

METRONext

Vision & Moving Forward Plans

Board Workshop

July 26, 2018

DRAFT 07.26.2018 - For Preliminary Discussion Only



Disclaimer

This presentation is being provided solely for preliminary discussion purposes by the Board of Directors of the Metropolitan Transit Authority of Harris County, Texas (METRO) during a workshop session on July 26, 2018. It includes draft alternative transit plans, which utilize a range of modes of transportation based on different funding scenarios, including a draft long-term plan that provides a vision of future transit in the service area assuming unconstrained financial resources. The draft plans are based on various financial estimates, economic forecasts and other assumptions, which are subject to change. As a result, the final proposed plan could differ materially. Additionally, any proposed plan or project conducted by METRO is subject to certain approvals and authorization, including approval by the METRO Board of Directors.

METRO makes no claim, promise or guarantee of any kind, including with respect to the feasibility or future implementation of any proposed plans or projects discussed herein.



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- › **Overview of METRONext process**
- › **Presentation of Draft Vision & Moving Forward Plans**
- › **Financial Forecast**
- › **Next Steps**

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Why METRONext?

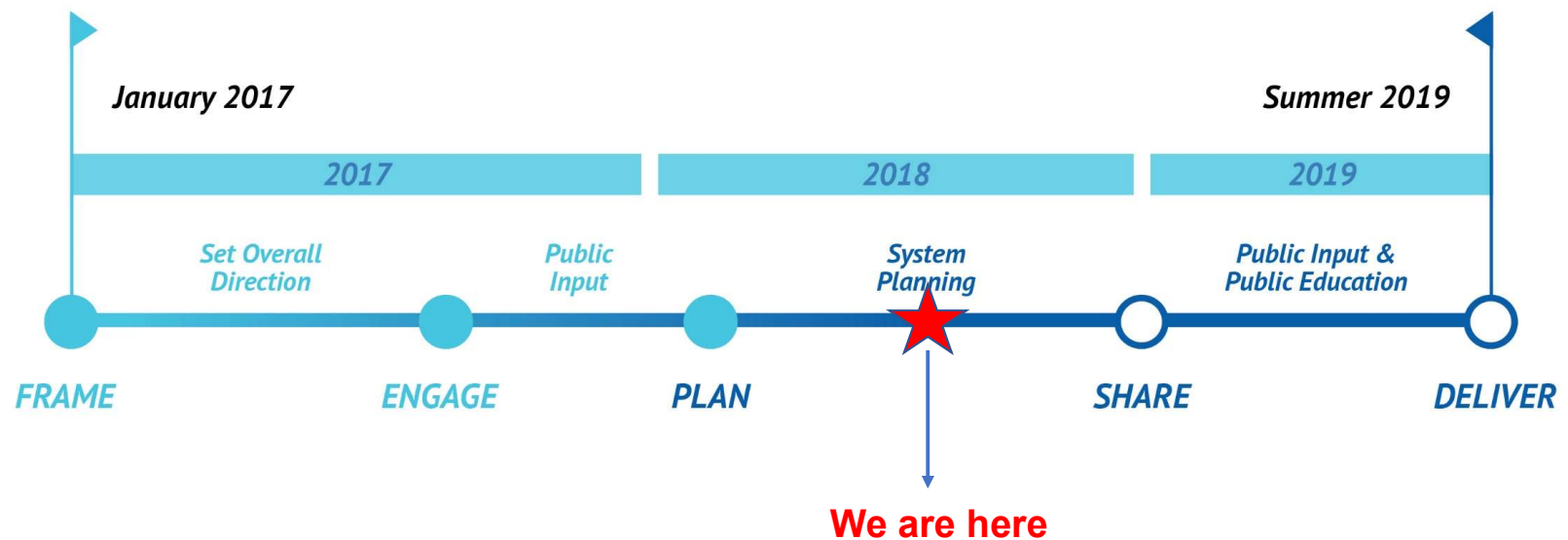
A Critical Plan for a Dynamic, Changing Region

- › A bold, transformative vision
- › Support a more resilient Houston region
- › First major capital planning effort since METRO Solutions 2003
- › Regional transit framework
- › Build on success of New Bus Network and light rail expansion

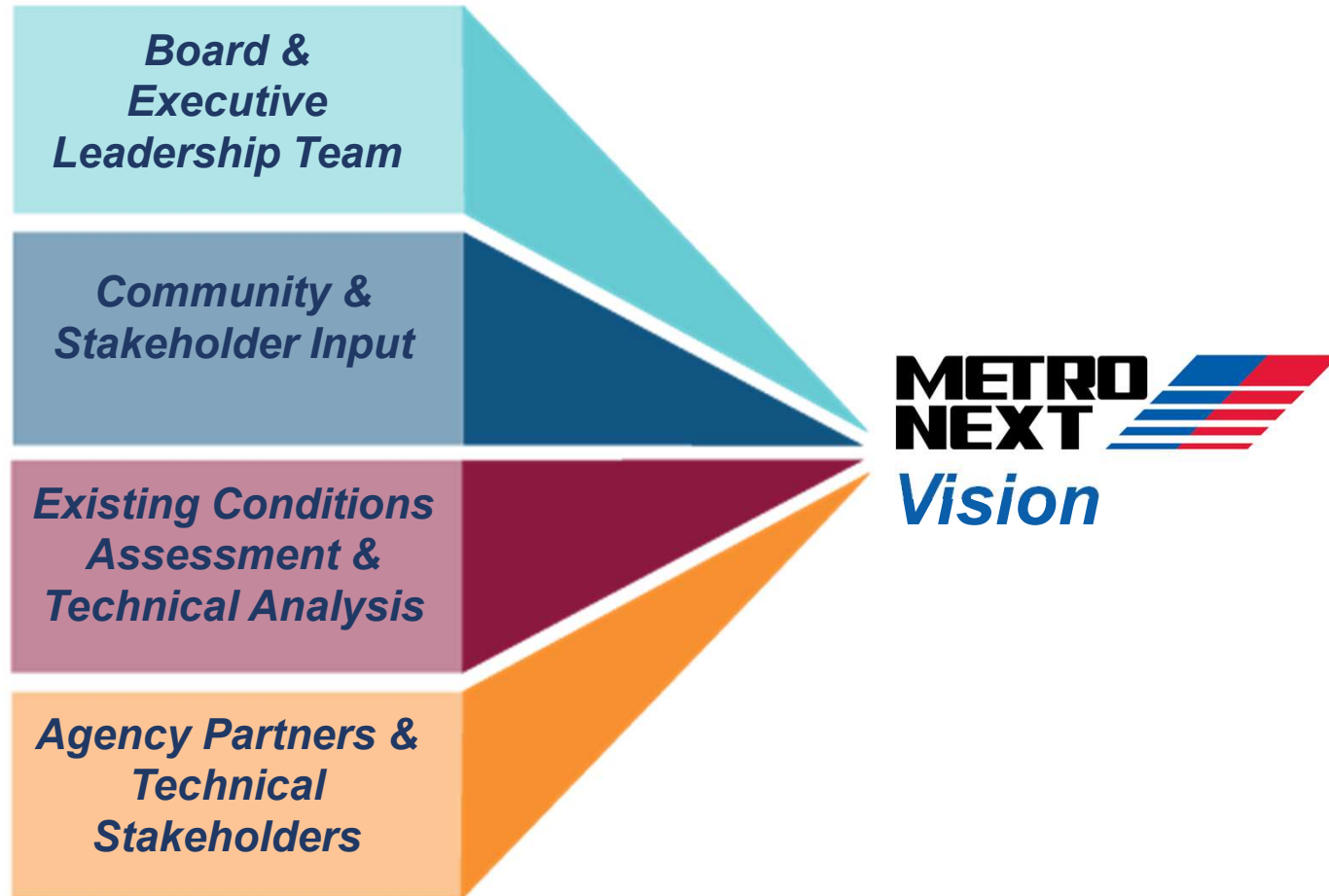
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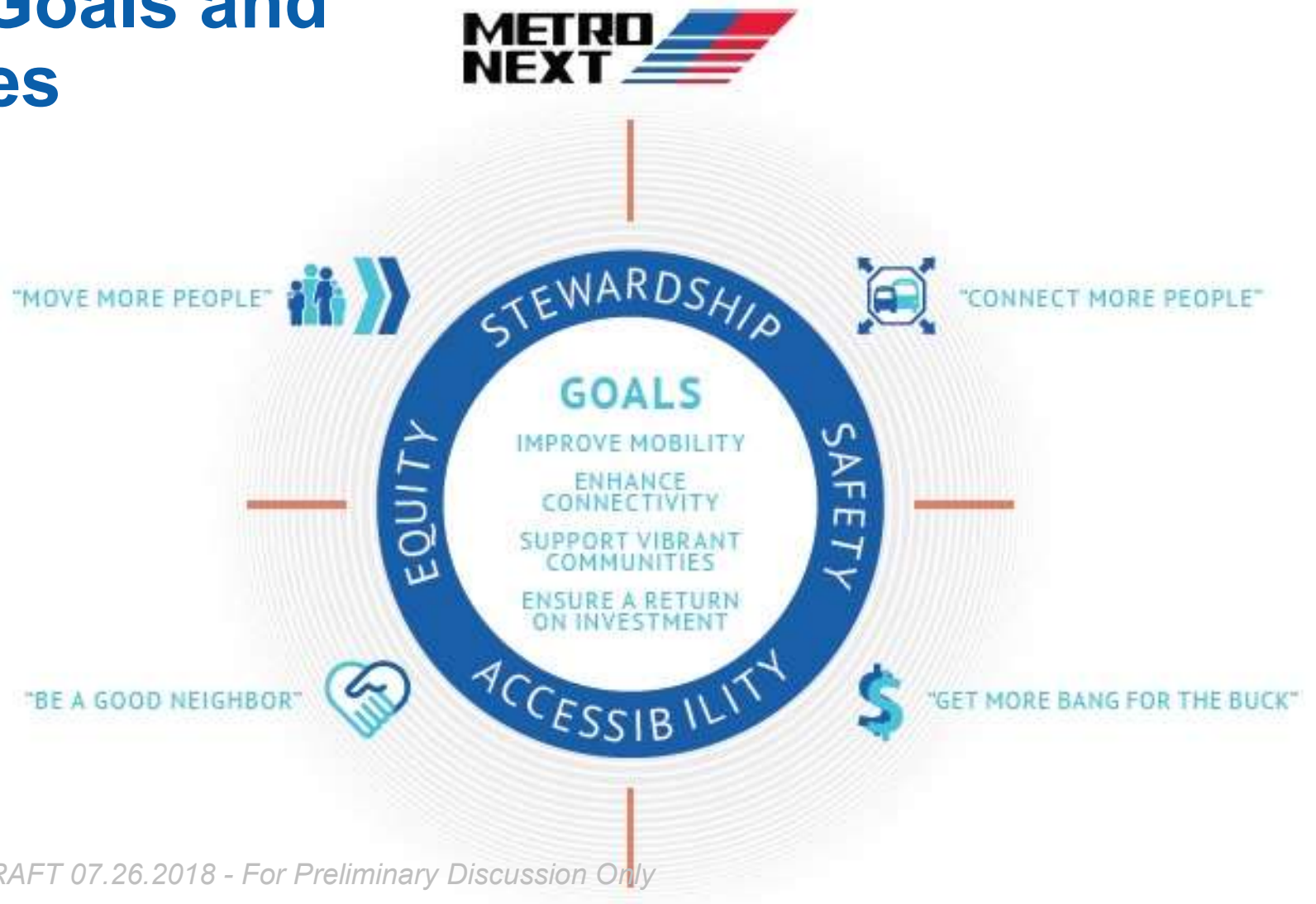
Project Milestones



Inputs to the Vision Development



Board Goals and Priorities

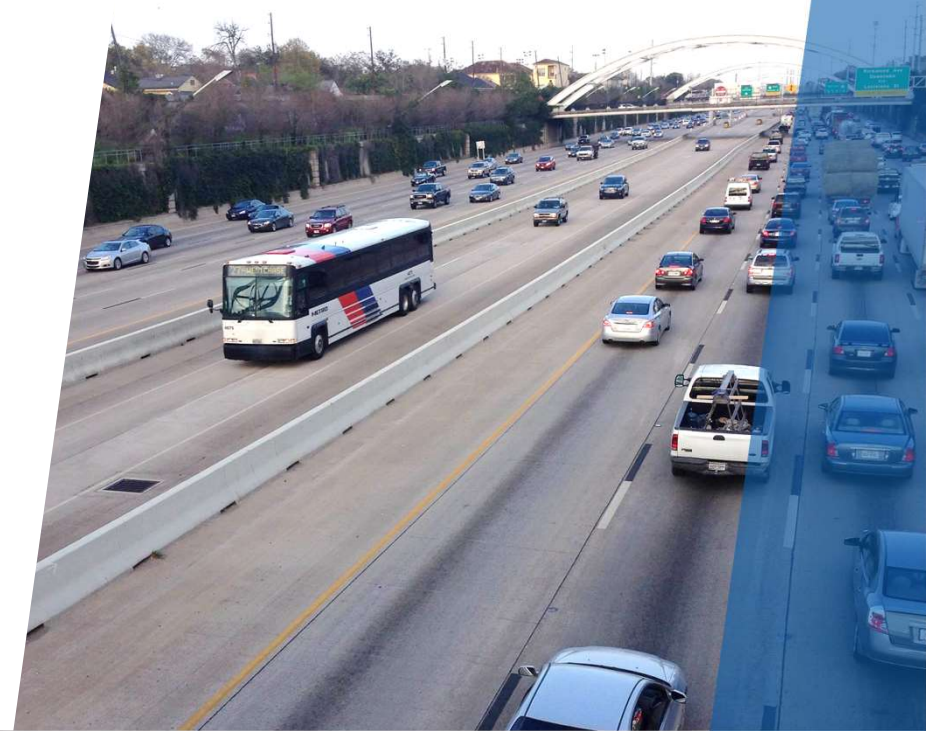


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Community Stakeholders: Four Emerging Themes

- **Connections**

- › Better serve major activity centers
- › Connect airports
- › Link region to jobs, education, and services
- › Expand commuter network
- › New Transit Oriented Development (TOD) hubs
 - » Retail, residential, and employment development at transit hubs



Community Stakeholders: Four Emerging Themes

- **Speed and Reliability**

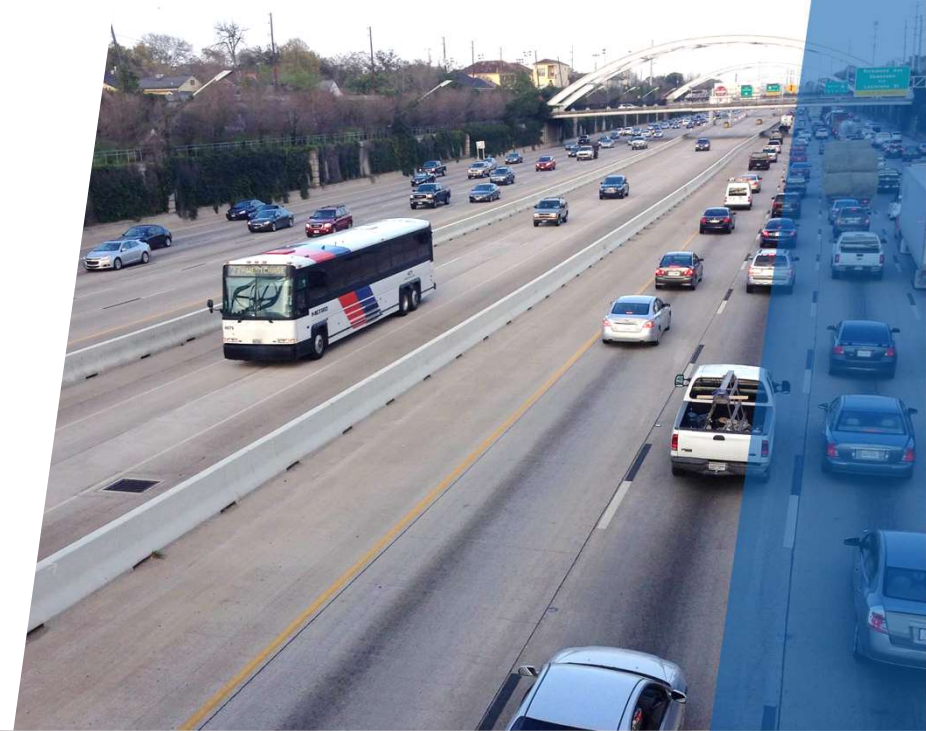
- › Exclusive right-of-way for transit
- › Expanded two-way HOV/HOT and all-day service
- › Rail and BRT expansion
- › Traffic signal priority for transit vehicles
- › Bus stop improvements and optimization
 - » Stop consolidation, access improvements, and far side stops



Community Stakeholders: Four Emerging Themes

- **Customer Experience**

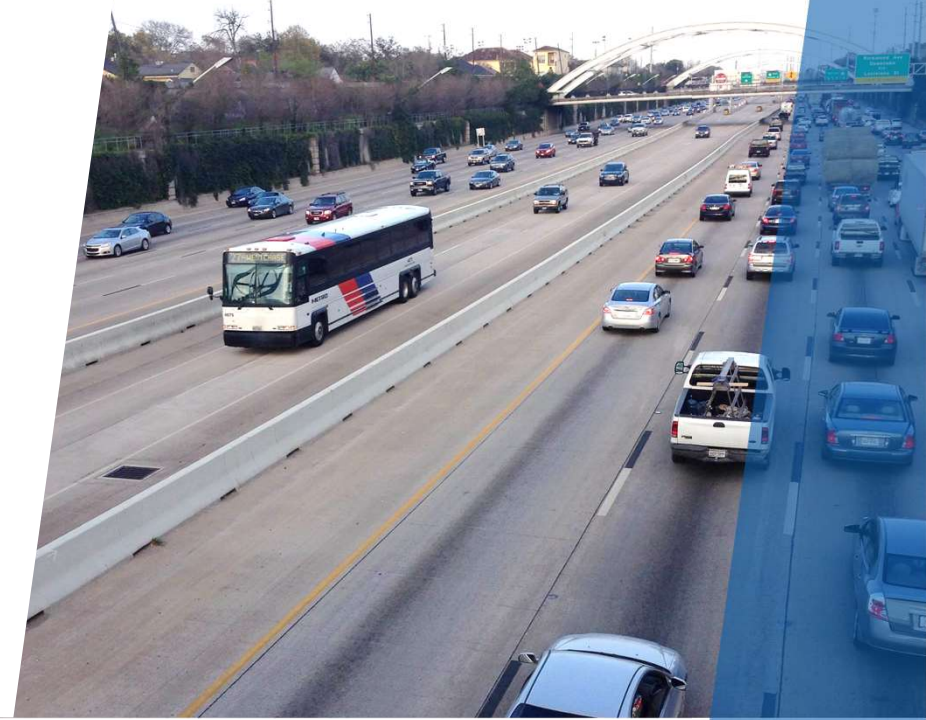
- › Safe, clean, accessible & attractive facilities
- › First/last mile access
- › More & better shelters
- › Real-time passenger information
- › Safety improvements



Community Stakeholders: Four Emerging Themes

- **Innovation**

- › New and emerging technologies
- › Autonomous vehicles
- › Transportation Network Company (TNC) integration
- › Mobile applications and tools

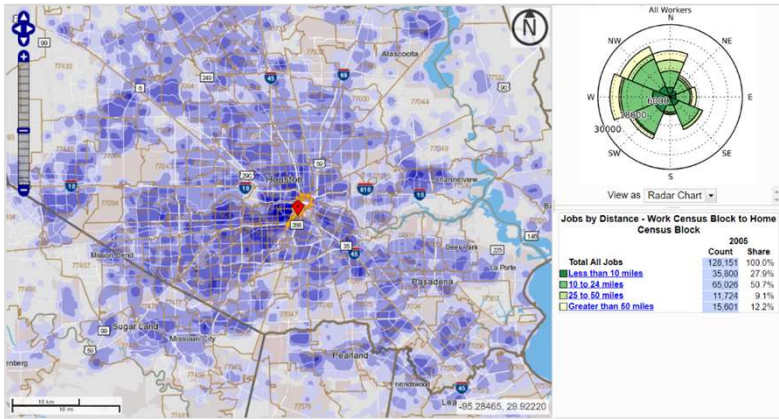


Coordination with Regional Partners

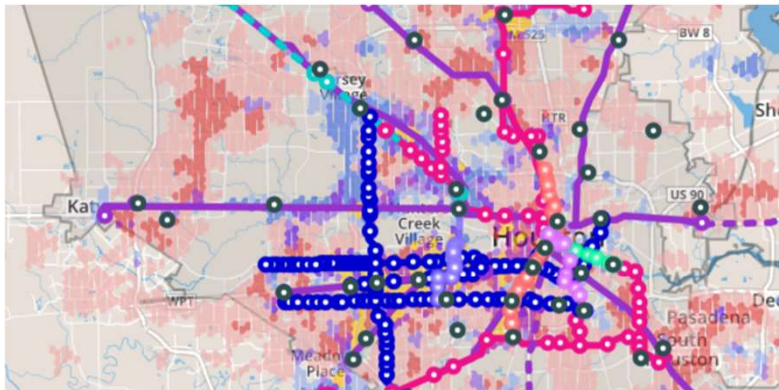
- Technical Stakeholders Advisory Committee
- Potential Implementation Partners
 - › TxDOT
 - › City of Houston
 - › Harris County
 - › Multi-cities
 - › H-GAC
 - › Others



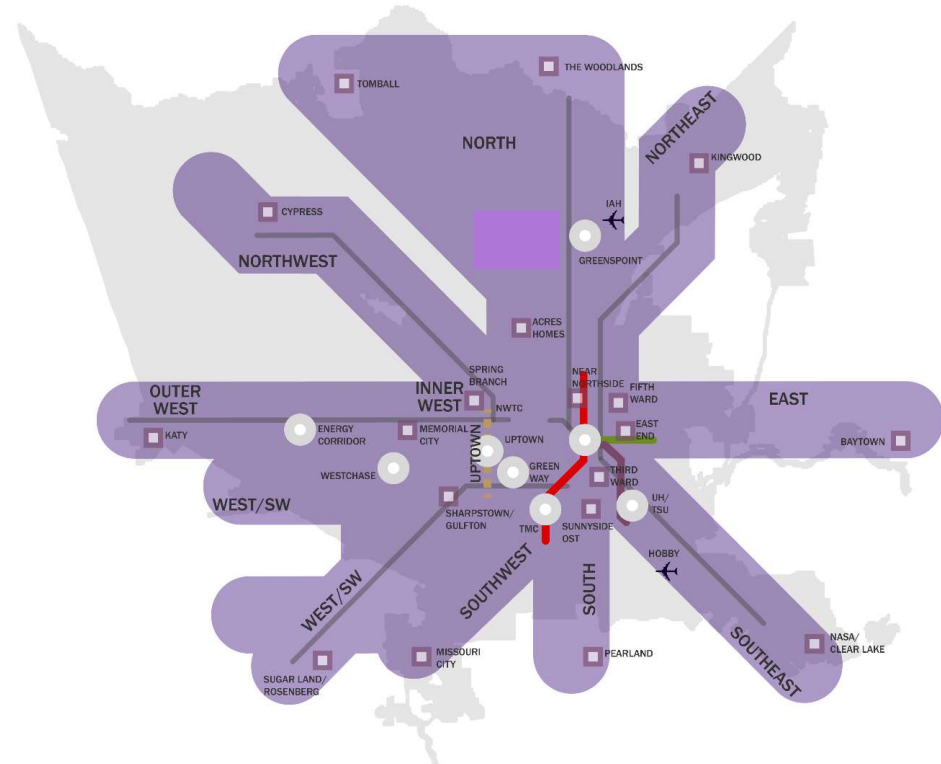
Technical Analysis



Travel Patterns



Development Density



Major Investment Corridors

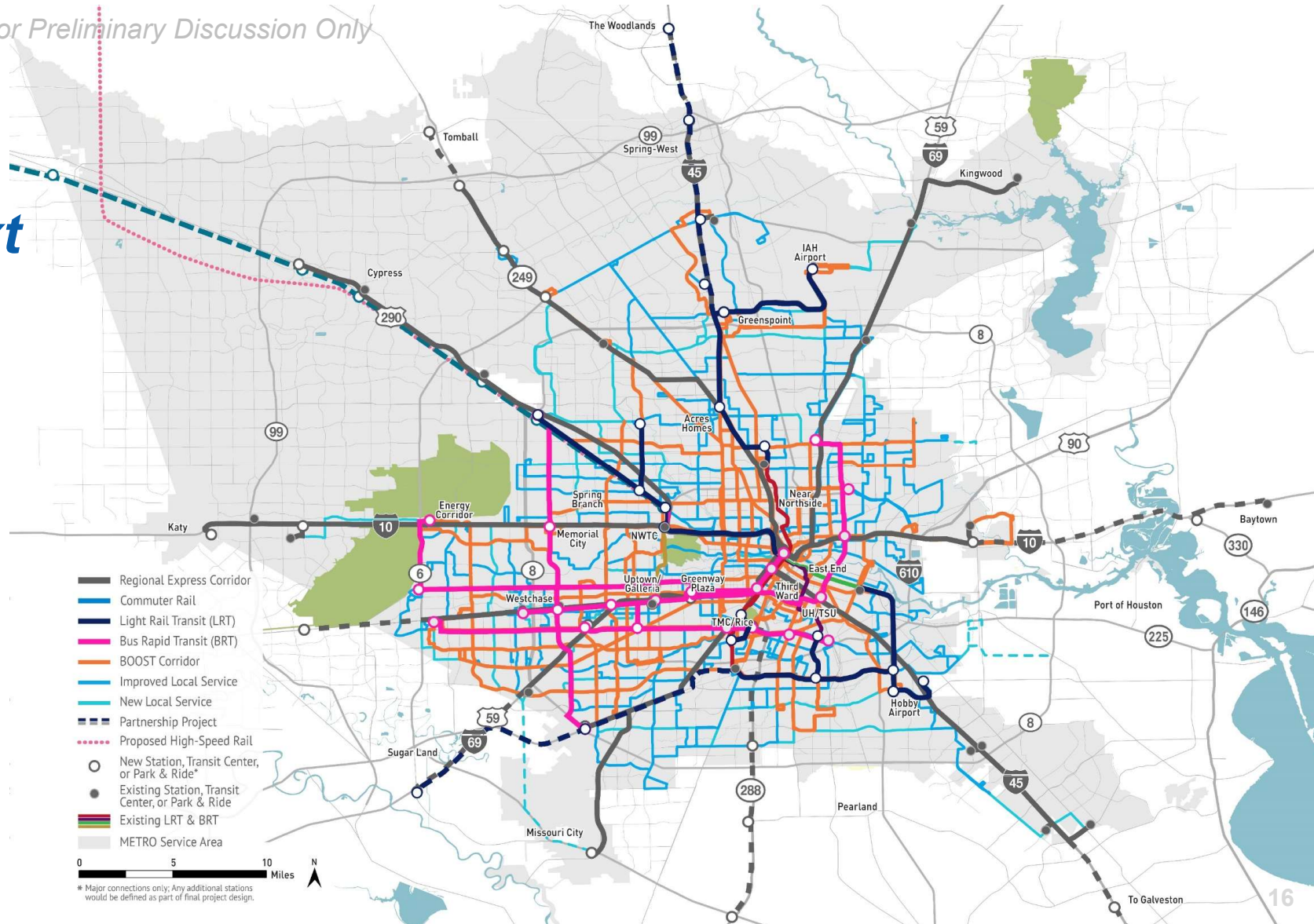
The METRONext Long-Term Vision Plan

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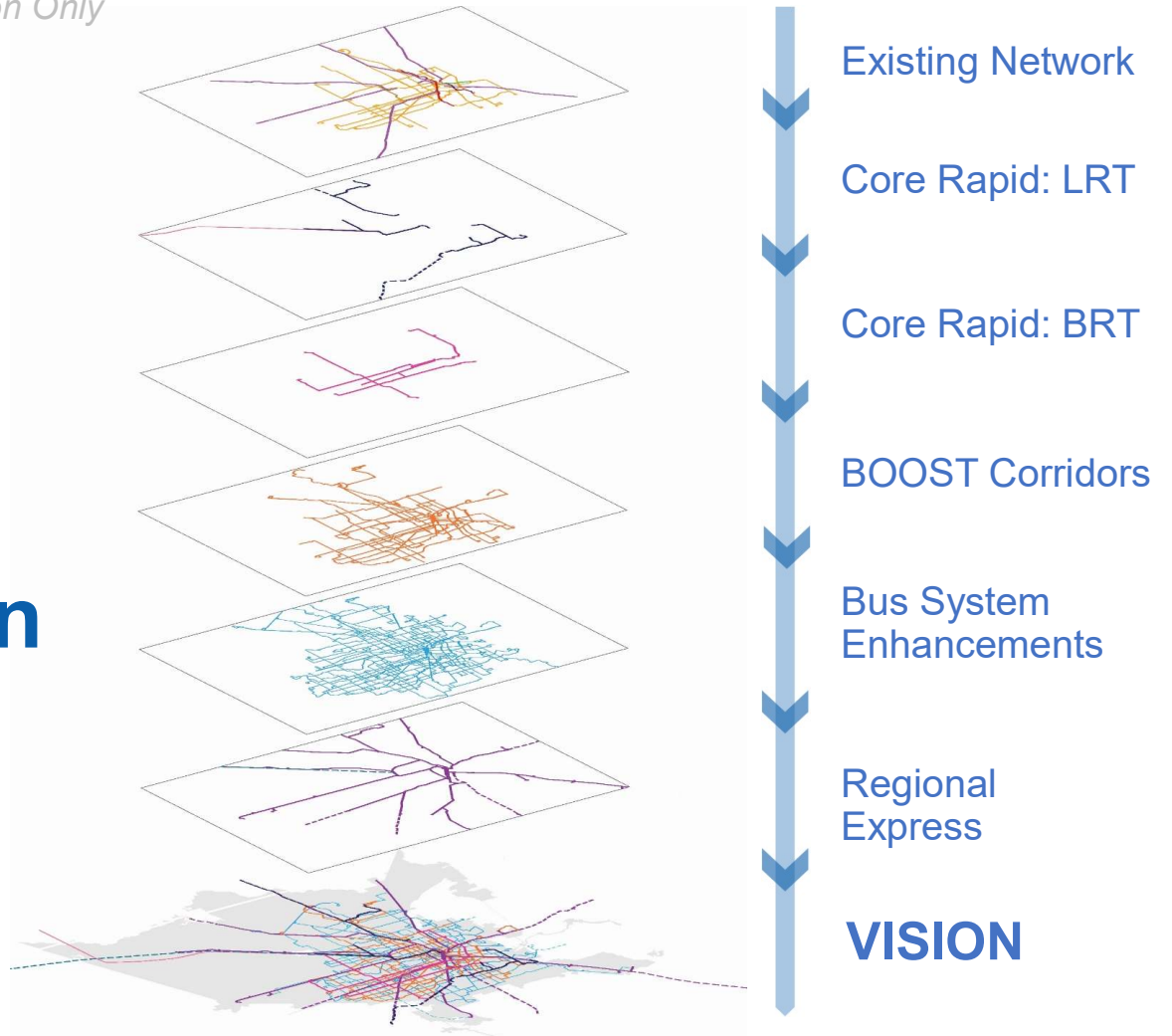


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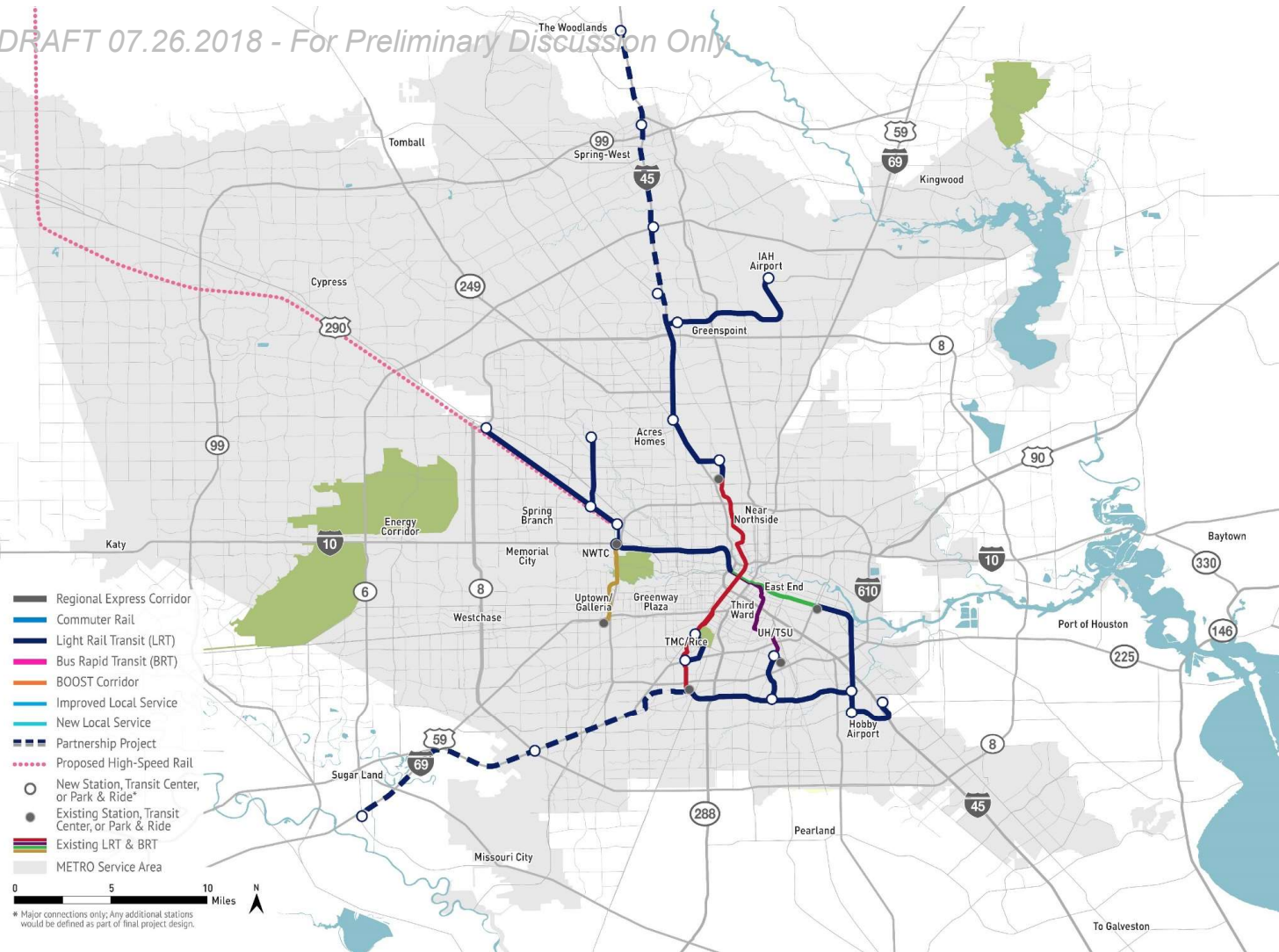
METRONext Long-Term Vision Plan



Building the METRONext Long-Term Vision



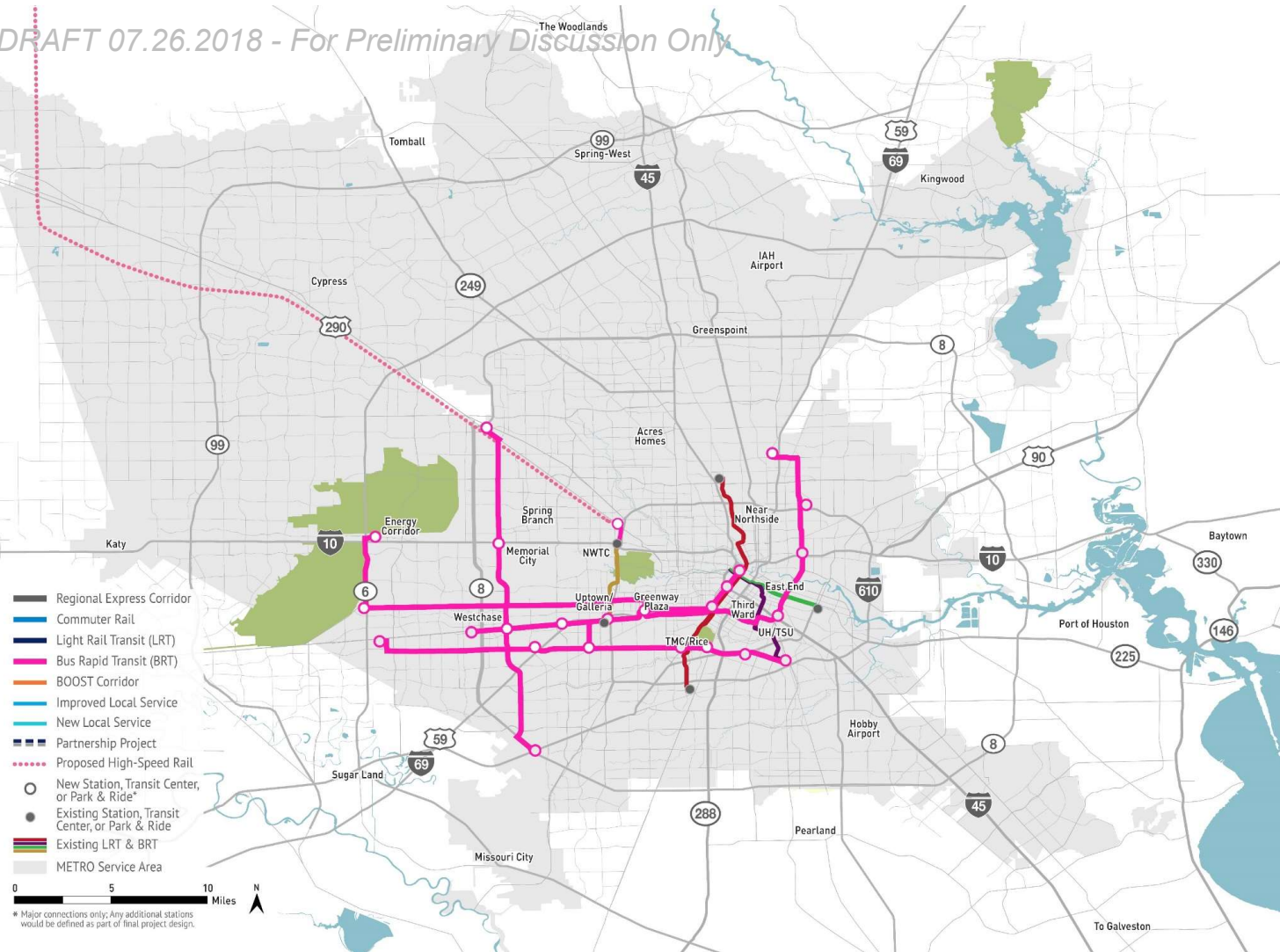
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Core Rapid Transit: LRT

- › Fast and reliable network backbone
- › Extends the existing Red, Green, and Purple Lines
- › Focused on dense, higher-ridership corridors, and key destinations
- › Connects major destinations including airports
- › Provides Downtown-NWTC link

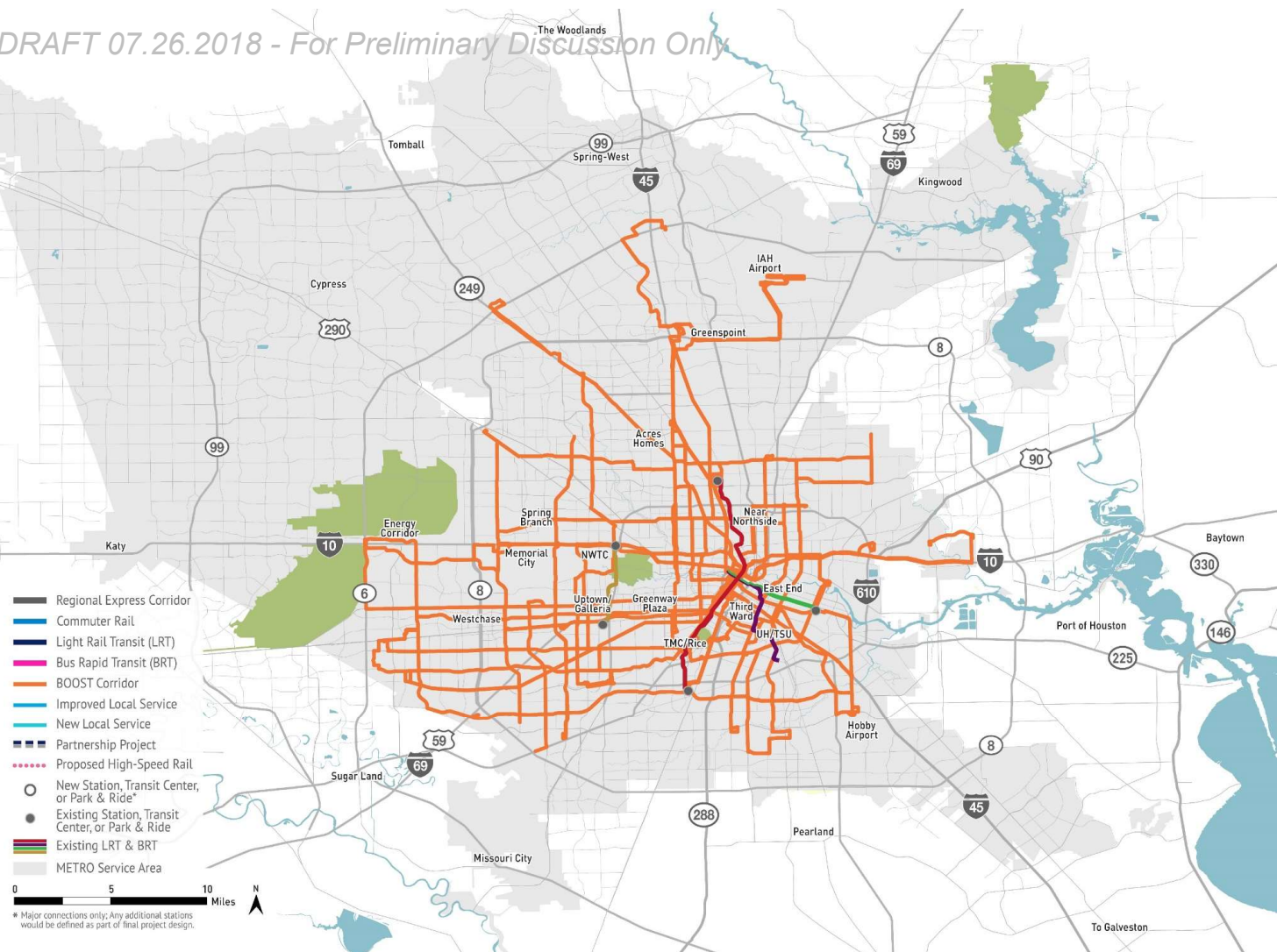
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Core Rapid Transit: BRT

- › Serves dense, high-ridership corridors, and key destinations, especially in the Southwest area
- › Allows multiple routes to use the same busway
- › Integrates with HOV/HOT lanes

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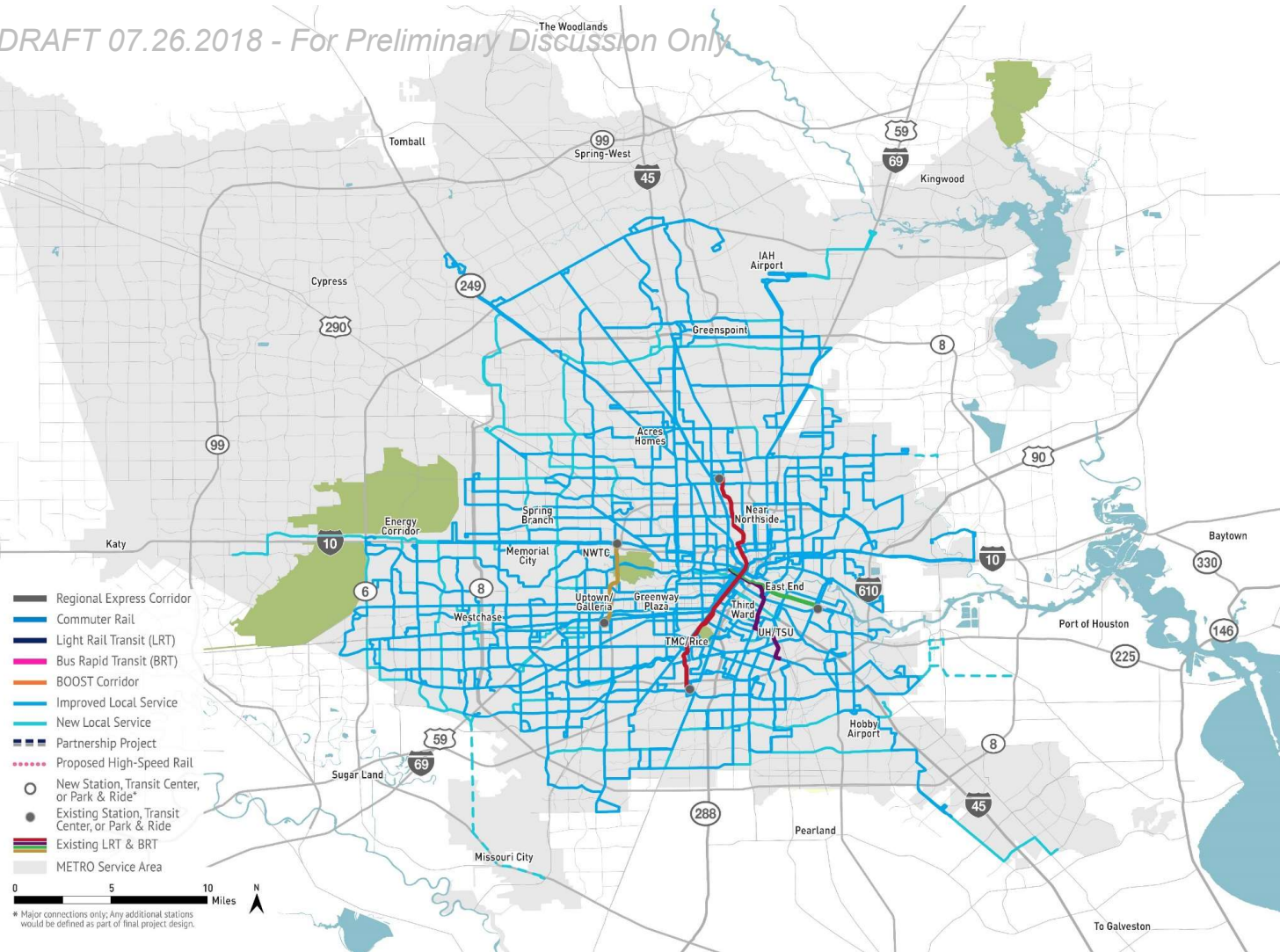
METRONext Vision Plan

BOOST Network

(Bus Operations
Optimized System
Treatments)

- › Improves speed and reliability on high frequency, high ridership bus routes
- › Toolbox includes:
 - » Transit signal priority
 - » Stop optimization/relocation
 - » New shelters
 - » Access improvements
 - » Queue jumps - transit vehicle moves through intersection first
 - » Bus-only lanes
 - » Enhanced passenger information

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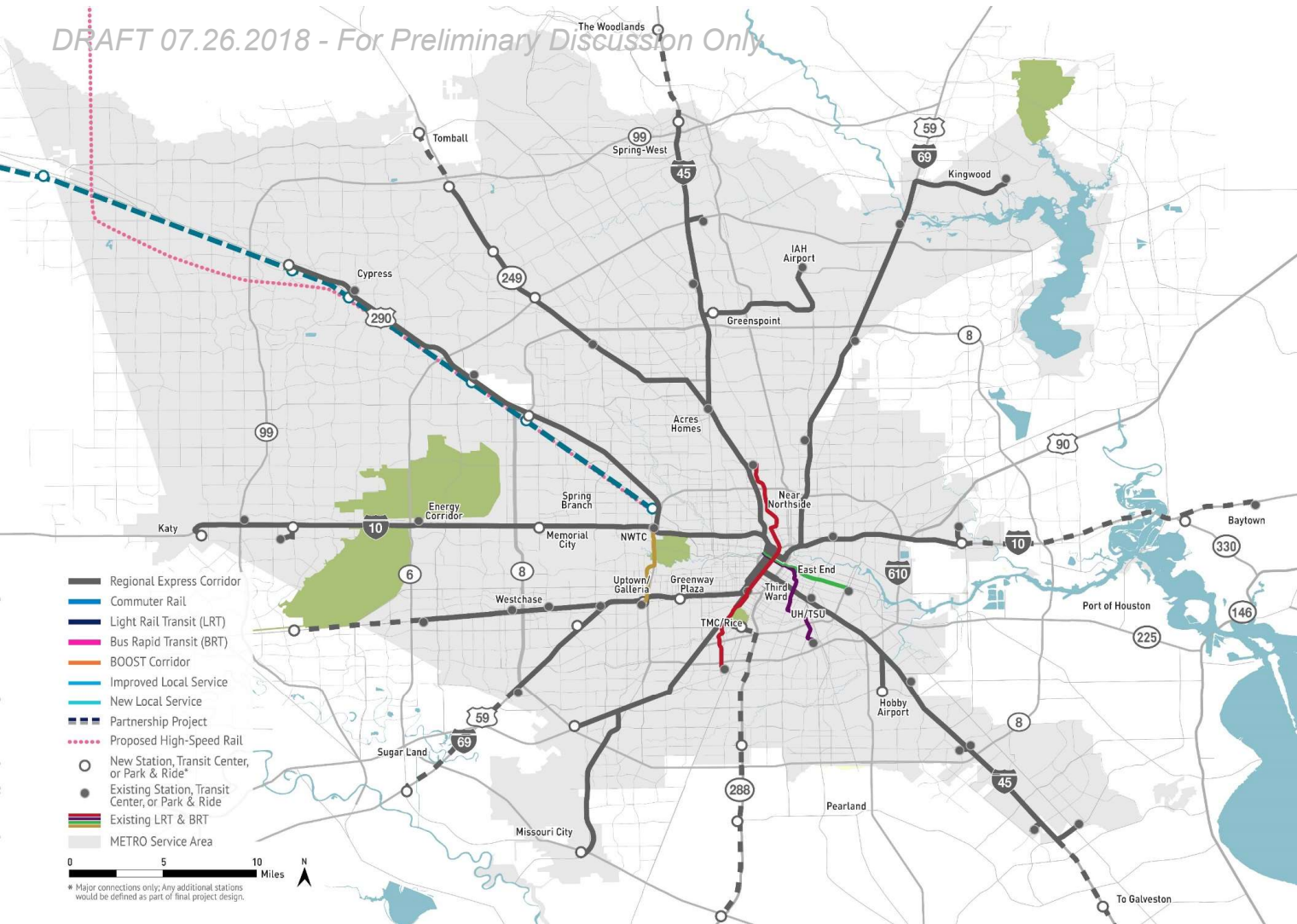


METRONext Vision Plan

Local Bus System Enhancements

- › Improvements identified on nearly every existing route
- › New routes and expanded coverage
- › Enhances frequency, span, and route alignments
- › Expands late-night service
- › Improves connectivity
- › Fast to implement

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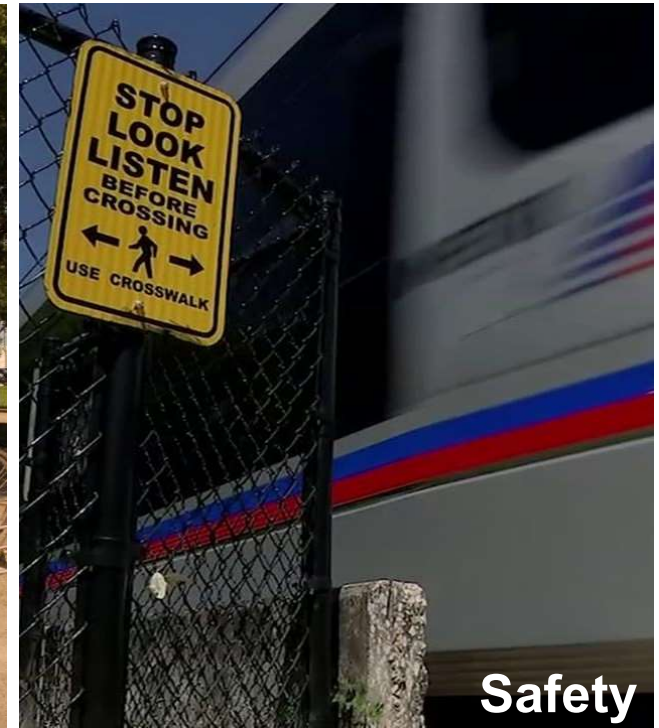


METRONext Vision Plan

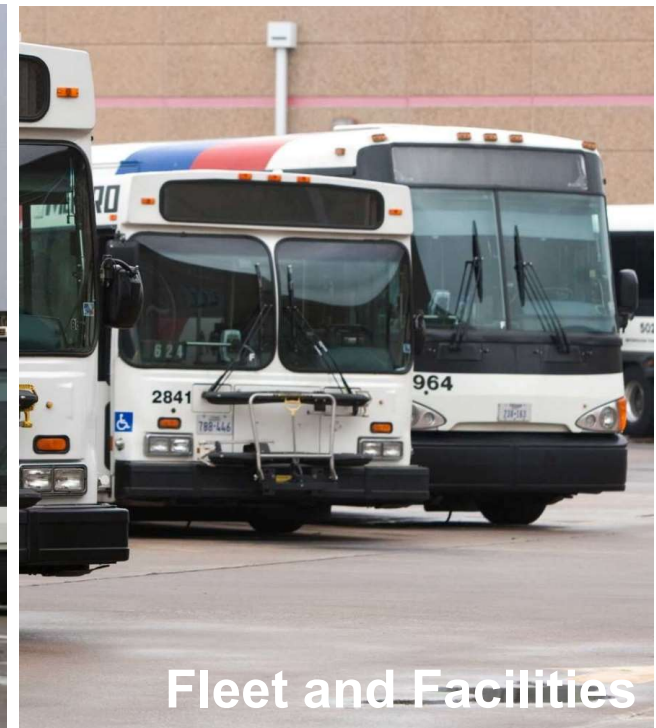
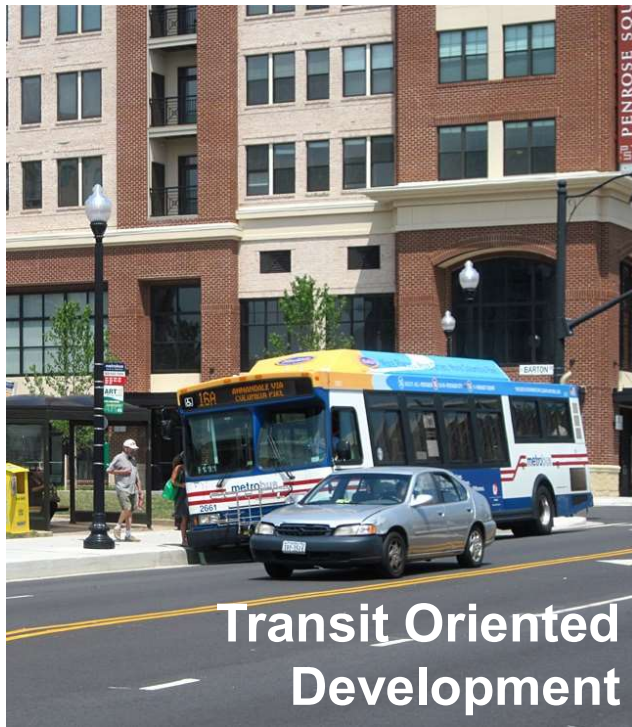
Regional Express (Park & Rides)

- › Fast regional trips between activity centers and major destinations
- › All-day, all-week service, including weekends
- › Utilizes expanded two-way HOV/HOT
- › Expands commuter service to new destinations

Customer Experience



Customer Experience

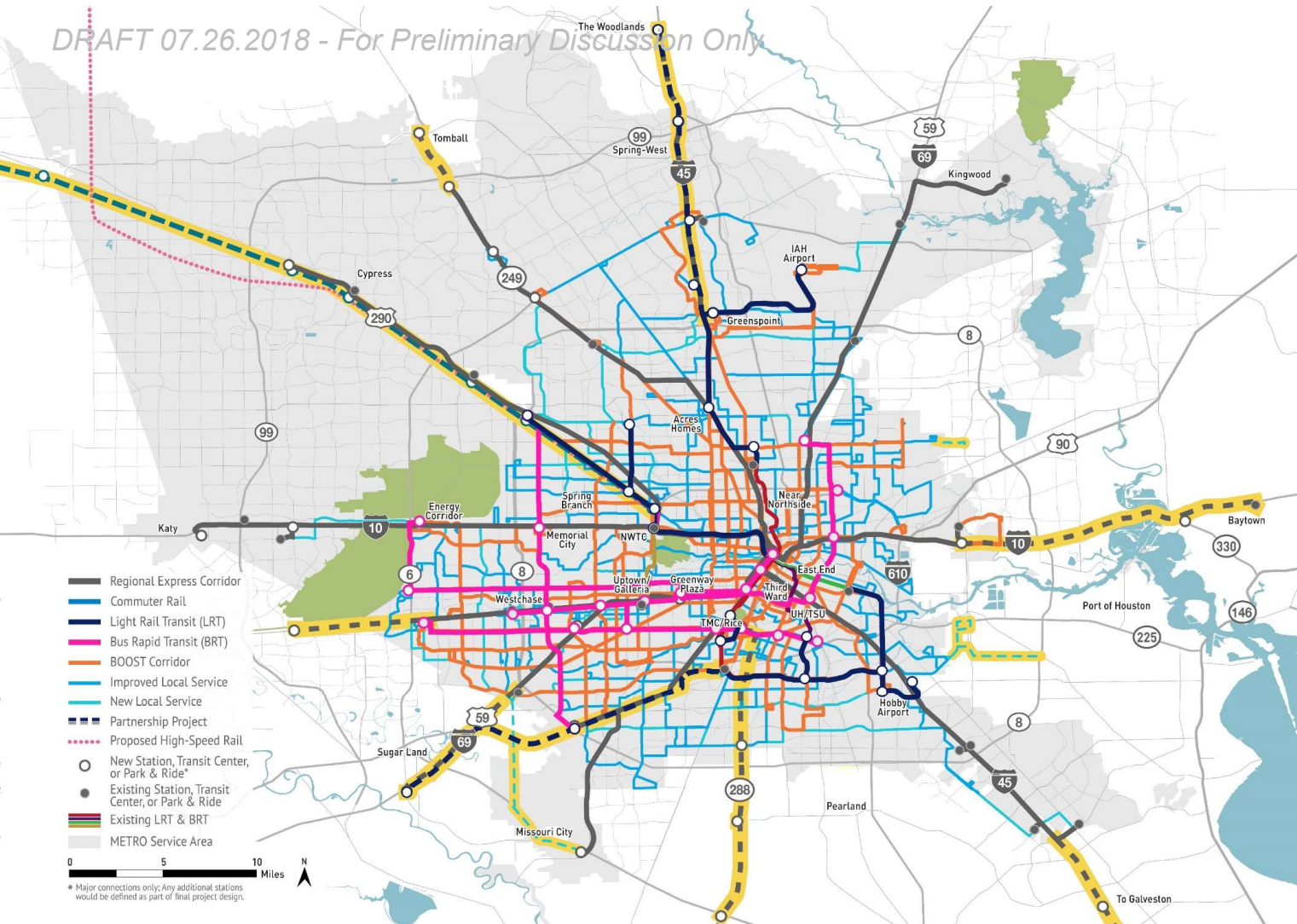


Programs

Major Activity Centers' Operations and System Improvements



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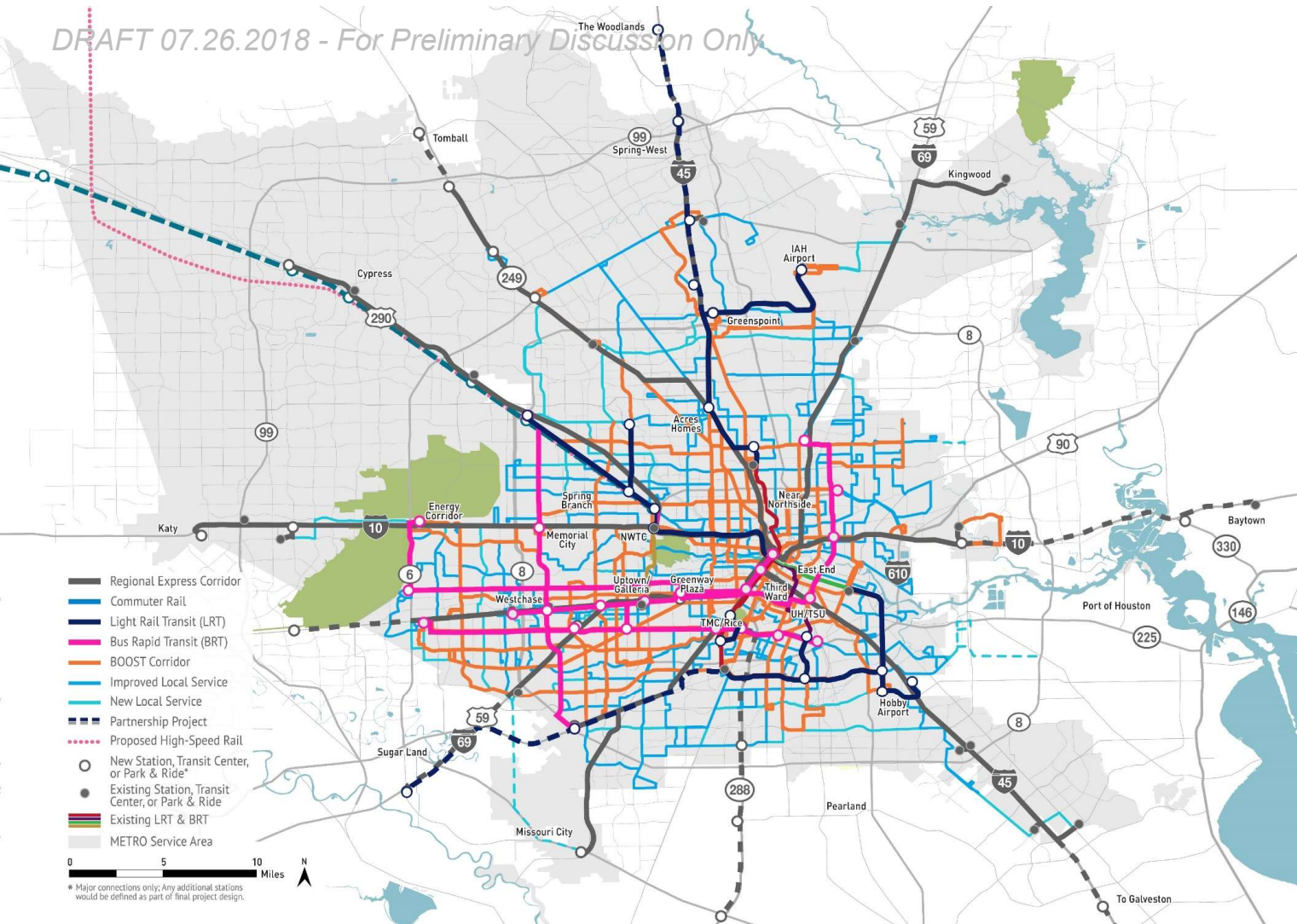


METRONext Vision Plan

Partnership Opportunities

- › Partner projects serving major destinations outside METRO service area
- › Assumes partnership commitment from an outside entity
- › High Capacity Transit Task Force integration





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The METRONext Long-Term Vision Plan

Vision Plan Investments

Major Investments:

200 mi		Two-way HOV
100 mi		Extended LRT lines
90 mi		New BRT system
500 mi		BOOST Network

Fleet & Operational Investments:

211		New light rail vehicles
448		New buses
33		BOOST corridors

Service & Access Improvements:



**RESILIENCY
PLANNING**



NEW SERVICE



**PARTNERSHIP
PROJECTS**



**UNIVERSAL
ACCESSIBILITY**



**IMPROVED BUS
SERVICE AND
BUS STOPS**

Key Long-Term Vision Plan Benefits



Delivers faster, more reliable connections



460% increase in people served and 120% increase in employment covered within ½ mile of LRT/BRT network



Speed, reliability and access improvements



Expanded late-night service



New two-way Regional Express Network



Access for 440% more low-income households to LRT/BRT network; improved service for **all Complete Communities**



More Bus Shelters with Better Access



Innovate with new technologies in vehicles and passenger communications

Applying Financial Assumptions

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Key Assumptions & Conclusion

Key Financial Assumptions:

- No increase in sales tax rate (remains 8.25%) and no property tax increase
- Net Sales Tax Revenues available to METRO are based on the annual growth rates (FY2019 – FY2040) formulated by Dr. Robert W. Gilmer, University of Houston – C.T. Bauer College of Business as of June 2018
- General Mobility Program continues through 2040
- Bus and Light Rail infrastructure projects are financed using 45% debt/55% grant funds
- Bus system enhancements and optimization projects are financed using debt and local funds
- Forecasted expenditures include operating and maintenance costs for all METRONext projects
- METRO's Board approved cash reserve requirements (25% of operating expenses plus \$10MM) are met

Conclusion:

Under the above financial constraints, approximately 3 -8 percent of the \$35 billion in METRONext Vision Projects can be completed during the FY2019 through FY2040 period.

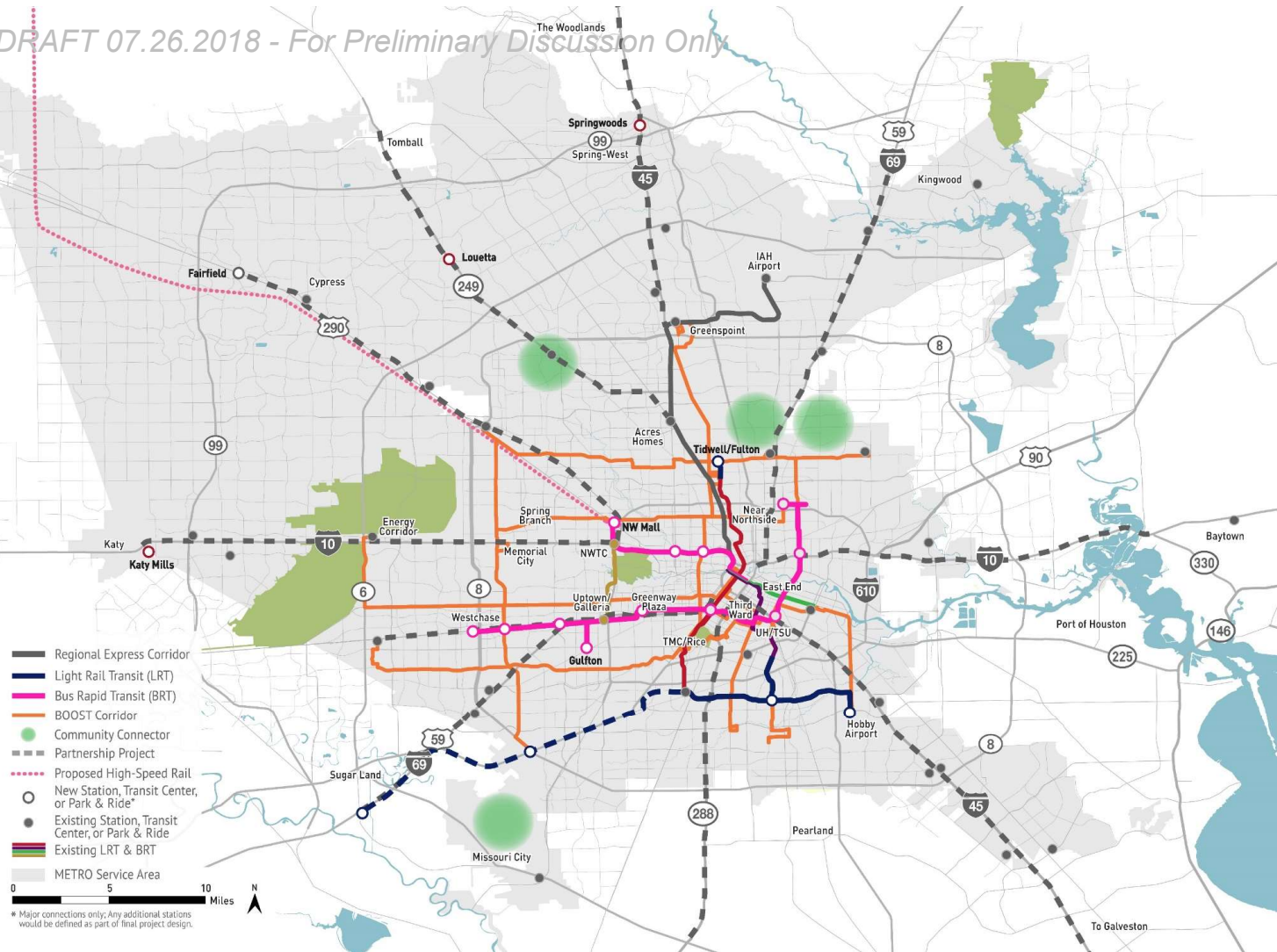
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Moving Forward Plan A

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Forward Plan

Plan A

LRT Extensions

- › Red Line to Hobby Airport
- › Purple Line to Bellfort/Hobby Airport
- › Red Line North to Tidwell

BRT

- › University BRT
- › Inner Katy BRT
- › Uptown BRT Extension

BOOST Network

- › 10 Corridors

Bus Network Improvements

- › Route improvements including 4 Community Connectors
- › Universal Accessibility

Regional Express

- › IH 45 from Downtown to Greenspoint and IAH

Facilities

- › Fairfield Park & Ride
- › Gulfton Transit Center
- › Tidwell/Fulton Transit Center
- › 3 Vanpool lots

Moving Forward Plan A

Highlights and Benefits

12 mi  Extended LRT

34 mi  New BRT

174 mi  BOOST Network

3  Park & Rides, Transit Centers

4  Community Connectors

10%  Increase in Bus Service

Service & Access Improvements:



**IMPROVED BUS
SERVICE AND
BUS STOPS**



**RESILIENCY
PLANNING**



**PARTNERSHIP
PROJECTS**



**UNIVERSAL
ACCESSIBILITY**

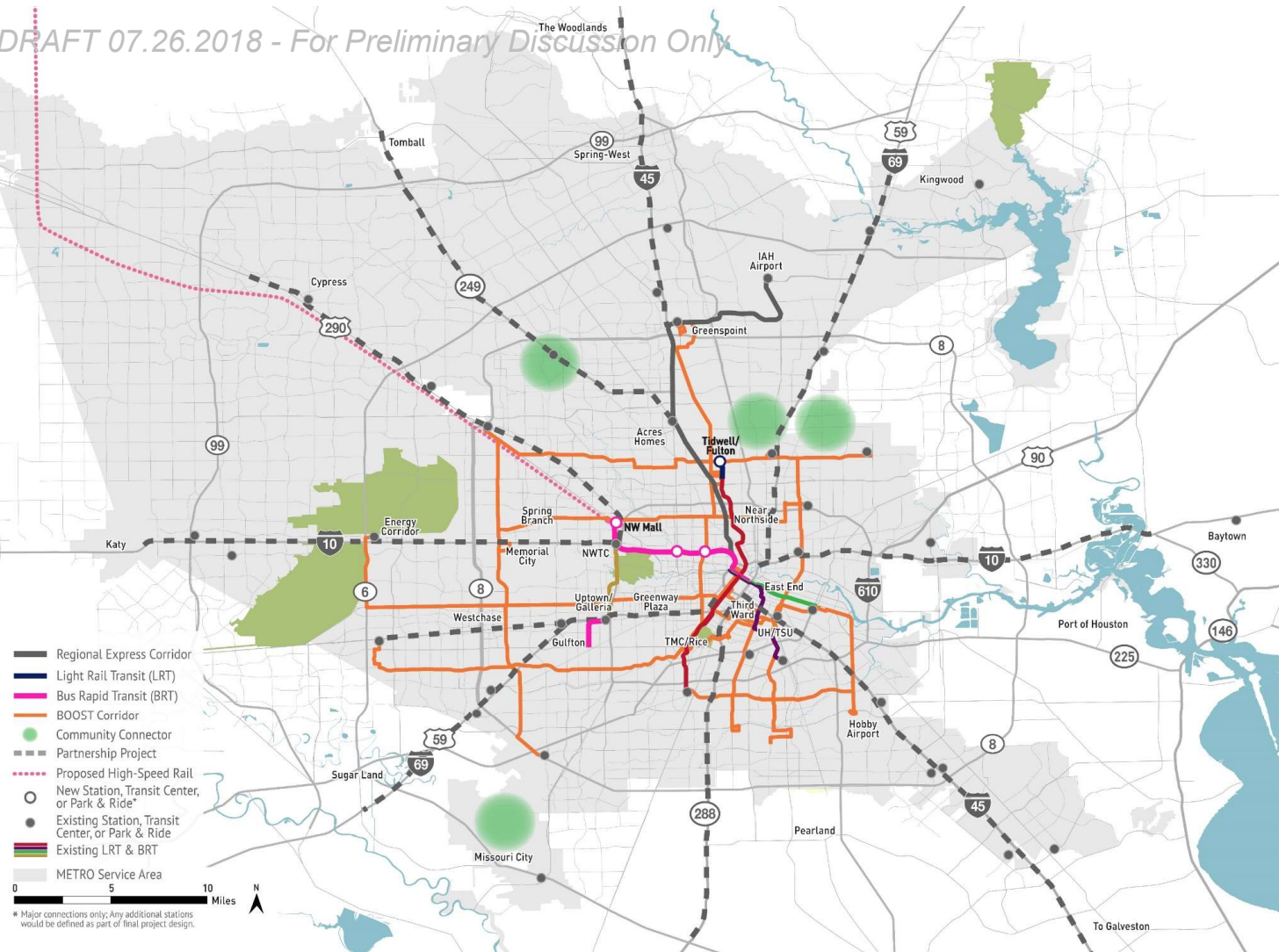
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Moving Forward Plan B

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Forward Plan Plan B

LRT Extensions

- › Red Line North to Tidwell with new Transit Center

BRT

- › Inner Katy BRT
- › Uptown BRT Extension

BOOST Network

- › 10 corridors

Bus Network Improvements

- › Route improvements including 4 Community Connectors
- › Universal Accessibility

Regional Express






- › IH 45 from Downtown to Greenspoint and IAH Airport

Partnership Projects

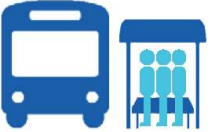



- › Expansion of Two-way HOV Network

Moving Forward Plan B

Highlights and Benefits

1 mi		Extended LRT	1		Transit Center
11 mi		New BRT	4		Community Connectors
174 mi		BOOST Network	10%		Increase in Bus Service

Service & Access Improvements

 IMPROVED BUS SERVICE AND BUS STOPS	 RESILIENCY PLANNING	 PARTNERSHIP PROJECTS	 UNIVERSAL ACCESSIBILITY
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Next Steps

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