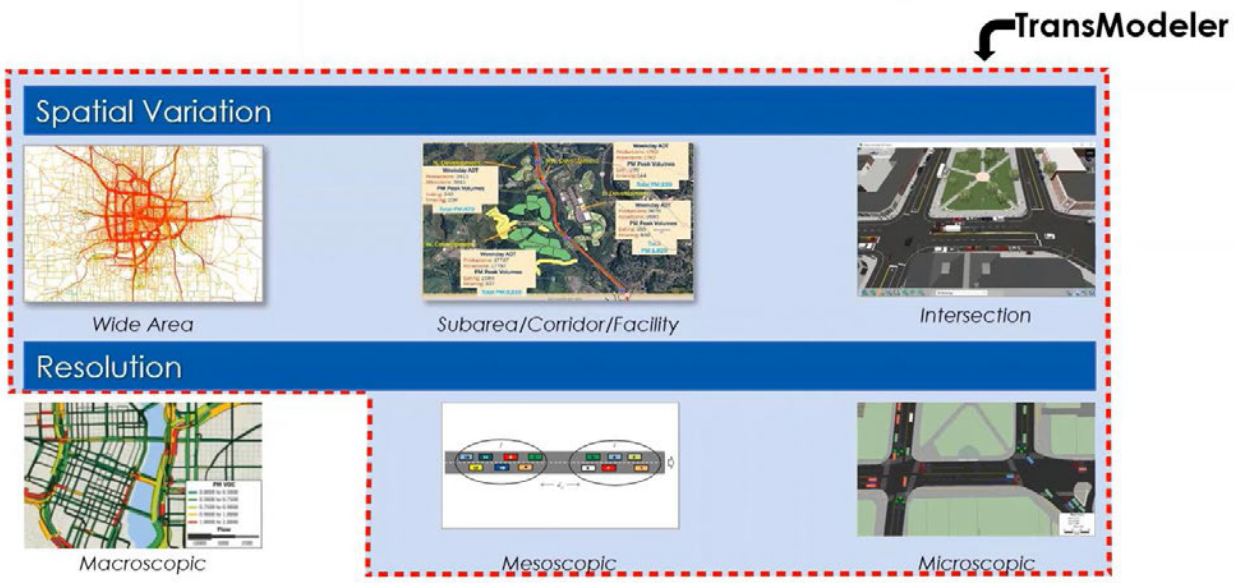
TransModeler network could be progressed to the next stage of this project to minimize the need to re-create the traffic models from scratch when we move into the detailed analysis of the Locally Preferred Alternative.

ATG Experience with TransModeler and the Federal Transit Administration (FTA)

ATG has years of experience with TransModeler for traffic operational analysis. ATG also has experience using TransModeler to evaluate traffic impacts in FTA projects. For example, ATG is currently evaluating the operational impacts of Cap METRO's light rail Orange Line project that runs from north Austin to South Austin.

TransModeler Overview

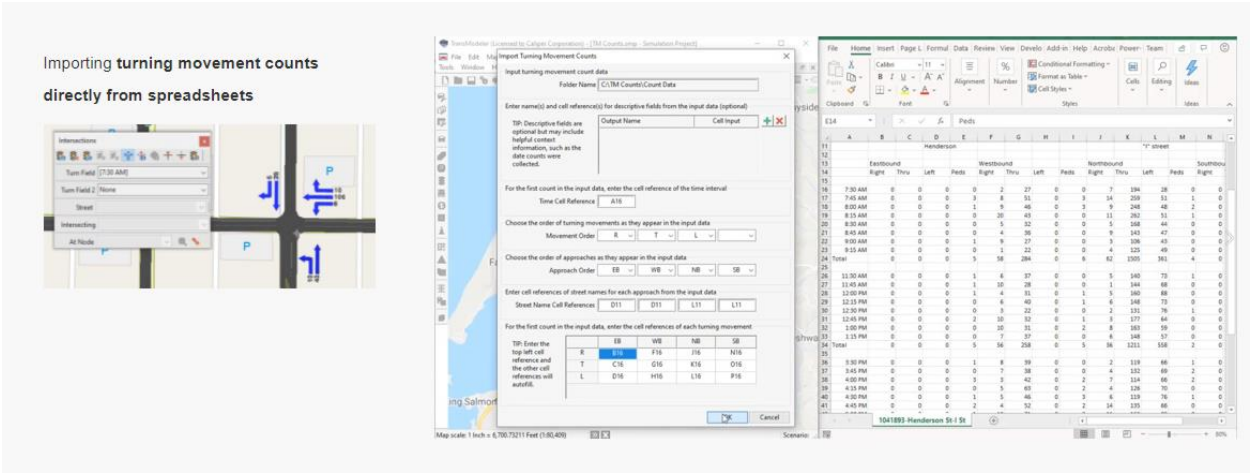
1. Multi-resolution MOE's: Corridor → Segment → Intersection



2. HD Backgrounds, great for client and public use (Highly anticipated for this project)



3. GIS Based and can easily import intersection data from a database. 100+ potential study intersections



4. Calibrated Driving behaviors

Driving Behaviors

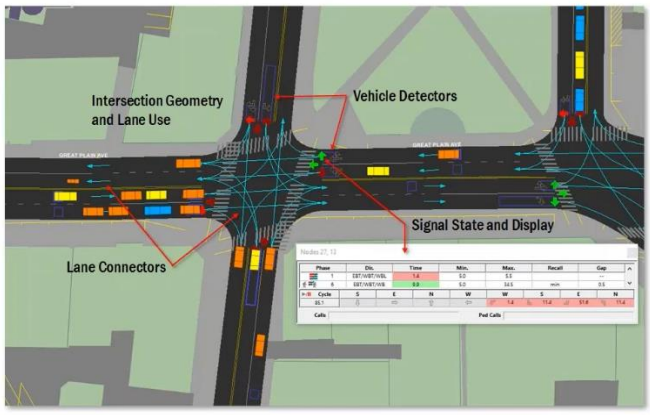
- Calibrated for US driving conditions
- Defaults backed by US research
- Corroborated with empirical analysis methods (e.g. HCM)
- Operating capacities and other performance characteristics routinely validated in practice

Vehicle Performance

- Detailed models of US vehicle fleet including auto and heavy vehicles
- Accurate treatments of the effect of grade, horizontal curvature on acceleration, limiting speeds
- Customizable to reflect route restrictions, lane use privileges

5. Detailed Traffic Model for next phase of design

- Ground-truth intersection and lane geometry enables faithful model of operating capacity queue storage, spillback
- Lane connectors represent vehicle paths through intersection, point of conflicts, gap-checking
- Signals and sensors emulate traffic control and vehicle detection in the field



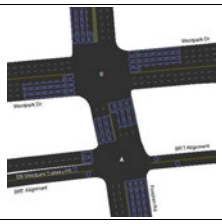
APPENDIX H – TRANSMODELER SIGNAL TIMING REPORTS- BUILD CONDITIONS

TransModeler® Intersection Report

Site Information

Intersection ID:	*101,102*	**Site Name:**	*N 29.720989, W 95.520203*
Cross Street:	*Fondren Rd & EB Westpark Tollway FR, etc.*	**Number of Phase:**	*1*
Analysis Date:	*2023/3/7 15:14:8*		

Intersection Geometry



Turn Movement Volumes (Fondren Rd & EB Westpark Tollway FR)

@ Node 101 From \ To	Fondren Rd (NB)	BRT Alignment (WB)	Fondren Rd (SB)	BRT Alignment (EB)
Fondren Rd (SB)				
EB Westpark Tollway FR (EB)				
BRT Alignment (NEB)				
Fondren Rd (NB)				
BRT Alignment (WB)				

Turn Movement Volumes (Fondren Rd & Westpark Dr)

@ Node 102 From \ To	Fondren Rd (NB)	Westpark Dr (WB)	Fondren Rd (SB)	Westpark Dr (EB)
Fondren Rd (SB)				
Westpark Dr (EB)				
Fondren Rd (NB)				
Westpark Dr (WB)				

(Row Field) = Volume

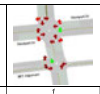
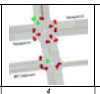
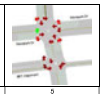
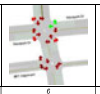
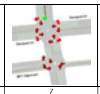
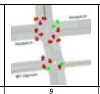
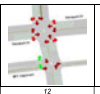
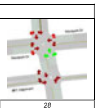
Volume Adjustment and Saturation Flow Rate

Movement	Fondren Rd (SB)	EB Westpark Tollway FR (EB)		BRT Alignment (NEB)	Fondren Rd (NB)	BRT Alignment (WB)	Fondren Rd (SB)				Westpark Dr (EB)			Fondren Rd (NB)			Westpark Dr (WB)			
	Fondren Rd	Fondren Rd	Fondren Rd	BRT Alignment	Fondren Rd	BRT Alignment	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr	Fondren Rd	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr	Westpark Dr	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr
	SBT	EBL	EBR	NEBT	NBT	WBT	NBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*133.0 sec*
Control Delay:	*46.3 sec*
Level of Service:	*D*
Offset:	*48.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*By Phase*

Phasing

Item Name \ Signal States												
ID	1	2	3	4	5	6	7	8	9	12	13	28
Min Green	3.0	3.0	3.0	7.0	3.0	7.0	3.0	7.0	3.0	1.0	2.0	2.0
Max Green	11.0	20.0	12.0	23.0	12.0	31.0	15.0	20.0	8.0	6.0	12.0	12.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	5.0	6.0	6.0
Recall Mode	None	Max	Min	Max	Min	Max	Min	Max	None	Max	Max	None
Memory Mode	Look	Look	Look	Look	Look	Look	Look	Look	Non-Look	Look	Look	Look
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	15.0	13.0	15.0	15.0	15.0	15.0	15.0	12.0	15.0	15.0	7.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	No	No	Yes	No	No	No	No	No	No
Split	17.0	26.0	19.0	29.0	18.0	37.0	21.0	26.0	13.0	12.0	18.0	18.0
Max Inhibit	False	False	False	False	False	False	False	False	False	False	False	False
Opt Min Green	9.0	9.0	9.0	13.0	9.0	13.0	9.0	13.0	8.0	7.0	8.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3	CG - 4
Ring - 1	2, 1, 12	3, 4	13	9
Ring - 2	6, 5	8, 7	28	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

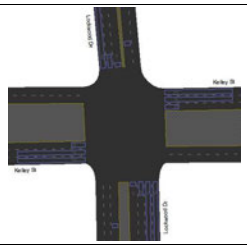
Lane Group	Fordnet Rd (SB)	FM Westpark Tollway ER (EB)		IRRT Alignment (NEB)	Fordnet Rd (NB)	IRRT Alignment (WB)	Fordnet Rd (SB)			Westpark Dr (EB)			Fordnet Rd (NB)			Westpark Dr (WB)		
	T	L	R	T	T	T	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	5700	1881	1609	1976	1900	1976	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900
Capacity (c), veh/h	2685	306	262	114	1143	114	204	657	329	104	571	286	326	914	457	104	1238	619
Available Capacity (ca), veh/h	986	170	145	119	1143	119	204	657	329	163	571	286	163	343	171	150	229	114
Volume-to-Capacity Ratio (X)	3,72e-05	0,000326	0,000381	0,000877	8,75e-05	0,000877	0,00098	0,000152	0,000335	0,00096	0,000175	0,000385	0,000306	0,000109	0,000241	0,00192	8,07e-05	0,000178
Green Ratio (g/C)	0,47	0,16	0,16	0,06	0,15	0,06	0,11	0,17	0,17	0,06	0,15	0,15	0,18	0,24	0,24	0,06	0,33	0,33
Assigned Phase	4+3+1+2	13+12	13+12	9	8	9	7	4	4	6	2	2	28+3	28+8	28+8	1	9+6	9+6
Max. Allowable Headway (MAH), s veh	5,27	3,92	3,92	3,48	4,72	3,48	3,76	5,27	5,27	3,73	5,15	5,15	4,17	4,17	4,17	3,73	3,48	3,48
Queue Service Time (gs), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Queue Permitted Service Time (gps), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Call Probability (pc)	1,00	1,00	1,00	0,52	1,00	0,52	1,00	1,00	1,00	1,00	1,00	1,00	0,52	0,52	0,52	0,51	0,52	0,52
Max Out Probability (gs)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Green Extension Time (ge), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Duration (Dp), s	29,0	18,0	18,0	12,1	26,0	12,1	21,0	29,0	29,0	13,1	26,0	26,0	18,0	18,0	18,0	13,1	12,1	12,1
Uniform Delay (d1), s/veh	18,6	46,6	46,6	59,1	48	59,1	52,4	45,5	45,5	59,1	48	48	44,7	38,4	38,4	59,1	30,2	30,2
Incremental Delay (d2), s/veh	2,5e-05	0,00192	0,00262	0,0139	0,000136	0,0139	0,00866	0,00417	0,00183	0,0166	0,00551	0,00343	0,00169	0,00215	0,00948	0,0332	0,000117	0,000517
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Control Delay (d), s/veh	18,6	46,6	46,6	59,1	48	59,1	52,4	45,5	45,5	59,1	48	48	44,7	38,4	38,4	59,1	30,2	30,2
Level Of Service	B	D	D	E	D	E	D	D	D	E	D	D	D	D	D	E	C	C
Total Delay, veh-hr	0,000517	0,00179	0,00179	0,00164	0,00133	0,00164	0,00291	0,00136	0,00139	0,00164	0,00133	0,00147	0,00124	0,00107	0,00117	0,00328	0,000839	0,000923
Fully Stopped (NS), veh/h	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Percentile Back of Queue (Q%), veh ln	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Effective Green Time, s	62,7	21,7	21,7	7,7	20,0	7,7	15,0	23,0	23,0	7,7	20,0	20,0	24,0	32,0	32,0	7,7	43,3	43,3
Approach Volume, veh/h	0	0	--	0	0	0	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	18,6	46,6	--	59,1	48,0	59,1	--	--	46,8	--	--	51,6	--	--	40,4	--	--	44,3

TransModeler® Intersection Report

Site Information

Intersection ID:	*173*	**Site Name:**	*N 29.813533, W 95.317185*
Cross Street:	*Kelley St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:46*		

Intersection Geometry



Turn Movement Volumes (Kelley St & Lockwood Dr)

@ Node 173 From \ To	Lockwood Dr (NB)	Kelley St (WB)	Lockwood Dr (SB)	Kelley St (EB)
Kelley St (WB)			*67.0*	
Lockwood Dr (SB)				
Kelley St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

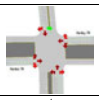
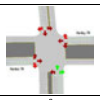
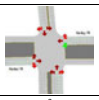
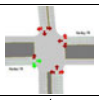
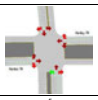
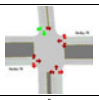
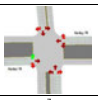
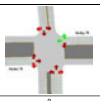
Volume Adjustment and Saturation Flow Rate

Movement	Kelley St (WB)			Lockwood Dr (SB)			Kelley St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Lockwood Dr	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Kelley St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*22.9 sec*
Level of Service:	*C*
Offset:	*0.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*7.0*	*10.0*	*7.0*	*12.0*	*7.0*	*10.0*	*7.0*	*12.0*
Max Green	*13.5*	*25.5*	*9.4*	*25.4*	*13.5*	*25.5*	*13.4*	*21.4*
Yellow	*3.9*	*3.9*	*3.6*	*3.6*	*3.9*	*3.9*	*3.6*	*3.6*
Red Clearance	*2.6*	*2.6*	*3.0*	*3.0*	*2.6*	*2.6*	*3.0*	*3.0*
Lost Time	*6.5*	*6.5*	*6.6*	*6.6*	*6.5*	*6.5*	*6.6*	*6.6*
Recall Mode	*None*	*None*	*None*	*Max*	*None*	*None*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*9.0*	*12.0*	*9.0*	*9.0*	*9.0*	*12.0*	*9.0*	*9.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*10.5*	*17.0*	*10.4*	*22.0*	*9.5*	*17.0*	*10.4*	*22.0*
Coordinated	*No*	*No*	*No*	*No*	*No*	*No*	*No*	*Yes*
Split	*20.0*	*32.0*	*16.0*	*32.0*	*20.0*	*32.0*	*20.0*	*28.0*
Max Inhibit	*True*	*True*	*True*	*True*	*True*	*True*	*True*	*False*
Opt Min Green	*13.5*	*16.5*	*13.6*	*18.6*	*13.5*	*16.5*	*13.6*	*18.6*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4, 3*	
Ring - 2	*6, 5*	*7, 8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

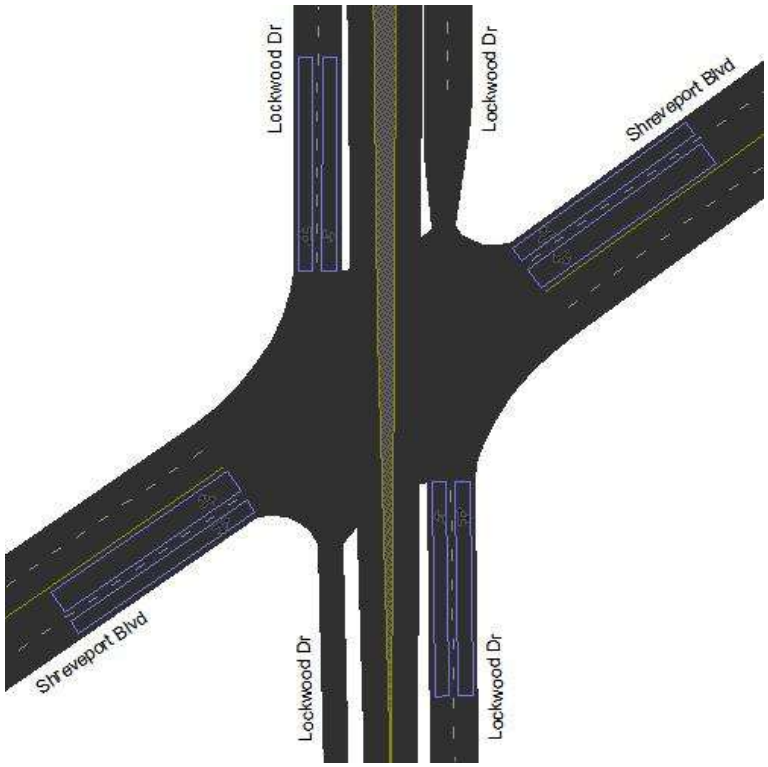
Lane Group	Kelley St (WB)			Lockwood Dr (SB)			Kelley St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	R
Adjusted Flow, veh/h	*67*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*1900*	*1857*	*1809*	*1976*	*1900*	*1809*	*1900*	*1900*	*1809*	*3800*	*1609*
Capacity (c), veh/h	*621*	*1034*	*1011*	*97*	*172*	*165*	*96*	*483*	*483*	*97*	*577*	*245*
Available Capacity (ca), veh/h	*170*	*407*	*397*	*244*	*504*	*484*	*242*	*483*	*483*	*244*	*969*	*410*
Volume-to-Capacity Ratio (X)	*0.108*	*9.67e-05*	*0.000109*	*0.00103*	*0.000582*	*0.000666*	*0.00104*	*0.000207*	*0.000228*	*0.00103*	*0.000173*	*0.000409*
Green Ratio (g/C)	*0.34*	*0.54*	*0.54*	*0.05*	*0.09*	*0.09*	*0.05*	*0.25*	*0.25*	*0.05*	*0.15*	*0.15*
Assigned Phase	*3*	*8*	*8*	*1*	*6*	*6*	*7*	*4*	*4*	*5*	*2*	*2*
Max. Allowable Headway (MAH), s/veh	*3.76*	*5.26*	*5.26*	*3.76*	*4.36*	*4.36*	*3.76*	*5.27*	*5.27*	*3.76*	*4.85*	*4.85*
Queue Service Time (gs), s	*2.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.92*	*1.00*	*1.00*	*0.51*	*0.51*	*0.51*	*0.51*	*1.00*	*1.00*	*0.51*	*0.51*	*0.51*
Max Out Probability (px)	*1.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*40.9*	*61.0*	*61.0*	*11.9*	*15.2*	*15.2*	*11.9*	*32.0*	*32.0*	*11.9*	*15.2*	*15.2*
Uniform Delay (d1), s/veh	*22.4*	*10.4*	*10.4*	*44.8*	*41.7*	*41.7*	*44.8*	*27.8*	*27.8*	*44.8*	*36*	*36*
Incremental Delay (d2), s/veh	*0.35*	*0.000168*	*0.000194*	*0.0191*	*0.0061*	*0.00726*	*0.0195*	*0.000773*	*0.000851*	*0.0191*	*0.00054*	*0.00301*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*22.7*	*10.4*	*10.4*	*44.8*	*41.7*	*41.7*	*44.8*	*27.8*	*27.8*	*44.8*	*36*	*36*
Level Of Service	*C*	*B*	*B*	*D*	*D*	*D*	*D*	*C*	*C*	*D*	*D*	*D*
Total Delay, veh-hr	*0.423*	*0.000289*	*0.000317*	*0.00124*	*0.00116*	*0.00127*	*0.00125*	*0.000173*	*0.00085*	*0.00124*	*0.000999*	*0.000999*
Fully Stopped (Nf), veh/ln	*1.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*1.2*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*34.3*	*54.4*	*54.4*	*5.4*	*9.7*	*9.7*	*5.3*	*25.4*	*25.4*	*5.4*	*15.2*	*15.2*
Approach Volume, veh/h	--	--	*67*	--	--	*0*	--	--	*0*	--	*0*	--
Approach Delay, s/veh	--	--	*22.7*	--	--	*42.7*	--	--	*33.3*	--	*38.9*	--

TransModeler® Intersection Report

Site Information

Intersection ID:	*174*	**Site Name:**	*N 29.822347, W 95.318556*
Cross Street:	*Shreveport Blvd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:56*		

Intersection Geometry



Turn Movement Volumes (Shreveport Blvd & Lockwood Dr)

@ Node 174 From \ To	Shreveport Blvd (NEB)	Lockwood Dr (NB)	Shreveport Blvd (SWB)	Lockwood Dr (SB)
Shreveport Blvd (SWB)		*3.0*		
Lockwood Dr (SB)				
Shreveport Blvd (NEB)				*14.0*
Lockwood Dr (NB)			*4.0*	

[Flow Field] = Volume

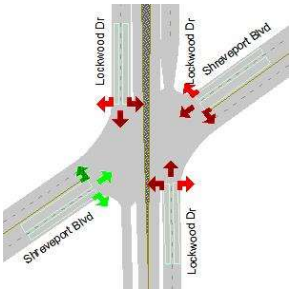
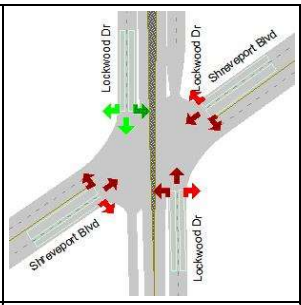
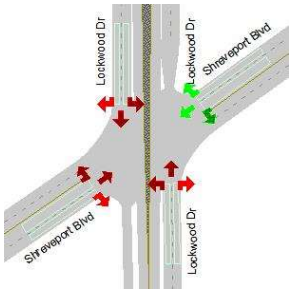
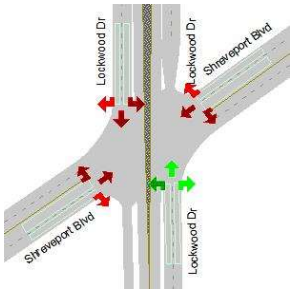
Volume Adjustment and Saturation Flow Rate

Movement	Shreveport Blvd (SWB)			Lockwood Dr (SB)			Shreveport Blvd (NEB)			Lockwood Dr (NB)		
	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Shreveport Blvd	Shreveport Blvd	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Shreveport Blvd
	SWBR	SWBT	SWBL	SBL	SBR	SBT	NEBT	NEBL	NEBR	NBR	NBT	NBL

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*32.3 sec*
Level of Service:	*C*
Offset:	*41.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States				
ID	*2*	*4*	*6*	*8*
Min Green	*6.0*	*8.0*	*6.0*	*8.0*
Max Green	*28.6*	*59.2*	*28.6*	*59.2*
Yellow	*3.2*	*3.6*	*3.2*	*3.6*
Red Clearance	*3.2*	*2.2*	*3.2*	*2.2*
Lost Time	*6.4*	*5.8*	*6.4*	*5.8*
Recall Mode	*None*	*Max*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*8.0*	*8.0*	*8.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*23.0*	*25.0*	*23.0*	*25.0*
Coordinated	*No*	*Yes*	*No*	*No*
Split	*35.0*	*65.0*	*35.0*	*65.0*
Max Inhibit	*True*	*False*	*True*	*True*
Opt Min Green	*12.4*	*13.8*	*12.4*	*13.8*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*2*	*4*
Ring - 2	*6*	*8*

Signal Timing Plan - 1

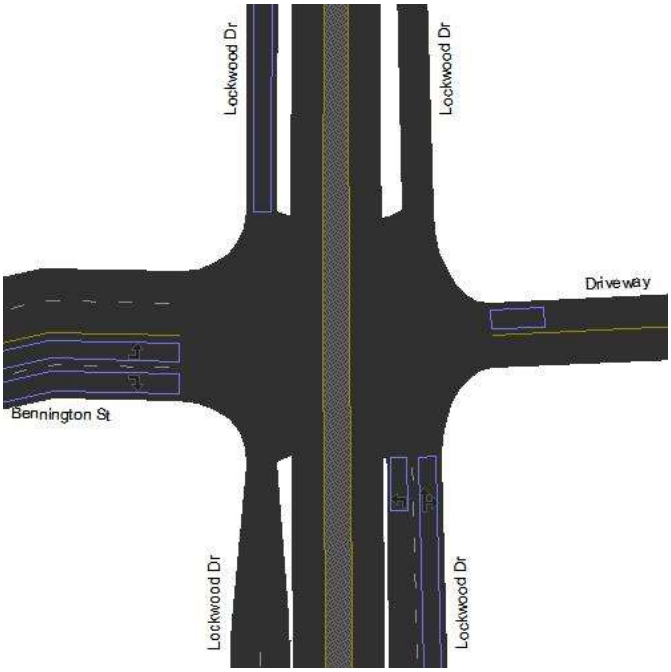
Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Shreveport Blvd (SWB)		Lockwood Dr (SB)		Shreveport Blvd (NEB)		Lockwood Dr (NB)	
	L+T	T+R	L	T+R	L+T	T+R	L	T+R
Adjusted Flow, veh/h	*0*	*3*	*0*	*0*	*0*	*14*	*4*	*0*
Adjusted Saturation Flow, veh/h	*1974*	*1898*	*1440*	*1900*	*1968*	*1890*	*1440*	*1897*
Capacity (c), veh/h	*274*	*241*	*953*	*1427*	*275*	*240*	*953*	*1425*
Available Capacity (ca), veh/h	*543*	*543*	*724*	*1125*	*546*	*541*	*724*	*1123*
Volume-to-Capacity Ratio (X)	*0.000729*	*0.0125*	*0.000105*	*0.00014*	*0.000727*	*0.0584*	*0.0042*	*0.00014*
Green Ratio (g/C)	*0.13*	*0.13*	*0.75*	*0.75*	*0.13*	*0.13*	*0.75*	*0.75*
Assigned Phase	*6*	*6*	*4*	*4*	*2*	*2*	*8*	*8*
Max. Allowable Headway (MAH), s/veh	*5.62*	*5.62*	*5.22*	*5.22*	*5.69*	*5.69*	*5.11*	*5.11*
Queue Service Time (gs), s	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.7*	*0.1*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*0.0*
Phase Call Probability (pc)	*0.55*	*0.55*	*1.00*	*1.00*	*0.67*	*0.67*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*19.1*	*19.1*	*80.9*	*80.9*	*19.1*	*19.1*	*80.9*	*80.9*
Uniform Delay (d1), s/veh	*38.1*	*38.2*	*7.53*	*3.1*	*38.1*	*38.4*	*7.55*	*3.1*
Incremental Delay (d2), s/veh	*0.00479*	*0.0946*	*0.000198*	*0.000177*	*0.00475*	*0.465*	*0.00796*	*0.000177*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*38.1*	*38.3*	*7.53*	*3.1*	*38.1*	*38.9*	*7.56*	*3.1*
Level Of Service	*D*	*D*	*A*	*A*	*D*	*D*	*A*	*A*
Total Delay, veh-hr	*0.00212*	*0.032*	*0.000209*	*0.000172*	*0.00212*	*0.151*	*0.0084*	*0.000172*
Fully Stopped (Nf), veh/ln	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.3*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.3*	*0.0*	*0.0*
Effective Green Time, s	*12.7*	*12.7*	*75.1*	*75.1*	*12.7*	*12.7*	*75.1*	*75.1*
Approach Volume, veh/h	--	*3*	--	*0*	--	*14*	--	*4*
Approach Delay, s/veh	--	*38.3*	--	*4.6*	--	*38.9*	--	*7.3*

TransModeler® Intersection Report

Site Information

Intersection ID:	*175*	**Site Name:**	*N 29.823740, W 95.318566*
Cross Street:	*Driveway & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:3*		

Intersection Geometry



Turn Movement Volumes (Driveway & Lockwood Dr)

@ Node 175 From \ To	Lockwood Dr (NWB)	Bennington St (WB)	Lockwood Dr (SB)	Driveway (EB)
Driveway (WB)				
Lockwood Dr (SB)		*99.0*		*2.0*
Bennington St (EB)				
Lockwood Dr (NB)		*55.0*		

[Flow Field] = Volume

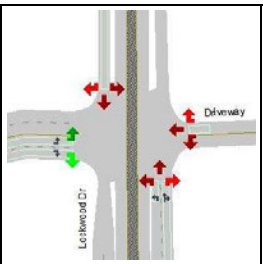
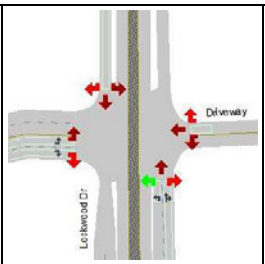
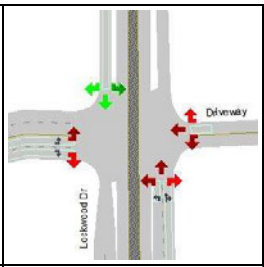
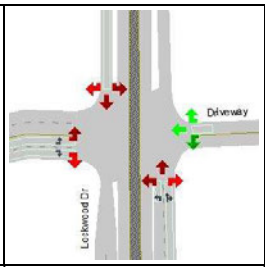
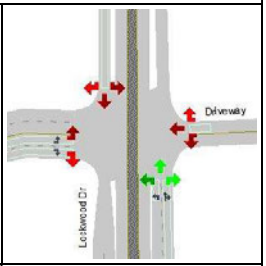
Volume Adjustment and Saturation Flow Rate

Movement	Driveway (WB)			Lockwood Dr (SB)			Bennington St (EB)		Lockwood Dr (NB)		
	Lockwood Dr	Bennington St	Lockwood Dr	Bennington St	Lockwood Dr	Driveway	Lockwood Dr	Lockwood Dr	Lockwood Dr	Bennington St	Driveway
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *6.6 sec*
Level of Service: *A*
Offset: *57.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	3	4	6	8
Min Green	6.0	4.0	10.0	6.0	10.0
Max Green	28.7	17.6	37.6	28.7	60.6
Yellow	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.7	1.8	1.8	1.7	1.8
Lost Time	5.3	5.4	5.4	5.3	5.4
Recall Mode	None	None	Min	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	3.5	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	6.0	12.0	8.0	12.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	23.0	14.6	20.0	23.0	20.0
Coordinated	No	No	Yes	No	No
Split	34.0	23.0	43.0	34.0	66.0
Max Inhibit	True	True	False	True	True
Opt Min Green	11.3	9.4	15.4	11.3	15.4

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2	3, 4
Ring - 2	6	8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Driveway (WB)	Lockwood Dr (SB)	Bennington St (EB)		Lockwood Dr (NB)	
	LTR	LTR	L	R	L	T+R
Adjusted Flow, veh/h	0	101	0	0	55	0
Adjusted Saturation Flow, veh/h	1900	1903	1440	1609	1809	1864
Capacity (c), veh/h	223	1202	241	189	1031	1446
Available Capacity (ca), veh/h	545	715	485	462	1187	1130

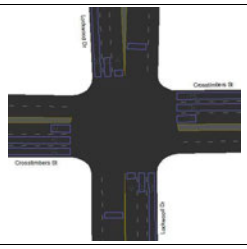
Volume-to-Capacity Ratio (X)	0.00134	0.0841	0.000415	0.000529	0.0533	0.000138
Green Ratio (g/C)	0.12	0.63	0.12	0.12	0.72	0.78
Assigned Phase	6	4	2	2	3+8	8
Max. Allowable Headway (MAH), s/veh	2.82	4.27	4.40	4.40	4.26	4.27
Queue Service Time (gs), s	0.0	2.1	0.0	0.0	0.9	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	60.5	0.0
Phase Call Probability (pc)	0.51	1.00	0.51	0.51	0.89	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.3	0.0	0.0	0.1	0.0
Phase Duration (Dp), s	17.0	68.6	17.0	17.0	14.4	83.0
Uniform Delay (d1), s/veh	38.9	7.16	38.9	38.9	4.83	2.52
Incremental Delay (d2), s/veh	0.0109	0.137	0.0031	0.00504	0.0983	0.000172
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	39	7.3	39	39	4.93	2.52
Level Of Service	D	A	D	D	A	A
Total Delay, veh-hr	0.00325	0.205	0.00108	0.00108	0.0753	0.00014
Fully Stopped (Nf), veh/ln	0.0	0.9	0.0	0.0	0.3	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.9	0.0	0.0	0.3	0.0
Effective Green Time, s	11.7	63.2	11.7	11.7	72.2	77.6
Approach Volume, veh/h	0	101	0	--	--	55
Approach Delay, s/veh	39.0	7.3	39.0	--	--	4.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*176*	**Site Name:**	*N 29.830994, W 95.318829*
Cross Street:	*Crosstimbers St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:17*		

Intersection Geometry



Turn Movement Volumes (Crosstimbers St & Lockwood Dr)

@ Node 176 From \ To	Lockwood Dr (NB)	Crosstimbers St (WB)	Lockwood Dr (SB)	Crosstimbers St (EB)
Crosstimbers St (WB)				
Lockwood Dr (SB)				
Crosstimbers St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

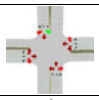
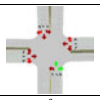
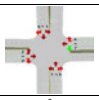
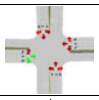
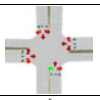
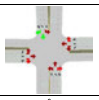
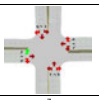
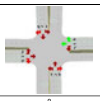
Volume Adjustment and Saturation Flow Rate

Movement	Crosstimbers St (WB)				Lockwood Dr (SB)				Crosstimbers St (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	90.0 sec
Control Delay:	29.8 sec
Level of Service:	C
Offset:	3.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	8.0	6.0	8.0	6.0	8.0	6.0	8.0
Max Green	8.7	22.7	14.6	22.6	8.7	22.7	8.6	28.6
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.8
Lost Time	5.3	5.3	5.4	5.4	5.3	5.3	5.4	5.4
Recall Mode	None	Max	None	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	9.7	19.0	9.6	23.0	9.7	19.0	9.6	23.0
Coordinated	No	No	No	No	No	Yes	No	No
Split	14.0	28.0	20.0	28.0	14.0	28.0	14.0	34.0
Max Inhibit	True	True	True	False	True	False	True	False
Opt Min Green	11.3	13.3	11.4	13.4	11.3	13.3	11.4	13.4

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

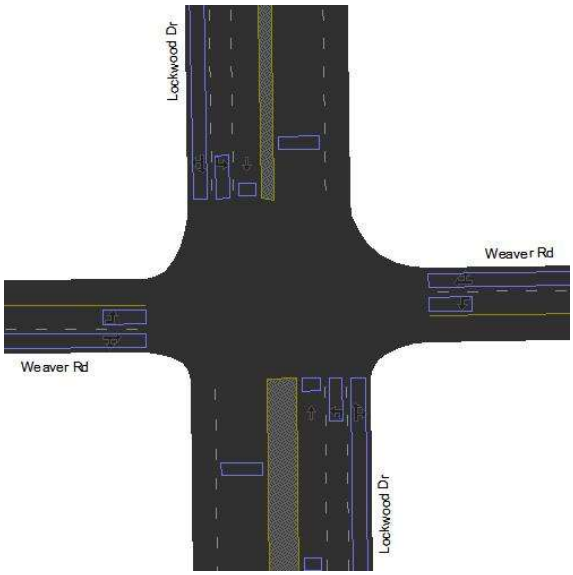
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Crosstimbers St (WB)			Lockwood Dr (SB)			Crosstimbers St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1976	1900	1809	1900	1900	1809	1976	1900
Capacity (c), veh/h	219	604	604	249	661	636	99	477	477	100	498	479
Available Capacity (ca), veh/h	293	604	604	175	498	479	173	477	477	175	498	479
Volume-to-Capacity Ratio (X)	0.000912	0.000166	0.000182	0.000803	0.000151	0.000173	0.00203	0.00021	0.000231	0.00201	0.000201	0.00023
Green Ratio (g/C)	0.12	0.32	0.32	0.14	0.33	0.33	0.05	0.25	0.25	0.06	0.25	0.25
Assigned Phase	3	8	8	1	6	6	7	4	4	5	2	2
Max. Allowable Headway (MAH), s/veh	2.76	4.27	4.27	2.76	3.36	3.36	2.76	4.27	4.27	2.76	3.36	3.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	16.3	34.0	34.0	17.7	35.4	35.4	10.3	28.0	28.0	10.3	28.0	28.0
Uniform Delay (d1), s/veh	34.8	20.9	20.9	33.5	19.9	19.9	40.2	25.2	25.2	40.2	25.2	25.2
Incremental Delay (d2), s/veh	0.00749	0.000494	0.000543	0.00581	0.000411	0.00049	0.037	0.000791	0.00087	0.0363	0.000725	0.000863
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34.6	20.9	20.9	33.5	19.9	19.9	40.3	25.2	25.2	40.2	25.2	25.2
Level Of Service	C	C	C	C	B	B	D	C	C	D	C	C
Total Delay, veh-hr	0.00193	0.000582	0.00064	0.00186	0.000563	0.000609	0.00234	0.000701	0.000771	0.00223	0.000699	0.000769
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	10.9	28.6	28.6	12.4	30.1	30.1	4.9	22.6	22.6	5.0	22.7	22.7
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	27.7	--	--	26.5	--	--	32.6	--	--	32.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*177*	**Site Name:**	*N 29.834200, W 95.318847*
Cross Street:	*Weaver Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:24*		

Intersection Geometry



Turn Movement Volumes (Weaver Rd & Lockwood Dr)

@ Node 177 From \ To	Lockwood Dr (NB)	Weaver Rd (WB)	Lockwood Dr (SB)	Weaver Rd (EB)
Weaver Rd (WB)				
Lockwood Dr (SB)				
Weaver Rd (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

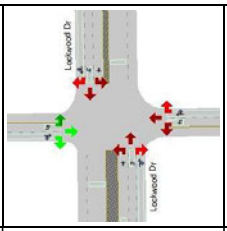
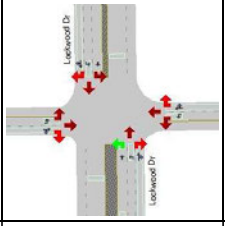
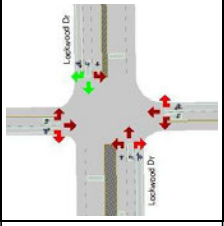
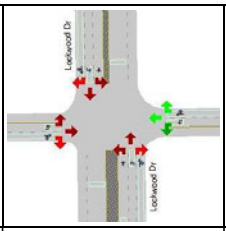
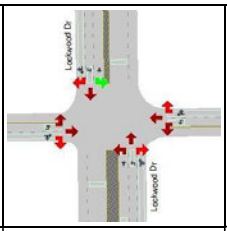
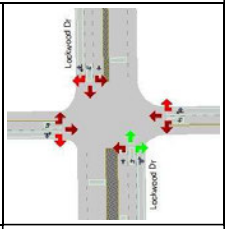
Volume Adjustment and Saturation Flow Rate

Movement	Weaver Rd (WB)			Lockwood Dr (SB)				Weaver Rd (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Weaver Rd	Lockwood Dr	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd	Lockwood Dr	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *23.3 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	9.0	5.0	18.0	9.0	5.0	16.0
Max Green	33.5	8.2	31.2	33.5	8.5	30.0
Yellow	3.2	3.2	3.2	3.2	3.2	5.0
Red Clearance	2.3	2.6	2.6	2.3	2.3	2.0
Lost Time	5.5	5.8	5.8	5.5	5.5	7.0
Recall Mode	Max	None	Max	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	19.5	19.5	19.5	19.5	19.5	19.5
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	29.2	29.2	19.0	19.0	28.0
Coordinated	No	No	Yes	No	No	No
Split	39.0	14.0	37.0	39.0	14.0	37.0
Max Inhibit	True	True	False	True	True	False
Opt Min Green	14.5	10.8	23.8	14.5	10.5	23.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Weaver Rd (WB)		Lockwood Dr (SB)			Weaver Rd (EB)		Lockwood Dr (NB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	1976	1900	1440	1900	1809	1976	1900
Capacity (c), veh/h	616	707	171	812	781	616	707	165	659	633
Available Capacity (ca), veh/h	616	707	171	685	659	616	707	165	659	633
Volume-to-Capacity Ratio (X)	0.000162	0.000283	0.00117	0.00012	0.000131	0.000162	0.000283	0.00121	0.000148	0.000162
Green Ratio (g/C)	0.37	0.37	0.09	0.41	0.41	0.37	0.37	0.09	0.33	0.33
Assigned Phase	6	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.33	4.33	3.76	4.21	4.21	4.33	4.33	3.76	4.21	4.21
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	39.0	39.0	14.0	37.0	37.0	39.0	39.0	14.0	37.0	37.0

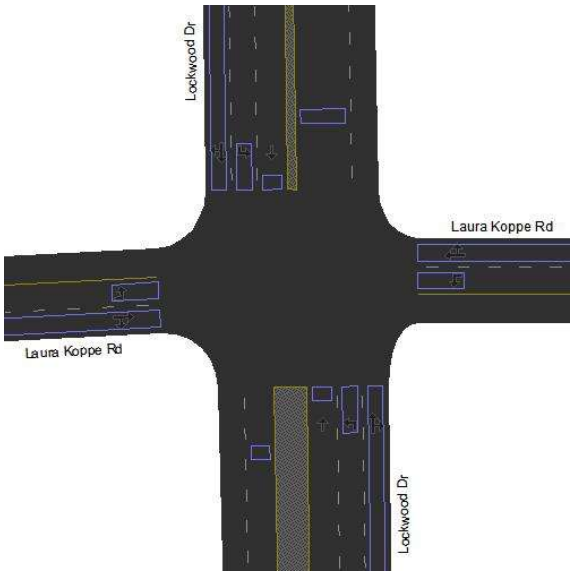
Uniform Delay (d1), s/veh	17.7	17.7	36.9	15.6	15.6	17.7	17.7	37.2	20	20
Incremental Delay (d2), s/veh	0.000475	0.00072	0.0123	0.000266	0.000303	0.000475	0.00072	0.0133	0.000404	0.000461
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	17.7	17.7	36.9	15.6	15.6	17.7	17.7	37.2	20	20
Level Of Service	B	B	D	B	B	B	B	D	C	C
Total Delay, veh-hr	0.000493	0.000985	0.00205	0.000422	0.000445	0.000493	0.000985	0.00207	0.000541	0.00057
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	33.5	33.5	8.5	37.0	37.0	33.5	33.5	8.2	30.0	30.0
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	17.7	--	--	26.3	--	17.7	--	--	28.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*178*	**Site Name:**	*N 29.840542, W 95.318956*
Cross Street:	*Laura Koppe Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:36*		

Intersection Geometry



Turn Movement Volumes (Laura Koppe Rd & Lockwood Dr)

@ Node 178 From \ To	Lockwood Dr (NB)	Laura Koppe Rd (WB)	Lockwood Dr (SB)	Laura Koppe Rd (EB)
Laura Koppe Rd (WB)				
Lockwood Dr (SB)				
Laura Koppe Rd (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

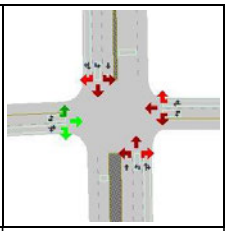
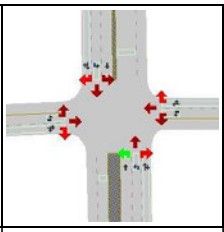
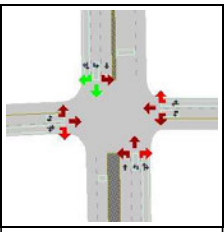
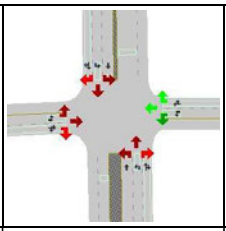
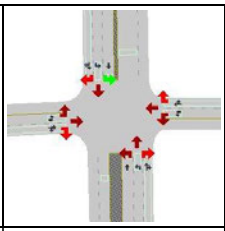
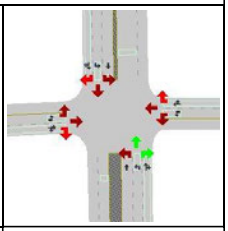
Volume Adjustment and Saturation Flow Rate

Movement	Laura Koppe Rd (WB)			Lockwood Dr (SB)				Laura Koppe Rd (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *27.7 sec*
Level of Service: *C*
Offset: *51.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	6.0	6.0	8.0	6.0	6.0	8.0
Max Green	25.5	9.7	38.7	25.5	9.7	38.7
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.9	1.7	1.7	1.9	1.7	1.7
Lost Time	5.5	5.3	5.3	5.5	5.3	5.3
Recall Mode	None	None	Min	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.5	3.0	3.0	2.5	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	10.0	8.0	8.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	23.0	9.7	21.0	23.0	9.7	21.0
Coordinated	No	No	Yes	No	No	No
Split	31.0	15.0	44.0	31.0	15.0	44.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	11.5	11.3	13.3	11.5	11.3	13.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Laura Koppe Rd (WB)		Lockwood Dr (SB)			Laura Koppe Rd (EB)		Lockwood Dr (NB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	1976	1900	1440	1900	1809	1976	1900
Capacity (c), veh/h	268	248	1033	1256	1207	268	248	100	236	226
Available Capacity (ca), veh/h	488	538	195	850	817	488	538	195	850	817
Volume-to-Capacity Ratio (X)	0.000373	0.000806	0.000194	7.96e-05	9.11e-05	0.000746	0.000806	0.00201	0.000424	0.000486
Green Ratio (g/C)	0.13	0.13	0.57	0.64	0.64	0.13	0.13	0.06	0.12	0.12
Assigned Phase	6	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.26	4.26	3.26	4.36	4.36	4.11	4.11	3.26	4.36	4.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	0.51	1.00	1.00	0.51	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	17.3	17.3	56.7	62.5	62.5	17.3	17.3	10.3	16.0	16.0

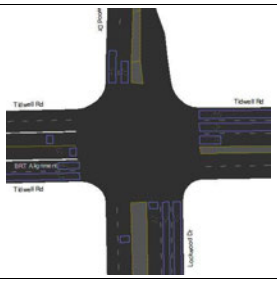
Uniform Delay (d1), s/veh	34	34	8.27	5.98	5.98	34	34	40.2	34.9	34.9
Incremental Delay (d2), s/veh	0.00251	0.00585	0.000337	0.000114	0.000136	0.00502	0.00586	0.0363	0.00324	0.00386
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34	34	8.27	5.98	5.98	34	34	40.2	34.9	34.9
Level Of Service	C	C	A	A	A	C	C	D	C	C
Total Delay, veh-hr	0.000945	0.00189	0.000459	0.000166	0.000183	0.00189	0.00189	0.00223	0.00097	0.00107
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	11.8	11.8	51.4	57.2	57.2	11.8	11.8	5.0	10.7	10.7
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	34.0	--	--	7.1	--	34.0	--	--	37.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*179*	**Site Name:**	*N 29.848187, W 95.319120*
Cross Street:	*Tidwell Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:11:42*		

" "

Intersection Geometry



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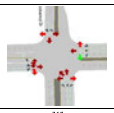
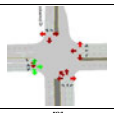
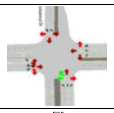
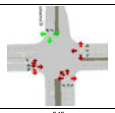
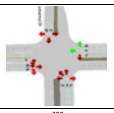
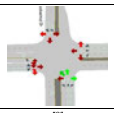
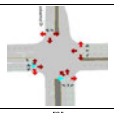
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *103.0 sec*
Offset: *51.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States							
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"Min Green"	"5.0"	"10.0"	"6.0"	"6.0"	"10.0"	"10.0"	"0.0"
"Max Green"	"14.3"	"29.3"	"11.3"	"12.5"	"49.3"	"29.5"	"7.5"
"Yellow"	"3.9"	"3.9"	"3.9"	"3.6"	"3.9"	"3.6"	"3.6"
"Red Clearance"	"1.8"	"1.8"	"1.8"	"1.9"	"1.8"	"1.9"	"1.9"
"Last Time"	"5.7"	"5.7"	"5.7"	"5.5"	"5.7"	"5.5"	"5.5"
"Recall Mode"	"Max"	"Max"	"Min"	"Min"	"Max"	"Min"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"7.0"	"7.0"	"7.0"	"8.0"	"7.0"	"12.0"	"12.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"14.3"	"25.0"	"25.0"	"11.0"	"25.0"	"16.0"	"16.0"
"Coordinated"	"No"	"No"	"No"	"No"	"Yes"	"No"	"No"
"Split"	"20.0"	"35.0"	"17.0"	"18.0"	"55.0"	"35.0"	"13.0"
"Max Inhibit"	"True"	"True"	"True"	"True"	"False"	"True"	"True"
"Opt Min Green"	"10.7"	"15.7"	"11.7"	"11.5"	"15.7"	"15.5"	"5.5"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"4", "9"	"9"
Ring - 2	"8"	"8"	

"
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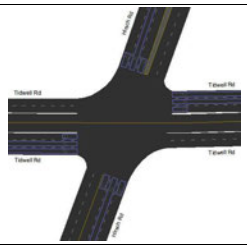
TransModeler® Intersection Report

Site Information

Intersection ID:	*180*	**Site Name:**	*N 29.848103, W 95.323829*
Cross Street:	*Tidwell Rd & Hirsch Rd*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:50*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Hirsch Rd)

@ Node 180 From \ To	Hirsch Rd (NB)	Tidwell Rd (NWB)	Hirsch Rd (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)				
Hirsch Rd (SB)				
Tidwell Rd (EB)				
Hirsch Rd (NB)				

[Flow Field] = Volume

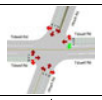
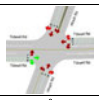
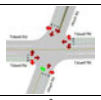
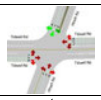
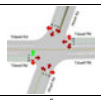
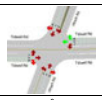
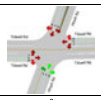
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Hirsch Rd (SB)			Tidwell Rd (EB)			Hirsch Rd (NB)		
	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	90.0 sec
Control Delay:	25.3 sec
Level of Service:	C
Offset:	7.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States							
							
ID	1	2	3	4	5	6	8
Min Green	5.0	10.0	5.0	14.0	5.0	10.0	14.0
Max Green	6.4	36.4	7.4	14.2	7.2	36.4	28.2
Yellow	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Red Clearance	2.7	2.7	2.7	1.9	1.9	2.7	1.9
Lost Time	6.6	6.6	6.6	5.8	5.8	6.6	5.8
Recall Mode	None	Min	Min	Min	None	Min	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	12.0	12.0	16.0	16.0	12.0	16.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	27.0	27.0	27.0	29.2	29.2	27.0	25.0
Coordinated	No	Yes	No	No	No	Yes	No
Split	13.0	43.0	14.0	20.0	13.0	43.0	34.0
Max Inhibit	False	False	False	True	True	False	True
Opt Min Green	11.6	16.6	11.6	19.8	10.8	16.6	19.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2, 1	4, 3
Ring - 2	6, 5	8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

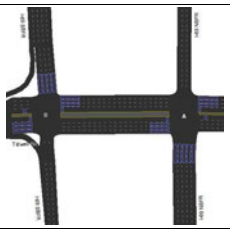
Lane Group	Tidwell Rd (WB)			Hirsch Rd (SB)			Tidwell Rd (EB)			Hirsch Rd (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1440	1900	1900	1809	1900	1900	1809	1900	1900
Capacity (c), veh/h	129	768	768	307	300	300	145	908	908	456	595	595
Available Capacity (ca), veh/h	129	768	768	307	300	300	145	768	768	456	595	595
Volume-to-Capacity Ratio (X)	0.000777	0.000124	0.000136	0.000326	0.000318	0.000349	0.000691	0.000105	0.000115	0.000219	0.00016	0.000176
Green Ratio (g/C)	0.07	0.40	0.40	0.16	0.16	0.16	0.08	0.48	0.48	0.24	0.31	0.31
Assigned Phase	1	6	6	4	4	4	5	2	2	3+8	8	8
Max. Allowable Headway (MAH), s/veh	3.26	4.74	4.74	3.85	3.85	3.85	3.26	4.74	4.74	3.26	4.17	4.17
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0
Phase Call Probability (pc)	0.61	1.00	1.00	1.00	1.00	1.00	0.61	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	1.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.0	43.0	43.0	20.0	20.0	20.0	13.0	43.0	43.0	14.0	34.0	34.0
Uniform Delay (d1), s/veh	38.8	16	16	31.9	31.9	31.9	38.1	12.3	12.3	31.4	21.2	21.2
Incremental Delay (d2), s/veh	0.0109	0.000291	0.000319	0.00191	0.00191	0.0021	0.0086	0.000209	0.000228	0.000866	0.000485	0.000531
Initial Queue Delay (d3), s/veh:	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	38.8	16	16	31.9	31.9	31.9	38.1	12.3	12.3	31.4	21.2	21.2
Level Of Service	D	B	B	C	C	C	D	B	B	C	C	C
Total Delay, veh-hr	0.00108	0.000423	0.000464	0.000887	0.000847	0.000927	0.00106	0.000325	0.000356	0.000872	0.000563	0.000616
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.4	36.4	36.4	14.2	14.2	14.2	7.2	43.0	43.0	21.6	28.2	28.2
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	23.6	--	--	31.9	--	--	20.9	--	--	24.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*181,182*	**Site None:**	*N 29.848720, W 95.333057*
Cross Street:	*Tidwell Rd & I-69 NBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:37:1*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & I-69 NBFR)

⊗ Node 181 From \ To	I-69 NBFR (NB)	Tidwell Rd (WB)	Tidwell Rd (EB)
Tidwell Rd (WB)			
Tidwell Rd (EB)			
I-69 NBFR (NB)			

Turn Movement Volumes (Tidwell Rd & I-69 SBFR)

⊗ Node 182 From \ To	Tidwell Rd (WB)	I-69 SBFR (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)			
I-69 SBFR (SB)			
Tidwell Rd (EB)			

(Flow Field) = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)		Tidwell Rd (EB)		I-69 NBFR (NB)			Tidwell Rd (WB)		I-69 SBFR (SB)		Tidwell Rd (EB)
	I-69 NBFR	Tidwell Rd	I-69 NBFR	Tidwell Rd	I-69 NBFR	Tidwell Rd	Tidwell Rd	Tidwell Rd	I-69 SBFR	I-69 SBFR	Tidwell Rd	Tidwell Rd
	WBR	WBT	EBL	EBT	NBT	NBL	NBR	WBT	WBL	SBT	SBL	EBT

Signal Timing Plan - 1

Time of Day: 00:00:00 - 23:59:59
Plan Description: 00:00:00
Controller Type: Traffic Actuated
Cycle Length: 105.0 sec
Control Delay: 24.6 sec
Level of Service: C
Offset: 5.0 sec
Coordinate Begin of: Yellow
Yield Point: By Phase

Phasing

Item Name \ Signal States							
ID	1	2	4	5	6	8	9
Min Green	8.0	8.0	8.0	8.0	8.0	8.0	0.0
Max Green	19.5	32.5	25.5	17.5	33.5	25.5	10.5
Yellow	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Recall Mode	None	Max	None	None	Max	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	16.5	18.5	18.5	13.5	18.5	18.5	10.5
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Coordinated	No	No	No	No	Yes	No	No
Split	23.0	37.0	30.0	22.0	38.0	30.0	15.0
Max Inhibit	False	False	False	False	False	False	False
Opt Min Green	12.5	12.5	12.5	12.5	12.5	12.5	4.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4	9
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

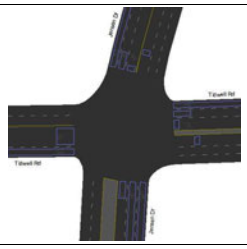
Lane Group	Tidwell Rd (WB)		Tidwell Rd (EB)			I-69 NBFR (NB)					Tidwell Rd (WB)			I-69 SBFR (SB)			Tidwell Rd (EB)
	T	T+R	L	L+T	T	L	L+T	T	T+R	R	L	L+T	T	L	L+T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	5700	1900	1809	1900	3800	1809	1900	1900	1900	1609	1809	1900	3800	1809	1900	3800	7600
Capacity (c), veh/h	3724	1241	158	1241	2482	159	167	167	167	141	158	1241	2482	159	167	333	4965
Available Capacity (ca), veh/h	1819	606	301	317	1176	439	461	461	461	391	319	335	1212	439	461	923	2352
Volume-to-Capacity Ratio (X)	2.59e-05	8.86e-05	0.000311	4.89e-05	4.03e-05	0.000373	0.000373	0.000374	0.000377	0.000377	0.000308	4.13e-05	4.02e-05	0.000308	0.000308	0.0003	2.01e-05
Green Ratio (gC)	0.65	0.65	0.09	0.65	0.65	0.09	0.09	0.09	0.09	0.09	0.09	0.65	0.65	0.09	0.09	0.09	0.65
Assigned Phase	6+9	6+9	5	5+2+9	2+9	8	8	8	8	8	1	1+6+9	6+9	4	4	4	2+9
Max. Allowable Headway (MAH), s/veh	5.23	5.23	4.43	4.43	5.07	5.42	5.42	5.42	5.42	5.42	4.43	4.43	5.23	5.31	5.31	5.31	5.07
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.51	0.51	1.00	0.51	0.51	0.51	0.51	0.51	0.51	0.51	1.00	0.51	0.51	0.51	1.00
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	62.6	62.6	13.7	13.7	62.6	13.7	13.7	13.7	13.7	13.7	13.7	13.7	62.6	13.7	13.7	13.7	62.6
Uniform Delay (d1), s/veh	6.31	6.31	43.7	6.31	6.31	43.7	43.7	43.7	43.7	43.7	43.7	6.31	6.31	43.7	43.7	43.7	6.31
Incremental Delay (d2), s/veh	1.3e-05	0.000129	0.00354	7.1e-05	2.92e-05	0.00423	0.00403	0.00404	0.00408	0.00481	0.00351	5.99e-05	2.92e-05	0.00349	0.00332	0.00162	7.3e-06
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	6.31	6.31	43.7	6.31	6.31	43.7	43.7	43.7	43.7	43.7	43.7	6.31	6.31	43.7	43.7	43.7	6.31
Level Of Service	A	A	D	A	A	D	D	D	D	D	D	A	A	D	D	D	A
Total Delay, veh-h	0.000175	0.000193	0.000598	0.000106	0.000175	0.000719	0.000785	0.000757	0.000764	0.000647	0.000593	8.99e-05	0.000175	0.000592	0.000622	0.00121	0.000175
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	68.6	68.6	9.2	68.6	68.6	9.2	9.2	9.2	9.2	9.2	9.2	68.6	68.6	9.2	9.2	9.2	68.6
Approach Volume, veh/h	--	0	--	--	0	--	--	--	0	--	--	--	0	--	--	0	0
Approach Delay, s/veh	--	6.3	--	--	15.1	--	--	--	43.7	--	--	--	15.4	--	--	43.7	6.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*183*	**Site Name:**	*N 29.848152, W 95.342910*
Cross Street:	*Tidwell Rd & Jensen Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:37:14*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Jensen Dr)

@ Node 183 From \ To	Jensen Dr (NB)	Tidwell Rd (WB)	Jensen Dr (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)				
Jensen Dr (SB)				
Tidwell Rd (EB)			*69.0*	
Jensen Dr (NB)		*5.0*		

[Flow Field] = Volume

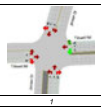
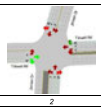
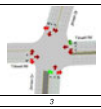
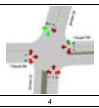
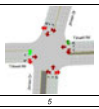
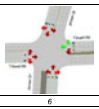
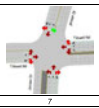
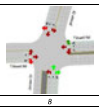
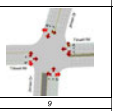
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Jensen Dr (SB)				Tidwell Rd (EB)			Jensen Dr (NB)			
	Jensen Dr	Tidwell Rd	Jensen Dr	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd	Jensen Dr	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	105.0 sec
Control Delay:	43.2 sec
Level of Service:	D
Offset:	43.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	5.0	7.0	5.0	8.0	5.0	7.0	5.0	8.0	0.0
Max Green	10.9	28.9	10.2	18.2	7.9	31.9	10.2	18.2	7.2
Yellow	3.9	3.9	3.6	3.6	3.9	3.9	3.6	3.6	3.6
Red Clearance	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Lost Time	6.1	6.1	5.8	5.8	6.1	6.1	5.8	5.8	5.8
Recall Mode	None	Min	None	None	None	Min	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	9.0	7.0	10.0	7.0	9.0	7.0	10.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	13.9	23.0	11.2	17.0	13.9	23.0	11.2	17.0	17.0
Coordinated	No	No	No	No	No	Yes	No	No	No
Split	17.0	35.0	16.0	24.0	14.0	38.0	16.0	24.0	13.0
Max Inhibit	True	True	True	True	True	False	True	True	True
Opt Min Green	11.1	13.1	10.8	13.8	11.1	13.1	10.8	13.8	5.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	3, 4	9
Ring - 2	5, 6	8, 7	

Signal Timing Plan - 1

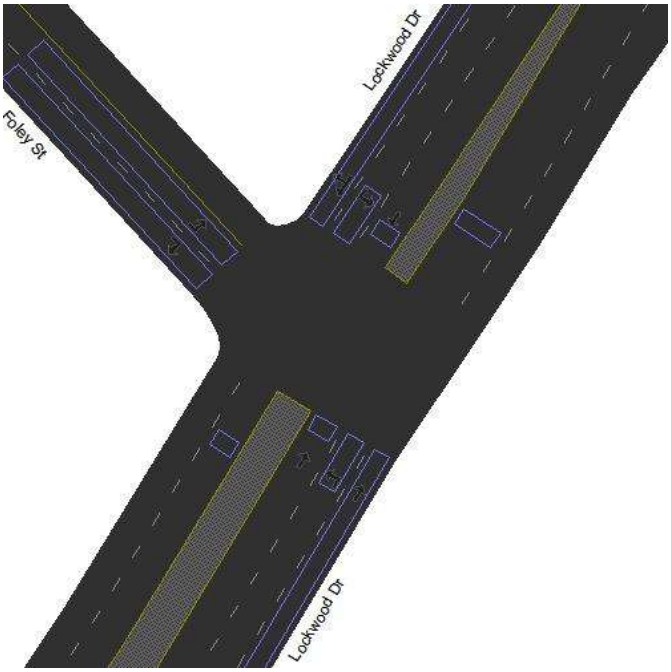
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Jensen Dr (SB)		Tidwell Rd (EB)		Jensen Dr (NB)		
	L	T+R	R	L	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	69	5	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1674	1809	1900	1881	1614	1809	1900	1696
Capacity (c), veh/h	668	1364	1202	200	157	127	254	104	157	157
Available Capacity (ca), veh/h	188	577	461	272	329	142	499	176	329	329
Volume-to-Capacity Ratio (X)	0.00015	7.79e-05	7.79e-05	0.000999	0.00127	0.000787	0.272	0.0489	0.000636	0.000701
Green Ratio (g/C)	0.37	0.72	0.72	0.13	0.08	0.07	0.14	0.06	0.08	0.08
Assigned Phase	1	6+8+3+9+5+4+1+2	2+8+3+9+5+4+1+6	7+9	4	5	2	3	8	8
Max. Allowable Headway (MAH), s/veh	2.76	4.12	4.45	2.63	4.27	2.76	4.45	2.76	4.27	4.27
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.3	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	0.51	1.00	0.58	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Phase Duration (Dp), s	44.9	52.5	20.8	11.9	14.5	13.2	20.8	11.9	14.5	14.5
Uniform Delay (d1), s/veh	20.9	4.17	4.17	40.3	44.2	45.6	40.4	46.8	44.2	44.2
Incremental Delay (d2), s/veh	0.000404	0.000103	0.000117	0.00899	0.0146	0.0111	2.63	0.887	0.00128	0.00804
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	20.9	4.17	4.17	40.3	44.2	45.7	43	47.6	44.2	44.2
Level Of Service	C	A	A	D	D	D	D	D	D	D
Total Delay, veh-hr	0.000581	0.000123	0.000109	0.00234	0.00245	0.00127	0.825	0.0615	0.00123	0.00135
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.1	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	0.0	0.0
Effective Green Time, s	38.8	75.4	75.4	13.3	8.7	7.1	14.7	6.1	8.7	8.7
Approach Volume, veh/h	--	0	--	--	0	--	69	--	--	5
Approach Delay, s/veh	--	9.7	--	--	42.2	--	43.0	--	--	47.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*197*	**Site Name:**	*N 29.753608, W 95.322102*
Cross Street:	*Lockwood Dr & Foley St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:30:40*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & Foley St)

@ Node 197 From \ To	Foley St (NWB)	Lockwood Dr (SWB)	Lockwood Dr (NEB)
Lockwood Dr (SWB)	*404.0*		
Foley St (SEB)			
Lockwood Dr (NEB)			

[Flow Field] = Volume

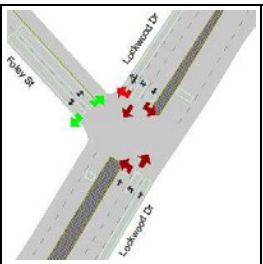
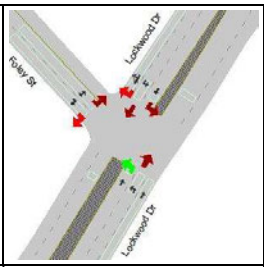
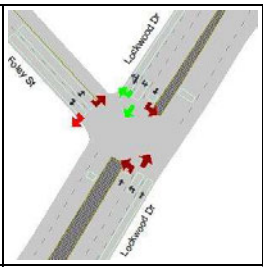
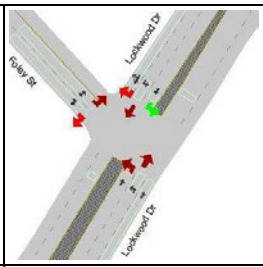
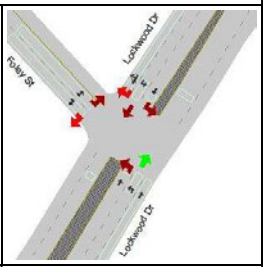
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SWB)			Foley St (SEB)		Lockwood Dr (NEB)	
	Foley St	Lockwood Dr	Lockwood Dr	Lockwood Dr	Lockwood Dr	Foley St	Lockwood Dr
	SWBR	SWBT	SWBL	SEBR	SEBL	NEBL	NEBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *6.9 sec*
Level of Service: *A*
Offset: *96.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	3	4	7	8
Min Green	8.0	5.0	8.0	5.0	8.0
Max Green	12.0	20.0	53.0	20.0	53.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	5.0	5.0	5.0	8.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No
Split	17.0	25.0	58.0	25.0	58.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	10.0	13.0	10.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	3
Ring - 2		8	7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SWB)			Foley St (SEB)		Lockwood Dr (NEB)	
	L	T	T+R	L	R	L	T
Adjusted Flow, veh/h	0	0	404	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1698	1809	1609	1809	3800
Capacity (c), veh/h	138	1377	1183	139	123	138	2648
Available Capacity (ca), veh/h	362	1047	900	217	193	362	2014

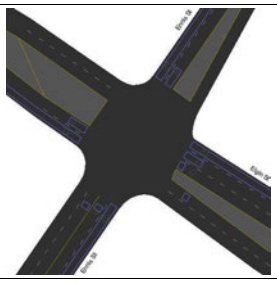
Volume-to-Capacity Ratio (X)	0.000722	7.26e-05	0.341	0.000721	0.00081	0.000722	3.78e-05
Green Ratio (g/C)	0.08	0.70	0.70	0.08	0.08	0.08	0.70
Assigned Phase	7	4	4	2	2	3	8
Max. Allowable Headway (MAH), s/veh	4.73	6.33	6.33	6.59	6.59	4.73	5.19
Queue Service Time (gs), s	0.0	0.0	9.5	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	4.2	4.2	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.7	74.7	74.7	12.7	12.7	12.7	74.7
Uniform Delay (d1), s/veh	42.6	4.6	6.03	42.6	42.6	42.6	4.6
Incremental Delay (d2), s/veh	0.00939	9.5e-05	0.787	0.00935	0.0118	0.00939	2.57e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.6	4.6	6.82	42.6	42.6	42.6	4.6
Level Of Service	D	A	A	D	D	D	A
Total Delay, veh-hr	0.00118	0.000128	0.766	0.00118	0.00118	0.00118	0.000128
Fully Stopped (Nf), veh/ln	0.0	0.0	3.1	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	3.4	0.0	0.0	0.0	0.0
Effective Green Time, s	7.7	69.7	69.7	7.7	7.7	7.7	69.7
Approach Volume, veh/h	--	--	404	0	--	--	0
Approach Delay, s/veh	--	--	6.8	42.6	--	--	23.6

TransModeler® Intersection Report

Site Information			
Intersection ID:	*249*	**Site Name:**	*N 29.731343, W 95.359884*
Cross Street:	*Ennis St & Elgin St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:38*		

" "

Intersection Geometry



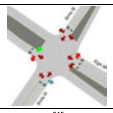
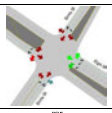
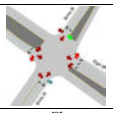
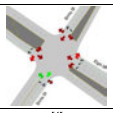
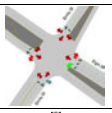
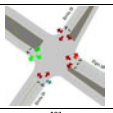
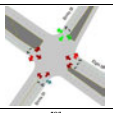
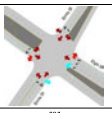
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *24.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Flexible*

"" " "

Phasing

Item Name \ Signal States								
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"Min Green"	*"6.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"0.0"*
"Max Green"	*"9.0"*	*"11.0"*	*"9.0"*	*"11.0"*	*"8.8"*	*"10.8"*	*"24.8"*	*"7.8"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.2"*	*"5.2"*	*"5.2"*	*"5.2"*
"Recall Mode"	*"None"*	*"Max"*	*"None"*	*"Max"*	*"None"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"7.8"*	*"8.0"*	*"7.8"*	*"7.8"*	*"7.8"*	*"7.8"*	*"14.8"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"22.0"*	*"22.0"*	*"22.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"14.0"*	*"16.0"*	*"14.0"*	*"16.0"*	*"14.0"*	*"16.0"*	*"30.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"11.0"*	*"10.0"*	*"10.0"*	*"10.0"*	*"10.2"*	*"10.2"*	*"10.2"*	*"5.2"*

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"1", "2"*	*"3", "4"*	*"9"*
Ring - 2	*"5", "6"*	*"8"*	

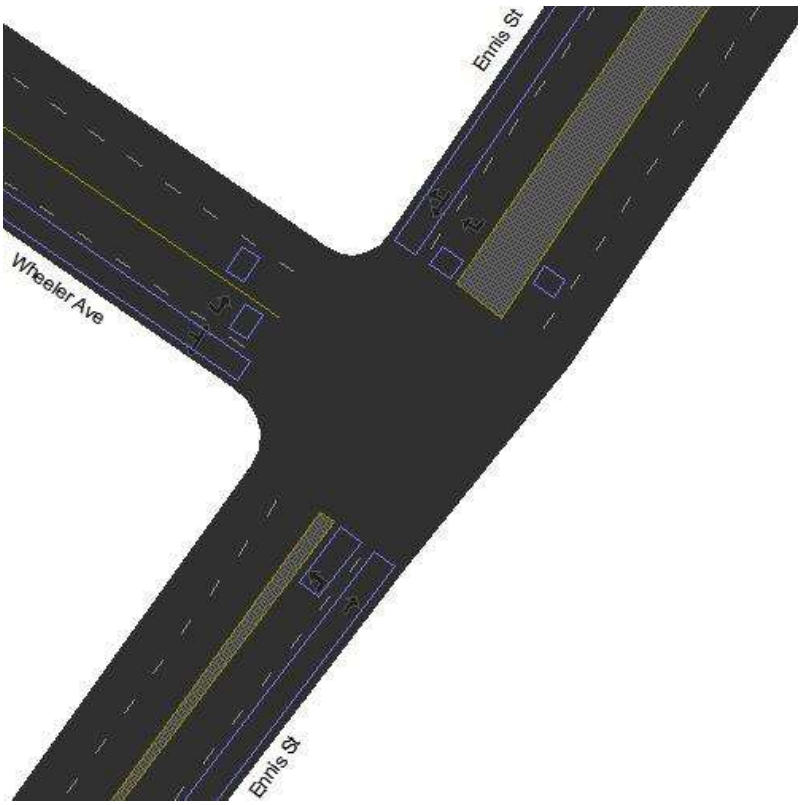
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*266*	**Site Name:**	*N 29.723838, W 95.365842*
Cross Street:	*Ennis St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:13:22*		

" "

Intersection Geometry

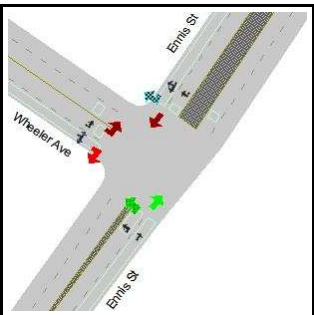
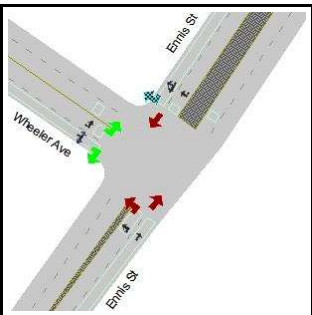
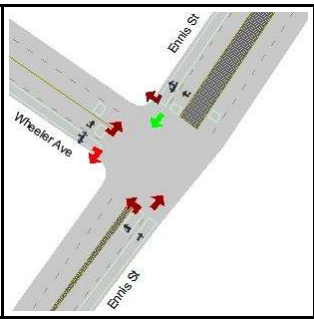
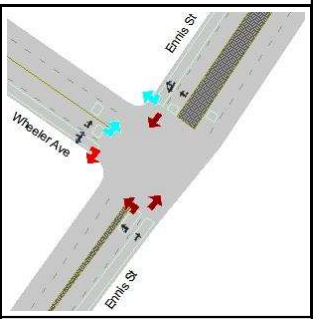


"

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*"Traffic Actuated"*
Cycle Length:	*73.0 sec*
Offset:	*4.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

"" " "

Phasing				
Item Name \ Signal States				
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"Min Green"	*"8.0"*	*"4.0"*	*"8.0"*	*"3.0"*
"Max Green"	*"37.5"*	*"11.7"*	*"37.5"*	*"8.0"*
"Yellow"	*"3.6"*	*"3.6"*	*"3.6"*	*"3.0"*
"Red Clearance"	*"1.9"*	*"1.7"*	*"1.9"*	*"2.0"*
"Lost Time"	*"5.5"*	*"5.3"*	*"5.5"*	*"5.0"*
"Recall Mode"	*"Max"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"1.0"*	*"1.0"*	*"1.0"*	*"2.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"14.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"43.0"*	*"17.0"*	*"43.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"True"*	*"True"*
"Opt Min Green"	*"13.5"*	*"9.3"*	*"13.5"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1		*"4"*	*"9"*

Ring - 2	*"6"*	*"8"*	

"

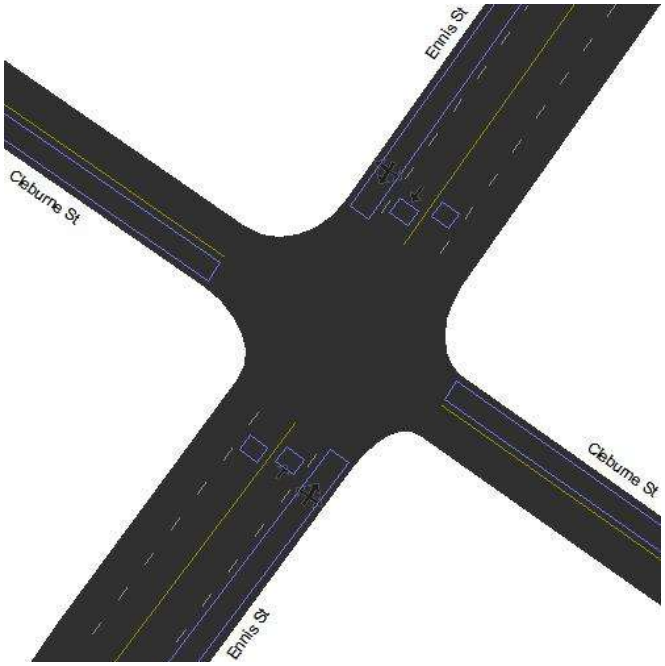
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*292*	**Site Name:**	*N 29.725733, W 95.364354*
Cross Street:	*Ennis St & Cleburne St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:13:4*		

" "

Intersection Geometry



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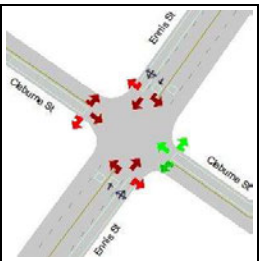
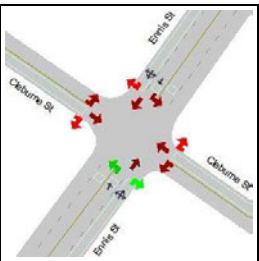
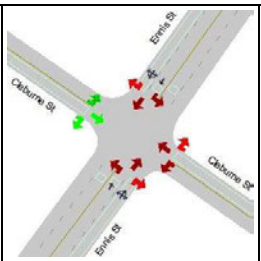
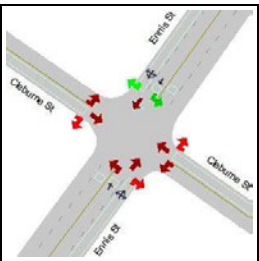
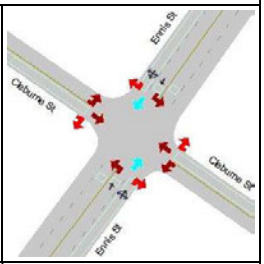
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *44.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
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"Max Green"	*"19.0"*	*"31.0"*	*"19.0"*	*"31.0"*	*"8.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"Min"*	*"None"*	*"Min"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"3.0"*	*"4.0"*	*"3.0"*	*"2.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"17.0"*	*"13.0"*	*"17.0"*	*"13.0"*	*"13.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"24.0"*	*"36.0"*	*"24.0"*	*"36.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"True"*	*"True"*
"Opt Min Green"	*"9.0"*	*"13.0"*	*"9.0"*	*"13.0"*	*"7.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

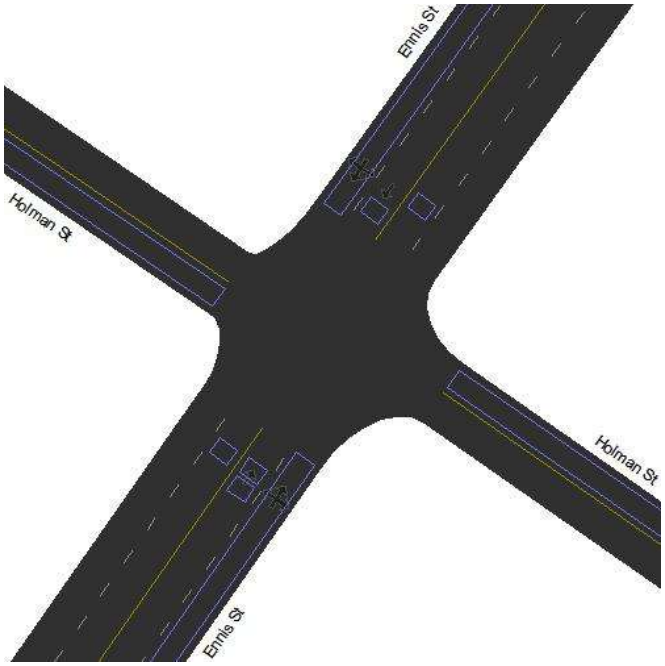
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*306*	**Site Name:**	*N 29.729462, W 95.361380*
Cross Street:	*Ennis St & Holman St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:45*		

" "

Intersection Geometry

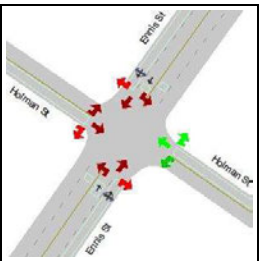
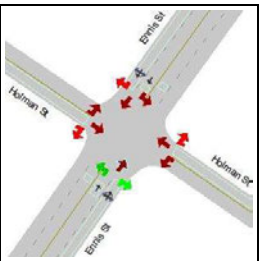
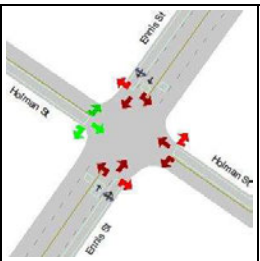
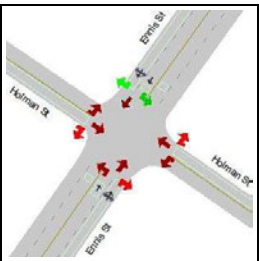
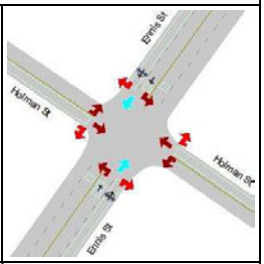


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *14.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
"ID"	*"2"*	*"4"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*	*"3.0"*
"Max Green"	*"20.3"*	*"30.3"*	*"20.3"*	*"30.3"*	*"7.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.5"*	*"1.5"*	*"1.5"*	*"1.5"*	*"3.0"*
"Lost Time"	*"4.7"*	*"4.7"*	*"4.7"*	*"4.7"*	*"6.0"*
"Recall Mode"	*"Max"*	*"Max"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"2.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"25.0"*	*"35.0"*	*"25.0"*	*"35.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"True"*	*"False"*	*"False"*
"Opt Min Green"	*"10.7"*	*"10.7"*	*"10.7"*	*"10.7"*	*"9.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

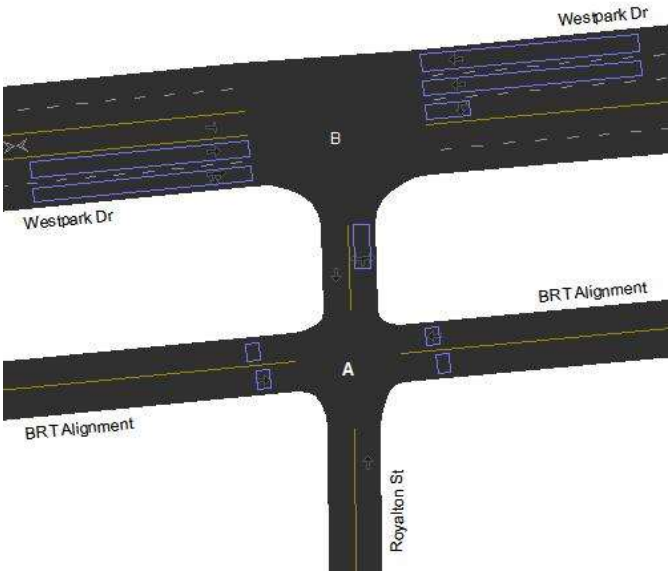
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*99566,309*	**Site Name:**	*N 29.724946, W 95.472350*
Cross Street:	*BRT Alignment & Royalton St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:16:37*		

Intersection Geometry



Turn Movement Volumes (BRT Alignment & Royalton St)

@ Node 99566 From \ To	Royalton St (NB)	BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Royalton St (SB)				
BRT Alignment (EB)				
Royalton St (NB)				

Turn Movement Volumes (Westpark Dr & Royalton St)

@ Node 309 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Royalton St (SB)
Westpark Dr (WB)			*24.0*
Westpark Dr (EB)			*109.0*
Royalton St (NB)	*97.0*	*123.0*	

[Flow Field] = Volume

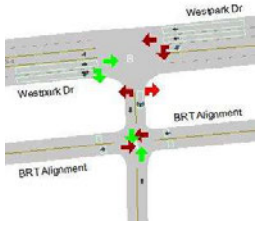
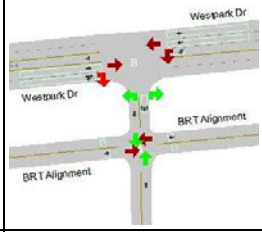
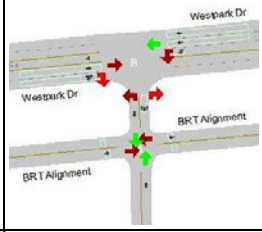
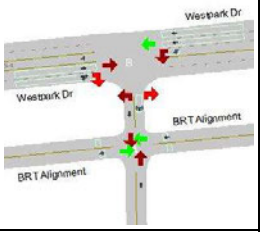
Volume Adjustment and Saturation Flow Rate

Movement	BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)	Royalton St (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Royalton St (NB)	
	BRT Alignment	Royalton St	BRT Alignment	Royalton St	Westpark Dr	Royalton St	Westpark Dr	Royalton St	Westpark Dr	Westpark Dr
	WBT	SBT	EBT	NBT	WBT	WBL	EBT	EBR	NBR	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *143.0 sec*
Control Delay: *67.4 sec*
Level of Service: *E*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	*1*	*2*	*4*	*6*	*9*
Min Green	*8.0*	*8.0*	*5.0*	*8.0*	*3.0*
Max Green	*17.0*	*70.0*	*28.0*	*92.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Max*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*13.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*22.0*	*75.0*	*33.0*	*97.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*10.0*	*13.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	*9*
Ring - 2	*6*		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)	Royalton St (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Royalton St (NB)
	T	T	T	T	L	T	T	T+R	L+R
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*24*	*0*	*0*	*109*	*220*
Adjusted Saturation Flow, veh/h	*1976*	*1900*	*1976*	*1900*	*1809*	*3800*	*1900*	*915*	*1767*
Capacity (c), veh/h	*106*	*1532*	*106*	*1532*	*127*	*2867*	*1132*	*545*	*248*

Available Capacity (ca), veh/h	111	930	111	930	215	2445	930	448	346
Volume-to-Capacity Ratio (X)	0.000945	6.53e-05	0.000945	6.53e-05	0.189	3.49e-05	8.84e-05	0.2	0.886
Green Ratio (g/C)	0.05	0.81	0.05	0.81	0.07	0.75	0.60	0.60	0.14
Assigned Phase	9	2+6+4+1	9	2+6+4+1	1	6+9	2	2	4
Max. Allowable Headway (MAH), s/veh	2.41	6.44	2.41	6.44	4.76	6.10	6.44	6.44	4.85
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	1.8	0.0	0.0	7.8	17.5
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	0.51	1.00	0.81	0.51	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
Green Extention Time (ge), s	0.0	1.0	0.0	1.0	0.0	0.0	1.0	1.0	0.6
Phase Duration (Dp), s	12.7	90.2	12.7	90.2	15.1	105.2	90.2	90.2	25.1
Uniform Delay (d1), s/veh	64	2.68	64	2.68	62.6	4.31	11.7	13.3	60.3
Incremental Delay (d2), s/veh	0.0161	7.67e-05	0.0161	7.67e-05	3.26	2.19e-05	0.000141	0.824	33.8
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	64.1	2.68	64.1	2.68	65.9	4.31	11.7	14.1	94.2
Level Of Service	E	A	E	A	E	A	B	B	F
Total Delay, veh-hr	0.00178	7.43e-05	0.00178	7.43e-05	0.439	0.00012	0.000325	0.427	5.75
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.7	8.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.8	10.3
Effective Green Time, s	7.7	115.3	7.7	115.3	10.1	107.9	85.2	85.2	20.1
Approach Volume, veh/h	0	0	0	0	--	24	--	109	220
Approach Delay, s/veh	64.1	2.7	64.1	2.7	--	65.6	--	14.1	94.2

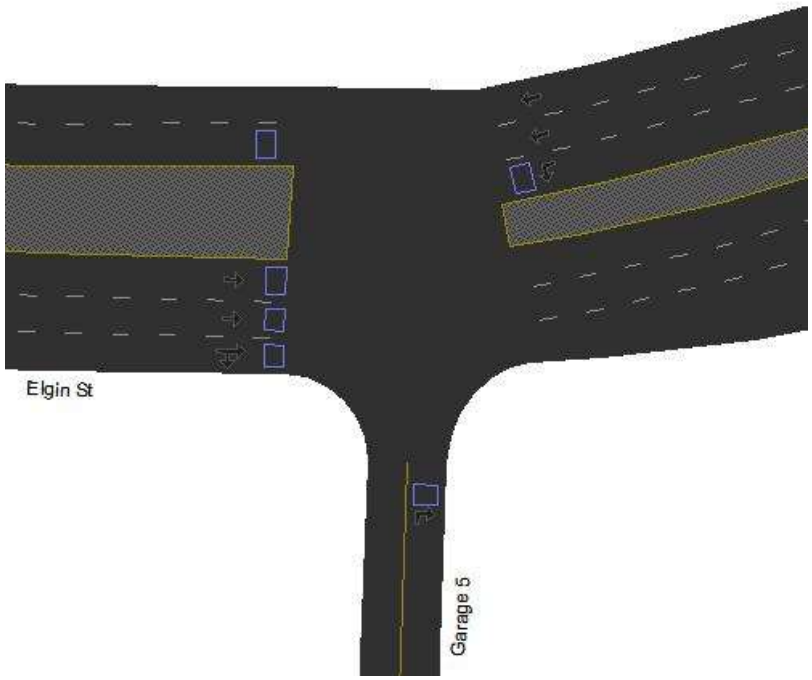
TransModeler® Intersection Report

Site Information

Intersection ID:	*353*	**Site Name:**	*N 29.725941, W 95.339106*
Cross Street:	*Elgin St & Garage 5*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:13*		

" "

Intersection Geometry

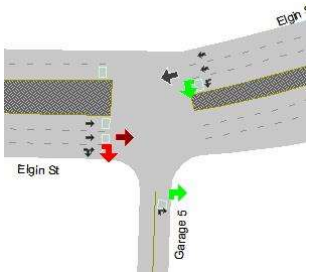
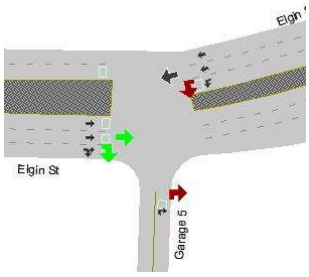


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *65.0 sec*

"" " "

Phasing		
Item Name \ Signal States		
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"Min Green"	*"8.0"*	*"8.0"*
"Max Green"	*"15.0"*	*"40.0"*
"Yellow"	*"3.0"*	*"3.0"*
"Red Clearance"	*"2.0"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"No"*
"Split"	*"20.0"*	*"45.0"*
"Max Inhibit"	*"False"*	*"False"*
"Opt Min Green"	*"13.0"*	*"13.0"*

"

" " "

Phase Sequence and Concurrency Group		
Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*"6"*	*"5"*
Ring - 2		

"

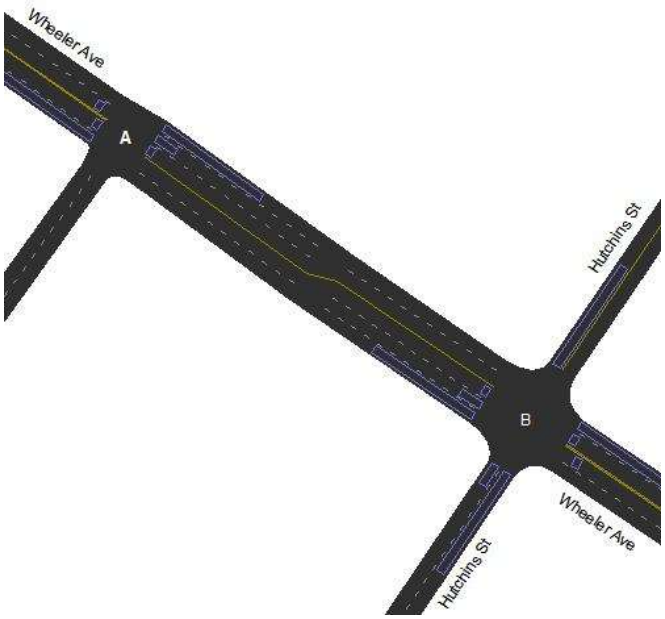
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*365,367*	**Site Name:**	*N 29.728611, W 95.373760*
Cross Street:	*Wheeler Ave & Hutchins St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:13:46*		

" "

Intersection Geometry



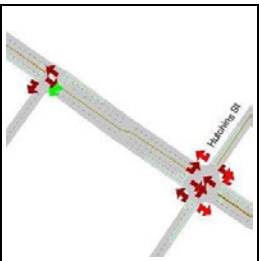
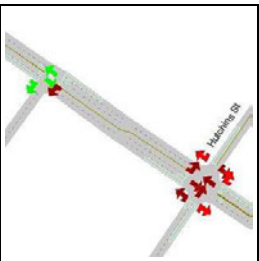
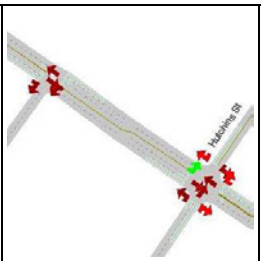
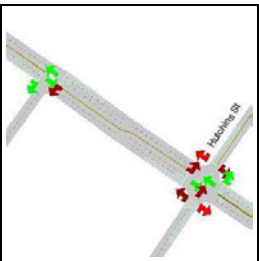
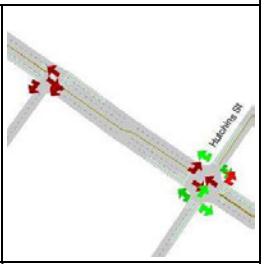
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States					
"ID"	*"1"*	*"2"*	*"5"*	*"6"*	*"8"*
"Min Green"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"6.0"*
"Max Green"	*"15.0"*	*"23.0"*	*"15.0"*	*"20.0"*	*"23.0"*
"Yellow"	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*
"Red Clearance"	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"None"*	*"None"*	*"None"*	*"Max"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"No"*	*"No"*	*"No"*	*"Yes"*
"Split"	*"20.0"*	*"28.0"*	*"20.0"*	*"25.0"*	*"28.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"10.0"*	*"10.0"*	*"10.0"*	*"10.0"*	*"11.0"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"1", "2"*		
Ring - 2	*"5", "8"*	*"6"*	

"

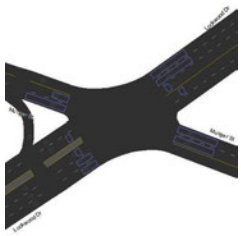
"

TransModeler® Intersection Report

Site Information

Intersection ID:	453	**Site Name:**	N 29.728900, W 95.335117
Cross Street:	Munger St & Lockwood Dr	**Number of Plans:**	1
Analysis Date:	2023/3/7 15:29:22		

Intersection Geometry



Turn Movement Volumes (Munger St & Lockwood Dr)

@ Node 453 From \ To	Lockwood Dr (NEB)	Munger St (WB)	Lockwood Dr (SWB)	Munger St (EB)
Munger St (EB)	5.0			
Lockwood Dr (NEB)				
Munger St (WB)				
Lockwood Dr (SWB)				70.0

[Flow Field] = Volume

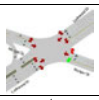
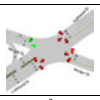
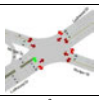
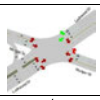
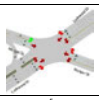
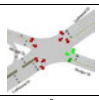
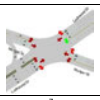
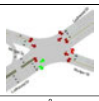
Volume Adjustment and Saturation Flow Rate

Movement	Munger St (EB)		Lockwood Dr (NEB)			Munger St (WB)			Lockwood Dr (SWB)		
	Lockwood Dr	Munger St	Lockwood Dr	Munger St	Munger St	Lockwood Dr	Munger St	Lockwood Dr	Munger St	Lockwood Dr	Munger St
	EBL	EBT	NEBT	NEBL	NEBR	WBR	WBT	WBL	SWBR	SWBT	SWBL

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*70.0 sec*
Control Delay:	*30.3 sec*
Level of Service:	*C*
Offset:	*10.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*By Phase*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*5.0*	*8.0*	*5.0*	*8.0*	*5.0*	*8.0*	*5.0*	*8.0*
Max Green	*5.0*	*17.0*	*10.0*	*18.0*	*5.0*	*17.0*	*10.0*	*18.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*None*	*None*	*None*	*None*	*None*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*No*	*No*	*No*	*No*	*No*	*No*	*Yes*
Split	*10.0*	*22.0*	*15.0*	*23.0*	*10.0*	*22.0*	*15.0*	*23.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*10.0*	*13.0*	*10.0*	*13.0*	*10.0*	*13.0*	*10.0*	*13.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*1, 2*	*4, 3*
Ring - 2	*6, 5*	*8, 7*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

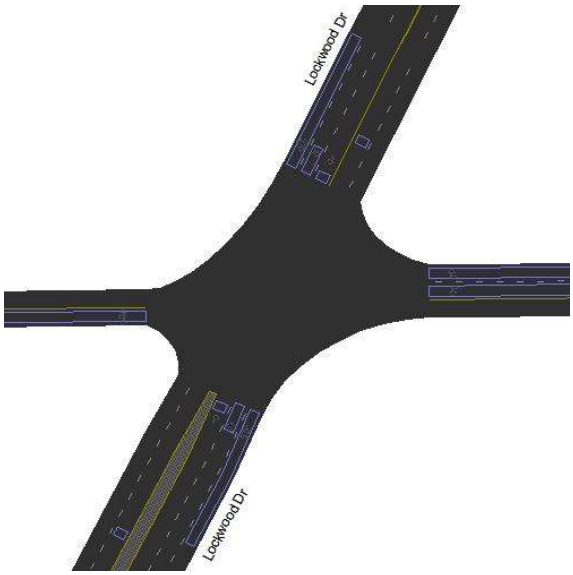
Lane Group	Munger St (EB)		Lockwood Dr (NEB)			Munger St (WB)		Lockwood Dr (SWB)		
	L	T	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*70*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*1900*	*1809*	*1976*	*1900*	*1809*	*1900*	*1809*	*1976*	*1854*
Capacity (c), veh/h	*69*	*208*	*767*	*787*	*756*	*69*	*208*	*245*	*216*	*203*
Available Capacity (ca), veh/h	*129*	*461*	*258*	*508*	*489*	*129*	*461*	*258*	*508*	*477*
Volume-to-Capacity Ratio (X)	*0.0728*	*0.000481*	*0.00013*	*0.000127*	*0.000145*	*0.00145*	*0.000961*	*0.286*	*0.000462*	*0.000542*
Green Ratio (g/C)	*0.04*	*0.11*	*0.42*	*0.40*	*0.40*	*0.04*	*0.11*	*0.14*	*0.11*	*0.11*
Assigned Phase	*5+2*	*2*	*3*	*8*	*8*	*1+6*	*6*	*7*	*4*	*4*
Max. Allowable Headway (MAH), s/veh	*4.84*	*5.36*	*4.73*	*4.66*	*4.66*	*5.45*	*5.53*	*5.24*	*4.90*	*4.90*
Queue Service Time (gs), s	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*2.4*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.56*	*0.51*	*0.51*	*1.00*	*1.00*	*0.51*	*0.51*	*0.87*	*0.51*	*0.51*
Max Out Probability (px)	*1.00*	*0.00*	*0.08*	*0.00*	*0.00*	*1.00*	*0.00*	*1.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*
Phase Duration (Dp), s	*10.0*	*12.7*	*34.7*	*32.9*	*32.9*	*10.0*	*12.7*	*14.5*	*12.7*	*12.7*
Uniform Delay (d1), s/veh	*32.5*	*27.8*	*11.6*	*12.7*	*12.7*	*32.4*	*27.8*	*27.2*	*27.8*	*27.8*
Incremental Delay (d2), s/veh	*2.05*	*0.00411*	*0.000306*	*0.000291*	*0.000346*	*0.038*	*0.00833*	*2.92*	*0.00365*	*0.00481*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*34.5*	*27.8*	*11.6*	*12.7*	*12.7*	*32.4*	*27.8*	*30.1*	*27.8*	*27.8*
Level Of Service	*C*	*C*	*B*	*B*	*B*	*C*	*C*	*C*	*C*	*C*
Total Delay, veh-hr	*0.048*	*0.000771*	*0.000323*	*0.000352*	*0.000387*	*0.000801*	*0.00154*	*0.086*	*0.000771*	*0.000848*
Fully Stopped (Nf), veh/ln	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.1*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.3*	*0.0*	*0.0*
Effective Green Time, s	*2.7*	*7.7*	*29.7*	*27.9*	*27.9*	*2.7*	*7.7*	*9.5*	*7.7*	*7.7*
Approach Volume, veh/h	*--*	*5*	*--*	*--*	*0*	*--*	*0*	*--*	*--*	*70*
Approach Delay, s/veh	*--*	*34.4*	*--*	*--*	*12.3*	*--*	*29.3*	*--*	*--*	*30.1*

TransModeler® Intersection Report

Site Information

Intersection ID:	*514*	**Site Name:**	*N 29.759036, W 95.318122*
Cross Street:	*Harvey Wilson Dr & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:30:46*		

Intersection Geometry



Turn Movement Volumes (Harvey Wilson Dr & Lockwood Dr)

@ Node 514 From \ To	Lockwood Dr (NEB)	Harvey Wilson Dr (WB)	Lockwood Dr (SWB)	Harvey Wilson Dr (EB)
Harvey Wilson Dr (WB)			*1.0*	
Lockwood Dr (SWB)				*24.0*
Harvey Wilson Dr (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

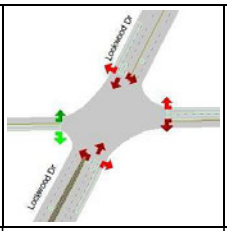
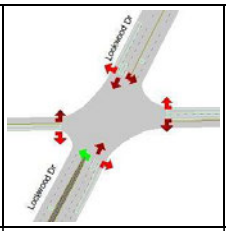
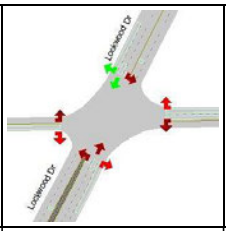
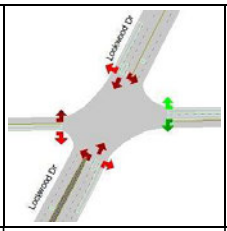
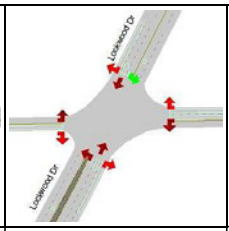
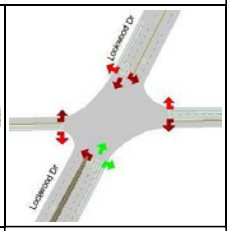
Volume Adjustment and Saturation Flow Rate

Movement	Harvey Wilson Dr (WB)		Lockwood Dr (SWB)				Harvey Wilson Dr (EB)		Lockwood Dr (NB)			
	Lockwood Dr	Lockwood Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Lockwood Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Harvey Wilson Dr
	WBR	WBL	SWBU	SWBR	SWBT	SWBL	EBL	EBR	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *42.5 sec*
Level of Service: *D*
Offset: *19.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	15.0	15.0	55.0	15.0	15.0	55.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	20.0	20.0	60.0	20.0	20.0	60.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	3
Ring - 2	6	8	7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Harvey Wilson Dr (WB)		Lockwood Dr (SWB)			Harvey Wilson Dr (EB)	Lockwood Dr (NB)		
	L	R	L	T	T+R	L+R	L	T	T+R
Adjusted Flow, veh/h	1	0	24	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1609	1809	1976	1884	1900	1809	1976	1900
Capacity (c), veh/h	213	125	173	1337	1275	148	173	1337	1286
Available Capacity (ca), veh/h	343	241	271	1087	1036	285	271	1087	1045
Volume-to-Capacity Ratio (X)	0.00471	0.0008	0.139	7.48e-05	8.63e-05	0.00136	0.00116	7.48e-05	8.56e-05
Green Ratio (g/C)	0.08	0.08	0.10	0.68	0.68	0.08	0.10	0.68	0.68
Assigned Phase	6	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.94	5.94	4.73	5.29	5.29	6.48	4.73	5.30	5.30
Queue Service Time (gs), s	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.52	0.52	0.75	1.00	1.00	0.51	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.8	12.8	14.6	72.7	72.7	12.8	14.6	72.7	72.7

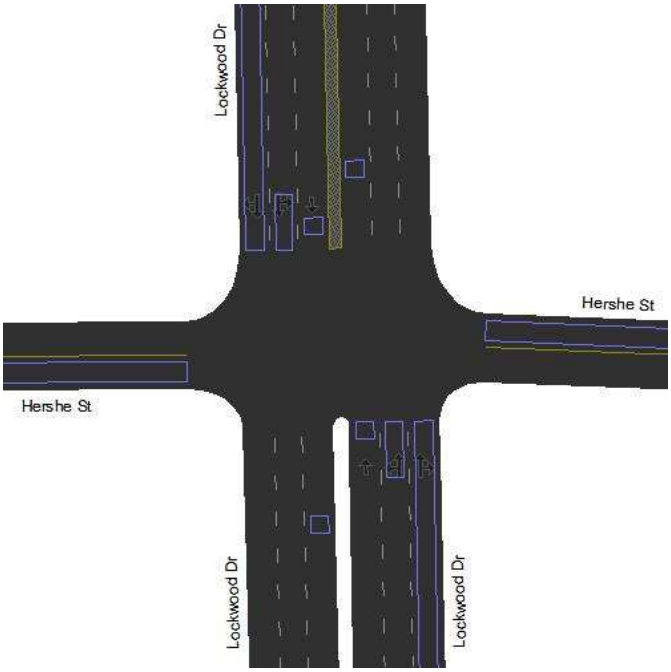
Uniform Delay (d1), s/veh	42.6	42.5	41.4	5.23	5.23	42.5	40.9	5.23	5.23
Incremental Delay (d2), s/veh	0.04	0.0115	1.68	0.000101	0.000122	0.0166	0.012	0.000101	0.00012
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.6	42.5	43.1	5.23	5.23	42.6	40.9	5.23	5.23
Level Of Service	D	D	D	A	A	D	D	A	A
Total Delay, veh-hr	0.0118	0.00118	0.289	0.000145	0.00016	0.00236	0.00227	0.000145	0.00016
Fully Stopped (Nf), veh/ln	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.8	7.8	9.6	67.7	67.7	7.8	9.6	67.7	67.7
Approach Volume, veh/h	1	--	--	--	24	0	--	--	0
Approach Delay, s/veh	42.6	--	--	--	42.8	42.6	--	--	22.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*534*	**Site Name:**	*N 29.778370, W 95.315883*
Cross Street:	*Hershe St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:34:29*		

Intersection Geometry



Turn Movement Volumes (Hershe St & Lockwood Dr)

@ Node 534 From \ To	Lockwood Dr (NB)	Hershe St (WB)	Lockwood Dr (SB)	Hershe St (EB)
Hershe St (WB)	*3.0*	*3.0*	*7.0*	
Lockwood Dr (SB)		*18.0*		*4.0*
Hershe St (EB)	*9.0*		*10.0*	*3.0*
Lockwood Dr (NB)		*7.0*		*5.0*

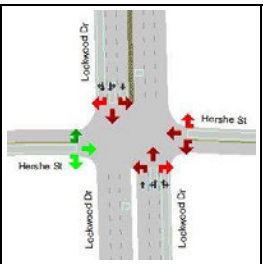
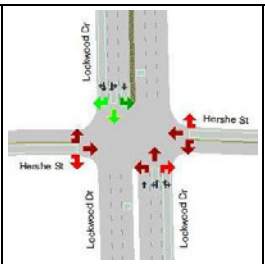
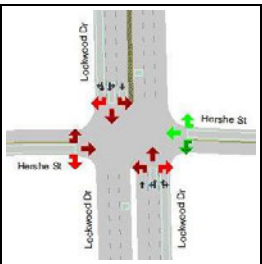
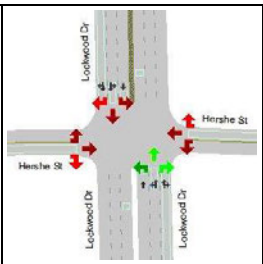
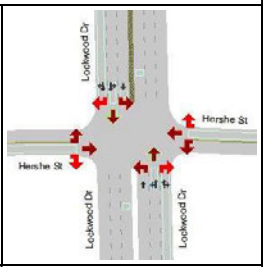
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Hershe St (WB)			Lockwood Dr (SB)			Hershe St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Lockwood Dr	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Hershe St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *24.1 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*0.0*
Max Green	*23.0*	*57.0*	*23.0*	*57.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*0.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*28.0*	*62.0*	*28.0*	*62.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*13.0*	*5.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Hershe St (WB)	Lockwood Dr (SB)			Hershe St (EB)	Lockwood Dr (NB)		
	LTR	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	*13*	*4*	*0*	*18*	*22*	*7*	*0*	*5*
Adjusted Saturation Flow, veh/h	*1900*	*1574*	*1900*	*1890*	*1903*	*1575*	*1900*	*1894*
Capacity (c), veh/h	*175*	*895*	*1448*	*1441*	*175*	*878*	*1448*	*1444*
Available Capacity (ca), veh/h	*424*	*706*	*1051*	*1046*	*425*	*692*	*1051*	*1048*

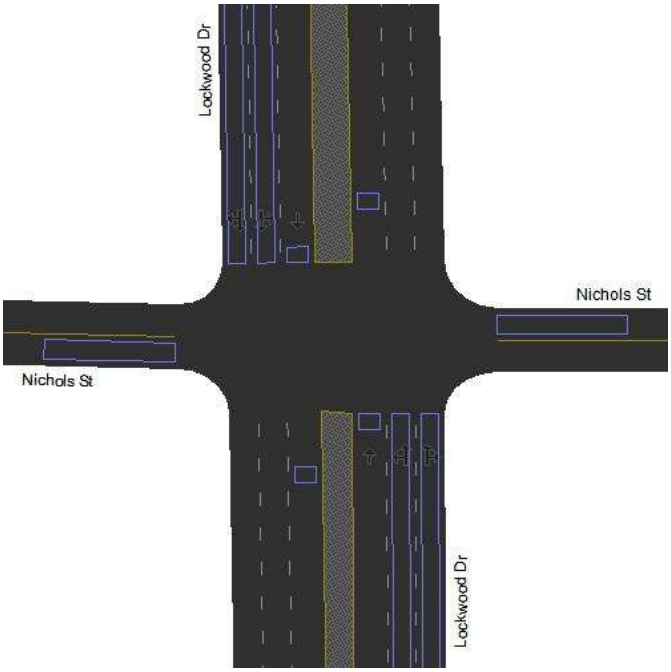
Volume-to-Capacity Ratio (X)	0.0743	0.00458	6.9e-06	0.0125	0.126	0.00798	6.9e-06	0.00353
Green Ratio (g/C)	0.09	0.76	0.76	0.76	0.09	0.76	0.76	0.76
Assigned Phase	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	6.43	5.66	5.66	5.66	6.46	4.20	4.20	4.20
Queue Service Time (gs), s	0.6	0.0	0.0	0.2	1.1	0.2	0.0	0.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Phase Call Probability (pc)	0.66	1.00	1.00	1.00	0.74	0.65	0.65	0.65
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Phase Duration (Dp), s	14.5	75.5	75.5	75.5	14.5	75.5	75.5	75.5
Uniform Delay (d1), s/veh	42.7	3.72	2.91	2.94	43	6.32	2.91	2.92
Incremental Delay (d2), s/veh	0.824	0.00925	8.58e-06	0.0158	1.47	0.0165	8.58e-06	0.00442
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	43.6	3.73	2.91	2.95	44.4	6.33	2.91	2.92
Level Of Service	D	A	A	A	D	A	A	A
Total Delay, veh-hr	0.157	0.00424	8.08e-06	0.0148	0.271	0.0123	8.08e-06	0.00414
Fully Stopped (Nf), veh/ln	0.3	0.0	0.0	0.1	0.5	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.4	0.0	0.0	0.1	0.6	0.0	0.0	0.0
Effective Green Time, s	9.5	78.5	78.5	78.5	9.5	78.5	78.5	78.5
Approach Volume, veh/h	13	--	--	22	22	--	--	12
Approach Delay, s/veh	43.6	--	--	3.1	44.4	--	--	4.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*567*	**Site Name:**	*N 29.781237, W 95.315919*
Cross Street:	*Nichols St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:34:38*		

Intersection Geometry



Turn Movement Volumes (Nichols St & Lockwood Dr)

@ Node 567 From \ To	Lockwood Dr (NB)	Nichols St (WB)	Lockwood Dr (SB)	Nichols St (EB)
Nichols St (WB)		*2.0*		
Lockwood Dr (SB)				
Nichols St (EB)				
Lockwood Dr (NB)				

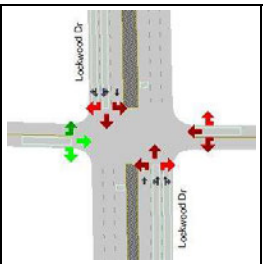
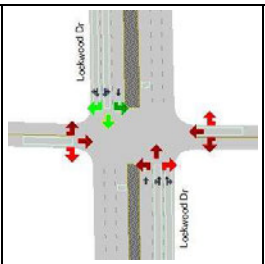
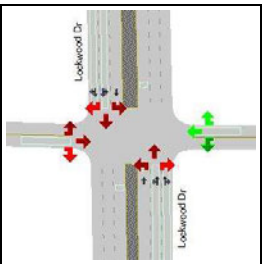
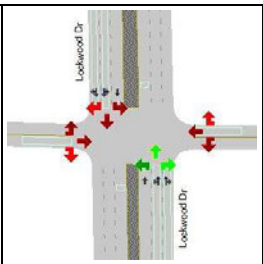
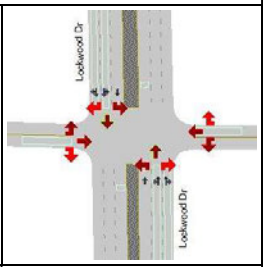
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Nichols St (WB)			Lockwood Dr (SB)			Nichols St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Lockwood Dr	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Nichols St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *93.0 sec*
Control Delay: *32.0 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*0.0*
Max Green	*21.0*	*49.0*	*21.0*	*49.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*26.0*	*54.0*	*26.0*	*54.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*13.0*	*5.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

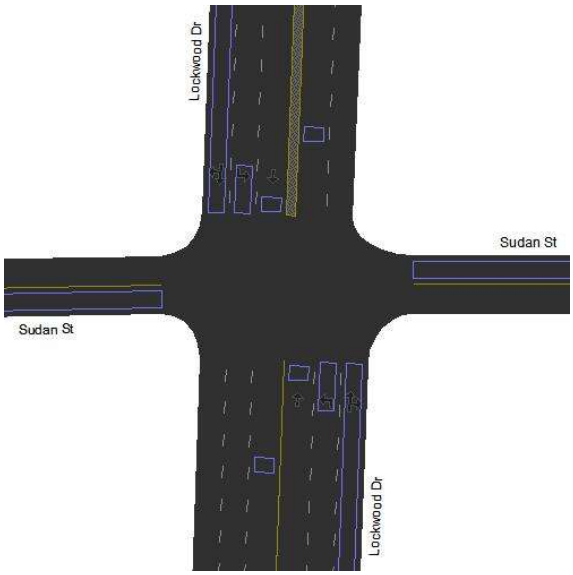
Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Nichols St (WB)	Lockwood Dr (SB)			Nichols St (EB)	Lockwood Dr (NB)		
	LTR	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	*2*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1900*	*1565*	*1976*	*1900*	*1900*	*1565*	*1976*	*1900*
Capacity (c), veh/h	*161*	*885*	*1490*	*1433*	*161*	*885*	*1490*	*1433*
Available Capacity (ca), veh/h	*429*	*677*	*1041*	*1001*	*429*	*677*	*1041*	*1001*

Volume-to-Capacity Ratio (X)	0.0137	0.000124	5.41e-05	8.34e-05	0.00187	0.000124	5.41e-05	8.34e-05
Green Ratio (g/C)	0.08	0.75	0.75	0.75	0.08	0.75	0.75	0.75
Assigned Phase	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	5.37	4.99	4.99	4.99	5.43	4.99	4.99	4.99
Queue Service Time (gs), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.54	1.00	1.00	1.00	0.51	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.9	67.1	67.1	67.1	12.9	67.1	67.1	67.1
Uniform Delay (d1), s/veh	39	3.45	2.81	2.81	39	3.45	2.81	2.81
Incremental Delay (d2), s/veh	0.155	0.000253	6.53e-05	0.000105	0.0209	0.000253	6.53e-05	0.000105
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	39.2	3.45	2.81	2.81	39	3.45	2.81	2.81
Level Of Service	D	A	A	A	D	A	A	A
Total Delay, veh-hr	0.0239	0.000106	6.29e-05	9.33e-05	0.00325	0.000106	6.29e-05	9.33e-05
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.9	70.1	70.1	70.1	7.9	70.1	70.1	70.1
Approach Volume, veh/h	2	--	--	0	0	--	--	0
Approach Delay, s/veh	39.2	--	--	3.0	39.0	--	--	3.0

TransModeler® Intersection Report

Site Information			
Intersection ID:	*576*	**Site Name:**	*N 29.784136, W 95.315919*
Cross Street:	*Sudan St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:34:53*		

Intersection Geometry



Turn Movement Volumes (Sudan St & Lockwood Dr)

@ Node 576 From \ To	Lockwood Dr (NB)	Sudan St (WB)	Lockwood Dr (SB)	Sudan St (EB)
Sudan St (WB)	*7.0*	*2.0*	*10.0*	
Lockwood Dr (SB)		*4.0*		*9.0*
Sudan St (EB)	*4.0*			
Lockwood Dr (NB)		*2.0*		*5.0*

[Flow Field] = Volume

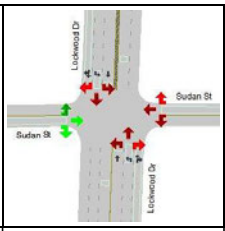
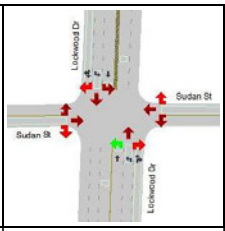
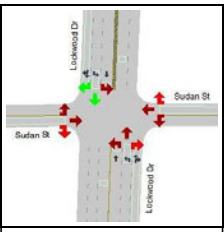
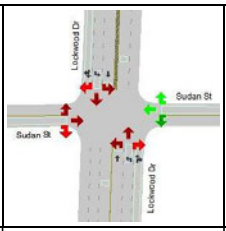
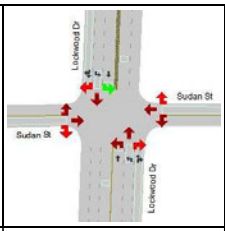
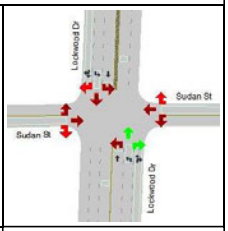
Volume Adjustment and Saturation Flow Rate

Movement	Sudan St (WB)			Lockwood Dr (SB)			Sudan St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Lockwood Dr	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Sudan St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *28.0 sec*
Level of Service: *C*
Offset: *15.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	5.0	8.0	8.0	5.0	8.0
Max Green	21.0	6.0	48.0	21.0	6.0	48.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	26.0	11.0	53.0	26.0	11.0	53.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	10.0	13.0	13.0	10.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

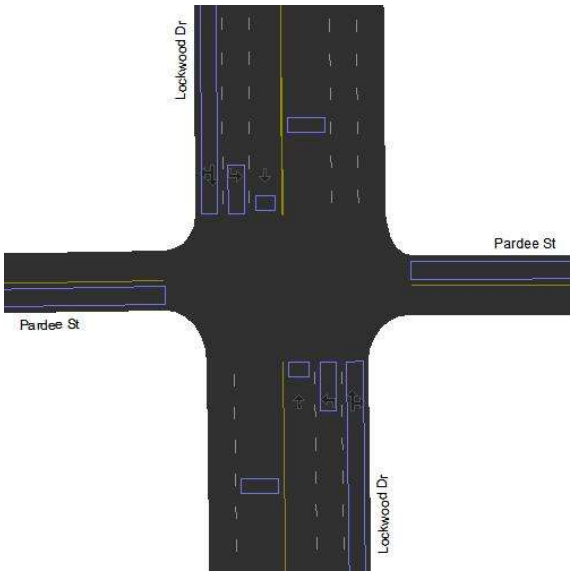
Lane Group	Sudan St (WB)	Lockwood Dr (SB)			Sudan St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	19	9	0	4	4	2	0	5
Adjusted Saturation Flow, veh/h	1901	1809	1976	1891	2048	1809	1976	1895
Capacity (c), veh/h	193	1161	1314	1258	208	121	178	171
Available Capacity (ca), veh/h	444	121	1054	1008	478	121	1054	1011
Volume-to-Capacity Ratio (X)	0.0985	0.00775	7.61e-05	0.00319	0.0202	0.0166	0.000561	0.0293
Green Ratio (g/C)	0.10	0.64	0.67	0.67	0.10	0.07	0.09	0.09
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	6.46	4.73	6.28	6.28	6.42	4.73	6.29	6.29
Queue Service Time (gs), s	0.8	0.2	0.0	0.1	0.2	0.1	0.0	0.2
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.70	0.61	1.00	1.00	0.56	0.53	0.57	0.57
Max Out Probability (px)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.1	62.7	64.9	64.9	14.1	11.0	13.1	13.1

Uniform Delay (d1), s/veh	36.7	5.81	5.04	5.05	36.4	39.2	37.2	37.3
Incremental Delay (d2), s/veh	1.02	0.0121	0.000104	0.00458	0.179	0.252	0.00567	0.318
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	37.7	5.82	5.04	5.06	36.6	39.5	37.3	37.7
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.199	0.0145	0.00014	0.00564	0.0427	0.0219	0.00103	0.0524
Fully Stopped (Nf), veh/ln	0.4	0.1	0.0	0.0	0.1	0.0	0.0	0.1
Percentile Back of Queue (Q%), veh/ln	0.4	0.1	0.0	0.0	0.1	0.1	0.0	0.1
Effective Green Time, s	9.1	57.7	59.9	59.9	9.1	6.0	8.1	8.1
Approach Volume, veh/h	19	--	--	13	4	--	--	7
Approach Delay, s/veh	37.7	--	--	5.6	36.6	--	--	38.2

TransModeler® Intersection Report

Site Information			
Intersection ID:	*604*	**Site Name:**	*N 29.805946, W 95.317057*
Cross Street:	*Pardee St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:28*		

Intersection Geometry



Turn Movement Volumes (Pardee St & Lockwood Dr)

@ Node 604 From \ To	Lockwood Dr (NB)	Pardee St (WB)	Lockwood Dr (SB)	Pardee St (EB)
Pardee St (WB)	*8.0*	*4.0*	*6.0*	
Lockwood Dr (SB)		*95.0*		*4.0*
Pardee St (EB)	*60.0*		*32.0*	*4.0*
Lockwood Dr (NB)		*12.0*		*5.0*

[Flow Field] = Volume

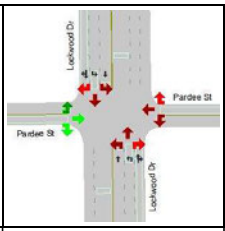
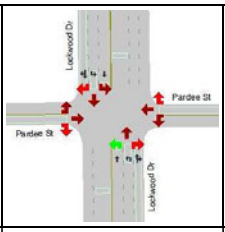
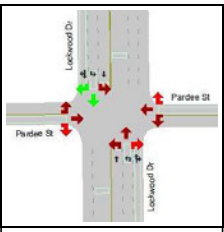
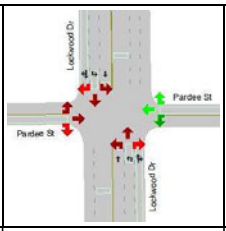
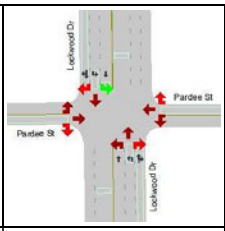
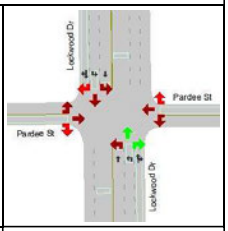
Volume Adjustment and Saturation Flow Rate

Movement	Pardee St (WB)			Lockwood Dr (SB)				Pardee St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Pardee St	Lockwood Dr	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St	Lockwood Dr	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *26.0 sec*
Level of Service: *C*
Offset: *51.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	23.0	9.0	43.0	23.0	9.0	43.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	28.0	14.0	48.0	28.0	14.0	48.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Pardee St (WB)	Lockwood Dr (SB)			Pardee St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	18	4	0	95	96	12	0	5
Adjusted Saturation Flow, veh/h	1903	1809	1976	1836	1893	1809	1976	1888
Capacity (c), veh/h	237	1119	1210	1124	236	174	178	170
Available Capacity (ca), veh/h	486	181	944	877	484	181	944	902
Volume-to-Capacity Ratio (X)	0.0759	0.00366	8.26e-05	0.0845	0.407	0.0694	0.000561	0.0294
Green Ratio (g/C)	0.12	0.62	0.61	0.61	0.12	0.10	0.09	0.09
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	6.46	4.73	6.33	6.33	6.45	4.73	6.29	6.29
Queue Service Time (gs), s	0.8	0.1	0.0	1.9	4.2	0.5	0.0	0.2
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.69	0.56	1.00	1.00	0.96	0.64	0.57	0.57
Max Out Probability (px)	0.00	0.09	0.00	0.00	0.01	0.17	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.8	0.8	0.6	0.0	0.0	0.0
Phase Duration (Dp), s	16.2	60.7	60.1	60.1	16.2	13.7	13.1	13.1

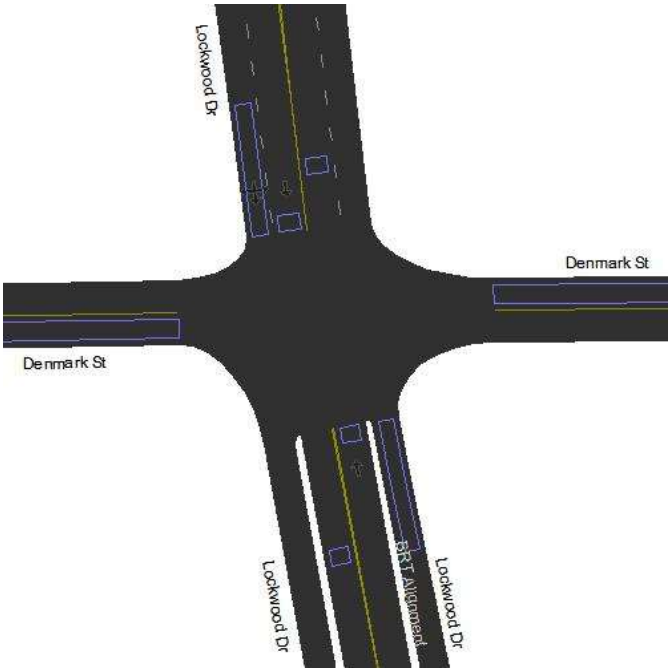
Uniform Delay (d1), s/veh	34.8	6.56	6.76	7.13	36.3	37	37.2	37.3
Incremental Delay (d2), s/veh	0.623	0.00592	0.000123	0.148	5.14	0.769	0.00567	0.32
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	35.4	6.57	6.76	7.28	41.5	37.8	37.3	37.7
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.177	0.00748	0.000188	0.192	1.11	0.127	0.00103	0.0524
Fully Stopped (Nf), veh/ln	0.4	0.0	0.0	0.7	2.0	0.2	0.0	0.1
Percentile Back of Queue (Q%), veh/ln	0.4	0.0	0.0	0.8	2.3	0.3	0.0	0.1
Effective Green Time, s	11.2	55.7	55.1	55.1	11.2	8.7	8.1	8.1
Approach Volume, veh/h	18	--	--	99	96	--	--	17
Approach Delay, s/veh	35.4	--	--	7.2	41.5	--	--	37.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*623*	**Site Name:**	*N 29.827467, W 95.318713*
Cross Street:	*Denmark St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:10*		

Intersection Geometry



Turn Movement Volumes (Denmark St & Lockwood Dr)

@ Node 623 From \ To	Denmark St (EB)	Lockwood Dr (NB)	Denmark St (WB)	Lockwood Dr (SB)	BRT Alignment (SB)
Denmark St (WB)		*9.0*	*12.0*	*42.0*	
Lockwood Dr (SB)	*4.0*		*13.0*		
Denmark St (EB)	*5.0*	*8.0*		*45.0*	
BRT Alignment (NB)					
Lockwood Dr (NWB)	*18.0*		*16.0*		

[Flow Field] = Volume

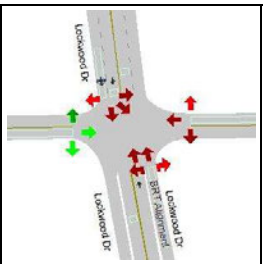
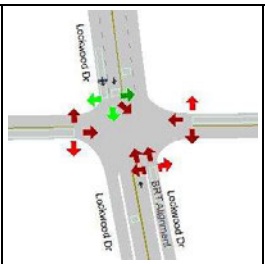
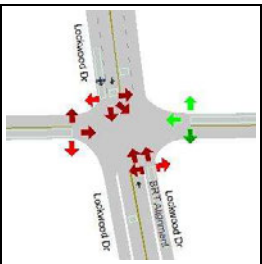
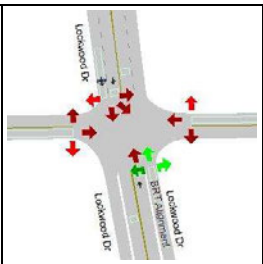
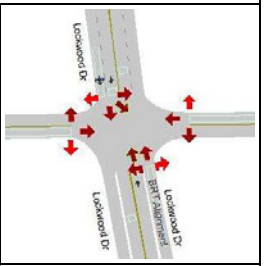
Volume Adjustment and Saturation Flow Rate

Movement	Denmark St (WB)			Lockwood Dr (SB)				Denmark St (EB)			BRT Alignment (NB)	Lockwood Dr (NWB)		
	Lockwood Dr	Denmark St	Lockwood Dr	Denmark St	Denmark St	Lockwood Dr	BRT Alignment	Denmark St	Lockwood Dr	Lockwood Dr	Lockwood Dr	Denmark St	Lockwood Dr	Denmark St
	WBR	WBT	WBL	SBL	SBR	SBT	SBLT	EBT	EBL	EBR	NBT	NWBR	NWBT	NWBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *29.2 sec*
Level of Service: *C*
Offset: *67.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	8.0	8.0	8.0	8.0	0.0
Max Green	22.0	45.0	22.0	45.0	8.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No
Split	27.0	50.0	27.0	50.0	13.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	9
Ring - 2	6	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

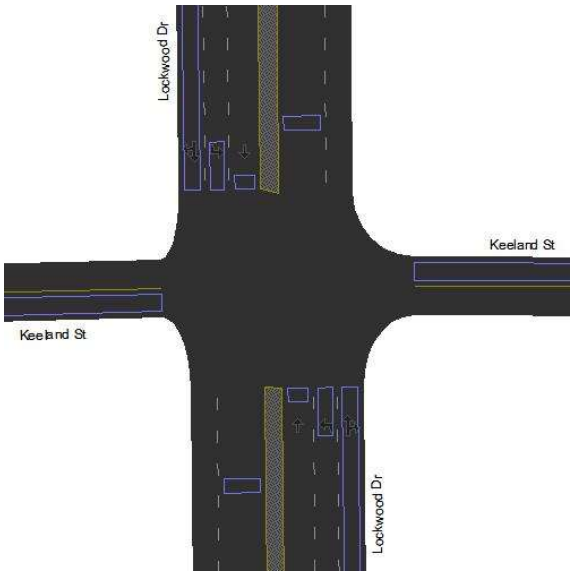
Lane Group	Denmark St (WB)	Lockwood Dr (SB)		Denmark St (EB)	BRT Alignment (NB)	Lockwood Dr (NWB)
	LTR	T	LTR	LTR	T	LTR
Adjusted Flow, veh/h	63	0	17	58	0	34
Adjusted Saturation Flow, veh/h	1895	1881	1898	1908	1900	1894
Capacity (c), veh/h	227	240	1194	228	162	1191
Available Capacity (ca), veh/h	463	247	949	466	169	947

Volume-to-Capacity Ratio (X)	0.278	0.000417	0.0143	0.254	0.000619	0.0286
Green Ratio (g/C)	0.12	0.09	0.63	0.12	0.09	0.63
Assigned Phase	6	9	4	2	9	8
Max. Allowable Headway (MAH), s/veh	6.42	2.12	5.35	6.37	2.12	5.32
Queue Service Time (gs), s	2.7	0.0	0.3	2.5	0.0	0.6
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.90	0.51	1.00	0.89	0.51	0.79
Max Out Probability (px)	0.01	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.4	0.0	0.1	0.3	0.0	0.2
Phase Duration (Dp), s	15.8	12.7	61.6	15.8	12.7	61.6
Uniform Delay (d1), s/veh	36.1	37.7	6.26	36	37.7	6.32
Incremental Delay (d2), s/veh	3.03	0.00313	0.0219	2.67	0.0069	0.0446
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	39.1	37.7	6.28	38.6	37.7	6.36
Level Of Service	D	D	A	D	D	A
Total Delay, veh-hr	0.685	0.00105	0.0298	0.623	0.00105	0.0603
Fully Stopped (Nf), veh/ln	1.3	0.0	0.1	1.2	0.0	0.2
Percentile Back of Queue (Q%), veh/ln	1.5	0.0	0.1	1.4	0.0	0.3
Effective Green Time, s	10.8	7.7	56.6	10.8	7.7	56.6
Approach Volume, veh/h	63	--	17	58	0	34
Approach Delay, s/veh	39.1	--	6.5	38.6	37.7	6.4

TransModeler® Intersection Report

Site Information			
Intersection ID:	*641*	**Site Name:**	*N 29.837077, W 95.318889*
Cross Street:	*Keeland St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:30*		

Intersection Geometry



Turn Movement Volumes (Keeland St & Lockwood Dr)

@ Node 641 From \ To	Lockwood Dr (NB)	Keeland St (WB)	Lockwood Dr (SB)	Keeland St (EB)
Keeland St (WB)	*3.0*		*4.0*	
Lockwood Dr (SB)				*5.0*
Keeland St (EB)				
Lockwood Dr (NB)		*3.0*		*5.0*

[Flow Field] = Volume

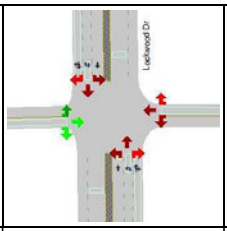
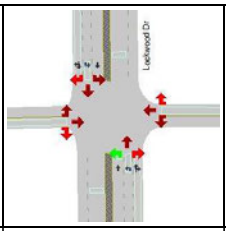
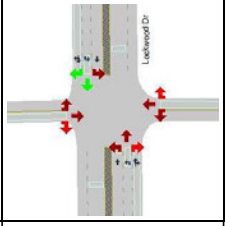
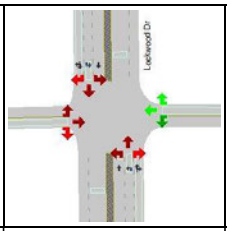
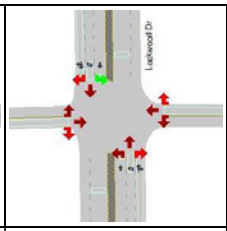
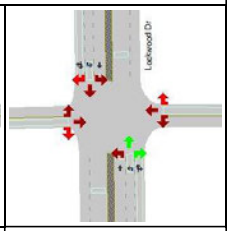
Volume Adjustment and Saturation Flow Rate

Movement	Keeland St (WB)			Lockwood Dr (SB)				Keeland St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Keeland St	Lockwood Dr	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St	Lockwood Dr	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *29.5 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	22.0	10.0	43.0	22.0	10.0	43.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	27.0	15.0	48.0	27.0	15.0	48.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2	4, 3
Ring - 2	6	8, 7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

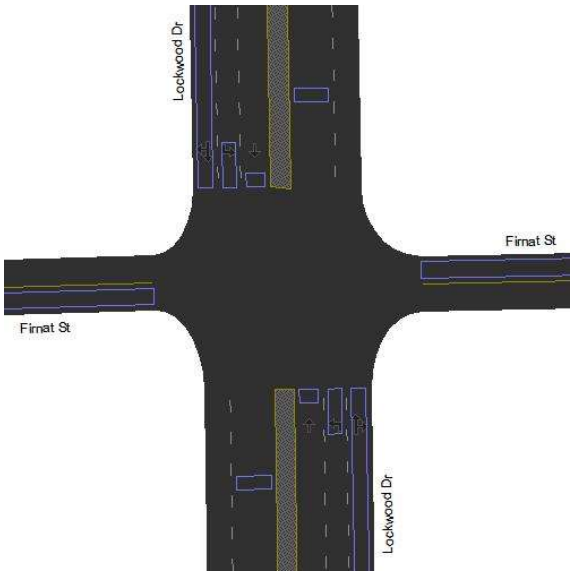
Lane Group	Keeland St (WB)	Lockwood Dr (SB)			Keeland St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	7	5	0	0	0	3	0	5
Adjusted Saturation Flow, veh/h	1900	1809	1976	1896	1900	1809	1976	1894
Capacity (c), veh/h	175	1178	1290	1238	175	160	178	171
Available Capacity (ca), veh/h	464	201	944	906	464	201	944	905
Volume-to-Capacity Ratio (X)	0.0406	0.00433	7.75e-05	8.88e-05	0.00171	0.0194	0.000561	0.0293
Green Ratio (g/C)	0.09	0.65	0.65	0.65	0.09	0.09	0.09	0.09
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	6.47	4.76	5.36	5.36	6.44	4.76	6.40	6.40
Queue Service Time (gs), s	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.2
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.59	0.57	1.00	1.00	0.51	0.55	0.57	0.57
Max Out Probability (px)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.3	63.6	63.8	63.8	13.3	12.9	13.1	13.1

Uniform Delay (d1), s/veh	37.2	5.5	5.42	5.42	37.1	37.5	37.2	37.3
Incremental Delay (d2), s/veh	0.435	0.00665	0.000108	0.000129	0.0177	0.223	0.00567	0.318
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	37.7	5.5	5.42	5.42	37.1	37.7	37.3	37.7
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.0743	0.0078	0.000151	0.000166	0.00309	0.0325	0.00103	0.0524
Fully Stopped (Nf), veh/ln	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Percentile Back of Queue (Q%), veh/ln	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Effective Green Time, s	8.3	58.6	58.8	58.8	8.3	7.9	8.1	8.1
Approach Volume, veh/h	7	--	--	5	0	--	--	8
Approach Delay, s/veh	37.7	--	--	5.5	37.1	--	--	37.7

TransModeler® Intersection Report

Site Information			
Intersection ID:	*659*	**Site Name:**	*N 29.844802, W 95.319046*
Cross Street:	*Firnat St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:36:42*		

Intersection Geometry



Turn Movement Volumes (Firnat St & Lockwood Dr)

@ Node 659 From \ To	Lockwood Dr (NB)	Firnat St (WB)	Lockwood Dr (SB)	Firnat St (EB)
Firnat St (WB)	*29.0*	*34.0*	*17.0*	
Lockwood Dr (SB)		*4.0*		*7.0*
Firnat St (EB)	*2.0*		*3.0*	*5.0*
Lockwood Dr (NB)		*2.0*		*13.0*

[Flow Field] = Volume

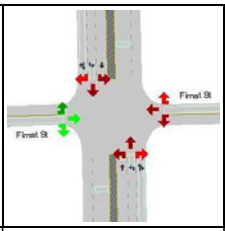
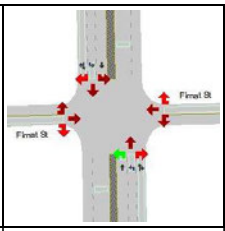
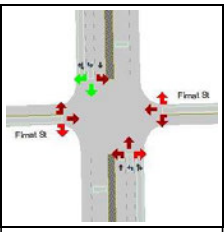
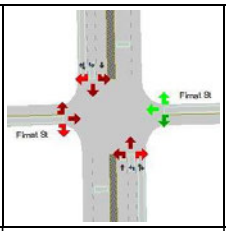
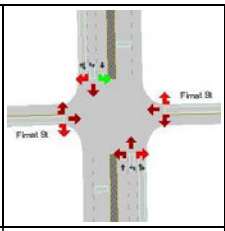
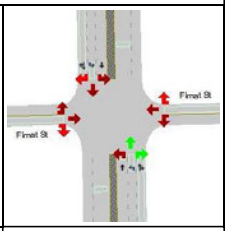
Volume Adjustment and Saturation Flow Rate

Movement	Firnat St (WB)			Lockwood Dr (SB)				Firnat St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Firnat St	Lockwood Dr	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St	Lockwood Dr	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *36.1 sec*
Level of Service: *D*
Offset: *51.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	38.0	10.0	27.0	38.0	10.0	27.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	43.0	15.0	32.0	43.0	15.0	32.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

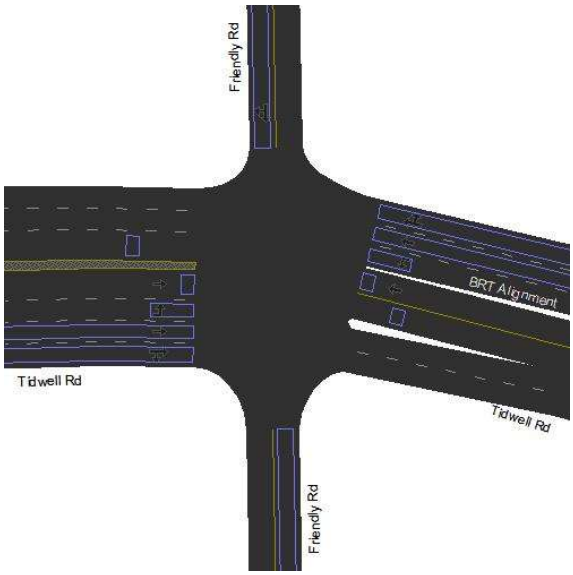
Lane Group	Firnat St (WB)	Lockwood Dr (SB)			Firnat St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	80	7	0	4	10	2	0	13
Adjusted Saturation Flow, veh/h	1911	1809	1976	1892	1902	1809	1976	1889
Capacity (c), veh/h	234	1110	1232	1180	233	158	192	184
Available Capacity (ca), veh/h	807	201	593	568	803	201	593	567
Volume-to-Capacity Ratio (X)	0.341	0.0064	8.12e-05	0.0034	0.0429	0.0133	0.000521	0.0709
Green Ratio (g/C)	0.12	0.61	0.62	0.62	0.12	0.09	0.10	0.10
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	6.30	4.76	6.39	6.39	6.29	4.76	6.43	6.43
Queue Service Time (gs), s	3.5	0.1	0.0	0.1	0.4	0.1	0.0	0.6
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.93	0.59	1.00	1.00	0.62	0.54	0.65	0.65
Max Out Probability (px)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Green Extention Time (ge), s	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Phase Duration (Dp), s	16.0	60.2	61.1	61.1	16.0	12.9	13.7	13.7

Uniform Delay (d1), s/veh	36.2	6.75	6.38	6.39	34.8	37.5	36.7	36.9
Incremental Delay (d2), s/veh	3.93	0.0104	0.000119	0.0052	0.345	0.154	0.00488	0.746
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	40.1	6.76	6.38	6.4	35.2	37.7	36.7	37.7
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.891	0.0133	0.000177	0.00713	0.0977	0.022	0.00102	0.136
Fully Stopped (Nf), veh/ln	1.7	0.1	0.0	0.0	0.2	0.0	0.0	0.3
Percentile Back of Queue (Q%), veh/ln	1.9	0.1	0.0	0.0	0.2	0.1	0.0	0.3
Effective Green Time, s	11.0	55.2	56.1	56.1	11.0	7.9	8.7	8.7
Approach Volume, veh/h	80	--	--	11	10	--	--	15
Approach Delay, s/veh	40.1	--	--	6.6	35.2	--	--	37.7

TransModeler® Intersection Report

Site Information			
Intersection ID:	*677*	**Site Name:**	*N 29.848735, W 95.327557*
Cross Street:	*Tidwell Rd & Friendly Rd*	**Number of Plans:**	*1*
Analysis Date:	*2023/4/6 17:33:35*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Friendly Rd)

@ Node 677 From \ To	Friendly Rd (NB)	Tidwell Rd (WB)	Friendly Rd (SB)	Tidwell Rd (EB)	BRT Alignment (EB)
Tidwell Rd (WB)					
Friendly Rd (SB)					
Tidwell Rd (EB)	*5.0*				
Friendly Rd (NB)					
BRT Alignment (NWB)					

[Flow Field] = Volume

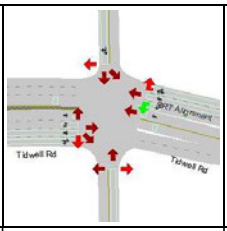
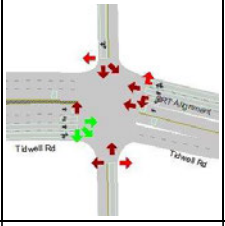
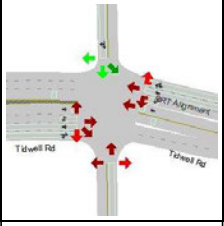
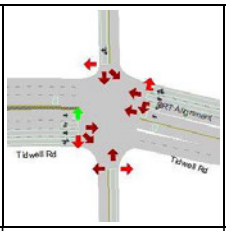
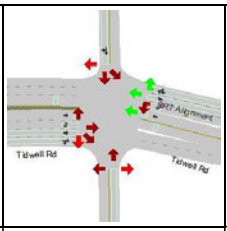
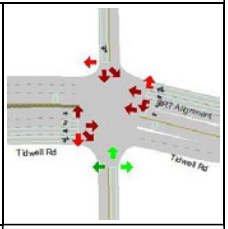
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Friendly Rd (SB)			Tidwell Rd (EB)				Friendly Rd (NB)			BRT Alignment (NWB)
	Friendly Rd	Tidwell Rd	Friendly Rd	Tidwell Rd	Friendly Rd	Tidwell Rd	Friendly Rd	Friendly Rd	Tidwell Rd	BRT Alignment	Friendly Rd	Tidwell Rd	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	SBR	SBT	SBLT	EBL	EBR	EBRT	EBT	NBT	NBL	NBR	NWBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *35.7 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	8.0	53.0	14.0	8.0	53.0	14.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	None	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	No	Yes	No
Split	13.0	58.0	19.0	13.0	58.0	19.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Friendly Rd (SB)	Tidwell Rd (EB)			Friendly Rd (NB)	BRT Alignment (NWB)
	L	T	T+R	T+R	L	T	T+R	LTR	T
Adjusted Flow, veh/h	0	0	0	0	5	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1900	1809	3796	1609	1900	1900
Capacity (c), veh/h	1199	1252	1252	162	161	324	137	162	1252
Available Capacity (ca), veh/h	161	1119	1119	296	161	2236	948	296	1119
Volume-to-Capacity Ratio (X)	8.34e-05	7.99e-05	8.78e-05	0.00185	0.0311	0.000617	0.000801	0.00185	7.99e-05
Green Ratio (g/C)	0.66	0.66	0.66	0.09	0.09	0.09	0.09	0.09	0.66
Assigned Phase	1	6	6	4	5	2	2	8	6
Max. Allowable Headway (MAH), s/veh	4.76	5.32	5.32	6.30	4.76	6.45	6.45	6.44	5.32
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.57	0.51	0.51	0.51	1.00
Max Out Probability (px)	0.26	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	64.6	64.3	64.3	12.7	13.0	12.7	12.7	12.7	64.3

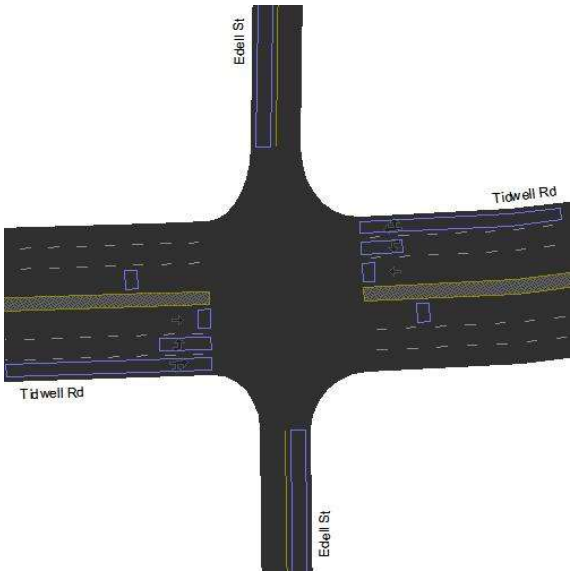
Uniform Delay (d1), s/veh	5.12	5.23	5.23	37.7	37.5	37.6	37.7	37.7	5.23
Incremental Delay (d2), s/veh	0.000125	0.000115	0.000126	0.0206	0.359	0.00343	0.0105	0.0206	0.000115
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	5.12	5.23	5.23	37.7	37.8	37.7	37.7	37.7	5.23
Level Of Service	A	A	A	D	D	D	D	D	A
Total Delay, veh-hr	0.000142	0.000145	0.00016	0.00314	0.0525	0.00209	0.00115	0.00314	0.000145
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Effective Green Time, s	59.6	59.3	59.3	7.7	8.0	7.7	7.7	7.7	59.3
Approach Volume, veh/h	--	--	0	0	--	5	--	0	0
Approach Delay, s/veh	--	--	5.2	37.7	--	37.8	--	37.7	5.2

TransModeler® Intersection Report

Site Information

Intersection ID:	*689*	**Site Name:**	*N 29.848275, W 95.338146*
Cross Street:	*Tidwell Rd & Edell St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:37:8*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Edell St)

@ Node 689 From \ To	Edell St (NB)	Tidwell Rd (WB)	Edell St (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)			*5.0*	
Edell St (SB)				
Tidwell Rd (EB)				
Edell St (NB)				

[Flow Field] = Volume

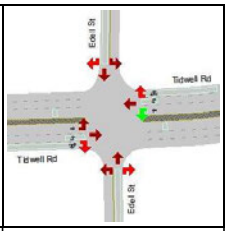
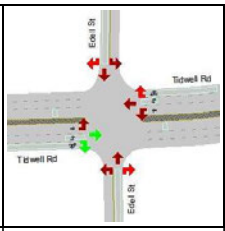
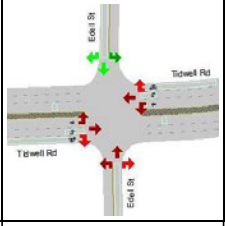
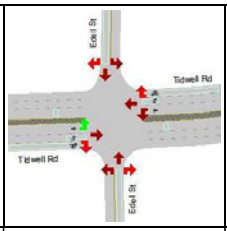
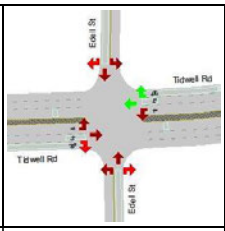
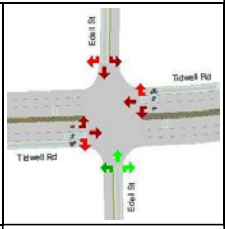
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)				Edell St (SB)			Tidwell Rd (EB)				Edell St (NB)		
	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *23.1 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	11.0	40.0	24.0	11.0	40.0	24.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Max	None	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	No	Yes	No
Split	16.0	45.0	29.0	16.0	45.0	29.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Edell St (SB)	Tidwell Rd (EB)			Edell St (NB)
	L	T	T+R	LTR	L	T	T+R	LTR
Adjusted Flow, veh/h	5	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1896	1900	1809	1976	1900	1900
Capacity (c), veh/h	543	1306	1254	163	155	883	849	163
Available Capacity (ca), veh/h	222	883	847	509	222	883	849	509
Volume-to-Capacity Ratio (X)	0.0094	7.65e-05	8.77e-05	0.00184	0.00129	0.000113	0.00013	0.00184
Green Ratio (g/C)	0.30	0.66	0.66	0.09	0.09	0.45	0.45	0.09
Assigned Phase	1	6	6	4	5	2	2	8
Max. Allowable Headway (MAH), s/veh	4.76	5.32	5.32	6.44	4.85	5.32	5.32	6.44
Queue Service Time (gs), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.57	1.00	1.00	0.51	0.51	1.00	1.00	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	31.9	64.2	64.2	12.7	12.7	45.0	45.0	12.7

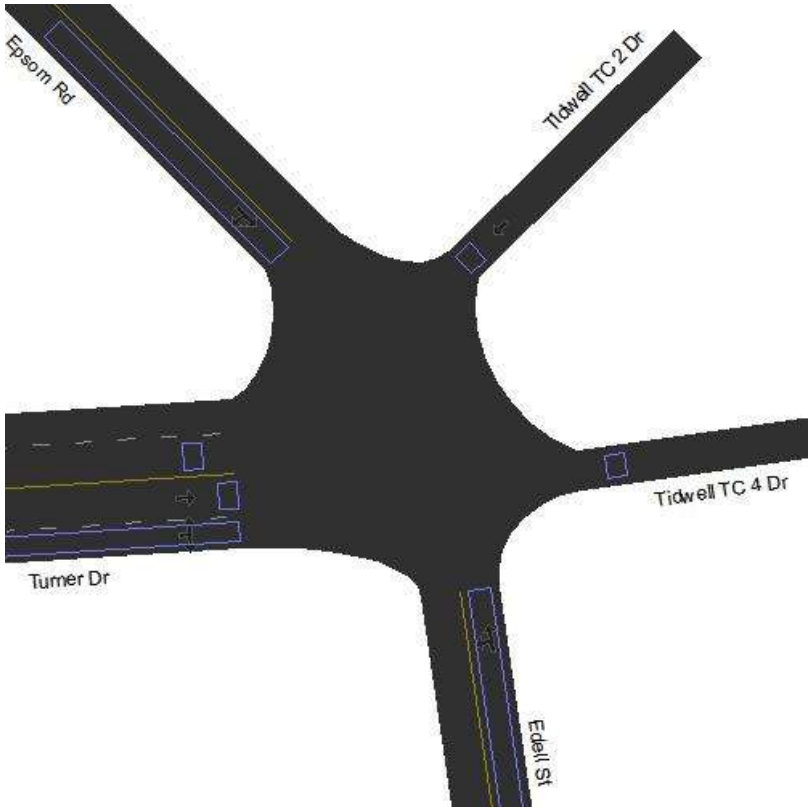
Uniform Delay (d1), s/veh	22	5.14	5.14	37.4	37.4	13.7	13.7	37.4
Incremental Delay (d2), s/veh	0.0315	0.000105	0.000126	0.0204	0.015	0.000231	0.000275	0.0204
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	22	5.14	5.14	37.5	37.5	13.7	13.7	37.5
Level Of Service	C	A	A	D	D	B	B	D
Total Delay, veh-hr	0.0312	0.000143	0.000157	0.00312	0.00208	0.000381	0.000419	0.00312
Fully Stopped (Nf), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	26.9	59.2	59.2	7.7	7.7	40.0	40.0	7.7
Approach Volume, veh/h	--	--	5	0	--	--	0	0
Approach Delay, s/veh	--	--	21.4	37.5	--	--	25.3	37.5

TransModeler® Intersection Report

Site Information

Intersection ID:	*690*	**Site Name:**	*N 29.851140, W 95.338321*
Cross Street:	*Epsom Rd & Turner Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:42:28*		

Intersection Geometry



Turn Movement Volumes (Epsom Rd & Turner Dr)

@ Node 690 From \ To	Epsom Rd (NWB)	Turner Dr (WB)	Edell St (SB)	Tidwell TC 4 Dr (EB)
Epsom Rd (SEB)		*1.0*	*5.0*	
Turner Dr (EB)				
Edell St (NB)	*1.0*	*1.0*		
Tidwell TC 2 Dr (SWB)				

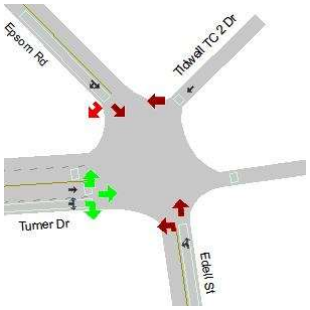
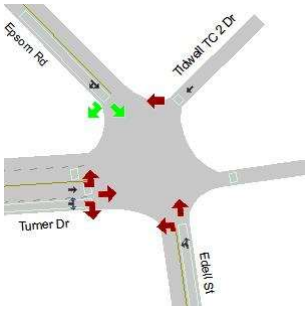
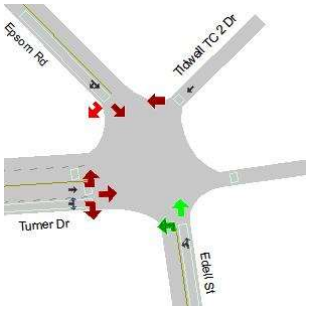
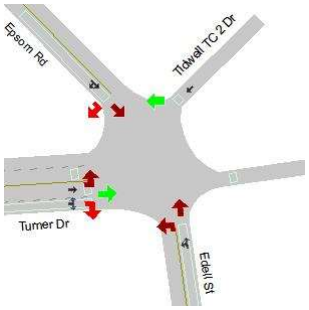
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Epsom Rd (SEB)		Turner Dr (EB)			Edell St (NB)		Tidwell TC 2 Dr (SWB)
	Turner Dr	Edell St	Epsom Rd	Edell St	Tidwell TC 4 Dr	Epsom Rd	Turner Dr	Turner Dr
	SEBR	SEBT	EBL	EBR	EBT	NBT	NBL	SWBRT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *73.0 sec*
Control Delay: *20.1 sec*
Level of Service: *C*

Phasing				
Item Name \ Signal States				
ID	*2*	*4*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*3.0*
Max Green	*25.0*	*25.0*	*25.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*Max*	*Min*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*No*	*No*	*No*
Split	*30.0*	*30.0*	*30.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*8.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2		*8*	

Signal Timing Plan - 1

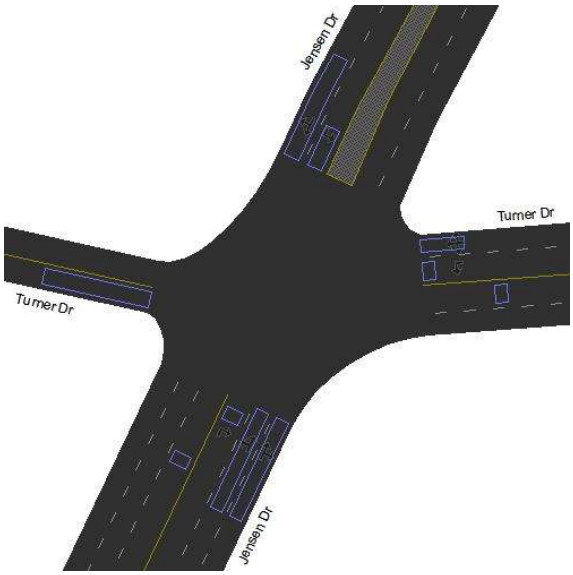
Lane Group Capacity, Control Delay, and LOS Determination					
Lane Group	Epsom Rd (SEB)	Turner Dr (EB)		Edell St (NB)	Tidwell TC 2 Dr (SWB)
	T+R	L+R	T	L+T	T
Adjusted Flow, veh/h	*6*	*0*	*0*	*2*	*0*
Adjusted Saturation Flow, veh/h	*1899*	*1900*	*1976*	*1898*	*1609*
Capacity (c), veh/h	*273*	*853*	*1159*	*341*	*221*
Available Capacity (ca), veh/h	*853*	*853*	*888*	*840*	*231*
Volume-to-Capacity Ratio (X)	*0.022*	*0.000234*	*8.63e-05*	*0.00587*	*0.000452*
Green Ratio (g/C)	*0.14*	*0.45*	*0.59*	*0.14*	*0.14*
Assigned Phase	*4*	*2*	*2+9*	*8*	*9*
Max. Allowable Headway (MAH), s/veh	*6.42*	*5.26*	*5.26*	*5.37*	*2.81*
Queue Service Time (gs), s	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*1.00*	*1.00*	*1.00*	*1.00*	*0.51*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*13.0*	*30.0*	*30.0*	*13.0*	*12.7*
Uniform Delay (d1), s/veh	*20.5*	*8.44*	*4.75*	*20.4*	*20.7*
Incremental Delay (d2), s/veh	*0.148*	*0.000494*	*0.000134*	*0.0312*	*0.00368*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*20.6*	*8.44*	*4.75*	*20.5*	*20.7*
Level Of Service	*C*	*A*	*A*	*C*	*C*
Total Delay, veh-hr	*0.0344*	*0.000469*	*0.000132*	*0.0114*	*0.000575*
Fully Stopped (Nf), veh/ln	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*8.0*	*25.0*	*32.7*	*8.0*	*7.7*
Approach Volume, veh/h	*6*	--	*0*	*2*	*0*
Approach Delay, s/veh	*20.6*	--	*7.2*	*20.5*	*20.7*

TransModeler® Intersection Report

Site Information

Intersection ID:	*705*	**Site Name:**	*N 29.850927, W 95.341468*
Cross Street:	*Turner Dr & Jensen Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:39:21*		

Intersection Geometry



Turn Movement Volumes (Turner Dr & Jensen Dr)

@ Node 705 From \ To	Jensen Dr (NEB)	Turner Dr (WB)	Jensen Dr (SWB)	Turner Dr (EB)
Turner Dr (WB)	*6.0*	*6.0*	*2.0*	
Jensen Dr (SWB)		*6.0*	*368.0*	*6.0*
Turner Dr (EB)	*2.0*		*2.0*	*2.0*
Jensen Dr (NEB)	*219.0*	*6.0*		*6.0*

[Flow Field] = Volume

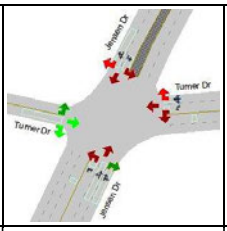
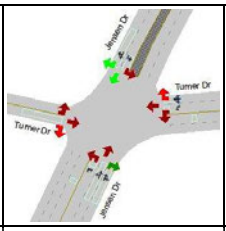
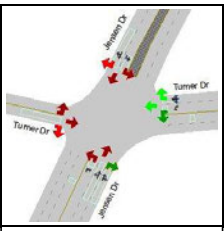
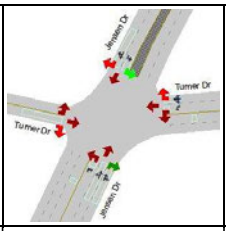
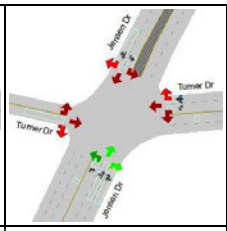
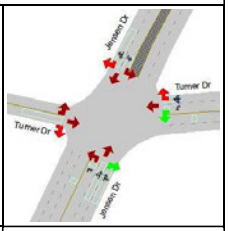
Volume Adjustment and Saturation Flow Rate

Movement	Turner Dr (WB)			Jensen Dr (SWB)			Turner Dr (EB)			Jensen Dr (NEB)		
	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Jensen Dr	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Turner Dr
	WBR	WBT	WBL	SWBR	SWBT	SWBL	EBL	EBR	EBT	NEBT	NEBL	NEBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *60.0 sec*
Control Delay: *13.1 sec*
Level of Service: *B*

Phasing

Item Name \ Signal States						
ID	2	4	6	7	8	9
Min Green	8.0	8.0	8.0	8.0	8.0	0.0
Max Green	10.0	25.0	10.0	8.0	12.0	10.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Min	None	None	Min	None
Memory Mode	Non-Lock	Non-Lock	Non-Lock	Lock	Non-Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	No	No	No
Split	15.0	30.0	15.0	13.0	17.0	15.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	9
Ring - 2	6	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

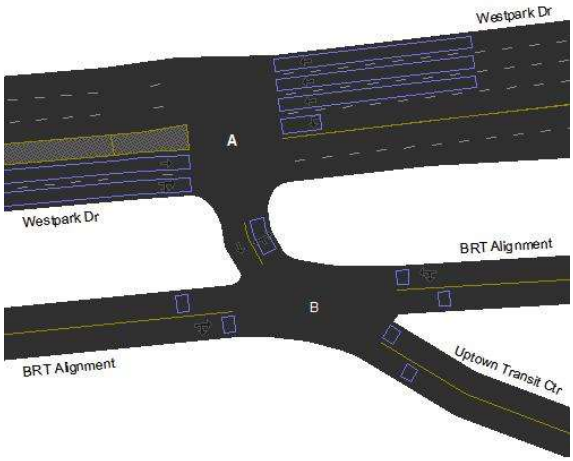
Lane Group	Turner Dr (WB)		Jensen Dr (SWB)		Turner Dr (EB)	Jensen Dr (NEB)		
	L	LTR	L	T+R	LTR	L+T	T+R	R
Adjusted Flow, veh/h	2	12	6	374	6	112	113	6
Adjusted Saturation Flow, veh/h	1882	1900	1809	1895	1901	1888	1899	1674
Capacity (c), veh/h	638	587	250	818	328	454	1243	1095
Available Capacity (ca), veh/h	638	328	250	818	328	454	394	347
Volume-to-Capacity Ratio (X)	0.00313	0.0208	0.024	0.457	0.0183	0.248	0.091	0.00548
Green Ratio (g/C)	0.31	0.31	0.14	0.43	0.17	0.21	0.65	0.65
Assigned Phase	9+6	9+6	7	4	2	8	8+7+4+2+6+9	8+7+4+2+6+9
Max. Allowable Headway (MAH), s/veh	4.53	4.53	4.76	5.21	5.43	4.92	4.92	4.92
Queue Service Time (gs), s	0.0	0.3	0.2	8.1	0.2	0.0	1.3	0.1
Queue Permitted Service Time (gps), s	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.61	0.61	0.56	1.00	0.56	1.00	1.00	1.00
Max Out Probability (px)	0.01	0.01	0.36	0.14	0.05	1.00	1.00	1.00
Green Extention Time (ge), s	0.0	0.0	0.0	2.0	0.0	0.2	0.2	0.2
Phase Duration (Dp), s	12.9	12.9	13.0	30.0	15.0	17.0	17.0	17.0
Uniform Delay (d1), s/veh	17.3	13.9	21.6	11.6	19.9	19.3	3.67	3.47
Incremental Delay (d2), s/veh	0.00887	0.0651	0.177	1.84	0.102	1.3	0.145	0.00905
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0

Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	17.3	14	21.7	13.5	20	20.6	3.82	3.48
Level Of Service	B	B	C	B	B	C	A	A
Total Delay, veh-hr	0.0096	0.0474	0.0362	1.4	0.0333	0.644	0.12	0.0058
Fully Stopped (Nf), veh/ln	0.0	0.1	0.1	3.2	0.1	1.3	0.4	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.1	0.1	3.6	0.1	1.4	0.4	0.0
Effective Green Time, s	17.9	17.9	8.0	25.0	10.0	12.0	37.9	37.9
Approach Volume, veh/h	--	14	--	380	6	--	232	--
Approach Delay, s/veh	--	14.4	--	13.6	20.0	--	12.0	--

TransModeler® Intersection Report

Site Information			
Intersection ID:	*99553,99560*	**Site Name:**	*N 29.725723, W 95.466346*
Cross Street:	*Westpark Dr & Uptown Transit Ctr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:17:9*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Uptown Transit Ctr)			
@ Node 99553 From \ To	Westpark Dr (WB)	Uptown Transit Ctr (SEB)	Westpark Dr (EB)
Westpark Dr (WB)		*6.0*	
Westpark Dr (EB)		*17.0*	
Uptown Transit Ctr (NB)	*10.0*		*9.0*

Turn Movement Volumes (BRT Alignment & Uptown Transit Ctr)				
@ Node 99560 From \ To	BRT Alignment (NEB)	Uptown Transit Ctr (NB)	BRT Alignment (WB)	Uptown Transit Ctr (EB)
BRT Alignment (EB)				
Uptown Transit Ctr (NWB)				
BRT Alignment (WB)				
Uptown Transit Ctr (SEB)				

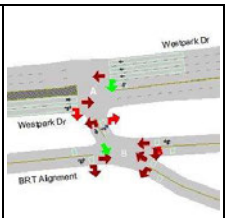
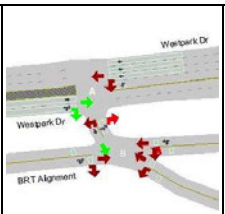
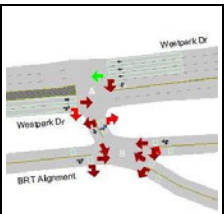
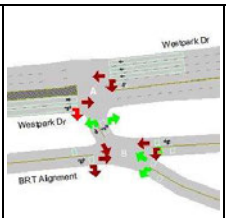
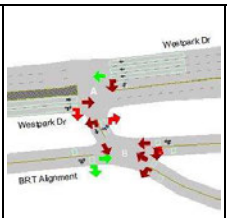
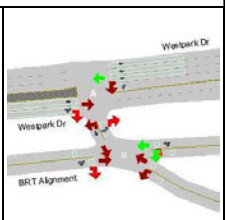
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate														
Movement	Westpark Dr (WB)		Westpark Dr (EB)		Uptown Transit Ctr (NB)		BRT Alignment (EB)		Uptown Transit Ctr (NWB)			BRT Alignment (WB)		Uptown Transit Ctr (SEB)
	Westpark Dr	Uptown Transit Ctr	Uptown Transit Ctr	Westpark Dr	Westpark Dr	Westpark Dr	BRT Alignment	Uptown Transit Ctr	BRT Alignment	Uptown Transit Ctr	BRT Alignment	BRT Alignment	Uptown Transit Ctr	Uptown Transit Ctr
	WBT	WBL	EBR	EBT	NBL	NBR	EBT	EBR	NWBR	NWBT	NWBL	WBT	WBL	SEBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *130.0 sec*
Control Delay: *39.9 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	6	8	9	10
Min Green	8.0	8.0	8.0	8.0	5.0	5.0
Max Green	15.0	59.0	79.0	15.0	8.0	8.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	Min	Max	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	8.0	8.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No	No
Split	20.0	64.0	84.0	20.0	13.0	13.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	10.0	10.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	8	9, 10
Ring - 2	6		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)		Westpark Dr (EB)		Uptown Transit Ctr (NB)	BRT Alignment (EB)	Uptown Transit Ctr (NWB)	BRT Alignment (WB)	Uptown Transit Ctr (SEB)
	L	T	T	T+R	L+R	T+R	LTR	L+T	T
Adjusted Flow, veh/h	6	0	0	17	19	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	5700	1900	1888	1884	1976	1900	1900	1900
Capacity (c), veh/h	118	4396	1043	1037	140	117	141	113	1167
Available Capacity (ca), veh/h	210	352	866	861	218	122	220	117	866
Volume-to-Capacity Ratio (X)	0.0511	2.27e-05	9.58e-05	0.0164	0.136	0.00171	0.00213	0.00178	8.57e-05
Green Ratio (g/C)	0.06	0.77	0.55	0.55	0.07	0.06	0.07	0.06	0.61
Assigned Phase	1	9+10+6	2	2	8	9	8	10	2+1
Max. Allowable Headway (MAH), s/veh	4.76	4.48	6.43	6.43	4.64	4.48	4.64	4.46	6.43
Queue Service Time (gs), s	0.4	0.0	0.0	0.5	1.2	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	0.52	1.00	1.00	0.76	0.52	0.76	0.51	1.00
Max Out Probability (px)	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.04	0.00
Green Extention Time (ge), s	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1

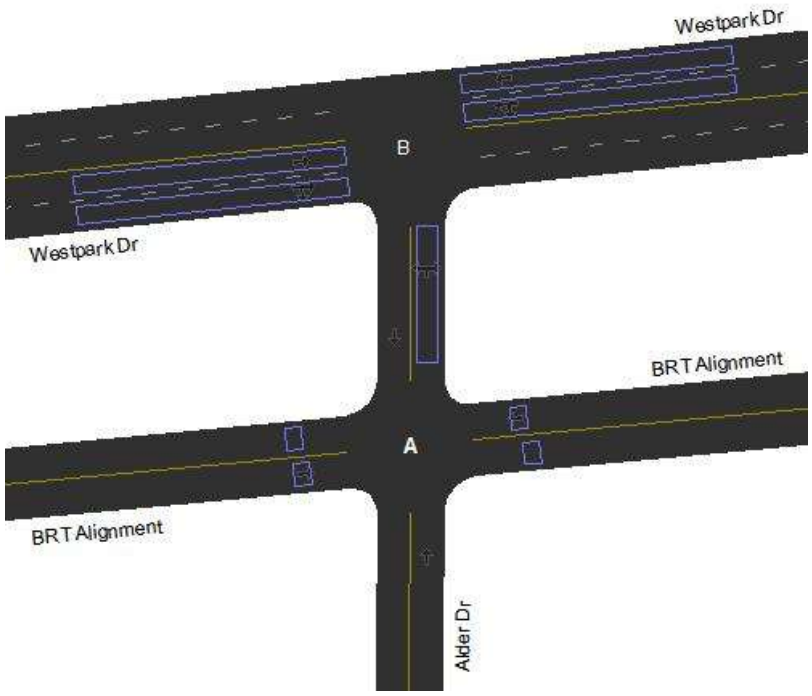
Phase Duration (Dp), s	13.4	12.7	76.1	76.1	14.6	12.7	14.6	12.7	76.1
Uniform Delay (d1), s/veh	56.8	3.39	13.2	13.3	56	57.3	55.5	57.3	9.64
Incremental Delay (d2), s/veh	0.823	9.31e-06	0.000165	0.029	2.01	0.0263	0.0272	0.0285	0.000132
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	57.6	3.39	13.2	13.3	58.1	57.3	55.5	57.3	9.64
Level Of Service	E	A	B	B	E	E	E	E	A
Total Delay, veh-hr	0.096	9.41e-05	0.000366	0.0629	0.306	0.00318	0.00463	0.00318	0.000268
Fully Stopped (Nf), veh/ln	0.2	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.2	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.0
Effective Green Time, s	8.4	99.8	71.1	71.1	9.6	7.7	9.6	7.7	79.5
Approach Volume, veh/h	--	6	--	17	19	0	0	0	0
Approach Delay, s/veh	--	56.7	--	13.3	58.1	57.3	55.5	57.3	9.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*99556,99558*	**Site Name:**	*N 29.724275, W 95.480703*
Cross Street:	*BRT Alignment & Alder Dr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:16:5*		

Intersection Geometry



Turn Movement Volumes (BRT Alignment & Alder Dr)

@ Node 99556 From \ To	Alder Dr (NB)	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Alder Dr (SB)				
BRT Alignment (EB)				
Alder Dr (NB)				

Turn Movement Volumes (Westpark Dr & Alder Dr)

@ Node 99558 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Alder Dr (SB)
Westpark Dr (WB)			*33.0*
Westpark Dr (EB)			*175.0*
Alder Dr (NB)	*114.0*	*147.0*	

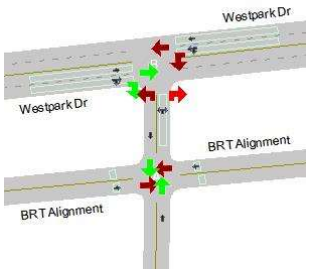
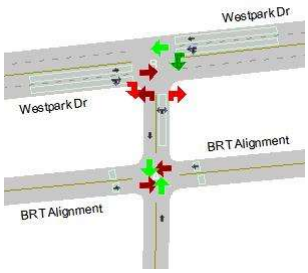
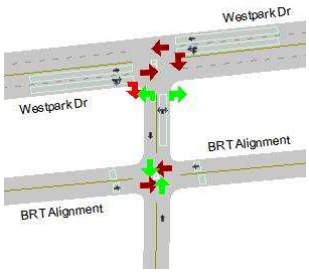
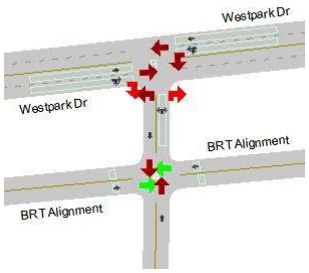
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate										
Movement	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)	Alder Dr (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Alder Dr (NB)	
	BRT Alignment	Alder Dr	BRT Alignment	Alder Dr	Westpark Dr	Alder Dr	Westpark Dr	Alder Dr	Westpark Dr	Westpark Dr
	WBT	SBT	EBT	NBT	WBT	WBL	EBT	EBR	NBR	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *143.0 sec*
Control Delay: *53.3 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States				
ID	*2*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*5.0*	*3.0*
Max Green	*85.0*	*85.0*	*35.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*Max*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*Yes*	*No*	*No*	*No*
Split	*90.0*	*90.0*	*40.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*10.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*8*	*9*

Ring - 2	6		

Signal Timing Plan - 1

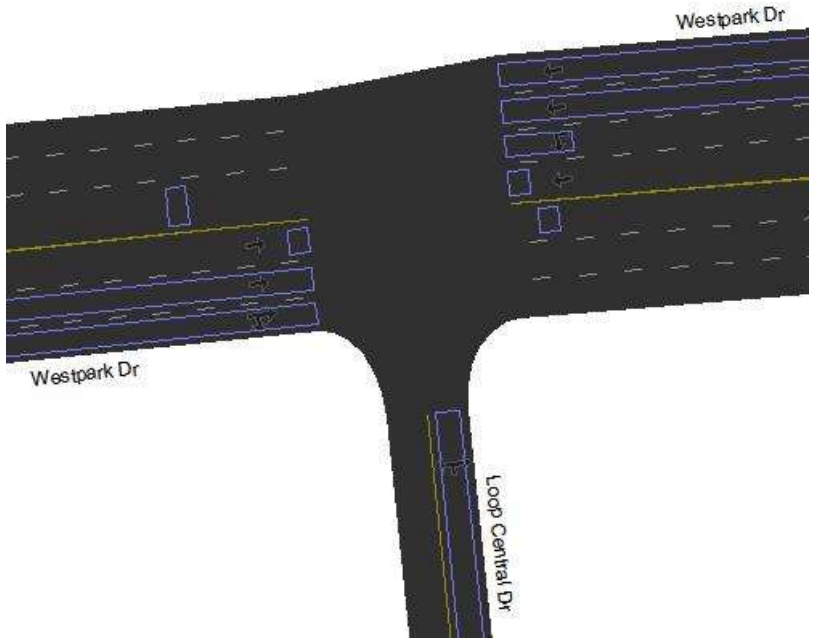
Lane Group Capacity, Control Delay, and LOS Determination									
Lane Group	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)	Alder Dr (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Alder Dr (NB)
	T	T	T	T	L+T	T	T	T+R	L+R
Adjusted Flow, veh/h	0	0	0	0	33	0	0	175	261
Adjusted Saturation Flow, veh/h	1976	1900	1976	1900	1560	1900	1900	1794	1752
Capacity (c), veh/h	106	1599	106	1599	755	1280	1280	1208	294
Available Capacity (ca), veh/h	111	1129	111	1129	657	1129	1129	1066	429
Volume-to-Capacity Ratio (X)	0.000945	6.25e-05	0.000945	6.25e-05	0.0437	7.81e-05	7.81e-05	0.145	0.887
Green Ratio (g/C)	0.05	0.84	0.05	0.84	0.67	0.67	0.67	0.67	0.17
Assigned Phase	9	6+2+8	9	6+2+8	6	6	2	2	8
Max. Allowable Headway (MAH), s/veh	2.41	4.54	2.41	4.54	4.54	4.54	6.45	6.45	5.38
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	1.7	0.0	0.0	5.0	20.8
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.87	0.51	0.87	0.87	0.87	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Green Extention Time (ge), s	0.0	0.1	0.0	0.1	0.1	0.1	1.8	1.8	1.2
Phase Duration (Dp), s	12.7	101.3	12.7	101.3	101.3	101.3	101.3	101.3	29.0
Uniform Delay (d1), s/veh	64	1.8	64	1.8	13.4	7.62	7.62	8.44	58.2
Incremental Delay (d2), s/veh	0.0161	7.04e-05	0.0161	7.04e-05	0.109	0.00011	0.00011	0.252	30.1
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	64.1	1.8	64.1	1.8	13.5	7.62	7.62	8.69	88.3
Level Of Service	E	A	E	A	B	A	A	A	F
Total Delay, veh-hr	0.00178	4.99e-05	0.00178	4.99e-05	0.124	0.000212	0.000212	0.423	6.4
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.4	0.0	0.0	2.1	9.4
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.4	0.0	0.0	2.2	11.8
Effective Green Time, s	7.7	120.3	7.7	120.3	96.3	96.3	96.3	96.3	24.0
Approach Volume, veh/h	0	0	0	0	--	33	--	175	261
Approach Delay, s/veh	64.1	1.8	64.1	1.8	--	13.5	--	8.7	88.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*99561*	**Site Name:**	*N 29.726665, W 95.454690*
Cross Street:	*Westpark Dr & Loop Central Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:21:22*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Loop Central Dr)

@ Node 99561 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Loop Central Dr (SB)
Westpark Dr (WB)			*117.0*
Westpark Dr (EB)			*120.0*
Loop Central Dr (NB)	*50.0*	*16.0*	

[Flow Field] = Volume

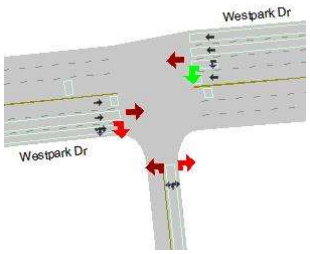
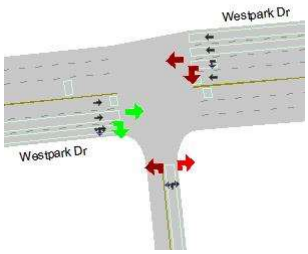
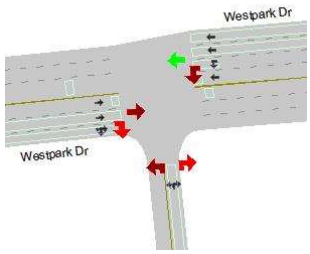
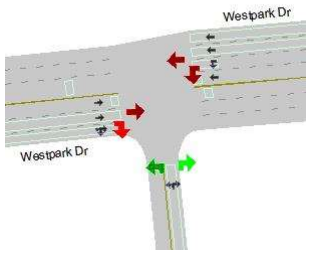
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)		Westpark Dr (EB)		Loop Central Dr (NB)	
	Westpark Dr	Loop Central Dr	Westpark Dr	Loop Central Dr	Westpark Dr	Westpark Dr
	WBT	WBL	EBT	EBR	NBR	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *41.2 sec*
Level of Service: *D*
Offset: *123.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States				
ID	*1*	*2*	*6*	*8*
Min Green	*8.0*	*8.0*	*8.0*	*5.0*
Max Green	*15.0*	*73.0*	*73.0*	*17.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*None*	*Max*	*Min*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*No*	*Yes*	*No*
Split	*20.0*	*78.0*	*78.0*	*22.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*10.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*8*	

Ring - 2	6		

Signal Timing Plan - 1

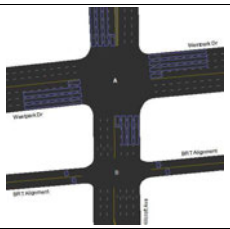
Lane Group Capacity, Control Delay, and LOS Determination					
Lane Group	Westpark Dr (WB)		Westpark Dr (EB)		Loop Central Dr (NB)
	L	T	T	T+R	L+R
Adjusted Flow, veh/h	117	0	0	120	66
Adjusted Saturation Flow, veh/h	1809	5700	3800	1847	1831
Capacity (c), veh/h	1234	4730	404	196	159
Available Capacity (ca), veh/h	226	3468	2312	1124	259
Volume-to-Capacity Ratio (X)	0.0948	2.11e-05	0.000248	0.611	0.415
Green Ratio (g/C)	0.68	0.83	0.11	0.11	0.09
Assigned Phase	1	6	2	2	8
Max. Allowable Headway (MAH), s/veh	4.76	5.54	6.44	6.44	6.51
Queue Service Time (gs), s	2.6	0.0	0.0	7.5	4.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.99	1.00	0.99	0.99	1.00
Max Out Probability (px)	0.02	0.00	0.00	0.00	0.08
Green Extention Time (ge), s	0.3	0.0	1.2	1.2	0.2
Phase Duration (Dp), s	86.8	104.6	17.8	17.8	15.4
Uniform Delay (d1), s/veh	6.49	1.74	47.9	51.3	51.9
Incremental Delay (d2), s/veh	0.153	8.04e-06	0.0011	13.4	7.82
Initial Queue Delay (d3), s/veh	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	6.64	1.74	47.9	64.7	59.7
Level Of Service	A	A	D	E	E
Total Delay, veh-hr	0.216	4.82e-05	0.00133	2.16	1.1
Fully Stopped (Nf), veh/ln	1.0	0.0	0.0	3.5	1.9
Percentile Back of Queue (Q%), veh/ln	1.1	0.0	0.0	4.3	2.3
Effective Green Time, s	81.8	99.6	12.8	12.8	10.4
Approach Volume, veh/h	--	117	--	120	66
Approach Delay, s/veh	--	6.6	--	64.6	59.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*103,99552*	**Site Name:**	*N 29.723046, W 95.501062*
Cross Street:	*Westpark Dr & Hillcroft Ave, etc,*	**Number of Plans:**	*1*
Analysis Date:	*2023/9/7 15:14:31*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Hillcroft Ave)

※ Node 103 From \ To	Hillcroft Ave (NB)	Westpark Dr (WB)	Hillcroft Ave (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Hillcroft Ave (SB)				
Westpark Dr (EB)				
Hillcroft Ave (NB)				

Turn Movement Volumes (BRT Alignment & Hillcroft Ave)

※ Node 99552 From \ To	Hillcroft Ave (NB)	BRT Alignment (WB)	Hillcroft Ave (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Hillcroft Ave (SB)				
BRT Alignment (EB)				
Hillcroft Ave (NB)				

[Row Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Hillcroft Ave (SB)				Westpark Dr (EB)			Hillcroft Ave (NB)				BRT Alignment (WB)	Hillcroft Ave (SB)	BRT Alignment (EB)	Hillcroft Ave (NB)
	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	BRT Alignment	Hillcroft Ave	BRT Alignment	Hillcroft Ave
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	133.0 sec
Control Delay:	40.5 sec
Level of Service:	D
Offset:	53.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	7.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	3.0
Max Green	14.0	33.0	15.0	28.0	20.0	33.0	14.0	29.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	None	Max	None	Max	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	3.0	2.5	2.5	2.5	6.0	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	23.0	16.0	29.0	19.0	29.0	14.0	29.0	29.0
Coordinated	No	No	No	No	No	Yes	No	No	No
Split	20.0	45.0	21.0	34.0	26.0	39.0	20.0	35.0	13.0
Max Inhibit	True	True	True	True	True	False	True	True	True
Opt Min Green	13.0	16.0	13.0	16.0	13.0	16.0	13.0	16.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	9
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

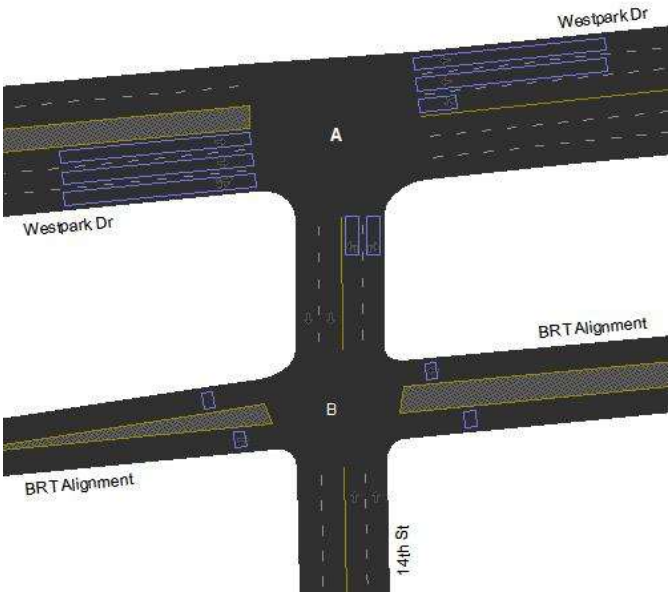
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)			Hillcroft Ave (SB)			Westpark Dr (EB)			Hillcroft Ave (NB)			BR1 Alignment (WB)	Hillcroft Ave (SB)	BR1 Alignment (EB)	Hillcroft Ave (NB)
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900	1976	5700	1976	7600
Capacity (c), veh/h	111	1058	529	84	1432	716	97	800	400	132	1534	767	119	4114	119	5486
Available Capacity (ca), veh/h	204	229	114	190	943	471	190	800	400	272	1114	557	119	1671	119	2229
Volume-to-Capacity Ratio (X)	0.0009	9.45e-05	0.000208	0.00239	6.98e-05	0.000154	0.00103	0.000125	0.000275	0.00151	6.52e-05	0.000143	0.000841	2.43e-05	0.000841	1.82e-05
Green Ratio (gC)	0.06	0.28	0.28	0.05	0.38	0.38	0.05	0.21	0.21	0.07	0.40	0.40	0.06	0.72	0.06	0.72
Assigned Phase	3	9+8	9+8	1	6	6	7	4	4	5	2	2	9	2+3+5+1+6+7+8+4	9	2+3+5+1+6+7+8+4
Max. Allowable Headway (MAH), s/veh	3.23	3.02	3.02	3.73	4.65	4.65	3.23	4.65	4.65	6.73	3.80	3.80	3.02	3.80	3.02	3.80
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.52	0.52	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.52	1.00	0.52	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.2	13.0	13.0	12.1	56.1	56.1	13.2	34.0	34.0	16.7	59.7	59.7	13.0	59.7	13.0	59.7
Uniform Delay (d1), s/veh	58.6	34.6	34.6	60.5	25.8	25.8	59.5	41.4	41.4	57.1	23.7	23.7	58.7	5.15	58.7	5.15
Incremental Delay (d2), s/veh	0.0146	0.000161	0.000708	0.0517	8.78e-05	0.000386	0.019	0.000281	0.00124	0.0207	7.55e-05	0.000337	0.0128	1.06e-05	0.0128	5.98e-06
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	58.6	34.6	34.6	60.6	25.8	25.8	59.6	41.4	41.5	57.2	23.7	23.7	58.8	5.15	58.8	5.15
Level Of Service	E	C	C	E	C	C	E	D	D	E	C	C	E	A	E	A
Total Delay, veh-h	0.00163	0.000962	0.00106	0.00336	0.000717	0.000789	0.00165	0.00115	0.00127	0.00318	0.000657	0.000723	0.00163	0.000143	0.00163	0.000143
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	8.2	37.0	37.0	6.1	50.1	50.1	7.2	28.0	28.0	9.7	53.7	53.7	8.0	96.0	8.0	96.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	42.4	--	--	42.8	--	--	47.3	--	--	40.0	58.8	5.1	58.8	5.1

TransModeler® Intersection Report

Site Information			
Intersection ID:	*104,99554*	**Site Name:**	*N 29.723315, W 95.497379*
Cross Street:	*Westpark Dr & 14th St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:14:45*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & 14th St)			
@ Node 104 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	14th St (SB)
Westpark Dr (WB)			
Westpark Dr (EB)			
14th St (NB)			

Turn Movement Volumes (BRT Alignment & 14th St)				
@ Node 99554 From \ To	14th St (NB)	BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
14th St (SB)				
BRT Alignment (EB)				
14th St (NB)				

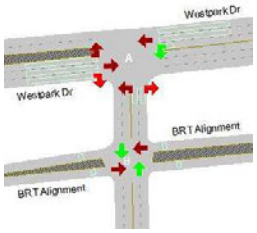
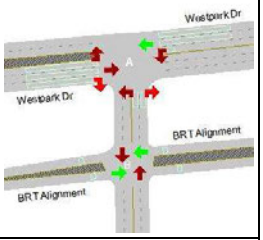
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate												
Movement	Westpark Dr (WB)			Westpark Dr (EB)			14th St (NB)		BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)	14th St (NB)
	Westpark Dr	Westpark Dr	14th St	Westpark Dr	Westpark Dr	14th St	Westpark Dr	Westpark Dr	BRT Alignment	14th St	BRT Alignment	14th St
	WBU	WBT	WBL	EBT	EBL	EBR	NBR	NBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *32.0 sec*
Level of Service: *C*
Offset: *87.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	*1*	*2*	*6*	*8*	*9*
Min Green	*5.0*	*7.0*	*7.0*	*5.0*	*3.0*
Max Green	*12.0*	*64.0*	*82.0*	*26.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*None*	*Min*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*2.0*	*3.0*	*3.0*	*6.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*7.0*	*9.0*	*9.0*	*7.0*	*7.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*12.0*	*23.0*	*82.0*	*23.0*	*23.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*18.0*	*70.0*	*88.0*	*32.0*	*13.0*
Max Inhibit	*True*	*False*	*True*	*True*	*True*
Opt Min Green	*11.0*	*13.0*	*13.0*	*11.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*1, 2*		*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)		Westpark Dr (EB)			14th St (NB)		BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)	14th St (NB)
	L	T	L+T	T	T+R	L	R	T	T	T	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*3800*	*1899*	*1900*	*1900*	*1809*	*1609*	*1976*	*3800*	*1976*	*3800*
Capacity (c), veh/h	*83*	*2979*	*970*	*1202*	*1202*	*160*	*142*	*119*	*2914*	*119*	*2914*

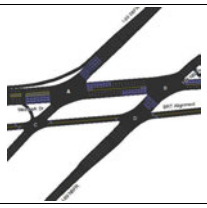
Available Capacity (ca), veh/h	163	2343	751	914	914	354	315	119	1829	119	1829
Volume-to-Capacity Ratio (X)	0.0024	3.36e-05	0.000113	8.32e-05	8.33e-05	0.000626	0.000703	0.000841	3.43e-05	0.000841	3.43e-05
Green Ratio (g/C)	0.05	0.78	0.63	0.63	0.63	0.09	0.09	0.06	0.77	0.06	0.77
Assigned Phase	1	6+9	2	2	2	8	8	9	2+1+6+8	9	2+1+6+8
Max. Allowable Headway (MAH), s/veh	2.73	4.99	3.92	3.92	3.92	6.97	6.97	2.39	3.92	2.39	3.92
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	0.51	0.51	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.1	102.3	90.1	90.1	90.1	17.7	17.7	13.0	90.1	13.0	90.1
Uniform Delay (d1), s/veh	60.5	3.11	8.98	8.98	8.98	55.3	55.3	58.7	3.61	58.7	3.61
Incremental Delay (d2), s/veh	0.0518	2.03e-05	0.00021	0.000125	0.000125	0.00706	0.00891	0.0128	2.12e-05	0.0128	2.12e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	60.6	3.11	8.99	8.98	8.99	55.3	55.3	58.8	3.61	58.8	3.61
Level Of Service	E	A	A	A	A	E	E	E	A	E	A
Total Delay, veh-hr	0.00336	8.63e-05	0.000275	0.000249	0.00025	0.00154	0.00154	0.00163	0.0001	0.00163	0.0001
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.1	104.3	84.1	84.1	84.1	11.7	11.7	8.0	102.0	8.0	102.0
Approach Volume, veh/h	--	0	--	--	0	0	--	0	0	0	0
Approach Delay, s/veh	--	41.4	--	--	9.0	55.3	--	58.8	3.6	58.8	3.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*105.106.65.99557*	**Site Name:**	*N 29.723731; W 95.491886*
Cross Street:	*Westpark Dr & I-69 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:15:4*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & I-69 SBFR)

@ Node 105 From: \ To	Westpark Dr (EB)	Westpark Dr (WB)	I-69 SBFR (SWB)
Westpark Dr (WB)			
I-69 SBFR (SWB)			
Westpark Dr (EB)			

Turn Movement Volumes (Westpark Dr & I-69 NBFR)

@ Node 106 From: \ To	I-69 NBFR (NEB)	Westpark Dr (WB)	Westpark Dr (EB)
Westpark Dr (WB)			
I-69 NBFR (NEB)			
Westpark Dr (WB)			

Turn Movement Volumes (Westpark Dr & BRT Alignment)

@ Node 65 From: \ To	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBFR (SWB)
Westpark Dr (SB)			
BRT Alignment (EB)			
BRT Alignment (WB)			
I-69 SBFR (SWB)			

Turn Movement Volumes (BRT Alignment & I-69 NBFR)

@ Node 99557 From: \ To	I-69 NBFR (NEB)	BRT Alignment (WB)	BRT Alignment (EB)
BRT Alignment (WB)			
BRT Alignment (EB)			
I-69 NBFR (NEB)			

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)		I-69 SBFR (SWB)		Westpark Dr (EB)	Westpark Dr (EB)		I-69 NBFR (NEB)			Westpark Dr (WB)	Westpark Dr (SB)	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBFR (SWB)	BRT Alignment (WB)	BRT Alignment (EB)	I-69 NBFR (NEB)
	Westpark Dr	I-69 SBFR	Westpark Dr	I-69 SBFR	Westpark Dr	I-69 NBFR	Westpark Dr	I-69 NBFR	Westpark Dr	Westpark Dr	Westpark Dr	I-69 SBFR	BRT Alignment	BRT Alignment	I-69 SBFR	BRT Alignment	BRT Alignment	I-69 NBFR
	WBT	WBL	SWBL	SWBT	EBT	EBL	EBT	NEBT	NEBL	NEBR	WBT	SBR	EBT	WBT	SWBT	WBT	EBT	NEBT

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	110,0 sec
Control Delay:	30.4 sec
Level of Service:	C
Offset:	17,0 sec
Coordinate Begin of:	Red
Yield Point:	By Phase

Phasing

Item Name \ Signal States								
ID	1	2	4	5	6	8	9	
Min Green	8,0	8,0	8,0	8,0	8,0	8,0	15,0	
Max Green	16,7	31,7	22,7	19,7	28,7	22,7	15,0	
Yellow	4,3	4,3	4,3	4,3	4,3	4,3	3,0	
Red Clearance	2,0	2,0	2,0	2,0	2,0	2,0	2,0	
Lost Time	6,3	6,3	6,3	6,3	6,3	6,3	5,0	
Recall Mode	None	Max	None	None	None	None	None	
Vehicle Mode	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock	
Passage Extension	4,0	4,0	4,0	4,0	4,0	4,0	4,0	
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Adical Initial	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Max Initial	15,7	25,7	25,7	17,7	27,7	25,7	15,0	
Time before Reduction	7,0	7,0	7,0	7,0	7,0	7,0	7,0	
Time to Reduce	0,5	0,5	0,5	0,5	0,5	0,5	0,5	
Min Gap	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Ped Walk - FDW	15,7	29,7	15,0	17,7	23,0	21,0	21,0	
Coordinated	No	Yes	No	Yes	No	No	No	
Split	23,0	38,0	29,0	26,0	35,0	29,0	29,0	
Max Inhibit	Force	Force	Force	Force	Force	Force	Force	
Dbl Min Green	14,3	14,3	14,3	14,3	14,3	14,3	26,0	

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4	9
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

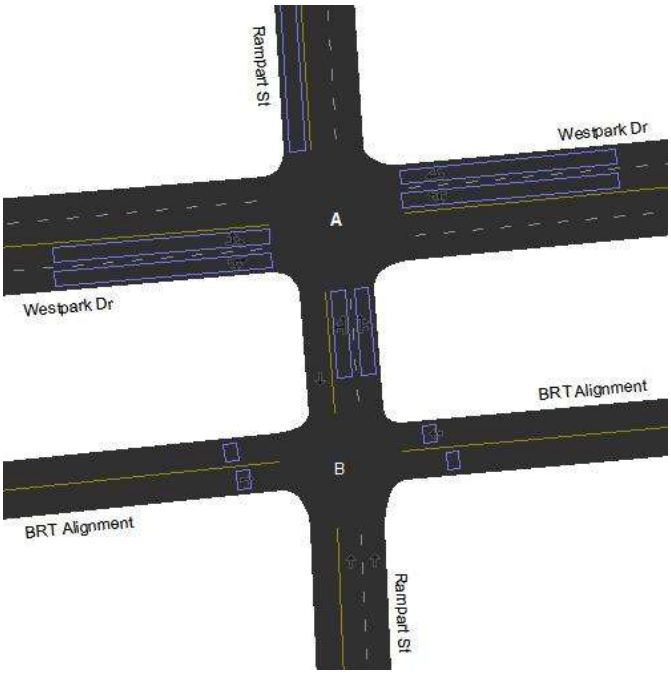
Lane Group	Westpark Dr (WB)		I-69 SBFR (SWB)			Westpark Dr (EB)				I-69 NBFR (NEB)				Westpark Dr (WB)	Westpark Dr (SB)	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBFR (SWB)	BRT Alignment (WB)	BRT Alignment (EB)	I-69 NBFR (NEB)
	L	T	L	L+T	T	T	L	L+T	T	L	T	R	T	T	R	T	T	T	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1809	1900	3800	5700	1810	1900	1900	3618	3800	1609	3800	1609	1615	1976	1976	5700	1976	1976	5700
Capacity (c), veh/h	132	1367	177	186	371	3489	842	869	1163	353	371	157	1367	1100	195	195	195	3571	195	195	5496
Available Capacity (ca), veh/h	275	518	373	392	784	777	972	948	269	741	784	332	518	464	269	269	269	1176	269	269	1950
Volume-to-Capacity Ratio (X)	0,000758	7,376e-05	0,000279	0,000327	0,000269	2,87e-05	7,67e-05	7,73e-05	5,62e-05	0,000283	0,000263	0,000636	7,31e-05	9,09e-05	0,000512	0,000512	2,56e-05	0,000512	0,000512	1,54e-05	
Green Ratio (g/C)	0,07	0,36	0,10	0,10	0,10	0,61	0,48	0,61	0,61	0,10	0,10	0,10	0,36	0,58	0,10	0,10	0,63	0,10	0,10	0,58	
Assigned Phase	1	2+6	4	4	4	5+2	5+2	5+2+9	9+2	8	8	8	2+6	2+6+1+4+5+8	9	9	9	4+8+1+2+5+6	9	9	4+8+1+2+5+6
Max. Allowable Headway (MAH), s/veh	4,76	4,41	5,03	5,03	5,03	4,41	4,43	4,43	4,41	5,04	5,04	5,04	4,41	4,66	4,41	4,41	5,03	4,41	4,41	5,03	
Queue Service Time (gs), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Queue Permitted Service Time (gps), s	0,0	0,0	0,0	0,0	0,0	0,0	14,4	12,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Prune Call Probability (pc)	0,51	0,52	0,52	0,52	0,52	0,52	0,51	0,51	0,52	0,51	0,51	0,51	0,52	1,00	0,52	0,52	0,52	0,52	0,52	0,52	
Prune Out Probability (po)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
Green Extension Time (ge), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Phase Duration (Dp), s	14,3	15,9	17,0	17,0	17,0	15,9	42,1	42,1	15,9	17,0	17,0	17,0	15,9	62,8	15,9	15,9	17,0	15,9	15,9	17,0	
Uniform Delay (d1), s/veh	47,3	22,5	44,8	44,8	44,8	8,27	20,2	6,63	8,27	44,8	44,8	44,8	22,5	5,5	44,7	44,7	7,67	44,7	44,7	5,5	
Incremental Delay (d2), s/veh	0,0104	9,63e-05	0,00284	0,00317	0,00131	1,48e-05	0,000164	0,000161	9,01e-05	0,00144	0,00131	0,00729	9,63e-05	0,000149	0,00471	0,00471	1,41e-05	0,00471	0,00471	4,27e-06	
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Incremental Delay Calibration (C)	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	
Control Delay (d), s/veh	47,3	22,5	44,8	44,8	44,8	8,27	20,2	6,63	8,27	44,8	44,8	44,8	22,5	5,5	44,7	44,7	7,67	44,7	44,7	5,5	
Level Of Service	D	C	D	D	D	A	C	A	A	D	D	D	C	A	D	D	A	D	D	A	
Total Delay, veh-hr	0,00131	0,00026	0,000513	0,000755	0,00124	0,00023	0,000362	0,000162	0,000156	0,00124	0,00124	0,00124	0,000626	0,000153	0,00124	0,00124	0,000213	0,00124	0,00124	0,000153	
Fully Stopped (Nf), veh/h	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Percent Back of Queue (Q%), veh/ln	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	
Effective Green Time, s	8,0	39,6	10,7	10,7	10,7	67,3	50,2	67,3	67,3	10,7	10,7	10,7	39,6	79,2	10,9	10,9	68,9	10,9	10,9	76,2	
Approach Volume, veh/h	--	0	--	--	0	0	--	--	0	--	0	--	0	0	0	0	0	0	0	0	
Approach Delay, s/veh	--	34,9	--	--	44,8	8,3	--	--	12,0	--	44,8	--	22,5	5,5	44,7	44,7	7,7	44,7	44,7	5,5	

TransModeler® Intersection Report

Site Information

Intersection ID:	*107,99559*	**Site Name:**	*N 29.723900, W 95.489072*
Cross Street:	*Westpark Dr & Rampart St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:15:17*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Rampart St)

@ Node 107 From \ To	Rampart St (NB)	Westpark Dr (WB)	Rampart St (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Rampart St (SB)				
Westpark Dr (EB)				
Rampart St (NB)				

Turn Movement Volumes (BRT Alignment & Rampart St)

@ Node 99559 From \ To	Rampart St (NB)	BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Rampart St (SB)				
BRT Alignment (EB)				
Rampart St (NB)				

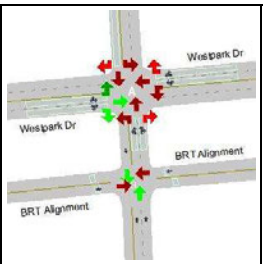
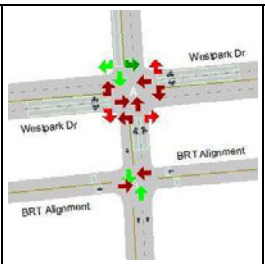
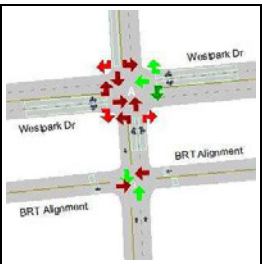
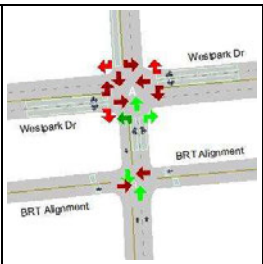
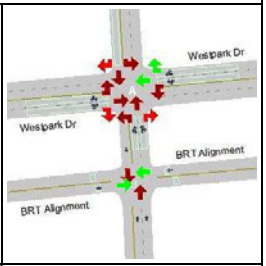
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Rampart St (SB)			Westpark Dr (EB)			Rampart St (NB)			BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)	Rampart St (NB)
	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Rampart St	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Westpark Dr	BRT Alignment	Rampart St	BRT Alignment	Rampart St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *30.2 sec*
Level of Service: *C*
Offset: *113.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*10.0*	*10.0*	*10.0*	*10.0*	*3.0*
Max Green	*82.0*	*26.0*	*82.0*	*26.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*Min*	*None*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*17.0*	*21.0*	*82.0*	*21.0*	*21.0*
Coordinated	*Yes*	*No*	*No*	*No*	*No*
Split	*88.0*	*32.0*	*88.0*	*32.0*	*13.0*
Max Inhibit	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*16.0*	*16.0*	*16.0*	*16.0*	*8.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination											
Lane Group	Westpark Dr (WB)		Rampart St (SB)	Westpark Dr (EB)		Rampart St (NB)		BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)	Rampart St (NB)
	L+T	T+R	LTR	L+T	T+R	L+T	T+R	T	T	T	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1657*	*1900*	*1900*	*1657*	*1900*	*1900*	*1900*	*1976*	*1900*	*1976*	*3800*

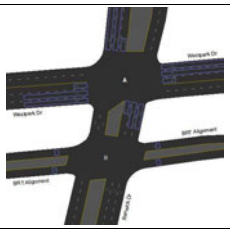
Capacity (c), veh/h	1035	1503	154	1035	1388	175	154	119	1543	119	3086
Available Capacity (ca), veh/h	858	1171	371	858	1171	354	371	119	371	119	743
Volume-to-Capacity Ratio (X)	0.000135	0.000107	0.00194	0.000135	0.000115	0.000858	0.000972	0.000841	6.48e-05	0.000841	3.24e-05
Green Ratio (g/C)	0.79	0.79	0.08	0.73	0.73	0.08	0.08	0.06	0.81	0.06	0.81
Assigned Phase	6+9	6+9	4	2	2	8	8	9	8+2+4+6	9	8+2+4+6
Max. Allowable Headway (MAH), s/veh	4.60	4.60	5.30	4.60	4.60	3.67	3.67	3.41	3.67	3.41	3.67
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.52	1.00	1.00	0.52	0.52	0.51	0.52	0.51	0.52
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	103.2	103.2	16.8	103.2	103.2	16.8	16.8	13.0	16.8	13.0	16.8
Uniform Delay (d1), s/veh	3.48	2.91	56.1	5.4	4.82	56.1	56.1	58.7	2.35	58.7	2.35
Incremental Delay (d2), s/veh	0.000235	0.000128	0.0227	0.000235	0.00015	0.00885	0.0114	0.0128	7.56e-05	0.0128	1.89e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	3.48	2.91	56.2	5.4	4.82	56.2	56.2	58.8	2.35	58.8	2.35
Level Of Service	A	A	E	A	A	E	E	E	A	E	A
Total Delay, veh-hr	0.000135	0.000129	0.00468	0.00021	0.000214	0.00234	0.00234	0.00163	6.53e-05	0.00163	6.53e-05
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	105.2	105.2	10.8	97.2	97.2	10.8	10.8	8.0	108.0	8.0	108.0
Approach Volume, veh/h	--	0	0	--	0	--	0	0	0	0	0
Approach Delay, s/veh	--	3.2	56.2	--	5.1	--	56.2	58.8	2.3	58.8	2.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*108,99562*	**Site Name:**	*N 29.724298, W 95.484302*
Cross Street:	*Fountain View Dr & Westpark Dr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/9/7 15:15:31*		

Intersection Geometry



Turn Movement Volumes (Fountain View Dr & Westpark Dr)

⊠ Node 108 From \ To	Fountain View Dr (NB)	Westpark Dr (WB)	Renwick Dr (SB)	Westpark Dr (EB)
Fountain View Dr (SB)				
Westpark Dr (EB)				
Renwick Dr (NB)				
Westpark Dr (WB)				

Turn Movement Volumes (BRT Alignment & Renwick Dr)

⊠ Node 99562 From \ To	Renwick Dr (NB)	BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Renwick Dr (SB)				
BRT Alignment (EB)				
Renwick Dr (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Fountain View Dr (SB)				Westpark Dr (EB)			Renwick Dr (NB)			Westpark Dr (WB)			BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)	Renwick Dr (NB)
	Fountain View Dr	Westpark Dr	Renwick Dr	Westpark Dr	Fountain View Dr	Renwick Dr	Westpark Dr	Fountain View Dr	Westpark Dr	Renwick Dr	Fountain View Dr	Westpark Dr	Renwick Dr	BRT Alignment	Renwick Dr	BRT Alignment	Renwick Dr
	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	143.0 sec
Control Delay:	41.9 sec
Level of Service:	D
Offset:	59.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	3.0	7.0	3.0	5.0	3.0	7.0	3.0	5.0	3.0
Max Green	9.0	45.0	15.0	42.0	20.0	34.0	20.0	32.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	Max	Max	None	Max	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0
Ped Walk + FDW	8.0	13.0	10.0	29.0	18.0	29.0	20.0	29.0	29.0
Coordinated	No	Yes	No	No	No	No	No	No	No
Split	15.0	51.0	16.0	46.0	26.0	40.0	26.0	38.0	13.0
Max Inhibit	True	False	True	True	True	True	True	True	True
Opt Min Green	9.0	13.0	9.0	11.0	9.0	13.0	9.0	11.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	9
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

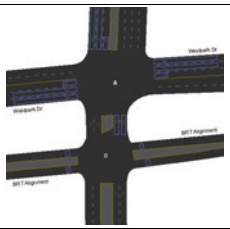
Lane Group	Fountain View Dr (SB)			Westpark Dr (EB)			Renwick Dr (NB)			Westpark Dr (WB)			BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)	Renwick Dr (NB)
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1809	1900	1900	1976	3800	1976	5700
Capacity (c), veh/h	253	558	558	253	663	663	126	425	425	52	558	558	111	2817	111	4225
Available Capacity (ca), veh/h	253	558	558	253	598	598	126	425	425	114	106	106	111	850	111	1276
Volume-to-Capacity Ratio (X)	0.00791	0.00179	0.00197	0.00395	0.00151	0.00166	0.00791	0.00235	0.00259	0.00193	0.00179	0.00197	0.00905	3.55e-05	0.00905	2.37e-05
Green Ratio (g/C)	0.14	0.29	0.29	0.14	0.35	0.35	0.07	0.22	0.22	0.03	0.29	0.29	0.06	0.74	0.06	0.74
Assigned Phase	7	4	4	5	2	2	3	8	8	1	9+6	9+6	9	8+7+3+2+1+4+5+6	9	8+7+3+2+1+4+5+6
Max. Allowable Headway (MAH), s/veh	2.80	4.39	4.39	2.76	4.27	4.27	2.80	3.24	3.24	2.76	2.54	2.54	2.54	3.24	2.54	3.24
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.91	0.52	0.52	0.52	1.00	0.52	1.00
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	26.0	48.0	48.0	26.0	55.9	55.9	16.0	38.0	38.0	10.1	13.0	13.0	13.0	38.0	13.0	38.0
Uniform Delay (d1), s/veh	52.9	35.7	35.7	52.9	30.3	30.3	61.9	43.1	43.1	67.5	35.7	35.7	63.7	4.79	63.7	4.79
Incremental Delay (d2), s/veh	0.0563	0.000578	0.000636	0.00281	0.000409	0.00045	0.0113	0.000996	0.0011	0.0675	0.000578	0.000636	0.0147	2.27e-05	0.0147	1.01e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	52.9	35.7	35.7	52.9	30.3	30.3	61.9	43.1	43.1	67.5	35.7	35.7	63.7	4.79	63.7	4.79
Level Of Service	D	D	D	D	C	C	E	D	D	E	D	D	E	A	E	A
Total Delay, veh-h	0.00294	0.000991	0.00109	0.00147	0.000842	0.000926	0.00172	0.0012	0.00132	0.00188	0.000991	0.00109	0.00177	0.000133	0.00177	0.000133
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	20.0	42.0	42.0	20.0	49.9	49.9	10.0	32.0	32.0	4.1	42.0	42.0	8.0	106.0	8.0	106.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	44.1	--	--	37.6	--	--	49.1	--	--	46.0	63.7	4.8	63.7	4.8

TransModeler® Intersection Report

Site Information

Intersection ID:	*109,99564*	**Site Name:**	*N 29.724924, W 95.476488*
Cross Street:	*Westpark Dr & Chimney Rock Rd, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/9/7 15:16:20*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Chimney Rock Rd)

※ Node 109 From \ To	Chimney Rock Rd (NB)	Westpark Dr (WB)	Chimney Rock Rd (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Chimney Rock Rd (SB)				
Westpark Dr (EB)				
Chimney Rock Rd (NB)				

Turn Movement Volumes (BRT Alignment & Chimney Rock Rd)

※ Node 99564 From \ To	Chimney Rock Rd (NB)	BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Chimney Rock Rd (SB)				
BRT Alignment (EB)				
Chimney Rock Rd (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Chimney Rock Rd (SB)				Westpark Dr (EB)			Chimney Rock Rd (NB)		BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)	Chimney Rock Rd (NB)
	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Westpark Dr	BRT Alignment	Chimney Rock Rd	BRT Alignment	Chimney Rock Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	143.0 sec
Control Delay:	29.1 sec
Level of Service:	D
Offset:	60.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	4	5	6	7	8	9
Min Green	6.0	12.0	7.0	6.0	12.0	6.0	7.0	3.0
Max Green	12.0	36.0	64.0	24.0	24.0	20.0	38.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	Max	None	None	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	14.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	29.0	19.0	24.0	24.0	20.0	19.0	19.0
Coordinated	No	No	Yes	No	No	No	No	No
Split	18.0	42.0	79.0	35.0	35.0	26.0	44.0	13.0
Max Inhibit	True	True	False	True	True	True	True	True
Opt Min Green	12.0	18.0	13.0	12.0	18.0	12.0	13.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	9
Ring - 2	5, 6	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

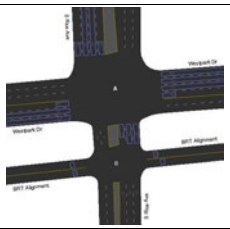
Lane Group	Westpark Dr (WB)			Chimney Rock Rd (SB)			Westpark Dr (EB)			Chimney Rock Rd (NB)		BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)	Chimney Rock Rd (NB)
	L	T	T+R	L	T	T+R	L	T	T~R	T	T~R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1900	1900	1976	3800	1976	3800
Capacity (c), veh/h	78	503	503	253	928	928	155	478	478	583	583	111	2976	111	2976
Available Capacity (ca), veh/h	152	106	106	253	850	850	304	478	478	505	505	111	957	111	957
Volume-to-Capacity Ratio (X)	0.00129	0.000199	0.000219	0.000791	0.000108	0.000119	0.000645	0.000209	0.00023	0.000172	0.000189	0.000905	3.36e-05	0.000905	3.36e-05
Green Ratio (g/C)	0.04	0.26	0.26	0.14	0.49	0.49	0.09	0.25	0.25	0.31	0.31	0.06	0.78	0.06	0.78
Assigned Phase	1	9+6	9+6	7	4	4	5	2	2	8	8	9	2+1+0+7+4+0+5	9	2+1+0+7+4+0+5
Max. Allowable Headway (MAH), s/veh	2.76	2.54	2.54	2.76	4.27	4.27	2.76	3.32	3.32	3.01	3.01	2.54	3.32	2.54	3.32
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.52	0.52	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00	0.52	1.00	0.52	1.00
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.1	13.0	13.0	26.0	75.9	75.9	18.3	42.0	42.0	49.9	49.9	13.0	42.0	13.0	42.0
Uniform Delay (d1), s/veh	65.5	38.6	38.6	52.9	18.7	18.7	59.8	40	40	34.4	34.4	63.7	3.36	63.7	3.36
Incremental Delay (d2), s/veh	0.03	0.000711	0.000782	0.00563	0.000209	0.00023	0.0075	0.000787	0.000866	0.00053	0.000583	0.0147	2.03e-05	0.0147	2.03e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	65.5	38.6	38.6	52.9	18.7	18.7	59.8	40	40	34.4	34.4	63.7	3.36	63.7	3.36
Level Of Service	E	D	D	D	B	B	E	D	D	C	C	E	A	E	A
Total Delay, veh-hr	0.00182	0.00107	0.00118	0.00294	0.000519	0.000571	0.00166	0.00111	0.00122	0.000955	0.00105	0.00177	9.33e-05	0.00177	9.33e-05
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.1	37.9	37.9	20.0	69.9	69.9	12.3	36.0	36.0	43.9	43.9	8.0	112.0	8.0	112.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	0	0	0	0	0
Approach Delay, s/veh	--	--	47.3	--	--	35.4	--	--	46.4	--	34.4	63.7	3.4	63.7	3.4

TransModeler® Intersection Report

Site Information

Intersection ID:	110,99568	**Site Name:**	N 29.725629, W 95.468222
Cross Street:	S Rice Ave & Westpark Dr, orb;	**Number of Plans:**	1
Analysis Date:	2023/9/7 15:16:52		

Intersection Geometry



Turn Movement Volumes (S Rice Ave & Westpark Dr)

@ Node 110 From \ To	S Rice Ave (NB)	Westpark Dr (WB)	S Rice Ave (SB)	Westpark Dr (EB)
S Rice Ave (SB)				
Westpark Dr (EB)				
S Rice Ave (NB)				
Westpark Dr (WB)				

Turn Movement Volumes (BRT Alignment & S Rice Ave)

@ Node 99568 From \ To	S Rice Ave (NB)	BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
S Rice Ave (SB)				
BRT Alignment (EB)				
S Rice Ave (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	S Rice Ave (SB)				Westpark Dr (EB)			S Rice Ave (NB)				Westpark Dr (WB)			BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)	S Rice Ave (NB)
	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	BRT Alignment	S Rice Ave	BRT Alignment	S Rice Ave
	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR	WBR	WBT	WBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: 00:00:00 - 23:59:59
Plan Description: 00:00:00
Controller Type: Traffic Actuated
Cycle Length: 143.0 sec
Control Delay: 43.0 sec
Level of Service: D
Offset: 65.0 sec
Coordinate Begin of: Red
Yield Point: By Phase

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	6.0	8.0	6.0	8.0	6.0	8.0	6.0	8.0	3.0
Max Green	20.0	28.0	17.0	41.0	14.0	34.0	31.0	27.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	None	Max	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	12.0	18.0	12.0	22.0	12.0	14.0	31.0	27.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	23.0	18.0	27.0	22.0	39.0	14.0	26.0	26.0
Coordinated	No	No	No	Yes	No	No	No	No	No
Split	26.0	34.0	23.0	47.0	20.0	40.0	37.0	33.0	13.0
Max Inhibit	True	False	True	False	True	True	True	True	True
Opt Min Green	12.0	14.0	12.0	14.0	12.0	14.0	12.0	14.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	9
Ring - 2	5, 6	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

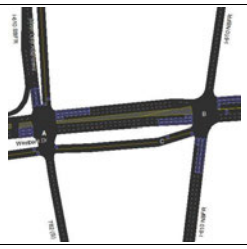
Lane Group	S Rice Ave (SB)				Westpark Dr (EB)			S Rice Ave (NB)			Westpark Dr (WB)			BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)	S Rice Ave (NB)
	L	T	T+R	R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1609	1809	1900	1900	1809	1900	1900	1809	3800	1900	1976	3800	1976	5700
Capacity (c), veh/h	218	452	452	383	90	685	685	142	372	372	116	1637	818	111	2817	111	4225
Available Capacity (ca), veh/h	253	452	452	383	392	545	545	177	372	372	215	213	106	111	903	111	1355
Volume-to-Capacity Ratio (X)	0.000917	0.000155	0.000155	0.000156	0.00111	0.000146	0.000161	0.00141	0.000269	0.000296	0.00086	6.11e-05	0.000134	0.000905	3.55e-05	0.000905	2.27e-05
Green Ratio (g/C)	0.12	0.24	0.24	0.24	0.05	0.36	0.36	0.08	0.20	0.20	0.06	0.43	0.43	0.06	0.74	0.06	0.74
Assigned Phase	1	6	6	6	7	4	4	5	2	2	3	9+8	9+8	9	6+3+4+8+7+1+5+2	9	6+3+4+8+7+1+5+2
Max. Allowable Headway (MAH), s/veh	2.76	2.61	2.61	2.61	2.76	4.27	4.27	2.76	3.01	3.01	2.76	2.54	2.54	2.54	2.61	2.54	2.61
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	0.52	0.52	0.52	1.00	0.52	1.00
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	23.2	40.0	40.0	40.0	13.2	57.6	57.6	17.2	34.0	34.0	15.2	13.0	13.0	13.0	40.0	13.0	40.0
Uniform Delay (d1), s/veh	56.3	41.5	41.5	41.5	64.5	29.2	29.2	60.7	46.2	46.2	62.6	23.2	23.2	63.7	4.79	63.7	4.79
Incremental Delay (d2), s/veh	0.00757	0.000619	0.000619	0.000733	0.022	0.000384	0.000422	0.0178	0.0013	0.00143	0.0133	6.72e-05	0.000296	0.0147	2.27e-05	0.0147	1.01e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	56.3	41.5	41.5	41.5	64.6	29.2	29.2	60.7	46.2	46.2	62.6	23.2	23.2	63.7	4.79	63.7	4.79
Level Of Service	E	D	D	D	E	C	C	E	D	D	E	C	C	E	A	E	A
Total Delay, veh-hr	0.00307	0.00081	0.00081	0.000688	0.00179	0.000812	0.000893	0.00337	0.00128	0.00141	0.00174	0.000643	0.000708	0.00177	0.000133	0.00177	0.000133
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	17.2	34.0	34.0	34.0	7.2	51.6	51.6	11.2	28.0	28.0	9.2	61.6	61.6	8.0	106.0	8.0	106.0
Approach Volume, veh/h	--	--	0	--	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	46.4	--	--	--	40.6	--	--	53.3	--	--	35.9	63.7	4.8	63.7	4.8

TransModeler® Intersection Report

Site Information			
Intersection ID:	*111,112,194*	**Site Name:**	*N 29.726134, W 95.461027*
Cross Street:	*Westpark Dr & BRT Alignment, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:15:55*		

" "

Intersection Geometry



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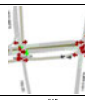
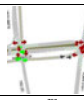
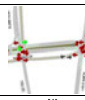
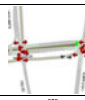
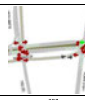
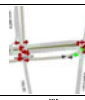
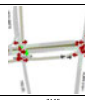
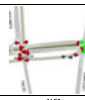
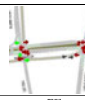
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *130.0 sec*
Offset: *5.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States										
"ID"	"1"	"2"	"4"	"5"	"6"	"8"	"11"	"15"	"16"	"22"
"Min Green"	"7.0"	"8.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Max Green"	"11.0"	"53.0"	"11.0"	"48.0"	"12.0"	"27.0"	"7.0"	"9.0"	"9.0"	"13.0"
"Yellow"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"
"Lost Time"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"
"Recall Mode"	"None"	"Min"	"None"	"Max"	"Max"	"None"	"None"	"None"	"Min"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"	"Non-Lock"
"Passage/Extension"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"8.5"	"14.5"	"44.5"	"14.5"	"14.5"	"19.5"	"8.0"	"20.0"	"10.5"	"20.0"
"Time before Reduction"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time to Reduce"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"29.5"	"14.0"	"24.0"	"34.5"	"16.0"	"19.0"	"9.5"	"9.5"	"9.5"	"9.5"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"No"
"Split"	"16.0"	"68.0"	"16.0"	"53.0"	"17.0"	"32.0"	"12.0"	"14.0"	"14.0"	"18.0"
"Max Inhibit"	"True"	"False"	"True"	"True"	"True"	"True"	"True"	"True"	"True"	"True"
"Opt Min Green"	"12.0"	"13.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	"2", "1"	"4", "22", "11"
Ring - 2	"6", "5", "16"	"8", "15"

"

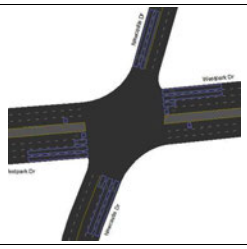
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*113*	**Site Name:**	*N 29.726879, W 95.451685*
Cross Street:	*Westpark Dr & Newcastle Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:21:29*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Newcastle Dr)

⇗ Node 113 From \ To	Newcastle Dr (NB)	Westpark Dr (WB)	Newcastle Dr (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Newcastle Dr (SB)				
Westpark Dr (EB)				
Newcastle Dr (NB)				

[Flow Field] = Volume

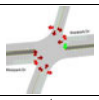
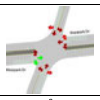
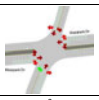
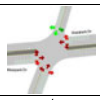
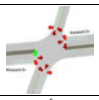
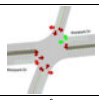
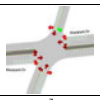
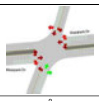
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Newcastle Dr (SB)			Westpark Dr (EB)				Newcastle Dr (NB)		
	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Westpark Dr
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*120.0 sec*
Control Delay:	*38.9 sec*
Level of Service:	*D*
Offset:	*8.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*By Phase*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*5.0*	*7.0*	*5.0*	*5.0*	*5.0*	*7.0*	*5.0*	*5.0*
Max Green	*18.0*	*48.0*	*15.0*	*15.0*	*18.0*	*48.0*	*10.0*	*20.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*	*6.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*2.0*	*3.0*	*3.0*	*3.0*	*2.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*12.0*	*30.0*	*12.0*	*17.0*	*18.0*	*25.0*	*12.0*	*17.0*
Coordinated	*No*	*No*	*No*	*No*	*No*	*Yes*	*No*	*No*
Split	*24.0*	*54.0*	*21.0*	*21.0*	*24.0*	*54.0*	*16.0*	*26.0*
Max Inhibit	*True*	*True*	*True*	*True*	*True*	*False*	*True*	*True*
Opt Min Green	*11.0*	*13.0*	*11.0*	*11.0*	*11.0*	*13.0*	*11.0*	*11.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*3, 4*	
Ring - 2	*6, 5*	*8, 7*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

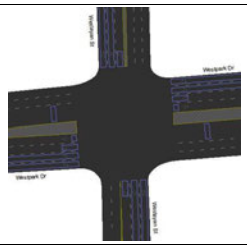
Lane Group	Westpark Dr (WB)			Newcastle Dr (SB)		Westpark Dr (EB)			Newcastle Dr (NB)		
	L	T	T+R	L+T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*3800*	*1900*	*2162*	*1900*	*1809*	*3800*	*1900*	*1809*	*1900*	*1900*
Capacity (c), veh/h	*500*	*2280*	*1140*	*157*	*138*	*139*	*1520*	*760*	*92*	*138*	*138*
Available Capacity (ca), veh/h	*271*	*1520*	*760*	*180*	*237*	*271*	*1520*	*760*	*226*	*317*	*317*
Volume-to-Capacity Ratio (X)	*0.0002*	*4.39e-05*	*9.65e-05*	*0.00102*	*0.00102*	*0.00144*	*6.58e-05*	*0.000145*	*0.00108*	*0.000727*	*0.0008*
Green Ratio (g/C)	*0.28*	*0.60*	*0.60*	*0.07*	*0.07*	*0.06*	*0.40*	*0.40*	*0.05*	*0.07*	*0.07*
Assigned Phase	*1*	*6*	*6*	*7+4*	*4*	*5*	*2*	*2*	*3*	*8*	*8*
Max. Allowable Headway (MAH), s/veh	*2.76*	*4.82*	*4.82*	*5.29*	*5.46*	*2.76*	*4.82*	*4.82*	*3.80*	*5.39*	*5.39*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.51*	*1.00*	*1.00*	*0.51*	*0.51*	*0.51*	*1.00*	*1.00*	*0.51*	*0.51*	*0.51*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*39.2*	*78.0*	*78.0*	*12.1*	*14.7*	*15.2*	*54.0*	*54.0*	*12.1*	*14.7*	*14.7*
Uniform Delay (d1), s/veh	*31.4*	*9.61*	*9.61*	*51.6*	*51.6*	*51.2*	*21.6*	*21.6*	*54*	*51.6*	*51.6*
Incremental Delay (d2), s/veh	*0.00072*	*3.46e-05*	*0.000152*	*0.0117*	*0.0134*	*0.0188*	*7.79e-05*	*0.000343*	*0.0211*	*0.00952*	*0.0105*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*31.4*	*9.61*	*9.61*	*51.6*	*51.6*	*51.2*	*21.6*	*21.6*	*54.1*	*51.6*	*51.6*
Level Of Service	*C*	*A*	*A*	*D*	*D*	*D*	*C*	*C*	*D*	*D*	*D*
Total Delay, veh-hr	*0.00087.2*	*0.000267*	*0.000294*	*0.00229*	*0.00201*	*0.00284*	*0.0006*	*0.00066*	*0.0015*	*0.00143*	*0.00158*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*33.2*	*72.0*	*72.0*	*8.7*	*8.7*	*9.2*	*48.0*	*48.0*	*6.1*	*8.7*	*8.7*
Approach Volume, veh/h	*--*	*--*	*0*	*--*	*0*	*--*	*--*	*0*	*--*	*--*	*0*
Approach Delay, s/veh	*--*	*--*	*16.6*	*--*	*51.6*	*--*	*--*	*36.0*	*--*	*--*	*52.4*

TransModeler® Intersection Report

Site Information

Intersection ID:	*114*	**Site Name:**	*N 29.727733, W 95.441414*
Cross Street:	*Westpark Dr & Weslayan St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:21:54*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Weslayan St)

@ Node 114 From \ To	Weslayan St (NB)	Westpark Dr (WB)	Weslayan St (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Weslayan St (SB)				
Westpark Dr (EB)				
Weslayan St (NB)				

[Flow Field] = Volume

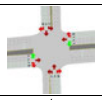
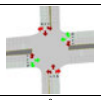
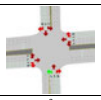
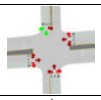
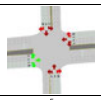
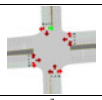
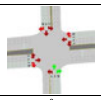
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)				Weslayan St (SB)			Westpark Dr (EB)				Weslayan St (NB)		
	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Westpark Dr
	WbR	WbT	WbL	WbU	SbR	SbT	SbL	EbL	EbU	EbR	EbT	NbT	NbL	NbR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	39.0 sec
Level of Service:	D
Offset:	45.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States							
							
ID	1	2	3	4	5	7	8
Min Green	6.0	9.0	6.0	7.0	6.0	6.0	7.0
Max Green	9.6	16.7	13.7	32.7	20.7	8.7	37.7
Yellow	3.9	3.9	3.6	3.6	3.9	3.6	3.6
Red Clearance	1.5	1.4	1.7	1.7	1.4	1.7	1.7
Lost Time	5.4	5.3	5.3	5.3	5.3	5.3	5.3
Recall Mode	None	Min	Min	Min	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	3.0	2.0	2.0	3.0	2.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	11.0	8.0	8.0	8.0	8.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	7.6	16.0	15.7	15.0	24.7	8.7	15.0
Coordinated	No	No	No	No	No	No	Yes
Split	15.0	22.0	19.0	38.0	26.0	14.0	43.0
Max Inhibit	True	True	True	True	True	True	False
Opt Min Green	11.4	14.3	11.3	12.3	11.3	11.3	12.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	1, 5, 2	3, 4
Ring - 2		8, 7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

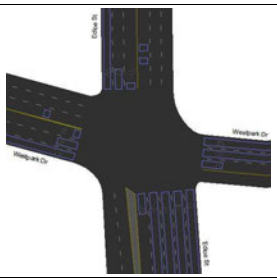
Lane Group	Westpark Dr (WB)			Westlayan St (SB)			Westpark Dr (EB)			Westlayan St (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1809	1900	1900	1809	3800	1900	1809	1900	1900
Capacity (c), veh/h	59	285	142	67	948	948	249	685	342	121	1004	1004
Available Capacity (ca), veh/h	145	529	264	131	518	518	312	529	264	207	597	597
Volume-to-Capacity Ratio (X)	0.00341	0.000351	0.000772	0.00149	0.000105	0.000116	0.000804	0.000146	0.000321	0.000828	9.96e-05	0.00011
Green Ratio (g/C)	0.03	0.08	0.08	0.04	0.50	0.50	0.14	0.18	0.18	0.07	0.53	0.53
Assigned Phase	1	2	2	7	4	4	5+1	2+5	2+5	3	8	8
Max. Allowable Headway (MAH), s/veh	2.76	4.82	4.82	2.76	4.27	4.27	3.76	4.82	4.82	2.76	4.77	4.77
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	9.3	14.3	14.3	9.7	65.2	65.2	17.9	14.3	14.3	13.3	68.7	68.7
Uniform Delay (d1), s/veh	56.2	51.3	51.3	55.6	15.1	15.1	44.6	40.3	40.3	52.3	13.3	13.3
Incremental Delay (d2), s/veh	0.105	0.00222	0.00976	0.0401	0.0002	0.00022	0.00582	0.000384	0.00169	0.0123	0.000178	0.000196
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	56.3	51.3	51.4	55.7	15.1	15.1	44.6	40.3	40.3	52.3	13.3	13.3
Level Of Service	E	D	D	E	B	B	D	D	D	D	B	B
Total Delay, veh-hr	0.00313	0.00143	0.00157	0.00155	0.000418	0.00046	0.00248	0.00112	0.00123	0.00145	0.00037	0.000407
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	3.9	9.0	9.0	4.4	59.9	59.9	16.5	21.6	21.6	8.0	63.4	63.4
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	53.8	--	--	28.2	--	--	42.4	--	--	25.9

TransModeler® Intersection Report

Site Information			
Intersection ID:	*115*	**Site Name:**	*N 29.728054, W 95.433475*
Cross Street:	*Westpark Dr & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:15:39*		

" "

Intersection Geometry



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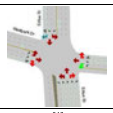
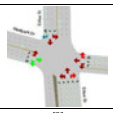
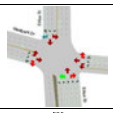
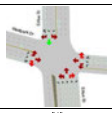
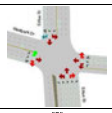
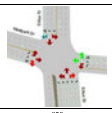
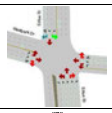
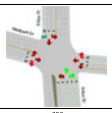
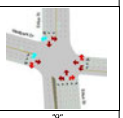
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *133.0 sec*
Offset: *13.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States									
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"Max Green"	"20.0"	"39.5"	"10.0"	"30.0"	"20.0"	"39.5"	"9.7"	"30.0"	"8.0"
"Yellow"	"3.0"	"3.5"	"3.0"	"3.0"	"3.0"	"3.5"	"3.0"	"3.0"	"3.0"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.3"	"2.0"	"2.0"
"Lost Time"	"5.0"	"5.5"	"5.0"	"5.0"	"5.0"	"5.5"	"5.3"	"5.0"	"5.0"
"Recall Mode"	"None"	"Min"	"None"	"None"	"None"	"Min"	"None"	"None"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"2.0"	"3.0"	"2.0"	"2.0"	"2.0"	"3.0"	"2.0"	"2.0"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"12.0"	"12.0"	"12.0"	"10.0"	"9.0"	"12.0"	"9.0"	"10.0"	"10.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"20.0"	"20.0"	"20.0"	"15.0"	"20.0"	"20.0"	"14.7"	"13.0"	"13.0"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"	"No"	"No"
"Split"	"25.0"	"45.0"	"15.0"	"35.0"	"25.0"	"45.0"	"15.0"	"35.0"	"13.0"
"Max Inhibit"	"False"	"False"	"False"	"True"	"True"	"True"	"True"	"True"	"True"
"Opt Min Green"	"12.0"	"15.5"	"12.0"	"13.0"	"12.0"	"15.5"	"12.3"	"13.0"	"5.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"4", "3"	"9"
Ring - 2	"5", "6"	"7", "8"	

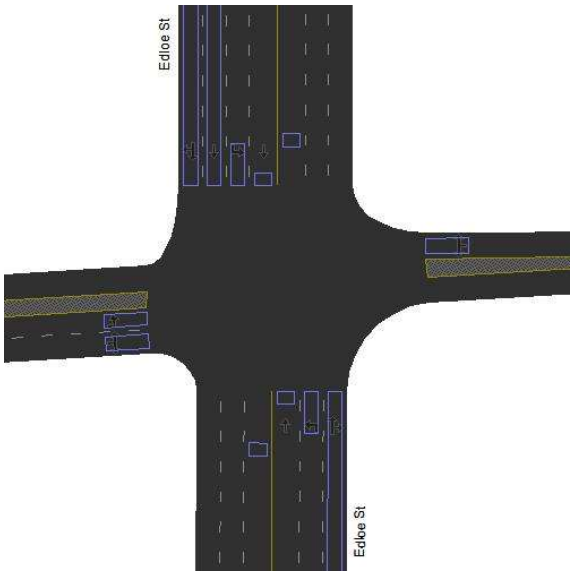
"
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*116*	**Site Name:**	*N 29.729225, W 95.433474*
Cross Street:	*I-69 Express Lanes & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:1*		

Intersection Geometry



Turn Movement Volumes (I-69 Express Lanes & Edloe St)

@ Node 116 From \ To	Edloe St (NB)	I-69 Express Lanes (WB)	Edloe St (SB)	I-69 Express Lanes (EB)
I-69 Express Lanes (WB)				
Edloe St (SB)				
I-69 Express Lanes (EB)				
Edloe St (NB)				

[Flow Field] = Volume

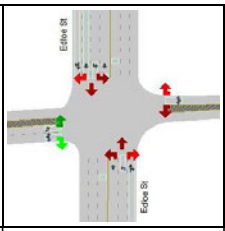
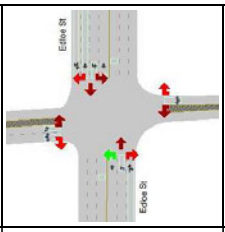
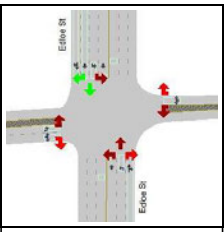
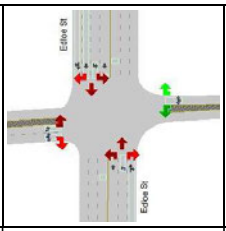
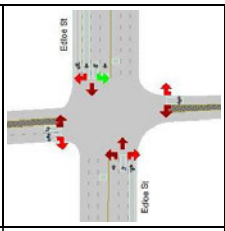
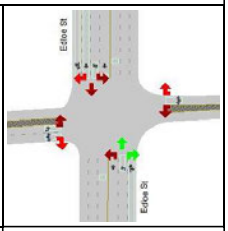
Volume Adjustment and Saturation Flow Rate

Movement	I-69 Express Lanes (WB)		Edloe St (SB)				I-69 Express Lanes (EB)		Edloe St (NB)			
	Edloe St	Edloe St	Edloe St	I-69 Express Lanes	Edloe St	I-69 Express Lanes	Edloe St	Edloe St	Edloe St	I-69 Express Lanes	Edloe St	I-69 Express Lanes
	WBR	WBL	SBU	SBR	SBT	SBL	EBL	EBR	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *60.0 sec*
Control Delay: *18.9 sec*
Level of Service: *B*
Offset: *19.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	5.0	5.0	10.0	5.0	5.0	10.0
Max Green	8.0	7.5	25.5	8.0	8.0	25.5
Yellow	3.5	4.0	4.0	3.5	3.5	4.0
Red Clearance	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time	6.0	6.5	6.5	6.0	6.0	6.5
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	0.2	0.2	0.2	0.2	0.2	0.2
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	8.0	5.0	20.0	8.0	8.0	20.0
Coordinated	No	No	Yes	No	No	No
Split	14.0	14.0	32.0	14.0	14.0	32.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	11.0	11.5	16.5	11.0	11.0	16.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	I-69 Express Lanes (WB)	Edloe St (SB)			I-69 Express Lanes (EB)		Edloe St (NB)		
	L+R	L	T	T+R	L	L+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	1809	3800	1900	190	1900	1809	1976	1900
Capacity (c), veh/h	129	359	2176	1088	243	129	77	840	807
Available Capacity (ca), veh/h	253	241	1615	807	361	253	226	840	807
Volume-to-Capacity Ratio (X)	0.00155	0.000557	4.6e-05	0.000101	7.48e-05	0.0014	0.00259	0.000119	0.000136
Green Ratio (g/C)	0.07	0.20	0.57	0.57	0.07	0.07	0.04	0.42	0.42
Assigned Phase	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	1.01	1.00	2.12	2.12	1.05	1.05	1.00	1.63	1.63
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	1.00	1.00	0.51	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	10.1	17.9	40.9	40.9	10.1	10.1	9.1	32.0	32.0

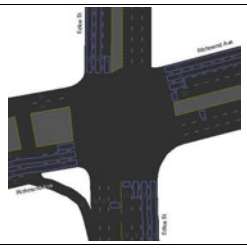
Uniform Delay (d1), s/veh	26.1	19.3	5.48	5.48	26.1	26.1	27.5	9.92	9.92
Incremental Delay (d2), s/veh	0.0215	0.00279	3.8e-05	0.000167	0.000553	0.0196	0.0607	0.000255	0.000304
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	26.1	19.3	5.48	5.48	26.1	26.1	27.6	9.92	9.92
Level Of Service	C	B	A	A	C	C	C	A	A
Total Delay, veh-hr	0.00145	0.00107	0.000152	0.000167	0.000132	0.00132	0.00153	0.000276	0.000303
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	4.1	11.9	34.4	34.4	4.1	4.1	2.6	25.5	25.5
Approach Volume, veh/h	0	--	--	0	0	--	--	--	0
Approach Delay, s/veh	26.1	--	--	12.2	26.1	--	--	--	18.5

TransModeler® Intersection Report

Site Information

Intersection ID:	*118*	**Site Name:**	*N 29.732984, W 95.433466*
Cross Street:	*Richmond Ave & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:7*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Edloe St)

⇗ Node 118 From \ To	Edloe St (NB)	Richmond Ave (WB)	Edloe St (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Edloe St (SB)				
Richmond Ave (EB)				
Edloe St (NB)				

[Flow Field] = Volume

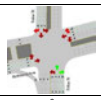
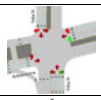
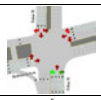
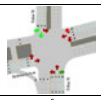
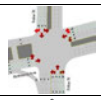
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Edloe St (SB)				Richmond Ave (EB)		Edloe St (NB)			
	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	133.0 sec
Control Delay:	43.0 sec
Level of Service:	D
Offset:	0.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	6.0	10.0	6.0	7.0	6.0	10.0	6.0	7.0	0.0
Max Green	8.6	24.6	41.5	23.5	9.6	23.6	10.5	54.5	7.5
Yellow	3.6	3.6	3.2	3.2	3.6	3.6	3.2	3.2	3.2
Red Clearance	1.8	1.8	2.3	2.3	1.8	1.8	2.3	2.3	2.3
Lost Time	5.4	5.4	5.5	5.5	5.4	5.4	5.5	5.5	5.5
Recall Mode	Min	Max	Min	None	Min	Max	None	Min	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.5	3.0	2.5	3.0	3.0	3.0	2.5	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	9.0	8.0	8.0	8.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	9.6	14.0	14.5	22.0	12.6	14.0	9.5	22.0	22.0
Coordinated	No	Yes	No	No	No	No	No	No	No
Split	14.0	30.0	47.0	29.0	15.0	29.0	16.0	60.0	13.0
Max Inhibit	True	False	True	True	True	True	True	True	True
Opt Min Green	11.4	15.4	11.5	12.5	11.4	15.4	11.5	12.5	5.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	3, 4	9
Ring - 2	6, 5	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

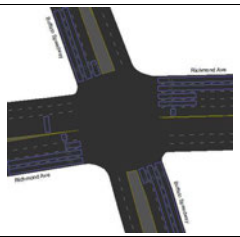
Lane Group	Richmond Ave (WB)			Edloe St (SB)			Richmond Ave (EB)		Edloe St (NB)			
	L	T	T+R	L	T	T+R	L	T	L	T	T+R	R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	3800	1809	1900	1900	1674
Capacity (c), veh/h	177	161	161	82	337	337	101	321	781	1051	1510	1330
Available Capacity (ca), veh/h	640	779	778	117	337	337	143	671	131	351	351	310
Volume-to-Capacity Ratio (X)	0.00113	0.000622	0.000685	0.00245	0.000297	0.000326	0.000993	0.000312	0.000263	6.59e-05	4.6e-05	4.6e-05
Green Ratio (g/C)	0.11	0.08	0.08	0.05	0.18	0.18	0.06	0.08	0.42	0.55	0.79	0.79
Assigned Phase	3+9	8	8	1	6	6	7	4	5	2	2+8+1+3+4+5+9+6+7	2+8+1+3+4+5+9+6+7
Max. Allowable Headway (MAH), s/veh	3.13	5.27	5.27	3.30	5.39	5.39	3.26	5.10	3.80	4.46	4.46	4.46
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.9	16.7	16.7	11.4	29.0	29.0	12.9	16.7	61.4	79.0	79.0	79.0
Uniform Delay (d1), s/veh	52.6	55.7	55.7	60.6	45	45	59.3	55.7	22.3	13.3	2.8	2.8
Incremental Delay (d2), s/veh	0.0116	0.00698	0.00768	0.0542	0.00158	0.00174	0.0178	0.00175	0.000622	0.000113	5.49e-05	6.23e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	52.6	55.7	55.7	60.7	45	45	59.3	55.7	22.3	13.3	2.8	2.8
Level Of Service	D	E	E	E	D	D	E	E	C	B	A	A
Total Delay, veh-hr	0.00292	0.00155	0.0017	0.00337	0.00125	0.00137	0.00165	0.00155	0.00124	0.000256	5.41e-05	4.71e-05
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	14.9	11.2	11.2	6.0	23.6	23.6	7.4	11.2	56.0	73.6	105.7	105.7
Approach Volume, veh/h	--	--	0	--	--	0	--	0	--	--	0	--
Approach Delay, s/veh	--	--	54.2	--	--	52.7	--	57.5	--	--	14.4	--

TransModeler® Intersection Report

Site Information

Intersection ID:	*119*	**Site Name:**	*N 29.733916, W 95.429299*
Cross Street:	*Buffalo Speedway & Richmond Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:14*		

Intersection Geometry



Turn Movement Volumes (Buffalo Speedway & Richmond Ave)

@ Node 119 From \ To	Buffalo Speedway (NB)	Richmond Ave (WB)	Buffalo Speedway (SB)	Richmond Ave (EB)
Buffalo Speedway (SB)				
Richmond Ave (EB)				
Buffalo Speedway (NB)				
Richmond Ave (WB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Buffalo Speedway (SB)			Richmond Ave (EB)				Buffalo Speedway (NB)				Richmond Ave (WB)			
	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave
	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	37.6 sec
Level of Service:	D
Offset:	40.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	10.0	8.0	10.0	8.0	5.0	8.0	8.0	8.0
Max Green	10.9	35.9	19.8	28.8	8.9	37.9	19.8	28.8
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.6
Lost Time	6.1	6.1	6.2	6.2	6.1	6.1	6.2	6.2
Recall Mode	None	Max	None	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	10.0	12.0	10.0	9.9	10.0	10.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	13.9	20.0	18.8	25.0	13.9	20.0	10.8	25.0
Coordinated	No	No	No	No	No	Yes	No	No
Split	17.0	42.0	26.0	35.0	15.0	44.0	26.0	35.0
Max Inhibit	True	True	True	True	True	False	True	True
Opt Min Green	16.1	14.1	16.2	14.2	11.1	14.1	14.2	14.2

Phase Sequence and Concurrency Group

Ring | Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

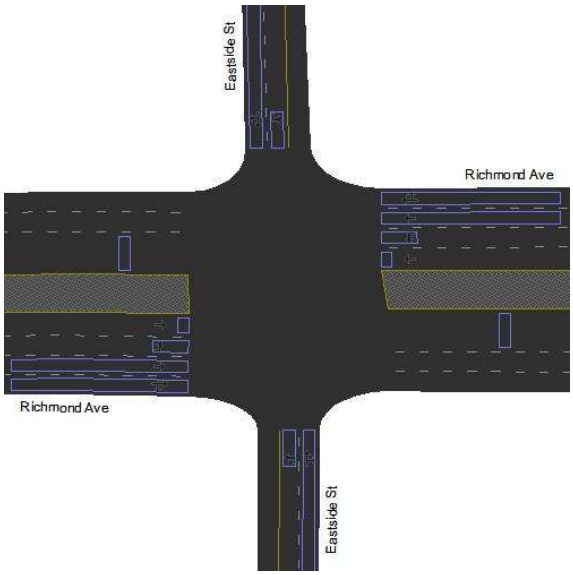
Lane Group	Buffalo Speedway (SB)			Richmond Ave (EB)			Buffalo Speedway (NB)			Richmond Ave (WB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	3800	1900	1809	1900	1900	3618	3800	1900
Capacity (c), veh/h	107	568	568	145	912	456	318	790	790	290	1108	554
Available Capacity (ca), veh/h	134	568	568	298	912	456	164	600	600	597	912	456
Volume-to-Capacity Ratio (X)	0.000935	0.000176	0.000194	0.00136	0.00011	0.000241	0.000629	0.000127	0.000139	0.00069	9.02e-05	0.000199
Green Ratio (g/C)	0.06	0.30	0.30	0.08	0.24	0.24	0.18	0.42	0.42	0.08	0.29	0.29
Assigned Phase	5	2	2	3	8	8	1	6	6	7	4	4
Max. Allowable Headway (MAH), s/veh	3.26	4.77	4.77	3.26	4.32	4.32	3.26	4.77	4.77	3.80	4.32	4.32
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.2	42.0	42.0	15.8	35.0	35.0	27.2	56.0	56.0	15.8	35.0	35.0
Uniform Delay (d1), s/veh	53.1	29.5	29.5	50.8	34.7	34.7	40.8	20.5	20.5	50.8	30.1	30.1
Incremental Delay (d2), s/veh	0.0151	0.000557	0.000613	0.0171	0.000216	0.000553	0.00351	0.000289	0.000318	0.00428	0.000141	0.000645
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	53.1	29.5	29.5	50.8	34.7	34.7	40.8	20.5	20.5	50.8	30.1	30.1
Level Of Service	D	C	C	D	C	C	D	C	C	D	C	C
Total Delay, veh-hr	0.00148	0.000819	0.000901	0.00282	0.000963	0.00106	0.00227	0.000569	0.000626	0.00282	0.000836	0.00092
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.1	35.9	35.9	9.6	28.9	28.9	21.1	49.9	49.9	9.6	35.0	35.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	37.1	--	--	42.5	--	--	30.4	--	--	40.2

TransModeler® Intersection Report

Site Information

Intersection ID:	*120*	**Site Name:**	*N 29.734031, W 95.424480*
Cross Street:	*Eastside St & Richmond Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:24*		

Intersection Geometry



Turn Movement Volumes (Eastside St & Richmond Ave)

@ Node 120 From \ To	Eastside St (NB)	Richmond Ave (WB)	Eastside St (SB)	Richmond Ave (EB)
Eastside St (SB)				
Richmond Ave (EB)				
Eastside St (NB)				
Richmond Ave (WB)				

[Flow Field] = Volume

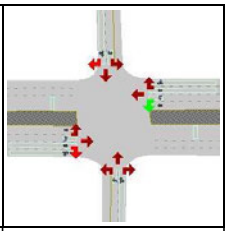
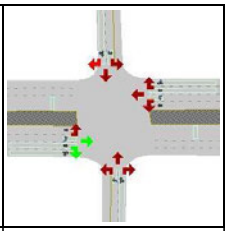
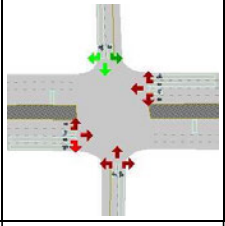
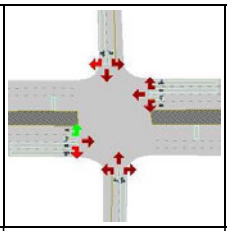
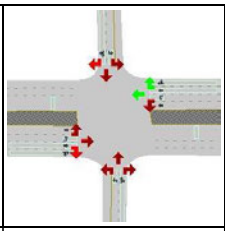
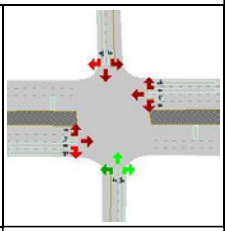
Volume Adjustment and Saturation Flow Rate

Movement	Eastside St (SB)			Richmond Ave (EB)				Eastside St (NB)			Richmond Ave (WB)			
	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave
	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *37.4 sec*
Level of Service: *D*
Offset: *54.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	7.0	10.0	7.0	7.0	10.0	7.0
Max Green	17.7	53.7	30.8	17.7	53.7	30.8
Yellow	3.6	3.6	3.2	3.6	3.6	3.2
Red Clearance	2.7	2.7	2.0	2.7	2.7	2.0
Lost Time	6.3	6.3	5.2	6.3	6.3	5.2
Recall Mode	Min	Min	None	None	Min	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	2.5	3.0	3.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	12.0	9.0	9.0	12.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	8.7	33.0	19.0	28.7	33.0	19.0
Coordinated	No	Yes	No	No	No	No
Split	24.0	60.0	36.0	24.0	60.0	36.0
Max Inhibit	True	False	True	True	True	True
Opt Min Green	13.3	16.3	12.2	13.3	16.3	12.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Eastside St (SB)		Richmond Ave (EB)			Eastside St (NB)		Richmond Ave (WB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	3800	1900	1440	1900	1809	3800	1900
Capacity (c), veh/h	177	154	1140	2707	1353	177	154	106	534	267
Available Capacity (ca), veh/h	430	488	267	1701	850	430	488	267	1701	850
Volume-to-Capacity Ratio (X)	0.000566	0.0013	0.000175	3.69e-05	8.13e-05	0.000566	0.0013	0.0019	0.000187	0.000412
Green Ratio (g/C)	0.08	0.08	0.63	0.71	0.71	0.08	0.08	0.06	0.14	0.14
Assigned Phase	4	4	5	2	2	8	8	1	6	6
Max. Allowable Headway (MAH), s/veh	3.83	3.83	3.76	4.82	4.82	3.90	3.90	3.76	4.82	4.82
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	0.51	1.00	1.00	0.51	0.51	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.9	14.9	81.9	91.8	91.8	14.9	14.9	13.3	23.2	23.2

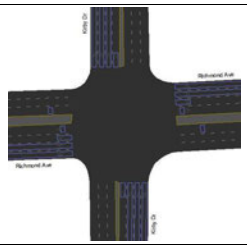
Uniform Delay (d1), s/veh	50.7	50.7	8.21	4.97	4.97	50.7	50.7	53.2	44.3	44.3
Incremental Delay (d2), s/veh	0.00577	0.0152	0.000277	2.46e-05	0.000108	0.00577	0.0152	0.0324	0.000631	0.00278
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	50.7	50.7	8.21	4.97	4.97	50.7	50.7	53.2	44.3	44.3
Level Of Service	D	D	A	A	A	D	D	D	D	D
Total Delay, veh-hr	0.00141	0.00282	0.000456	0.000138	0.000152	0.00141	0.00282	0.00296	0.00123	0.00135
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	9.7	9.7	75.6	85.5	85.5	9.7	9.7	7.0	16.9	16.9
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	50.7	--	--	6.5	--	50.7	--	--	48.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*121*	**Site Name:**	*N 29.734099, W 95.418683*
Cross Street:	*Richmond Ave & Kirby Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:30*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Kirby Dr)

@ Node 121 From \ To	Kirby Dr (NB)	Richmond Ave (WB)	Kirby Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Kirby Dr (SB)				
Richmond Ave (EB)				
Kirby Dr (NB)				

[Flow Field] = Volume

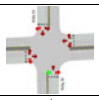
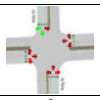
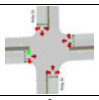
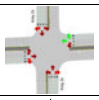
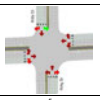
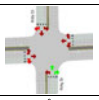
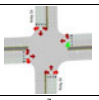
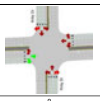
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Kirby Dr (SB)			Richmond Ave (EB)				Kirby Dr (NB)		
	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	36.9 sec
Level of Service:	D
Offset:	115.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	8.0	6.0	9.0	6.0	8.0	6.0	9.0
Max Green	17.5	40.5	17.5	22.5	8.5	49.5	17.5	22.5
Yellow	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Red Clearance	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Lost Time	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Recall Mode	None	Max	None	Max	Max	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Ped Walk + FDW	11.5	19.0	19.5	22.0	13.5	19.0	9.5	22.0
Coordinated	No	Yes	No	No	No	No	No	No
Split	23.0	46.0	23.0	28.0	14.0	55.0	23.0	28.0
Max Inhibit	True	False	True	True	True	True	True	True
Opt Min Green	11.5	13.5	11.5	14.5	11.5	13.5	11.5	14.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	5, 6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

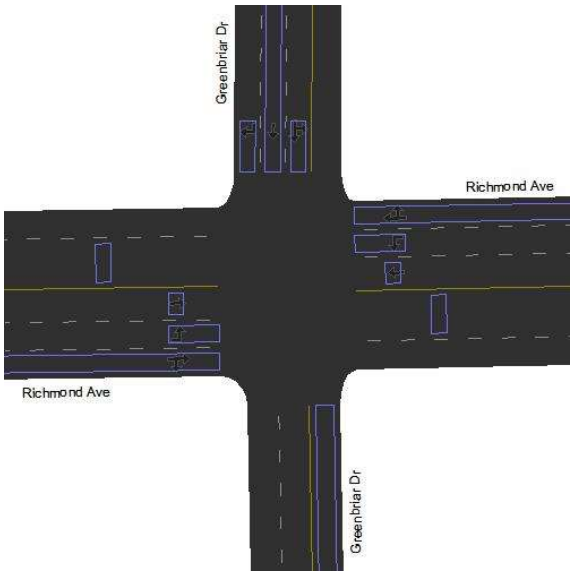
Lane Group	Richmond Ave (WB)			Kirby Dr (SB)			Richmond Ave (EB)			Kirby Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900
Capacity (c), veh/h	150	887	443	128	1889	945	150	713	356	89	1806	903
Available Capacity (ca), veh/h	264	713	356	128	1283	641	264	713	356	264	1568	784
Volume-to-Capacity Ratio (X)	0.00133	0.000113	0.000248	0.00078	5.29e-05	0.000116	0.00133	0.00014	0.000309	0.00113	5.54e-05	0.000122
Green Ratio (g/C)	0.08	0.23	0.23	0.07	0.50	0.50	0.08	0.19	0.19	0.05	0.48	0.48
Assigned Phase	7	4	4	5	2	2	3	8	8	1	6	6
Max. Allowable Headway (MAH), s/veh	3.26	4.32	4.32	3.26	4.77	4.77	3.26	4.32	4.32	3.26	4.77	4.77
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.5	28.0	28.0	14.0	65.2	65.2	15.5	28.0	28.0	11.4	62.5	62.5
Uniform Delay (d1), s/veh	50.5	35.3	35.3	51.8	15.2	15.2	50.5	39.6	39.6	54.3	16.5	16.5
Incremental Delay (d2), s/veh	0.016	0.000229	0.00101	0.011	5.04e-05	0.000222	0.016	0.000355	0.00156	0.023	5.52e-05	0.000243
Initial Queue Delay (d3), s/veh:	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	50.5	35.3	35.3	51.8	15.2	15.2	50.5	39.6	39.6	54.3	16.5	16.5
Level Of Service	D	D	D	D	B	B	D	D	D	D	B	B
Total Delay, veh-hr	0.0028	0.00098	0.00108	0.00144	0.000421	0.000464	0.0028	0.0011	0.00121	0.00151	0.000459	0.000505
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	10.0	28.0	28.0	8.5	59.7	59.7	10.0	22.5	22.5	5.9	57.0	57.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	-	--	42.7	--	--	27.0	--	--	44.9	--	--	28.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*122*	**Site Name:**	*N 29.734214, W 95.412911*
Cross Street:	*Richmond Ave & Greenbriar Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:37*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Greenbriar Dr)

@ Node 122 From \ To	Greenbriar Dr (NB)	Richmond Ave (WB)	Greenbriar Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)	*14.0*			
Greenbriar Dr (SB)				*18.0*
Richmond Ave (EB)				
Greenbriar Dr (NB)				

[Flow Field] = Volume

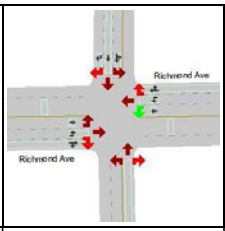
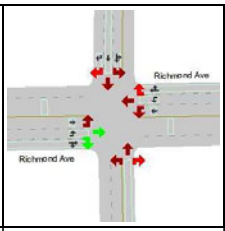
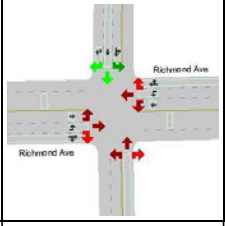
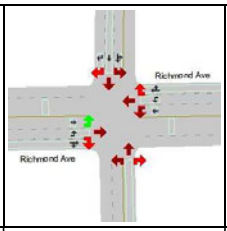
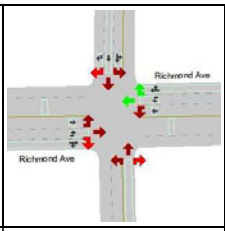
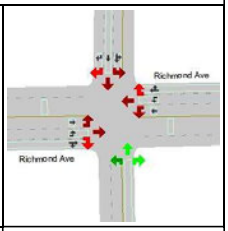
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Greenbriar Dr (SB)			Richmond Ave (EB)				Greenbriar Dr (NB)			
	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *24.3 sec*
Level of Service: *C*
Offset: *35.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	4.0	10.0	6.0	3.0	10.0	6.0
Max Green	17.0	30.0	58.0	17.0	30.0	58.0
Yellow	3.6	3.6	3.2	3.6	3.6	3.2
Red Clearance	1.4	1.4	1.8	1.4	1.4	1.8
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	Max	Min	Max	Max	Min	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	12.0	8.0	8.0	12.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.0	0.2	0.2	0.0	0.2
Ped Walk + FDW	23.0	12.0	17.0	33.0	12.0	17.0
Coordinated	No	No	No	No	Yes	No
Split	22.0	35.0	63.0	22.0	35.0	63.0
Max Inhibit	True	True	True	True	False	True
Opt Min Green	9.0	15.0	11.0	8.0	15.0	11.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Richmond Ave (WB)			Greenbriar Dr (SB)			Richmond Ave (EB)			Greenbriar Dr (NB)
	L	T	T+R	L+T	T	R	L	T	T+R	LTR
Adjusted Flow, veh/h	0	0	14	18	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1890	1878	1900	1609	1809	1976	1900	1900
Capacity (c), veh/h	558	494	473	756	918	778	256	165	158	918
Available Capacity (ca), veh/h	256	494	473	756	918	778	256	494	475	918
Volume-to-Capacity Ratio (X)	0.000359	0.000202	0.0297	0.0238	0.000109	0.000129	0.00078	0.000607	0.000695	0.000436
Green Ratio (g/C)	0.31	0.25	0.25	0.48	0.48	0.48	0.14	0.08	0.08	0.48
Assigned Phase	1	6	6	4	4	4	5	2	2	8
Max. Allowable Headway (MAH), s/veh	2.76	4.43	4.43	0.78	0.78	0.78	2.76	3.36	3.36	4.43
Queue Service Time (gs), s	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	42.0	35.0	35.0	63.0	63.0	63.0	22.0	15.0	15.0	63.0

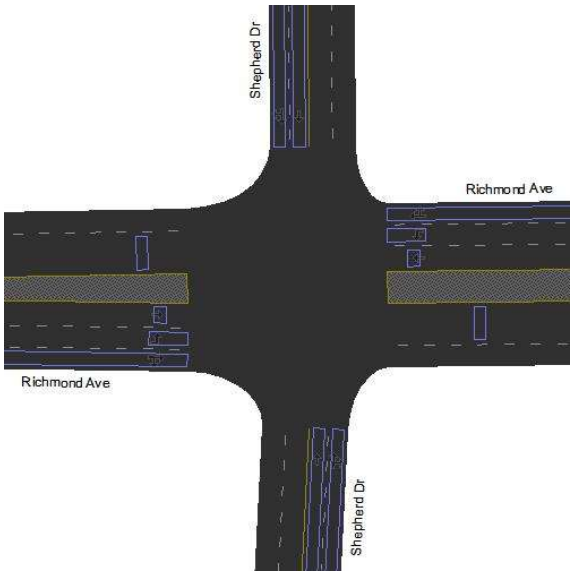
Uniform Delay (d1), s/veh	28.7	33.8	34	16.2	16	16	44.2	50.4	50.4	16
Incremental Delay (d2), s/veh	0.00116	0.000738	0.116	0.0581	0.000213	0.000298	0.00549	0.00664	0.00791	0.000854
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	28.7	33.8	34.1	16.3	16	16	44.2	50.4	50.4	16
Level Of Service	C	C	C	B	B	B	D	D	D	B
Total Delay, veh-hr	0.00159	0.000938	0.133	0.0814	0.000445	0.000445	0.00246	0.0014	0.00154	0.00178
Fully Stopped (Nf), veh/ln	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	37.0	30.0	30.0	58.0	58.0	58.0	17.0	10.0	10.0	58.0
Approach Volume, veh/h	--	--	14	--	18	--	--	--	0	0
Approach Delay, s/veh	--	--	34.0	--	16.3	--	--	--	47.4	16.0

TransModeler® Intersection Report

Site Information

Intersection ID:	*123*	**Site Name:**	*N 29.734240, W 95.410690*
Cross Street:	*Richmond Ave & Shepherd Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:22:42*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Shepherd Dr)

@ Node 123 From \ To	Shepherd Dr (NB)	Richmond Ave (WB)	Shepherd Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Shepherd Dr (SB)				
Richmond Ave (EB)				
Shepherd Dr (NB)				

[Flow Field] = Volume

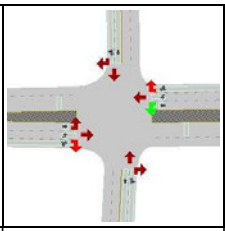
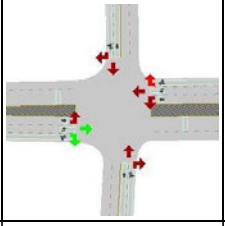
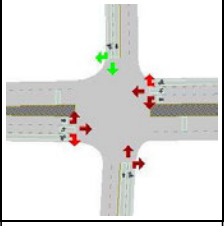
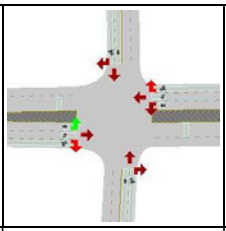
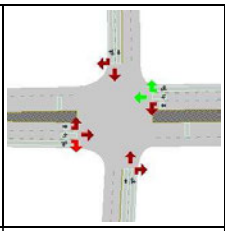
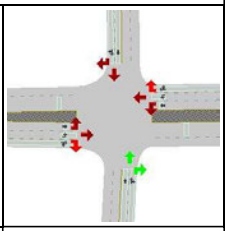
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Shepherd Dr (SB)		Richmond Ave (EB)				Shepherd Dr (NB)	
	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave	Richmond Ave	Shepherd Dr	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	EBL	EBU	EBR	EBT	NBT	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *36.0 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	5.0	4.0	5.0	5.0	4.0	5.0
Max Green	10.0	34.0	60.8	9.8	34.0	60.8
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.4	1.4	1.6	1.6	1.4	1.6
Lost Time	5.0	5.0	5.2	5.2	5.0	5.2
Recall Mode	None	Min	Min	None	Min	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	2.0	2.5	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	6.0	7.0	7.0	6.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	25.0	15.0	17.0	19.8	15.0	17.0
Coordinated	No	Yes	No	No	No	No
Split	15.0	39.0	66.0	15.0	39.0	66.0
Max Inhibit	True	False	True	True	True	True
Opt Min Green	10.0	9.0	10.2	10.2	9.0	10.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2, 1	4
Ring - 2	6, 5	8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

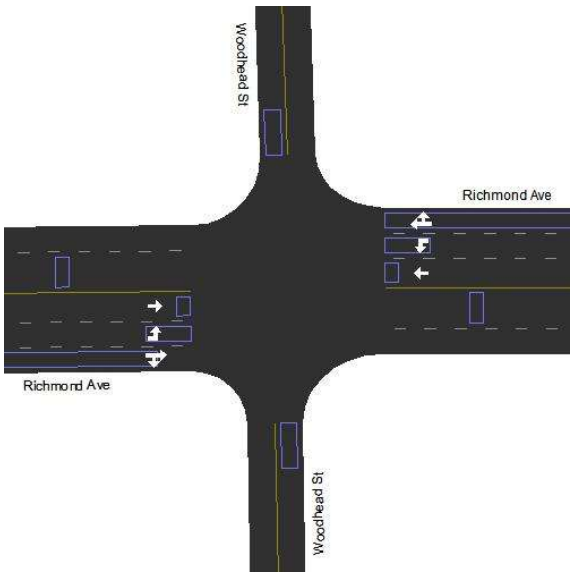
Lane Group	Richmond Ave (WB)			Shepherd Dr (SB)		Richmond Ave (EB)			Shepherd Dr (NB)	
	L	T	T+R	T	T+R	L	T	T+R	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1900	1900	1809	1976	1900	1900	1900
Capacity (c), veh/h	151	126	121	138	138	1330	1418	1363	138	138
Available Capacity (ca), veh/h	151	560	538	963	963	148	560	538	963	963
Volume-to-Capacity Ratio (X)	0.00133	0.000792	0.000907	0.000727	0.0008	0.00015	7.05e-05	8.07e-05	0.000727	0.0008
Green Ratio (g/C)	0.08	0.06	0.06	0.07	0.07	0.74	0.72	0.72	0.07	0.07
Assigned Phase	1	6	6	4	4	5	2	2	8	8
Max. Allowable Headway (MAH), s/veh	3.76	3.36	3.36	4.27	4.27	3.26	3.36	3.36	4.27	4.27
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.0	12.7	12.7	13.9	13.9	93.5	91.1	91.1	13.9	13.9

Uniform Delay (d1), s/veh	50.4	52.6	52.6	51.6	51.6	4.2	4.78	4.78	51.6	51.6
Incremental Delay (d2), s/veh	0.0159	0.0113	0.0135	0.00952	0.0105	0.000203	8.95e-05	0.000107	0.00952	0.0105
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	50.4	52.6	52.6	51.6	51.6	4.2	4.78	4.78	51.6	51.6
Level Of Service	D	D	D	D	D	A	A	A	D	D
Total Delay, veh-hr	0.0028	0.00146	0.00161	0.00143	0.00158	0.000233	0.000133	0.000146	0.00143	0.00158
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	10.0	7.7	7.7	8.7	8.7	88.3	86.1	86.1	8.7	8.7
Approach Volume, veh/h	--	--	0	--	0	--	--	0	--	0
Approach Delay, s/veh	--	--	51.5	--	51.6	--	--	4.5	--	51.6

TransModeler® Intersection Report

Site Information			
Intersection ID:	*125*	**Site Name:**	*N 29.734295, W 95.404482*
Cross Street:	*Richmond Ave & Woodhead St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:24:53*		

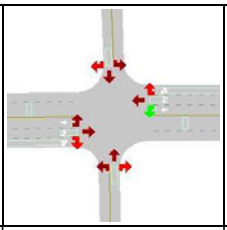
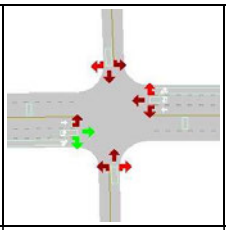
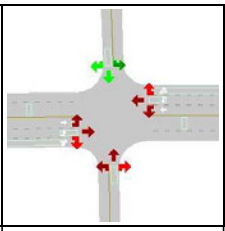
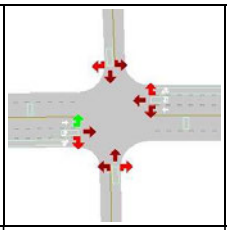
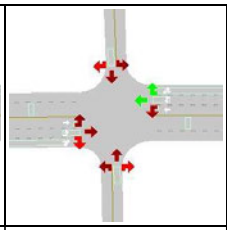
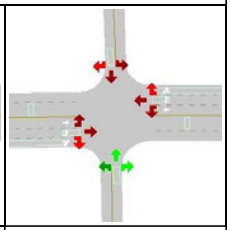
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *86.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	*1*	*2*	*4*	*5*	*6*	*8*
Min Green	*6.0*	*10.0*	*6.0*	*6.0*	*10.0*	*6.0*
Max Green	*15.7*	*60.2*	*29.2*	*15.5*	*60.2*	*29.2*
Yellow	*3.6*	*3.6*	*3.2*	*3.2*	*3.6*	*3.2*
Red Clearance	*1.3*	*1.3*	*1.9*	*1.9*	*1.3*	*1.9*
Lost Time	*4.9*	*4.9*	*5.1*	*5.1*	*4.9*	*5.1*
Recall Mode	*None*	*Min*	*None*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*2.5*	*2.5*	*3.0*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*8.0*	*8.0*	*12.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*14.0*	*14.0*	*19.0*	*19.0*	*14.0*	*19.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*20.6*	*65.1*	*34.3*	*20.6*	*65.1*	*34.3*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*10.9*	*14.9*	*11.1*	*11.1*	*14.9*	*11.1*

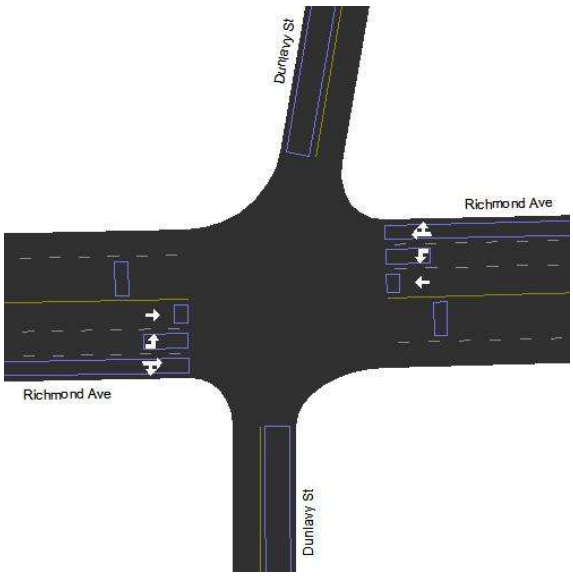
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	
Ring - 2	*6, 5*	*8*	

TransModeler® Intersection Report

Site Information			
Intersection ID:	*126*	**Site Name:**	*N 29.734320, W 95.402110*
Cross Street:	*Richmond Ave & Dunlavy St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:25:9*		

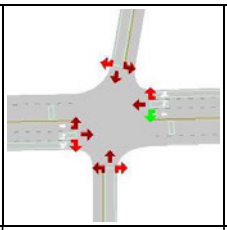
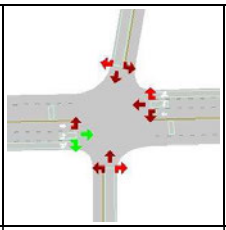
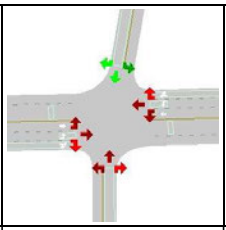
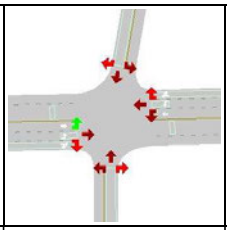
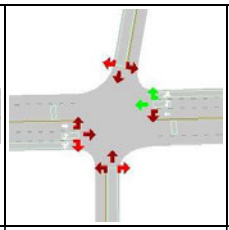
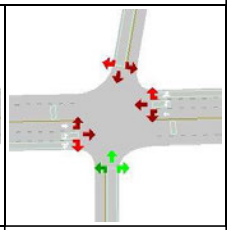
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *78.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	*1*	*2*	*4*	*5*	*6*	*8*
Min Green	*6.0*	*9.0*	*6.0*	*6.0*	*9.0*	*6.0*
Max Green	*12.0*	*50.0*	*43.0*	*12.0*	*50.0*	*43.0*
Yellow	*3.6*	*3.6*	*3.2*	*3.2*	*3.6*	*3.2*
Red Clearance	*1.4*	*1.4*	*1.8*	*1.8*	*1.4*	*1.8*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Min*	*None*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*3.5*	*3.5*	*3.0*	*3.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*11.0*	*11.0*	*8.0*	*8.0*	*11.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*16.0*	*16.0*	*23.0*	*23.0*	*16.0*	*23.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*17.0*	*55.0*	*48.0*	*17.0*	*55.0*	*48.0*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*11.0*	*14.0*	*11.0*	*11.0*	*14.0*	*11.0*

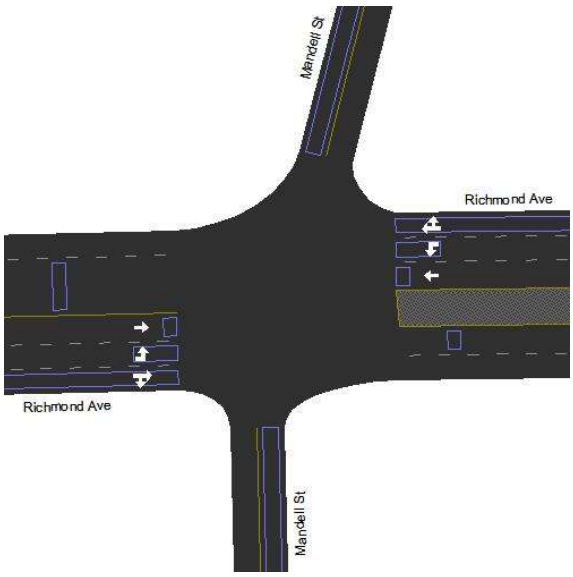
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	
Ring - 2	*6, 5*	*8*	

TransModeler® Intersection Report

Site Information			
Intersection ID:	*127*	**Site Name:**	*N 29.734378, W 95.399520*
Cross Street:	*Richmond Ave & Mandell St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:25:19*		

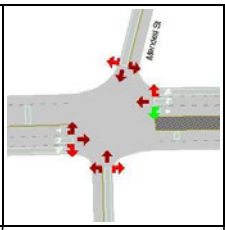
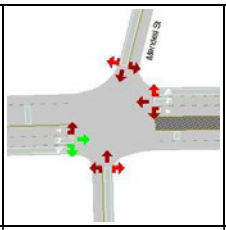
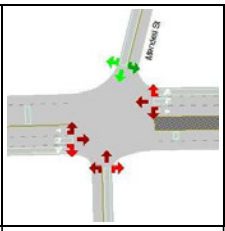
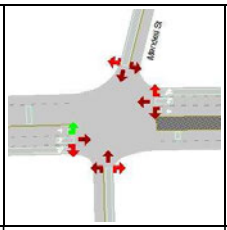
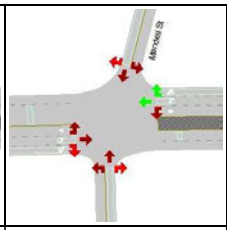
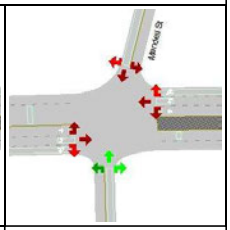
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *92.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	*1*	*2*	*4*	*5*	*6*	*8*
Min Green	*7.0*	*10.0*	*7.0*	*7.0*	*10.0*	*7.0*
Max Green	*14.5*	*67.1*	*23.5*	*14.3*	*67.2*	*23.5*
Yellow	*3.6*	*3.6*	*3.2*	*3.2*	*3.6*	*3.2*
Red Clearance	*1.3*	*1.3*	*1.9*	*1.9*	*1.2*	*1.9*
Lost Time	*4.9*	*4.9*	*5.1*	*5.1*	*4.8*	*5.1*
Recall Mode	*None*	*Min*	*None*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*2.5*	*2.5*	*3.0*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*9.0*	*9.0*	*12.0*	*9.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*18.0*	*18.0*	*21.0*	*21.0*	*18.0*	*21.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*19.4*	*72.0*	*28.6*	*19.4*	*72.0*	*28.6*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*11.9*	*14.9*	*12.1*	*12.1*	*14.8*	*12.1*

Phase Sequence and Concurrency Group

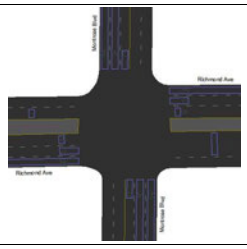
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	
Ring - 2	*6, 5*	*8*	

TransModeler® Intersection Report

Site Information

Intersection ID:	*128*	**Site Name:**	*N 29.734503, W 95.391142*
Cross Street:	*Richmond Ave & Montrose Blvd*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:23:9*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Montrose Blvd)

(c) Node 128 From \ To	Montrose Blvd (NB)	Richmond Ave (WB)	Montrose Blvd (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Montrose Blvd (SB)		*173.0*		
Richmond Ave (EB)	*140.0*			
Montrose Blvd (NB)				

[Flow Field] = Volume

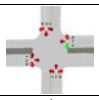
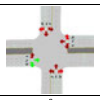
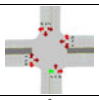
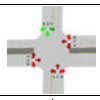
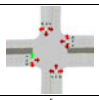
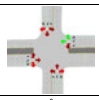
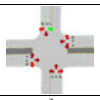
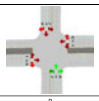
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Montrose Blvd (SB)			Richmond Ave (EB)				Montrose Blvd (NB)		
	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	43.3 sec
Level of Service:	D
Offset:	88.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	4.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Max Green	13.9	20.9	21.9	42.9	13.9	20.9	10.9	53.9
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Recall Mode	Max	Max	None	None	Max	None	None	None
Memory Mode	Look	Look	Look	Look	Look	Look	Look	Look
Passage/Extension	2.5	2.5	2.5	3.0	2.5	3.0	2.5	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	6.0	6.0	6.0	10.0	6.0	10.0	6.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	10.9	17.0	8.9	17.0	16.9	17.0	15.9	17.0
Coordinated	No	Yes	No	No	No	No	No	No
Split	19.0	26.0	27.0	48.0	19.0	26.0	16.0	59.0
Max Inhibit	True	False	True	True	True	True	True	True
Opt Min Green	9.1	13.1	9.1	13.1	9.1	13.1	9.1	13.1

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

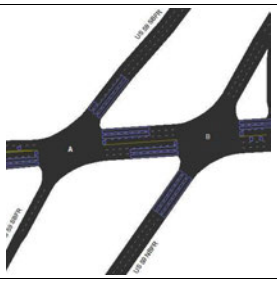
Lane Group	Richmond Ave (WB)			Montrose Blvd (SB)			Richmond Ave (EB)			Montrose Blvd (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	173	140	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1809	1900	1795	1809	1976	1620	1809	1900	1900
Capacity (c), veh/h	210	143	138	211	247	233	1087	1079	994	153	191	190
Available Capacity (ca), veh/h	210	344	331	253	679	642	210	344	317	415	853	853
Volume-to-Capacity Ratio (X)	0.000955	0.00068	0.000746	0.000474	0.000405	0.741	0.131	9.21e-05	0.000101	0.000654	0.000501	0.000549
Green Ratio (g/C)	0.12	0.07	0.07	0.09	0.13	0.13	0.59	0.55	0.55	0.06	0.10	0.10
Assigned Phase	1	6	6	7+4	4	4	5	2	2	3+8	8	8
Max. Allowable Headway (MAH), s/veh	3.26	4.45	4.45	3.26	5.45	5.45	3.26	3.97	3.97	3.26	5.27	5.27
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	11.1	4.1	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Phase Call Probability (pc)	1.00	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	1.1	1.1	0.1	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	19.0	13.8	13.8	13.2	20.7	20.7	75.9	70.7	70.7	9.6	17.1	17.1
Uniform Delay (d1), s/veh	46.9	51.6	51.6	50	45.4	50.3	11	12.4	12.4	54.4	48.6	48.6
Incremental Delay (d2), s/veh	0.00821	0.00655	0.00975	0.00405	0.00295	19	0.255	0.000154	0.000183	0.0077	0.00474	0.00519
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	46.9	51.6	51.6	50	45.4	69.3	11.2	12.4	12.4	54.4	48.6	48.6
Level Of Service	D	D	D	D	D	E	B	B	B	D	D	D
Total Delay, veh-hr	0.00261	0.0014	0.00147	0.00139	0.00126	3.33	0.436	0.000341	0.000345	0.00151	0.00129	0.00141
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	5.1	1.7	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	6.3	1.8	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	13.9	8.7	8.7	10.5	15.6	15.6	70.8	65.6	65.6	6.9	12.0	12.0
Approach Volume, veh/h	--	--	0	--	--	173	--	--	140	--	--	0
Approach Delay, s/veh	--	--	49.3	--	--	69.2	--	--	11.2	--	--	50.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*129,130*	**Site Name:**	*N 29.734508, W 95.385779*
Cross Street:	*Richmond Ave & US 59 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:15:25*		

" "

Intersection Geometry



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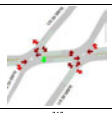
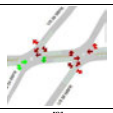
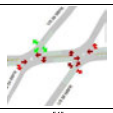
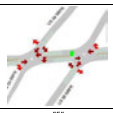
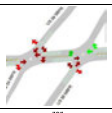
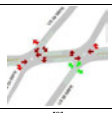
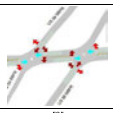
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *133.0 sec*
Offset: *75.0 sec*
Coordinate Begin of: *Green*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States							
"ID"	"1"	"2"	"4"	"5"	"6"	"8"	"9"
"Min Green"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"0.0"
"Max Green"	"56.5"	"31.5"	"18.5"	"54.5"	"33.5"	"18.5"	"8.5"
"Yellow"	"3.5"	"3.5"	"3.5"	"3.5"	"3.5"	"3.5"	"3.5"
"Red Clearance"	"1.0"	"1.0"	"1.0"	"1.0"	"1.0"	"1.0"	"1.0"
"Last Time"	"4.5"	"4.5"	"4.5"	"4.5"	"4.5"	"4.5"	"4.5"
"Recall Mode"	"None"	"Max"	"None"	"None"	"Min"	"None"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"18.0"	"18.0"	"16.0"	"18.0"	"18.0"	"18.0"	"18.0"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"
"Split"	"61.0"	"36.0"	"23.0"	"59.0"	"38.0"	"23.0"	"13.0"
"Max Inhibit"	"True"	"False"	"True"	"True"	"True"	"True"	"True"
"Opt Min Green"	"9.5"	"9.5"	"9.5"	"9.5"	"9.5"	"9.5"	"4.5"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"1"	"9"
Ring - 2	"5"	"6", "8"	

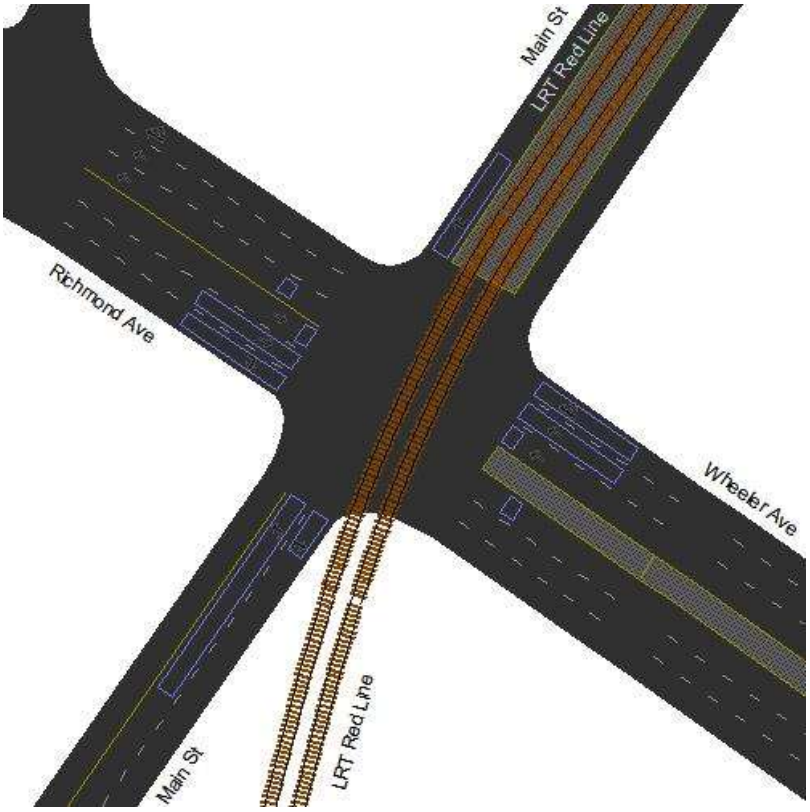
"
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*131*	**Site Name:**	*N 29.734110, W 95.382982*
Cross Street:	*Richmond Ave & Main St*	**Number of Plans:**	*1*
Analysis Date:	*2023/4/6 17:33:8*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Main St)

@ Node 131 From \ To	Main St (NEB)	LRT Red Line (NB)	Richmond Ave (NWB)	Main St (SWB)	LRT Red Line (SWB)	Wheeler Ave (SEB)
Richmond Ave (SEB)						
Main St (NEB)			*64.0*			
LRT Red Line (NB)						
Wheeler Ave (NWB)						
LRT Red Line (SWB)						
Main St (SB)			*120.0*			

[Flow Field] = Volume

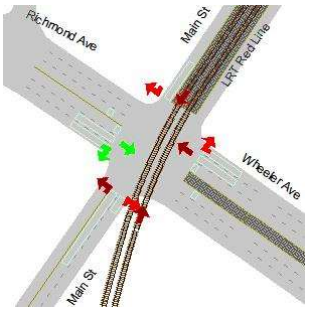
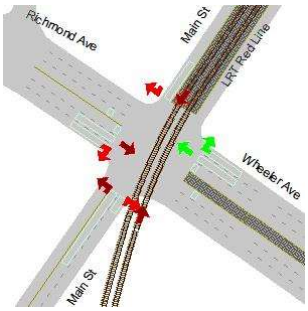
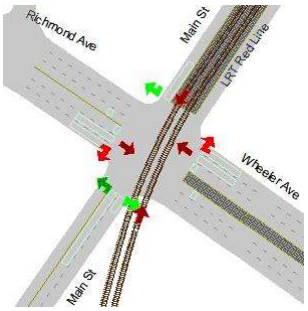
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (SEB)		Main St (NEB)		Wheeler Ave (NWB)		Main St (SB)
	Main St	Wheeler Ave	Richmond Ave	Wheeler Ave	Main St	Richmond Ave	Richmond Ave
	SEBR	SEBT	NEBL	NEBR	NWBR	NWBT	SBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *4.2 sec*
Level of Service: *A*
Offset: *57.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States			
ID	*2*	*6*	*8*
Min Green	*12.0*	*12.0*	*7.0*
Max Green	*47.1*	*47.1*	*29.2*
Yellow	*3.2*	*3.2*	*3.2*
Red Clearance	*2.7*	*2.7*	*4.6*
Lost Time	*5.9*	*5.9*	*7.8*
Recall Mode	*Min*	*Min*	*Min*
Memory Mode	*Lock*	*Lock*	*Lock*
Passage/Extension	*2.0*	*2.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*
Max Initial	*14.0*	*14.0*	*9.0*
Time before Reduction	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*24.0*	*24.0*	*26.0*
Coordinated	*No*	*No*	*Yes*
Split	*53.0*	*53.0*	*37.0*
Max Inhibit	*True*	*True*	*False*
Opt Min Green	*17.9*	*17.9*	*14.8*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*2*	
Ring - 2	*6*	*8*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination							
Lane Group	Richmond Ave (SEB)		Main St (NEB)		Wheeler Ave (NWB)		Main St (SB)
	T	R	L	R	T	T+R	R
Adjusted Flow, veh/h	*0*	*0*	*64*	*0*	*0*	*0*	*120*
Adjusted Saturation Flow, veh/h	*3800*	*1609*	*1809*	*1609*	*3800*	*1900*	*1609*
Capacity (c), veh/h	*518*	*219*	*1367*	*1145*	*518*	*259*	*1145*
Available Capacity (ca), veh/h	*1989*	*842*	*667*	*522*	*1989*	*994*	*522*
Volume-to-Capacity Ratio (X)	*0.000193*	*0.000456*	*0.0468*	*8.73e-05*	*0.000193*	*0.000425*	*0.105*
Green Ratio (g/C)	*0.14*	*0.14*	*0.71*	*0.71*	*0.14*	*0.14*	*0.71*
Assigned Phase	*2*	*2*	*8*	*8*	*6*	*6*	*8*
Max. Allowable Headway (MAH), s/veh	*3.18*	*3.18*	*3.56*	*3.56*	*3.16*	*3.16*	*3.56*
Queue Service Time (gs), s	*0.0*	*0.0*	*1.0*	*0.0*	*0.0*	*0.0*	*2.1*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*1.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.4*	*0.4*	*0.0*	*0.0*	*0.4*
Phase Duration (Dp), s	*18.2*	*18.2*	*71.8*	*71.8*	*18.2*	*18.2*	*71.8*
Uniform Delay (d1), s/veh	*33.6*	*33.6*	*3.88*	*3.75*	*33.6*	*33.6*	*4.05*
Incremental Delay (d2), s/veh	*0.000671*	*0.00374*	*0.0647*	*0.000137*	*0.000671*	*0.00295*	*0.184*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*33.6*	*33.6*	*3.95*	*3.75*	*33.6*	*33.6*	*4.23*
Level Of Service	*C*	*C*	*A*	*A*	*C*	*C*	*A*
Total Delay, veh-hr	*0.000932*	*0.000933*	*0.0702*	*0.000104*	*0.000932*	*0.00103*	*0.141*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.5*	*0.0*	*0.0*	*0.0*	*0.6*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.5*	*0.0*	*0.0*	*0.0*	*0.7*
Effective Green Time, s	*12.3*	*12.3*	*64.0*	*64.0*	*12.3*	*12.3*	*64.0*
Approach Volume, veh/h	*0*	--	*64*	--	--	*0*	*120*
Approach Delay, s/veh	*33.6*	--	*3.9*	--	--	*33.6*	*4.2*

TransModeler® Intersection Report

Site Information			
Intersection ID:	*132*	**Site Name:**	*N 29.733601, W 95.382143*
Cross Street:	*Fannin St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:15:10*		

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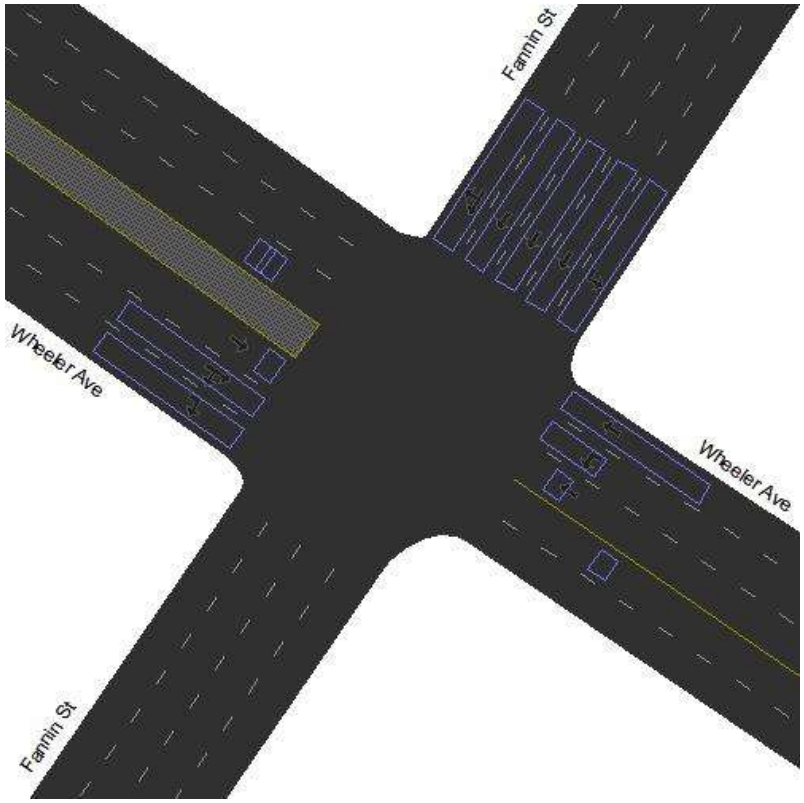
Intersection Geometry



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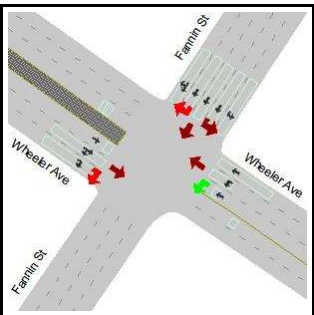
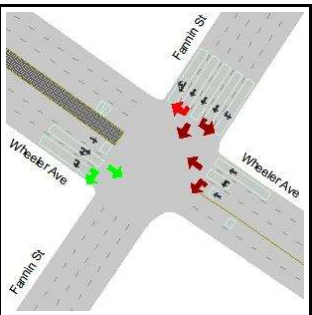
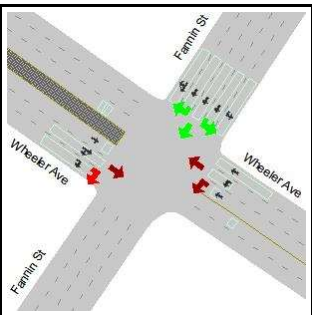
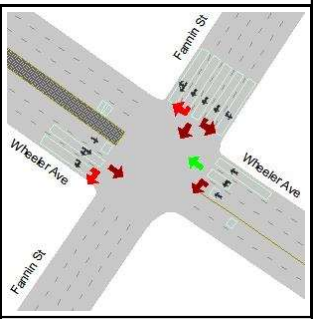
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *90.0 sec*
Offset: *33.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing				
Item Name \ Signal States				
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"Min Green"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Max Green"	*"8.5"*	*"32.5"*	*"35.5"*	*"32.5"*
"Yellow"	*"3.5"*	*"3.5"*	*"3.5"*	*"3.5"*
"Red Clearance"	*"1.0"*	*"1.0"*	*"1.0"*	*"1.0"*
"Lost Time"	*"4.5"*	*"4.5"*	*"4.5"*	*"4.5"*
"Recall Mode"	*"None"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*
"Ped Walk + FDW"	*"18.0"*	*"18.0"*	*"18.0"*	*"18.0"*
"Coordinated"	*"No"*	*"No"*	*"Yes"*	*"No"*
"Split"	*"13.0"*	*"37.0"*	*"40.0"*	*"37.0"*
"Max Inhibit"	*"True"*	*"True"*	*"False"*	*"True"*
"Opt Min Green"	*"9.5"*	*"9.5"*	*"9.5"*	*"9.5"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"6"*	*"4"*	*"3"*

Ring - 2		*"8"*	

"

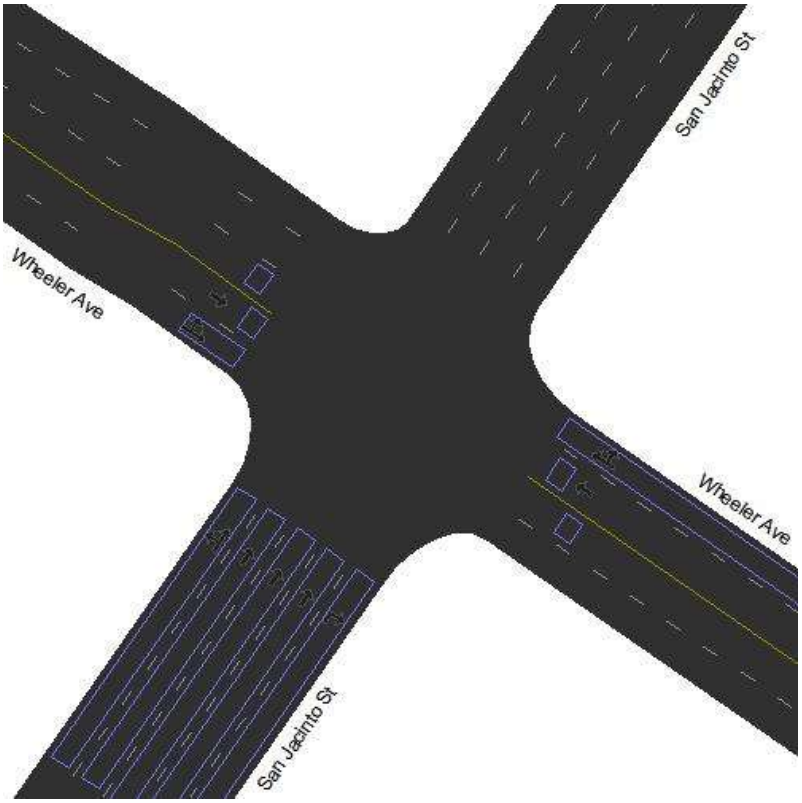
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*133*	**Site Name:**	*N 29.733096, W 95.381297*
Cross Street:	*Wheeler Ave & San Jacinto St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:15:0*		

" "

Intersection Geometry

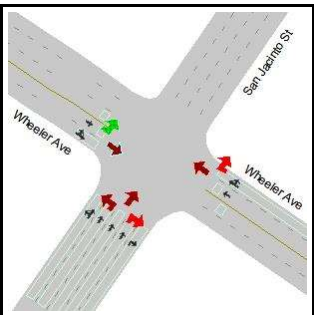
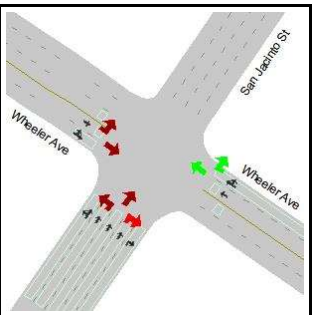
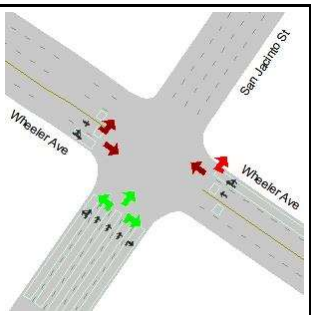
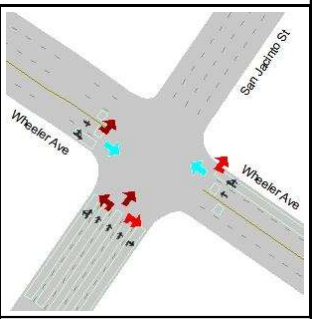


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *103.0 sec*
Offset: *61.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Flexible*

"" " "

Phasing				
Item Name \ Signal States				
"ID"	*"2"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"12.0"*	*"12.0"*	*"12.0"*	*"0.0"*
"Max Green"	*"55.0"*	*"55.0"*	*"25.0"*	*"8.0"*
"Yellow"	*"3.5"*	*"3.5"*	*"3.5"*	*"3.5"*
"Red Clearance"	*"1.5"*	*"1.5"*	*"1.5"*	*"1.5"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"13.0"*	*"13.0"*	*"13.0"*	*"13.0"*
"Coordinated"	*"No"*	*"No"*	*"Yes"*	*"No"*
"Split"	*"60.0"*	*"60.0"*	*"30.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"17.0"*	*"17.0"*	*"17.0"*	*"5.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"8"*	*"9"*

Ring - 2	*"6"*		

"

"

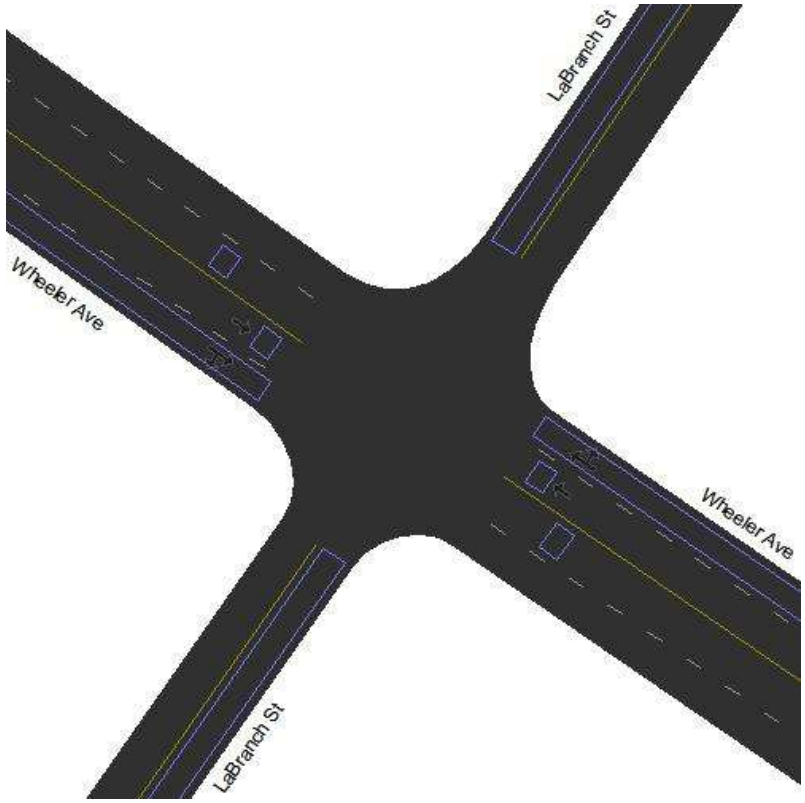
TransModeler® Intersection Report

Site Information

Intersection ID:	*134*	**Site Name:**	*N 29.731564, W 95.378719*
Cross Street:	*LaBranch St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:14:50*		

" "

Intersection Geometry

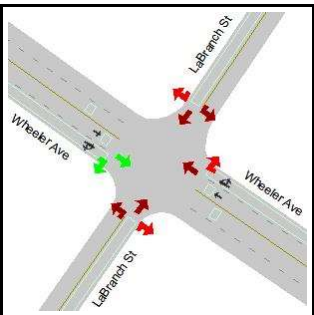
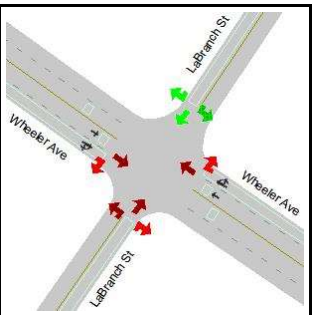
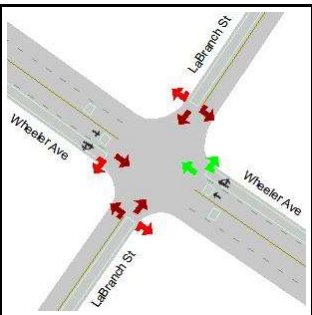
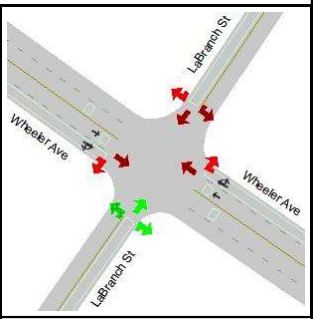


"

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*"Traffic Actuated"*
Cycle Length:	*72.0 sec*
Offset:	*54.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

"" " "

Phasing				
Item Name \ Signal States				
"ID"	*"2"*	*"4"*	*"6"*	*"8"*
"Min Green"	*"7.0"*	*"4.0"*	*"7.0"*	*"4.0"*
"Max Green"	*"40.0"*	*"22.1"*	*"40.0"*	*"22.1"*
"Yellow"	*"3.6"*	*"3.2"*	*"3.6"*	*"3.2"*
"Red Clearance"	*"1.4"*	*"1.7"*	*"1.4"*	*"1.7"*
"Lost Time"	*"5.0"*	*"4.9"*	*"5.0"*	*"4.9"*
"Recall Mode"	*"Min"*	*"Min"*	*"Min"*	*"Min"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"3.0"*	*"1.0"*	*"3.0"*	*"1.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"9.0"*	*"6.0"*	*"9.0"*	*"6.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"12.0"*	*"11.0"*	*"12.0"*	*"11.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"45.0"*	*"27.0"*	*"45.0"*	*"27.0"*
"Max Inhibit"	*"False"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"12.0"*	*"8.9"*	*"12.0"*	*"8.9"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	

Ring - 2	*"6"*	*"8"*	

"

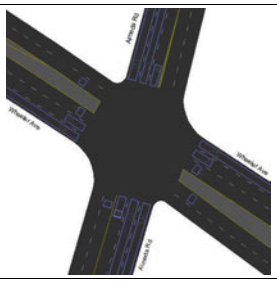
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*135*	**Site Name:**	*N 29.730102, W 95.376232*
Cross Street:	*Almeda Rd & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:14:34*		

" "

Intersection Geometry



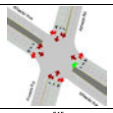
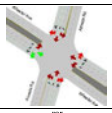
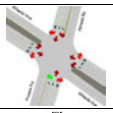
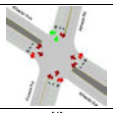
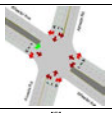
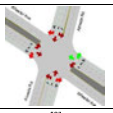
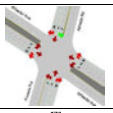
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *72.0 sec*
Offset: *66.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
"ID"	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"8"
"Min Green"	"6.0"	"6.0"	"8.0"	"10.0"	"6.0"	"6.0"	"6.0"	"10.0"
"Max Green"	"6.8"	"20.8"	"8.0"	"15.8"	"6.8"	"19.8"	"6.0"	"17.8"
"Yellow"	"3.2"	"3.2"	"3.0"	"3.6"	"3.6"	"3.2"	"3.0"	"3.6"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"1.6"	"1.6"	"3.0"	"2.0"	"1.6"
"Lost Time"	"5.2"	"5.2"	"5.0"	"5.2"	"5.2"	"6.2"	"5.0"	"5.2"
"Recall Mode"	"None"	"Min"	"None"	"Min"	"None"	"Min"	"None"	"Min"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"
"Passage/Extension"	"2.0"	"2.0"	"2.5"	"2.0"	"2.0"	"2.0"	"2.5"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"6.8"	"8.0"	"8.0"	"12.0"	"12.0"	"8.0"	"8.0"	"12.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"13.0"	"13.0"	"10.0"	"10.0"	"10.0"	"13.0"	"10.0"	"10.0"
"Coordinated"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"Yes"
"Split"	"12.0"	"26.0"	"13.0"	"21.0"	"12.0"	"26.0"	"11.0"	"23.0"
"Max Inhibit"	"True"	"True"	"True"	"True"	"True"	"True"	"True"	"False"
"Opt Min Green"	"11.2"	"11.2"	"13.0"	"15.2"	"11.2"	"12.2"	"11.0"	"15.2"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"4", "3"	
Ring - 2	"6", "5"	"7", "8"	

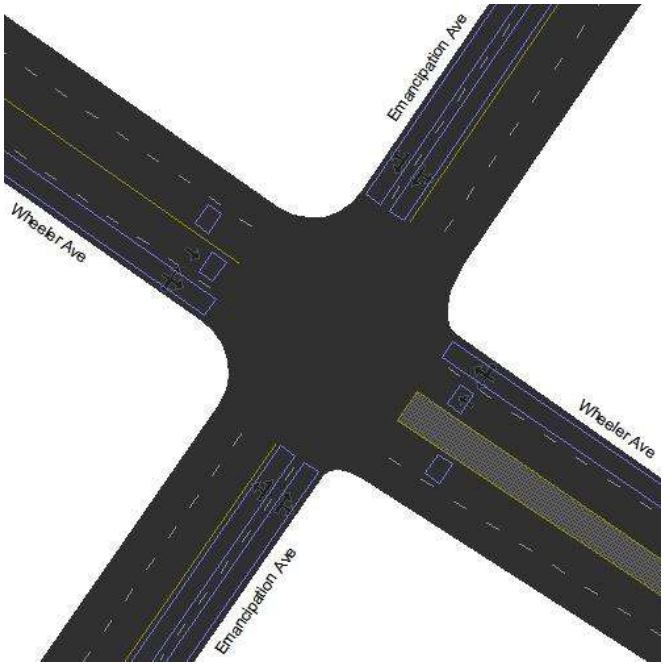
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*136*	**Site Name:**	*N 29.726946, W 95.370983*
Cross Street:	*Emancipation Ave & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:13:31*		

" "

Intersection Geometry



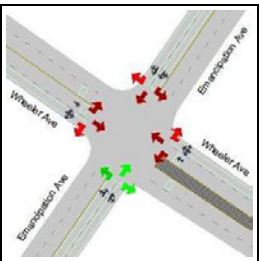
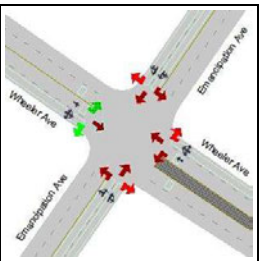
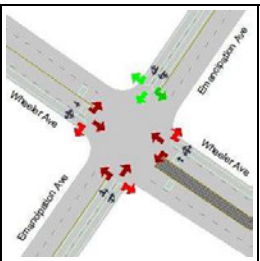
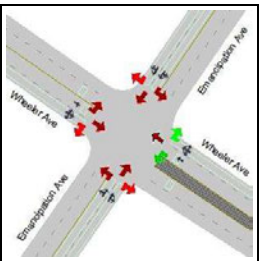
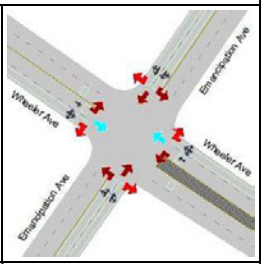
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *53.0 sec*
Coordinate Begin of: *Red*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States					
"ID"	*"2"*	*"4"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"8.0"*	*"8.0"*	*"8.0"*	*"8.0"*	*"0.0"*
"Max Green"	*"21.0"*	*"27.0"*	*"21.0"*	*"27.0"*	*"7.0"*
"Yellow"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Red Clearance"	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Lost Time"	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*
"Recall Mode"	*"Max"*	*"Max"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"24.0"*	*"24.0"*	*"24.0"*	*"24.0"*	*"24.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"24.0"*	*"24.0"*	*"24.0"*	*"24.0"*	*"24.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"27.0"*	*"33.0"*	*"27.0"*	*"33.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"True"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"6.0"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

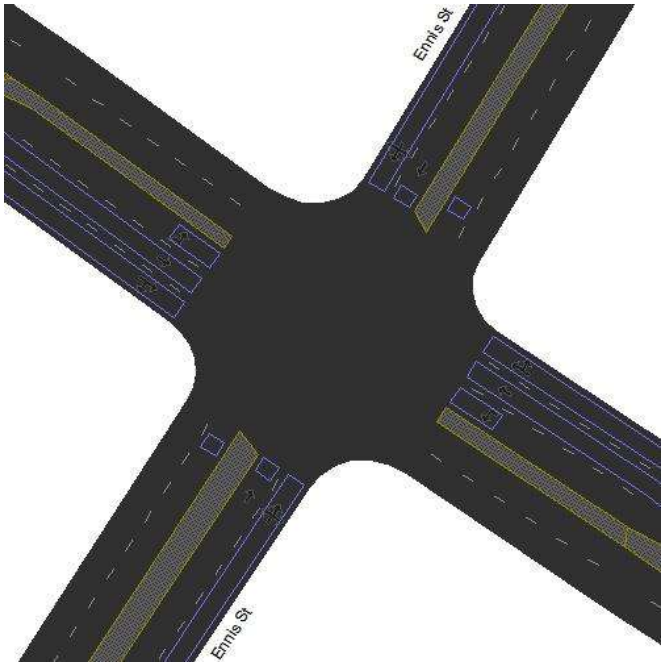
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*141*	**Site Name:**	*N 29.727578, W 95.362848*
Cross Street:	*Alabama St & Ennis St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:50*		

" "

Intersection Geometry

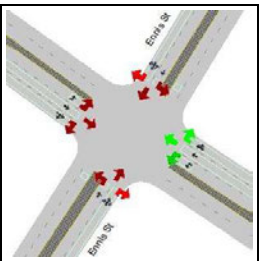
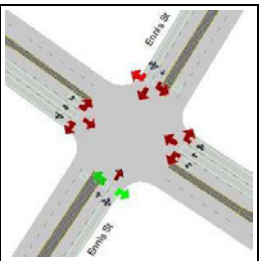
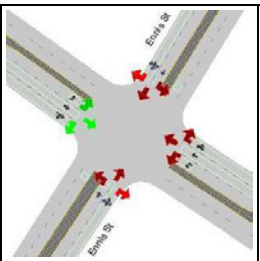
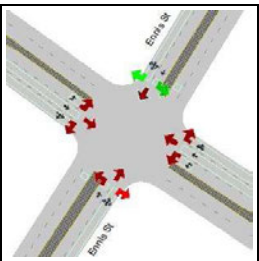
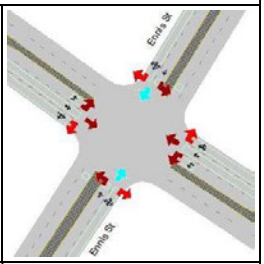


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
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"Min Green"	*"12.0"*	*"12.0"*	*"12.0"*	*"12.0"*	*"3.0"*
"Max Green"	*"16.0"*	*"34.0"*	*"16.0"*	*"34.0"*	*"8.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"Max"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"2.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"21.0"*	*"39.0"*	*"21.0"*	*"39.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"17.0"*	*"17.0"*	*"17.0"*	*"17.0"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

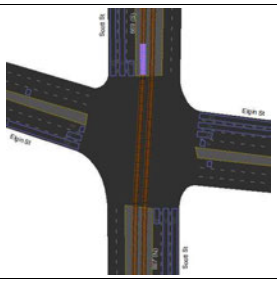
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*143*	**Site Name:**	*N 29.727838, W 95.349919*
Cross Street:	*Elgin St & 669 (S)*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:30*		

" "

Intersection Geometry



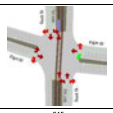
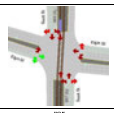
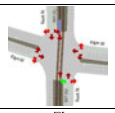
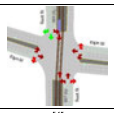
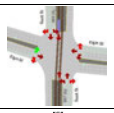
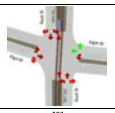
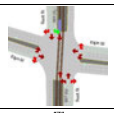
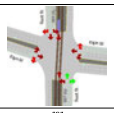
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *19.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
"ID"	*"1"*	*"2"*	*"3"*	*"4"*	*"5"*	*"6"*	*"7"*	*"8"*
"Min Green"	*"7.0"*	*"12.0"*	*"7.0"*	*"12.0"*	*"7.0"*	*"12.0"*	*"7.0"*	*"12.0"*
"Max Green"	*"24.0"*	*"29.0"*	*"12.3"*	*"27.3"*	*"24.0"*	*"29.0"*	*"10.3"*	*"29.2"*
"Yellow"	*"3.6"*	*"3.6"*	*"3.6"*	*"3.6"*	*"3.6"*	*"3.6"*	*"3.6"*	*"3.6"*
"Red Clearance"	*"3.4"*	*"3.4"*	*"3.1"*	*"3.1"*	*"3.4"*	*"3.4"*	*"3.1"*	*"3.2"*
"Last Time"	*"7.0"*	*"7.0"*	*"6.7"*	*"6.7"*	*"7.0"*	*"7.0"*	*"6.7"*	*"6.8"*
"Recall Mode"	*"None"*	*"None"*	*"None"*	*"Min"*	*"None"*	*"None"*	*"None"*	*"Min"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"2.5"*	*"2.5"*	*"2.5"*	*"2.5"*	*"2.5"*	*"2.5"*	*"2.5"*	*"2.5"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"9.0"*	*"14.0"*	*"9.0"*	*"14.0"*	*"9.0"*	*"14.0"*	*"9.0"*	*"14.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"11.0"*	*"37.0"*	*"11.3"*	*"33.0"*	*"11.0"*	*"28.0"*	*"11.3"*	*"33.0"*
"Coordinated"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"Yes"*
"Split"	*"31.0"*	*"36.0"*	*"19.0"*	*"34.0"*	*"31.0"*	*"36.0"*	*"17.0"*	*"36.0"*
"Max Inhibit"	*"True"*	*"True"*	*"True"*	*"True"*	*"True"*	*"True"*	*"True"*	*"False"*
"Opt Min Green"	*"14.0"*	*"19.0"*	*"13.7"*	*"18.7"*	*"14.0"*	*"19.0"*	*"13.7"*	*"18.8"*

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2", "1"*	*"4", "3"*	
Ring - 2	*"6", "5"*	*"7", "8"*	

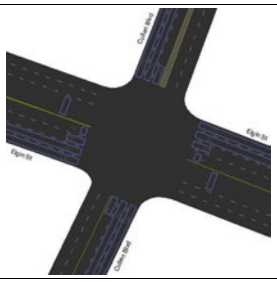
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*144*	**Site Name:**	*N 29.727301, W 95.343988*
Cross Street:	*Cullen Blvd & Elgin St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:23*		

" "

Intersection Geometry



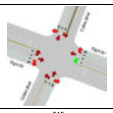
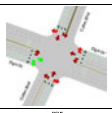
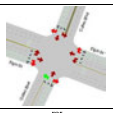
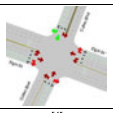
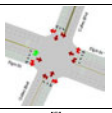
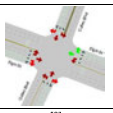
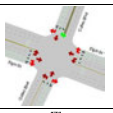
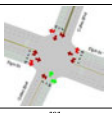
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *70.0 sec*
Coordinate Begin of: *Red*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States								
"ID"	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"8"
"Min Green"	"5.0"	"5.0"	"4.0"	"8.0"	"5.0"	"5.0"	"4.0"	"8.0"
"Max Green"	"21.0"	"30.0"	"25.0"	"23.2"	"21.0"	"30.0"	"23.2"	"25.0"
"Yellow"	"3.2"	"3.2"	"3.0"	"3.6"	"3.2"	"3.2"	"3.6"	"3.0"
"Red Clearance"	"1.8"	"1.8"	"2.0"	"2.2"	"1.8"	"1.8"	"2.2"	"2.0"
"Last Time"	"5.0"	"5.0"	"5.0"	"5.8"	"5.0"	"5.0"	"5.8"	"5.0"
"Recall Mode"	"None"	"None"	"None"	"None"	"None"	"None"	"None"	"Max"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"
"Passage/Extension"	"2.0"	"3.0"	"2.0"	"3.0"	"2.0"	"3.0"	"2.0"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"30.0"	"20.0"	"25.0"	"24.2"	"20.0"	"30.0"	"24.2"	"20.0"
"Time before Reduction"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time to Reduce"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"30.0"	"19.0"	"25.0"	"25.0"	"20.0"	"19.0"	"24.2"	"25.0"
"Coordinated"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"Yes"
"Split"	"26.0"	"35.0"	"30.0"	"29.0"	"26.0"	"35.0"	"29.0"	"30.0"
"Max Inhibit"	"True"	"True"	"True"	"True"	"True"	"True"	"True"	"False"
"Opt Min Green"	"10.0"	"10.0"	"9.0"	"13.8"	"10.0"	"10.0"	"9.8"	"13.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"3", "4"	
Ring - 2	"6", "5"	"8", "7"	

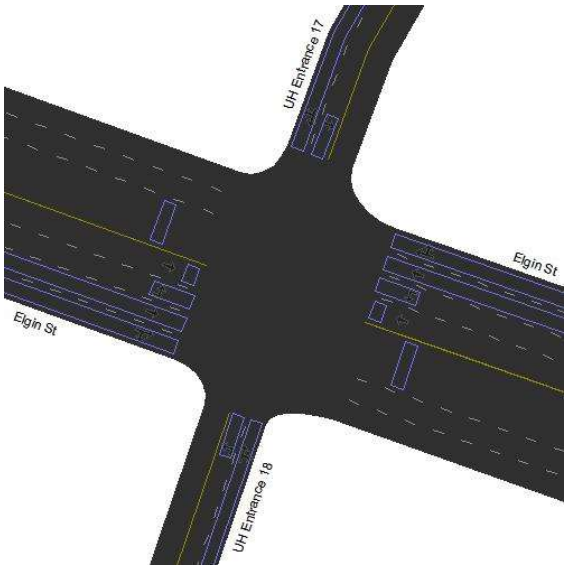
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*145*	**Site Name:**	*N 29.726292, W 95.340781*
Cross Street:	*Elgin St & UH Entrance 17*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:18*		

" "

Intersection Geometry



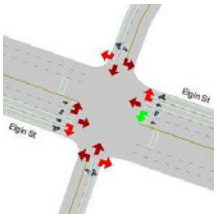
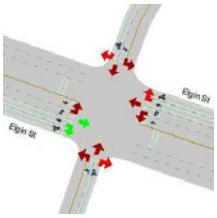
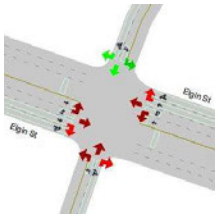
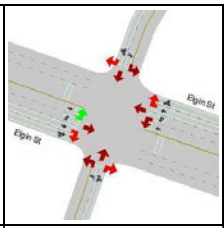
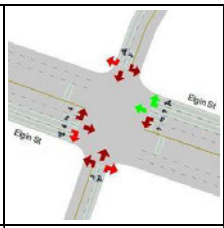
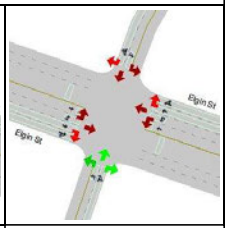
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *13.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States						
"ID"	*"1"*	*"2"*	*"4"*	*"5"*	*"6"*	*"8"*
"Min Green"	*"7.0"*	*"12.0"*	*"10.0"*	*"7.0"*	*"12.0"*	*"10.0"*
"Max Green"	*"15.1"*	*"56.1"*	*"33.4"*	*"15.1"*	*"56.1"*	*"33.4"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.0"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.7"*	*"1.7"*	*"2.6"*	*"1.7"*	*"1.7"*	*"2.6"*
"Lost Time"	*"4.9"*	*"4.9"*	*"5.6"*	*"4.9"*	*"4.9"*	*"5.6"*
"Recall Mode"	*"Min"*	*"Max"*	*"Min"*	*"None"*	*"Max"*	*"Min"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"9.0"*	*"9.0"*	*"12.0"*	*"9.0"*	*"9.0"*	*"12.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.1"*	*"18.0"*	*"30.0"*	*"15.1"*	*"18.0"*	*"30.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"20.0"*	*"61.0"*	*"39.0"*	*"20.0"*	*"61.0"*	*"39.0"*
"Max Inhibit"	*"True"*	*"False"*	*"True"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"11.9"*	*"16.9"*	*"15.6"*	*"11.9"*	*"16.9"*	*"15.6"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2", "1"*	*"4"*	
Ring - 2	*"6", "5"*	*"8"*	

"

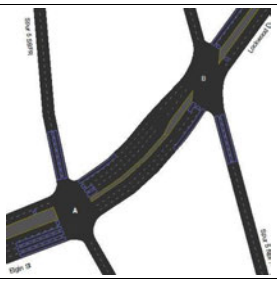
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*146,147*	**Site Name:**	*N 29.726208, W 95.338165*
Cross Street:	*Elgin St & Spur 5 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:8*		

" "

Intersection Geometry



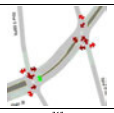
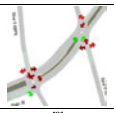
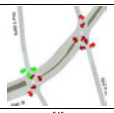
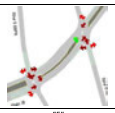
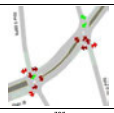
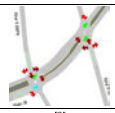
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *48.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Flexible*

"" " "

Phasing

Item Name \ Signal States							
"ID"	"1"	"2"	"4"	"5"	"6"	"8"	"9"
"Min Green"	"1.0"	"7.0"	"7.0"	"1.0"	"7.0"	"7.0"	"0.0"
"Max Green"	"15.0"	"10.0"	"16.7"	"10.0"	"15.0"	"16.7"	"7.0"
"Yellow"	"3.2"	"3.2"	"4.7"	"3.2"	"3.2"	"4.7"	"3.2"
"Red Clearance"	"2.8"	"2.8"	"1.6"	"2.8"	"2.8"	"1.6"	"2.8"
"Last Time"	"6.0"	"6.0"	"6.3"	"6.0"	"6.0"	"6.3"	"6.0"
"Recall Mode"	"None"	"Max"	"Max"	"None"	"None"	"None"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"2.0"	"4.0"	"4.0"	"2.0"	"4.0"	"4.0"	"4.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"3.0"	"9.0"	"9.0"	"3.0"	"9.0"	"9.0"	"9.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"16.0"	"13.0"	"11.0"	"6.0"	"13.0"	"11.0"	"11.0"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"
"Split"	"21.0"	"16.0"	"23.0"	"16.0"	"21.0"	"23.0"	"13.0"
"Max Inhibit"	"True"	"False"	"True"	"True"	"True"	"True"	"True"
"Opt Min Green"	"7.0"	"13.0"	"13.3"	"7.0"	"13.0"	"13.3"	"6.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"4"	"9"
Ring - 2	"6", "5"	"8"	

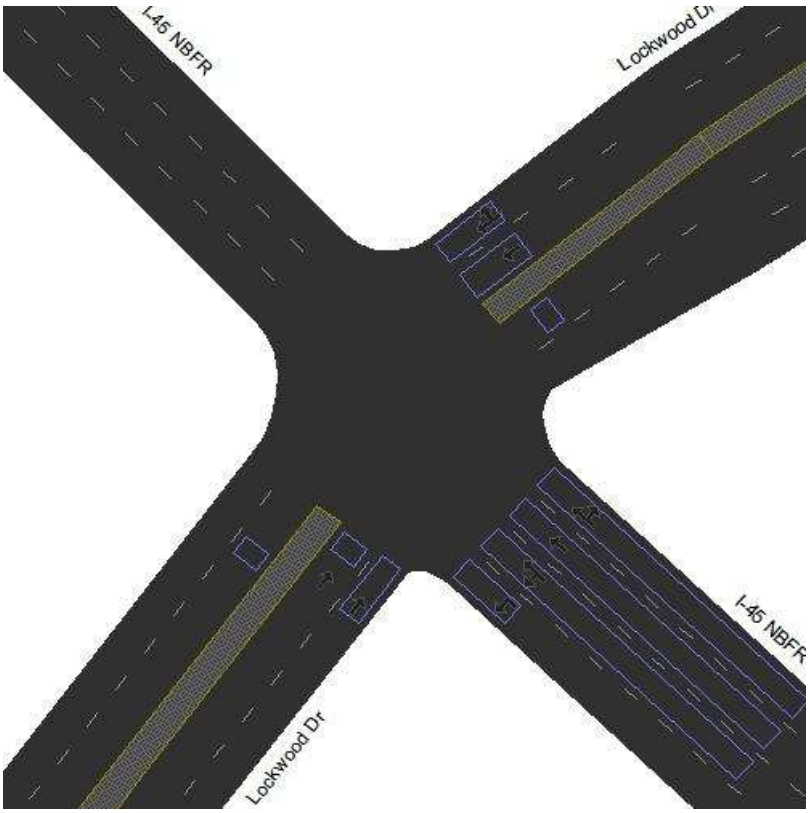
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*148*	**Site Name:**	*N 29.728243, W 95.336213*
Cross Street:	*Lockwood Dr & I-45 NBFR*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:12:1*		

" "

Intersection Geometry

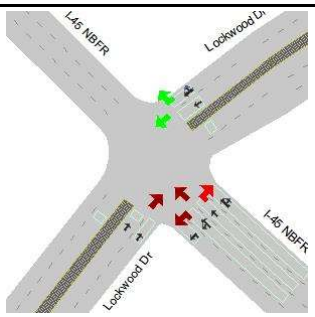
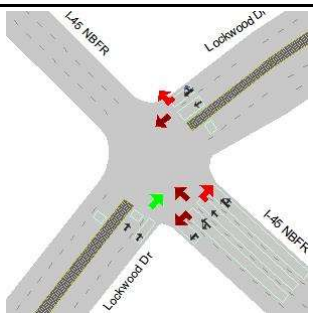
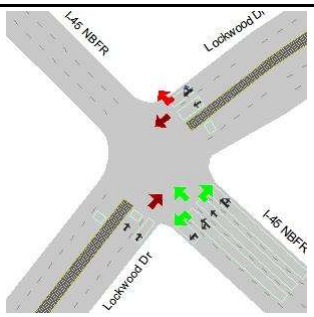


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *41.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Flexible*

"" " "

Phasing			
Item Name \ Signal States			
"ID"	*"2"*	*"4"*	*"6"*
"Min Green"	*"8.0"*	*"8.0"*	*"8.0"*
"Max Green"	*"29.9"*	*"29.9"*	*"19.0"*
"Yellow"	*"3.6"*	*"3.6"*	*"3.6"*
"Red Clearance"	*"2.5"*	*"2.5"*	*"1.4"*
"Lost Time"	*"6.1"*	*"6.1"*	*"5.0"*
"Recall Mode"	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"2.0"*	*"2.0"*	*"2.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"10.0"*	*"10.0"*	*"10.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"18.9"*	*"18.9"*	*"30.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*
"Split"	*"36.0"*	*"36.0"*	*"24.0"*
"Max Inhibit"	*"False"*	*"False"*	*"True"*
"Opt Min Green"	*"14.1"*	*"14.1"*	*"13.0"*

"

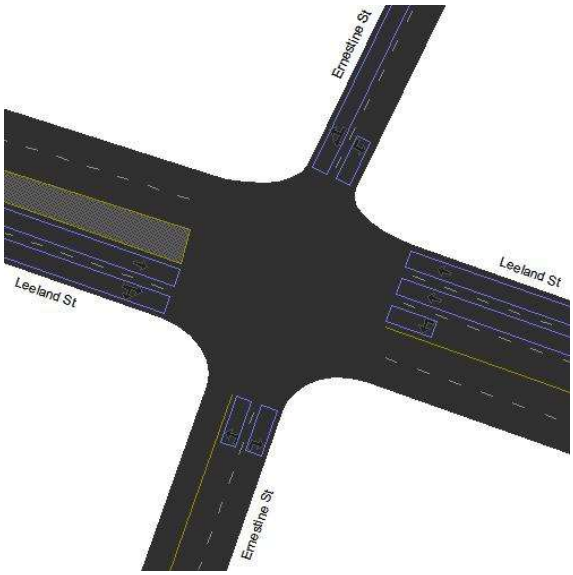
" " "

Phase Sequence and Concurrency Group		
Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1		*"4"*
Ring - 2	*"6"*	*"2"*

TransModeler® Intersection Report

Site Information			
Intersection ID:	*149*	**Site Name:**	*N 29.735709, W 95.333976*
Cross Street:	*Ernestine St & Leeland St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:29:33*		

Intersection Geometry



Turn Movement Volumes (Ernestine St & Leeland St)

@ Node 149 From \ To	Leeland St (WB)	Ernestine St (SB)	Leeland St (EB)
Ernestine St (SWB)		*830.0*	
Leeland St (EB)		*65.0*	
Ernestine St (NB)			
Leeland St (WB)	*160.0*	*122.0*	

[Flow Field] = Volume

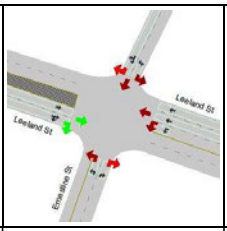
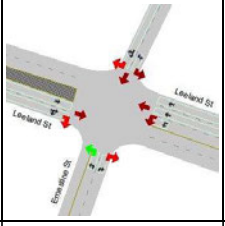
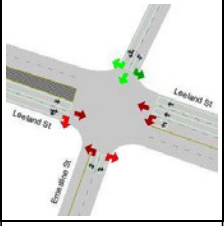
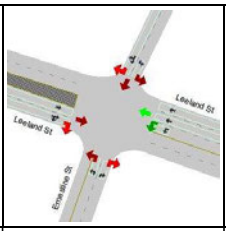
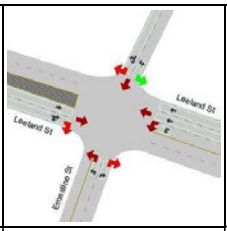
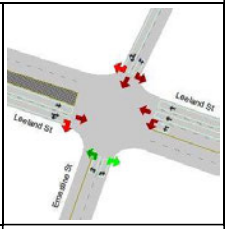
Volume Adjustment and Saturation Flow Rate

Movement	Ernestine St (SWB)			Leeland St (EB)		Ernestine St (NB)		Leeland St (WB)	
	Leeland St	Ernestine St	Leeland St	Ernestine St	Leeland St	Leeland St	Leeland St	Leeland St	Ernestine St
	SWBR	SWBT	SWBL	EBR	EBT	NBL	NBR	WBT	WBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *144.1 sec*
Level of Service: *F*
Offset: *20.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	10.0	5.0	10.0	10.0	5.0	8.0
Max Green	34.4	9.4	29.4	34.4	9.4	29.4
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.6	5.6	5.6	5.6	5.6	5.6
Recall Mode	Min	None	Max	Min	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	12.0	12.0	12.0	12.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	17.0	22.0	22.0	17.0	22.0	9.4
Coordinated	No	No	No	Yes	No	No
Split	40.0	15.0	35.0	40.0	15.0	35.0
Max Inhibit	True	True	True	False	True	True
Opt Min Green	15.6	10.6	15.6	15.6	10.6	13.6

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2	4, 3
Ring - 2	6	8, 7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Ernestine St (SWB)		Leeland St (EB)		Ernestine St (NB)		Leeland St (WB)	
	L	T+R	T	T+R	L	R	L	T
Adjusted Flow, veh/h	0	830	0	65	0	0	122	160
Adjusted Saturation Flow, veh/h	1809	1900	1900	1857	1809	1609	1358	3800
Capacity (c), veh/h	860	621	726	710	284	86	599	1452
Available Capacity (ca), veh/h	365	621	726	710	284	526	599	1452
Volume-to-Capacity Ratio (X)	0.000116	1.34	0.000138	0.0916	0.000352	0.00116	0.204	0.11
Green Ratio (g/C)	0.43	0.33	0.38	0.38	0.16	0.05	0.38	0.38
Assigned Phase	7+4	4	2	2	3+8	8	6	6
Max. Allowable Headway (MAH), s/veh	2.73	3.99	4.44	4.44	2.73	3.97	3.54	3.54
Queue Service Time (gs), s	0.0	29.4	0.0	2.0	0.0	0.0	5.5	2.4
Queue Permitted Service Time (gps), s	4.8	0.0	0.0	0.0	2.0	0.0	5.5	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.3	0.3	0.0	0.0	0.7	0.7
Phase Duration (Dp), s	39.6	35.0	40.0	40.0	15.0	10.4	40.0	40.0

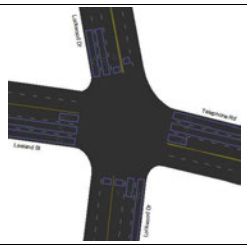
Uniform Delay (d1), s/veh	15.9	34	17.2	17.8	35.2	40.3	18.9	17.9
Incremental Delay (d2), s/veh	0.000244	163	0.000341	0.256	0.00224	0.0244	0.768	0.153
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	15.9	197	17.2	18.1	35.2	40.4	19.6	18.1
Level Of Service	B	F	B	B	D	D	B	B
Total Delay, veh-hr	0.000443	45.3	0.000477	0.326	0.000978	0.00112	0.666	0.804
Fully Stopped (Nf), veh/ln	0.0	18.8	0.0	0.9	0.0	0.0	1.6	2.2
Percentile Back of Queue (Q%), veh/ln	0.0	46.8	0.0	0.9	0.0	0.0	1.7	2.2
Effective Green Time, s	38.8	29.4	34.4	34.4	14.2	4.8	34.4	34.4
Approach Volume, veh/h	--	830	--	65	0	--	--	282
Approach Delay, s/veh	--	196.6	--	18.1	37.8	--	--	18.8

TransModeler® Intersection Report

Site Information

Intersection ID:	*150*	**Site Name:**	*N 29.735224, W 95.331820*
Cross Street:	*Telephone Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:29:41*		

Intersection Geometry



Turn Movement Volumes (Telephone Rd & Lockwood Dr)

@ Node 150 From \ To	Lockwood Dr (NB)	Leeland St (WB)	Lockwood Dr (SB)	Telephone Rd (SEB)
Telephone Rd (WB)		*70.0*		
Lockwood Dr (SB)				
Leeland St (EB)				
Lockwood Dr (NB)		*150.0*		*180.0*

[Flow Field] = Volume

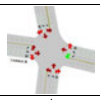
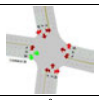
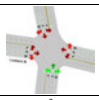
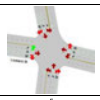
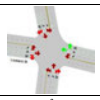
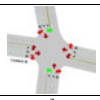
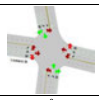
Volume Adjustment and Saturation Flow Rate

Movement	Telephone Rd (WB)			Lockwood Dr (SB)			Leeland St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Leeland St	Lockwood Dr	Leeland St	Lockwood Dr	Telephone Rd	Lockwood Dr	Lockwood Dr	Telephone Rd	Lockwood Dr	Leeland St	Telephone Rd
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	100.0 sec
Control Delay:	27.9 sec
Level of Service:	C
Offset:	85.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States							
ID	1	2	3	5	6	7	8
Min Green	5.0	8.0	5.0	5.0	8.0	5.0	8.0
Max Green	5.8	10.8	12.8	5.8	10.8	9.8	34.5
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.6	1.6	1.6	1.6	1.6	1.6	1.9
Lost Time	5.2	5.2	5.2	5.2	5.2	5.2	5.5
Recall Mode	None	Max	None	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	0.0	2.0	2.0	0.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	10.0	10.0	10.0	7.0	10.0	10.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	19.0	19.0	9.8	12.0	12.0	21.0
Coordinated	No	No	No	No	No	No	Yes
Split	11.0	16.0	16.0	11.0	16.0	16.0	40.0
Max Inhibit	True	True	True	True	True	True	False
Opt Min Green	10.2	13.2	10.2	10.2	13.2	10.2	13.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	3, 8, 7	
Ring - 2	6, 5		

Signal Timing Plan - 1

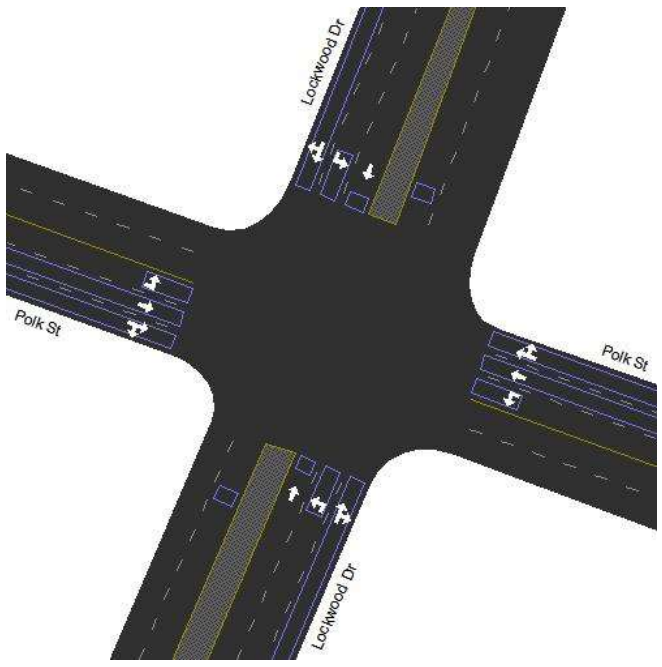
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Telephone Rd (WB)			Lockwood Dr (SB)			Lecland St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	35	35	0	0	0	0	0	0	150	0	180
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1809	1976	1724
Capacity (c), veh/h	105	205	205	177	656	655	105	304	304	409	935	816
Available Capacity (ca), veh/h	105	205	205	177	656	655	105	205	205	177	682	595
Volume-to-Capacity Ratio (X)	0.000953	0.171	0.171	0.000564	0.000153	0.000168	0.000953	0.000329	0.000362	0.367	0.000107	0.221
Green Ratio (g/C)	0.06	0.11	0.11	0.10	0.34	0.34	0.06	0.16	0.16	0.23	0.47	0.47
Assigned Phase	1	6	6	7	8	8	5	2	2	7+3	8+3	8+3
Max. Allowable Headway (MAH), s/veh	0.76	4.10	4.10	2.73	4.33	4.33	0.76	4.24	4.24	2.73	4.33	4.33
Queue Service Time (gs), s	0.0	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	6.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.99	1.00	1.00	0.51	1.00	1.00	0.99	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.1	0.1	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.7	0.7
Phase Duration (Dp), s	11.0	16.0	16.0	15.0	40.0	40.0	11.0	16.0	16.0	15.0	40.0	40.0
Uniform Delay (d1), s/veh	44.4	40.5	40.5	40.7	21.5	21.5	44.4	35.3	35.3	32.7	13.9	15.5
Incremental Delay (d2), s/veh	0.0164	1.8	1.8	0.00573	0.000419	0.000461	0.0164	0.00195	0.00214	2.53	0.000206	0.624
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	44.4	42.3	42.3	40.7	21.5	21.5	44.4	35.3	35.3	35.2	13.9	16.1
Level Of Service	D	D	D	D	C	C	D	D	D	D	B	B
Total Delay, veh-hr	0.00123	0.412	0.412	0.00113	0.000695	0.000656	0.00123	0.00098	0.00108	1.47	0.000386	0.806
Fully Stopped (Nf), veh/ln	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	2.4
Percentile Back of Queue (Q%), veh/ln	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	2.6
Effective Green Time, s	5.8	10.8	10.8	9.8	34.5	34.5	5.8	16.0	16.0	22.6	47.3	47.3
Approach Volume, veh/h	--	--	70	--	--	0	--	--	0	--	--	330
Approach Delay, s/veh	--	--	42.3	--	--	27.7	--	--	38.2	--	--	24.8

TransModeler® Intersection Report

Site Information			
Intersection ID:	*151*	**Site Name:**	*N 29.737757, W 95.331679*
Cross Street:	*Lockwood Dr & Polk St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:26:8*		

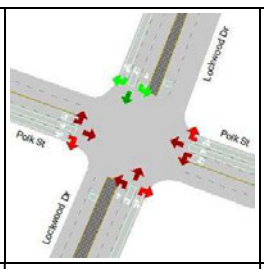
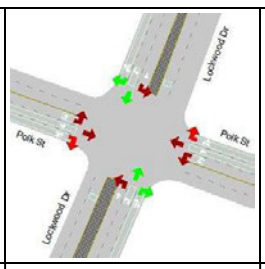
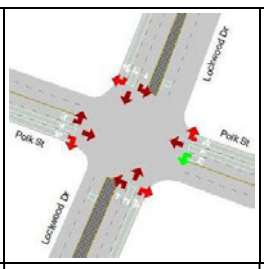
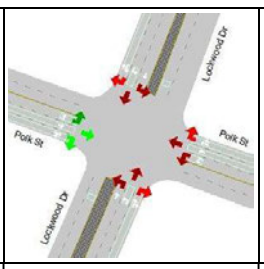
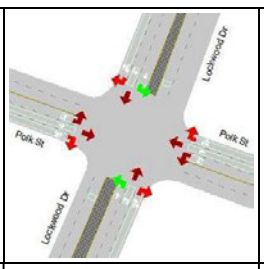
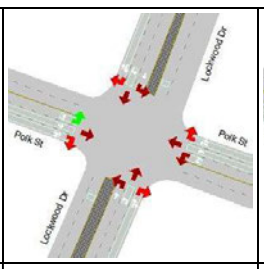
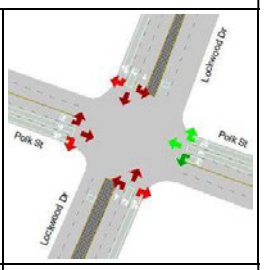
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Offset: *13.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States							
ID	*1*	*2*	*3*	*4*	*5*	*7*	*8*
Min Green	*5.0*	*6.0*	*5.0*	*6.0*	*5.0*	*5.0*	*6.0*
Max Green	*7.4*	*38.4*	*8.4*	*10.4*	*7.4*	*7.4*	*11.4*
Yellow	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*
Recall Mode	*None*	*Max*	*None*	*Max*	*None*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*17.0*	*17.0*	*17.0*	*22.0*	*9.4*	*5.4*	*22.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*	*No*
Split	*13.0*	*44.0*	*14.0*	*16.0*	*13.0*	*13.0*	*17.0*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*	*True*
Opt Min Green	*10.6*	*11.6*	*10.6*	*11.6*	*10.6*	*10.6*	*11.6*

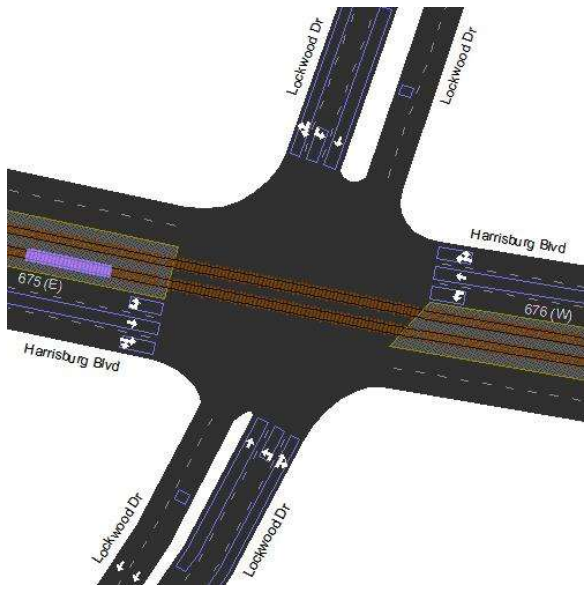
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*5, 1, 2*	*4, 3*	
Ring - 2		*7, 8*	

TransModeler® Intersection Report

Site Information			
Intersection ID:	*153*	**Site Name:**	*N 29.743455, W 95.328608*
Cross Street:	*Lockwood Dr & 675 (E)*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:26:28*		

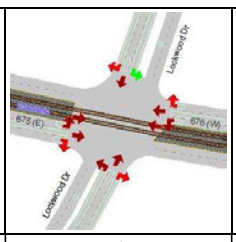
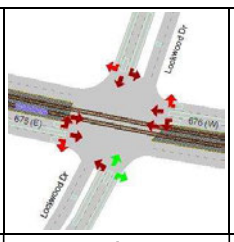
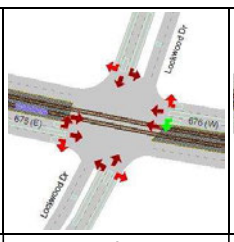
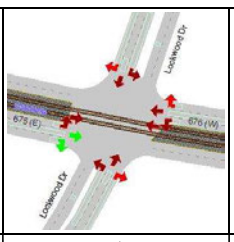
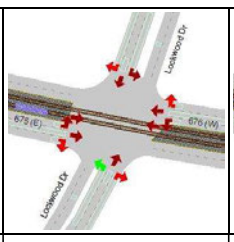
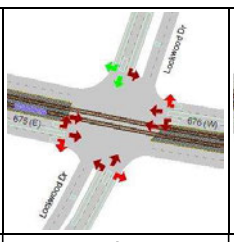
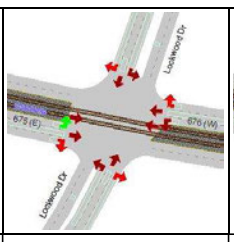
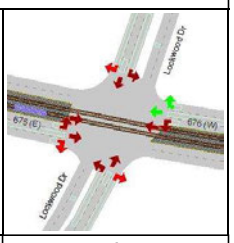
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Offset: *13.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Flexible*

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	7.0	5.0	12.0	5.0	7.0	5.0	12.0
Max Green	12.3	41.8	7.6	13.1	12.3	41.8	6.7	14.0
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	3.1	2.6	2.4	2.7	3.1	2.6	2.4	2.7
Lost Time	6.7	6.2	6.0	6.3	6.7	6.2	6.0	6.3
Recall Mode	None	Max	None	Min	None	Max	None	None
Memory Mode	Lock	Lock	Lock	Non-Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	No	No	Yes	Yes	No	No
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	14.0	7.0	7.0	7.0	14.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	8.3	12.0	9.0	16.0	8.3	12.0	9.0	16.0
Coordinated	No	No	No	Yes	No	No	No	No
Split	19.0	48.0	13.6	19.4	19.0	48.0	12.7	20.3
Max Inhibit	True	True	False	False	True	True	False	False
Opt Min Green	11.7	13.2	11.0	18.3	11.7	13.2	11.0	18.3

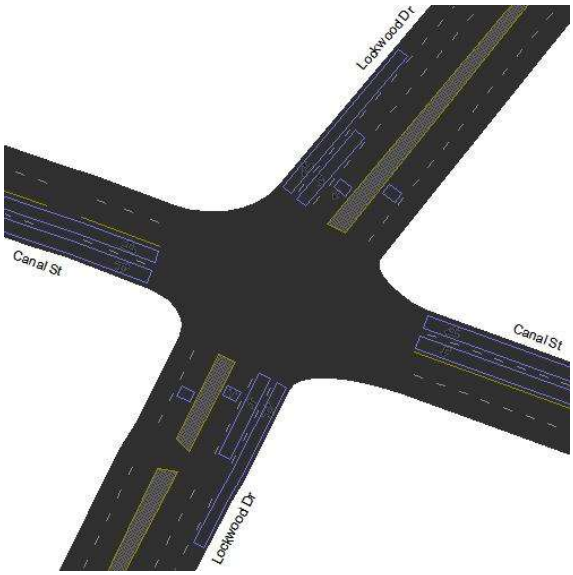
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1	2	4, 3
Ring - 2	5	6	8, 7

TransModeler® Intersection Report

Site Information			
Intersection ID:	*154*	**Site Name:**	*N 29.747928, W 95.326602*
Cross Street:	*Lockwood Dr & Canal St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:30:28*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & Canal St)

@ Node 154 From \ To	Lockwood Dr (NEB)	Canal St (WB)	Lockwood Dr (SWB)	Canal St (EB)
Lockwood Dr (SWB)				
Canal St (EB)				
Lockwood Dr (NEB)				
Canal St (WB)				

[Flow Field] = Volume

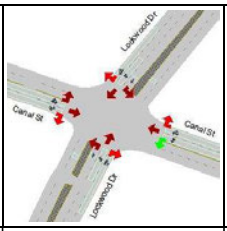
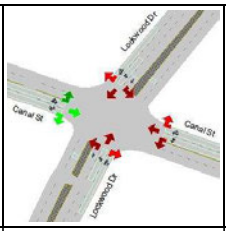
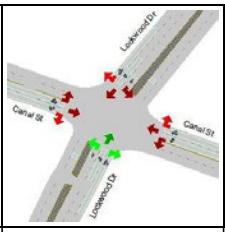
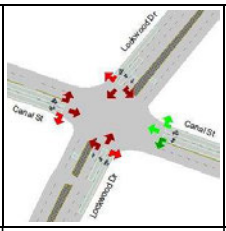
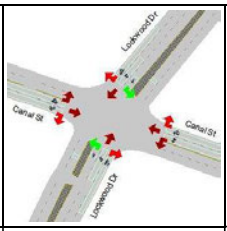
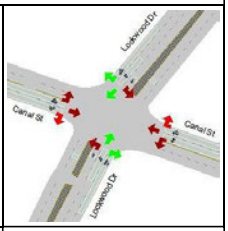
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SWB)				Canal St (EB)			Lockwood Dr (NEB)				Canal St (WB)		
	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr
	SWBU	SWBR	SWBT	SWBL	EBL	EBR	EBT	NEBT	NEBL	NEBU	NEBR	WBR	WBT	WBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *31.1 sec*
Level of Service: *C*
Offset: *98.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	3	6	7	8
Min Green	4.0	4.0	4.0	4.0	4.0	8.0
Max Green	5.4	8.4	9.4	19.4	14.0	36.0
Yellow	3.2	3.2	3.2	3.2	3.6	3.6
Red Clearance	2.4	2.4	2.4	2.4	1.4	1.4
Lost Time	5.6	5.6	5.6	5.6	5.0	5.0
Recall Mode	None	Max	None	Max	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	18.0	18.0	15.0	20.0
Coordinated	No	No	No	No	No	Yes
Split	11.0	14.0	15.0	25.0	19.0	41.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	9.6	9.6	9.6	9.6	9.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	1, 2	7, 3, 8
Ring - 2	6	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SWB)			Canal St (EB)		Lockwood Dr (NEB)			Canal St (WB)	
	L	T	T+R	L+T	T+R	L	T	T+R	L	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1900	1900	1809	1976	1900	1809	1900
Capacity (c), veh/h	139	836	804	195	160	309	1022	983	291	369
Available Capacity (ca), veh/h	253	711	684	195	160	253	711	684	291	369
Volume-to-Capacity Ratio (X)	0.00144	0.00012	0.000137	0.00077	0.00094	0.000648	9.78e-05	0.000112	0.000344	0.000543
Green Ratio (g/C)	0.08	0.42	0.42	0.08	0.08	0.17	0.52	0.52	0.14	0.19
Assigned Phase	7	8	8	2	2	7+3	8+3	8+3	1+6	6
Max. Allowable Headway (MAH), s/veh	3.24	3.30	3.30	3.68	3.68	3.24	3.30	3.30	4.32	4.40
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0
Phase Call Probability (pc)	0.52	1.00	1.00	1.00	1.00	0.52	1.00	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.7	47.3	47.3	14.0	14.0	12.7	47.3	47.3	11.0	25.0

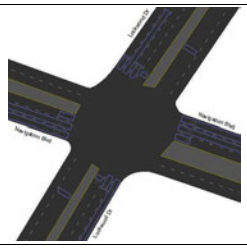
Uniform Delay (d1), s/veh	42.6	16.6	16.6	42	42	34.4	11.7	11.7	37.2	32.5
Incremental Delay (d2), s/veh	0.0187	0.000257	0.000306	0.00712	0.0106	0.00378	0.000172	0.000205	0.00213	0.00265
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.6	16.6	16.6	42	42	34.4	11.7	11.7	37.2	32.5
Level Of Service	D	B	B	D	D	C	B	B	D	C
Total Delay, veh-hr	0.00237	0.000462	0.000508	0.00175	0.00175	0.00191	0.000324	0.000356	0.00103	0.0018
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.7	42.3	42.3	8.4	8.4	17.1	51.7	51.7	13.8	19.4
Approach Volume, veh/h	--	--	0	--	0	--	--	0	--	0
Approach Delay, s/veh	--	--	29.3	--	42.0	--	--	22.7	--	34.0

TransModeler® Intersection Report

Site Information

Intersection ID:	*155*	**Site Name:**	*N 29.751104, W 95.323988*
Cross Street:	*Navigation Blvd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:30:33*		

Intersection Geometry



Turn Movement Volumes (Navigation Blvd & Lockwood Dr)

@ Node 155 From \ To	Lockwood Dr (NEB)	Navigation Blvd (WB)	Lockwood Dr (SWB)	Navigation Blvd (EB)
Navigation Blvd (EB)				
Lockwood Dr (NEB)				
Navigation Blvd (WB)				
Lockwood Dr (SWB)				

[Flow Field] = Volume

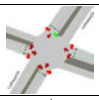
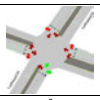
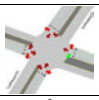
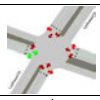
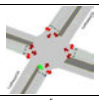
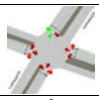
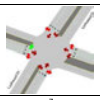
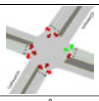
Volume Adjustment and Saturation Flow Rate

Movement	Navigation Blvd (EB)			Lockwood Dr (NEB)			Navigation Blvd (WB)			Lockwood Dr (SWB)			
	Lockwood Dr	Lockwood Dr	Navigation Blvd	Lockwood Dr	Navigation Blvd	Navigation Blvd	Lockwood Dr	Navigation Blvd	Lockwood Dr	Lockwood Dr	Navigation Blvd	Lockwood Dr	Navigation Blvd
	EBL	EBR	EBT	NEBT	NEBL	NEBR	WBR	WBT	WBL	SWBU	SWBR	SWBT	SWBL

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*31.8 sec*
Level of Service:	*C*
Offset:	*12.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*6.0*	*8.0*	*6.0*	*8.0*	*6.0*	*6.0*	*6.0*	*8.0*
Max Green	*13.0*	*35.0*	*10.8*	*16.8*	*13.0*	*35.0*	*9.8*	*17.8*
Yellow	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*
Red Clearance	*2.4*	*2.4*	*2.6*	*2.6*	*2.4*	*2.4*	*2.6*	*2.6*
Lost Time	*6.0*	*6.0*	*6.2*	*6.2*	*6.0*	*6.0*	*6.2*	*6.2*
Recall Mode	*None*	*Max*	*Min*	*Max*	*None*	*Max*	*None*	*Max*
Memory Mode	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*
Passage/Extension	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*12.0*	*21.0*	*11.8*	*20.0*	*12.0*	*21.0*	*11.8*	*20.0*
Coordinated	*No*	*No*	*No*	*No*	*No*	*Yes*	*No*	*No*
Split	*19.0*	*41.0*	*17.0*	*23.0*	*19.0*	*41.0*	*16.0*	*24.0*
Max Inhibit	*True*	*True*	*True*	*False*	*True*	*False*	*True*	*True*
Opt Min Green	*12.0*	*14.0*	*12.2*	*14.2*	*12.0*	*12.0*	*12.2*	*14.2*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*1*	*2*	*3, 4*
Ring - 2	*5*	*6*	*8, 7*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

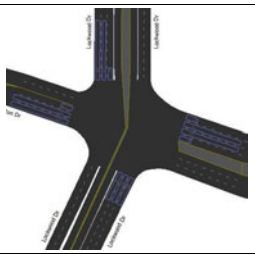
Lane Group	Navigation Blvd (EB)			Lockwood Dr (NEB)			Navigation Blvd (WB)			Lockwood Dr (SWB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	R
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*1900*	*1900*	*1809*	*1976*	*1900*	*1809*	*1900*	*1900*	*1809*	*3800*	*1609*
Capacity (c), veh/h	*109*	*338*	*338*	*111*	*902*	*867*	*109*	*338*	*338*	*111*	*1735*	*735*
Available Capacity (ca), veh/h	*177*	*319*	*319*	*235*	*692*	*665*	*195*	*338*	*338*	*235*	*1330*	*563*
Volume-to-Capacity Ratio (X)	*0.000917*	*0.000296*	*0.000325*	*0.000902*	*0.000111*	*0.000127*	*0.000917*	*0.000296*	*0.000325*	*0.0018*	*5.77e-05*	*0.000136*
Green Ratio (g/C)	*0.06*	*0.18*	*0.18*	*0.06*	*0.46*	*0.46*	*0.06*	*0.18*	*0.18*	*0.06*	*0.46*	*0.46*
Assigned Phase	*7*	*4*	*4*	*5*	*2*	*2*	*3*	*8*	*8*	*1*	*6*	*6*
Max. Allowable Headway (MAH), s/veh	*3.26*	*4.77*	*4.77*	*3.23*	*3.80*	*3.80*	*3.26*	*4.77*	*4.77*	*3.23*	*3.58*	*3.58*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.51*	*1.00*	*1.00*	*0.51*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*0.51*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.09*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*12.2*	*24.0*	*24.0*	*12.1*	*51.6*	*51.6*	*12.2*	*24.0*	*24.0*	*12.1*	*51.6*	*51.6*
Uniform Delay (d1), s/veh	*44.2*	*33.8*	*33.8*	*44.1*	*14.8*	*14.8*	*44.2*	*33.8*	*33.8*	*44.1*	*14.8*	*14.8*
Incremental Delay (d2), s/veh	*0.0152*	*0.00157*	*0.00173*	*0.0141*	*0.000221*	*0.000263*	*0.0152*	*0.00157*	*0.00173*	*0.0294*	*5.98e-05*	*0.000334*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*44.2*	*33.8*	*33.8*	*44.1*	*14.8*	*14.8*	*44.2*	*33.8*	*33.8*	*44.1*	*14.8*	*14.8*
Level Of Service	*D*	*C*	*C*	*D*	*B*	*B*	*D*	*C*	*C*	*D*	*B*	*B*
Total Delay, veh-hr	*0.00123*	*0.000939*	*0.00103*	*0.00122*	*0.00041*	*0.000451*	*0.00123*	*0.000939*	*0.00103*	*0.00245*	*0.00041*	*0.00041*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*6.0*	*17.8*	*17.8*	*6.1*	*45.6*	*46.6*	*6.0*	*17.8*	*17.8*	*6.1*	*45.6*	*45.6*
Approach Volume, veh/h	*--*	*--*	*0*	*--*	*--*	*0*	*--*	*--*	*0*	*--*	*0*	*--*
Approach Delay, s/veh	*--*	*--*	*37.1*	*--*	*--*	*24.2*	*--*	*--*	*37.1*	*--*	*29.4*	*--*

TransModeler® Intersection Report

Site Information

Intersection ID:	*157*	**Site Name:**	*N 29.763622, W 95.315504*
Cross Street:	*Clinton Dr & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:30:51*		

Intersection Geometry



Turn Movement Volumes (Clinton Dr & Lockwood Dr)

(e: Node 157 From \ To	Lockwood Dr (NB)	Clinton Dr (WB)	Lockwood Dr (SB)	Clinton Dr (EB)
Clinton Dr (EB)				
Lockwood Dr (NEB)				
Clinton Dr (WB)				
Lockwood Dr (SB)				

[Flow Field] = Volume

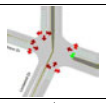
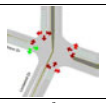
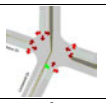
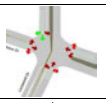
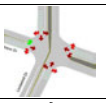
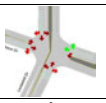
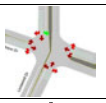
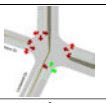
Volume Adjustment and Saturation Flow Rate

Movement	Clinton Dr (EB)			Lockwood Dr (NEB)				Clinton Dr (WB)			Lockwood Dr (SB)			
	Lockwood Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr
	EBL	EBR	EBT	NEBT	NEBL	NEBU	NEBR	WBR	WBT	WBL	SBU	SBR	SBT	SBL

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*16.5 sec*
Level of Service:	*B*
Offset:	*72.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*5.0*	*8.0*	*5.0*	*15.0*	*5.0*	*8.0*	*5.0*	*15.0*
Max Green	*8.2*	*15.2*	*8.4*	*45.4*	*8.2*	*15.2*	*16.4*	*37.4*
Yellow	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*
Red Clearance	*2.2*	*2.2*	*2.0*	*2.0*	*2.2*	*2.2*	*2.0*	*2.0*
Lost Time	*5.8*	*5.8*	*5.6*	*5.6*	*5.8*	*5.8*	*5.6*	*5.6*
Recall Mode	*None*	*None*	*None*	*Min*	*None*	*None*	*None*	*Min*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*7.0*	*10.0*	*7.0*	*17.0*	*7.0*	*10.0*	*7.0*	*17.0*
Time b/fore Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*12.2*	*18.0*	*8.4*	*30.0*	*12.2*	*18.0*	*12.4*	*28.0*
Coordinated	*No*	*No*	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*14.0*	*21.0*	*14.0*	*51.0*	*14.0*	*21.0*	*22.0*	*43.0*
Max Inhibit	*True*	*True*	*True*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*10.8*	*13.8*	*10.6*	*20.6*	*10.8*	*13.8*	*10.6*	*20.6*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*1, 2*	*4, 3*
Ring - 2	*5, 6*	*7, 8*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

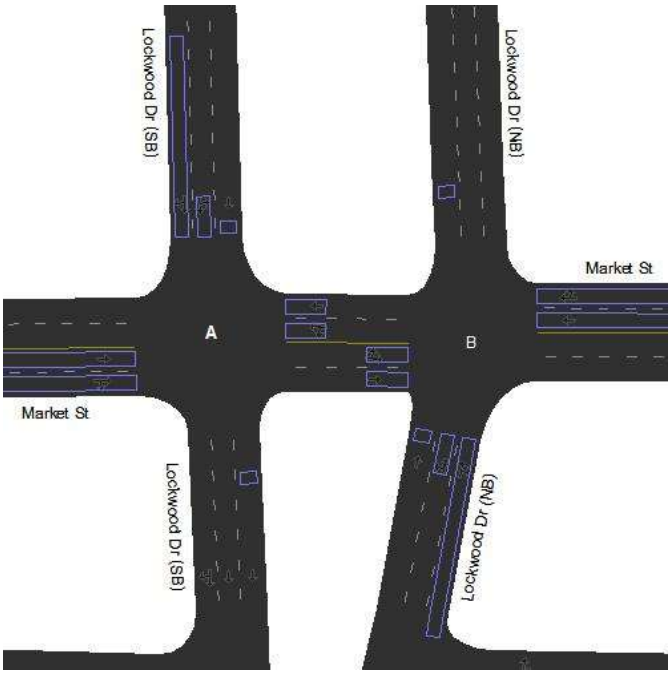
Lane Group	Clinton Dr (EB)			Lockwood Dr (NEB)			Clinton Dr (WB)			Lockwood Dr (SB)		
	L	T	T+R	L	T	T+R	L	T	R	L	T	T+R
Assigned Phase	*5*	*2*	*2*	*3*	*8*	*8*	*1*	*6*	*6*	*7*	*4*	*4*
Phase Duration (Dp), s	*5.8*	*5.8*	*5.8*	*5.6*	*20.6*	*20.6*	*5.8*	*5.8*	*5.8*	*5.6*	*20.6*	*20.6*
Change Period (Y+Rc), s	*5.8*	*5.8*	*5.8*	*5.6*	*5.6*	*5.6*	*5.8*	*5.8*	*5.8*	*5.6*	*5.6*	*5.6*
Max. Allowable Headway (MAH), s/veh	*3.76*	*5.00*	*5.00*	*4.24*	*4.74*	*4.74*	*3.73*	*5.00*	*5.00*	*3.73*	*4.74*	*4.74*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.00*	*0.01*	*0.01*	*0.00*	*1.00*	*1.00*	*0.00*	*0.01*	*0.01*	*0.00*	*1.00*	*1.00*
Max Out Probability (px)	*0.19*	*0.00*	*0.00*	*0.15*	*0.00*	*0.00*	*1.00*	*0.00*	*0.00*	*1.00*	*0.00*	*0.00*
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1810*	*1900*	*1610*	*1810*	*1900*	*1610*	*1810*	*3800*	*1610*	*1810*	*1900*	*1610*
Capacity (c), veh/h	*5*	*5*	*4*	*5*	*753*	*638*	*5*	*10*	*4*	*5*	*753*	*638*
Volume-to-Capacity Ratio (X)	*0.0209*	*0.0199*	*0.0235*	*0.0209*	*0.000133*	*0.000157*	*0.0209*	*0.00996*	*0.0235*	*0.0209*	*0.000133*	*0.000157*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Green Ratio (g/C)	*0.00*	*0.00*	*0.00*	*0.00*	*0.15*	*0.15*	*0.00*	*0.00*	*0.00*	*0.00*	*0.15*	*0.15*
Uniform Delay (d1), s/veh	*18.9*	*18.9*	*18.9*	*18.9*	*6.9*	*6.94*	*18.9*	*18.9*	*18.9*	*18.9*	*6.9*	*6.94*
Incremental Delay (d2), s/veh	*1.73*	*1.57*	*2.19*	*1.73*	*6.71e-05*	*9.39e-05*	*1.73*	*0.389*	*2.19*	*1.73*	*6.71e-05*	*9.39e-05*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Control Delay (d), s/veh	*20.6*	*20.4*	*21*	*20.6*	*6.9*	*6.94*	*20.6*	*19.2*	*21*	*20.6*	*6.9*	*6.94*
Level Of Service	*C*	*C*	*C*	*C*	*A*	*A*	*C*	*B*	*C*	*C*	*A*	*A*

TransModeler® Intersection Report

Site Information

Intersection ID:	*158,159*	**Site Name:**	*N 29.772662, W 95.315542*
Cross Street:	*Lockwood Dr (SB) & Market St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:33:41*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr (SB) & Market St)

@ Node 158 From \ To	Market St (EB)	Market St (WB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)			
Market St (EB)			
Market St (WB)			

Turn Movement Volumes (Market St & Lockwood Dr (NB))

@ Node 159 From \ To	Lockwood Dr (NB) (NB)	Market St (WB)	Market St (EB)
Market St (WB)			
Market St (EB)			
Lockwood Dr (NB) (NB)			

[Flow Field] = Volume

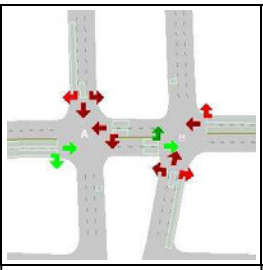
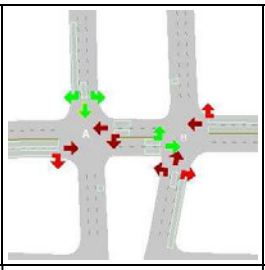
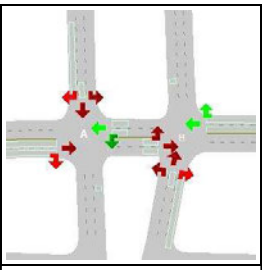
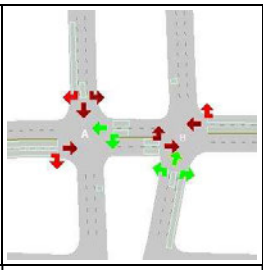
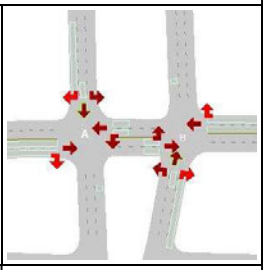
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SB) (SB)			Market St (EB)		Market St (WB)		Market St (WB)		Market St (EB)		Lockwood Dr (NB) (NB)		
	Market St	Market St	Lockwood Dr (SB)	Market St	Lockwood Dr (SB)	Market St	Lockwood Dr (SB)	Lockwood Dr (NB)	Market St	Lockwood Dr (NB)	Market St	Lockwood Dr (NB)	Market St	Market St
	SBL	SBR	SBT	EBT	EBR	WBT	WBL	WBR	WBT	EBL	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *27.1 sec*
Level of Service: *C*
Offset: *44.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	5.0	5.0	5.0	5.0	0.0
Max Green	12.9	19.9	12.9	38.9	6.9
Yellow	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.5	2.5	2.5	2.5	2.5
Lost Time	6.1	6.1	6.1	6.1	6.1
Recall Mode	None	Max	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	1.0	1.0	1.0	1.0	1.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	4.0	4.0	4.0	4.0
Coordinated	No	Yes	No	No	No
Split	19.0	26.0	19.0	45.0	13.0
Max Inhibit	True	False	True	True	True
Opt Min Green	11.1	11.1	11.1	11.1	6.1

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 8	9
Ring - 2	6		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SB) (SB)			Market St (EB)		Market St (WB)		Market St (WB)		Market St (EB)		Lockwood Dr (NB) (NB)		
	L+T	T	T+R	T	T+R	L+T	T	T	T+R	L+T	T	L+T	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1976	1900

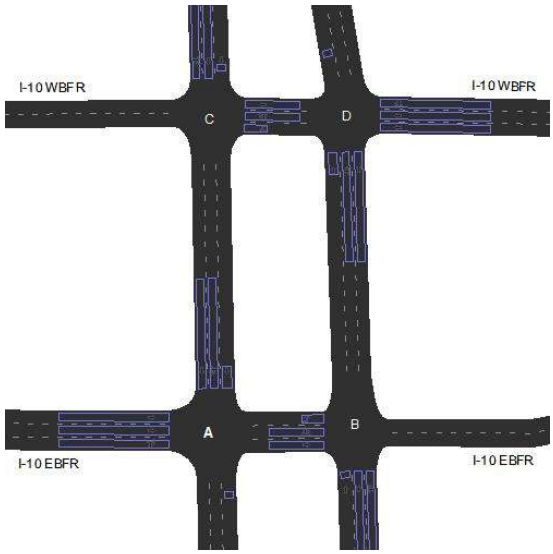
Flow, veh/h														
Capacity (c), veh/h	619	644	619	113	113	840	831	113	113	625	605	845	879	845
Available Capacity (ca), veh/h	367	382	367	238	238	1303	718	238	238	819	367	718	746	718
Volume-to-Capacity Ratio (X)	0.000178	0.000155	0.000178	0.000884	0.000972	0.000131	0.00012	0.000884	0.000972	0.000176	0.000165	0.00013	0.000114	0.00013
Green Ratio (g/C)	0.33	0.33	0.33	0.06	0.06	0.44	0.44	0.06	0.06	0.32	0.32	0.44	0.44	0.44
Assigned Phase	4+9	4+9	4+9	2	2	8+6	8+6	6	6	4+2	4+2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	1.47	1.47	1.47	2.55	2.55	1.55	1.55	2.55	2.55	1.47	1.47	1.55	1.55	1.55
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	0.51	0.51	1.00	1.00	0.51	0.51	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	32.8	32.8	32.8	12.2	12.2	45.0	45.0	12.2	12.2	32.8	32.8	45.0	45.0	45.0
Uniform Delay (d1), s/veh	23.4	23.4	23.4	45.6	45.6	16.3	16.3	45.6	45.6	24	23.9	15.9	15.9	15.9
Incremental Delay (d2), s/veh	0.000517	0.000434	0.000517	0.0141	0.0155	0.000281	0.000261	0.0141	0.0155	0.000507	0.000492	0.000277	0.000233	0.000277
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	23.4	23.4	23.4	45.6	45.6	16.3	16.3	45.6	45.6	24	23.9	15.9	15.9	15.9
Level Of Service	C	C	C	D	D	B	B	D	D	C	C	B	B	B
Total Delay, veh-hr	0.000715	0.00065	0.000715	0.00127	0.00139	0.000499	0.000453	0.00127	0.00139	0.000732	0.000665	0.000485	0.000441	0.000485
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	33.6	33.6	33.6	6.1	6.1	45.0	45.0	6.1	6.1	32.8	32.8	45.8	45.8	45.8
Approach Volume,	--	--	0	--	0	--	0	--	0	--	0	--	--	0

veh/h														
Approach Delay, s/veh	--	--	*23.4*	--	*45.6*	--	*16.3*	--	*45.6*	--	*23.9*	--	--	*15.9*

TransModeler® Intersection Report

Site Information			
Intersection ID:	*160,161,162,163*	**Site Name:**	*N 29.773864, W 95.315598*
Cross Street:	*Lockwood Dr (SB) & I-10 EBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:34:4*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr (SB) & I-10 EBFR)		
@ Node 160 From \ To	I-10 EBFR (EB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)		
I-10 EBFR (EB)		

Turn Movement Volumes (I-10 EBFR & Lockwood Dr (NB))		
@ Node 161 From \ To	Lockwood Dr (NB) (NB)	I-10 EBFR (EB)
I-10 EBFR (EB)		
Lockwood Dr (NB) (NB)		

Turn Movement Volumes (Lockwood Dr (SB) & I-10 WBFR)		
@ Node 162 From \ To	I-10 WBFR (WB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)		
I-10 WBFR (WB)		

Turn Movement Volumes (I-10 WBFR & Lockwood Dr (NB))		
@ Node 163 From \ To	Lockwood Dr (NB) (NB)	I-10 WBFR (WB)
I-10 WBFR (WB)		
Lockwood Dr (NB) (NB)		

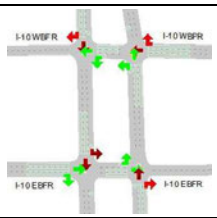
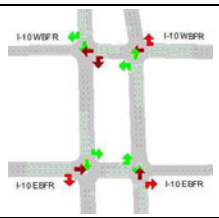
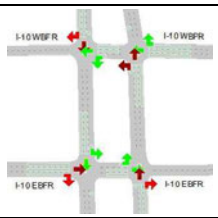
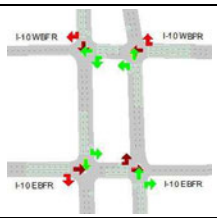
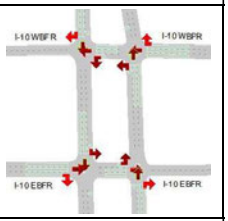
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate																
Movement	Lockwood Dr (SB) (SB)		I-10 EBFR (EB)		I-10 EBFR (EB)		Lockwood Dr (NB) (NB)		Lockwood Dr (SB) (SB)		I-10 WBFR (WB)		I-10 WBFR (WB)		Lockwood Dr (NB) (NB)	
	I-10 EBFR	Lockwood Dr (SB)	I-10 EBFR	Lockwood Dr (SB)	Lockwood Dr (NB)	I-10 EBFR	Lockwood Dr (NB)	I-10 EBFR	I-10 WBFR	Lockwood Dr (SB)	I-10 WBFR	Lockwood Dr (SB)	Lockwood Dr (NB)	I-10 WBFR	Lockwood Dr (NB)	I-10 WBFR
	SBL	SBT	EBT	EBR	EBL	EBT	NBT	NBR	SBR	SBT	WBT	WBL	WBR	WBT	NBT	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *22.4 sec*
Level of Service: *C*
Offset: *92.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	8.0	8.0	8.0	8.0	0.0
Max Green	17.0	17.0	20.0	16.0	8.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Max	Max	None	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	17.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	18.0	12.0	15.0	15.0
Coordinated	No	Yes	No	No	No
Split	22.0	22.0	25.0	21.0	13.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 6	4, 8	9
Ring - 2			

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

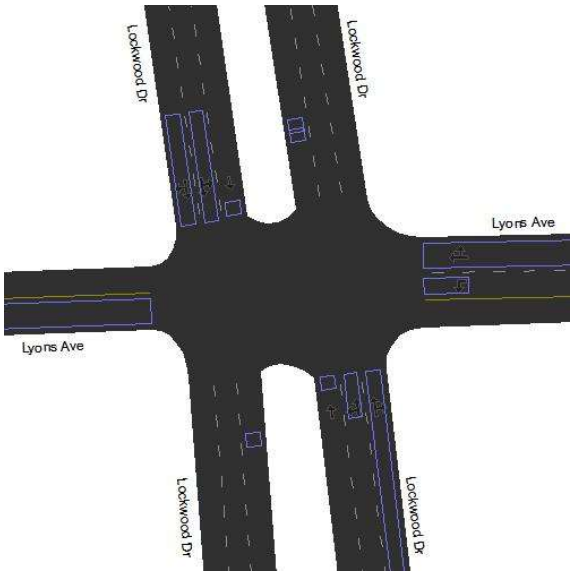
Lane Group	Lockwood Dr (SB) (SB)		I-10 EBFR (EB)		I-10 EBFR (EB)			Lockwood Dr (NB) (NB)		Lockwood Dr (SB) (SB)		I-10 WBFR (WB)			I-10 WBFR (WB)		Lockwood Dr (NB) (NB)	
	L+T	T	T	T+R	L	L+T	T	T	T+R	T	T+R	L	L+T	T	T	T+R	L+T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	3800	3800	1900	1809	1900	1900	3800	1900	3800	1900	1809	1900	1900	3800	1900	1900	3800
Capacity (c), veh/h	1324	2649	229	115	1095	1150	1150	578	289	1628	814	595	625	625	738	369	1070	2140
Available Capacity (ca), veh/h	369	738	627	314	299	314	314	590	295	627	314	299	314	314	738	369	314	627
Volume-to-Capacity Ratio (X)	8.31e-05	3.78e-05	0.000436	0.00096	5.9e-05	5.89e-05	5.89e-05	0.000173	0.00038	6.14e-05	0.000135	0.000108	0.000108	0.000108	0.000136	0.000298	0.000103	4.67e-05
Green Ratio (g/C)	0.70	0.70	0.06	0.06	0.61	0.61	0.61	0.15	0.15	0.43	0.43	0.33	0.33	0.33	0.19	0.19	0.56	0.56
Assigned Phase	6+4+9+8	6+4+9+8	2	2	2+6+4	2+6+4	2+6+4	8+9	8+9	4+9	4+9	2+6+8	2+6+8	2+6+8	6	6	2+4+9+8	2+4+9+8
Max. Allowable Headway	5.91	5.91	6.06	6.06	6.06	6.06	6.06	5.88	5.88	5.88	5.88	6.06	6.06	6.06	5.91	5.91	6.06	6.06

(MAH), s/veh																		
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.52	0.52	0.52	0.52	0.52	0.51	0.51	1.00	1.00	0.52	0.52	0.52	1.00	1.00	0.52	0.52
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	25.0	25.0	11.2	11.2	11.2	11.2	11.2	12.7	12.7	41.1	41.1	11.2	11.2	11.2	25.0	25.0	11.2	11.2
Uniform Delay (d1), s/veh	4.73	4.73	45.5	45.5	8.03	8.03	8.03	37	37	16.8	16.8	23.2	23.2	23.2	33.4	33.4	9.83	9.83
Incremental Delay (d2), s/veh	0.000113	2.57e-05	0.00343	0.0151	9.7e-05	9.22e-05	9.22e-05	0.000538	0.00237	6.8e-05	0.000299	0.000328	0.000312	0.000312	0.000331	0.00146	0.000173	3.93e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	4.73	4.73	45.5	45.5	8.03	8.03	8.03	37	37	16.8	16.8	23.2	23.2	23.2	33.4	33.4	9.83	9.83
Level Of Service	A	A	D	D	A	A	A	D	D	B	B	C	C	C	C	C	A	A
Total Delay, veh-hr	0.000145	0.000131	0.00126	0.00139	0.000144	0.000151	0.000151	0.00103	0.00113	0.000468	0.000514	0.000416	0.000437	0.000436	0.000929	0.00102	0.0003	0.000273
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	71.8	71.8	6.2	6.2	62.3	62.3	62.3	15.7	15.7	44.1	44.1	33.9	33.9	33.9	20.0	20.0	58.0	58.0
Approach Volume, veh/h	--	0	--	0	--	--	0	--	0	--	0	--	--	0	--	0	--	0
Approach Delay, s/veh	--	4.7	--	45.5	--	--	8.0	--	37.0	--	16.8	--	--	23.2	--	33.4	--	9.8

TransModeler® Intersection Report

Site Information			
Intersection ID:	*165*	**Site Name:**	*N 29.776444, W 95.315584*
Cross Street:	*Lyons Ave & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:34:18*		

Intersection Geometry



Turn Movement Volumes (Lyons Ave & Lockwood Dr)

@ Node 165 From \ To	Lockwood Dr (NB)	Lyons Ave (WB)	Lockwood Dr (SB)	Lyons Ave (EB)
Lyons Ave (WB)			*5.0*	
Lockwood Dr (SB)				
Lyons Ave (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

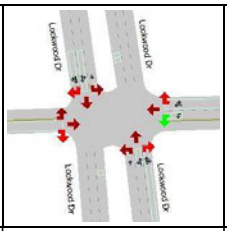
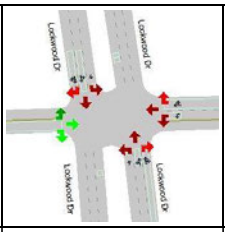
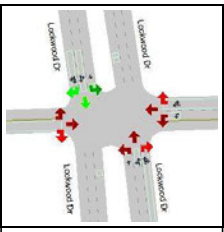
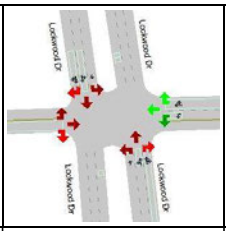
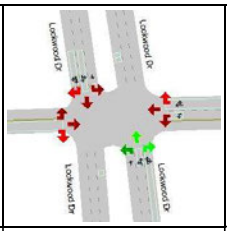
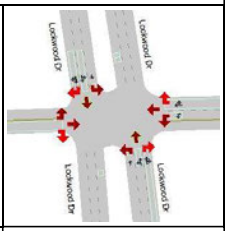
Volume Adjustment and Saturation Flow Rate

Movement	Lyons Ave (WB)			Lockwood Dr (SB)			Lyons Ave (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lockwood Dr	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lyons Ave
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *32.4 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	6	8	9
Min Green	5.0	5.0	10.0	5.0	10.0	0.0
Max Green	6.9	20.9	44.7	33.9	44.7	7.7
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.5	2.5	1.7	2.5	1.7	1.7
Lost Time	6.1	6.1	5.3	6.1	5.3	5.3
Recall Mode	None	Max	Max	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	13.0	27.0	50.0	40.0	50.0	13.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	11.1	11.1	15.3	11.1	15.3	5.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	9
Ring - 2	6	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lyons Ave (WB)		Lockwood Dr (SB)			Lyons Ave (EB)	Lockwood Dr (NB)		
	L	T+R	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	5	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1972	1900	1900	1900	1976	1900	1900	1900
Capacity (c), veh/h	483	649	706	967	967	401	706	967	967
Available Capacity (ca), veh/h	483	649	706	825	824	401	706	825	824
Volume-to-Capacity Ratio (X)	0.0103	0.000308	0.000146	9.72e-05	0.000107	0.000748	0.000146	9.72e-05	0.000107
Green Ratio (g/C)	0.27	0.33	0.51	0.51	0.51	0.20	0.51	0.51	0.51
Assigned Phase	1+6	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	4.76	6.27	4.29	4.29	4.29	6.18	4.36	4.36	4.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	20.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.58	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.0	40.0	50.0	50.0	50.0	27.0	50.0	50.0	50.0

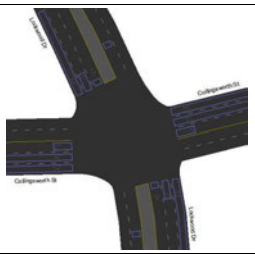
Uniform Delay (d1), s/veh	35.1	23.2	12.4	12.4	12.4	32.7	12.4	12.4	12.4
Incremental Delay (d2), s/veh	0.0389	0.000855	0.000372	0.000181	0.000199	0.00336	0.000372	0.000181	0.000199
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	35.1	23.2	12.4	12.4	12.4	32.7	12.4	12.4	12.4
Level Of Service	D	C	B	B	B	C	B	B	B
Total Delay, veh-hr	0.0488	0.00129	0.000356	0.000324	0.000356	0.00273	0.000356	0.000324	0.000356
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	27.8	33.9	52.4	52.4	52.4	20.9	52.4	52.4	52.4
Approach Volume, veh/h	--	5	--	--	0	0	--	--	0
Approach Delay, s/veh	--	34.7	--	--	12.4	32.7	--	--	12.4

TransModeler® Intersection Report

Site Information

Intersection ID:	*167*	**Site Name:**	*N 29.793711, W 95.316236*
Cross Street:	*Collingsworth St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:6*		

Intersection Geometry



Turn Movement Volumes (Collingsworth St & Lockwood Dr)

@ Node 167 From \ To	Lockwood Dr (NWB)	Collingsworth St (WB)	Lockwood Dr (SB)	Collingsworth St (EB)
Collingsworth St (WB)	*22.0*			
Lockwood Dr (SEB)		*3.0*		*14.0*
Collingsworth St (EB)	*24.0*			
Lockwood Dr (NB)				

[Flow Field] = Volume

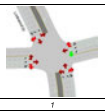
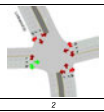
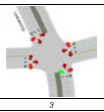
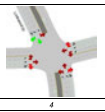
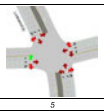
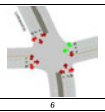
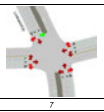
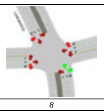
Volume Adjustment and Saturation Flow Rate

Movement	Collingsworth St (WB)				Lockwood Dr (SEB)				Collingsworth St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St
	WBR	WBT	WBL	WBU	SEBU	SEBR	SEBT	SEBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*90.0 sec*
Control Delay:	*23.7 sec*
Level of Service:	*C*
Offset:	*82.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	4.0	6.0	4.0	8.0	4.0	6.0	4.0	8.0
Max Green	8.4	19.4	9.4	30.4	8.4	19.4	9.4	30.4
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Recall Mode	None	None	None	Max	None	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.5	3.0	2.5	3.0	2.5	3.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	6.0	8.0	6.0	6.0	6.0	8.0	6.0	6.0
Time b/fore Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	9.4	19.0	9.4	23.0	9.4	19.0	9.4	23.0
Coordinated	No	No	No	No	No	No	No	Yes
Split	14.0	25.0	15.0	36.0	14.0	25.0	15.0	36.0
Max Inhibit	True	True	True	True	True	True	True	False
Opt Min Green	9.6	11.6	9.6	13.6	9.6	11.6	9.6	13.6

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	1, 2	4, 3
Ring - 2	5, 6	8, 7

Signal Timing Plan - 1

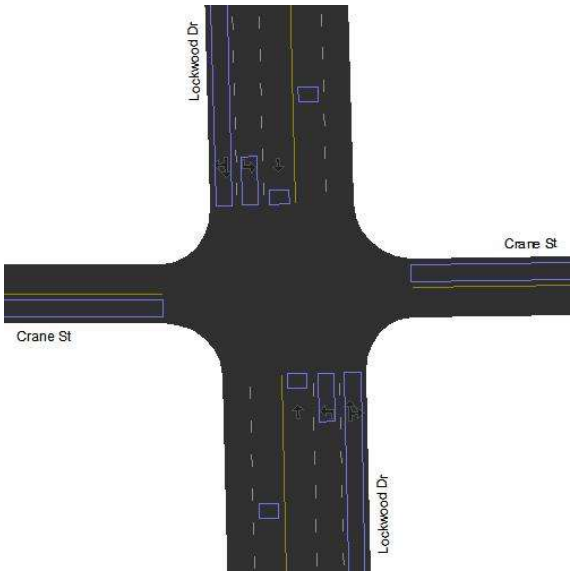
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Collingsworth St (WB)			Lockwood Dr (SEB)			Collingsworth St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Assigned Phase	1	6	6	7	4	4	5	2	2	3	8	8
Phase Duration (Dp), s	5.6	6.9	6.9	6.1	14.1	14.1	6.4	7.7	7.7	5.6	13.6	13.6
Change Period (Y+Rc), s	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Max. Allowable Headway (MAH), s/veh	3.85	5.21	5.21	3.73	4.01	4.01	3.76	5.21	5.21	3.73	4.01	4.01
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.00	0.19	0.19	0.12	1.00	1.00	0.20	0.35	0.35	0.00	1.00	1.00
Max Out Probability (px)	0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	1.00	0.00	0.00
Adjusted Flow, veh/h	0	0	22	14	0	3	24	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1810	1900	1610	1810	1976	1675	1810	1900	1610	1810	1976	1675
Capacity (c), veh/h	5	74	63	26	508	431	43	120	101	5	480	406
Volume-to-Capacity Ratio (X)	0.0182	0.00135	0.35	0.53	0.000197	0.00696	0.554	0.000837	0.000987	0.0182	0.000208	0.000246
Queue Service Time (gs), s	0.0	0.0	1.0	0.6	0.0	0.1	1.1	0.0	0.0	0.0	0.0	0.0
Green Ratio (g/C)	0.00	0.01	0.01	0.01	0.09	0.09	0.01	0.02	0.02	0.00	0.09	0.09
Uniform Delay (d1), s/veh	16.4	15.2	15.4	16.1	9.09	9.11	15.9	14.5	14.5	16.4	9.45	9.48
Incremental Delay (d2), s/veh	1.31	0.00524	2.45	15.5	0.000697	0.0293	10.6	0.00203	0.00282	1.31	0.000791	0.00109
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Control Delay (d), s/veh	17.7	15.2	17.9	31.6	9.09	9.14	26.5	14.5	14.5	17.7	9.45	9.48
Level Of Service	B	B	B	C	A	A	C	B	B	B	A	A

TransModeler® Intersection Report

Site Information			
Intersection ID:	*168*	**Site Name:**	*N 29.797007, W 95.316914*
Cross Street:	*Crane St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:13*		

Intersection Geometry



Turn Movement Volumes (Crane St & Lockwood Dr)

@ Node 168 From \ To	Lockwood Dr (NB)	Crane St (WB)	Lockwood Dr (SB)	Crane St (EB)
Crane St (WB)	*9.0*		*22.0*	
Lockwood Dr (SB)		*24.0*		*8.0*
Crane St (EB)	*28.0*		*32.0*	
Lockwood Dr (NB)		*20.0*		*11.0*

[Flow Field] = Volume

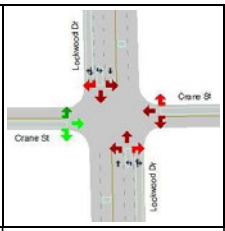
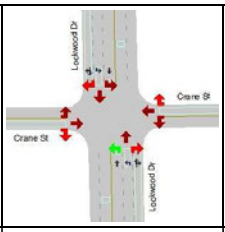
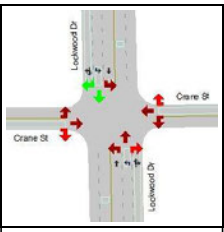
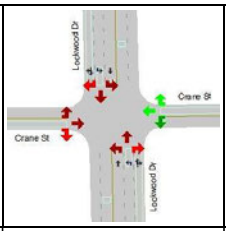
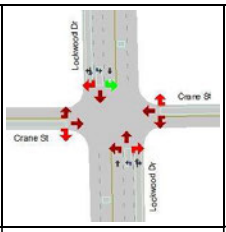
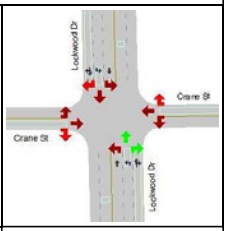
Volume Adjustment and Saturation Flow Rate

Movement	Crane St (WB)			Lockwood Dr (SB)				Crane St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Crane St	Lockwood Dr	Lockwood Dr	Crane St	Lockwood Dr	Crane St	Lockwood Dr	Lockwood Dr	Crane St	Lockwood Dr	Crane St	Lockwood Dr	Crane St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *30.6 sec*
Level of Service: *C*
Offset: *25.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	6.0	6.0	8.0	6.0	6.0
Max Green	20.0	10.2	45.2	20.0	10.2	45.2
Yellow	3.2	3.6	3.6	3.2	3.6	3.6
Red Clearance	1.8	1.2	1.2	1.8	1.2	1.2
Lost Time	5.0	4.8	4.8	5.0	4.8	4.8
Recall Mode	None	None	Min	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	3.0	3.0	2.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	10.0	8.0	8.0	10.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	10.2	14.0	19.0	10.2	14.0
Coordinated	No	No	Yes	No	No	No
Split	25.0	15.0	50.0	25.0	15.0	50.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	13.0	10.8	10.8	13.0	10.8	10.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Crane St (WB)	Lockwood Dr (SB)			Crane St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	31	8	0	24	60	20	0	11
Adjusted Saturation Flow, veh/h	1895	1809	1976	1878	1901	1809	1976	1879
Capacity (c), veh/h	268	1102	1236	1175	269	128	172	164
Available Capacity (ca), veh/h	421	205	992	943	423	205	992	943
Volume-to-Capacity Ratio (X)	0.116	0.00735	8.09e-05	0.0204	0.223	0.157	0.00058	0.0672
Green Ratio (g/C)	0.14	0.61	0.63	0.63	0.14	0.07	0.09	0.09
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.45	2.73	5.33	5.33	5.34	2.73	5.31	5.31
Queue Service Time (gs), s	1.3	0.2	0.0	0.4	2.5	0.9	0.0	0.5
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.77	0.60	1.00	1.00	0.89	0.70	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.0
Phase Duration (Dp), s	17.7	59.6	61.1	61.1	17.7	11.2	12.7	12.7

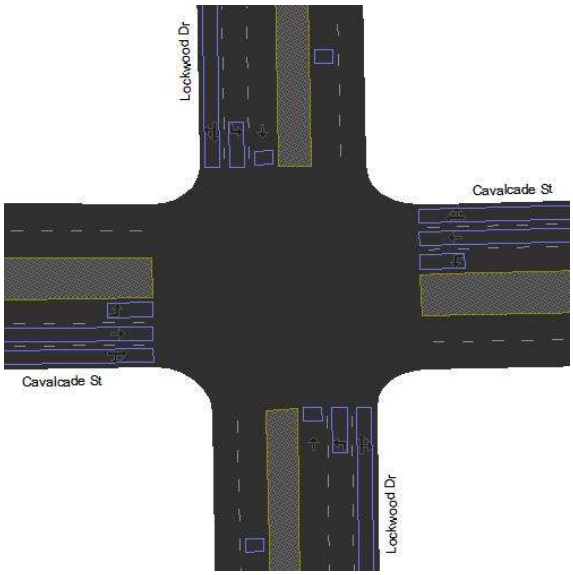
Uniform Delay (d1), s/veh	33.7	6.91	6.31	6.39	34.2	39.3	37.5	37.7
Incremental Delay (d2), s/veh	0.878	0.0121	0.000118	0.032	1.91	2.61	0.00606	0.789
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34.6	6.92	6.31	6.42	36.2	41.9	37.5	38.5
Level Of Service	C	A	A	A	D	D	D	D
Total Delay, veh-hr	0.299	0.0156	0.000175	0.0428	0.604	0.234	0.00104	0.118
Fully Stopped (Nf), veh/ln	0.6	0.1	0.0	0.2	1.2	0.4	0.0	0.2
Percentile Back of Queue (Q%), veh/ln	0.7	0.1	0.0	0.2	1.3	0.5	0.0	0.3
Effective Green Time, s	12.7	54.8	56.3	56.3	12.7	6.4	7.9	7.9
Approach Volume, veh/h	31	--	--	32	60	--	--	31
Approach Delay, s/veh	34.6	--	--	6.5	36.2	--	--	40.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*169*	**Site Name:**	*N 29.800383, W 95.316967*
Cross Street:	*Cavalcade St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:17*		

Intersection Geometry



Turn Movement Volumes (Cavalcade St & Lockwood Dr)

@ Node 169 From \ To	Lockwood Dr (NB)	Cavalcade St (WB)	Lockwood Dr (SB)	Cavalcade St (EB)
Cavalcade St (WB)			*70.0*	
Lockwood Dr (SB)				
Cavalcade St (EB)				
Lockwood Dr (NB)				*51.0*

[Flow Field] = Volume

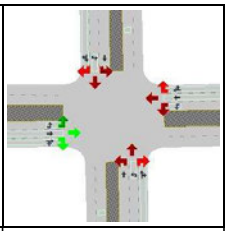
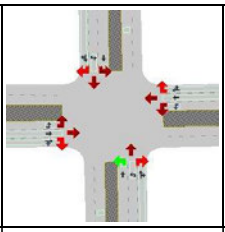
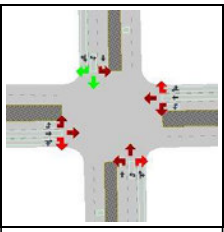
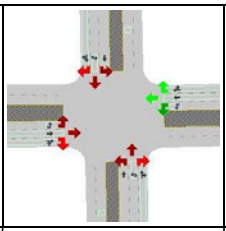
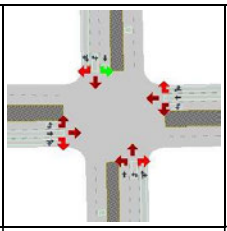
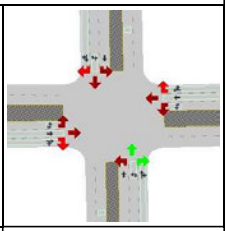
Volume Adjustment and Saturation Flow Rate

Movement	Cavalcade St (WB)				Lockwood Dr (SB)				Cavalcade St (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *22.7 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	10.0	7.0	12.0	10.0	7.0	12.0
Max Green	24.1	14.1	34.1	24.1	14.1	34.1
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.3	2.3	2.3	2.3	2.3	2.3
Lost Time	5.9	5.9	5.9	5.9	5.9	5.9
Recall Mode	Max	None	Max	Max	Min	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	9.0	9.0	9.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.0	0.2	0.2	0.0	0.2
Ped Walk + FDW	17.0	14.1	26.0	17.0	14.1	26.0
Coordinated	No	No	Yes	No	No	No
Split	30.0	20.0	40.0	30.0	20.0	40.0
Max Inhibit	True	True	False	True	True	False
Opt Min Green	15.9	12.9	17.9	15.9	12.9	17.9

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Cavalcade St (WB)			Lockwood Dr (SB)			Cavalcade St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	70	0	0	0	0	0	0	0	0	0	0	51
Adjusted Saturation Flow, veh/h	1440	1900	1855	1809	1976	1900	1440	1900	1900	1809	1976	1865
Capacity (c), veh/h	466	509	497	283	900	865	466	509	509	145	749	707
Available Capacity (ca), veh/h	466	509	497	283	749	720	466	509	509	283	749	707
Volume-to-Capacity Ratio (X)	0.151	0.000197	0.000221	0.000706	0.000111	0.000127	0.00043	0.000197	0.000216	0.00138	0.000134	0.0722
Green Ratio (g/C)	0.27	0.27	0.27	0.16	0.46	0.46	0.27	0.27	0.27	0.08	0.38	0.38
Assigned Phase	6	6	6	7	4	4	2	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	3.67	3.67	3.67	3.73	4.30	4.30	4.47	4.47	4.47	3.73	5.33	5.33
Queue Service Time (gs), s	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Queue Permitted Service Time (gps), s	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Phase Duration (Dp), s	30.0	30.0	30.0	20.0	46.9	46.9	30.0	30.0	30.0	13.1	40.0	40.0

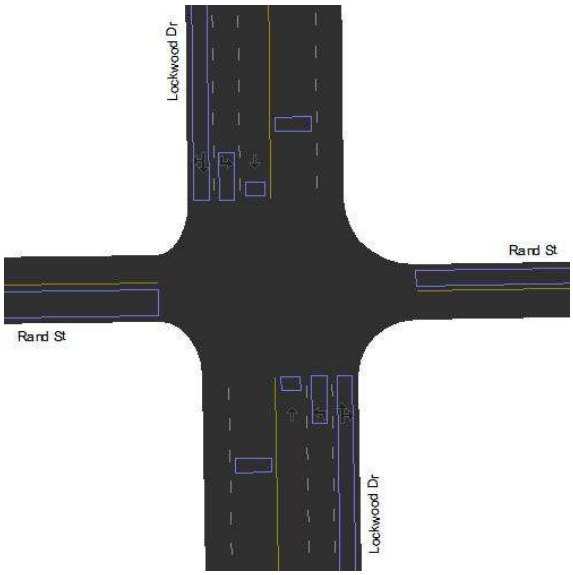
Uniform Delay (d1), s/veh	25.4	24.1	24.1	32	13.3	13.3	24.1	24.1	24.1	38.1	17.4	17.8
Incremental Delay (d2), s/veh	0.684	0.000696	0.000803	0.00449	0.000222	0.000265	0.00166	0.000696	0.000765	0.0172	0.000321	0.198
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	26	24.1	24.1	32	13.3	13.3	24.1	24.1	24.1	38.1	17.4	18
Level Of Service	C	C	C	C	B	B	C	C	C	D	B	B
Total Delay, veh-hr	0.507	0.00067	0.000737	0.00178	0.000371	0.000408	0.00134	0.00067	0.000737	0.00212	0.000482	0.256
Fully Stopped (Nf), veh/ln	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Percentile Back of Queue (Q%), veh/ln	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Effective Green Time, s	24.1	24.1	24.1	14.1	41.0	41.0	24.1	24.1	24.1	7.2	34.1	34.1
Approach Volume, veh/h	--	--	70	--	--	0	--	--	0	--	--	51
Approach Delay, s/veh	--	--	26.0	--	--	22.5	--	--	24.1	--	--	18.1

TransModeler® Intersection Report

Site Information

Intersection ID:	*170*	**Site Name:**	*N 29.803959, W 95.317025*
Cross Street:	*Rand St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:24*		

Intersection Geometry



Turn Movement Volumes (Rand St & Lockwood Dr)

@ Node 170 From \ To	Lockwood Dr (NB)	Rand St (WB)	Lockwood Dr (SB)	Rand St (EB)
Rand St (WB)				
Lockwood Dr (SB)				
Rand St (EB)			*13.0*	
Lockwood Dr (NB)		*10.0*		

[Flow Field] = Volume

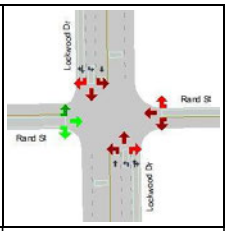
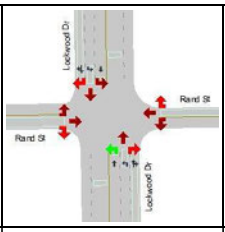
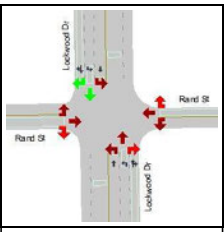
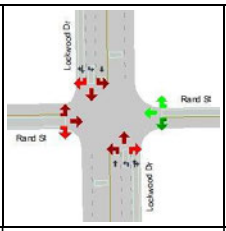
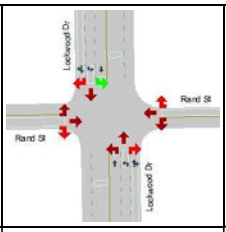
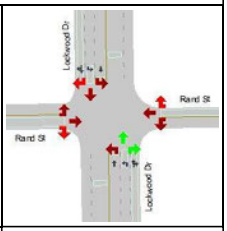
Volume Adjustment and Saturation Flow Rate

Movement	Rand St (WB)			Lockwood Dr (SB)				Rand St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Rand St	Lockwood Dr	Lockwood Dr	Rand St	Lockwood Dr	Rand St	Lockwood Dr	Lockwood Dr	Rand St	Lockwood Dr	Rand St	Lockwood Dr	Rand St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *35.7 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	5.0	6.0	6.0	5.0	5.0	6.0
Max Green	16.4	9.7	47.7	16.4	9.4	47.7
Yellow	3.2	3.6	3.6	3.2	3.2	3.6
Red Clearance	2.4	1.7	1.7	2.4	2.4	1.7
Lost Time	5.6	5.3	5.3	5.6	5.6	5.3
Recall Mode	None	Max	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	2.0	3.0	3.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	17.0	17.0	19.0	19.0	17.0
Coordinated	No	No	Yes	No	No	No
Split	22.0	15.0	53.0	22.0	15.0	53.0
Max Inhibit	True	False	False	True	True	True
Opt Min Green	10.6	11.3	11.3	10.6	10.6	11.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Rand St (WB)	Lockwood Dr (SB)			Rand St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	13	10	0	0
Adjusted Saturation Flow, veh/h	1900	1809	1976	1900	1976	1809	1976	1893
Capacity (c), veh/h	219	310	1179	1134	228	195	1047	1003
Available Capacity (ca), veh/h	346	189	1047	1007	360	195	1047	1003
Volume-to-Capacity Ratio (X)	0.00137	0.000645	8.48e-05	9.7e-05	0.0579	0.0518	9.55e-05	0.00011
Green Ratio (g/C)	0.12	0.17	0.60	0.60	0.12	0.11	0.53	0.53
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.44	3.73	3.30	3.30	5.54	2.73	3.30	3.30
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	1.00	1.00	0.65	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	16.0	21.0	59.0	59.0	16.0	15.0	53.0	53.0

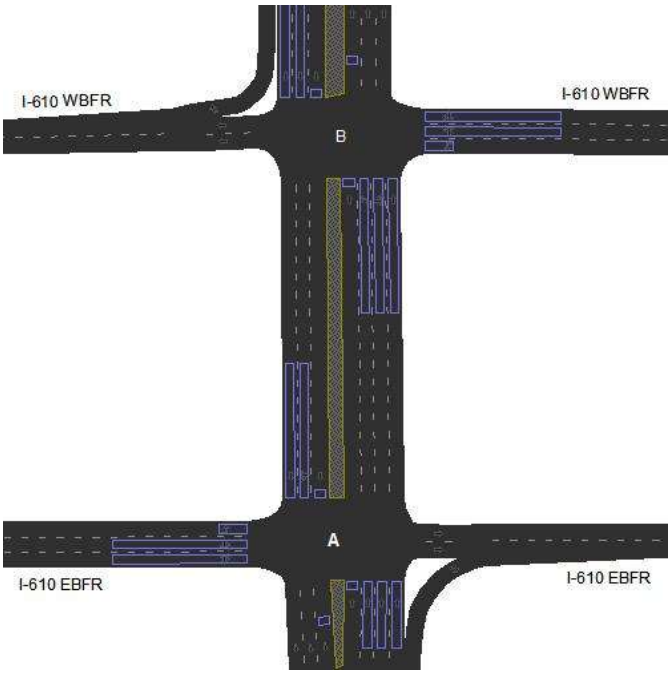
Uniform Delay (d1), s/veh	35.2	30.9	7.31	7.31	35.5	36	9.94	9.94
Incremental Delay (d2), s/veh	0.0113	0.00375	0.000129	0.000154	0.485	0.504	0.000164	0.000197
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	35.2	30.9	7.31	7.31	35.9	36.5	9.94	9.94
Level Of Service	D	C	A	A	D	D	A	A
Total Delay, veh-hr	0.00294	0.00172	0.000203	0.000223	0.132	0.102	0.000276	0.000304
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0
Effective Green Time, s	10.4	15.4	53.7	53.7	10.4	9.7	47.7	47.7
Approach Volume, veh/h	0	--	--	0	13	--	--	10
Approach Delay, s/veh	35.2	--	--	18.8	35.9	--	--	36.0

TransModeler® Intersection Report

Site Information

Intersection ID:	*171,172*	**Site Name:**	*N 29.808970, W 95.317119*
Cross Street:	*Lockwood Dr & I-610 EBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:35:38*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & I-610 EBFR)

@ Node 171 From \ To	Lockwood Dr (NB)	Lockwood Dr (SB)	I-610 EBFR (EB)
Lockwood Dr (SB)			
I-610 EBFR (EB)			
Lockwood Dr (NB)			

Turn Movement Volumes (Lockwood Dr & I-610 WBFR)

@ Node 172 From \ To	Lockwood Dr (NB)	I-610 WBFR (WB)	Lockwood Dr (SB)
Lockwood Dr (NB)			
I-610 WBFR (WB)			
Lockwood Dr (SB)			

[Flow Field] = Volume

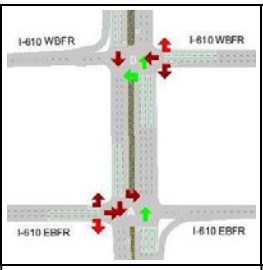
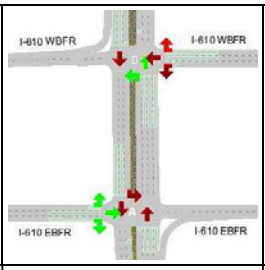
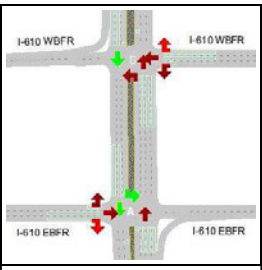
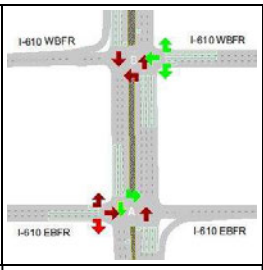
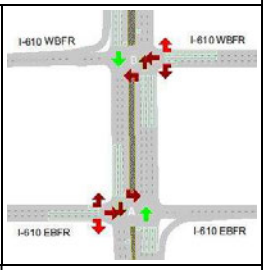
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SB)		I-610 EBFR (EB)			Lockwood Dr (NB)	Lockwood Dr (NB)		I-610 WBFR (WB)			Lockwood Dr (SB)
	Lockwood Dr	I-610 EBFR	Lockwood Dr	Lockwood Dr	I-610 EBFR	Lockwood Dr	Lockwood Dr	I-610 WBFR	Lockwood Dr	I-610 WBFR	Lockwood Dr	Lockwood Dr
	SBT	SBL	EBL	EBR	EBT	NBT	NBT	NBL	WBR	WBT	WBL	SBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *39.4 sec*
Level of Service: *D*
Offset: *17.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*0.0*
Max Green	*19.5*	*33.2*	*20.5*	*23.0*	*8.0*
Yellow	*3.2*	*3.2*	*3.2*	*5.0*	*3.0*
Red Clearance	*2.3*	*2.6*	*2.3*	*2.0*	*2.0*
Lost Time	*5.5*	*5.8*	*5.5*	*7.0*	*5.0*
Recall Mode	*Max*	*None*	*Max*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*19.5*	*29.2*	*19.5*	*28.0*	*28.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*19.0*	*29.2*	*19.0*	*28.0*	*28.0*
Coordinated	*No*	*No*	*Yes*	*No*	*No*
Split	*25.0*	*39.0*	*26.0*	*30.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.5*	*13.8*	*13.5*	*15.0*	*5.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 4*	*6, 8*	*9*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SB)		I-610 EBFR (EB)			Lockwood Dr (NB)	Lockwood Dr (NB)			I-610 WBFR (WB)			Lockwood Dr (SB)
	L+T	T	L	L+T	T+R	T	L	L+T	T	L	L+T	T+R	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1900*	*3800*	*1809*	*1900*	*1900*	*7600*	*1809*	*1900*	*3800*	*1809*	*1900*	*1900*	*5700*
Capacity (c), veh/h	*996*	*1992*	*204*	*214*	*214*	*1571*	*469*	*607*	*1213*	*195*	*205*	*205*	*2374*

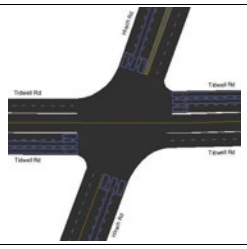
Available Capacity (ca), veh/h	329	657	452	474	474	1114	452	474	949	313	329	329	879
Volume-to-Capacity Ratio (X)	0.00011	5.02e-05	0.000469	0.000479	0.000479	6.36e-05	0.000104	8.45e-05	8.24e-05	0.000493	0.000493	0.0005	4.21e-05
Green Ratio (g/C)	0.52	0.52	0.11	0.11	0.11	0.21	0.26	0.32	0.32	0.11	0.11	0.11	0.42
Assigned Phase	8+9+6	8+9+6	4	4	4	2+9	4+2	4+2+9	4+2+9	8	8	8	6+9
Max. Allowable Headway (MAH), s/veh	6.31	6.31	6.28	6.28	6.28	5.40	6.28	6.28	6.28	6.31	6.31	6.31	5.62
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.52	0.52	0.52	0.52	0.52	1.00	0.52	0.52	0.52	0.52	0.52	0.52	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	21.4	21.4	20.8	20.8	20.8	25.0	20.8	20.8	20.8	21.4	21.4	21.4	52.9
Uniform Delay (d1), s/veh	15	15	52.4	52.4	52.4	41.8	36.5	30.8	30.8	52.9	52.9	52.9	22.6
Incremental Delay (d2), s/veh	0.0002	4.53e-05	0.00415	0.00403	0.00403	7.29e-05	0.0004	0.000251	0.000122	0.00455	0.00433	0.00439	3.2e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	15	15	52.4	52.4	52.4	41.8	36.5	30.8	30.8	52.9	52.9	52.9	22.6
Level Of Service	B	B	D	D	D	D	D	C	C	D	D	D	C
Total Delay, veh-hr	0.00046	0.000418	0.00139	0.00149	0.00149	0.00116	0.000495	0.000439	0.000855	0.00142	0.00149	0.00151	0.000629
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	69.7	69.7	15.0	15.0	15.0	27.5	34.5	42.5	42.5	14.4	14.4	14.4	55.4
Approach Volume, veh/h	--	0	--	--	0	0	--	--	0	--	--	0	0
Approach Delay, s/veh	--	15.0	--	--	52.4	41.8	--	--	32.2	--	--	52.9	22.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*180*	**Site Name:**	*N 29.848103, W 95.323829*
Cross Street:	*Tidwell Rd & Hirsch Rd*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:59:7*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Hirsch Rd)

@ Node 180 From \ To	Hirsch Rd (NB)	Tidwell Rd (NWB)	Hirsch Rd (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)				
Hirsch Rd (SB)				
Tidwell Rd (EB)				
Hirsch Rd (NB)				

[Flow Field] = Volume

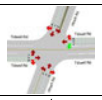
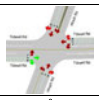
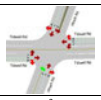
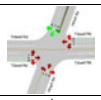
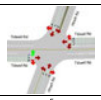
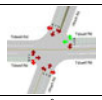
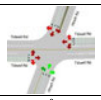
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Hirsch Rd (SB)			Tidwell Rd (EB)			Hirsch Rd (NB)		
	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Hirsch Rd	Tidwell Rd	Hirsch Rd	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	90.0 sec
Control Delay:	27.1 sec
Level of Service:	C
Offset:	70.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States							
							
ID	1	2	3	4	5	6	8
Min Green	5.0	10.0	5.0	10.0	5.0	10.0	14.0
Max Green	8.4	31.4	10.4	14.2	8.4	31.4	31.2
Yellow	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Red Clearance	2.7	2.7	2.7	1.9	2.7	2.7	1.9
Lost Time	6.6	6.6	6.6	5.8	6.6	6.6	5.8
Recall Mode	None	Min	None	Min	None	Min	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	12.0	12.0	12.0	11.2	12.0	12.0	16.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	27.0	27.0	27.0	29.2	27.0	27.0	25.0
Coordinated	No	No	No	No	No	Yes	No
Split	15.0	38.0	17.0	20.0	15.0	38.0	37.0
Max Inhibit	False	False	False	True	True	False	True
Opt Min Green	11.6	16.6	11.6	15.8	11.6	16.6	19.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2, 1	4, 3
Ring - 2	6, 5	8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

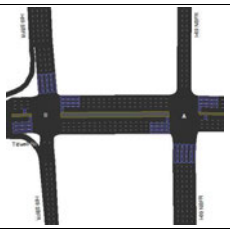
Lane Group	Tidwell Rd (WB)			Hirsch Rd (SB)			Tidwell Rd (EB)			Hirsch Rd (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1440	1900	1900	1809	1900	1900	1809	1900	1900
Capacity (c), veh/h	523	663	663	307	300	300	169	291	291	516	659	659
Available Capacity (ca), veh/h	169	663	663	307	300	300	169	663	663	516	659	659
Volume-to-Capacity Ratio (X)	0.000191	0.000151	0.000166	0.000326	0.000334	0.000367	0.000592	0.000343	0.000378	0.000194	0.000152	0.000167
Green Ratio (g/C)	0.29	0.35	0.35	0.16	0.16	0.16	0.09	0.15	0.15	0.27	0.35	0.35
Assigned Phase	1	6	6	4	4	4	5	2	2	3+8	8	8
Max. Allowable Headway (MAH), s/veh	3.26	4.77	4.77	3.78	3.78	3.78	3.26	4.77	4.77	3.26	4.08	4.08
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	32.6	38.0	38.0	20.0	20.0	20.0	15.0	20.4	20.4	17.0	37.0	37.0
Uniform Delay (d1), s/veh	22.8	19.1	19.1	31.9	31.9	31.9	37	32.3	32.3	26.9	19.2	19.2
Incremental Delay (d2), s/veh	0.000659	0.00041	0.000451	0.00191	0.002	0.0022	0.00632	0.00212	0.00234	0.000676	0.000415	0.000457
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	22.8	19.1	19.1	31.9	31.9	31.9	37	32.3	32.3	26.9	19.2	19.2
Level Of Service	C	B	B	C	C	C	D	C	C	C	B	B
Total Delay, veh-hr	0.000632	0.00053	0.000583	0.000887	0.000887	0.000975	0.00103	0.000896	0.000986	0.000803	0.000534	0.000587
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	26.0	31.4	31.4	14.2	14.2	14.2	8.4	13.8	13.8	24.6	31.2	31.2
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	20.3	--	--	31.9	--	--	33.8	--	--	22.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*181,182*	**Site Note:**	*N 29.848720, W 95.333057*
Cross Street:	*Tidwell Rd & I-69 NBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:59:23*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & I-69 NBFR)

⊗ Node 181 From \ To	I-69 NBFR (NB)	Tidwell Rd (WB)	Tidwell Rd (EB)
Tidwell Rd (WB)			
Tidwell Rd (EB)			
I-69 NBFR (NB)			

Turn Movement Volumes (Tidwell Rd & I-69 SBFR)

⊗ Node 182 From \ To	Tidwell Rd (WB)	I-69 SBFR (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)			
I-69 SBFR (SB)			
Tidwell Rd (EB)			

(Flow Field) = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)		Tidwell Rd (EB)		I-69 NBFR (NB)			Tidwell Rd (WB)		I-69 SBFR (SB)		Tidwell Rd (EB)
	I-69 NBFR	Tidwell Rd	I-69 NBFR	Tidwell Rd	I-69 NBFR	Tidwell Rd	Tidwell Rd	Tidwell Rd	I-69 SBFR	I-69 SBFR	Tidwell Rd	Tidwell Rd
	WBR	WBT	EBL	EBT	NBT	NBL	NBR	WBT	WBL	SBT	SBL	EBT

Signal Timing Plan - 1

Time of Day: 16:30:00 - 16:30:00
Plan Description: 16:30:00
Controller Type: Traffic Actuated
Cycle Length: 103.0 sec
Control Delay: 26.0 sec
Level of Service: C
Offset: 48.0 sec
Coordinate Begin of: Yellow
Yield Point: By Phase

Phasing

Item Name \ Signal States							
ID	1	2	4	5	6	8	9
Min Green	8.0	8.0	8.0	8.0	8.0	8.0	0.0
Max Green	23.5	29.5	23.5	21.5	31.5	23.5	10.0
Yellow	3.5	3.5	3.5	3.5	3.5	3.5	2.0
Red Clearance	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time	4.5	4.5	4.5	4.5	4.5	4.5	3.0
Recall Mode	None	Max	None	None	Max	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	16.5	18.5	16.5	13.5	18.5	16.5	16.5
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Coordinated	No	No	No	No	Yes	No	No
Split	28.0	34.0	28.0	26.0	36.0	28.0	13.0
Max Inhibit	False	False	False	False	False	False	False
Opt Min Green	12.5	12.5	12.5	12.5	12.5	12.5	3.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	9
Ring - 2	5, 6	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

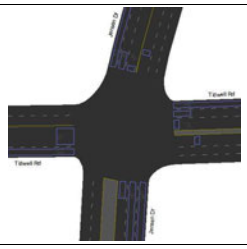
Lane Group	Tidwell Rd (WB)		Tidwell Rd (EB)			I-69 NBHR (NB)					Tidwell Rd (WB)			I-69 SBHR (SB)			Tidwell Rd (EB)
	T	T+R	L	L+T	T	L	L+T	T	T+R	R	L	L+T	T	L	L+T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	5700	1900	1809	1900	3800	1809	1900	1900	1900	1609	1809	1900	3800	1809	1900	3800	7600
Capacity (c), veh/h	3768	1256	161	729	1457	162	170	170	170	144	664	1256	2512	162	170	340	2915
Available Capacity (ca), veh/h	1743	581	378	397	1088	413	433	433	433	367	413	433	1162	413	433	867	2177
Volume-to-Capacity Ratio (X)	2.65e-05	8.76e-05	0.000305	8.33e-05	6.86e-05	0.000366	0.000366	0.000367	0.00037	0.00037	7.38e-05	4.06e-05	3.98e-05	0.000302	0.000302	0.000294	3.43e-05
Green Ratio (gC)	0.66	0.66	0.09	0.38	0.38	0.09	0.09	0.09	0.09	0.09	0.37	0.66	0.66	0.09	0.09	0.09	0.38
Assigned Phase	6+9	6+9	5	5+9+2	2+9	8	8	8	8	8	1	1+6+9	6+9	4	4	4	2+9
Max. Allowable Headway (MAH), s/veh	5.23	5.23	4.43	4.43	5.07	5.42	5.42	5.42	5.42	5.42	4.43	4.43	5.23	5.31	5.31	5.31	5.07
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.51	0.51	1.00	0.51	0.51	0.51	0.51	0.51	0.51	0.51	1.00	0.51	0.51	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	62.6	62.6	13.7	13.7	34.0	13.7	13.7	13.7	13.7	13.7	42.3	42.3	62.6	13.7	13.7	13.7	34.0
Uniform Delay (d1), s/veh	5.91	5.91	42.7	19.6	19.6	42.7	42.7	42.7	42.7	42.7	20.6	5.91	5.91	42.7	42.7	42.7	19.6
Incremental Delay (d2), s/veh	1.27e-05	0.000126	0.00341	0.000206	8.40e-05	0.00407	0.00388	0.00389	0.00392	0.00463	0.0002	5.85e-05	2.85e-05	0.00336	0.0032	0.00156	2.12e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	5.91	5.91	42.7	19.6	19.6	42.7	42.7	42.7	42.7	42.7	20.6	5.91	5.91	42.7	42.7	42.7	19.6
Level Of Service	A	A	D	B	B	D	D	D	D	D	C	A	A	D	D	D	B
Total Delay, veh-hr	0.000164	0.000181	0.000585	0.00033	0.000544	0.000702	0.000738	0.00074	0.000747	0.000632	0.00028	8.42e-05	0.000164	0.000579	0.000608	0.00119	0.000544
Fully Stopped (Nf), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	68.1	68.1	9.2	38.5	38.5	9.2	9.2	9.2	9.2	9.2	37.8	68.1	68.1	9.2	9.2	9.2	38.5
Approach Volume, veh/h	–	0	--	--	0	--	--	–	0	–	--	--	0	–	–	0	0
Approach Delay, s/veh	–	5.9	--	--	25.0	--	--	–	42.7	–	--	--	9.5	–	–	42.7	19.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*183*	**Site Name:**	*N 29.848152, W 95.342910*
Cross Street:	*Tidwell Rd & Jensen Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:59:39*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Jensen Dr)

@ Node 183 From \ To	Jensen Dr (NB)	Tidwell Rd (WB)	Jensen Dr (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)				
Jensen Dr (SB)				
Tidwell Rd (EB)			*42.0*	
Jensen Dr (NB)				

[Flow Field] = Volume

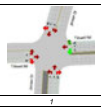
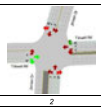
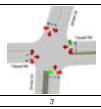
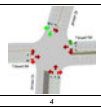
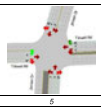
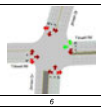
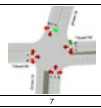
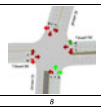
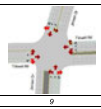
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Jensen Dr (SB)				Tidwell Rd (EB)			Jensen Dr (NB)			
	Jensen Dr	Tidwell Rd	Jensen Dr	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd	Jensen Dr	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd	Jensen Dr	Tidwell Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	103.0 sec
Control Delay:	40.5 sec
Level of Service:	D
Offset:	66.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	5.0	7.0	5.0	8.0	5.0	7.0	5.0	8.0	0.0
Max Green	7.9	32.9	10.2	15.2	8.9	31.9	10.2	15.2	8.0
Yellow	3.9	3.9	3.6	3.6	3.9	3.9	3.6	3.6	3.0
Red Clearance	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.0
Lost Time	6.1	6.1	5.8	5.8	6.1	6.1	5.8	5.8	5.0
Recall Mode	None	Min	None	None	None	Min	None	None	None
Memory Mode	Non-Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	9.0	7.0	10.0	7.0	9.0	7.0	10.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	13.9	23.0	11.2	16.0	13.9	23.0	11.2	16.0	16.0
Coordinated	No	No	No	No	No	Yes	No	No	No
Split	14.0	39.0	16.0	21.0	15.0	38.0	16.0	21.0	13.0
Max Inhibit	True	True	True	True	True	False	True	True	True
Opt Min Green	11.1	13.1	10.8	13.8	11.1	13.1	10.8	13.8	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	3, 4	9
Ring - 2	5, 6	7, 8	

Signal Timing Plan - 1

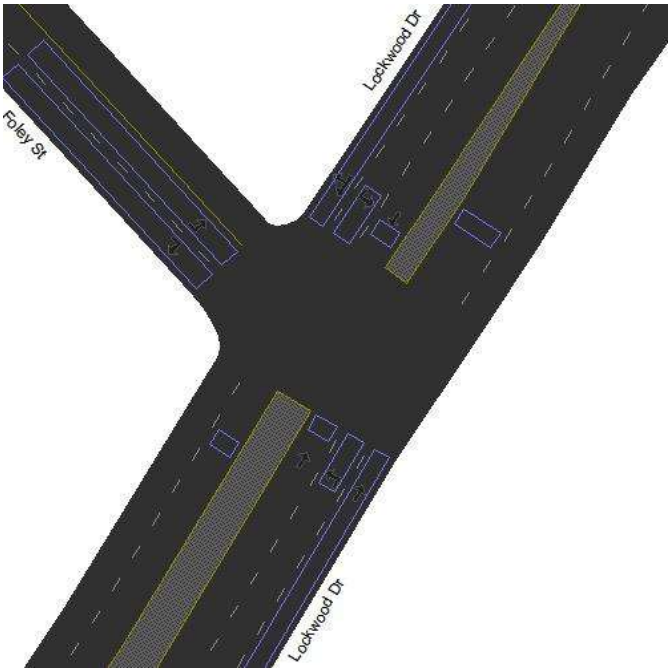
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Jensen Dr (SB)		Tidwell Rd (EB)		Jensen Dr (NB)		
	L	T+R	R	L	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	42	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1674	1809	1900	1881	1845	1809	1900	1900
Capacity (c), veh/h	670	1476	1300	198	151	130	253	202	151	151
Available Capacity (ca), veh/h	139	588	145	277	280	163	589	179	280	280
Volume-to-Capacity Ratio (X)	0.000149	7.21e-05	7.21e-05	0.00101	0.00133	0.000771	0.166	0.000988	0.000663	0.000729
Green Ratio (g/C)	0.37	0.78	0.78	0.13	0.08	0.07	0.14	0.11	0.08	0.08
Assigned Phase	1	6+1+4+2+7+3+5+8+9	5+1+4+2+6+7+3+8+9	7+9	4	5	2	3	8	8
Max. Allowable Headway (MAH), s/veh	2.76	4.12	2.72	2.63	4.27	2.72	4.44	2.76	4.27	4.27
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	0.51	0.51	0.51	0.51	1.00	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Phase Duration (Dp), s	44.3	51.3	13.2	11.5	14.0	13.2	20.2	11.5	14.0	14.0
Uniform Delay (d1), s/veh	20.4	2.57	2.57	38.9	43.6	44.6	39.2	40.6	43.6	43.6
Incremental Delay (d2), s/veh	0.000401	8.79e-05	9.98e-05	0.00916	0.0158	0.0107	1.41	0.0088	0.00791	0.0087
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	20.4	2.57	2.57	38.9	43.7	44.7	40.6	40.6	43.7	43.7
Level Of Service	C	A	A	D	D	D	D	D	D	D
Total Delay, veh-hr	0.000167	7.99e-05	6.68e-05	0.00216	0.00243	0.00124	0.475	0.00226	0.00121	0.00133
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Effective Green Time, s	38.2	80.0	80.0	13.7	8.2	7.1	14.1	11.5	8.2	8.2
Approach Volume, veh/h	--	0	--	--	0	--	42	--	--	0
Approach Delay, s/veh	--	8.5	--	--	41.3	--	40.7	--	--	42.2

TransModeler® Intersection Report

Site Information			
Intersection ID:	*197*	**Site Name:**	*N 29.753608, W 95.322102*
Cross Street:	*Lockwood Dr & Foley St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:3*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & Foley St)

@ Node 197 From \ To	Foley St (NWB)	Lockwood Dr (SWB)	Lockwood Dr (NEB)
Lockwood Dr (SWB)	*127.0*		
Foley St (SEB)			
Lockwood Dr (NEB)			

[Flow Field] = Volume

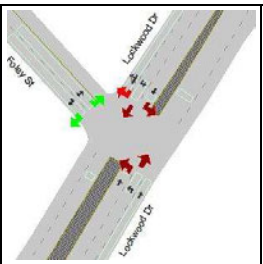
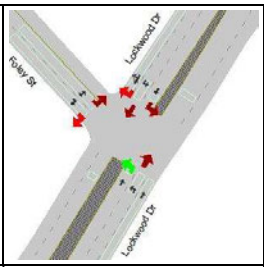
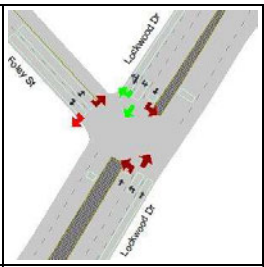
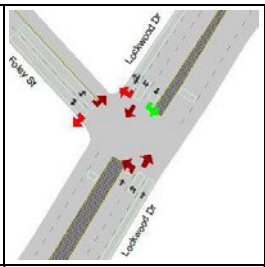
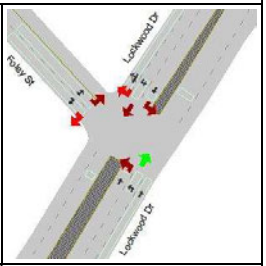
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SWB)			Foley St (SEB)		Lockwood Dr (NEB)	
	Foley St	Lockwood Dr	Lockwood Dr	Lockwood Dr	Lockwood Dr	Foley St	Lockwood Dr
	SWBR	SWBT	SWBL	SEBR	SEBL	NEBL	NEBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *5.2 sec*
Level of Service: *A*
Offset: *11.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	3	4	7	8
Min Green	8.0	8.0	8.0	8.0	8.0
Max Green	19.0	12.0	54.0	12.0	54.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No
Split	24.0	17.0	59.0	17.0	59.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	3
Ring - 2		8	7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SWB)			Foley St (SEB)		Lockwood Dr (NEB)	
	L	T	T+R	L	R	L	T
Adjusted Flow, veh/h	0	0	127	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1820	1809	1609	1809	3800
Capacity (c), veh/h	139	1377	1268	139	123	139	2647
Available Capacity (ca), veh/h	217	1067	983	344	306	217	2052

Volume-to-Capacity Ratio (X)	0.000722	7.26e-05	0.1	0.000721	0.00081	0.000722	3.78e-05
Green Ratio (g/C)	0.08	0.70	0.70	0.08	0.08	0.08	0.70
Assigned Phase	7	4	4	2	2	3	8
Max. Allowable Headway (MAH), s/veh	4.73	6.33	6.33	6.59	6.59	4.73	5.19
Queue Service Time (gs), s	0.0	0.0	2.3	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	1.1	1.1	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.7	74.7	74.7	12.7	12.7	12.7	74.7
Uniform Delay (d1), s/veh	42.6	4.6	4.95	42.6	42.6	42.6	4.6
Incremental Delay (d2), s/veh	0.00938	9.5e-05	0.158	0.00935	0.0118	0.00938	2.57e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.6	4.6	5.1	42.6	42.6	42.6	4.6
Level Of Service	D	A	A	D	D	D	A
Total Delay, veh-hr	0.00118	0.000128	0.18	0.00118	0.00118	0.00118	0.000128
Fully Stopped (Nf), veh/ln	0.0	0.0	0.8	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.9	0.0	0.0	0.0	0.0
Effective Green Time, s	7.7	69.7	69.7	7.7	7.7	7.7	69.7
Approach Volume, veh/h	--	--	127	0	--	--	0
Approach Delay, s/veh	--	--	5.1	42.6	--	--	23.6

TransModeler® Intersection Report

Site Information			
Intersection ID:	*249*	**Site Name:**	*N 29.731343, W 95.359884*
Cross Street:	*Ennis St & Elgin St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:11*		

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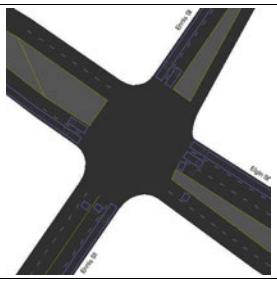
Intersection Geometry



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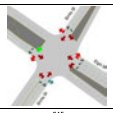
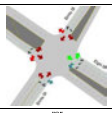
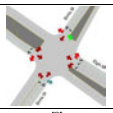
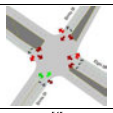
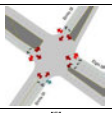
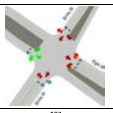
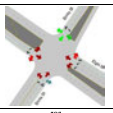
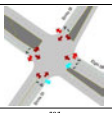
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *14.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
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"Max Green"	*"7.0"*	*"17.0"*	*"6.0"*	*"10.0"*	*"6.8"*	*"16.8"*	*"20.8"*	*"7.8"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
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"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"7.8"*	*"15.0"*	*"15.0"*	*"14.8"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"22.0"*	*"15.0"*	*"15.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"12.0"*	*"22.0"*	*"11.0"*	*"15.0"*	*"12.0"*	*"22.0"*	*"26.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"11.0"*	*"10.0"*	*"11.0"*	*"11.0"*	*"10.2"*	*"10.2"*	*"10.2"*	*"5.2"*

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"1", "2"*	*"3", "4"*	*"9"*
Ring - 2	*"5", "6"*	*"8"*	

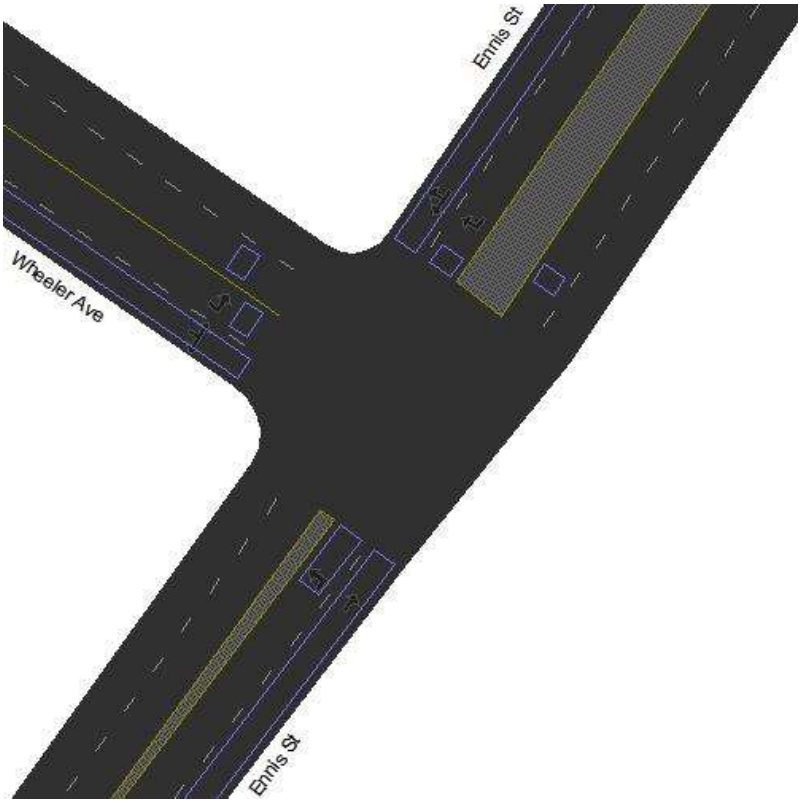
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*266*	**Site Name:**	*N 29.723838, W 95.365842*
Cross Street:	*Ennis St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:9:29*		

" "

Intersection Geometry

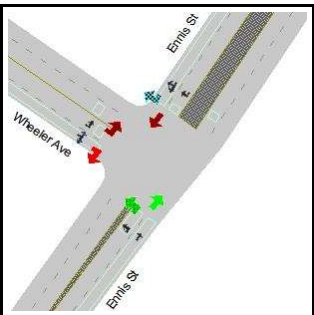
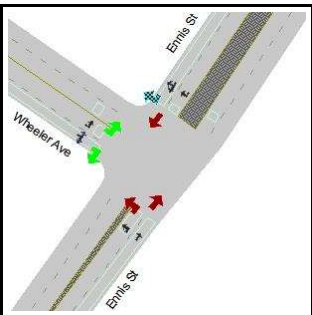
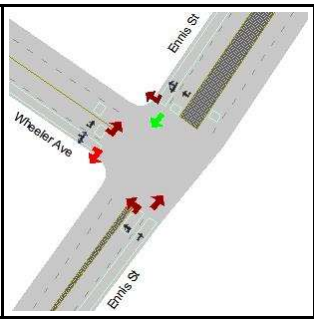
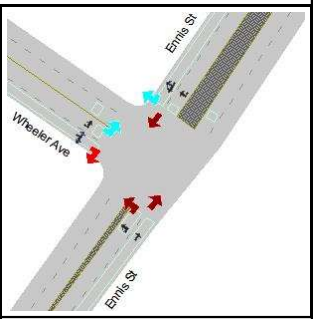


"

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*"Traffic Actuated"*
Cycle Length:	*73.0 sec*
Offset:	*13.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

"" " "

Phasing				
Item Name \ Signal States				
"ID"	*"4"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"8.0"*	*"4.0"*	*"8.0"*	*"3.0"*
"Max Green"	*"32.5"*	*"16.7"*	*"32.5"*	*"8.0"*
"Yellow"	*"3.6"*	*"3.6"*	*"3.6"*	*"3.0"*
"Red Clearance"	*"1.9"*	*"1.7"*	*"1.9"*	*"2.0"*
"Lost Time"	*"5.5"*	*"5.3"*	*"5.5"*	*"5.0"*
"Recall Mode"	*"Max"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"1.0"*	*"1.0"*	*"1.0"*	*"1.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"14.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"38.0"*	*"22.0"*	*"38.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"True"*	*"True"*
"Opt Min Green"	*"13.5"*	*"9.3"*	*"13.5"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1		*"4"*	*"9"*

Ring - 2	*"6"*	*"8"*	

"

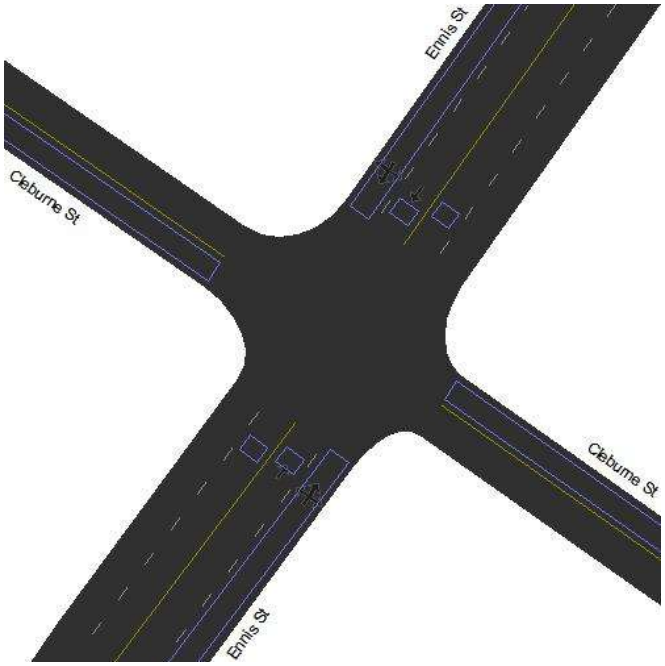
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*292*	**Site Name:**	*N 29.725733, W 95.364354*
Cross Street:	*Ennis St & Cleburne St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:9:37*		

" "

Intersection Geometry

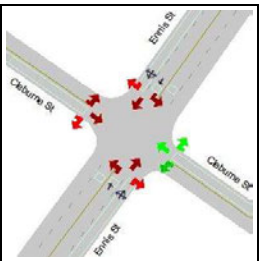
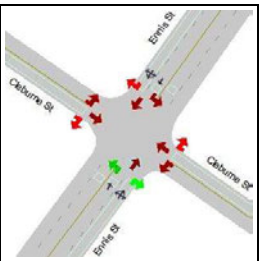
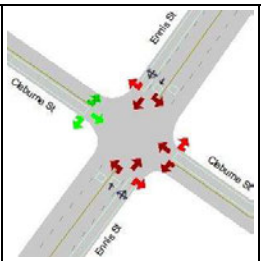
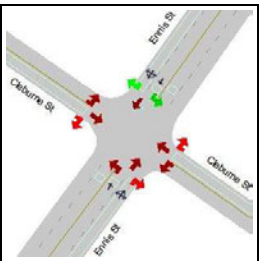
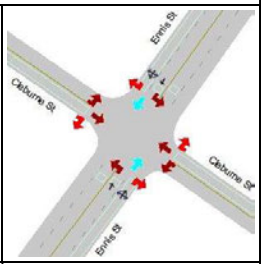


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *44.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
"ID"	*"2"*	*"4"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"4.0"*	*"8.0"*	*"4.0"*	*"8.0"*	*"3.0"*
"Max Green"	*"17.0"*	*"33.0"*	*"17.0"*	*"33.0"*	*"8.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"Min"*	*"None"*	*"Min"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"3.0"*	*"4.0"*	*"3.0"*	*"2.0"*
"Simultaneous Gap Out"	*"No"*	*"No"*	*"No"*	*"No"*	*"No"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"17.0"*	*"13.0"*	*"17.0"*	*"13.0"*	*"13.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"22.0"*	*"38.0"*	*"22.0"*	*"38.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"9.0"*	*"13.0"*	*"9.0"*	*"13.0"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

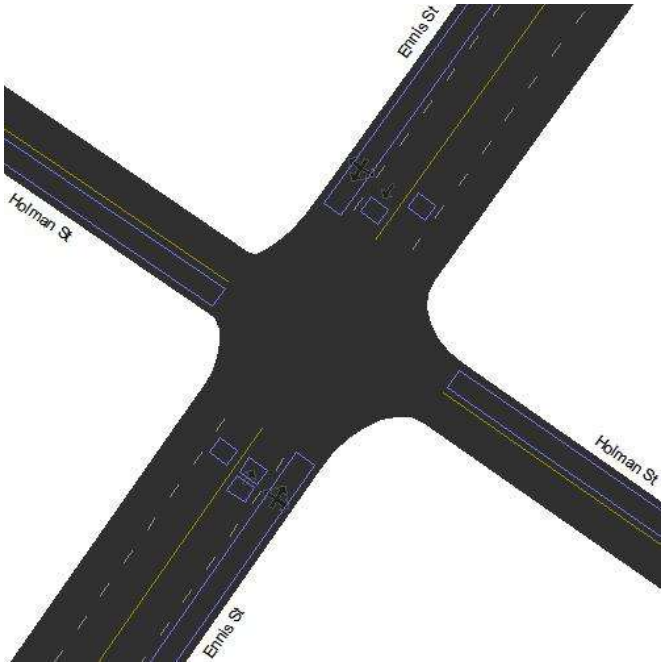
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*306*	**Site Name:**	*N 29.729462, W 95.361380*
Cross Street:	*Ennis St & Holman St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:0*		

" "

Intersection Geometry

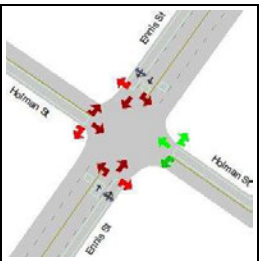
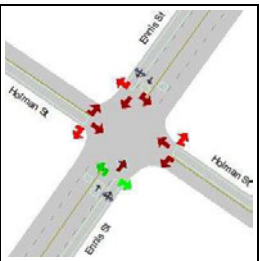
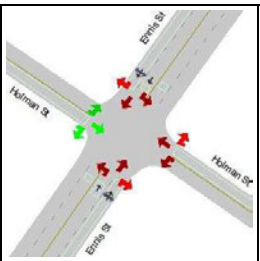
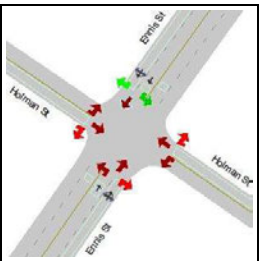
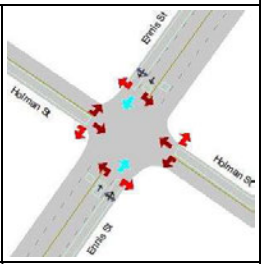


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *14.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
"ID"	*"2"*	*"4"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*	*"3.0"*
"Max Green"	*"14.3"*	*"36.3"*	*"14.3"*	*"36.3"*	*"8.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.5"*	*"1.5"*	*"1.5"*	*"1.5"*	*"2.0"*
"Lost Time"	*"4.7"*	*"4.7"*	*"4.7"*	*"4.7"*	*"5.0"*
"Recall Mode"	*"Max"*	*"Max"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"19.0"*	*"41.0"*	*"19.0"*	*"41.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"True"*	*"False"*	*"False"*
"Opt Min Green"	*"10.7"*	*"10.7"*	*"10.7"*	*"10.7"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

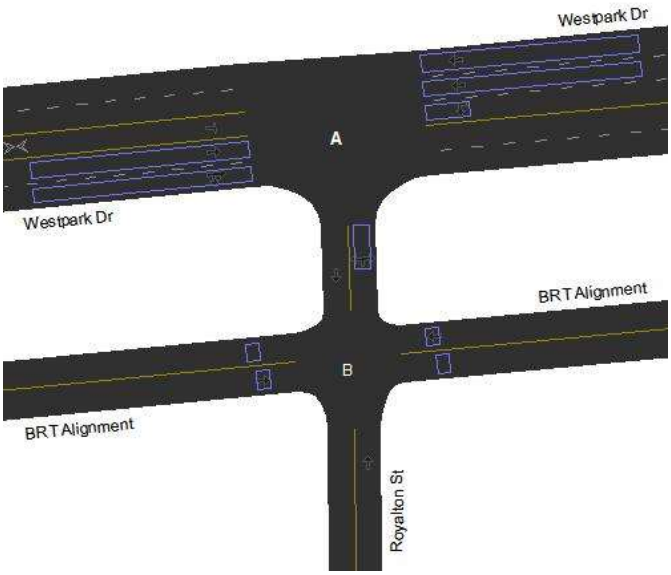
"

"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*309,99566*	**Site Name:**	*N 29.725239, W 95.472367*
Cross Street:	*Westpark Dr & Royalton St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:50:34*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Royalton St)

@ Node 309 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Royalton St (SB)
Westpark Dr (WB)			*61.0*
Westpark Dr (EB)			*168.0*
Royalton St (NB)	*212.0*	*208.0*	

Turn Movement Volumes (BRT Alignment & Royalton St)

@ Node 99566 From \ To	Royalton St (NB)	BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Royalton St (SB)				
BRT Alignment (EB)				
Royalton St (NB)				

[Flow Field] = Volume

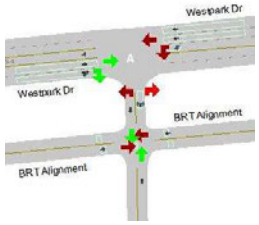
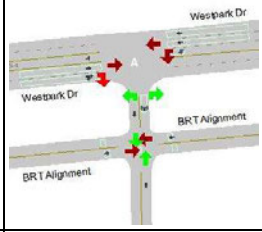
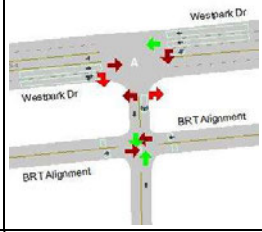
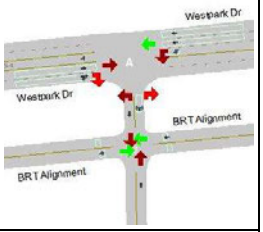
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)		Westpark Dr (EB)		Royalton St (NB)		BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)	Royalton St (NB)
	Westpark Dr	Royalton St	Westpark Dr	Royalton St	Westpark Dr	Westpark Dr	BRT Alignment	Royalton St	BRT Alignment	Royalton St
	WBT	WBL	EBT	EBR	NBR	NBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *143.0 sec*
Control Delay: *107.7 sec*
Level of Service: *F*
Offset: *24.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	*1*	*2*	*4*	*6*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*3.0*
Max Green	*17.0*	*64.0*	*31.0*	*87.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*2.5*	*2.5*	*2.5*	*2.5*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*23.0*	*70.0*	*37.0*	*93.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*14.0*	*14.0*	*14.0*	*14.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	*9*
Ring - 2	*6*		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)		Westpark Dr (EB)		Royalton St (NB)	BRT Alignment (WB)	Royalton St (SB)	BRT Alignment (EB)	Royalton St (NB)
	L	T	T	T+R	L+R	T	T	T	T
Adjusted Flow, veh/h	*61*	*0*	*0*	*168*	*420*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*3800*	*1900*	*899*	*1706*	*1976*	*1900*	*1976*	*1900*
Capacity (c), veh/h	*216*	*2522*	*852*	*403*	*371*	*106*	*1492*	*106*	*1492*

Available Capacity (ca), veh/h	216	213	852	403	371	111	852	111	852
Volume-to-Capacity Ratio (X)	0.283	3.97e-05	0.000117	0.417	1.13	0.000942	6.7e-05	0.000942	6.7e-05
Green Ratio (g/C)	0.12	0.66	0.45	0.45	0.22	0.05	0.79	0.05	0.79
Assigned Phase	1	9+6	2	2	4	9	2+1+6+4	9	2+1+6+4
Max. Allowable Headway (MAH), s/veh	3.26	2.41	4.94	4.94	3.36	2.41	4.94	2.41	4.94
Queue Service Time (gs), s	4.4	0.0	0.0	18.1	31.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.96	0.52	1.00	1.00	1.00	0.52	1.00	0.52	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.9	0.9	0.0	0.0	0.9	0.0	0.9
Phase Duration (Dp), s	23.0	12.7	70.0	70.0	37.0	12.7	70.0	12.7	70.0
Uniform Delay (d1), s/veh	57.3	8.07	21.7	26.7	57.7	63.9	3.3	63.9	3.3
Incremental Delay (d2), s/veh	3.26	2.83e-05	0.000248	3.15	88.1	0.016	8.09e-05	0.016	8.09e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	60.5	8.07	21.7	29.8	146	63.9	3.3	63.9	3.3
Level Of Service	E	A	C	C	F	E	A	E	A
Total Delay, veh-hr	1.03	0.000224	0.000603	1.39	17	0.00177	9.16e-05	0.00177	9.16e-05
Fully Stopped (Nf), veh/ln	2.1	0.0	0.0	4.0	15.6	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	2.3	0.0	0.0	4.4	24.7	0.0	0.0	0.0	0.0
Effective Green Time, s	17.0	94.7	64.0	64.0	31.0	7.7	112.0	7.7	112.0
Approach Volume, veh/h	--	61	--	168	420	0	0	0	0
Approach Delay, s/veh	--	60.5	--	29.8	145.7	63.9	3.3	63.9	3.3

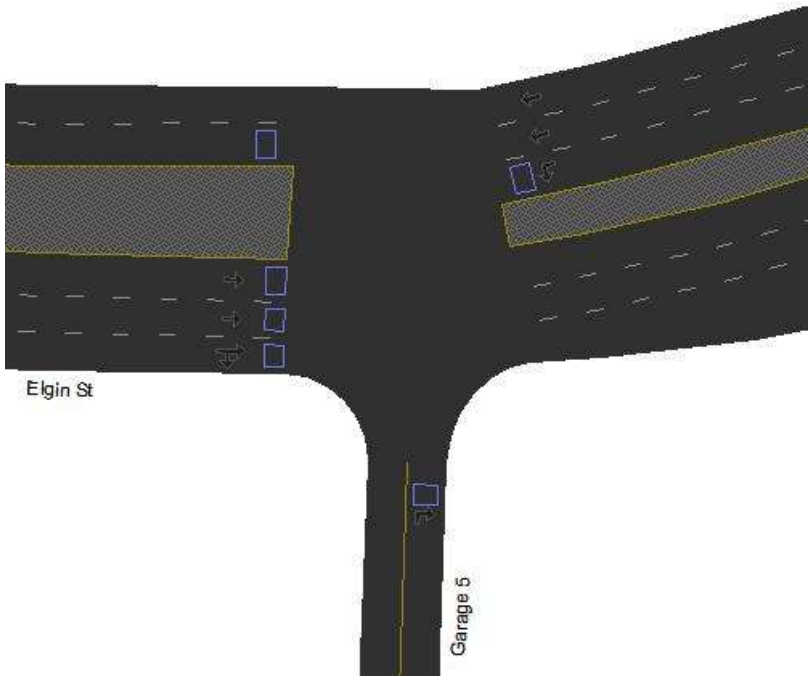
TransModeler® Intersection Report

Site Information

Intersection ID:	*353*	**Site Name:**	*N 29.725941, W 95.339106*
Cross Street:	*Elgin St & Garage 5*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:57*		

" "

Intersection Geometry



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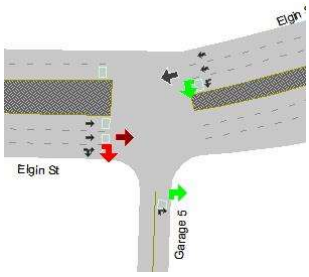
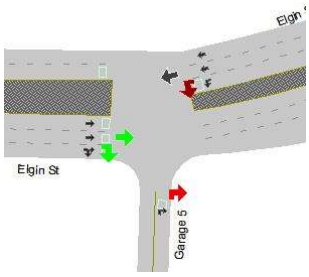
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *65.0 sec*

"" " "

Phasing		
Item Name \ Signal States		
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"Max Green"	*"10.0"*	*"45.0"*
"Yellow"	*"3.0"*	*"3.0"*
"Red Clearance"	*"2.0"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"Max"*
"Memory Mode"	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"No"*
"Split"	*"15.0"*	*"50.0"*
"Max Inhibit"	*"False"*	*"False"*
"Opt Min Green"	*"10.0"*	*"13.0"*

"

" " "

Phase Sequence and Concurrency Group		
Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*"6"*	*"5"*
Ring - 2		

"

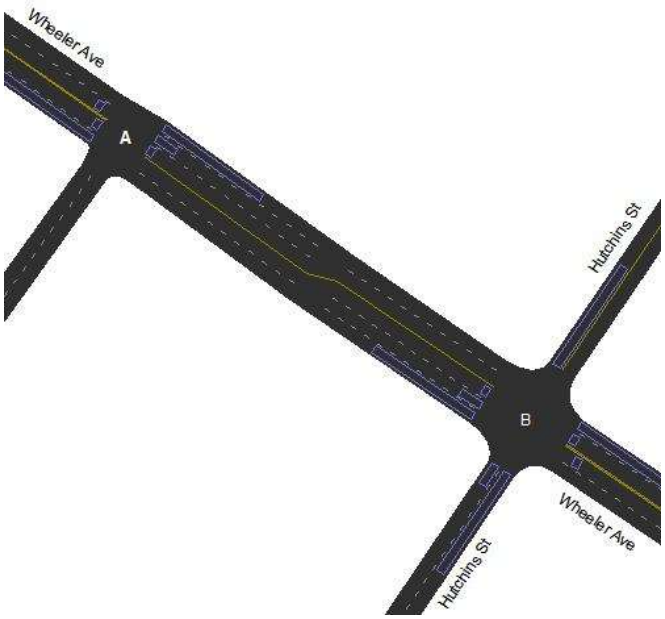
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*365,367*	**Site Name:**	*N 29.728611, W 95.373760*
Cross Street:	*Wheeler Ave & Hutchins St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:9:8*		

" "

Intersection Geometry



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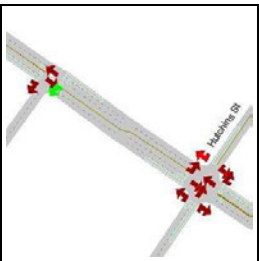
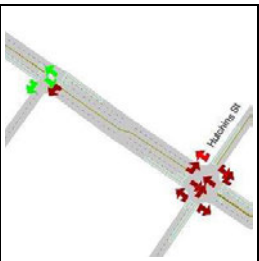
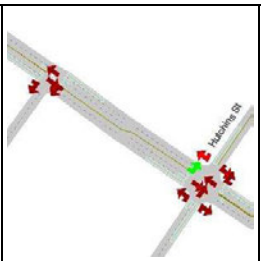
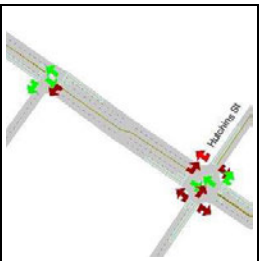
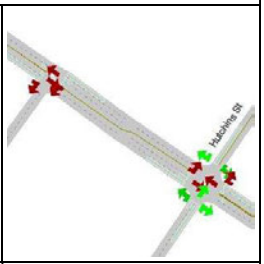
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States					
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"Max Green"	*"15.0"*	*"23.0"*	*"15.0"*	*"20.0"*	*"23.0"*
"Yellow"	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*	*"3.0"*
"Red Clearance"	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"None"*	*"None"*	*"None"*	*"Max"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"No"*	*"No"*	*"No"*	*"Yes"*
"Split"	*"20.0"*	*"28.0"*	*"20.0"*	*"25.0"*	*"28.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"10.0"*	*"10.0"*	*"10.0"*	*"10.0"*	*"11.0"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*"1", "2"*	
Ring - 2	*"5", "8"*	*"6"*

"

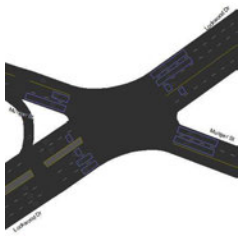
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*453*	**Site Name:**	*N 29.728900, W 95.335117*
Cross Street:	*Munger St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:55:19*		

Intersection Geometry



Turn Movement Volumes (Munger St & Lockwood Dr)

@ Node 453 From \ To	Lockwood Dr (NEB)	Munger St (WB)	Lockwood Dr (SWB)	Munger St (EB)
Munger St (EB)	*10.0*			
Lockwood Dr (NEB)				
Munger St (WB)				
Lockwood Dr (SWB)		*15.0*		*15.0*

[Flow Field] = Volume

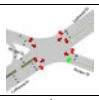
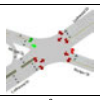
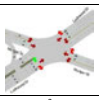
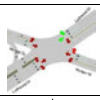
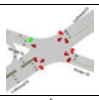
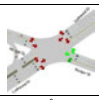
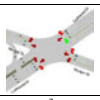
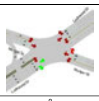
Volume Adjustment and Saturation Flow Rate

Movement	Munger St (EB)		Lockwood Dr (NEB)			Munger St (WB)			Lockwood Dr (SWB)		
	Lockwood Dr	Munger St	Lockwood Dr	Munger St	Munger St	Lockwood Dr	Munger St	Lockwood Dr	Munger St	Lockwood Dr	Munger St
	EBL	EBT	NEBT	NEBL	NEBR	WBR	WBT	WBL	SWBR	SWBT	SWBL

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	70.0 sec
Control Delay:	29.8 sec
Level of Service:	C
Offset:	4.0 sec
Coordinate Begin of:	Yellow
Yield Point:	By Phase

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	8.0	5.0	8.0	5.0	8.0	8.0	8.0
Max Green	5.0	17.0	10.0	18.0	5.0	17.0	10.0	18.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	No	No	No	No	Yes
Split	10.0	22.0	15.0	23.0	10.0	22.0	15.0	23.0
Max Inhibit	False	False	False	False	False	False	False	False
Opt Min Green	10.0	13.0	10.0	13.0	10.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	1, 2	4, 3
Ring - 2	6, 5	8, 7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

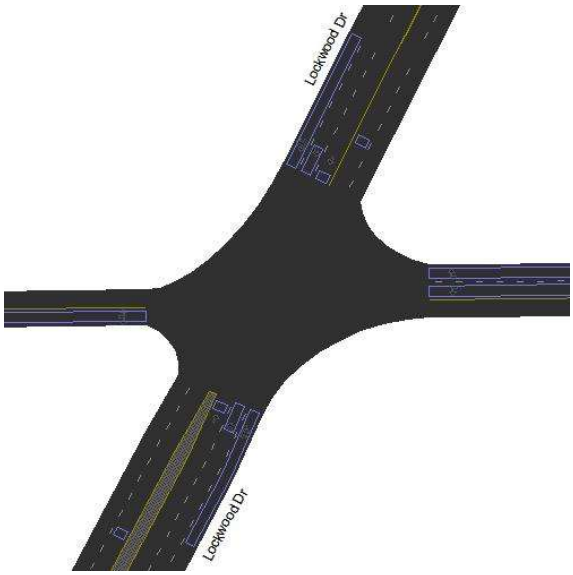
Lane Group	Munger St (EB)		Lockwood Dr (NEB)			Munger St (WB)		Lockwood Dr (SWB)		
	L	T	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	10	0	0	0	0	0	0	15	0	15
Adjusted Saturation Flow, veh/h	1809	1900	1809	1976	1900	1809	1900	1809	1976	1879
Capacity (c), veh/h	69	208	741	810	779	69	208	223	244	232
Available Capacity (ca), veh/h	129	461	258	508	489	129	461	258	508	483
Volume-to-Capacity Ratio (X)	0.146	0.000481	0.000135	0.000123	0.000141	0.00145	0.000961	0.0672	0.00041	0.0646
Green Ratio (g/C)	0.04	0.11	0.41	0.41	0.41	0.04	0.11	0.12	0.12	0.12
Assigned Phase	5	2	3	8	8	116	6	7	4	4
Max. Allowable Headway (MAH), s/veh	3.34	3.86	3.23	3.16	3.16	3.95	4.03	3.74	3.97	3.97
Queue Service Time (gs), s	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.60	0.51	0.51	1.00	1.00	0.51	0.51	0.63	0.63	0.63
Max Out Probability (px)	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	10.0	12.7	33.7	33.7	33.7	10.0	12.7	13.6	13.6	13.6
Uniform Delay (d1), s/veh	32.6	27.8	12.2	12.2	12.2	32.4	27.8	27.1	26.9	27.1
Incremental Delay (d2), s/veh	4.42	0.00417	0.000327	0.000274	0.000326	0.038	0.00833	0.58	0.00302	0.535
Initial Queue Delay (d3), s/veh:	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	37	27.8	12.2	12.2	12.2	32.4	27.8	27.7	26.9	27.6
Level Of Service	D	C	B	B	B	C	C	C	C	C
Total Delay, veh-hr	0.103	0.000171	0.000339	0.000338	0.000372	0.000901	0.00164	0.115	0.000747	0.115
Fully Stopped (Nf), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Percentile Back of Queue (Q%), veh/ln	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Effective Green Time, s	2.7	7.7	28.7	28.7	28.7	2.7	7.7	8.6	8.6	8.6
Approach Volume, veh/h	--	10	--	--	0	--	0	--	--	30
Approach Delay, s/veh	--	36.9	--	--	12.2	--	29.3	--	--	27.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*514*	**Site Name:**	*N 29.759036, W 95.318122*
Cross Street:	*Harvey Wilson Dr & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:10*		

Intersection Geometry



Turn Movement Volumes (Harvey Wilson Dr & Lockwood Dr)

@ Node 514 From \ To	Lockwood Dr (NEB)	Harvey Wilson Dr (WB)	Lockwood Dr (SWB)	Harvey Wilson Dr (EB)
Harvey Wilson Dr (WB)				
Lockwood Dr (SWB)				*24.0*
Harvey Wilson Dr (EB)				
Lockwood Dr (NB)				*46.0*

[Flow Field] = Volume

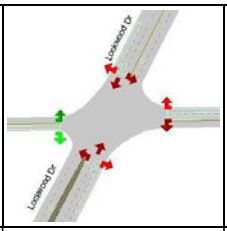
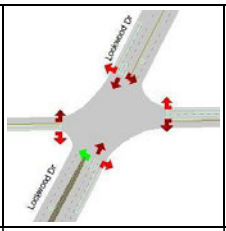
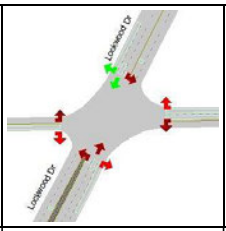
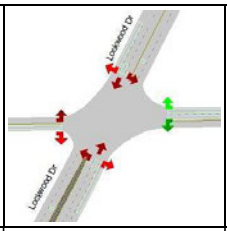
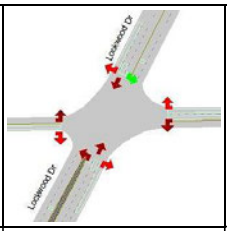
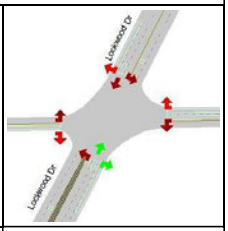
Volume Adjustment and Saturation Flow Rate

Movement	Harvey Wilson Dr (WB)		Lockwood Dr (SWB)				Harvey Wilson Dr (EB)		Lockwood Dr (NB)			
	Lockwood Dr	Lockwood Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Lockwood Dr	Lockwood Dr	Harvey Wilson Dr	Lockwood Dr	Harvey Wilson Dr
	WBR	WBL	SWBU	SWBR	SWBT	SWBL	EBL	EBR	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *18.5 sec*
Level of Service: *B*
Offset: *18.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	19.0	16.0	50.0	19.0	16.0	50.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	Yes	No	No	No
Split	24.0	21.0	55.0	24.0	21.0	55.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	3
Ring - 2	6	8	7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Harvey Wilson Dr (WB)		Lockwood Dr (SWB)			Harvey Wilson Dr (EB)	Lockwood Dr (NB)		
	L	R	L	T	T+R	L+R	L	T	T+R
Adjusted Flow, veh/h	0	0	24	0	0	0	0	0	46
Adjusted Saturation Flow, veh/h	1809	1609	1809	1976	1884	1900	1809	1976	1869
Capacity (c), veh/h	211	123	173	1339	1276	146	173	1339	1266
Available Capacity (ca), veh/h	416	306	289	988	942	361	289	988	934
Volume-to-Capacity Ratio (X)	0.000474	0.00081	0.139	7.47e-05	8.62e-05	0.00137	0.00116	7.47e-05	0.0363
Green Ratio (g/C)	0.08	0.08	0.10	0.68	0.68	0.08	0.10	0.68	0.68
Assigned Phase	6	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.78	4.78	3.23	3.79	3.79	4.98	3.23	4.83	4.83
Queue Service Time (gs), s	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.8
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	0.75	1.00	1.00	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Phase Duration (Dp), s	12.7	12.7	14.6	72.8	72.8	12.7	14.6	72.8	72.8

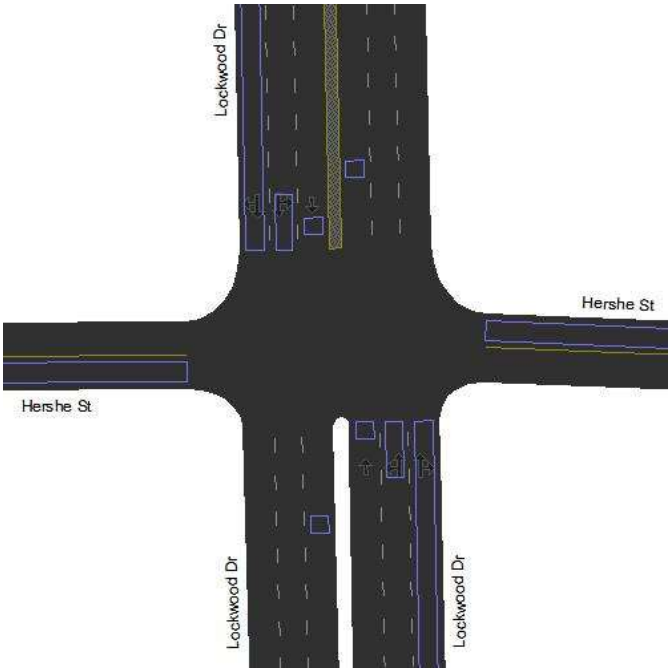
Uniform Delay (d1), s/veh	42.6	42.6	41.4	5.2	5.2	42.6	40.9	5.2	5.33
Incremental Delay (d2), s/veh	0.00405	0.0118	1.68	0.0001	0.000122	0.017	0.012	0.0001	0.0536
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.6	42.6	43.1	5.2	5.2	42.6	40.9	5.2	5.38
Level Of Service	D	D	D	A	A	D	D	A	A
Total Delay, veh-hr	0.00118	0.00118	0.289	0.000144	0.000159	0.00237	0.00227	0.000144	0.0688
Fully Stopped (Nf), veh/ln	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.3
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.3
Effective Green Time, s	7.7	7.7	9.6	67.8	67.8	7.7	9.6	67.8	67.8
Approach Volume, veh/h	0	--	--	--	24	0	--	--	46
Approach Delay, s/veh	42.6	--	--	--	42.8	42.6	--	--	5.5

TransModeler® Intersection Report

Site Information

Intersection ID:	*534*	**Site Name:**	*N 29.778370, W 95.315883*
Cross Street:	*Hershe St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:5*		

Intersection Geometry



Turn Movement Volumes (Hershe St & Lockwood Dr)

@ Node 534 From \ To	Lockwood Dr (NB)	Hershe St (WB)	Lockwood Dr (SB)	Hershe St (EB)
Hershe St (WB)	*7.0*	*1.0*	*5.0*	
Lockwood Dr (SB)		*9.0*		*10.0*
Hershe St (EB)	*10.0*		*10.0*	*4.0*
Lockwood Dr (NB)		*12.0*		*10.0*

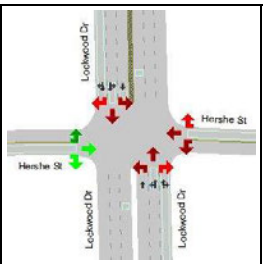
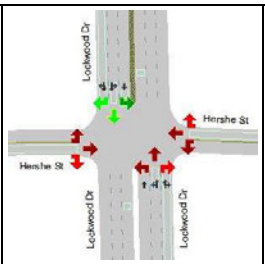
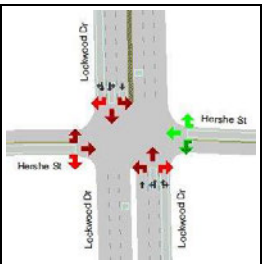
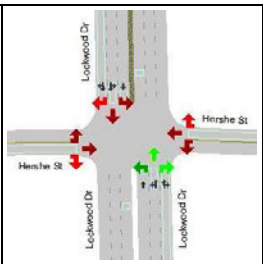
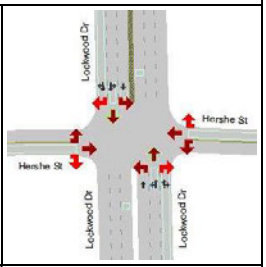
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Hershe St (WB)			Lockwood Dr (SB)			Hershe St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Lockwood Dr	Lockwood Dr	Hershe St	Lockwood Dr	Hershe St	Hershe St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *23.6 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*0.0*
Max Green	*25.0*	*55.0*	*25.0*	*55.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*0.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*30.0*	*60.0*	*30.0*	*60.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*13.0*	*5.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Hershe St (WB)	Lockwood Dr (SB)			Hershe St (EB)	Lockwood Dr (NB)		
	LTR	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	*13*	*10*	*0*	*9*	*24*	*12*	*0*	*10*
Adjusted Saturation Flow, veh/h	*1902*	*1522*	*1900*	*1891*	*1903*	*1516*	*1900*	*1890*
Capacity (c), veh/h	*177*	*858*	*1446*	*1440*	*177*	*857*	*1446*	*1439*
Available Capacity (ca), veh/h	*462*	*644*	*1015*	*1010*	*462*	*643*	*1015*	*1009*

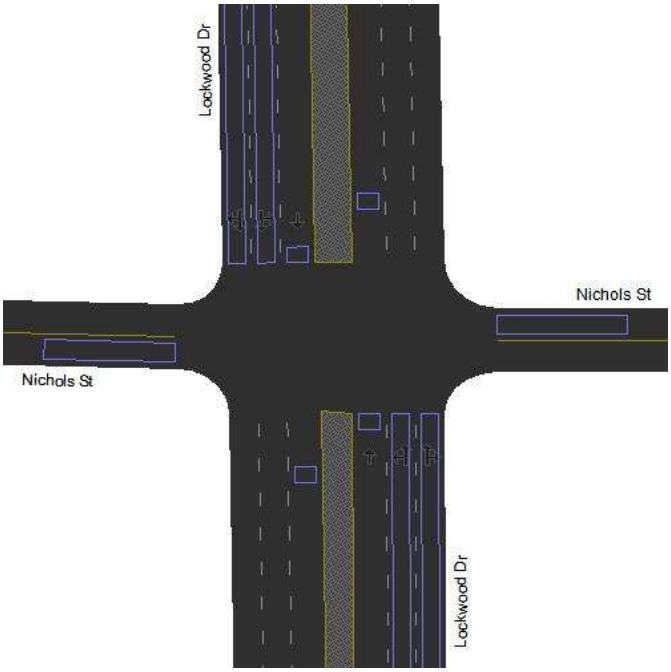
Volume-to-Capacity Ratio (X)	0.0734	0.0117	6.91e-06	0.00632	0.135	0.014	6.91e-06	0.00702
Green Ratio (g/C)	0.09	0.76	0.76	0.76	0.09	0.76	0.76	0.76
Assigned Phase	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	6.48	4.40	4.40	4.40	6.46	4.32	4.32	4.32
Queue Service Time (gs), s	0.6	0.3	0.0	0.1	1.2	0.3	0.0	0.1
Queue Permitted Service Time (gps), s	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
Phase Call Probability (pc)	0.66	1.00	1.00	1.00	0.75	0.74	0.74	0.74
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Phase Duration (Dp), s	14.6	75.4	75.4	75.4	14.6	75.4	75.4	75.4
Uniform Delay (d1), s/veh	42.6	7.06	2.94	2.95	42.9	7.13	2.94	2.95
Incremental Delay (d2), s/veh	0.803	0.0248	8.61e-06	0.00795	1.58	0.0299	8.61e-06	0.00885
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	43.4	7.08	2.94	2.96	44.5	7.16	2.94	2.96
Level Of Service	D	A	A	A	D	A	A	A
Total Delay, veh-hr	0.157	0.0197	8.16e-06	0.00748	0.296	0.0239	8.16e-06	0.00831
Fully Stopped (Nf), veh/ln	0.3	0.0	0.0	0.0	0.6	0.1	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.4	0.1	0.0	0.0	0.7	0.1	0.0	0.0
Effective Green Time, s	9.6	78.4	78.4	78.4	9.6	78.4	78.4	78.4
Approach Volume, veh/h	13	--	--	19	24	--	--	22
Approach Delay, s/veh	43.4	--	--	5.1	44.5	--	--	5.2

TransModeler® Intersection Report

Site Information

Intersection ID:	*567*	**Site Name:**	*N 29.781237, W 95.315919*
Cross Street:	*Nichols St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:11*		

Intersection Geometry



Turn Movement Volumes (Nichols St & Lockwood Dr)

@ Node 567 From \ To	Lockwood Dr (NB)	Nichols St (WB)	Lockwood Dr (SB)	Nichols St (EB)
Nichols St (WB)				
Lockwood Dr (SB)				
Nichols St (EB)				*4.0*
Lockwood Dr (NB)				

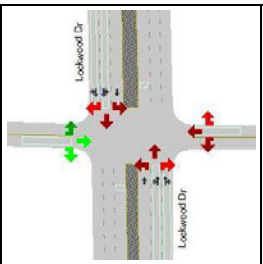
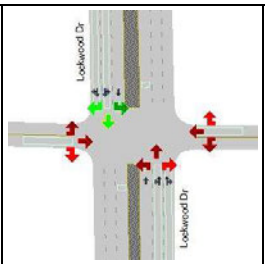
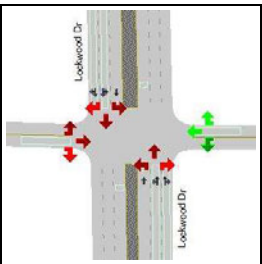
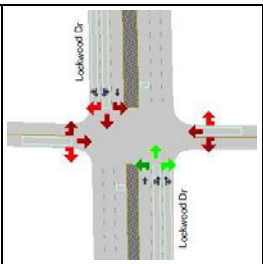
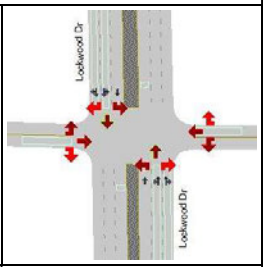
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Nichols St (WB)			Lockwood Dr (SB)			Nichols St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Lockwood Dr	Lockwood Dr	Nichols St	Lockwood Dr	Nichols St	Nichols St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *37.9 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*	*0.0*
Max Green	*25.0*	*55.0*	*25.0*	*55.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*18.0*	*18.0*	*18.0*	*18.0*	*15.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*30.0*	*60.0*	*30.0*	*60.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*13.0*	*5.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

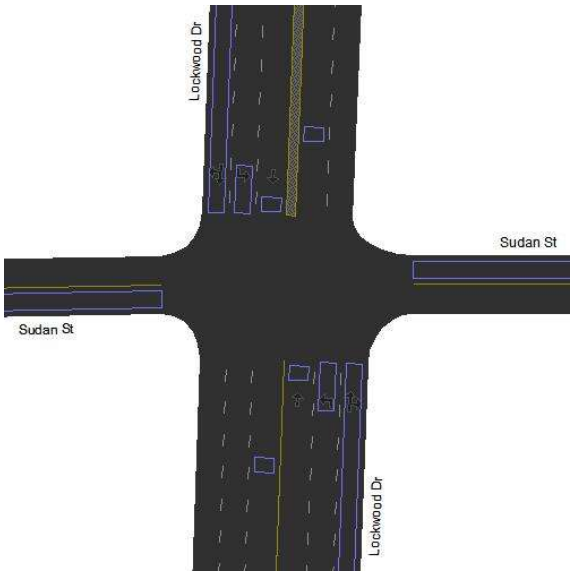
Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Nichols St (WB)	Lockwood Dr (SB)			Nichols St (EB)	Lockwood Dr (NB)		
	LTR	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*4*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1900*	*1544*	*1976*	*1900*	*1900*	*1544*	*1976*	*1900*
Capacity (c), veh/h	*178*	*885*	*1504*	*1446*	*178*	*885*	*1504*	*1446*
Available Capacity (ca), veh/h	*461*	*665*	*1055*	*1014*	*461*	*665*	*1055*	*1014*

Volume-to-Capacity Ratio (X)	0.00169	0.000124	5.26e-05	8.37e-05	0.0237	0.000124	5.26e-05	8.37e-05
Green Ratio (g/C)	0.09	0.76	0.76	0.76	0.09	0.76	0.76	0.76
Assigned Phase	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	5.43	5.00	5.00	5.00	5.36	5.00	5.00	5.00
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	0.57	0.51	0.51	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.6	75.4	75.4	75.4	14.6	75.4	75.4	75.4
Uniform Delay (d1), s/veh	42.3	3.79	2.94	2.94	42.4	3.79	2.94	2.94
Incremental Delay (d2), s/veh	0.0172	0.000253	6.29e-05	0.000104	0.246	0.000253	6.29e-05	0.000104
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.3	3.79	2.94	2.94	42.7	3.79	2.94	2.94
Level Of Service	D	A	A	A	D	A	A	A
Total Delay, veh-hr	0.00353	0.000116	6.46e-05	9.89e-05	0.0498	0.000116	6.46e-05	9.89e-05
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Effective Green Time, s	9.6	78.4	78.4	78.4	9.6	78.4	78.4	78.4
Approach Volume, veh/h	0	--	--	0	4	--	--	0
Approach Delay, s/veh	42.3	--	--	3.2	42.7	--	--	3.2

TransModeler® Intersection Report

Site Information			
Intersection ID:	*576*	**Site Name:**	*N 29.784136, W 95.315919*
Cross Street:	*Sudan St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:16*		

Intersection Geometry



Turn Movement Volumes (Sudan St & Lockwood Dr)

@ Node 576 From \ To	Lockwood Dr (NB)	Sudan St (WB)	Lockwood Dr (SB)	Sudan St (EB)
Sudan St (WB)	*15.0*		*3.0*	
Lockwood Dr (SB)		*5.0*		*16.0*
Sudan St (EB)	*6.0*		*2.0*	*2.0*
Lockwood Dr (NB)		*3.0*		*8.0*

[Flow Field] = Volume

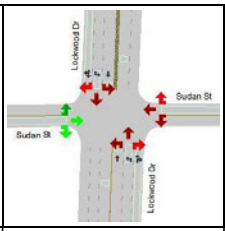
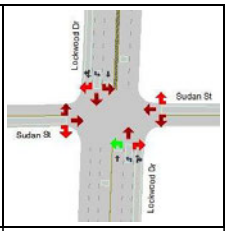
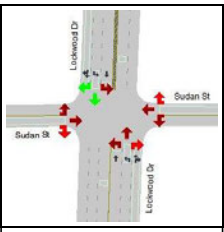
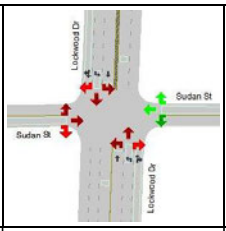
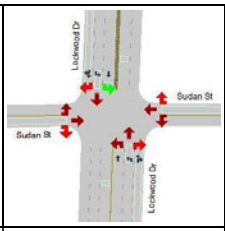
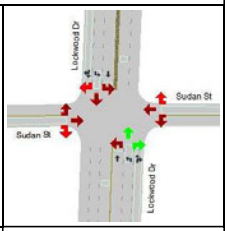
Volume Adjustment and Saturation Flow Rate

Movement	Sudan St (WB)			Lockwood Dr (SB)			Sudan St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Lockwood Dr	Lockwood Dr	Sudan St	Lockwood Dr	Sudan St	Sudan St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *28.8 sec*
Level of Service: *C*
Offset: *24.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	5.0	8.0	8.0	5.0	8.0
Max Green	20.0	6.0	49.0	20.0	6.0	49.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	18.0	18.0	18.0	18.0
Coordinated	No	No	Yes	No	No	No
Split	25.0	11.0	54.0	25.0	11.0	54.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	10.0	13.0	13.0	10.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

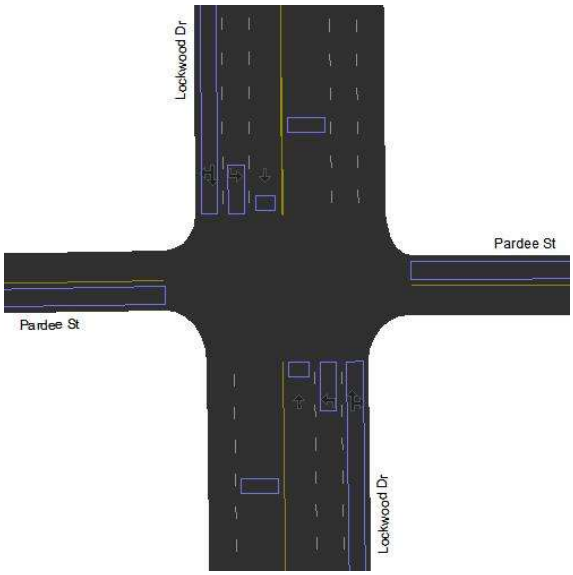
Lane Group	Sudan St (WB)	Lockwood Dr (SB)			Sudan St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	18	16	0	5	10	3	0	8
Adjusted Saturation Flow, veh/h	1903	1809	1976	1885	1900	1809	1976	1892
Capacity (c), veh/h	224	309	1282	1223	224	121	1076	1030
Available Capacity (ca), veh/h	423	121	1076	1027	422	121	1076	1030
Volume-to-Capacity Ratio (X)	0.0807	0.0517	7.8e-05	0.0041	0.0447	0.0249	9.3e-05	0.00778
Green Ratio (g/C)	0.12	0.17	0.65	0.65	0.12	0.07	0.54	0.54
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.02	3.23	4.79	4.79	4.93	3.23	4.81	4.81
Queue Service Time (gs), s	0.8	0.7	0.0	0.1	0.4	0.1	0.0	0.2
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.69	0.67	1.00	1.00	0.62	0.55	1.00	1.00
Max Out Probability (px)	0.00	1.00	0.00	0.00	0.00	0.76	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.6	20.4	63.4	63.4	15.6	11.0	54.0	54.0

Uniform Delay (d1), s/veh	35.4	31.2	5.55	5.56	35.2	39.3	9.34	9.38
Incremental Delay (d2), s/veh	0.703	0.317	0.00011	0.00605	0.376	0.381	0.000156	0.0137
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	36.1	31.5	5.55	5.57	35.6	39.6	9.34	9.39
Level Of Service	D	C	A	A	D	D	A	A
Total Delay, veh-hr	0.181	0.14	0.000154	0.00775	0.0988	0.033	0.000259	0.0209
Fully Stopped (Nf), veh/ln	0.4	0.3	0.0	0.0	0.2	0.1	0.0	0.1
Percentile Back of Queue (Q%), veh/ln	0.4	0.3	0.0	0.0	0.2	0.1	0.0	0.1
Effective Green Time, s	10.6	15.4	58.4	58.4	10.6	6.0	49.0	49.0
Approach Volume, veh/h	18	--	--	21	10	--	--	11
Approach Delay, s/veh	36.1	--	--	25.2	35.6	--	--	17.6

TransModeler® Intersection Report

Site Information			
Intersection ID:	*604*	**Site Name:**	*N 29.805946, W 95.317057*
Cross Street:	*Pardee St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:49*		

Intersection Geometry



Turn Movement Volumes (Pardee St & Lockwood Dr)

@ Node 604 From \ To	Lockwood Dr (NB)	Pardee St (WB)	Lockwood Dr (SB)	Pardee St (EB)
Pardee St (WB)	*10.0*	*6.0*	*6.0*	
Lockwood Dr (SB)		*69.0*		*13.0*
Pardee St (EB)	*37.0*		*13.0*	*3.0*
Lockwood Dr (NB)		*14.0*		*5.0*

[Flow Field] = Volume

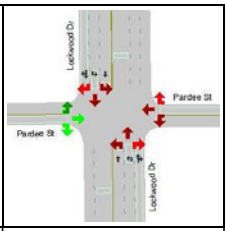
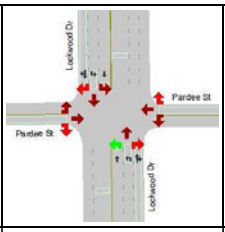
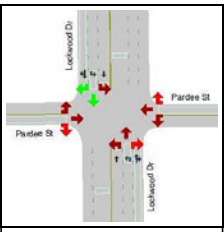
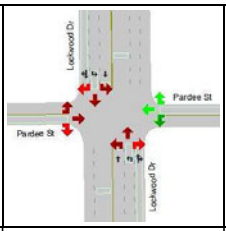
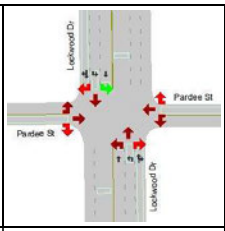
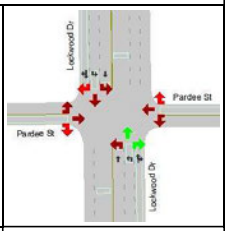
Volume Adjustment and Saturation Flow Rate

Movement	Pardee St (WB)			Lockwood Dr (SB)				Pardee St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Pardee St	Lockwood Dr	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St	Lockwood Dr	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St	Lockwood Dr	Pardee St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *23.9 sec*
Level of Service: *C*
Offset: *51.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	18.0	8.0	49.0	18.0	8.0	49.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	15.0	18.0	18.0	15.0	18.0
Coordinated	No	No	Yes	No	No	No
Split	23.0	13.0	54.0	23.0	13.0	54.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Pardee St (WB)	Lockwood Dr (SB)			Pardee St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	22	13	0	69	53	14	0	5
Adjusted Saturation Flow, veh/h	1904	1809	1976	1846	1900	1809	1976	1887
Capacity (c), veh/h	255	280	1206	1127	255	161	1076	1027
Available Capacity (ca), veh/h	381	161	1076	1005	380	161	1076	1027
Volume-to-Capacity Ratio (X)	0.0863	0.0468	8.29e-05	0.0612	0.208	0.0877	9.3e-05	0.00488
Green Ratio (g/C)	0.13	0.15	0.61	0.61	0.13	0.09	0.54	0.54
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.96	3.23	4.83	4.83	4.94	3.23	4.79	4.79
Queue Service Time (gs), s	0.9	0.6	0.0	1.4	2.2	0.6	0.0	0.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.72	0.65	1.00	1.00	0.87	0.66	1.00	1.00
Max Out Probability (px)	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.3	0.3	0.1	0.0	0.0	0.0
Phase Duration (Dp), s	17.1	18.9	59.9	59.9	17.1	13.0	54.0	54.0

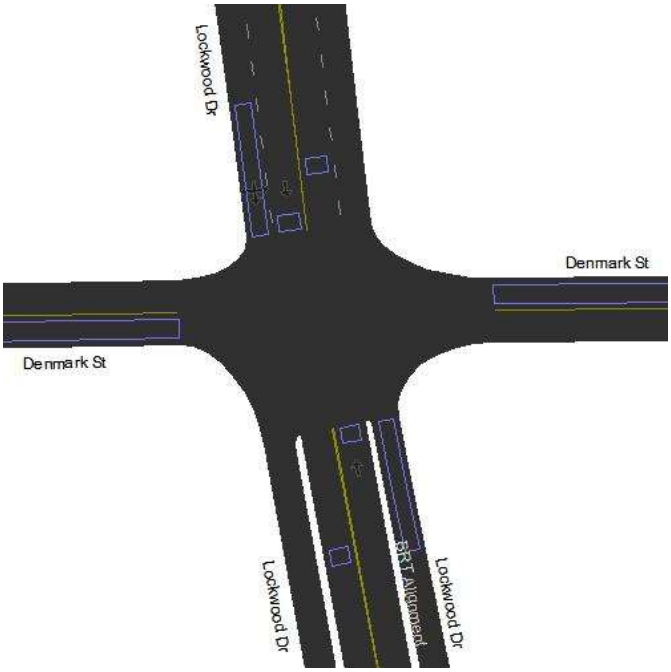
Uniform Delay (d1), s/veh	34.1	32.4	6.83	7.09	34.7	37.6	9.34	9.36
Incremental Delay (d2), s/veh	0.665	0.315	0.000124	0.104	1.85	1.07	0.000156	0.00859
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34.8	32.7	6.83	7.2	36.6	38.7	9.34	9.37
Level Of Service	C	C	A	A	D	D	A	A
Total Delay, veh-hr	0.213	0.119	0.00019	0.138	0.538	0.152	0.000259	0.013
Fully Stopped (Nf), veh/ln	0.4	0.2	0.0	0.5	1.1	0.3	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.5	0.3	0.0	0.6	1.2	0.3	0.0	0.0
Effective Green Time, s	12.1	13.9	54.9	54.9	12.1	8.0	49.0	49.0
Approach Volume, veh/h	22	--	--	82	53	--	--	19
Approach Delay, s/veh	34.8	--	--	11.3	36.6	--	--	30.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*623*	**Site Name:**	*N 29.827467, W 95.318713*
Cross Street:	*Denmark St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:26*		

Intersection Geometry



Turn Movement Volumes (Denmark St & Lockwood Dr)

@ Node 623 From \ To	Denmark St (EB)	Lockwood Dr (NB)	Denmark St (WB)	Lockwood Dr (SB)	BRT Alignment (SB)
Denmark St (WB)		*7.0*	*16.0*	*19.0*	
Lockwood Dr (SB)	*8.0*		*13.0*		
Denmark St (EB)	*15.0*	*17.0*		*13.0*	
BRT Alignment (NB)					
Lockwood Dr (NWB)	*20.0*		*14.0*		

[Flow Field] = Volume

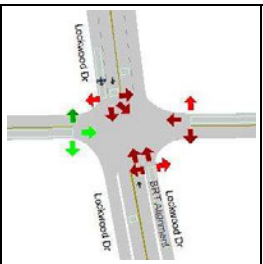
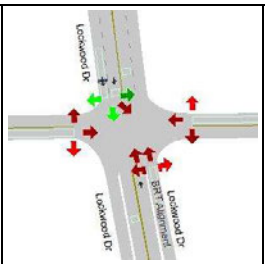
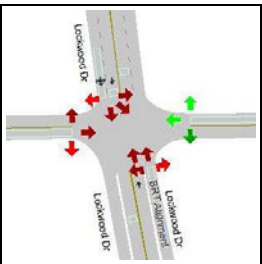
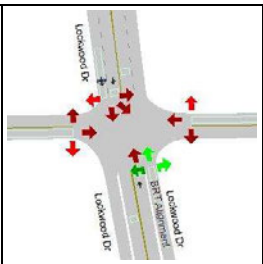
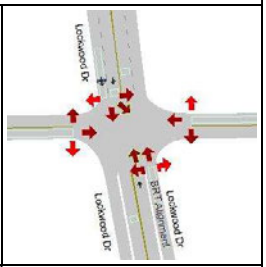
Volume Adjustment and Saturation Flow Rate

Movement	Denmark St (WB)			Lockwood Dr (SB)				Denmark St (EB)			BRT Alignment (NB)	Lockwood Dr (NWB)		
	Lockwood Dr	Denmark St	Lockwood Dr	Denmark St	Denmark St	Lockwood Dr	BRT Alignment	Denmark St	Lockwood Dr	Lockwood Dr	Lockwood Dr	Denmark St	Lockwood Dr	Denmark St
	WBR	WBT	WBL	SBL	SBR	SBT	SBLT	EBT	EBL	EBR	NBT	NWBR	NWBT	NWBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *25.9 sec*
Level of Service: *C*
Offset: *69.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	8.0	8.0	8.0	8.0	0.0
Max Green	10.0	57.0	10.0	57.0	8.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Max	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No
Split	15.0	62.0	15.0	62.0	13.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	9
Ring - 2	6	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

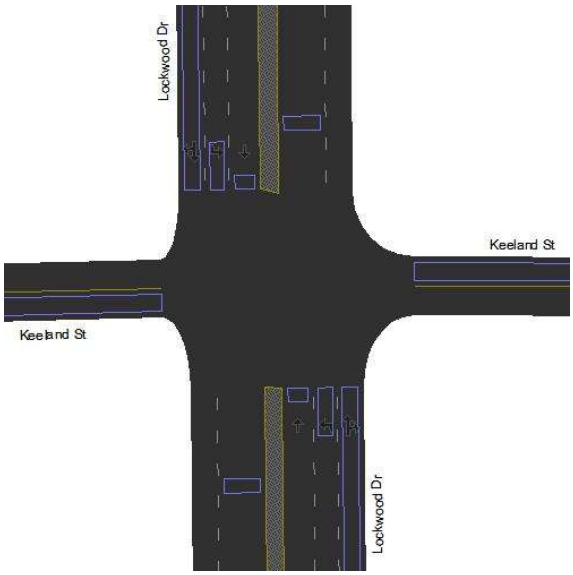
Lane Group	Denmark St (WB)	Lockwood Dr (SB)		Denmark St (EB)	BRT Alignment (NB)	Lockwood Dr (NWB)
	LTR	T	LTR	LTR	T	LTR
Adjusted Flow, veh/h	42	0	21	45	0	34
Adjusted Saturation Flow, veh/h	1904	1881	1897	1906	1900	1895
Capacity (c), veh/h	212	241	1206	213	162	1205
Available Capacity (ca), veh/h	212	248	1206	213	170	1205

Volume-to-Capacity Ratio (X)	0.198	0.000415	0.0175	0.212	0.000616	0.0283
Green Ratio (g/C)	0.11	0.09	0.64	0.11	0.09	0.64
Assigned Phase	6	9	4	2	9	8
Max. Allowable Headway (MAH), s/veh	4.92	2.62	3.83	4.79	2.62	3.82
Queue Service Time (gs), s	1.8	0.0	0.4	1.9	0.0	0.6
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.83	0.51	1.00	0.84	0.51	1.00
Max Out Probability (px)	0.53	0.00	0.00	0.52	0.00	0.00
Green Extention Time (ge), s	0.1	0.0	0.1	0.1	0.0	0.1
Phase Duration (Dp), s	15.0	12.7	62.0	15.0	12.7	62.0
Uniform Delay (d1), s/veh	36.2	37.5	6.01	36.2	37.5	6.06
Incremental Delay (d2), s/veh	2.08	0.0031	0.0266	2.26	0.00684	0.0435
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	38.3	37.5	6.04	38.5	37.5	6.1
Level Of Service	D	D	A	D	D	A
Total Delay, veh-hr	0.446	0.00104	0.0354	0.481	0.00104	0.0578
Fully Stopped (Nf), veh/ln	0.9	0.0	0.1	0.9	0.0	0.2
Percentile Back of Queue (Q%), veh/ln	1.0	0.0	0.2	1.1	0.0	0.3
Effective Green Time, s	10.0	7.7	57.0	10.0	7.7	57.0
Approach Volume, veh/h	42	--	21	45	0	34
Approach Delay, s/veh	38.3	--	6.2	38.5	37.5	6.1

TransModeler® Intersection Report

Site Information			
Intersection ID:	*641*	**Site Name:**	*N 29.837077, W 95.318889*
Cross Street:	*Keeland St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:47*		

Intersection Geometry



Turn Movement Volumes (Keeland St & Lockwood Dr)

@ Node 641 From \ To	Lockwood Dr (NB)	Keeland St (WB)	Lockwood Dr (SB)	Keeland St (EB)
Keeland St (WB)	*2.0*		*2.0*	
Lockwood Dr (SB)				*2.0*
Keeland St (EB)	*3.0*		*5.0*	
Lockwood Dr (NB)		*10.0*		*3.0*

[Flow Field] = Volume

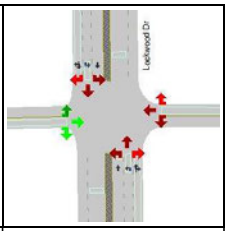
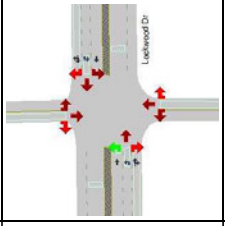
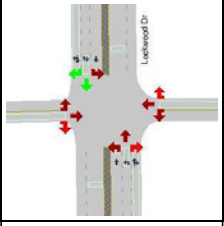
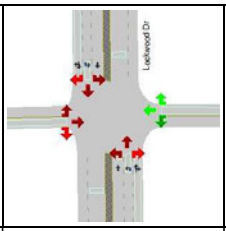
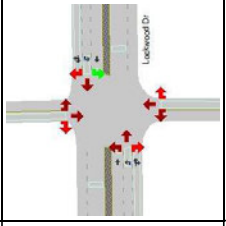
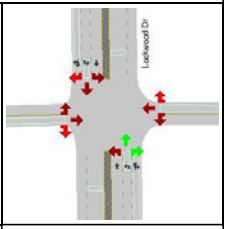
Volume Adjustment and Saturation Flow Rate

Movement	Keeland St (WB)			Lockwood Dr (SB)				Keeland St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Keeland St	Lockwood Dr	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St	Lockwood Dr	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St	Lockwood Dr	Keeland St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *34.2 sec*
Level of Service: *C*
Offset: *40.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	25.0	10.0	40.0	25.0	10.0	40.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	15.0	18.0	18.0	15.0	18.0
Coordinated	No	No	Yes	No	No	No
Split	30.0	15.0	45.0	30.0	15.0	45.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

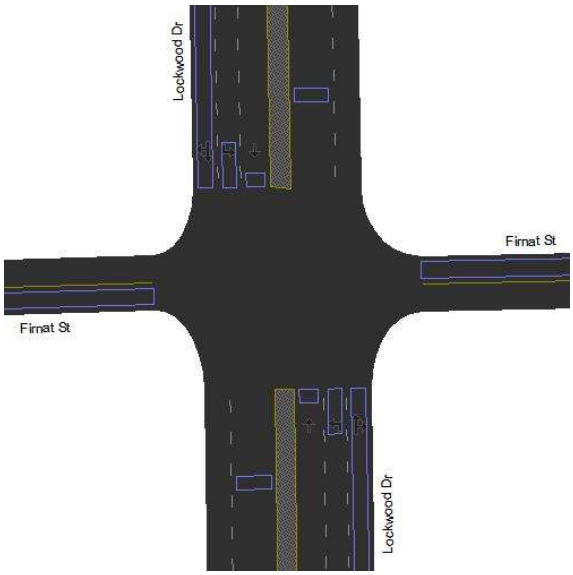
Lane Group	Keeland St (WB)	Lockwood Dr (SB)			Keeland St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	4	2	0	0	8	10	0	3
Adjusted Saturation Flow, veh/h	1900	1809	1976	1898	1901	1809	1976	1891
Capacity (c), veh/h	209	1118	1242	1193	209	171	208	199
Available Capacity (ca), veh/h	528	201	878	844	528	201	878	840
Volume-to-Capacity Ratio (X)	0.0196	0.00188	8.05e-05	9.22e-05	0.0387	0.059	0.000481	0.0151
Green Ratio (g/C)	0.11	0.62	0.63	0.63	0.11	0.09	0.11	0.11
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.97	3.26	3.86	3.86	4.99	3.26	4.87	4.87
Queue Service Time (gs), s	0.2	0.0	0.0	0.0	0.3	0.5	0.0	0.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.56	0.54	1.00	1.00	0.60	0.62	0.55	0.55
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.9	60.6	61.6	61.6	14.9	13.5	14.5	14.5

Uniform Delay (d1), s/veh	35.7	6.57	6.21	6.21	35.8	37.1	36	36.1
Incremental Delay (d2), s/veh	0.172	0.00303	0.000117	0.000139	0.347	0.657	0.00416	0.139
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	35.9	6.57	6.21	6.21	36.1	37.7	36	36.2
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.0409	0.00383	0.000172	0.00019	0.0813	0.106	0.001	0.0303
Fully Stopped (Nf), veh/ln	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.1
Percentile Back of Queue (Q%), veh/ln	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.1
Effective Green Time, s	9.9	55.6	56.6	56.6	9.9	8.5	9.5	9.5
Approach Volume, veh/h	4	--	--	2	8	--	--	13
Approach Delay, s/veh	35.9	--	--	6.5	36.1	--	--	37.4

TransModeler® Intersection Report

Site Information			
Intersection ID:	*659*	**Site Name:**	*N 29.844802, W 95.319046*
Cross Street:	*Firnat St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:59:0*		

Intersection Geometry



Turn Movement Volumes (Firnat St & Lockwood Dr)

@ Node 659 From \ To	Lockwood Dr (NB)	Firnat St (WB)	Lockwood Dr (SB)	Firnat St (EB)
Firnat St (WB)				
Lockwood Dr (SB)		*2.0*		
Firnat St (EB)				
Lockwood Dr (NB)		*6.0*		

[Flow Field] = Volume

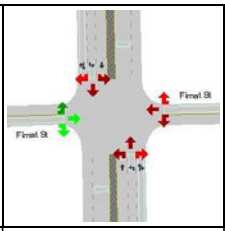
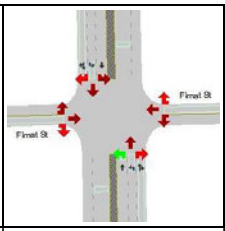
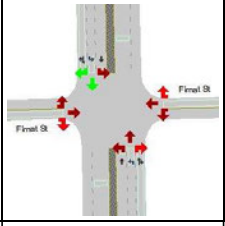
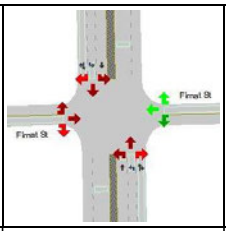
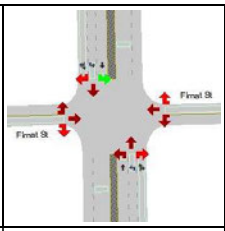
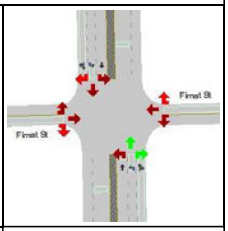
Volume Adjustment and Saturation Flow Rate

Movement	Firnat St (WB)			Lockwood Dr (SB)				Firnat St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Firnat St	Lockwood Dr	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St	Lockwood Dr	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St	Lockwood Dr	Firnat St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *29.5 sec*
Level of Service: *C*
Offset: *95.0 sec*
Coordinate Begin of: *Red*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	23.0	13.0	39.0	23.0	13.0	39.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	15.0	18.0	18.0	15.0	18.0
Coordinated	No	No	Yes	No	No	No
Split	28.0	18.0	44.0	28.0	18.0	44.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

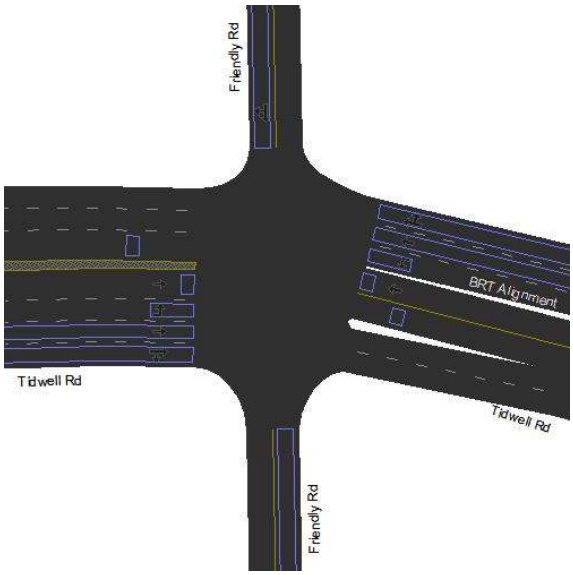
Lane Group	Firnat St (WB)	Lockwood Dr (SB)			Firnat St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	0	0	0	2	0	6	0	0
Adjusted Saturation Flow, veh/h	1900	1809	1976	1898	1900	1809	1976	1896
Capacity (c), veh/h	194	538	1264	1215	194	165	856	821
Available Capacity (ca), veh/h	486	261	856	823	486	261	856	821
Volume-to-Capacity Ratio (X)	0.00154	0.000371	7.91e-05	0.00165	0.00154	0.037	0.000117	0.000134
Green Ratio (g/C)	0.10	0.30	0.64	0.64	0.10	0.09	0.43	0.43
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.80	3.26	4.84	4.84	4.80	3.26	3.86	3.86
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	1.00	1.00	0.51	0.58	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.2	31.8	62.6	62.6	14.2	13.2	44.0	44.0

Uniform Delay (d1), s/veh	36.3	22.2	5.84	5.84	36.3	37.3	14.5	14.5
Incremental Delay (d2), s/veh	0.0143	0.00124	0.000113	0.00246	0.0143	0.419	0.000246	0.000293
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	36.3	22.2	5.84	5.85	36.3	37.7	14.5	14.5
Level Of Service	D	C	A	A	D	D	B	B
Total Delay, veh-hr	0.00302	0.00123	0.000162	0.00326	0.00302	0.0639	0.000401	0.000442
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Effective Green Time, s	9.2	26.8	57.6	57.6	9.2	8.2	39.0	39.0
Approach Volume, veh/h	0	--	--	2	0	--	--	6
Approach Delay, s/veh	36.3	--	--	7.3	36.3	--	--	36.9

TransModeler® Intersection Report

Site Information			
Intersection ID:	*677*	**Site Name:**	*N 29.848735, W 95.327557*
Cross Street:	*Tidwell Rd & Friendly Rd*	**Number of Plans:**	*1*
Analysis Date:	*2023/4/6 17:34:16*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Friendly Rd)

@ Node 677 From \ To	Friendly Rd (NB)	Tidwell Rd (WB)	Friendly Rd (SB)	Tidwell Rd (EB)	BRT Alignment (EB)
Tidwell Rd (WB)					
Friendly Rd (SB)					
Tidwell Rd (EB)					
Friendly Rd (NB)					
BRT Alignment (NWB)					

[Flow Field] = Volume

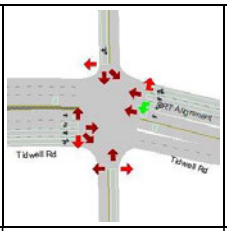
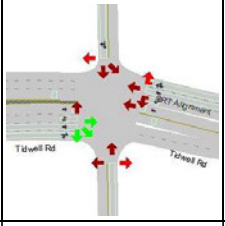
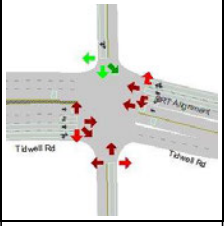
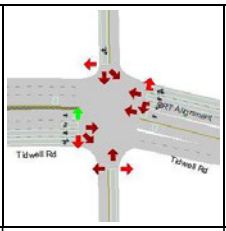
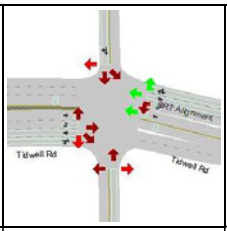
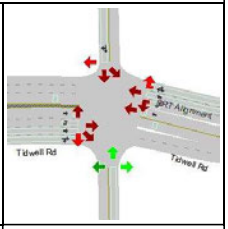
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)			Friendly Rd (SB)			Tidwell Rd (EB)				Friendly Rd (NB)			BRT Alignment (NWB)
	Friendly Rd	Tidwell Rd	Friendly Rd	Tidwell Rd	Friendly Rd	Tidwell Rd	Friendly Rd	Friendly Rd	Tidwell Rd	BRT Alignment	Friendly Rd	Tidwell Rd	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	SBR	SBT	SBLT	EBL	EBR	EBRT	EBT	NBT	NBL	NBR	NWBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *23.8 sec*
Level of Service: *C*
Offset: *11.0 sec*
Coordinate Begin of: *Red*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	12.0	48.0	12.0	12.0	48.0	12.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0
Recall Mode	None	Max	None	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	18.0	18.0	15.0	18.0	18.0
Coordinated	No	No	No	No	Yes	No
Split	18.0	54.0	18.0	18.0	54.0	18.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	14.0	14.0	14.0	14.0	14.0	14.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Friendly Rd (SB)	Tidwell Rd (EB)			Friendly Rd (NB)	BRT Alignment (NWB)
	L	T	T+R	T+R	L	T	T+R	LTR	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1900	1809	3800	1609	1900	1900
Capacity (c), veh/h	297	1164	1164	194	154	2027	858	194	1164
Available Capacity (ca), veh/h	241	1013	1013	253	241	2027	858	253	1013
Volume-to-Capacity Ratio (X)	0.000336	8.59e-05	9.45e-05	0.00154	0.00065	9.87e-05	0.000128	0.00154	8.59e-05
Green Ratio (g/C)	0.16	0.61	0.61	0.10	0.09	0.53	0.53	0.10	0.61
Assigned Phase	1	6	6	4	5	2	2	8	6
Max. Allowable Headway (MAH), s/veh	3.26	3.86	3.86	4.80	3.26	4.95	4.95	4.94	3.86
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	1.00	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	20.8	61.1	61.1	15.2	13.7	54.0	54.0	15.2	61.1

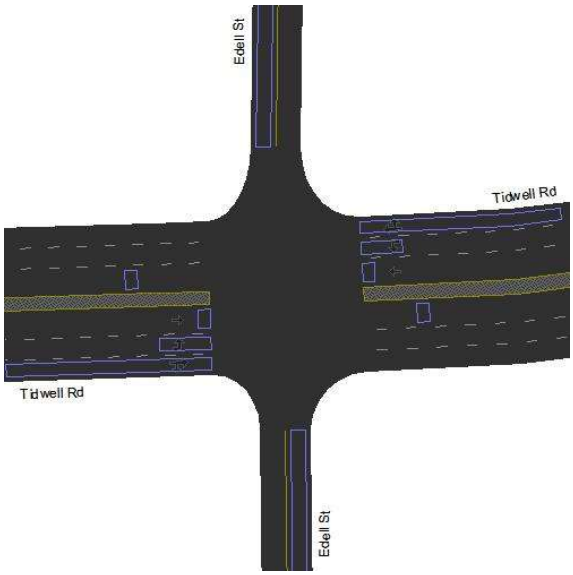
Uniform Delay (d1), s/veh	31.4	6.76	6.76	36.3	37.7	9.8	9.8	36.3	6.76
Incremental Delay (d2), s/veh	0.00204	0.000133	0.000146	0.0143	0.0076	8.77e-05	0.000269	0.0143	0.000133
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	31.4	6.76	6.76	36.3	37.7	9.8	9.8	36.3	6.76
Level Of Service	C	A	A	D	D	A	A	D	A
Total Delay, veh-hr	0.000873	0.000188	0.000206	0.00302	0.00105	0.000544	0.000299	0.00302	0.000188
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	14.8	55.1	55.1	9.2	7.7	48.0	48.0	9.2	55.1
Approach Volume, veh/h	--	--	0	0	--	0	--	0	0
Approach Delay, s/veh	--	--	14.7	36.3	--	16.6	--	36.3	6.8

TransModeler® Intersection Report

Site Information

Intersection ID:	*689*	**Site Name:**	*N 29.848275, W 95.338146*
Cross Street:	*Tidwell Rd & Edell St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:59:31*		

Intersection Geometry



Turn Movement Volumes (Tidwell Rd & Edell St)

@ Node 689 From \ To	Edell St (NB)	Tidwell Rd (WB)	Edell St (SB)	Tidwell Rd (EB)
Tidwell Rd (WB)				
Edell St (SB)				
Tidwell Rd (EB)				
Edell St (NB)				

[Flow Field] = Volume

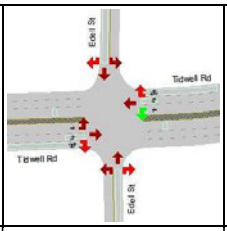
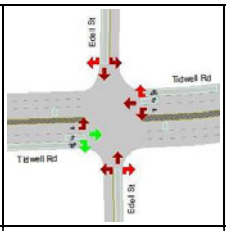
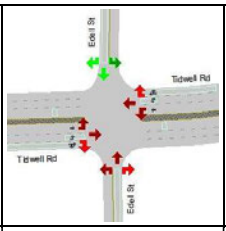
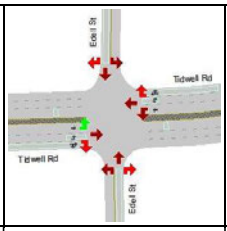
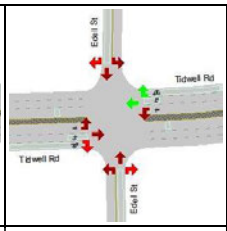
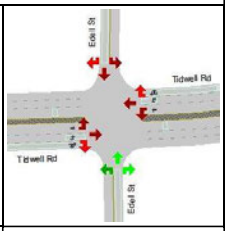
Volume Adjustment and Saturation Flow Rate

Movement	Tidwell Rd (WB)				Edell St (SB)			Tidwell Rd (EB)				Edell St (NB)		
	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Edell St	Tidwell Rd	Tidwell Rd
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *25.0 sec*
Level of Service: *C*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	5.0	10.0	14.0	5.0	10.0	14.0
Max Green	10.0	46.0	16.0	10.0	46.0	16.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0
Recall Mode	None	Max	None	None	Min	None
Memory Mode	Non-Lock	Lock	Non-Lock	Non-Lock	Non-Lock	Non-Lock
Passage/Extension	0.0	0.0	0.0	0.0	0.0	0.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	10.0	15.0	15.0	10.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	18.0	15.0	15.0	18.0	18.0
Coordinated	No	No	No	No	No	No
Split	16.0	52.0	22.0	16.0	52.0	22.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	11.0	16.0	20.0	11.0	16.0	20.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Tidwell Rd (WB)			Edell St (SB)	Tidwell Rd (EB)			Edell St (NB)
	L	T	T+R	LTR	L	T	T+R	LTR
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1900	1809	1976	1900	1900
Capacity (c), veh/h	171	244	235	217	976	1124	1080	217
Available Capacity (ca), veh/h	224	1124	1080	376	224	1124	1080	376
Volume-to-Capacity Ratio (X)	0.00117	0.000409	0.000468	0.00138	0.000205	8.9e-05	0.000102	0.00138
Green Ratio (g/C)	0.09	0.12	0.12	0.11	0.54	0.57	0.57	0.11
Assigned Phase	1	6	6	4	5	2	2	8
Max. Allowable Headway (MAH), s/veh	0.76	1.36	1.36	2.44	0.85	1.36	1.36	2.44
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	1.00	1.00	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.7	16.0	16.0	15.2	49.7	52.0	52.0	15.2
Uniform Delay (d1), s/veh	33.1	31.1	31.1	31.7	8.57	7.52	7.52	31.7
Incremental Delay (d2), s/veh	0.0123	0.00302	0.00359	0.0115	0.000378	0.000143	0.00017	0.0115
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0

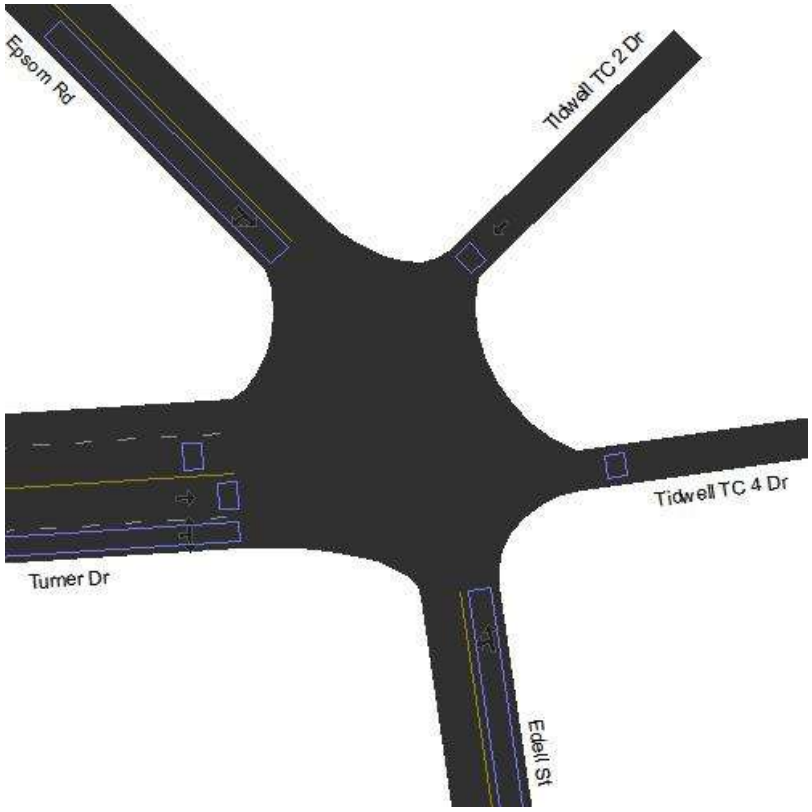
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	33.2	31.1	31.1	31.8	8.57	7.52	7.52	31.8
Level Of Service	C	C	C	C	A	A	A	C
Total Delay, veh-hr	0.00184	0.000863	0.000949	0.00265	0.000476	0.000209	0.00023	0.00265
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.7	10.0	10.0	9.2	43.7	46.0	46.0	9.2
Approach Volume, veh/h	--	--	0	0	--	--	0	0
Approach Delay, s/veh	--	--	32.1	31.8	--	--	8.0	31.8

TransModeler® Intersection Report

Site Information

Intersection ID:	*690*	**Site Name:**	*N 29.851140, W 95.338321*
Cross Street:	*Epsom Rd & Turner Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 16:4:59*		

Intersection Geometry



Turn Movement Volumes (Epsom Rd & Turner Dr)

@ Node 690 From \ To	Epsom Rd (NWB)	Turner Dr (WB)	Edell St (SB)	Tidwell TC 4 Dr (EB)
Epsom Rd (SEB)				
Turner Dr (EB)				
Edell St (NB)				
Tidwell TC 2 Dr (SWB)				

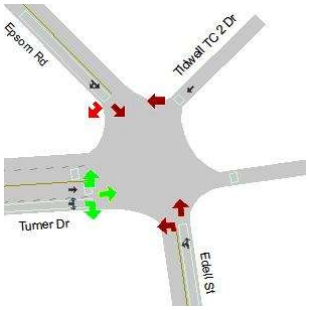
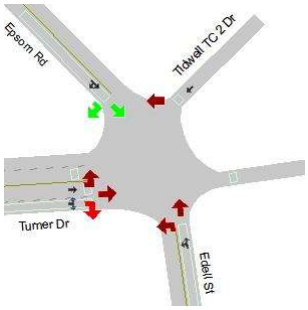
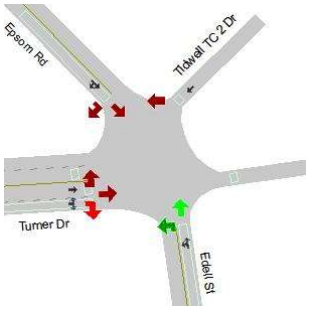
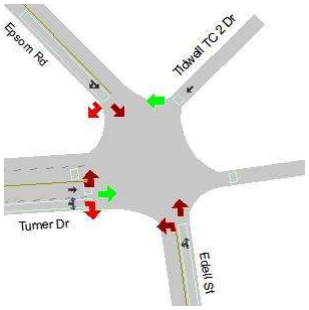
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Epsom Rd (SEB)		Turner Dr (EB)			Edell St (NB)		Tidwell TC 2 Dr (SWB)
	Turner Dr	Edell St	Epsom Rd	Edell St	Tidwell TC 4 Dr	Epsom Rd	Turner Dr	Turner Dr
	SEBR	SEBT	EBL	EBR	EBT	NBT	NBL	SWBRT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *73.0 sec*
Control Delay: *15.5 sec*
Level of Service: *B*

Phasing				
Item Name \ Signal States				
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Min Green	*5.0*	*5.0*	*5.0*	*3.0*
Max Green	*25.0*	*25.0*	*25.0*	*8.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*Max*	*Min*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*-2.0*	*12.0*	*-2.0*	*3.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*No*	*No*	*No*
Split	*30.0*	*30.0*	*30.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*10.0*	*10.0*	*10.0*	*8.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2		*8*	

Signal Timing Plan - 1

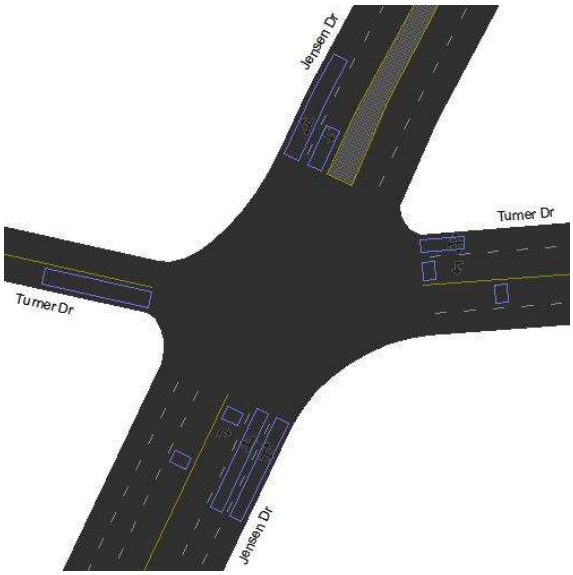
Lane Group Capacity, Control Delay, and LOS Determination					
Lane Group	Epsom Rd (SEB)	Turner Dr (EB)		Edell St (NB)	Tidwell TC 2 Dr (SWB)
	T+R	L+R	T	L+T	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1900*	*1900*	*1976*	*1900*	*1609*
Capacity (c), veh/h	*263*	*859*	*1167*	*333*	*223*
Available Capacity (ca), veh/h	*859*	*859*	*893*	*847*	*233*
Volume-to-Capacity Ratio (X)	*0.00076*	*0.000233*	*8.57e-05*	*0.0006*	*0.000449*
Green Ratio (g/C)	*0.14*	*0.45*	*0.59*	*0.14*	*0.14*
Assigned Phase	*4*	*2*	*2+9*	*8*	*9*
Max. Allowable Headway (MAH), s/veh	*6.54*	*5.26*	*5.26*	*5.37*	*2.81*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*1.00*	*1.00*	*1.00*	*1.00*	*0.51*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*12.7*	*30.0*	*30.0*	*12.7*	*12.7*
Uniform Delay (d1), s/veh	*20.5*	*8.31*	*4.64*	*20.5*	*20.5*
Incremental Delay (d2), s/veh	*0.00521*	*0.000488*	*0.000132*	*0.00324*	*0.00363*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*20.5*	*8.31*	*4.64*	*20.5*	*20.5*
Level Of Service	*C*	*A*	*A*	*C*	*C*
Total Delay, veh-hr	*0.00114*	*0.000461*	*0.000129*	*0.00114*	*0.00057*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*7.7*	*25.0*	*32.7*	*7.7*	*7.7*
Approach Volume, veh/h	*0*	--	*0*	*0*	*0*
Approach Delay, s/veh	*20.5*	--	*7.1*	*20.5*	*20.5*

TransModeler® Intersection Report

Site Information

Intersection ID:	*705*	**Site Name:**	*N 29.850927, W 95.341468*
Cross Street:	*Turner Dr & Jensen Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 16:4:40*		

Intersection Geometry



Turn Movement Volumes (Turner Dr & Jensen Dr)

@ Node 705 From \ To	Jensen Dr (NEB)	Turner Dr (WB)	Jensen Dr (SWB)	Turner Dr (EB)
Turner Dr (WB)	*2.0*	*2.0*	*2.0*	
Jensen Dr (SWB)		*2.0*	*367.0*	*2.0*
Turner Dr (EB)	*2.0*		*2.0*	*2.0*
Jensen Dr (NEB)	*454.0*	*2.0*		*2.0*

[Flow Field] = Volume

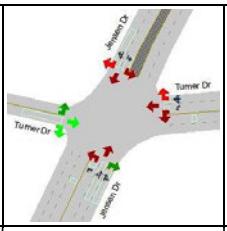
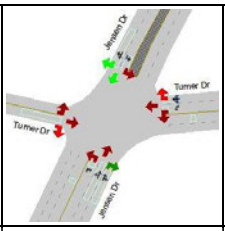
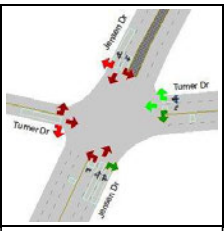
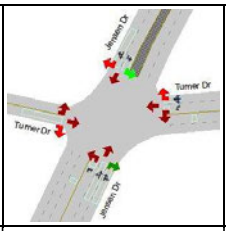
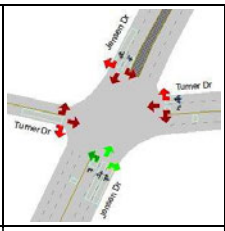
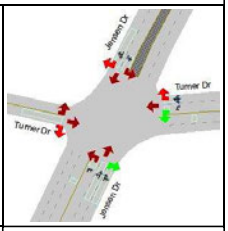
Volume Adjustment and Saturation Flow Rate

Movement	Turner Dr (WB)			Jensen Dr (SWB)			Turner Dr (EB)			Jensen Dr (NEB)		
	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Jensen Dr	Jensen Dr	Turner Dr	Jensen Dr	Turner Dr	Turner Dr
	WBR	WBT	WBL	SWBR	SWBT	SWBL	EBL	EBR	EBT	NEBT	NEBL	NEBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *105.0 sec*
Control Delay: *19.2 sec*
Level of Service: *B*

Phasing

Item Name \ Signal States						
ID	2	4	6	7	8	9
Min Green	8.0	8.0	8.0	8.0	8.0	8.0
Max Green	25.0	55.0	25.0	10.0	40.0	10.0
Yellow	3.0	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Min	None	None	Min	None
Memory Mode	Non-Lock	Non-Lock	Non-Lock	Lock	Non-Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	18.0	15.0	18.0	18.0
Coordinated	No	No	No	No	No	No
Split	30.0	60.0	30.0	15.0	45.0	15.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	13.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4	9
Ring - 2	6	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

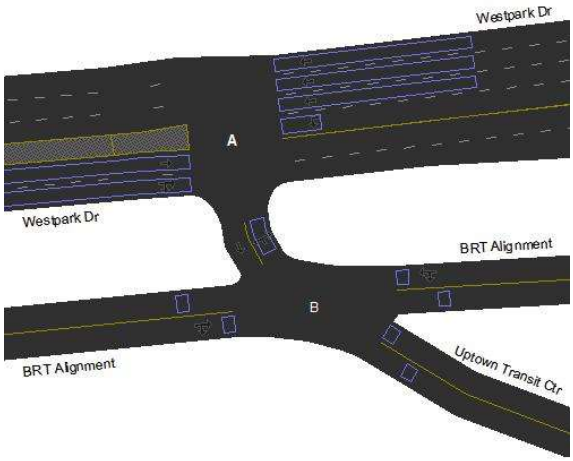
Lane Group	Turner Dr (WB)		Jensen Dr (SWB)		Turner Dr (EB)	Jensen Dr (NEB)		
	L	LTR	L	T+R	LTR	L+T	T+R	R
Adjusted Flow, veh/h	2	4	2	369	6	228	228	2
Adjusted Saturation Flow, veh/h	1882	1900	1809	1898	1900	1898	1900	1674
Capacity (c), veh/h	783	823	177	721	593	462	1425	1256
Available Capacity (ca), veh/h	504	237	226	1304	593	990	949	836
Volume-to-Capacity Ratio (X)	0.00255	0.0051	0.0113	0.512	0.0101	0.494	0.16	0.00159
Green Ratio (g/C)	0.43	0.43	0.10	0.38	0.31	0.22	0.75	0.75
Assigned Phase	9+6	9+6	7	4	2	8	8+6+4+9+2+7	8+6+4+9+2+7
Max. Allowable Headway (MAH), s/veh	3.03	3.03	3.26	3.71	3.93	3.44	3.44	3.44
Queue Service Time (gs), s	0.0	0.1	0.1	12.0	0.2	0.0	2.7	0.0
Queue Permitted Service Time (gps), s	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.57	0.57	0.53	1.00	0.57	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	1.1	0.0	1.1	1.1	1.1
Phase Duration (Dp), s	14.7	14.7	12.8	35.4	30.0	22.6	22.6	22.6
Uniform Delay (d1), s/veh	20	12.9	32.6	19.1	19	27.7	2.84	2.5
Incremental Delay (d2), s/veh	0.00588	0.0112	0.117	2.59	0.031	3.74	0.241	0.00229
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0

Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	20	12.9	32.8	21.7	19	31.5	3.08	2.5
Level Of Service	B	B	C	C	B	C	A	A
Total Delay, veh-hr	0.0111	0.0151	0.0182	2.23	0.0317	1.99	0.195	0.00139
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	5.3	0.1	3.9	0.9	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	5.8	0.1	4.4	1.0	0.0
Effective Green Time, s	34.7	34.7	7.8	30.4	25.0	17.6	60.1	60.1
Approach Volume, veh/h	--	6	--	371	6	--	458	--
Approach Delay, s/veh	--	15.2	--	21.8	19.0	--	17.2	--

TransModeler® Intersection Report

Site Information			
Intersection ID:	*99553,99560*	**Site Name:**	*N 29.725723, W 95.466346*
Cross Street:	*Westpark Dr & Uptown Transit Ctr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:50:53*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Uptown Transit Ctr)			
@ Node 99553 From \ To	Westpark Dr (WB)	Uptown Transit Ctr (SEB)	Westpark Dr (EB)
Westpark Dr (WB)		*7.0*	
Westpark Dr (EB)		*17.0*	
Uptown Transit Ctr (NB)	*11.0*		*9.0*

Turn Movement Volumes (BRT Alignment & Uptown Transit Ctr)				
@ Node 99560 From \ To	BRT Alignment (NEB)	Uptown Transit Ctr (NB)	BRT Alignment (WB)	Uptown Transit Ctr (EB)
BRT Alignment (EB)				
Uptown Transit Ctr (NWB)				
BRT Alignment (WB)				
Uptown Transit Ctr (SEB)				

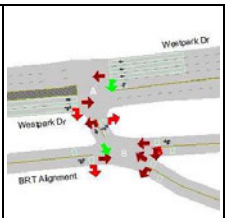
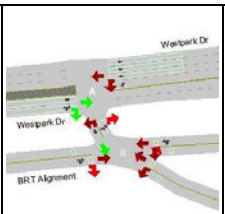
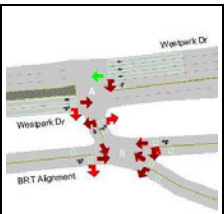
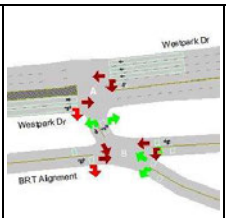
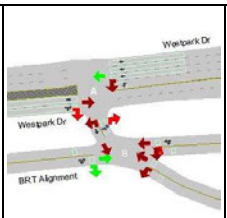
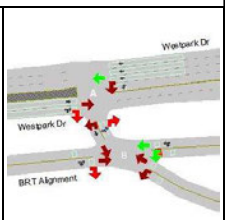
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate														
Movement	Westpark Dr (WB)		Westpark Dr (EB)		Uptown Transit Ctr (NB)		BRT Alignment (EB)		Uptown Transit Ctr (NWB)			BRT Alignment (WB)		Uptown Transit Ctr (SEB)
	Westpark Dr	Uptown Transit Ctr	Uptown Transit Ctr	Westpark Dr	Westpark Dr	Westpark Dr	BRT Alignment	Uptown Transit Ctr	BRT Alignment	Uptown Transit Ctr	BRT Alignment	BRT Alignment	Uptown Transit Ctr	Uptown Transit Ctr
	WBT	WBL	EBR	EBT	NBL	NBR	EBT	EBR	NWBR	NWBT	NWBL	WBT	WBL	SEBT

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *130.0 sec*
Control Delay: *41.3 sec*
Level of Service: *D*
Offset: *117.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	1	2	6	8	9	10
Min Green	8.0	8.0	8.0	8.0	0.0	0.0
Max Green	8.0	64.0	78.0	15.0	8.0	8.0
Yellow	4.0	4.0	4.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	5.0	5.0	5.0
Recall Mode	Min	Max	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	7.0	7.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No	No
Split	14.0	70.0	84.0	20.0	13.0	13.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	14.0	14.0	14.0	13.0	5.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	8	9, 10
Ring - 2	6		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)		Westpark Dr (EB)		Uptown Transit Ctr (NB)	BRT Alignment (EB)	Uptown Transit Ctr (NWB)	BRT Alignment (WB)	Uptown Transit Ctr (SEB)
	L	T	T	T+R	L+R	T+R	LTR	L+T	T
Adjusted Flow, veh/h	7	0	0	17	20	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	5700	1900	1888	1883	1976	1900	1900	1900
Capacity (c), veh/h	111	4355	1023	1017	140	116	142	112	1140
Available Capacity (ca), veh/h	111	351	935	930	217	122	219	117	935
Volume-to-Capacity Ratio (X)	0.0629	2.3e-05	9.78e-05	0.0167	0.143	0.00172	0.00212	0.00179	8.77e-05
Green Ratio (g/C)	0.06	0.76	0.54	0.54	0.07	0.06	0.07	0.06	0.60
Assigned Phase	1	9+6+10	2	2	8	9	8	10	2+1
Max. Allowable Headway (MAH), s/veh	4.76	4.48	6.43	6.43	4.64	4.48	4.64	4.46	6.43
Queue Service Time (gs), s	0.5	0.0	0.0	0.5	1.3	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	0.52	1.00	1.00	0.76	0.52	0.76	0.51	1.00
Max Out Probability (px)	1.00	0.04	0.00	0.00	0.00	0.04	0.00	0.04	0.00
Green Extention Time (ge), s	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1

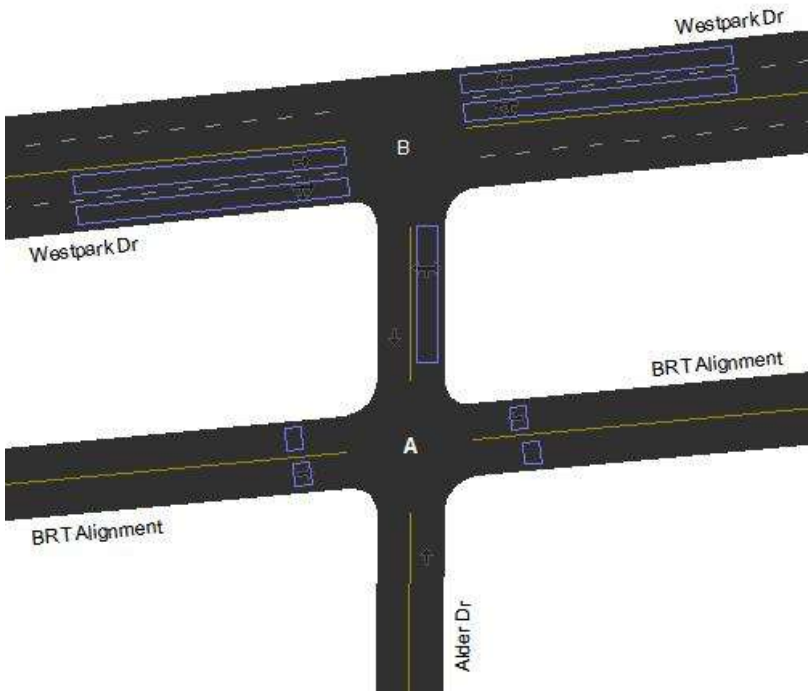
Phase Duration (Dp), s	14.0	12.7	76.0	76.0	14.7	12.7	14.7	12.7	76.0
Uniform Delay (d1), s/veh	57.5	3.62	13.8	14	56.3	57.6	55.7	57.6	10.4
Incremental Delay (d2), s/veh	1.08	9.49e-06	0.000172	0.0301	2.12	0.0266	0.027	0.0288	0.000139
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	58.6	3.62	13.8	14	58.4	57.6	55.7	57.6	10.4
Level Of Service	E	A	B	B	E	E	E	E	B
Total Delay, veh-hr	0.114	0.000101	0.000385	0.0662	0.324	0.0032	0.00464	0.0032	0.000289
Fully Stopped (Nf), veh/ln	0.2	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.3	0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0
Effective Green Time, s	8.0	99.3	70.0	70.0	9.7	7.7	9.7	7.7	78.0
Approach Volume, veh/h	--	7	--	17	20	0	0	0	0
Approach Delay, s/veh	--	57.8	--	14.0	58.4	57.6	55.7	57.6	10.4

TransModeler® Intersection Report

Site Information

Intersection ID:	*99556,99558*	**Site Name:**	*N 29.724275, W 95.480703*
Cross Street:	*BRT Alignment & Alder Dr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:50:14*		

Intersection Geometry



Turn Movement Volumes (BRT Alignment & Alder Dr)

@ Node 99556 From \ To	Alder Dr (NB)	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Alder Dr (SB)				
BRT Alignment (EB)				
Alder Dr (NB)				

Turn Movement Volumes (Westpark Dr & Alder Dr)

@ Node 99558 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Alder Dr (SB)
Westpark Dr (WB)			*61.0*
Westpark Dr (EB)			*212.0*
Alder Dr (NB)	*146.0*	*140.0*	

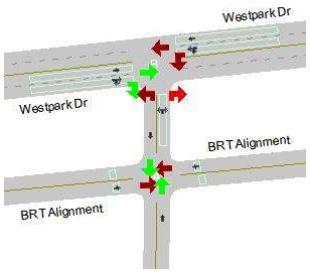
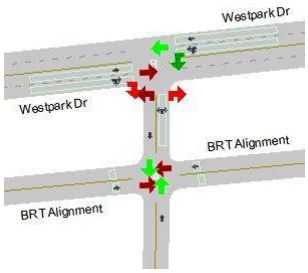
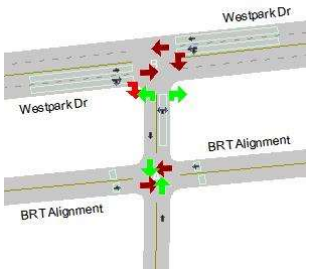
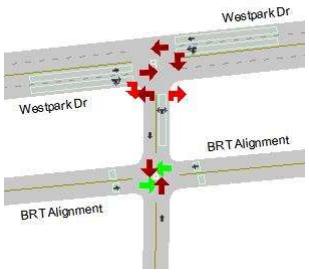
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate										
Movement	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)	Alder Dr (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Alder Dr (NB)	
	BRT Alignment	Alder Dr	BRT Alignment	Alder Dr	Westpark Dr	Alder Dr	Westpark Dr	Alder Dr	Westpark Dr	Westpark Dr
	WBT	SBT	EBT	NBT	WBT	WBL	EBT	EBR	NBR	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *143.0 sec*
Control Delay: *52.0 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States				
ID	*2*	*6*	*8*	*9*
Min Green	*8.0*	*8.0*	*8.0*	*3.0*
Max Green	*82.0*	*82.0*	*36.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*Max*	*None*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*2.5*	*2.5*	*2.5*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*Yes*	*No*	*No*	*No*
Split	*88.0*	*88.0*	*42.0*	*13.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*14.0*	*14.0*	*14.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*8*	*9*

Ring - 2	6		

Signal Timing Plan - 1

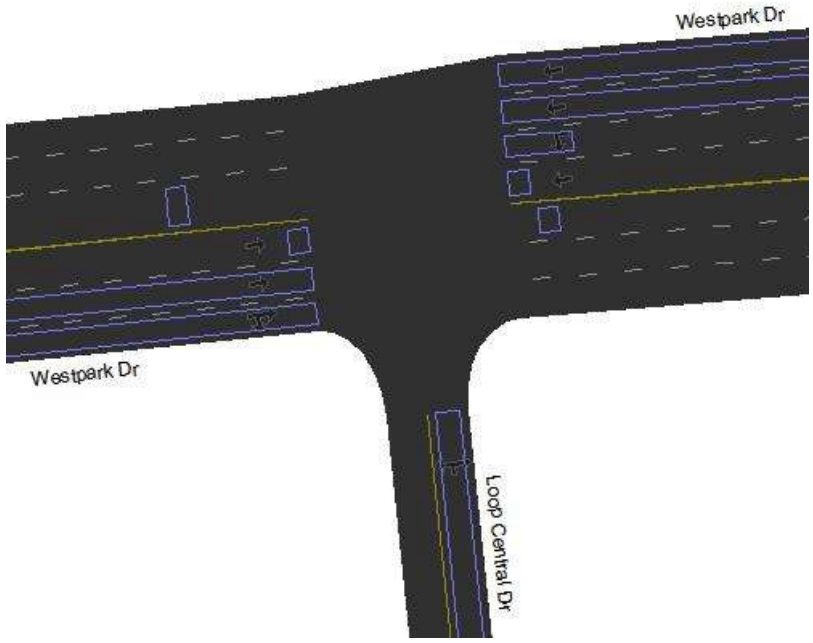
Lane Group Capacity, Control Delay, and LOS Determination									
Lane Group	BRT Alignment (WB)	Alder Dr (SB)	BRT Alignment (EB)	Alder Dr (NB)	Westpark Dr (WB)		Westpark Dr (EB)		Alder Dr (NB)
	T	T	T	T	L+T	T	T	T+R	L+R
Adjusted Flow, veh/h	0	0	0	0	61	0	0	212	286
Adjusted Saturation Flow, veh/h	1976	1900	1976	1900	1477	1900	1900	1775	1732
Capacity (c), veh/h	106	1572	106	1572	691	1229	1229	1148	313
Available Capacity (ca), veh/h	111	1090	111	1090	604	1090	1090	1018	436
Volume-to-Capacity Ratio (X)	0.000945	6.36e-05	0.000945	6.36e-05	0.0883	8.14e-05	8.14e-05	0.185	0.913
Green Ratio (g/C)	0.05	0.83	0.05	0.83	0.65	0.65	0.65	0.65	0.18
Assigned Phase	9	6+2+8	9	6+2+8	6	6	2	2	8
Max. Allowable Headway (MAH), s/veh	2.41	3.14	2.41	3.14	3.14	3.14	4.95	4.95	3.89
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	3.6	0.0	0.0	6.8	23.2
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.96	0.51	0.96	0.96	0.96	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Green Extention Time (ge), s	0.0	0.1	0.0	0.1	0.1	0.1	1.2	1.2	0.7
Phase Duration (Dp), s	12.7	98.5	12.7	98.5	98.5	98.5	98.5	98.5	31.9
Uniform Delay (d1), s/veh	64	2.13	64	2.13	16	8.92	8.92	10.1	57.5
Incremental Delay (d2), s/veh	0.0161	7.28e-05	0.0161	7.28e-05	0.252	0.000119	0.000119	0.355	32.9
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	64.1	2.13	64.1	2.13	16.2	8.92	8.92	10.5	90.4
Level Of Service	E	A	E	A	B	A	A	B	F
Total Delay, veh-hr	0.00178	5.91e-05	0.00178	5.91e-05	0.275	0.000248	0.000248	0.618	7.18
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.7	0.0	0.0	2.8	10.2
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.8	0.0	0.0	2.9	13.1
Effective Green Time, s	7.7	118.3	7.7	118.3	92.5	92.5	92.5	92.5	25.9
Approach Volume, veh/h	0	0	0	0	--	61	--	212	286
Approach Delay, s/veh	64.1	2.1	64.1	2.1	--	16.2	--	10.5	90.4

TransModeler® Intersection Report

Site Information

Intersection ID:	*99561*	**Site Name:**	*N 29.726665, W 95.454690*
Cross Street:	*Westpark Dr & Loop Central Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:51:2*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Loop Central Dr)

@ Node 99561 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	Loop Central Dr (SB)
Westpark Dr (WB)			*26.0*
Westpark Dr (EB)			*33.0*
Loop Central Dr (NB)	*155.0*	*192.0*	

[Flow Field] = Volume

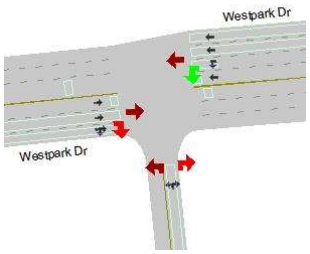
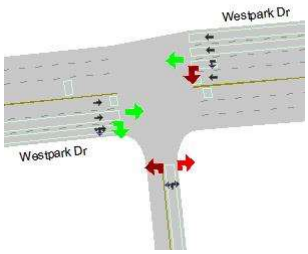
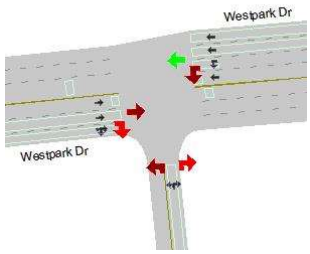
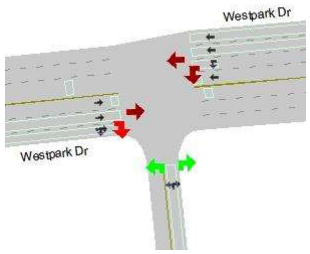
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)		Westpark Dr (EB)		Loop Central Dr (NB)	
	Westpark Dr	Loop Central Dr	Westpark Dr	Loop Central Dr	Westpark Dr	Westpark Dr
	WBT	WBL	EBT	EBR	NBR	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *59.8 sec*
Level of Service: *E*
Offset: *113.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States				
ID	*1*	*2*	*6*	*8*
Min Green	*8.0*	*8.0*	*8.0*	*8.0*
Max Green	*9.0*	*49.0*	*63.0*	*47.0*
Yellow	*3.0*	*3.0*	*3.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.0*	*5.0*	*5.0*	*5.0*
Recall Mode	*None*	*None*	*Max*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*4.0*	*4.0*	*4.0*	*4.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*15.0*	*15.0*	*15.0*	*15.0*
Coordinated	*No*	*No*	*Yes*	*No*
Split	*14.0*	*54.0*	*68.0*	*52.0*
Max Inhibit	*False*	*False*	*False*	*False*
Opt Min Green	*13.0*	*13.0*	*13.0*	*13.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*8*	

Ring - 2	6		

Signal Timing Plan - 1

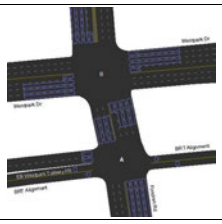
Lane Group Capacity, Control Delay, and LOS Determination					
Lane Group	Westpark Dr (WB)		Westpark Dr (EB)		Loop Central Dr (NB)
	L	T	T	T+R	L+R
Adjusted Flow, veh/h	26	0	0	33	347
Adjusted Saturation Flow, veh/h	1809	5700	3800	1885	1728
Capacity (c), veh/h	1003	3648	325	161	406
Available Capacity (ca), veh/h	136	2328	1552	770	677
Volume-to-Capacity Ratio (X)	0.0259	2.74e-05	0.000307	0.205	0.855
Green Ratio (g/C)	0.55	0.64	0.09	0.09	0.23
Assigned Phase	1	2+6	2	2	8
Max. Allowable Headway (MAH), s/veh	4.76	6.44	6.44	6.44	6.47
Queue Service Time (gs), s	0.8	0.0	0.0	2.0	23.1
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.79	0.84	0.84	0.84	1.00
Max Out Probability (px)	0.30	0.00	0.00	0.00	0.03
Green Extention Time (ge), s	0.0	0.2	0.2	0.2	3.1
Phase Duration (Dp), s	71.5	15.3	15.3	15.3	33.2
Uniform Delay (d1), s/veh	12.1	7.77	50.2	51.1	43.9
Incremental Delay (d2), s/veh	0.0478	1.35e-05	0.0017	2.85	20
Initial Queue Delay (d3), s/veh	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	12.1	7.77	50.2	53.9	63.9
Level Of Service	B	A	D	D	E
Total Delay, veh-hr	0.0876	0.000216	0.00139	0.494	6.16
Fully Stopped (Nf), veh/ln	0.3	0.0	0.0	0.9	10.0
Percentile Back of Queue (Q%), veh/ln	0.3	0.0	0.0	1.1	12.2
Effective Green Time, s	66.5	76.8	10.3	10.3	28.2
Approach Volume, veh/h	--	26	--	33	347
Approach Delay, s/veh	--	12.1	--	53.9	63.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*101,102*	**Site Name:**	*N 29.720989, W 95.520203*
Cross Street:	*Fondren Rd & EB Westpark Tollway FR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:48:48*		

Intersection Geometry



Turn Movement Volumes (Fondren Rd & EB Westpark Tollway FR)

@ Node 101 From \ To	Fondren Rd (NB)	BRT Alignment (WB)	Fondren Rd (SB)	BRT Alignment (EB)
Fondren Rd (SB)				
EB Westpark Tollway FR (EB)				
BRT Alignment (NEB)				
Fondren Rd (NB)				
BRT Alignment (WB)				

Turn Movement Volumes (Fondren Rd & Westpark Dr)

@ Node 102 From \ To	Fondren Rd (NB)	Westpark Dr (WB)	Fondren Rd (SB)	Westpark Dr (EB)
Fondren Rd (SB)				
Westpark Dr (EB)				
Fondren Rd (NB)				
Westpark Dr (WB)				

(Flow Field) = Volume

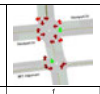
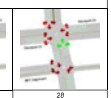
Volume Adjustment and Saturation Flow Rate

Movement	Fondren Rd (SB)	EB Westpark Tollway FR (EB)		BRT Alignment (NEB)	Fondren Rd (NB)	BRT Alignment (WB)	Fondren Rd (SB)				Westpark Dr (EB)			Fondren Rd (NB)			Westpark Dr (WB)			
	Fondren Rd	Fondren Rd	Fondren Rd	BRT Alignment	Fondren Rd	BRT Alignment	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr	Fondren Rd	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr	Westpark Dr	Fondren Rd	Westpark Dr	Fondren Rd	Westpark Dr
	SBT	EBL	EBR	NEBT	NBT	WBT	NBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*133.0 sec*
Control Delay:	*48.7 sec*
Level of Service:	*D*
Offset:	*6.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

Phasing

Item Name \ Signal States												
ID	1	2	3	4	5	6	7	8	9	12	13	28
Min Green	3.0	3.0	3.0	7.0	3.0	7.0	3.0	7.0	2.0	1.0	2.0	2.0
Max Green	14.0	20.0	10.0	27.0	7.0	38.0	13.0	24.0	8.0	5.0	8.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	6.0	6.0	6.0
Recall Mode	None	Max	None	None	None	Max	None	None	None	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	27.0	15.0	29.0	15.0	27.0	15.0	29.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No	No	No	No	No	No	No	No
Split	26.0	26.0	16.0	33.0	13.0	44.0	19.0	30.0	13.0	11.0	14.0	14.0
Max Inhibit	False	False	False	False	False	False	False	False	False	False	False	False
Opt Min Green	9.0	9.0	9.0	13.0	9.0	13.0	9.0	13.0	7.0	7.0	8.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3	CG - 4
Ring - 1	2, 1, 12	3, 4	13	9
Ring - 2	6, 5	8, 7	28	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

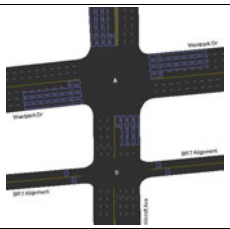
Lane Group	Fordtree Rd (SB)	FH Westpark Tollway ER (EB)		IRRT Alignment (NEB)	Fordtree Rd (NB)	IRRT Alignment (WB)	Fordtree Rd (SB)			Westpark Dr (EB)			Fordtree Rd (NB)			Westpark Dr (WB)		
	T	L	R	T	T	T	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	5700	1881	1609	1976	1500	1976	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900
Capacity (c), veh/h	2057	164	157	114	946	114	136	423	213	265	1110	555	245	557	276	104	1305	653
Available Capacity (ca), veh/h	857	71	80	119	1371	119	177	771	386	85	571	286	109	229	114	190	229	114
Volume-to-Capacity Ratio (X)	3,27e-05	0,000544	0,000636	0,000878	0,000118	0,000879	0,00147	0,000236	0,00052	0,000377	9,01e-05	0,000188	0,000408	0,000153	0,000338	0,01192	7,66e-05	0,000169
Green Ratio (g/C)	0,54	0,10	0,10	0,06	0,11	0,06	0,08	0,11	0,11	0,15	0,29	0,29	0,14	0,17	0,17	0,06	0,34	0,34
Assigned Phase	2+3+4+1	12+13	12+13	9	8	9	7	4	4	5	2	2	28+3	28+8	28+8	1	9+6	9+6
Max. Allowable Headway (MAH), s veh	5.15	3.92	3.92	3.48	4.72	3.48	3.76	5.27	5.27	3.73	5.15	5.15	4.17	4.17	4.17	3.73	3.48	3.48
Queue Service Time (gs), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Queue Permitted Service Time (gps), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Call Probability (pc)	1,00	0,51	0,51	0,52	0,51	0,52	0,51	0,51	0,51	0,51	1,00	1,00	0,52	0,52	0,52	0,51	0,52	0,52
Max Out Probability (gs)	0,00	1,00	1,00	0,00	0,00	0,00	0,00	0,00	0,00	0,38	0,00	0,00	0,06	0,06	0,06	0,00	0,00	0,00
Green Extension Time (ge), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Duration (Dp), s	44,9	11,0	11,0	12,1	20,8	12,1	16,0	20,8	20,8	25,5	44,9	44,9	14,0	14,0	14,0	13,1	12,1	12,1
Uniform Delay (d1), s/veh	14,3	54,1	54,1	59,1	52,5	59,1	56,9	52,5	52,5	46,4	33,3	33,3	49,7	45,7	45,7	59,1	28,7	28,7
Incremental Delay (d2), s/veh	1,93e-05	0,00533	0,00726	0,0139	0,000252	0,0139	0,0194	0,001	0,00442	0,00256	0,000146	0,000643	0,003	0,000424	0,00187	0,0332	0,000106	0,000465
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Control Delay (d), s/veh	14,3	54,1	54,1	59,1	52,5	59,1	56,9	52,5	52,5	46,4	33,3	33,3	49,7	45,7	45,7	59,1	28,7	28,7
Level Of Service	B	D	D	E	D	E	E	D	D	D	C	C	D	D	D	E	C	C
Total Delay, veh-hr	0,000367	0,0015	0,0015	0,00164	0,00146	0,00164	0,00316	0,00146	0,0016	0,00134	0,000926	0,00102	0,00138	0,00127	0,0014	0,00328	0,000797	0,000876
Fully Stopped (NS), veh/h	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Percentile Back of Queue (Q%), veh ln	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Effective Green Time, s	71,3	13,0	13,0	7,7	14,8	7,7	10,0	14,8	14,8	19,5	38,9	38,9	18,0	22,8	22,8	7,7	45,7	45,7
Approach Volume, veh/h	0	0	--	0	0	0	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	14,3	54,1	--	59,1	52,5	59,1	--	--	54,6	--	--	38,2	--	--	47,0	--	--	43,5

TransModeler® Intersection Report

Site Information

Intersection ID:	*103,99552*	**Site Name:**	*N 29.723046, W 95.501062*
Cross Street:	*Westpark Dr & Hillcroft Ave, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/9/7 15:49:11*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Hillcroft Ave)

※ Node 103 From \ To	Hillcroft Ave (NB)	Westpark Dr (WB)	Hillcroft Ave (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Hillcroft Ave (SB)				
Westpark Dr (EB)				
Hillcroft Ave (NB)				

Turn Movement Volumes (BRT Alignment & Hillcroft Ave)

※ Node 99552 From \ To	Hillcroft Ave (NB)	BRT Alignment (WB)	Hillcroft Ave (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Hillcroft Ave (SB)				
BRT Alignment (EB)				
Hillcroft Ave (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Hillcroft Ave (SB)				Westpark Dr (EB)			Hillcroft Ave (NB)				BRT Alignment (WB)	Hillcroft Ave (SB)	BRT Alignment (EB)	Hillcroft Ave (NB)
	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	Hillcroft Ave	Westpark Dr	BRT Alignment	Hillcroft Ave	BRT Alignment	Hillcroft Ave
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	133.0 sec
Control Delay:	40.7 sec
Level of Service:	D
Offset:	104.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	7.0	10.0	7.0	10.0	7.0	10.0	7.0	10.0	3.0
Max Green	14.0	31.0	11.0	40.0	14.0	31.0	12.0	39.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	None	Max	None	Max	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	3.0	2.5	2.5	2.5	6.0	2.5	2.5	2.5	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	23.0	16.0	29.0	12.0	29.0	11.0	29.0	29.0
Coordinated	No	No	No	Yes	No	No	No	No	No
Split	20.0	37.0	17.0	46.0	20.0	37.0	18.0	45.0	13.0
Max Inhibit	True	True	True	False	True	False	True	True	True
Opt Min Green	13.0	16.0	13.0	16.0	13.0	16.0	13.0	16.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	9
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

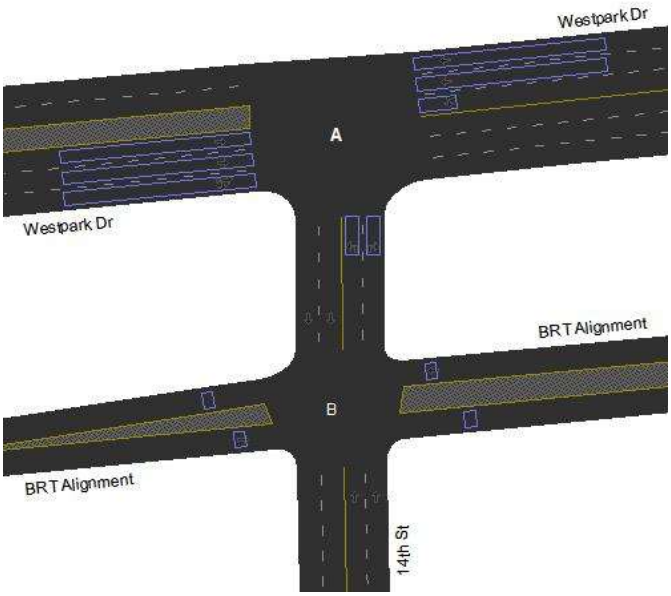
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)			Hillcroft Ave (SB)			Westpark Dr (EB)			Hillcroft Ave (NB)			BR1 Alignment (WB)	Hillcroft Ave (SB)	BR1 Alignment (EB)	Hillcroft Ave (NB)
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900	1976	5700	1976	7600
Capacity (c), veh/h	111	1749	875	84	886	443	76	1448	724	84	886	443	119	4114	119	5486
Available Capacity (ca), veh/h	150	229	114	190	886	443	163	1143	571	190	886	443	119	1329	119	1771
Volume-to-Capacity Ratio (X)	0.0009	5.72e-05	0.000126	0.00239	0.000113	0.000248	0.00131	6.91e-05	0.000152	0.00239	0.000113	0.000248	0.000841	2.43e-05	0.000841	1.82e-05
Green Ratio (gC)	0.06	0.46	0.46	0.05	0.23	0.23	0.04	0.38	0.38	0.05	0.23	0.23	0.06	0.72	0.06	0.72
Assigned Phase	3	9+8	9+8	1	6	5	7	4	4	5	2	2	9	2+1+7+3+4+5+6+8	9	2+1+7+3+4+5+6+8
Max. Allowable Headway (MAH), s/veh	3.23	2.52	2.52	3.73	4.65	4.65	3.23	4.65	4.65	6.73	3.80	3.80	2.52	3.80	2.52	3.80
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.52	0.52	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.52	1.00	0.52	1.00
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.2	13.0	13.0	12.1	37.0	37.0	11.6	56.7	56.7	12.1	37.0	37.0	13.0	37.0	13.0	37.0
Uniform Delay (d1), s/veh	58.6	19.4	19.4	60.5	39.1	39.1	61	25.5	25.5	60.5	39.1	39.1	58.7	5.15	58.7	5.15
Incremental Delay (d2), s/veh	0.0146	5.88e-05	0.000259	0.0517	0.000229	0.00101	0.0308	8.58e-05	0.000378	0.0517	0.000229	0.00101	0.0128	1.06e-05	0.0128	5.98e-06
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	58.6	19.4	19.4	60.6	39.1	39.1	61	25.5	25.5	60.6	39.1	39.1	58.8	5.15	58.8	5.15
Level Of Service	E	B	B	E	D	D	E	C	C	E	D	D	E	A	E	A
Total Delay, veh-hr	0.00163	0.000538	0.000592	0.00336	0.00109	0.0012	0.0017	0.000708	0.000778	0.00336	0.00109	0.0012	0.00163	0.000143	0.00163	0.000143
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	8.2	61.2	61.2	6.1	31.0	31.0	5.6	50.7	50.7	6.1	31.0	31.0	8.0	96.0	8.0	96.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	32.0	--	--	49.6	--	--	36.9	--	--	49.6	58.8	5.1	58.8	5.1

TransModeler® Intersection Report

Site Information			
Intersection ID:	*104,99554*	**Site Name:**	*N 29.723315, W 95.497379*
Cross Street:	*Westpark Dr & 14th St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:49:22*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & 14th St)			
@ Node 104 From \ To	Westpark Dr (EB)	Westpark Dr (WB)	14th St (SB)
Westpark Dr (WB)			
Westpark Dr (EB)			
14th St (NB)			

Turn Movement Volumes (BRT Alignment & 14th St)				
@ Node 99554 From \ To	14th St (NB)	BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
14th St (SB)				
BRT Alignment (EB)				
14th St (NB)				

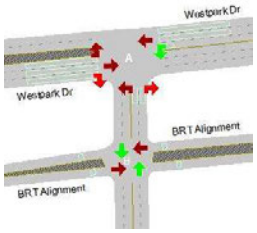
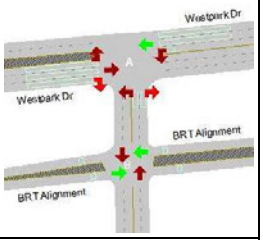
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate												
Movement	Westpark Dr (WB)			Westpark Dr (EB)			14th St (NB)		BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)	14th St (NB)
	Westpark Dr	Westpark Dr	14th St	Westpark Dr	Westpark Dr	14th St	Westpark Dr	Westpark Dr	BRT Alignment	14th St	BRT Alignment	14th St
	WBU	WBT	WBL	EBT	EBL	EBR	NBR	NBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *32.0 sec*
Level of Service: *C*
Offset: *49.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	*1*	*2*	*6*	*8*	*9*
Min Green	*5.0*	*7.0*	*7.0*	*5.0*	*3.0*
Max Green	*12.0*	*61.0*	*79.0*	*29.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*None*	*Min*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*2.0*	*3.0*	*3.0*	*6.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*7.0*	*9.0*	*9.0*	*7.0*	*7.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*12.0*	*23.0*	*82.0*	*23.0*	*23.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*
Split	*18.0*	*67.0*	*85.0*	*35.0*	*13.0*
Max Inhibit	*True*	*False*	*True*	*True*	*True*
Opt Min Green	*11.0*	*13.0*	*13.0*	*11.0*	*8.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*1, 2*		*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Westpark Dr (WB)		Westpark Dr (EB)			14th St (NB)		BRT Alignment (WB)	14th St (SB)	BRT Alignment (EB)	14th St (NB)
	L	T	L+T	T	T+R	L	R	T	T	T	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*3800*	*1830*	*1900*	*1900*	*1809*	*1609*	*1976*	*3800*	*1976*	*3800*
Capacity (c), veh/h	*83*	*2979*	*933*	*1202*	*1202*	*160*	*142*	*119*	*2914*	*119*	*2914*

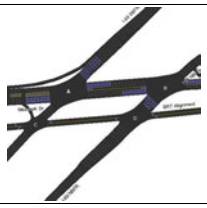
Available Capacity (ca), veh/h	163	2257	682	871	871	394	351	119	1743	119	1743
Volume-to-Capacity Ratio (X)	0.0024	3.36e-05	0.000118	8e-05	8.64e-05	0.000626	0.000703	0.000841	3.43e-05	0.000841	3.43e-05
Green Ratio (g/C)	0.05	0.78	0.63	0.63	0.63	0.09	0.09	0.06	0.77	0.06	0.77
Assigned Phase	1	6+9	2	2	2	8	8	9	2+8+6+1	9	2+8+6+1
Max. Allowable Headway (MAH), s/veh	2.73	4.99	3.93	3.93	3.93	6.97	6.97	2.39	3.93	2.39	3.93
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	0.51	0.51	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.1	102.3	90.1	90.1	90.1	17.7	17.7	13.0	90.1	13.0	90.1
Uniform Delay (d1), s/veh	60.5	3.11	9.02	8.98	8.98	55.3	55.3	58.7	3.61	58.7	3.61
Incremental Delay (d2), s/veh	0.0518	2.03e-05	0.000228	0.00012	0.000129	0.00706	0.00891	0.0128	2.12e-05	0.0128	2.12e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	60.6	3.11	9.02	8.98	8.99	55.3	55.3	58.8	3.61	58.8	3.61
Level Of Service	E	A	A	A	A	E	E	E	A	E	A
Total Delay, veh-hr	0.00336	8.63e-05	0.000276	0.00024	0.000259	0.00154	0.00154	0.00163	0.0001	0.00163	0.0001
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.1	104.3	84.1	84.1	84.1	11.7	11.7	8.0	102.0	8.0	102.0
Approach Volume, veh/h	--	0	--	--	0	0	--	0	0	0	0
Approach Delay, s/veh	--	41.4	--	--	9.0	55.3	--	58.8	3.6	58.8	3.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*105.106.65.99557*	**Site Name:**	*N 29.723731; W 95.491886*
Cross Street:	*Westpark Dr & I-69 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:49:35*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & I-69 SBFR)

@ Node 105 From: \ To	Westpark Dr (EB)	Westpark Dr (WB)	I-69 SBFR (SWB)
Westpark Dr (WB)			
I-69 SBFR (SWB)			
Westpark Dr (EB)			

Turn Movement Volumes (Westpark Dr & I-69 NBFR)

@ Node 106 From: \ To	I-69 NBFR (NEB)	Westpark Dr (WB)	Westpark Dr (EB)
Westpark Dr (WB)			
I-69 NBFR (NEB)			
Westpark Dr (WB)			

Turn Movement Volumes (Westpark Dr & BRT Alignment)

@ Node 65 From: \ To	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBFR (NWB)
Westpark Dr (SB)			
BRT Alignment (EB)			
BRT Alignment (WB)			
I-69 SBFR (SWB)			

Turn Movement Volumes (BRT Alignment & I-69 NBFR)

@ Node 99557 From: \ To	I-69 NBFR (NEB)	BRT Alignment (WB)	BRT Alignment (EB)
BRT Alignment (WB)			
BRT Alignment (EB)			
I-69 NBFR (NEB)			

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)		I-69 SBFR (SWB)		Westpark Dr (EB)	Westpark Dr (EB)		I-69 NBFR (NEB)			Westpark Dr (WB)	Westpark Dr (SB)	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBFR (SWB)	BRT Alignment (WB)	BRT Alignment (EB)	I-69 NBFR (NEB)
	Westpark Dr	I-69 SBFR	Westpark Dr	I-69 SBFR	Westpark Dr	I-69 NBFR	Westpark Dr	I-69 NBFR	Westpark Dr	Westpark Dr	Westpark Dr	I-69 SBFR	BRT Alignment	BRT Alignment	I-69 SBFR	BRT Alignment	BRT Alignment	I-69 NBFR
	WBT	WBL	SWBL	SWBT	EBT	EBL	EBT	NEBT	NEBL	NEBR	WBT	SBR	EBT	WBT	SWBT	WBT	EBT	NEBT

Signal Timing Plan - 1

Time of Day:	*16:30:00 - 16:30:00*
Plan Description:	*16:30:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*27.8 sec*
Level of Service:	*C*
Offset:	*58.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*By Phase*

Phasing

Item Name \ Signal States								
ID	1	2	4	5	6	8	9
Min Green	8,0	8,0	8,0	8,0	8,0	8,0	15,0
Max Green	16,7	28,7	16,7	16,7	22,7	19,7	15,0
Yellow	4,3	4,3	4,3	4,3	4,3	4,3	3,0
Red Clearance	2,0	2,0	2,0	2,0	2,0	2,0	2,0
Lost Time	6,3	6,3	6,3	6,3	6,3	6,3	5,0
Recall Mode	None	Max	None	None	None	None	None
Vehicency Mode	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage Extension	4,0	4,0	4,0	4,0	4,0	4,0	4,0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adfical Initial	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Max Initial	15,7	17,7	15,7	15,7	23,7	17,7	15,0
Time before Reduction	7,0	7,0	7,0	7,0	7,0	7,0	7,0
Time to Reduce	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Min Gap	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Ped Walk - FDW	15,7	27,7	21,0	15,7	23,0	21,0	21,0
Coordinated	No	Yes	No	No	No	No	No
Split	21,0	33,0	26,0	25,0	29,0	25,0	20,0
Max Inhibit	Force	Force	Force	Force	Force	Force	Force
Dtl Min Green	14,3	14,3	14,3	14,3	14,3	14,3	20,0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4	9
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

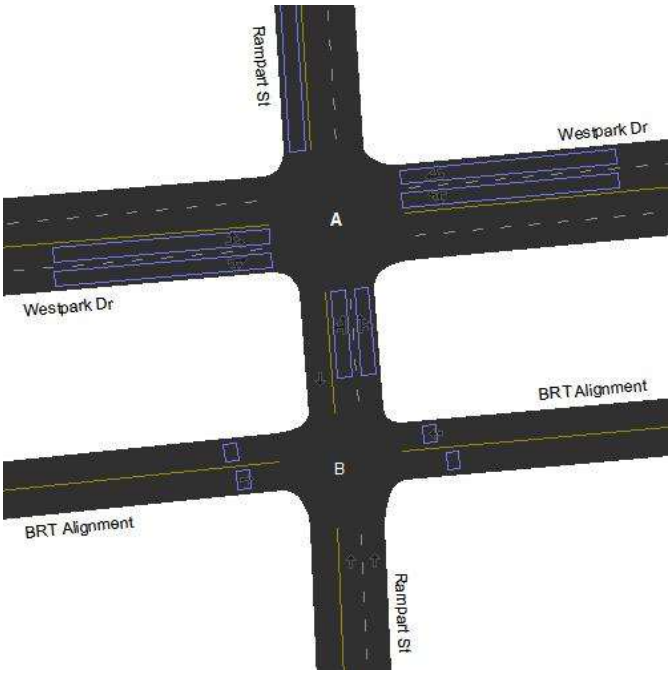
Lane Group	Westpark Dr (WB)		I-69 SBIR (SWB)			Westpark Dr (EB)		Westpark Dr (EB)		I-69 NBIR (NEB)			Westpark Dr (WB)	Westpark Dr (SB)	BRT Alignment (EB)	BRT Alignment (WB)	I-69 SBIR (SWB)	BRT Alignment (WB)	BRT Alignment (EB)	I-69 NBIR (NEB)
	L	T	L	L+T	T	T	L	L+T	T	L	T	R	T	R	T	T	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1809	1900	3800	5700	1810	1900	1900	3518	3800	1609	3800	1609	1976	1976	5700	1976	1976	5900
Capacity (c), veh/h	145	1275	195	204	409	3258	768	784	1089	389	409	173	1275	1080	215	215	3359	215	215	6197
Available Capacity (ca), veh/h	266	570	336	374	749	855	916	952	285	713	749	317	570	430	296	296	1123	296	296	1871
Volume-to-Capacity Ratio (X)	0,00069	7,84e-05	0,000253	0,000197	0,000245	3,06e-05	6,41e-05	6,53e-05	6,22e-05	0,000257	0,000245	0,000578	7,84e-05	9,53e-05	0,000466	0,000466	2,98e-05	0,000466	0,000466	1,51e-05
Green Ratio (g/C)	0,08	0,34	0,11	0,11	0,11	0,57	0,46	0,57	0,57	0,11	0,11	0,11	0,34	0,65	0,11	0,11	0,59	0,11	0,11	0,65
Assigned Phase	1	9+6	4	4	4	9+2	9+2	5+2+9	9+2	8	8	8	9+6	2+6+8+4+1+5	9	9	4+6+8+1+5+2	9	9	4+6+8+1+5+2
Max. Allowable Headway (MAH), s/veh	4,76	4,41	5,03	5,03	5,03	4,41	4,43	4,43	4,41	5,04	5,04	5,04	4,41	4,66	4,41	4,41	5,03	4,41	4,41	5,03
Queue Service Time (gs), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Queue Permitted Service Time (gps), s	0,0	0,0	0,0	0,0	0,0	0,0	6,4	6,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Prune Call Probability (pc)	0,51	0,52	0,52	0,52	0,52	0,52	0,51	0,51	0,52	0,51	0,51	0,51	0,52	1,00	0,52	0,52	0,52	0,52	0,52	0,52
Max Out Probability (gs)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Green Extension Time (ge), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Duration (Dp), s	14,3	15,9	17,1	17,1	17,1	15,9	39,1	38,1	15,9	17,1	17,1	17,1	15,9	52,8	15,9	15,9	17,1	15,9	15,9	17,1
Uniform Delay (d1), s/veh	42,3	22,1	39,8	39,8	39,8	9,1	20,4	9,48	9,1	39,8	39,8	39,8	22,1	6,04	39,7	39,7	8,43	39,7	39,7	6,04
Incremental Delay (d2), s/veh	0,00856	0,000111	0,00234	0,00262	0,00108	1,69e-05	0,000197	0,000108	0,000103	0,00119	0,00108	0,00601	0,000111	0,000163	0,00391	0,00391	1,56e-05	0,00391	0,00391	4,69e-06
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Control Delay (d), s/veh	42,3	22,1	39,8	39,8	39,8	9,1	20,4	9,48	9,1	39,8	39,8	39,8	22,1	6,04	39,7	39,7	8,43	39,7	39,7	6,04
Level Of Service	D	C	D	D	D	A	C	A	A	D	D	D	C	A	D	D	A	D	D	A
Total Delay, veh*h	0,00118	0,000013	0,000545	0,000672	0,00111	0,000253	0,000356	0,000178	0,000171	0,00111	0,00111	0,00111	0,000613	0,000168	0,0011	0,0011	0,000234	0,0011	0,0011	0,000168
Fully Stopped (Nf), veh/h	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Percent Back of Queue (Q%), veh/ln	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Effective Green Time, s	8,0	33,6	10,8	10,8	10,8	57,3	46,2	57,3	57,3	10,8	10,8	10,8	33,6	65,2	10,9	10,9	58,9	10,9	10,9	65,2
Approach Volume, veh/h	--	0	--	--	0	0	--	--	0	--	0	--	0	0	0	0	0	0	0	0
Approach Delay, s/veh	--	22,1	--	--	39,8	9,1	--	--	10,9	--	39,8	--	22,1	6,0	39,7	39,7	8,4	39,7	39,7	6,0

TransModeler® Intersection Report

Site Information

Intersection ID:	*107,99559*	**Site Name:**	*N 29.723900, W 95.489072*
Cross Street:	*Westpark Dr & Rampart St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:49:52*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Rampart St)

@ Node 107 From \ To	Rampart St (NB)	Westpark Dr (WB)	Rampart St (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Rampart St (SB)				
Westpark Dr (EB)				
Rampart St (NB)				

Turn Movement Volumes (BRT Alignment & Rampart St)

@ Node 99559 From \ To	Rampart St (NB)	BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Rampart St (SB)				
BRT Alignment (EB)				
Rampart St (NB)				

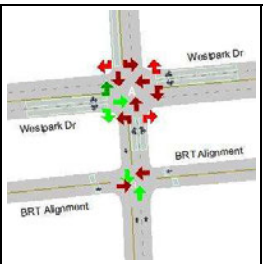
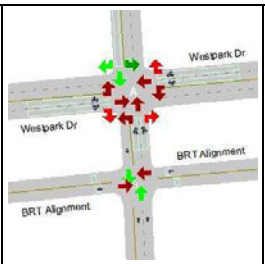
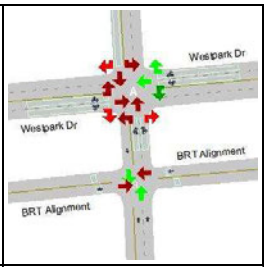
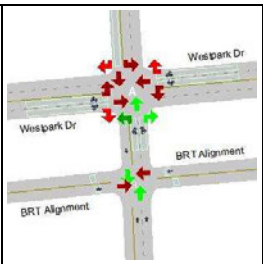
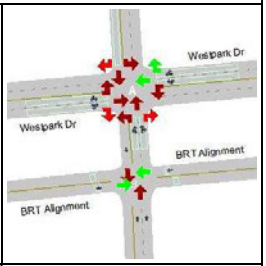
[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Rampart St (SB)			Westpark Dr (EB)			Rampart St (NB)			BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)	Rampart St (NB)
	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Rampart St	Rampart St	Westpark Dr	Rampart St	Westpark Dr	Westpark Dr	BRT Alignment	Rampart St	BRT Alignment	Rampart St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *30.3 sec*
Level of Service: *C*
Offset: *111.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing					
Item Name \ Signal States					
ID	*2*	*4*	*6*	*8*	*9*
Min Green	*10.0*	*10.0*	*10.0*	*10.0*	*3.0*
Max Green	*82.0*	*26.0*	*82.0*	*26.0*	*8.0*
Yellow	*4.0*	*4.0*	*4.0*	*4.0*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*6.0*	*6.0*	*6.0*	*6.0*	*5.0*
Recall Mode	*Min*	*None*	*Min*	*None*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*12.0*	*12.0*	*12.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*17.0*	*21.0*	*82.0*	*21.0*	*21.0*
Coordinated	*Yes*	*No*	*No*	*No*	*No*
Split	*88.0*	*32.0*	*88.0*	*32.0*	*13.0*
Max Inhibit	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*16.0*	*16.0*	*16.0*	*16.0*	*8.0*

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*4*	*9*
Ring - 2	*6*	*8*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination											
Lane Group	Westpark Dr (WB)		Rampart St (SB)	Westpark Dr (EB)		Rampart St (NB)		BRT Alignment (WB)	Rampart St (SB)	BRT Alignment (EB)	Rampart St (NB)
	L+T	T+R	LTR	L+T	T+R	L+T	T+R	T	T	T	T
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1657*	*1900*	*1900*	*1657*	*1900*	*1900*	*1900*	*1976*	*1900*	*1976*	*3800*

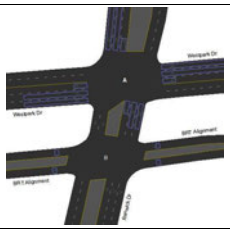
Capacity (c), veh/h	1035	1503	154	1035	1389	174	154	119	1543	119	3086
Available Capacity (ca), veh/h	857	1171	371	857	1171	354	371	119	1171	119	2343
Volume-to-Capacity Ratio (X)	0.000135	0.000107	0.00195	0.000135	0.000115	0.00086	0.000976	0.000841	6.48e-05	0.000841	3.24e-05
Green Ratio (g/C)	0.79	0.79	0.08	0.73	0.73	0.08	0.08	0.06	0.81	0.06	0.81
Assigned Phase	6+9	6+9	4	2	2	8	8	9	6+2+8+4	9	6+2+8+4
Max. Allowable Headway (MAH), s/veh	3.86	3.86	5.30	4.60	4.60	3.53	3.53	2.41	3.86	2.41	3.86
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.52	1.00	1.00	0.52	0.52	0.51	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	103.2	103.2	16.8	103.2	103.2	16.8	16.8	13.0	103.2	13.0	103.2
Uniform Delay (d1), s/veh	3.48	2.9	56.2	5.39	4.81	56.2	56.2	58.7	2.35	58.7	2.35
Incremental Delay (d2), s/veh	0.000235	0.000128	0.0229	0.000235	0.00015	0.00889	0.0114	0.0128	7.56e-05	0.0128	1.89e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	3.48	2.9	56.2	5.39	4.81	56.2	56.2	58.8	2.35	58.8	2.35
Level Of Service	A	A	E	A	A	E	E	E	A	E	A
Total Delay, veh-hr	0.000135	0.000129	0.00468	0.000209	0.000214	0.00234	0.00234	0.00163	6.53e-05	0.00163	6.53e-05
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	105.2	105.2	10.8	97.2	97.2	10.8	10.8	8.0	108.0	8.0	108.0
Approach Volume, veh/h	--	0	0	--	0	--	0	0	0	0	0
Approach Delay, s/veh	--	3.2	56.2	--	5.1	--	56.2	58.8	2.3	58.8	2.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*108,99562*	**Site Name:**	*N 29.724298, W 95.484302*
Cross Street:	*Fountain View Dr & Westpark Dr, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:50:2*		

Intersection Geometry



Turn Movement Volumes (Fountain View Dr & Westpark Dr)

⊠ Node 108 From \ To	Fountain View Dr (NB)	Westpark Dr (WB)	Renwick Dr (SB)	Westpark Dr (EB)
Fountain View Dr (SB)				
Westpark Dr (EB)				
Renwick Dr (NB)				
Westpark Dr (WB)				

Turn Movement Volumes (BRT Alignment & Renwick Dr)

⊠ Node 99562 From \ To	Renwick Dr (NB)	BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Renwick Dr (SB)				
BRT Alignment (EB)				
Renwick Dr (NB)				

[Row Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Fountain View Dr (SB)				Westpark Dr (EB)			Renwick Dr (NB)			Westpark Dr (WB)			BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)	Renwick Dr (NB)
	Fountain View Dr	Westpark Dr	Renwick Dr	Westpark Dr	Fountain View Dr	Renwick Dr	Westpark Dr	Fountain View Dr	Westpark Dr	Westpark Dr	Fountain View Dr	Westpark Dr	Renwick Dr	BRT Alignment	Renwick Dr	BRT Alignment	Renwick Dr
	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	*16:30:00 - 16:30:00*
Plan Description:	*16:30:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*143,0 sec*
Control Delay:	*41,7 sec*
Level of Service:	*D*
Offset:	*15,0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	3,0	7,0	3,0	5,0	3,0	7,0	3,0	5,0	3,0
Max Green	8,0	45,0	18,0	38,0	8,0	42,0	24,0	32,0	8,0
Yellow	4,0	4,0	4,0	4,0	4,0	4,0	4,0	4,0	3,0
Red Clearance	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0
Lost Time	6,0	6,0	6,0	6,0	6,0	6,0	6,0	6,0	5,0
Recall Mode	None	Max	Max	Max	None	Max	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Max Initial	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0
Time before Reduction	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Time to Reduce	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Min Gap	0,0	0,2	0,2	0,2	0,0	0,2	0,2	0,2	0,0
Ped Walk + FDW	8,0	13,0	18,0	29,0	8,0	29,0	24,0	29,0	29,0
Coordinated	No	Yes	No	No	No	No	No	No	No
Split	14,0	45,0	24,0	44,0	14,0	48,0	30,0	38,0	13,0
Max Inhibit	True	False	True	True	True	True	True	True	True
Opt Min Green	9,0	13,0	9,0	11,0	9,0	13,0	9,0	11,0	8,0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	9
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

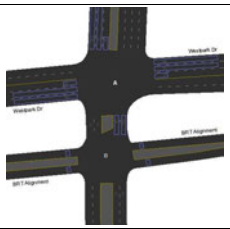
Lane Group	Fountain View Dr (SB)			Westpark Dr (EB)			Renwick Dr (NB)			Westpark Dr (WB)			BRT Alignment (WB)	Renwick Dr (SB)	BRT Alignment (EB)	Renwick Dr (NB)
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1809	1900	1900	1976	3800	1976	5700
Capacity (c), veh/h	304	505	505	101	610	610	228	425	425	52	664	664	111	2817	111	4225
Available Capacity (ca), veh/h	304	505	505	101	558	558	228	425	425	101	558	558	111	1010	111	1515
Volume-to-Capacity Ratio (X)	0,000659	0,000198	0,000218	0,000688	0,000164	0,00018	0,000439	0,000235	0,000259	0,00193	0,000151	0,000166	0,000905	3,55e-05	0,000905	2,37e-05
Green Ratio (g/C)	0,17	0,27	0,27	0,06	0,32	0,32	0,13	0,22	0,22	0,03	0,35	0,35	0,06	0,74	0,06	0,74
Assigned Phase	7	4	4	5	2	2	3	8	8	1	6+9	6+9	9	4+7+1+5+3+8+6+2	9	4+7+1+5+3+8+6+2
Max. Allowable Headway (MAH), s/veh	2,80	3,39	3,39	2,76	4,27	4,27	2,80	3,25	3,25	2,76	4,27	4,27	2,41	3,39	2,41	3,39
Queue Service Time (gs), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Queue Permitted Service Time (gps), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Call Probability (pc)	1,00	1,00	1,00	0,51	1,00	1,00	1,00	1,00	1,00	0,51	1,00	1,00	0,51	1,00	0,51	1,00
Max Out Probability (px)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Green Extension Time (ge), s	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Phase Duration (Dp), s	30,0	44,0	44,0	14,0	51,9	51,9	24,0	38,0	38,0	10,1	48,0	48,0	13,0	44,0	13,0	44,0
Uniform Delay (d1), s/veh	49,5	38,6	38,6	63,7	33	33	54,6	43,1	43,1	67,5	30,2	30,2	63,7	4,79	63,7	4,79
Incremental Delay (d2), s/veh	0,00391	0,000706	0,000777	0,0176	0,000484	0,000532	0,00347	0,000996	0,0011	0,0675	0,000408	0,000449	0,0147	2,27e-05	0,0147	1,01e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5
Control Delay (d), s/veh	49,5	38,6	38,6	63,7	33	33	54,6	43,1	43,1	67,5	30,2	30,2	63,7	4,79	63,7	4,79
Level Of Service	D	D	D	E	C	C	D	D	D	E	C	C	E	A	E	A
Total Delay, veh-hr	0,00275	0,00107	0,00118	0,00177	0,000916	0,00101	0,00152	0,0012	0,00132	0,00188	0,00084	0,000924	0,00177	0,000133	0,00177	0,000133
Fully Stopped (NS), veh/h	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Percentile Back of Queue (QN), veh/ln	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Effective Green Time, s	24,0	38,0	38,0	8,0	45,9	45,9	18,0	32,0	32,0	4,1	50,0	50,0	8,0	106,0	8,0	106,0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	43,9	--	--	42,9	--	--	46,8	--	--	42,3	63,7	4,8	63,7	4,8

TransModeler® Intersection Report

Site Information

Intersection ID:	*109,99564*	**Site Name:**	*N 29.724924, W 95.476488*
Cross Street:	*Westpark Dr & Chimney Rock Rd, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:50:23*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Chimney Rock Rd)

※ Node 109 From \ To	Chimney Rock Rd (NB)	Westpark Dr (WB)	Chimney Rock Rd (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Chimney Rock Rd (SB)				
Westpark Dr (EB)				
Chimney Rock Rd (NB)				

Turn Movement Volumes (BRT Alignment & Chimney Rock Rd)

※ Node 99564 From \ To	Chimney Rock Rd (NB)	BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
Chimney Rock Rd (SB)				
BRT Alignment (EB)				
Chimney Rock Rd (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Chimney Rock Rd (SB)				Westpark Dr (EB)			Chimney Rock Rd (NB)		BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)	Chimney Rock Rd (NB)
	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Chimney Rock Rd	Westpark Dr	Chimney Rock Rd	Westpark Dr	BRT Alignment	Chimney Rock Rd	BRT Alignment	Chimney Rock Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBR	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	143.0 sec
Control Delay:	29.5 sec
Level of Service:	D
Offset:	12.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	4	5	6	7	8	9
Min Green	6.0	12.0	7.0	6.0	12.0	6.0	7.0	3.0
Max Green	10.0	41.0	61.0	13.0	39.0	22.0	33.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	Max	Max	None	None	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	14.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	14.0	29.0	19.0	10.0	29.0	29.0	19.0	19.0
Coordinated	No	No	Yes	No	No	No	No	No
Split	16.0	47.0	67.0	13.0	45.0	28.0	39.0	13.0
Max Inhibit	True	True	False	True	True	True	True	True
Opt Min Green	12.0	18.0	13.0	12.0	18.0	12.0	13.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	9
Ring - 2	5, 6	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

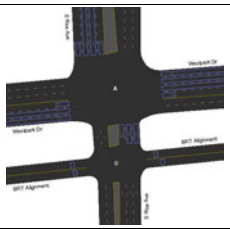
Lane Group	Westpark Dr (WB)			Chimney Rock Rd (SB)			Westpark Dr (EB)			Chimney Rock Rd (NB)		BRT Alignment (WB)	Chimney Rock Rd (SB)	BRT Alignment (EB)	Chimney Rock Rd (NB)
	L	T	T+R	L	T	T+R	L	T	T+R	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1900	1900	1978	3800	1976	3800
Capacity (c), veh/h	90	572	572	278	848	848	65	545	545	476	476	111	2976	111	2976
Available Capacity (ca), veh/h	126	518	518	278	810	810	152	545	545	438	438	111	1036	111	1036
Volume-to-Capacity Ratio (X)	0.00111	0.000175	0.000192	0.000719	0.000118	0.00013	0.00155	0.000184	0.000202	0.00021	0.000231	0.000905	3.36e-05	0.000905	3.36e-05
Green Ratio (g/C)	0.05	0.36	0.36	0.15	0.45	0.45	0.04	0.29	0.29	0.25	0.25	0.06	0.78	0.06	0.78
Assigned Phase	1	6	6	7	4	4	5	2	2	8	8	9	6+2+8+1+7+4+5	9	6+2+8+1+7+4+5
Max. Allowable Headway (MAH), s/veh	2.76	4.32	4.32	2.76	4.27	4.27	2.76	4.27	4.27	3.01	3.01	2.41	4.32	2.41	4.32
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.52	0.52	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00	0.51	0.52	0.51	0.52
Max Out Probability (pc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	13.2	49.0	49.0	28.0	69.8	69.8	11.1	47.0	47.0	41.8	41.8	13.0	49.0	13.0	49.0
Uniform Delay (d1), s/veh	64.5	34.9	34.9	51.2	21.9	21.9	66.5	36.4	36.4	40.1	40.1	63.7	3.36	63.7	3.36
Incremental Delay (d2), s/veh	0.022	0.000551	0.000606	0.00465	0.00025	0.000275	0.0431	0.000607	0.000667	0.000794	0.000873	0.0147	2.03e-05	0.0147	2.03e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	64.6	34.9	34.9	51.2	21.9	21.9	66.5	36.4	36.4	40.1	40.1	63.7	3.36	63.7	3.36
Level Of Service	E	C	C	D	C	C	E	D	D	D	D	E	A	E	A
Total Delay, veh-hr	0.00179	0.000971	0.00107	0.00284	0.000609	0.000689	0.00185	0.00101	0.00111	0.00112	0.00123	0.00177	9.33e-05	0.00177	9.33e-05
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.2	43.0	43.0	22.0	63.8	63.8	5.1	41.0	41.0	35.8	35.8	8.0	112.0	8.0	112.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	0	0	0	0	0
Approach Delay, s/veh	--	--	44.5	--	--	36.2	--	--	46.1	--	40.1	63.7	3.4	63.7	3.4

TransModeler® Intersection Report

Site Information

Intersection ID:	110,99568	**Site Name:**	N 29.725629, W 95.468222
Cross Street:	S Rice Ave & Westpark Dr, orb;	**Number of Plans:**	1
Analysis Date:	2023/9/7 15:50:44		

Intersection Geometry



Turn Movement Volumes (S Rice Ave & Westpark Dr)

@ Node 110 From \ To	S Rice Ave (NB)	Westpark Dr (WB)	S Rice Ave (SB)	Westpark Dr (EB)
S Rice Ave (SB)				
Westpark Dr (EB)				
S Rice Ave (NB)				
Westpark Dr (WB)				

Turn Movement Volumes (BRT Alignment & S Rice Ave)

@ Node 99568 From \ To	S Rice Ave (NB)	BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)
BRT Alignment (WB)				
S Rice Ave (SB)				
BRT Alignment (EB)				
S Rice Ave (NB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	S Rice Ave (SB)				Westpark Dr (EB)			S Rice Ave (NB)				Westpark Dr (WB)			BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)	S Rice Ave (NB)
	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	Westpark Dr	S Rice Ave	BRT Alignment	S Rice Ave	BRT Alignment	S Rice Ave
	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR	WBR	WBT	WBL	WBT	SBT	EBT	NBT

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	143.0 sec
Control Delay:	44.0 sec
Level of Service:	D
Offset:	0.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	6.0	8.0	6.0	8.0	6.0	8.0	6.0	8.0	3.0
Max Green	12.0	36.0	33.0	24.0	24.0	26.0	16.0	40.0	8.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0
Recall Mode	None	None	None	Max	None	None	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.0	6.0	2.0	2.0	6.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	23.0	18.0	31.0	12.0	45.0	24.0	22.0	22.0
Coordinated	No	No	No	Yes	No	No	No	No	No
Split	18.0	44.0	36.0	30.0	30.0	32.0	22.0	46.0	13.0
Max Inhibit	True	False	True	False	True	True	True	True	True
Opt Min Green	12.0	14.0	12.0	14.0	12.0	14.0	12.0	14.0	8.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	9
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

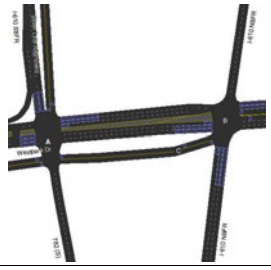
Lane Group	S Rice Ave (SB)				Westpark Dr (EB)			S Rice Ave (NB)			Westpark Dr (WB)			BRT Alignment (WB)	S Rice Ave (SB)	BRT Alignment (EB)	S Rice Ave (NB)
	L	T	T+R	R	L	T	T+R	L	T	T+R	L	T	T+R	T	T	T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1809	1900	1900	1809	1900	1900	1809	3800	1900	1976	3800	1976	5700
Capacity (c), veh/h	116	306	306	259	155	899	899	78	265	265	116	1929	964	111	2817	111	4225
Available Capacity (ca), veh/h	152	345	345	293	202	319	319	304	505	505	405	213	106	111	691	111	1026
Volume-to-Capacity Ratio (X)	0.00172	0.00023	0.00023	0.00023	0.000645	0.000111	0.000122	0.00257	0.000377	0.000415	0.00086	5.18e-05	0.000114	0.000905	3.55e-05	0.000905	2.27e-05
Green Ratio (g/C)	0.06	0.16	0.16	0.16	0.09	0.47	0.47	0.04	0.14	0.14	0.06	0.51	0.51	0.06	0.74	0.06	0.74
Assigned Phase	1	6	6	6	7	4	4	5	2	2	3	9+8	9+8	9	6+2+7+8+4+3+1+5	9	6+2+7+8+4+3+1+5
Max. Allowable Headway (MAH), s/veh	2.76	2.61	2.61	2.61	2.76	4.27	4.27	6.76	7.01	7.01	2.76	2.54	2.54	2.54	2.61	2.54	2.61
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.52	0.52	0.52	0.51	1.00	1.00	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.2	29.0	29.0	29.0	18.3	73.7	73.7	12.1	26.0	26.0	15.2	13.0	13.0	13.0	29.0	13.0	29.0
Uniform Delay (d1), s/veh	62.6	50.3	50.3	50.3	59.8	19.9	19.9	65.5	52.9	52.9	62.6	17.3	17.3	63.7	4.79	63.7	4.79
Incremental Delay (d2), s/veh	0.0266	0.00135	0.00135	0.0016	0.0075	0.000223	0.000245	0.0598	0.00256	0.00282	0.0133	4.94e-05	0.000213	0.0147	2.27e-05	0.0147	1.01e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	62.6	50.3	50.3	50.3	59.8	19.9	19.9	65.6	52.9	52.9	62.6	17.3	17.3	63.7	4.79	63.7	4.79
Level Of Service	E	D	D	D	E	B	B	E	D	D	E	B	B	E	A	E	A
Total Delay, veh-h	0.00348	0.000982	0.000982	0.000833	0.00166	0.000551	0.000607	0.00364	0.00147	0.00162	0.00174	0.000481	0.00053	0.00177	0.000133	0.00177	0.000133
Fully Stopped (NS), veh/h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (QN), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	9.2	23.0	23.0	23.0	12.3	67.7	67.7	6.1	20.0	20.0	9.2	72.6	72.6	8.0	106.0	8.0	106.0
Approach Volume, veh/h	--	--	0	--	--	--	0	--	--	0	--	--	0	0	0	0	0
Approach Delay, s/veh	--	--	50.5	--	--	--	32.7	--	--	59.1	--	--	31.9	63.7	4.8	63.7	4.8

TransModeler® Intersection Report

Site Information			
Intersection ID:	*111,112,194*	**Site Name:**	*N 29.726134, W 95.461027*
Cross Street:	*Westpark Dr & BRT Alignment, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:7:25*		

" "

Intersection Geometry



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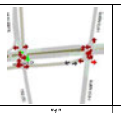
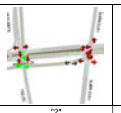
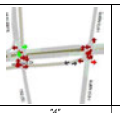
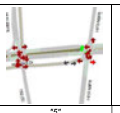
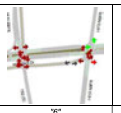
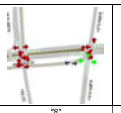
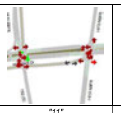
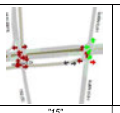
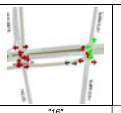
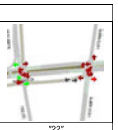
Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *5.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States										
"ID"	"1"	"2"	"4"	"5"	"6"	"8"	"11"	"15"	"16"	"22"
"Min Green"	"7.0"	"8.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Max Green"	"12.0"	"41.0"	"12.0"	"18.0"	"21.0"	"38.0"	"17.0"	"9.0"	"9.0"	"13.0"
"Yellow"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"
"Lost Time"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"
"Recall Mode"	"None"	"Min"	"None"	"Max"	"Max"	"None"	"None"	"None"	"Min"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"	"Non-Lock"
"Passage/Extension"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"No"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"15.0"	"15.0"	"11.5"	"15.0"	"15.0"	"9.5"	"8.0"	"20.0"	"11.5"	"20.0"
"Time before Reduction"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time to Reduce"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"No"
"Split"	"17.0"	"46.0"	"17.0"	"23.0"	"26.0"	"43.0"	"22.0"	"14.0"	"14.0"	"18.0"
"Max Inhibit"	"False"	"False"	"False"	"False"	"False"	"False"	"False"	"False"	"False"	"False"
"Opt Min Green"	"12.0"	"13.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"	"12.0"

" "

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	"2", "1"	"4", "22", "11"
Ring - 2	"16", "5", "6"	"8", "15"

"

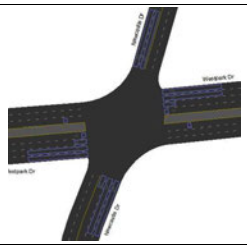
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*113*	**Site Name:**	*N 29.726879, W 95.451685*
Cross Street:	*Westpark Dr & Newcastle Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:51:12*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Newcastle Dr)

⇗ Node 113 From \ To	Newcastle Dr (NB)	Westpark Dr (WB)	Newcastle Dr (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Newcastle Dr (SB)				
Westpark Dr (EB)				
Newcastle Dr (NB)				

[Flow Field] = Volume

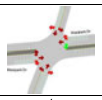
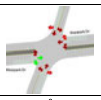
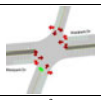
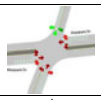
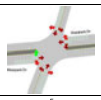
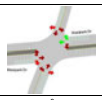
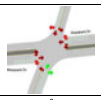
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)			Newcastle Dr (SB)			Westpark Dr (EB)				Newcastle Dr (NB)		
	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Newcastle Dr	Westpark Dr	Westpark Dr
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	35.2 sec
Level of Service:	D
Offset:	118.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States							
ID	1	2	3	4	5	6	8
Min Green	7.0	7.0	5.0	5.0	5.0	7.0	5.0
Max Green	19.0	45.0	15.0	17.0	19.0	45.0	38.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Recall Mode	None	Max	Max	Max	None	Max	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	0.0	2.0	2.0	2.0	0.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.2	0.2	0.2	0.0	0.2	0.2
Ped Walk + FDW	30.0	30.0	12.0	18.0	18.0	25.0	18.0
Coordinated	No	No	No	No	No	Yes	No
Split	25.0	51.0	21.0	23.0	25.0	51.0	44.0
Max Inhibit	True	True	True	True	True	False	True
Opt Min Green	13.0	13.0	11.0	11.0	11.0	13.0	11.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	3, 4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

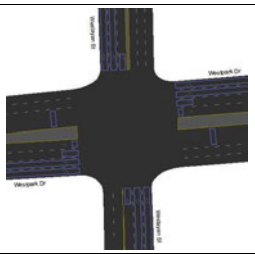
Lane Group	Westpark Dr (WB)			Newcastle Dr (SB)		Westpark Dr (EB)			Newcastle Dr (NB)		
	L	T	T+R	L+T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1900	1900	1809	3800	1900	1809	1900	1900
Capacity (c), veh/h	286	1735	868	275	269	139	1425	712	228	602	602
Available Capacity (ca), veh/h	286	1425	712	275	269	286	1425	712	228	602	602
Volume-to-Capacity Ratio (X)	0.000349	5.76e-05	0.000127	0.000546	0.000557	0.00144	7.02e-05	0.000154	0.000442	0.000166	0.000183
Green Ratio (g/C)	0.16	0.46	0.46	0.14	0.14	0.08	0.38	0.38	0.13	0.32	0.32
Assigned Phase	1	6	6	4	4	5	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	0.76	3.82	3.82	3.68	3.68	0.76	3.82	3.82	2.80	4.39	4.39
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	25.0	60.8	60.8	23.0	23.0	15.2	51.0	51.0	21.0	44.0	44.0
Uniform Delay (d1), s/veh	42.5	17.7	17.7	44.2	44.2	51.2	23.4	23.4	45.9	28	28
Incremental Delay (d2), s/veh	0.0022	5.98e-05	0.000263	0.00358	0.00373	0.0188	8.86e-05	0.00039	0.00352	0.000497	0.000547
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.5	17.7	17.7	44.2	44.2	51.2	23.4	23.4	45.9	28	28
Level Of Service	D	B	B	D	D	D	C	C	D	C	C
Total Delay, veh-hr	0.00118	0.000492	0.000341	0.00184	0.00184	0.00284	0.000651	0.000116	0.00128	0.000178	0.000856
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	19.0	54.8	54.8	17.0	17.0	9.2	45.0	45.0	15.0	38.0	38.0
Approach Volume, veh/h	--	--	0	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	25.7	--	44.2	--	--	37.0	--	--	33.8

TransModeler® Intersection Report

Site Information

Intersection ID:	*114*	**Site Name:**	*N 29.727733, W 95.441414*
Cross Street:	*Westpark Dr & Weslayan St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:52:48*		

Intersection Geometry



Turn Movement Volumes (Westpark Dr & Weslayan St)

@ Node 114 From \ To	Weslayan St (NB)	Westpark Dr (WB)	Weslayan St (SB)	Westpark Dr (EB)
Westpark Dr (WB)				
Weslayan St (SB)				
Westpark Dr (EB)				
Weslayan St (NB)				

[Flow Field] = Volume

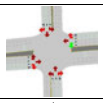
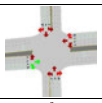
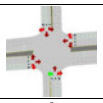
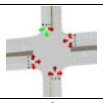
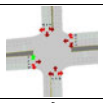
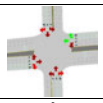
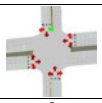
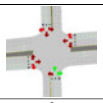
Volume Adjustment and Saturation Flow Rate

Movement	Westpark Dr (WB)				Weslayan St (SB)			Westpark Dr (EB)				Weslayan St (NB)		
	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Weslayan St	Westpark Dr	Westpark Dr
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: 16:30:00 - 16:30:00
Plan Description: 16:30:00
Controller Type: Traffic Actuated
Cycle Length: 120.0 sec
Control Delay: 16.9 sec
Level of Service: B
Offset: 25.0 sec
Coordinate Begin of: Red
Yield Point: Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	9.0	6.0	7.0	6.0	9.0	6.0	7.0
Max Green	22.6	23.7	12.7	39.7	22.7	23.6	11.7	40.7
Yellow	3.9	3.9	3.6	3.6	3.9	3.9	3.6	3.6
Red Clearance	1.5	1.4	1.7	1.7	1.4	1.5	1.7	1.7
Lost Time	5.4	5.3	5.3	5.3	5.3	5.4	5.3	5.3
Recall Mode	None	Max	Max	Max	None	Max	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	3.0	2.0	2.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	9.0
Time b/fore Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	11.6	16.0	7.7	15.0	12.7	17.0	14.7	15.0
Coordinated	No	No	No	No	No	No	No	Yes
Split	28.0	29.0	18.0	45.0	28.0	29.0	17.0	46.0
Max Inhibit	True	True	True	True	True	True	True	False
Opt Min Green	11.4	14.3	11.3	12.3	11.3	14.4	11.3	12.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2, 1	4, 3
Ring - 2	6, 5	7, 8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Wespark Dr (WB)			Weslayan St (SB)			Wespark Dr (EB)			Weslayan St (NB)		
	L	T	T~R	L	T	T+R	L	T	T+R	L	T	T+R
Assigned Phase	1	6	6	7	4	4	5	2	2	3	8	8
Phase Duration (Dp), s	5.4	14.5	14.5	5.3	12.3	12.3	5.3	14.4	14.4	11.3	18.3	18.3
Change Period (Y+Rc), s	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max. Allowable Headway (MAH), s/veh	2.76	3.71	3.71	2.76	4.53	4.53	3.76	3.71	3.71	2.76	4.53	4.53
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1810	3800	1610	1810	1900	1610	1810	3800	1610	1810	1900	1610
Capacity (c), veh/h	4	791	336	4	306	260	4	788	334	250	589	482
Volume-to-Capacity Ratio (X)	0.024	0.000126	0.000296	0.024	0.000326	0.000365	0.024	0.000127	0.0003	0.0004	0.000176	0.000207
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g/C)	0.00	0.08	0.08	0.00	0.06	0.06	0.00	0.08	0.08	0.05	0.11	0.11
Uniform Delay (d1), s/veh	21.7	13.6	13.6	21.7	15.3	15.3	21.7	13.6	13.7	16.1	10.7	10.7
Incremental Delay (d2), s/veh	0.85	0.000282	0.00158	0.85	0.00192	0.00267	2.28	0.000282	0.00162	0.00288	9.39e-05	0.000134
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Control Delay (d), s/veh	22.5	13.6	13.6	22.5	15.3	15.3	23.9	13.6	13.7	16.1	10.7	10.7
Level Of Service	C	B	B	C	B	B	C	B	B	B	B	B

TransModeler® Intersection Report

Site Information			
Intersection ID:	*115*	**Site Name:**	*N 29.728054, W 95.433475*
Cross Street:	*Westpark Dr & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:7:43*		

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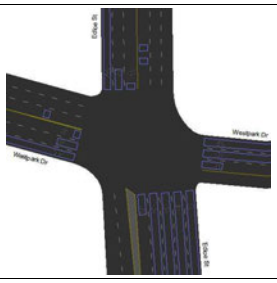
Intersection Geometry



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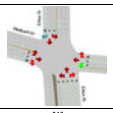
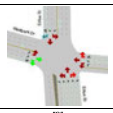
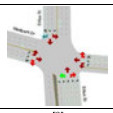
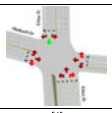
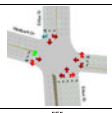
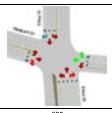
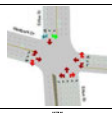
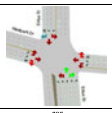
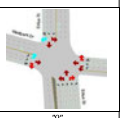
Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *133.0 sec*
Offset: *108.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States									
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"Min Green"	"7.0"	"10.0"	"7.0"	"8.0"	"7.0"	"10.0"	"7.0"	"8.0"	"0.0"
"Max Green"	"15.0"	"33.5"	"10.0"	"41.0"	"15.0"	"33.5"	"9.7"	"41.0"	"8.0"
"Yellow"	"3.0"	"3.5"	"3.0"	"3.0"	"3.0"	"3.5"	"3.0"	"3.0"	"3.0"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.3"	"2.0"	"2.0"
"Lost Time"	"5.0"	"5.5"	"5.0"	"5.0"	"5.0"	"5.5"	"5.3"	"5.0"	"5.0"
"Recall Mode"	"None"	"Min"	"None"	"Min"	"None"	"None"	"None"	"None"	"None"
"Memory Mode"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"	"Non-Lock"
"Passage/Extension"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"12.0"	"12.0"	"12.0"	"10.0"	"9.0"	"12.0"	"9.0"	"10.0"	"10.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"20.0"	"20.0"	"20.0"	"15.0"	"15.0"	"20.0"	"14.7"	"13.0"	"13.0"
"Coordinated"	"No"	"Yes"	"No"	"No"	"No"	"No"	"No"	"No"	"No"
"Split"	"20.0"	"39.0"	"15.0"	"46.0"	"20.0"	"39.0"	"15.0"	"46.0"	"13.0"
"Max Inhibit"	"False"	"False"	"False"	"True"	"True"	"True"	"True"	"True"	"True"
"Opt Min Green"	"12.0"	"15.5"	"12.0"	"13.0"	"12.0"	"15.5"	"12.3"	"13.0"	"5.0"

"
" " "

Phase Sequence and Concurrency Group

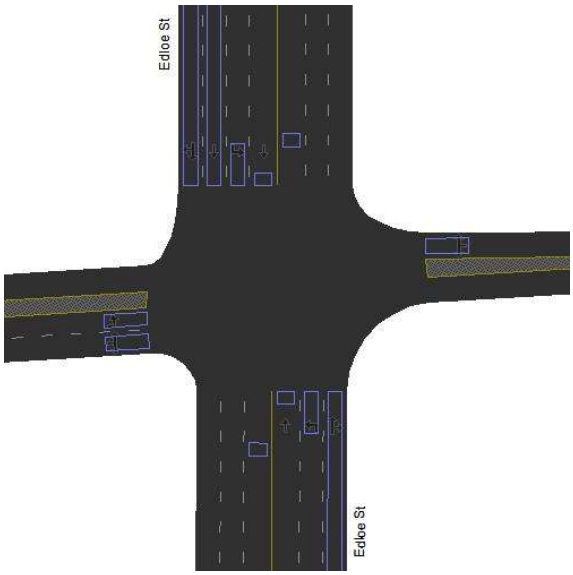
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"4", "3"	"9"
Ring - 2	"5", "6"	"7", "8"	

"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*116*	**Site Name:**	*N 29.729225, W 95.433474*
Cross Street:	*I-69 Express Lanes & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:52:53*		

Intersection Geometry



Turn Movement Volumes (I-69 Express Lanes & Edloe St)

@ Node 116 From \ To	Edloe St (NB)	I-69 Express Lanes (WB)	Edloe St (SB)	I-69 Express Lanes (EB)
I-69 Express Lanes (WB)				
Edloe St (SB)				
I-69 Express Lanes (EB)				
Edloe St (NB)				

[Flow Field] = Volume

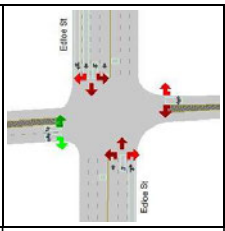
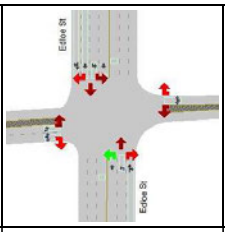
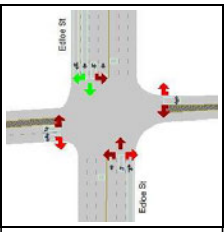
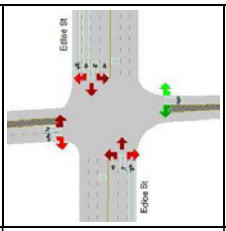
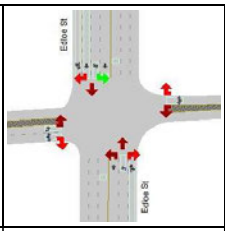
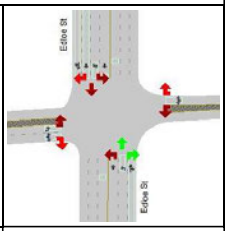
Volume Adjustment and Saturation Flow Rate

Movement	I-69 Express Lanes (WB)		Edloe St (SB)				I-69 Express Lanes (EB)		Edloe St (NB)			
	Edloe St	Edloe St	Edloe St	I-69 Express Lanes	Edloe St	I-69 Express Lanes	Edloe St	Edloe St	Edloe St	I-69 Express Lanes	Edloe St	I-69 Express Lanes
	WBR	WBL	SBU	SBR	SBT	SBL	EBL	EBR	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *77.0 sec*
Control Delay: *23.5 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	5.0	5.0	10.0	5.0	5.0	10.0
Max Green	11.0	13.5	33.5	11.0	14.0	33.5
Yellow	3.5	4.0	4.0	3.5	3.5	4.0
Red Clearance	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time	6.0	6.5	6.5	6.0	6.0	6.5
Recall Mode	None	None	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	0.2	0.2	0.2	0.2	0.2	0.2
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	5.0	8.5	20.0	5.0	5.0	20.0
Coordinated	No	No	Yes	No	No	No
Split	17.0	20.0	40.0	17.0	20.0	40.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	11.0	11.5	16.5	11.0	11.0	16.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	I-69 Express Lanes (WB)	Edloe St (SB)			I-69 Express Lanes (EB)		Edloe St (NB)		
	L+R	L	T	T+R	L	L+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	1809	3800	1900	190	1900	1809	1976	1900
Capacity (c), veh/h	63	527	2522	1261	154	63	102	860	827
Available Capacity (ca), veh/h	271	329	1653	827	352	271	317	860	827
Volume-to-Capacity Ratio (X)	0.00317	0.000379	3.97e-05	8.73e-05	0.000118	0.00288	0.00196	0.000116	0.000133
Green Ratio (g/C)	0.03	0.29	0.66	0.66	0.03	0.03	0.06	0.44	0.44
Assigned Phase	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	1.01	1.00	2.12	2.12	1.05	1.05	1.00	1.63	1.63
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	1.00	1.00	0.51	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	8.6	28.4	57.6	57.6	8.6	8.6	10.8	40.0	40.0

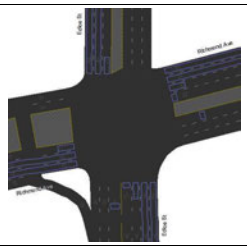
Uniform Delay (d1), s/veh	36	19.3	4.36	4.36	36	36	34.3	12.3	12.3
Incremental Delay (d2), s/veh	0.0905	0.0013	2.83e-05	0.000125	0.00139	0.0822	0.0346	0.000244	0.00029
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	36.1	19.3	4.36	4.36	36	36.1	34.3	12.3	12.3
Level Of Service	D	B	A	A	D	D	C	B	B
Total Delay, veh-hr	0.002	0.00107	0.000121	0.000133	0.000182	0.00182	0.00191	0.000341	0.000375
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	2.6	22.4	51.1	51.1	2.6	2.6	4.3	33.5	33.5
Approach Volume, veh/h	0	--	--	0	0	--	--	--	0
Approach Delay, s/veh	36.1	--	--	11.7	36.1	--	--	--	23.0

TransModeler® Intersection Report

Site Information

Intersection ID:	*118*	**Site Name:**	*N 29.732984, W 95.433466*
Cross Street:	*Richmond Ave & Edloe St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:1*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Edloe St)

@ Node 118 From \ To	Edloe St (NB)	Richmond Ave (WB)	Edloe St (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Edloe St (SB)				
Richmond Ave (EB)				
Edloe St (NB)				

[Flow Field] = Volume

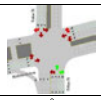
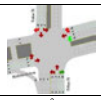
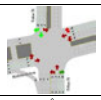
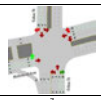
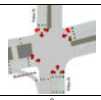
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WH)				Edloe St (SB)				Richmond Ave (LH)		Edloe St (NB)			
	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave	Edloe St	Richmond Ave
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	133.0 sec
Control Delay:	42.5 sec
Level of Service:	D
Offset:	0.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States									
ID	1	2	3	4	5	6	7	8	9
Min Green	6.0	10.0	6.0	7.0	6.0	10.0	6.0	7.0	7.0
Max Green	8.6	24.6	42.5	22.5	11.6	21.6	10.5	54.5	8.0
Yellow	3.6	3.6	3.2	3.2	3.6	3.6	3.2	3.2	3.0
Red Clearance	1.8	1.8	2.3	2.3	1.8	1.8	2.3	2.3	2.0
Lost Time	5.4	5.4	5.5	5.5	5.4	5.4	5.5	5.5	5.0
Recall Mode	Min	Max	Min	None	Min	Max	None	Min	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	2.5	3.0	2.5	3.0	3.0	3.0	2.5	3.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	9.0	8.0	8.0	8.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	13.6	14.0	25.5	22.0	9.6	14.0	11.5	22.0	22.0
Coordinated	No	Yes	No	No	No	No	No	No	No
Split	14.0	30.0	48.0	28.0	17.0	27.0	16.0	60.0	13.0
Max Inhibit	True	False	True	True	True	True	True	True	True
Opt Min Green	11.4	15.4	11.5	12.5	11.4	15.4	11.5	12.5	12.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	3, 4	9
Ring - 2	6, 5	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

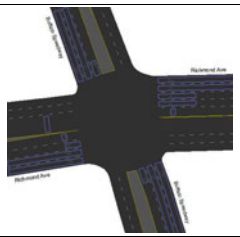
Lane Group	Richmond Ave (WB)			Edloe St (SB)			Richmond Ave (EB)		Edloe St (NB)			
	L	T	T+R	L	T	T+R	L	T	L	T	T+R	R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	3800	1809	1900	1900	1674
Capacity (c), veh/h	253	161	161	95	309	309	177	321	712	957	1517	1336
Available Capacity (ca), veh/h	654	779	778	117	309	309	143	643	158	351	351	272
Volume-to-Capacity Ratio (X)	0.000791	0.000622	0.000685	0.00211	0.000324	0.000357	0.000565	0.000312	0.000281	7.24e-05	4.58e-05	4.58e-05
Green Ratio (g/C)	0.16	0.08	0.08	0.05	0.16	0.16	0.10	0.08	0.39	0.80	0.80	0.80
Assigned Phase	3+9	8	8	1	6	6	7	4	5	2	2+6+8+3+5+7+4+9+1	6+8+3+5+7+4+9+1+2
Max. Allowable Headway (MAH), s/veh	3.13	5.27	5.27	3.30	4.43	4.43	3.26	5.10	3.80	5.32	5.32	4.43
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	1.00	1.00	1.00	1.00
Max Out Probability (gx)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extension Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	18.5	16.7	16.7	12.4	27.0	27.0	18.5	16.7	57.7	72.4	72.4	27.0
Uniform Delay (d1), s/veh	47.3	55.7	55.7	59.7	46.7	46.7	54.1	55.7	24.5	16.4	2.7	2.7
Incremental Delay (d2), s/veh	0.00563	0.00698	0.00768	0.0403	0.00189	0.00208	0.00575	0.00175	0.000711	0.000136	5.44e-05	6.17e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	47.3	55.7	55.7	59.8	46.7	46.7	54.1	55.7	24.5	16.4	2.7	2.7
Level Of Service	D	E	E	E	D	D	D	E	C	B	A	A
Total Delay, veh-hr	0.00263	0.00155	0.0017	0.00332	0.0013	0.00143	0.0015	0.00155	0.00136	0.000315	5.21e-05	4.58e-05
Fully Stopped (NS), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	21.0	11.2	11.2	7.0	21.6	21.6	13.0	11.2	52.3	67.0	106.2	106.2
Approach Volume, veh/h	--	--	0	--	--	0	--	0	--	--	0	--
Approach Delay, s/veh	--	--	51.6	--	--	53.1	--	54.9	--	--	16.0	--

TransModeler® Intersection Report

Site Information

Intersection ID:	*119*	**Site Name:**	*N 29.733916, W 95.429299*
Cross Street:	*Buffalo Speedway & Richmond Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:5*		

Intersection Geometry



Turn Movement Volumes (Buffalo Speedway & Richmond Ave)

@ Node 119 From \ To	Buffalo Speedway (NB)	Richmond Ave (WB)	Buffalo Speedway (SB)	Richmond Ave (EB)
Buffalo Speedway (SB)				
Richmond Ave (EB)				
Buffalo Speedway (NB)				
Richmond Ave (WB)				

[Flow Field] = Volume

Volume Adjustment and Saturation Flow Rate

Movement	Buffalo Speedway (SB)			Richmond Ave (EB)				Buffalo Speedway (NB)				Richmond Ave (WB)			
	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave	Buffalo Speedway	Richmond Ave
	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	37.6 sec
Level of Service:	D
Offset:	121.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name | Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	8.0	10.0	8.0	8.0	8.0	8.0	8.0
Max Green	19.9	31.9	15.8	27.8	9.9	41.9	15.8	27.8
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.6
Lost Time	6.1	6.1	6.2	6.2	6.1	6.1	6.2	6.2
Recall Mode	None	Max	None	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.9	10.0	12.0	10.0	9.9	10.0	10.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	13.9	20.0	18.8	25.0	17.9	20.0	9.8	25.0
Coordinated	No	No	No	No	No	Yes	No	No
Split	26.0	38.0	22.0	34.0	16.0	48.0	22.0	34.0
Max Inhibit	True	True	True	True	True	False	True	True
Opt Min Green	11.1	14.1	16.2	14.2	14.1	14.1	14.2	14.2

Phase Sequence and Concurrency Group

Ring | Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	5, 6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

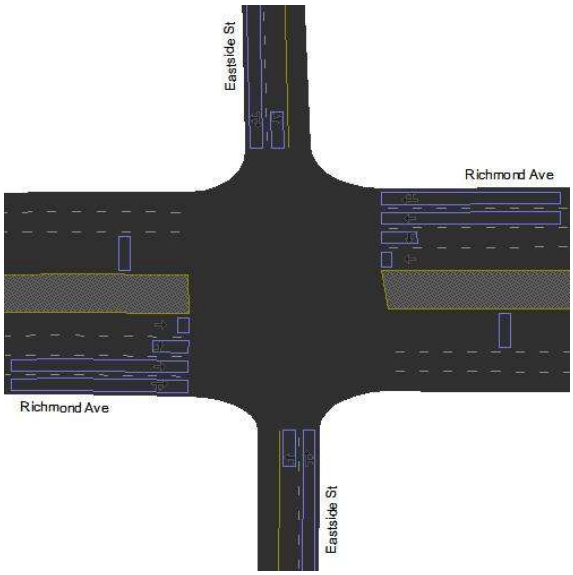
Lane Group	Buffalo Speedway (SB)			Richmond Ave (EB)			Buffalo Speedway (NB)			Richmond Ave (WB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	3800	1900	1809	1900	1900	3618	3800	1900
Capacity (c), veh/h	138	505	505	145	880	440	393	773	773	290	1077	536
Available Capacity (ca), veh/h	149	505	505	238	880	440	300	663	663	476	880	440
Volume-to-Capacity Ratio (X)	0.000726	0.000198	0.000718	0.00138	0.000114	0.00025	0.000509	0.000129	0.000142	0.00069	9.29e-05	0.000204
Green Ratio (g/C)	0.08	0.27	0.27	0.08	0.23	0.23	0.22	0.41	0.41	0.08	0.28	0.28
Assigned Phase	5	2	2	3	8	8	1	6	6	7	4	4
Max. Allowable Headway (MAH), s/veh	3.26	4.77	4.77	3.26	4.32	4.32	3.26	4.77	4.77	3.80	4.32	4.32
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.2	38.0	38.0	15.8	34.0	34.0	32.2	54.9	54.9	15.8	34.0	34.0
Uniform Delay (d1), s/veh	51.2	32.3	32.3	50.8	35.4	35.4	36.8	21.1	21.1	50.8	30.8	30.8
Incremental Delay (d2), s/veh	0.00949	0.000706	0.000776	0.0171	0.000232	0.00102	0.00233	0.000301	0.000331	0.00428	0.000155	0.000683
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	51.2	32.3	32.3	50.8	35.4	35.4	36.8	21.1	21.1	50.8	30.8	30.8
Level Of Service	D	C	C	D	D	D	D	C	C	D	C	C
Total Delay, veh-hr	0.00142	0.000898	0.000988	0.00282	0.000984	0.00108	0.00204	0.000586	0.000645	0.00282	0.000856	0.000942
Fully Stopped (NF), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	9.1	31.9	31.9	9.6	27.8	27.8	26.1	48.8	48.8	9.6	34.0	34.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	38.4	--	--	42.9	--	--	28.7	--	--	40.6

TransModeler® Intersection Report

Site Information

Intersection ID:	*120*	**Site Name:**	*N 29.734031, W 95.424480*
Cross Street:	*Eastside St & Richmond Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:12*		

Intersection Geometry



Turn Movement Volumes (Eastside St & Richmond Ave)

@ Node 120 From \ To	Eastside St (NB)	Richmond Ave (WB)	Eastside St (SB)	Richmond Ave (EB)
Eastside St (SB)				
Richmond Ave (EB)				
Eastside St (NB)				
Richmond Ave (WB)				

[Flow Field] = Volume

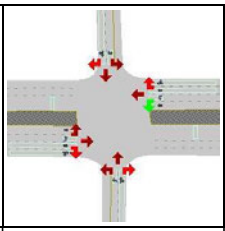
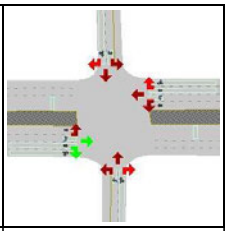
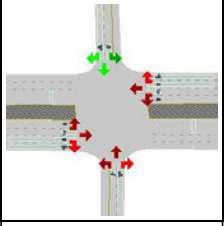
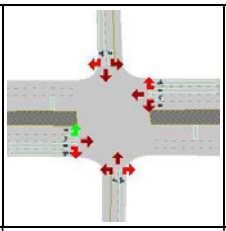
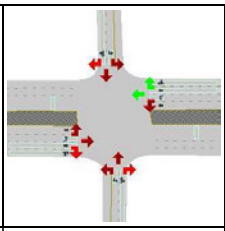
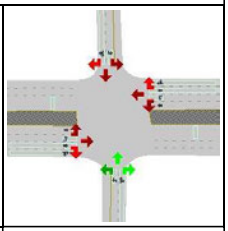
Volume Adjustment and Saturation Flow Rate

Movement	Eastside St (SB)			Richmond Ave (EB)				Eastside St (NB)			Richmond Ave (WB)			
	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave	Richmond Ave	Eastside St	Richmond Ave	Eastside St	Richmond Ave
	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR	WBR	WBT	WBL	WBU

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *37.2 sec*
Level of Service: *D*
Offset: *4.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	7.0	10.0	7.0	7.0	10.0	7.0
Max Green	20.7	53.7	27.8	20.7	53.7	27.8
Yellow	3.6	3.6	3.2	3.6	3.6	3.2
Red Clearance	2.7	2.7	2.0	2.7	2.7	2.0
Lost Time	6.3	6.3	5.2	6.3	6.3	5.2
Recall Mode	Min	Min	None	None	Min	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	2.5	3.0	3.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	12.0	9.0	9.0	12.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	8.7	33.0	20.0	8.7	33.0	20.0
Coordinated	No	Yes	No	No	No	No
Split	27.0	60.0	33.0	27.0	60.0	33.0
Max Inhibit	True	False	True	True	True	True
Opt Min Green	13.3	16.3	12.2	13.3	16.3	12.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Eastside St (SB)		Richmond Ave (EB)			Eastside St (NB)		Richmond Ave (WB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	3800	1900	1440	1900	1809	3800	1900
Capacity (c), veh/h	183	162	1132	2691	1345	183	162	106	534	267
Available Capacity (ca), veh/h	394	440	312	1701	850	394	440	312	1701	850
Volume-to-Capacity Ratio (X)	0.000547	0.00123	0.000177	3.72e-05	8.18e-05	0.000547	0.00123	0.0019	0.000187	0.000412
Green Ratio (g/C)	0.09	0.09	0.63	0.71	0.71	0.09	0.09	0.06	0.14	0.14
Assigned Phase	4	4	5	2	2	8	8	1	6	6
Max. Allowable Headway (MAH), s/veh	3.83	3.83	3.76	4.82	4.82	3.90	3.90	3.76	4.82	4.82
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	0.51	1.00	1.00	0.51	0.51	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.4	15.4	81.4	91.3	91.3	15.4	15.4	13.3	23.2	23.2

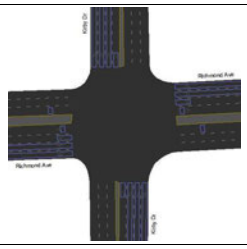
Uniform Delay (d1), s/veh	50.2	50.2	8.4	5.11	5.11	50.2	50.2	53.2	44.3	44.3
Incremental Delay (d2), s/veh	0.00539	0.0137	0.000281	2.49e-05	0.000109	0.00539	0.0137	0.0324	0.000631	0.00278
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	50.2	50.2	8.4	5.11	5.11	50.2	50.2	53.2	44.3	44.3
Level Of Service	D	D	A	A	A	D	D	D	D	D
Total Delay, veh-hr	0.00139	0.00279	0.000467	0.000142	0.000156	0.00139	0.00279	0.00296	0.00123	0.00135
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	10.2	10.2	75.1	85.0	85.0	10.2	10.2	7.0	16.9	16.9
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	50.2	--	--	6.7	--	50.2	--	--	48.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*121*	**Site Name:**	*N 29.734099, W 95.418683*
Cross Street:	*Richmond Ave & Kirby Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:17*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Kirby Dr)

(c) Node 121 From \ To	Kirby Dr (NB)	Richmond Ave (WB)	Kirby Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Kirby Dr (SB)				
Richmond Ave (EB)				
Kirby Dr (NB)				

[Flow Field] = Volume

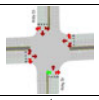
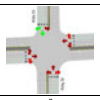
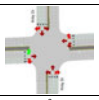
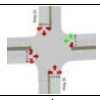
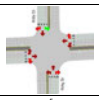
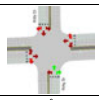
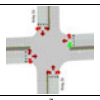
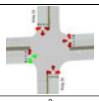
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Kirby Dr (SB)			Richmond Ave (EB)				Kirby Dr (NB)		
	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Kirby Dr	Richmond Ave	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	37.4 sec
Level of Service:	D
Offset:	2.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	8.0	6.0	9.0	6.0	8.0	6.0	9.0
Max Green	15.5	35.5	24.5	22.5	8.5	42.5	24.5	22.5
Yellow	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Red Clearance	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Lost Time	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Recall Mode	None	Max	None	Max	Max	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.2	0.0	0.2	0.2	0.2	0.0	0.2
Ped Walk + FDW	21.5	19.0	12.5	22.0	24.5	19.0	9.5	22.0
Coordinated	No	Yes	No	No	No	No	No	No
Split	21.0	41.0	30.0	28.0	14.0	48.0	30.0	28.0
Max Inhibit	True	False	True	True	True	True	True	True
Opt Min Green	11.5	13.5	11.5	14.5	11.5	13.5	11.5	14.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1, 2	4, 3	
Ring - 2	5, 6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

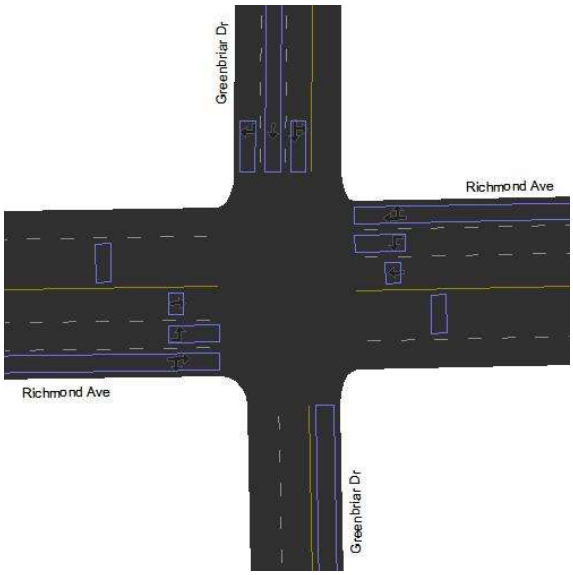
Lane Group	Richmond Ave (WB)			Kirby Dr (SB)			Richmond Ave (EB)			Kirby Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	3800	1900	1809	3800	1900	1809	3800	1900	1809	3800	1900
Capacity (c), veh/h	96	887	443	128	1841	920	96	713	356	165	1919	960
Available Capacity (ca), veh/h	369	713	356	128	1124	562	369	713	356	234	1346	673
Volume-to-Capacity Ratio (X)	0.00207	0.000113	0.000248	0.00078	5.43e-05	0.00012	0.00207	0.00014	0.000309	0.000604	5.21e-05	0.000115
Green Ratio (g/C)	0.05	0.23	0.23	0.07	0.48	0.48	0.05	0.19	0.19	0.09	0.51	0.51
Assigned Phase	7	4	4	5	2	2	3	8	8	1	6	6
Max. Allowable Headway (MAH), s/veh	3.26	4.32	4.32	3.26	4.77	4.77	3.26	4.32	4.32	3.26	4.77	4.77
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	11.9	28.0	28.0	14.0	63.6	63.6	11.9	28.0	28.0	16.5	66.1	66.1
Uniform Delay (d1), s/veh	53.8	35.3	35.3	51.8	15.9	16	53.8	39.6	39.6	49.5	14.7	14.7
Incremental Delay (d2), s/veh	0.0388	0.000229	0.00101	0.011	5.31e-05	0.000234	0.0388	0.000355	0.00156	0.00658	4.89e-05	0.000215
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	53.8	35.3	35.3	51.8	15.9	16	53.8	39.6	39.6	49.5	14.7	14.7
Level Of Service	D	D	D	D	B	B	D	D	D	D	B	B
Total Delay, veh-hr	0.00299	0.00098	0.00108	0.00144	0.000443	0.000487	0.00299	0.0011	0.00121	0.00138	0.000408	0.000449
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.4	28.0	28.0	8.5	58.1	58.1	6.4	22.5	22.5	11.0	60.6	60.6
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	44.3	--	--	27.5	--	--	46.5	--	--	25.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*122*	**Site Name:**	*N 29.734214, W 95.412911*
Cross Street:	*Richmond Ave & Greenbriar Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:21*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Greenbriar Dr)

@ Node 122 From \ To	Greenbriar Dr (NB)	Richmond Ave (WB)	Greenbriar Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)	*34.0*			
Greenbriar Dr (SB)				*15.0*
Richmond Ave (EB)				
Greenbriar Dr (NB)				

[Flow Field] = Volume

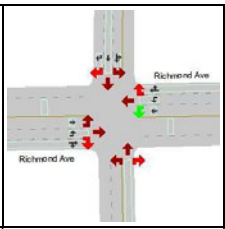
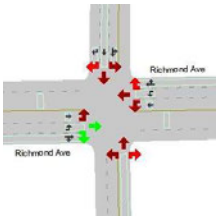
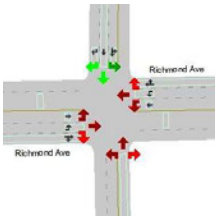
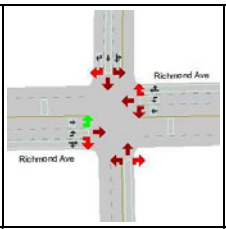
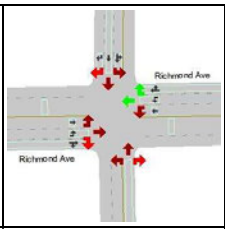
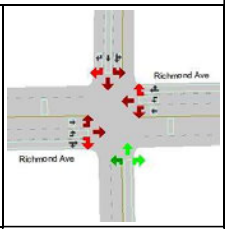
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Greenbriar Dr (SB)			Richmond Ave (EB)				Greenbriar Dr (NB)			
	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave	Greenbriar Dr	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *21.2 sec*
Level of Service: *C*
Offset: *40.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	4.0	10.0	6.0	3.0	10.0	6.0
Max Green	20.0	57.0	28.0	20.0	57.0	28.0
Yellow	3.6	3.6	3.2	3.6	3.6	3.2
Red Clearance	1.4	1.4	1.8	1.4	1.4	1.8
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	Max	Max	Max	Max	Max	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.2	0.2	0.2	0.2	0.2
Ped Walk + FDW	20.0	12.0	17.0	20.0	12.0	17.0
Coordinated	No	No	No	No	Yes	No
Split	25.0	62.0	33.0	25.0	62.0	33.0
Max Inhibit	True	True	True	True	False	True
Opt Min Green	9.0	15.0	11.0	8.0	15.0	11.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Richmond Ave (WB)			Greenbriar Dr (SB)			Richmond Ave (EB)			Greenbriar Dr (NB)
	L	T	T+R	L+T	T	R	L	T	T+R	LTR
Adjusted Flow, veh/h	0	0	34	15	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1877	1881	1900	1609	1809	1976	1900	1900
Capacity (c), veh/h	301	1021	970	396	443	376	301	939	902	443
Available Capacity (ca), veh/h	301	939	891	396	443	376	301	939	902	443
Volume-to-Capacity Ratio (X)	0.000663	9.79e-05	0.0351	0.0379	0.000226	0.000266	0.000663	0.000104	0.000114	0.000902
Green Ratio (g/C)	0.17	0.52	0.52	0.23	0.23	0.23	0.17	0.47	0.47	0.23
Assigned Phase	1	6	6	4	4	4	5	2	2	8
Max. Allowable Headway (MAH), s/veh	2.76	4.44	4.44	0.80	0.80	0.80	2.76	3.21	3.21	4.43
Queue Service Time (gs), s	0.0	0.0	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	25.0	62.0	62.0	33.0	33.0	33.0	25.0	62.0	62.0	33.0

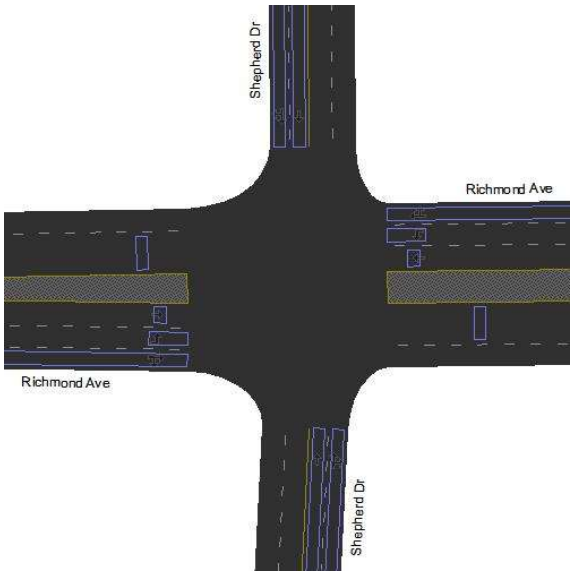
Uniform Delay (d1), s/veh	41.7	14	14.3	35.6	35.3	35.3	41.7	16.5	16.5	35.3
Incremental Delay (d2), s/veh	0.00396	0.000173	0.0675	0.179	0.000916	0.00128	0.00396	0.000199	0.000227	0.00367
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	41.7	14	14.3	35.8	35.3	35.3	41.7	16.5	16.5	35.3
Level Of Service	D	B	B	D	D	D	D	B	B	D
Total Delay, veh-hr	0.00232	0.000389	0.136	0.149	0.00098	0.00098	0.00232	0.000447	0.000472	0.00392
Fully Stopped (Nf), veh/ln	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	20.0	62.0	62.0	28.0	28.0	28.0	20.0	57.0	57.0	28.0
Approach Volume, veh/h	--	--	34	--	15	--	--	--	0	0
Approach Delay, s/veh	--	--	14.5	--	35.8	--	--	--	29.1	35.3

TransModeler® Intersection Report

Site Information

Intersection ID:	*123*	**Site Name:**	*N 29.734240, W 95.410690*
Cross Street:	*Richmond Ave & Shepherd Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:27*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Shepherd Dr)

@ Node 123 From \ To	Shepherd Dr (NB)	Richmond Ave (WB)	Shepherd Dr (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Shepherd Dr (SB)				
Richmond Ave (EB)				
Shepherd Dr (NB)				

[Flow Field] = Volume

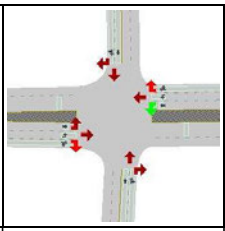
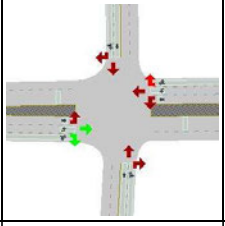
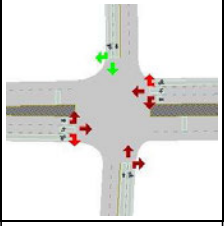
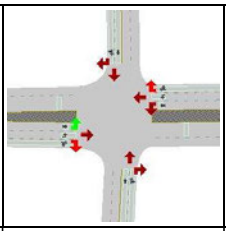
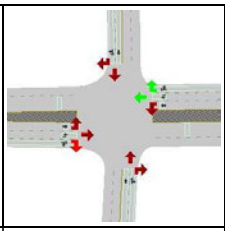
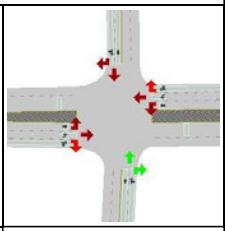
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Shepherd Dr (SB)		Richmond Ave (EB)				Shepherd Dr (NB)	
	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave	Richmond Ave	Shepherd Dr	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave	Shepherd Dr	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	EBL	EBU	EBR	EBT	NBT	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Control Delay: *33.3 sec*
Level of Service: *C*
Offset: *0.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	5.0	4.0	5.0	5.0	4.0	5.0
Max Green	22.0	38.0	44.8	21.8	38.0	44.8
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.4	1.4	1.6	1.6	1.4	1.6
Lost Time	5.0	5.0	5.2	5.2	5.0	5.2
Recall Mode	None	Max	Min	None	Max	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	2.0	2.5	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	30.0	15.0	17.0	14.8	15.0	17.0
Coordinated	No	Yes	No	No	No	No
Split	27.0	43.0	50.0	27.0	43.0	50.0
Max Inhibit	True	False	True	True	True	True
Opt Min Green	10.0	9.0	10.2	10.2	9.0	10.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

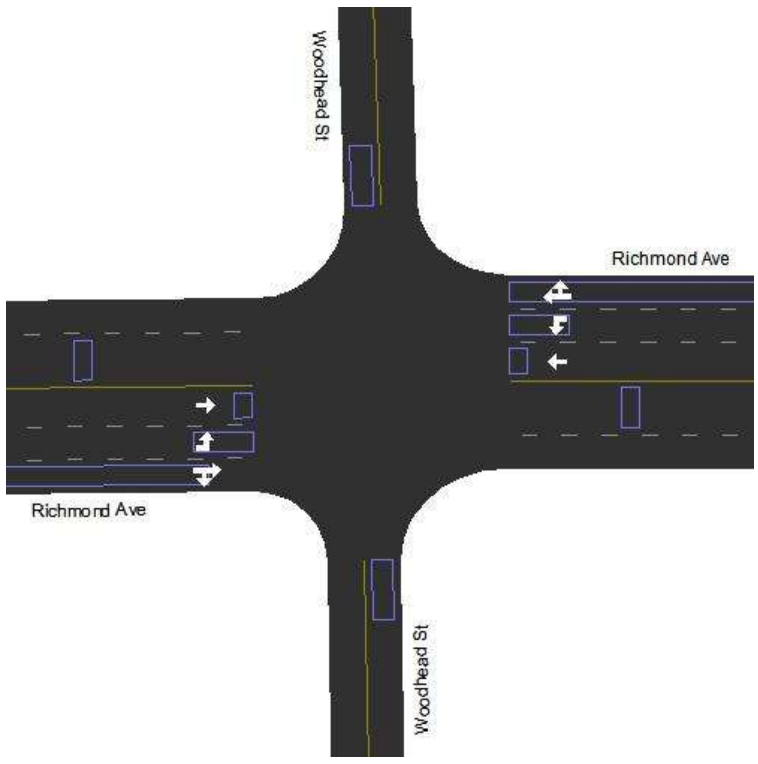
Lane Group	Richmond Ave (WB)			Shepherd Dr (SB)		Richmond Ave (EB)			Shepherd Dr (NB)	
	L	T	T+R	T	T+R	L	T	T+R	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1900	1900	1809	1976	1900	1900	1900
Capacity (c), veh/h	231	626	602	138	138	873	1330	1279	138	138
Available Capacity (ca), veh/h	332	626	602	709	709	329	626	602	709	709
Volume-to-Capacity Ratio (X)	0.000866	0.00016	0.000183	0.000727	0.0008	0.000229	7.52e-05	8.6e-05	0.000727	0.0008
Green Ratio (g/C)	0.13	0.32	0.32	0.07	0.07	0.48	0.67	0.67	0.07	0.07
Assigned Phase	1	6	6	4	4	5	2	2	8	8
Max. Allowable Headway (MAH), s/veh	3.76	3.36	3.36	4.27	4.27	3.26	3.36	3.36	4.27	4.27
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	20.3	43.0	43.0	13.9	13.9	63.1	85.8	85.8	13.9	13.9

Uniform Delay (d1), s/veh	45.7	28	28	51.6	51.6	16.1	6.4	6.4	51.6	51.6
Incremental Delay (d2), s/veh	0.00676	0.00046	0.000547	0.00952	0.0105	0.000473	0.000102	0.000121	0.00952	0.0105
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	45.7	28	28	51.6	51.6	16.1	6.4	6.4	51.6	51.6
Level Of Service	D	C	C	D	D	B	A	A	D	D
Total Delay, veh-hr	0.00254	0.000778	0.000856	0.00143	0.00158	0.000892	0.000178	0.000196	0.00143	0.00158
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	15.3	38.0	38.0	8.7	8.7	57.9	80.8	80.8	8.7	8.7
Approach Volume, veh/h	--	--	0	--	0	--	--	0	--	0
Approach Delay, s/veh	--	--	36.6	--	51.6	--	--	11.1	--	51.6

TransModeler® Intersection Report

Site Information			
Intersection ID:	*125*	**Site Name:**	*N 29.734295, W 95.404482*
Cross Street:	*Richmond Ave & Woodhead St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:35:6*		

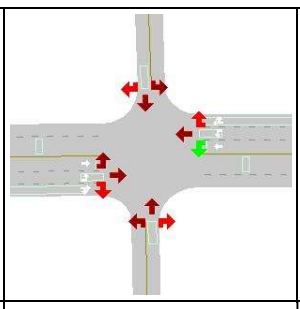
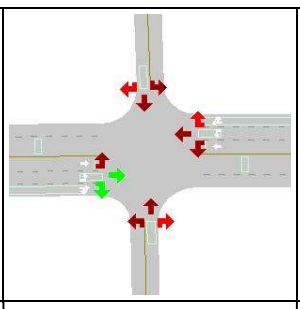
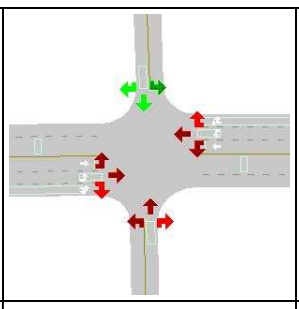
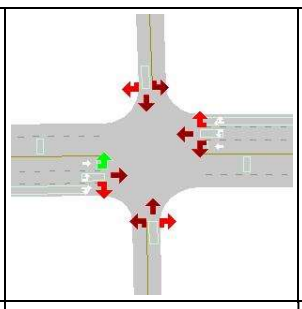
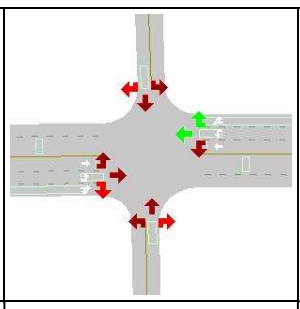
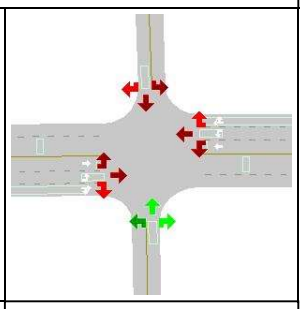
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *33.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	*1*	*2*	*4*	*5*	*6*	*8*
Min Green	*6.0*	*10.0*	*6.0*	*6.0*	*10.0*	*6.0*
Max Green	*23.6*	*61.4*	*20.1*	*23.6*	*61.4*	*20.1*
Yellow	*3.6*	*3.6*	*3.2*	*3.6*	*3.6*	*3.2*
Red Clearance	*1.3*	*1.3*	*1.9*	*1.3*	*1.3*	*1.9*
Lost Time	*4.9*	*4.9*	*5.1*	*4.9*	*4.9*	*5.1*
Recall Mode	*None*	*Min*	*None*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*2.5*	*3.0*	*3.0*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*8.0*	*12.0*	*12.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*14.0*	*14.0*	*19.0*	*14.0*	*14.0*	*19.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*28.5*	*66.3*	*25.2*	*28.5*	*66.3*	*25.2*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*10.9*	*14.9*	*11.1*	*10.9*	*14.9*	*11.1*

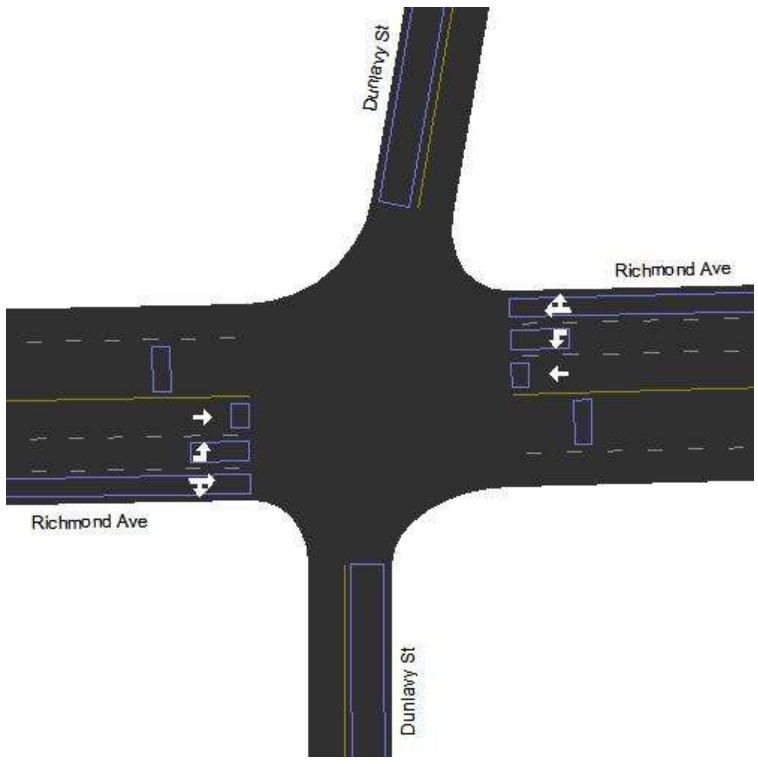
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	
Ring - 2	*6, 5*	*8*	

TransModeler® Intersection Report

Site Information			
Intersection ID:	*126*	**Site Name:**	*N 29.734320, W 95.402110*
Cross Street:	*Richmond Ave & Dunlavy St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:34:52*		

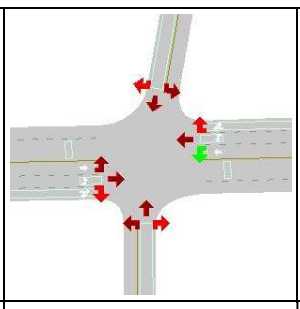
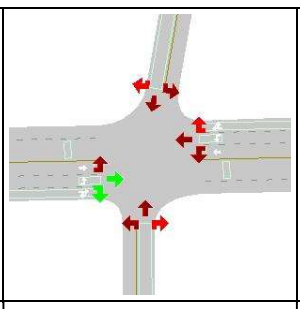
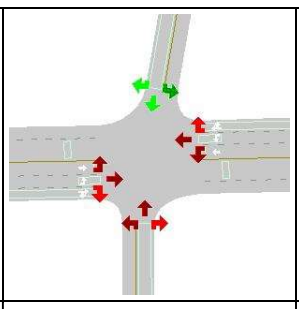
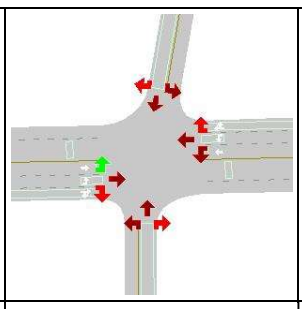
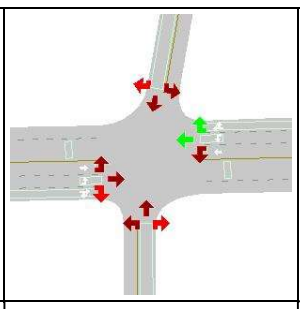
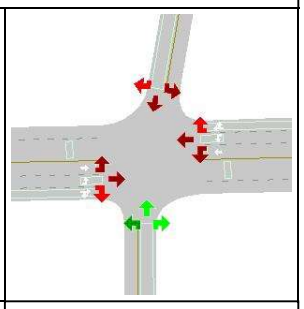
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *26.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	1	2	4	5	6	8
Min Green	6.0	9.0	6.0	6.0	9.0	6.0
Max Green	16.0	65.5	23.5	16.0	65.5	23.5
Yellow	3.6	3.6	3.2	3.6	3.6	3.2
Red Clearance	1.4	1.4	1.8	1.4	1.4	1.8
Lost Time	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Min	None	None	Min	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.5	3.0	3.0	3.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	11.0	11.0	8.0	11.0	11.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	16.0	16.0	23.0	16.0	16.0	23.0
Coordinated	No	Yes	No	No	No	No
Split	21.0	70.5	28.5	21.0	70.5	28.5
Max Inhibit	False	False	True	False	True	True
Opt Min Green	11.0	14.0	11.0	11.0	14.0	11.0

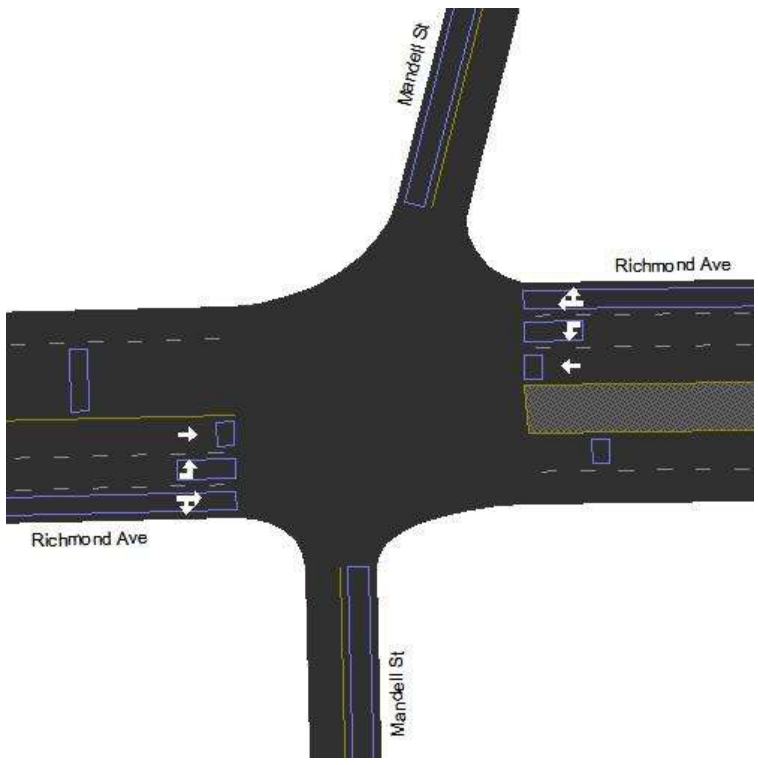
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	
Ring - 2	6, 5	8	

TransModeler® Intersection Report

Site Information			
Intersection ID:	*127*	**Site Name:**	*N 29.734378, W 95.399520*
Cross Street:	*Richmond Ave & Mandell St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:34:41*		

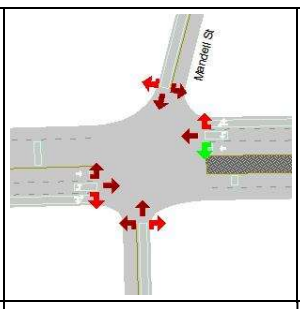
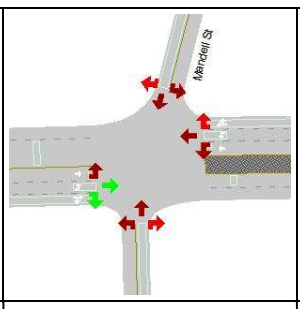
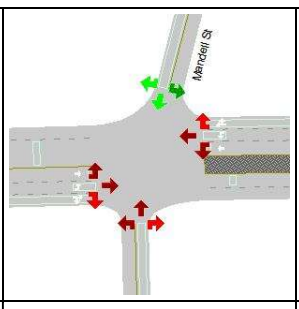
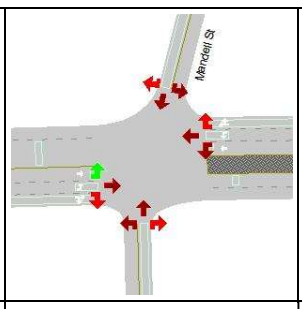
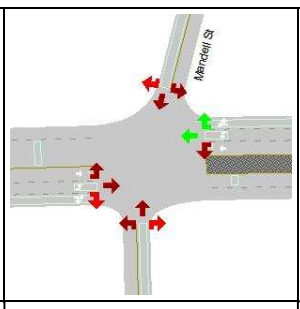
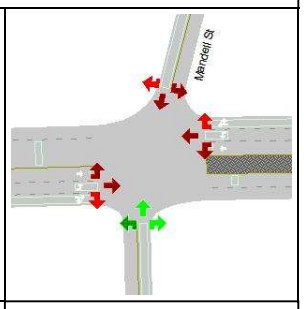
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *120.0 sec*
Offset: *3.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	*1*	*2*	*4*	*5*	*6*	*8*
Min Green	*7.0*	*10.0*	*7.0*	*7.0*	*10.0*	*7.0*
Max Green	*23.7*	*57.9*	*23.5*	*23.5*	*58.0*	*23.5*
Yellow	*3.6*	*3.6*	*3.2*	*3.2*	*3.6*	*3.2*
Red Clearance	*1.3*	*1.3*	*1.9*	*1.9*	*1.2*	*1.9*
Lost Time	*4.9*	*4.9*	*5.1*	*5.1*	*4.8*	*5.1*
Recall Mode	*None*	*Min*	*None*	*None*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*2.5*	*2.5*	*3.0*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*9.0*	*9.0*	*12.0*	*9.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*18.0*	*18.0*	*21.0*	*21.0*	*18.0*	*21.0*
Coordinated	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*28.6*	*62.8*	*28.6*	*28.6*	*62.8*	*28.6*
Max Inhibit	*False*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*11.9*	*14.9*	*12.1*	*12.1*	*14.8*	*12.1*

Phase Sequence and Concurrency Group

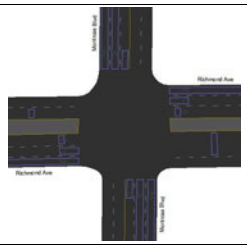
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2, 1*	*4*	
Ring - 2	*6, 5*	*8*	

TransModeler® Intersection Report

Site Information

Intersection ID:	*128*	**Site Name:**	*N 29.734503, W 95.391142*
Cross Street:	*Richmond Ave & Montrose Blvd*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:53:52*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Montrose Blvd)

(c) Node 128 From \ To	Montrose Blvd (NB)	Richmond Ave (WB)	Montrose Blvd (SB)	Richmond Ave (EB)
Richmond Ave (WB)				
Montrose Blvd (SB)				
Richmond Ave (EB)	*96.0*			
Montrose Blvd (NB)				

[Flow Field] = Volume

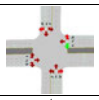
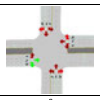
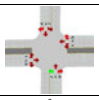
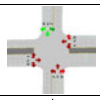
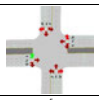
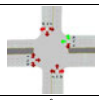
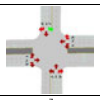
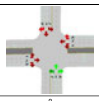
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (WB)				Montrose Blvd (SB)			Richmond Ave (EB)				Montrose Blvd (NB)		
	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Montrose Blvd	Richmond Ave	Richmond Ave
	WBR	WBT	WBL	WBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	120.0 sec
Control Delay:	52.4 sec
Level of Service:	D
Offset:	1.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	4.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Max Green	15.9	34.9	12.9	35.9	15.9	34.9	12.9	35.9
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Ped Walk + FDW	12.9	17.0	13.9	17.0	18.9	17.0	13.9	17.0
Coordinated	No	Yes	No	No	No	No	No	No
Split	21.0	40.0	18.0	41.0	21.0	40.0	18.0	41.0
Max Inhibit	True	False	True	True	True	True	True	True
Opt Min Green	9.1	13.1	9.1	13.1	9.1	13.1	9.1	13.1

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	3, 4	
Ring - 2	6, 5	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

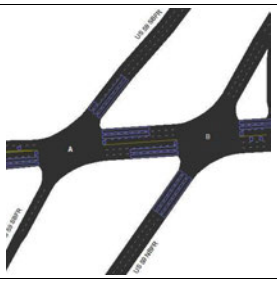
Lane Group	Richmond Ave (WB)			Montrose Blvd (SB)			Richmond Ave (EB)			Montrose Blvd (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	96	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1809	1900	1900	1809	1976	1843	1809	1900	1900
Capacity (c), veh/h	240	575	553	469	568	568	240	659	614	469	588	588
Available Capacity (ca), veh/h	240	575	553	469	568	568	240	575	536	469	588	568
Volume-to-Capacity Ratio (X)	0.000834	0.000169	0.000186	0.000213	0.000168	0.000184	0.401	0.00015	0.000165	0.000213	0.000168	0.000184
Green Ratio (g/C)	0.13	0.29	0.29	0.26	0.30	0.30	0.13	0.33	0.33	0.26	0.30	0.30
Assigned Phase	1	6	6	7+4	4	4	5	2	2	3+8	8	8
Max. Allowable Headway (MAH), s/veh	3.26	3.71	3.71	3.26	4.74	4.74	3.26	3.71	3.71	3.26	4.74	4.74
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	17.9	0.0	0.0	0.0	0.0	0.0	17.9	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	21.0	40.0	40.0	18.0	41.0	41.0	21.0	40.0	40.0	18.0	41.0	41.0
Uniform Delay (d1), s/veh	45.2	30.2	30.2	39.8	29.5	29.5	47.7	26.7	26.7	33.2	29.5	29.5
Incremental Delay (d2), s/veh	0.00621	0.000531	0.000605	0.000818	0.000532	0.000583	4.94	0.00041	0.000483	0.000818	0.000532	0.000583
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	45.2	30.2	30.2	39.8	29.5	29.5	52.6	26.7	26.7	33.2	29.5	29.5
Level Of Service	D	C	C	D	C	C	D	C	C	C	C	C
Total Delay, veh-hr	0.00251	0.000816	0.000861	0.00111	0.000781	0.000856	1.4	0.000732	0.00075	0.000921	0.000781	0.000856
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	15.9	34.9	34.9	30.8	35.9	35.9	15.9	40.0	40.0	30.8	35.9	35.9
Approach Volume, veh/h	--	--	0	--	--	0	--	--	96	--	--	0
Approach Delay, s/veh	--	--	37.7	--	--	32.9	--	--	52.6	--	--	30.7

TransModeler® Intersection Report

Site Information			
Intersection ID:	*129,130*	**Site Name:**	*N 29.734508, W 95.385779*
Cross Street:	*Richmond Ave & US 59 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:8:0*		

" "

Intersection Geometry



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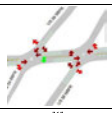
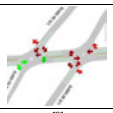
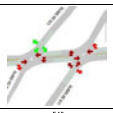
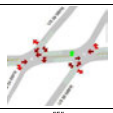
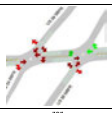
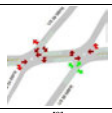
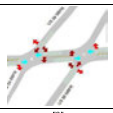
Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *143.0 sec*
Offset: *124.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States							
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"Min Green"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"5.0"	"0.0"
"Max Green"	"64.5"	"21.5"	"30.5"	"56.5"	"41.5"	"18.5"	"8.0"
"Yellow"	"3.5"	"3.5"	"3.5"	"3.5"	"3.5"	"3.5"	"3.0"
"Red Clearance"	"1.0"	"1.0"	"1.0"	"1.0"	"1.0"	"1.0"	"2.0"
"Last Time"	"4.5"	"4.5"	"4.5"	"4.5"	"4.5"	"4.5"	"5.0"
"Recall Mode"	"None"	"Max"	"None"	"Max"	"Min"	"Max"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"0.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"0.0"
"Ped Walk + FDW"	"18.0"	"18.0"	"18.0"	"18.0"	"18.0"	"18.0"	"18.0"
"Coordinated"	"No"	"Yes"	"No"	"Yes"	"No"	"No"	"No"
"Split"	"89.0"	"26.0"	"35.0"	"61.0"	"46.0"	"23.0"	"13.0"
"Max Inhibit"	"False"	"False"	"False"	"False"	"False"	"False"	"False"
"Opt Min Green"	"9.5"	"9.5"	"9.5"	"9.5"	"9.5"	"9.5"	"5.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"1"	"9"
Ring - 2	"5"	"6", "8"	

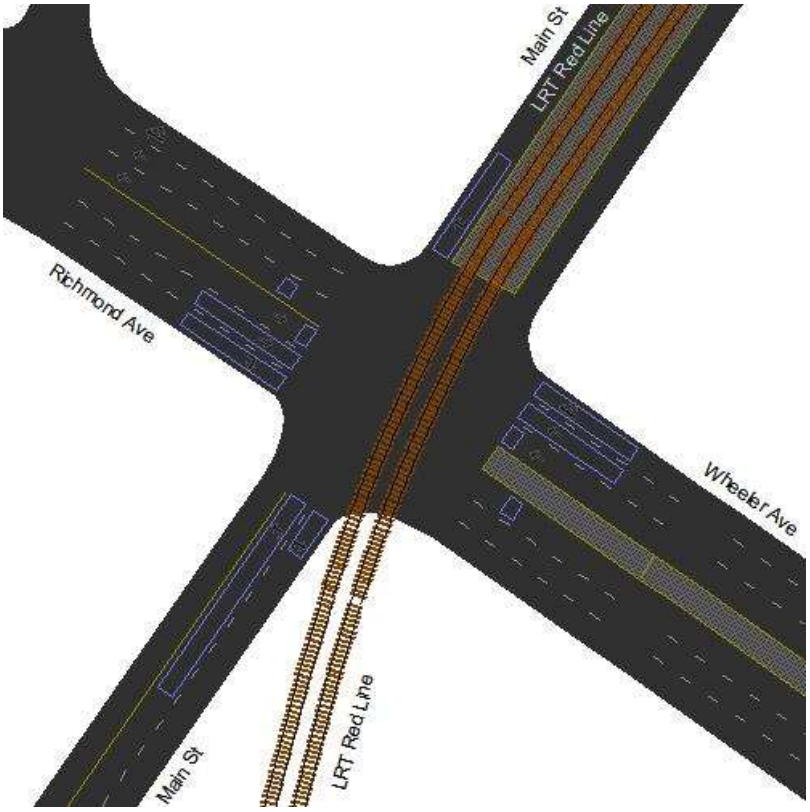
"
"

TransModeler® Intersection Report

Site Information

Intersection ID:	*131*	**Site Name:**	*N 29.734110, W 95.382982*
Cross Street:	*Richmond Ave & Main St*	**Number of Plans:**	*1*
Analysis Date:	*2023/4/6 17:34:34*		

Intersection Geometry



Turn Movement Volumes (Richmond Ave & Main St)

@ Node 131 From \ To	Main St (NEB)	LRT Red Line (NB)	Richmond Ave (NWB)	Main St (SWB)	LRT Red Line (SWB)	Wheeler Ave (SEB)
Richmond Ave (SEB)						
Main St (NEB)			*14.0*			
LRT Red Line (NB)						
Wheeler Ave (NWB)						
LRT Red Line (SWB)						
Main St (SB)			*99.0*			

[Flow Field] = Volume

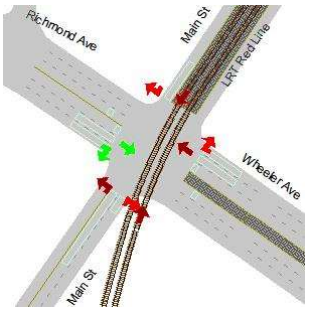
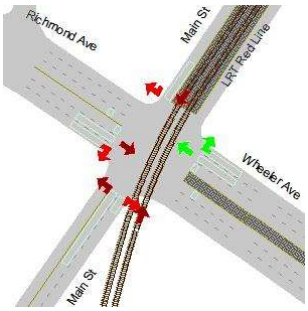
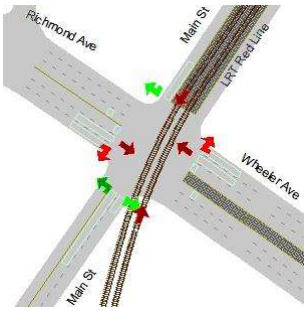
Volume Adjustment and Saturation Flow Rate

Movement	Richmond Ave (SEB)		Main St (NEB)		Wheeler Ave (NWB)		Main St (SB)
	Main St	Wheeler Ave	Richmond Ave	Wheeler Ave	Main St	Richmond Ave	Richmond Ave
	SEBR	SEBT	NEBL	NEBR	NWBR	NWBT	SBR

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *4.4 sec*
Level of Service: *A*
Offset: *69.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States			
ID	*2*	*6*	*8*
Min Green	*12.0*	*12.0*	*7.0*
Max Green	*34.1*	*34.1*	*42.2*
Yellow	*3.2*	*3.2*	*3.2*
Red Clearance	*2.7*	*2.7*	*4.6*
Lost Time	*5.9*	*5.9*	*7.8*
Recall Mode	*Min*	*Min*	*Min*
Memory Mode	*Lock*	*Lock*	*Lock*
Passage/Extension	*2.0*	*2.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*
Max Initial	*15.0*	*15.0*	*15.0*
Time before Reduction	*7.0*	*7.0*	*7.0*
Time to Reduce	*0.5*	*0.5*	*0.5*
Min Gap	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*25.0*	*24.0*	*25.0*
Coordinated	*No*	*No*	*Yes*
Split	*40.0*	*40.0*	*50.0*
Max Inhibit	*False*	*False*	*False*
Opt Min Green	*17.9*	*17.9*	*14.8*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*2*	
Ring - 2	*6*	*8*

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination							
Lane Group	Richmond Ave (SEB)		Main St (NEB)		Wheeler Ave (NWB)		Main St (SB)
	T	R	L	R	T	T+R	R
Adjusted Flow, veh/h	*0*	*0*	*14*	*0*	*0*	*0*	*99*
Adjusted Saturation Flow, veh/h	*3800*	*1609*	*1809*	*1609*	*3800*	*1900*	*1609*
Capacity (c), veh/h	*540*	*229*	*1357*	*1136*	*540*	*270*	*1136*
Available Capacity (ca), veh/h	*1440*	*610*	*928*	*755*	*1440*	*720*	*755*
Volume-to-Capacity Ratio (X)	*0.000185*	*0.000438*	*0.0103*	*8.8e-05*	*0.000185*	*0.000408*	*0.0872*
Green Ratio (g/C)	*0.14*	*0.14*	*0.71*	*0.71*	*0.14*	*0.14*	*0.71*
Assigned Phase	*2*	*2*	*8*	*8*	*6*	*6*	*8*
Max. Allowable Headway (MAH), s/veh	*3.18*	*3.18*	*3.55*	*3.55*	*3.16*	*3.16*	*3.55*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.0*	*1.7*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.3*	*0.3*	*0.0*	*0.0*	*0.3*
Phase Duration (Dp), s	*18.7*	*18.7*	*71.3*	*71.3*	*18.7*	*18.7*	*71.3*
Uniform Delay (d1), s/veh	*33.1*	*33.1*	*3.93*	*3.9*	*33.1*	*33.1*	*4.15*
Incremental Delay (d2), s/veh	*0.000618*	*0.00345*	*0.0138*	*0.00014*	*0.000618*	*0.00272*	*0.151*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*33.1*	*33.1*	*3.94*	*3.9*	*33.1*	*33.1*	*4.3*
Level Of Service	*C*	*C*	*A*	*A*	*C*	*C*	*A*
Total Delay, veh-hr	*0.00092*	*0.00092*	*0.0153*	*0.000108*	*0.00092*	*0.00101*	*0.118*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.5*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.6*
Effective Green Time, s	*12.8*	*12.8*	*63.5*	*63.5*	*12.8*	*12.8*	*63.5*
Approach Volume, veh/h	*0*	--	*14*	--	--	*0*	*99*
Approach Delay, s/veh	*33.1*	--	*3.9*	--	--	*33.1*	*4.3*

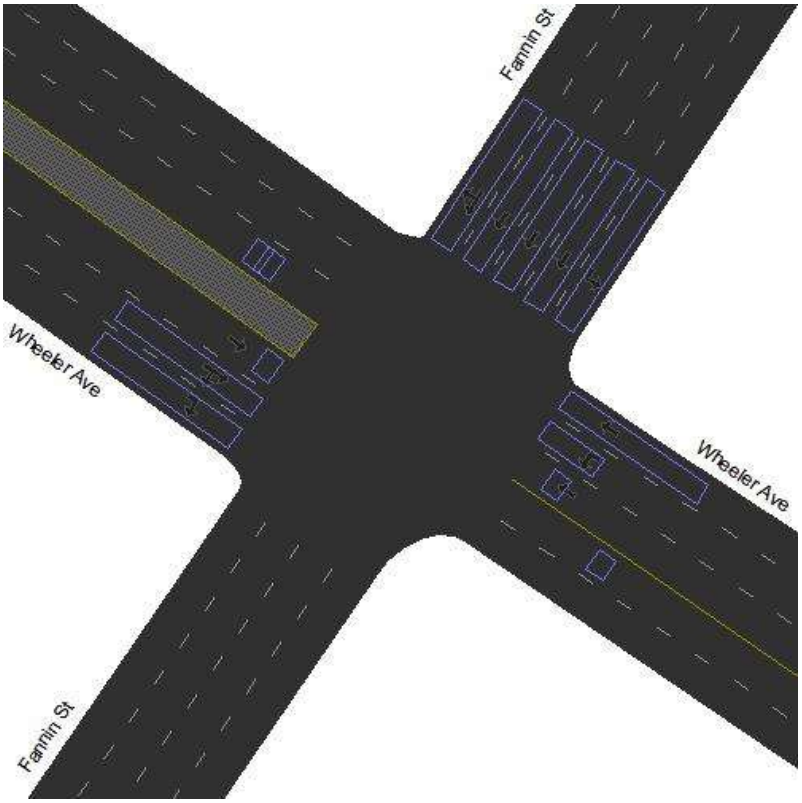
TransModeler® Intersection Report

Site Information

Intersection ID:	*132*	**Site Name:**	*N 29.733601, W 95.382143*
Cross Street:	*Fannin St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:8:25*		

" "

Intersection Geometry

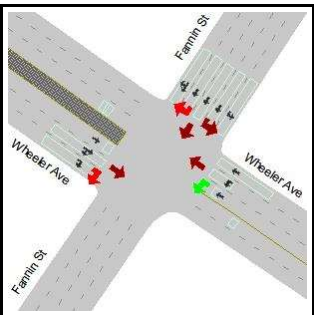
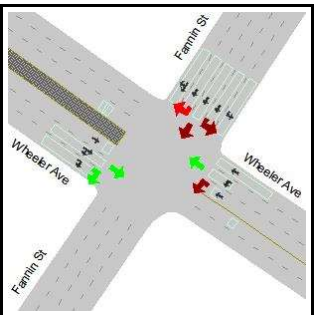
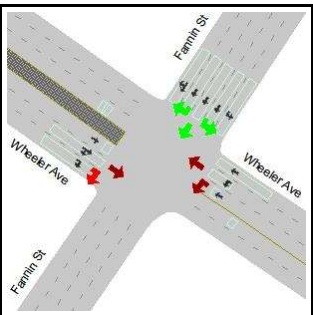
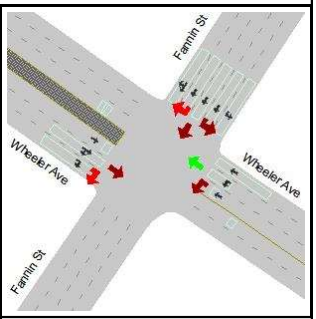


"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *90.0 sec*
Offset: *12.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing				
Item Name \ Signal States				
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"Min Green"	*"8.0"*	*"8.0"*	*"8.0"*	*"8.0"*
"Max Green"	*"10.5"*	*"37.5"*	*"28.5"*	*"37.5"*
"Yellow"	*"3.5"*	*"3.5"*	*"3.5"*	*"3.5"*
"Red Clearance"	*"1.0"*	*"1.0"*	*"1.0"*	*"1.0"*
"Lost Time"	*"4.5"*	*"4.5"*	*"4.5"*	*"4.5"*
"Recall Mode"	*"None"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"18.0"*	*"18.0"*	*"18.0"*	*"18.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"18.0"*	*"18.0"*	*"18.0"*	*"18.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*
"Split"	*"15.0"*	*"42.0"*	*"33.0"*	*"42.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"12.5"*	*"12.5"*	*"12.5"*	*"12.5"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"6"*	*"4"*	*"3"*

Ring - 2		*"8"*	

"

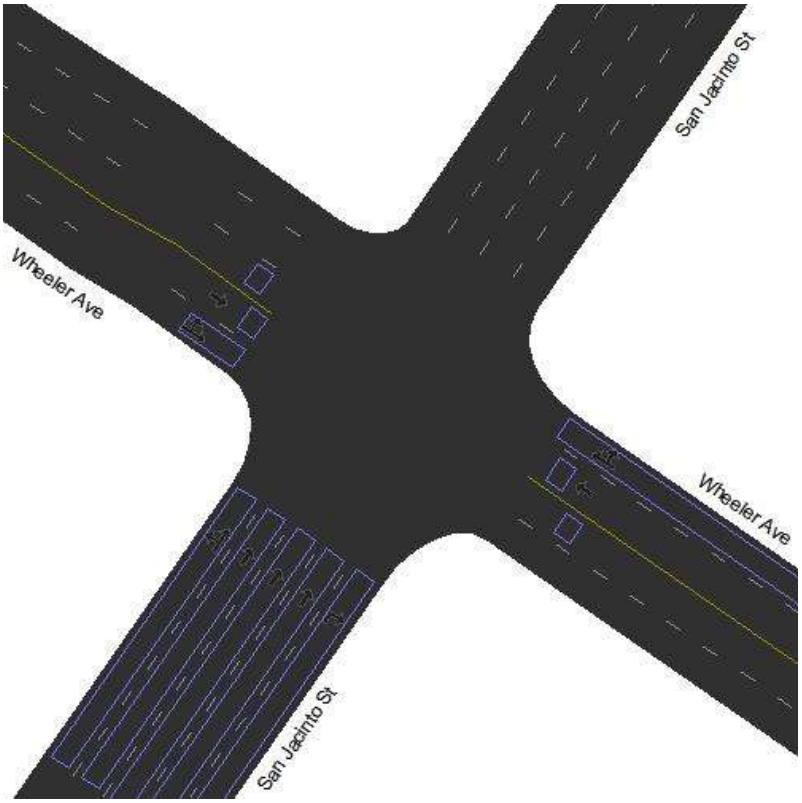
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*133*	**Site Name:**	*N 29.733096, W 95.381297*
Cross Street:	*Wheeler Ave & San Jacinto St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:8:31*		

" "

Intersection Geometry

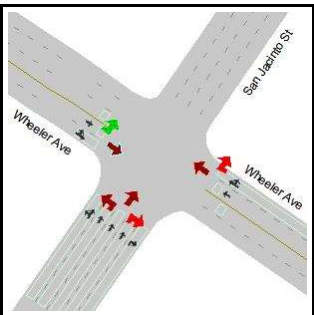
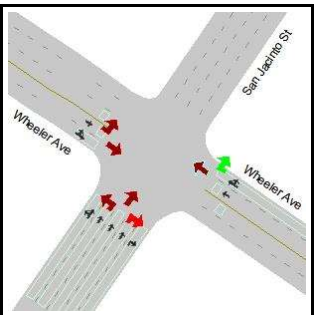
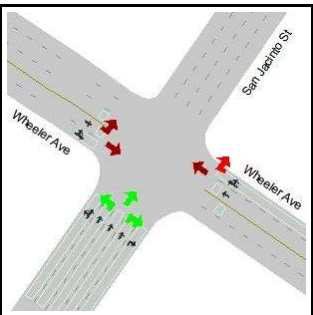
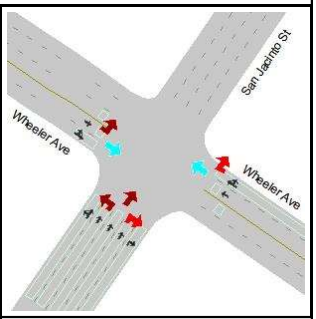


"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *103.0 sec*
Offset: *55.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing				
Item Name \ Signal States				
"ID"	*"2"*	*"6"*	*"8"*	*"9"*
"Min Green"	*"12.0"*	*"12.0"*	*"12.0"*	*"0.0"*
"Max Green"	*"51.0"*	*"51.0"*	*"29.0"*	*"8.0"*
"Yellow"	*"3.5"*	*"3.5"*	*"3.5"*	*"3.5"*
"Red Clearance"	*"1.5"*	*"1.5"*	*"1.5"*	*"1.5"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"Max"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"0.2"*	*"0.2"*	*"0.2"*	*"0.2"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"14.0"*	*"14.0"*	*"14.0"*	*"10.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"13.0"*	*"13.0"*	*"13.0"*	*"13.0"*
"Coordinated"	*"No"*	*"No"*	*"Yes"*	*"No"*
"Split"	*"56.0"*	*"56.0"*	*"34.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"True"*	*"False"*	*"False"*
"Opt Min Green"	*"17.0"*	*"17.0"*	*"17.0"*	*"5.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*		*"9"*

Ring - 2	*"6"*	*"8"*	

"

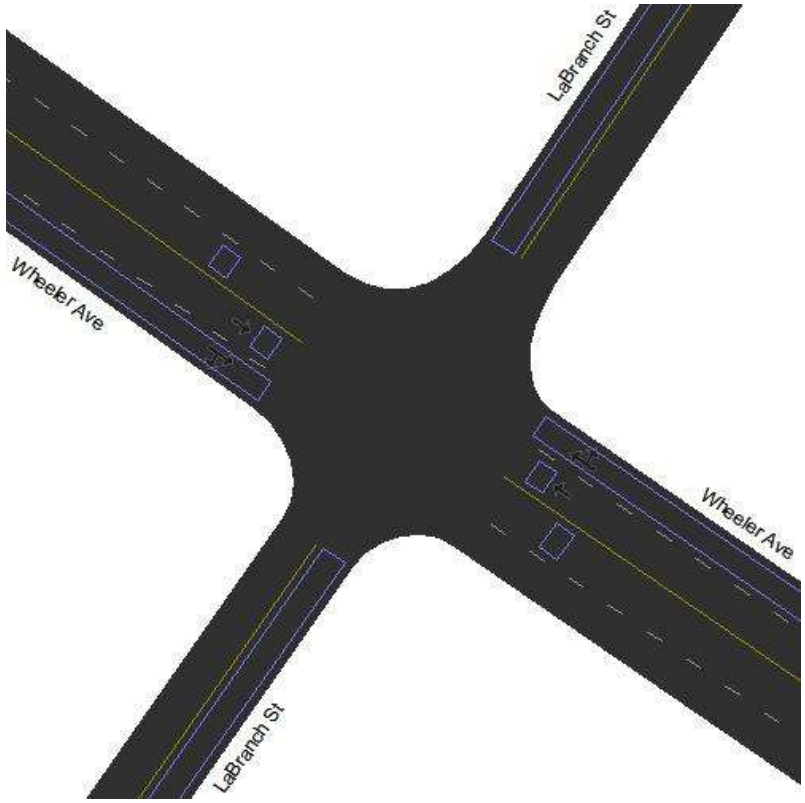
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*134*	**Site Name:**	*N 29.731564, W 95.378719*
Cross Street:	*LaBranch St & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:8:41*		

" "

Intersection Geometry

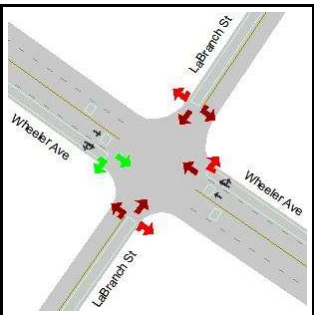
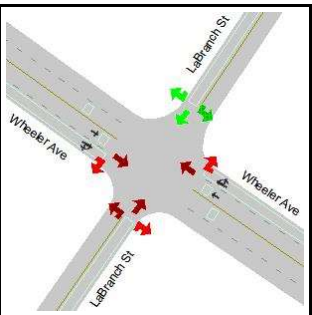
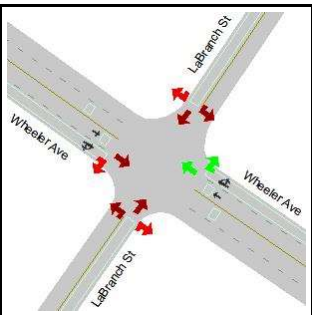
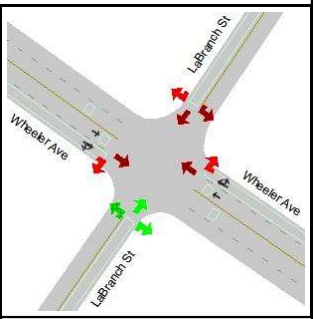


"

Signal Timing Plan - 1

Time of Day:	*16:30:00 - 16:30:00*
Plan Description:	*16:30:00*
Controller Type:	*"Traffic Actuated"*
Cycle Length:	*90.0 sec*
Offset:	*93.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

"" " "

Phasing				
Item Name \ Signal States				
"ID"	*"2"*	*"4"*	*"6"*	*"8"*
"Min Green"	*"7.0"*	*"4.0"*	*"7.0"*	*"4.0"*
"Max Green"	*"61.0"*	*"19.1"*	*"61.0"*	*"19.1"*
"Yellow"	*"3.6"*	*"3.2"*	*"3.6"*	*"3.2"*
"Red Clearance"	*"1.4"*	*"1.7"*	*"1.4"*	*"1.7"*
"Lost Time"	*"5.0"*	*"4.9"*	*"5.0"*	*"4.9"*
"Recall Mode"	*"Min"*	*"Min"*	*"Min"*	*"Min"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"3.0"*	*"1.0"*	*"3.0"*	*"1.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"9.0"*	*"6.0"*	*"9.0"*	*"6.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"12.0"*	*"12.0"*	*"12.0"*	*"12.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"66.0"*	*"24.0"*	*"66.0"*	*"24.0"*
"Max Inhibit"	*"False"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"12.0"*	*"8.9"*	*"12.0"*	*"8.9"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	

Ring - 2	*"6"*	*"8"*	

"

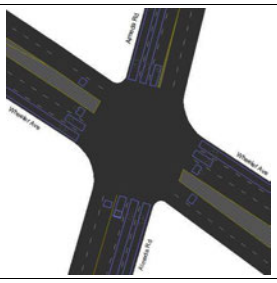
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*135*	**Site Name:**	*N 29.730102, W 95.376232*
Cross Street:	*Almeda Rd & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:8:47*		

" "

Intersection Geometry



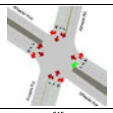
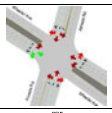
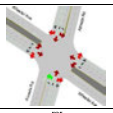
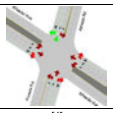
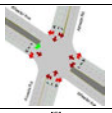
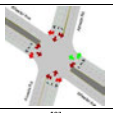
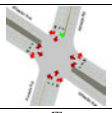
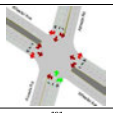
"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *90.0 sec*
Offset: *17.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
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"Min Green"	"6.0"	"6.0"	"8.0"	"10.0"	"6.0"	"6.0"	"8.0"	"10.0"
"Max Green"	"8.8"	"24.8"	"11.0"	"24.8"	"8.8"	"23.8"	"8.0"	"27.8"
"Yellow"	"3.2"	"3.2"	"3.0"	"3.6"	"3.6"	"3.2"	"3.0"	"3.6"
"Red Clearance"	"2.0"	"2.0"	"2.0"	"1.6"	"1.6"	"3.0"	"2.0"	"1.6"
"Lost Time"	"5.2"	"5.2"	"5.0"	"5.2"	"5.2"	"6.2"	"5.0"	"5.2"
"Recall Mode"	"None"	"Min"	"None"	"Min"	"None"	"Min"	"None"	"Min"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"
"Passage/Extension"	"2.0"	"2.0"	"2.5"	"2.0"	"2.0"	"2.0"	"2.5"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"8.0"	"8.0"	"0.0"	"12.0"	"8.8"	"8.0"	"10.0"	"12.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"13.0"	"13.0"	"15.0"	"10.0"	"10.0"	"13.0"	"15.0"	"10.0"
"Coordinated"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"Yes"
"Split"	"14.0"	"30.0"	"16.0"	"30.0"	"14.0"	"30.0"	"13.0"	"33.0"
"Max Inhibit"	"True"	"False"	"True"	"True"	"True"	"True"	"True"	"False"
"Opt Min Green"	"11.2"	"11.2"	"13.0"	"15.2"	"11.2"	"12.2"	"13.0"	"15.2"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"4", "3"	
Ring - 2	"6", "5"	"7", "8"	

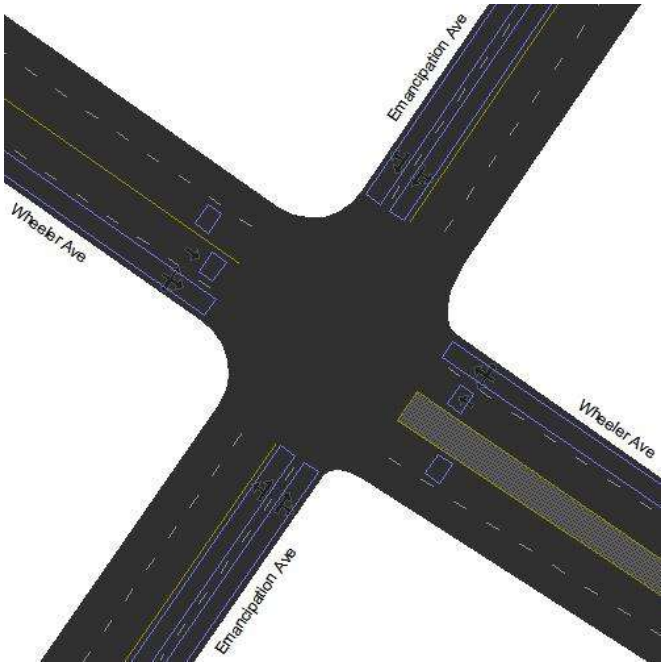
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*136*	**Site Name:**	*N 29.726946, W 95.370983*
Cross Street:	*Emancipation Ave & Wheeler Ave*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:9:18*		

" "

Intersection Geometry



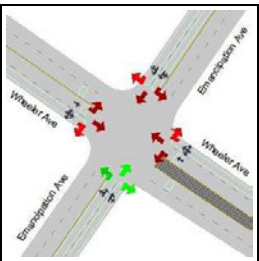
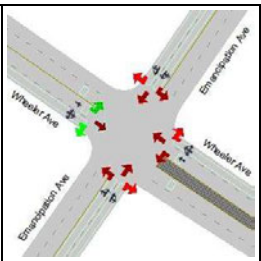
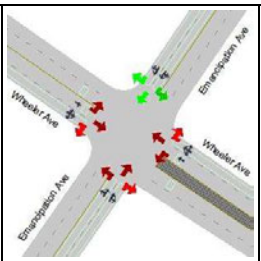
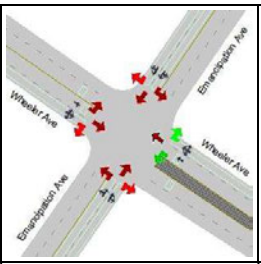
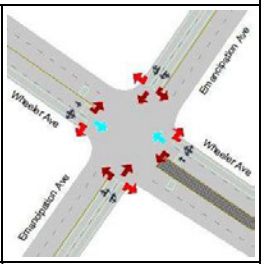
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *73.0 sec*
Offset: *56.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States					
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"Min Green"	*"8.0"*	*"8.0"*	*"8.0"*	*"8.0"*	*"0.0"*
"Max Green"	*"21.0"*	*"27.0"*	*"21.0"*	*"27.0"*	*"7.0"*
"Yellow"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Red Clearance"	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*	*"2.0"*
"Lost Time"	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*	*"6.0"*
"Recall Mode"	*"Max"*	*"Max"*	*"Max"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"27.0"*	*"33.0"*	*"27.0"*	*"33.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"True"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"14.0"*	*"14.0"*	*"14.0"*	*"14.0"*	*"6.0"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

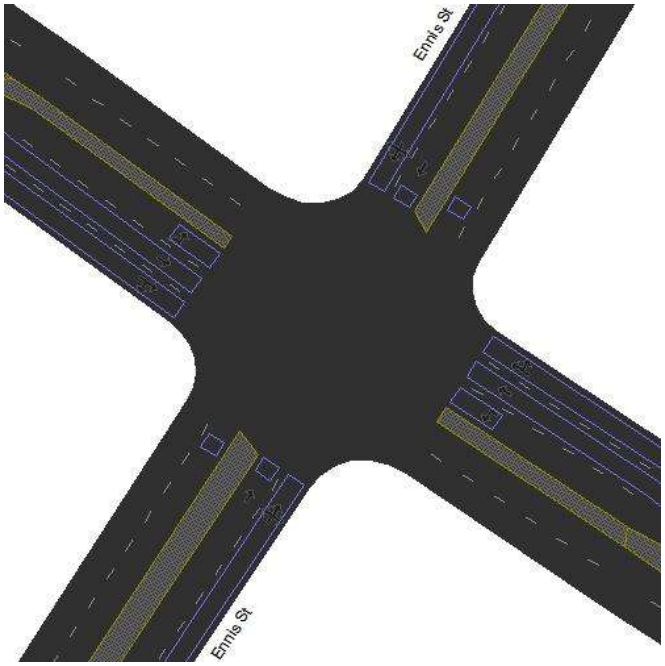
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*141*	**Site Name:**	*N 29.727578, W 95.362848*
Cross Street:	*Alabama St & Ennis St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:9:48*		

" "

Intersection Geometry

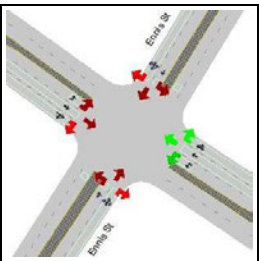
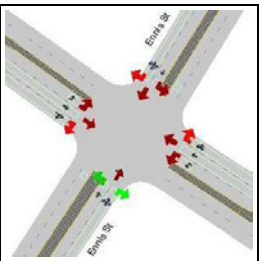
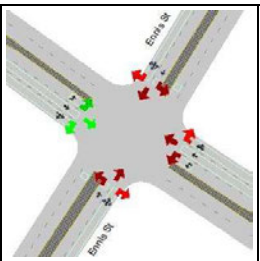
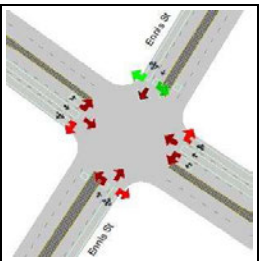
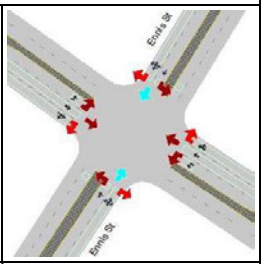


"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *42.0 sec*
Offset: *39.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing					
Item Name \ Signal States					
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"Min Green"	*"12.0"*	*"12.0"*	*"12.0"*	*"12.0"*	*"3.0"*
"Max Green"	*"16.0"*	*"16.0"*	*"16.0"*	*"16.0"*	*"8.0"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.8"*	*"1.8"*	*"1.8"*	*"1.8"*	*"2.0"*
"Lost Time"	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*	*"5.0"*
"Recall Mode"	*"None"*	*"Max"*	*"None"*	*"Max"*	*"None"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Non-Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"2.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Time before Reduction"	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*	*"7.0"*
"Time to Reduce"	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*	*"0.5"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*	*"15.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*
"Split"	*"21.0"*	*"21.0"*	*"21.0"*	*"21.0"*	*"13.0"*
"Max Inhibit"	*"False"*	*"False"*	*"False"*	*"False"*	*"False"*
"Opt Min Green"	*"17.0"*	*"17.0"*	*"17.0"*	*"17.0"*	*"8.0"*

"

" " "

Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2"*	*"4"*	*"9"*
Ring - 2	*"6"*	*"8"*	

"

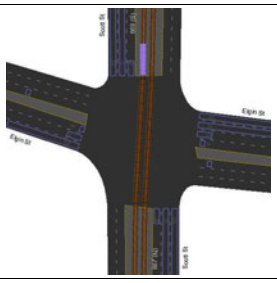
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*143*	**Site Name:**	*N 29.727838, W 95.349919*
Cross Street:	*Elgin St & 669 (S)*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:25*		

" "

Intersection Geometry



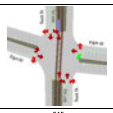
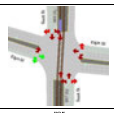
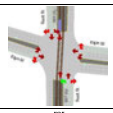
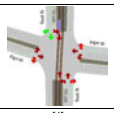
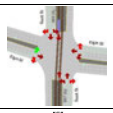
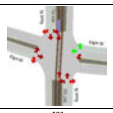
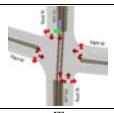
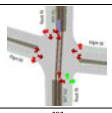
"

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *6.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
"ID"	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"8"
"Min Green"	"7.0"	"12.0"	"7.0"	"12.0"	"7.0"	"12.0"	"7.0"	"12.0"
"Max Green"	"25.0"	"32.0"	"13.0"	"22.3"	"25.0"	"32.0"	"14.3"	"21.2"
"Yellow"	"3.6"	"3.6"	"3.6"	"3.6"	"3.6"	"3.6"	"3.6"	"3.6"
"Red Clearance"	"3.4"	"3.4"	"3.4"	"3.1"	"3.4"	"3.4"	"3.1"	"3.2"
"Last Time"	"7.0"	"7.0"	"7.0"	"6.7"	"7.0"	"7.0"	"6.7"	"6.8"
"Recall Mode"	"None"	"Max"	"None"	"Min"	"None"	"Max"	"None"	"Min"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"
"Passage/Extension"	"2.5"	"2.5"	"2.5"	"2.5"	"2.5"	"2.5"	"2.5"	"2.5"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"11.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"	"15.0"
"Time before Reduction"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time to Reduce"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"	"0.5"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"15.0"	"27.0"	"27.0"	"33.0"	"15.0"	"28.0"	"15.0"	"33.0"
"Coordinated"	"No"	"No"	"No"	"No"	"No"	"No"	"No"	"Yes"
"Split"	"32.0"	"39.0"	"20.0"	"29.0"	"32.0"	"39.0"	"21.0"	"28.0"
"Max Inhibit"	"False"	"False"	"False"	"False"	"False"	"False"	"False"	"False"
"Opt Min Green"	"14.0"	"19.0"	"14.0"	"18.7"	"14.0"	"19.0"	"13.7"	"18.8"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"4", "3"	
Ring - 2	"6", "5"	"7", "8"	

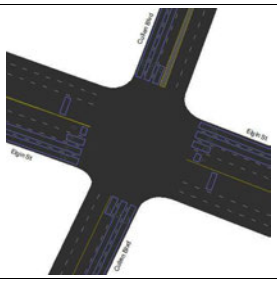
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*144*	**Site Name:**	*N 29.727301, W 95.343988*
Cross Street:	*Cullen Blvd & Elgin St*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:36*		

" "

Intersection Geometry



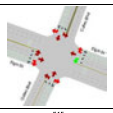
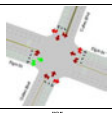
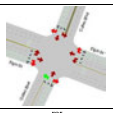
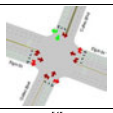
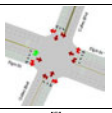
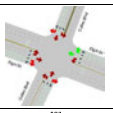
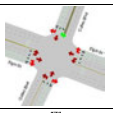
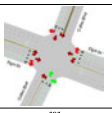
"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *68.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States								
"ID"	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"8"
"Min Green"	"5.0"	"5.0"	"4.0"	"8.0"	"5.0"	"5.0"	"4.0"	"8.0"
"Max Green"	"15.0"	"25.0"	"30.0"	"29.2"	"15.0"	"25.0"	"29.2"	"30.0"
"Yellow"	"3.2"	"3.2"	"3.0"	"3.6"	"3.2"	"3.2"	"3.6"	"3.0"
"Red Clearance"	"1.8"	"1.8"	"2.0"	"2.2"	"1.8"	"1.8"	"2.2"	"2.0"
"Last Time"	"5.0"	"5.0"	"5.0"	"5.8"	"5.0"	"5.0"	"5.8"	"5.0"
"Recall Mode"	"Max"	"Max"	"Max"	"Max"	"Max"	"Max"	"Max"	"Max"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"
"Passage/Extension"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"	"7.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"0.2"	"0.2"	"0.2"	"0.2"	"0.2"	"0.2"	"0.2"	"0.2"
"Ped Walk + FDW"	"20.0"	"19.0"	"30.0"	"29.2"	"20.0"	"19.0"	"29.2"	"25.0"
"Coordinated"	"No"	"No"	"No"	"Yes"	"No"	"No"	"No"	"No"
"Split"	"20.0"	"30.0"	"35.0"	"35.0"	"20.0"	"30.0"	"35.0"	"35.0"
"Max Inhibit"	"True"	"True"	"True"	"False"	"True"	"True"	"True"	"True"
"Opt Min Green"	"10.0"	"10.0"	"9.0"	"13.8"	"10.0"	"10.0"	"9.8"	"13.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"3", "4"	
Ring - 2	"6", "5"	"8", "7"	

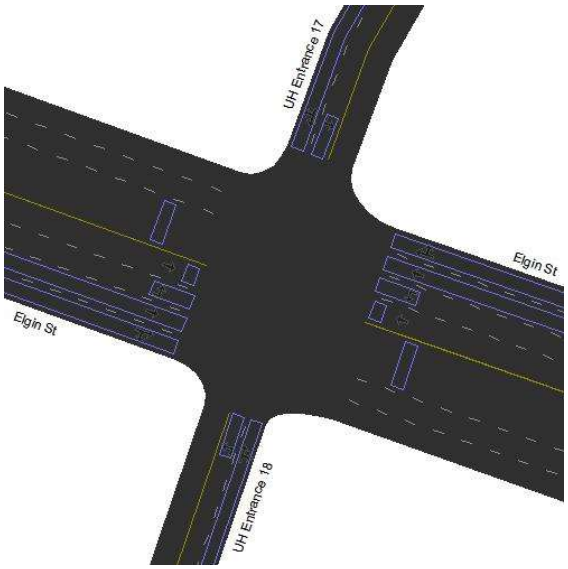
"
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*145*	**Site Name:**	*N 29.726292, W 95.340781*
Cross Street:	*Elgin St & UH Entrance 17*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:10:43*		

" "

Intersection Geometry



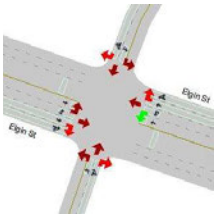
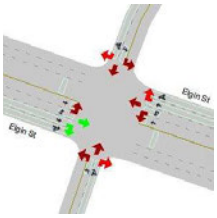
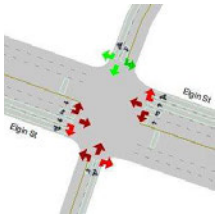
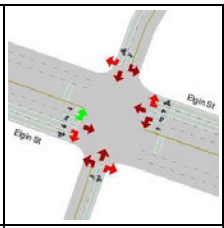
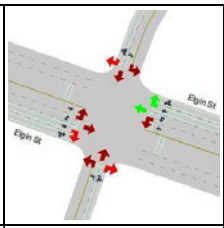
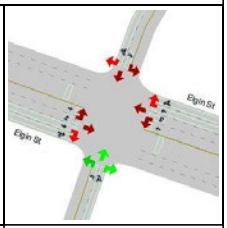
"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *120.0 sec*
Offset: *102.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States						
"ID"	*"1"*	*"2"*	*"4"*	*"5"*	*"6"*	*"8"*
"Min Green"	*"7.0"*	*"12.0"*	*"10.0"*	*"7.0"*	*"12.0"*	*"10.0"*
"Max Green"	*"12.1"*	*"49.1"*	*"43.4"*	*"12.1"*	*"49.1"*	*"43.4"*
"Yellow"	*"3.2"*	*"3.2"*	*"3.0"*	*"3.2"*	*"3.2"*	*"3.0"*
"Red Clearance"	*"1.7"*	*"1.7"*	*"2.6"*	*"1.7"*	*"1.7"*	*"2.6"*
"Lost Time"	*"4.9"*	*"4.9"*	*"5.6"*	*"4.9"*	*"4.9"*	*"5.6"*
"Recall Mode"	*"Min"*	*"Max"*	*"Min"*	*"None"*	*"Max"*	*"Min"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*	*"4.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"9.0"*	*"9.0"*	*"12.0"*	*"9.0"*	*"9.0"*	*"12.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"15.1"*	*"18.0"*	*"30.0"*	*"15.1"*	*"18.0"*	*"30.0"*
"Coordinated"	*"No"*	*"Yes"*	*"No"*	*"No"*	*"No"*	*"No"*
"Split"	*"17.0"*	*"54.0"*	*"49.0"*	*"17.0"*	*"54.0"*	*"49.0"*
"Max Inhibit"	*"True"*	*"False"*	*"True"*	*"True"*	*"True"*	*"True"*
"Opt Min Green"	*"11.9"*	*"16.9"*	*"15.6"*	*"11.9"*	*"16.9"*	*"15.6"*

"

" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*"2", "1"*	*"4"*	
Ring - 2	*"6", "5"*	*"8"*	

"

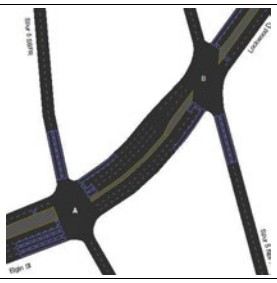
"

TransModeler® Intersection Report

Site Information			
Intersection ID:	*146,147*	**Site Name:**	*N 29.726208, W 95.338165*
Cross Street:	*Elgin St & Spur 5 SBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:11:6*		

" "

Intersection Geometry



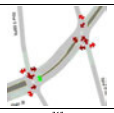
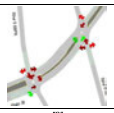
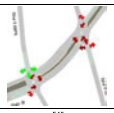
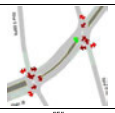
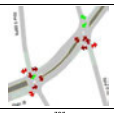
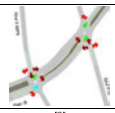
"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *75.0 sec*
Offset: *9.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

"" " "

Phasing

Item Name \ Signal States							
"ID"	"1"	"2"	"4"	"5"	"6"	"8"	"9"
"Min Green"	"7.0"	"7.0"	"7.0"	"5.0"	"7.0"	"7.0"	"0.0"
"Max Green"	"10.0"	"15.0"	"18.7"	"10.0"	"15.0"	"18.7"	"8.0"
"Yellow"	"3.2"	"3.2"	"4.7"	"3.2"	"3.2"	"4.7"	"3.0"
"Red Clearance"	"2.8"	"2.8"	"1.6"	"2.8"	"2.8"	"1.6"	"2.0"
"Last Time"	"6.0"	"6.0"	"6.3"	"6.0"	"6.0"	"8.3"	"5.0"
"Recall Mode"	"None"	"None"	"Max"	"None"	"None"	"None"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"4.0"	"4.0"	"4.0"	"4.0"	"4.0"	"4.0"	"4.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"11.0"	"19.0"	"11.7"	"6.0"	"24.0"	"11.7"	"11.7"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Ped Walk + FDW"	"11.0"	"13.0"	"11.0"	"6.0"	"13.0"	"11.0"	"11.0"
"Coordinated"	"No"	"No"	"Yes"	"No"	"No"	"No"	"No"
"Split"	"16.0"	"21.0"	"25.0"	"16.0"	"21.0"	"25.0"	"13.0"
"Max Inhibit"	"False"	"False"	"False"	"False"	"False"	"False"	"False"
"Opt Min Green"	"13.0"	"13.0"	"13.3"	"11.0"	"13.0"	"13.3"	"5.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "1"	"4"	"9"
Ring - 2	"6", "5"	"8"	

"
"

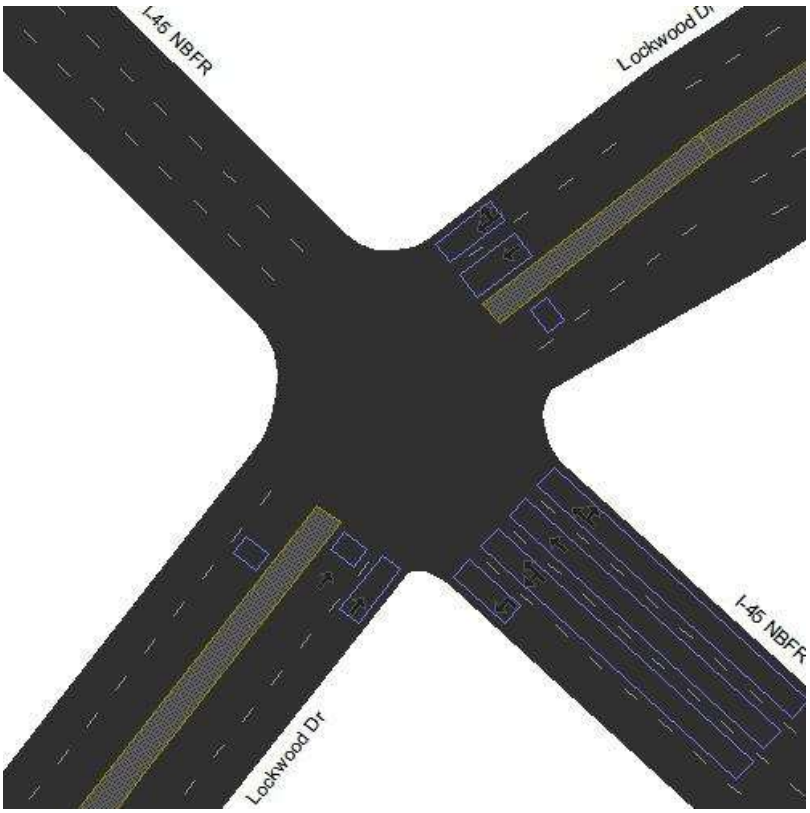
TransModeler® Intersection Report

Site Information

Intersection ID:	*148*	**Site Name:**	*N 29.728243, W 95.336213*
Cross Street:	*Lockwood Dr & I-45 NBFR*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:11:13*		

" "

Intersection Geometry

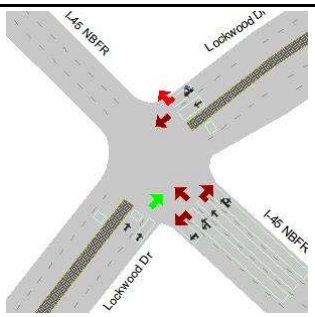
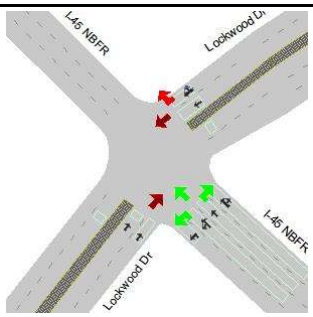
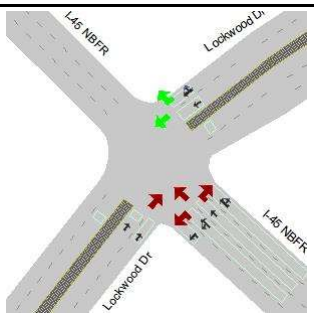


"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *60.0 sec*
Offset: *69.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

"" " "

Phasing			
Item Name \ Signal States			
"ID"	*"4"*	*"6"*	*"8"*
"Min Green"	*"8.0"*	*"8.0"*	*"8.0"*
"Max Green"	*"23.9"*	*"25.0"*	*"23.9"*
"Yellow"	*"3.6"*	*"3.6"*	*"3.6"*
"Red Clearance"	*"2.5"*	*"1.4"*	*"2.5"*
"Lost Time"	*"6.1"*	*"5.0"*	*"6.1"*
"Recall Mode"	*"Max"*	*"None"*	*"Max"*
"Memory Mode"	*"Lock"*	*"Lock"*	*"Lock"*
"Passage/Extension"	*"2.0"*	*"2.0"*	*"2.0"*
"Simultaneous Gap Out"	*"Yes"*	*"Yes"*	*"Yes"*
"Added Initial"	*"0.0"*	*"0.0"*	*"0.0"*
"Max Initial"	*"10.0"*	*"10.0"*	*"10.0"*
"Time before Reduction"	*"0.0"*	*"0.0"*	*"0.0"*
"Time to Reduce"	*"0.0"*	*"0.0"*	*"0.0"*
"Min Gap"	*"0.0"*	*"0.0"*	*"0.0"*
"Ped Walk + FDW"	*"23.9"*	*"25.0"*	*"23.9"*
"Coordinated"	*"Yes"*	*"No"*	*"No"*
"Split"	*"30.0"*	*"30.0"*	*"30.0"*
"Max Inhibit"	*"False"*	*"True"*	*"False"*
"Opt Min Green"	*"14.1"*	*"13.0"*	*"14.1"*

"

" " "

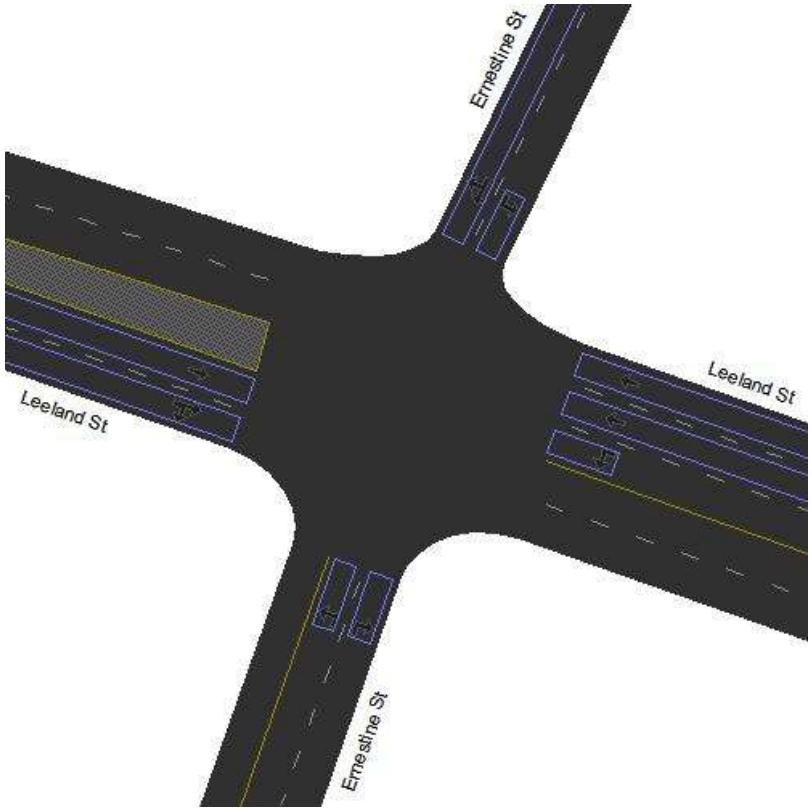
Phase Sequence and Concurrency Group			
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1		*"4"*	
Ring - 2	*"6"*	*"8"*	

TransModeler® Intersection Report

Site Information

Intersection ID:	*149*	**Site Name:**	*N 29.735709, W 95.333976*
Cross Street:	*Ernestine St & Leeland St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:55:25*		

Intersection Geometry



Turn Movement Volumes (Ernestine St & Leeland St)

@ Node 149 From \ To	Leeland St (WB)	Ernestine St (SB)	Leeland St (EB)
Ernestine St (SWB)			
Leeland St (EB)		*50.0*	
Ernestine St (NB)			*20.0*
Leeland St (WB)		*100.0*	

[Flow Field] = Volume

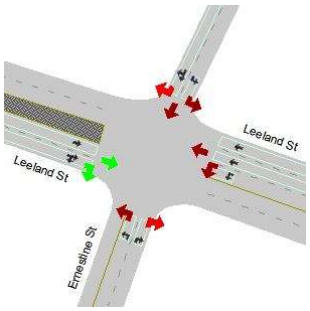
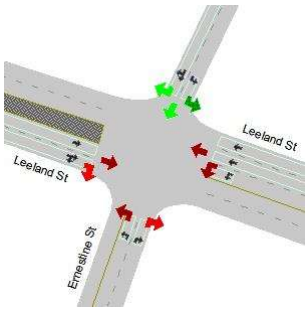
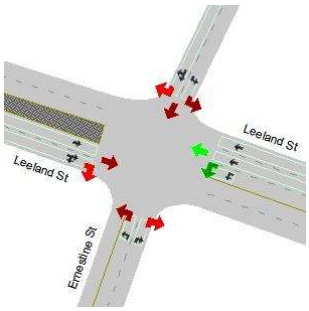
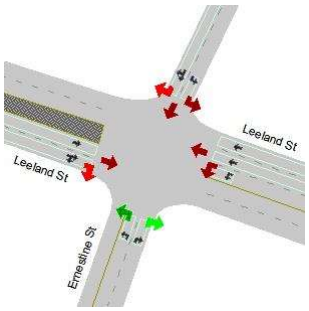
Volume Adjustment and Saturation Flow Rate

Movement	Ernestine St (SWB)			Leeland St (EB)		Ernestine St (NB)		Leeland St (WB)	
	Leeland St	Ernestine St	Leeland St	Ernestine St	Leeland St	Leeland St	Leeland St	Leeland St	Ernestine St
	SWBR	SWBT	SWBL	EBR	EBT	NBL	NBR	WBT	WBL

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *17.8 sec*
Level of Service: *B*
Offset: *63.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

Phasing

Item Name \ Signal States				
ID	*2*	*4*	*6*	*8*
Min Green	*10.0*	*10.0*	*10.0*	*0.0*
Max Green	*34.4*	*44.4*	*34.4*	*45.0*
Yellow	*3.6*	*3.6*	*3.6*	*3.0*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.6*	*5.6*	*5.6*	*5.0*
Recall Mode	*Min*	*Max*	*Min*	*None*
Memory Mode	*Lock*	*Lock*	*Lock*	*Non-Lock*
Passage/Extension	*2.0*	*2.0*	*2.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*12.0*	*12.0*	*12.0*	*10.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*17.0*	*22.0*	*17.0*	*17.0*
Coordinated	*No*	*No*	*Yes*	*No*
Split	*40.0*	*50.0*	*40.0*	*50.0*
Max Inhibit	*True*	*True*	*False*	*False*
Opt Min Green	*15.6*	*15.6*	*15.6*	*5.0*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*2*	*4*

Ring - 2	6	8

Signal Timing Plan - 1

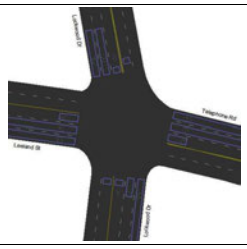
Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Ernestine St (SWB)		Leeland St (EB)		Ernestine St (NB)		Leeland St (WB)	
	L	T+R	T	T+R	L	R	L	T
Adjusted Flow, veh/h	0	0	0	50	0	20	100	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1866	1440	1609	1376	3800
Capacity (c), veh/h	972	937	726	713	800	805	606	1452
Available Capacity (ca), veh/h	972	937	726	713	800	805	606	1452
Volume-to-Capacity Ratio (X)	0.000103	0.000213	0.000138	0.0701	0.000125	0.0249	0.165	6.88e-05
Green Ratio (g/C)	0.49	0.49	0.38	0.38	0.50	0.50	0.38	0.38
Assigned Phase	4	4	2	2	8	8	6	6
Max. Allowable Headway (MAH), s/veh	3.03	3.03	4.44	4.44	2.97	2.97	2.78	2.78
Queue Service Time (gs), s	0.0	0.0	0.0	1.5	0.0	0.6	4.4	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	0.70	0.70	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.2	0.2	0.0	0.0	0.1	0.1
Phase Duration (Dp), s	50.0	50.0	40.0	40.0	50.0	50.0	40.0	40.0
Uniform Delay (d1), s/veh	11.6	11.6	17.2	17.6	11.3	11.4	18.5	17.2
Incremental Delay (d2), s/veh	0.00019	0.00041	0.000341	0.19	0.000281	0.057	0.586	8.53e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	11.6	11.6	17.2	17.8	11.3	11.4	19.1	17.2
Level Of Service	B	B	B	B	B	B	B	B
Total Delay, veh-hr	0.000321	0.000642	0.000477	0.248	0.000313	0.0636	0.531	0.000477
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.7	0.0	0.2	1.4	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.7	0.0	0.2	1.5	0.0
Effective Green Time, s	44.4	44.4	34.4	34.4	45.0	45.0	34.4	34.4
Approach Volume, veh/h	--	0	--	50	20	--	--	100
Approach Delay, s/veh	--	11.6	--	17.8	11.4	--	--	19.1

TransModeler® Intersection Report

Site Information

Intersection ID:	*150*	**Site Name:**	*N 29.735224, W 95.331820*
Cross Street:	*Telephone Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:55:29*		

Intersection Geometry



Turn Movement Volumes (Telephone Rd & Lockwood Dr)

@ Node 150 From \ To	Lockwood Dr (NB)	Leeland St (WB)	Lockwood Dr (SB)	Telephone Rd (SEB)
Telephone Rd (WB)				
Lockwood Dr (SB)				
Leeland St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

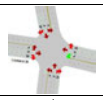
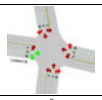
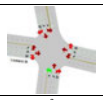
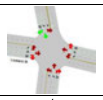
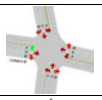
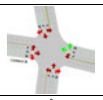
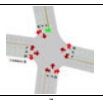
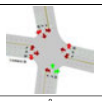
Volume Adjustment and Saturation Flow Rate

Movement	Telephone Rd (WB)			Lockwood Dr (SB)			Leeland St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Leeland St	Lockwood Dr	Leeland St	Lockwood Dr	Telephone Rd	Lockwood Dr	Lockwood Dr	Telephone Rd	Lockwood Dr	Leeland St	Telephone Rd
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	100.0 sec
Control Delay:	32.0 sec
Level of Service:	C
Offset:	24.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	8.0	5.0	8.0	5.0	8.0	5.0	8.0
Max Green	10.8	15.8	9.8	42.8	10.8	15.8	9.8	42.5
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.9
Lost Time	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.5
Recall Mode	None	Max	None	None	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	10.0	10.0	10.0	10.0	7.0	10.0	10.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	19.0	19.0	19.0	9.8	13.0	13.0	21.0
Coordinated	No	No	No	No	No	No	No	Yes
Split	16.0	21.0	15.0	48.0	16.0	21.0	15.0	48.0
Max Inhibit	True	True	True	True	True	True	True	False
Opt Min Green	10.2	13.2	10.2	13.2	10.2	13.2	10.2	13.5

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	8, 7	

Signal Timing Plan - 1

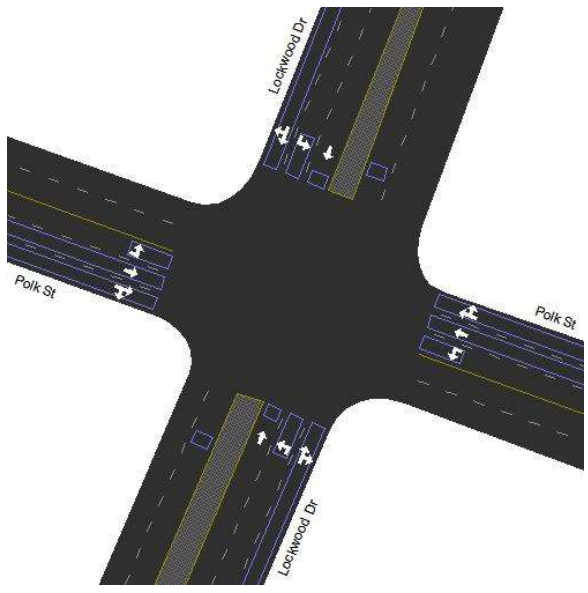
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Telephone Rd (WB)			Lockwood Dr (SB)			Leeland St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1900	1900	1809	1900	1900	1809	1976	1900
Capacity (c), veh/h	175	300	300	120	165	165	175	399	399	796	924	888
Available Capacity (ca), veh/h	195	300	300	177	813	813	195	300	300	177	840	807
Volume-to-Capacity Ratio (X)	0.00057	0.000333	0.000366	0.000833	0.000542	0.000596	0.00057	0.000251	0.000276	0.000126	0.000108	0.000124
Green Ratio (g/C)	0.10	0.16	0.16	0.07	0.10	0.10	0.10	0.21	0.21	0.44	0.47	0.47
Assigned Phase	1	6	6	7	4	4	5	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	2.76	4.27	4.27	3.24	2.91	2.91	2.76	4.27	4.27	2.73	3.30	3.30
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	0.51	0.51	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	14.9	21.0	21.0	11.8	14.9	14.9	14.9	21.0	21.0	49.2	52.3	52.3
Uniform Delay (d1), s/veh	40.8	35.4	35.5	43.6	40.8	40.8	40.8	31.2	31.2	15.7	14.2	14.2
Incremental Delay (d2), s/veh	0.00585	0.002	0.0022	0.0125	0.00529	0.00582	0.00585	0.00113	0.00124	0.000284	0.000211	0.000251
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	40.8	35.5	35.5	43.6	40.8	40.8	40.8	31.2	31.2	15.7	14.2	14.2
Level Of Service	D	D	D	D	D	D	D	C	C	B	B	B
Total Delay, veh-hr	0.00113	0.000985	0.001108	0.00121	0.00113	0.00125	0.00113	0.000867	0.000954	0.000436	0.000394	0.000433
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	9.7	15.8	15.8	6.6	9.7	9.7	9.7	21.0	21.0	44.0	46.8	46.8
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	37.2	--	--	41.7	--	--	34.3	--	--	14.7

TransModeler® Intersection Report

Site Information			
Intersection ID:	*151*	**Site Name:**	*N 29.737757, W 95.331679*
Cross Street:	*Lockwood Dr & Polk St*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:34:17*		

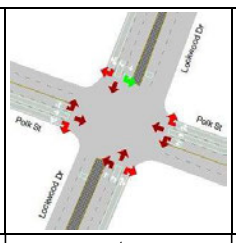
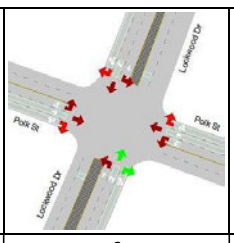
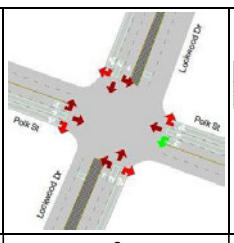
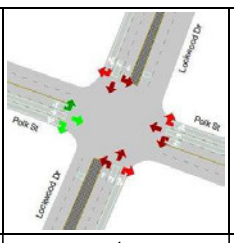
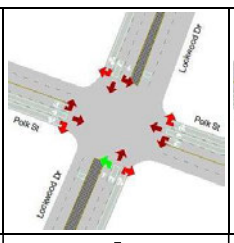
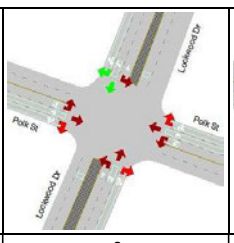
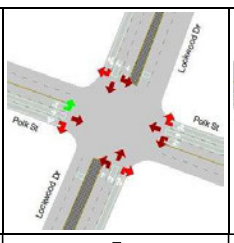
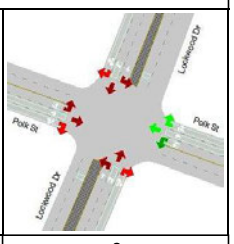
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Offset: *50.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*5.0*	*6.0*	*5.0*	*10.0*	*5.0*	*6.0*	*5.0*	*10.0*
Max Green	*13.4*	*44.4*	*8.6*	*11.6*	*13.4*	*44.4*	*8.6*	*11.6*
Yellow	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*
Red Clearance	*2.0*	*2.0*	*1.8*	*1.8*	*2.0*	*2.0*	*1.8*	*1.8*
Lost Time	*5.6*	*5.6*	*5.4*	*5.4*	*5.6*	*5.6*	*5.4*	*5.4*
Recall Mode	*None*	*Max*	*None*	*Max*	*None*	*Max*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*	*7.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*8.4*	*22.0*	*13.6*	*20.0*	*9.4*	*22.0*	*8.6*	*20.0*
Coordinated	*No*	*No*	*No*	*Yes*	*No*	*No*	*No*	*No*
Split	*19.0*	*50.0*	*14.0*	*17.0*	*19.0*	*50.0*	*14.0*	*17.0*
Max Inhibit	*True*	*True*	*True*	*False*	*True*	*True*	*True*	*True*
Opt Min Green	*10.6*	*11.6*	*10.4*	*15.4*	*10.6*	*11.6*	*10.4*	*15.4*

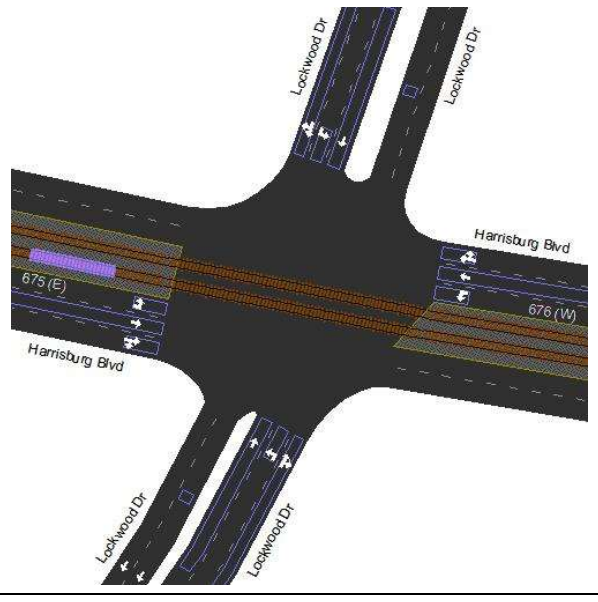
Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*2*	*1*	*3, 4*
Ring - 2	*6*	*5*	*7, 8*

TransModeler® Intersection Report

Site Information			
Intersection ID:	*153*	**Site Name:**	*N 29.743455, W 95.328608*
Cross Street:	*Lockwood Dr & 675 (E)*	**Number of Plans:**	*1*
Analysis Date:	*2023/5/3 20:34:0*		

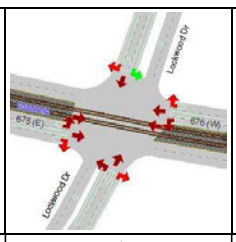
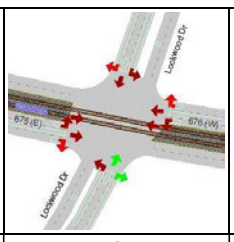
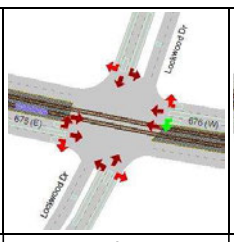
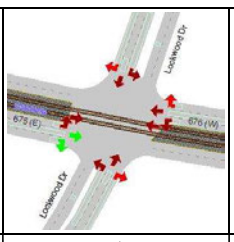
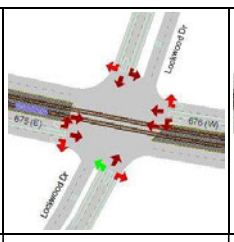
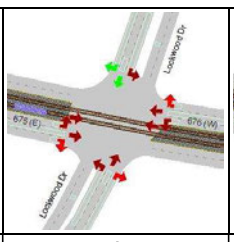
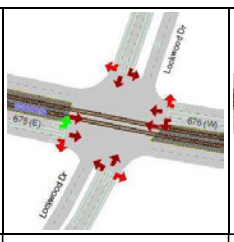
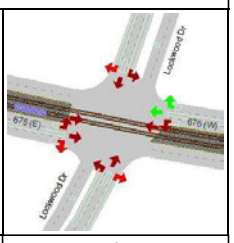
Intersection Geometry



Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Offset: *37.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Flexible*

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	7.0	5.0	12.0	5.0	7.0	5.0	12.0
Max Green	14.7	38.4	9.0	12.7	14.7	38.4	7.8	12.7
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	3.1	2.6	2.4	2.7	3.1	2.6	3.6	2.7
Lost Time	6.7	6.2	6.0	6.3	6.7	6.2	7.2	6.3
Recall Mode	None	Max	None	Min	None	Max	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.3	15.0	10.0	15.0	8.3	15.0	7.8	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	13.0	15.0	18.0	15.0	13.0	15.0	18.0
Coordinated	No	No	No	Yes	No	No	No	No
Split	21.4	44.6	15.0	19.0	21.4	44.6	15.0	19.0
Max Inhibit	False	False	False	False	False	False	False	False
Opt Min Green	11.7	13.2	11.0	18.3	11.7	13.2	12.2	18.3

Phase Sequence and Concurrency Group

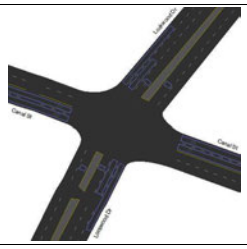
Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	1	2	4, 3
Ring - 2	5	6	8, 7

TransModeler® Intersection Report

Site Information

Intersection ID:	*154*	**Site Name:**	*N 29.747928, W 95.326602*
Cross Street:	*Lockwood Dr & Canal St*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:55:52*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & Canal St)

@ Node 154 From \ To	Lockwood Dr (NEB)	Canal St (WB)	Lockwood Dr (SWB)	Canal St (EB)
Lockwood Dr (SWB)				
Canal St (EB)				
Lockwood Dr (NEB)				
Canal St (WB)				

[Flow Field] = Volume

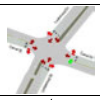
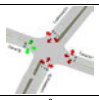
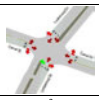
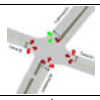
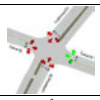
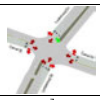
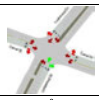
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SWB)				Canal St (EB)			Lockwood Dr (NEB)				Canal St (WB)		
	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr	Canal St	Lockwood Dr
	SWBU	SWBR	SWBT	SWBL	EBL	EBR	EBT	NEBT	NEBL	NEBU	NEBR	WBR	WBT	WBL

Signal Timing Plan - 1

Time of Day:	00:00:00 - 23:59:59
Plan Description:	00:00:00
Controller Type:	Traffic Actuated
Cycle Length:	100.0 sec
Control Delay:	30.1 sec
Level of Service:	C
Offset:	45.0 sec
Coordinate Begin of:	Yellow
Yield Point:	Single

Phasing

Item Name | Signal States							
							
ID	1	2	3	4	6	7	8
Min Green	4.0	4.0	4.0	8.0	4.0	4.0	8.0
Max Green	7.4	9.4	19.0	43.0	22.4	19.0	43.0
Yellow	3.2	3.2	3.6	3.6	3.2	3.6	3.6
Red Clearance	2.4	2.4	1.4	1.4	2.4	1.4	1.4
Lost Time	5.6	5.6	5.0	5.0	5.6	5.0	5.0
Recall Mode	None	Max	None	Min	Max	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	4.0	4.0	4.0	3.0	4.0	2.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	19.0	15.0	20.0	19.0	15.0	20.0
Coordinated	No	No	No	No	No	No	Yes
Split	13.0	15.0	24.0	48.0	28.0	24.0	48.0
Max Inhibit	False	False	False	False	False	False	False
Opt Min Green	9.6	9.6	9.0	13.0	9.6	9.0	13.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2, 1	3, 4
Ring - 2	6	7, 8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

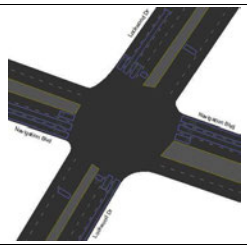
Lane Group	Lockwood Dr (SWB)			Canal St (EB)		Lockwood Dr (NEB)			Canal St (WB)	
	L	T	T+R	L+T	T+R	L	T	T+R	L	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1976	1900	1900	1900	1809	1976	1900	1809	1900
Capacity (c), veh/h	139	1074	1032	211	179	229	1074	1032	341	426
Available Capacity (ca), veh/h	344	850	817	211	179	344	850	817	341	426
Volume-to-Capacity Ratio (X)	0.00144	9.31e-05	0.000107	0.000712	0.00084	0.000873	9.31e-05	0.000107	0.000293	0.00047
Green Ratio (g/C)	0.08	0.54	0.54	0.09	0.09	0.13	0.54	0.54	0.17	0.22
Assigned Phase	7	4	4	2	2	3	8	8	1+6	6
Max. Allowable Headway (MAH), s/veh	3.24	4.30	4.30	5.68	5.68	5.24	5.30	5.30	6.32	6.40
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00	0.51	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.7	59.3	59.3	15.0	15.0	12.7	59.3	59.3	13.0	28.0
Uniform Delay (d1), s/veh	42.6	10.4	10.4	41	41	38.1	10.4	10.4	38.5	30.1
Incremental Delay (d2), s/veh	0.0188	0.000156	0.000186	0.0061	0.00847	0.00687	0.000156	0.000186	0.00155	0.00199
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	42.7	10.4	10.4	41.1	41.1	38.2	10.4	10.4	38.5	30.1
Level Of Service	D	B	B	D	D	D	B	B	D	C
Total Delay, veh-hr	0.00237	0.00029	0.000319	0.00171	0.00171	0.00212	0.00029	0.000319	0.00107	0.00167
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	7.7	54.3	54.3	9.4	9.4	12.7	54.3	54.3	16.8	22.4
Approach Volume, veh/h	--	--	0	--	0	--	--	0	--	0
Approach Delay, s/veh	--	--	26.1	--	41.1	--	--	24.0	--	32.9

TransModeler® Intersection Report

Site Information

Intersection ID:	*155*	**Site Name:**	*N 29.751104, W 95.323988*
Cross Street:	*Navigation Blvd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:55:58*		

Intersection Geometry



Turn Movement Volumes (Navigation Blvd & Lockwood Dr)

@ Node 155 From \ To	Lockwood Dr (NEB)	Navigation Blvd (WB)	Lockwood Dr (SWB)	Navigation Blvd (EB)
Navigation Blvd (EB)				
Lockwood Dr (NEB)				
Navigation Blvd (WB)				
Lockwood Dr (SWB)				

[Flow Field] = Volume

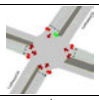
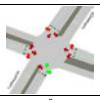
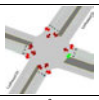
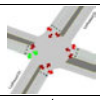
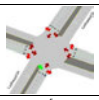
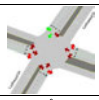
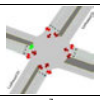
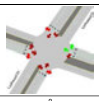
Volume Adjustment and Saturation Flow Rate

Movement	Navigation Blvd (EB)			Lockwood Dr (NEB)			Navigation Blvd (WB)			Lockwood Dr (SWB)			
	Lockwood Dr	Lockwood Dr	Navigation Blvd	Lockwood Dr	Navigation Blvd	Navigation Blvd	Lockwood Dr	Navigation Blvd	Lockwood Dr	Lockwood Dr	Navigation Blvd	Lockwood Dr	Navigation Blvd
	EBL	EBR	EBT	NEBT	NEBL	NEBR	WBR	WBT	WBL	SWBU	SWBR	SWBT	SWBL

Signal Timing Plan - 1

Time of Day: 16:30:00 - 16:30:00
Plan Description: 16:30:00
Controller Type: Traffic Actuated
Cycle Length: 100.0 sec
Control Delay: 31.5 sec
Level of Service: C
Offset: 71.0 sec
Coordinate Begin of: Red
Yield Point: Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	8.0	6.0	8.0	6.0	6.0	6.0	8.0
Max Green	13.0	35.0	10.8	16.8	13.0	35.0	10.8	16.8
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.4	2.4	2.6	2.6	2.4	2.4	2.6	2.6
Lost Time	6.0	6.0	6.2	6.2	6.0	6.0	6.2	6.2
Recall Mode	None	Max	Min	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	12.0	21.0	11.8	20.0	12.0	21.0	11.8	20.0
Coordinated	No	No	No	No	No	Yes	No	No
Split	19.0	41.0	17.0	23.0	19.0	41.0	17.0	23.0
Max Inhibit	True	True	True	False	True	False	True	True
Opt Min Green	12.0	14.0	12.2	14.2	12.0	12.0	12.2	14.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	1	3, 4
Ring - 2	6	5	7, 8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

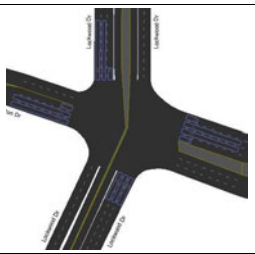
Lane Group	Navigation Blvd (EB)			Lockwood Dr (NEB)			Navigation Blvd (WB)			Lockwood Dr (SWB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1976	1900	1809	1900	1900	1809	3800	1609
Capacity (c), veh/h	109	319	319	111	922	886	221	319	319	111	1773	751
Available Capacity (ca), veh/h	195	319	319	235	692	665	195	319	319	235	1330	563
Volume-to-Capacity Ratio (X)	0.000917	0.000313	0.000345	0.000902	0.000108	0.000124	0.000452	0.000313	0.000345	0.0018	5.64e-05	0.000133
Green Ratio (g/C)	0.06	0.17	0.17	0.06	0.47	0.47	0.12	0.17	0.17	0.06	0.47	0.47
Assigned Phase	7	4	4	5	2	2	3	8	8	1	6	6
Max. Allowable Headway (MAH), s/veh	3.26	4.77	4.77	3.23	3.80	3.80	3.26	4.77	4.77	3.23	3.58	3.58
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.2	23.0	23.0	12.1	52.6	52.6	12.2	23.0	23.0	12.1	52.6	52.6
Uniform Delay (d1), s/veh	44.2	34.6	34.6	44.1	14.2	14.2	38.5	34.6	34.6	44.1	14.2	14.2
Incremental Delay (d2), s/veh	0.0152	0.00177	0.00194	0.0147	0.000212	0.000252	0.00368	0.00177	0.00194	0.0294	5.73e-05	0.000319
Initial Queue Delay (d3), s/veh:	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	44.2	34.6	34.6	44.1	14.2	14.2	38.5	34.6	34.6	44.1	14.2	14.2
Level Of Service	D	C	C	D	B	B	D	C	C	D	B	B
Total Delay, veh-hr	0.00123	0.000862	0.00106	0.00122	0.000395	0.000435	0.00107	0.000962	0.00106	0.00245	0.000395	0.000395
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	6.0	16.8	16.8	6.1	46.6	46.6	12.2	16.8	16.8	6.1	46.6	46.6
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	0	--
Approach Delay, s/veh	--	--	37.7	--	--	23.9	--	--	35.9	--	29.2	--

TransModeler® Intersection Report

Site Information

Intersection ID:	*157*	**Site Name:**	*N 29.763622, W 95.315504*
Cross Street:	*Clinton Dr & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:16*		

Intersection Geometry



Turn Movement Volumes (Clinton Dr & Lockwood Dr)

(e: Node 157 From \ To	Lockwood Dr (NB)	Clinton Dr (WB)	Lockwood Dr (SB)	Clinton Dr (EB)
Clinton Dr (EB)				
Lockwood Dr (NEB)				
Clinton Dr (WB)				
Lockwood Dr (SB)				

[Flow Field] = Volume

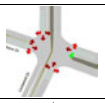
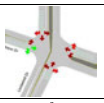
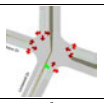
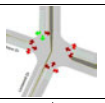
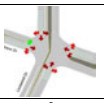
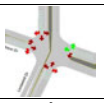
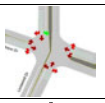
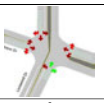
Volume Adjustment and Saturation Flow Rate

Movement	Clinton Dr (EB)			Lockwood Dr (NEB)				Clinton Dr (WB)			Lockwood Dr (SB)			
	Lockwood Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Lockwood Dr	Clinton Dr	Lockwood Dr	Clinton Dr
	EBL	EBR	EBT	NEBT	NEBL	NEBU	NEBR	WBR	WBT	WBL	SBU	SBR	SBT	SBL

Signal Timing Plan - 1

Time of Day:	*00:00:00 - 23:59:59*
Plan Description:	*00:00:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*16.8 sec*
Level of Service:	*B*
Offset:	*3.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*By Phase*

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	5.0	8.0	5.0	15.0	5.0	8.0	5.0	15.0
Max Green	9.2	14.2	7.2	46.2	7.2	16.2	9.2	44.2
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Lost Time	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Recall Mode	None	None	None	Min	None	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Time b/fore Reduction	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Coordinated	No	No	No	Yes	No	No	No	No
Split	15.0	20.0	13.0	52.0	13.0	22.0	15.0	50.0
Max Inhibit	False	False	False	False	False	False	False	False
Opt Min Green	10.8	13.8	10.8	20.8	10.8	13.8	10.8	20.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	1, 2	3, 4
Ring - 2	5, 6	8, 7

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

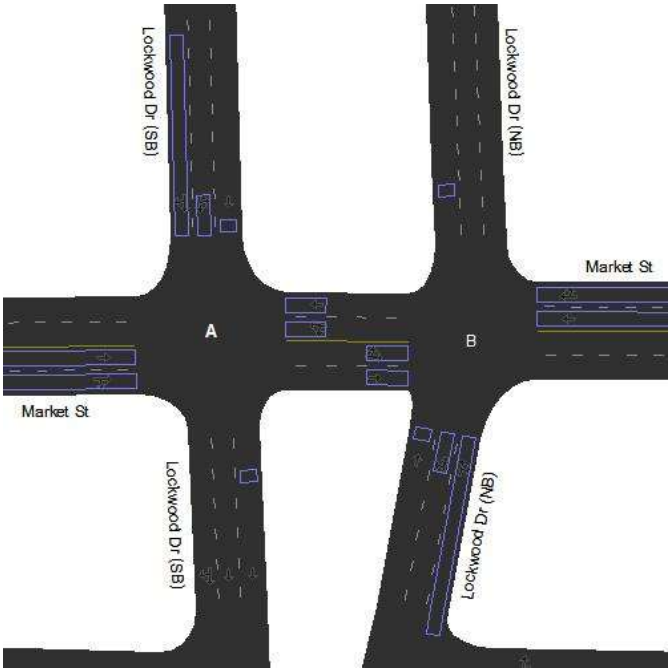
Lane Group	Clinton Dr (EB)			Lockwood Dr (NEB)			Clinton Dr (WB)			Lockwood Dr (SB)		
	L	T	T+R	L	T	T+R	L	T	R	L	T	T+R
Assigned Phase	5	2	2	3	8	8	1	6	6	7	4	4
Phase Duration (Dp), s	5.8	5.8	5.8	5.8	20.8	20.8	5.8	5.8	5.8	5.8	20.8	20.8
Change Period (Y+Rc), s	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Max. Allowable Headway (MAH), s/veh	3.76	5.00	5.00	4.24	4.74	4.74	3.73	5.00	5.00	3.73	4.74	4.74
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.00	0.01	0.01	0.00	1.00	1.00	0.00	0.01	0.01	0.00	1.00	1.00
Max Out Probability (px)	0.38	0.00	0.00	0.43	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3800	1610	1810	1900	1610
Capacity (c), veh/h	5	5	4	5	745	631	5	10	4	5	745	631
Volume-to-Capacity Ratio (X)	0.0211	0.0201	0.0236	0.0211	0.000134	0.000158	0.0211	0.0101	0.0236	0.0211	0.000134	0.000158
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g/C)	0.00	0.00	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.00	0.15	0.15
Uniform Delay (d1), s/veh	19.1	19.1	19.1	19.1	7.07	7.11	19.1	19.1	19.1	19.1	7.07	7.11
Incremental Delay (d2), s/veh	1.77	1.6	2.24	1.77	6.71e-05	9.39e-05	1.77	0.398	2.24	1.77	6.71e-05	9.39e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Control Delay (d), s/veh	20.8	20.7	21.3	20.8	7.07	7.11	20.8	19.5	21.3	20.8	7.07	7.11
Level Of Service	C	C	C	C	A	A	C	B	C	C	A	A

TransModeler® Intersection Report

Site Information

Intersection ID:	*158,159*	**Site Name:**	*N 29.772662, W 95.315542*
Cross Street:	*Lockwood Dr (SB) & Market St, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:36*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr (SB) & Market St)

@ Node 158 From \ To	Market St (EB)	Market St (WB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)			
Market St (EB)			
Market St (WB)			

Turn Movement Volumes (Market St & Lockwood Dr (NB))

@ Node 159 From \ To	Lockwood Dr (NB) (NB)	Market St (WB)	Market St (EB)
Market St (WB)			
Market St (EB)			
Lockwood Dr (NB) (NB)			

[Flow Field] = Volume

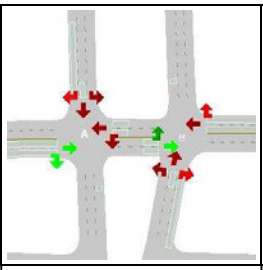
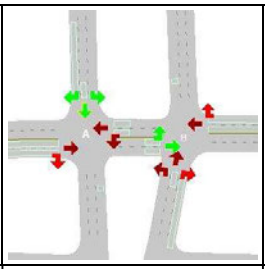
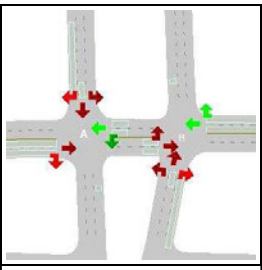
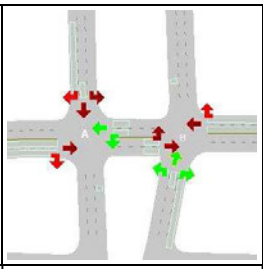
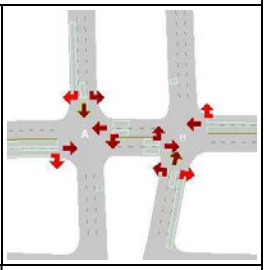
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SB) (SB)			Market St (EB)		Market St (WB)		Market St (WB)		Market St (EB)		Lockwood Dr (NB) (NB)		
	Market St	Market St	Lockwood Dr (SB)	Market St	Lockwood Dr (SB)	Market St	Lockwood Dr (SB)	Lockwood Dr (NB)	Market St	Lockwood Dr (NB)	Market St	Lockwood Dr (NB)	Market St	Market St
	SBL	SBR	SBT	EBT	EBR	WBT	WBL	WBR	WBT	EBL	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *26.7 sec*
Level of Service: *C*
Offset: *4.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	5.0	5.0	5.0	5.0	0.0
Max Green	15.9	22.9	15.9	32.9	8.0
Yellow	3.6	3.6	3.6	3.6	3.0
Red Clearance	2.5	2.5	2.5	2.5	2.0
Lost Time	6.1	6.1	6.1	6.1	5.0
Recall Mode	None	Max	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	1.0	1.0	1.0	1.0	1.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.2	0.2	0.2	0.0
Ped Walk + FDW	12.0	4.0	4.0	4.0	4.0
Coordinated	No	Yes	No	No	No
Split	22.0	29.0	22.0	39.0	13.0
Max Inhibit	False	False	False	True	True
Opt Min Green	11.1	11.1	11.1	11.1	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 8	9
Ring - 2	6		

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SB) (SB)			Market St (EB)		Market St (WB)		Market St (WB)		Market St (EB)		Lockwood Dr (NB) (NB)		
	L+T	T	T+R	T	T+R	L+T	T	T	T+R	L+T	T	L+T	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation	1900	1976	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1976	1900

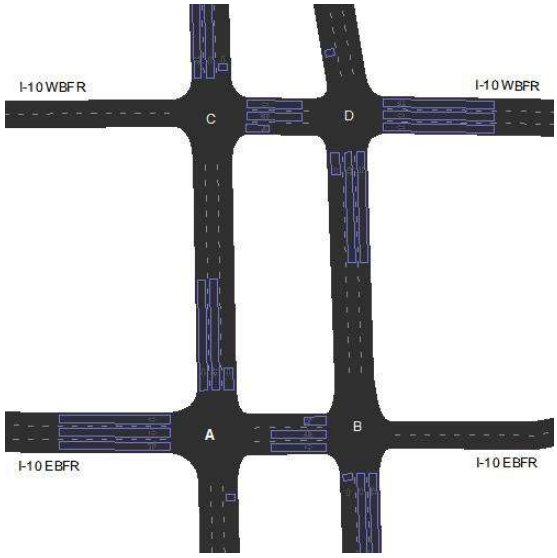
Flow, veh/h														
Capacity (c), veh/h	750	780	750	113	113	734	720	113	113	730	716	754	785	754
Available Capacity (ca), veh/h	422	439	422	293	293	1113	607	293	293	967	422	607	631	607
Volume-to-Capacity Ratio (X)	0.000147	0.000128	0.000147	0.000884	0.000972	0.00015	0.000139	0.000884	0.000972	0.000151	0.00014	0.000146	0.000127	0.000146
Green Ratio (g/C)	0.39	0.39	0.39	0.06	0.06	0.38	0.38	0.06	0.06	0.38	0.38	0.40	0.40	0.40
Assigned Phase	4+9	4+9	4+9	2	2	8+6	8+6	6	6	4+2	4+2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	2.22	2.22	2.22	2.55	2.55	2.07	2.07	2.55	2.55	2.22	2.22	2.07	2.07	2.07
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	0.51	0.51	1.00	1.00	0.51	0.51	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	38.8	38.8	38.8	12.2	12.2	39.0	39.0	12.2	12.2	38.8	38.8	39.0	39.0	39.0
Uniform Delay (d1), s/veh	18.9	18.9	18.9	45.6	45.6	19.9	19.9	45.6	45.6	20	20	18.7	18.7	18.7
Incremental Delay (d2), s/veh	0.000352	0.000296	0.000352	0.0141	0.0155	0.000367	0.000347	0.0141	0.0155	0.000371	0.000351	0.000348	0.000292	0.000348
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	18.9	18.9	18.9	45.6	45.6	19.9	19.9	45.6	45.6	20	20	18.7	18.7	18.7
Level Of Service	B	B	B	D	D	B	B	D	D	C	C	B	B	B
Total Delay, veh-hr	0.000576	0.000524	0.000576	0.00127	0.00139	0.000608	0.000552	0.00127	0.00139	0.000612	0.000556	0.000572	0.00052	0.000572
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	40.7	40.7	40.7	6.1	6.1	39.0	39.0	6.1	6.1	38.8	38.8	40.9	40.9	40.9
Approach Volume,	--	--	0	--	0	--	0	--	0	--	0	--	--	0

veh/h														
Approach Delay, s/veh	--	--	*18.9*	--	*45.6*	--	*19.9*	--	*45.6*	--	*20.0*	--	--	*18.7*

TransModeler® Intersection Report

Site Information			
Intersection ID:	*160,161,162,163*	**Site Name:**	*N 29.773864, W 95.315598*
Cross Street:	*Lockwood Dr (SB) & I-10 EBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:43*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr (SB) & I-10 EBFR)

@ Node 160 From \ To	I-10 EBFR (EB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)		
I-10 EBFR (EB)		

Turn Movement Volumes (I-10 EBFR & Lockwood Dr (NB))

@ Node 161 From \ To	Lockwood Dr (NB) (NB)	I-10 EBFR (EB)
I-10 EBFR (EB)		
Lockwood Dr (NB) (NB)		

Turn Movement Volumes (Lockwood Dr (SB) & I-10 WBFR)

@ Node 162 From \ To	I-10 WBFR (WB)	Lockwood Dr (SB) (SB)
Lockwood Dr (SB) (SB)		
I-10 WBFR (WB)		

Turn Movement Volumes (I-10 WBFR & Lockwood Dr (NB))

@ Node 163 From \ To	Lockwood Dr (NB) (NB)	I-10 WBFR (WB)
I-10 WBFR (WB)		
Lockwood Dr (NB) (NB)		

[Flow Field] = Volume

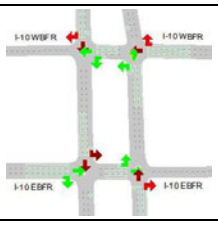
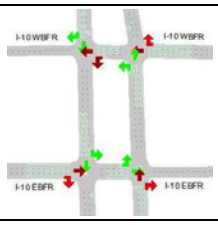
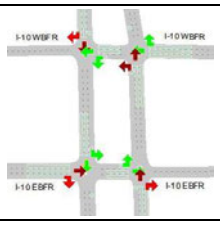
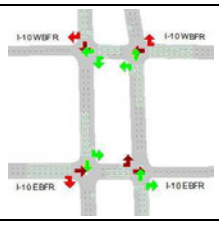
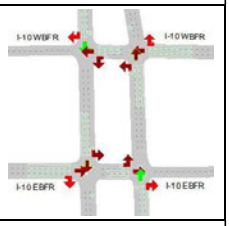
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SB) (SB)		I-10 EBFR (EB)		I-10 EBFR (EB)		Lockwood Dr (NB) (NB)		Lockwood Dr (SB) (SB)		I-10 WBFR (WB)		I-10 WBFR (WB)		Lockwood Dr (NB) (NB)	
	I-10 EBFR	Lockwood Dr (SB)	I-10 EBFR	Lockwood Dr (SB)	Lockwood Dr (NB)	I-10 EBFR	Lockwood Dr (NB)	I-10 EBFR	I-10 WBFR	Lockwood Dr (SB)	I-10 WBFR	Lockwood Dr (SB)	Lockwood Dr (NB)	I-10 WBFR	Lockwood Dr (NB)	I-10 WBFR
	SBL	SBT	EBT	EBR	EBL	EBT	NBT	NBR	SBR	SBT	WBT	WBL	WBR	WBT	NBT	NBL

Signal Timing Plan - 1

Time of Day: *00:00:00 - 23:59:59*
Plan Description: *00:00:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *23.3 sec*
Level of Service: *C*
Offset: *53.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	8.0	8.0	8.0	8.0	0.0
Max Green	17.0	15.0	15.0	23.0	8.0
Yellow	3.0	3.0	3.0	3.0	3.0
Red Clearance	2.0	2.0	2.0	2.0	2.0
Lost Time	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	Max	None	None	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	13.0	17.0	17.0	17.0	15.0
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	15.0	15.0	15.0	15.0	15.0
Coordinated	No	Yes	No	No	No
Split	22.0	20.0	20.0	28.0	13.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.0	13.0	13.0	13.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 6	4, 8	9
Ring - 2			

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SB) (SB)		I-10 EBFR (EB)		I-10 EBFR (EB)			Lockwood Dr (NB) (NB)		Lockwood Dr (SB) (SB)		I-10 WBFR (WB)			I-10 WBFR (WB)		Lockwood Dr (NB) (NB)	
	L+T	T	T	T+R	L	L+T	T	T	T+R	T	T+R	L	L+T	T	T	T+R	L+T	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	3800	3800	1900	1809	1900	1900	3800	1900	3800	1900	1809	1900	1900	3800	1900	1900	3800
Capacity (c), veh/h	1296	2592	286	143	1095	1150	1150	578	289	2025	1012	406	426	426	284	142	1297	2594
Available Capacity (ca), veh/h	277	553	627	314	299	314	314	849	424	553	277	299	314	314	553	277	314	627
Volume-to-Capacity Ratio (X)	8.49e-05	3.86e-05	0.00035	0.00077	5.9e-05	5.89e-05	5.89e-05	0.000173	0.00038	4.94e-05	0.000109	0.000159	0.000159	0.000159	0.000352	0.000775	8.48e-05	3.86e-05
Green Ratio (g/C)	0.68	0.68	0.08	0.08	0.61	0.61	0.61	0.15	0.15	0.53	0.53	0.22	0.22	0.22	0.07	0.07	0.68	0.68
Assigned Phase	6+9+4+8	6+9+4+8	2	2	2+6+4	2+6+4	2+6+4	8+9	8+9	4+9	4+9	2+6+8	2+6+8	2+6+8	6	6	2+9+4+8	2+9+4+8
Max. Allowable Headway	5.91	5.91	5.82	5.82	5.82	5.82	5.82	5.77	5.77	5.77	5.77	5.82	5.82	5.82	5.91	5.91	5.82	5.82

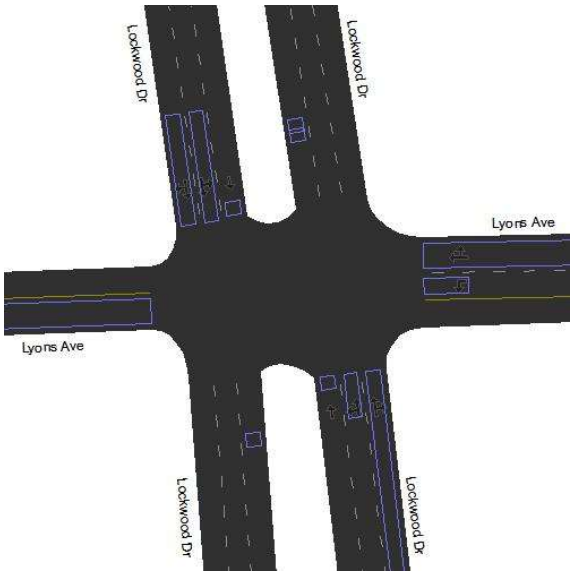
(MAH), s/veh																		
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.51	0.51	1.00	1.00	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	51.9	51.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
Uniform Delay (d1), s/veh	5.2	5.2	44.1	44.1	8.03	8.03	8.03	37	37	11.2	11.2	31	31	31	44.1	44.1	5.19	5.19
Incremental Delay (d2), s/veh	0.000118	2.68e-05	0.00221	0.00972	9.7e-05	9.22e-05	9.22e-05	0.000538	0.00237	4.39e-05	0.000193	0.000705	0.000671	0.00067	0.00223	0.00983	0.000118	2.68e-05
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	5.2	5.2	44.1	44.1	8.03	8.03	8.03	37	37	11.2	11.2	31	31	31	44.1	44.1	5.19	5.19
Level Of Service	A	A	D	D	A	A	A	D	D	B	B	C	C	C	D	D	A	A
Total Delay, veh-hr	0.000159	0.000145	0.00122	0.00135	0.000144	0.000151	0.000151	0.00103	0.00113	0.000312	0.000343	0.000555	0.000583	0.000583	0.00122	0.00135	0.000159	0.000144
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	70.3	70.3	7.7	7.7	62.3	62.3	62.3	15.7	15.7	54.9	54.9	23.1	23.1	23.1	7.7	7.7	70.3	70.3
Approach Volume, veh/h	--	0	--	0	--	--	0	--	0	--	0	--	--	0	--	0	--	0
Approach Delay, s/veh	--	5.2	--	44.1	--	--	8.0	--	37.0	--	11.2	--	--	31.0	--	44.1	--	5.2

TransModeler® Intersection Report

Site Information

Intersection ID:	*165*	**Site Name:**	*N 29.776444, W 95.315584*
Cross Street:	*Lyons Ave & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:56:57*		

Intersection Geometry



Turn Movement Volumes (Lyons Ave & Lockwood Dr)

@ Node 165 From \ To	Lockwood Dr (NB)	Lyons Ave (WB)	Lockwood Dr (SB)	Lyons Ave (EB)
Lyons Ave (WB)			*100.0*	
Lockwood Dr (SB)				
Lyons Ave (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

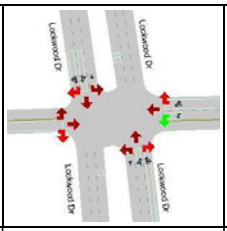
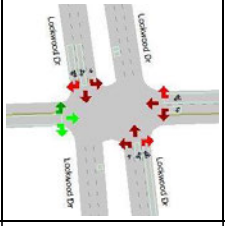
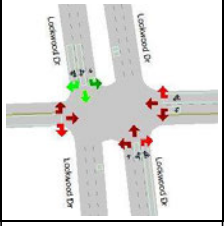
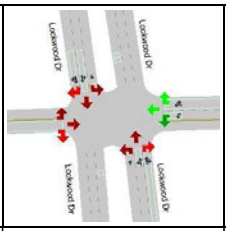
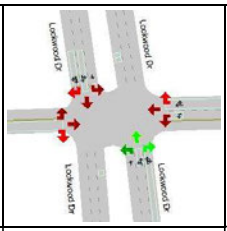
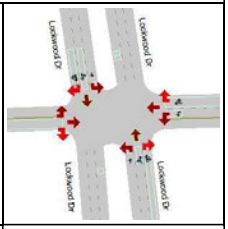
Volume Adjustment and Saturation Flow Rate

Movement	Lyons Ave (WB)			Lockwood Dr (SB)			Lyons Ave (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lockwood Dr	Lockwood Dr	Lyons Ave	Lockwood Dr	Lyons Ave	Lyons Ave
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *103.0 sec*
Control Delay: *32.6 sec*
Level of Service: *C*
Offset: *2.0 sec*
Coordinate Begin of: *Red*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	1	2	4	6	8	9
Min Green	5.0	5.0	10.0	5.0	10.0	0.0
Max Green	8.9	23.9	39.7	38.9	39.7	7.7
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.5	2.5	1.7	2.5	1.7	1.7
Lost Time	6.1	6.1	5.3	6.1	5.3	5.3
Recall Mode	None	Max	Max	Max	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	4.0	0.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	28.9	28.9	28.9	28.9	28.9	9.7
Time before Reduction	7.0	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	18.0	18.0	19.0	18.0	19.0	19.0
Coordinated	No	No	Yes	No	No	No
Split	15.0	30.0	45.0	45.0	45.0	13.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	11.1	11.1	15.3	11.1	15.3	5.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4	9
Ring - 2	6	8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lyons Ave (WB)		Lockwood Dr (SB)			Lyons Ave (EB)	Lockwood Dr (NB)		
	L	T+R	L+T	T	T+R	LTR	L+T	T	T+R
Adjusted Flow, veh/h	100	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1912	1900	1900	1900	1976	1900	1900	1900
Capacity (c), veh/h	560	722	635	874	874	459	635	874	874
Available Capacity (ca), veh/h	560	722	635	732	732	459	635	732	732
Volume-to-Capacity Ratio (X)	0.178	0.000277	0.000162	0.000107	0.000118	0.000654	0.000162	0.000107	0.000118
Green Ratio (g/C)	0.32	0.38	0.46	0.46	0.46	0.23	0.46	0.46	0.46
Assigned Phase	1+6	6	4+9	4+9	4+9	2	8+9	8+9	8+9
Max. Allowable Headway (MAH), s/veh	4.76	6.27	4.29	4.29	4.29	6.18	4.36	4.36	4.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	23.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability (px)	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	15.0	45.0	45.0	45.0	45.0	30.0	45.0	45.0	45.0

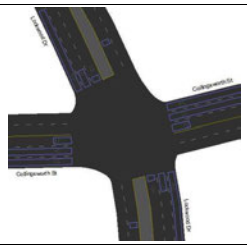
Uniform Delay (d1), s/veh	32.1	19.9	15	15	15	30.4	15	15	15
Incremental Delay (d2), s/veh	0.697	0.00069	0.00046	0.000221	0.000243	0.00257	0.00046	0.000221	0.000243
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	32.8	19.9	15	15	15	30.4	15	15	15
Level Of Service	C	B	B	B	B	C	B	B	B
Total Delay, veh-hr	0.91	0.00111	0.000429	0.000392	0.00043	0.00253	0.000429	0.000392	0.00043
Fully Stopped (Nf), veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	32.8	38.9	47.4	47.4	47.4	23.9	47.4	47.4	47.4
Approach Volume, veh/h	--	100	--	--	0	0	--	--	0
Approach Delay, s/veh	--	32.7	--	--	15.0	30.4	--	--	15.0

TransModeler® Intersection Report

Site Information

Intersection ID:	*167*	**Site Name:**	*N 29.793711, W 95.316236*
Cross Street:	*Collingsworth St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:25*		

Intersection Geometry



Turn Movement Volumes (Collingsworth St & Lockwood Dr)

@ Node 167 From \ To	Lockwood Dr (NWB)	Collingsworth St (WB)	Lockwood Dr (SB)	Collingsworth St (EB)
Collingsworth St (WB)	*33.0*			
Lockwood Dr (SEB)		*5.0*		*30.0*
Collingsworth St (EB)	*73.0*			
Lockwood Dr (NB)				

[Flow Field] = Volume

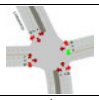
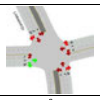
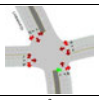
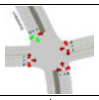
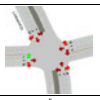
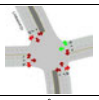
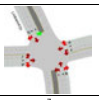
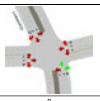
Volume Adjustment and Saturation Flow Rate

Movement	Collingsworth St (WB)				Lockwood Dr (SEB)				Collingsworth St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St	Lockwood Dr	Collingsworth St
	WBR	WBT	WBL	WBU	SEBU	SEBR	SEBT	SEBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	*16:30:00 - 16:30:00*
Plan Description:	*16:30:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*90.0 sec*
Control Delay:	*46.0 sec*
Level of Service:	*D*
Offset:	*27.0 sec*
Coordinate Begin of:	*Yellow*
Yield Point:	*Single*

Phasing

Item Name \ Signal States								
ID	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Min Green	*4.0*	*6.0*	*4.0*	*8.0*	*4.0*	*6.0*	*4.0*	*8.0*
Max Green	*8.4*	*18.4*	*17.4*	*23.4*	*8.4*	*18.4*	*17.4*	*23.4*
Yellow	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*	*3.6*
Red Clearance	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*	*2.0*
Lost Time	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*	*5.6*
Recall Mode	*None*	*None*	*None*	*Max*	*None*	*None*	*None*	*Max*
Memory Mode	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*	*Look*
Passage/Extension	*3.0*	*2.5*	*3.0*	*2.5*	*3.0*	*2.5*	*3.0*	*2.5*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*6.0*	*8.0*	*6.0*	*8.0*	*6.0*	*8.0*	*6.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*9.4*	*19.0*	*9.4*	*23.0*	*9.4*	*19.0*	*9.4*	*23.0*
Coordinated	*No*	*No*	*No*	*No*	*No*	*No*	*No*	*Yes*
Split	*14.0*	*24.0*	*23.0*	*29.0*	*14.0*	*24.0*	*23.0*	*29.0*
Max Inhibit	*True*	*True*	*True*	*True*	*True*	*True*	*True*	*False*
Opt Min Green	*9.6*	*11.6*	*9.6*	*13.6*	*9.6*	*11.6*	*9.6*	*13.6*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	*1, 2*	*4, 3*	
Ring - 2	*5, 6*	*8, 7*	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

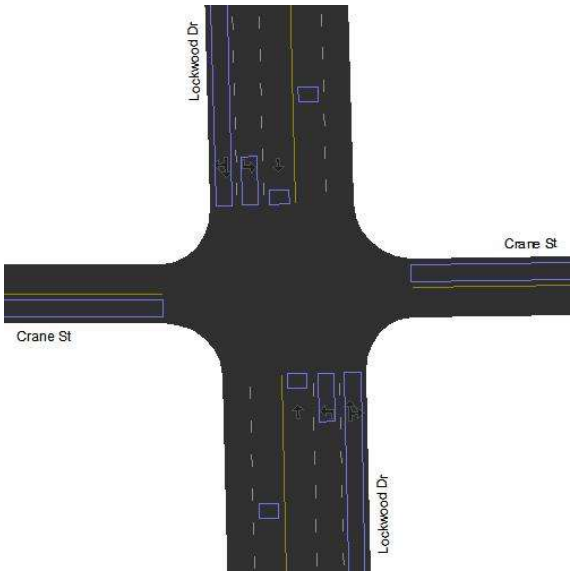
Lane Group	Collingsworth St (WB)			Lockwood Dr (SEB)			Collingsworth St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	*0*	*0*	*33*	*30*	*0*	*5*	*73*	*0*	*0*	*0*	*0*	*0*
Adjusted Saturation Flow, veh/h	*1809*	*1900*	*1877*	*1809*	*1976*	*1876*	*1809*	*1900*	*1853*	*1809*	*1976*	*1900*
Capacity (c), veh/h	*97*	*240*	*237*	*117*	*514*	*488*	*142*	*287*	*280*	*518*	*952*	*915*
Available Capacity (ca), veh/h	*169*	*388*	*384*	*350*	*514*	*488*	*169*	*388*	*379*	*350*	*514*	*494*
Volume-to-Capacity Ratio (X)	*0.00207*	*0.000418*	*0.139*	*0.257*	*0.000195*	*0.0103*	*0.514*	*0.000348*	*0.000393*	*0.000386*	*0.000105*	*0.00012*
Green Ratio (g/C)	*0.05*	*0.13*	*0.13*	*0.06*	*0.26*	*0.26*	*0.08*	*0.15*	*0.15*	*0.29*	*0.48*	*0.48*
Assigned Phase	*1*	*6*	*6*	*7*	*4*	*4*	*5*	*2*	*2*	*3*	*8*	*8*
Max. Allowable Headway (MAH), s/veh	*3.84*	*5.21*	*5.21*	*3.73*	*4.79*	*4.79*	*3.76*	*4.76*	*4.76*	*3.73*	*3.80*	*3.80*
Queue Service Time (gs), s	*0.0*	*0.0*	*1.4*	*1.4*	*0.0*	*0.2*	*3.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Call Probability (pc)	*0.51*	*0.79*	*0.79*	*0.77*	*1.00*	*1.00*	*0.92*	*0.51*	*0.51*	*0.51*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*1.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.1*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*10.4*	*16.9*	*16.9*	*11.4*	*29.0*	*29.0*	*12.7*	*19.2*	*19.2*	*31.4*	*49.0*	*49.0*
Uniform Delay (d1), s/veh	*40.3*	*34.4*	*35*	*40*	*24.6*	*24.7*	*39.8*	*32.4*	*32.4*	*22.9*	*12.1*	*12.1*
Incremental Delay (d2), s/veh	*0.0387*	*0.00314*	*1.23*	*5.23*	*0.000682*	*0.0383*	*12.1*	*0.00218*	*0.00252*	*0.00134*	*0.000199*	*0.000236*
Initial Queue Delay (d3), s/veh:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*40.4*	*34.4*	*36.2*	*45.3*	*24.6*	*24.7*	*52.5*	*32.4*	*32.4*	*22.9*	*12.1*	*12.1*
Level Of Service	*D*	*C*	*D*	*D*	*C*	*C*	*D*	*C*	*C*	*C*	*B*	*B*
Total Delay, veh-hr	*0.00224*	*0.000905*	*0.332*	*0.378*	*0.000685*	*0.0344*	*1.06*	*0.000901*	*0.000991*	*0.00127*	*0.000336*	*0.000369*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.7*	*0.6*	*0.0*	*0.1*	*1.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.7*	*0.8*	*0.0*	*0.1*	*2.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*4.8*	*11.3*	*11.3*	*5.8*	*23.4*	*23.4*	*7.1*	*13.6*	*13.6*	*25.8*	*43.4*	*43.4*
Approach Volume, veh/h	*--*	*--*	*33*	*--*	*--*	*35*	*--*	*--*	*73*	*--*	*--*	*0*
Approach Delay, s/veh	*--*	*--*	*36.2*	*--*	*--*	*42.3*	*--*	*--*	*52.5*	*--*	*--*	*17.4*

TransModeler® Intersection Report

Site Information

Intersection ID:	*168*	**Site Name:**	*N 29.797007, W 95.316914*
Cross Street:	*Crane St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:32*		

Intersection Geometry



Turn Movement Volumes (Crane St & Lockwood Dr)

@ Node 168 From \ To	Lockwood Dr (NB)	Crane St (WB)	Lockwood Dr (SB)	Crane St (EB)
Crane St (WB)	*22.0*		*30.0*	
Lockwood Dr (SB)		*45.0*		*21.0*
Crane St (EB)	*31.0*		*29.0*	
Lockwood Dr (NB)		*21.0*		*33.0*

[Flow Field] = Volume

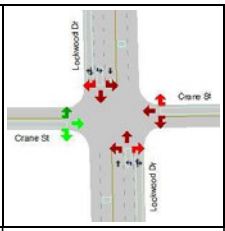
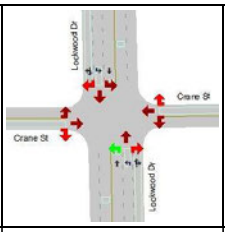
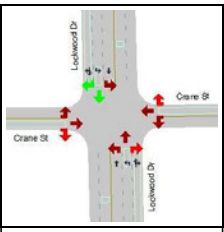
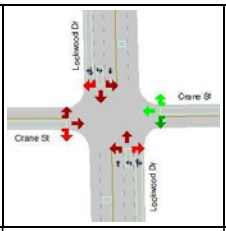
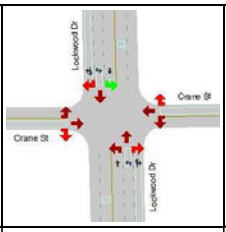
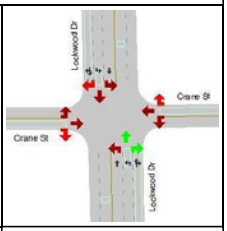
Volume Adjustment and Saturation Flow Rate

Movement	Crane St (WB)			Lockwood Dr (SB)				Crane St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Crane St	Lockwood Dr	Lockwood Dr	Crane St	Lockwood Dr	Crane St	Lockwood Dr	Lockwood Dr	Crane St	Lockwood Dr	Crane St	Lockwood Dr	Crane St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *28.7 sec*
Level of Service: *C*
Offset: *77.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	8.0	6.0	6.0	8.0	6.0	6.0
Max Green	20.0	13.2	42.2	20.0	13.2	42.2
Yellow	3.2	3.6	3.6	3.2	3.6	3.6
Red Clearance	1.8	1.2	1.2	1.8	1.2	1.2
Lost Time	5.0	4.8	4.8	5.0	4.8	4.8
Recall Mode	None	None	Min	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	3.0	3.0	2.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	10.0	8.0	8.0	10.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	10.2	14.0	19.0	10.2	14.0
Coordinated	No	No	Yes	No	No	No
Split	25.0	18.0	47.0	25.0	18.0	47.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	13.0	10.8	10.8	13.0	10.8	10.8

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Crane St (WB)	Lockwood Dr (SB)			Crane St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	52	21	0	45	60	21	0	33
Adjusted Saturation Flow, veh/h	1898	1809	1976	1856	1948	1809	1976	1864
Capacity (c), veh/h	269	1083	1235	1160	276	129	193	182
Available Capacity (ca), veh/h	422	265	927	870	433	265	927	874
Volume-to-Capacity Ratio (X)	0.194	0.0195	8.1e-05	0.0388	0.218	0.164	0.000518	0.181
Green Ratio (g/C)	0.14	0.60	0.63	0.63	0.14	0.07	0.10	0.10
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.47	2.73	5.33	5.33	5.33	2.73	5.33	5.33
Queue Service Time (gs), s	2.2	0.4	0.0	0.8	2.5	1.0	0.0	1.5
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.87	0.71	1.00	1.00	0.89	0.71	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.2	0.0	0.2	0.2	0.2	0.0	0.1	0.1
Phase Duration (Dp), s	17.7	58.7	61.1	61.1	17.7	11.2	13.6	13.6

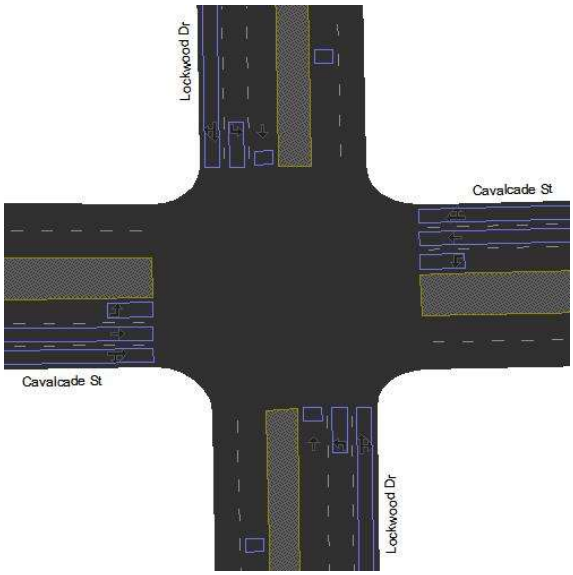
Uniform Delay (d1), s/veh	34.1	7.34	6.33	6.48	34.2	39.3	36.6	37.3
Incremental Delay (d2), s/veh	1.61	0.033	0.000118	0.0626	1.81	2.72	0.00483	2.18
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	35.7	7.37	6.33	6.55	36	42	36.6	39.5
Level Of Service	D	A	A	A	D	D	D	D
Total Delay, veh-hr	0.517	0.0432	0.000176	0.0818	0.602	0.246	0.00102	0.362
Fully Stopped (Nf), veh/ln	1.0	0.2	0.0	0.3	1.2	0.4	0.0	0.7
Percentile Back of Queue (Q%), veh/ln	1.2	0.2	0.0	0.3	1.3	0.5	0.0	0.8
Effective Green Time, s	12.7	53.9	56.3	56.3	12.7	6.4	8.8	8.8
Approach Volume, veh/h	52	--	--	66	60	--	--	54
Approach Delay, s/veh	35.7	--	--	6.8	36.0	--	--	40.4

TransModeler® Intersection Report

Site Information

Intersection ID:	*169*	**Site Name:**	*N 29.800383, W 95.316967*
Cross Street:	*Cavalcade St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:38*		

Intersection Geometry



Turn Movement Volumes (Cavalcade St & Lockwood Dr)

@ Node 169 From \ To	Lockwood Dr (NB)	Cavalcade St (WB)	Lockwood Dr (SB)	Cavalcade St (EB)
Cavalcade St (WB)			*80.0*	
Lockwood Dr (SB)				
Cavalcade St (EB)				
Lockwood Dr (NB)				*73.0*

[Flow Field] = Volume

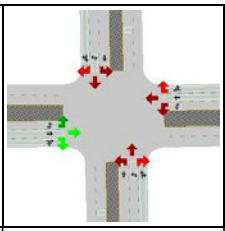
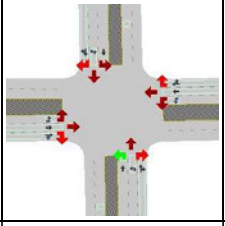
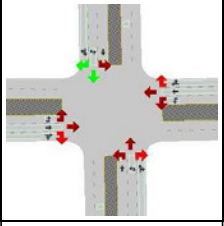
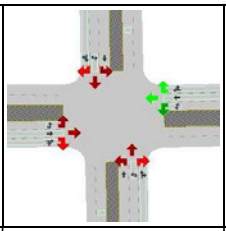
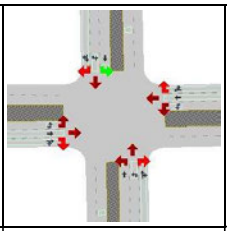
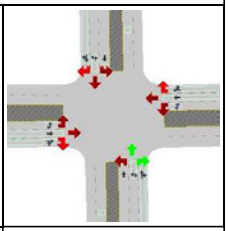
Volume Adjustment and Saturation Flow Rate

Movement	Cavalcade St (WB)				Lockwood Dr (SB)				Cavalcade St (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St	Lockwood Dr	Cavalcade St
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *20.5 sec*
Level of Service: *C*
Offset: *95.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	10.0	7.0	12.0	10.0	7.0	12.0
Max Green	24.1	17.1	31.1	24.1	17.1	31.1
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	2.3	2.3	2.3	2.3	2.3	2.3
Lost Time	5.9	5.9	5.9	5.9	5.9	5.9
Recall Mode	Max	None	Max	Max	Min	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	9.0	9.0	9.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.2	0.0	0.2	0.2	0.0	0.2
Ped Walk + FDW	17.0	14.1	26.0	17.0	14.1	26.0
Coordinated	No	No	No	No	No	Yes
Split	30.0	23.0	37.0	30.0	23.0	37.0
Max Inhibit	True	True	True	True	True	False
Opt Min Green	15.9	12.9	17.9	15.9	12.9	17.9

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Cavalcade St (WB)			Lockwood Dr (SB)			Cavalcade St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	80	0	0	0	0	0	0	0	0	0	0	73
Adjusted Saturation Flow, veh/h	1440	1900	1849	1809	1976	1900	1440	1900	1900	1809	1976	1852
Capacity (c), veh/h	466	509	495	145	683	656	466	509	509	344	900	843
Available Capacity (ca), veh/h	466	509	495	344	683	656	466	509	509	344	683	640
Volume-to-Capacity Ratio (X)	0.172	0.000197	0.000222	0.00138	0.000146	0.000168	0.00043	0.000197	0.000216	0.000582	0.000111	0.0866
Green Ratio (g/C)	0.27	0.27	0.27	0.08	0.35	0.35	0.27	0.27	0.27	0.19	0.46	0.46
Assigned Phase	6	6	6	7	4	4	2	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	3.67	3.67	3.67	3.73	4.30	4.30	4.47	4.47	4.47	3.73	5.33	5.33
Queue Service Time (gs), s	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Queue Permitted Service Time (gps), s	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Phase Duration (Dp), s	30.0	30.0	30.0	13.1	37.0	37.0	30.0	30.0	30.0	23.0	46.9	46.9

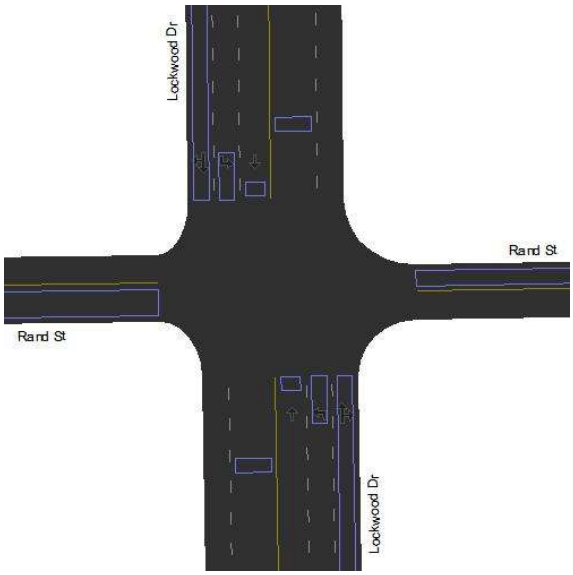
Uniform Delay (d1), s/veh	25.5	24.1	24.1	38.1	19.3	19.3	24.1	24.1	24.1	29.5	13.3	13.9
Incremental Delay (d2), s/veh	0.802	0.000696	0.000808	0.0172	0.000386	0.00046	0.00166	0.000696	0.000765	0.00305	0.000222	0.202
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	26.4	24.1	24.1	38.1	19.3	19.3	24.1	24.1	24.1	29.5	13.3	14.1
Level Of Service	C	C	C	D	B	B	C	C	C	C	B	B
Total Delay, veh-hr	0.586	0.00067	0.000737	0.00212	0.000535	0.000589	0.00134	0.00067	0.000737	0.00164	0.000371	0.286
Fully Stopped (Nf), veh/ln	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Percentile Back of Queue (Q%), veh/ln	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Effective Green Time, s	24.1	24.1	24.1	7.2	31.1	31.1	24.1	24.1	24.1	17.1	41.0	41.0
Approach Volume, veh/h	--	--	80	--	--	0	--	--	0	--	--	73
Approach Delay, s/veh	--	--	26.3	--	--	28.5	--	--	24.1	--	--	14.1

TransModeler® Intersection Report

Site Information

Intersection ID:	*170*	**Site Name:**	*N 29.803959, W 95.317025*
Cross Street:	*Rand St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:44*		

Intersection Geometry



Turn Movement Volumes (Rand St & Lockwood Dr)

@ Node 170 From \ To	Lockwood Dr (NB)	Rand St (WB)	Lockwood Dr (SB)	Rand St (EB)
Rand St (WB)				
Lockwood Dr (SB)				
Rand St (EB)			*26.0*	
Lockwood Dr (NB)		*13.0*		

[Flow Field] = Volume

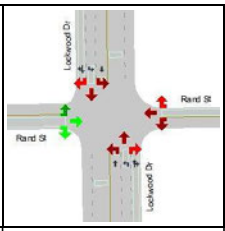
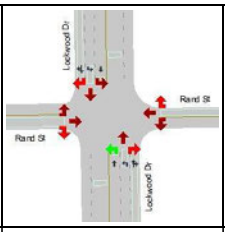
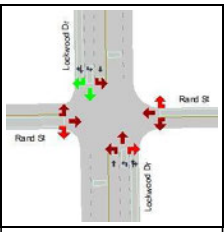
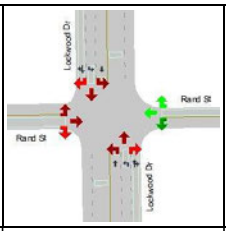
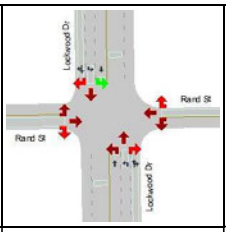
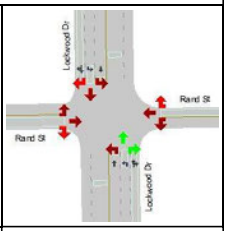
Volume Adjustment and Saturation Flow Rate

Movement	Rand St (WB)			Lockwood Dr (SB)				Rand St (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Rand St	Lockwood Dr	Lockwood Dr	Rand St	Lockwood Dr	Rand St	Lockwood Dr	Lockwood Dr	Rand St	Lockwood Dr	Rand St	Lockwood Dr	Rand St
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *35.4 sec*
Level of Service: *D*
Offset: *0.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	5.0	6.0	6.0	5.0	5.0	6.0
Max Green	19.4	11.7	42.7	19.4	11.4	42.7
Yellow	3.2	3.6	3.6	3.2	3.2	3.6
Red Clearance	2.4	1.7	1.7	2.4	2.4	1.7
Lost Time	5.6	5.3	5.3	5.6	5.6	5.3
Recall Mode	None	Max	Max	None	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.0	2.0	3.0	3.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	7.0	7.0	7.0	7.0	7.0	7.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	19.0	17.0	17.0	19.0	19.0	17.0
Coordinated	No	No	Yes	No	No	No
Split	25.0	17.0	48.0	25.0	17.0	48.0
Max Inhibit	True	False	False	True	True	True
Opt Min Green	10.6	11.3	11.3	10.6	10.6	11.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

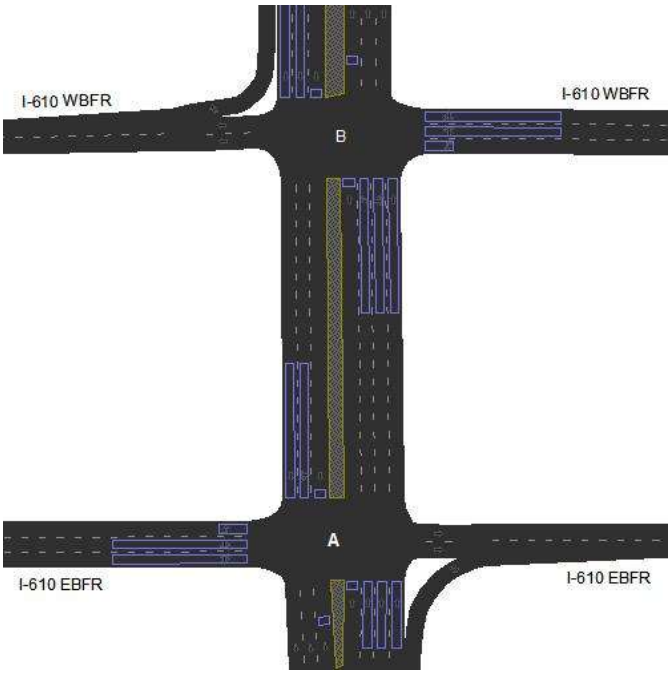
Lane Group	Rand St (WB)	Lockwood Dr (SB)			Rand St (EB)	Lockwood Dr (NB)		
	LTR	L	T	T+R	LTR	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	26	13	0	0
Adjusted Saturation Flow, veh/h	1900	1809	1976	1900	1976	1809	1976	1891
Capacity (c), veh/h	229	401	1125	1081	239	235	938	897
Available Capacity (ca), veh/h	410	229	938	901	426	235	938	897
Volume-to-Capacity Ratio (X)	0.00131	0.000499	8.89e-05	0.000102	0.11	0.0557	0.000107	0.000123
Green Ratio (g/C)	0.12	0.22	0.57	0.57	0.12	0.13	0.47	0.47
Assigned Phase	6	7	4	4	2	3	8	8
Max. Allowable Headway (MAH), s/veh	5.44	3.73	3.30	3.30	5.54	2.73	3.30	3.30
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	1.1	0.6	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	1.00	1.00	0.75	1.00	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Phase Duration (Dp), s	16.5	25.5	56.5	56.5	16.5	17.0	48.0	48.0

Uniform Delay (d1), s/veh	34.8	27.3	8.35	8.35	35.3	34.3	12.4	12.4
Incremental Delay (d2), s/veh	0.0103	0.00224	0.000142	0.000169	0.928	0.451	0.000205	0.000246
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34.8	27.3	8.35	8.35	36.2	34.8	12.4	12.4
Level Of Service	C	C	A	A	D	C	B	B
Total Delay, veh-hr	0.0029	0.00152	0.000232	0.000255	0.263	0.126	0.000345	0.00038
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.5	0.3	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.0
Effective Green Time, s	10.9	19.9	51.2	51.2	10.9	11.7	42.7	42.7
Approach Volume, veh/h	0	--	--	0	26	--	--	13
Approach Delay, s/veh	34.8	--	--	17.6	36.2	--	--	34.4

TransModeler® Intersection Report

Site Information			
Intersection ID:	*171,172*	**Site Name:**	*N 29.808970, W 95.317119*
Cross Street:	*Lockwood Dr & I-610 EBFR, etc.*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:57:58*		

Intersection Geometry



Turn Movement Volumes (Lockwood Dr & I-610 EBFR)			
@ Node 171 From \ To	Lockwood Dr (NB)	Lockwood Dr (SB)	I-610 EBFR (EB)
Lockwood Dr (SB)			
I-610 EBFR (EB)			
Lockwood Dr (NB)			

Turn Movement Volumes (Lockwood Dr & I-610 WBFR)			
@ Node 172 From \ To	Lockwood Dr (NB)	I-610 WBFR (WB)	Lockwood Dr (SB)
Lockwood Dr (NB)			
I-610 WBFR (WB)			
Lockwood Dr (SB)			

[Flow Field] = Volume

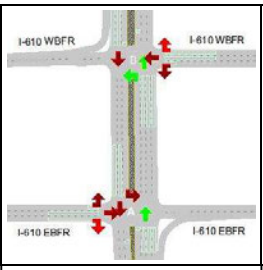
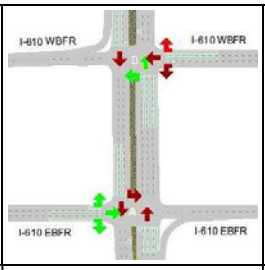
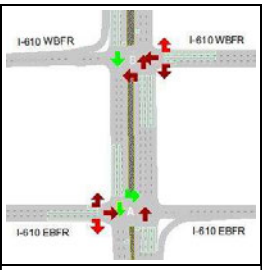
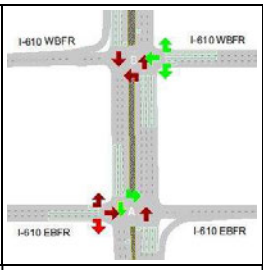
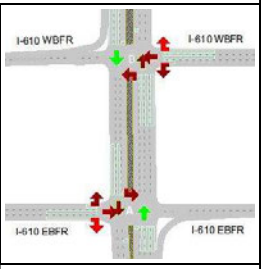
Volume Adjustment and Saturation Flow Rate

Movement	Lockwood Dr (SB)		I-610 EBFR (EB)			Lockwood Dr (NB)	Lockwood Dr (NB)		I-610 WBFR (WB)			Lockwood Dr (SB)
	Lockwood Dr	I-610 EBFR	Lockwood Dr	Lockwood Dr	I-610 EBFR	Lockwood Dr	Lockwood Dr	I-610 WBFR	Lockwood Dr	I-610 WBFR	Lockwood Dr	Lockwood Dr
	SBT	SBL	EBL	EBR	EBT	NBT	NBT	NBL	WBR	WBT	WBL	SBT

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *133.0 sec*
Control Delay: *34.2 sec*
Level of Service: *C*
Offset: *43.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States					
ID	2	4	6	8	9
Min Green	8.0	8.0	8.0	8.0	0.0
Max Green	25.5	30.2	15.5	25.0	8.0
Yellow	3.2	3.2	3.2	5.0	3.0
Red Clearance	2.3	2.6	2.3	2.0	2.0
Lost Time	5.5	5.8	5.5	7.0	5.0
Recall Mode	None	None	None	Max	None
Memory Mode	Lock	Lock	Lock	Lock	Non-Lock
Passage/Extension	4.0	4.0	4.0	4.0	2.5
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	31.5	22.2	14.5	14.5	14.5
Time before Reduction	7.0	7.0	7.0	7.0	7.0
Time to Reduce	0.5	0.5	0.5	0.5	0.5
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	22.0	29.2	13.0	28.0	28.0
Coordinated	No	No	No	Yes	No
Split	31.0	36.0	21.0	32.0	13.0
Max Inhibit	False	False	False	False	False
Opt Min Green	13.5	13.8	13.5	15.0	5.0

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 4	6, 8	9

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Lockwood Dr (SB)		I-610 EBFR (EB)			Lockwood Dr (NB)	Lockwood Dr (NB)			I-610 WBFR (WB)			Lockwood Dr (SB)
	L+T	T	L	L+T	T+R	T	L	L+T	T	L	L+T	T+R	T
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	3800	1809	1900	1900	7600	1809	1900	3800	1809	1900	1900	5700
Capacity (c), veh/h	1114	2229	204	214	214	1099	356	489	977	862	905	905	628

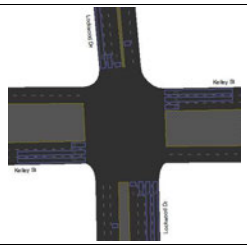
Available Capacity (ca), veh/h	357	714	411	431	431	1457	411	431	863	340	357	357	664
Volume-to-Capacity Ratio (X)	9.87e-05	4.49e-05	0.000469	0.000479	0.000479	9.1e-05	0.000137	0.000105	0.000102	0.000112	0.000112	0.000113	0.000159
Green Ratio (g/C)	0.59	0.59	0.11	0.11	0.11	0.14	0.20	0.26	0.26	0.48	0.48	0.48	0.11
Assigned Phase	8+6+9	8+6+9	4	4	4	2+9	4+2	4+2+9	4+2+9	8	8	8	6+9
Max. Allowable Headway (MAH), s/veh	6.31	6.31	6.28	6.28	6.28	5.40	6.28	6.28	6.28	6.31	6.31	6.31	5.62
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.52	0.52	0.52	0.51	0.52	0.52	0.52	1.00	1.00	1.00	0.51
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	70.4	70.4	20.8	20.8	20.8	16.7	20.8	20.8	20.8	70.4	70.4	70.4	12.1
Uniform Delay (d1), s/veh	11.4	11.4	52.4	52.4	52.4	48.7	42.9	36.7	36.7	18.2	18.2	18.2	52.7
Incremental Delay (d2), s/veh	0.000159	3.62e-05	0.00415	0.00403	0.00403	0.000149	0.000692	0.000387	0.000188	0.000234	0.000222	0.000225	0.000457
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	11.4	11.4	52.4	52.4	52.4	48.7	42.9	36.7	36.7	18.2	18.2	18.2	52.7
Level Of Service	B	B	D	D	D	D	D	D	D	B	B	B	D
Total Delay, veh-hr	0.000347	0.000316	0.00139	0.00149	0.00149	0.00135	0.000581	0.000523	0.00102	0.000488	0.000512	0.000519	0.00146
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	78.0	78.0	15.0	15.0	15.0	19.2	26.2	34.2	34.2	63.4	63.4	63.4	14.6
Approach Volume, veh/h	--	0	--	--	0	0	--	--	0	--	--	0	0
Approach Delay, s/veh	--	11.4	--	--	52.4	48.7	--	--	38.2	--	--	18.2	52.7

TransModeler® Intersection Report

Site Information

Intersection ID:	*173*	**Site Name:**	*N 29.813533, W 95.317185*
Cross Street:	*Kelley St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:5*		

Intersection Geometry



Turn Movement Volumes (Kelley St & Lockwood Dr)

@ Node 173 From \ To	Lockwood Dr (NB)	Kelley St (WB)	Lockwood Dr (SB)	Kelley St (EB)
Kelley St (WB)				
Lockwood Dr (SB)				
Kelley St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

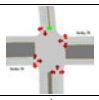
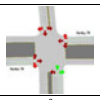
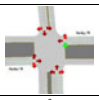
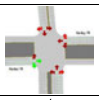
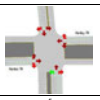
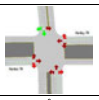
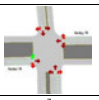
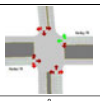
Volume Adjustment and Saturation Flow Rate

Movement	Kelley St (WB)			Lockwood Dr (SB)			Kelley St (EB)			Lockwood Dr (NB)		
	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Lockwood Dr	Lockwood Dr	Kelley St	Lockwood Dr	Kelley St	Kelley St
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	100.0 sec
Control Delay:	30.4 sec
Level of Service:	C
Offset:	14.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	7.0	10.0	7.0	12.0	7.0	10.0	7.0	12.0
Max Green	16.5	22.5	10.4	24.4	16.5	22.5	11.4	23.4
Yellow	3.9	3.9	3.6	3.6	3.9	3.9	3.6	3.6
Red Clearance	2.6	2.6	3.0	3.0	2.6	2.6	3.0	3.0
Lost Time	6.5	6.5	6.6	6.6	6.5	6.5	6.6	6.6
Recall Mode	None	Max	None	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	8.5	16.0	8.4	22.0	10.5	16.0	9.4	22.0
Coordinated	No	No	No	No	No	No	No	Yes
Split	23.0	29.0	17.0	31.0	23.0	29.0	18.0	30.0
Max Inhibit	True	True	True	True	True	True	True	False
Opt Min Green	13.5	16.5	13.6	18.6	13.5	16.5	13.6	18.6

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

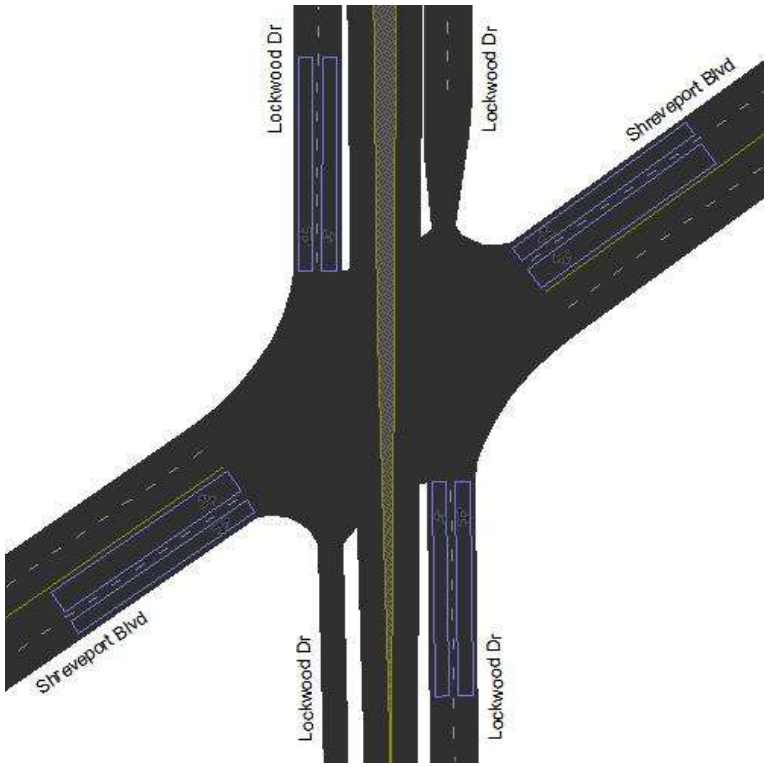
Lane Group	Kelley St (WB)			Lockwood Dr (SB)			Kelley St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1976	1900	1809	1900	1900	1809	3800	1609
Capacity (c), veh/h	383	776	776	98	447	430	97	466	466	98	1107	469
Available Capacity (ca), veh/h	189	447	447	300	447	430	207	466	466	300	859	364
Volume-to-Capacity Ratio (X)	0.000261	0.000129	0.000142	0.00103	0.000224	0.000256	0.00115	0.000215	0.000236	0.00103	9.03e-05	0.000213
Green Ratio (g/C)	0.21	0.41	0.41	0.05	0.23	0.23	0.05	0.25	0.25	0.05	0.29	0.29
Assigned Phase	3	8	8	1	6	6	7	4	4	5	2	2
Max. Allowable Headway (MAH), s/veh	3.76	5.27	5.27	3.76	4.36	4.36	3.76	5.27	5.27	3.76	4.85	4.85
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	27.6	47.2	47.2	11.9	29.0	29.0	11.4	31.0	31.0	11.9	29.0	29.0
Uniform Delay (d1), s/veh	30.9	17.4	17.4	44.5	29.8	29.8	45.1	28.3	28.3	44.5	25	25
Incremental Delay (d2), s/veh	0.00123	0.000299	0.000329	0.0189	0.0009902	0.00107	0.0236	0.000829	0.000913	0.0189	0.000147	0.000819
Initial Queue Delay (d3), s/veh:	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	30.9	17.4	17.4	44.6	29.8	29.8	45.1	28.3	28.3	44.6	25	25
Level Of Service	C	B	B	D	C	C	D	C	C	D	C	C
Total Delay, veh-hr	0.000859	0.000484	0.000532	0.00124	0.000828	0.000911	0.00125	0.000787	0.000866	0.00124	0.000694	0.000694
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	21.0	40.6	40.6	5.4	22.5	22.5	4.8	24.4	24.4	5.4	29.0	29.0
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	0	--
Approach Delay, s/veh	--	--	21.8	--	--	34.6	--	--	33.8	--	31.5	--

TransModeler® Intersection Report

Site Information

Intersection ID:	*174*	**Site Name:**	*N 29.822347, W 95.318556*
Cross Street:	*Shreveport Blvd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:14*		

Intersection Geometry



Turn Movement Volumes (Shreveport Blvd & Lockwood Dr)

@ Node 174 From \ To	Shreveport Blvd (NEB)	Lockwood Dr (NB)	Shreveport Blvd (SWB)	Lockwood Dr (SB)
Shreveport Blvd (SWB)				
Lockwood Dr (SB)				
Shreveport Blvd (NEB)				*20.0*
Lockwood Dr (NB)			*20.0*	

[Flow Field] = Volume

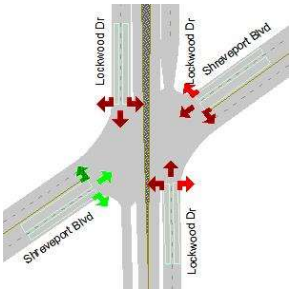
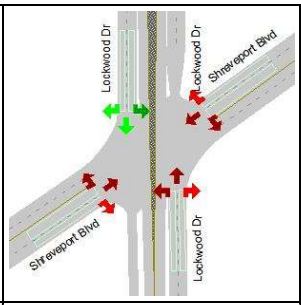
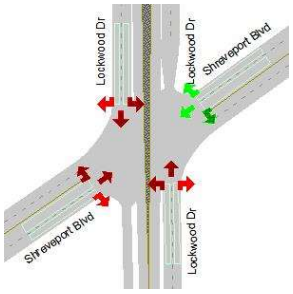
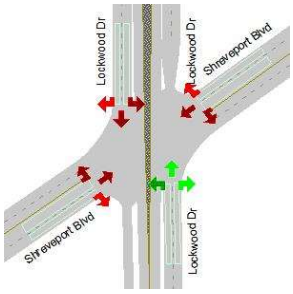
Volume Adjustment and Saturation Flow Rate

Movement	Shreveport Blvd (SWB)			Lockwood Dr (SB)			Shreveport Blvd (NEB)			Lockwood Dr (NB)		
	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Shreveport Blvd	Shreveport Blvd	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Lockwood Dr	Shreveport Blvd	Lockwood Dr	Shreveport Blvd
	SWBR	SWBT	SWBL	SBL	SBR	SBT	NEBT	NEBL	NEBR	NBR	NBT	NBL

Signal Timing Plan - 1

Time of Day:	*16:30:00 - 16:30:00*
Plan Description:	*16:30:00*
Controller Type:	*Traffic Actuated*
Cycle Length:	*100.0 sec*
Control Delay:	*23.0 sec*
Level of Service:	*C*
Offset:	*37.0 sec*
Coordinate Begin of:	*Red*
Yield Point:	*Single*

Phasing

Item Name \ Signal States				
ID	*2*	*4*	*6*	*8*
Min Green	*6.0*	*8.0*	*6.0*	*8.0*
Max Green	*27.6*	*60.2*	*27.6*	*60.2*
Yellow	*3.2*	*3.6*	*3.2*	*3.6*
Red Clearance	*3.2*	*2.2*	*3.2*	*2.2*
Lost Time	*6.4*	*5.8*	*6.4*	*5.8*
Recall Mode	*None*	*Max*	*None*	*Max*
Memory Mode	*Lock*	*Lock*	*Lock*	*Lock*
Passage/Extension	*3.0*	*3.0*	*3.0*	*3.0*
Simultaneous Gap Out	*Yes*	*Yes*	*Yes*	*Yes*
Added Initial	*0.0*	*0.0*	*0.0*	*0.0*
Max Initial	*8.0*	*8.0*	*8.0*	*8.0*
Time before Reduction	*0.0*	*0.0*	*0.0*	*0.0*
Time to Reduce	*0.0*	*0.0*	*0.0*	*0.0*
Min Gap	*0.0*	*0.0*	*0.0*	*0.0*
Ped Walk + FDW	*23.0*	*25.0*	*23.0*	*25.0*
Coordinated	*No*	*Yes*	*No*	*No*
Split	*34.0*	*66.0*	*34.0*	*66.0*
Max Inhibit	*True*	*False*	*True*	*True*
Opt Min Green	*12.4*	*13.8*	*12.4*	*13.8*

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	*2*	*4*
Ring - 2	*6*	*8*

Signal Timing Plan - 1

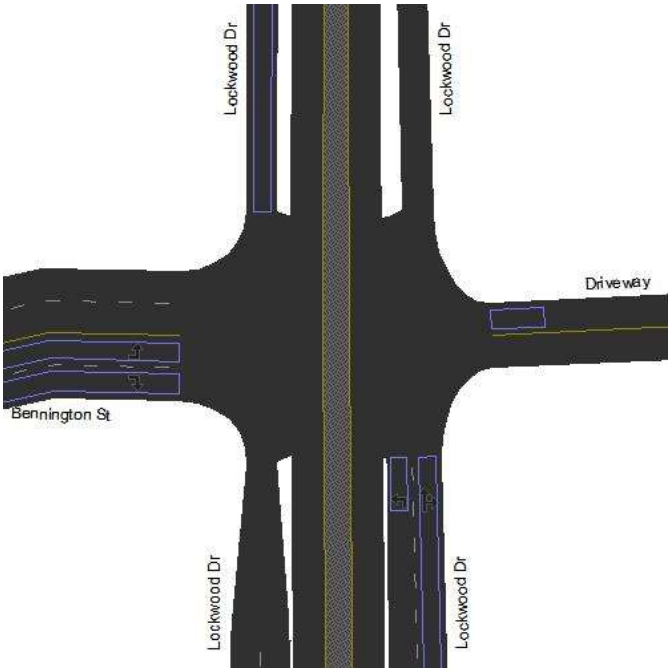
Lane Group Capacity, Control Delay, and LOS Determination								
Lane Group	Shreveport Blvd (SWB)		Lockwood Dr (SB)		Shreveport Blvd (NEB)		Lockwood Dr (NB)	
	L+T	T+R	L	T+R	L+T	T+R	L	T+R
Adjusted Flow, veh/h	*0*	*0*	*0*	*0*	*0*	*20*	*20*	*0*
Adjusted Saturation Flow, veh/h	*1976*	*1900*	*1440*	*1900*	*1965*	*1886*	*1440*	*1886*
Capacity (c), veh/h	*273*	*247*	*967*	*1421*	*281*	*245*	*967*	*1411*
Available Capacity (ca), veh/h	*509*	*524*	*757*	*1144*	*530*	*521*	*757*	*1135*
Volume-to-Capacity Ratio (X)	*0.00056*	*0.000596*	*0.000103*	*0.000141*	*0.000712*	*0.0817*	*0.0207*	*0.000142*
Green Ratio (g/C)	*0.13*	*0.13*	*0.75*	*0.75*	*0.13*	*0.13*	*0.75*	*0.75*
Assigned Phase	*6*	*6*	*4*	*4*	*2*	*2*	*8*	*8*
Max. Allowable Headway (MAH), s/veh	*4.80*	*4.80*	*5.22*	*5.22*	*5.70*	*5.70*	*5.11*	*5.11*
Queue Service Time (gs), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.9*	*0.5*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*	*0.0*
Phase Call Probability (pc)	*0.51*	*0.51*	*1.00*	*1.00*	*0.72*	*0.72*	*1.00*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*0.1*	*0.1*	*0.1*
Phase Duration (Dp), s	*19.4*	*19.4*	*80.6*	*80.6*	*19.4*	*19.4*	*80.6*	*80.6*
Uniform Delay (d1), s/veh	*37.9*	*37.9*	*7.15*	*3.17*	*37.9*	*38.3*	*7.25*	*3.17*
Incremental Delay (d2), s/veh	*0.0037*	*0.00435*	*0.000192*	*0.000178*	*0.00457*	*0.652*	*0.0393*	*0.000181*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*37.9*	*37.9*	*7.15*	*3.17*	*37.9*	*38.9*	*7.29*	*3.17*
Level Of Service	*D*	*D*	*A*	*A*	*D*	*D*	*A*	*A*
Total Delay, veh-hr	*0.00161*	*0.00155*	*0.000198*	*0.000176*	*0.0021*	*0.216*	*0.0405*	*0.000176*
Fully Stopped (Nf), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.4*	*0.2*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*	*0.2*	*0.0*
Effective Green Time, s	*13.0*	*13.0*	*74.8*	*74.8*	*13.0*	*13.0*	*74.8*	*74.8*
Approach Volume, veh/h	--	*0*	--	*0*	--	*20*	--	*20*
Approach Delay, s/veh	--	*37.9*	--	*4.5*	--	*38.9*	--	*7.2*

TransModeler® Intersection Report

Site Information

Intersection ID:	*175*	**Site Name:**	*N 29.823740, W 95.318566*
Cross Street:	*Driveway & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:20*		

Intersection Geometry



Turn Movement Volumes (Driveway & Lockwood Dr)

@ Node 175 From \ To	Lockwood Dr (NWB)	Bennington St (WB)	Lockwood Dr (SB)	Driveway (EB)
Driveway (WB)				
Lockwood Dr (SB)		*30.0*		
Bennington St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

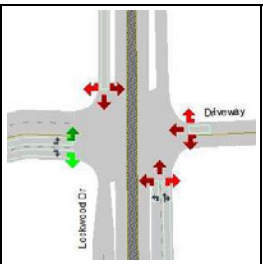
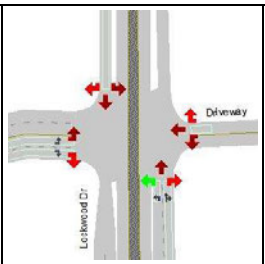
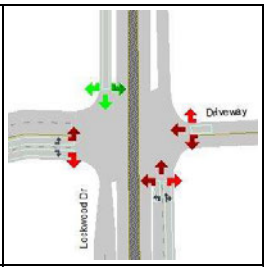
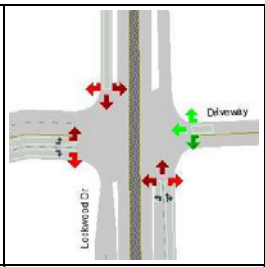
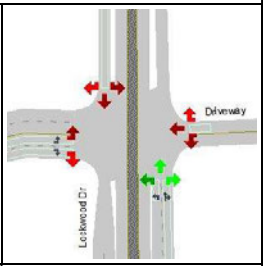
Volume Adjustment and Saturation Flow Rate

Movement	Driveway (WB)			Lockwood Dr (SB)			Bennington St (EB)		Lockwood Dr (NB)		
	Lockwood Dr	Bennington St	Lockwood Dr	Bennington St	Lockwood Dr	Driveway	Lockwood Dr	Lockwood Dr	Lockwood Dr	Bennington St	Driveway
	WBR	WBT	WBL	SBR	SBT	SBL	EBL	EBR	NBT	NBL	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *100.0 sec*
Control Delay: *6.9 sec*
Level of Service: *A*
Offset: *48.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States					
ID	2	3	4	6	8
Min Green	6.0	4.0	10.0	6.0	10.0
Max Green	28.7	17.6	37.6	28.7	60.6
Yellow	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.7	1.8	1.8	1.7	1.8
Lost Time	5.3	5.4	5.4	5.3	5.4
Recall Mode	None	None	Min	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	3.5	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	6.0	12.0	8.0	12.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	23.0	14.6	20.0	23.0	20.0
Coordinated	No	No	Yes	No	No
Split	34.0	23.0	43.0	34.0	66.0
Max Inhibit	True	True	False	True	True
Opt Min Green	11.3	9.4	15.4	11.3	15.4

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2
Ring - 1	2	3, 4
Ring - 2	6	8

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Driveway (WB)	Lockwood Dr (SB)	Bennington St (EB)		Lockwood Dr (NB)	
	LTR	LTR	L	R	L	T+R
Adjusted Flow, veh/h	0	30	0	0	0	0
Adjusted Saturation Flow, veh/h	1900	1900	1440	1609	1809	1900
Capacity (c), veh/h	223	1229	241	189	1076	1473
Available Capacity (ca), veh/h	545	714	485	462	1260	1151

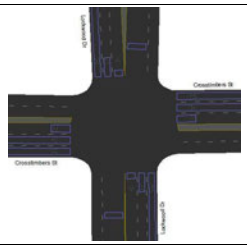
Volume-to-Capacity Ratio (X)	*0.00134*	*0.0246*	*0.000415*	*0.000529*	*9.29e-05*	*0.000136*
Green Ratio (g/C)	*0.12*	*0.65*	*0.12*	*0.12*	*0.72*	*0.78*
Assigned Phase	*6*	*4*	*2*	*2*	*3+8*	*8*
Max. Allowable Headway (MAH), s/veh	*2.82*	*4.27*	*4.40*	*4.40*	*4.26*	*4.27*
Queue Service Time (gs), s	*0.0*	*0.6*	*0.0*	*0.0*	*0.0*	*0.0*
Queue Permitted Service Time (gps), s	*0.0*	*0.0*	*0.0*	*0.0*	*62.0*	*0.0*
Phase Call Probability (pc)	*0.51*	*1.00*	*0.51*	*0.51*	*0.51*	*1.00*
Max Out Probability (px)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Green Extention Time (ge), s	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*
Phase Duration (Dp), s	*17.0*	*70.1*	*17.0*	*17.0*	*12.9*	*83.0*
Uniform Delay (d1), s/veh	*38.9*	*6.33*	*38.9*	*38.9*	*4.74*	*2.52*
Incremental Delay (d2), s/veh	*0.0109*	*0.0369*	*0.0031*	*0.00504*	*0.000155*	*0.000166*
Initial Queue Delay (d3), s/veh	*0*	*0*	*0*	*0*	*0*	*0*
Incremental Delay Calibration (K)	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*	*0.5*
Control Delay (d), s/veh	*39*	*6.37*	*39*	*39*	*4.74*	*2.52*
Level Of Service	*D*	*A*	*D*	*D*	*A*	*A*
Total Delay, veh-hr	*0.00325*	*0.0534*	*0.00108*	*0.00108*	*0.000132*	*0.00014*
Fully Stopped (Nf), veh/ln	*0.0*	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*
Percentile Back of Queue (Q%), veh/ln	*0.0*	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*
Effective Green Time, s	*11.7*	*64.7*	*11.7*	*11.7*	*72.2*	*77.6*
Approach Volume, veh/h	*0*	*30*	*0*	*--*	*--*	*0*
Approach Delay, s/veh	*39.0*	*6.4*	*39.0*	*--*	*--*	*3.3*

TransModeler® Intersection Report

Site Information

Intersection ID:	*176*	**Site Name:**	*N 29.830994, W 95.318829*
Cross Street:	*Crosstimbers St & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:34*		

Intersection Geometry



Turn Movement Volumes (Crosstimbers St & Lockwood Dr)

@ Node 176 From \ To	Lockwood Dr (NB)	Crosstimbers St (WB)	Lockwood Dr (SB)	Crosstimbers St (EB)
Crosstimbers St (WB)				
Lockwood Dr (SB)				
Crosstimbers St (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

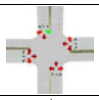
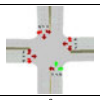
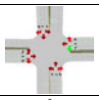
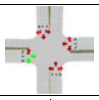
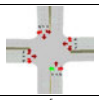
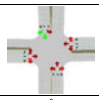
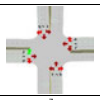
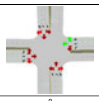
Volume Adjustment and Saturation Flow Rate

Movement	Crosstimbers St (WB)				Lockwood Dr (SB)				Crosstimbers St (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St	Lockwood Dr	Crosstimbers St
	WBR	WBT	WBL	WBU	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day:	16:30:00 - 16:30:00
Plan Description:	16:30:00
Controller Type:	Traffic Actuated
Cycle Length:	90.0 sec
Control Delay:	29.9 sec
Level of Service:	C
Offset:	38.0 sec
Coordinate Begin of:	Red
Yield Point:	Single

Phasing

Item Name \ Signal States								
ID	1	2	3	4	5	6	7	8
Min Green	6.0	8.0	6.0	8.0	6.0	8.0	6.0	8.0
Max Green	10.7	22.7	7.6	27.6	10.7	22.7	7.6	27.6
Yellow	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.8
Lost Time	5.3	5.3	5.4	5.4	5.3	5.3	5.4	5.4
Recall Mode	None	Max	None	Max	None	Max	None	Max
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	9.7	19.0	9.6	23.0	9.7	19.0	9.6	23.0
Coordinated	No	No	No	No	No	Yes	No	No
Split	16.0	28.0	13.0	33.0	16.0	28.0	13.0	33.0
Max Inhibit	True	True	True	True	True	False	True	False
Opt Min Green	11.3	13.3	11.4	13.4	11.3	13.3	11.4	13.4

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2, 1	4, 3	
Ring - 2	6, 5	7, 8	

Signal Timing Plan - 1

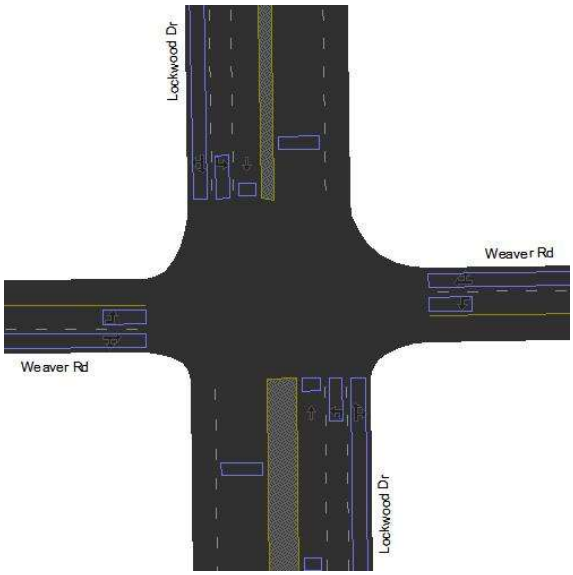
Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Crosstimbers St (WB)			Lockwood Dr (SB)			Crosstimbers St (EB)			Lockwood Dr (NB)		
	L	T	T+R	L	T	T+R	L	T	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1809	1900	1900	1809	1976	1900	1809	1900	1900	1809	1976	1900
Capacity (c), veh/h	99	583	583	269	683	657	99	583	583	100	498	479
Available Capacity (ca), veh/h	153	583	583	215	498	479	153	583	583	215	498	479
Volume-to-Capacity Ratio (X)	0.00203	0.000172	0.000189	0.000743	0.000146	0.000167	0.00203	0.000172	0.000189	0.00201	0.000201	0.00023
Green Ratio (g/C)	0.05	0.31	0.31	0.15	0.35	0.35	0.05	0.31	0.31	0.06	0.25	0.25
Assigned Phase	3	8	8	1	6	6	7	4	4	5	2	2
Max. Allowable Headway (MAH), s/veh	2.76	4.27	4.27	2.78	3.36	3.36	2.78	4.27	4.27	2.78	3.36	3.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	10.3	33.0	33.0	18.7	36.4	36.4	10.3	33.0	33.0	10.3	28.0	28.0
Uniform Delay (d1), s/veh	40.2	21.6	21.6	32.6	19.3	19.3	40.2	21.6	21.6	40.2	25.2	25.2
Incremental Delay (d2), s/veh	0.037	0.00053	0.000583	0.00498	0.000385	0.000459	0.037	0.00053	0.000583	0.0353	0.000725	0.000863
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	40.3	21.6	21.6	32.6	19.3	19.3	40.3	21.6	21.6	40.2	25.2	25.2
Level Of Service	D	C	C	C	B	B	D	C	C	D	C	C
Total Delay, veh-hr	0.00224	0.000601	0.000661	0.00181	0.000535	0.000588	0.00224	0.000601	0.000661	0.00223	0.000699	0.000769
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	4.9	27.6	27.6	13.4	31.1	31.1	4.9	27.6	27.6	5.0	22.7	22.7
Approach Volume, veh/h	--	--	0	--	--	0	--	--	0	--	--	0
Approach Delay, s/veh	--	--	30.7	--	--	26.8	--	--	30.7	--	--	32.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*177*	**Site Name:**	*N 29.834200, W 95.318847*
Cross Street:	*Weaver Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:39*		

Intersection Geometry



Turn Movement Volumes (Weaver Rd & Lockwood Dr)

@ Node 177 From \ To	Lockwood Dr (NB)	Weaver Rd (WB)	Lockwood Dr (SB)	Weaver Rd (EB)
Weaver Rd (WB)				
Lockwood Dr (SB)				
Weaver Rd (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

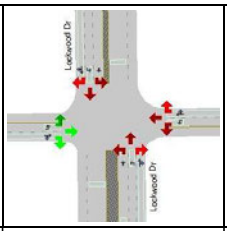
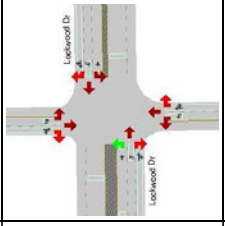
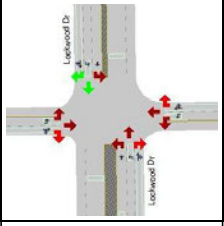
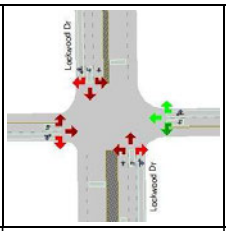
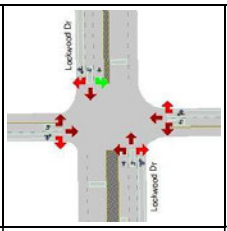
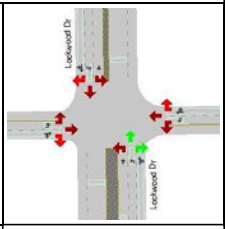
Volume Adjustment and Saturation Flow Rate

Movement	Weaver Rd (WB)			Lockwood Dr (SB)				Weaver Rd (EB)			Lockwood Dr (NB)			
	Lockwood Dr	Weaver Rd	Lockwood Dr	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd	Lockwood Dr	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd	Lockwood Dr	Weaver Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *26.8 sec*
Level of Service: *C*
Offset: *6.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *By Phase*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	9.0	5.0	18.0	9.0	5.0	16.0
Max Green	30.5	9.2	33.2	30.5	9.8	33.8
Yellow	3.2	3.2	3.2	3.2	3.2	3.2
Red Clearance	2.3	2.6	2.6	2.3	2.0	2.0
Lost Time	5.5	5.8	5.8	5.5	5.2	5.2
Recall Mode	Min	None	Min	Min	None	Min
Memory Mode	Lock	Non-Lock	Non-Lock	Non-Lock	Lock	Non-Lock
Passage/Extension	3.0	0.0	3.0	3.0	0.0	3.0
Simultaneous Gap Out	Yes	No	No	Yes	No	No
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	11.0	11.0	11.0	11.0	11.0	11.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	22.0	29.2	29.2	14.0	28.0	28.0
Coordinated	No	No	Yes	No	No	No
Split	36.0	15.0	39.0	36.0	15.0	39.0
Max Inhibit	False	False	False	False	False	False
Opt Min Green	14.5	10.8	23.8	14.5	10.2	21.2

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

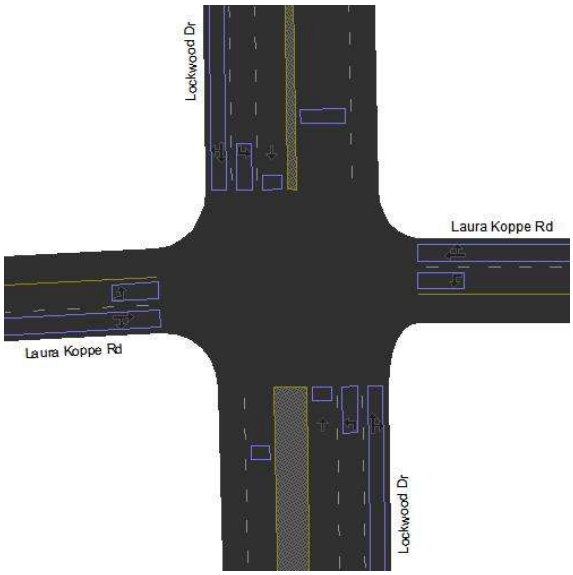
Lane Group	Weaver Rd (WB)		Lockwood Dr (SB)			Weaver Rd (EB)		Lockwood Dr (NB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	1976	1900	1440	1900	1809	1976	1900
Capacity (c), veh/h	260	238	942	1152	1107	260	238	185	351	338
Available Capacity (ca), veh/h	568	644	197	729	701	568	644	185	742	713
Volume-to-Capacity Ratio (X)	0.000385	0.000842	0.000212	8.68e-05	9.94e-05	0.000385	0.000842	0.00108	0.000285	0.000326
Green Ratio (g/C)	0.13	0.13	0.52	0.58	0.58	0.13	0.13	0.10	0.18	0.18
Assigned Phase	6	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.33	4.33	0.76	4.36	4.36	4.33	4.33	0.76	4.36	4.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	1.00	1.00	0.51	1.00	1.00	1.00	1.00	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	16.8	16.8	52.0	58.2	58.2	16.8	16.8	15.0	21.2	21.2

Uniform Delay (d1), s/veh	34.5	34.5	10.3	7.83	7.84	34.5	34.5	36.3	30.4	30.4
Incremental Delay (d2), s/veh	0.00266	0.00639	0.000406	0.000136	0.000162	0.00266	0.00639	0.0105	0.00146	0.00174
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34.5	34.5	10.3	7.84	7.84	34.5	34.5	36.3	30.4	30.4
Level Of Service	C	C	B	A	A	C	C	D	C	C
Total Delay, veh-hr	0.000957	0.00191	0.000575	0.000218	0.000239	0.000957	0.00191	0.00202	0.000845	0.00093
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	11.3	11.3	46.8	52.4	52.4	11.3	11.3	9.2	16.0	16.0
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	34.5	--	--	9.1	--	34.5	--	--	33.3

TransModeler® Intersection Report

Site Information			
Intersection ID:	*178*	**Site Name:**	*N 29.840542, W 95.318956*
Cross Street:	*Laura Koppe Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/3/7 15:58:53*		

Intersection Geometry



Turn Movement Volumes (Laura Koppe Rd & Lockwood Dr)

@ Node 178 From \ To	Lockwood Dr (NB)	Laura Koppe Rd (WB)	Lockwood Dr (SB)	Laura Koppe Rd (EB)
Laura Koppe Rd (WB)				
Lockwood Dr (SB)				
Laura Koppe Rd (EB)				
Lockwood Dr (NB)				

[Flow Field] = Volume

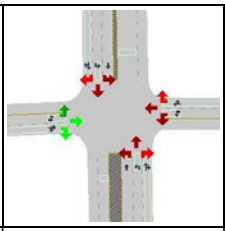
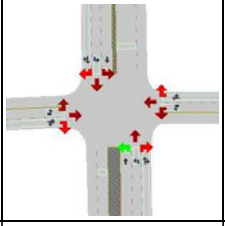
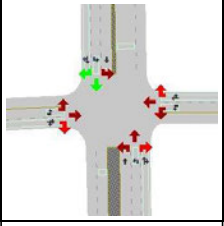
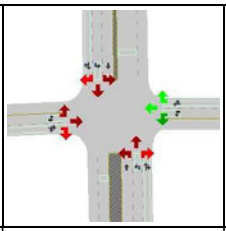
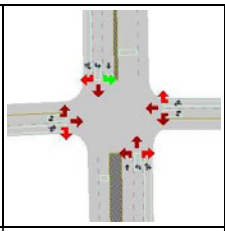
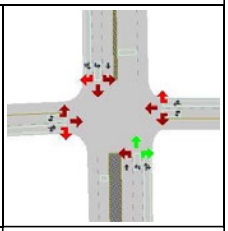
Volume Adjustment and Saturation Flow Rate

Movement	Laura Koppe Rd (WB)			Lockwood Dr (SB)				Laura Koppe Rd (EB)				Lockwood Dr (NB)			
	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd	Lockwood Dr	Laura Koppe Rd
	WBR	WBT	WBL	SBU	SBR	SBT	SBL	EBL	EBU	EBR	EBT	NBT	NBL	NBU	NBR

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *Traffic Actuated*
Cycle Length: *90.0 sec*
Control Delay: *27.7 sec*
Level of Service: *C*
Offset: *18.0 sec*
Coordinate Begin of: *Red*
Yield Point: *Single*

Phasing

Item Name \ Signal States						
ID	2	3	4	6	7	8
Min Green	6.0	6.0	8.0	6.0	6.0	8.0
Max Green	35.5	10.7	27.7	35.5	10.7	27.7
Yellow	3.6	3.6	3.6	3.6	3.6	3.6
Red Clearance	1.9	1.7	1.7	1.9	1.7	1.7
Lost Time	5.5	5.3	5.3	5.5	5.3	5.3
Recall Mode	None	None	Min	None	None	Min
Memory Mode	Lock	Lock	Lock	Lock	Lock	Lock
Passage/Extension	3.0	2.5	3.0	3.0	2.5	3.0
Simultaneous Gap Out	Yes	Yes	Yes	Yes	Yes	Yes
Added Initial	0.0	0.0	0.0	0.0	0.0	0.0
Max Initial	8.0	8.0	10.0	8.0	8.0	10.0
Time before Reduction	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0
Ped Walk + FDW	23.0	9.7	21.0	23.0	9.7	21.0
Coordinated	No	No	Yes	No	No	No
Split	41.0	16.0	33.0	41.0	16.0	33.0
Max Inhibit	True	True	False	True	True	True
Opt Min Green	11.5	11.3	13.3	11.5	11.3	13.3

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	2	4, 3	
Ring - 2	6	8, 7	

Signal Timing Plan - 1

Lane Group Capacity, Control Delay, and LOS Determination

Lane Group	Laura Koppe Rd (WB)		Lockwood Dr (SB)			Laura Koppe Rd (EB)		Lockwood Dr (NB)		
	L	T+R	L	T	T+R	L	T+R	L	T	T+R
Adjusted Flow, veh/h	0	0	0	0	0	0	0	0	0	0
Adjusted Saturation Flow, veh/h	1440	1900	1809	1976	1900	1440	1900	1809	1976	1900
Capacity (c), veh/h	268	248	1033	1256	1207	268	248	100	236	226
Available Capacity (ca), veh/h	648	749	215	608	585	648	749	215	608	585
Volume-to-Capacity Ratio (X)	0.000373	0.000806	0.000194	7.96e-05	9.11e-05	0.000746	0.000806	0.00201	0.000424	0.000486
Green Ratio (g/C)	0.13	0.13	0.57	0.64	0.64	0.13	0.13	0.06	0.12	0.12
Assigned Phase	6	6	7	4	4	2	2	3	8	8
Max. Allowable Headway (MAH), s/veh	4.26	4.26	3.26	4.36	4.36	4.11	4.11	3.26	4.36	4.36
Queue Service Time (gs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Queue Permitted Service Time (gps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Call Probability (pc)	0.51	0.51	0.51	1.00	1.00	0.51	0.51	0.51	1.00	1.00
Max Out Probability (px)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Extention Time (ge), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Phase Duration (Dp), s	17.3	17.3	56.7	62.5	62.5	17.3	17.3	10.3	16.0	16.0

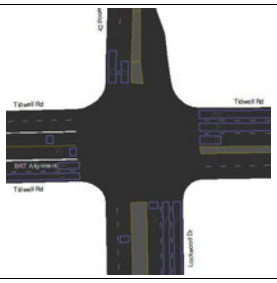
Uniform Delay (d1), s/veh	34	34	8.27	5.98	5.98	34	34	40.2	34.9	34.9
Incremental Delay (d2), s/veh	0.00251	0.00585	0.000337	0.000114	0.000136	0.00502	0.00586	0.0363	0.00324	0.00386
Initial Queue Delay (d3), s/veh	0	0	0	0	0	0	0	0	0	0
Incremental Delay Calibration (K)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Control Delay (d), s/veh	34	34	8.27	5.98	5.98	34	34	40.2	34.9	34.9
Level Of Service	C	C	A	A	A	C	C	D	C	C
Total Delay, veh-hr	0.000945	0.00189	0.000459	0.000166	0.000183	0.00189	0.00189	0.00223	0.00097	0.00107
Fully Stopped (Nf), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile Back of Queue (Q%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Effective Green Time, s	11.8	11.8	51.4	57.2	57.2	11.8	11.8	5.0	10.7	10.7
Approach Volume, veh/h	--	0	--	--	0	--	0	--	--	0
Approach Delay, s/veh	--	34.0	--	--	7.1	--	34.0	--	--	37.5

TransModeler® Intersection Report

Site Information			
Intersection ID:	*179*	**Site Name:**	*N 29.848187, W 95.319120*
Cross Street:	*Tidwell Rd & Lockwood Dr*	**Number of Plans:**	*1*
Analysis Date:	*2023/2/10 22:11:25*		

" "

Intersection Geometry



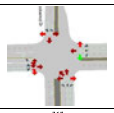
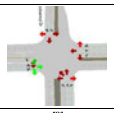
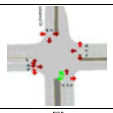
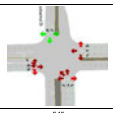
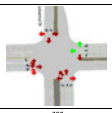
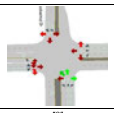
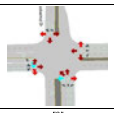
"

Signal Timing Plan - 1

Time of Day: *16:30:00 - 16:30:00*
Plan Description: *16:30:00*
Controller Type: *"Traffic Actuated"*
Cycle Length: *103.0 sec*
Offset: *99.0 sec*
Coordinate Begin of: *Yellow*
Yield Point: *Single*

"" " "

Phasing

Item Name \ Signal States							
"ID"	"1"	"2"	"3"	"4"	"6"	"8"	"9"
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"Max Green"	"8.3"	"39.3"	"10.3"	"9.5"	"53.3"	"25.5"	"8.0"
"Yellow"	"3.9"	"3.9"	"3.9"	"3.6"	"3.9"	"3.6"	"3.0"
"Red Clearance"	"1.8"	"1.8"	"1.8"	"1.9"	"1.8"	"1.9"	"2.0"
"Last Time"	"5.7"	"5.7"	"5.7"	"5.5"	"5.7"	"5.5"	"5.0"
"Recall Mode"	"Max"	"Max"	"Min"	"Min"	"Max"	"Min"	"None"
"Memory Mode"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Lock"	"Non-Lock"
"Passage/Extension"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"	"2.0"
"Simultaneous Gap Out"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"
"Added Initial"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Max Initial"	"7.0"	"7.0"	"7.0"	"5.5"	"7.0"	"12.0"	"10.0"
"Time before Reduction"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Time to Reduce"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"	"0.0"
"Min Gap"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"	"3.0"
"Ped Walk + FDW"	"14.3"	"25.0"	"25.0"	"11.0"	"25.0"	"16.0"	"16.0"
"Coordinated"	"No"	"No"	"No"	"No"	"Yes"	"No"	"No"
"Split"	"14.0"	"45.0"	"16.0"	"15.0"	"59.0"	"31.0"	"13.0"
"Max Inhibit"	"True"	"True"	"True"	"True"	"False"	"True"	"True"
"Opt Min Green"	"10.7"	"15.7"	"10.7"	"10.5"	"15.7"	"15.5"	"5.0"

"
" " "

Phase Sequence and Concurrency Group

Ring \ Concurrency Group	CG - 1	CG - 2	CG - 3
Ring - 1	"2", "4"	"4", "3"	"9"
Ring - 2	"6"	"8"	
Ring - 3			

"
"

APPENDIX I – TRAFFIC MITIGATION SCENARIO EXHIBITS

APPENDIX I – TRAFFIC MITIGATION SCENARIOS

LANE CONFIGURATION METHODOLOGY

Determining lane configurations at signalized intersections was an iterative process. With anticipated impacts to traffic capacity and intersection LOS, METRO and COH agreed that multiple configuration scenarios should be explored to understand the LOS and resulting impacts from those scenarios before moving forward with a recommended configuration. With some guidance from COH, the general approach to the lane configuration methodology included:

1. Determine lane configuration that would fully mitigate intersection to either a LOS D or baseline LOS condition (2030 No-Build), whichever is less restrictive.
2. Consider multiple lane configurations and their resulting LOS until LOS becomes significant.
3. Compare LOS, V/C ratio, ROW requirements, tree and drainage impacts for each mitigation scenario.
4. No mitigation should come at the expense of requirements and plan for transit, pedestrian or bicycle facilities.

This lane configuration methodology focused only on intersections with projected LOS E or F as modeled by TransModeler in October 2022. Once the intersections were identified, Synchro would be used to model the mitigation scenarios as the results would provide a reasonable idea as to how each mitigation scenario would operate and can be done much quicker. Running a large number of scenarios on an intersection by intersection basis in a traffic microsimulation software would have been overly time consuming and unproductive.

LANE CONFIGURATION ANALYSIS

While the traffic modeling focused on the projected traffic conditions by measuring the LOS at each intersection, the design efforts focused on the impacts to ROW. The impacts to existing trees and drainage were considered at a high level as a detailed analysis with specialists would be needed to determine the actual impacts. In general, the more pavement that a scenario required would result in more impacts to trees and drainage. The tables in this Appendix summarize the mitigation analysis performed.

From the analysis, intersection exhibits for each mitigation scenario were prepared to demonstrate what the lane configurations look like from an aerial view and graphically identify potential ROW impacts. These exhibits are also included in this Appendix. It is noted that exhibits prepared and discussed with COH for those intersections in the 2030 Building conditions that were shown in Synchro to have a LOS E or F and were performing at a poorer LOS than the 2030 No-Build conditions. Additionally, Segment 2 mitigation analysis received a more detailed ROW review as additional roadway design was needed between intersections to properly measure and compare the scenarios.

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added second EBR turn lane from the ramp				Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
102	Fondren Road and Westpark Drive	Eastbound	F	114.4	1.16	22	F	190.2	1.35	22	F	104.5	1.11	-	F	104.5	1.1	-	F	96.6	1.09	-	F	95.4	1.09	-
		Westbound (Coordinated)	D	45.5	0.52	22	D	47.7	0.62	22	E	73.9	1.3	21	E	73.9	1.3	21	E	72.6	1.3	26	E	62.5	0.99	32
		Northbound	F	168.7	2.23	24	F	210.7	2.62	24	D	54.2	0.91	-	D	54.2	0.9	-	D	54.9	0.92	-	D	44.9	0.75	-
		Southbound	F	120.4	1.72	24	F	150.5	2.02	24	F	116.6	1.31	21	F	116.6	1.3	21	F	116.6	1.31	-	F	98.9	1.00	-
		Total	F	**114.1**	**2.23**		F	**154.6**	**2.62**		F	**83.0**	**1.31**		F	**83.0**	**1.30**		F	**80.5**	**1.31**		E	**72**	**1.09**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	8	EBL	0.14	150	8	EBL	0.14	150	8	EBL	0.13	150	8	EBL	0.17	145

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added second EBR turn lane from the ramp				Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
101	Fondren Road and Westpark Tollway Ramp	Eastbound	D	36.8	0.83	11	D	35.9	0.86	11	F	110.6	1.25	-	F	110.6	1.3	-	F	81.7	1.32	-	E	78.8	1.06	-
		Westbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Northbound (Coordinated - Existing, Future No-Build)	B	18.5	0.49	11	C	25.6	0.64	11	F	244.4	1.44	-	F	244.4	1.4	-	F	244.4	1.44	-	F	119	1.13	-
		Southbound (Coordinated - Existing, Future No-Build, Build)	B	12.1	0.33	11	B	15.9	0.44	11	C	27.6	0.36	21	C	27.6	0.4	21	C	26.7	0.35	26	B	19.2	0.37	32
		Total	**C**	**21.0**	**0.83**		**C**	**25.1**	**0.86**		F	**148.2**	**1.44**		**F**	**148.2**	**1.40**		**F**	**140.9**	**1.44**		**E**	**79.9**	**1.13**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	8	EBL	0.14	150	8	EBL	0.14	150	8	EBL	0.13	150	8	EBL	0.17	145

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added second EBR turn lane from the ramp				Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
102	Fondren Road and Westpark Drive	Eastbound	D	49.2	0.83	22	E	64.7	0.97	22	F	95.9	0.95	-	F	95.9	1	-	F	88	0.93	-	E	55.7	0.97	-
		Westbound (Coordinated)	E	76.4	1.18	22	F	94.7	1.39	22	F	94.8	1.5	21	F	94.8	1.5	21	F	85.3	1.37	26	E	69	1.13	32
		Northbound	F	109.8	1.22	24	F	129.1	1.43	24	E	59.6	0.96	-	E	59.6	1	-	E	60.2	0.99	-	D	43.8	0.88	-
		Southbound	E	55.2	0.95	24	E	70.5	1.13	24	F	191.9	1.45	21	F	191.9	1.5	21	F	187.6	1.41	-	F	139.3	1.17	-
		Total	**E**	**77.2**	**1.22**		**F**	**94.6**	**1.43**		**F**	**104.6**	**1.50**		**F**	**104.6**	**1.50**		**F**	**99.7**	**1.41**		**E**	**73.5**	**1.17**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	8	EBL	0.1	130	8	EBL	0.1	130	8	EBL	0.1	150	8	EBL	0.11	140

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added second EBR turn lane from the ramp				Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
101	Fondren Road and Westpark Tollway Ramp	Eastbound	D	52.3	0.77	11	D	51.8	0.8	11	F	112.2	1.32	-	F	112.2	1.3	-	F	107.6	1.31	-	F	81.8	1.15	-
		Westbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Northbound (Coordinated - Existing, Future No-Build)	A	6.4	0.41	11	A	9.7	0.51	11	F	309.7	1.6	-	F	309.7	1.6	-	F	328.9	1.64	-	F	131.7	1.17	-
		Southbound (Coordinated - Existing, Future No-Build, Build)	A	4.6	0.36	11	A	7.5	0.45	11	E	73.3	0.63	21	E	73.3	0.6	21	E	74.3	0.62	26	D	36.9	0.59	32
		Total	**B**	**11.6**	**0.77**		**B**	**14.2**	**0.80**		F	**189.4**	**1.60**		**F**	**189.4**	**1.60**		**F**	**198.3**	**1.64**		**F**	**87.2**	**1.17**	
						120				120	8	EBL	0.1	130	8	EBL	0.1	130	8	EBL	0.1	150	8	EBL	0.11	140

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added second EBR turn lane from the ramp				Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				1				1				1				3

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030	Full Mitigation 2030: Same as Build Baseline	Partial Mitigation 1: Added second EBR turn lane from the ramp	Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection
	1	1	2	3

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030	Full Mitigation 2030: Same as Build Baseline	Partial Mitigation 1: Added second EBR turn lane from the ramp	Partial Mitigation 2: Added second SBL and WBL lanes at Fondren Road intersection
	1	1	1	1

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one EB left lane				Partial Mitigation 2: Add one EB left lane, one NB left lane, and one WB right lane			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
103	Westpark Dr and Hillcroft Ave	Eastbound	F	176.3	1.55	24	F	267.4	1.81	24	F	167.2	1.86	30	F	167.2	1.86	30	E	71.7	1.04	30	E	58.6	1.22	30
		Westbound	F	120.7	1.18	24	F	197.9	1.39	24	F	180.4	1.30	30	F	180.4	1.30	30	D	48.8	0.86	30	D	49.4	0.92	30
		Northbound	D	46.2	0.88	24	E	60.0	1.02	24	F	106.4	1.22	27	F	106.4	1.22	27	C	21.4	0.98	27	C	27.7	0.98	27
		Southbound	D	49.0	0.86	24	E	64.8	1.01	24	F	91.5	1.06	27	F	91.5	1.06	27	E	64.9	0.95	27	E	62.2	1.17	27
		Total (uncoordinated)	**F**	**104.4**	**1.55**		**F**	**157.9**	**1.81**		**F**	**140.5**	**1.86**		**F**	**140.5**	**1.86**		**D**	**52.2**	**1.04**		**D**	**49.4**	**1.22**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	9	EBT/WBT	0.03	150	9	EBT/WBT	0.03	150	9	EBT/WBT	0.03	130	9	EBT/WBT	0.04	130

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one EB left lane				Partial Mitigation 2: Add one EB left lane, one NB left lane, and one WB right lane			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
103	Westpark Dr and Hillcroft Ave	Eastbound	F	112.3	1.24	24	F	188.5	1.46	24	F	139.4	1.76	30	F	139.4	1.76	30	F	105.4	1.10	30	E	59.6	1.17	30
		Westbound	E	79.4	1.06	24	F	145.6	1.25	24	F	171.3	1.29	30	F	171.3	1.29	30	E	70.1	1.05	30	F	104.9	1.16	30
		Northbound	F	100.9	1.62	24	F	130.3	1.90	24	E	56.1	1.10	27	E	56.1	1.10	27	C	26.5	0.88	27	C	28.6	0.91	27
		Southbound	D	47.0	0.98	24	E	58.6	1.16	24	F	90.4	1.09	27	F	90.4	1.09	27	E	72.8	0.92	27	E	68.5	0.97	27
		Total (uncoordinated)	**F**	**85.9**	**1.62**		**F**	**133.4**	**1.90**		**F**	**116.9**	**1.76**		**F**	**116.9**	**1.76**		**E**	**69.7**	**1.10**		**E**	**66.4**	**1.17**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	9	EBT/WBT	0.03	135	9	EBT/WBT	0.03	135	9	EBT/WBT	0.03	150	9	EBT/WBT	0.04	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one EB left lane				Partial Mitigation 2: Add one EB left lane, one NB left lane, and one WB right lane			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**1**				**2**				**3**

Drainage Impact Rating

	Build Baseline 2030	Full Mitigation 2030 (same as Baseline)	Partial Mitigation 1: Add one EB left lane	Partial Mitigation 2: Add one EB left lane, one NB left lane, and one WB right lane
Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**1**	**2**	**3**

Tree Impact Rating

	Build Baseline 2030	Full Mitigation 2030 (same as Baseline)	Partial Mitigation 1: Add one EB left lane	Partial Mitigation 2: Add one EB left lane, one NB left lane, and one WB right lane
Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**2**	**2**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Baseline 2030 - Baseline matches existing - operations are fine, no mitgation needed													
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
108	Westpark & Renwick	Eastbound (Coordinated - Existing, No-Build)	D	35.9	0.69	14	D	40.3	0.81	14	D	39.5	0.84													
		Westbound	C	25.1	0.35	24	C	26.5	0.41	24	C	28.8	0.32	31												
		Northbound	D	52.9	0.73	24	E	61.4	0.86	24	C	29.8	0.96	19												
		Southbound	D	37.0	0.40	24	D	38.1	0.47	24	D	46.8	0.52	19												
		Total (Uncoordinated - Build)	**D**	**39.2**	0.73		**D**	**43.7**	0.86		**D**	**36.6**	0.96													
		Bus Phase(s) / Concurrent Movement(s) / G/C				130				130	9	EBT/WBT	0.26	125												

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Baseline 2030 - Baseline matches existing - operations are fine, no mitgation needed													
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
108	Westpark & Renwick	Eastbound (Coordinated - Existing, No-Build)	D	43.1	0.79	14	D	50.0	0.92	14	D	40.0	0.71													
		Westbound	C	23.6	0.58	24	C	25.7	0.68	24	D	42.5	0.74	31												
		Northbound	D	44.9	0.61	24	D	48.1	0.71	24	A	9.1	0.72	19												
		Southbound	B	12.7	0.60	24	D	47.5	0.71	24	D	45.1	0.68	19												
		Total (Uncoordinated - Build)	**C**	**31.1**	0.79		**D**	**42.9**	0.92		**D**	**35.2**	0.74													
		Bus Phase(s) / Concurrent Movement(s) / G/C				130				130	9	EBT/WBT	0.16	125												

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Baseline 2030 - Baseline matches existing - operations are fine, no mitgation needed											
	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Comparison not performed; baseline operates at acceptable LOS.																
Limits:																

Drainage Impact Rating

	Baseline 2030 - Baseline matches existing - operations are fine, no mitgation needed			
Comparison not performed; baseline operates at acceptable LOS.				

Tree Impact Rating

	Baseline 2030 - Baseline matches existing - operations are fine, no mitgation needed			
Comparison not performed; baseline operates at acceptable LOS.				

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021 (Volumes Unknown)				No Build 2030				Build Baseline 2030													
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
220 & 221	Westpark and Alder	Eastbound					A	0.0	0.56		B	17.4	0.83	11												
		Westbound					A	1.7	0.09		A	7.5	0.17	11												
		Northbound (Coordinated)					F	223.4	1.34		A	4.5	0.51	15												
		Southbound	Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist			
		Total					**D**	**29.6**	1.34		**B**	**14.6**	0.83													
		Bus Phase(s) / Concurrent Movement(s) / G/C / C									9	EBT/WBT	0.15	70												

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030													
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
220 & 221	Westpark and Alder	Eastbound					A	0.0	0.43		B	18.2	0.72	11												
		Westbound					A	1.3	0.27		B	17.9	0.66	11												
		Northbound (Coordinated)					F	274.1	1.46		A	2.6	0.40	15												
		Southbound	Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist			
		Total					**D**	**39.5**	1.46		**B**	**15.9**	0.72													
		Bus Phase(s) / Concurrent Movement(s) / G/C / C									9	EBT/WBT	0.19	70												

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030															
Comparison not performed; baseline operates at acceptable LOS.	SF	# Full Acq	# Partial Acq		SF	# Full Acq	# Partial Acq		SF	# Full Acq	# Partial Acq		SF	# Full Acq	# Partial Acq	
Limits:																

Drainage Impact Rating

	Build Baseline 2030			
Comparison not performed; baseline operates at acceptable LOS.				

Tree Impact Rating

	Build Baseline 2030			
Comparison not performed; baseline operates at acceptable LOS.				

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one NB right lane				Partial Mitigation 2: Add one NB right lane and one SB left lane			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
109	Westpark Dr and Chimney Rock Rd	Eastbound	D	38.6	0.87	24	E	57.7	1.02	24	F	104.3	1.10	30	F	104.3	1.10	30	E	71.3	1.00	30	D	54.1	0.92	30
		Westbound	C	28.7	0.44	19	C	31.4	0.50	19	C	28.3	0.49	30	C	28.3	0.49	30	C	27.4	0.49	30	C	20.9	0.41	30
		Northbound	E	59.7	0.94	14	F	100.5	1.10	14	B	18.2	0.96	20	B	18.2	0.96	20	B	18.2	0.82	20	C	23.3	0.84	20
		Southbound (coordinated)	E	60.0	0.83	14	F	92.7	1.09	14	E	70.5	1.08	20	E	70.5	1.08	20	F	87.4	1.17	20	E	63.7	0.83	20
		Total	**D**	**49.9**	0.94		**E**	**77.4**	1.10		**E**	**61.6**	1.10		**E**	**61.6**	1.10		**E**	**56.0**	1.17		**D**	**44.5**	0.92	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	9	EBT/WBT	0.04	125	9	EBT/WBT	0.04	125	9	EBT/WBT	0.04	125	9	EBT/WBT	0.05	105

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one NB right lane				Partial Mitigation 2: Add one NB right lane and one SB left lane			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
109	Westpark Dr and Chimney Rock Rd	Eastbound	D	51.5	0.88	24	E	73.5	1.03	24	D	36.1	0.92	30	D	36.1	0.92	30	D	36.1	0.86	30	C	27.8	0.78	30
		Westbound	D	48.4	0.79	24	D	53.9	0.89	24	C	29.7	0.75	30	C	29.7	0.75	30	C	29.7	0.81	30	C	25.6	0.65	30
		Northbound	D	49.2	0.72	14	E	55.8	0.84	14	A	5.6	0.68	20	A	5.6	0.68	20	A	4.1	0.21	20	A	3.2	0.62	20
		Southbound (coordinated)	E	79.2	0.51	14	F	82.1	0.64	14	F	84.7	0.97	20	F	84.7	0.97	20	F	84.7	0.67	20	E	70.0	0.79	20
		Total	**E**	**58.9**	0.88		**E**	**68.2**	1.03		**D**	**43.8**	0.97		**D**	**43.8**	0.97		**D**	**48.8**	0.86		**D**	**35.7**	0.79	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	9	EBT/WBT	0.06	95	9	EBT/WBT	0.06	95	9	EBT/WBT	0.06	125	9	EBT/WBT	0.06	90

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030 (same as Baseline)				Partial Mitigation 1: Add one NB right lane				Partial Mitigation 2: Add one NB right lane and one SB left lane			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				1				1								

Drainage Impact Rating

	Build Baseline 2030	Full Mitigation 2030 (same as Baseline)	Partial Mitigation 1: Add one NB right lane	Partial Mitigation 2: Add one NB right lane and one SB left lane
Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	1	1	1	1

Tree Impact Rating

	Build Baseline 2030	Full Mitigation 2030 (same as Baseline)	Partial Mitigation 1: Add one NB right lane	Partial Mitigation 2: Add one NB right lane and one SB left lane
Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	1	1	1	1

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added a dedicated right turn lane at EB approach to the baseline scenario				Partial Mitigation 2: Added a dedicated right turn lane at WB approach to the baseline scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
110	Westpark & Rice	Eastbound	F	140.9	1.26		F	219.5	1.48		F	96.5	0.97	22	F	96.5	0.97	22	D	55.0	0.86	22	F	101.8	1.04	22
		Westbound	C	25.8	0.43	22	C	27.0	0.51	22	D	36.1	0.69	33	D	36.1	0.69	33	C	34.3	0.56	33	C	34.8	0.71	33
		Northbound (Coordinated - Existing, No-Build)	C	34.5	0.57	19	D	37.1	0.66	19	C	34.2	0.98	21	C	34.2	0.98	21	C	22.5	0.93	21	C	29.8	0.96	24
		Southbound	D	40.7	0.50		D	42.2	0.59		D	49.1	0.63	21	D	49.1	0.63	21	D	47.0	0.62	24	D	49.2	0.62	21
		Total (Uncoordinated - Build)	**E**	**73.7**	1.26		**F**	**104.3**	1.48		**E**	**61.7**	0.98		**E**	**61.7**	0.98		D	**41.2**	0.93		**E**	**62.3**	1.04	
		Bus Phase(s) / Concurrent Movement(s) / G/C				130				130	9	EBT/WBT	0.24	130	9	EBT/WBT	0.24	130	9	EBT/WBT	0.23	130	9	EBT/WBT	0.23	130

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added a dedicated right turn lane at EB approach to the baseline scenario				Partial Mitigation 2: Added a dedicated right turn lane at WB approach to the baseline scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
110	Westpark & Rice	Eastbound	D	46.0	0.69		D	51.5	0.81		F	104.2	1.03	22	F	104.2	1.03	22	E	76.9	1.10	22	F	125.6	1.29	22
		Westbound	F	81.2	1.13	18	F	152.0	1.33	18	E	59.4	0.89	33	E	59.4	0.89	33	E	63.9	0.89	33	D	42.6	0.91	33
		Northbound (Coordinated - Existing, No-Build)	F	89.4	1.35	19	F	119.5	1.61	19	D	37.2	1.02	21	D	37.2	1.02	21	D	47.4	1.06	21	C	30.9	1.00	24
		Southbound	D	38.9	0.64		D	42.9	0.77		E	57.4	0.89	21	E	57.4	0.89	21	D	53.0	0.82	24	D	50.5	0.85	21
		Total (Uncoordinated - Build)	**E**	**67.8**	1.35		**F**	**101.8**	1.61		**E**	**62.7**	1.03		**E**	**62.7**	1.03		**E**	**60.3**	1.10		**E**	**58.4**	1.20	
		Bus Phase(s) / Concurrent Movement(s) / G/C				130				130	9	EBT/WBT	0.21	125	9	EBT/WBT	0.21	125	9	EBT/WBT	0.20	135	9	EBT/WBT	0.20	120

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Added a dedicated right turn lane at EB approach to the baseline scenario				Partial Mitigation 2: Added a dedicated right turn lane at WB approach to the baseline scenario			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**1**				**1**				**1**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.				
	1	**1**	**2**	**3**

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.				
	1	**1**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: Assume hold phase for BRT				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Exclusive EBR Additional WBT EBL = L + LT + T							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
112	28: Westpark and IH-610 NBFR	Eastbound	F	1446.2	5.50dl		F	1913.6	7.40dl		C	32.1	0.98	11	C	32.1	0.98	11	B	11.5	0.86					
		Westbound	C	33.1	0.54	19	D	35.5	0.63	19	F	138.4	1.16		F	138.4	1.16		E	63.7	0.90	11				
		Northbound	D	41.2	0.47	9	D	43.2	0.55	9	E	64.5	0.79	14	E	64.5	0.79	14	D	53.6	0.71	14				
		Total (Act-Uncrd - Build)	**F**	**869.8**	**5.50dl**		**F**	**1146.5**	**7.40dl**		**E**	**59.0**	**1.16**		**E**	**59.0**	**1.16**		**C**	**30.1**	**0.90**					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	9	None	0.03	150	9	None	0.03	150	9	None	0.03	150				
111	27: Westpark and IH-610 SBFR	Eastbound	F	444.6	2.25		F	612.2	2.71		F	265.1	1.51		F	265.1	1.51		D	45.2	0.99					
		Westbound	D	47.6	0.90	14	D	53.7	1.01	14	B	10.8	0.67	9	B	10.8	0.67	9	B	11.1	0.68	9				
		Southbound (Reference Phase Existing + No-Build)	C	25.6	0.20	11	C	26.0	0.24	11	C	34.9	0.29	19	C	34.9	0.29	19	D	36.0	0.36	19				
		Total (Act-Uncrd - Build)	**F**	**328.1**	**2.25**		**F**	**448.1**	**2.71**		**F**	**194.9**	**1.51**		**F**	**194.9**	**1.51**		**D**	**37.6**	**0.99**					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	9	None	0.03	150	9	None	0.03	150	9	None	0.03	145				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: Assume hold phase for BRT				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Exclusive EBR Additional WBT EBL = L + LT + T							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
112	28: Westpark and IH-610 NBFR	Eastbound (Coordinated - Build)	F	872.3	7.09dl		F	1033.3	8.33dl		A	9.1	0.78	11	A	9.1	0.78	11	B	14.2	0.76					
		Westbound (Coordinated - All)	E	55.7	0.85	19	F	101.5	1.00	19	F	219.2	1.39		F	219.2	1.39		F	104.8	1.09	11				
		Northbound	E	73.4	0.97	9	F	120.3	1.13	9	F	95.3	1.06	14	F	95.3	1.06	14	E	72.8	0.98	14				
		Total	**F**	**319.6**	**7.09dl**		**F**	**402.0**	**8.33dl**		**F**	**107.6**	**1.39**		**F**	**107.6**	**1.39**		**E**	**64.6**	**1.09**					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C								130	9	None	0.03	150	9	None	0.03	150	9	None	0.03	150				
111	27: Westpark and IH-610 SBFR	Eastbound (Coordinated - Build)	F	146.3	1.38		F	222.5	1.62		F	209.4	1.41 dr		F	209.4	1.41 dr		E	63.1	1.07					
		Westbound (Coordinated - All)	F	110.9	1.36	14	F	144.1	1.60	14	D	45.5	0.61	9	D	45.5	0.61	9	D	37.8	0.60	9				
		Southbound	C	23.5	0.32	11	C	24.2	0.38	11	C	34.5	0.45	19	C	34.5	0.45	19	C	34.6	0.46	19				
		Total	**F**	**116.0**	**1.38**		**F**	**163.9**	**1.62**		**F**	**114.5**	**1.41 dr**		**F**	**114.5**	**1.41 dr**		**D**	**48.3**	**1.07**					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	9	None	0.03	150	9	None	0.03	150	9	None	0.03	150				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: Assume hold phase for BRT				Full Mitigation 2030: Same as Build Baseline				Partial Mitigation 1: Exclusive EBR Additional WBT EBL = L + LT + T							
ROW is ranked from 1 to 2 with 1 having the least ROW impacts and 2 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**1**				**2**				

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 2 with 1 having least drainage impacts and 2 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030: Assume hold phase for BRT	Full Mitigation 2030: Same as Build Baseline	Partial Mitigation 1: Exclusive EBR Additional WBT EBL = L + LT + T	
	1	**1**	**2**	

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 2 with 1 having least impacts to existing trees and 2 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030: Assume hold phase for BRT	Full Mitigation 2030: Same as Build Baseline	Partial Mitigation 1: Exclusive EBR Additional WBT EBL = L + LT + T	
	1	**1**	**1**	

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: Max recall for mainline only				Same as Build Baseline				Partial Mitigation 1: NB exclusive L, T, R SB Shared L+T, exclusive R Exclusive EBR				Partial Mitigation 2: NBL / SBL Permitted Phasing			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
113	29: Westpark and Newcastle	Eastbound	C	28.8	0.64	25	C	32.1	0.74	25	E	55.1	0.93	27	E	55.1	0.93	27	D	45.0	0.84	27	D	37.4	0.83	27
		Westbound (Reference Phase)	D	40.7	0.68	20	D	44.7	0.81	20	D	39.6	0.69	22	D	39.6	0.69	22	D	41.3	0.71	22	C	32.1	0.65	22
		Northbound	E	71.6	1.14	12	F	107.8	1.33	12	C	32.6	0.82	33	C	32.6	0.82	33	C	27.9	0.85	33	C	31.1	0.94	33
		Southbound	C	22.2	0.38	12	C	23.0	0.44	12	C	34.5	0.69	35	C	34.5	0.69	35	D	36.0	0.63	35	B	11.4	0.27	35
		Total (Pretimed Existing + No-Build / Act-Uncrd Res	**D**	**44.3**	**1.14**		**E**	**57.9**	**1.33**		**D**	**42.4**	**0.93**		**D**	**42.4**	**0.93**		**D**	**37.6**	**0.85**		**C**	**32.1**	**0.94**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.39	160	2/6	EBT/WBT	0.39	160	2/6	EBT/WBT	0.38	160	2/6	EBT/WBT	0.38	110

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: Max recall for mainline only				Same as Build Baseline				Partial Mitigation 1: NB exclusive L, T, R SB Shared L+T, exclusive R				Partial Mitigation 2: NBL / SBL Permitted Phasing			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
113	29: Westpark and Newcastle	Eastbound	C	34.0	0.66	25	D	37.9	0.77	25	D	35.1	0.78	27	D	35.1	0.78	27	C	31.6	0.70	27	C	26.3	0.60	27
		Westbound (Reference Phase)	D	39.2	0.66	20	D	40.2	0.77	20	C	28.7	0.75	22	C	28.7	0.75	22	C	33.1	0.76	22	C	26.9	0.73	22
		Northbound	C	30.6	0.78	13	D	37.8	0.91	13	C	25.1	0.76	33	C	25.1	0.76	33	C	25.1	0.74	33	C	23.4	0.79	33
		Southbound	C	24.2	0.48	13	C	25.3	0.56	13	C	28.4	0.73	35	C	28.4	0.73	35	C	28.9	0.66	35	B	13.8	0.46	35
		Total (Act-Coord Existing + No-Build / Act-Uncrd Re	**C**	**34.1**	**0.78**		**D**	**37.4**	0.91		**C**	**29.7**	**0.78**		**C**	**29.7**	**0.78**		**C**	**30.4**	**0.76**		**C**	**24.5**	**0.79**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.38	130	2/6	EBT/WBT	0.38	130	2/6	EBT/WBT	0.34	130	2/6	EBT/WBT	0.39	110

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: Max recall for mainline only				Same as Build Baseline				Partial Mitigation 1: NB exclusive L, T, R SB Shared L+T, exclusive R Exclusive EBR				Partial Mitigation 2: NBL / SBL Permitted Phasing			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**1**				**1**				**1**

Drainage Impact Rating

	Build Baseline 2030: Max recall for mainline only	Same as Build Baseline	Partial Mitigation 1: NB exclusive L, T, R SB Shared L+T, exclusive R Exclusive EBR	Partial Mitigation 2: NBL / SBL Permitted Phasing
Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**1**	**3**	**3**

Tree Impact Rating

	Build Baseline 2030: Max recall for mainline only	Same as Build Baseline	Partial Mitigation 1: NB exclusive L, T, R SB Shared L+T, exclusive R Exclusive EBR	Partial Mitigation 2: NBL / SBL Permitted Phasing
Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**3**	**3**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 TH, THRT EB/WB)				Full Mitigation 2030: Same as Build Baseline				Alternative Scenario: One dedicated left turn lane and one single through/right lane (EB & WB approch)				Partial Mitigation: Add one dedicated right turn lane at SB approach and one dedicated left turn lane at EB approach			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
114	Westpark at Weslayan	Eastbound	D	41.1	0.86	12	D	42.1	0.91	12	F	104.5	1.29	20	F	104.5	1.29	20	F	148.9	1.29	20	F	114.9	1.23	23
		Westbound	E	56.9	0.66	13	E	58.0	0.69	13	D	41.7	0.58	22	D	41.7	0.58	22	E	64.1	0.86	22	D	40.6	0.69	22
		Northbound ((Coordinated - Existing,No Build)	C	31.7	0.60	11	D	36.6	0.72	11	C	23.0	0.92	32	C	23.0	0.92	32	F	83.0	1.16	28	B	11.1	0.83	35
		Southbound	F	96.3	0.91	11	F	101.0	1.04	11	F	92.9	0.93	30	F	92.9	0.93	30	F	102.4	1.06	27	E	70.2	0.79	30
		Total (Uncoordinated - Build)	**E**	**55.7**	**0.91**		**E**	**58.9**	**1.04**		**E**	**71.7**	**1.29**		**E**	**71.7**	**1.29**		**F**	**109.0**	**1.29**		**E**	**65.4**	**1.23**	
		Bus Phase(s) / Concurrent Movement(s) / G/C				120				120	9	EBT/WBT	0.24	110	9	EBT/WBT	0.24	110	9	EBT/WBT	0.35	125	9	EBT/WBT	0.18	105

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 TH, THRT EB/WB)				Full Mitigation 2030: Same as Build Baseline				Alternative Scenario: One dedicated left turn lane and one single through/right lane (EB & WB approch)				Partial Mitigation: Add one dedicated right turn lane at SB approach and one dedicated left turn lane at EB approach			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
114	Westpark at Weslayan	Eastbound	F	121.6	1.15	12	F	158.4	1.27	12	F	101.3	0.95	20	F	101.3	0.95	20	F	163.5	1.33	20	E	72.8	1.26	23
		Westbound	E	76.4	0.96	13	F	96.5	1.06	13	E	68.8	0.88	22	E	68.8	0.88	22	F	115.7	1.22	22	E	73.0	1.37	22
		Northbound ((Coordinated - Existing,No Build)	D	48.3	1.24	11	F	56.5	1.37	11	C	24.7	0.93	32	C	24.7	0.93	32	D	36.4	1.29	28	C	22.0	0.87	35
		Southbound	E	79.8	0.83	11	E	84.1	0.91	11	F	96.1	1.05	30	F	96.1	1.05	30	F	140.8	1.22	27	E	63.9	0.80	30
		Total (Uncoordinated - Build)	**F**	**81.6**	**1.24**		**F**	**97.5**	**1.37**		**E**	**75.2**	**1.05**		**E**	**75.2**	**1.05**		**F**	**116.5**	**1.33**		**E**	**57.6**	**1.37**	
		Bus Phase(s) / Concurrent Movement(s) / G/C				120				120	9	EBT/WBT	0.15	130	9	EBT/WBT	0.15	130	9	EBT/WBT	0.18	125	9	EBT/WBT	0.10	100

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030 (1 LT, 1 TH, THRT EB/WB)				Full Mitigation 2030: Same as Build Baseline				Alternative Scenario: One dedicated left turn lane and one single through/right lane (EB & WB approch)				Partial Mitigation: Add one dedicated right turn lane at SB approach and one dedicated left turn lane at EB approach			
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:	**30405**	**0**	**6**	**1**	**30405**	**0**	**6**	**1**	**30505**	**0**	**8**	**2**	**30506**	**0**	**8**	**3**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030 (1 LT, 1 TH, THRT EB/WB)	Full Mitigation 2030: Same as Build Baseline	Alternative Scenario: One dedicated left turn lane and one single through/right lane (EB & WB approch)	Partial Mitigation: Add one dedicated right turn lane at SB approach and one dedicated left turn lane at EB approach
	1	**1**	**3**	**2**

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030 (1 LT, 1 TH, THRT EB/WB)	Full Mitigation 2030: Same as Build Baseline	Alternative Scenario: One dedicated left turn lane and one single through/right lane (EB & WB approch)	Partial Mitigation: Add one dedicated right turn lane at SB approach and one dedicated left turn lane at EB approach
	1	**1**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 - One shared thru-right lane and one left turn lane (EB approach), shared thru-left and a shared thru- right (SB approach)				Full Mitigation 2030 - Adds one thru lane to the EB approach and seperates the SB shared thru-left movements (one thru lane, one left turn lane)				Partial Mitigation 1 - Adds one EB thru lane to the baseline and moves the WB left turn to its own dedicated lane				Partial Mitigation 2 - At the EB approach, convert the dedicated left turn in the baseline to a shared thru-left. Convert the thru-left at the WB approach to a dedicated thru and a dedicated left turn lane.				Partial Mitigation (Recommended) - Convert one NB thru lane to shared left-thru lane. Convert thru-left at the WB approach to dedicated thru + dedicated left			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
115	Westpark & Edloe	Eastbound (Coordinated)	C	28.8	0.79	16	C	30.6	0.82	16	D	36.5	0.63	31	C	23.0	0.59	31	C	28.7	0.54	31	C	29.6	0.73	33	D	46.5	0.76	31
		Westbound	C	23.9	0.46	16	C	28.4	0.57	16	D	41.2	0.75	31	C	27.9	0.66	38	C	34.0	0.58	31	B	13.0	0.30	32	C	33.2	0.6	31
		Northbound	D	46.2	0.75	10	C	46.7	0.78	10	D	49.2	0.76	22	D	40.0	0.72	22	D	49.1	0.76	22	D	42.6	0.74	24	D	44.4	0.77	22
		Southbound	D	39.8	0.54	12	D	41.8	0.58	12	E	55.2	0.79	23	C	27.3	0.50	26	E	55.2	0.79	25	D	48.4	0.77	22	E	55.2	0.79	23
		Total	**D**	**35.6**	0.79		**D**	**37.5**	0.82		**D**	**45.0**	0.79		**C**	**30.2**	0.72		**D**	**41.2**	0.79		**C**	**33.9**	0.77		**D**	**44.8**	0.79	
		Bus Phase(s) / Concurrent Movement(s) / G/C				120				120	5, 8	EBL, NBT	0.32	125	5	EBL	0.23	105	5, 8	EBL, NBT	0.32	125	8	NBT	0.21	110	5	EBL	0.18	125

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 - One shared thru-right lane and one left turn lane (EB approach), shared thru-left and a shared thru- right (SB approach)				Full Mitigation 2030 - Adds one thru lane to the EB approach and seperates the SB shared thru-left movements (one thru lane, one left turn lane)				Partial Mitigation 1 - Adds one EB thru lane to the baseline and moves the WB left turn to its own dedicated lane				Partial Mitigation 2 - At the EB approach, convert the dedicated left turn in the baseline to a shared thru-left. Convert the thru-left at the WB approach to a dedicated thru and a dedicated left turn lane.				Partial Mitigation (Recommended) - Convert one NB thru lane to shared left-thru lane. Convert thru-left at the WB approach to dedicated thru + dedicated left			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
115	Westpark & Edloe	Eastbound (Coordinated)	C	23.7	0.66	16	C	24.2	0.68	16	D	41.3	0.79	31	C	20.3	0.63	31	C	33.2	0.70	31	C	30.1	0.71	33	D	46.8	0.9	31
		Westbound	C	30.9	0.73	16	D	38.7	0.86	16	E	73.8	1.01	31	D	35.1	0.86	38	D	47.6	0.85	31	C	24.7	0.59	32	D	50.1	0.9	31
		Northbound	D	47.8	0.68	10	C	47.4	0.70	10	E	60.0	0.76	22	D	41.0	0.68	22	D	50.1	0.72	22	D	43.8	0.69	24	D	50.7	0.86	22
		Southbound	D	41.3	0.64	12	C	41.6	0.67	12	F	118.1	1.00	23	D	43.4	0.83	26	E	61.9	0.90	25	D	51.9	0.90	22	E	66.1	0.97	23
		Total	**D**	**35.8**	0.72		**D**	**38.6**	0.86		**E**	**76.4**	**1.01**		**D**	**35.7**	0.86		**D**	**49.2**	0.90		**D**	**36.9**	0.90		**D**	**53.7**	0.97	
		Bus Phase(s) / Concurrent Movement(s) / G/C				120				120	5, 8	EBL, NBT	0.28	145	5	EBL	0.14	105	5, 8	EBL, NBT	0.32		8	NBT	0.16	110	5	EBL	0.09	115

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030 - One shared thru-right lane and one left turn lane (EB approach), shared thru-left and a shared thru- right (SB approach)				Full Mitigation 2030 - Adds one thru lane to the EB approach and seperates the SB shared thru-left movements (one thru lane, one left turn lane)				Partial Mitigation 1 - Adds one EB thru lane to the baseline and moves the WB left turn to its own dedicated lane				Partial Mitigation 2 - At the EB approach, convert the dedicated left turn in the baseline to a shared thru-left. Convert the thru-left at the WB approach to a dedicated thru and a dedicated left turn lane.				Partial Mitigation (Recommended) - Convert one NB thru lane to shared left-thru lane. Convert thru-left at the WB approach to dedicated thru + dedicated left			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:	**56563**	**0**	**4**	**1**	**61206**	**0**	**5**	**4**	**61206**	**0**	**5**	**4**	**59492**	**0**	**4**	**2**	**56563**	**0**	**4**	**1**

Drainage Impact Rating

	Build Baseline 2030 - One shared thru-right lane and one left turn lane (EB approach), shared thru-left and a shared thru- right (SB approach)	Full Mitigation 2030 - Adds one thru lane to the EB approach and seperates the SB shared thru-left movements (one thru lane, one left turn lane)	Partial Mitigation 1 - Adds one EB thru lane to the baseline and moves the WB left turn to its own dedicated lane	Partial Mitigation 2 - At the EB approach, convert the dedicated left turn in the baseline to a shared thru-left. Convert the thru-left at the WB approach to a dedicated thru and a dedicated left turn lane.	Partial Mitigation (Recommended) - Convert one NB thru lane to shared left-thru lane. Convert thru-left at the WB approach to dedicated thru + dedicated left
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**4**	**3**	**2**	**1**

Tree Impact Rating

	Build Baseline 2030 - One shared thru-right lane and one left turn lane (EB approach), shared thru-left and a shared thru- right (SB approach)	Full Mitigation 2030 - Adds one thru lane to the EB approach and seperates the SB shared thru-left movements (one thru lane, one left turn lane)	Partial Mitigation 1 - Adds one EB thru lane to the baseline and moves the WB left turn to its own dedicated lane	Partial Mitigation 2 - At the EB approach, convert the dedicated left turn in the baseline to a shared thru-left. Convert the thru-left at the WB approach to a dedicated thru and a dedicated left turn lane.	Partial Mitigation (Recommended) - Convert one NB thru lane to shared left-thru lane. Convert thru-left at the WB approach to dedicated thru + dedicated left
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**4**	**4**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added an EBT, WBT, and NBR dedicated turn lane to the baseline				Partial Mitigation 1: Added dedicated left turn lane to the baseline at the NBL approach				Partial Mitigation 2: Added WBT lane to the baseline			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
118	Richmond at Edloe	Eastbound	D	43.0	0.67	18	D	42.7	0.69	18	D	37.5	0.76	26	D	39.5	0.68	26	D	38.9	0.76	26	D	39.6	0.78	26
		Westbound	D	46.9	0.64	18	D	46.0	0.65	18	D	41.4	0.85	26	D	43.3	0.90	29	D	40.9	0.85	29	D	40.3	0.90	26
		Northbound (Coordinated)	C	33.7	0.67	10	D	36.3	0.78	10	E	75.8	1.31	27	C	33.0	0.88	30	D	49.8	0.93	27	D	49.7	0.98	30
		Southbound	C	34.6	0.52	10	D	36.4	0.58	10	C	34.7	0.57	27	C	33.9	0.48	30	C	34.2	0.57	27	D	38.5	0.64	27
		Total	**D**	**38.8**	0.67		**D**	**39.8**	0.78		**D**	**52.2**	1.31		**D**	**37.1**	0.90		**D**	**42.7**	0.93		**D**	**43.4**	0.98	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	3	WBL/NBR	0.06	105	3	WBL/NBR	0.06	110	3	WBL/NBR	0.06	105	3	WBL/NBR	0.06	110

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added an EBT, WBT, and NBR dedicated turn lane to the baseline				Partial Mitigation 1: Added dedicated left turn lane to the baseline at the NBL approach				Partial Mitigation 2: Added WBT lane to the baseline			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
118	Richmond at Edloe	Eastbound	D	41.8	0.72	18	D	43.6	0.76	18	D	51.9	0.89	26	D	43.9	0.70	26	D	43.6	0.83	26	E	55.5	0.91	26
		Westbound	D	47.4	0.76	18	D	47.4	0.80	18	E	61.7	1.04	26	E	57.6	1.04	29	D	54.1	1.04	29	D	51.8	0.98	26
		Northbound (Coordinated)	C	112.1	1.66	10	F	131.4	1.83	10	E	60.7	1.05	27	D	51.6	1.04	30	E	56.3	0.99	27	E	57.1	0.98	30
		Southbound	C	32.7	0.48	10	D	35.2	0.53	10	D	51.4	0.77	27	D	47.6	0.67	30	D	44.1	0.69	27	D	53.3	0.78	27
		Total	**E**	**58.3**	**1.66**		**E**	**63.8**	**1.83**		**E**	**56.9**	**1.05**		**D**	**50.7**	1.04		**D**	**49.9**	1.04		**D**	**54.3**	0.98	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	3	WBL/NBR	0.14	125	3	WBL/NBR	0.14	130	3	WBL/NBR	0.14	115	3	WBL/NBR	0.15	130

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.

	Build Baseline 2030				Full Mitigation 2030: Added an EBT, WBT, and NBR dedicated turn lane to the baseline				Partial Mitigation 1: Added dedicated left turn lane to the baseline at the NBL approach				Partial Mitigation 2: Added WBT lane to the baseline			
	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:	**6256**	**0**	**6**	**1**	**29984**	**3**	**8**	**4**	**7423**	**1**	**5**	**2**	**19767**	**2**	**5**	**3**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.

Build Baseline 2030	Full Mitigation 2030: Added an EBT, WBT, and NBR dedicated turn lane to the baseline	Partial Mitigation 1: Added dedicated left turn lane to the baseline at the NBL approach	Partial Mitigation 2: Added WBT lane to the baseline
1	4	2	3

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.

Build Baseline 2030	Full Mitigation 2030: Added an EBT, WBT, and NBR dedicated turn lane to the baseline	Partial Mitigation 1: Added dedicated left turn lane to the baseline at the NBL approach	Partial Mitigation 2: Added WBT lane to the baseline
1	4	2	3

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added EBT and WBT lanes to the baseline				Partial Mitigation 1: Added a NBL dedicated turn lane and removed EBT lane and changed a shared WBT lane to a dedicated WBR lane from the Full Mitigation Scenario				Partial Mitigation 2: Removed WBT lane and changed a shared EBT lane to a dedicated EBR lane from the Full Mitigation Scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
119	Richmond at Buffalo Speedway	Eastbound	D	40.7	0.70	20	D	39.7	0.71	20	E	75.5	1.03	26	D	44.4	0.78	29	E	63.3	0.97	29	D	48.8	0.90	26
		Westbound	E	55.8	0.87	20	E	63.8	0.96	20	E	63.9	0.95	25	E	55.6	0.79	28	F	90.6	1.26	28	E	61.2	0.89	22
		Northbound (Coordinated)	D	37.6	0.82	15	D	48.3	0.94	15	D	54.6	0.96	29	E	56.1	1.00	36	D	48.4	0.94	37	D	49.6	0.92	30
		Southbound	C	32.0	0.40	15	D	35.5	0.48	15	D	38.8	0.58	30	D	35.7	0.59	37	D	35.7	0.59	30	D	35.6	0.58	37
		Total	**D**	**41.7**	0.87		**D**	**47.6**	0.96		**E**	**59.6**	**1.03**		**D**	**49.5**	1.00		**E**	**60.0**	**1.26**		**D**	**49.8**	0.92	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	4/8	EBT/WBT	0.28	120	4/8	EBT/WBT	0.19	120	4/8	EBT/WBT	0.23	120	4/8	EBT/WBT	0.26	120

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added EBT and WBT lanes to the baseline				Partial Mitigation 1: Added a NBL dedicated turn lane and removed EBT lane and changed a shared WBT lane to a dedicated WBR lane from the Full Mitigation Scenario				Partial Mitigation 2: Removed WBT lane and changed a shared EBT lane to a dedicated EBR lane from the Full Mitigation Scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
119	Richmond at Buffalo Speedway	Eastbound	C	33.8	0.64	20	C	33.8	0.68	20	F	83.2	0.97	26	E	61.9	0.83	29	E	79.1	0.99	29	E	70.5	1.00	26
		Westbound	F	123.3	1.57	20	F	147.0	1.74	20	F	87.0	1.04	25	E	66.4	0.96	28	E	68.9	1.05	28	F	99.7	1.10	22
		Northbound (Coordinated)	F	81.6	1.31	15	F	105.5	1.46	15	E	64.5	1.00	29	E	64.5	1.13	36	E	61.0	1.02	37	E	70.7	1.07	30
		Southbound	D	41.4	0.61	15	D	44.5	0.70	15	E	64.8	0.81	30	D	49.8	0.69	37	D	43.5	0.68	30	E	58.7	0.79	37
		Total	**E**	**78.4**	**1.57**		**F**	**93.5**	**1.74**		**E**	**76.2**	**1.04**		**E**	**62.1**	**1.13**		**E**	**64.6**	**1.05**		**E**	**78.4**	**1.07**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	4/8	EBT/WBT	0.27	150	4/8	EBT/WBT	0.22	140	4/8	EBT/WBT	0.27	130	4/8	EBT/WBT	0.24	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Added EBT and WBT lanes to the baseline				Partial Mitigation 1: Added a NBL dedicated turn lane and removed EBT lane and changed a shared WBT lane to a dedicated WBR lane from the Full Mitigation Scenario				Partial Mitigation 2: Removed WBT lane and changed a shared EBT lane to a dedicated EBR lane from the Full Mitigation Scenario			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:	**3192**	**1**	**3**	**1**	**20037**	**3**	**8**	**4**	**5082**	**1**	**3**	**2**	**3192**	**1**	**3**	**1**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030	Full Mitigation 2030: Added EBT and WBT lanes to the baseline	Partial Mitigation 1: Added a NBL dedicated turn lane and removed EBT lane and changed a shared WBT lane to a dedicated WBR lane from the Full Mitigation Scenario	Partial Mitigation 2: Removed WBT lane and changed a shared EBT lane to a dedicated EBR lane from the Full Mitigation Scenario
	1	4	3	2

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030	Full Mitigation 2030: Added EBT and WBT lanes to the baseline	Partial Mitigation 1: Added a NBL dedicated turn lane and removed EBT lane and changed a shared WBT lane to a dedicated WBR lane from the Full Mitigation Scenario	Partial Mitigation 2: Removed WBT lane and changed a shared EBT lane to a dedicated EBR lane from the Full Mitigation Scenario
	1	4	3	2

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one dedicated left turn lane in both EB and WB directions				Full Mitigation 2030: Add two thru lanes to the EB and WB directions				Partial Mitigation 1: Add one thru lane to the EB and WB directions to baseline.				Partial Mitigation 2: Add a dedicated SBR turn lane.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
120	Richmond Avenue and Eastside Street	Eastbound (Coordinated)	C	20.5	0.78	26	C	28.5	0.90	26	D	47.5	1.00	13	C	28.3	0.93	13	D	37.3	0.95	13	E	58.6	1.13	13
		Westbound	C	24.3	0.41	26	C	29.6	0.54	26	F	80.1	1.04	13	B	16.2	0.37	13	C	22.6	0.53	13	C	32.5	0.83	17
		Northbound	C	21.7	0.29	12	C	21.4	0.30	12	F	82.2	1.06	26	D	43.7	0.77	40	C	30.4	0.42	33	D	44.1	0.55	26
		Southbound	B	13.5	0.43	12	B	13.0	0.43	12	C	20.7	0.59	26	C	21.4	0.69	40	C	25.9	0.76	33	D	53.5	0.95	26
		Total	C	**20.8**	**0.78**		C	**26.1**	**0.90**		**E**	**55.5**	**1.06**		**C**	**23.9**	**0.93**		**C**	**30.1**	**0.95**		**D**	**48.4**	**1.13**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.49	150	2/6	EBT/WBT	0.50	100	2/6	EBT/WBT	0.50	120	2/6	EBT/WBT	0.61	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one dedicated left turn lane in both EB and WB directions				Full Mitigation 2030: Add two thru lanes to the EB and WB directions				Partial Mitigation 1: Add one thru lane to the EB and WB directions to baseline.				Partial Mitigation 2: Add a dedicated SBR turn lane.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
120	Richmond Avenue and Eastside Street	Eastbound (Coordinated)	B	14.0	0.56	26	B	17.3	0.69	26	E	61.8	1.14	13	C	32.0	1.00	13	D	38.8	1.00	13	E	63.0	1.28	13
		Westbound	B	16.5	0.40	26	B	19.0	0.46	26	F	115.8	1.16	13	B	19.5	0.46	13	C	27.5	0.68	13	E	79.5	1.07	17
		Northbound	C	33.2	0.68	13	D	36.4	0.76	13	E	59.2	0.96	26	C	21.9	0.41	40	C	20.8	0.35	33	C	28.9	0.43	26
		Southbound	C	32.3	0.77	13	D	36.7	0.81	13	D	45.6	0.82	26	C	26.8	0.80	40	C	33.8	0.84	33	D	54.0	0.82	26
		Total	B	**18.9**	**0.77**		C	**22.2**	**0.81**		**E**	**79.8**	**1.16**		**C**	**25.8**	**1.00**		**C**	**32.8**	**1.00**		**E**	**66.2**	**1.28**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.57	150	2/6	EBT/WBT	0.53	110	2/6	EBT/WBT	0.51	120	2/6	EBT/WBT	0.63	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: One thru lane and one dedicated left turn lane in both EB and WB directions				Full Mitigation 2030: Add two thru lanes to the EB and WB directions				Partial Mitigation 1: Add one thru lane to the EB and WB directions to baseline.				Partial Mitigation 2: Add a dedicated SBR turn lane.			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits: Audley St to Virginia St	**332**	**0**	**4**	**1**	**33073**	**7**	**11**	**4**	**2971**	**0**	**5**	**2**	**3714**	**0**	**5**	**3**

Drainage Impact Rating

	Build Baseline 2030: One thru lane and one dedicated left turn lane in both EB and WB directions	Full Mitigation 2030: Add two thru lanes to the EB and WB directions	Partial Mitigation 1: Add one thru lane to the EB and WB directions to baseline.	Partial Mitigation 2: Add a dedicated SBR turn lane.
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**4**	**3**	**2**

Tree Impact Rating

	Build Baseline 2030: One thru lane and one dedicated left turn lane in both EB and WB directions	Full Mitigation 2030: Add two thru lanes to the EB and WB directions	Partial Mitigation 1: Add one thru lane to the EB and WB directions to baseline.	Partial Mitigation 2: Add a dedicated SBR turn lane.
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**4**	**3**	**2**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one left turn lane at the westbound approach. Two thru lanes and one left turn lane at the eastbound approach.				Full Mitigation 2030: Add one thru lane to the eastbound approach and two thru lanes to the westbound approach.				Partial Mitigation 1: Add one WB thru lane to baseline.				Partial Mitigation 2:Add one WB thru lane to baseline. Add an additional left turn lane to both NB and SB. Dual left turn lanes in both directions.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
121	Richmond Avenue and Kirby Drive	Eastbound	C	27.5	0.68	17	C	30.0	0.77	17	E	58.5	0.98	29	E	61.4	1.04	25	E	61.2	0.99	26	D	54.2	0.98	25
		Westbound	D	41.9	0.79	17	D	45.3	0.87	17	F	92.7	0.82	26	D	44.0	0.53	26	D	44.8	0.52	25	D	38.6	0.50	26
		Northbound	F	298.8	1.61	14	F	365.4	1.77	14	D	52.7	0.98	26	D	52.6	1.04	36	D	53.5	0.99	32	E	57.3	0.98	30
		Southbound (Coordinated)	F	153.7	1.25	14	F	203.0	1.38	14	E	67.7	0.99	25	E	57.3	0.95	37	E	69.5	1.01	30	D	50.4	0.95	32
		Total	**F**	**181.4**	**1.61**		**F**	**225.3**	**1.77**		**E**	**62.4**	**0.99**		**D**	**54.8**	**1.04**		**E**	**59.2**	**1.01**		**D**	**52.7**	**0.98**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	4/8	EBT/WBT	0.24	130	4/8	EBT/WBT	0.24	130	4/8	EBT/WBT	0.24	125	4/8	EBT/WBT	0.27	115

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one left turn lane at the westbound approach. Two thru lanes and one left turn lane at the eastbound approach.				Full Mitigation 2030: Add one thru lane to the eastbound approach and two thru lanes to the westbound approach.				Partial Mitigation 1: Add one WB thru lane to baseline.				Partial Mitigation 2:Add one WB thru lane to baseline. Add an additional left turn lane to both NB and SB. Dual left turn lanes in both directions.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
121	Richmond Avenue and Kirby Drive	Eastbound	F	118.3	1.65	17	F	142.7	1.84	17	F	96.3	1.35	29	E	80.0	1.23	25	E	67.1	1.00	26	F	80.5	1.26	25
		Westbound	D	38.8	0.86	17	D	43.3	0.96	17	F	127.0	1.17	26	D	43.1	0.56	26	E	72.8	0.80	25	D	44.2	0.71	26
		Northbound	F	404.7	1.93	14	F	478.6	2.12	14	E	70.4	1.27	26	E	62.1	1.19	36	E	55.9	0.99	32	E	58.9	1.01	30
		Southbound (Coordinated)	F	208.5	1.39	14	F	292.3	1.60	14	E	76.4	1.03	25	E	66.2	0.99	37	F	80.6	1.03	30	E	59.2	0.99	32
		Total	**F**	**235.9**	**1.93**		**F**	**293.2**	**2.12**		**F**	**85.1**	**1.35**		**E**	**64.7**	**1.23**		**E**	**68.0**	**1.03**		**E**	**61.7**	**1.26**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	4/8	EBT/WBT	0.28	130	4/8	EBT/WBT	0.24	130	4/8	EBT/WBT	0.21	145	4/8	EBT/WBT	0.27	115

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: One thru lane and one left turn lane at the westbound approach. Two thru lanes and one left turn lane at the eastbound approach.				Full Mitigation 2030: Add one thru lane to the eastbound approach and two thru lanes to the westbound approach.				Partial Mitigation 1: Add one WB thru lane to baseline.				Partial Mitigation 2:Add one WB thru lane to baseline. Add an additional left turn lane to both NB and SB. Dual left turn lanes in both directions.			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits: Virginia St to Greenbriar Dr	**16455**	**3**	**21**	**1**	**59999**	**11**	**26**	**4**	**23448**	**5**	**14**	**2**	**26914**	**5**	**14**	**3**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030: One thru lane and one left turn lane at the westbound approach. Two thru lanes and one left turn lane at the eastbound approach.	Full Mitigation 2030: Add one thru lane to the eastbound approach and two thru lanes to the westbound approach.	Partial Mitigation 1: Add one WB thru lane to baseline.	Partial Mitigation 2:Add one WB thru lane to baseline. Add an additional left turn lane to both NB and SB. Dual left turn lanes in both directions.
	1	**4**	**2**	**3**

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030: One thru lane and one left turn lane at the westbound approach. Two thru lanes and one left turn lane at the eastbound approach.	Full Mitigation 2030: Add one thru lane to the eastbound approach and two thru lanes to the westbound approach.	Partial Mitigation 1: Add one WB thru lane to baseline.	Partial Mitigation 2:Add one WB thru lane to baseline. Add an additional left turn lane to both NB and SB. Dual left turn lanes in both directions.
	1	**1**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane and one WB thru lane				Partial Mitigation 1: Add one EB thru lane				Partial Mitigation 2: EB and WB have shared LT/TH and TH/RT lanes			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
125	Richmond Ave at Woodhead St	Eastbound (coordinated)	A	9.9	0.22	10	B	13.9	0.28	10	B	19.2	0.62	10	B	13.3	0.31	10	B	13.2	0.31	10	B	14.6	0.47	10
		Westbound	A	6.2	0.23	10	A	9.3	0.29	10	B	18.1	0.56	10	B	12.9	0.29	10	B	17.6	0.54	10	B	14.2	0.45	10
		Northbound	D	45.3	0.74	15	C	34.9	0.63	15	C	23.9	0.70	20	C	23.5	0.68	27	C	23.5	0.68	24	C	31.2	0.73	27
		Southbound	D	47.7	0.76	15	C	34.3	0.61	15	C	21.3	0.76	20	C	24.0	0.77	27	C	24.0	0.77	24	C	30.4	0.81	27
		Total	**C**	**21.9**	0.76		**B**	**19.9**	0.63		**C**	**20.1**	0.76		**B**	**17.0**	0.77		**B**	**18.4**	0.77		**C**	**20.4**	0.81	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.17	60	2/6	EBT/WBT	0.15	65	2/6	EBT/WBT	0.15	65	9	None	0.07	75

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane and one WB thru lane				Partial Mitigation 1: Add one EB thru lane				Partial Mitigation 2: EB and WB have shared LT/TH and TH/RT lanes			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
125	Richmond Ave at Woodhead St	Eastbound (coordinated)	B	12.3	0.23	10	B	15.2	0.28	10	C	23.3	0.70	10	B	19.3	0.44	10	B	18.2	0.39	10	B	19.5	0.51	10
		Westbound	A	8.9	0.25	10	B	14.2	0.30	10	C	25.0	0.75	10	B	19.2	0.47	10	C	31.4	0.80	10	B	20.0	0.55	10
		Northbound	D	48.9	0.85	15	D	41.8	0.81	15	D	37.5	0.89	20	C	24.2	0.79	27	C	27.4	0.82	24	C	31.7	0.84	27
		Southbound	C	33.1	0.55	15	C	28.9	0.50	15	B	18.8	0.54	20	B	11.9	0.44	27	B	14.5	0.48	24	B	17.2	0.51	27
		Total	**C**	**23.7**	0.85		**C**	**23.8**	0.81		**C**	**27.1**	0.89		**B**	**19.7**	0.79		**C**	**24.3**	0.82		**C**	**22.6**	0.84	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.14	70	2/6	EBT/WBT	0.15	90	2/6	EBT/WBT	0.14	70	9	None	0.07	75

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehcile V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane and one WB thru lane				Partial Mitigation 1: Add one EB thru lane				Partial Mitigation 2: EB and WB have shared LT/TH and TH/RT lanes			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**4**				**3**				**2**

Drainage Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Add one EB thru lane and one WB thru lane	Partial Mitigation 1: Add one EB thru lane	Partial Mitigation 2: EB and WB have shared LT/TH and TH/RT lanes
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**4**	**3**	**2**

Tree Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Add one EB thru lane and one WB thru lane	Partial Mitigation 1: Add one EB thru lane	Partial Mitigation 2: EB and WB have shared LT/TH and TH/RT lanes
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Exclusive SBR Additional EBT lane				Partial Mitigation 2: Shared EB/WB LTTH + THRT Exclusive SBL			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
126	Richmond at Dunlavy	Eastbound (Coordinated)	B	12.0	0.25	11	B	13.2	0.29	11	C	23.5	0.67	11	C	20.1	0.59	11	B	17.8	0.61	11	A	9.4	0.42	11
		Westbound	B	10.8	0.22	11	B	14.0	0.26	11	C	24.3	0.65	11	C	21.5	0.35	11	C	22.6	0.55	15	A	7.1	0.21	11
		Northbound	D	36.0	0.53	18	C	32.5	0.52	18	B	19.2	0.45	20	B	19.5	0.43	27	C	33.4	0.68	24	E	59.5	0.89	24
		Southbound	D	51.7	0.85	18	D	47.7	0.85	18	C	33.8	0.83	20	C	31.5	0.80	27	C	28.6	0.79	24	C	29.4	0.69	24
		Total	**C**	**25.0**	0.85		**C**	**24.8**	0.85		**C**	**26.0**	0.83		**C**	**23.5**	0.80		**C**	**23.8**	0.79		**C**	**20.5**	0.89	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.35	70	2/6	EBT/WBT	0.34	80	2/6	EBT/WBT	0.42	80	9	None	0.06	80

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Exclusive SBR Additional EBT lane				Partial Mitigation 2: Shared EB/WB LTTH + THRT Exclusive SBL			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
126	Richmond at Dunlavy	Eastbound (Coordinated)	C	20.2	0.43	11	C	27.5	0.64	11	D	36.2	0.85	11	C	25.8	0.69	11	C	21.7	0.81	11	B	13.4	0.62	11
		Westbound	B	11.3	0.29	11	B	14.7	0.37	11	D	43.5	0.91	11	C	24.7	0.56	11	D	35.8	0.82	15	A	8.4	0.35	11
		Northbound	C	29.3	0.45	18	C	24.7	0.42	18	C	23.4	0.52	20	B	20.0	0.48	27	C	28.1	0.57	24	C	29.0	0.64	24
		Southbound	D	48.6	0.82	18	D	35.7	0.72	18	E	59.6	0.95	20	D	40.3	0.87	27	D	50.3	0.94	24	D	42.5	0.92	24
		Total	**C**	**24.2**	0.82		**C**	**25.0**	0.72		**D**	**40.5**	0.95		**C**	**27.3**	0.87		**C**	**31.9**	0.94		**B**	**19.8**	0.92	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.36	80	2/6	EBT/WBT	0.30	80	2/6	EBT/WBT	0.40	90	9	None	0.06	80

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.

	Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Exclusive SBR Additional EBT lane				Partial Mitigation 2: Shared EB/WB LTTH + THRT Exclusive SBL			
	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				1				4				2				3

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.

Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Exclusive SBR Additional EBT lane	Partial Mitigation 2: Shared EB/WB LTTH + THRT Exclusive SBL
1	4	3	2

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.

Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Exclusive SBR Additional EBT lane	Partial Mitigation 2: Shared EB/WB LTTH + THRT Exclusive SBL
1	4	2	2

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Shared EB/WB LTTH + THRT Separate Bus phase							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
127	Richmond at Mandell	Eastbound (Coordinated)	A	2.2	0.22	14	A	2.4	0.24	14	B	14.1	0.54	14	B	10.3	0.31	14	A	9.4	0.45	14				
		Westbound	A	3.8	0.16	14	A	4.2	0.18	14	B	12.3	0.35	14	B	10.4	0.24	14	A	8.1	0.32	14				
		Northbound	E	65.7	0.79	17	E	68.2	0.82	17	C	29.1	0.57	22	C	31.3	0.58	29	C	30.4	0.73	26				
		Southbound	E	58.8	0.67	17	E	59.3	0.70	17	C	28.4	0.45	22	C	30.7	0.46	29	C	23.2	0.41	26				
		Total	**B**	**18.0**	0.79		**B**	**18.7**	0.82		**B**	**17.5**	0.57		**B**	**15.8**	0.58		**B**	**15.3**	0.73					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.62	75	2/6	EBT/WBT	0.64	80	9	None	0.06	80				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Shared EB/WB LTTH + THRT Separate Bus phase							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
127	Richmond at Mandell	Eastbound (Coordinated)	A	6.7	0.35	14	A	9.1	0.44	14	C	24.4	0.76	14	B	16.7	0.43	14	A	4.0	0.29	14				
		Westbound	B	11.5	0.23	14	B	15.2	0.29	14	B	19.7	0.53	14	B	15.7	0.29	14	A	3.6	0.19	14				
		Northbound	D	49.8	0.84	17	D	39.3	0.76	17	D	38.6	0.79	22	C	32.5	0.74	29	C	31.8	0.58	26				
		Southbound	C	30.5	0.35	17	C	26.0	0.31	17	C	29.6	0.48	22	C	25.3	0.44	29	C	31.0	0.46	26				
		Total	**C**	**20.4**	0.84		**B**	**19.5**	0.76		**C**	**27.0**	0.79		**C**	**21.0**	0.74		**B**	**11.2**	0.58					
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.55	90	2/6	EBT/WBT	0.54	85	9	None	0.06	80				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Shared EB/WB LTTH + THRT Separate Bus phase							
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**1**				**3**				

Drainage Impact Rating

	Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Shared EB/WB LTTH + THRT Separate Bus phase	
Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**1**	**3**	

Tree Impact Rating

	Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Shared EB/WB LTTH + THRT Separate Bus phase	
Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**3**	

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one left turn lanes in each direction				Full Mitigation 2030: Add one thru lane in each direction to Baseline				Partial Mitigation 1: Add one WB lane to Richmond to Baseline				Partial Mitigation 2: Two thru lanes with shared lefts in each direction			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
128	Richmond Ave at Montrose Blvd	Eastbound (Coordinated)	C	35.0	0.4	13	D	36.0	0.51	13	E	72.0	1.05	17	D	37.6	0.87	17	E	63.8	0.94	17	C	24.6	0.72	17
		Westbound	D	50.2	0.7	13	D	53.0	0.76	13	F	81.9	1.04	17	E	79.4	1.40	17	E	79.4	1.40	17	C	22.9	0.68	17
		Northbound	D	47.2	0.9	13	E	57.4	0.98	13	E	56.9	1.01	22	C	32.5	0.87	29	C	32.5	0.87	26	E	61.3	1.02	22
		Southbound	D	40.1	0.8	13	D	39.8	0.81	13	D	38.7	0.91	22	D	36.1	0.97	29	D	36.1	0.97	26	D	38.1	0.85	22
		Total	**D**	**43.3**	**0.9**		**D**	**47.9**	0.98		**E**	**58.6**	**1.05**		**D**	**42.7**	**1.40**		**D**	**47.4**	**1.40**		**D**	**41.2**	**1.02**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	2/6	EBT/WBT	0.27	80	2/6	EBT/WBT	0.25	85	2/6	EBT/WBT	0.25	85	9	None	0.06	90

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One thru lane and one left turn lanes in each direction				Full Mitigation 2030: Add one thru lane in each direction to Baseline				Partial Mitigation 1: Add one WB lane to Richmond to Baseline				Partial Mitigation 2: Two thru lanes with shared lefts in each direction			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
128	Richmond Ave at Montrose Blvd	Eastbound (Coordinated)	D	38.5	0.59	13	D	40.2	0.65	13	F	93.2	1.10	17	D	39.9	0.74	17	F	107.6	1.14	17	C	32.1	0.74	17
		Westbound	F	83.9	1.02	13	F	112.2	1.12	13	F	99.4	1.06	17	E	55.9	1.02	17	F	81.4	1.33	17	D	54.5	0.96	17
		Northbound	C	34.1	0.73	13	D	36.5	0.80	13	E	78.4	1.12	22	D	43.3	0.99	29	D	51.3	1.10	26	E	78.5	1.11	22
		Southbound	D	46.2	0.91	13	E	60.4	1.00	13	F	111.1	1.13	22	E	57.3	1.01	29	E	57.4	1.01	26	F	120.1	1.16	22
		Total	**D**	**52.0**	**1.02**		**E**	**65.0**	**1.12**		**F**	**97.4**	**1.13**		**D**	**50.7**	**1.02**		**E**	**71.2**	**1.33**		**E**	**77.9**	**1.16**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				120				120	4/8	EBT/WBT	0.33	150	2/6	EBT/WBT	0.23	95	2/6	EBT/WBT	0.27	95	9	None	0.03	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: One thru lane and one left turn lanes in each direction				Full Mitigation 2030: Add one thru lane in each direction to Baseline				Partial Mitigation 1: Add one WB lane to Richmond to Baseline				Partial Mitigation 2: Two thru lanes with shared lefts in each direction			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rand	SF	# Full Acq	# Partial Acq	Rank
Limits: East of Mandell to West of 527 SBFR	**20501**	**0**	**27**	**1**	**83402**	**30**	**36**	**4**	**53460**	**18**	**33**	**2**	**68590**	**27**	**39**	**3**

Drainage Impact Rating

	Build Baseline 2030: One thru lane and one left turn lanes in each direction	Full Mitigation 2030: Add one thru lane in each direction to Baseline	Partial Mitigation 1: Add one WB lane to Richmond to Baseline	Partial Mitigation 2: Two thru lanes with shared lefts in each direction
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**4**	**3**	**2**

Tree Impact Rating

	Build Baseline 2030: One thru lane and one left turn lanes in each direction	Full Mitigation 2030: Add one thru lane in each direction to Baseline	Partial Mitigation 1: Add one WB lane to Richmond to Baseline	Partial Mitigation 2: Two thru lanes with shared lefts in each direction
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**4**	**3**	**2**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Added dedicated EBR turn lane				Partial Mitigation 2: Convert EB/WB LTLs to Shared T+L to add additional thru lane through the interchange			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
11	Richmond at SR 527 SB FR	Eastbound (Coordinated)	C	20.4	0.43	11	C	23.2	0.51	11	D	38.9	0.66	13	C	26.8	0.42	13	C	30.3	0.55	13	C	28.0	0.57	13
		Westbound (Coordinated)	A	3.4	0.56	11	A	4.1	0.62	11	A	5.5	0.64	13	A	7.1	0.74	13	A	5.0	0.60	13	F	125.5	1.79dl	13
		Southbound	C	26.5	0.51	11	C	26.0	0.52	11	D	46.6	0.67	27	D	41.5	0.64	34	D	41.6	0.64	31	C	31.6	0.38	27
		Total	**B**	**14.2**	0.56		**B**	**15.4**	0.62		**C**	**27.3**	0.67		**C**	**22.2**	0.74		**C**	**22.7**	0.64		**E**	**67.8**	1.05	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	2	EBT/WBT	0.36	150	2	EBT/WBT	0.42	135	2	EBT/WBT	0.32	135	2/6	EBT/WBT	0.10	145
12	Richmond at SR 527 NB FR	Eastbound (Coordinated)	A	0.8	0.23	11	A	0.9	0.26	11	A	2.4	0.23	17	A	1.4	0.20	17	A	2.0	0.24	17	A	9.8	0.37	13
		Westbound (Coordinated)	C	33.2	0.63	11	C	33.8	0.67	11	D	47.9	0.71	17	D	46.6	0.63	17	D	41.0	0.67	17	F	117.5	0.86	13
		Northbound	D	39.3	0.41	11	C	26.8	0.41	11	D	43.7	0.70	28	D	44.0	0.59	35	D	38.8	0.68	28	D	42.2	0.70	28
		Total	**C**	**20.9**	0.63		**C**	**21.1**	0.67		**C**	**31.6**	0.71		**C**	**30.7**	0.63		**C**	**27.3**	0.68		**E**	**68.0**	0.86	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	6	EBT/WBT	0.33	150	6	EBT/WBT	0.26	135	6	EBT/WBT	0.34	135	2/6	EBT/WBT	0.10	145

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Added dedicated EBR turn lane				Partial Mitigation 2: Convert EB/WB LTLs to Shared T+L to add additional thru lane through the interchange			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
11	Richmond at SR 527 SB FR	Eastbound (Coordinated)	C	33.7	0.52	11	C	33.9	0.66	11	E	74.2	0.99	13	C	33.8	0.55	13	D	43.0	0.69	13	D	37.3	0.72	13
		Westbound (Coordinated)	A	1.9	0.52	11	A	4.0	0.59	11	A	3.8	0.54	13	A	9.1	0.66	13	A	3.8	0.54	13	F	128.1	2.67dl	13
		Southbound	D	39.7	0.62	11	D	40.3	0.61	11	D	46.9	0.64	27	D	45.1	0.63	34	D	45.2	0.63	31	C	30.9	0.35	27
		Total	**C**	**20.3**	0.62		**C**	**23.9**	0.66		**D**	**43.0**	0.99		**C**	**26.6**	0.66		**C**	**28.8**	0.69		**E**	**70.0**	1.12	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	2	EBT/WBT	0.31	150	2	EBT/WBT	0.40	145	2	EBT/WBT	0.31	145	2/6	EBT/WBT	0.10	150
12	Richmond at SR 527 NB FR	Eastbound (Coordinated)	A	0.6	0.19	11	A	0.9	0.36	11	A	2.5	0.48	17	A	1.5	0.40	17	A	2.1	0.42	17	A	8.5	0.51	13
		Westbound (Coordinated)	D	40.4	0.65	11	D	43.2	0.64	11	D	41.4	0.65	17	D	46.5	0.60	17	D	40.1	0.65	17	F	126.8	0.95	13
		Northbound	D	40.7	0.55	11	D	37.4	0.60	11	D	40.2	0.73	28	D	44.1	0.64	35	D	38.6	0.73	28	D	40.3	0.73	28
		Total	**C**	**28.5**	0.65		**C**	**25.1**	0.64		**C**	**25.5**	0.73		**C**	**27.9**	0.64		**C**	**24.5**	0.73		**E**	**65.0**	0.95	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				130				130	6	EBT/WBT	0.38	150	6	EBT/WBT	0.29	145	6	EBT/WBT	0.38	145	2/6	EBT/WBT	0.10	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030 (1 LT, 1 THRT EB/WB)				Full Mitigation 2030: Added additional EBT/WBT lanes				Partial Mitigation 1: Added dedicated EBR turn lane				Partial Mitigation 2: Convert EB/WB LTLs to Shared T+L to add additional thru lane through the interchange			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**4**				**2**				**1**

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Added dedicated EBR turn lane	Partial Mitigation 2: Convert EB/WB LTLs to Shared T+L to add additional thru lane through the interchange
	1	**4**	**2**	**1**

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	Build Baseline 2030 (1 LT, 1 THRT EB/WB)	Full Mitigation 2030: Added additional EBT/WBT lanes	Partial Mitigation 1: Added dedicated EBR turn lane	Partial Mitigation 2: Convert EB/WB LTLs to Shared T+L to add additional thru lane through the interchange
	1	**4**	**2**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 - SB approach is eliminated; 1 EBT, 1 EBR, 1 NBL, 1 NBR, I WBT, 1 WBTR				Full Mitigation 2030 - EBR is converted to a shared thru-right				Partial Mitigation 1 - Add dual Left turns at the NB approach to the baseline							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
131	Richmond & Main	Eastbound (Coordinated - Build)	D	39.2	0.65	17	D	39.6	0.68	17	B	10.7	0.38	20	A	9.3	0.25	20	A	5.6	0.30	23				
		Westbound (Coordinated - Build)	D	53.2	0.79	17	D	54.0	0.81	17	B	11.2	0.37	10	B	11.2	0.37	10	A	6.2	0.30	10				
		Northbound (Coordinated - Existing,No-Build)	D	40.7	0.83	19	D	42.0	0.85	19	C	28.4	0.74	24	C	28.4	0.74	24	C	30.8	0.62	24				
		Southbound	C	32.9	0.39	9	D	37.1	0.52	9	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist							
		Total	**D**	**44.6**	0.83		**D**	**45.7**	0.85		**B**	**15.7**	0.74		**B**	**15.3**	0.74		**B**	**12.6**	0.62					
		Bus Phase(s) / Concurrent Movement(s) / G/C				90				90	2/6	EBT/WBT	0.55	70	2/6	EBT/WBT	0.53	70	2/6	EBT/WBT	0.67	75				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030 - SB approach is eliminated; 1 EBT, 1 EBR, 1 NBL, 1 NBR, I WBT, 1 WBTR				Full Mitigation 2030 - EBR is converted to a shared thru-right				Partial Mitigation 1 - Add dual Left turns at the NB approach to the baseline							
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
131	Richmond & Main	Eastbound (Coordinated - Build)	D	40.2	0.70	18	D	39.6	0.72	18	C	22.0	0.66	20	B	17.1	0.38	20	B	11.7	0.47	23				
		Westbound (Coordinated - Build)	D	37.7	0.75	17	D	36.2	0.78	17	B	12.4	0.45	10	B	12.0	0.48	10	A	9.4	0.32	10				
		Northbound (Coordinated - Existing,No-Build)	D	37.8	0.85	18	D	54.7	0.99	18	D	35.1	0.91	24	C	28.6	0.87	24	C	27.6	0.72	24				
		Southbound	D	40.8	0.52	9	D	41.8	0.56	9	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist							
		Total	**D**	**38.6**	0.85		**D**	**44.2**	0.99		**C**	**23.7**	0.91		**B**	**19.8**	0.87		**B**	**17.0**	0.72					
		Bus Phase(s) / Concurrent Movement(s) / G/C				90				90	2/6	EBT/WBT	0.42	70	2/6	EBT/WBT	0.40	70	2/6	EBT/WBT	0.59	75				

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030 - SB approach is eliminated; 1 EBT, 1 EBR, 1 NBL, 1 NBR, I WBT, 1 WBTR				Full Mitigation 2030 - EBR is converted to a shared thru-right				Partial Mitigation 1 - Add dual Left turns at the NB approach to the baseline							
ROW is ranked from 1 to 3 with 1 having the least ROW impacts and 3 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank				
Limits:				**1**				**1**				**3**				

Drainage Impact Rating

	Build Baseline 2030 - SB approach is eliminated; 1 EBT, 1 EBR, 1 NBL, 1 NBR, I WBT, 1 WBTR	Full Mitigation 2030 - EBR is converted to a shared thru-right	Partial Mitigation 1 - Add dual Left turns at the NB approach to the baseline	
Drainage Impact Rating ranks options from 1 to 3 with 1 having least drainage impacts and 3 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**1**	**3**	

Tree Impact Rating

	Build Baseline 2030 - SB approach is eliminated; 1 EBT, 1 EBR, 1 NBL, 1 NBR, I WBT, 1 WBTR	Full Mitigation 2030 - EBR is converted to a shared thru-right	Partial Mitigation 1 - Add dual Left turns at the NB approach to the baseline	
Tree Impact Rating ranks options from 1 to 3 with 1 having least impacts to existing trees and 3 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**1**	

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One shared thru right EB direction. One thru lane and one dedicated left turn WB direction				Full Mitigation 2030: Add thru lane in WB direction with shared left. Add thru lane in EB direction				Partial Mitigation 1: Add thru lane in both EB and WB directions				Partial Mitigation 2: Converted WBL dedicated left turn to a thru lane with shared left turn			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
132	Wheeler Avenue and Fannin Street	Eastbound	C	33.1	0.5	11	C	32.4	0.51	11	D	48.3	0.84	18	C	28.2	0.57	18	C	34.2	0.65	18	D	48.1	0.82	18
		Westbound	D	47.0	0.7	11	D	46.6	0.74	11	D	36.0	0.68	18	C	32.9	0.71	18	C	25.9	0.46	18	C	32.2	0.63	18
		Northbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Southbound (Coordinated)	A	6.2	0.2	11	A	7.2	0.27	11	B	12.1	0.33	25	A	5.9	0.26	29	A	8.9	0.28	33	A	10.3	0.29	26
		Total	**C**	**21.9**	**0.7**		**C**	**22.2**	**0.74**		**C**	**25.5**	**0.84**		**B**	**17.1**	**0.71**		**B**	**18.4**	**0.65**		**C**	**23.6**	**0.82**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	4/8	EBT/WBT	0.32	80	9	None	0.07	80	4/8	EBT/WBT	0.22	85	9	None	0.06	100

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One shared thru right EB direction. One thru lane and one dedicated left turn WB direction				Full Mitigation 2030: Add thru lane in WB direction with shared left. Add thru lane in EB direction				Partial Mitigation 1: Add thru lane in both EB and WB directions				Partial Mitigation 2: Converted WBL dedicated left turn to a thru lane with shared left turn			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
132	Wheeler Avenue and Fannin Street	Eastbound	B	11.4	0.44	11	B	11.8	0.47	11	F	85.3	0.85	18	C	26.2	0.61	18	C	24.2	0.52	18	F	93.8	0.87	18
		Westbound	B	16.3	0.33	11	B	16.5	0.37	11	C	23.7	0.50	18	C	24.6	0.48	18	B	19.3	0.30	18	B	18.1	0.42	18
		Northbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Southbound (Coordinated)	A	6.8	0.22	11	A	6.9	0.23	11	B	11.8	0.23	25	A	6.0	0.17	29	B	9.7	0.20	33	B	10.7	0.20	26
		Total	**B**	**10.8**	**0.44**		**B**	**11.0**	**0.47**		**D**	**40.5**	**0.85**		**B**	**17.7**	**0.61**		**B**	**17.1**	**0.52**		**D**	**41.6**	**0.87**	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				45				45	4/8	EBT/WBT	0.44	80	9	None	0.07	80	4/8	EBT/WBT	0.38	85	9	None	0.06	90

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030: One shared thru right EB direction. One thru lane and one dedicated left turn WB direction				Full Mitigation 2030: Add thru lane in WB direction with shared left. Add thru lane in EB direction				Partial Mitigation 1: Add thru lane in both EB and WB directions				Partial Mitigation 2: Converted WBL dedicated left turn to a thru lane with shared left turn			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				1				4				4				1

Drainage Impact Rating

	Build Baseline 2030: One shared thru right EB direction. One thru lane and one dedicated left turn WB direction	Full Mitigation 2030: Add thru lane in WB direction with shared left. Add thru lane in EB direction	Partial Mitigation 1: Add thru lane in both EB and WB directions	Partial Mitigation 2: Converted WBL dedicated left turn to a thru lane with shared left turn
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	1	4	4	1

Tree Impact Rating

	Build Baseline 2030: One shared thru right EB direction. One thru lane and one dedicated left turn WB direction	Full Mitigation 2030: Add thru lane in WB direction with shared left. Add thru lane in EB direction	Partial Mitigation 1: Add thru lane in both EB and WB directions	Partial Mitigation 2: Converted WBL dedicated left turn to a thru lane with shared left turn
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	1	4	4	1

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One shared thru right in WB direction and one shared thru left in EB direction				Full Mitigation 2030: Add a thru lane in both EB and WB directions.				Partial Mitigation 1: Add a dedicated EBL turn lane.				Partial Mitigation 2: Add a thru lane in the EB direction, and a dedicated right turn lane in the WB direction.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
133	Wheeler Avenue and San Jacinto Street	Eastbound (Coordinated - Build)	D	48.5	0.87	9	D	44.2	0.85	9	C	30.8	0.66	19	B	15.3	0.45	19	C	23.6	0.66	19	B	16.4	0.48	19
		Westbound (Coordinated - Build)	C	26.8	0.52	9	C	24.4	0.50	9	B	11.2	0.47	16	B	12.0	0.30	16	C	28.2	0.75	16	B	14.7	0.50	16
		Northbound (Coordinated - Existing, Future No-Build)	A	7.7	0.11	9	A	9.3	0.13	9	C	20.5	0.27	20	B	14.0	0.20	26	B	13.4	0.22	20	B	13.4	0.20	27
		Southbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Total	**C**	**27.3**	0.87		**C**	**25.7**	**0.85**		**C**	**21.2**	0.66		**B**	**13.9**	0.45		**C**	**21.6**	0.75		**B**	**14.8**	0.50	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	9	None	0.06	80	9	None	0.07	75	2/6	EBT/WBT	0.36	65	9	None	0.07	75

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030: One shared thru right in WB direction and one shared thru left in EB direction				Full Mitigation 2030: Add a thru lane in both EB and WB directions.				Partial Mitigation 1: Add a dedicated EBL turn lane.				Partial Mitigation 2: Add a thru lane in the EB direction, and a dedicated right turn lane in the WB direction.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
133	Wheeler Avenue and San Jacinto Street	Eastbound (Coordinated - Build)	D	52.7	0.84	9	D	46.5	0.81	9	E	73.0	0.83	19	B	19.8	0.63	19	C	21.0	0.71	19	B	19.6	0.61	19
		Westbound (Coordinated - Build)	B	19.1	0.42	9	B	16.8	0.40	9	A	9.2	0.46	16	B	11.4	0.34	16	D	36.4	0.86	16	B	12.1	0.45	16
		Northbound (Coordinated - Existing, Future No-Build)	B	12.4	0.30	9	B	15.2	0.36	9	D	38.4	0.79	20	B	17.1	0.47	26	B	18.9	0.55	20	B	18.4	0.49	27
		Southbound	Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist				Movement Dosen't Exist			
		Total	**C**	**25.7**	0.81		**C**	**24.7**	**0.81**		**D**	**42.3**	0.83		**B**	**16.4**	0.63		**C**	**23.3**	0.86		**B**	**17.4**	0.61	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	9	None	0.05	100	9	None	0.07	75	2/6	EBT/WBT	0.35	70	9	None	0.06	80

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.

	Build Baseline 2030: One shared thru right in WB direction and one shared thru left in EB direction				Full Mitigation 2030: Add a thru lane in both EB and WB directions.				Partial Mitigation 1: Add a dedicated EBL turn lane.				Partial Mitigation 2: Add a thru lane in the EB direction, and a dedicated right turn lane in the WB direction.			
	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				2				4				1				3

Drainage Impact Rating

Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.

Build Baseline 2030: One shared thru right in WB direction and one shared thru left in EB direction	Full Mitigation 2030: Add a thru lane in both EB and WB directions.	Partial Mitigation 1: Add a dedicated EBL turn lane.	Partial Mitigation 2: Add a thru lane in the EB direction, and a dedicated right turn lane in the WB direction.
1	4	2	3

Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.

Build Baseline 2030: One shared thru right in WB direction and one shared thru left in EB direction	Full Mitigation 2030: Add a thru lane in both EB and WB directions.	Partial Mitigation 1: Add a dedicated EBL turn lane.	Partial Mitigation 2: Add a thru lane in the EB direction, and a dedicated right turn lane in the WB direction.
1	1	1	1

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030 (including planned City modifications)				Build Baseline 2030				Full Mitigation 2030: Added one through lane at WB and NB approach to the baseline; Changed dedicated RT to shared THRT at EB and SB approach from the baseline				Partial Mitigation 1: Added one through lane at WB and NB approach to the baselines; converted shared thru-right lane to a dedicated RT at NB and WB approaches from the baseline				Partial Mitigation 2: Same as Baseline, but changed EB and WB left turns from protected-only to permitted only.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
155	Lockwood at Navigation	Eastbound (Cordinated)	C	32.3	0.46	15	D	40.0	0.85	20	E	70.0	1.20	25	F	147.2	1.80	29	D	52.3	0.99	29	D	35.6	0.96	25
		Westbound	D	40.5	0.80	15	D	46.9	0.84	25	C	33.6	0.69	25	D	41.4	0.98	29	C	31.7	0.51	29	B	18.9	0.49	25
		Northbound	C	30.4	0.46	16	D	45.3	0.92	21	E	71.0	0.99	21	E	57.3	1.14	25	E	56.2	0.92	25	D	43.3	0.83	21
		Southbound	C	28.2	0.54	16	D	36.7	0.70	24	E	56.9	0.99	21	D	50.8	1.14	25	E	58.7	0.92	25	C	34.9	0.83	17
		Total	**C**	**33.3**	0.80		**D**	**42.2**	0.92		**E**	**56.4**	**1.20**		**E**	**73.2**	**1.80**		**D**	**49.0**	0.99		**C**	**32.2**	0.96	
		Bus Phase(s) / Concurrent Movement(s) / G/C				90				95	2/6	NBT/SBT	0.28	95	2/6	NBT/SBT	0.30	100	2/6	NBT/SBT	0.28	110	2/6	NBT/SBT	0.33	80

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030 (including planned City modifications)				Build Baseline 2030				Full Mitigation 2030: Added one through lane at WB and NB approach to the baseline; Changed dedicated RT to shared THRT at EB and SB approach from the baseline				Partial Mitigation 1: Added one through lane at WB and NB approach to the baselines; converted shared thru-right lane to a dedicated RT at NB and WB approaches from the baseline				Partial Mitigation 2: Same as Baseline, but changed EB and WB left turns from protected-only to permitted only.			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
155	Lockwood at Navigation	Eastbound (Cordinated)	C	31.0	0.46	15	D	37.8	0.84	20	D	47.7	1.03	25	E	65.5	1.24	29	E	65.5	1.24	29	B	18.5	0.57	25
		Westbound	C	31.4	0.58	15	D	37.6	0.81	25	C	34.8	0.85	25	D	38.8	0.95	29	D	35.4	0.95	29	B	16.4	0.42	25
		Northbound	C	32.0	0.56	16	D	40.4	0.86	21	F	110.3	1.10	21	D	50.7	1.07	25	E	68.9	1.07	25	D	50.7	0.93	21
		Southbound	C	25.9	0.48	16	C	32.8	0.68	24	D	48.2	1.01	21	D	50.6	1.07	25	D	45.9	0.99	25	C	30.9	0.78	17
		Total	**C**	**30.3**	0.58		**D**	**37.4**	0.86		**E**	**61.0**	**1.10**		**D**	**51.0**	1.24		**D**	**53.9**	1.24		**C**	**29.1**	0.93	
		Bus Phase(s) / Concurrent Movement(s) / G/C				90				95	2/6	NBT/SBT	0.28	95	2/6	NBT/SBT	0.30	100	2/6	NBT/SBT	0.30	100	2/6	NBT/SBT	0.33	80

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Added one through lane at WB and NB approach to the baseline; Changed dedicated RT to shared THRT at EB and SB approach from the baseline				Partial Mitigation 1: Added one through lane at WB and NB approach to the baselines; converted shared thru-right lane to a dedicated RT at NB and WB approaches from the baseline				Partial Mitigation 2: Same as Baseline, but changed EB and WB left turns from protected-only to permitted only.			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**4**				**2**				**1**

Drainage Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Added one through lane at WB and NB approach to the baseline; Changed dedicated RT to shared THRT at EB and SB approach from the baseline	Partial Mitigation 1: Added one through lane at WB and NB approach to the baselines; converted shared thru-right lane to a dedicated RT at NB and WB approaches from the baseline	Partial Mitigation 2: Same as Baseline, but changed EB and WB left turns from protected-only to permitted only.
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**1**	**4**	**3**	**2**

Tree Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Added one through lane at WB and NB approach to the baseline; Changed dedicated RT to shared THRT at EB and SB approach from the baseline	Partial Mitigation 1: Added one through lane at WB and NB approach to the baselines; converted shared thru-right lane to a dedicated RT at NB and WB approaches from the baseline	Partial Mitigation 2: Same as Baseline, but changed EB and WB left turns from protected-only to permitted only.
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**1**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021: Intersection Does Not Exist Today				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added a through lane at SB and NB approaches to the baseline scenario				Partial Mitigation 1: Added a SBR lane to the baseline scenario				Partial Mitigation 2: Removed one lane at EB approach from the baseline scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
197	Lockwood at Marron Parkway	Eastbound					D	42.3	0.67	26	D	39.8	0.63	28	C	34.7	0.59	35	D	39.5	0.62	28	E	67.7	0.80	28
		Westbound					Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist			
		Northbound					D	36.4	1.00		F	86.2	1.26		C	23.0	0.79		C	29.2	0.81		F	96.3	1.29	
		Southbound					E	61.8	1.03	13	F	108.6	1.16	21	C	29.6	0.8	21	C	28.9	0.85	21	F	145.5	1.24	17
		Total (Uncoordinated)					D	**50.6**	1.03		**F**	**92.7**	**1.26**		C	**27.6**	0.80		C	**30.1**	0.85		**F**	**118.1**	**1.29**	
		Bus Phase(s) / Concurrent Movement(s) / G/C								150	2/6	NBT/SBT	0.58	145	2/6	NBT/SBT	0.44	140	2/6	NBT/SBT	0.48	145	2/6	NBT/SBT	0.54	150

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection Updated

LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021: Intersection Does Not Exist Today				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Added a through lane at SB and NB approaches to the baseline scenario				Partial Mitigation 1: Added a SBR lane to the baseline scenario				Partial Mitigation 2: Removed one lane at EB approach from the baseline scenario			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
197	Lockwood at Marron Parkway	Eastbound					C	25.9	0.80	26	C	23.1	0.78	28	B	15.7	0.67	35	B	18.5	0.72	28	F	88.1	1.08	28
		Westbound					Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist				Movement Doesn't Exist			
		Northbound					B	18.7	0.74		C	23.9	0.77		B	16.8	0.67		C	22.9	0.70		D	41.7	0.93	
		Southbound					C	32.2	0.88	13	C	34.7	0.86	21	C	20.2	0.65	21	C	26.3	0.81	21	E	68.8	1.00	17
		Total (Uncoordinated)					C	**26.0**	0.88		**C**	**26.9**	0.86		**B**	**17.5**	0.67		**C**	**22.4**	0.81		**E**	**65.4**	1.08	
		Bus Phase(s) / Concurrent Movement(s) / G/C								90	2/6	NBT/SBT	0.44	100	2/6	NBT/SBT	0.31	90	2/6	NBT/SBT	0.37	85	2/6	NBT/SBT	0.38	110

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection

LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

ROW Acquisition

	Build Baseline 2030				Full Mitigation 2030: Added a through lane at SB and NB approaches to the baseline scenario				Partial Mitigation 1: Added a SBR lane to the baseline scenario				Partial Mitigation 2: Removed one lane at EB approach from the baseline scenario			
ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**4**				**1**				**1**

Drainage Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Added a through lane at SB and NB approaches to the baseline scenario	Partial Mitigation 1: Added a SBR lane to the baseline scenario	Partial Mitigation 2: Removed one lane at EB approach from the baseline scenario
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.	**2**	**4**	**3**	**1**

Tree Impact Rating

	Build Baseline 2030	Full Mitigation 2030: Added a through lane at SB and NB approaches to the baseline scenario	Partial Mitigation 1: Added a SBR lane to the baseline scenario	Partial Mitigation 2: Removed one lane at EB approach from the baseline scenario
Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.	**1**	**4**	**1**	**1**

AM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane, one WB thru lane, and one SB thru lane				Partial Mitigation 1: Add one WB thru lane				Partial Mitigation 2: Add one EB thru lane and WB becomes LT/TH and TH/RT			
			LOS	Delay	V/C	FDW	LOS	Delay	V/C	FDW	LOS	Delay	V/C	FDW	LOS	Delay	V/C	FDW	LOS	Delay	V/C	FDW	LOS	Delay	V/C	FDW
183	Tidwell Rd and Jensen Dr	Eastbound	C	34.5	0.7	12	D	36.3	0.73	12	D	46.9	0.79	27	D	48.8	0.79	31	E	62.5	0.95	27	D	50.4	0.84	27
		Westbound	C	33.6	0.7	12	C	34.8	0.76	12	E	62.5	0.97	27	D	40.4	0.74	31	C	34.0	0.66	31	E	56.2	0.95	27
		Northbound	C	26.8	0.5	18	C	26.9	0.50	18	D	52.5	0.68	25	C	30.0	0.50	29	D	42.2	0.65	29	D	49.1	0.67	29
		Southbound (coordinated)	C	26.4	0.4	18	C	26.8	0.38	18	E	64.7	0.83	25	C	30.4	0.45	29	D	47.6	0.72	25	E	58.2	0.78	25
		Total	**C**	**31.6**	0.73		**C**	**32.6**	0.76		**E**	**57.0**	0.97		**D**	**39.8**	0.79		**D**	**45.6**	0.95		**D**	**53.9**	0.95	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	1	SBL	0.14	140	1	SBL	0.10	115	1	SBL	0.16	120	1	SBL	0.16	135

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
LOS - Level of Service Delay - Average Delay per Entering Vehicle V/C - Volume to Capacity Ratio FDW - Flashing Don't Walk Time G/C - Green to Cycle Length Ratio C - Cycle Length

PM Levels of Service (LOS), Delay, V/C and Signal Phasing

ID	Intersection	Approach	Existing 2021				No Build 2030				Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane, one WB thru lane, and one SB thru lane				Partial Mitigation 1: Add one WB thru lane				Partial Mitigation 2: Add one EB thru lane and WB becomes LT/TH and TH/RT			
			LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW	LOS	Delay (s/veh)	V/C	FDW
183	Tidwell Rd and Jensen Dr	Eastbound	D	35.5	0.70	11	D	37.4	0.75	11	F	81.5	1.01	27	D	44.5	0.77	31	F	84.4	1.04	27	C	23.7	0.72	27
		Westbound	D	37.8	0.80	11	D	40.6	0.85	11	F	118.3	1.16	27	D	52.3	0.90	31	D	44.5	0.80	31	D	44.3	0.94	27
		Northbound	C	33.2	0.66	18	C	33.7	0.68	18	E	76.3	0.93	25	D	52.8	0.86	29	E	75.0	0.91	29	E	64.1	0.82	29
		Southbound (coordinated)	C	29.9	0.50	18	C	30.2	0.52	18	E	71.3	0.79	25	C	31.3	0.44	29	E	70.9	0.79	25	E	65.6	0.78	25
		Total	**D**	**35.1**	0.80		**D**	**36.8**	0.85		**F**	**92.2**	1.16		**D**	**47.3**	0.90		**E**	**66.4**	1.04		**D**	**45.1**	0.94	
		Bus Phase(s) / Concurrent Movement(s) / G/C / C				90				90	1	SBL	0.08	150	1	SBL	0.13	115	1	SBL	0.09	150	1	SBL	0.10	140

V/C reported from Synchro based on movement not approach. Value shows worst movement of approach. V/C shows maximum V/C of the worst movement at the entire intersection
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ROW Acquisition

ROW is ranked from 1 to 4 with 1 having the least ROW impacts and 4 having the most ROW impacts. Impacts based upon total SF of approximate ROW needs and anticipated number of full acquisitions.

	Build Baseline 2030				Full Mitigation 2030: Add one EB thru lane, one WB thru lane, and one SB thru lane				Partial Mitigation 1: Add one WB thru lane				Partial Mitigation 2: Add one EB thru lane and WB becomes LT/TH and TH/RT			
	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank	SF	# Full Acq	# Partial Acq	Rank
Limits:				**1**				**4**				**3**				**1**

Drainage Impact Rating

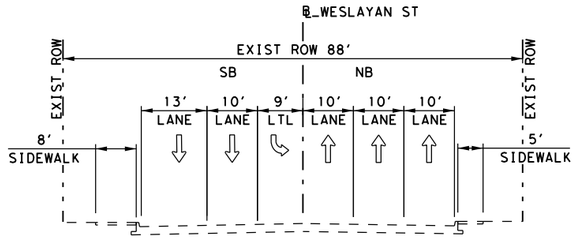
Drainage Impact Rating ranks options from 1 to 4 with 1 having least drainage impacts and 4 having most drainage impacts. It is assumed that options with more impervious cover are considered to have more drainage impacts.

Build Baseline 2030	Full Mitigation 2030: Add one EB thru lane, one WB thru lane, and one SB thru lane	Partial Mitigation 1: Add one WB thru lane	Partial Mitigation 2: Add one EB thru lane and WB becomes LT/TH and TH/RT
1	**4**	**3**	**1**

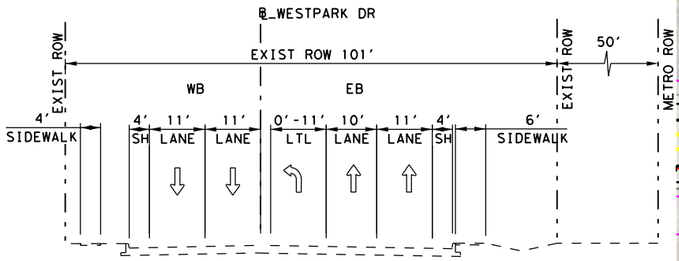
Tree Impact Rating

Tree Impact Rating ranks options from 1 to 4 with 1 having least impacts to existing trees and 4 having most tree impacts. Ratings are provided based upon the proximity of the proposed pavement to existing trees; it is assumed that options with pavement closer to existing trees will have more impacts to them.

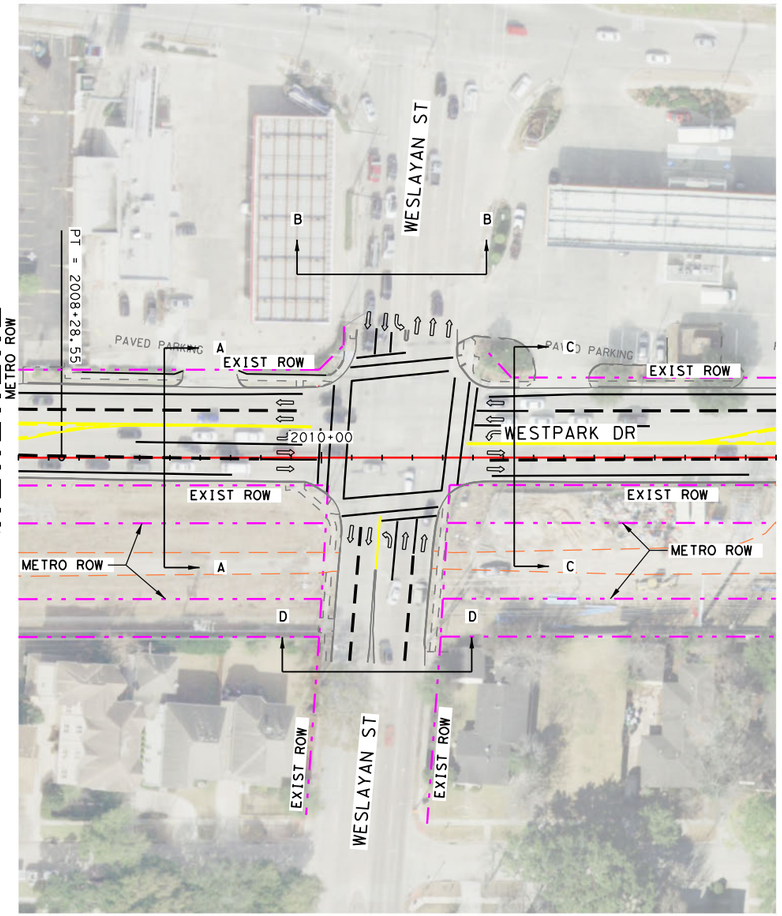
Build Baseline 2030	Full Mitigation 2030: Add one EB thru lane, one WB thru lane, and one SB thru lane	Partial Mitigation 1: Add one WB thru lane	Partial Mitigation 2: Add one EB thru lane and WB becomes LT/TH and TH/RT
1	**4**	**1**	**1**

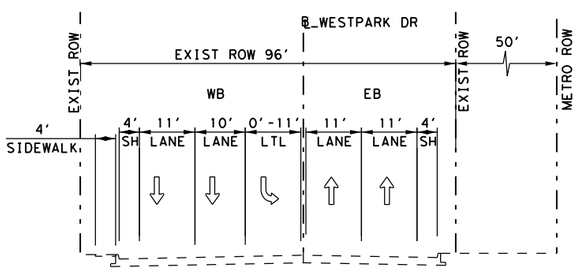


NO-BUILD TYPICAL SECTION
WESLAYAN ST
B-B

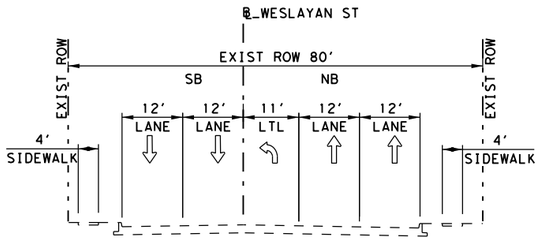


NO-BUILD TYPICAL SECTION
WESTPARK DR
A-A





NO-BUILD TYPICAL SECTION
WESTPARK DR
C-C



NO-BUILD TYPICAL SECTION
WESLAYAN ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 WESTPARK/WESLAYAN INTERSECTION LAYOUT NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 3

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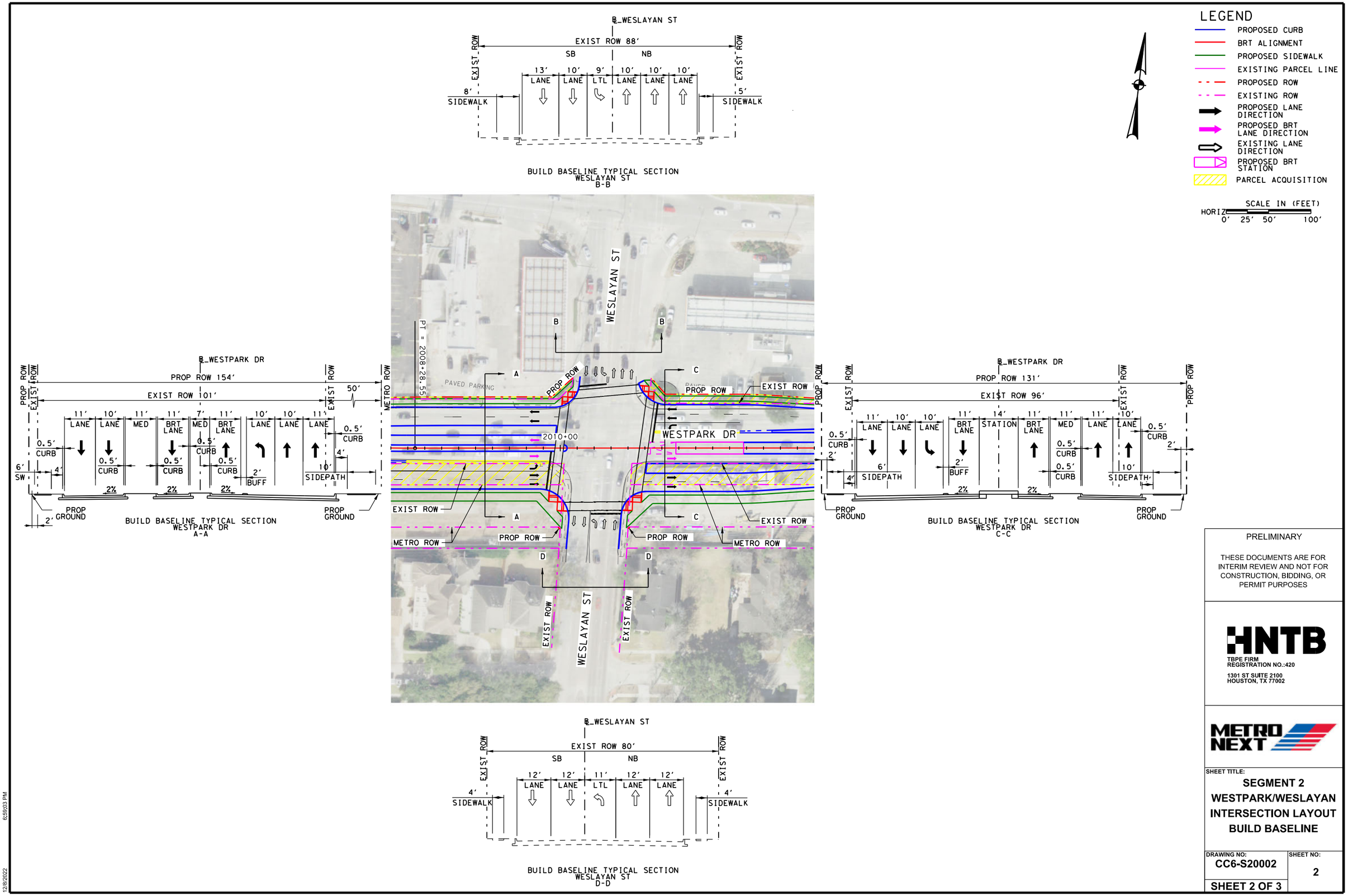

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
WESTPARK/WESLAYAN
INTERSECTION LAYOUT
BUILD BASELINE

DRAWING NO: CC6-S20002

SHEET NO: 2

SHEET 2 OF 3

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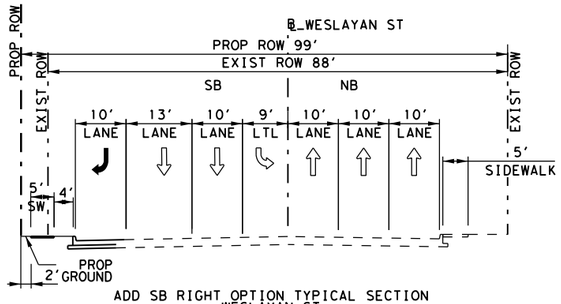
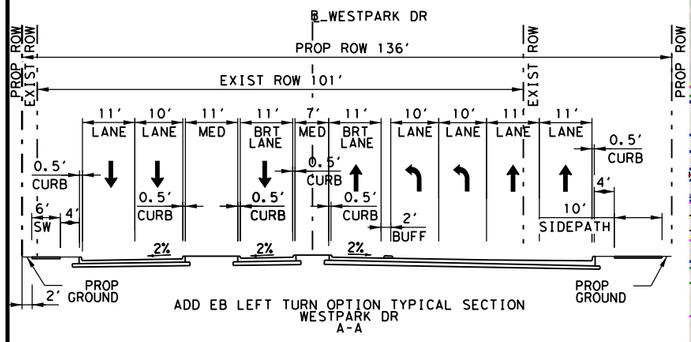
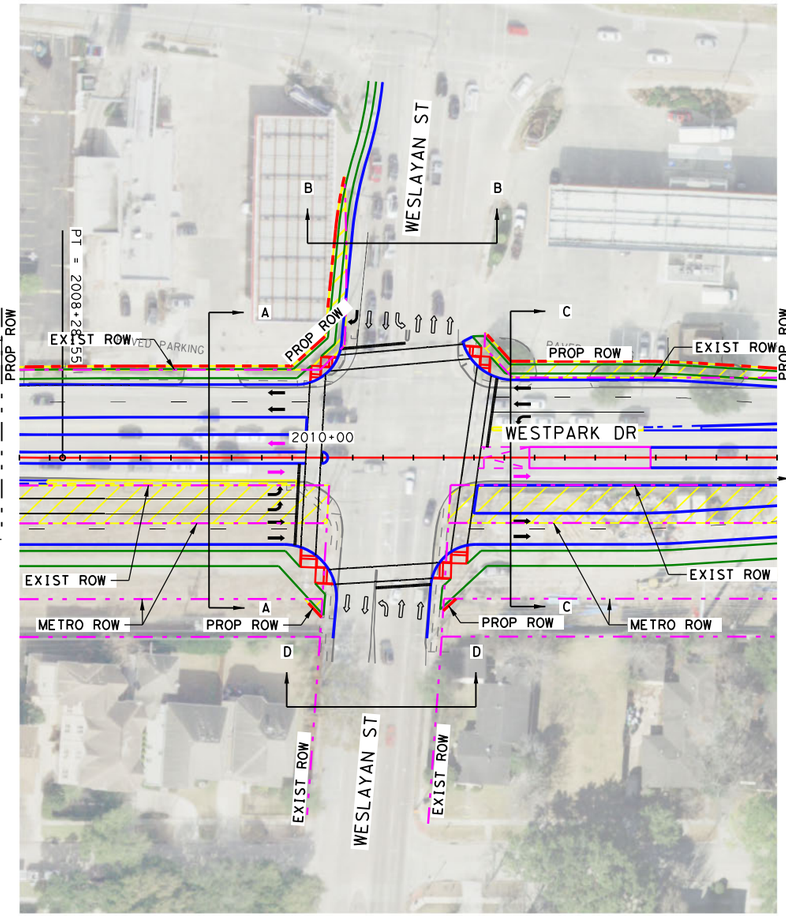
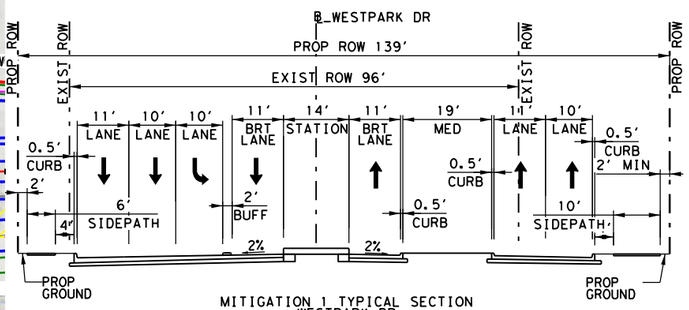


ADD SB RIGHT OPTION TYPICAL SECTION
WESLAYAN ST
B-B

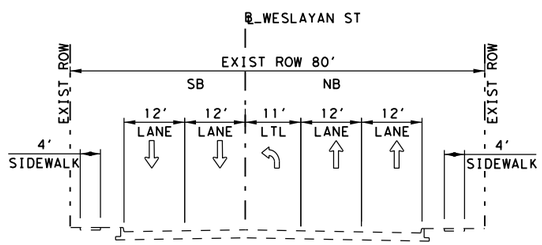


ADD EB LEFT TURN OPTION TYPICAL SECTION
WESTPARK DR
A-A





MITIGATION 1 TYPICAL SECTION
WESTPARK DR
C-C



MITIGATION 1 TYPICAL SECTION
WESLAYAN ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
WESTPARK/WESLAYAN
INTERSECTION LAYOUT
PARTIAL MITIGATION
SB RT & EB LT

DRAWING NO: CC6-S20005
SHEET NO: 3
SHEET 3 OF 3

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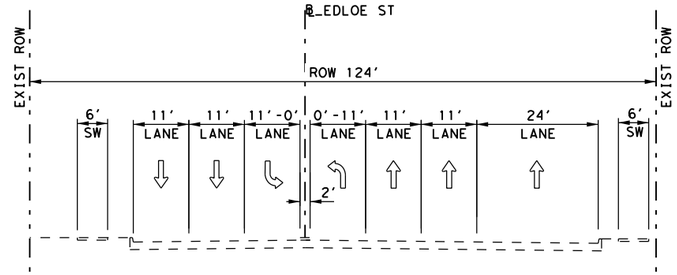
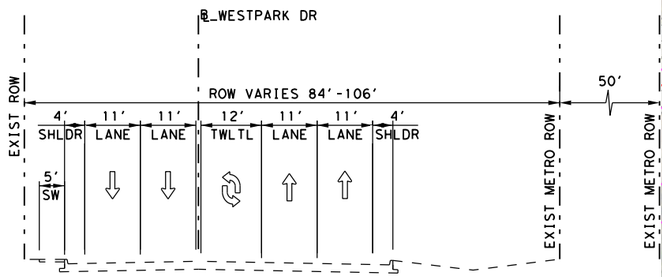
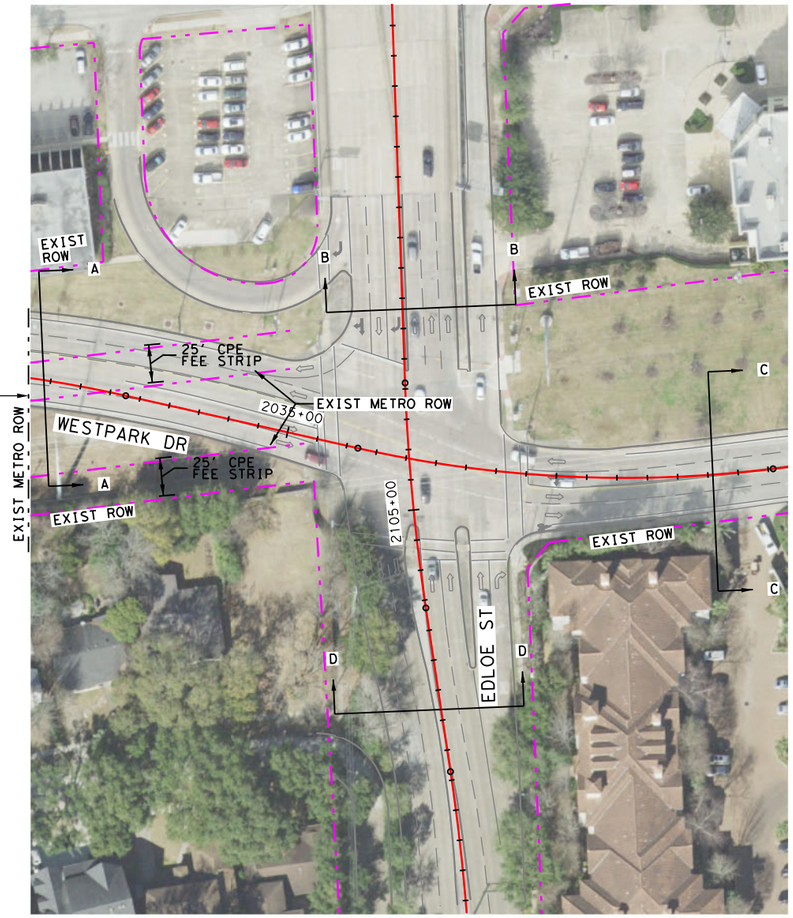
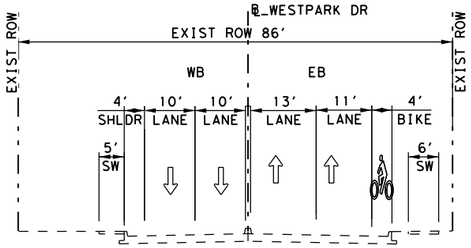


NO-BUILD TYPICAL SECTION
EDLOE ST
B-B

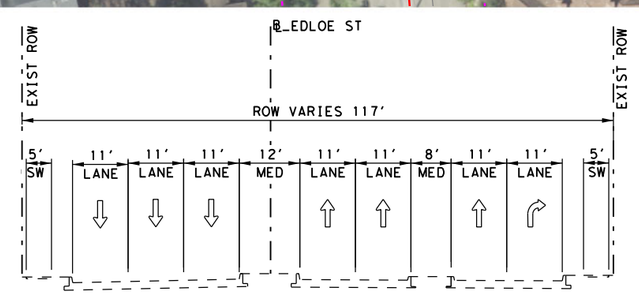


NO-BUILD TYPICAL SECTION
WESTPARK DR
A-A





NO-BUILD TYPICAL SECTION
WESTPARK DR
C-C



NO-BUILD TYPICAL SECTION
EDLOE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 WESTPARK/EDLOE INTERSECTION LAYOUT NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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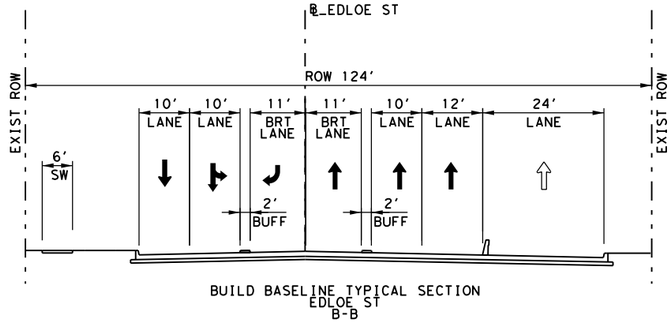
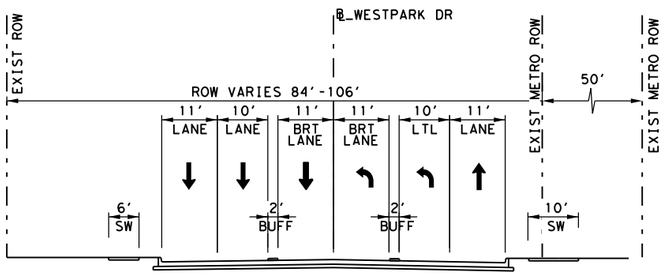
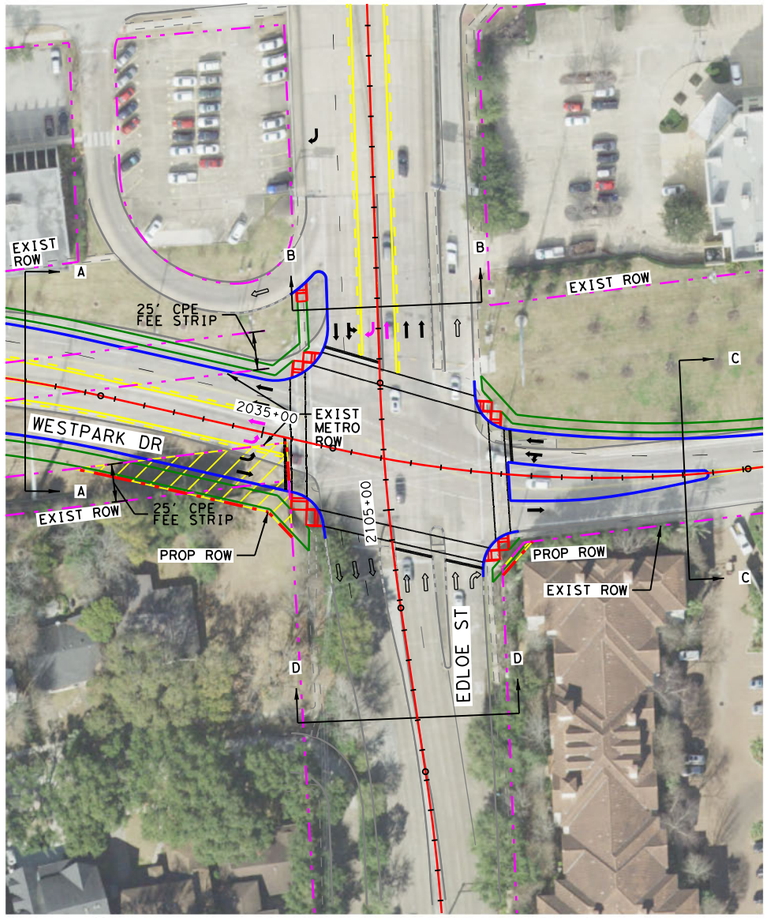
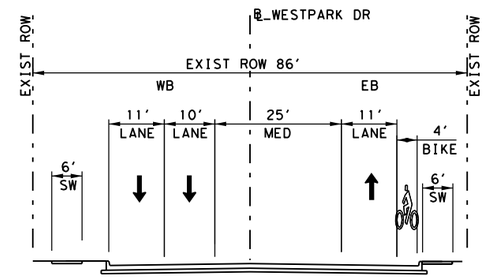


BUILD BASELINE TYPICAL SECTION
EDLOE ST
B-B

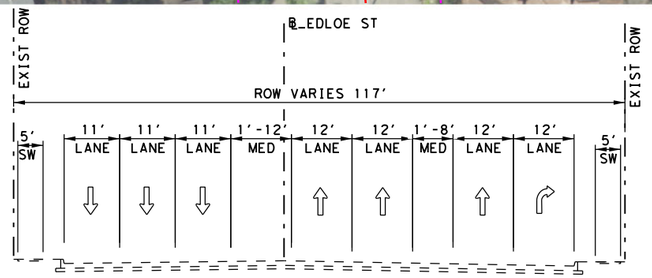


BUILD BASELINE TYPICAL SECTION
WESTPARK DR
A-A





BUILD BASELINE TYPICAL SECTION
WESTPARK DR
C-C



BUILD BASELINE TYPICAL SECTION
EDLOE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 WESTPARK/EDLOE INTERSECTION LAYOUT BUILD BASELINE

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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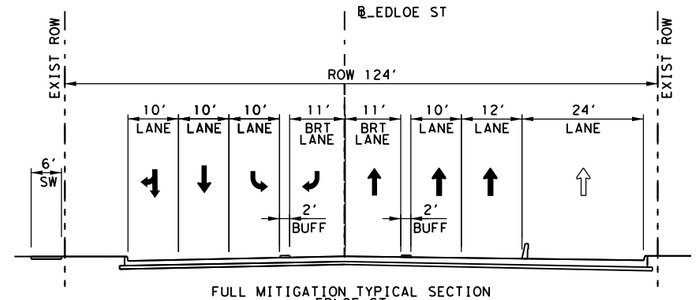
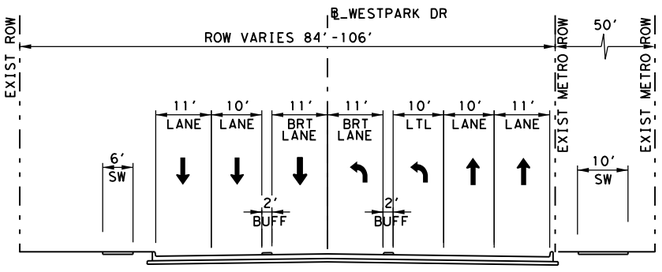
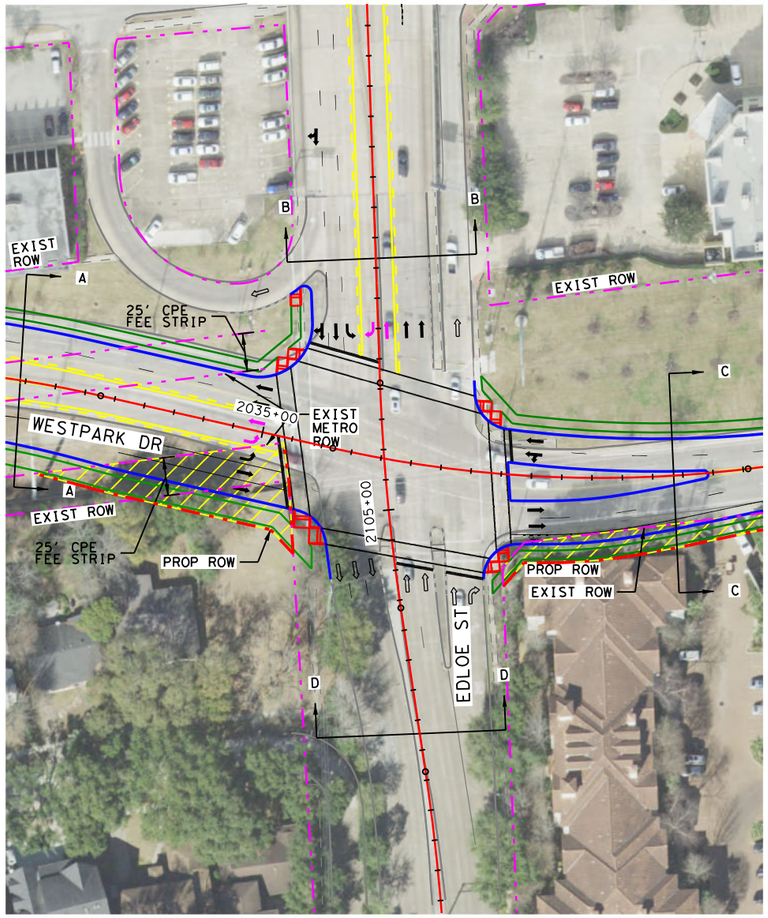
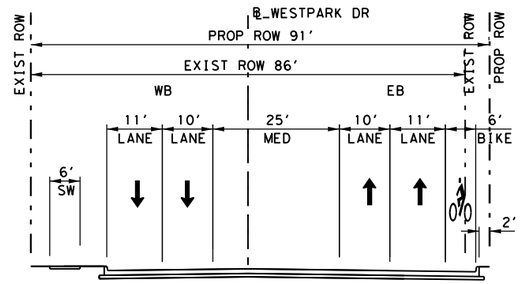


FULL MITIGATION TYPICAL SECTION
EDLOE ST
B-B

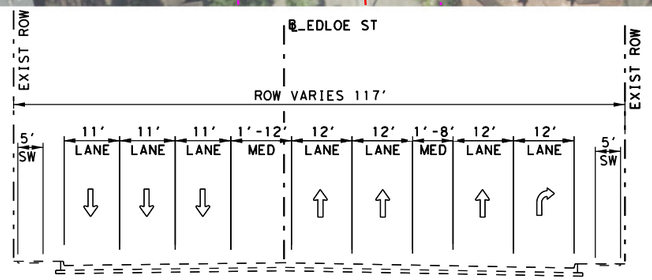


FULL MITIGATION TYPICAL SECTION
WESTPARK DR
A-A





FULL MITIGATION TYPICAL SECTION
WESTPARK DR
C-C



FULL MITIGATION TYPICAL SECTION
EDLOE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 WESTPARK/EDLOE INTERSECTION LAYOUT FULL MITIGATION

DRAWING NO: CC6-S20003
SHEET NO: 3
SHEET 3 OF 5

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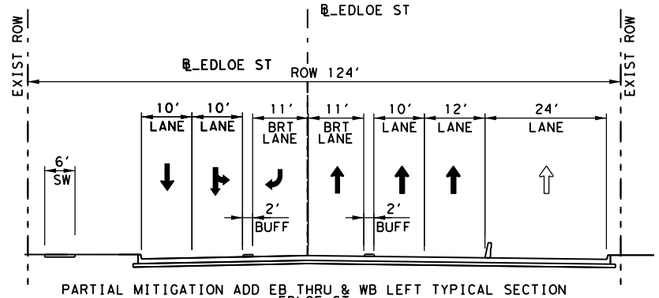
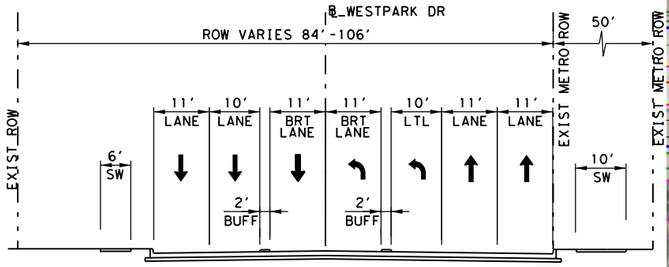
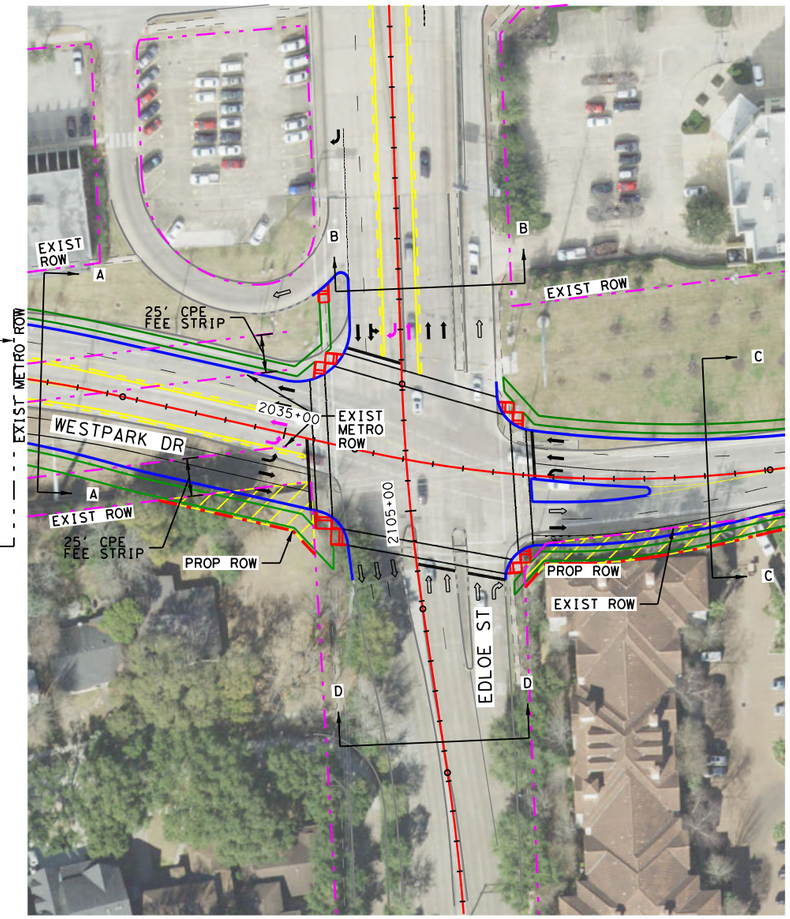
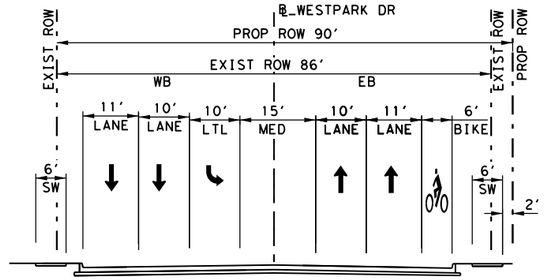


PARTIAL MITIGATION ADD EB THRU & WB LEFT TYPICAL SECTION
EDLOE ST
B-B

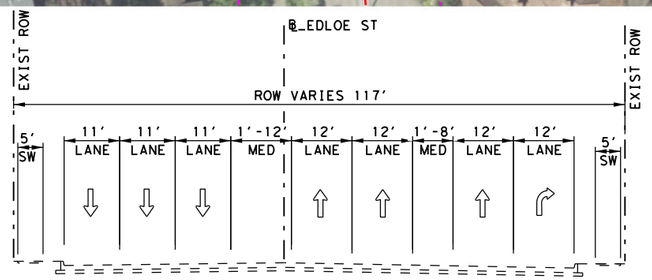


PARTIAL MITIGATION ADD EB THRU & WB LEFT TYPICAL SECTION
WESTPARK DR
A-A





PARTIAL MITIGATION ADD EB THRU & WB LEFT TYPICAL SECTION
WESTPARK DR
C-C



PARTIAL MITIGATION ADD EB THRU & WB LEFT TYPICAL SECTION
EDLOE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
WESTPARK/EDLOE
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
EB THRU & WB LT

DRAWING NO: CC6-S20004
SHEET NO: 4
SHEET 4 OF 5

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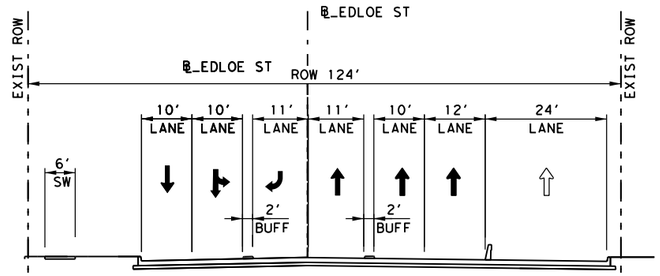
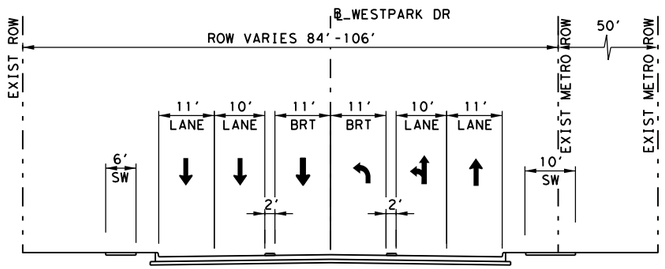
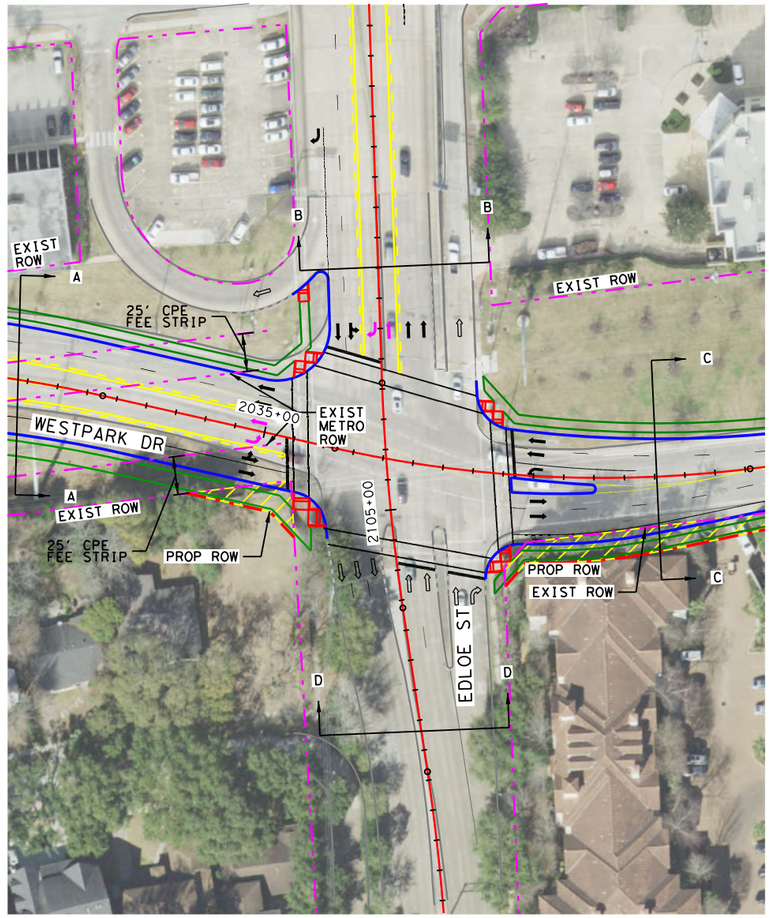


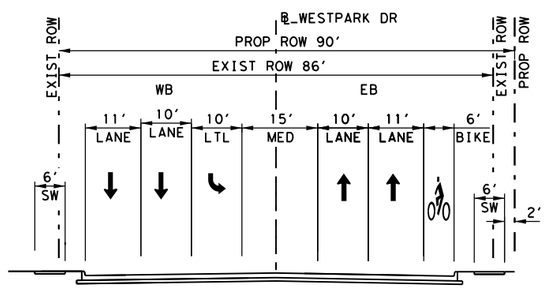
PARTIAL MITIGATION CONVERT EB/WB TURN LANES TYPICAL SECTION
EDLOE ST
B-B



PARTIAL MITIGATION CONVERT EB/WB TURN LANES TYPICAL SECTION
WESTPARK DR
A-A



PARTIAL MITIGATION CONVERT EB/WB TURN LANES TYPICAL SECTION
EDLOE ST
D-D



PARTIAL MITIGATION CONVERT EB/WB TURN LANES TYPICAL SECTION
WESTPARK DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 WESTPARK/EDLOE INTERSECTION LAYOUT PARTIAL MITIGATION 2 EB THRU/LT, WB THRU

DRAWING NO: CC6-S20005
SHEET NO: 5
SHEET 5 OF 5

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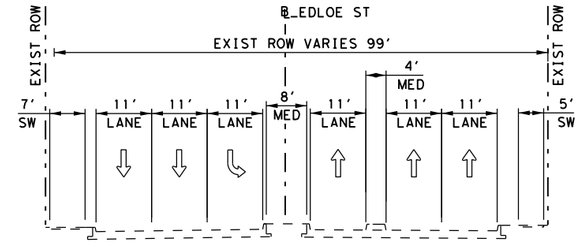
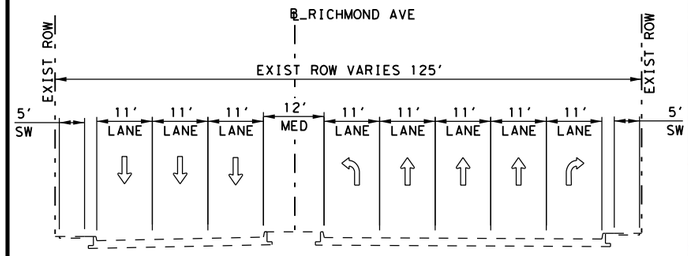
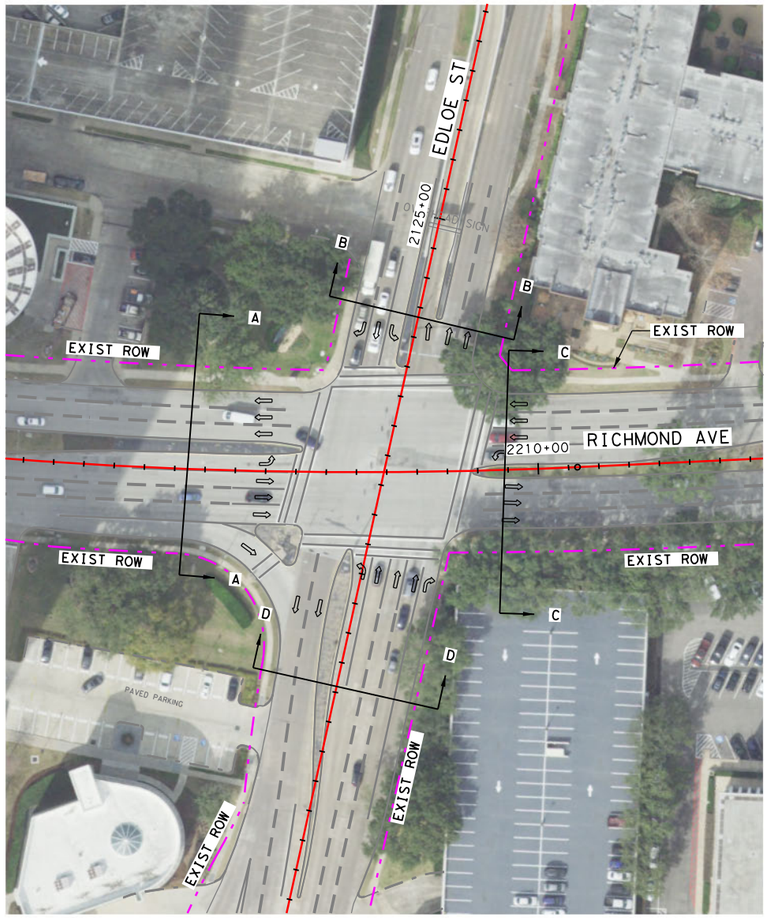
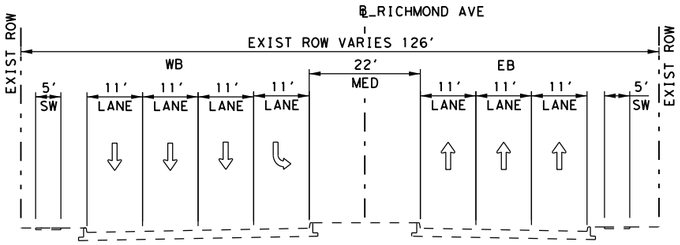


NO-BUILD TYPICAL SECTION
EDLOE STREET
B-B

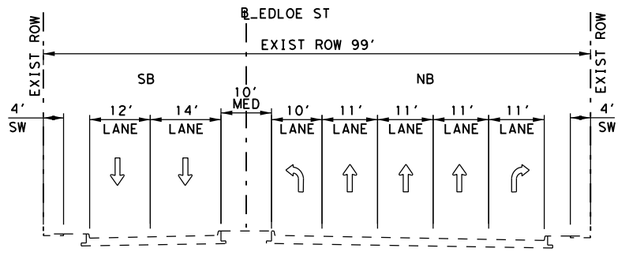


NO-BUILD TYPICAL SECTION
RICHMOND AVENUE
A-A





NO-BUILD TYPICAL SECTION
RICHMOND AVENUE
C-C



NO-BUILD TYPICAL SECTION
EDLOE STREET
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 RICHMOND/EDLOE INTERSECTION LAYOUT NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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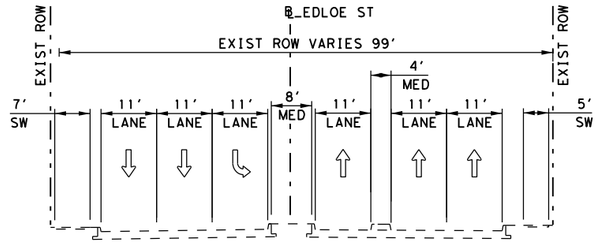
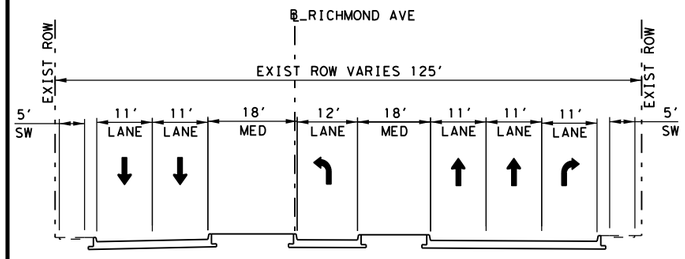
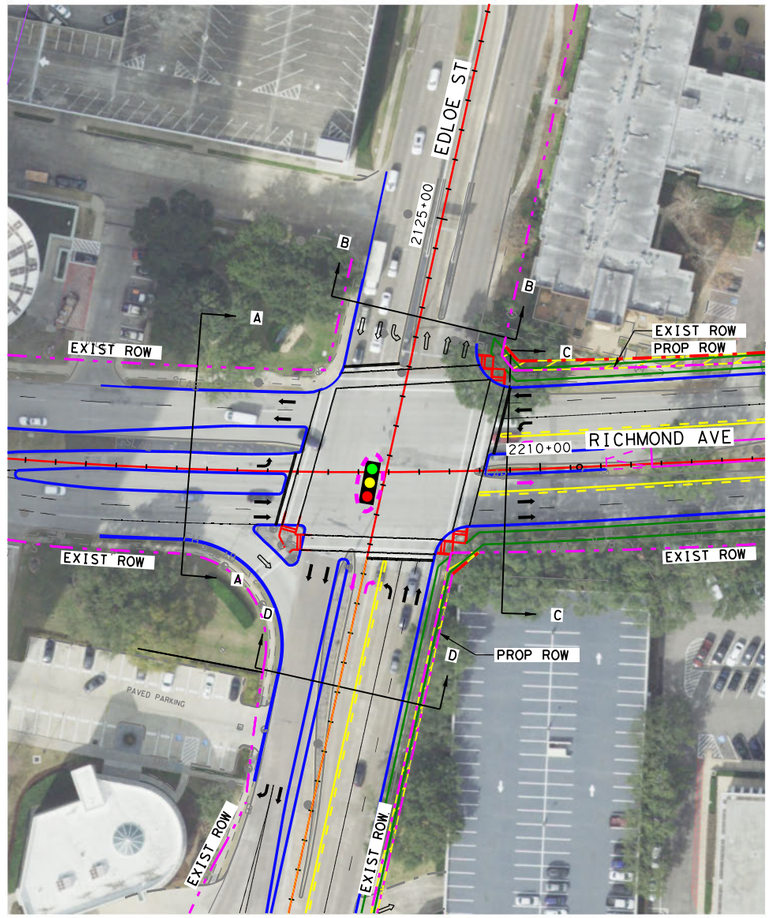
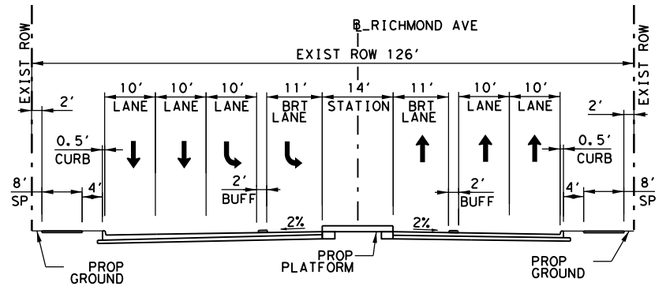


BUILD BASELINE TYPICAL SECTION
EDLOE STREET
B-B

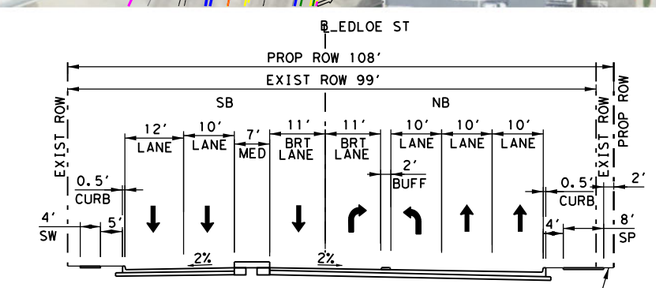


BUILD BASELINE TYPICAL SECTION
RICHMOND AVENUE
A-A





BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
C-C



BUILD BASELINE TYPICAL SECTION
EDLOE STREET
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EDLOE
INTERSECTION LAYOUT
BUILD BASELINE

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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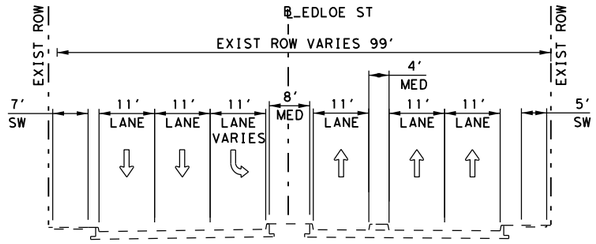
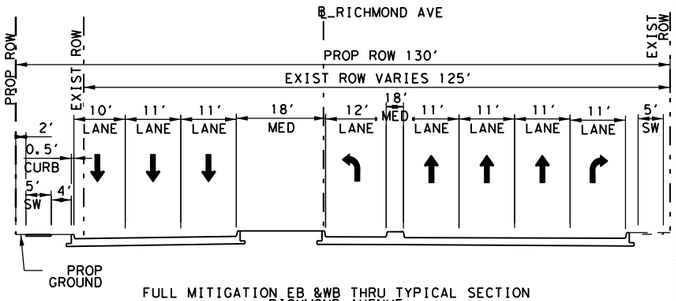
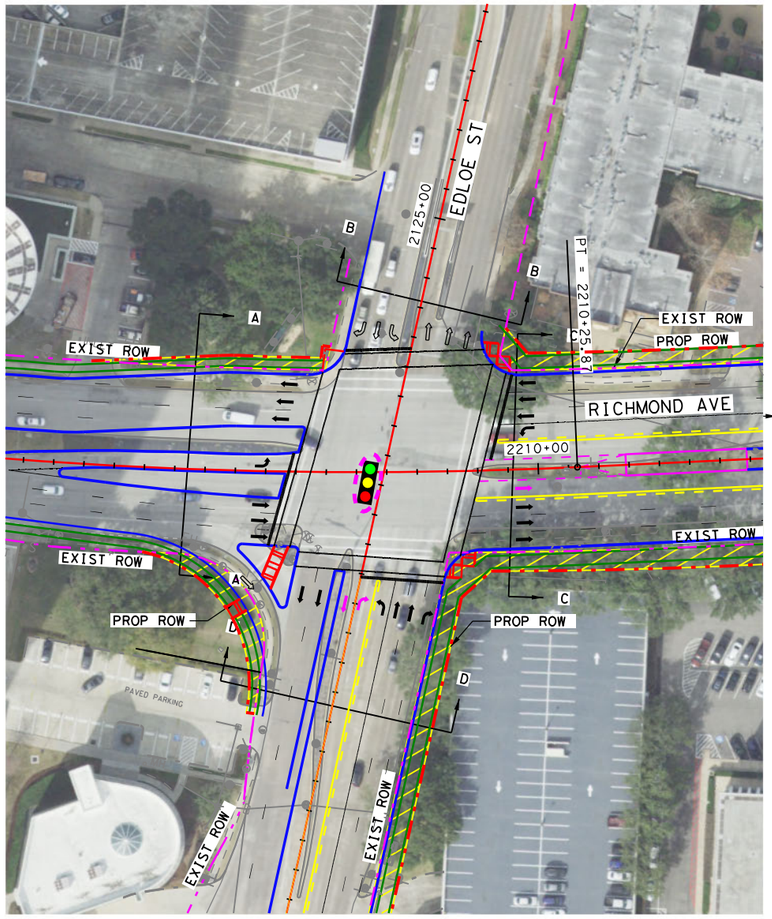
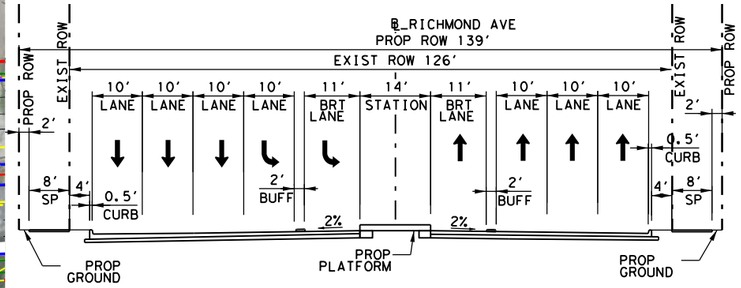


FULL MITIGATION TYPICAL SECTION
EDLOE STREET
B-B

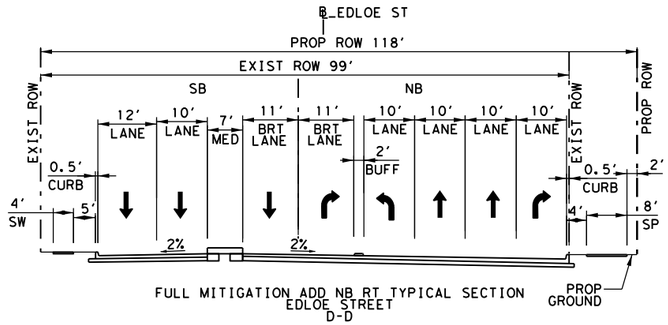


FULL MITIGATION EB &WB THRU TYPICAL SECTION
RICHMOND AVENUE
A-A





FULL MITIGATION EB &WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



FULL MITIGATION ADD NB RT TYPICAL SECTION
EDLOE STREET
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EDLOE
INTERSECTION LAYOUT
FULL MITIGATION
EB & WB THRU, NB RT

DRAWING NO: CC6-S20003
SHEET NO: 3
SHEET 3 OF 5

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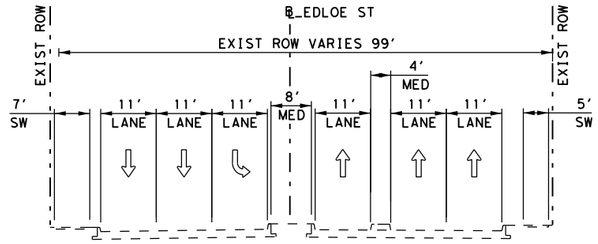
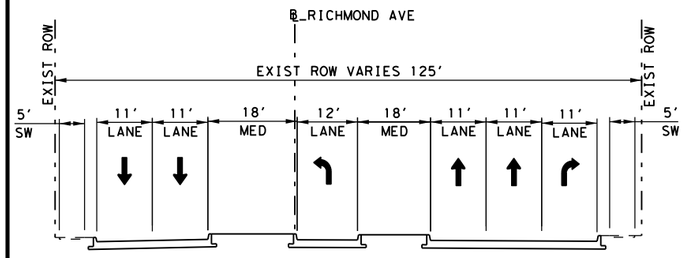
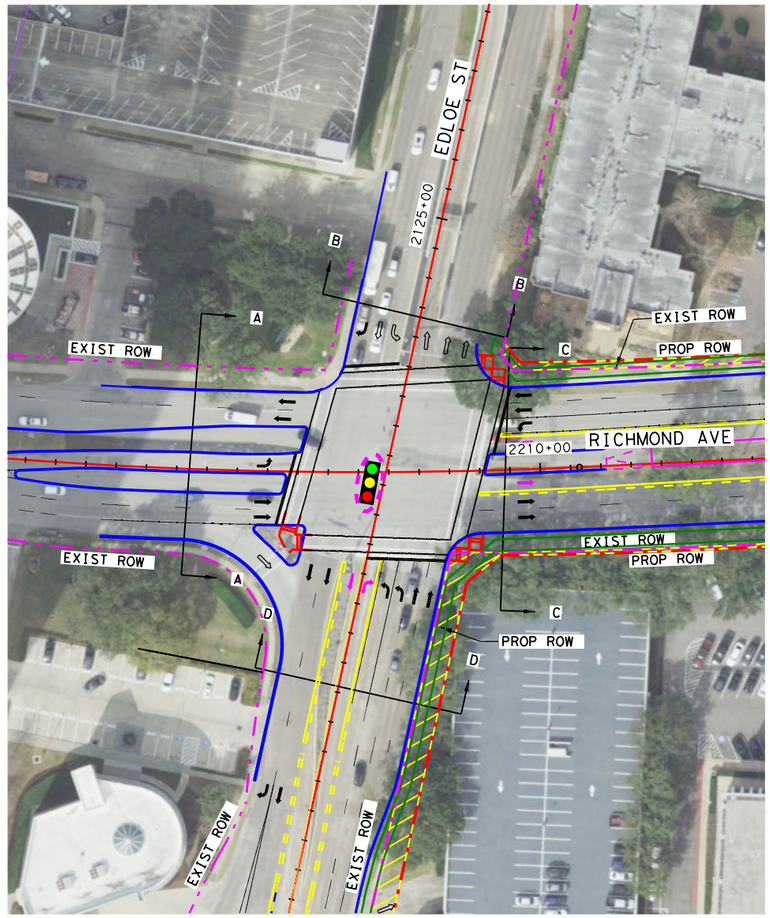
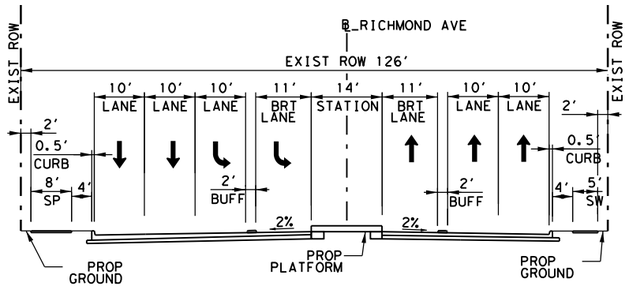


PARTIAL MITIGATION 1 TYPICAL SECTION
EDLOE STREET
B-B

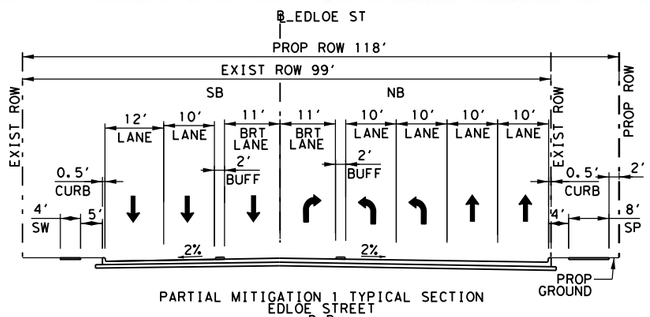


PARTIAL MITIGATION 1 TYPICAL SECTION
RICHMOND AVENUE
A-A





PARTIAL MITIGATION 1 ADD NB LT TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION 1 TYPICAL SECTION
EDLOE STREET
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EDLOE
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
NB LT

DRAWING NO: CC6-S20004
SHEET NO: 4
SHEET 4 OF 5

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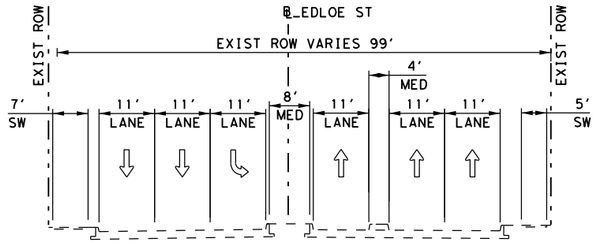
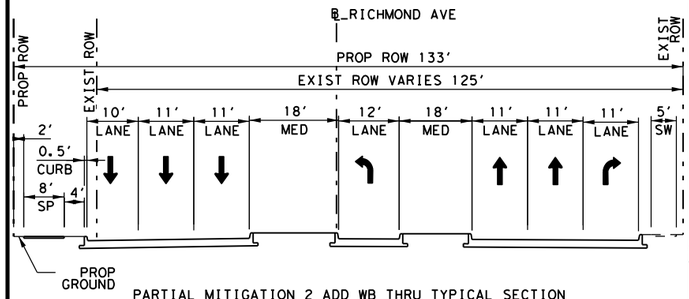
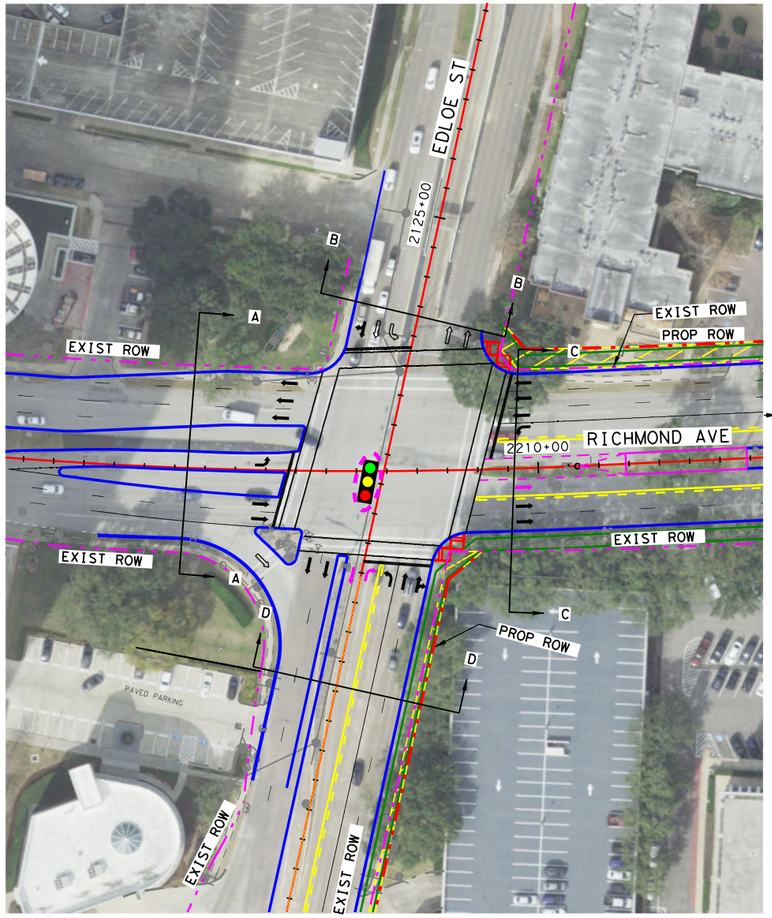
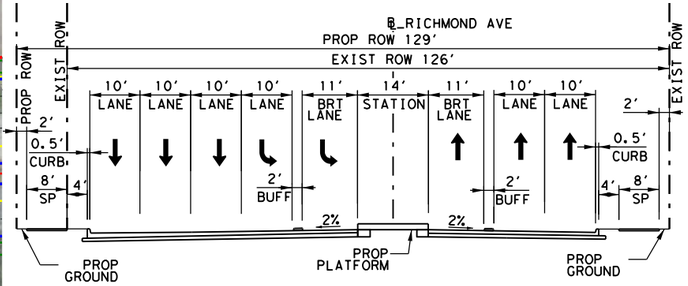


PARTIAL MITIGATION 2 TYPICAL SECTION
EDLOE STREET
B-B

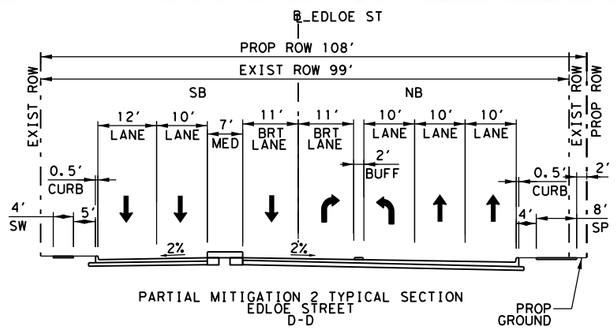


PARTIAL MITIGATION 2 ADD WB THRU TYPICAL SECTION
RICHMOND AVENUE
A-A





PARTIAL MITIGATION 2 ADD WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION 2 TYPICAL SECTION
EDLOE STREET
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EDLOE
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
WB THRU

DRAWING NO: CC6-S20005
SHEET NO: 5
SHEET 5 OF 5

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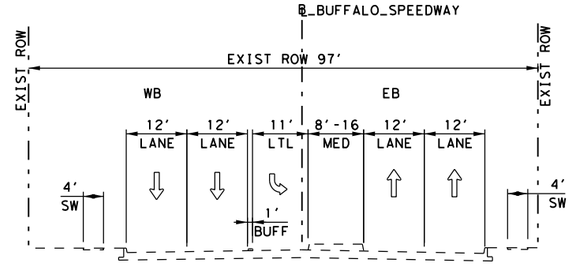
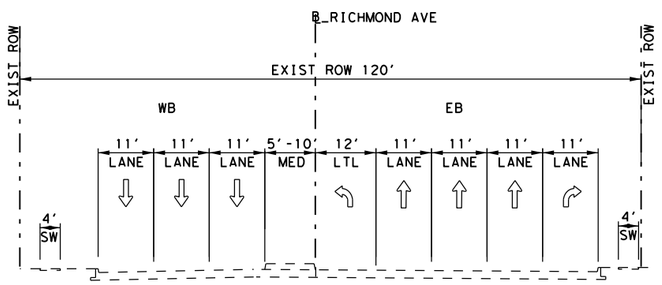
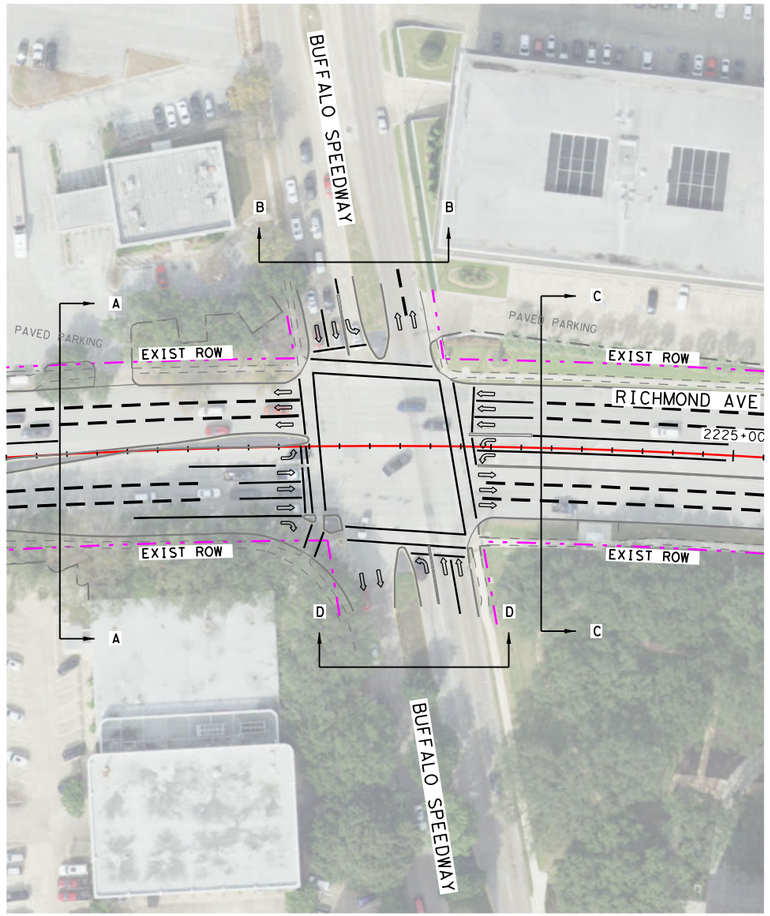
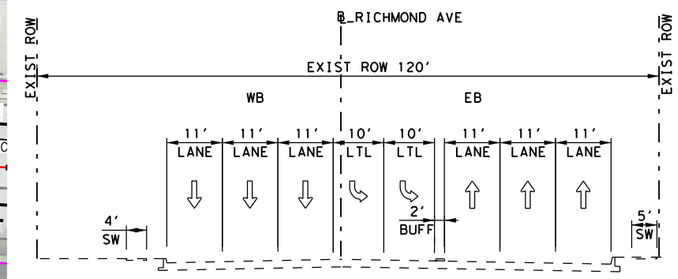


NO-BUILD TYPICAL SECTION
BUFFALO SPEEDWAY
B-B

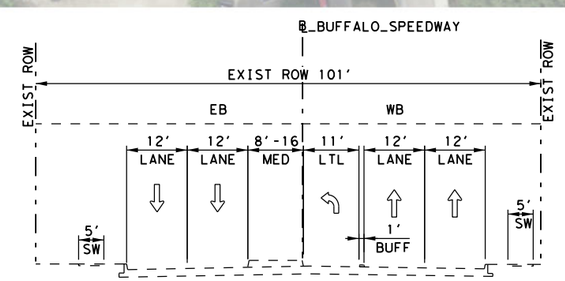


NO-BUILD TYPICAL SECTION
RICHMOND AVE
A-A





NO-BUILD TYPICAL SECTION
RICHMOND AVE
C-C



NO-BUILD TYPICAL SECTION
BUFFALO SPEEDWAY
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/BUFFALO SPEEDWAY
INTERSECTION LAYOUT
NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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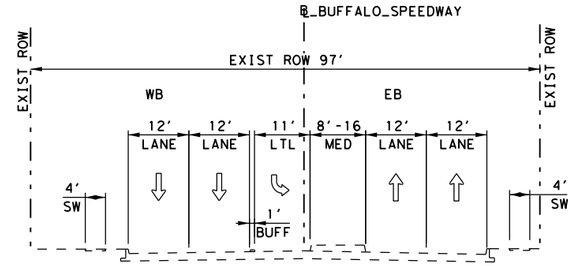
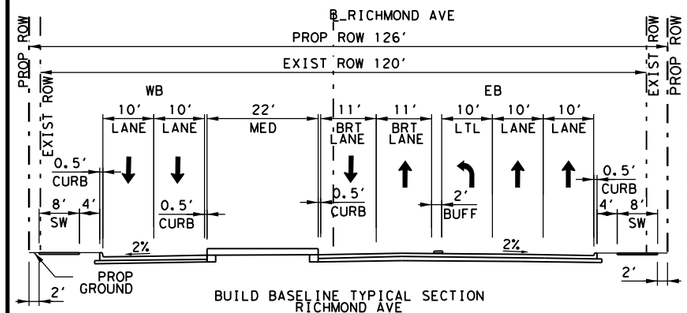
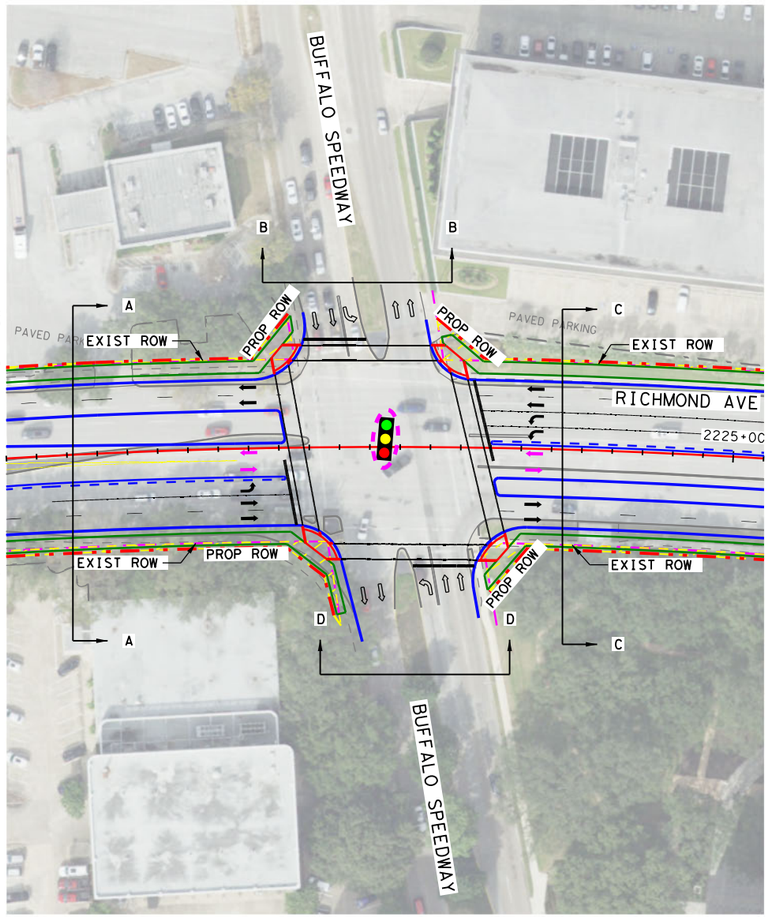
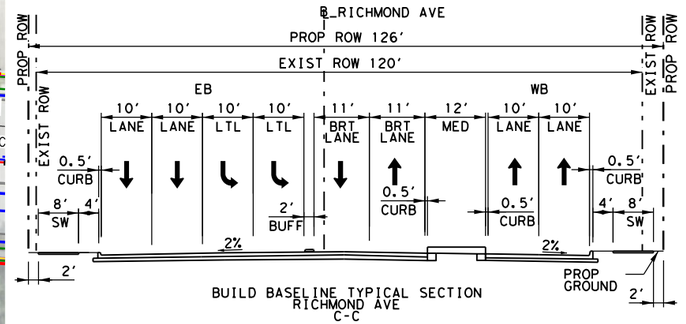


BUILD BASELINE TYPICAL SECTION
BUFFALO SPEEDWAY
B-B

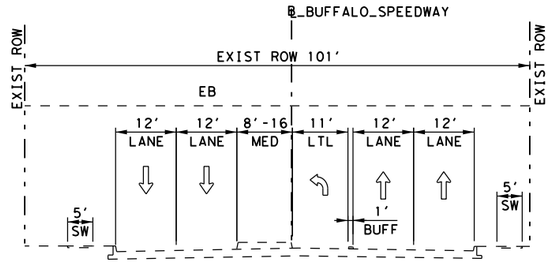


BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
A-A





BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
C-C



BUILD BASELINE TYPICAL SECTION
BUFFALO SPEEDWAY
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/BUFFALO SPEEDWAY
INTERSECTION LAYOUT
BUILD BASELINE

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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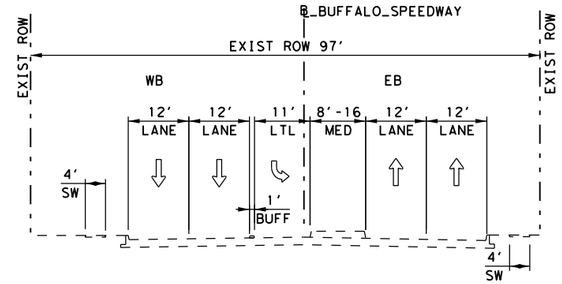
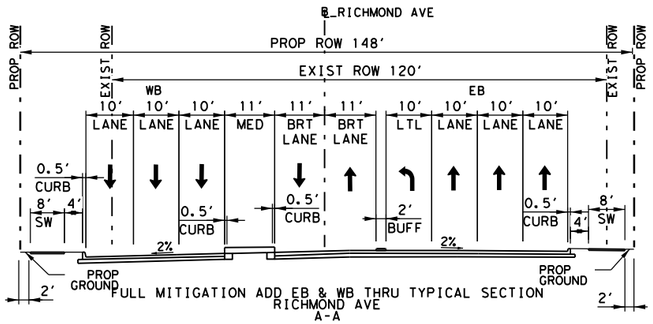
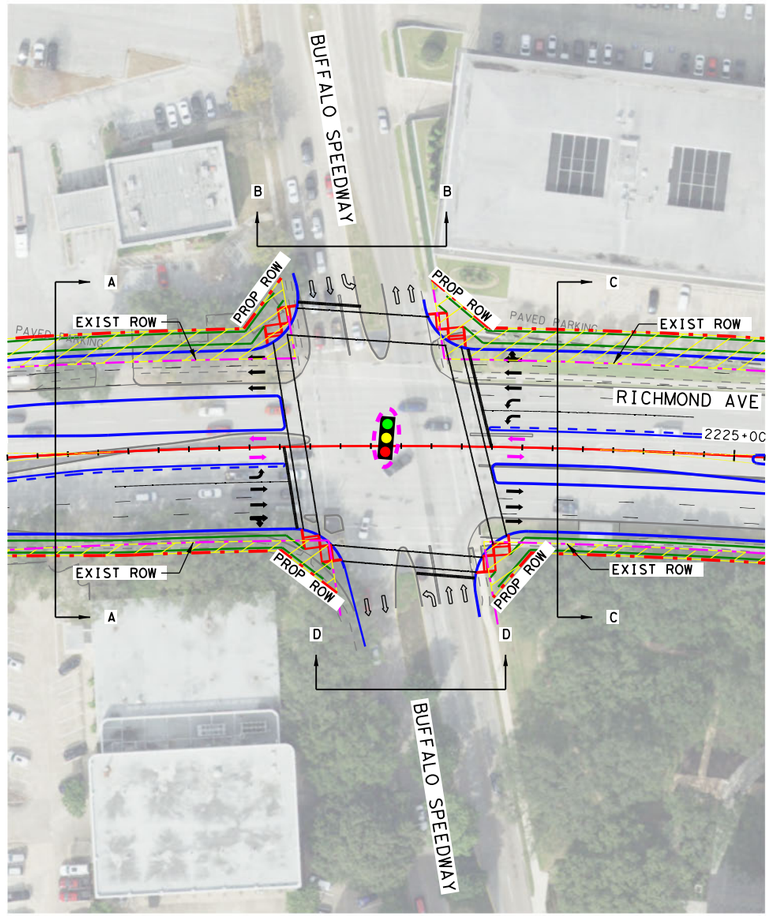
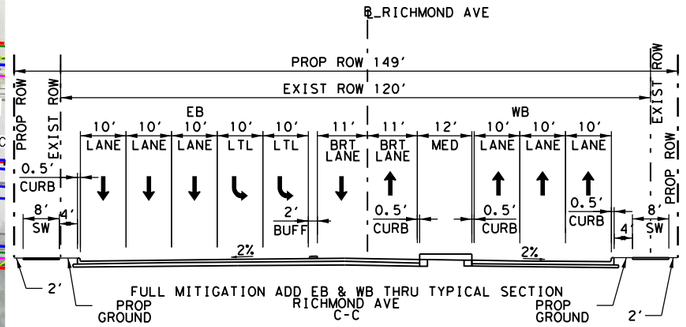


FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
BUFFALO SPEEDWAY
B-B

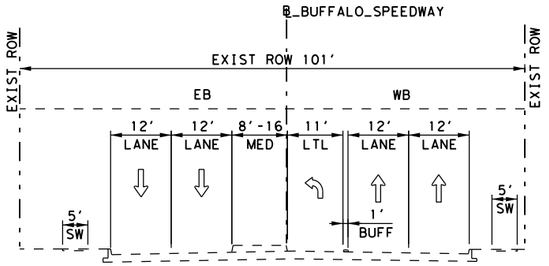


FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
RICHMOND AVE
A-A





FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
BUFFALO SPEEDWAY
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/BUFFALO SPEEDWAY
INTERSECTION LAYOUT
FULL MITIGATION
EB & WB THRU

DRAWING NO: CC6-S20003
SHEET NO: 3
SHEET 3 OF 5

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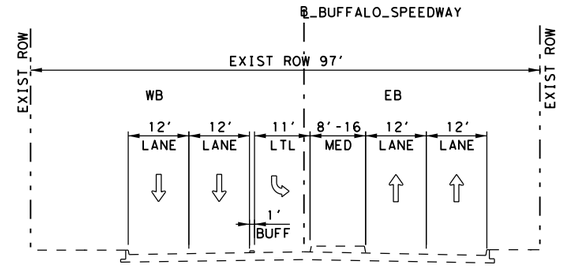
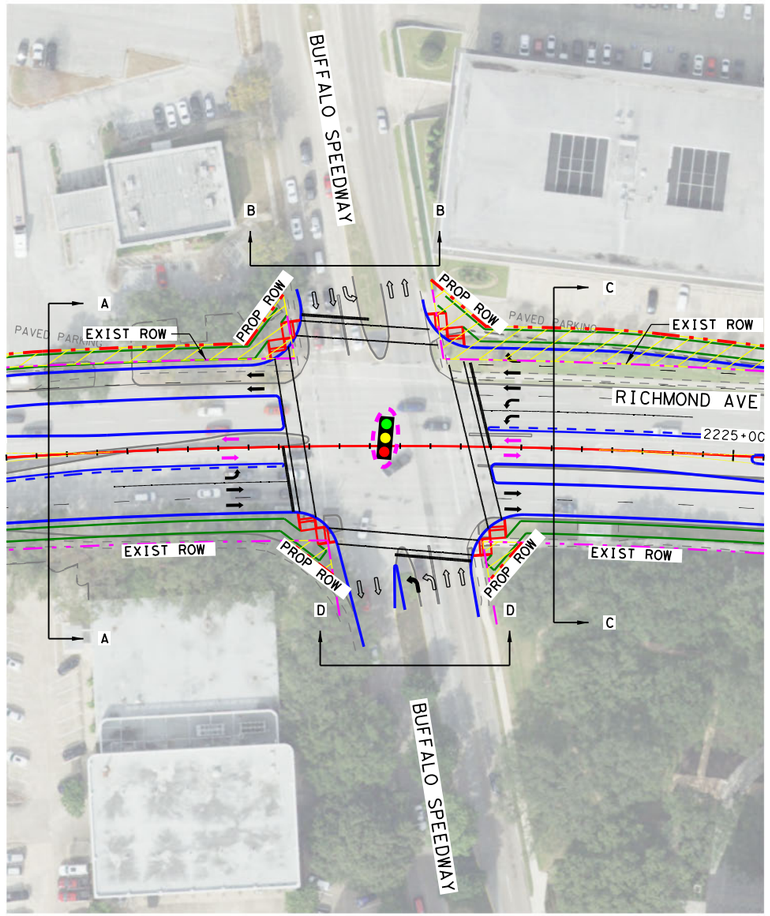
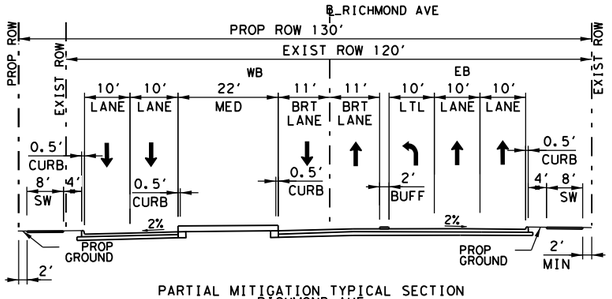
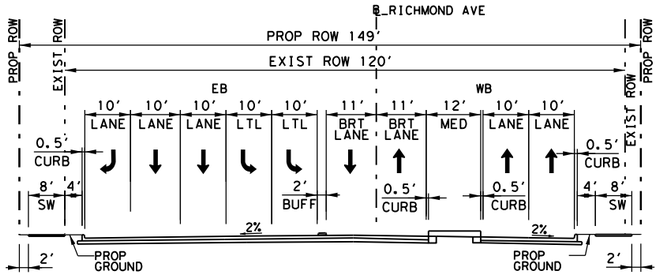


PARTIAL MITIGATION TYPICAL SECTION
BUFFALO SPEEDWAY
B-B

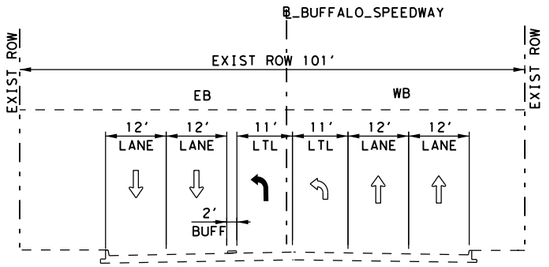




PARTIAL MITIGATION TYPICAL SECTION
RICHMOND AVE
A-A



PARTIAL MITIGATION ADD WB RT TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION ADD NB LT TYPICAL SECTION
BUFFALO SPEEDWAY
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/BUFFALO SPEEDWAY
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
NB LT, WB RT

DRAWING NO: CC6-S20004
SHEET NO: 4
SHEET 4 OF 5

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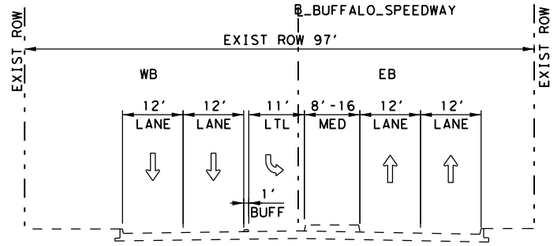
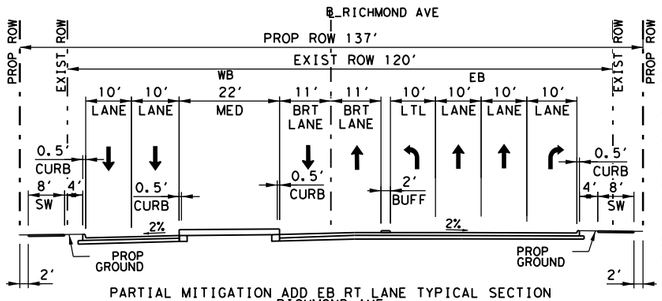
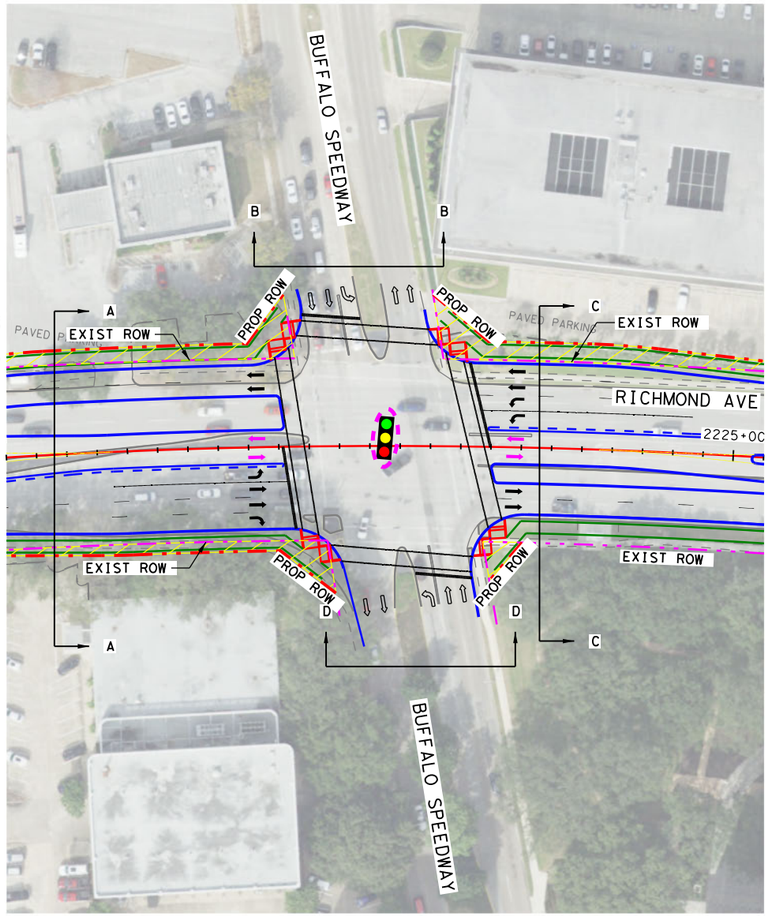
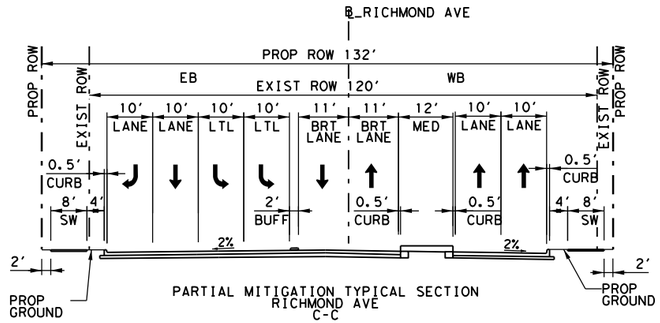


PARTIAL MITIGATION TYPICAL SECTION
BUFFALO SPEEDWAY
B-B

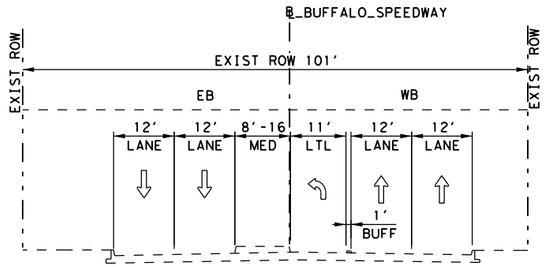


PARTIAL MITIGATION ADD EB RT LANE TYPICAL SECTION
RICHMOND AVE
A-A





PARTIAL MITIGATION TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION TYPICAL SECTION
BUFFALO SPEEDWAY
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
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1301 ST SUITE 2100
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METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/BUFFALO SPEEDWAY
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
EB RT

DRAWING NO: CC6-S20005
SHEET NO: 5
SHEET 5 OF 5

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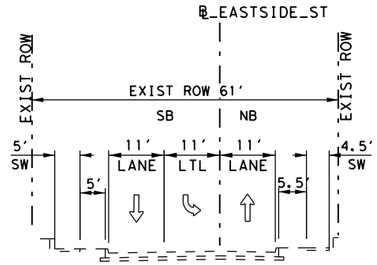
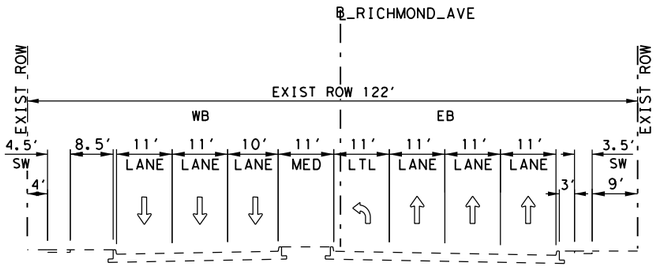
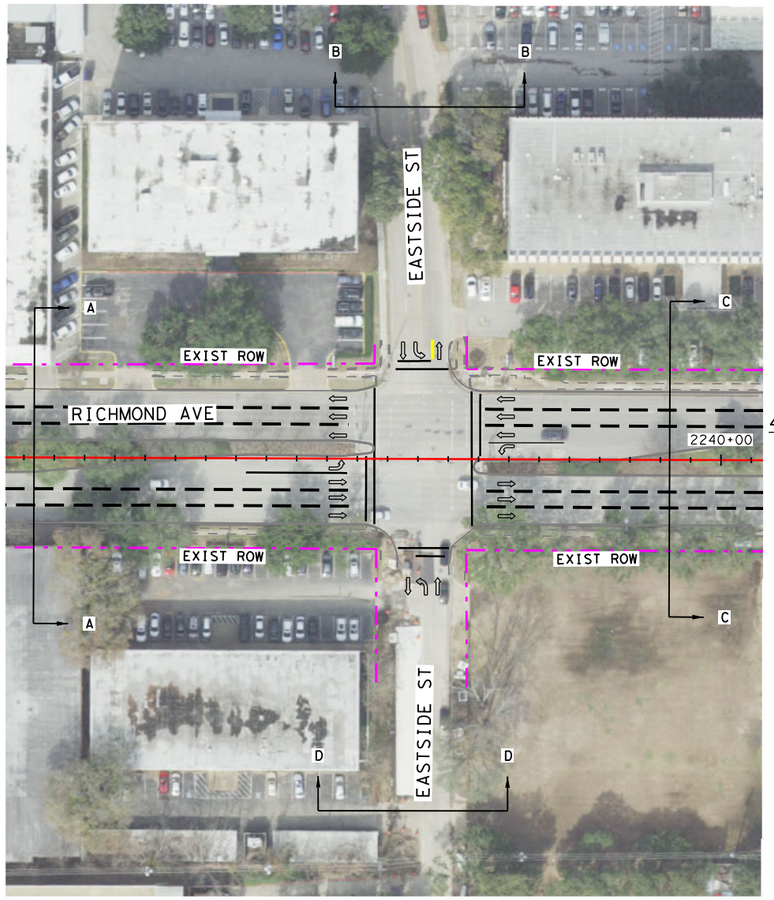
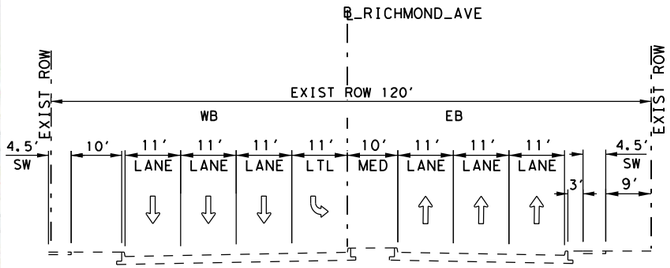


NO BUILD TYPICAL SECTION
EASTSIDE ST
B-B

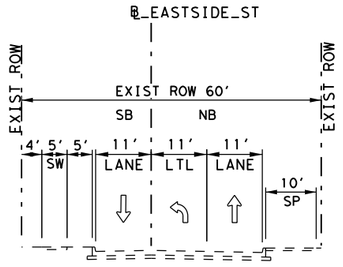


NO BUILD TYPICAL SECTION
RICHMOND AVE
A-A





NO BUILD TYPICAL SECTION
RICHMOND AVE
C-C



NO BUILD TYPICAL SECTION
EASTSIDE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EASTSIDE
INTERSECTION LAYOUT
NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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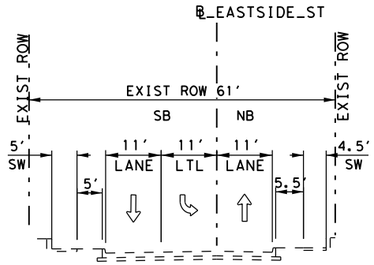
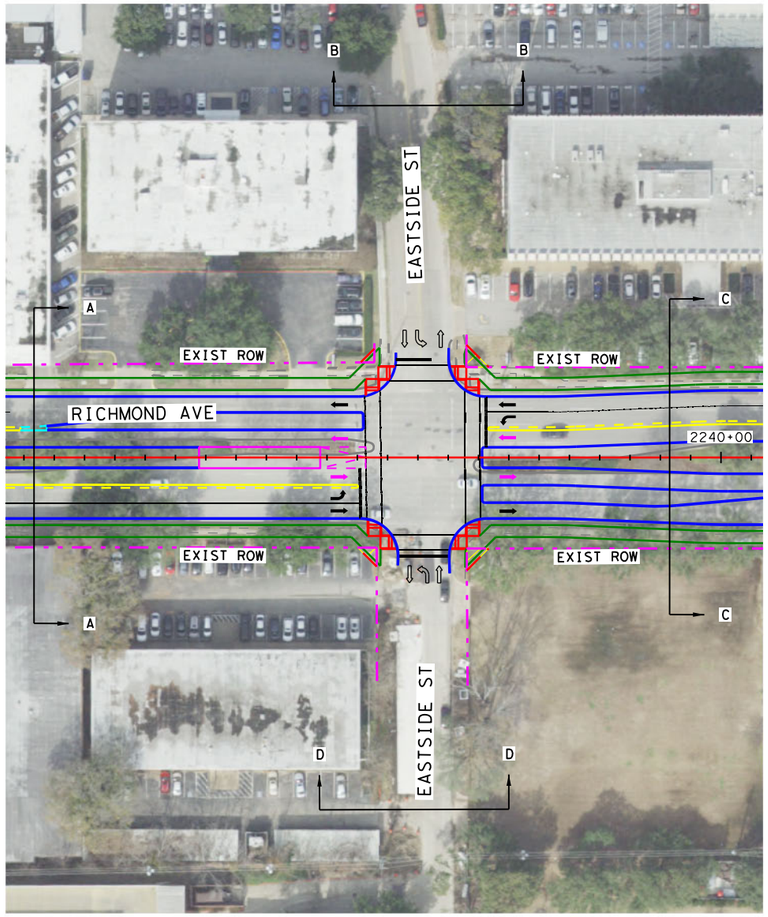
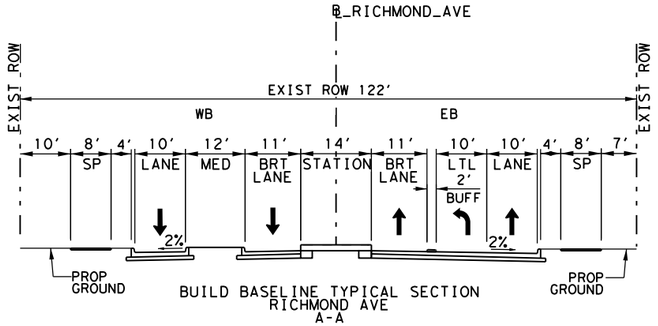
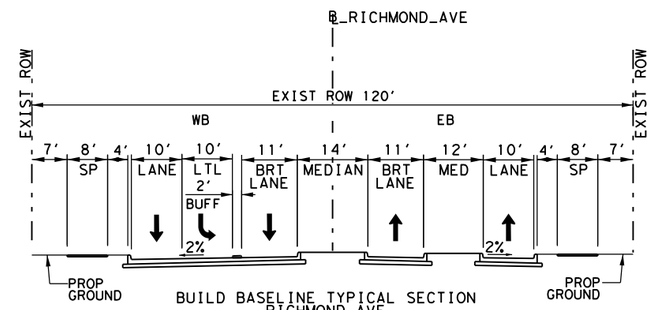


BUILD BASELINE TYPICAL SECTION
EASTSIDE ST
B-B

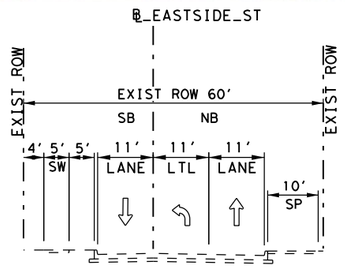




BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
A-A



BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
C-C



BUILD BASELINE TYPICAL SECTION
EASTSIDE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EASTSIDE
INTERSECTION LAYOUT
BUILD BASELINE

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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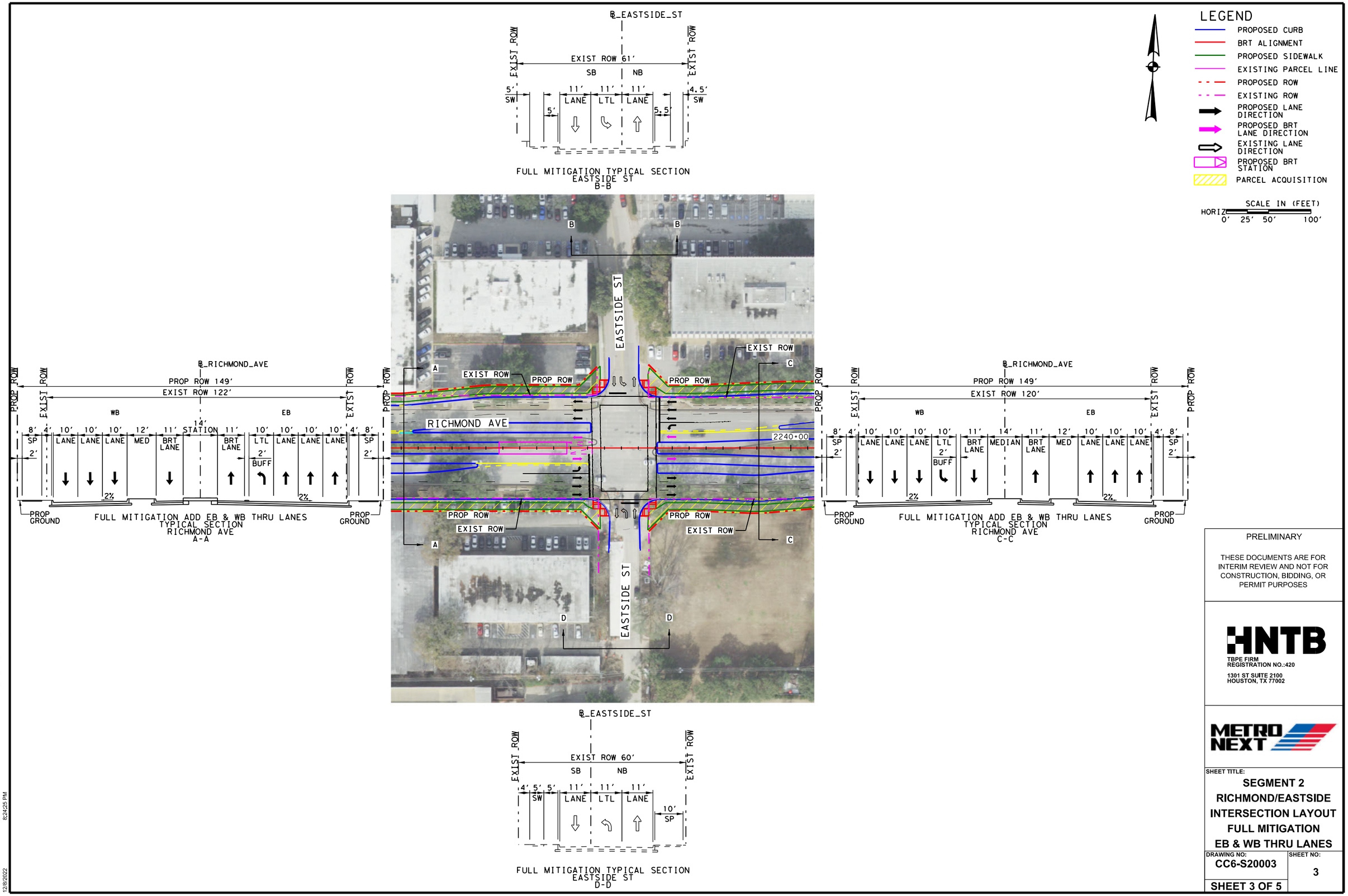

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EASTSIDE
INTERSECTION LAYOUT
FULL MITIGATION
EB & WB THRU LANES

DRAWING NO: CC6-S20003

SHEET NO: 3

SHEET 3 OF 5

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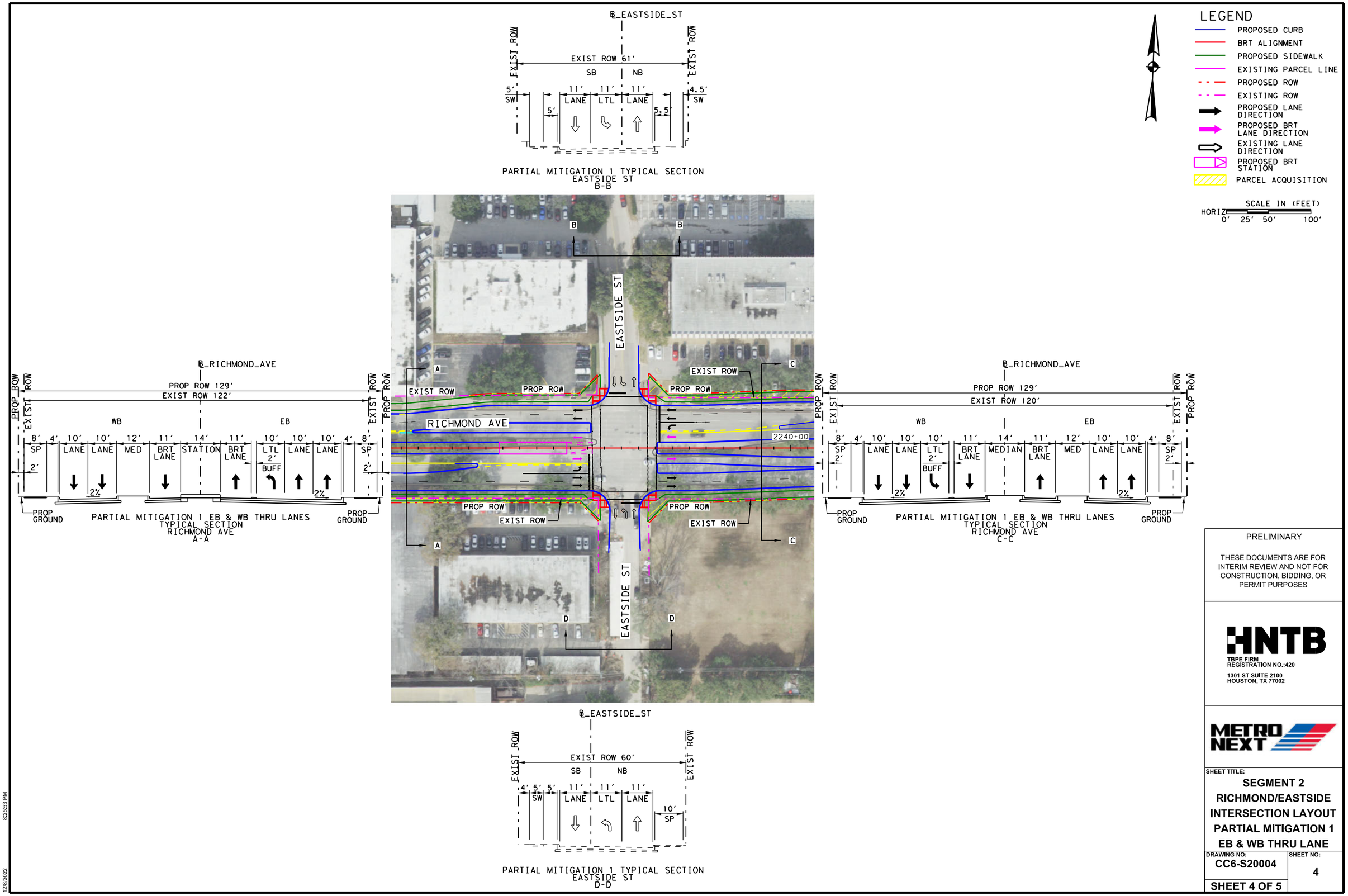

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EASTSIDE
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
EB & WB THRU LANE

DRAWING NO: CC6-S20004

SHEET NO: 4

SHEET 4 OF 5

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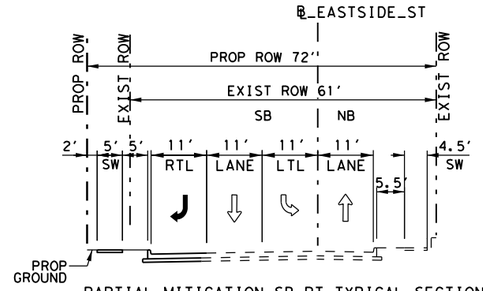
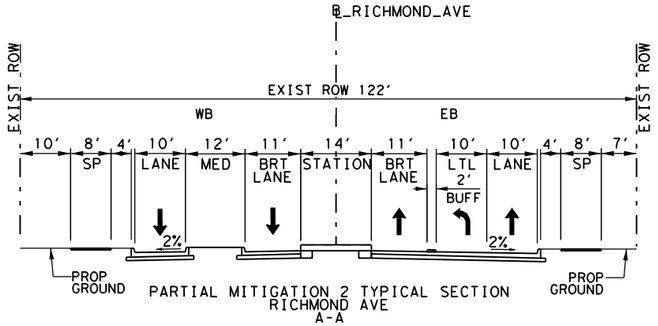
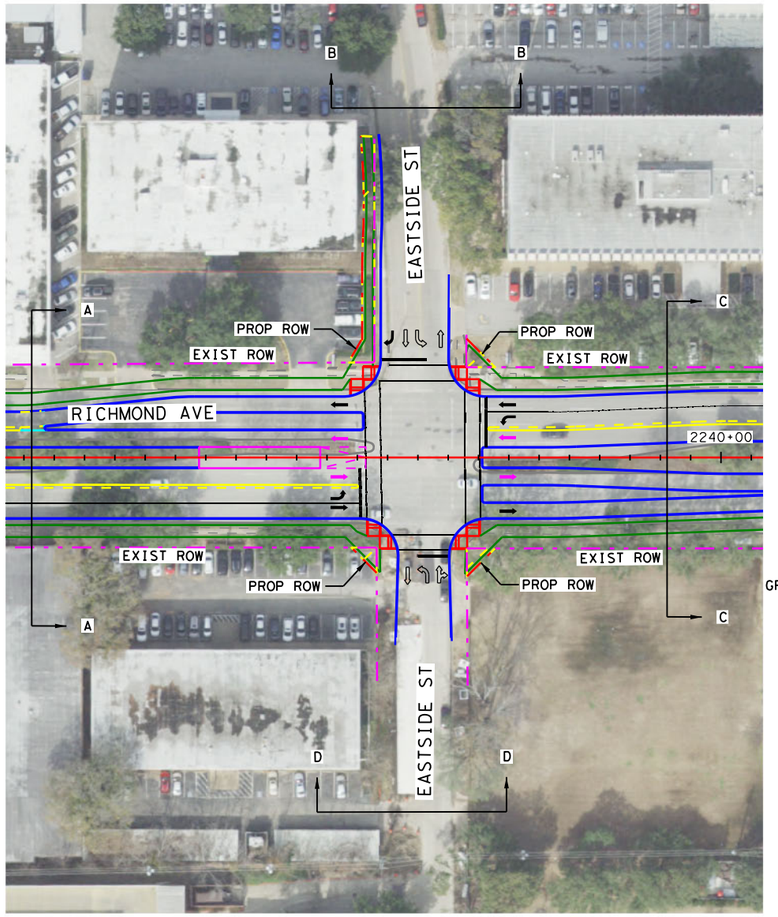
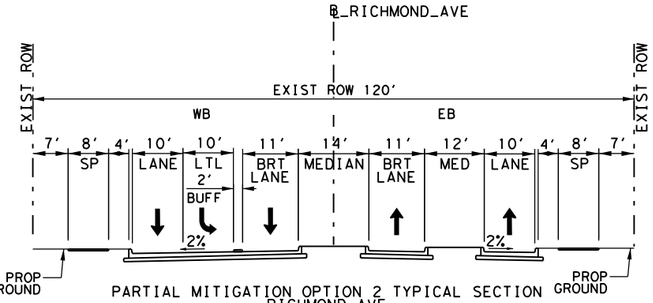


PARTIAL MITIGATION SB RT TYPICAL SECTION
EASTSIDE ST
B-B

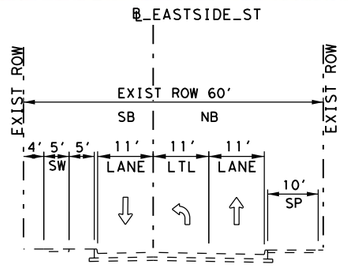


PARTIAL MITIGATION 2 TYPICAL SECTION
RICHMOND AVE
A-A





PARTIAL MITIGATION OPTION 2 TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION 2 TYPICAL SECTION
EASTSIDE ST
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/EASTSIDE
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
SB RT

DRAWING NO: CC6-S20005
SHEET NO: 5
SHEET 5 OF 5

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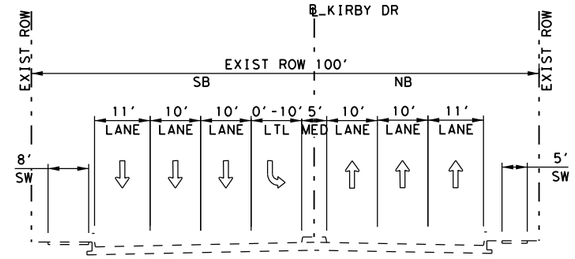
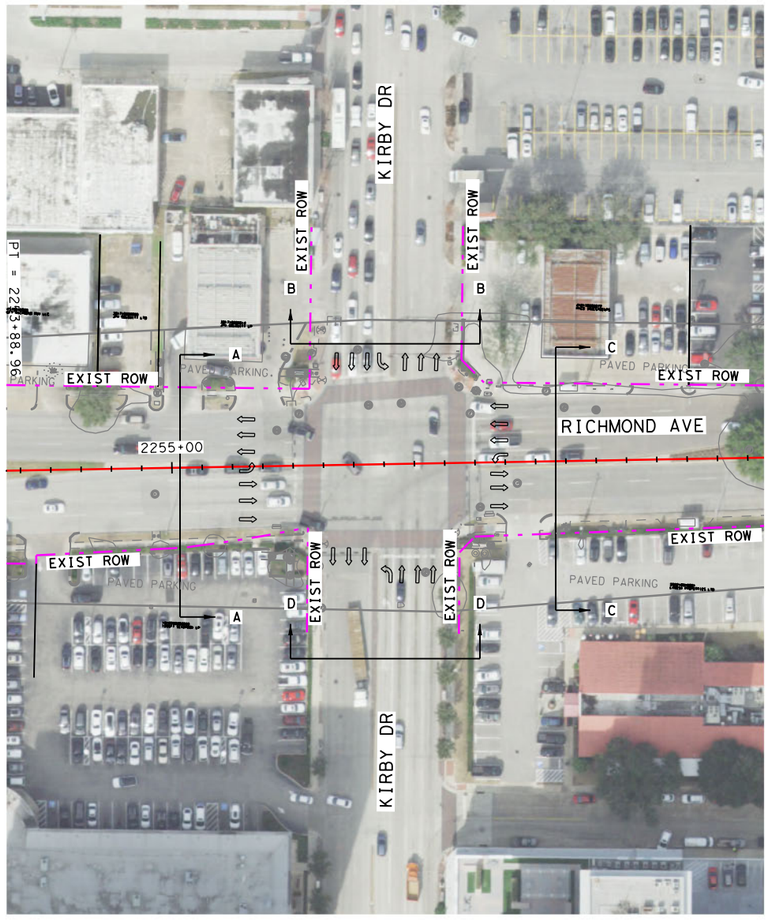
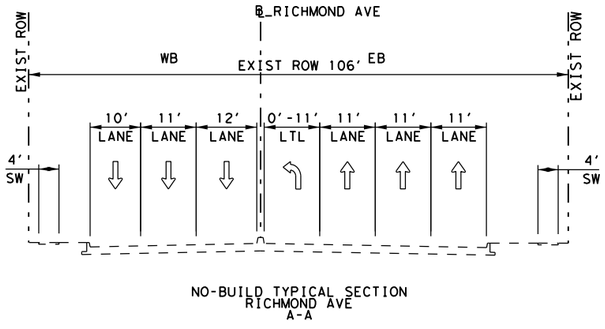
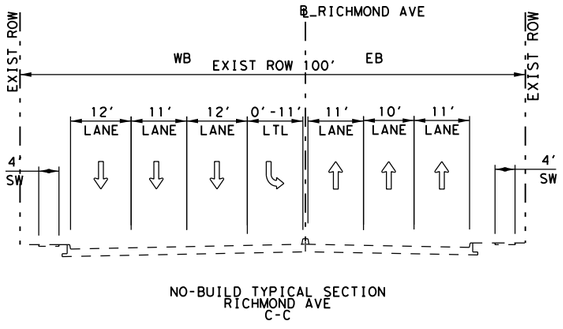


NO-BUILD TYPICAL SECTION
KIRBY DR
B-B

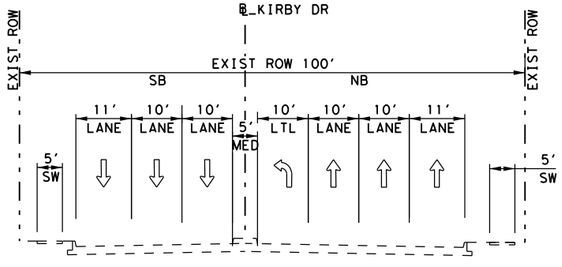




NO-BUILD TYPICAL SECTION
RICHMOND AVE
A-A



NO-BUILD TYPICAL SECTION
RICHMOND AVE
C-C



NO-BUILD TYPICAL SECTION
KIRBY DR
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ
0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 RICHMOND/KIRBY INTERSECTION LAYOUT NO BUILD

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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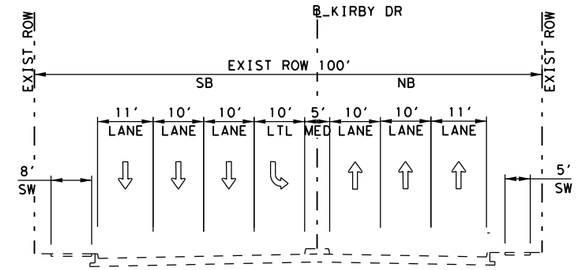
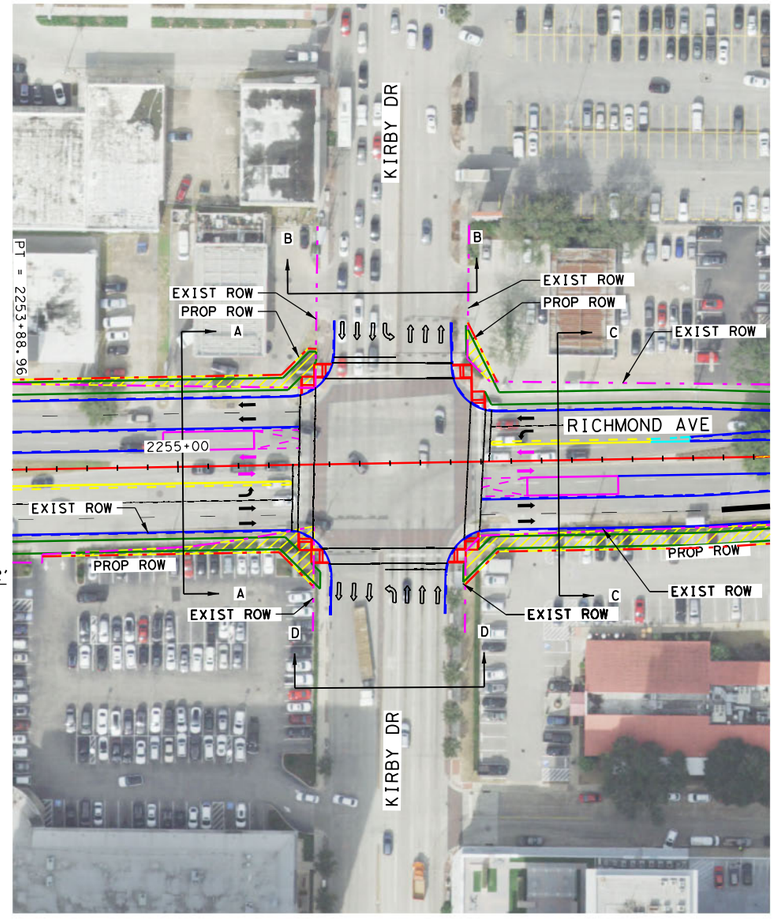
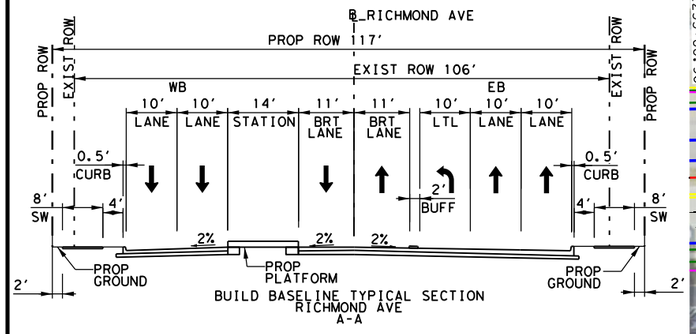
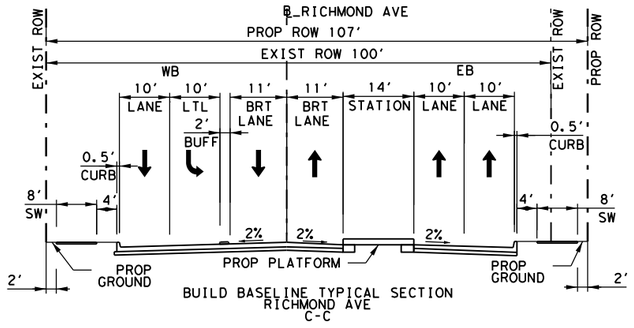


BUILD BASELINE TYPICAL SECTION
KIRBY DR
B-B

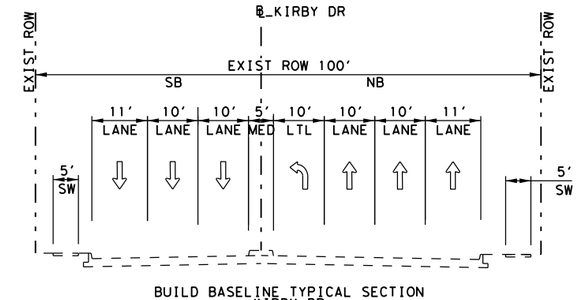




BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
A-A



BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
C-C



BUILD BASELINE TYPICAL SECTION
KIRBY DR
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ
0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 RICHMOND/KIRBY INTERSECTION LAYOUT BUILD BASELINE

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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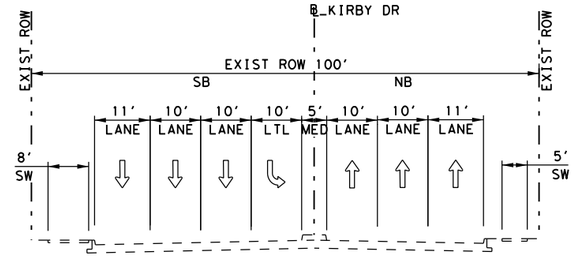
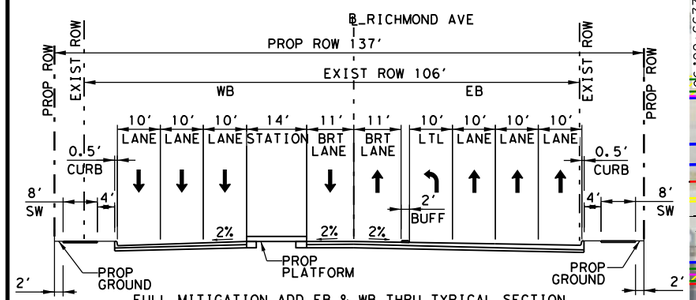
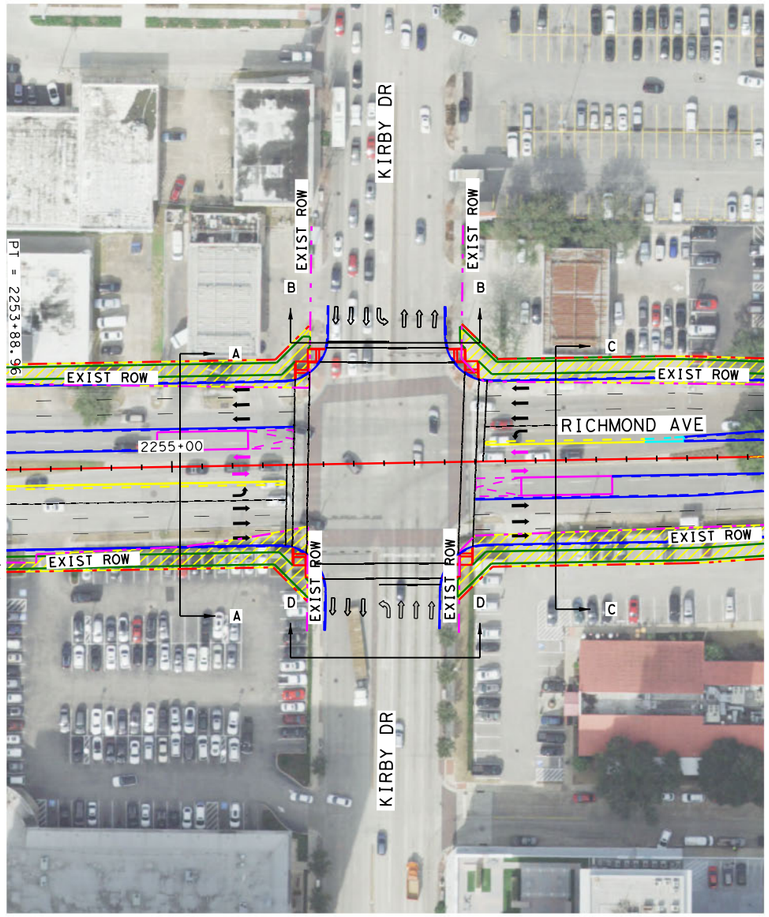
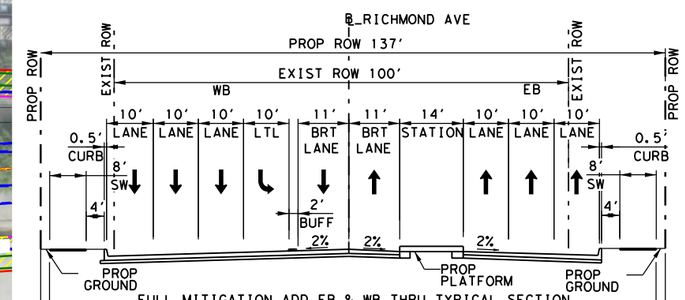


FULL MITIGATION TYPICAL SECTION
KIRBY DR
B-B

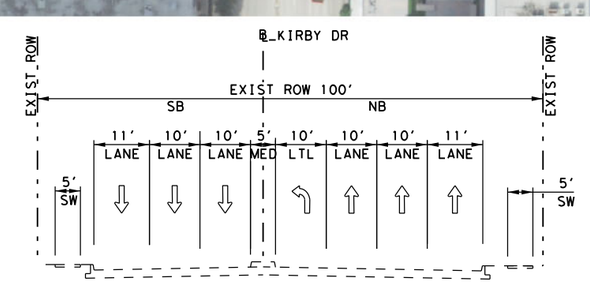


FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
RICHMOND AVE
A-A





FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



FULL MITIGATION TYPICAL SECTION
KIRBY DR
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/KIRBY
INTERSECTION LAYOUT
FULL MITIGATION
EB & WB THRU

DRAWING NO: CC6-S20003
SHEET NO: 3
SHEET 3 OF 5

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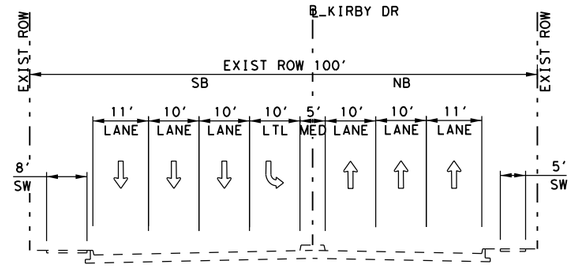
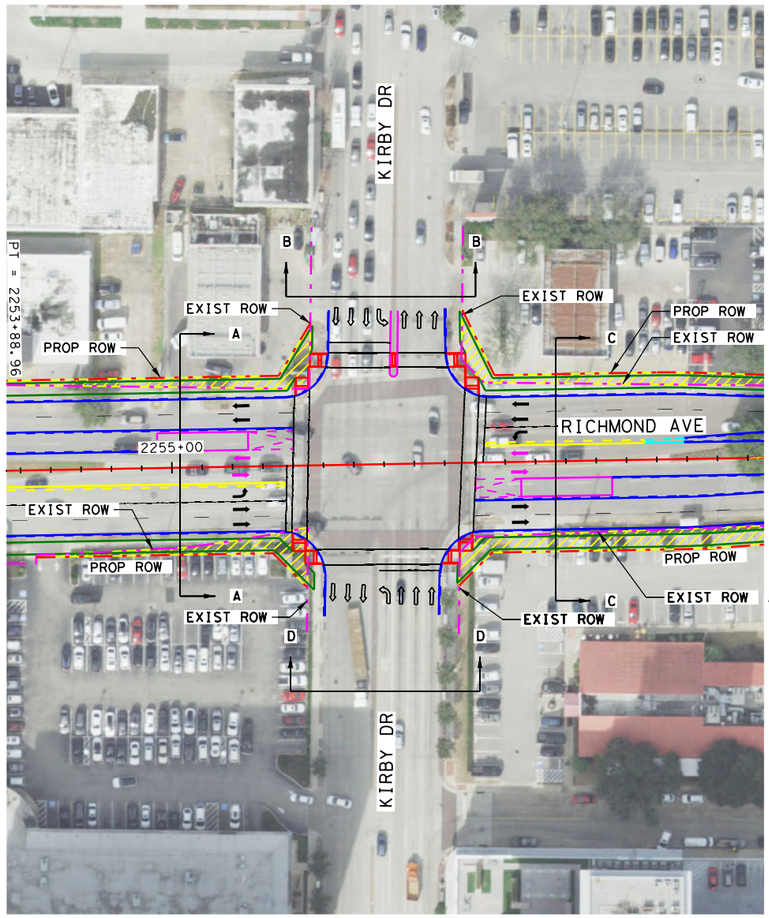
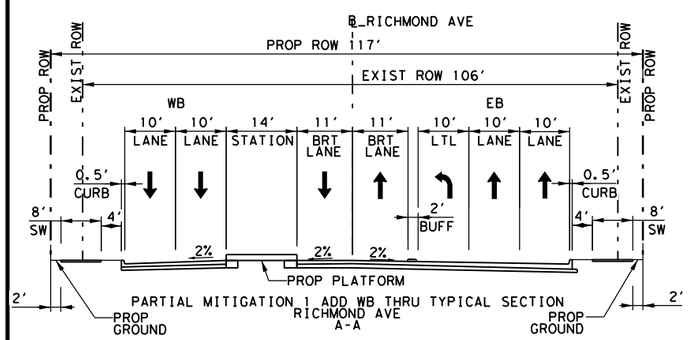
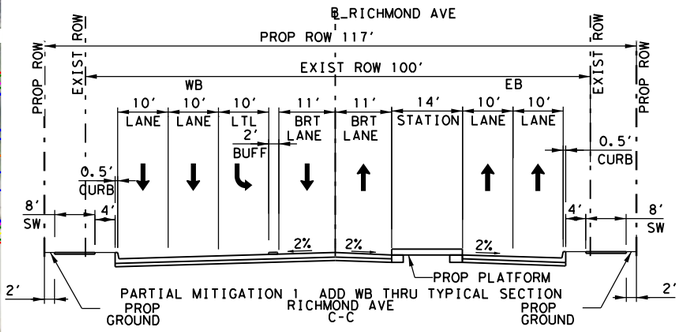


PARTIAL MITIGATION 1 TYPICAL SECTION
KIRBY DR
B-B

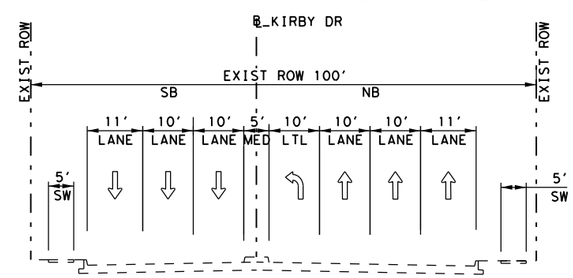




PARTIAL MITIGATION 1 ADD WB THRU TYPICAL SECTION
RICHMOND AVE
A-A



PARTIAL MITIGATION 1 ADD WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION 1 TYPICAL SECTION
KIRBY DR
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/KIRBY
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
WB THRU

DRAWING NO: CC6-S20004
SHEET NO: 4
SHEET 4 OF 5

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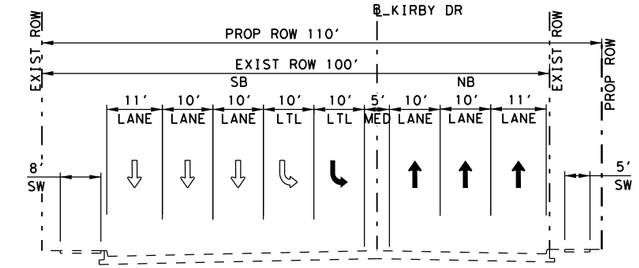
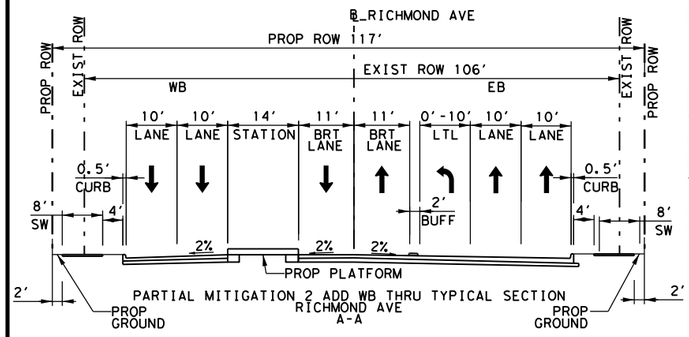
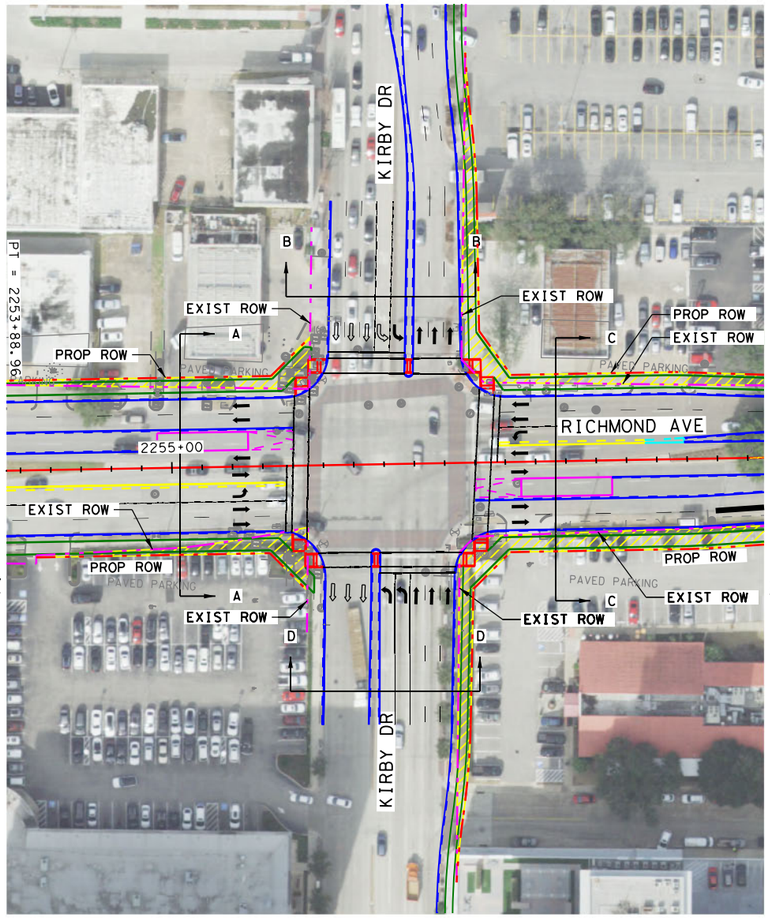
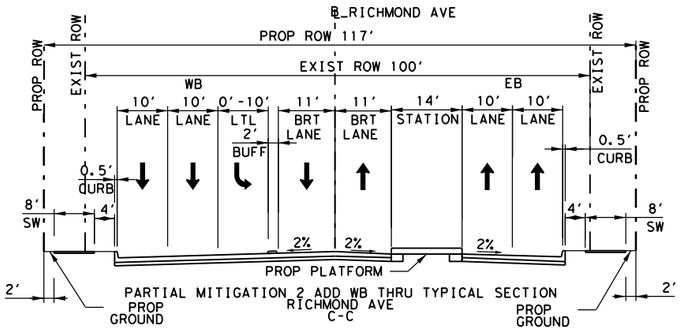


PARTIAL MITIGATION 2 ADD SB LT TYPICAL SECTION
KIRBY DR
B-B

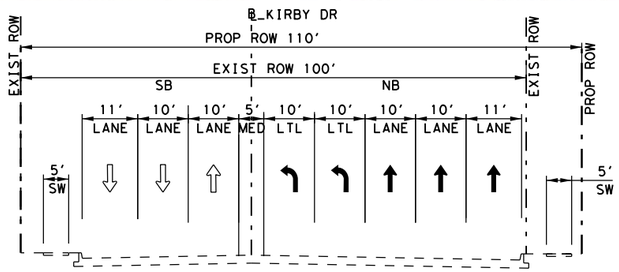


PARTIAL MITIGATION 2 ADD WB THRU TYPICAL SECTION
RICHMOND AVE
A-A





PARTIAL MITIGATION 2 ADD WB THRU TYPICAL SECTION
RICHMOND AVE
C-C



PARTIAL MITIGATION 2 ADD NB LT TYPICAL SECTION
KIRBY DR
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/KIRBY
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
WB THRU, NB & SB LT

DRAWING NO: CC6-S20005
SHEET NO: 5
SHEET 5 OF 5

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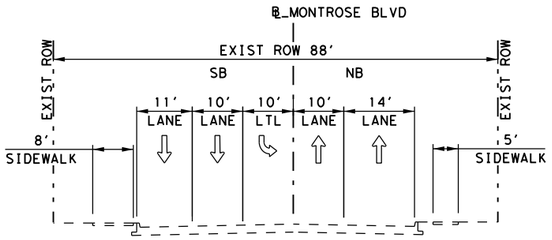
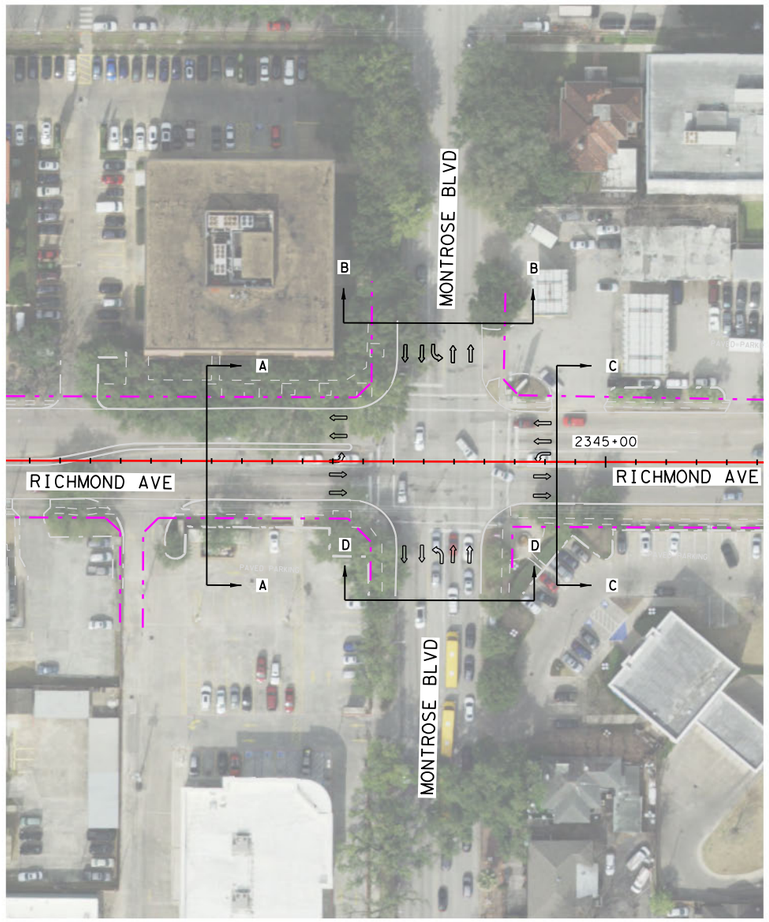
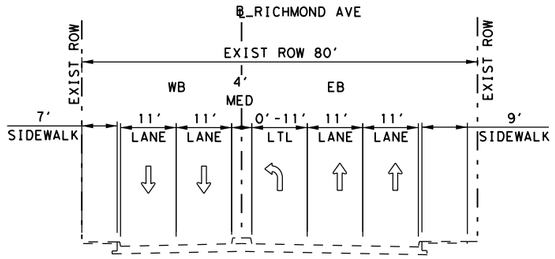
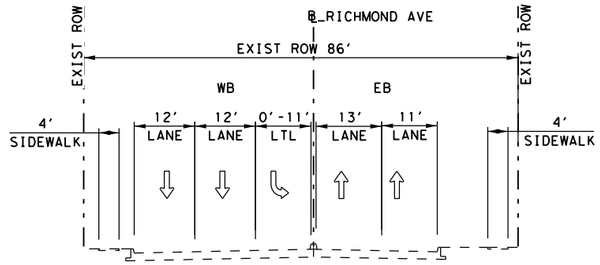


NO-BUILD TYPICAL SECTION
MONTROSE BLVD
B-B

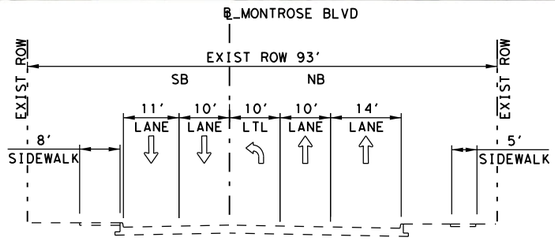




NO-BUILD TYPICAL SECTION
RICHMOND AVE
A-A



NO-BUILD TYPICAL SECTION
RICHMOND AVE
C-C



NO-BUILD TYPICAL SECTION
MONTROSE BLVD
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
0 12.5 25 50

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/MONTROSE INTERSECTION LAYOUT
NO BUILD
AM LOS D / PM LOS E

DRAWING NO: CC6-S20001
SHEET NO: 1
SHEET 1 OF 5

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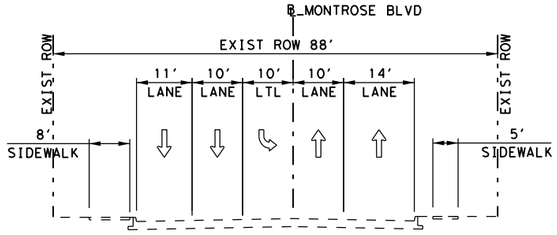
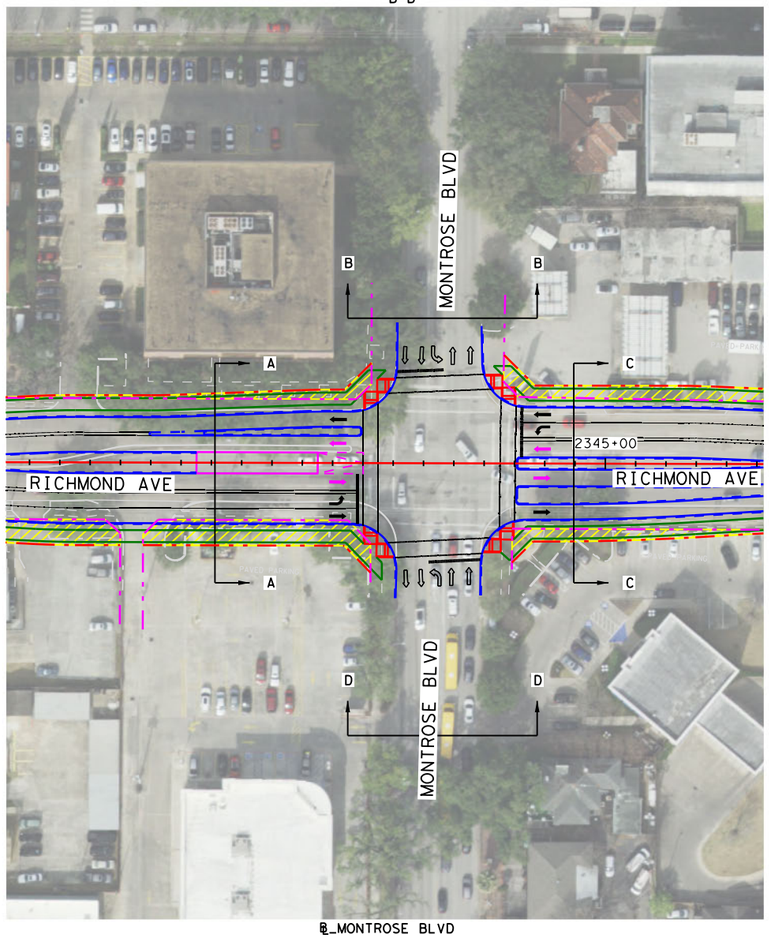
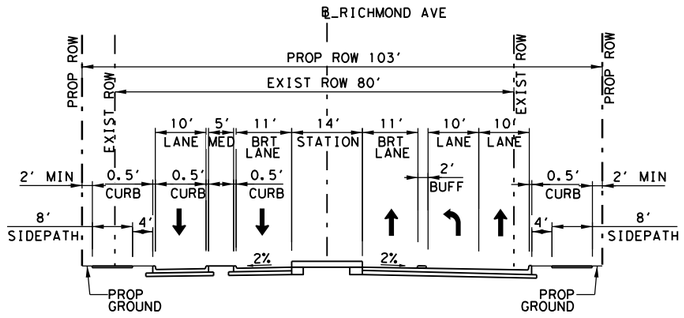
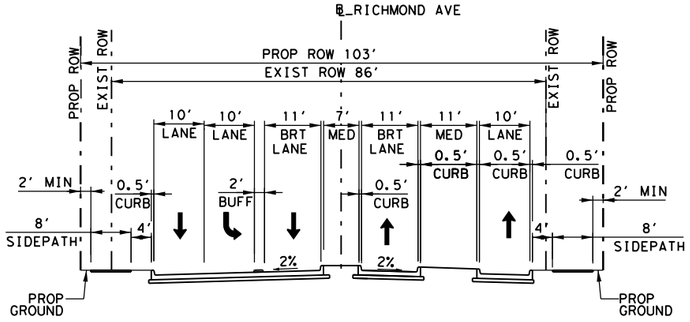


BUILD BASELINE TYPICAL SECTION
MONTROSE BLVD
B-B

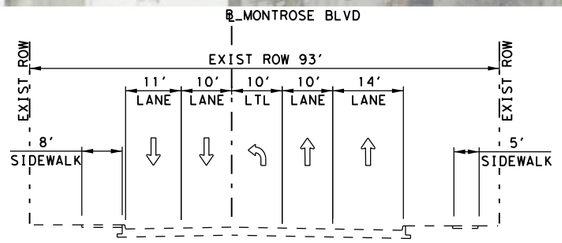




BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
A-A



BUILD BASELINE TYPICAL SECTION
RICHMOND AVE
C-C



BUILD BASELINE TYPICAL SECTION
MONTROSE BLVD
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/MONTROSE
INTERSECTION LAYOUT
BUILD BASELINE
AM LOS E / PM LOS F

DRAWING NO: CC6-S20002
SHEET NO: 2
SHEET 2 OF 5

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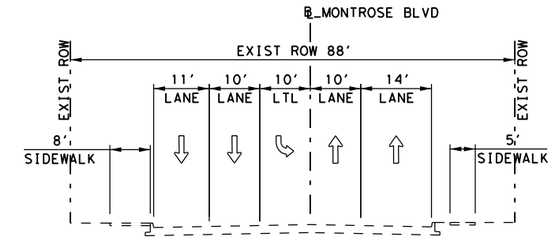
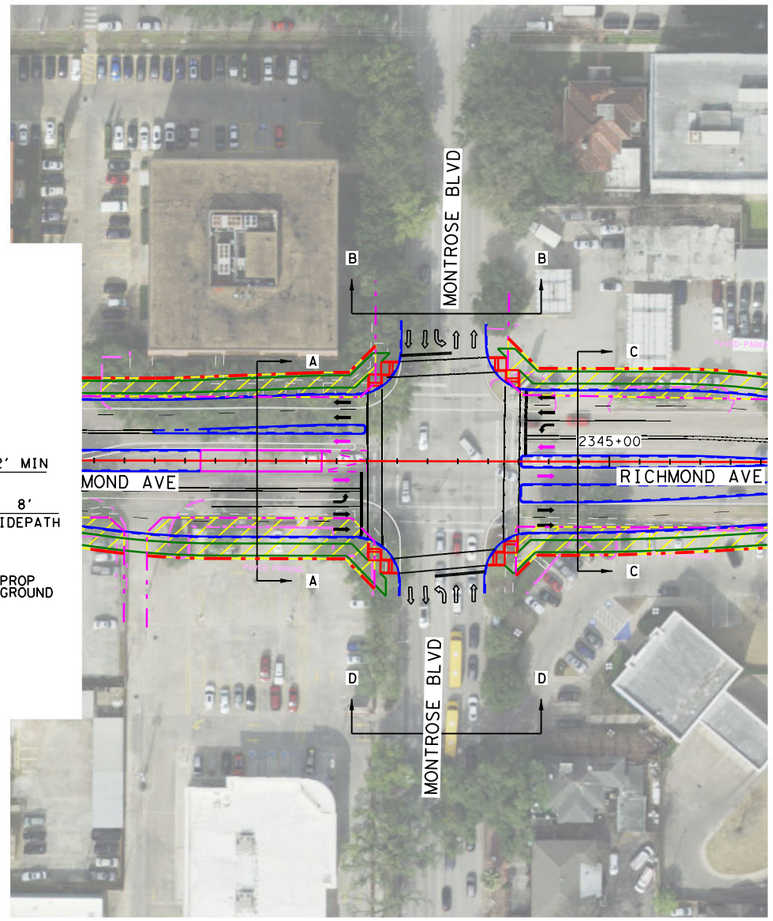
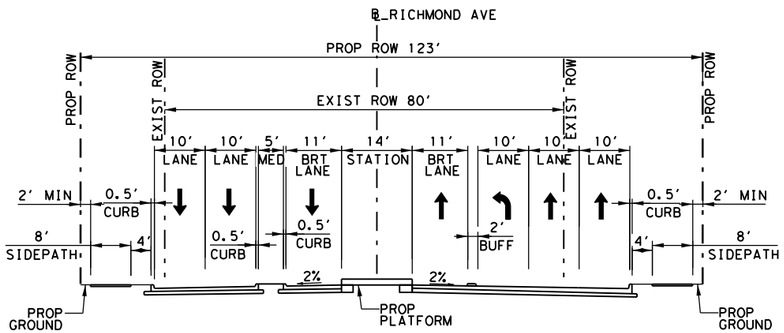
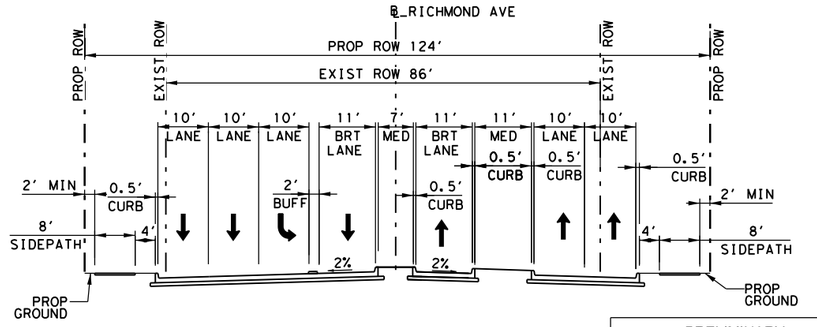


FULL MITIGATION OPTION TYPICAL SECTION
MONTROSE BLVD
B-B

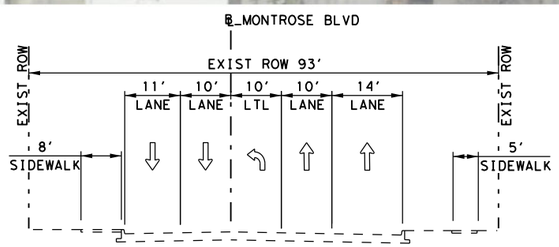




FULL MITIGATION OPTION TYPICAL SECTION
RICHMOND AVE
A-A



FULL MITIGATION OPTION TYPICAL SECTION
RICHMOND AVE
C-C



FULL MITIGATION OPTION TYPICAL SECTION
MONTROSE BLVD
D-D





PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/MONTROSE
INTERSECTION LAYOUT
FULL MITIGATION
AM LOS D / PM LOS D

DRAWING NO: CC6-S20004
SHEET NO: 3
SHEET 3 OF 5

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10/28/2022
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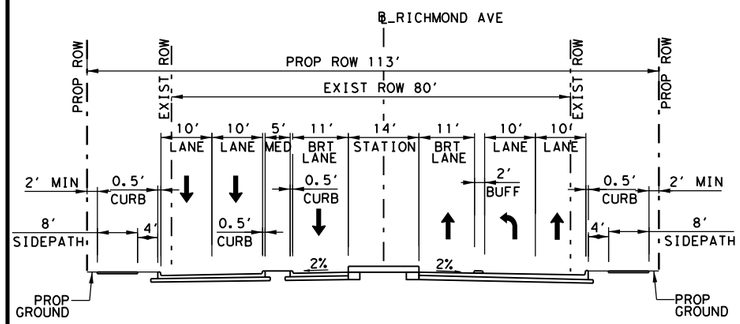
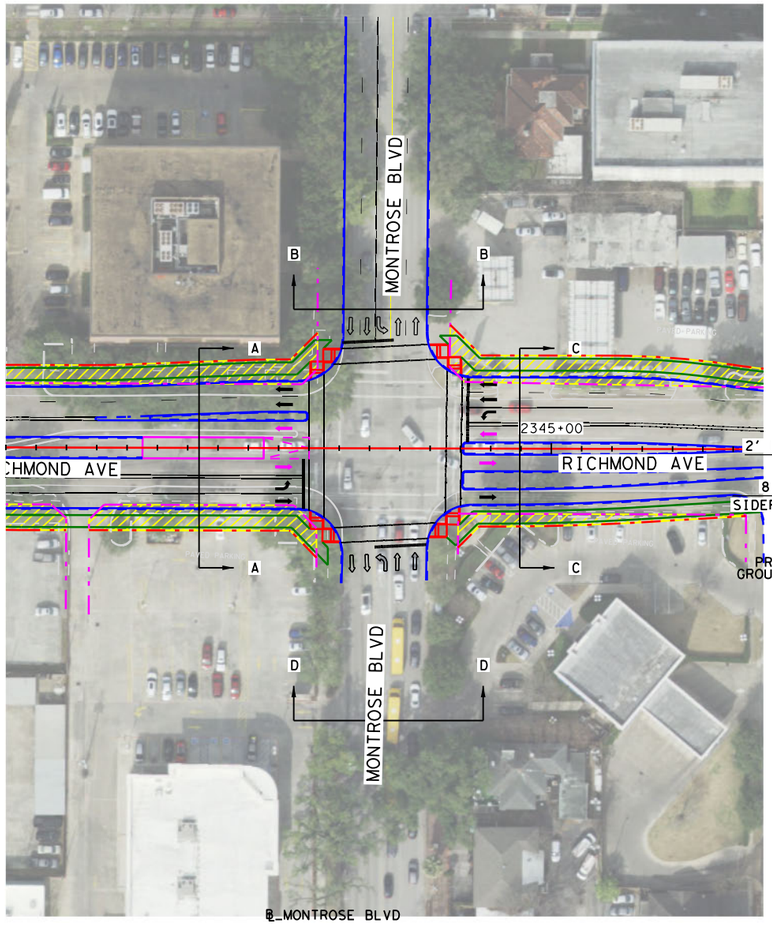
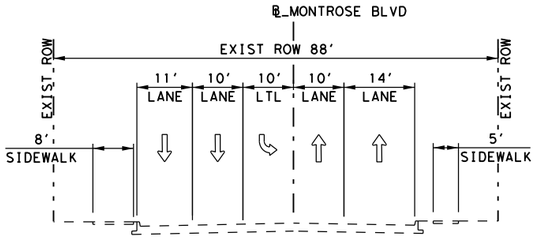
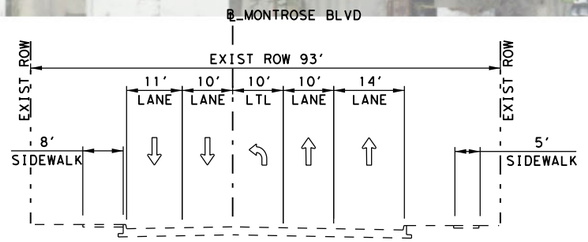


ADD WB LANE OPTION TYPICAL SECTION
RICHMOND AVE
A-A

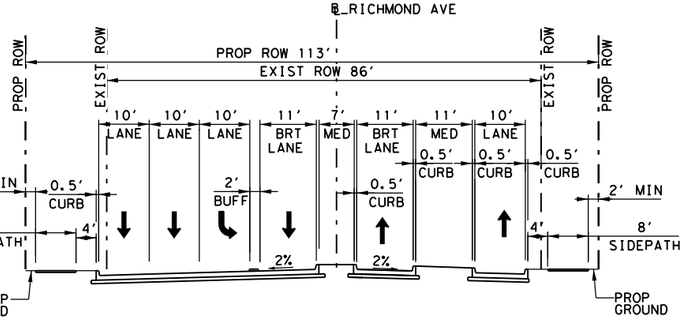




ADD WB LANE OPTION TYPICAL SECTION
MONTROSE BLVD
B-B



ADD WB LANE OPTION TYPICAL SECTION
MONTROSE BLVD
D-D



ADD WB LANE OPTION TYPICAL SECTION
RICHMOND AVE
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ
0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2 RICHMOND/MONTROSE INTERSECTION LAYOUT PARTIAL MITIGATION ADD WB LANE AM LOS D / PM LOS E

DRAWING NO: CC6-S20006
SHEET NO: 4
SHEET 4 OF 5

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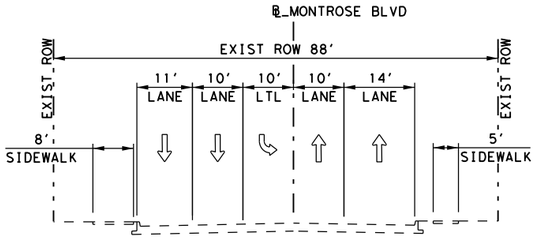
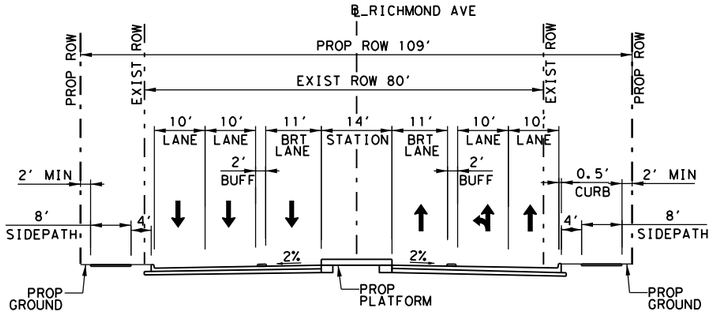
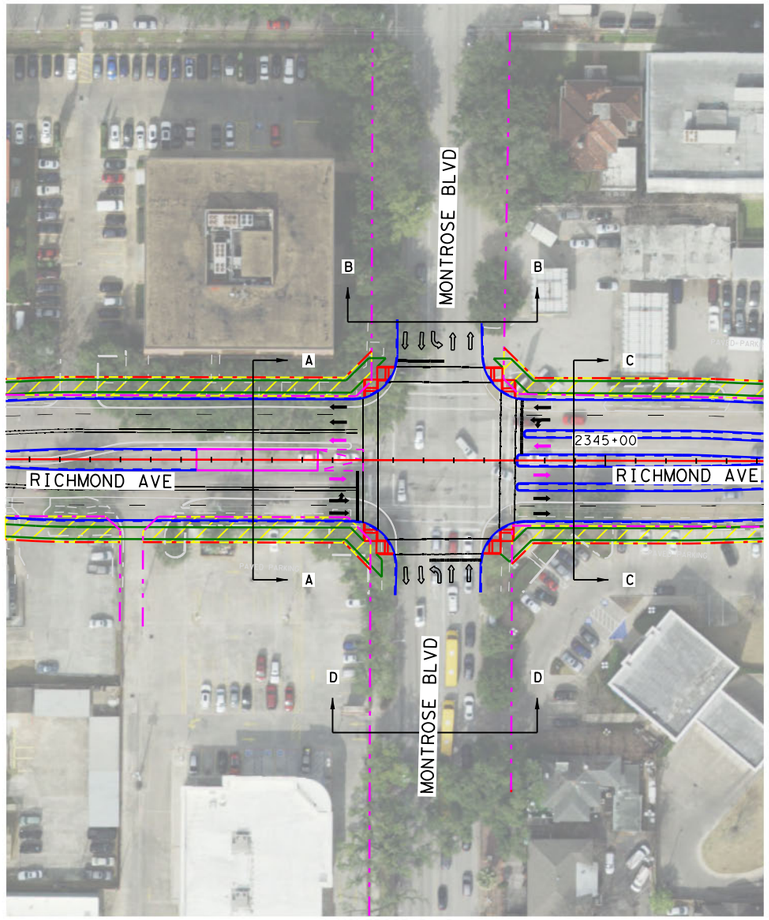
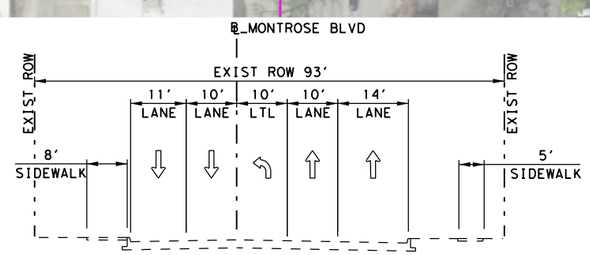


SHARED TURN LANE OPTION TYPICAL SECTION
MONTROSE BLVD
B-B

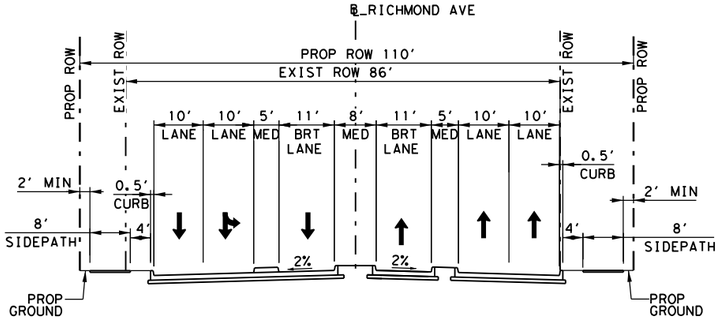


SHARED TURN LANE OPTION TYPICAL SECTION
RICHMOND AVE
A-A





SHARED TURN LANE OPTION TYPICAL SECTION
MONTROSE BLVD
D-D



SHARED TURN LANE OPTION TYPICAL SECTION
RICHMOND AVE
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
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1301 ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 2
RICHMOND/MONTROSE
INTERSECTION LAYOUT
PARTIAL MITIGATION
SHARED TURN LANE
AM LOS D / PM LOS E

DRAWING NO: CC6-S20006
SHEET NO: 5
SHEET 5 OF 5

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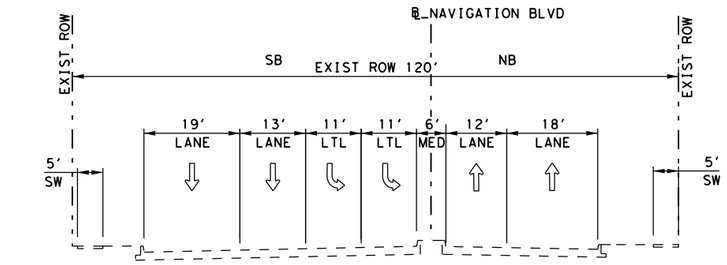
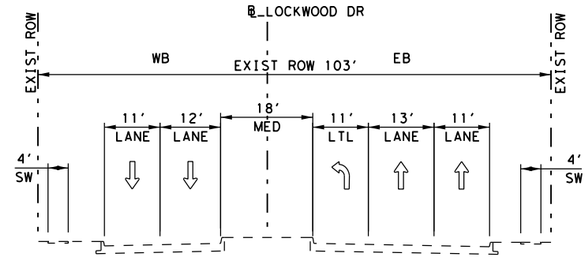
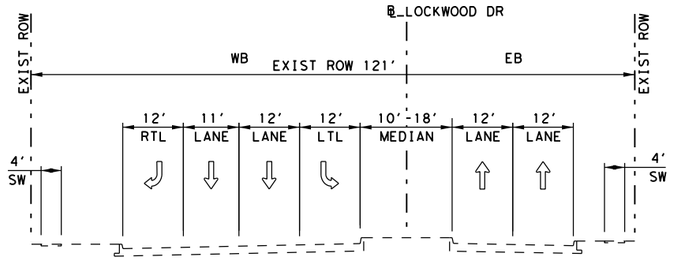


NO-BUILD TYPICAL SECTION
NAVIGATION BLVD
B-B

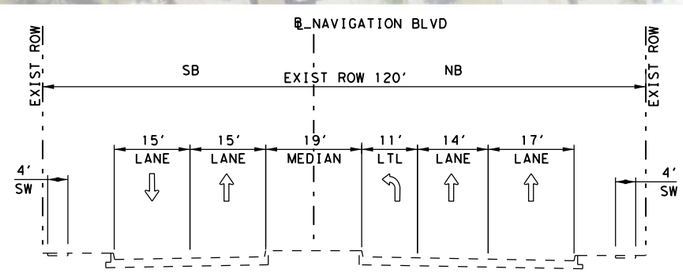




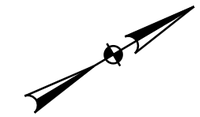
NO-BUILD TYPICAL SECTION
LOCKWOOD DR
A-A



NO-BUILD TYPICAL SECTION
LOCKWOOD DR
C-C



NO-BUILD TYPICAL SECTION
NAVIGATION BLVD
D-D



LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
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1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 4
LOCKWOOD/NAVIGATION
INTERSECTION LAYOUT
NO BUILD

DRAWING NO: CC6-S40001
SHEET NO: 1
SHEET 1 OF 5

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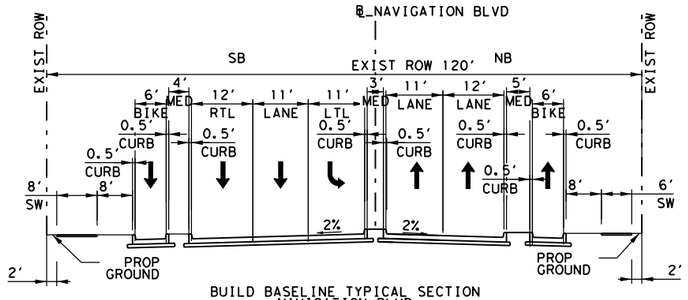
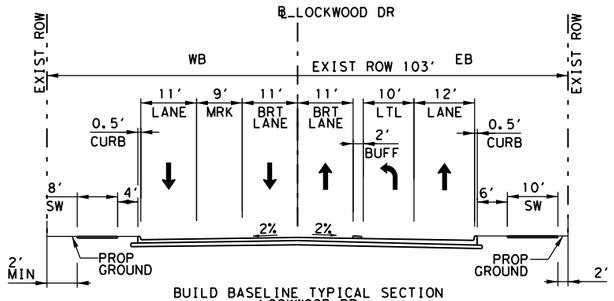
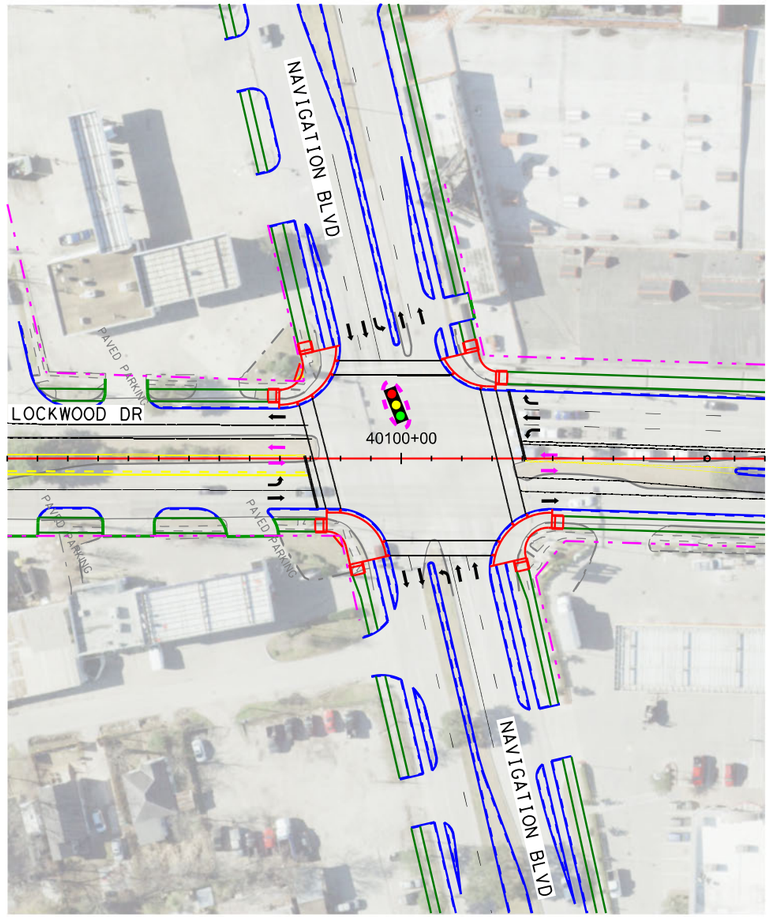
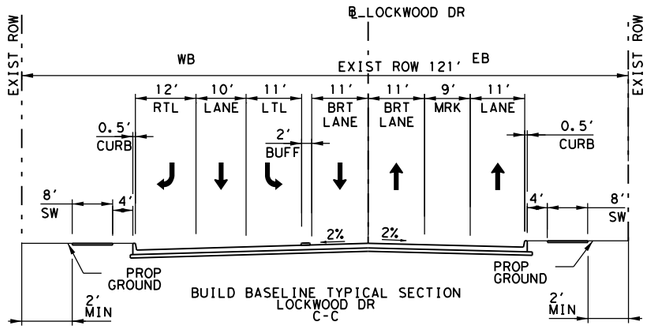


BUILD BASELINE TYPICAL SECTION
NAVIGATION BLVD
B-B

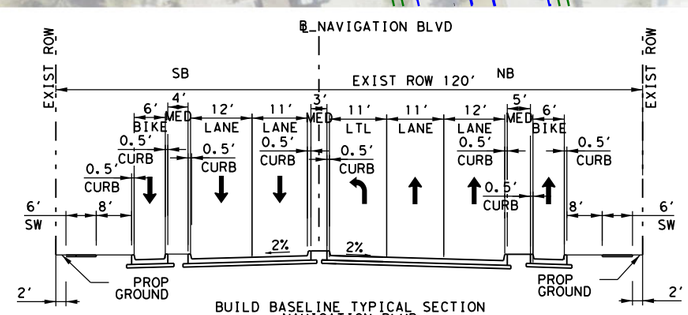


BUILD BASELINE TYPICAL SECTION
LOCKWOOD DR
A-A

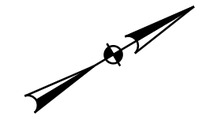




BUILD BASELINE TYPICAL SECTION
LOCKWOOD DR
C-C



BUILD BASELINE TYPICAL SECTION
NAVIGATION BLVD
D-D



LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
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1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 4
LOCKWOOD/NAVIGATION
INTERSECTION LAYOUT
BUILD BASELINE

DRAWING NO: CC6-S40002
SHEET NO: 2
SHEET 2 OF 5

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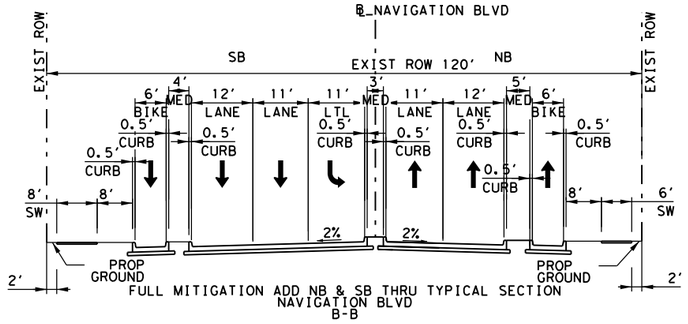
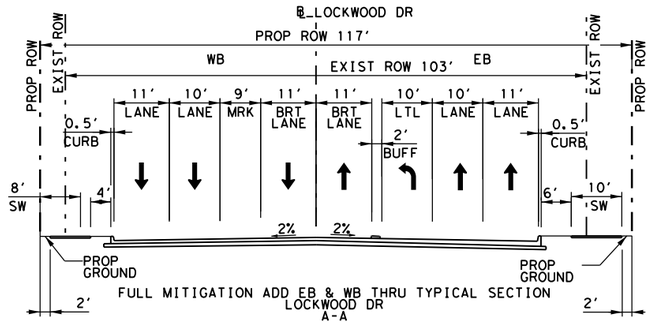
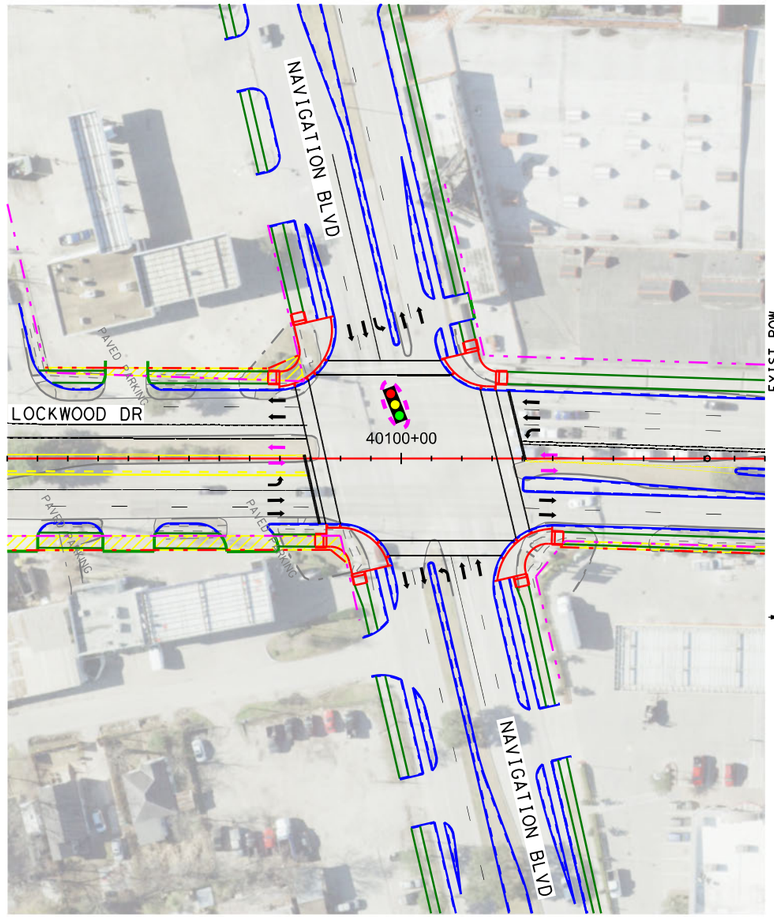
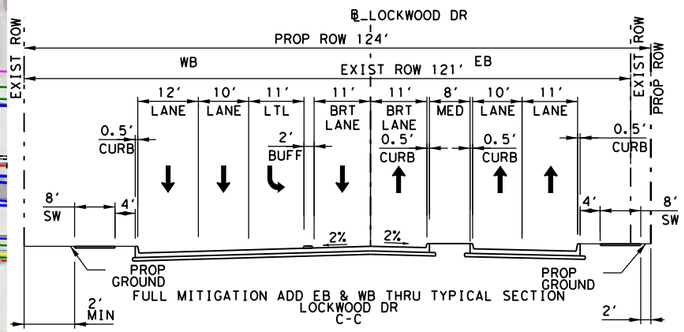


FULL MITIGATION ADD NB & SB THRU TYPICAL SECTION
NAVIGATION BLVD
B-B

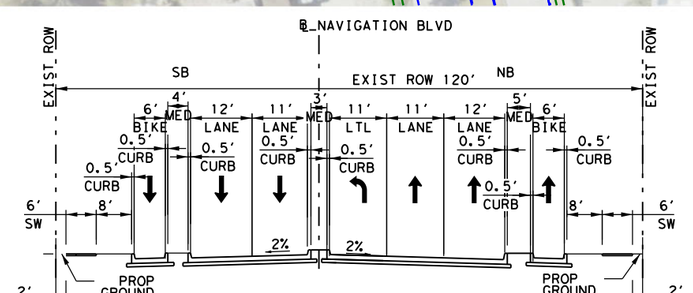


FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
LOCKWOOD DR
A-A





FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
LOCKWOOD DR
C-C



FULL MITIGATION ADD NB & SB THRU TYPICAL SECTION
NAVIGATION BLVD
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ
0' 25' 50' 100'

PRELIMINARY

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HNTB
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1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 4 LOCKWOOD/NAVIGATION INTERSECTION LAYOUT FULL MITIGATION NB, SB, EB, WB THRU

DRAWING NO: CC6-S40003
SHEET NO: 3
SHEET 3 OF 5

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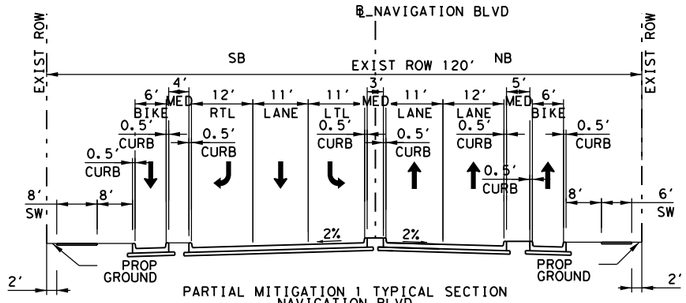
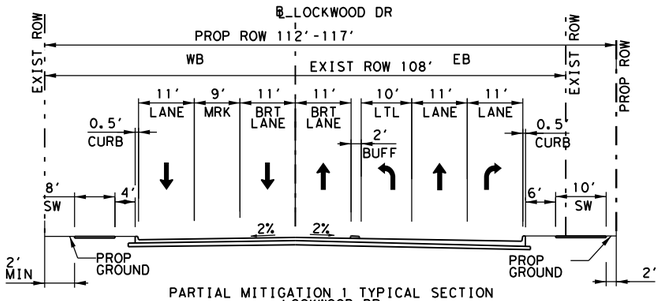
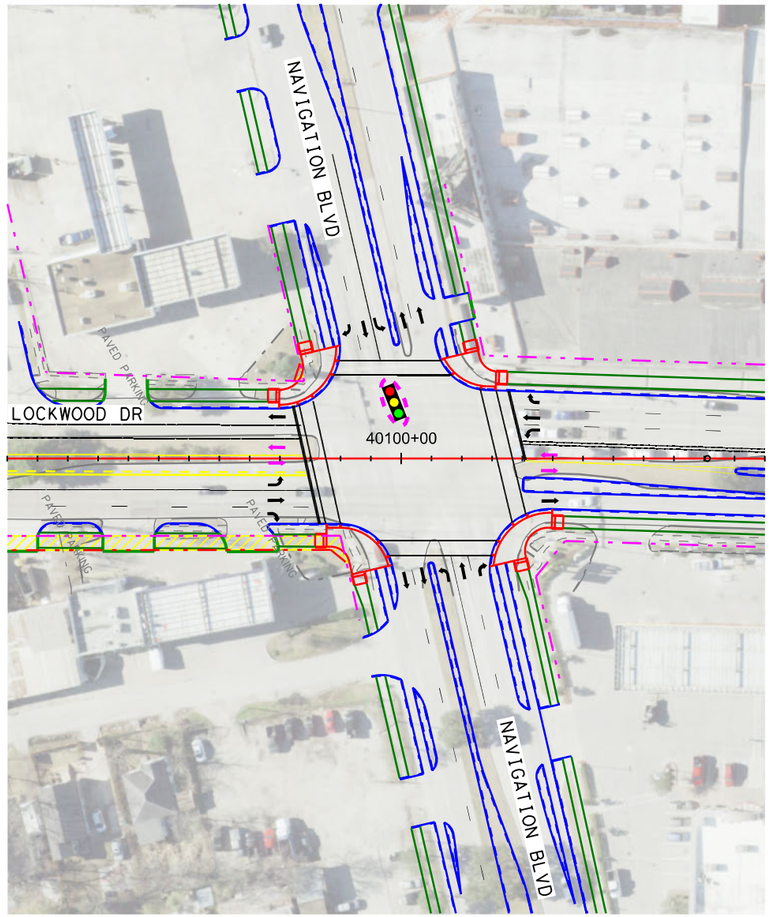
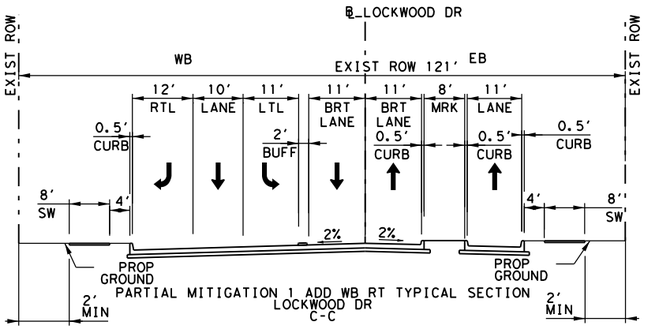


PARTIAL MITIGATION 1 TYPICAL SECTION
NAVIGATION BLVD
B-B

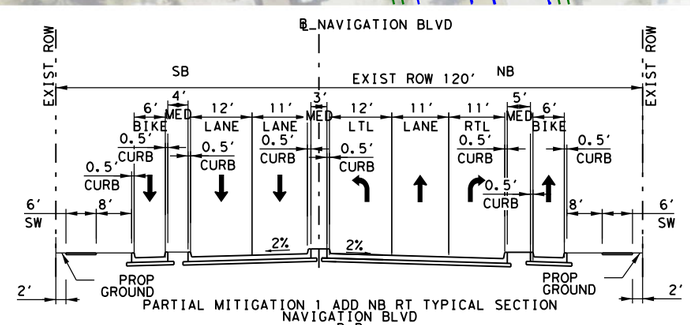


PARTIAL MITIGATION 1 TYPICAL SECTION
LOCKWOOD DR
A-A

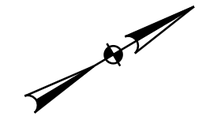




PARTIAL MITIGATION 1 ADD WB RT TYPICAL SECTION
LOCKWOOD DR
C-C



PARTIAL MITIGATION 1 ADD NB RT TYPICAL SECTION
NAVIGATION BLVD
D-D



LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 4
LOCKWOOD/NAVIGATION
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
NB & WB RT

DRAWING NO: CC6-S40004
SHEET NO: 4
SHEET 4 OF 5

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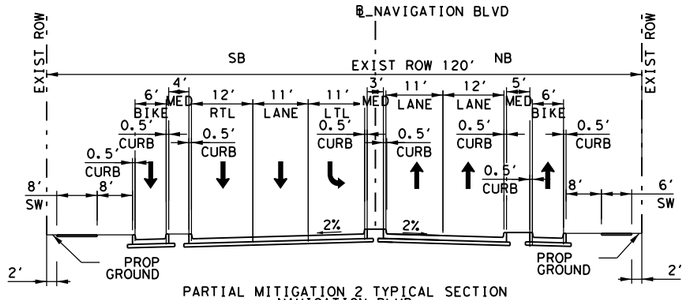
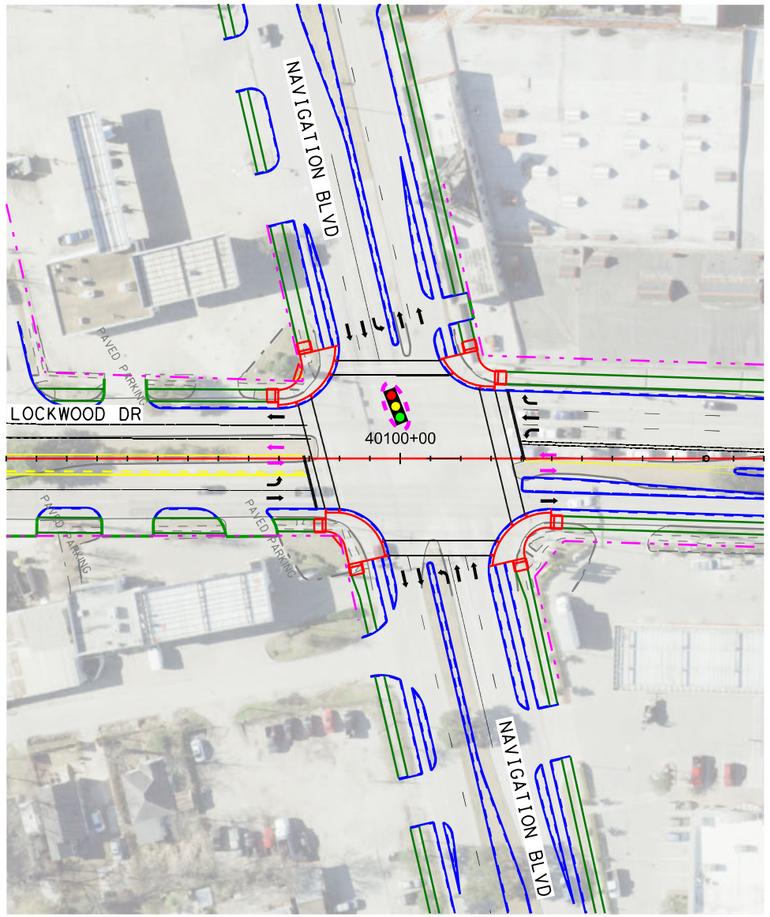
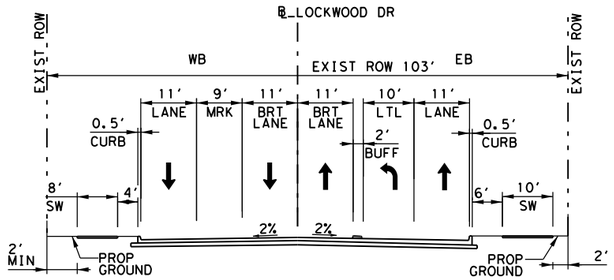
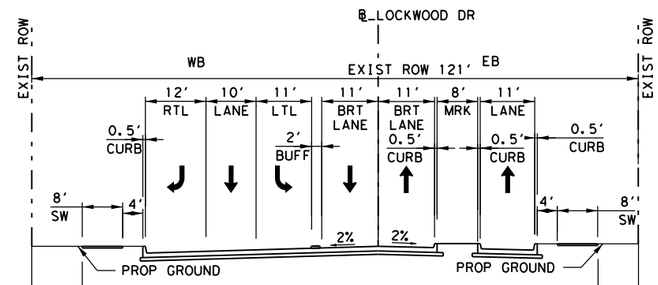


PARTIAL MITIGATION 2 TYPICAL SECTION
NAVIGATION BLVD
B-B

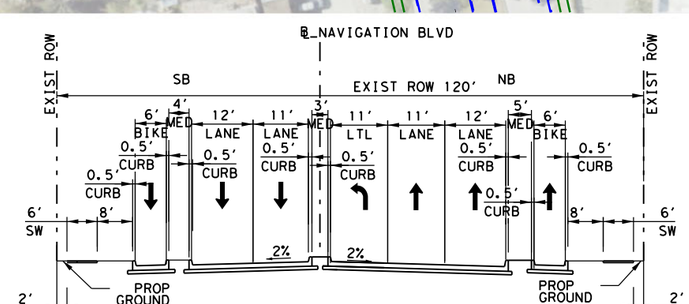




PARTIAL MITIGATION 2 ADD WB THRU/LT, REMOVE EB RT TYPICAL SECTION
LOCKWOOD DR
A-A



PARTIAL MITIGATION 2 ADD WB THRU/LT TYPICAL SECTION
LOCKWOOD DR
C-C



PARTIAL MITIGATION OPTION 2 TYPICAL SECTION
NAVIGATION BLVD
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 4
LOCKWOOD/NAVIGATION
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
PERMITTED EB/WB LT

DRAWING NO: CC6-S40005
SHEET NO: 5
SHEET 5 OF 5

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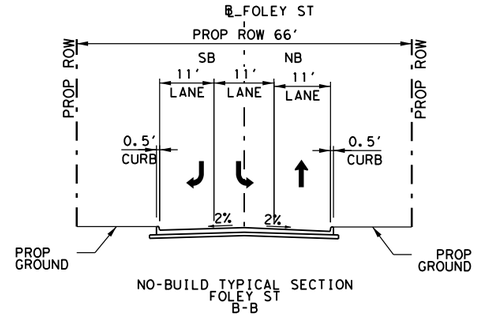
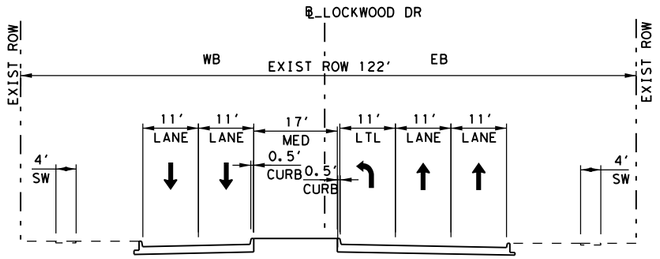
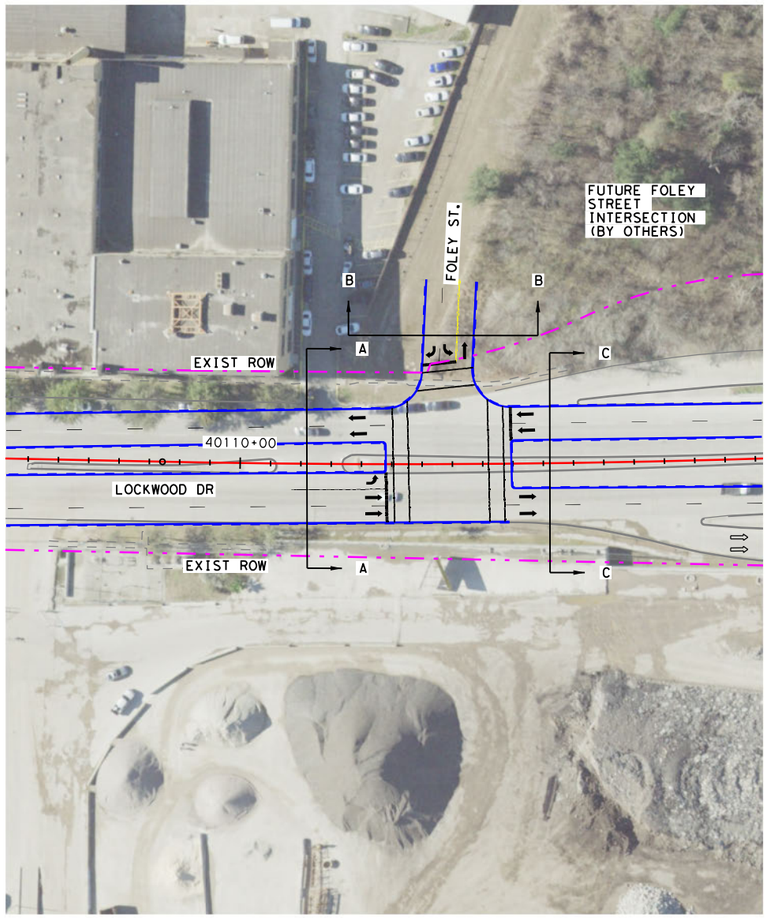
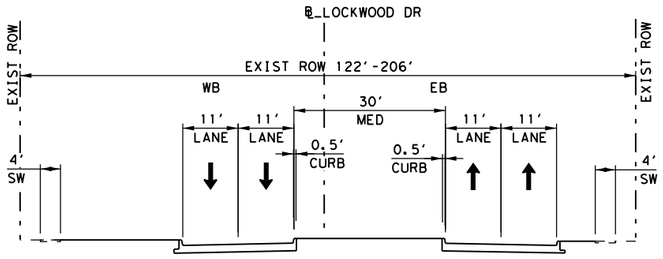


NO-BUILD TYPICAL SECTION
FOLEY ST
B-B



NO-BUILD TYPICAL SECTION
LOCKWOOD DR
A-A





NO-BUILD TYPICAL SECTION
LOCKWOOD DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5 LOCKWOOD/FOLEY INTERSECTION LAYOUT NO BUILD

DRAWING NO: CC6-S50001
SHEET NO: 1
SHEET 1 OF 5

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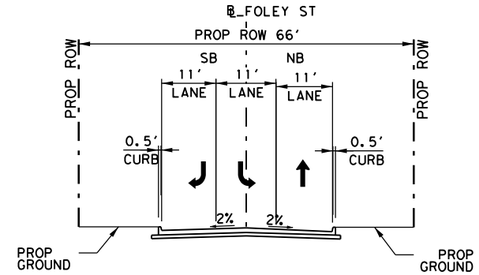
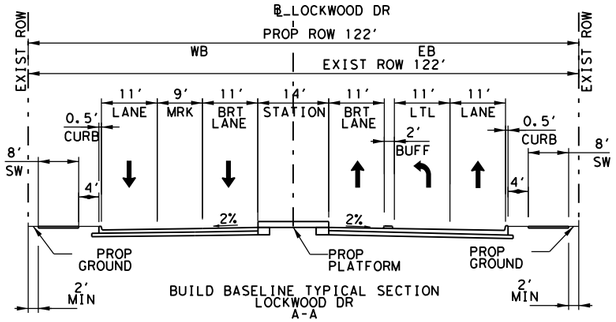
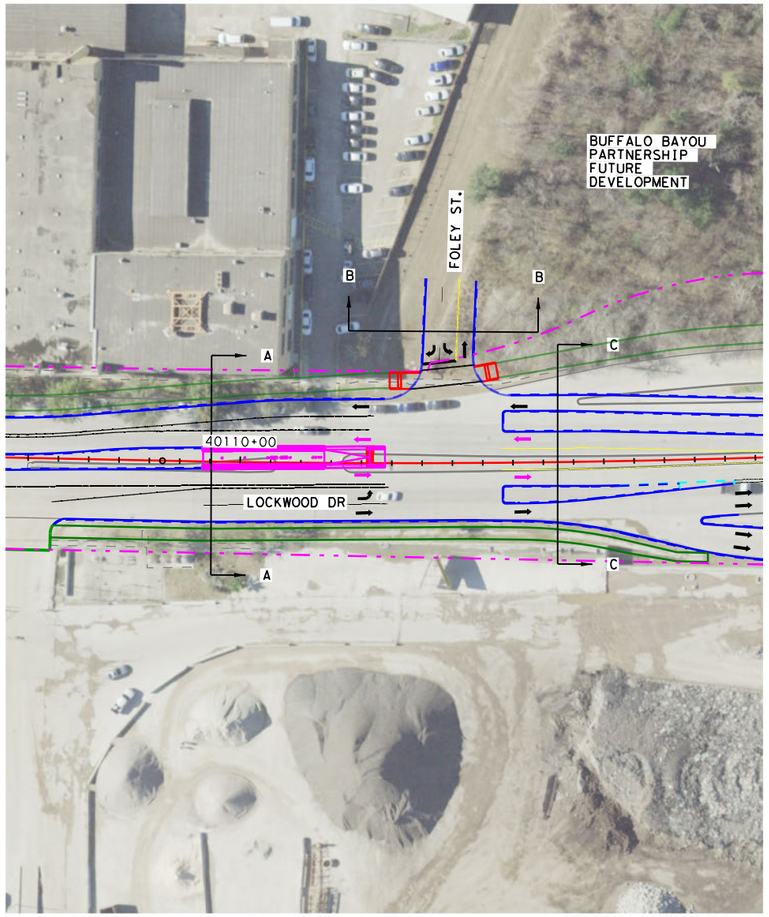
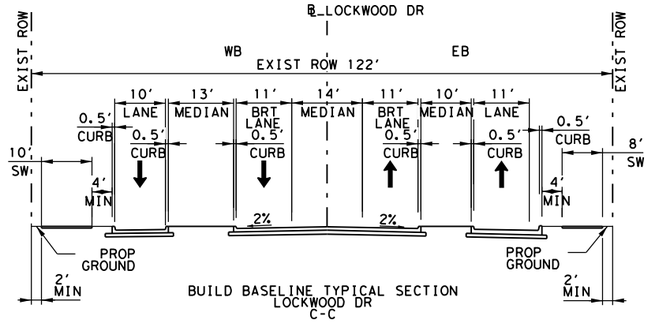


BUILD BASELINE TYPICAL SECTION
FOLEY ST
B-B



BUILD BASELINE TYPICAL SECTION
LOCKWOOD DR
A-A





BUILD BASELINE TYPICAL SECTION
LOCKWOOD DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5 LOCKWOOD/FOLEY INTERSECTION LAYOUT BUILD BASELINE

DRAWING NO: CC6-S50002
SHEET NO: 2
SHEET 2 OF 5

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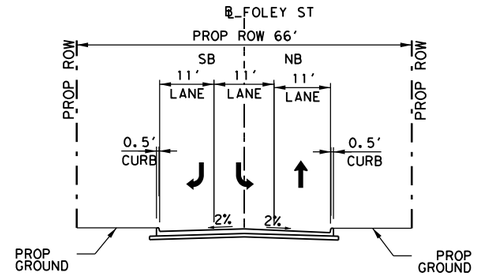
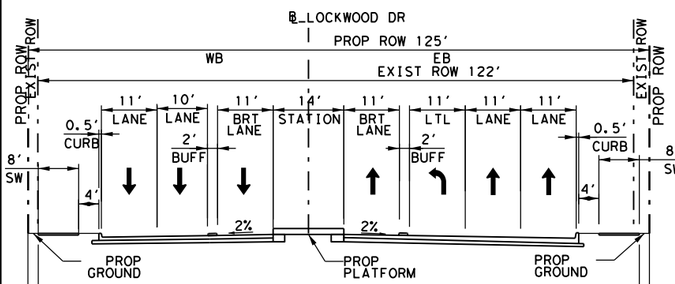
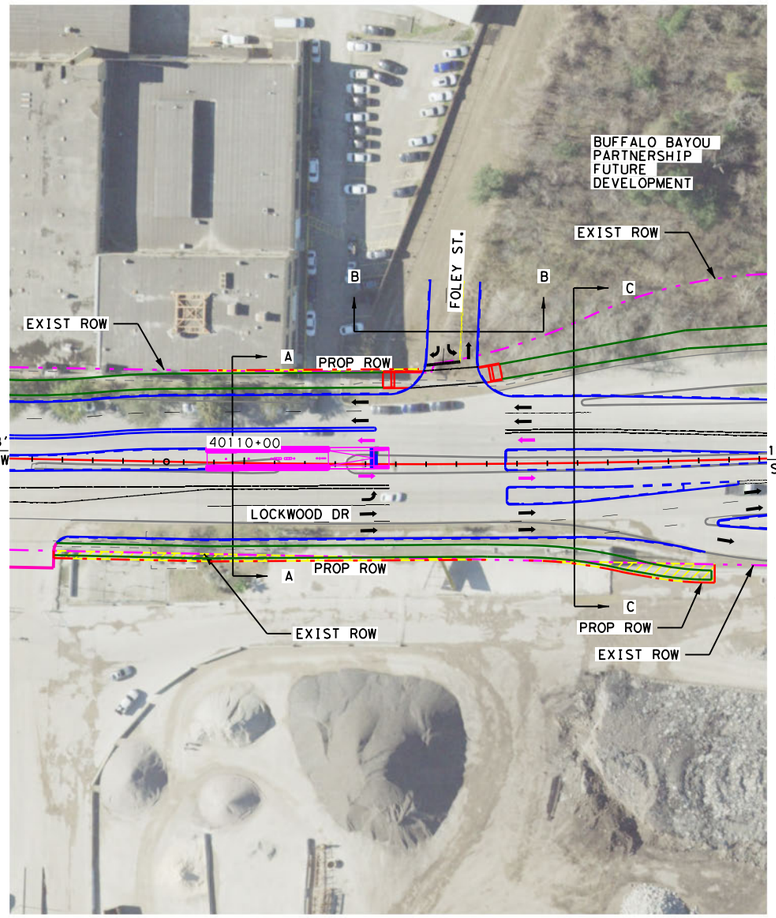
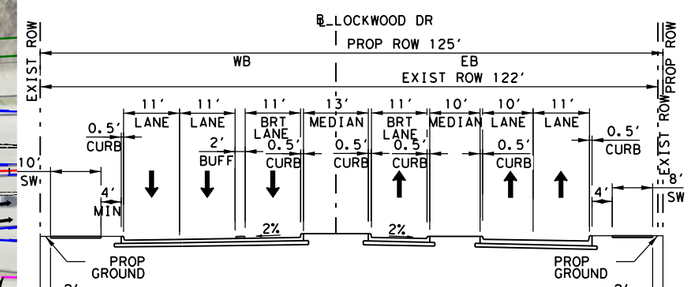


FULL MITIGATION TYPICAL SECTION
FOLEY ST
B-B



FULL MITIGATION TYPICAL SECTION
LOCKWOOD DR
A-A





FULL MITIGATION TYPICAL SECTION
LOCKWOOD DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5 LOCKWOOD/FOLEY INTERSECTION LAYOUT FULL MITIGATION

DRAWING NO: CC6-S50003
SHEET NO: 3
SHEET 3 OF 5

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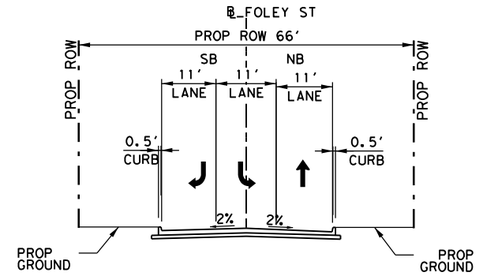
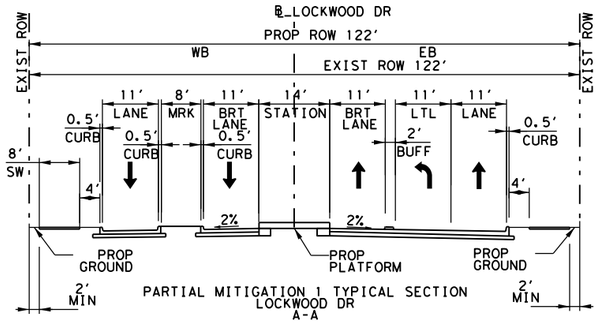
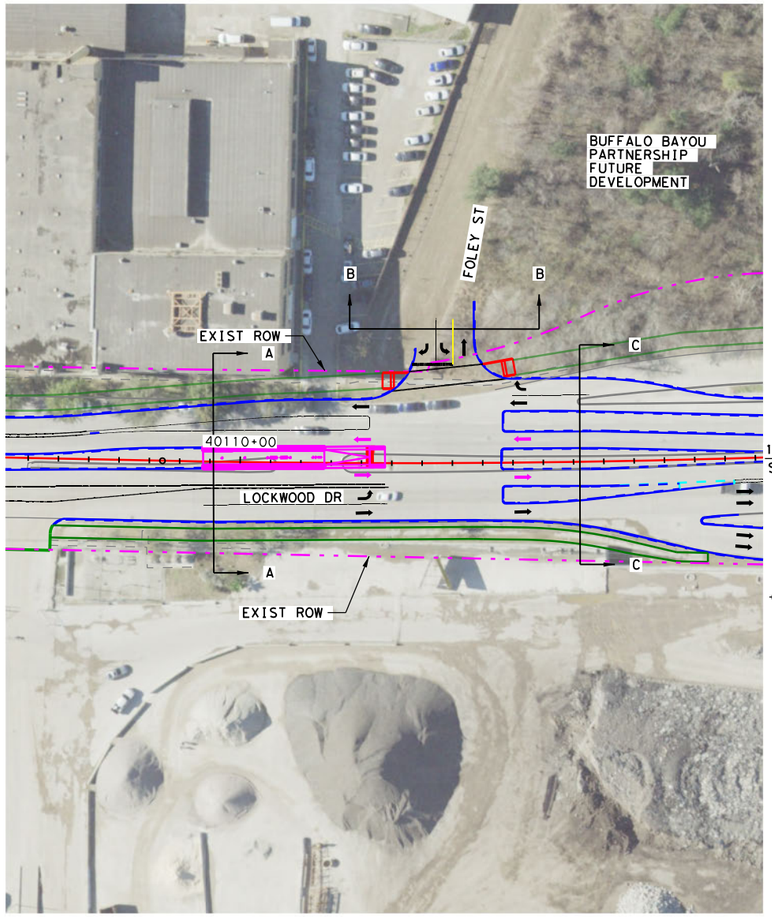
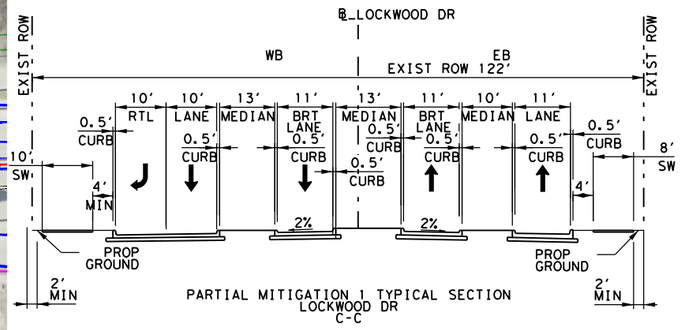


PARTIAL MITIGATION 1 TYPICAL SECTION
FOLEY ST
B-B



PARTIAL MITIGATION 1 TYPICAL SECTION
LOCKWOOD DR
A-A





PARTIAL MITIGATION 1 TYPICAL SECTION
LOCKWOOD DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
LOCKWOOD/FOLEY
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
SB RT

DRAWING NO: CC6-S50004
SHEET NO: 4
SHEET 4 OF 5

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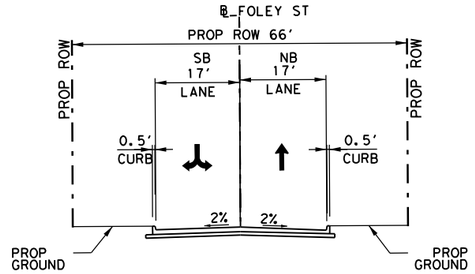
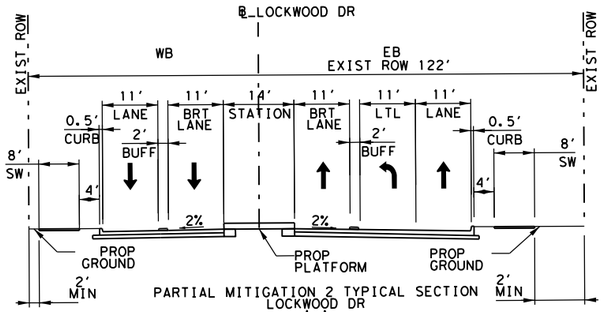
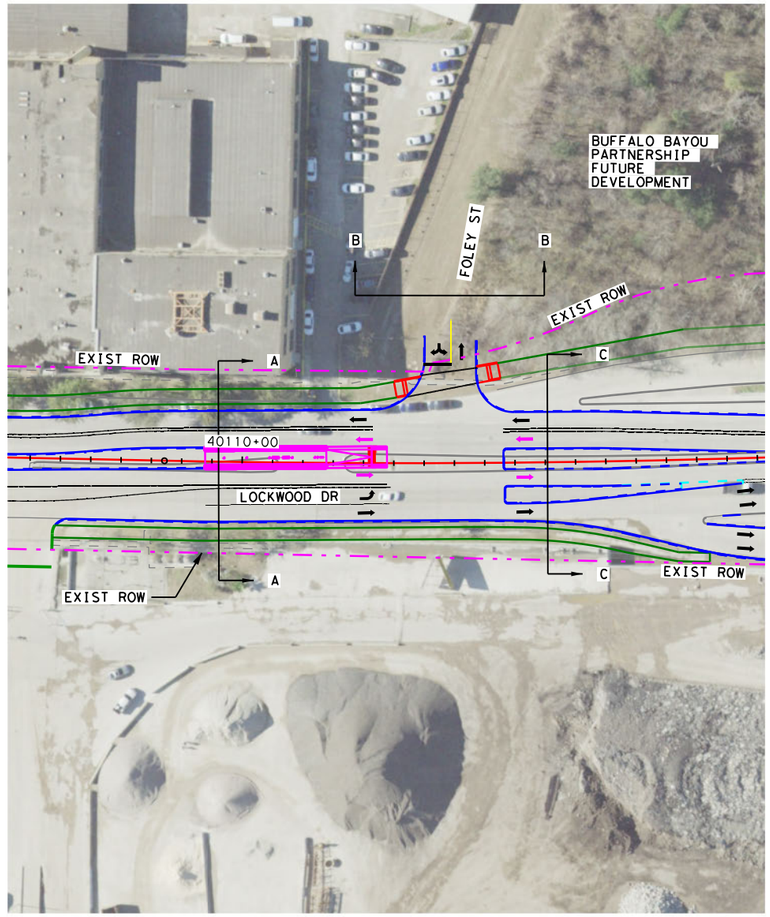
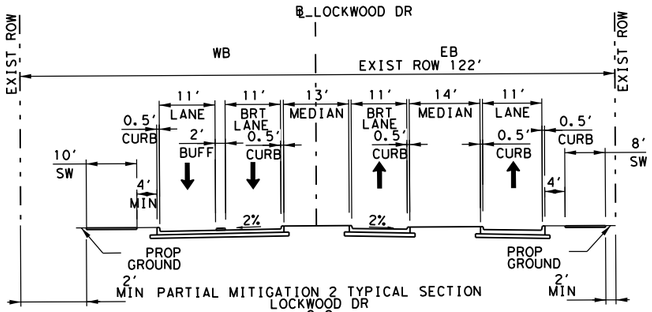


PARTIAL MITIGATION 2 TYPICAL SECTION
FOLEY ST
B-B



PARTIAL MITIGATION 2 TYPICAL SECTION
LOCKWOOD DR
A-A





PARTIAL MITIGATION 2 TYPICAL SECTION
LOCKWOOD DR
C-C

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
LOCKWOOD/FOLEY
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
REMOVE 1 EB THRU

DRAWING NO: CC6-S50005
SHEET NO: 5
SHEET 5 OF 5

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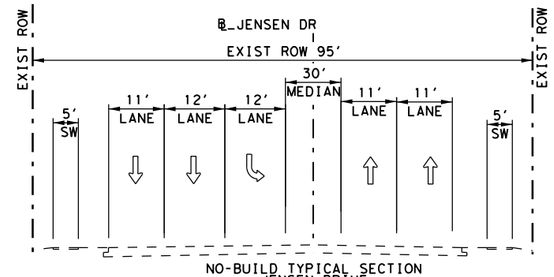
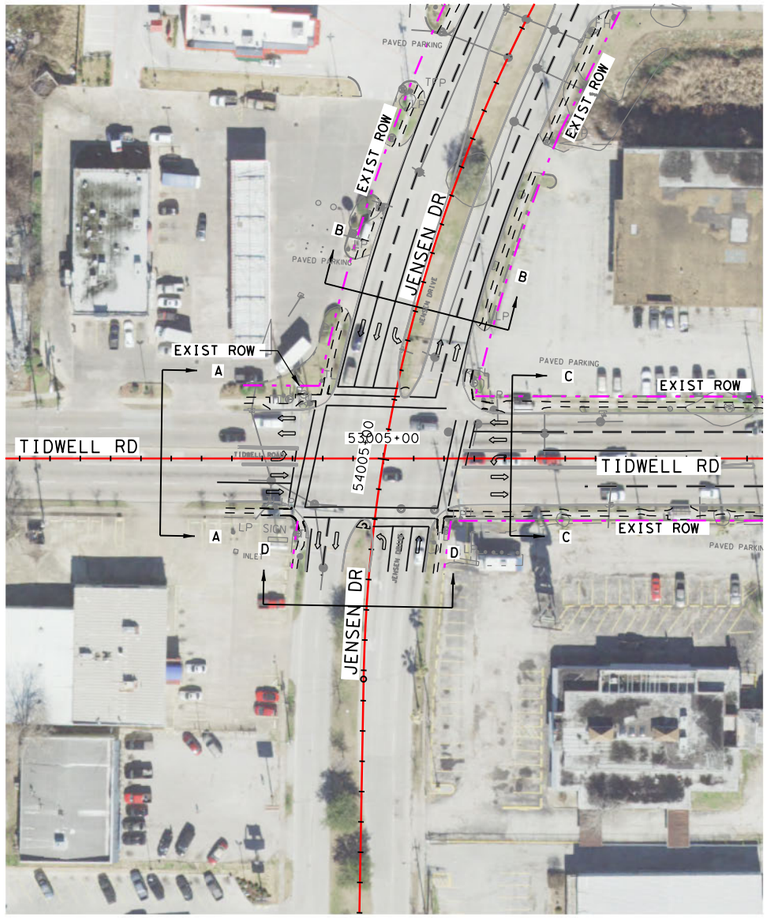
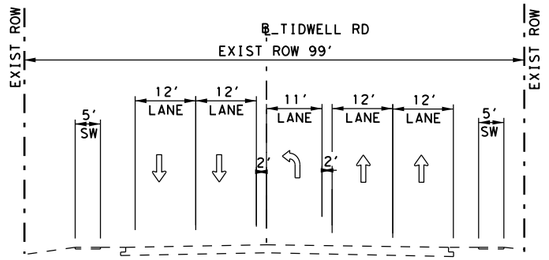
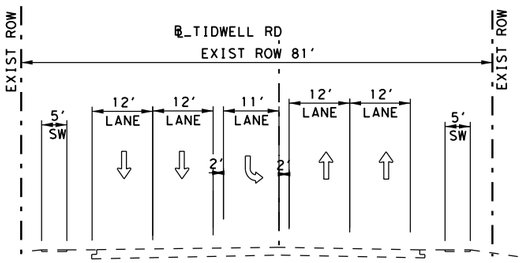


NO-BUILD TYPICAL SECTION
JENSEN DRIVE
B-B

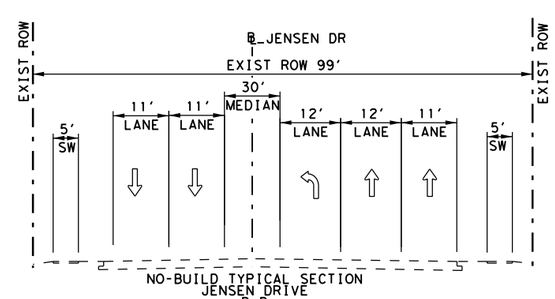




NO-BUILD TYPICAL SECTION
TIDWELL ROAD
A-A



NO-BUILD TYPICAL SECTION
TIDWELL ROAD
C-C



NO-BUILD TYPICAL SECTION
JENSEN DRIVE
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
TIDWELL/JENSEN
INTERSECTION LAYOUT
NO BUILD

DRAWING NO: CC6-S50001
SHEET NO: 1
SHEET 1 OF 5

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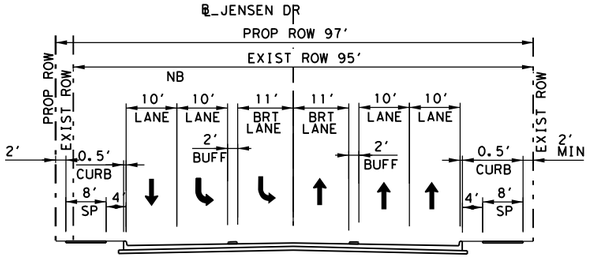
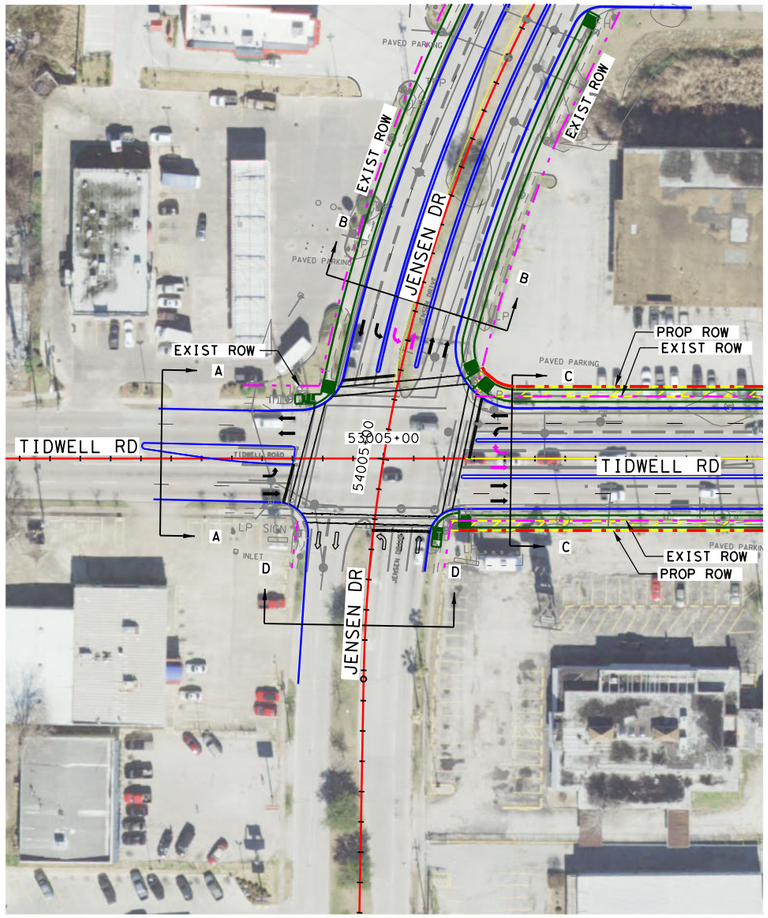
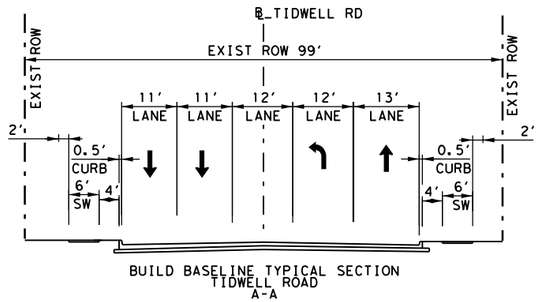
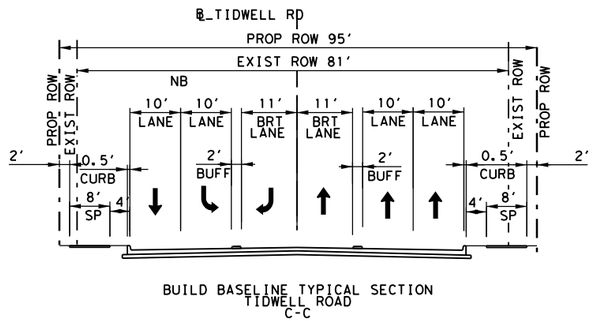


BUILD BASELINE TYPICAL SECTION
JENSEN DRIVE
B-B

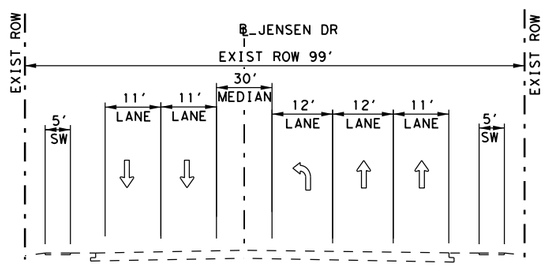




BUILD BASELINE TYPICAL SECTION
TIDWELL ROAD
A-A



BUILD BASELINE TYPICAL SECTION
TIDWELL ROAD
C-C



BUILD BASELINE TYPICAL SECTION
JENSEN DRIVE
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ
0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5 TIDWELL/JENSEN INTERSECTION LAYOUT BUILD BASELINE

DRAWING NO: CC6-S50002
SHEET NO: 2
SHEET 2 OF 5

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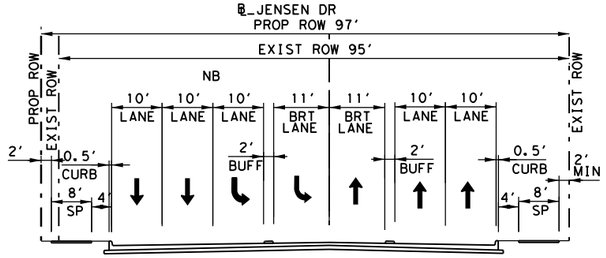
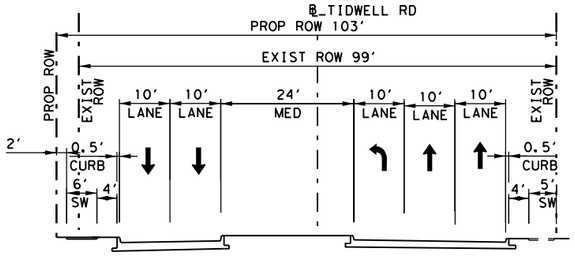
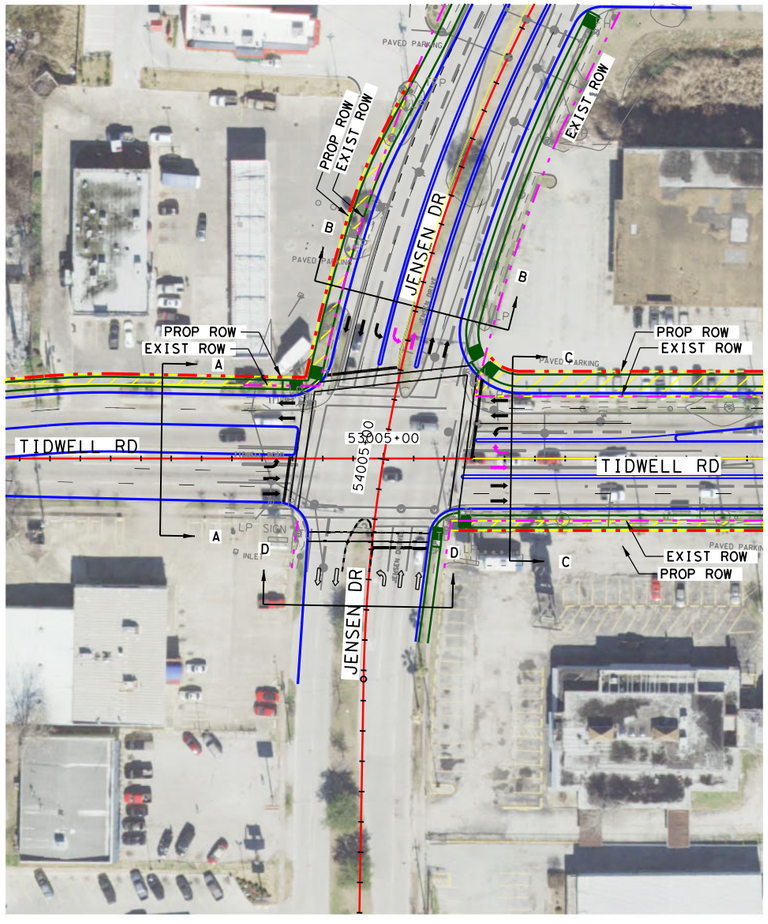
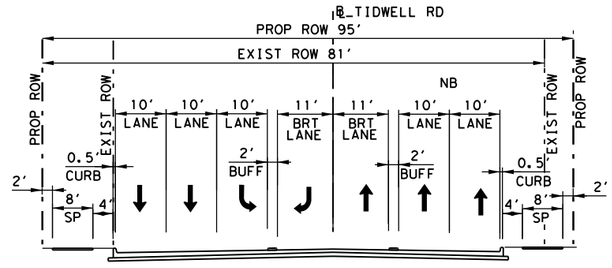


FULL MITIGATION ADD SB THRU TYPICAL SECTION
JENSEN DRIVE
B-B

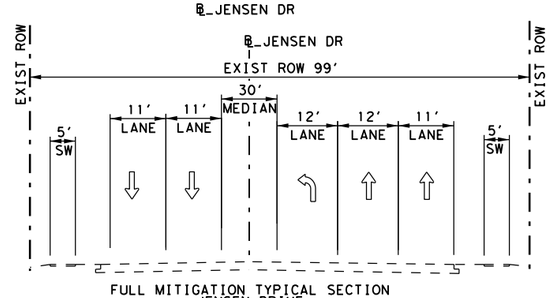


FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
TIDWELL ROAD
A-A





FULL MITIGATION ADD EB & WB THRU TYPICAL SECTION
TIDWELL ROAD
C-C



FULL MITIGATION TYPICAL SECTION
JENSEN DRIVE
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
TIDWELL/JENSEN
INTERSECTION LAYOUT
FULL MITIGATION
EB, WB & SB THRU

DRAWING NO: CC6-S50003
SHEET NO: 3
SHEET 3 OF 5

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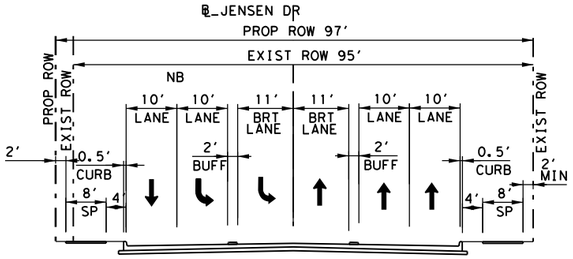
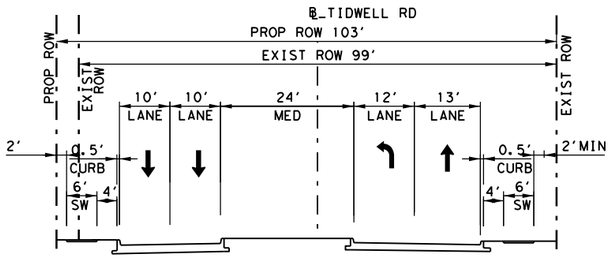
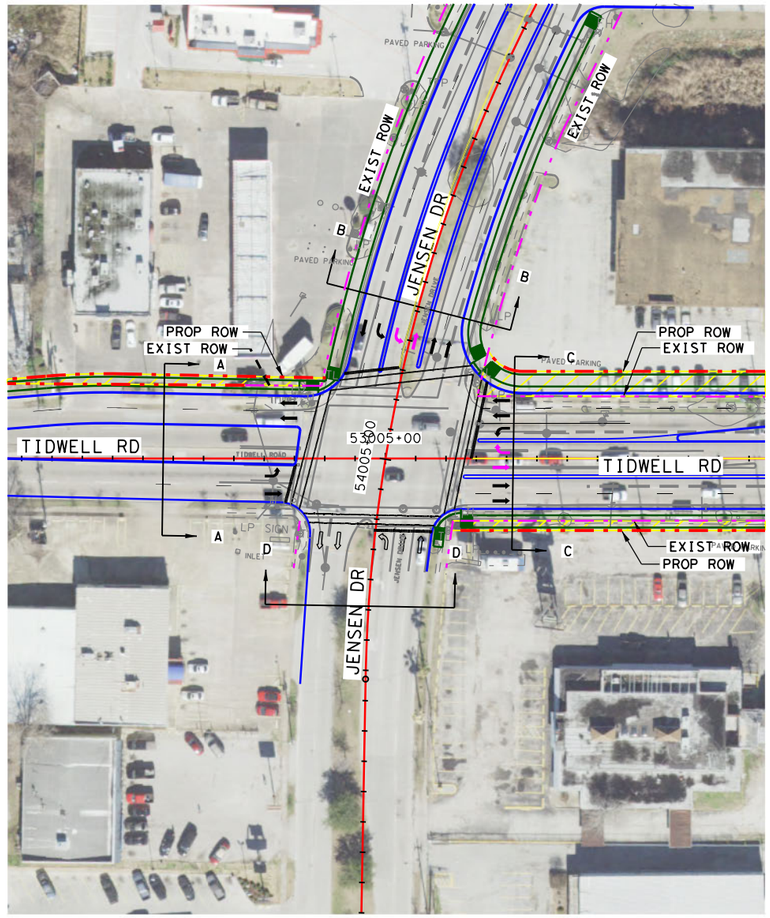
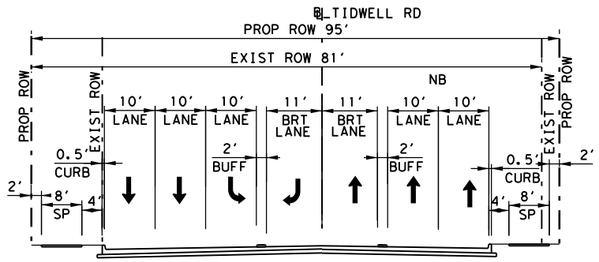


PARTIAL MITIGATION 1 TYPICAL SECTION
JENSEN DRIVE
B-B

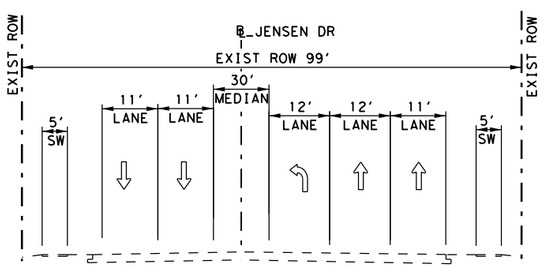


PARTIAL MITIGATION 1 ADD WB THRU TYPICAL SECTION
TIDWELL ROAD
A-A





PARTIAL MITIGATION 1 ADD WB THRU TYPICAL SECTION
TIDWELL ROAD
C-C



PARTIAL MITIGATION 1 TYPICAL SECTION
JENSEN DRIVE
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND NOT FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
TIDWELL/JENSEN
INTERSECTION LAYOUT
PARTIAL MITIGATION 1
WB THRU

DRAWING NO: CC6-S50004
SHEET NO: 4
SHEET 4 OF 5

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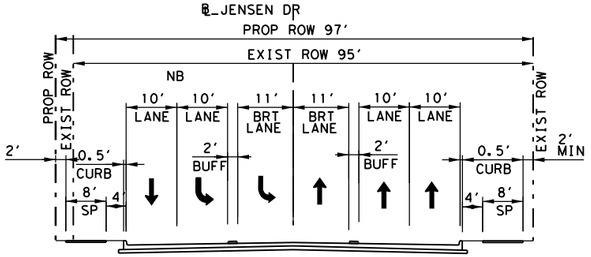
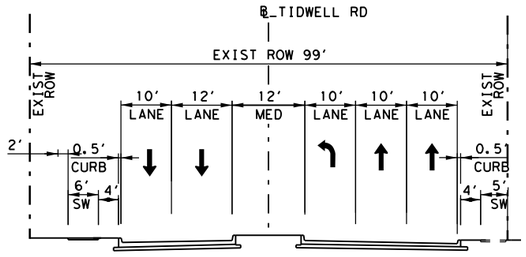
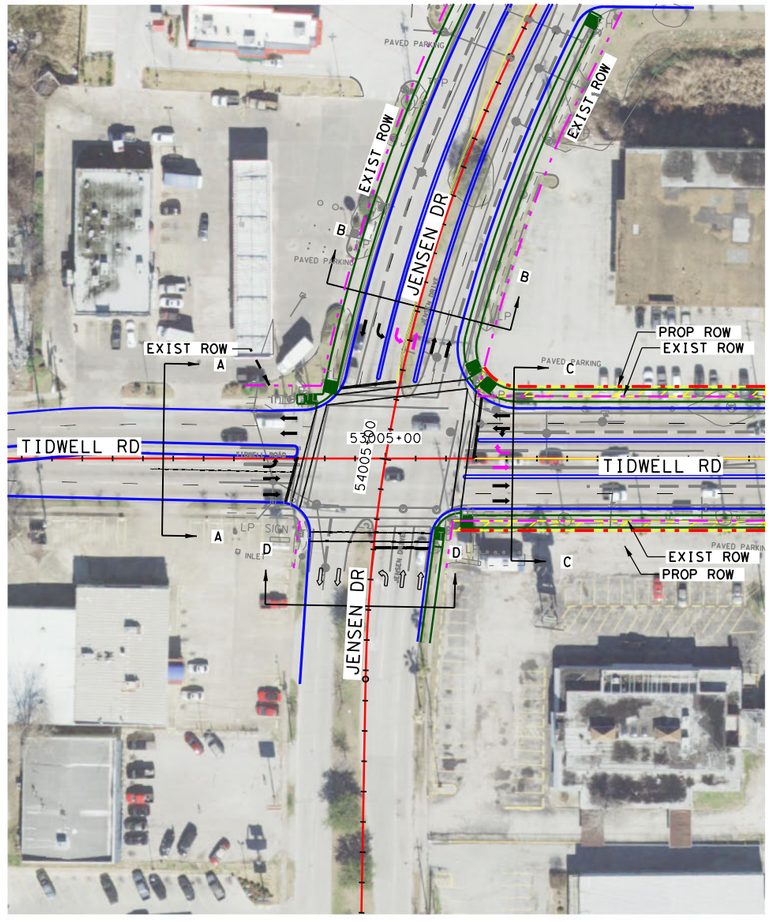
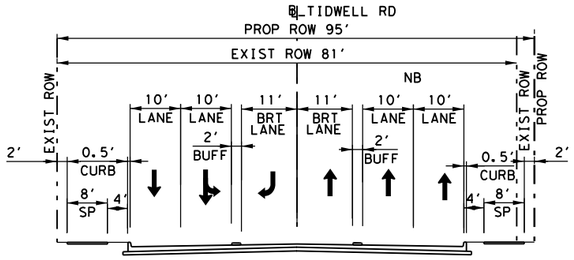


PARTIAL MITIGATION 2 TYPICAL SECTION
JENSEN DRIVE
B-B

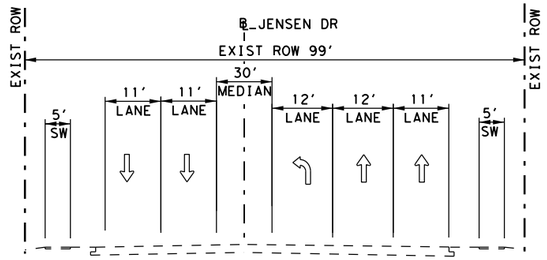


PARTIAL MITIGATION 2 ADD EB & WB THRU TYPICAL SECTION
TIDWELL ROAD
A-A





PARTIAL MITIGATION 2 ADD EB THRU, WB THRU/LT TYPICAL SECTION
TIDWELL ROAD
C-C



PARTIAL MITIGATION 2 TYPICAL SECTION
JENSEN DRIVE
D-D

LEGEND

- PROPOSED CURB
- BRT ALIGNMENT
- PROPOSED SIDEWALK
- EXISTING PARCEL LINE
- PROPOSED ROW
- EXISTING ROW
- PROPOSED LANE DIRECTION
- PROPOSED BRT LANE DIRECTION
- EXISTING LANE DIRECTION
- PROPOSED BRT STATION
- PARCEL ACQUISITION

SCALE IN (FEET)
HORIZ 0' 25' 50' 100'

PRELIMINARY

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HNTB
TBPE FIRM REGISTRATION NO.:420
1301 FANNIN ST SUITE 2100
HOUSTON, TX 77002

METRO NEXT

SHEET TITLE:
SEGMENT 5
TIDWELL/JENSEN
INTERSECTION LAYOUT
PARTIAL MITIGATION 2
EB THRU, WB THRU/LT

DRAWING NO: CC6-S50005
SHEET NO: 5
SHEET 5 OF 5

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APPENDIX J – 2030 BUILD QUEUE LENGTHS

Lane Queue by Intersection – Build 2030 AM

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
101	NEB T	0	BRT Alignment	12.5	0.2	60.8	1	0.0%
101	NB T	0	Fondren Rd	79.0	3.1	248.8	9.42	0.9%
101	SB T	0	Fondren Rd	4.9	0.2	38.5	1.81	6.6%
101	WB T	0	BRT Alignment	1.0	0.0	6.1	0.1	0.0%
101	EB L	0	EB Westpark Tollway FR	69.9	2.6	271.3	9.91	0.0%
101	NB T	1	Fondren Rd	730.7	25.3	1106.1	39.41	44.6%
101	SB T	1	Fondren Rd	6.8	0.3	48.6	1.92	8.4%
101	EB R	1	EB Westpark Tollway FR	621.2	21.3	1585.1	55.61	18.7%
101	NB T	2	Fondren Rd	744.0	26.0	1108.9	40.3	49.1%
101	SB T	2	Fondren Rd	8.9	0.4	53.5	2.22	12.9%
101	NB T	3	Fondren Rd	924.3	32.9	1110.8	41.1	82.9%
102	NB L	0	Fondren Rd	7.7	0.3	59.2	2.44	11.3%
102	SB L	0	Fondren Rd	584.0	21.0	1270.3	45.87	0.0%
102	EB L	0	Westpark Dr	21.8	0.9	114.1	4.43	0.0%
102	WB L	0	Westpark Dr	642.0	22.9	1632.2	56.4	0.0%
102	NB T	1	Fondren Rd	14.1	0.6	66.7	2.81	20.9%
102	SB T	1	Fondren Rd	82.8	3.0	209.9	7.43	0.0%
102	EB T	1	Westpark Dr	876.6	29.1	1433.0	49.63	44.2%
102	WB T	1	Westpark Dr	64.1	2.4	244.7	8.47	0.0%
102	NB T	2	Fondren Rd	10.9	0.5	58.0	2.22	15.3%
102	SB T	2	Fondren Rd	140.6	4.7	396.9	12.06	0.0%
102	EB T	2	Westpark Dr	853.8	28.5	1428.7	49.91	45.8%
102	WB T	2	Westpark Dr	129.2	4.4	446.1	14.96	0.0%
102	NB TR	3	Fondren Rd	14.5	0.7	64.4	2.72	21.7%
102	SB TR	3	Fondren Rd	176.7	5.9	475.4	14.92	0.0%
102	EB TR	3	Westpark Dr	933.6	30.9	1433.4	49.9	56.1%
102	WB TR	3	Westpark Dr	211.2	6.7	764.8	23.83	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
103	EB L	0	Westpark Dr	401.6	14.6	771.8	27.26	0.0%
103	WB L	0	Westpark Dr	40.8	1.8	128.5	5.1	0.0%
103	SB L	0	Hillcroft Ave	212.4	6.8	623.6	19.28	0.3%
103	NB L	0	Hillcroft Ave	69.0	2.3	293.1	9.22	1.8%
103	EB T	1	Westpark Dr	114.3	4.2	327.4	11.51	0.0%
103	WB T	1	Westpark Dr	250.0	8.8	672.4	23.22	0.9%
103	SB T	1	Hillcroft Ave	47.1	1.7	270.7	9.57	0.0%
103	NB T	1	Hillcroft Ave	5.7	0.2	44.5	1.61	0.0%
103	EB T	2	Westpark Dr	172.7	6.1	529.4	18.08	0.0%
103	WB T	2	Westpark Dr	209.7	6.6	501.9	16.51	0.0%
103	SB T	2	Hillcroft Ave	187.4	6.7	582.2	19.95	0.2%
103	NB T	2	Hillcroft Ave	39.8	1.7	75.7	3	0.0%
103	EB TR	3	Westpark Dr	221.4	7.1	631.4	19.48	0.0%
103	WB TR	3	Westpark Dr	282.9	9.6	602.4	20.58	0.4%
103	SB TR	3	Hillcroft Ave	202.9	7.0	601.2	20.36	0.2%
103	NB TR	3	Hillcroft Ave	44.3	1.8	79.0	3	0.0%
104	WB L	0	Westpark Dr	0.3	0.0	0.3	0.02	0.0%
104	EB T	0	Westpark Dr	17.1	0.6	120.6	3.96	0.0%
104	NB L	0	14th St	0.0	0.0	0.0	0	0.0%
104	WB T	1	Westpark Dr	113.0	4.0	543.6	19.22	0.0%
104	EB T	1	Westpark Dr	15.2	0.5	120.5	3.97	0.0%
104	NB R	1	14th St	6.9	0.3	43.8	1.53	0.0%
104	WB T	2	Westpark Dr	173.4	5.4	635.2	20.4	0.0%
104	EB TR	2	Westpark Dr	14.5	0.5	121.8	4.42	0.0%
105	EB T	0	Westpark Dr	25.7	0.9	176.1	5.86	0.0%
105	SWB R	0	I-69 SBFR	72.7	2.3	536.9	17.19	2.4%
105	SWB L	0	I-69 SBFR	12.4	0.7	54.9	2.51	0.0%
105	WB L	0	Westpark Dr	54.3	2.2	178.9	6.83	2.9%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
105	EB T	1	Westpark Dr	46.4	1.6	257.7	9.16	0.0%
105	SWB LT	1	I-69 SBFR	31.4	1.5	101.9	4.2	0.0%
105	WB T	1	Westpark Dr	6.5	0.3	44.7	2.01	0.0%
105	EB T	2	Westpark Dr	24.8	1.0	143.0	5.34	0.0%
105	SWB T	2	I-69 SBFR	22.4	1.3	87.1	3.91	0.0%
105	WB T	2	Westpark Dr	5.9	0.3	42.4	2.01	0.0%
105	SWB T	3	I-69 SBFR	18.3	1.2	83.7	4.1	0.0%
106	EB L	0	Westpark Dr	24.6	0.9	137.6	4.77	1.8%
106	NEB L	0	I-69 NBFR	6.8	0.4	33.0	1.72	0.0%
106	WB T	0	Westpark Dr	42.4	1.7	210.7	8.04	0.4%
106	WB R	0	Westpark Dr	0.7	0.0	0.0	0	0.0%
106	EB LT	1	Westpark Dr	30.4	1.1	156.2	5.47	2.3%
106	NEB L	1	I-69 NBFR	4.5	0.4	28.5	1.62	0.0%
106	WB T	1	Westpark Dr	27.8	1.1	152.9	5.85	0.2%
106	EB T	2	Westpark Dr	35.7	1.4	170.1	6.13	1.5%
106	NEB T	2	I-69 NBFR	15.3	1.2	51.3	3	0.0%
106	NEB T	3	I-69 NBFR	7.6	0.9	43.9	3	0.0%
106	NEB R	4	I-69 NBFR	5.0	0.7	37.6	2.9	0.0%
107	WB LT	0	Westpark Dr	5.4	0.2	34.8	1.66	0.0%
107	SB LTR	0	Rampart St	40.6	1.5	117.1	4.2	29.2%
107	EB LT	0	Westpark Dr	27.5	1.0	170.7	6.05	1.1%
107	NB LT	0	Rampart St	37.6	1.6	54.5	2.01	0.7%
107	WB TR	1	Westpark Dr	3.2	0.1	17.9	1.01	0.0%
107	EB TR	1	Westpark Dr	29.4	1.1	188.5	6.71	1.8%
107	NB TR	1	Rampart St	2.9	0.2	19.7	1.11	0.0%
108	EB L	0	Westpark Dr	31.9	1.2	141.6	5.02	0.0%
108	SB L	0	Fountain View Dr	101.9	3.7	272.9	9.65	11.9%
108	NB L	0	Renwick Dr	26.9	1.2	70.3	2.51	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
108	WB L	0	Westpark Dr	7.5	0.4	43.6	2	0.0%
108	EB T	1	Westpark Dr	234.1	8.1	991.1	32.92	2.0%
108	SB T	1	Fountain View Dr	33.9	1.4	139.6	5.04	0.0%
108	NB T	1	Renwick Dr	28.1	1.3	54.1	2.1	0.0%
108	WB T	1	Westpark Dr	26.6	1.1	119.7	4.81	0.0%
108	EB TR	2	Westpark Dr	216.0	7.7	968.5	34.16	1.4%
108	SB TR	2	Fountain View Dr	32.8	1.3	136.6	5.11	0.0%
108	NB TR	2	Renwick Dr	30.6	1.3	54.7	2.11	0.0%
108	WB TR	2	Westpark Dr	32.5	1.3	148.7	5.63	0.0%
109	WB L	0	Westpark Dr	21.2	1.0	78.1	3.21	0.0%
109	SB L	0	Chimney Rock Rd	247.4	8.9	479.1	16.21	14.0%
109	EB L	0	Westpark Dr	116.4	4.0	586.5	19.17	2.0%
109	NB T	0	Chimney Rock Rd	37.9	1.3	190.8	5.39	0.0%
109	WB T	1	Westpark Dr	35.7	1.4	169.4	6.33	0.0%
109	SB T	1	Chimney Rock Rd	39.4	1.5	188.5	7.02	0.0%
109	EB T	1	Westpark Dr	484.4	17.0	1251.7	44.45	13.1%
109	NB TR	1	Chimney Rock Rd	50.8	1.4	172.8	4.81	0.0%
109	WB TR	2	Westpark Dr	73.3	2.4	315.2	9.94	0.0%
109	SB TR	2	Chimney Rock Rd	42.1	1.6	194.7	7.33	0.1%
109	EB TR	2	Westpark Dr	568.2	20.2	1258.5	45.04	16.1%
110	SB L	0	S Rice Ave	80.5	2.5	246.3	7.14	2.6%
110	EB L	0	Westpark Dr	190.7	7.0	595.2	21.61	0.0%
110	NB L	0	S Rice Ave	77.0	2.6	366.1	11.19	0.2%
110	WB L	0	Westpark Dr	301.3	11.1	500.2	18.22	25.0%
110	SB T	1	S Rice Ave	70.5	2.7	225.5	8.06	1.3%
110	EB T	1	Westpark Dr	113.5	4.1	462.7	15.99	0.0%
110	NB T	1	S Rice Ave	59.6	2.3	320.6	10.47	0.3%
110	WB T	1	Westpark Dr	53.5	1.9	179.6	6.21	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
110	SB TR	2	S Rice Ave	68.3	2.6	218.0	7.99	1.2%
110	EB TR	2	Westpark Dr	195.2	7.1	681.7	24.24	0.0%
110	NB TR	2	S Rice Ave	51.2	2.0	213.6	7.25	0.5%
110	WB T	2	Westpark Dr	70.2	2.5	209.0	7.03	0.0%
110	SB R	3	S Rice Ave	0.5	0.0	0.1	0.01	0.0%
110	WB TR	3	Westpark Dr	103.7	2.8	383.3	9.54	0.7%
111	NEB LT	0	BRT Alignment	13.1	0.2	61.3	1	0.0%
111	WB T	0	BRT Alignment	2.7	0.0	18.9	0.31	0.0%
111	EB T	0	Westpark Dr	207.2	7.2	1002.6	34.19	0.0%
111	SWB L	0	Westpark Dr	111.0	4.3	294.5	10.73	2.0%
111	SB R	0	Silver Line Alignment	9.6	0.2	60.8	1	0.0%
111	SEB LT	0	I-610 SBFR	106.2	4.2	261.1	9.53	0.1%
111	WB R	0	I-610 SBFR	0.0	0.0	0.0	0	0.0%
111	EB T	1	Westpark Dr	338.1	11.4	1034.2	35.84	0.0%
111	SWB T	1	Westpark Dr	22.2	0.8	154.4	5.17	0.0%
111	SEB T	1	I-610 SBFR	35.9	1.5	122.6	4.33	0.0%
111	EB TR	2	Westpark Dr	324.4	11.2	1033.5	37.13	0.0%
111	SWB T	2	Westpark Dr	16.1	0.6	114.8	4.03	0.0%
112	EB L	0	Westpark Dr	31.7	1.3	150.5	5.81	0.7%
112	NB L	0	I-610 NBFR	50.3	1.8	166.2	5.13	0.0%
112	WB T	0	Westpark Dr	3.0	0.0	14.6	0.24	0.0%
112	NEB T	0	BRT Alignment	5.8	0.1	48.7	0.8	7.4%
112	EB T	1	Westpark Dr	63.0	2.2	202.8	7.21	0.0%
112	NB LT	1	I-610 NBFR	78.3	2.9	222.7	7.72	0.0%
112	WB T	1	Westpark Dr	102.4	3.4	349.6	11.04	0.0%
112	EB T	2	Westpark Dr	42.1	1.7	180.7	6.63	0.0%
112	NB TR	2	I-610 NBFR	78.9	2.9	225.2	7.85	0.0%
112	WB TR	2	Westpark Dr	111.5	3.8	333.0	10.55	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
113	WB T	0	Westpark Dr	1.3	0.0	0.0	0	0.0%
113	SB LT	0	Newcastle Dr	24.4	1.1	85.8	3.51	0.0%
113	EB T	0	Westpark Dr	1.9	0.0	0.0	0	0.0%
113	NB L	0	Newcastle Dr	338.1	12.1	537.3	19.71	52.6%
113	WB L	1	Westpark Dr	38.2	1.6	161.8	6.15	0.0%
113	SB TR	1	Newcastle Dr	33.1	1.3	137.7	5.21	0.0%
113	EB L	1	Westpark Dr	61.2	2.1	289.7	9.75	0.1%
113	NB T	1	Newcastle Dr	32.6	1.4	109.2	4.33	0.0%
113	WB T	2	Westpark Dr	22.8	0.8	162.4	4.45	0.0%
113	EB T	2	Westpark Dr	66.1	2.3	437.8	15.25	0.6%
113	NB TR	2	Newcastle Dr	217.6	7.6	509.9	17.73	13.7%
113	WB TR	3	Westpark Dr	26.7	1.0	171.9	5.86	0.0%
113	EB TR	3	Westpark Dr	87.3	3.1	487.3	16.47	0.6%
114	EB T	0	Westpark Dr	6.9	0.1	53.0	0.91	0.0%
114	WB T	0	Westpark Dr	4.9	0.1	41.7	0.72	0.0%
114	SB L	0	Weslayan St	24.7	1.0	94.0	3.11	0.0%
114	NB L	0	Weslayan St	124.1	4.7	397.4	14.39	8.2%
114	EB L	1	Westpark Dr	394.0	13.5	1328.6	44.26	0.0%
114	WB L	1	Westpark Dr	31.3	1.3	112.8	4.36	0.0%
114	SB T	1	Weslayan St	175.1	6.4	446.4	16.05	3.1%
114	NB T	1	Weslayan St	49.6	1.9	243.9	9.27	1.0%
114	EB T	2	Westpark Dr	45.3	1.8	166.2	5.87	0.0%
114	WB T	2	Westpark Dr	121.7	3.6	391.6	11.25	0.0%
114	SB TR	2	Weslayan St	198.2	7.2	505.2	18.03	9.3%
114	NB TR	2	Weslayan St	106.4	3.9	395.1	14.33	5.8%
114	EB TR	3	Westpark Dr	506.7	17.8	1546.6	54.64	0.0%
114	WB TR	3	Westpark Dr	131.3	4.1	391.1	11.88	0.0%
115	WB L	0	Westpark Dr	22.8	1.0	90.7	3.62	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
115	NB L	0	Edloe St	9.5	0.5	41.7	1.73	0.0%
115	EB L	0	Westpark Dr	6.2	0.1	60.8	1	0.0%
115	SB R	0	Edloe St	7.7	0.1	60.8	1	0.0%
115	NB T	1	Edloe St	70.6	2.7	228.3	8.53	0.0%
115	EB L	1	Westpark Dr	62.6	2.3	240.1	8.31	0.0%
115	SB L	1	Edloe St	48.7	1.7	161.7	5.22	1.0%
115	WB T	1	Westpark Dr	54.6	1.7	192.0	5.62	0.0%
115	NB T	2	Edloe St	331.0	11.8	525.6	19.3	51.6%
115	EB TR	2	Westpark Dr	103.7	3.6	476.9	16.07	0.0%
115	SB TR	2	Edloe St	96.6	3.6	308.2	10.72	9.2%
115	WB TR	2	Westpark Dr	68.0	2.4	237.8	8.02	0.0%
115	NB	3	Edloe St	0.0	0.0	0.0	0	0.0%
115	NB R	4	Edloe St	4.2	0.2	27.3	1.42	0.0%
116	EB L	0	I-69 Express Lanes	16.5	0.8	71.1	3	0.0%
116	WB LR	0	I-69 Express Lanes	0.0	0.0	0.0	0	0.0%
116	NB T	0	Edloe St	1.2	0.0	0.0	0	0.0%
116	SB T	0	Edloe St	1.2	0.0	0.0	0	0.0%
116	EB LR	1	I-69 Express Lanes	26.9	1.2	103.0	3.93	0.0%
116	NB L	1	Edloe St	0.3	0.0	0.0	0	0.0%
116	SB L	1	Edloe St	14.5	0.7	60.7	2.51	0.0%
116	NB TR	2	Edloe St	57.3	2.1	301.2	10.93	7.5%
116	SB T	2	Edloe St	6.9	0.2	47.2	1.32	0.0%
116	SB TR	3	Edloe St	24.6	0.9	139.2	4.33	0.0%
118	SB L	0	Edloe St	33.0	1.4	112.6	4.22	0.0%
118	WB L	0	Richmond Ave	8.5	0.1	67.9	1.1	0.0%
118	EB L	0	Richmond Ave	17.7	0.8	76.3	3.01	0.0%
118	NB R	0	Edloe St	8.0	0.1	67.7	1.1	0.0%
118	EB R	0	Richmond Ave	2.6	0.1	13.1	0.7	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
118	SB T	1	Edloe St	36.7	1.3	154.6	5.2	0.0%
118	WB L	1	Richmond Ave	36.3	1.5	129.0	4.8	0.0%
118	EB T	1	Richmond Ave	68.9	2.6	223.4	7.92	0.0%
118	NB L	1	Edloe St	42.7	1.7	136.9	5.01	0.0%
118	SB TR	2	Edloe St	38.3	1.4	161.7	5.73	0.0%
118	WB T	2	Richmond Ave	70.0	2.6	253.5	9.41	0.0%
118	EB T	2	Richmond Ave	71.5	2.7	214.0	7.73	0.0%
118	NB T	2	Edloe St	67.1	2.5	218.9	8	0.0%
118	WB TR	3	Richmond Ave	70.4	2.7	253.0	9.31	0.0%
118	NB TR	3	Edloe St	78.0	2.9	238.6	8.72	0.0%
119	SB L	0	Buffalo Speedway	21.4	0.9	89.7	3.31	0.0%
119	NB L	0	Buffalo Speedway	26.7	1.1	107.2	4.11	0.0%
119	EB T	0	Richmond Ave	3.6	0.1	31.6	0.52	0.0%
119	WB T	0	Richmond Ave	2.1	0.0	7.3	0.12	0.0%
119	SB T	1	Buffalo Speedway	48.7	1.8	170.5	5.93	0.0%
119	NB T	1	Buffalo Speedway	137.1	5.1	504.8	18.36	0.5%
119	EB L	1	Richmond Ave	17.4	0.8	83.2	3.32	0.0%
119	WB L	1	Richmond Ave	32.7	1.4	119.0	4.83	0.0%
119	SB TR	2	Buffalo Speedway	53.2	2.0	174.5	6.51	0.0%
119	NB TR	2	Buffalo Speedway	204.6	7.3	682.5	23.33	1.0%
119	EB T	2	Richmond Ave	152.6	5.5	596.6	20.84	0.0%
119	WB L	2	Richmond Ave	32.0	1.4	121.3	4.61	0.0%
119	EB TR	3	Richmond Ave	164.1	5.9	586.5	20.38	0.0%
119	WB T	3	Richmond Ave	63.9	2.5	241.1	8.73	0.0%
119	WB TR	4	Richmond Ave	65.8	2.6	239.3	8.84	0.0%
120	SB L	0	Eastside St	26.8	1.1	106.6	3.94	0.0%
120	NB L	0	Eastside St	15.2	0.8	57.7	2.32	0.0%
120	WB T	0	Richmond Ave	2.0	0.0	5.9	0.1	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
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120	EB T	0	Richmond Ave	1.9	0.0	0.6	0.01	0.0%
120	SB TR	1	Eastside St	29.7	1.2	139.6	5.03	0.0%
120	NB TR	1	Eastside St	32.2	1.3	134.1	4.94	0.0%
120	WB L	1	Richmond Ave	31.2	1.2	137.5	4.93	0.0%
120	EB L	1	Richmond Ave	212.0	7.6	501.6	17.92	0.0%
120	WB T	2	Richmond Ave	46.8	1.8	208.9	7.88	0.0%
120	EB T	2	Richmond Ave	73.8	2.8	459.7	16.34	0.4%
120	EB TR	3	Richmond Ave	133.4	4.8	488.9	17.42	0.3%
120	WB TR	3	Richmond Ave	61.3	2.3	245.1	8.86	0.0%
121	SB L	0	Kirby Dr	32.2	1.4	113.3	4.51	0.0%
121	WB T	0	Richmond Ave	4.4	0.1	42.6	0.7	0.0%
121	EB T	0	Richmond Ave	8.8	0.1	60.8	1	0.0%
121	NB L	0	Kirby Dr	218.5	7.7	673.0	23.26	2.6%
121	SB T	1	Kirby Dr	112.4	4.2	360.7	12.83	0.0%
121	WB L	1	Richmond Ave	30.6	1.3	113.2	4.32	0.0%
121	EB L	1	Richmond Ave	216.8	8.0	281.9	10.9	0.0%
121	NB T	1	Kirby Dr	119.4	4.4	494.5	17.21	0.1%
121	SB T	2	Kirby Dr	121.7	4.5	364.0	12.97	0.0%
121	WB T	2	Richmond Ave	56.8	2.3	179.7	6.82	0.0%
121	EB T	2	Richmond Ave	141.6	5.1	272.6	10.1	0.0%
121	NB T	2	Kirby Dr	178.7	6.5	609.3	21.86	0.4%
121	WB TR	3	Richmond Ave	68.7	2.7	201.2	7.61	0.0%
121	SB TR	3	Kirby Dr	130.9	4.8	399.2	14.41	0.0%
121	NB TR	3	Kirby Dr	180.9	6.6	603.0	21.75	0.2%
121	EB TR	3	Richmond Ave	140.9	5.1	275.1	10.22	0.0%
122	EB T	0	Richmond Ave	4.7	0.1	25.0	0.41	0.0%
122	SB LT	0	Greenbriar Dr	22.9	1.0	104.2	4.21	0.0%
122	NB LTR	0	Greenbriar Dr	12.0	0.5	63.2	2.3	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
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122	WB T	0	Richmond Ave	4.9	0.1	55.3	0.91	0.0%
122	EB L	1	Richmond Ave	19.4	0.9	82.4	3.33	0.0%
122	SB T	1	Greenbriar Dr	21.7	0.9	101.1	4.03	0.0%
122	WB L	1	Richmond Ave	48.2	1.9	175.0	6.25	0.0%
122	EB TR	2	Richmond Ave	111.2	4.1	416.4	14.83	0.0%
122	SB R	2	Greenbriar Dr	2.9	0.1	18.9	1.01	0.0%
122	WB TR	2	Richmond Ave	56.6	2.2	280.0	10.43	0.2%
123	WB T	0	Richmond Ave	6.5	0.1	49.8	0.82	0.0%
123	SB T	0	Shepherd Dr	58.6	2.3	195.7	7.35	0.0%
123	NB T	0	Shepherd Dr	52.0	2.0	174.1	6.61	0.0%
123	EB T	0	Richmond Ave	3.7	0.1	31.4	0.52	0.0%
123	WB L	1	Richmond Ave	126.0	4.6	424.0	14.89	0.0%
123	SB TR	1	Shepherd Dr	61.8	2.4	201.3	7.62	0.0%
123	NB TR	1	Shepherd Dr	53.4	2.1	175.7	6.64	0.0%
123	EB L	1	Richmond Ave	24.0	1.1	87.4	3.41	0.0%
123	WB TR	2	Richmond Ave	75.0	2.8	393.9	14.38	0.0%
123	EB TR	2	Richmond Ave	56.3	2.0	295.9	10.57	0.0%
124	EB T	0	Richmond Ave	0.0	0.0	0.0	0	0.0%
124	SB R	0	Hazard St	14.3	0.6	90.2	3.51	0.0%
124	NB R	0	Hazard St	169.3	6.1	675.7	23.76	6.9%
124	WB T	0	Richmond Ave	0.0	0.0	0.0	0	0.0%
124	EB TR	1	Richmond Ave	16.7	0.6	117.5	4.22	0.0%
124	WB TR	1	Richmond Ave	2.7	0.1	16.7	0.6	0.0%
125	NB L	0	Woodhead St	391.3	14.3	905.0	33.12	22.1%
125	SB L	0	Woodhead St	55.2	2.2	189.2	7.22	0.0%
125	WB T	0	Richmond Ave	1.6	0.0	6.7	0.11	0.0%
125	EB T	0	Richmond Ave	3.5	0.1	19.8	0.34	0.0%
125	NB TR	1	Woodhead St	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
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125	SB TR	1	Woodhead St	0.0	0.0	0.0	0	0.0%
125	WB L	1	Richmond Ave	9.9	0.5	61.2	2.6	0.0%
125	EB L	1	Richmond Ave	66.0	2.6	211.6	7.94	0.0%
125	WB TR	2	Richmond Ave	29.3	1.1	174.8	6.3	0.0%
125	EB TR	2	Richmond Ave	129.4	4.7	569.8	19.45	4.6%
126	SB LTR	0	Dunlavy St	588.8	20.5	1477.9	51.5	26.5%
126	NB LTR	0	Dunlavy St	226.4	8.6	751.8	28.14	7.6%
126	EB T	0	Richmond Ave	1.3	0.0	0.6	0.01	0.0%
126	WB T	0	Richmond Ave	1.6	0.0	11.4	0.2	0.0%
126	EB L	1	Richmond Ave	28.4	1.2	121.4	4.45	0.1%
126	WB L	1	Richmond Ave	2.6	0.1	15.6	0.9	0.0%
126	EB TR	2	Richmond Ave	106.6	3.9	511.0	17.67	6.8%
126	WB TR	2	Richmond Ave	10.8	0.4	69.1	2.74	0.0%
127	WB T	0	Richmond Ave	1.4	0.0	0.6	0.01	0.0%
127	NB L	0	Mandell St	205.5	7.6	625.3	22.43	2.9%
127	EB T	0	Richmond Ave	0.1	0.0	0.0	0	0.0%
127	SB L	0	Mandell St	288.4	10.6	930.9	33.38	1.3%
127	WB L	1	Richmond Ave	146.1	5.4	464.0	16.5	0.0%
127	NB TR	1	Mandell St	0.0	0.0	0.0	0	0.0%
127	EB L	1	Richmond Ave	7.7	0.4	47.6	1.95	0.0%
127	SB TR	1	Mandell St	0.0	0.0	0.0	0	0.0%
127	WB TR	2	Richmond Ave	31.8	1.2	197.8	7.32	0.0%
127	EB TR	2	Richmond Ave	165.2	6.1	715.9	25.66	13.9%
128	SB L	0	Montrose Blvd	391.3	13.8	783.2	28.52	33.0%
128	NB L	0	Montrose Blvd	70.9	2.6	395.0	13.01	5.3%
128	EB T	0	Richmond Ave	6.2	0.1	60.8	1	0.0%
128	WB T	0	Richmond Ave	5.4	0.1	60.5	1	0.0%
128	SB T	1	Montrose Blvd	58.7	2.2	384.3	13.64	2.8%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
128	NB T	1	Montrose Blvd	152.6	5.3	708.7	24.45	9.3%
128	EB L	1	Richmond Ave	104.2	4.0	218.9	8.31	0.0%
128	WB L	1	Richmond Ave	215.7	7.7	454.2	15.36	0.0%
128	SB TR	2	Montrose Blvd	317.5	11.4	773.4	28.04	16.7%
128	NB TR	2	Montrose Blvd	197.9	7.0	717.9	25.14	11.2%
128	EB TR	2	Richmond Ave	256.7	8.8	440.6	14.5	0.0%
128	WB TR	2	Richmond Ave	104.5	3.8	354.7	12.4	0.0%
129	SWB LT	0	US 59 SBFR	46.2	1.9	178.0	6.9	0.0%
129	EB T	0	Richmond Ave	3.1	0.0	24.3	0.4	0.0%
129	WB T	0	Richmond Ave	9.1	0.1	60.8	1	1.3%
129	SWB T	1	US 59 SBFR	41.5	1.7	170.3	6.5	0.0%
129	EB T	1	Richmond Ave	23.8	1.0	103.3	4.11	0.0%
129	WB L	1	Richmond Ave	11.6	0.6	88.1	3.92	3.4%
129	SWB R	2	US 59 SBFR	265.9	9.4	496.8	17.9	42.1%
129	EB TR	2	Richmond Ave	191.6	6.9	532.8	18.43	0.0%
129	WB T	2	Richmond Ave	59.9	2.6	158.7	6	35.2%
130	NEB LT	0	US 59 NBFR	368.9	13.6	512.5	19.1	58.1%
130	EB T	0	Richmond Ave	17.9	0.3	84.1	1.31	4.2%
130	WB T	0	Richmond Ave	4.5	0.1	44.3	0.8	0.0%
130	WB R	0	Richmond Ave	0.4	0.0	0.0	0	0.0%
130	NEB TR	1	US 59 NBFR	48.1	2.0	184.8	7.19	0.0%
130	EB L	1	Richmond Ave	41.4	1.8	133.5	5.5	11.8%
130	WB T	1	Richmond Ave	195.4	7.4	356.6	13.62	0.2%
130	NEB R	2	US 59 NBFR	0.6	0.0	0.0	0	0.0%
130	EB T	2	Richmond Ave	2.1	0.1	15.1	0.6	1.3%
130	WB TR	2	Richmond Ave	303.5	10.9	440.3	15.32	3.8%
131	SEB T	0	Richmond Ave	1.3	0.0	0.0	0	0.0%
131	NEB L	0	Main St	298.8	10.1	398.0	13.4	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
131	NB T	0	LRT Red Line	2.2	0.0	0.0	0	0.0%
131	NWB T	0	Wheeler Ave	0.7	0.0	0.0	0	0.0%
131	SWB T	0	LRT Red Line	0.0	0.0	0.0	0	0.0%
131	SB R	0	Main St	370.4	13.7	519.0	19.6	65.0%
131	NWB T	1	Wheeler Ave	158.3	5.8	246.8	9.11	58.8%
131	SEB T	1	Richmond Ave	73.8	2.8	281.4	10.12	1.4%
131	NEB R	1	Main St	0.7	0.0	1.6	0.1	0.0%
131	SEB R	2	Richmond Ave	3.2	0.1	13.2	0.53	0.0%
131	NWB TR	2	Wheeler Ave	195.4	7.2	247.8	9.4	74.2%
132	SWB L	0	Fannin St	24.2	0.9	138.3	5	1.0%
132	SEB T	0	Wheeler Ave	3.6	0.1	20.6	0.34	0.0%
132	NWB T	0	Wheeler Ave	2.2	0.0	1.8	0.03	0.0%
132	SWB T	1	Fannin St	24.1	1.0	105.3	3.92	0.1%
132	SEB TR	1	Wheeler Ave	67.2	2.5	245.1	9.1	20.5%
132	NWB L	1	Wheeler Ave	2.9	0.1	15.1	0.82	0.0%
132	SWB T	2	Fannin St	24.7	1.0	103.5	3.91	0.0%
132	NWB T	2	Wheeler Ave	190.9	6.9	248.6	9.2	76.4%
132	SEB R	2	Wheeler Ave	0.1	0.0	0.0	0	0.0%
132	SWB T	3	Fannin St	27.1	1.1	114.0	4.3	0.1%
132	SWB R	4	Fannin St	154.1	5.7	345.6	12.57	15.4%
133	NWB T	0	Wheeler Ave	1.9	0.0	6.7	0.11	0.0%
133	SEB T	0	Wheeler Ave	13.5	0.2	76.3	1.22	0.1%
133	NEB LT	0	San Jacinto St	528.8	18.6	737.1	26.12	0.0%
133	NWB TR	1	Wheeler Ave	185.0	6.9	249.3	9.4	0.0%
133	SEB LT	1	Wheeler Ave	50.0	2.0	215.0	8.02	10.3%
133	NEB T	1	San Jacinto St	23.9	1.0	111.3	4.22	0.0%
133	NEB T	2	San Jacinto St	18.9	0.8	93.6	3.61	0.0%
133	NEB T	3	San Jacinto St	18.7	0.8	91.9	3.62	0.0%

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133	NEB R	4	San Jacinto St	0.7	0.0	2.7	0.21	0.0%
134	NWB T	0	Wheeler Ave	0.7	0.0	6.1	0.1	0.0%
134	SWB LTR	0	LaBranch St	118.4	4.3	366.0	12.84	11.6%
134	NEB LTR	0	LaBranch St	296.3	10.9	506.6	18.9	49.5%
134	SEB T	0	Wheeler Ave	0.2	0.0	0.0	0	0.0%
134	NWB TR	1	Wheeler Ave	203.0	7.1	401.4	12.9	0.8%
134	SEB TR	1	Wheeler Ave	12.5	0.5	93.3	3.55	0.0%
135	SEB T	0	Wheeler Ave	5.3	0.1	38.2	0.91	0.0%
135	NB L	0	Almeda Rd	339.5	12.6	770.1	28.1	36.8%
135	SB L	0	Almeda Rd	9.4	0.5	38.2	1.72	0.0%
135	NWB T	0	Wheeler Ave	7.0	0.1	48.8	0.8	0.0%
135	NB T	1	Almeda Rd	0.8	0.0	1.9	0.1	0.0%
135	SEB L	1	Wheeler Ave	2.7	0.2	17.2	1	0.0%
135	NWB L	1	Wheeler Ave	4.0	0.2	29.6	1.5	0.0%
135	SB T	1	Almeda Rd	111.1	3.9	330.8	11.42	0.0%
135	SEB TR	2	Wheeler Ave	96.9	3.6	352.6	12.55	0.0%
135	NB TR	2	Almeda Rd	4.1	0.2	28.8	1.5	0.0%
135	NWB TR	2	Wheeler Ave	371.4	13.4	634.3	22.6	0.0%
135	SB TR	2	Almeda Rd	173.9	6.3	403.5	13.5	0.6%
136	SWB LT	0	Emancipation Ave	4.9	0.3	27.5	1.32	0.0%
136	SEB T	0	Wheeler Ave	7.7	0.1	60.9	1	0.0%
136	NEB LT	0	Emancipation Ave	6.4	0.3	35.5	1.51	0.0%
136	NWB T	0	Wheeler Ave	4.4	0.1	36.2	0.61	0.0%
136	SWB TR	1	Emancipation Ave	7.7	0.4	31.8	1.5	0.0%
136	SEB LTR	1	Wheeler Ave	26.7	1.1	148.8	5.55	0.0%
136	NEB TR	1	Emancipation Ave	8.0	0.4	49.4	2.22	0.0%
136	NWB LTR	1	Wheeler Ave	131.4	4.9	473.8	16.81	0.0%
141	SEB L	0	Alabama St	4.6	0.3	25.3	1.3	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
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141	NWB L	0	Alabama St	1.5	0.1	10.1	0.71	0.0%
141	NEB T	0	Ennis St	59.6	0.9	138.2	2	0.0%
141	SWB T	0	Ennis St	18.3	0.3	69.8	1.1	0.0%
141	SEB T	1	Alabama St	25.1	1.1	98.5	4	0.0%
141	NWB T	1	Alabama St	10.1	0.5	48.1	2.11	0.0%
141	NEB LTR	1	Ennis St	7.1	0.3	49.2	1.8	0.0%
141	SWB LTR	1	Ennis St	6.2	0.2	41.0	1.23	0.0%
141	SEB TR	2	Alabama St	38.1	1.4	128.9	4.44	0.0%
141	NWB TR	2	Alabama St	10.3	0.5	51.3	2.12	0.0%
143	NWB L	0	Scott St	30.9	1.1	134.6	3.82	0.0%
143	SEB L	0	Scott St	11.1	0.5	54.9	2.32	0.0%
143	WB T	0	Elgin St	3.8	0.1	26.8	0.44	0.0%
143	EB T	0	Elgin St	4.7	0.1	48.6	0.8	0.0%
143	NWB T	1	Scott St	25.1	1.0	122.2	4.63	0.0%
143	SEB T	1	Scott St	59.6	2.4	230.1	8.64	0.0%
143	WB L	1	Elgin St	98.0	3.5	335.3	11.34	0.0%
143	EB L	1	Elgin St	12.4	0.6	65.5	2.31	0.0%
143	NWB TR	2	Scott St	27.6	1.0	140.7	4.84	0.0%
143	SEB TR	2	Scott St	59.5	2.3	225.1	8.51	0.0%
143	WB T	2	Elgin St	24.6	0.9	112.2	4.23	0.0%
143	EB TR	2	Elgin St	82.5	3.1	257.4	9.41	0.0%
143	WB TR	3	Elgin St	26.7	1.0	127.7	4.53	0.0%
144	SB L	0	Cullen Blvd	20.9	0.9	88.3	3.33	0.0%
144	EB T	0	Elgin St	2.7	0.0	24.3	0.4	0.0%
144	NEB L	0	Cullen Blvd	8.7	0.4	46.0	2	0.0%
144	WB T	0	Elgin St	4.7	0.1	43.2	0.71	0.0%
144	SB T	1	Cullen Blvd	30.8	1.2	137.7	4.64	0.0%
144	EB L	1	Elgin St	31.7	1.2	128.5	4.15	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
144	NEB T	1	Cullen Blvd	9.3	0.4	55.6	1.92	0.0%
144	WB L	1	Elgin St	30.1	1.1	135.3	4.27	0.0%
144	SB TR	2	Cullen Blvd	36.5	1.3	156.0	4.74	0.0%
144	EB T	2	Elgin St	16.1	0.6	84.6	3.01	0.0%
144	NEB TR	2	Cullen Blvd	14.0	0.5	83.9	2.74	0.0%
144	WB T	2	Elgin St	24.2	1.0	103.3	3.9	0.0%
144	EB TR	3	Elgin St	16.9	0.6	91.5	3.32	0.0%
144	WB TR	3	Elgin St	30.7	1.2	123.7	4.22	0.0%
145	WB T	0	Elgin St	1.9	0.0	6.1	0.1	0.0%
145	SB L	0	UH Entrance 17	2.1	0.1	15.4	0.9	0.0%
145	EB T	0	Elgin St	2.3	0.0	0.6	0.01	0.0%
145	NB L	0	UH Entrance 18	5.9	0.3	32.7	1.62	0.0%
145	WB L	1	Elgin St	47.3	1.9	162.8	6.14	0.0%
145	SB TR	1	UH Entrance 17	11.3	0.5	51.0	2.12	0.9%
145	EB L	1	Elgin St	12.4	0.6	56.5	2.32	0.0%
145	NB TR	1	UH Entrance 18	13.4	0.6	68.3	2.91	0.0%
145	WB T	2	Elgin St	17.1	0.6	117.4	4.22	0.4%
145	EB T	2	Elgin St	6.0	0.2	41.4	1.51	0.0%
145	WB TR	3	Elgin St	13.2	0.5	100.7	3.65	0.0%
145	EB TR	3	Elgin St	8.7	0.3	63.3	2.24	0.0%
146	SWB L	0	Elgin St	13.5	0.6	74.2	3.02	0.0%
146	SB LT	0	Spur 5 SBFR	29.6	1.3	107.9	4.24	0.0%
146	EB T	0	Elgin St	6.3	0.1	60.8	1	0.0%
146	SWB L	1	Elgin St	12.8	0.6	74.1	3.02	0.0%
146	SB TR	1	Spur 5 SBFR	29.1	1.3	113.8	4.43	0.0%
146	EB T	1	Elgin St	6.9	0.3	47.2	1.42	0.0%
146	SWB T	2	Elgin St	1.3	0.0	0.3	0.02	0.0%
146	EB T	2	Elgin St	11.7	0.4	69.8	2.41	0.3%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
146	SWB T	3	Elgin St	38.3	1.4	171.3	6.01	0.3%
146	EB R	3	Elgin St	1.8	0.1	6.6	0.43	0.0%
147	NEB L	0	Elgin St	0.2	0.0	0.0	0	0.0%
147	SWB T	0	Lockwood Dr	25.8	1.0	130.4	4.63	0.0%
147	NB LT	0	Spur 5 NBFR	6.5	0.3	34.2	1.71	0.0%
147	NEB T	1	Elgin St	0.8	0.0	1.5	0.1	0.0%
147	SWB TR	1	Lockwood Dr	51.3	1.9	208.8	6.76	0.1%
147	NB TR	1	Spur 5 NBFR	6.9	0.3	39.9	1.72	0.0%
147	NEB T	2	Elgin St	9.1	0.4	59.6	2.22	0.0%
148	NEB T	0	Lockwood Dr	0.1	0.0	0.0	0	0.0%
148	NWB L	0	I-45 NBFR	33.1	1.4	135.4	5.3	0.0%
148	SWB T	0	Lockwood Dr	0.3	0.0	0.0	0	0.0%
148	SWB TR	1	Lockwood Dr	7.6	0.3	58.8	2.3	0.1%
148	NEB T	1	Lockwood Dr	16.1	0.6	104.9	3.32	0.1%
148	NWB LT	1	I-45 NBFR	43.2	1.7	171.9	6.31	0.0%
148	NWB T	2	I-45 NBFR	54.4	2.1	201.9	7.37	0.0%
148	NWB TR	3	I-45 NBFR	115.3	4.3	390.1	14.42	0.8%
149	SWB L	0	Ernestine St	2.6	0.0	12.5	0.2	0.0%
149	EB T	0	Leeland St	11.5	0.6	49.4	2.02	0.0%
149	WB L	0	Leeland St	19.4	0.9	84.3	3.51	0.0%
149	NB L	0	Ernestine St	61.7	2.5	192.8	7.14	0.0%
149	SWB TR	1	Ernestine St	75.5	3.0	152.5	5.71	0.0%
149	EB TR	1	Leeland St	14.5	0.7	66.3	2.81	0.0%
149	WB T	1	Leeland St	14.2	0.6	71.4	2.91	0.0%
149	NB R	1	Ernestine St	0.7	0.0	0.0	0	0.0%
149	WB T	2	Leeland St	12.6	0.6	66.3	2.82	0.0%
150	EB L	0	Leeland St	23.4	0.7	100.8	2.62	0.0%
150	NB T	0	Lockwood Dr	1.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
150	SB T	0	Lockwood Dr	3.4	0.1	20.6	0.34	0.0%
150	WB L	0	Telephone Rd	24.4	1.1	85.4	3.41	0.0%
150	EB T	1	Leeland St	23.6	1.0	92.5	3.63	0.0%
150	WB T	1	Telephone Rd	17.0	0.8	66.4	2.72	0.0%
150	SB L	1	Lockwood Dr	17.8	0.8	86.0	3.42	0.0%
150	NB L	1	Lockwood Dr	35.8	1.4	148.9	5.77	0.0%
150	NB TR	2	Lockwood Dr	157.0	5.5	750.5	25.9	0.0%
150	EB TR	2	Leeland St	29.7	1.1	115.3	3.92	0.0%
150	WB TR	2	Telephone Rd	29.5	1.3	110.6	4.31	0.0%
150	SB TR	2	Lockwood Dr	155.1	5.5	513.3	17.74	0.3%
151	NB T	0	Lockwood Dr	1.4	0.0	0.6	0.01	0.0%
151	SB T	0	Lockwood Dr	1.2	0.0	0.0	0	0.0%
151	EB L	0	Polk St	23.3	1.0	89.2	3.42	0.0%
151	WB L	0	Polk St	37.9	1.5	135.6	4.82	0.0%
151	SB L	1	Lockwood Dr	67.9	2.7	168.8	6.33	0.0%
151	EB T	1	Polk St	31.8	1.4	113.9	4.21	0.0%
151	WB T	1	Polk St	24.8	1.1	94.9	3.61	0.0%
151	NB L	1	Lockwood Dr	35.3	1.5	121.3	4.91	0.0%
151	EB TR	2	Polk St	41.1	1.7	139.3	4.93	0.0%
151	WB TR	2	Polk St	39.2	1.6	138.3	5.22	0.0%
151	SB TR	2	Lockwood Dr	36.3	1.3	167.0	6.01	0.0%
151	NB TR	2	Lockwood Dr	44.2	1.6	177.0	6.41	0.0%
152	SB L	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	EB LTR	0	McKinney St	7.6	0.3	42.6	1.52	0.0%
152	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	WB LTR	0	McKinney St	2.0	0.1	17.0	1	0.0%
152	SWB T	0	BRT Alignment	0.0	0.0	0.0	0	0.0%
152	SB TR	1	Lockwood Dr	11.7	0.4	81.3	3.02	3.3%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
152	NB L	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	NB TR	2	Lockwood Dr	0.1	0.0	0.0	0	0.0%
153	SB L	0	Lockwood Dr	27.3	1.2	104.6	4.03	0.1%
153	SEB L	0	Harrisburg Blvd	6.5	0.3	34.2	1.71	0.0%
153	NEB L	0	Lockwood Dr	21.8	1.0	87.5	3.61	0.0%
153	NWB L	0	Harrisburg Blvd	35.6	1.6	119.0	4.53	0.0%
153	SB TR	1	Lockwood Dr	225.8	7.7	788.7	26.53	5.5%
153	SEB T	1	Harrisburg Blvd	18.2	0.8	74.4	2.9	0.0%
153	NEB TR	1	Lockwood Dr	37.2	1.4	118.8	4.6	0.0%
153	NWB T	1	Harrisburg Blvd	28.7	1.2	107.0	4.22	0.0%
153	SEB TR	2	Harrisburg Blvd	20.5	0.9	83.9	3.1	0.0%
153	NWB TR	2	Harrisburg Blvd	31.7	1.4	116.0	4.51	0.0%
154	SWB T	0	Lockwood Dr	6.4	0.1	60.8	1	0.0%
154	NEB T	0	Lockwood Dr	3.5	0.1	36.8	0.61	0.0%
154	WB L	0	Canal St	19.3	0.9	72.5	2.81	0.0%
154	EB LT	0	Canal St	30.7	1.3	103.0	3.93	0.0%
154	WB TR	1	Canal St	51.4	2.1	174.9	6.41	0.0%
154	SWB L	1	Lockwood Dr	62.0	2.4	209.9	7.45	0.0%
154	NEB L	1	Lockwood Dr	84.3	3.2	287.3	10.42	0.0%
154	EB TR	1	Canal St	49.7	2.0	156.9	5.82	0.0%
154	NEB TR	2	Lockwood Dr	34.6	1.2	208.6	6.79	0.0%
154	SWB TR	2	Lockwood Dr	149.1	4.9	452.4	15.1	0.0%
155	EB L	0	Navigation Blvd	35.7	1.4	126.4	4.23	0.0%
155	NEB T	0	Lockwood Dr	1.4	0.0	0.6	0.01	0.0%
155	WB L	0	Navigation Blvd	35.9	1.4	132.1	4.82	0.0%
155	SWB T	0	Lockwood Dr	0.6	0.0	0.0	0	0.0%
155	EB T	1	Navigation Blvd	35.0	1.4	128.2	4.63	0.0%
155	NEB L	1	Lockwood Dr	28.8	1.1	112.2	3.72	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
155	WB T	1	Navigation Blvd	81.9	3.0	255.1	8.76	0.0%
155	SWB L	1	Lockwood Dr	59.0	2.3	178.5	6.61	0.0%
155	EB TR	2	Navigation Blvd	44.0	1.7	145.1	5.12	0.0%
155	NEB TR	2	Lockwood Dr	58.1	2.1	221.5	7.63	0.0%
155	WB TR	2	Navigation Blvd	95.3	3.5	262.9	9.04	0.0%
155	SWB T	2	Lockwood Dr	81.6	2.9	327.3	11.25	0.0%
155	SWB R	3	Lockwood Dr	1.6	0.1	11.4	0.72	0.0%
156	SWB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	NEB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	WB R	0	Armour Dr	2.3	0.1	16.4	1	1.6%
156	SWB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	NEB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	NEB T	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
157	EB L	0	Clinton Dr	3.9	0.2	18.5	1	0.0%
157	NEB L	0	Lockwood Dr	10.3	0.5	54.0	2.1	0.0%
157	WB L	0	Clinton Dr	31.4	1.2	116.6	3.91	0.0%
157	SB L	0	Lockwood Dr	46.7	1.8	196.9	6.94	0.0%
157	EB T	1	Clinton Dr	12.3	0.6	53.4	2.21	0.0%
157	NEB T	1	Lockwood Dr	25.8	1.0	122.1	4.35	0.0%
157	WB T	1	Clinton Dr	10.9	0.5	49.4	1.91	0.0%
157	SB T	1	Lockwood Dr	16.1	0.6	95.3	3.67	0.0%
157	SB TR	2	Lockwood Dr	20.1	0.8	128.3	4.45	0.0%
157	EB TR	2	Clinton Dr	16.7	0.7	74.9	2.81	0.0%
157	WB T	2	Clinton Dr	16.0	0.7	63.1	2.51	0.0%
157	NEB TR	2	Lockwood Dr	28.1	1.0	133.2	4.51	0.0%
157	WB R	3	Clinton Dr	4.2	0.1	27.6	1	0.0%
158	SB T	0	Lockwood Dr (SB)	10.4	0.2	60.9	1	0.0%
158	EB T	0	Market St	14.8	0.7	60.2	2.4	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
158	WB LT	0	Market St	7.9	0.4	43.5	2	12.7%
158	SB LT	1	Lockwood Dr (SB)	80.9	3.0	267.7	9.73	2.6%
158	EB TR	1	Market St	8.7	0.4	46.7	1.71	0.0%
158	WB T	1	Market St	1.0	0.0	4.5	0.32	1.1%
158	SB TR	2	Lockwood Dr (SB)	88.0	3.3	304.2	11.11	5.7%
159	EB LT	0	Market St	0.8	0.1	0.6	0.1	1.6%
159	WB T	0	Market St	47.6	2.0	157.8	6.03	0.0%
159	NB T	0	Lockwood Dr	5.7	0.1	60.8	1	0.0%
159	EB T	1	Market St	0.1	0.0	0.0	0	0.2%
159	WB TR	1	Market St	17.5	0.8	75.9	3.11	0.0%
159	NB LT	1	Lockwood Dr	25.5	0.9	84.7	3	0.0%
159	NB TR	2	Lockwood Dr	24.9	1.0	84.0	3.21	0.0%
160	SB T	0	Lockwood Dr (SB)	7.9	0.1	60.8	1	0.0%
160	EB T	0	I-10 EBFR	63.9	2.3	205.8	6.81	0.0%
160	SB LT	1	Lockwood Dr (SB)	3.0	0.1	19.7	1.01	0.0%
160	EB T	1	I-10 EBFR	15.7	0.7	63.8	2.53	0.0%
160	SB T	2	Lockwood Dr (SB)	4.0	0.2	23.1	1.14	0.2%
160	EB TR	2	I-10 EBFR	10.8	0.5	53.5	2.22	0.0%
161	NB T	0	Lockwood Dr (NB)	0.0	0.0	0.0	0	0.0%
161	EB L	0	I-10 EBFR	1.1	0.1	5.2	0.33	0.8%
161	NB T	1	Lockwood Dr (NB)	73.3	2.6	256.1	8.35	1.5%
161	EB LT	1	I-10 EBFR	5.8	0.3	46.4	2.01	8.2%
161	NB TR	2	Lockwood Dr (NB)	74.1	2.8	274.6	9.77	3.0%
161	EB T	2	I-10 EBFR	5.8	0.3	44.2	1.91	8.5%
162	SB T	0	Lockwood Dr (SB)	5.7	0.1	60.8	1	0.0%
162	WB L	0	I-10 WBFR	2.6	0.1	16.9	1	3.3%
162	SB T	1	Lockwood Dr (SB)	61.3	2.4	204.5	7.64	0.0%
162	WB LT	1	I-10 WBFR	9.7	0.4	51.3	2	17.5%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
162	SB TR	2	Lockwood Dr (SB)	24.4	1.0	104.6	4.13	0.0%
162	WB T	2	I-10 WBFR	8.3	0.3	49.9	2	14.6%
163	NB T	0	Lockwood Dr (NB)	8.1	0.1	54.7	0.9	0.0%
163	WB T	0	I-10 WBFR	41.9	1.7	136.6	5.03	0.0%
163	NB LT	1	Lockwood Dr (NB)	29.7	1.1	134.1	4.62	1.2%
163	WB T	1	I-10 WBFR	51.9	1.9	148.9	5.12	0.0%
163	NB T	2	Lockwood Dr (NB)	3.4	0.2	19.0	1	0.0%
163	WB TR	2	I-10 WBFR	32.3	1.2	138.2	4.51	0.0%
165	WB L	0	Lyons Ave	0.5	0.0	1.1	0.11	0.0%
165	SB T	0	Lockwood Dr	12.3	0.2	61.9	1.01	0.0%
165	EB LTR	0	Lyons Ave	70.3	2.8	275.3	10.33	0.0%
165	NB T	0	Lockwood Dr (NB)	8.0	0.1	60.8	1	0.0%
165	WB TR	1	Lyons Ave	29.7	1.3	125.5	4.73	0.0%
165	SB LT	1	Lockwood Dr	12.2	0.5	74.5	3.03	0.0%
165	NB LT	1	Lockwood Dr (NB)	19.7	0.9	111.3	4.05	0.0%
165	NB TR	2	Lockwood Dr (NB)	22.5	0.9	119.8	4.52	0.0%
165	SB TR	2	Lockwood Dr	15.4	0.7	93.3	3.73	0.0%
166	WB R	0	Mulvey St	0.2	0.0	0.0	0	0.0%
166	SB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	EB R	0	Mulvey St	0.1	0.0	0.0	0	0.0%
166	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	SB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	NB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	NB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	SB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
167	WB L	0	Collingsworth St	10.1	0.5	49.1	2.21	0.0%
167	SEB T	0	Lockwood Dr	1.6	0.0	0.6	0.01	0.0%
167	EB L	0	Collingsworth St	4.9	0.3	22.0	1.1	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
167	NB T	0	Lockwood Dr	0.7	0.0	0.6	0.01	0.0%
167	WB T	1	Collingsworth St	3.6	0.2	19.6	1.1	0.0%
167	SEB L	1	Lockwood Dr	0.9	0.0	4.8	0.32	0.0%
167	EB T	1	Collingsworth St	2.2	0.1	15.6	0.91	0.0%
167	NB L	1	Lockwood Dr	52.8	2.2	163.4	6.14	0.0%
167	WB TR	2	Collingsworth St	5.7	0.3	28.6	1.32	0.0%
167	SEB TR	2	Lockwood Dr	22.7	0.9	128.1	4.94	0.0%
167	EB TR	2	Collingsworth St	7.3	0.4	42.6	1.91	0.0%
167	NB TR	2	Lockwood Dr	12.9	0.5	76.0	3.02	0.0%
168	WB LTR	0	Crane St	13.0	0.6	57.2	2.6	0.0%
168	SB T	0	Lockwood Dr	0.9	0.0	0.0	0	0.0%
168	EB LTR	0	Crane St	19.7	0.9	84.3	3.41	0.0%
168	NB T	0	Lockwood Dr	0.3	0.0	0.0	0	0.0%
168	SB L	1	Lockwood Dr	1.1	0.1	8.8	0.53	0.0%
168	NB L	1	Lockwood Dr	3.9	0.2	20.8	1.11	0.0%
168	SB TR	2	Lockwood Dr	12.0	0.5	88.2	3.56	0.0%
168	NB TR	2	Lockwood Dr	6.6	0.3	43.1	1.86	0.0%
169	WB L	0	Cavalcade St	16.9	0.8	76.3	3.2	0.0%
169	SB T	0	Lockwood Dr	2.6	0.0	7.8	0.13	0.0%
169	EB L	0	Cavalcade St	11.4	0.6	58.0	2.5	0.0%
169	NB T	0	Lockwood Dr	2.0	0.0	6.1	0.1	0.0%
169	WB T	1	Cavalcade St	15.8	0.7	67.0	2.81	0.0%
169	SB L	1	Lockwood Dr	10.5	0.5	57.8	2.52	0.0%
169	EB T	1	Cavalcade St	7.1	0.4	37.9	1.7	0.0%
169	NB L	1	Lockwood Dr	7.1	0.3	39.5	1.42	0.0%
169	WB TR	2	Cavalcade St	19.9	0.9	87.0	3.5	0.0%
169	SB TR	2	Lockwood Dr	30.2	1.2	165.7	6.33	0.0%
169	EB TR	2	Cavalcade St	11.3	0.5	57.7	2.4	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
169	NB TR	2	Lockwood Dr	49.4	1.9	194.6	7.41	0.0%
170	WB LTR	0	Rand St	13.8	0.6	64.4	2.7	0.0%
170	SB T	0	Lockwood Dr	1.3	0.0	0.0	0	0.0%
170	EB LTR	0	Rand St	18.0	0.8	67.9	2.72	0.0%
170	NB T	0	Lockwood Dr	0.8	0.0	0.0	0	0.0%
170	SB L	1	Lockwood Dr	13.5	0.6	66.1	2.51	0.0%
170	NB L	1	Lockwood Dr	1.5	0.1	10.1	0.6	0.0%
170	SB TR	2	Lockwood Dr	24.3	0.9	171.1	6.47	0.0%
170	NB TR	2	Lockwood Dr	14.7	0.6	105.3	4.22	0.0%
171	SB T	0	Lockwood Dr	9.3	0.2	60.8	1	0.0%
171	EB L	0	I-610 EBFR	55.9	2.2	174.3	6.45	0.0%
171	NB T	0	Lockwood Dr	4.3	0.1	37.7	0.62	0.0%
171	NB R	0	Lockwood Dr	0.3	0.0	0.0	0	0.0%
171	SB LT	1	Lockwood Dr	13.1	0.6	85.2	3.41	0.0%
171	EB LT	1	I-610 EBFR	55.8	2.2	180.4	6.71	0.0%
171	NB T	1	Lockwood Dr	25.4	1.1	100.6	3.94	0.0%
171	SB T	2	Lockwood Dr	11.6	0.5	81.8	3.32	0.0%
171	NB T	2	Lockwood Dr	45.8	1.9	190.7	7.36	0.0%
171	EB TR	2	I-610 EBFR	19.7	0.8	101.9	3.66	0.0%
171	NB T	3	Lockwood Dr	24.0	1.1	96.9	3.92	0.0%
172	NB T	0	Lockwood Dr	9.9	0.2	68.4	1.1	0.0%
172	WB L	0	I-610 WBFR	14.9	0.7	67.5	2.8	0.0%
172	SB T	0	Lockwood Dr	5.6	0.1	55.3	0.91	0.0%
172	WB R	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
172	NB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
172	WB LT	1	I-610 WBFR	46.6	1.9	144.5	5.34	0.0%
172	SB T	1	Lockwood Dr	41.1	1.7	142.4	5.45	0.0%
172	SB T	2	Lockwood Dr	30.3	1.3	130.2	5.13	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
172	NB LT	2	Lockwood Dr	6.0	0.3	30.5	1.31	0.0%
172	WB TR	2	I-610 WBFR	57.4	2.2	198.6	7.03	0.0%
172	NB T	3	Lockwood Dr	5.5	0.3	26.7	1.32	0.0%
173	WB L	0	Kelley St	14.4	0.7	62.7	2.71	0.0%
173	SB T	0	Lockwood Dr	4.6	0.1	47.9	0.8	0.0%
173	EB L	0	Kelley St	29.1	1.3	106.8	4.22	0.0%
173	NB T	0	Lockwood Dr	2.3	0.0	6.1	0.1	0.0%
173	WB T	1	Kelley St	7.0	0.4	35.5	1.72	0.0%
173	SB L	1	Lockwood Dr	16.7	0.7	86.1	3.21	0.0%
173	EB T	1	Kelley St	9.2	0.4	48.0	1.72	0.0%
173	NB L	1	Lockwood Dr	19.2	0.7	90.4	3.1	0.0%
173	WB TR	2	Kelley St	9.3	0.5	51.3	2.2	0.0%
173	SB TR	2	Lockwood Dr	107.3	4.1	405.1	14.61	0.0%
173	EB TR	2	Kelley St	15.5	0.7	75.0	2.91	0.0%
173	NB T	2	Lockwood Dr	58.2	2.3	230.5	8.73	0.0%
173	NB R	3	Lockwood Dr	24.7	1.0	118.9	4.12	0.0%
174	NB L	0	Lockwood Dr	0.1	0.0	0.0	0	0.0%
174	SWB LT	0	Shreveport Blvd	30.2	1.3	109.2	4.31	5.0%
174	SB L	0	Lockwood Dr	0.7	0.1	1.8	0.81	0.0%
174	NEB LT	0	Shreveport Blvd	3.9	0.2	18.0	1.01	0.0%
174	NEB TR	1	Shreveport Blvd	1.8	0.1	16.3	1	0.0%
174	NB TR	1	Lockwood Dr	1.9	0.1	4.0	0.24	0.0%
174	SWB TR	1	Shreveport Blvd	1.8	0.1	14.4	0.91	0.0%
174	SB TR	1	Lockwood Dr	5.4	0.2	33.3	1.63	0.0%
175	NB L	0	Lockwood Dr	0.2	0.0	0.0	0.32	0.0%
175	WB LTR	0	Driveway	0.5	0.0	0.0	0	0.0%
175	SB LTR	0	Lockwood Dr	5.7	0.2	34.8	1.63	0.0%
175	EB L	0	Bennington St	2.3	0.1	16.7	1	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
175	NB TR	1	Lockwood Dr	0.5	0.0	0.0	0	0.0%
175	EB R	1	Bennington St	0.5	0.0	0.0	0	0.0%
176	WB L	0	Crosstimbers St	21.2	1.0	79.2	3.4	0.0%
176	SB T	0	Lockwood Dr	5.6	0.1	60.8	1	0.0%
176	EB L	0	Crosstimbers St	9.0	0.5	39.6	1.8	0.0%
176	NB T	0	Lockwood Dr	2.7	0.0	12.8	0.21	0.0%
176	WB T	1	Crosstimbers St	14.0	0.6	64.9	2.23	0.0%
176	SB L	1	Lockwood Dr	7.0	0.3	37.2	1.71	0.0%
176	EB T	1	Crosstimbers St	10.4	0.4	51.8	1.9	0.0%
176	NB L	1	Lockwood Dr	8.9	0.4	46.9	2	0.0%
176	WB TR	2	Crosstimbers St	18.6	0.7	83.9	3.02	0.0%
176	SB TR	2	Lockwood Dr	38.0	1.5	150.9	5.72	0.0%
176	EB TR	2	Crosstimbers St	11.1	0.5	50.4	2	0.0%
176	NB TR	2	Lockwood Dr	20.0	0.9	103.4	4.11	0.0%
177	NB T	0	Lockwood Dr	2.6	0.0	7.3	0.12	0.0%
177	WB L	0	Weaver Rd	10.0	0.5	48.8	2.11	0.0%
177	SB T	0	Lockwood Dr	1.1	0.0	0.6	0.01	0.0%
177	EB L	0	Weaver Rd	1.3	0.1	13.1	0.9	0.0%
177	NB L	1	Lockwood Dr	6.9	0.3	41.7	1.91	0.0%
177	WB TR	1	Weaver Rd	18.9	0.7	93.9	3.2	0.0%
177	SB L	1	Lockwood Dr	5.8	0.3	36.9	1.6	0.0%
177	EB TR	1	Weaver Rd	7.1	0.4	38.4	1.81	0.0%
177	NB TR	2	Lockwood Dr	31.2	1.3	141.1	5.32	0.0%
177	SB TR	2	Lockwood Dr	19.5	0.8	120.1	4.26	0.0%
178	WB L	0	Laura Koppe Rd	9.2	0.5	45.1	2.1	0.0%
178	SB T	0	Lockwood Dr	0.9	0.0	0.0	0	0.0%
178	EB L	0	Laura Koppe Rd	2.7	0.2	17.3	1	0.0%
178	NB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
178	WB TR	1	Laura Koppe Rd	18.1	0.8	84.6	3.3	0.0%
178	SB L	1	Lockwood Dr	6.4	0.3	36.6	1.71	0.0%
178	EB TR	1	Laura Koppe Rd	9.6	0.4	48.9	2.11	0.0%
178	NB L	1	Lockwood Dr	3.1	0.2	17.3	1	0.0%
178	SB TR	2	Lockwood Dr	11.3	0.5	75.0	3.11	0.0%
178	NB TR	2	Lockwood Dr	8.2	0.3	57.0	2.41	0.0%
179	WB L	0	Tidwell Rd	14.7	0.7	59.9	2.52	0.0%
179	SB L	0	Lockwood Dr	0.5	0.0	1.6	0.11	0.0%
179	EB R	0	BRT Alignment	8.8	0.1	60.8	1	0.0%
179	NEB LT	0	Tidwell Rd	39.4	1.5	224.7	8.24	0.0%
179	NB L	0	Lockwood Dr	2.9	0.0	24.3	0.4	0.0%
179	WB T	1	Tidwell Rd	12.2	0.5	75.5	3.02	0.0%
179	SB TR	1	Lockwood Dr	2.3	0.1	17.6	1	0.0%
179	NEB TR	1	Tidwell Rd	43.4	1.6	226.0	8.22	0.0%
179	NB T	1	Lockwood Dr	28.0	1.2	124.3	4.73	0.0%
179	WB TR	2	Tidwell Rd	13.1	0.5	80.9	3.13	0.0%
179	NB R	2	Lockwood Dr	3.0	0.2	18.9	1.01	0.0%
180	WB L	0	Tidwell Rd	3.3	0.2	19.5	1.02	0.0%
180	SB L	0	Hirsch Rd	12.0	0.6	52.9	2.5	0.0%
180	EB L	0	Tidwell Rd	4.5	0.2	23.8	1.21	0.0%
180	NB L	0	Hirsch Rd	28.4	1.2	105.4	4.22	0.0%
180	WB T	1	Tidwell Rd	41.5	1.6	190.5	6.92	0.0%
180	SB T	1	Hirsch Rd	10.5	0.5	47.6	2.1	0.0%
180	EB T	1	Tidwell Rd	24.9	1.0	128.8	4.85	0.0%
180	NB T	1	Hirsch Rd	10.1	0.5	48.0	2.01	0.0%
180	EB TR	2	Tidwell Rd	32.0	1.3	155.9	5.84	0.0%
180	WB TR	2	Tidwell Rd	42.6	1.6	183.4	6.64	0.0%
180	SB TR	2	Hirsch Rd	22.6	1.0	97.7	3.7	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
180	NB TR	2	Hirsch Rd	10.4	0.5	50.5	2.11	0.0%
181	WB T	0	Tidwell Rd	0.8	0.0	0.0	0	0.0%
181	EB T	0	Tidwell Rd	7.3	0.1	60.8	1	0.0%
181	NB L	0	I-69 NBFR	28.1	1.2	101.6	3.82	0.0%
181	WB T	1	Tidwell Rd	24.7	1.0	122.8	4.82	0.0%
181	EB L	1	Tidwell Rd	55.4	2.1	179.0	6.44	1.4%
181	NB LT	1	I-69 NBFR	28.5	1.3	91.9	3.62	0.0%
181	WB T	2	Tidwell Rd	33.0	1.3	148.0	5.43	0.0%
181	EB LT	2	Tidwell Rd	81.9	3.1	224.2	8.03	4.1%
181	NB T	2	I-69 NBFR	14.9	0.7	61.7	2.61	0.0%
181	WB TR	3	Tidwell Rd	42.9	1.5	230.8	8.26	0.0%
181	EB T	3	Tidwell Rd	42.2	1.7	159.6	5.84	0.4%
181	NB TR	3	I-69 NBFR	27.7	1.3	81.0	3.1	0.0%
181	NB R	4	I-69 NBFR	7.9	0.4	45.6	2	0.0%
182	WB T	0	Tidwell Rd	4.2	0.1	37.1	0.61	0.0%
182	SB L	0	I-69 SBFR	31.8	1.4	111.4	4.3	0.0%
182	EB T	0	Tidwell Rd	3.0	0.0	18.9	0.31	0.0%
182	SB R	0	I-69 SBFR	1.7	0.1	5.6	0.33	0.0%
182	EB R	0	Tidwell Rd	0.9	0.0	0.0	0	0.0%
182	WB L	1	Tidwell Rd	52.7	2.1	200.4	7.48	2.9%
182	SB LT	1	I-69 SBFR	41.0	1.7	129.1	4.82	0.0%
182	EB T	1	Tidwell Rd	28.6	1.1	137.9	4.82	0.0%
182	WB LT	2	Tidwell Rd	56.3	2.2	216.5	7.74	2.9%
182	SB T	2	I-69 SBFR	29.7	1.3	102.0	4	0.0%
182	EB T	2	Tidwell Rd	39.7	1.5	169.7	5.84	0.0%
182	WB T	3	Tidwell Rd	17.9	0.7	104.9	4.12	0.1%
182	SB T	3	I-69 SBFR	17.5	0.8	69.4	2.91	0.0%
182	EB T	3	Tidwell Rd	22.1	0.9	110.0	3.94	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
183	WB R	0	Tidwell Rd	2.3	0.0	6.7	0.11	0.0%
183	SB L	0	Jensen Dr	7.4	0.1	60.8	1	0.0%
183	EB L	0	Tidwell Rd	18.2	0.8	75.6	2.91	0.0%
183	NB L	0	Jensen Dr	0.9	0.1	7.0	0.42	0.0%
183	WB L	1	Tidwell Rd	43.7	1.8	154.4	5.53	0.0%
183	SB L	1	Jensen Dr	49.2	2.1	139.8	5.31	0.0%
183	EB TR	1	Tidwell Rd	72.4	2.6	300.0	10.26	0.1%
183	NB T	1	Jensen Dr	25.8	1.2	89.6	3.52	0.0%
183	WB TR	2	Tidwell Rd	74.9	2.7	388.8	13.39	0.0%
183	SB TR	2	Jensen Dr	48.9	2.0	165.8	6.22	0.0%
183	NB TR	2	Jensen Dr	26.6	1.2	93.0	3.61	0.0%
197	SEB L	0	Marron Park Way	44.2	1.9	156.5	5.94	0.8%
197	NEB T	0	Lockwood Dr	2.8	0.0	6.8	0.12	0.0%
197	SWB T	0	Lockwood Dr	1.6	0.0	0.5	0.01	0.0%
197	SWB L	1	Lockwood Dr	20.1	0.8	89.3	3.04	0.0%
197	NEB L	1	Lockwood Dr	72.5	2.9	197.5	7.53	0.0%
197	SEB R	1	Marron Park Way	16.4	0.7	78.0	3.13	0.0%
197	NEB T	2	Lockwood Dr	53.5	1.9	209.7	7.9	0.0%
197	SWB TR	2	Lockwood Dr	250.6	8.5	987.0	33.73	0.0%
242	NWB LTR	0	Blodgett St	184.4	6.9	437.9	16.4	3.4%
242	SB L	0	Almeda Rd	1.9	0.1	11.2	1.01	0.0%
242	NB L	0	Almeda Rd	0.3	0.0	0.0	0	0.0%
242	SEB LTR	0	Blodgett St	12.4	0.6	56.1	2.31	0.0%
242	SB T	1	Almeda Rd	3.6	0.1	16.0	0.9	0.0%
242	NB T	1	Almeda Rd	174.7	6.6	365.1	13.81	45.6%
242	NB TR	2	Almeda Rd	3.0	0.1	11.7	0.61	0.0%
242	SB TR	2	Almeda Rd	2.2	0.1	6.9	0.62	0.0%
244	NWB L	0	Blodgett St	0.6	0.0	0.1	0.01	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
244	SWB LT	0	St Emanuel St	0.4	0.0	0.0	0	0.0%
244	SEB T	0	Blodgett St	1.0	0.1	6.7	0.51	0.0%
244	SWB TR	1	St Emanuel St	109.0	4.1	371.0	13.73	2.8%
244	NWB T	1	Blodgett St	100.2	3.4	293.7	10.2	17.0%
244	SEB TR	1	Blodgett St	0.8	0.0	2.5	0.22	0.0%
244	NWB T	2	Blodgett St	102.4	3.7	308.6	11.3	17.1%
245	SWB LT	0	Ennis St	8.1	0.4	41.2	1.72	0.0%
245	NEB LT	0	Ennis St	1.1	0.1	6.5	0.41	0.0%
245	NWB L	0	Blodgett St	0.0	0.0	0.0	0	0.0%
245	SEB L	0	Blodgett St	8.0	0.2	49.9	1.02	0.0%
245	NEB TR	1	Ennis St	11.8	0.6	54.8	2.22	0.0%
245	SWB TR	1	Ennis St	8.0	0.3	52.8	1.43	0.0%
245	NWB T	1	Blodgett St	2.3	0.1	17.3	1	0.0%
245	SEB T	1	Blodgett St	1.9	0.1	14.8	1	0.0%
245	SEB TR	2	Blodgett St	1.6	0.1	16.1	1	0.0%
245	NWB TR	2	Blodgett St	3.3	0.2	19.8	1.02	0.0%
249	SWB L	0	Ennis St	0.8	0.0	5.3	0.32	0.0%
249	NEB R	0	Ennis St	4.9	0.1	48.7	0.8	0.0%
249	SEB L	0	Elgin St	0.2	0.0	0.0	0	0.0%
249	NWB L	0	Elgin St	1.4	0.0	0.0	0	0.0%
249	SWB TR	1	Ennis St	7.8	0.3	54.5	1.41	0.0%
249	NWB L	1	Elgin St	4.4	0.2	24.2	1.21	0.0%
249	NEB LTR	1	Ennis St	16.9	0.7	97.4	3.73	0.0%
249	SEB TR	1	Elgin St	21.2	0.7	137.5	3.64	0.0%
249	NWB TR	2	Elgin St	29.7	1.1	194.5	6.67	0.0%
251	NWB T	0	Blodgett St	37.0	1.3	193.7	6.61	4.4%
251	NEB LT	0	Hutchins St	90.3	3.5	282.0	10.61	24.5%
251	SEB L	0	Blodgett St	2.0	0.1	11.7	0.5	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
251	NWB TR	1	Blodgett St	55.4	2.0	355.1	12.66	4.7%
251	SEB T	1	Blodgett St	1.2	0.1	8.5	0.54	0.0%
251	NEB TR	1	Hutchins St	13.8	0.6	79.4	3.02	0.8%
251	SEB T	2	Blodgett St	1.2	0.1	9.6	0.71	0.0%
252	NWB LTR	0	Blodgett St	40.6	1.4	241.6	8.35	0.0%
252	SEB LTR	0	Blodgett St	5.3	0.3	38.1	1.73	0.0%
252	SWB LT	0	Emancipation Ave	2.9	0.2	17.8	1.01	0.0%
252	NEB LT	0	Emancipation Ave	9.3	0.4	47.9	1.93	0.0%
252	SWB TR	1	Emancipation Ave	13.3	0.6	69.4	2.91	0.0%
252	NEB TR	1	Emancipation Ave	9.9	0.5	52.6	2.21	0.0%
266	NEB L	0	Ennis St	0.2	0.0	0.0	0	0.0%
266	SEB L	0	Wheeler Ave	3.2	0.1	30.5	0.51	0.0%
266	SWB R	0	Ennis St	7.4	0.1	60.8	1	0.0%
266	NEB T	1	Ennis St	1.9	0.1	6.6	0.41	0.0%
266	SEB LR	1	Wheeler Ave	12.4	0.4	67.8	2.12	0.0%
266	SWB TR	1	Ennis St	1.1	0.0	0.0	0	0.0%
292	NEB T	0	Ennis St	11.7	0.2	59.1	0.92	0.0%
292	SEB LTR	0	Cleburne St	9.1	0.5	44.1	1.92	0.0%
292	NWB LTR	0	Cleburne St	12.0	0.6	58.0	2.6	0.0%
292	SWB T	0	Ennis St	15.3	0.2	75.3	1.2	0.0%
292	NEB LTR	1	Ennis St	5.9	0.2	38.7	1.63	0.0%
292	SWB LTR	1	Ennis St	5.2	0.2	35.7	1.51	0.0%
306	NEB T	0	Ennis St	12.1	0.2	67.5	1.1	0.0%
306	SEB LTR	0	Holman St	2.2	0.1	15.7	0.91	0.0%
306	NWB LTR	0	Holman St	3.0	0.2	19.0	1.01	0.0%
306	SWB T	0	Ennis St	8.6	0.1	60.8	1	0.0%
306	SWB LTR	1	Ennis St	11.6	0.4	69.3	2.14	0.0%
306	NEB LTR	1	Ennis St	7.9	0.3	49.9	1.82	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
309	EB	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
309	WB L	0	Westpark Dr	6.2	0.3	33.9	1.6	0.0%
309	NB LR	0	Royalton St	28.1	1.3	55.7	2.21	0.4%
309	EB T	1	Westpark Dr	54.7	2.0	371.3	13.36	0.0%
309	WB T	1	Westpark Dr	4.9	0.2	25.4	1.15	0.0%
309	EB TR	2	Westpark Dr	48.9	1.8	303.6	11.15	0.0%
309	WB T	2	Westpark Dr	7.2	0.3	42.2	1.64	0.0%
353	EB T	0	Elgin St	0.8	0.0	0.0	0	0.0%
353	WB L	0	Elgin St	16.7	0.7	103.3	4.12	0.0%
353	NB R	0	Garage 5	3.6	0.2	18.3	1.02	3.4%
353	EB T	1	Elgin St	3.8	0.2	22.5	1.01	0.0%
353	WB T	1	Elgin St	0.0	0.0	0.0	0	0.0%
353	EB TR	2	Elgin St	11.8	0.5	67.3	2.52	0.0%
353	WB T	2	Elgin St	0.4	0.0	0.0	0	0.1%
365	SEB T	0	Wheeler Ave	0.4	0.0	0.0	0	0.0%
365	NWB T	0	Wheeler Ave	0.1	0.0	0.0	0	0.0%
365	NWB L	1	Wheeler Ave	2.2	0.1	16.1	0.92	0.0%
365	SEB TR	1	Wheeler Ave	5.6	0.2	28.2	1.31	0.0%
365	NWB T	2	Wheeler Ave	157.7	6.3	356.4	14.4	43.1%
367	SWB LR	0	Hutchins St	21.4	0.9	93.8	3.7	0.0%
367	NWB T	0	Wheeler Ave	5.7	0.1	60.8	1	0.0%
367	SEB T	0	Wheeler Ave	2.1	0.0	0.0	0	0.0%
367	NEB L	0	Hutchins St	270.2	10.0	736.6	27.2	26.7%
367	NWB TR	1	Wheeler Ave	109.2	4.2	266.3	10.2	0.0%
367	SEB L	1	Wheeler Ave	1.1	0.1	8.1	0.51	0.0%
367	NEB TR	1	Hutchins St	35.6	1.4	235.9	8.63	0.2%
367	SEB T	2	Wheeler Ave	13.8	0.6	80.0	3.32	0.0%
399	NB	0	Ernestine St	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
399	SB L	0	Ernestine St	0.0	0.0	0.0	0	0.0%
399	WB L	0	Munger St	3.4	0.2	18.8	1.01	0.0%
399	WB R	1	Munger St	0.9	0.0	1.2	0.11	0.0%
399	NB TR	1	Ernestine St	0.0	0.0	0.0	0	0.0%
399	SB T	1	Ernestine St	0.0	0.0	0.0	0	0.0%
453	SWB T	0	Lockwood Dr	2.0	0.0	1.1	0.02	0.0%
453	SB R	0	Munger St	0.0	0.0	0.0	0	0.0%
453	NEB T	0	Lockwood Dr	1.6	0.0	0.0	0	2.6%
453	EB L	0	Munger St	0.0	0.0	0.0	0	0.0%
453	WB L	0	Munger St	6.2	0.3	32.4	1.4	0.0%
453	WB TR	1	Munger St	32.4	1.3	130.3	4.53	0.1%
453	NEB L	1	Lockwood Dr	4.0	0.1	41.7	0.7	6.2%
453	SWB L	1	Lockwood Dr	9.7	0.5	54.9	2.4	0.0%
453	EB T	1	Munger St	9.4	0.4	49.8	2	0.0%
453	SWB TR	2	Lockwood Dr	67.6	2.4	290.3	9.86	0.0%
453	NEB TR	2	Lockwood Dr	19.7	0.8	61.6	2.6	41.8%
514	WB L	0	Harvey Wilson Dr	7.2	0.4	39.2	1.9	0.0%
514	NB T	0	Lockwood Dr	0.1	0.0	0.0	0	0.0%
514	EB LR	0	Harvey Wilson Dr	1.5	0.0	11.5	0.31	0.0%
514	SWB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%
514	NB L	1	Lockwood Dr	61.8	2.4	199.2	6.93	0.0%
514	WB R	1	Harvey Wilson Dr	1.5	0.1	12.5	0.81	0.0%
514	SWB L	1	Lockwood Dr	25.5	1.1	94.1	3.62	0.0%
514	NB TR	2	Lockwood Dr	8.2	0.3	55.2	2.06	0.0%
514	SWB TR	2	Lockwood Dr	25.5	0.9	153.3	5.54	0.0%
519	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
519	WB R	0	Sonora St	2.3	0.1	13.4	0.9	0.0%
519	SB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
519	EB R	0	Sonora St	3.0	0.1	19.4	1	0.0%
519	NB T	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
519	SB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
519	NB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
519	SB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
534	NB T	0	Lockwood Dr	7.3	0.1	60.8	1	0.0%
534	SB T	0	Lockwood Dr	10.2	0.2	60.8	1	0.0%
534	WB LTR	0	Hershe St	1.7	0.1	14.4	0.91	0.0%
534	EB LTR	0	Hershe St	3.2	0.2	20.4	1.1	0.0%
534	SB LT	1	Lockwood Dr	2.2	0.1	5.5	0.33	0.0%
534	NB LT	1	Lockwood Dr	0.4	0.0	0.0	0	0.0%
534	NB TR	2	Lockwood Dr	0.6	0.0	0.2	0.01	0.0%
534	SB TR	2	Lockwood Dr	2.4	0.1	5.4	0.32	0.0%
567	NB T	0	Lockwood Dr	5.0	0.1	55.1	0.91	0.0%
567	WB LTR	0	Nichols St	0.3	0.0	0.0	0	0.0%
567	SB T	0	Lockwood Dr	9.7	0.2	60.8	1	0.0%
567	EB LTR	0	Nichols St	0.9	0.0	6.2	0.41	0.0%
567	NB LT	1	Lockwood Dr	1.1	0.1	3.2	0.3	0.0%
567	SB LT	1	Lockwood Dr	3.9	0.2	19.6	1.2	0.0%
567	NB TR	2	Lockwood Dr	2.1	0.1	7.2	0.44	0.0%
567	SB TR	2	Lockwood Dr	3.3	0.1	16.0	0.93	0.0%
576	NB T	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
576	WB LTR	0	Sudan St	2.5	0.1	17.4	1	0.0%
576	SB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%
576	EB LTR	0	Sudan St	0.6	0.0	1.6	0.1	0.0%
576	NB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
576	SB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
576	NB TR	2	Lockwood Dr	15.1	0.6	117.9	4.46	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
576	SB TR	2	Lockwood Dr	10.7	0.4	48.1	1.89	0.0%
604	NB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%
604	WB LTR	0	Pardee St	1.4	0.1	11.3	0.81	0.0%
604	SB T	0	Lockwood Dr	1.0	0.0	0.0	0	0.0%
604	EB LTR	0	Pardee St	14.5	0.7	67.5	2.83	0.0%
604	NB L	1	Lockwood Dr	2.4	0.1	15.4	0.9	0.0%
604	SB L	1	Lockwood Dr	0.6	0.0	3.4	0.21	0.0%
604	NB TR	2	Lockwood Dr	24.3	1.0	151.5	5.88	0.0%
604	SB TR	2	Lockwood Dr	13.9	0.5	109.7	3.98	0.0%
623	NWB LTR	0	Lockwood Dr	10.8	0.5	82.1	3.3	0.0%
623	SB T	0	Lockwood Dr	10.3	0.2	60.8	1	0.0%
623	NB T	0	BRT Alignment	2.8	0.0	18.9	0.31	0.0%
623	WB LTR	0	Denmark St	7.0	0.4	42.0	1.91	0.0%
623	EB LTR	0	Denmark St	18.2	0.8	89.9	3.63	0.2%
623	SB LTR	1	Lockwood Dr	14.0	0.6	88.5	3.46	0.0%
641	NB T	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
641	WB LTR	0	Keeland St	2.5	0.1	16.2	0.91	0.0%
641	SB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%
641	EB LTR	0	Keeland St	0.3	0.0	0.0	0	0.0%
641	NB L	1	Lockwood Dr	0.2	0.0	0.2	0.01	0.0%
641	SB L	1	Lockwood Dr	0.2	0.0	0.0	0	0.0%
641	NB TR	2	Lockwood Dr	12.9	0.6	81.4	3.42	0.0%
641	SB TR	2	Lockwood Dr	6.2	0.3	44.4	1.91	0.0%
659	NB T	0	Lockwood Dr	1.1	0.0	0.5	0.01	0.0%
659	WB LTR	0	Firnat St	10.5	0.5	54.4	2.42	0.0%
659	SB T	0	Lockwood Dr	1.3	0.0	0.0	0	0.0%
659	EB LTR	0	Firnat St	3.5	0.2	25.5	1.32	0.0%
659	NB L	1	Lockwood Dr	9.4	0.4	51.5	2.13	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
659	SB L	1	Lockwood Dr	0.7	0.0	3.3	0.21	0.0%
659	NB TR	2	Lockwood Dr	8.8	0.4	59.0	2.52	0.0%
659	SB TR	2	Lockwood Dr	6.9	0.3	46.0	1.84	0.0%
677	WB T	0	BRT Alignment	0.4	0.0	0.0	0	0.0%
677	NWB L	0	Tidwell Rd	2.5	0.1	17.0	1	0.0%
677	SB TR	0	Friendly Rd	229.8	8.5	323.3	12.11	69.2%
677	EB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	NB LTR	0	Friendly Rd	0.0	0.0	0.0	0	0.0%
677	NWB TR	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	EB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	EB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	EB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	SB LTR	0	Edell St	0.0	0.0	0.0	0	0.0%
689	NB LTR	0	Edell St	0.0	0.0	0.0	0	0.0%
689	EB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	EB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
690	EB T	0	Turner Dr	0.0	0.0	0.0	0	0.0%
690	SWB T	0	Tidwell TC 2 Dr	0.0	0.0	0.0	0	0.0%
690	SEB TR	0	Epsom Rd	0.0	0.0	0.0	0	0.0%
690	NB LT	0	Edell St	0.0	0.0	0.0	0	0.0%
690	EB LR	1	Turner Dr	0.0	0.0	0.0	0	0.0%
705	WB L	0	Turner Dr	0.0	0.0	0.0	0	0.0%
705	SWB L	0	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB R	0	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	EB LTR	0	Turner Dr	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 AM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
705	WB LTR	1	Turner Dr	0.0	0.0	0.0	0	0.0%
705	SWB TR	1	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB LT	1	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB TR	2	Jensen Dr	0.0	0.0	0.0	0	0.0%
99553	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB L	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	NB LR	0	Uptown Transit Ctr	0.0	0.0	0.0	0	0.0%
99553	EB TR	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	3	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	WB LT	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	NB LR	0	Alder Dr	0.0	0.0	0.0	0	0.0%
99558	EB TR	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	WB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	NB LR	0	Loop Central Dr	0.0	0.0	0.0	0	0.0%
99561	EB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB L	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	EB TR	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	3	Westpark Dr	0.0	0.0	0.0	0	0.0%

Lane Queue by Intersection – Build 2030 PM

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
101	NEB T	0	BRT Alignment	11.2	0.2	60.8	1	0.0%
101	NB T	0	Fondren Rd	887.8	30.8	1111.0	39.9	78.1%
101	SB T	0	Fondren Rd	4.9	0.2	39.9	1.8	7.1%
101	WB T	0	BRT Alignment	2.1	0.0	18.2	0.3	0.0%
101	EB L	0	EB Westpark Tollway FR	921.9	31.7	1590.2	56.21	30.3%
101	NB T	1	Fondren Rd	89.3	3.4	177.3	6.32	0.0%
101	SB T	1	Fondren Rd	9.4	0.4	64.4	2.71	13.4%
101	EB R	1	EB Westpark Tollway FR	114.6	4.1	483.6	16.66	0.0%
101	NB T	2	Fondren Rd	506.5	18.1	1103.1	39.72	22.1%
101	SB T	2	Fondren Rd	10.4	0.5	64.0	2.7	15.3%
101	NB T	3	Fondren Rd	742.3	26.1	1108.5	40.21	40.4%
102	NB L	0	Fondren Rd	14.1	0.6	75.5	3	18.4%
102	SB L	0	Fondren Rd	1821.2	64.0	2666.8	94.6	41.4%
102	EB L	0	Westpark Dr	31.1	1.3	122.0	4.62	0.0%
102	WB L	0	Westpark Dr	1872.3	64.3	4024.7	138.56	0.0%
102	NB T	1	Fondren Rd	11.4	0.5	57.9	2	14.5%
102	SB T	1	Fondren Rd	146.6	5.3	265.1	9.43	0.0%
102	EB T	1	Westpark Dr	208.2	7.5	613.9	21.6	0.0%
102	WB T	1	Westpark Dr	47.1	1.8	142.8	5.42	0.0%
102	NB T	2	Fondren Rd	15.3	0.7	62.9	2.3	19.8%
102	SB T	2	Fondren Rd	392.5	13.6	1598.4	54	3.1%
102	EB T	2	Westpark Dr	213.8	7.7	613.4	21.66	0.0%
102	WB T	2	Westpark Dr	99.1	3.7	386.7	14.14	0.0%
102	NB TR	3	Fondren Rd	17.6	0.8	67.1	2.9	25.5%
102	SB TR	3	Fondren Rd	733.1	25.2	2313.6	79.52	1.8%
102	EB TR	3	Westpark Dr	248.6	8.7	675.0	23.45	0.0%
102	WB TR	3	Westpark Dr	181.8	6.4	631.1	21.69	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
103	EB L	0	Westpark Dr	43.0	1.7	147.6	5.6	0.0%
103	WB L	0	Westpark Dr	87.5	3.4	233.2	8.44	0.0%
103	SB L	0	Hillcroft Ave	706.3	24.7	961.0	34.82	54.4%
103	NB L	0	Hillcroft Ave	61.8	2.4	78.5	3	0.4%
103	EB T	1	Westpark Dr	145.1	5.3	519.1	18.25	0.0%
103	WB T	1	Westpark Dr	209.6	7.6	545.7	19.65	0.1%
103	SB T	1	Hillcroft Ave	10.6	0.4	56.9	2.5	0.2%
103	NB T	1	Hillcroft Ave	7.9	0.4	45.7	2	0.0%
103	EB T	2	Westpark Dr	144.0	5.2	506.8	17.84	0.0%
103	WB T	2	Westpark Dr	194.5	6.9	510.2	18.61	0.0%
103	SB T	2	Hillcroft Ave	464.7	16.5	931.0	33.04	12.3%
103	NB T	2	Hillcroft Ave	50.2	2.0	78.4	3	0.1%
103	EB TR	3	Westpark Dr	169.2	6.0	550.9	19.94	0.0%
103	WB TR	3	Westpark Dr	222.1	7.8	546.0	19.56	0.3%
103	SB TR	3	Hillcroft Ave	474.7	16.7	939.0	33.41	16.4%
103	NB TR	3	Hillcroft Ave	47.2	2.0	78.6	3	0.0%
104	WB L	0	Westpark Dr	17.8	0.8	73.5	3.01	0.0%
104	EB T	0	Westpark Dr	33.2	1.3	250.0	8.88	0.0%
104	NB L	0	14th St	36.1	1.3	70.9	3	0.0%
104	WB T	1	Westpark Dr	60.7	2.2	350.5	12.84	0.0%
104	EB T	1	Westpark Dr	27.5	1.0	198.2	7.19	0.0%
104	NB R	1	14th St	3.9	0.2	23.8	1.1	0.0%
104	WB T	2	Westpark Dr	80.7	2.8	403.4	14.28	0.0%
104	EB TR	2	Westpark Dr	19.7	0.8	112.4	4.09	0.0%
105	EB T	0	Westpark Dr	41.0	1.6	237.0	8.58	0.0%
105	SWB R	0	I-69 SBFR	21.2	0.8	153.9	5.58	0.0%
105	SWB L	0	I-69 SBFR	38.7	1.6	140.7	5.21	0.0%
105	WB L	0	Westpark Dr	84.9	3.2	223.9	8.4	9.9%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
105	EB T	1	Westpark Dr	67.7	2.5	346.8	12.21	0.0%
105	SWB LT	1	I-69 SBFR	79.8	3.2	226.0	8.43	0.0%
105	WB T	1	Westpark Dr	8.1	0.4	54.2	2.13	0.0%
105	EB T	2	Westpark Dr	40.5	1.6	216.1	8.06	0.0%
105	SWB T	2	I-69 SBFR	76.3	3.3	232.1	8.84	0.0%
105	WB T	2	Westpark Dr	8.8	0.4	55.0	2.34	0.0%
105	SWB T	3	I-69 SBFR	76.3	3.4	231.2	9.13	0.0%
106	EB L	0	Westpark Dr	45.0	1.7	186.1	6.63	3.7%
106	NEB L	0	I-69 NBFR	0.0	0.0	0.0	0	0.0%
106	WB T	0	Westpark Dr	76.7	2.8	339.0	11.82	6.9%
106	WB R	0	Westpark Dr	0.1	0.0	0.0	0	0.0%
106	EB LT	1	Westpark Dr	53.5	2.1	210.2	7.71	5.3%
106	NEB L	1	I-69 NBFR	0.0	0.0	0.0	0	0.0%
106	WB T	1	Westpark Dr	52.5	2.0	275.3	9.74	2.7%
106	EB T	2	Westpark Dr	53.0	2.0	219.1	8.2	6.3%
106	NEB T	2	I-69 NBFR	8.4	0.8	47.8	3	0.0%
106	NEB T	3	I-69 NBFR	3.5	0.6	26.2	2.33	0.0%
106	NEB R	4	I-69 NBFR	3.5	0.5	31.8	2.12	0.0%
107	WB LT	0	Westpark Dr	19.7	0.7	137.1	4.93	0.0%
107	SB LTR	0	Rampart St	8.9	0.4	47.0	2.02	2.6%
107	EB LT	0	Westpark Dr	18.7	0.7	136.2	5.23	0.2%
107	NB LT	0	Rampart St	36.9	1.5	61.6	2.1	0.8%
107	WB TR	1	Westpark Dr	12.0	0.5	85.8	3.44	0.0%
107	EB TR	1	Westpark Dr	27.7	1.0	193.3	7.13	0.6%
107	NB TR	1	Rampart St	4.6	0.2	29.1	1.32	0.0%
108	EB L	0	Westpark Dr	32.3	1.3	138.3	4.97	0.0%
108	SB L	0	Fountain View Dr	99.1	3.7	275.2	9.92	7.8%
108	NB L	0	Renwick Dr	22.0	1.0	53.6	2	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
108	WB L	0	Westpark Dr	86.9	3.3	246.7	8.69	0.0%
108	EB T	1	Westpark Dr	91.7	3.4	359.1	13.15	0.0%
108	SB T	1	Fountain View Dr	83.9	3.1	257.5	9.44	3.4%
108	NB T	1	Renwick Dr	26.2	1.2	52.1	2	0.0%
108	WB T	1	Westpark Dr	54.2	2.1	275.2	10.15	0.0%
108	EB TR	2	Westpark Dr	93.7	3.5	358.1	12.97	0.0%
108	SB TR	2	Fountain View Dr	83.2	3.1	259.4	9.29	3.9%
108	NB TR	2	Renwick Dr	27.2	1.2	56.8	2	0.0%
108	WB TR	2	Westpark Dr	78.5	2.9	361.0	12.66	0.0%
109	WB L	0	Westpark Dr	142.6	5.2	502.6	17.34	1.8%
109	SB L	0	Chimney Rock Rd	74.3	2.9	236.8	8.54	0.3%
109	EB L	0	Westpark Dr	115.0	4.4	382.9	14.06	0.0%
109	NB T	0	Chimney Rock Rd	14.1	0.7	48.1	1.21	0.0%
109	WB T	1	Westpark Dr	233.4	8.4	752.1	26.71	4.2%
109	SB T	1	Chimney Rock Rd	65.6	2.4	282.3	10.24	1.5%
109	EB T	1	Westpark Dr	164.5	6.0	567.0	20.48	0.0%
109	NB TR	1	Chimney Rock Rd	19.0	0.7	93.7	1.9	0.0%
109	WB TR	2	Westpark Dr	311.7	11.0	834.5	29.36	6.6%
109	SB TR	2	Chimney Rock Rd	69.7	2.6	287.2	10.54	1.8%
109	EB TR	2	Westpark Dr	201.4	7.3	606.1	21.47	0.0%
110	SB L	0	S Rice Ave	134.9	5.0	313.8	10.94	10.2%
110	EB L	0	Westpark Dr	281.3	10.1	628.1	22.21	0.0%
110	NB L	0	S Rice Ave	148.0	5.2	1000.2	33.22	2.4%
110	WB L	0	Westpark Dr	261.5	9.3	500.9	18.4	26.9%
110	SB T	1	S Rice Ave	174.0	6.3	351.4	12.9	29.7%
110	EB T	1	Westpark Dr	83.6	3.2	293.3	10.87	0.0%
110	NB T	1	S Rice Ave	34.9	1.4	116.7	3.67	0.3%
110	WB T	1	Westpark Dr	97.6	3.6	333.0	11.89	2.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
110	SB TR	2	S Rice Ave	176.3	6.4	348.1	13.2	31.0%
110	EB TR	2	Westpark Dr	189.4	6.9	603.6	21.14	0.1%
110	NB TR	2	S Rice Ave	54.2	2.0	286.4	9.15	0.3%
110	WB T	2	Westpark Dr	140.0	5.1	449.1	16.03	5.9%
110	SB R	3	S Rice Ave	0.7	0.0	1.5	0.1	0.0%
110	WB TR	3	Westpark Dr	153.4	5.5	477.6	17.21	9.2%
111	NEB LT	0	BRT Alignment	12.4	0.2	60.8	1	0.0%
111	WB T	0	BRT Alignment	0.0	0.0	0.0	0	0.0%
111	EB T	0	Westpark Dr	88.8	3.2	365.0	12.97	0.0%
111	SWB L	0	Westpark Dr	34.4	1.3	164.7	5.93	0.0%
111	SB R	0	Silver Line Alignment	7.6	0.1	36.5	0.6	0.0%
111	SEB LT	0	I-610 SBFR	73.1	2.9	186.1	6.72	0.0%
111	WB R	0	I-610 SBFR	0.0	0.0	0.0	0	0.0%
111	EB T	1	Westpark Dr	128.3	4.6	484.3	16.69	0.0%
111	SWB T	1	Westpark Dr	23.1	0.9	186.6	7.03	0.0%
111	SEB T	1	I-610 SBFR	46.1	1.9	132.8	5.01	0.0%
111	EB TR	2	Westpark Dr	417.3	14.3	1020.6	36.02	0.0%
111	SWB T	2	Westpark Dr	19.0	0.7	147.5	5.65	0.0%
112	EB L	0	Westpark Dr	125.3	4.7	327.7	11.73	3.7%
112	NB L	0	I-610 NBFR	99.4	3.7	285.3	10.23	0.0%
112	WB T	0	Westpark Dr	1.5	0.0	0.0	0	0.0%
112	NEB T	0	BRT Alignment	4.7	0.1	37.8	0.62	6.2%
112	EB T	1	Westpark Dr	10.3	0.5	48.6	2.1	0.0%
112	NB LT	1	I-610 NBFR	110.3	4.1	303.5	10.83	0.0%
112	WB T	1	Westpark Dr	55.5	2.1	253.3	9.15	0.0%
112	EB T	2	Westpark Dr	9.1	0.4	45.4	1.92	0.0%
112	NB TR	2	I-610 NBFR	103.4	3.8	303.7	10.84	0.0%
112	WB TR	2	Westpark Dr	49.5	1.9	225.7	7.94	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
113	WB T	0	Westpark Dr	0.8	0.0	0.0	0	0.0%
113	SB LT	0	Newcastle Dr	59.3	2.4	173.6	6.32	0.0%
113	EB T	0	Westpark Dr	2.0	0.0	6.1	0.1	0.0%
113	NB L	0	Newcastle Dr	76.0	3.0	223.1	8.03	0.0%
113	WB L	1	Westpark Dr	96.1	3.6	327.2	11.35	0.0%
113	SB TR	1	Newcastle Dr	69.6	2.7	215.9	7.92	0.0%
113	EB L	1	Westpark Dr	5.8	0.3	31.9	1.61	0.0%
113	NB T	1	Newcastle Dr	25.0	1.0	107.2	3.93	0.0%
113	WB T	2	Westpark Dr	42.5	1.6	223.2	8.06	0.0%
113	EB T	2	Westpark Dr	15.7	0.6	126.0	4.76	0.0%
113	NB TR	2	Newcastle Dr	51.4	1.9	217.0	7.65	0.0%
113	WB TR	3	Westpark Dr	50.2	1.9	226.1	8.25	0.0%
113	EB TR	3	Westpark Dr	18.4	0.7	160.1	5.69	0.0%
114	EB T	0	Westpark Dr	3.7	0.1	18.8	0.31	0.0%
114	WB T	0	Westpark Dr	4.6	0.1	37.7	0.62	0.0%
114	SB L	0	Weslayan St	5.8	0.3	25.1	1.2	0.0%
114	NB L	0	Weslayan St	142.8	5.2	395.2	14.13	9.9%
114	EB L	1	Westpark Dr	68.1	2.6	220.9	7.75	0.0%
114	WB L	1	Westpark Dr	20.7	0.9	98.1	3.72	0.0%
114	SB T	1	Weslayan St	163.6	5.8	495.9	16.84	6.4%
114	NB T	1	Weslayan St	34.5	1.3	170.9	6.14	0.2%
114	EB T	2	Westpark Dr	78.7	2.9	298.9	10.86	0.0%
114	WB T	2	Westpark Dr	137.0	4.9	484.1	16.63	0.0%
114	SB TR	2	Weslayan St	195.5	7.0	531.4	19.01	14.2%
114	NB TR	2	Weslayan St	75.0	2.8	317.4	11.13	2.4%
114	EB TR	3	Westpark Dr	106.3	3.9	360.5	12.49	0.0%
114	WB TR	3	Westpark Dr	132.4	4.9	461.7	16.28	0.0%
115	WB L	0	Westpark Dr	37.2	1.5	125.8	4.62	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
115	NB L	0	Edloe St	6.3	0.3	34.0	1.42	0.0%
115	EB L	0	Westpark Dr	5.5	0.1	42.6	0.7	0.0%
115	SB R	0	Edloe St	14.7	0.2	67.9	1.1	0.0%
115	NB T	1	Edloe St	34.7	1.4	130.6	4.93	0.0%
115	EB L	1	Westpark Dr	27.0	1.1	115.4	4.05	0.0%
115	SB L	1	Edloe St	38.3	1.6	121.0	4.54	0.5%
115	WB T	1	Westpark Dr	102.7	3.8	329.7	11.44	0.0%
115	NB T	2	Edloe St	71.1	2.7	231.3	8.33	0.0%
115	EB TR	2	Westpark Dr	61.3	2.3	309.2	11.4	0.0%
115	SB TR	2	Edloe St	155.9	5.7	332.7	12.21	34.5%
115	WB TR	2	Westpark Dr	120.3	4.4	369.7	13.14	0.0%
115	NB	3	Edloe St	0.0	0.0	0.0	0	0.0%
115	NB R	4	Edloe St	2.9	0.2	19.4	1	0.0%
116	EB L	0	I-69 Express Lanes	0.0	0.0	0.0	0	0.0%
116	WB LR	0	I-69 Express Lanes	157.7	5.8	380.6	13.63	8.8%
116	NB T	0	Edloe St	1.0	0.0	0.0	0	0.0%
116	SB T	0	Edloe St	1.0	0.0	0.0	0	0.0%
116	EB LR	1	I-69 Express Lanes	0.0	0.0	0.0	0	0.0%
116	NB L	1	Edloe St	20.0	0.9	94.3	3.41	0.0%
116	SB L	1	Edloe St	14.9	0.6	74.9	2.84	0.0%
116	NB TR	2	Edloe St	33.8	1.3	206.3	7.73	1.8%
116	SB T	2	Edloe St	11.1	0.5	72.5	3.1	0.0%
116	SB TR	3	Edloe St	226.8	8.1	946.1	32.49	2.3%
118	SB L	0	Edloe St	45.7	1.8	149.9	5.41	0.0%
118	WB L	0	Richmond Ave	5.8	0.1	42.6	0.7	0.0%
118	EB L	0	Richmond Ave	29.3	1.3	102.4	3.84	0.0%
118	NB R	0	Edloe St	13.3	0.2	69.2	1.11	0.0%
118	EB R	0	Richmond Ave	41.5	1.5	184.6	6.83	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
118	SB T	1	Edloe St	86.3	3.3	284.7	10.24	1.4%
118	WB L	1	Richmond Ave	112.3	4.3	255.1	9.41	0.0%
118	EB T	1	Richmond Ave	125.3	4.6	400.8	14.54	1.2%
118	NB L	1	Edloe St	245.4	8.7	650.4	22.18	0.0%
118	SB TR	2	Edloe St	89.7	3.3	287.5	10.41	1.7%
118	WB T	2	Richmond Ave	74.2	2.8	254.7	9.34	0.0%
118	EB T	2	Richmond Ave	131.7	4.8	396.8	13.85	1.2%
118	NB T	2	Edloe St	63.4	2.4	220.4	8.5	0.0%
118	WB TR	3	Richmond Ave	81.2	3.0	257.7	9.8	0.0%
118	NB TR	3	Edloe St	72.1	2.7	228.6	8.34	0.0%
119	SB L	0	Buffalo Speedway	32.8	1.4	110.1	3.81	0.0%
119	NB L	0	Buffalo Speedway	307.2	10.8	1038.6	35.76	7.7%
119	EB T	0	Richmond Ave	3.8	0.1	30.4	0.5	0.0%
119	WB T	0	Richmond Ave	0.8	0.0	0.0	0	0.0%
119	SB T	1	Buffalo Speedway	62.1	2.4	209.2	7.13	0.0%
119	NB T	1	Buffalo Speedway	129.1	4.7	693.2	24.64	2.1%
119	EB L	1	Richmond Ave	9.5	0.4	59.8	2.31	0.0%
119	WB L	1	Richmond Ave	47.6	1.9	162.1	6.03	0.0%
119	SB TR	2	Buffalo Speedway	70.7	2.7	228.0	8.05	0.0%
119	NB TR	2	Buffalo Speedway	293.7	10.3	1039.7	35.58	5.0%
119	EB T	2	Richmond Ave	110.8	4.0	425.7	15.36	0.0%
119	WB L	2	Richmond Ave	49.0	1.9	171.3	6.32	0.0%
119	EB TR	3	Richmond Ave	142.2	5.1	477.9	16.4	0.0%
119	WB T	3	Richmond Ave	90.3	3.4	306.8	11.55	0.0%
119	WB TR	4	Richmond Ave	92.0	3.4	301.4	11.06	0.0%
120	SB L	0	Eastside St	32.9	1.4	118.0	4.43	0.1%
120	NB L	0	Eastside St	68.1	2.7	280.4	10.56	0.0%
120	WB T	0	Richmond Ave	1.1	0.0	0.6	0.01	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
120	EB T	0	Richmond Ave	0.2	0.0	0.0	0	0.0%
120	SB TR	1	Eastside St	66.8	2.5	261.6	8.87	0.5%
120	NB TR	1	Eastside St	20.9	0.9	98.7	3.92	0.0%
120	WB L	1	Richmond Ave	9.4	0.4	48.0	2.1	0.0%
120	EB L	1	Richmond Ave	56.2	2.2	195.8	6.75	0.0%
120	WB T	2	Richmond Ave	37.1	1.5	150.9	5.63	0.0%
120	EB T	2	Richmond Ave	32.8	1.3	163.3	6.02	0.0%
120	EB TR	3	Richmond Ave	42.5	1.6	189.7	6.92	0.0%
120	WB TR	3	Richmond Ave	43.4	1.7	176.5	6.42	0.0%
121	SB L	0	Kirby Dr	59.3	2.3	198.7	7.12	0.0%
121	WB T	0	Richmond Ave	2.8	0.0	24.9	0.41	0.0%
121	EB T	0	Richmond Ave	3.3	0.1	14.1	0.23	0.0%
121	NB L	0	Kirby Dr	218.2	7.8	577.6	19.84	2.9%
121	SB T	1	Kirby Dr	125.9	4.6	400.3	14.47	0.3%
121	WB L	1	Richmond Ave	17.9	0.8	79.9	3.11	0.0%
121	EB L	1	Richmond Ave	151.7	5.6	275.5	10.1	0.0%
121	NB T	1	Kirby Dr	74.5	2.8	260.0	9.34	0.0%
121	SB T	2	Kirby Dr	138.4	5.1	414.8	14.82	0.3%
121	WB T	2	Richmond Ave	48.0	1.9	163.7	6.21	0.0%
121	EB T	2	Richmond Ave	101.0	3.7	267.2	9.9	0.0%
121	NB T	2	Kirby Dr	179.3	6.5	570.4	20.38	0.8%
121	WB TR	3	Richmond Ave	57.7	2.2	195.9	7.05	0.0%
121	SB TR	3	Kirby Dr	152.6	5.6	436.1	15.63	0.3%
121	NB TR	3	Kirby Dr	185.3	6.7	576.4	20.46	1.0%
121	EB TR	3	Richmond Ave	112.4	4.1	273.9	10.1	0.0%
122	EB T	0	Richmond Ave	5.4	0.1	52.1	0.9	0.0%
122	SB LT	0	Greenbriar Dr	35.0	1.4	129.3	4.92	0.0%
122	NB LTR	0	Greenbriar Dr	52.7	2.0	190.9	6.83	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
122	WB T	0	Richmond Ave	5.0	0.1	53.2	1	0.0%
122	EB L	1	Richmond Ave	66.7	2.6	197.5	7.22	0.0%
122	SB T	1	Greenbriar Dr	32.6	1.3	118.1	4.5	0.0%
122	WB L	1	Richmond Ave	35.5	1.5	125.7	4.63	0.0%
122	EB TR	2	Richmond Ave	60.7	2.2	318.2	11.14	0.0%
122	SB R	2	Greenbriar Dr	3.4	0.2	24.5	1.2	0.0%
122	WB TR	2	Richmond Ave	32.4	1.2	213.9	7.96	0.0%
123	WB T	0	Richmond Ave	4.0	0.1	42.5	0.71	0.0%
123	SB T	0	Shepherd Dr	61.4	2.4	197.3	7.22	0.0%
123	NB T	0	Shepherd Dr	61.5	2.4	199.3	7.3	0.3%
123	EB T	0	Richmond Ave	5.7	0.1	54.5	0.9	0.0%
123	WB L	1	Richmond Ave	42.0	1.7	142.6	5.43	0.0%
123	SB TR	1	Shepherd Dr	66.7	2.6	207.6	7.43	0.0%
123	NB TR	1	Shepherd Dr	66.0	2.6	209.5	7.53	0.8%
123	EB L	1	Richmond Ave	1.5	0.1	9.7	0.62	0.0%
123	WB TR	2	Richmond Ave	55.3	2.1	259.8	9.47	0.0%
123	EB TR	2	Richmond Ave	57.8	2.1	242.2	8.17	0.0%
124	EB T	0	Richmond Ave	0.0	0.0	0.0	0	0.0%
124	SB R	0	Hazard St	6.4	0.3	37.7	1.62	0.0%
124	NB R	0	Hazard St	513.8	17.8	1040.2	37.2	37.6%
124	WB T	0	Richmond Ave	0.0	0.0	0.0	0	0.0%
124	EB TR	1	Richmond Ave	30.6	1.0	231.9	7.61	0.1%
124	WB TR	1	Richmond Ave	0.0	0.0	0.0	0	0.0%
125	NB L	0	Woodhead St	804.1	27.9	1007.0	36.6	76.7%
125	SB L	0	Woodhead St	34.6	1.4	131.1	4.61	0.0%
125	WB T	0	Richmond Ave	0.0	0.0	0.0	0	0.0%
125	EB T	0	Richmond Ave	0.7	0.0	0.0	0	0.0%
125	NB TR	1	Woodhead St	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
125	SB TR	1	Woodhead St	0.0	0.0	0.0	0	0.0%
125	WB L	1	Richmond Ave	14.0	0.6	79.8	2.95	0.0%
125	EB L	1	Richmond Ave	38.4	1.6	147.7	5.72	0.0%
125	WB TR	2	Richmond Ave	21.9	0.9	132.8	5.06	0.1%
125	EB TR	2	Richmond Ave	142.3	5.1	687.4	23.98	8.2%
126	SB LTR	0	Dunlavy St	1312.6	46.3	1482.0	53.51	87.1%
126	NB LTR	0	Dunlavy St	360.9	12.7	898.6	31.14	18.4%
126	EB T	0	Richmond Ave	0.6	0.0	0.0	0	0.0%
126	WB T	0	Richmond Ave	0.3	0.0	0.0	0	0.0%
126	EB L	1	Richmond Ave	23.0	0.9	118.4	4.35	0.0%
126	WB L	1	Richmond Ave	11.5	0.5	59.2	2.33	0.0%
126	EB TR	2	Richmond Ave	170.3	6.1	655.0	23.04	16.1%
126	WB TR	2	Richmond Ave	20.4	0.8	145.2	5.13	0.1%
127	WB T	0	Richmond Ave	0.8	0.0	0.0	0	0.0%
127	NB L	0	Mandell St	789.7	27.6	974.1	35.3	77.6%
127	EB T	0	Richmond Ave	4.3	0.1	43.4	0.72	0.0%
127	SB L	0	Mandell St	618.2	21.7	1245.3	43.63	19.8%
127	WB L	1	Richmond Ave	41.1	1.7	161.5	6.21	0.0%
127	NB TR	1	Mandell St	0.0	0.0	0.0	0	0.0%
127	EB L	1	Richmond Ave	7.0	0.3	41.6	1.92	0.0%
127	SB TR	1	Mandell St	0.0	0.0	0.0	0	0.0%
127	WB TR	2	Richmond Ave	56.9	2.1	272.1	9.75	0.0%
127	EB TR	2	Richmond Ave	247.3	8.8	736.6	26.24	23.3%
128	SB L	0	Montrose Blvd	92.4	3.3	639.2	21.85	8.3%
128	NB L	0	Montrose Blvd	202.0	7.3	584.0	21.01	8.5%
128	EB T	0	Richmond Ave	7.4	0.1	60.8	1	0.0%
128	WB T	0	Richmond Ave	3.1	0.1	25.5	0.42	0.0%
128	SB T	1	Montrose Blvd	373.1	13.1	784.3	28.24	29.2%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
128	NB T	1	Montrose Blvd	65.0	2.4	417.3	14.46	2.2%
128	EB L	1	Richmond Ave	152.0	5.7	327.1	11.57	0.0%
128	WB L	1	Richmond Ave	36.5	1.4	163.4	5.86	0.0%
128	SB TR	2	Montrose Blvd	444.7	15.7	783.2	28.62	36.6%
128	NB TR	2	Montrose Blvd	222.3	7.9	578.3	20.81	7.8%
128	EB TR	2	Richmond Ave	250.7	8.4	465.6	15.29	0.0%
128	WB TR	2	Richmond Ave	196.4	7.0	413.1	13.45	0.0%
129	SWB LT	0	US 59 SBFR	40.7	1.7	125.5	4.71	0.0%
129	EB T	0	Richmond Ave	5.2	0.1	49.2	0.81	0.0%
129	WB T	0	Richmond Ave	9.1	0.1	60.8	1	1.1%
129	SWB T	1	US 59 SBFR	35.6	1.5	113.4	4.21	0.0%
129	EB T	1	Richmond Ave	35.0	1.4	162.4	5.8	0.0%
129	WB L	1	Richmond Ave	0.0	0.0	0.0	0	0.0%
129	SWB R	2	US 59 SBFR	10.0	0.5	54.3	2.21	0.0%
129	EB TR	2	Richmond Ave	198.6	6.9	546.0	18.2	0.0%
129	WB T	2	Richmond Ave	1.2	0.1	1.8	0.1	0.3%
130	NEB LT	0	US 59 NBFR	60.3	2.3	197.2	7.21	0.3%
130	EB T	0	Richmond Ave	12.3	0.2	67.8	1.1	2.2%
130	WB T	0	Richmond Ave	5.5	0.1	49.6	1.01	0.0%
130	WB R	0	Richmond Ave	32.0	1.1	168.1	5.49	0.0%
130	NEB TR	1	US 59 NBFR	295.8	10.6	468.8	16.6	14.2%
130	EB L	1	Richmond Ave	0.6	0.0	0.1	0.2	0.0%
130	WB T	1	Richmond Ave	147.9	5.2	357.7	13.12	0.8%
130	NEB R	2	US 59 NBFR	9.8	0.4	56.6	2.11	0.0%
130	EB T	2	Richmond Ave	15.2	0.7	116.7	4.05	5.9%
130	WB TR	2	Richmond Ave	175.1	6.3	398.7	13.91	1.4%
131	SEB T	0	Richmond Ave	2.2	0.0	6.7	0.11	0.0%
131	NEB L	0	Main St	190.1	6.7	363.2	13.42	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
131	NB T	0	LRT Red Line	22.1	0.1	102.4	0.51	0.0%
131	NWB T	0	Wheeler Ave	3.0	0.0	19.4	0.32	0.0%
131	SWB T	0	LRT Red Line	0.0	0.0	0.0	0	0.0%
131	SB R	0	Main St	11.6	0.5	67.3	2.9	0.0%
131	NWB T	1	Wheeler Ave	141.5	5.2	248.8	9.31	43.6%
131	SEB T	1	Richmond Ave	193.4	7.1	365.6	13.31	3.9%
131	NEB R	1	Main St	83.9	3.1	245.0	8.74	0.0%
131	SEB R	2	Richmond Ave	62.4	2.2	237.0	8.02	0.0%
131	NWB TR	2	Wheeler Ave	150.7	5.5	248.5	9.3	47.9%
132	SWB L	0	Fannin St	100.1	3.7	309.0	11.23	4.6%
132	SEB T	0	Wheeler Ave	4.4	0.1	37.6	0.62	0.0%
132	NWB T	0	Wheeler Ave	1.9	0.0	11.7	0.2	0.0%
132	SWB T	1	Fannin St	18.6	0.8	75.0	2.73	0.0%
132	SEB TR	1	Wheeler Ave	153.1	5.7	254.0	9.8	53.3%
132	NWB L	1	Wheeler Ave	31.9	1.3	113.4	4.11	3.2%
132	SWB T	2	Fannin St	16.9	0.8	73.5	3.01	0.0%
132	NWB T	2	Wheeler Ave	133.9	5.1	246.7	9.51	45.0%
132	SEB R	2	Wheeler Ave	0.2	0.0	0.0	0	0.0%
132	SWB T	3	Fannin St	18.7	0.8	79.1	3.03	0.0%
132	SWB R	4	Fannin St	50.2	1.9	207.8	7.23	1.8%
133	NWB T	0	Wheeler Ave	9.7	0.2	61.2	1	0.0%
133	SEB T	0	Wheeler Ave	7.6	0.1	60.8	1	0.0%
133	NEB LT	0	San Jacinto St	429.4	15.3	738.6	26.6	0.0%
133	NWB TR	1	Wheeler Ave	141.6	5.2	247.6	9.1	0.0%
133	SEB LT	1	Wheeler Ave	128.4	5.0	246.2	9.53	46.1%
133	NEB T	1	San Jacinto St	54.9	2.1	191.7	7.04	0.0%
133	NEB T	2	San Jacinto St	42.1	1.7	159.5	5.92	0.0%
133	NEB T	3	San Jacinto St	32.8	1.3	136.8	5.02	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
133	NEB R	4	San Jacinto St	4.6	0.2	30.4	1.42	0.0%
134	NWB T	0	Wheeler Ave	0.4	0.0	0.0	0	0.0%
134	SWB LTR	0	LaBranch St	7.8	0.3	49.4	2.11	0.0%
134	NEB LTR	0	LaBranch St	69.0	2.7	264.9	9.63	0.4%
134	SEB T	0	Wheeler Ave	0.8	0.0	0.0	0	0.0%
134	NWB TR	1	Wheeler Ave	160.8	5.5	349.5	10.31	0.2%
134	SEB TR	1	Wheeler Ave	17.9	0.7	115.3	4.24	0.0%
135	SEB T	0	Wheeler Ave	3.1	0.1	8.5	0.23	0.0%
135	NB L	0	Almeda Rd	357.6	12.9	769.4	28.02	32.5%
135	SB L	0	Almeda Rd	9.5	0.4	42.0	1.8	0.0%
135	NWB T	0	Wheeler Ave	5.6	0.1	37.8	0.62	0.0%
135	NB T	1	Almeda Rd	3.8	0.2	20.5	0.84	0.0%
135	SEB L	1	Wheeler Ave	4.6	0.2	24.4	1.2	0.0%
135	NWB L	1	Wheeler Ave	18.2	0.8	96.1	3.83	0.0%
135	SB T	1	Almeda Rd	86.2	3.1	309.5	10.73	0.0%
135	SEB TR	2	Wheeler Ave	99.1	3.6	389.2	13.52	0.0%
135	NB TR	2	Almeda Rd	25.9	1.0	159.8	5.95	0.0%
135	NWB TR	2	Wheeler Ave	274.0	10.0	598.6	22.02	0.5%
135	SB TR	2	Almeda Rd	100.4	3.6	349.8	11.76	0.0%
136	SWB LT	0	Emancipation Ave	11.4	0.5	63.7	2.62	0.0%
136	SEB T	0	Wheeler Ave	7.6	0.1	60.8	1	0.0%
136	NEB LT	0	Emancipation Ave	8.1	0.4	57.4	2.41	0.0%
136	NWB T	0	Wheeler Ave	4.2	0.1	37.6	0.62	0.0%
136	SWB TR	1	Emancipation Ave	11.7	0.5	63.8	2.6	0.0%
136	SEB LTR	1	Wheeler Ave	45.7	1.8	207.9	7.8	0.0%
136	NEB TR	1	Emancipation Ave	15.2	0.6	99.2	3.92	0.0%
136	NWB LTR	1	Wheeler Ave	109.3	4.0	495.6	17.72	0.0%
141	SEB L	0	Alabama St	14.3	0.7	70.6	3	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
141	NWB L	0	Alabama St	0.8	0.1	7.6	0.6	0.0%
141	NEB T	0	Ennis St	21.0	0.3	75.8	1.2	0.0%
141	SWB T	0	Ennis St	6.1	0.1	42.6	0.71	0.0%
141	SEB T	1	Alabama St	4.9	0.3	25.9	1.32	0.0%
141	NWB T	1	Alabama St	8.4	0.4	43.3	1.92	0.0%
141	NEB LTR	1	Ennis St	13.8	0.6	82.2	3.22	0.0%
141	SWB LTR	1	Ennis St	7.4	0.3	48.2	2.01	0.0%
141	SEB TR	2	Alabama St	9.1	0.4	50.1	2.1	0.0%
141	NWB TR	2	Alabama St	8.0	0.4	44.4	2	0.0%
143	NWB L	0	Scott St	36.1	1.5	132.8	4.85	0.0%
143	SEB L	0	Scott St	19.3	0.9	80.0	3.12	0.0%
143	WB T	0	Elgin St	2.7	0.0	18.2	0.3	0.0%
143	EB T	0	Elgin St	3.6	0.1	31.6	0.52	0.0%
143	NWB T	1	Scott St	40.0	1.5	182.5	6.45	0.0%
143	SEB T	1	Scott St	56.5	2.1	199.7	7.23	0.0%
143	WB L	1	Elgin St	66.1	2.6	220.9	7.74	0.0%
143	EB L	1	Elgin St	22.3	1.0	94.9	3.6	0.0%
143	NWB TR	2	Scott St	40.3	1.6	185.7	6.84	0.0%
143	SEB TR	2	Scott St	58.6	2.2	204.6	7.44	0.0%
143	WB T	2	Elgin St	23.7	1.0	124.2	4.82	0.0%
143	EB TR	2	Elgin St	62.7	2.4	253.8	9.43	0.0%
143	WB TR	3	Elgin St	22.6	0.9	120.9	4.72	0.0%
144	SB L	0	Cullen Blvd	23.9	1.0	98.3	3.71	0.0%
144	EB T	0	Elgin St	1.6	0.0	12.2	0.2	0.0%
144	NEB L	0	Cullen Blvd	10.9	0.5	54.1	2.3	0.0%
144	WB T	0	Elgin St	3.8	0.1	36.5	0.6	0.0%
144	SB T	1	Cullen Blvd	17.7	0.8	77.5	3.02	0.0%
144	EB L	1	Elgin St	52.5	2.1	192.9	7.13	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
144	NEB T	1	Cullen Blvd	39.7	1.6	144.1	5.21	0.0%
144	WB L	1	Elgin St	21.7	0.9	105.5	4.03	0.0%
144	SB TR	2	Cullen Blvd	28.3	1.1	125.9	4.61	0.0%
144	EB T	2	Elgin St	7.2	0.3	59.5	2.33	0.0%
144	NEB TR	2	Cullen Blvd	52.2	2.0	196.4	7.03	0.0%
144	WB T	2	Elgin St	18.6	0.8	111.2	4.22	0.0%
144	EB TR	3	Elgin St	9.2	0.4	61.5	2.42	0.0%
144	WB TR	3	Elgin St	47.9	1.0	237.0	4.27	0.0%
145	WB T	0	Elgin St	3.2	0.1	18.9	0.31	0.0%
145	SB L	0	UH Entrance 17	6.8	0.4	36.6	1.81	0.3%
145	EB T	0	Elgin St	3.8	0.1	31.5	0.52	0.0%
145	NB L	0	UH Entrance 18	88.3	1.2	320.5	4.22	0.9%
145	WB L	1	Elgin St	13.6	0.6	65.2	2.4	0.0%
145	SB TR	1	UH Entrance 17	8.8	0.4	48.9	2.03	1.3%
145	EB L	1	Elgin St	0.4	0.0	2.5	0.21	0.0%
145	NB TR	1	UH Entrance 18	7.3	0.3	44.7	1.83	0.0%
145	WB T	2	Elgin St	13.8	0.5	86.3	3.32	0.0%
145	EB T	2	Elgin St	15.1	0.6	91.5	3.41	0.0%
145	WB TR	3	Elgin St	10.9	0.4	67.9	2.64	0.0%
145	EB TR	3	Elgin St	22.0	0.9	117.8	4.23	0.0%
146	SWB L	0	Elgin St	9.4	0.4	60.6	2.23	0.0%
146	SB LT	0	Spur 5 SBFR	19.1	0.8	92.7	3.33	0.0%
146	EB T	0	Elgin St	5.6	0.1	55.3	0.91	0.0%
146	SWB L	1	Elgin St	9.8	0.4	61.5	2.51	0.0%
146	SB TR	1	Spur 5 SBFR	7.4	0.4	44.5	2.1	0.0%
146	EB T	1	Elgin St	100.9	3.7	238.0	8.8	20.3%
146	SWB T	2	Elgin St	3.1	0.1	31.0	0.51	0.0%
146	EB T	2	Elgin St	52.9	2.0	189.7	6.46	6.1%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
146	SWB T	3	Elgin St	50.0	2.0	166.4	5.83	0.3%
146	EB R	3	Elgin St	5.7	0.2	40.2	1.83	0.2%
147	NEB L	0	Elgin St	12.2	0.5	103.4	4.11	0.0%
147	SWB T	0	Lockwood Dr	44.5	1.6	173.6	5.74	0.0%
147	NB LT	0	Spur 5 NBFR	8.9	0.4	52.2	2.01	0.0%
147	NEB T	1	Elgin St	27.4	1.2	105.2	3.8	0.0%
147	SWB TR	1	Lockwood Dr	45.1	1.8	157.1	5.83	0.0%
147	NB TR	1	Spur 5 NBFR	19.8	0.8	105.1	3.74	0.0%
147	NEB T	2	Elgin St	93.0	3.4	243.1	8.63	4.5%
148	NEB T	0	Lockwood Dr	2.8	0.1	9.9	0.31	0.0%
148	NWB L	0	I-45 NBFR	16.7	0.7	89.6	3.34	0.0%
148	SWB T	0	Lockwood Dr	1.8	0.0	0.6	0.01	0.0%
148	SWB TR	1	Lockwood Dr	20.0	0.7	134.7	4.66	1.6%
148	NEB T	1	Lockwood Dr	76.5	2.7	348.2	12.03	3.0%
148	NWB LT	1	I-45 NBFR	37.6	1.5	170.7	5.94	0.0%
148	NWB T	2	I-45 NBFR	51.2	2.0	218.2	7.96	0.0%
148	NWB TR	3	I-45 NBFR	100.2	3.6	354.3	12.14	0.9%
149	SWB L	0	Ernestine St	0.9	0.0	0.0	0	0.0%
149	EB T	0	Leeland St	10.2	0.5	52.8	2.11	0.0%
149	WB L	0	Leeland St	15.6	0.8	72.6	3.22	0.0%
149	NB L	0	Ernestine St	1.5	0.1	9.2	1	0.0%
149	SWB TR	1	Ernestine St	3.8	0.2	27.1	1.22	0.0%
149	EB TR	1	Leeland St	11.9	0.5	62.8	2.41	0.0%
149	WB T	1	Leeland St	7.2	0.3	50.9	2.03	0.0%
149	NB R	1	Ernestine St	0.3	0.0	0.0	0	0.0%
149	WB T	2	Leeland St	5.3	0.2	32.9	1.35	0.0%
150	EB L	0	Leeland St	8.8	0.2	59.2	1.32	0.0%
150	NB T	0	Lockwood Dr	1.7	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
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150	SB T	0	Lockwood Dr	3.3	0.1	30.4	0.51	0.0%
150	WB L	0	Telephone Rd	21.8	1.0	87.9	3.31	0.0%
150	EB T	1	Leeland St	17.3	0.7	86.5	3.12	0.0%
150	WB T	1	Telephone Rd	15.3	0.7	68.4	2.61	0.0%
150	SB L	1	Lockwood Dr	12.8	0.6	58.7	2.5	0.0%
150	NB L	1	Lockwood Dr	7.4	0.3	39.1	1.8	0.0%
150	NB TR	2	Lockwood Dr	87.3	3.1	544.1	18.72	0.6%
150	EB TR	2	Leeland St	17.2	0.7	88.8	3.32	0.0%
150	WB TR	2	Telephone Rd	41.4	1.6	172.3	6.24	0.6%
150	SB TR	2	Lockwood Dr	20.8	0.8	132.2	5.04	0.0%
151	NB T	0	Lockwood Dr	1.8	0.0	0.0	0	0.0%
151	SB T	0	Lockwood Dr	3.9	0.1	43.2	0.71	0.0%
151	EB L	0	Polk St	22.4	0.9	102.9	3.81	0.4%
151	WB L	0	Polk St	30.6	1.3	113.6	4.02	0.0%
151	SB L	1	Lockwood Dr	75.3	2.9	167.0	6.2	0.0%
151	EB T	1	Polk St	22.3	0.9	81.6	3	0.0%
151	WB T	1	Polk St	21.2	0.9	83.0	3.01	0.0%
151	NB L	1	Lockwood Dr	21.6	0.9	93.4	3.51	0.0%
151	EB TR	2	Polk St	31.9	1.3	123.6	4.2	0.0%
151	WB TR	2	Polk St	33.3	1.4	131.2	4.73	0.0%
151	SB TR	2	Lockwood Dr	36.8	1.4	163.8	6	0.0%
151	NB TR	2	Lockwood Dr	56.0	2.1	177.7	6.72	0.0%
152	SB L	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	EB LTR	0	McKinney St	6.5	0.3	47.5	2	0.0%
152	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	WB LTR	0	McKinney St	4.8	0.2	32.1	1.51	0.0%
152	SWB T	0	BRT Alignment	0.0	0.0	0.0	0	0.0%
152	SB TR	1	Lockwood Dr	20.6	0.7	122.8	4.55	7.6%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
152	NB L	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
152	NB TR	2	Lockwood Dr	35.1	1.3	171.9	6.24	0.0%
153	SB L	0	Lockwood Dr	116.1	4.3	439.0	15.7	5.3%
153	SEB L	0	Harrisburg Blvd	29.0	1.2	119.5	4.51	0.0%
153	NEB L	0	Lockwood Dr	18.2	0.8	82.7	3.2	0.0%
153	NWB L	0	Harrisburg Blvd	53.0	2.0	209.2	7.24	0.9%
153	SB TR	1	Lockwood Dr	158.0	5.5	711.2	24.37	4.7%
153	SEB T	1	Harrisburg Blvd	24.5	1.1	94.6	3.62	0.0%
153	NEB TR	1	Lockwood Dr	53.9	2.0	124.3	4.9	0.0%
153	NWB T	1	Harrisburg Blvd	27.1	1.1	105.2	3.81	0.0%
153	SEB TR	2	Harrisburg Blvd	32.3	1.3	119.3	4.5	0.0%
153	NWB TR	2	Harrisburg Blvd	34.0	1.4	122.8	4.52	0.0%
154	SWB T	0	Lockwood Dr	5.7	0.1	60.8	1	0.0%
154	NEB T	0	Lockwood Dr	0.8	0.0	0.6	0.01	0.0%
154	WB L	0	Canal St	31.3	1.4	139.9	5.52	0.4%
154	EB LT	0	Canal St	195.0	7.1	653.9	22.82	10.9%
154	WB TR	1	Canal St	38.1	1.5	145.7	5.32	0.0%
154	SWB L	1	Lockwood Dr	43.0	1.7	158.7	6.01	0.0%
154	NEB L	1	Lockwood Dr	87.2	3.3	250.0	8.93	0.0%
154	EB TR	1	Canal St	236.3	8.5	702.2	25.1	16.3%
154	NEB TR	2	Lockwood Dr	12.5	0.5	73.5	2.63	0.0%
154	SWB TR	2	Lockwood Dr	109.4	3.7	457.1	15.42	0.0%
155	EB L	0	Navigation Blvd	25.8	1.1	95.5	3.62	0.0%
155	NEB T	0	Lockwood Dr	3.5	0.1	36.5	0.6	0.0%
155	WB L	0	Navigation Blvd	60.1	2.3	223.4	8	1.1%
155	SWB T	0	Lockwood Dr	4.5	0.1	54.7	0.91	0.0%
155	EB T	1	Navigation Blvd	47.1	1.8	152.7	5.62	0.0%
155	NEB L	1	Lockwood Dr	21.5	0.9	92.1	3.23	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
155	WB T	1	Navigation Blvd	51.9	2.0	169.7	6.21	0.0%
155	SWB L	1	Lockwood Dr	68.4	2.7	195.6	7.31	0.0%
155	EB TR	2	Navigation Blvd	61.6	2.4	194.3	7.03	0.0%
155	NEB TR	2	Lockwood Dr	36.1	1.4	173.9	6.25	0.0%
155	WB TR	2	Navigation Blvd	69.1	2.6	216.8	7.62	0.0%
155	SWB T	2	Lockwood Dr	104.2	3.7	407.5	14.45	0.8%
155	SWB R	3	Lockwood Dr	2.1	0.1	14.0	0.8	0.0%
156	SWB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	NEB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	WB R	0	Armour Dr	1.7	0.1	10.5	0.61	1.2%
156	SWB T	1	Lockwood Dr	2.7	0.1	39.8	1.6	0.6%
156	NEB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
156	NEB T	2	Lockwood Dr	1.1	0.0	1.5	0.1	0.0%
157	EB L	0	Clinton Dr	3.7	0.2	20.5	1	0.0%
157	NEB L	0	Lockwood Dr	12.5	0.6	56.1	2.31	0.0%
157	WB L	0	Clinton Dr	13.3	0.6	53.4	2.13	0.0%
157	SB L	0	Lockwood Dr	130.3	4.9	358.4	13.14	0.0%
157	EB T	1	Clinton Dr	6.9	0.4	37.4	1.61	0.0%
157	NEB T	1	Lockwood Dr	34.5	1.3	158.8	5.9	0.0%
157	WB T	1	Clinton Dr	18.8	0.8	71.1	2.9	0.0%
157	SB T	1	Lockwood Dr	6.0	0.2	42.3	1.54	0.0%
157	SB TR	2	Lockwood Dr	10.3	0.4	76.5	2.65	0.0%
157	EB TR	2	Clinton Dr	13.0	0.6	66.3	2.52	0.0%
157	WB T	2	Clinton Dr	23.8	1.0	79.9	3.01	0.0%
157	NEB TR	2	Lockwood Dr	35.3	1.3	170.7	6.03	0.0%
157	WB R	3	Clinton Dr	4.0	0.2	20.9	1.01	0.0%
158	SB T	0	Lockwood Dr (SB)	8.3	0.1	60.8	1	0.0%
158	EB T	0	Market St	31.1	1.3	106.4	3.92	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
158	WB LT	0	Market St	4.1	0.2	24.9	1.22	5.9%
158	SB LT	1	Lockwood Dr (SB)	42.9	1.6	198.2	7.15	0.1%
158	EB TR	1	Market St	1.4	0.1	11.0	0.7	0.0%
158	WB T	1	Market St	0.1	0.0	0.0	0	0.0%
158	SB TR	2	Lockwood Dr (SB)	49.3	1.9	222.2	7.84	0.7%
159	EB LT	0	Market St	0.9	0.0	0.0	0	1.6%
159	WB T	0	Market St	9.5	0.5	45.0	1.81	0.0%
159	NB T	0	Lockwood Dr	6.5	0.1	49.6	0.82	0.0%
159	EB T	1	Market St	0.1	0.0	0.0	0	0.0%
159	WB TR	1	Market St	1.2	0.1	6.6	0.42	0.0%
159	NB LT	1	Lockwood Dr	31.7	1.3	86.5	3.4	0.0%
159	NB TR	2	Lockwood Dr	42.5	1.6	94.6	4	0.0%
160	SB T	0	Lockwood Dr (SB)	8.0	0.1	60.8	1	0.0%
160	EB T	0	I-10 EBFR	70.2	2.7	211.3	7.43	0.0%
160	SB LT	1	Lockwood Dr (SB)	11.7	0.5	92.6	3.71	0.2%
160	EB T	1	I-10 EBFR	34.2	1.4	111.2	4.21	0.0%
160	SB T	2	Lockwood Dr (SB)	4.4	0.2	33.9	1.33	0.0%
160	EB TR	2	I-10 EBFR	18.3	0.8	79.9	3.12	0.0%
161	NB T	0	Lockwood Dr (NB)	0.0	0.0	0.0	0	0.0%
161	EB L	0	I-10 EBFR	3.4	0.2	21.7	1.01	3.6%
161	NB T	1	Lockwood Dr (NB)	64.5	2.4	252.1	9.04	1.2%
161	EB LT	1	I-10 EBFR	10.9	0.5	56.6	2.3	17.6%
161	NB TR	2	Lockwood Dr (NB)	79.1	2.9	330.2	11.64	6.1%
161	EB T	2	I-10 EBFR	8.7	0.4	51.4	2.1	13.1%
162	SB T	0	Lockwood Dr (SB)	0.6	0.0	0.0	0	0.0%
162	WB L	0	I-10 WBFR	1.1	0.1	5.9	0.43	0.9%
162	SB T	1	Lockwood Dr (SB)	93.2	3.4	293.7	10.06	0.0%
162	WB LT	1	I-10 WBFR	6.9	0.3	46.2	2	11.5%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
162	SB TR	2	Lockwood Dr (SB)	61.7	2.3	243.2	8.45	0.0%
162	WB T	2	I-10 WBFR	6.5	0.3	43.1	1.82	11.5%
163	NB T	0	Lockwood Dr (NB)	1.8	0.0	0.0	0	0.0%
163	WB T	0	I-10 WBFR	22.7	1.0	80.4	3.02	0.0%
163	NB LT	1	Lockwood Dr (NB)	24.3	1.0	124.8	4.62	1.2%
163	WB T	1	I-10 WBFR	24.2	1.0	95.9	3.4	0.0%
163	NB T	2	Lockwood Dr (NB)	9.2	0.4	59.5	2.31	0.2%
163	WB TR	2	I-10 WBFR	10.1	0.4	56.0	2.11	0.0%
165	WB L	0	Lyons Ave	15.7	0.8	72.6	3.03	0.0%
165	SB T	0	Lockwood Dr	12.0	0.2	60.8	1	0.0%
165	EB LTR	0	Lyons Ave	341.9	11.9	647.0	23.1	33.5%
165	NB T	0	Lockwood Dr (NB)	7.8	0.1	60.8	1	0.0%
165	WB TR	1	Lyons Ave	18.2	0.8	87.8	3.34	0.0%
165	SB LT	1	Lockwood Dr	14.9	0.7	90.0	3.62	0.0%
165	NB LT	1	Lockwood Dr (NB)	31.2	1.4	130.6	4.81	0.0%
165	NB TR	2	Lockwood Dr (NB)	32.7	1.3	142.9	5.4	0.0%
165	SB TR	2	Lockwood Dr	19.7	0.8	106.1	3.94	0.0%
166	WB R	0	Mulvey St	0.3	0.0	0.1	0.01	0.0%
166	SB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	EB R	0	Mulvey St	0.1	0.0	0.0	0	0.0%
166	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	SB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	NB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	NB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
166	SB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
167	WB L	0	Collingsworth St	12.0	0.6	48.4	2.02	0.0%
167	SEB T	0	Lockwood Dr	4.2	0.1	53.8	0.9	0.0%
167	EB L	0	Collingsworth St	17.0	0.8	62.8	2.63	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
167	NB T	0	Lockwood Dr	2.3	0.0	1.8	0.03	0.0%
167	WB T	1	Collingsworth St	2.0	0.1	15.4	0.91	0.0%
167	SEB L	1	Lockwood Dr	2.9	0.2	19.5	1.1	0.0%
167	EB T	1	Collingsworth St	7.4	0.4	39.9	1.61	0.0%
167	NB L	1	Lockwood Dr	47.8	1.9	169.2	6.21	0.0%
167	WB TR	2	Collingsworth St	2.9	0.2	16.7	1	0.0%
167	SEB TR	2	Lockwood Dr	66.6	2.4	301.9	10.63	0.0%
167	EB TR	2	Collingsworth St	15.0	0.7	75.5	2.93	0.0%
167	NB TR	2	Lockwood Dr	133.7	4.8	530.9	18.69	0.0%
168	WB LTR	0	Crane St	23.3	1.0	91.0	3.61	0.0%
168	SB T	0	Lockwood Dr	1.0	0.0	0.0	0	0.0%
168	EB LTR	0	Crane St	27.9	1.2	111.8	4.14	0.0%
168	NB T	0	Lockwood Dr	0.5	0.0	0.0	0	0.0%
168	SB L	1	Lockwood Dr	4.1	0.2	22.0	1.11	0.0%
168	NB L	1	Lockwood Dr	3.9	0.2	23.4	1.21	0.0%
168	SB TR	2	Lockwood Dr	22.5	0.8	165.4	5.98	0.0%
168	NB TR	2	Lockwood Dr	17.1	0.6	121.4	4.41	0.0%
169	WB L	0	Cavalcade St	13.6	0.7	68.6	2.9	0.0%
169	SB T	0	Lockwood Dr	2.0	0.0	12.8	0.21	0.0%
169	EB L	0	Cavalcade St	18.2	0.9	76.1	3.01	0.0%
169	NB T	0	Lockwood Dr	0.8	0.0	0.0	0	0.0%
169	WB T	1	Cavalcade St	16.1	0.7	71.4	2.72	0.0%
169	SB L	1	Lockwood Dr	5.7	0.3	38.7	1.72	0.0%
169	EB T	1	Cavalcade St	8.1	0.4	43.5	1.81	0.0%
169	NB L	1	Lockwood Dr	32.3	1.3	131.6	4.93	0.0%
169	WB TR	2	Cavalcade St	22.8	1.0	101.1	3.72	0.0%
169	SB TR	2	Lockwood Dr	49.0	1.9	215.2	7.96	0.0%
169	EB TR	2	Cavalcade St	12.4	0.6	61.2	2.3	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
169	NB TR	2	Lockwood Dr	40.3	1.5	228.1	8.16	0.0%
170	WB LTR	0	Rand St	22.3	1.0	93.7	3.42	0.0%
170	SB T	0	Lockwood Dr	1.9	0.0	1.1	0.02	0.0%
170	EB LTR	0	Rand St	22.2	1.0	87.4	3.12	0.0%
170	NB T	0	Lockwood Dr	1.9	0.0	5.7	0.1	0.0%
170	SB L	1	Lockwood Dr	11.6	0.5	58.8	2.42	0.0%
170	NB L	1	Lockwood Dr	1.4	0.1	8.8	0.51	0.0%
170	SB TR	2	Lockwood Dr	39.7	1.5	241.1	8.75	0.1%
170	NB TR	2	Lockwood Dr	73.9	2.7	308.1	11.22	0.0%
171	SB T	0	Lockwood Dr	8.0	0.1	60.8	1	0.0%
171	EB L	0	I-610 EBFR	36.8	1.5	114.9	4.43	0.0%
171	NB T	0	Lockwood Dr	3.8	0.1	26.2	0.43	0.0%
171	NB R	0	Lockwood Dr	0.3	0.0	0.0	0	0.0%
171	SB LT	1	Lockwood Dr	18.2	0.7	103.1	3.93	0.0%
171	EB LT	1	I-610 EBFR	39.0	1.6	118.7	4.51	0.0%
171	NB T	1	Lockwood Dr	37.6	1.5	203.4	7.24	0.0%
171	SB T	2	Lockwood Dr	15.0	0.6	91.0	3.41	0.0%
171	NB T	2	Lockwood Dr	78.2	2.9	351.6	12.35	0.0%
171	EB TR	2	I-610 EBFR	36.6	1.4	154.9	5.61	0.0%
171	NB T	3	Lockwood Dr	54.6	2.1	227.6	8.24	0.0%
172	NB T	0	Lockwood Dr	12.1	0.2	76.6	1.2	0.0%
172	WB L	0	I-610 WBFR	15.6	0.7	68.1	2.72	0.0%
172	SB T	0	Lockwood Dr	6.6	0.1	60.8	1	0.0%
172	WB R	0	Lockwood Dr	2.3	0.1	11.2	0.61	0.0%
172	NB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
172	WB LT	1	I-610 WBFR	38.8	1.6	131.5	5.11	0.0%
172	SB T	1	Lockwood Dr	63.8	2.4	205.9	7.32	0.0%
172	SB T	2	Lockwood Dr	40.2	1.6	165.0	5.92	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
172	NB LT	2	Lockwood Dr	3.5	0.2	21.4	1.1	0.0%
172	WB TR	2	I-610 WBFR	44.5	1.7	153.3	5.33	0.0%
172	NB T	3	Lockwood Dr	2.7	0.1	16.0	0.9	0.0%
173	WB L	0	Kelley St	9.1	0.4	48.3	2	0.0%
173	SB T	0	Lockwood Dr	3.9	0.1	31.0	0.51	0.0%
173	EB L	0	Kelley St	37.2	1.5	127.2	4.52	0.0%
173	NB T	0	Lockwood Dr	3.1	0.0	18.8	0.31	0.0%
173	WB T	1	Kelley St	31.4	1.3	124.6	4.42	0.0%
173	SB L	1	Lockwood Dr	6.8	0.3	35.7	1.62	0.0%
173	EB T	1	Kelley St	7.6	0.4	40.9	1.91	0.0%
173	NB L	1	Lockwood Dr	36.7	1.5	135.6	4.61	0.0%
173	WB TR	2	Kelley St	33.7	1.3	134.8	5.01	0.0%
173	SB TR	2	Lockwood Dr	141.6	5.2	487.3	17.05	0.0%
173	EB TR	2	Kelley St	14.6	0.7	74.9	2.91	0.0%
173	NB T	2	Lockwood Dr	70.7	2.6	234.3	8.52	0.0%
173	NB R	3	Lockwood Dr	1.7	0.1	12.8	0.82	0.0%
174	NB L	0	Lockwood Dr	0.4	0.0	0.0	0.01	0.0%
174	SWB LT	0	Shreveport Blvd	28.2	1.2	111.9	4.02	5.8%
174	SB L	0	Lockwood Dr	1.4	0.1	8.3	0.91	0.0%
174	NEB LT	0	Shreveport Blvd	10.5	0.5	48.1	2.01	0.0%
174	NEB TR	1	Shreveport Blvd	1.8	0.1	13.1	0.8	0.0%
174	NB TR	1	Lockwood Dr	4.1	0.2	27.0	1.22	0.0%
174	SWB TR	1	Shreveport Blvd	1.8	0.1	16.1	1	0.0%
174	SB TR	1	Lockwood Dr	4.3	0.2	25.4	1.23	0.0%
175	NB L	0	Lockwood Dr	0.1	0.0	0.0	0.2	0.0%
175	WB LTR	0	Driveway	0.3	0.0	0.0	0	0.0%
175	SB LTR	0	Lockwood Dr	6.3	0.3	43.1	1.75	0.0%
175	EB L	0	Bennington St	20.3	0.9	78.5	3.11	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
175	NB TR	1	Lockwood Dr	1.3	0.1	1.6	0.11	0.0%
175	EB R	1	Bennington St	2.1	0.1	13.6	0.81	0.0%
176	WB L	0	Crosstimbers St	22.9	1.0	92.3	3.2	0.0%
176	SB T	0	Lockwood Dr	0.5	0.0	0.0	0	0.0%
176	EB L	0	Crosstimbers St	23.2	1.0	91.0	3.13	0.0%
176	NB T	0	Lockwood Dr	0.1	0.0	0.0	0	0.0%
176	WB T	1	Crosstimbers St	17.7	0.7	78.8	2.91	0.0%
176	SB L	1	Lockwood Dr	7.3	0.3	40.9	1.81	0.0%
176	EB T	1	Crosstimbers St	19.7	0.9	81.3	3.1	0.0%
176	NB L	1	Lockwood Dr	7.1	0.3	37.3	1.61	0.0%
176	WB TR	2	Crosstimbers St	21.3	0.9	91.3	3.32	0.0%
176	SB TR	2	Lockwood Dr	16.9	0.7	96.1	3.63	0.0%
176	EB TR	2	Crosstimbers St	23.4	1.0	88.3	3.51	0.0%
176	NB TR	2	Lockwood Dr	59.5	2.2	242.4	8.85	0.0%
177	NB T	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
177	WB L	0	Weaver Rd	8.9	0.4	41.4	1.72	0.0%
177	SB T	0	Lockwood Dr	2.1	0.0	2.4	0.04	0.0%
177	EB L	0	Weaver Rd	4.4	0.2	20.6	1.1	0.0%
177	NB L	1	Lockwood Dr	5.8	0.3	31.9	1.31	0.0%
177	WB TR	1	Weaver Rd	32.4	1.3	129.7	4.72	0.0%
177	SB L	1	Lockwood Dr	5.3	0.3	29.6	1.41	0.0%
177	EB TR	1	Weaver Rd	17.0	0.8	76.5	2.93	0.0%
177	NB TR	2	Lockwood Dr	28.6	1.1	166.1	6.03	0.0%
177	SB TR	2	Lockwood Dr	17.1	0.7	99.1	3.53	0.0%
178	WB L	0	Laura Koppe Rd	8.7	0.5	46.0	2.11	0.0%
178	SB T	0	Lockwood Dr	0.7	0.0	0.0	0	0.0%
178	EB L	0	Laura Koppe Rd	6.3	0.3	32.7	1.42	0.0%
178	NB T	0	Lockwood Dr	1.3	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
178	WB TR	1	Laura Koppe Rd	14.3	0.6	65.9	2.62	0.0%
178	SB L	1	Lockwood Dr	5.5	0.3	27.4	1.21	0.0%
178	EB TR	1	Laura Koppe Rd	27.7	1.1	110.9	4.25	0.0%
178	NB L	1	Lockwood Dr	16.4	0.7	68.8	2.61	0.0%
178	SB TR	2	Lockwood Dr	6.0	0.3	37.2	1.62	0.0%
178	NB TR	2	Lockwood Dr	37.9	1.4	226.2	7.84	0.0%
179	WB L	0	Tidwell Rd	19.1	0.8	77.2	2.92	0.0%
179	SB L	0	Lockwood Dr	1.9	0.1	16.8	1	0.0%
179	EB R	0	BRT Alignment	8.9	0.1	60.8	1	0.0%
179	NEB LT	0	Tidwell Rd	37.5	1.4	229.4	8.23	0.0%
179	NB L	0	Lockwood Dr	2.9	0.0	13.3	0.22	0.0%
179	WB T	1	Tidwell Rd	18.7	0.7	114.4	4.13	0.0%
179	SB TR	1	Lockwood Dr	10.6	0.5	53.5	2.3	0.0%
179	NEB TR	1	Tidwell Rd	42.4	1.6	225.7	8.17	0.0%
179	NB T	1	Lockwood Dr	71.5	2.6	270.0	9.53	0.0%
179	WB TR	2	Tidwell Rd	19.2	0.7	105.7	3.94	0.0%
179	NB R	2	Lockwood Dr	3.0	0.1	20.5	1.1	0.0%
180	WB L	0	Tidwell Rd	3.0	0.2	16.8	0.91	0.0%
180	SB L	0	Hirsch Rd	24.2	1.0	104.3	3.5	0.0%
180	EB L	0	Tidwell Rd	10.4	0.5	50.4	2.04	0.0%
180	NB L	0	Hirsch Rd	14.4	0.7	68.3	2.81	0.0%
180	WB T	1	Tidwell Rd	45.6	1.7	211.9	7.46	0.0%
180	SB T	1	Hirsch Rd	10.4	0.5	48.7	2.1	0.0%
180	EB T	1	Tidwell Rd	75.5	2.8	349.6	12.64	0.0%
180	NB T	1	Hirsch Rd	12.3	0.6	53.9	2.1	0.0%
180	EB TR	2	Tidwell Rd	87.6	3.1	390.5	14.16	0.0%
180	WB TR	2	Tidwell Rd	46.4	1.8	213.6	7.64	0.0%
180	SB TR	2	Hirsch Rd	15.6	0.7	70.0	2.72	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
180	NB TR	2	Hirsch Rd	12.0	0.6	57.7	2.22	0.0%
181	WB T	0	Tidwell Rd	0.3	0.0	0.0	0	0.0%
181	EB T	0	Tidwell Rd	14.8	0.2	60.8	1	0.0%
181	NB L	0	I-69 NBFR	44.1	1.8	142.7	5.32	0.0%
181	WB T	1	Tidwell Rd	39.9	1.5	191.5	7.03	0.0%
181	EB L	1	Tidwell Rd	76.3	3.0	206.0	7.62	2.4%
181	NB LT	1	I-69 NBFR	58.6	2.3	167.2	6.12	0.0%
181	WB T	2	Tidwell Rd	60.7	2.2	275.7	9.71	0.0%
181	EB LT	2	Tidwell Rd	91.3	3.4	252.0	8.93	8.1%
181	NB T	2	I-69 NBFR	45.3	1.8	148.1	5.32	0.0%
181	WB TR	3	Tidwell Rd	78.8	2.8	317.6	11.32	0.0%
181	EB T	3	Tidwell Rd	50.2	1.9	215.8	7.55	3.5%
181	NB TR	3	I-69 NBFR	44.6	1.8	130.0	4.81	0.0%
181	NB R	4	I-69 NBFR	13.4	0.6	66.0	2.51	0.0%
182	WB T	0	Tidwell Rd	4.0	0.1	26.1	0.43	0.0%
182	SB L	0	I-69 SBFR	64.1	2.4	187.4	6.82	0.0%
182	EB T	0	Tidwell Rd	6.3	0.1	60.8	1	0.0%
182	SB R	0	I-69 SBFR	137.7	4.8	672.3	23.07	5.5%
182	EB R	0	Tidwell Rd	1.9	0.1	8.8	0.51	0.0%
182	WB L	1	Tidwell Rd	32.8	1.3	146.5	5.43	0.8%
182	SB LT	1	I-69 SBFR	60.4	2.3	184.4	6.61	0.0%
182	EB T	1	Tidwell Rd	24.9	1.0	114.4	4.04	0.0%
182	WB LT	2	Tidwell Rd	71.6	2.7	232.7	8.22	4.5%
182	SB T	2	I-69 SBFR	24.7	1.1	90.8	3.31	0.0%
182	EB T	2	Tidwell Rd	43.3	1.7	173.5	6.15	0.0%
182	WB T	3	Tidwell Rd	54.7	2.1	205.1	7.54	3.8%
182	SB T	3	I-69 SBFR	14.6	0.7	61.7	2.42	0.0%
182	EB T	3	Tidwell Rd	24.4	1.0	112.2	4.31	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
183	WB R	0	Tidwell Rd	4.0	0.1	43.2	0.71	0.0%
183	SB L	0	Jensen Dr	7.4	0.1	60.8	1	0.0%
183	EB L	0	Tidwell Rd	43.1	1.8	136.3	4.91	0.0%
183	NB L	0	Jensen Dr	131.9	4.8	341.1	12.32	0.0%
183	WB L	1	Tidwell Rd	119.6	4.2	674.0	23.08	0.0%
183	SB L	1	Jensen Dr	35.3	1.5	117.9	4.25	0.0%
183	EB TR	1	Tidwell Rd	122.0	4.4	485.1	16.61	1.4%
183	NB T	1	Jensen Dr	32.0	1.3	113.0	4.32	0.0%
183	WB TR	2	Tidwell Rd	447.9	15.2	1380.6	47.31	6.4%
183	SB TR	2	Jensen Dr	99.4	3.7	252.5	9.02	0.0%
183	NB TR	2	Jensen Dr	87.2	3.2	284.5	9.68	0.0%
197	SEB L	0	Marron Park Way	162.8	6.1	371.1	14.01	37.3%
197	NEB T	0	Lockwood Dr	0.6	0.0	0.0	0	0.0%
197	SWB T	0	Lockwood Dr	3.1	0.1	24.3	0.4	0.0%
197	SWB L	1	Lockwood Dr	34.8	1.2	217.4	7.62	0.8%
197	NEB L	1	Lockwood Dr	39.9	1.7	120.9	4.92	0.0%
197	SEB R	1	Marron Park Way	101.3	3.7	369.2	13.33	21.3%
197	NEB T	2	Lockwood Dr	38.8	1.5	192.0	6.71	0.0%
197	SWB TR	2	Lockwood Dr	123.1	4.5	566.4	19.93	0.9%
242	NWB LTR	0	Blodgett St	186.0	6.9	415.6	15.4	2.1%
242	SB L	0	Almeda Rd	19.9	0.9	107.4	4.23	0.0%
242	NB L	0	Almeda Rd	2.2	0.0	5.8	0.1	0.0%
242	SEB LTR	0	Blodgett St	42.4	1.8	156.7	6.13	0.0%
242	SB T	1	Almeda Rd	20.4	0.8	133.7	4.86	0.0%
242	NB T	1	Almeda Rd	115.0	4.0	373.9	12.61	25.4%
242	NB TR	2	Almeda Rd	31.0	1.0	194.9	5.85	2.4%
242	SB TR	2	Almeda Rd	21.8	0.8	157.0	6.04	0.0%
244	NWB L	0	Blodgett St	2.3	0.1	15.2	0.91	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
244	SWB LT	0	St Emanuel St	0.2	0.0	0.0	0	0.0%
244	SEB T	0	Blodgett St	2.8	0.1	18.4	1	0.0%
244	SWB TR	1	St Emanuel St	165.9	5.9	518.2	18.62	12.1%
244	NWB T	1	Blodgett St	89.1	3.3	280.7	10.4	13.4%
244	SEB TR	1	Blodgett St	4.3	0.2	22.6	1.02	0.0%
244	NWB T	2	Blodgett St	103.2	3.5	298.3	10.23	17.2%
245	SWB LT	0	Ennis St	11.0	0.5	60.4	2.51	0.0%
245	NEB LT	0	Ennis St	1.7	0.1	15.2	0.91	0.0%
245	NWB L	0	Blodgett St	37.8	0.5	176.4	2.32	0.0%
245	SEB L	0	Blodgett St	6.3	0.3	31.2	1.43	0.0%
245	NEB TR	1	Ennis St	18.3	0.6	95.2	2.21	0.0%
245	SWB TR	1	Ennis St	8.6	0.4	46.1	1.73	0.0%
245	NWB T	1	Blodgett St	13.1	0.5	94.0	2.77	0.0%
245	SEB T	1	Blodgett St	4.2	0.2	22.8	1.11	0.0%
245	SEB TR	2	Blodgett St	5.4	0.2	31.4	1.44	0.0%
245	NWB TR	2	Blodgett St	14.8	0.6	101.4	4.12	0.0%
249	SWB L	0	Ennis St	0.8	0.0	7.3	0.51	0.0%
249	NEB R	0	Ennis St	6.3	0.1	60.8	1	0.0%
249	SEB L	0	Elgin St	0.3	0.0	0.0	0	0.0%
249	NWB L	0	Elgin St	7.3	0.1	60.8	1	0.0%
249	SWB TR	1	Ennis St	4.5	0.2	23.0	1.12	0.0%
249	NWB L	1	Elgin St	2.2	0.1	6.9	0.82	0.0%
249	NEB LTR	1	Ennis St	22.2	0.9	114.6	4.32	0.0%
249	SEB TR	1	Elgin St	27.0	0.9	137.6	4.2	0.0%
249	NWB TR	2	Elgin St	21.9	0.8	163.6	6.05	0.0%
251	NWB T	0	Blodgett St	56.9	2.1	302.2	10.52	4.3%
251	NEB LT	0	Hutchins St	17.8	0.7	94.4	3.62	0.6%
251	SEB L	0	Blodgett St	1.1	0.1	7.9	0.52	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
251	NWB TR	1	Blodgett St	54.4	2.0	315.7	11.22	6.0%
251	SEB T	1	Blodgett St	4.0	0.2	20.2	1	0.0%
251	NEB TR	1	Hutchins St	45.8	1.8	170.1	6.1	1.1%
251	SEB T	2	Blodgett St	3.7	0.2	20.2	1	0.0%
252	NWB LTR	0	Blodgett St	110.6	4.0	422.7	15.21	0.0%
252	SEB LTR	0	Blodgett St	18.3	0.8	85.9	2.93	0.0%
252	SWB LT	0	Emancipation Ave	11.9	0.6	70.5	2.93	0.0%
252	NEB LT	0	Emancipation Ave	7.0	0.3	41.0	1.81	0.0%
252	SWB TR	1	Emancipation Ave	33.7	1.3	162.1	5.91	0.0%
252	NEB TR	1	Emancipation Ave	10.7	0.5	61.6	2.42	0.0%
266	NEB L	0	Ennis St	0.2	0.0	0.0	0	0.0%
266	SEB L	0	Wheeler Ave	1.2	0.0	0.0	0	0.0%
266	SWB R	0	Ennis St	7.7	0.1	60.8	1	0.0%
266	NEB T	1	Ennis St	1.8	0.1	6.5	0.41	0.0%
266	SEB LR	1	Wheeler Ave	21.0	0.9	87.3	3.34	0.0%
266	SWB TR	1	Ennis St	4.0	0.2	23.9	1.21	0.0%
292	NEB T	0	Ennis St	8.0	0.1	54.7	0.9	0.0%
292	SEB LTR	0	Cleburne St	4.7	0.3	25.3	1.21	0.0%
292	NWB LTR	0	Cleburne St	23.7	1.0	90.8	3.51	0.0%
292	SWB T	0	Ennis St	6.5	0.1	56.5	0.9	0.0%
292	NEB LTR	1	Ennis St	7.3	0.3	52.1	2.22	0.0%
292	SWB LTR	1	Ennis St	7.5	0.4	57.5	2.72	0.0%
306	NEB T	0	Ennis St	11.1	0.2	55.2	0.91	0.0%
306	SEB LTR	0	Holman St	2.7	0.2	17.5	1	0.0%
306	NWB LTR	0	Holman St	13.7	0.6	67.6	2.82	0.0%
306	SWB T	0	Ennis St	12.0	0.2	60.8	1	0.0%
306	SWB LTR	1	Ennis St	5.8	0.3	37.2	1.81	0.0%
306	NEB LTR	1	Ennis St	14.2	0.6	80.1	3.2	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
309	EB	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
309	WB L	0	Westpark Dr	18.9	0.9	79.8	3.12	0.0%
309	NB LR	0	Royalton St	34.6	1.5	56.2	2.18	1.7%
309	EB T	1	Westpark Dr	36.6	1.4	233.9	8.37	0.0%
309	WB T	1	Westpark Dr	54.7	2.0	275.0	9.87	0.8%
309	EB TR	2	Westpark Dr	32.4	1.3	204.3	7.4	0.0%
309	WB T	2	Westpark Dr	69.2	2.5	353.0	12.27	1.3%
353	EB T	0	Elgin St	0.3	0.0	0.0	0	0.0%
353	WB L	0	Elgin St	14.7	0.7	66.4	2.8	0.0%
353	NB R	0	Garage 5	46.7	1.9	85.3	3	62.1%
353	EB T	1	Elgin St	6.8	0.3	48.8	1.95	0.0%
353	WB T	1	Elgin St	0.0	0.0	0.0	0	0.0%
353	EB TR	2	Elgin St	10.9	0.4	79.3	3.02	0.0%
353	WB T	2	Elgin St	0.0	0.0	0.0	0	0.0%
365	SEB T	0	Wheeler Ave	0.3	0.0	0.0	0	0.0%
365	NWB T	0	Wheeler Ave	0.3	0.0	0.0	0	0.0%
365	NWB L	1	Wheeler Ave	4.7	0.2	28.6	1.4	0.0%
365	SEB TR	1	Wheeler Ave	20.1	0.7	89.7	3.41	0.0%
365	NWB T	2	Wheeler Ave	99.0	3.9	314.9	12.8	23.4%
367	SWB LR	0	Hutchins St	4.7	0.2	31.0	1.5	0.0%
367	NWB T	0	Wheeler Ave	8.0	0.1	60.8	1	0.0%
367	SEB T	0	Wheeler Ave	2.3	0.0	11.6	0.2	0.0%
367	NEB L	0	Hutchins St	36.1	1.4	201.3	7.45	0.0%
367	NWB TR	1	Wheeler Ave	68.7	2.6	227.5	8.4	0.0%
367	SEB L	1	Wheeler Ave	3.6	0.2	18.8	1	0.0%
367	NEB TR	1	Hutchins St	21.5	0.9	112.5	4.13	0.0%
367	SEB T	2	Wheeler Ave	29.4	1.2	148.5	5.53	0.1%
399	NB	0	Ernestine St	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
399	SB L	0	Ernestine St	0.0	0.0	0.0	0	0.0%
399	WB L	0	Munger St	0.2	0.0	0.0	0	0.0%
399	WB R	1	Munger St	0.3	0.0	0.0	0	0.0%
399	NB TR	1	Ernestine St	0.0	0.0	0.0	0	0.0%
399	SB T	1	Ernestine St	0.1	0.0	0.0	0	0.0%
453	SWB T	0	Lockwood Dr	2.3	0.0	11.9	0.2	0.0%
453	SB R	0	Munger St	0.0	0.0	0.0	0	0.0%
453	NEB T	0	Lockwood Dr	0.9	0.0	0.0	0	1.5%
453	EB L	0	Munger St	0.1	0.0	0.0	0	0.0%
453	WB L	0	Munger St	3.7	0.2	20.2	1.1	0.0%
453	WB TR	1	Munger St	1.4	0.1	13.4	0.81	0.0%
453	NEB L	1	Lockwood Dr	1.1	0.0	10.1	0.2	2.4%
453	SWB L	1	Lockwood Dr	1.8	0.1	12.8	0.8	0.0%
453	EB T	1	Munger St	8.7	0.4	42.0	1.83	0.0%
453	SWB TR	2	Lockwood Dr	46.0	1.7	198.7	7.22	0.0%
453	NEB TR	2	Lockwood Dr	21.5	0.9	66.1	2.72	42.9%
514	WB L	0	Harvey Wilson Dr	5.5	0.3	27.9	1.42	0.0%
514	NB T	0	Lockwood Dr	2.6	0.0	11.0	0.2	0.0%
514	EB LR	0	Harvey Wilson Dr	2.6	0.1	14.8	0.41	0.0%
514	SWB T	0	Lockwood Dr	1.0	0.0	0.0	0	0.0%
514	NB L	1	Lockwood Dr	45.2	1.8	167.6	6.31	0.3%
514	WB R	1	Harvey Wilson Dr	5.4	0.3	34.3	1.71	0.0%
514	SWB L	1	Lockwood Dr	3.5	0.2	18.8	1.01	0.0%
514	NB TR	2	Lockwood Dr	53.3	1.9	281.4	9.75	1.9%
514	SWB TR	2	Lockwood Dr	22.3	0.8	140.8	4.84	0.0%
519	NB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%
519	WB R	0	Sonora St	1.2	0.1	10.3	0.71	0.0%
519	SB T	0	Lockwood Dr	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
519	EB R	0	Sonora St	0.9	0.1	6.3	0.41	0.0%
519	NB T	1	Lockwood Dr	0.2	0.0	0.0	0	0.0%
519	SB T	1	Lockwood Dr	0.0	0.0	0.0	0	0.0%
519	NB TR	2	Lockwood Dr	0.1	0.0	0.0	0	0.0%
519	SB TR	2	Lockwood Dr	0.0	0.0	0.0	0	0.0%
534	NB T	0	Lockwood Dr	8.4	0.1	61.5	1.01	0.0%
534	SB T	0	Lockwood Dr	13.0	0.2	60.8	1	0.0%
534	WB LTR	0	Hershe St	1.0	0.1	5.3	0.32	0.0%
534	EB LTR	0	Hershe St	2.8	0.2	16.6	0.92	0.0%
534	SB LT	1	Lockwood Dr	2.3	0.1	9.8	0.72	0.0%
534	NB LT	1	Lockwood Dr	6.8	0.3	57.8	2.43	0.0%
534	NB TR	2	Lockwood Dr	4.4	0.2	32.9	1.36	0.0%
534	SB TR	2	Lockwood Dr	2.1	0.1	4.2	0.34	0.0%
567	NB T	0	Lockwood Dr	8.9	0.1	75.3	1.2	0.0%
567	WB LTR	0	Nichols St	0.2	0.0	0.0	0	0.0%
567	SB T	0	Lockwood Dr	9.2	0.2	60.8	1	0.0%
567	EB LTR	0	Nichols St	3.5	0.2	21.3	1.1	0.0%
567	NB LT	1	Lockwood Dr	7.5	0.3	60.3	2.45	0.2%
567	SB LT	1	Lockwood Dr	2.9	0.1	13.4	0.84	0.0%
567	NB TR	2	Lockwood Dr	7.8	0.3	61.3	2.62	0.0%
567	SB TR	2	Lockwood Dr	2.4	0.1	12.8	0.72	0.0%
576	NB T	0	Lockwood Dr	0.3	0.0	0.0	0	0.0%
576	WB LTR	0	Sudan St	1.1	0.1	6.6	0.5	0.0%
576	SB T	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
576	EB LTR	0	Sudan St	0.9	0.1	7.2	0.51	0.0%
576	NB L	1	Lockwood Dr	0.2	0.0	0.0	0	0.0%
576	SB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
576	NB TR	2	Lockwood Dr	20.7	0.8	163.6	5.66	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
576	SB TR	2	Lockwood Dr	5.3	0.2	33.6	1.36	0.0%
604	NB T	0	Lockwood Dr	1.1	0.0	0.0	0	0.0%
604	WB LTR	0	Pardee St	1.9	0.1	15.1	0.9	0.0%
604	SB T	0	Lockwood Dr	1.1	0.0	0.0	0	0.0%
604	EB LTR	0	Pardee St	6.2	0.3	30.2	1.42	0.0%
604	NB L	1	Lockwood Dr	2.0	0.1	14.8	0.9	0.0%
604	SB L	1	Lockwood Dr	1.4	0.1	10.6	0.7	0.0%
604	NB TR	2	Lockwood Dr	63.1	2.3	334.8	11.73	0.0%
604	SB TR	2	Lockwood Dr	15.7	0.6	108.2	3.87	0.0%
623	NWB LTR	0	Lockwood Dr	2.0	0.1	3.9	0.53	0.0%
623	SB T	0	Lockwood Dr	8.9	0.1	60.5	1	0.0%
623	NB T	0	BRT Alignment	5.6	0.1	59.3	1	0.0%
623	WB LTR	0	Denmark St	7.0	0.4	35.0	1.61	0.0%
623	EB LTR	0	Denmark St	17.2	0.8	70.1	2.83	0.1%
623	SB LTR	1	Lockwood Dr	0.3	0.0	0.0	0.1	0.0%
641	NB T	0	Lockwood Dr	0.2	0.0	0.0	0	0.0%
641	WB LTR	0	Keeland St	1.8	0.1	15.2	0.9	0.0%
641	SB T	0	Lockwood Dr	0.4	0.0	0.0	0	0.0%
641	EB LTR	0	Keeland St	1.4	0.1	11.5	0.71	0.0%
641	NB L	1	Lockwood Dr	0.5	0.0	3.1	0.21	0.0%
641	SB L	1	Lockwood Dr	0.1	0.0	0.0	0	0.0%
641	NB TR	2	Lockwood Dr	16.6	0.7	127.2	4.72	0.0%
641	SB TR	2	Lockwood Dr	2.5	0.1	10.5	0.54	0.0%
659	NB T	0	Lockwood Dr	0.9	0.0	0.0	0	0.0%
659	WB LTR	0	Firnat St	8.9	0.4	44.4	2.02	0.0%
659	SB T	0	Lockwood Dr	1.3	0.0	0.0	0	0.0%
659	EB LTR	0	Firnat St	15.0	0.7	67.7	2.6	0.0%
659	NB L	1	Lockwood Dr	10.0	0.5	57.3	2.31	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
659	SB L	1	Lockwood Dr	3.4	0.2	20.0	1.1	0.0%
659	NB TR	2	Lockwood Dr	15.7	0.6	115.6	4.34	0.0%
659	SB TR	2	Lockwood Dr	5.1	0.2	34.1	1.53	0.0%
677	WB T	0	BRT Alignment	0.6	0.0	0.0	0	0.0%
677	NWB L	0	Tidwell Rd	1.6	0.1	13.1	0.9	0.0%
677	SB TR	0	Friendly Rd	35.3	1.4	128.0	4.81	0.2%
677	EB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	NB LTR	0	Friendly Rd	0.0	0.0	0.0	0	0.0%
677	NWB TR	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	EB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
677	EB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	EB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB T	0	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	SB LTR	0	Edell St	0.0	0.0	0.0	0	0.0%
689	NB LTR	0	Edell St	0.0	0.0	0.0	0	0.0%
689	EB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB L	1	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	EB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
689	WB TR	2	Tidwell Rd	0.0	0.0	0.0	0	0.0%
690	EB T	0	Turner Dr	0.0	0.0	0.0	0	0.0%
690	SWB T	0	Tidwell TC 2 Dr	0.0	0.0	0.0	0	0.0%
690	SEB TR	0	Epsom Rd	0.0	0.0	0.0	0	0.0%
690	NB LT	0	Edell St	0.0	0.0	0.0	0	0.0%
690	EB LR	1	Turner Dr	0.0	0.0	0.0	0	0.0%
705	WB L	0	Turner Dr	0.0	0.0	0.0	0	0.0%
705	SWB L	0	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB R	0	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	EB LTR	0	Turner Dr	0.0	0.0	0.0	0	0.0%

Node	Movements	Position	Street Name	Build 2030 PM				
				Avg Queue Length (ft)	Avg Num Queued	95th Percentile Length (ft)	95th Percentile Num Queued	Spillback Rate (%)
705	WB LTR	1	Turner Dr	0.0	0.0	0.0	0	0.0%
705	SWB TR	1	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB LT	1	Jensen Dr	0.0	0.0	0.0	0	0.0%
705	NEB TR	2	Jensen Dr	0.0	0.0	0.0	0	0.0%
99553	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB L	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	NB LR	0	Uptown Transit Ctr	0.0	0.0	0.0	0	0.0%
99553	EB TR	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99553	WB T	3	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	WB LT	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	NB LR	0	Alder Dr	0.0	0.0	0.0	0	0.0%
99558	EB TR	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99558	WB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	EB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	0	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	NB LR	0	Loop Central Dr	0.0	0.0	0.0	0	0.0%
99561	EB T	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB L	1	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	EB TR	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	2	Westpark Dr	0.0	0.0	0.0	0	0.0%
99561	WB T	3	Westpark Dr	0.0	0.0	0.0	0	0.0%

APPENDIX K – UNIVERSITY CORRIDOR BRT: MOU

Mission Statement

"Provide safe, clean, reliable, accessible and friendly public transportation services to our region."

Board of Directors

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University Corridor BRT: MOU

This Memorandum of Understanding (MOU) describes the agreement between METRO and the City of Houston in connection with the METRORapid University Corridor Project (the Project) during the conceptual development and preliminary engineering phase of the project also described as the Federal Transit Administration (FTA) Project Development phase. This MOU also defines the understanding of the shared goals and roles and responsibilities between METRO and the City of Houston. An Interlocal Agreement will be produced at a later date to define the roles and responsibilities of each agency with respect to Project finance, construction, operations, and maintenance.

PROJECT BACKGROUND

The METRORapid University Corridor is a proposed 25-mile METRORapid Bus Rapid Transit (BRT) line from Westchase Park & Ride to Tidwell Transit Center planned by METRO. With dedicated bus lanes and approximately 40 stations, the Project will bring fast, reliable transit to some of Houston's busiest and most densely populated areas utilizing a low or no-emission bus fleet. In addition, the Project will include upgrades to Westchase Park & Ride, Fifth Ward/Denver Harbor Transit Center, and Tidwell Transit Center; and first-and-last mile solutions for access to stations. When complete, the Project will connect to all of METRO's existing light rail transit and BRT lines, thereby supporting the development of a high-frequency, high-capacity transit network across Houston.

CITY OF HOUSTON AND METRO SHARED GOALS AND COMMITMENTS

The City of Houston and METRO are committed to providing equitable regional mobility solutions to residents of the region. The University Corridor provides a generational opportunity to execute on such a commitment.

METRO and the City of Houston share a common goal of providing multi-modal travel options within the City of Houston. To deliver on this goal, the City and METRO have agreed to use the existing right-of-way along the alignment as much as practical to add a high-capacity transit option that prioritizes person throughput. The Project design will align with City's Vision Zero initiative and the City's plan to create walkable places.

The alignment will primarily run on City-owned streets controlled by the City's traffic signal system. Both parties understand that Transit Signal Priority (TSP) will be required to provide fast and reliable service at intersections. METRO and the City therefore commit to providing TSP at intersections where practicable and to the level possible, to improve the speed, reliability, and overall runtime of the proposed BRT Project.

METRO and the City will collaborate on additional project initiatives such as transit oriented development/joint development and stormwater management plans to promote resiliency and equitable development within the corridor. These initiatives will align with the City of Houston's *Resilient Houston Strategy*, *Climate Action Plan*, and *Complete Communities Action Plans* which are solutions-oriented platforms developed by community collaboratives and adopted by City Council on August 29, 2018. These action plans help provide greater access to many community benefits including quality affordable housing and transit options. The City's commitment to Complete Communities provides a basis for a partnership with METRO for the Project as it connects many of those neighborhoods. The Project furthers the goals of this plan and METRO's goal to equitable access to transit services. METRO and the City of Houston will continue to build upon the ongoing coordination and collaboration during the Project Development Phase, through the Final Design, Construction, and Operations and Maintenance phases of the Project.

ROLES AND RESPONSIBILITIES

1. METRO is the Project Sponsor and will be responsible for all project related work during Project Development, Final Design, Construction, Startup, and Operations and Maintenance.

2. METRO and the City of Houston shall meet biweekly, or as otherwise agreed to, to provide a forum to discuss all aspects of the Project during Project Development. Sharing a commitment to expedite the project into the Project Development phase and implement the project sooner, both parties implemented these review meetings at the outset of project coordination; this effort will continue into the subsequent phases of the project.

3. METRO and the City of Houston have established a senior-level committee focused on the successful delivery of the Project. The committee shall address any and all issues that may impact the Project and City-owned right-of-way.

Approved By:

City of Houston

Printed Name: David Fields

Title: Chief Transportation Planner

Signature:

Date: August 22, 2022

METRO

Printed Name: Clint Harbert

Title: VP, System & Capital Planning

Signature:

Date: 8/22/2022

APPENDIX L – THROUGHPUT METHODOLOGY AND FINDINGS

METRONext University Corridor
Throughput Methodology and Findings
March 9, 2022 (updated from February 8, 2022 with information on Segment 5 as requested)

Background

During a METRO/City of Houston (COH) call to initiate discussion on the University Corridor BRT (Bus Rapid Transit) Project held on June 11, 2021, METRO explained the need for the BRT to have a dedicated guideway. METRO explained the most cost-effective approach to develop the dedicated lanes would be to dedicate two general purpose lanes to BRT, especially in areas where right-of-way is limited. This approach would minimize right-of-way acquisitions and may help enhance roadway safety as well as other COH goals. The COH participants expressed their support for the project and for converting a traffic lane to a dedicated BRT lane. COH staff stated COH leadership would need some documentation to help it make an argument to dedicate the travel lanes to BRT. The COH suggested METRO compare the person throughput of a single lane of general-purpose traffic against the person throughput of the BRT as one way to justify the COH's support.

Methodology

There are two general ways to compare the throughput of a general-purpose travel lane to the throughput of a BRT guideway lane.

1. Calculate the Theoretical Maximum of each mode
2. Estimate the future BRT ridership and compare it to the existing vehicle throughput

<u>Method 1</u>
The first method of comparison is to calculate the maximum throughput of each mode. This calculation is straightforward as METRO would compare the throughput of the travel lane to the throughput of the BRT lane.

The throughput of a general-purpose travel lane on a signalized arterial is impacted primarily by the lane width and green time of the signal. For purposes of this comparison the calculation would use the COH's preferred lane width inside I-610 of 10 feet and assume a standard distribution of green time to traffic in both directions. Using these factors, the typical maximum throughput would be approximately 850 vehicles per hour. As suggested by COH, METRO should assume 1 person per vehicle for a maximum person throughput of 850 vehicles, one person per vehicle for a total throughput capacity of 850 people per hour.

The throughput of a BRT lane is calculated by multiplying the number of BRT vehicles per hour by METRO's maximum load per vehicle. Using a BRT headway of 6 minutes translates to 10 BRT vehicles per hour (note, as the system grows, METRO would provide the infrastructure to operate two vehicles consistently, which could increase the BRT capacity to 20 vehicles per hour). With a maximum capacity of 80 people per vehicle, the person throughout would be at 10 times 80 or 800 people per hour up to 20 times 80 or 1,600 people per hour. As the system grows and additional extra buses are added, the throughput would increase.

Implementation of Method 1

The basic calculations are described above. The variance in BRT throughput is large and illustrative of the potential capacity for BRT to dramatically increase person throughput when compared to personal vehicles. This method could be applied equally across the corridor because it is theoretical, and the conditions of the corridor are consistent with respect to travel lanes.

Method 2

The second method of comparison is to calculate projected ridership against existing traffic. This calculation is more complex than Method 1 as it requires several steps to develop the number of passengers on each BRT vehicle.

Developing the existing throughput for the travel lane requires gathering existing traffic data and processing it in Synchro to determine the current number of vehicles traveling through the intersection in the same directions of travel as the BRT and determining the peak direction of travel. This figure would be divided by the number of lanes to estimate the vehicles per lane. As stated above the number of vehicles equals the person throughput.

Developing the estimated throughput for the BRT lane is a three-step process because the FTA (FEDERAL TRANSIT ADMINISTRATION) modeling tool, called Simplified Trips on Project Software, or "STOPS," does not produce peak hour ridership. The steps in the process include:

1. Estimate a peak hour factor and determine the peak direction of travel.
2. Apply the peak hour factor to the station level boarding figures developed in STOPS.
3. Calculate the number of riders traveling through a selected intersection to determine the BRT throughput. This is done by adding boarding passengers and subtracting alighting passengers to determine the peak load. The peak load equals the BRT throughput.

Implementation of Method 2

METRO has completed the acquisition and evaluation of existing traffic counts. METRO will need to determine the number of vehicles per lane. To make this exercise more cost effective, it is recommended the throughput be calculated at the most congested intersection in Segments 2, 3, 4 and 5 as described above. Segment 1 is excluded because the BRT would be operating in METRO owned right-of-way on a new guideway built exclusively for BRT vehicles. Figure 1 shows the project limits and segments.

METRO is currently developing the projected ridership. Once the ridership modeling process is complete METRO should calculate the BRT throughput at the most congested intersections identified above and at the peak load point in each of the four segments. This approach provides a direct comparison to the traffic throughput and provides a comparison of the BRT's peak load point.



Figure 1: University Corridor Project Limits

Selected Approach

After reviewing the proposed methodology, the COH via David Fields selected Method 2, which was to compare actual traffic counts to the projected project ridership.

Analysis Findings

The METRO PMC performed the analysis to support the findings described below. The PMC collected traffic counts during the AM and PM peak periods, 7 AM – 9 AM and 4 PM to 6 PM. The counts were taking over two days, September 1st, 2021, and September 9th, 2021, due to the size of the corridor. The data was further analyzed to identify the peak hour for each intersection (see Appendix A). Based on the peak hour counts, the PMC selected the highest volume for Segment 2, Segment 3, Segment 4, and Segment 5 as follows:

- Segment 2 - Richmond Avenue at Kirby Drive
- Segment 3 - Wheeler Avenue at San Jacinto Street
- Segment 4 - Lockwood Drive at Navigation Boulevard
- Segment 5 – Lockwood Drive at Nichols Street

The equation to calculate the peak hour volume per lane on the legs of each intersection that would also be used by the BRT is the total volume of lanes traveling through the intersection divided by number of lanes, which equals volume per lane. Volumes on dedicated left turn lanes were removed from the total volumes because left turns would remain at each of the four intersections.

The PMC used the FTA's STOPS to produce the ridership forecast for the project. The PMC then calculated the peak period ridership at the proposed BRT station nearest to each of the above intersections.

Table 1 shows the peak volume per lane for the AM and PM peak periods and the comparable peak BRT ridership. The results show the BRT ridership to be higher than the peak lane volumes in Segments 2, 3 and 4. In Segment 5, the calculated peak traffic volume exceeds the forecasted BRT peak period ridership.

Table 1: Comparison of Peak Period Vehicles Per Lane to Forecasted BRT Ridership

Segments	Direction of Travel	Number of Through lanes[1]	Total Vehicles by Direction during Peak Hour [2]		Existing Vehicles Per Lane during Peak Hour		Total Passengers on BRT during Peak Hour from 2019 STOPS Model Results
			AM	PM	AM	PM	
Segment 2 - Richmond Avenue at Kirby Drive	Richmond Ave EB	3	495	659	165	**220**	**272**
	Richmond Ave WB	3	282	451	94	150	
Segment 3 - Wheeler Avenue at San Jacinto Street	Wheeler Ave EB	2	466	623	233	**312**	**423**
	Wheeler Ave WB	2	384	432	192	216	
Segment 4 - Lockwood Drive at Navigation Boulevard	Lockwood Dr NB	2	332	403	166	**202**	**260**
	Lockwood Dr SB	2	431	282	216	141	
Segment 5 - - Lockwood Dr at Nichols St	Lockwood Dr NB	3	288	733	96	244	**230**
	Lockwood Dr SB	3	458	480	153	160	

Notes:

1 – Existing number of lanes including through lanes and shared through/right lanes only as one of these lanes would be replaced by a dedicated BRT lane. Exclusive right and left turn lanes have NOT been included.

2 – Existing volumes are the total vehicles traveling in the through lanes identified in the previous column. Vehicles turning in dedicated left or right turn lanes are NOT included in the totals.

- Intersections with the highest congestion (largest total intersection volume) for each segment were collected for the throughput analysis

- Throughput calculations are based on approach volumes and do not take effects of green time reallocation into consideration

Appendix A

University Corridor Peak Existing Volumes

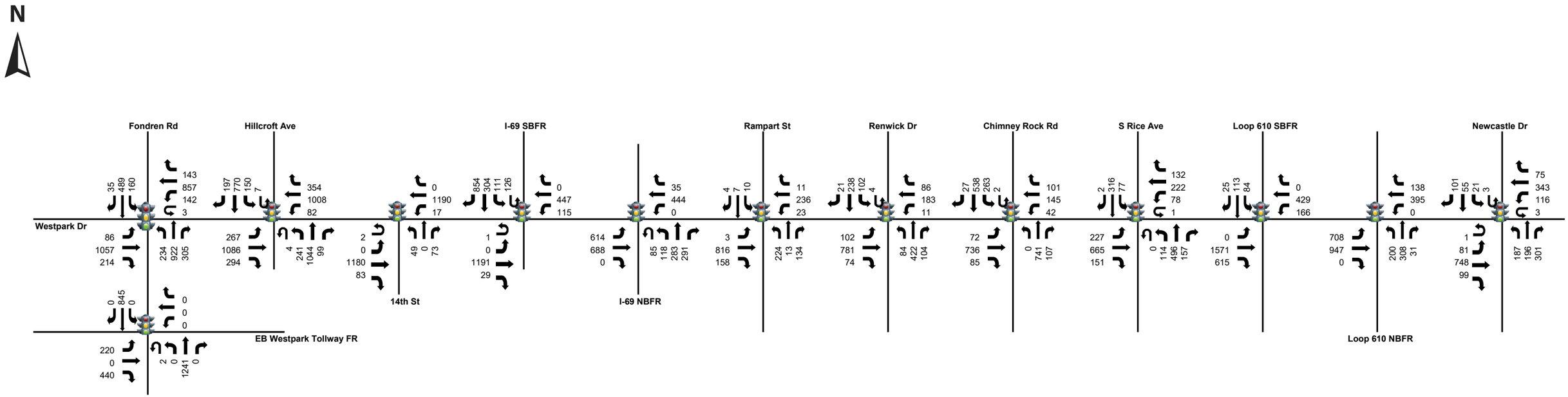


Figure 1/10: University Line Segment 1 Existing Volumes (AM)

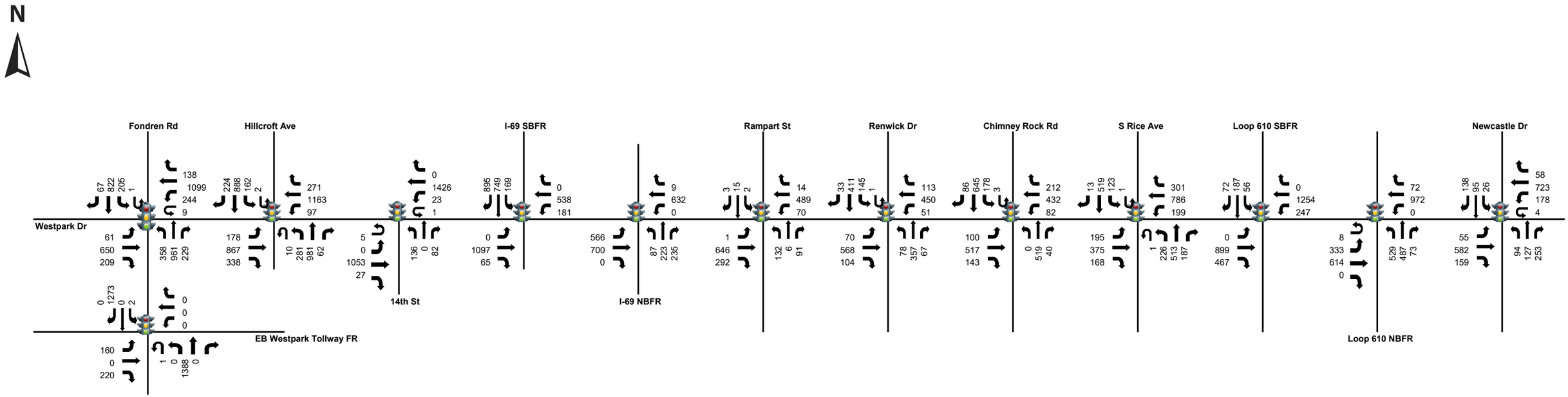


Figure 2/10: University Line Segment 1 Existing Volumes (PM)

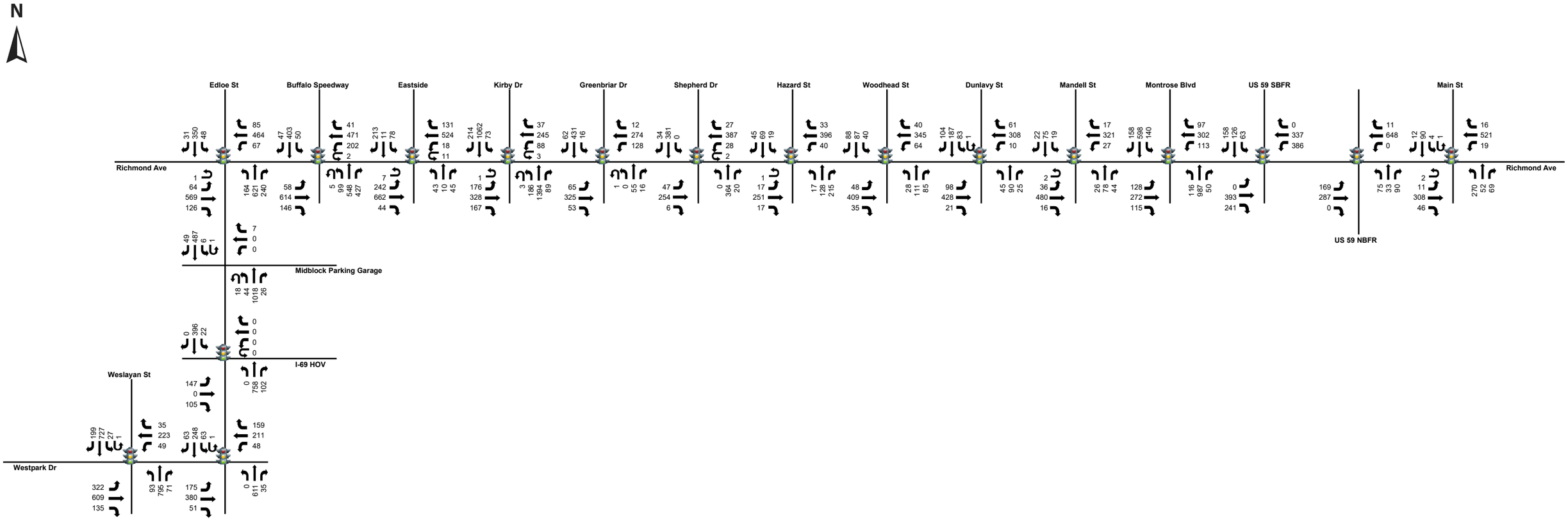


Figure 3/10: University Line Segment 2 Existing Volumes (AM)

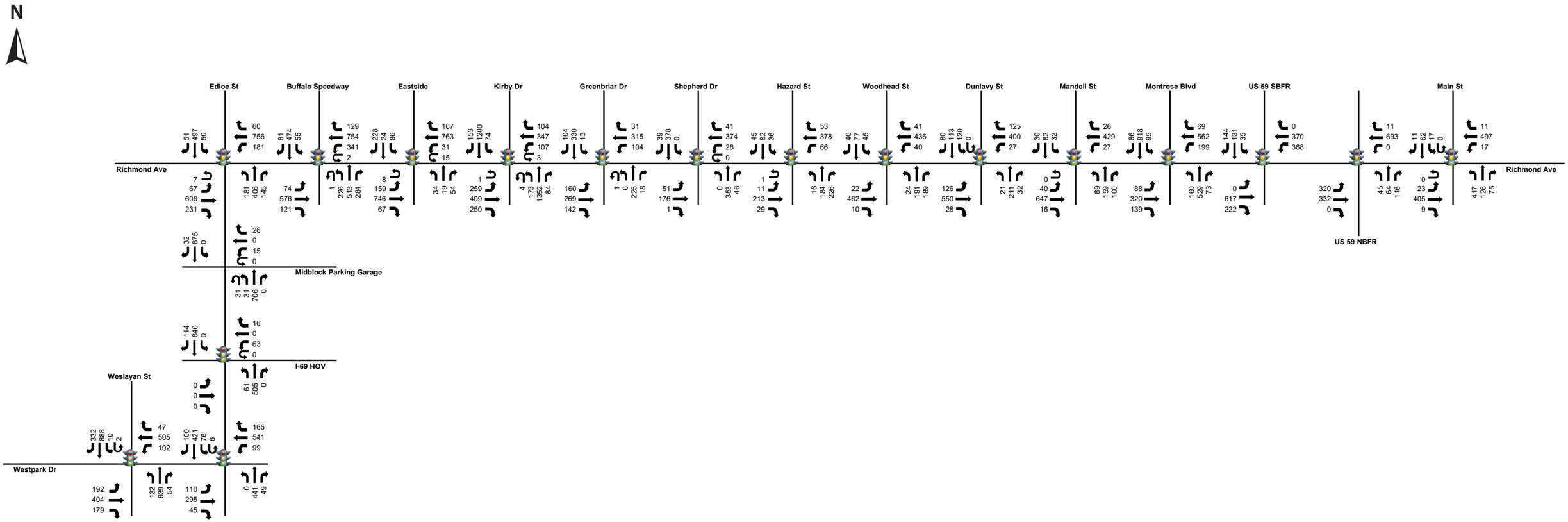
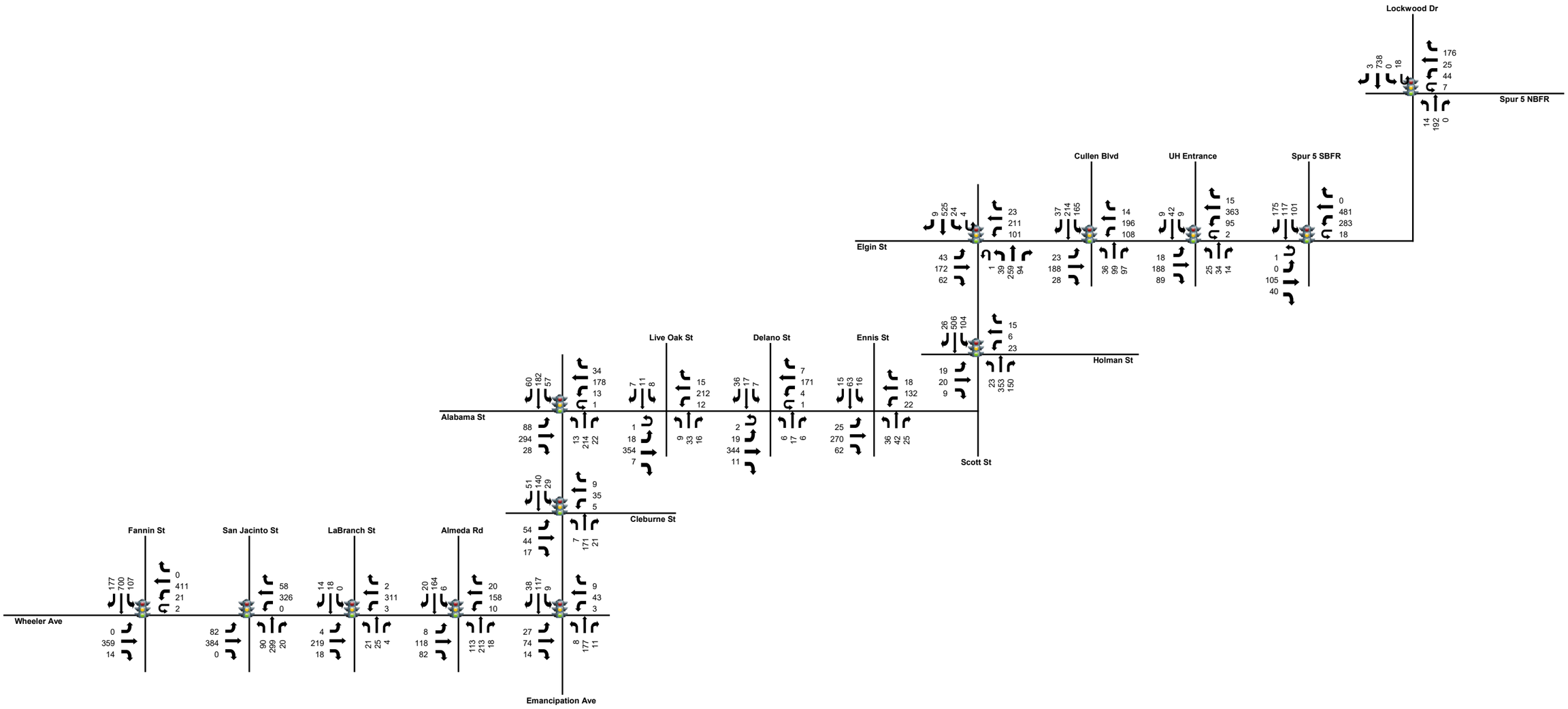


Figure 4/10: University Line Segment 2 Existing Volumes (PM)

N

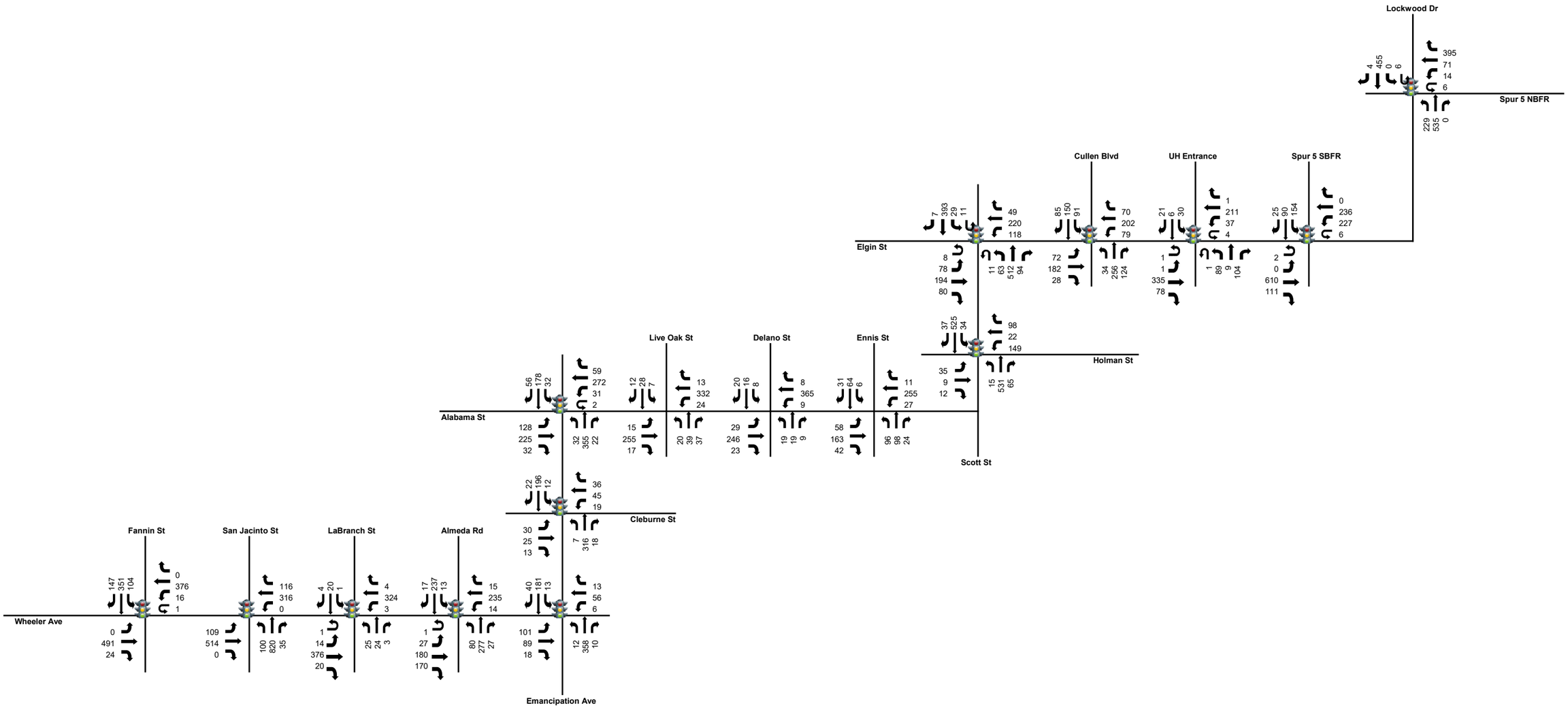


ATG ALLIANCE TRANSPORTATION GROUP

KEY:
Signalized Intersection

Figure 5/10: University Line Segment 3 Existing Volumes (AM)

N



ATG ALLIANCE TRANSPORTATION GROUP

KEY:
Signalized Intersection

Figure 6/10: University Line Segment 3 Existing Volumes (PM)

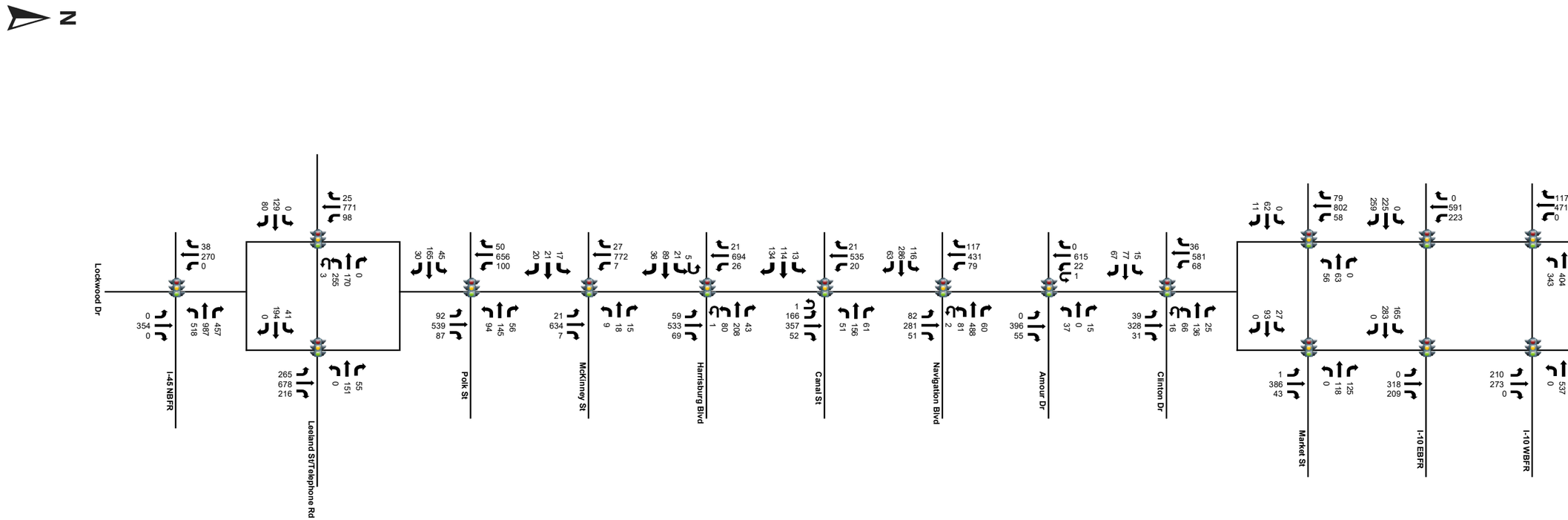


Figure 7/10: University Line Segment 4 Existing Volumes (AM)

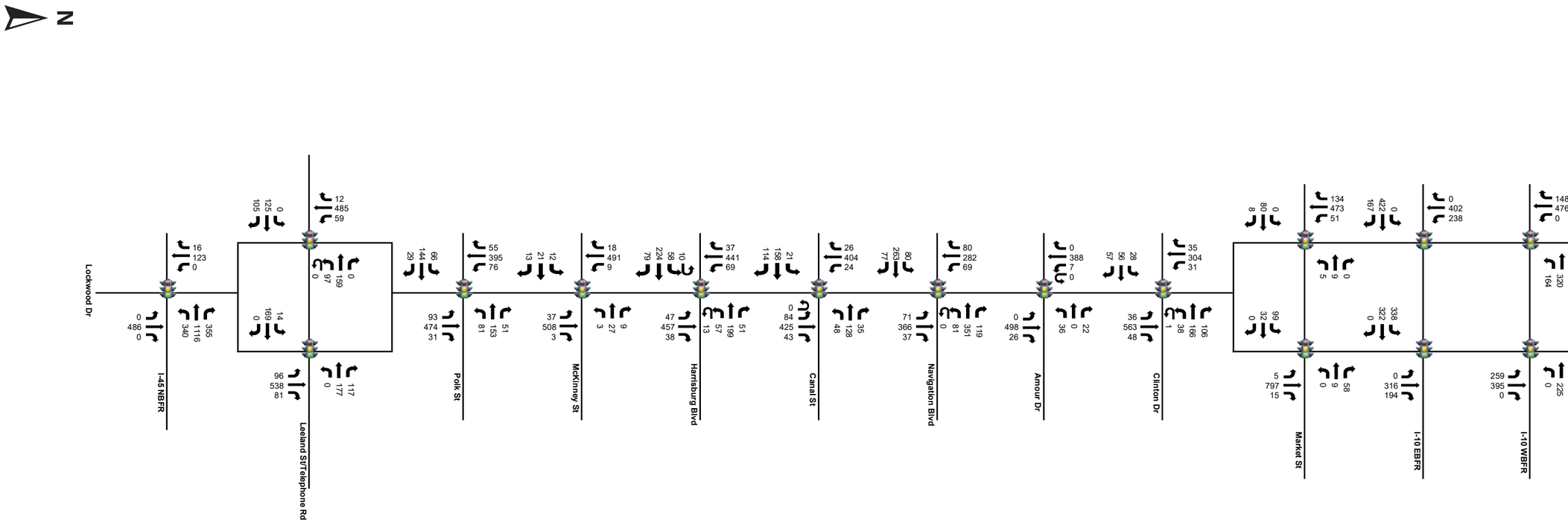


Figure 8/10: University Line Segment 4 Existing Volumes (PM)

Tidwell Rd
Jensen Dr
I-69 SBFR
I-69 NBFR
Hirsch Rd
Lockwood Dr
Loop 610 EBFR
Loop 610 WBFR
Kelley St
Shreveport Blvd
Bennington St
Crosstimbers Rd
Weaver Rd
Laura Koppe Rd
Lockwood Dr (SB)
Lockwood Dr (NB)
Lyons Ave
Mulvey St
Nichols St
Collingsworth St
Crane St
Cavalcade St
Rand St
N
KEY:
Signalized Intersection

N
Lockwood Dr
Hirsch Rd
I-69 SBFR
I-69 NBFR
Tidwell Rd
Jensen Dr
Loop 610 EBFR
Loop 610 WBFR
Mulvey St
Nichols St
Collingsworth St
Crane St
Cavalcade St
Rand St
Kelley St
Shreveport Blvd
Bennington St
Crosstimbers Rd
Weaver Rd
Laura Koppe Rd
Lyons Ave
Lockwood Dr (SB)
Lockwood Dr (NB)
KEY:
Signalized Intersection