RESOLUTION 2023 – 128

A RESOLUTION

ACCEPTING THE NOVEMBER 2023 WORKING COMMITTEE REPORTS, FINANCIAL AND INVESTMENT REPORTS, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, certain committees of the Metropolitan Transit Authority of Harris County, Texas Board of Directors (the "Board of Directors") held meetings in November 2023; and

WHEREAS, each such committee has provided the Board of Directors with a monthly committee report; and

WHEREAS, the materials for this meeting of the Board of Directors include certain finance and audit-related reports and supporting documents, including the Compliance Report for the period ended October 31, 2023, the November 2023 Sales & Use Tax Report, the October 2023 Investment Report, the October 2023 Debt Report, the October 2023 Monthly Performance Report, and the Monthly Report of the Chief Financial Officer dated November 9, 2023 (collectively, the "Finance and Audit materials"); and

WHEREAS, the Board of Directors has reviewed such materials, including the October 2023 Investment Report.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby accepts the November 2023 Finance and Audit Committee, Administration Committee, Capital and Strategic Planning Committee, Joint Development and Land Use Committee and Public Safety, Customer Service & Operations Committee monthly reports and the Finance and Audit materials, including the October 2023 Investment Report.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 129

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO EXECUTE A CONTRACT MODIFICATION WITH INDI CONSTRUCTION PARTNERS, LLC TO INCREASE THE MAXIMUM CONTRACT AMOUNT FOR THE FABRICATION AND DELIVERY OF BOOST BUS SHELTERS, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, pursuant to Resolution 2022-108, the Metropolitan Transit Authority of Harris County, Texas ("METRO") entered into a contract with INDI Construction Partners, LLC for the fabrication and delivery of BOOST bus shelters and related parts, with a maximum contract amount of $29,362,025.39; and

WHEREAS, several changes to the design of these BOOST bus shelters have been made after contract execution including, to conserve the battery life of the light sensors, to provide a lifting mechanism, to add METRO's logo, and to add a more functional translucent lighting lens; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a modification of its existing contract with INDI Construction Partners, LLC for these fabrication and delivery services of BOOST bus shelters and related parts to increase the base contract amount by $2,552,046, and add an owner-controlled contingency of $2,936,202.54, resulting in a new maximum contract amount of $34,850,273.93.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to execute a modification of its existing contract with INDI Construction Partners, LLC for fabrication and delivery services of BOOST bus shelters and related parts to increase the base contract amount by $2,552,046, and add an owner-controlled contingency of $2,936,202.54, resulting in a new maximum contract amount of $34,850,273.93.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 130

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO EXECUTE A CONTRACT WITH 3L INC. FOR AUTOMATIC TRANSMISSION FLUID, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires the purchase of automatic transmission fluid for METRO's transit vehicles; and

WHEREAS, METRO issued an Invitation for Bids for such automatic transmission fluid and 3L Inc. was the lowest responsive and responsible bidder of all those that submitted bids; and

WHEREAS, management recommends that METRO enter into a three (3) year contract with 3L Inc. for METRO to purchase automatic transmission fluid for METRO's transit vehicles, with a maximum contract amount of $1,064,520.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to execute a three (3) year contract with 3L Inc. for METRO to purchase automatic transmission fluid for METRO's transit vehicles, with a maximum contract amount of $1,064,520.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cynthia V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 131

A RESOLUTION

APPROVING A NEW LABOR AGREEMENT WITH THE TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO AND THE TRANSPORT WORKERS UNION OF AMERICA LOCAL 260, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, management of the Metropolitan Transit Authority of Harris County, Texas ("METRO"), the Transport Workers Union of America, AFL-CIO, and the Transport Workers Union of America Local 260 ("Local 260") met and conferred over the terms and conditions of a new labor agreement covering bargaining unit employees; and

WHEREAS, the parties have reached a settlement agreement regarding such terms and conditions, a copy of which is attached hereto as Exhibit A; and

WHEREAS, the proposed new labor agreement is effective as of February 1, 2024 through January 31, 2027 and subject to ratification by the membership of the Local 260 and approval by the METRO Board of Directors; and

WHEREAS, the proposed new labor agreement includes, but is not limited to, wage rate increases, wage enhancements, an increase in METRO's contribution to the Health & Welfare Trust, and an increase in pension benefits and life insurance; and

WHEREAS, the union membership has voted and ratified the proposed new labor agreement.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby approves a new labor agreement with the Transport Workers Union of America, AFL-CIO and the Transport of Workers Union of America Local 260, with the terms and conditions included in the meeting materials.

Section 2. The President & CEO is hereby authorized and directed to execute such labor agreement in accordance with this resolution and to take such other actions as may be reasonable and necessary to implement the terms and conditions of the labor agreement.

Section 3. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

SETTLEMENT AGREEMENT

The Metropolitan Transit Authority of Harris County, TX ("Metro") and the Transport Workers Union of America Local 260 and the Transport Workers Union of America, AFL-CIO,[1] agree to the following changes to the existing 2021-2024 Labor Agreement.

1. The following wage increases are agreed:

   A. Roll Into Base Wage Rate Increases for All Employees

   - An across-the-board wage increase of 4.0% effective the first complete pay period after October 1, 2024.
   - An across-the-board wage rate increase of 3.0% effective the first complete pay period after October 1, 2025.
   - An across-the-board wage rate increase of 4.0% effective the first complete pay period after October 1, 2026.

   B. Wage Rate Enhancements Rolled Into Base

   - In addition to the annual roll into base wage rate increases described above, bus operators hired on or after June 1, 1999, LRT Operators hired on or after June 1, 1999, and service drivers will receive an additional roll into base wage rate increase (enhancement) of 1% effective the first complete pay period after October 1, 2025.

   - In addition to the annual roll into base wage rate increases described above, bus operators hired on or after June 1, 1999, LRT Operators hired on or after June 1, 1999, and service drivers will receive an additional roll into base wage rate increase (enhancement) of 2% effective the first complete pay period after October 1, 2026.

2. Section 815 (Health Benefits)

   - Paragraph (F) of Section 815, will be modified to provide that Metro's contribution to the Transport Workers – Metro Health & Welfare Trust ("Trust") will remain at $1,275 a month per eligible employee and retiree covered by the Trust until October 2024. Metro's contribution to the Trust will increase to $1,339 a month per eligible employee and retiree covered by the Trust effective October 2024. Metro's contribution to the Trust will increase to $1,406 a month per eligible employee and retiree covered by the Trust effective October 2025. Metro's contribution to the Trust will increase to $1,476 a month per eligible employee and retiree covered by the Trust effective October 2026.

3. The increase in second and third shift premiums contained in the Tentative Agreement regarding Section 504(c) will also apply to revenue agents, storeroom attendants and Light Rail Servicers.

[1] Transport Workers Union of America Local 260 and Transport Workers Union of America, AFL-CIO, are collectively referred to herein as the "Union."

4. Section 904 (Complete Agreement) will list the following MOUs as continuing in effect:

    - MOU regarding Section 802(c) Military Service signed July 2022.
    - MOU Full-Time Operator Retirees signed November and December 2022.

    The date stated in Section 904 (Complete Agreement) will be January 31, 2024, instead of October 1, 2021.

5. The effective dates of the new agreement stated in Section 905 (Duration) will be February 1, 2024, through January 31, 2027. Section 203 (Impasse Procedure) will be changed to reflect that the new Labor Agreement will be effective through January 31, 2027.

6. Metro's proposal to revise Section 701(G) is adopted.

7. Appendix A and the Supplement to the Labor Agreement will be updated to reflect wage rate adjustments consistent with this agreement.

8. The maximum of $600 stated in Section 812 (Longevity Award) will be increased to $720 effective with the calculation made as of September 30, 2025. No other changes to Section 812.

9. The Labor Agreement will be revised to provide an extra $2 per hour for operators (bus and rail) who bid onto the Extra Board during a sign up and who, as a result, work the Extra Board. This will be effective commencing with the first job bid in FY2025.

10. The Union's proposal to change Section 509's call back of 3 hours to 4 hours effective FY2025 is adopted.

11. The $1.25 per hour line instructor additional pay in Section 305(B) is increased to $2.00 per hour effective the first complete pay period after October 1, 2024.

12. All Tentative Agreements signed by the parties (attached hereto) are adopted.

13. All provisions of the current Labor Agreement not modified herein will not change.

The above settlement terms are supported and agreed to by the negotiators and are subject to ratification by the members of TWU Local 260 and approval by Metro's Board of Directors.

Pending ratification of this agreement by TWU Local 260's members and approval by Metro's Board of Directors, the parties agree to postpone the date stated in Section 203 (Impasse Procedure) for the parties to exchange last and best offers. The date specified for the specification and exchange of last and best offers by Metro and the Union is postponed until 30 days after (a) any failure to ratify this agreement by the members of TWU Local 260 or (b) any failure to approve this agreement by Metro's Board of Directors.

TRANSPORT WORKERS UNION OF AMERICA AFL-CIO, LOCAL 260

By: Horace J. Morris

Date: 10/25/2023

TRANSPORT WORKERS UNION OF AMERICA AFL-CIO

By: _____

Date: _____

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TX

By: _____

Date: 10-25-2023

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree to revise Appendix B per the attached. Deletions are highlighted; additions are in bold and underlined. The wage rates for the new positions shown are wage rates for FY2024, and the wage rates will be placed in the Supplement which will be revised consistent with the attached.

SIGNED this 25th day of October, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Morris

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By: _____

APPENDIX B

I. VEHICLE MAINTENANCE

A. Transit Master
B. Transit Technician
C. Transit Vehicle Maintenance
    1. Transit Bus Repair A
    2. Transit Bus Repair B
    3. Transit Bus Repair C
    4. A/C & Heat A
    5. A/C & Heat B
    6. Collision Repair A
    7. Collision Repair B
    8. Collision Repair C
    9. T-Truck/Wrecker Operator
    10. Tool Room Attendant
    11. Support Vehicle Mechanic – ASV (rate $30.66)
D. Cleaner (hired before 8/1/82) – No employees currently in this role
    Cleaner (hired on or after 8/1/82)
    Cleaner (hired on or after 6/1/99)
E. Utility Worker

II. CENTRAL SUPPORT

A. Master Collision Technician
B. Certified Structural Welder/Fabricator
C. Sr. Machinist
D. Collision Technician
E. Unit Rebuild Master
F. Unit Rebuild Technician
G. Central Support Mechanic
    1. Unit Rebuild A
    2. Unit Rebuild B
    3. Unit Rebuild C
    4. Upholstery/Fabricator A
    5. Upholstery/Fabricator B
    6. Upholstery/Fabricator C
    7. Welder/Fabricator A
    8. Machinist - Tool & Die Maker
    9. Machinist
    10. Engine Dynamometer Diagnostic Lab Technician
    11. **10.** Transit Repair A
    12. **11.** Transit Repair B
    13. **12.** Collision Repair A
    14. **13.** Collision Repair B
    15. **14.** Collision Repair C
H. Cleaner (hired before 8/1/82) – No employees currently in this role
    Cleaner (hired on or after 8/1/82)
    Cleaner (hired on or after 6/1/99)

III. SUPPORT VEHICLE MAINTENANCE

A. Support Vehicle Master **Technician** (Updated name on position)

C. Support Vehicle Master Mechanic
D. Support Vehicle Mechanic
E. Off Road Technician
F. Small Engine Technician
G. Tool Room Attendant
H. Cleaner (hired before 8/1/82) – No employees currently in this role
Cleaner (hired on or after 8/1/82)
Cleaner (hired on or after 6/1/99)
I. Utility Worker

IV. OPERATING FACILITIES MAINTENANCE

A. Lead Maintenance Mechanic
B. Master Technician
C. General Maintenance Journey
D. Licensed Journey
1. Electrician
2. Plumber
3. Mechanical
4. A/C Refrigeration
E. Licensed Maintenance Mechanic
1. Electrician (rate $30.66)
2. Plumber (rate $30.66)
3. Mechanical (rate 30.66)
4. R&H (rate $30.66)
F. General Maintenance Mechanic A
G. General Maintenance Mechanic A (HVAC)
H. General Maintenance Mechanic A (Landscape Irrigation) **Facility Maintenance Role listed below**
H. Cleaner (hired before 8/1/82) – No employee currently in this role
Cleaner (hired on or after 8/1/82)
Cleaner (hired on or after 6/1/99)
I. Utility Worker Operating Facilities

V. MATERIALS MANAGEMENT

A. Lead Storeroom Attendant
B. Storeroom Attendant

VI. ELECTRONIC MAINTENANCE

A.-Electronic Farebox Technician/**Transit Bus Revenue Technician** (update name of position)
B. Lead Electronic Farebox Technician

VII. PUBLIC FACILITIES MAINTENANCE

A. Lead Maintenance Mechanic
B. Master Technician
C. Licensed Journey
1. Electrician
2. Plumber
3. Mechanical
D. General Maintenance Journey
E. Licensed Maintenance Mechanic

1. **Electrician (rate $30.66)**
2. **Plumber (rate $30.66)**
3. **Mechanical (rate $30.66)**
4. **R&H (rate $30.66)**

F. Crane Operator
G. General Maintenance Mechanic A
H. General Maintenance Mechanic B
I. General Maintenance Mechanic B (Sign Lab)
J. General Maintenance Mechanic A (HVAC)
K. General Maintenance Mechanic A (Landscape Irrigation) (rate $29.31)
L. Cleaner (hired before 8/1/82) – No employee currently in this role
Cleaner (hired on or after (8/1/82)
Cleaner (hired on or after 6/1/99)
M. General Maintenance C

VIII. OPERATIONS

A. Operator (Full-Time hired before 6/1/99)
B. Operators (Full-Time hired on or after 6/1/99)
C. Part-Time Operator (hired before 8/1/96)
D. Part-Time Operator (hired on or after 6/1/99)
E. Service Driver
F. Service Driver (Part-Time)
G. Starter
H. Relief Starter
I. Traffic Checker (propose top rate of $27.78 / current agreement 7 step progression - Pay Grade 21A)

IX. RAIL OPERATIONS SERVICE DELIVERY

A. LRT Operator (hired before 6/1/99)
B. LRT Operator (hired on or after 6/1/99)
C. Light Rail Vehicle (LRV) Technician
1. T1 Technician
2. T2 Technician
3. T3 Technician
4. T3 Technician-Heavy Repair (rate $34.81)

D. Light Rail Vehicle (LRV) Machinist Tool and Die
E. Light Rail Body Mechanic
F. Light Rail (LRV) Servicer (hired before 8/1/82) – No employee currently in this role.
G. Light Rail (LRV) Servicer (hired on or after 8/1/82)
H. Light Rail (LRV) Servicer (hired on or after 6/1/99)
I. Utility Worker (Rail) (hired on or after 2/7/16)

X. REVENUE DIVISION

A. Revenue Agent (formerly Vault Puller)

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree to the following (deletions are highlighted, additions are in bold and underlined):

- **SECTION 816. PENSION AGREEMENT** to be revised as follows (Deletions highlighted; additions in bold and underlined):

It is hereby agreed that the Metropolitan Transit Authority/Transport Workers Union Pension Plan as written and existing on the date of this Agreement (including amendments) ("Plan") shall continue in effect during the term of this agreement, applicable to bargaining unit employees hired before October 1, 2012. The Plan is not required to comply with ERISA as it is sponsored by a governmental entity. It is expressly authorized that the Plan shall be amended as necessary to maintain its qualified status (i.e., qualified to ensure tax-exempt status) under the Internal Revenue Code of 1986. Benefits will remain as under the 1994-1996 Labor Agreement including the following as stated in paragraph 1 below but with the following paragraph 2 being amended as shown:

1. A $500 per month minimum pension ($250 for surviving spouses) is established for eligible retirees who retired before August 1, 2004.

2. Employees having 28 years of service may retire with full benefits.

Surviving spouses of Bargaining Unit employees who retired with 30 plus years of service from METRO and/or predecessor companies of METRO will receive a $150.00 per month pension effective April 1, 1993 provided (1) the husband and/or wife did not elect to take a life only benefit and (2) they are not entitled to any other pension benefit from METRO and/or predecessor companies. The Plan has been amended to provide $65.00 per month for each year of credited service to METRO (as defined in the Plan) and predecessor companies of METRO for employees who retire on or after October 1, 2018. The Plan will be **has been** amended to provide $68 per month for each year of credited service to METRO (as defined in the Plan) and predecessor companies of METRO for employees who retire on or after October 1, 2023. **The Plan will be amended to provide $70 per**

month for each year of credited service to METRO (as defined in the Plan) and predecessor companies of METRO for employees who retire on or after October 1, 2025. The Plan has been amended to provide that effective the first pay period in October 2018 each employee eligible for the Defined Benefit Plan will contribute $3.00 through payroll deduction per weekly pay period to the Plan.

In lieu of the above defined benefit pension plan, all full-time bargaining unit employees hired or rehired on or after October 1, 2012, will participate in a new 401(a) defined contribution pension plan with the following vesting:

- 40% (any age plus 2 years of METRO employment).
- 60% (any age plus 3 years of METRO employment).
- 80% (any age plus 4 years of METRO employment).
- 100% (any age plus 5 years of METRO employment).

METRO will contribute 2% of total annual compensation on behalf of each full-time bargaining unit employee hired or rehired on or after October 1, 2012, to this plan. In addition, METRO will match each dollar contributed by each covered employee to his/her 457 plan (up to a total additional 4% contributed by METRO as a match into the 401(a) plan on behalf of the covered employee).

Defined benefit pension payments being received by a retiree who becomes a part-time employee will continue during the employee's part-time post-retirement employment. A retiree's defined benefit pension benefit will not be enhanced or increased as a result of the retiree's service as a part-time employee. A retiree serving as a part-time employee is not eligible for participation in the defined contribution pension plan. To the extent necessary, the Plan will be amended to reflect the above.

- **SECTION 801 (UNIFORM/WORK CLOTHES/TOOL ALLOWANCE).** The tool voucher provided in Section 801 will be increased from $450 to $460 annually effective FY2025. No other change to SECTION 801.

- **SECTION 814 (LIFE INSURANCE)** will be modified to increase life insurance for employees to $75,000 and to $28,000 for retirees

TENTATIVE AGREEMENT
(Subject to Agreement on the Entire Agreement)

The parties agree as follows:

- Facility Maintenance Mechanics, Fleet Services Mechanics and LRV Mechanics and Technicians who are regularly scheduled to work Saturday and/or Sunday will receive an extra $2.00 per hour for all such scheduled Saturday and/or Sunday work. This will become effective in FY2025.

SIGNED this 17 day of OCTOBER, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Mans

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By: J Cruz Sanz

at the conclusion of the current life insurance contracts on or about October 1, 2026.

SIGNED this 20 day of OCTOBER, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Marrero

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By:_____

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree to revise Section 312 pursuant to the attached (additions in bold and underlined; deletions highlighted).

SIGNED this 17 day of OCTOBER, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Murray

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By: J Conyers

SECTION 312. ROTATION OF REGULAR OPERATORS ON TRIPPERS EXTRA WORK

(A) All trippers **extra work**, charter work and work not included in the regular sign-up sheets shall be worked on an equitable basis from the extra-board and/or by Part-Time Operators. In cases where Part-Time Operators and extra-board Operators are not available, such work shall be assigned to regular Operators on a rotation list and then to any available Operator.

(B) Names are collected and entered into the overtime list on Saturday at 7:00 PM for operators lined up at the Starter window and 9:00 PM for operators calling in to the Starters Office for the following week and assignments one week in advance. At bus operating facilities utilizing a five-day schedule, the overtime list will be collected on Sunday at 1:00 PM.

(C) Requests to work overtime will be recorded on a first come first serve basis.

(B) **(D)** There shall be a separate rotation list for each day of the week. The position held by an Operator on one day's list will not have any effect on his/her position on another day's list where the Operator signs to work trippers **up for extra work** on more than one day.

(C) **(E)** Trippers **Extra work** shall be booked on a first-in, first-out basis. However, if the first Operator is not due in the terminal until after the first tripper **extra work assignment** is due out, he/she then will be booked on the first tripper **extra work assignment** due out after his/her terminal due time and the earlier tripper **extra work assignment** will be assigned to the next Operator available on the rotation list for that day. Such assignment will count as working his/her turn. If no Operator is available on the rotation list, then the work will be assigned to any available Operator.

(D) The rotation list for regular Operators shall be signed on only at the sign-ups except Operators signing on hold-downs after sign-ups are in effect.

1+5M

(E) At the time of a sign-up, an Operator will elect whether to sign on the tripper list as well as select the day or days on which he/she wishes to rotate on the list. Operators who have elected not to sign on the rotation list will not be required to work a tripper in addition to their regular work.

1+5M

nek

(F) In the event no Operator signs on a particular day or the list for a particular day is inadequate to supply Operators on the tripper work **extra work**, then the Starter may assign any available Operator to the additional work in order to get the work done.

(G) It is the duty of all Operators on the rotation list to follow this posting in order to determine when they have assignments to work.

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree as follows:

1. Section 312(B) proposed in Metro's initial proposal is adopted.

2. Adding "and Cleaners" to the introduction sentence of Section 513 as proposed in Metro's initial proposal is adopted. Metro's proposal to change (A) and (B) of Section 513 is withdrawn.

3. Metro's proposal to delete Sections 515 (Bus Mechanic Mentors), 516 (Facility Maintenance Mechanic Mentors), and 601 (Maintenance Training and Qualification Program) is adopted.

4. Metro's proposal to modify Section 815(E), as contained in its original proposal, is adopted.

5. Metro's initial proposal to add Section 121 (Part-time Employees) is withdrawn.

6. Metro's proposal to modify Section 703(A) is withdrawn.

SIGNED this 6 day of OCTOBER 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Mar

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By: J Cruz Soy

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree to the following:

1. The Union withdraws its proposals (i), (ii) and (ix) as contained in its October 5, 2023, presentation.
2. Section 304(C): $.25 is increased to $.50 and $.35 is increased to $.75.

SIGNED this 6 day of OCTOBER, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Manuel

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By:

TENTATIVE AGREEMENT
(Subject to Agreement on the Entire Agreement)

The parties agree to revise Section 112 (Seniority), paragraph (B) as follows (deletions are highlighted; additions in bold and underlined):

(B) Seniority for Bus Operators shall be determined by the date and hour when, after successful completion of their period of training, they are approved as extra Operators, provided that when several trainees are approved on the same day and at the same time, the order of their seniority shall be determined by lot. **If multiple operators have the same training completion date and no previous METRO experience, seniority will be established by drawing lots. If Operators in a qualifying class have a variety of previous experience, seniority will be established in the following order:**

- **Full-time METRO LRT Operator**
- **Other bargaining unit employees**
- **Other METRO employees**
- **New METRO employees**

Former METRO employees in Non-Bargaining Unit

The parties agree to revise Section 701 (Introduction), paragraph (E) as follows:

E. SENIORITY IN RAIL **OPERATIONS** SERVICE DELIVERY.

METRO will maintain a separate light rail seniority roster for bargaining unit positions in the Rail **Operations**Service Delivery.

Seniority for LRT Operators shall be determined in accordance with Section 112.[1]

All LRT Operators seniority is based on their seniority date as an LRT Operator. If multiple Operators have the same certification date, Metro certification will prevail. If multiple Operators have no previous Metro employment, seniority will be established by drawing lots. If Operators in

[1] "Bus Operators" in (B) of Section 112 will be changed to "Bus Operators and LRT Operators."

a qualifying class have a variety of previous experience, seniority is established in the following order:

* **Full-time Metro Bus Operator.**
* **Part-time Metro Bus Operator.**
* **Other Bargaining Unit employees.**
* **Other Metro employees(Non-Bargaining Unit).**
* **New Metro employee.**

Former METRO employees, hek HJM

SIGNED this 27th day of September, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Mares

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By: J Cruz Jaime

TENTATIVE AGREEMENT

(Subject to Agreement on the Entire Agreement)

The parties agree to adopt into the new Labor Agreement the following changes proposed by Metro in its initial proposal of September 6, 2023:

1. Section 112 (E)-Agree to delete as duplicative to paragraph (F) and renumber paragraph (F) to (E). Section (G), Accept deletions.

2. Section 116 (B)-Accept re-wording. (E)- Accept addition.

3. Section 119 (E)- Accept changing "Senior Director of Maintenance" to "Vice President of Facility Maintenance or his/her designee and/or Vice President of Fleet Services or his/her designee."

4. Section 201 (A)- Agree additional language.

5. Section 202 (B)-Step 2-Accept re-naming; Step 4 (k)-Accept.

6. Section 304 (E)- Intervening Time = Change accepted (consistent with existing MOU).

7. Section 305-Accept re-naming.

8. Section 309 (F)- Agree 7 days. Sections (H), (I), (M)-Accept re-wording.

9. Section 311 (C)- Accept re-wording.

10. ~~Section 312- (A)- through new (F) and change to title of Section 312:~~ Agree to language.

11. Section 313- Accept deletion (B) and (C).

12. Section 314-Accept re-naming.

13. Section 321-Accept removing Section 321 and "Starters" language including removing Starter and Relief Starter from Appendix A and B. Section 322 will not change.

14. Section 323- Accept "typo" correction in (F) changing 715 to 815.

15. Part IV- (D)-3-Agree "grandchild". (D)-4-Accept deletion as duplicative (Section 805-D).

16. Section 513- Accept typo correction in (H) changing 715 to 815.

17. Part VII-Accept change in naming throughout.

18. Section 702 (M)-Accept re-wording.

19. Section 705- Accept typo corrections in (A) and (B).

20. Section 708- Accept re-wording.

21. Section 711 (E)- Intervening Time = Change accepted (consistent with MOU).

22. Section 712- Accept re-naming.

23. Section 801 2-(d)- Spelling [vendors]-Accept.

24. Section 805 (C)- Agree "grandchild"; Accept deletion (E) as duplicative [804 G].

25. Section 808-Agree additional language

26. Section 811 (I)-Accept adding "16 hours".

SIGNED this 27th day of September, 2023.

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

By: Karen Kauffman

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO, LOCAL 260

By: Horace J Mar

TRANSPORT WORKERS UNION OF AMERICA, AFL-CIO

By:

RESOLUTION 2023 – 132

A RESOLUTION

REAFFIRMING METRO BOARD APPROVAL AND FINANCIAL COMMITMENT TO IMPLEMENT THE VOTER-APPROVED METRONEXT TRANSIT SYSTEM PLAN AND LIST OF PROJECTS, INCLUDING THE UNIVERSITY CORRIDOR BUS RAPID TRANSIT PROJECT WHILE CONTINUING OPERATION OF ITS CORE TRANSIT SERVICES AND PLANNED SYSTEM ENHANCEMENTS, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") has worked extensively with the community and interested stakeholders to develop a comprehensive $7,500,000,000 multi-year, regional transit plan that builds upon METRO Solutions, and includes major capital investments and other improvements needed for METRO to address mobility needs within its boundaries and service area through approximately 2040 ("METRONext"); and

WHEREAS, METRONext was approved by the METRO Board of Directors and the voters in METRO's service area in 2019, and provides an additional 75 miles of METRORapid service, 16 miles of METRORail extensions, 290 miles of bus operations optimized system treatments ("BOOST") improvements to high ridership routes, a signature bus service, universal accessibility, safety and security and usability improvements and other enhancements to the transit system and a 110 mile regional express network that includes two-way HOV lanes with direct access to existing and new transit centers and park and ride facilities, in addition to necessary drainage, traffic signal, sidewalk, street and other infrastructure improvements in the region; and

WHEREAS, the voters also authorized METRO to issue up to $3,500,000,000 of bonds, notes and other obligations to help finance METRONext projects; and

WHEREAS, METRO expects to utilize its $3,500,000,000 bonding authority over multiple years, in increments that are financially prudent as each increment is issued and subject to compliance with certain debt coverage requirements and the inclusion of amounts sufficient to maintain a minimum 15% working

capital reserve of annualized budgeted operating expenditures in METRO's then most recently adopted annual budget; and

WHEREAS, in addition to estimated proceeds from METRO's $3,500,000,000 voter-approved bond issuances, METRO expects to utilize its cash on hand, unused commercial paper capacity, federal grants and operating revenue as included in the 5-Year Sources and Uses Summary of METRO's Fiscal Year 2024 Business Plan & Budgets, to fund METRONext projects, without any increase in the rate of METRO's sales and use tax revenue; and

WHEREAS, METRO's Fiscal Year 2024 Business Plan & Budgets include very conservative planning assumptions based on Dr. Gilmer's 2023 Outlook for METRO's Sales Tax Revenue, including an estimated ten percent (10%) reduction in forecasted sales and use tax revenue and an additional one percent (1%) Board directed reduction in such amount; and

WHEREAS, as a result of METRO's fiscal stewardship and history of conservative budgeting, METRO is in a strong financial position, and has allocated sufficient funds in the 5-Year Sources and Uses Summary of its Fiscal Year 2024 Business Plan & Budgets, to continue implementing METRONext projects, including the required financial commitment to enter into the engineering phase of its application for the Capital Investment Grants ("CIG") program for the University Corridor BRT project; and

WHEREAS, METRO has and continues to make significant progress with the implementation of various METRONext projects, investing millions of dollars in important planning, development and engineering activities for the University Corridor, Inner Katy and Gulfton bus rapid transit ("BRT") projects, as necessary to remain eligible for matching federal funds, including the opportunity to obtain over $1,000,000,000 for the construction of critical infrastructure improvements in the Houston region; and

WHERAS, METRO also continues to make advancements in the construction of BOOST, universal accessibility, safety and security and usability improvements for disabled and senior patrons and additional system-wide enhancements; and

WHEREAS, based on the foregoing, management recommends that the METRO Board of Directors reaffirm its approval and intention to implement METRONext, including committing at least 30% of the non-Federal CIG funding towards the total design, engineering and construction costs for the University Corridor BRT Project and the estimated operations and maintenance costs of the project in the opening year.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby reaffirms its approval and financial commitment to continue (i) implementing the METRONext plan and projects, including committing at least 30% of the non-Federal Capital Investment Grants funding towards the total design, engineering and construction costs for construction of the University Corridor BRT Project, and (ii) providing METRO's core transit service operations and planned enhancements to the transit system, in each case, as included in the 5-Year Sources and Uses Summary of METRO's Fiscal Year 2024 Business Plan & BudgetsSection 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 133

A RESOLUTION

APPROVING AND ADOPTING THE FISCAL YEAR 2024 INVESTMENT POLICY AND THE FISCAL YEAR 2024 BROKER/DEALER LIST, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, in accordance with Section 2256.005(e) of the Texas Public Funds Investment Act (the "Act"), the Board of Directors (the "Board of Directors") of the Metropolitan Transit Authority of Harris County, Texas ("METRO") is required to annually review METRO's Investment Policy and investment strategies; and

WHEREAS, the Board of Directors has reviewed management's proposed Investment Policy for Fiscal Year 2024 attached hereto as Exhibit A and determined that such policy meets the objectives of good fiscal management, safety of principal, sound diversification and optimization of earnings; and

WHEREAS, the Board of Directors is also required under Section 2256.025 of the Act to annually review, revise, and adopt a list of qualified brokers that are authorized to engage in METRO's investment transactions; and

WHEREAS, management has recommended for approval a list of brokers that have certified compliance with appropriate registrations, licenses, and compliance with the U.S. Securities and Exchange Commission's Uniform Net Capital Rule 15c3-1, which is included as Schedule 5 of Exhibit A (the "Updated Approved Broker/Dealer List"); and

WHEREAS, the Board of Directors has reviewed the proposed Fiscal Year 2024 Broker/Dealer List and determined that the firms on the list are qualified to engage in METRO's investment transactions.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby approves and adopts the proposed Fiscal Year 2024 Investment Policy attached hereto as Exhibit A and the proposed Fiscal Year 2024 Broker/Dealer List included as Schedule 5 of Exhibit A.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii N. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY,

TEXAS INVESTMENT POLICY

As Approved on November 16, 2023

1.0 Policy

It is the policy of the Metropolitan Transit Authority of Harris County, Texas ("Metro") to invest public funds in a manner that will provide the highest investment return with maximum security while meeting the daily cash flow demands of Metro, conforming to all state and local statutes governing the investment of public funds and giving due consideration to the safety and risk of investments. This policy sets forth the investment program of Metro and the guidelines to be followed in achieving its objectives.

Effective cash management is recognized as essential to good fiscal management. Investment interest is a source of revenue to Metro. Metro's portfolio shall be designed and managed to maximize investment earnings as a revenue source, to be responsive to the public trust and to be in compliance with applicable legal requirements and limitations.

Investments shall be made with the primary objectives of:

- Preservation and safety of principal and diversification of the investment portfolio;
- Maintenance of sufficient liquidity to meet operating needs and marketability of the investment if the need arises to liquidate before maturity;
- Understanding the suitability of the investment to the financial requirements of Metro and maintaining public trust from prudent investment activities;
- Yield and optimization of interest earnings on the portfolio.

2.0 Purpose

The purpose of this investment policy is to comply with Section 451.104, Texas Transportation Code, and Chapter 2256, Texas Government Code (the "Public Funds Investment Act"). The Public Funds Investment Act requires Metro to adopt a written investment policy regarding the investment of its funds and funds under its control. This investment policy addresses the methods, procedures and practices that must be exercised to ensure effective and judicious fiscal management of Metro's funds.

3.0 Scope

This investment policy shall govern the investment of all financial assets of Metro, except those listed on Schedule 1, which are set up and administered separately and whose investment activities are conducted by third parties in accordance with instructions provided in ordinances, contracts, or escrow agreements, as applicable. The following funds shall be subject to this investment policy and are accounted for in Metro's Comprehensive Annual Financial Report ("CAFR"):

- General and Operating Funds;
- Capital Project Funds;
- Special Revenue Funds;
- Debt Service Funds, including reserves and sinking funds, to the extent not required by law, orders, resolutions or existing contracts to be kept segregated and managed separately;
- Trust and Agency Funds, to the extent not required by law, orders, resolutions or existing contracts to be kept

segregated and managed separately.

Any new fund created by Metro shall be subject to this investment policy, unless specifically exempted from this investment policy by the Board or by applicable law.

Metro will consolidate cash balances from all funds to maximize investment earnings. Investment income will be allocated to the various funds based on their respective participation and in accordance with generally accepted accounting principles.

4.0 Investment Objectives

General

Metro shall manage and invest its cash with four primary objectives, listed in order of priority:

- Safety
- Liquidity
- Suitability
- Yield (expressed as optimization of interest earnings)

The safety of the principal invested always remains the primary objective. All investments shall be designed and managed in a manner responsive to the public trust and consistent with applicable law.

Metro shall maintain a comprehensive cash management program that includes collection of account receivables, vendor payments in accordance with invoice terms and prudent investment of available cash. Cash management is defined as the process of managing monies in order to insure maximum cash availability and maximum earnings on short-term investment of idle cash.

Safety

Safety is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate credit and interest rate risk.

Metro will minimize credit risk, the risk of loss due to the failure of the issuer or backer of the investment, by (i) limiting investments to the safest types of investments; (ii) pre-qualifying financial institutions and broker/dealers that Metro does business with; and (iii) diversifying the investment portfolio so that potential losses on individual issuers will be minimized.

Metro will minimize the risk that interest earnings and the market value of investments in the portfolio will fall due to changes in general interest rates by (i) structuring the investment portfolio so that investments mature to meet cash requirements for ongoing operations, thereby avoiding the need to liquidate investments prior to maturity; (ii) investing operating funds primarily in certificates of deposit, shorter-term securities, money market mutual funds or local government investment pools functioning as money market mutual funds; and (iii) diversifying maturities and staggering purchase dates to minimize the impact of market movements over time.

Liquidity

The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This is accomplished by structuring the portfolio so that investments mature concurrent with cash needs to meet anticipated demands. Because all possible cash demands cannot be anticipated, a portion of the portfolio will be invested in shares of money market mutual funds or local government investment pools that offer same-day liquidity. In addition, a portion of the portfolio will consist of securities with active secondary or resale markets.

Suitability

All investments shall be suitable for the type of fund invested, and the investment portfolio shall be designed with the objective of meeting all legal requirements including yield restrictions. All participants in Metro's investment process shall seek to act responsibly as custodians of the public trust. Investment officers shall avoid any transaction that might impair public confidence in Metro's ability to govern effectively.

Yield (Optimization of Earnings)

The investment portfolio shall be designed with the objective of attaining a market rate of return through budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary importance compared to the safety and liquidity objectives described above.

In order to minimize risk of loss due to interest rate fluctuations, investment maturities will not exceed the anticipated ca sh flow requirements of the funds. Investment guidelines by fund-type are as follows:

5.0 Investment Strategies for Funds

General and Operating Funds

Investment guidelines for Metro's general and operating funds are as

follows:

Safety of Principal — All investments shall be in high quality securities with minimal default risk. Safety of principal shall be further ensured through diversification by issuer, maturity range and security type.

Liquidity — The general and operating funds will have high liquidity needs. Overnight repurchase agreements, local government investment pools and money market mutual funds can provide daily liquidity and may be utilized as competitive yield alternatives to fixed maturity investments.

Suitability — Any investment authorized by this investment policy having a final maturity not to exceed two years is suitable for general and operating funds.

Yield — Attaining a competitive market yield for comparable security types and portfolio restrictions is the desired objective. The minimum yield objective shall be the trailing three month average of the 3-month T-bill yield.

Capital Project Funds

Funds on deposit in capital project funds will pay for capital expenditures of Metro projects. Investment guidelines for such funds are as follows:

Safety — All investments shall be in high quality securities with minimal default risk. Maturities shall be placed to correspond with the anticipated capital spending or construction draw schedules. Safety of principal shall be further ensured through diversification by issuer, maturity range and security type.

Liquidity — Capital project funds require high short-term liquidity as the construction draw schedules are frequently uncertain. Overnight repurchase agreements, local government investment pools and money market mutual funds shall provide daily liquidity and may be utilized as competitive yield alternatives to fixed maturity investments.

Suitability — any investments authorized by this investment policy not exceeding the expected construction draw schedule are suitable for the capital project funds.

Yield — the most desirable yield objective when investing Capital Project Funds is to achieve a positive spread to the arbitrage yield that corresponds to the specific bond issue. In market conditions in which this objective is not possible within safety constraints, attaining a competitive market yield for comparable security types and portfolio restrictions is the desired objective. In this case, the minimum yield objective shall be the trailing average of the yield on the Treasury security corresponding to the weighted average maturity of the capital project fund portfolio.

Debt Service Funds

Investment guidelines for Metro debt service funds are as follows:

Safety of Principal — all investments shall be in high quality securities with no perceived default risk. Market price fluctuations will however occur, by managing the debt service fund's portfolio to not exceed the debt service payment schedule the market risk of the overall portfolio will be minimized. Market conditions influence the attractiveness of fully extending maturity to the next "unfunded" payment date. Generally, if investment rates are trending down, Metro is best served by locking in fixed rate securities. If interest rates are flat or trending up, concurrent market conditions will determine the attractiveness of extending maturity or investing in shorter alternatives. At no time shall the debt service schedule be exceeded in an attempt to bolster yield.

Liquidity — Debt service funds have predictable payment schedules. Therefore, investment maturities shall not exceed the anticipated cash flow requirements. Overnight repurchase agreements, local government investment pools and money market mutual funds shall provide competitive yield alternatives for short term fixed maturity investments.

Suitability — any investment authorized by this investment policy is suitable for the debt service fund.

Yield — attaining a competitive market yield for comparable security-types and portfolio restrictions is the desired objective. . The minimum yield objective shall be the trailing three-month average of the 3-month T-bill yield.

Special Revenue Funds

Metro's revenue funds are short term in nature and the investment guidelines are as follows:

Safety of Principal — all investments shall be in high quality short-term investments with no perceived default risk. Diversification is less of a concern since revenue funds will be highly liquid.

Liquidity — Revenue funds require high short-term liquidity. Overnight repurchase agreements, local government investment pools and money market mutual funds shall provide daily liquidity and may be utilized as competitive yield alternatives to fixed maturity investments.

Suitability — Eligible investments will be limited to overnight repurchase agreements, $1 NAV money market funds, $1 NAV local government investment pools, Treasury, agency and commercial paper issues with final maturities of less than 90 days.

Yield — attaining a competitive market yield for comparable security types and portfolio restrictions is the desired objective. The minimum yield objective shall be the trailing one-month average of the four-week T-bill yield.

6.0 Responsibility and Control

Delegation of Authority

In accordance with the Public Funds Investment Act, the Board designates the officers or employees listed on Schedule 2 as Metro's Investment Officers. An Investment Officer is authorized to execute investment transactions on behalf of Metro. No person may engage in an investment transaction or the management of Metro funds except as provided under the terms of this investment policy as approved by the Board. Such investment authority granted to the Investment Officers is effective until rescinded by the Board.

Quality and Capability of Investment Management

Metro shall provide periodic training in investments for the designated Investment Officers and other investment personnel through courses and seminars offered by professional organizations, associations, and other independent sources in order to insure the quality and capability of investment management in compliance with the Public Funds Investment Act.

Training Requirement

In accordance with the Public Funds Investment Act, the designated Investment Officers shall attend an investment training session no less often than once within every two of the Authority's fiscal years and shall receive not less than 10 hours of instruction relating to investment responsibilities. A newly appointed Investment Officer must attend a training session of at least 10 hours of instruction within 12 months of the date the officer took office or assumed the officer's duties. The investment training session shall be provided by an independent source approved by the Board. For purposes of this investment policy, an "independent source" from which investment training shall be obtained shall include a professional organization, an institution of higher education or any other sponsor other than a business organization with whom Metro may engage in an investment transaction.

Internal Controls

Metro's Chief Financial Officer is responsible for establishing and maintaining an internal control structure designed to ensure that Metro assets are protected from loss, theft or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (i) the cost of a control should not exceed the benefits likely to be derived; and (ii) the valuation of costs and benefits requires estimates and judgments by management.

Accordingly, the Chief Financial Officer shall establish a process for annual independent review by an external auditor to assure compliance with policies and procedures. The internal controls shall address the following points:

- Control of collusion
- Separation of transaction authority from accounting and record keeping
- Custodial safekeeping
- Avoidance of physical delivery of securities
- Clear delegation of authority to subordinate staff members
- Written confirmation for telephone (voice) transactions for investments and wire transfers
- Development of a safekeeping agreement with a depository bank or third-party custodian

Prudence

The standard of prudence to be applied by an Investment Officer shall be the "prudent investor" rule, which states that "investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital, as well as the probable income to be derived." In determining whether an Investment Officer has exercised prudence with respect to an investment decision, the determination shall be made taking into consideration the following:

- The investment of all funds over which the officer had responsibility rather than a consideration as to the prudence of a single investment;
- Whether the investment decision was consistent with this investment policy.

Indemnification

The Investment Officers, acting in accordance with written procedures and exercising due diligence, shall not be held personally responsible for a specific investment's credit risk or market price changes, provided that these deviations are reported immediately and the appropriate action is taken to control adverse developments.

Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall refrain from personal business activity that would conflict with the proper execution and management of the investment program, or that would impair their ability to make impartial decisions. Employees and Investment Officers shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking personal investment transactions with the same individual with which business is conducted on behalf of Metro.

An Investment Officer who has a personal business relationship with an organization seeking to sell an investment to Metro shall file a statement disclosing that personal business interest. An Investment Officer who is related within the second degree by affinity or consanguinity to an individual seeking to sell an investment to Metro shall file a statement disclosing that relationship. A statement required under this subsection must be filed with the Texas Ethics Commission and the Board.

7.0 Suitable and Authorized Investments

Portfolio Management

Metro currently has a "buy and hold" portfolio strategy. Maturity dates are matched with cash flow requirements and investments are purchased with the intent to be held until maturity. However, investments may be liquidated prior to maturity for the following reasons:

- An investment with declining credit may be liquidated early to minimize loss of principal;
- Cash flow needs of Metro may require that the investment be liquidated;
- To improve the overall quality or maturity structure of the portfolio;
- To enhance the interest earnings of the portfolio.

Authorized Investments

Metro funds governed by this policy may be invested in the instruments described below, all of which are authorized by the Public Funds Investment Act. Investment of Metro funds in any instrument or security not authorized for investment under such act is prohibited. Metro will not be required to liquidate an investment that becomes unauthorized subsequent to its purchase.

(a) Obligations of the United States of America or its agencies and instrumentalities.

(b) Fully collateralized certificates of deposit issued by a state or national bank domiciled in the State of Texas, a savings and loan association domiciled in the State that are fully insured for the principal and accrued interest by the United States or an instrumentality of the United States

(c) Direct obligations of the State of Texas or its agencies and instrumentalities;

(d) Other obligations the principal and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of the State of Texas or the United States of America or their respective

agencies and instrumentalities, including obligations that are fully guaranteed or insured by the Federal Deposit Insurance or by the explicit full faith and credit of the United States of America.

(e) Obligations of states, agencies, counties, cities and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than AA or its equivalent;

(f) Fully collateralized repurchase agreements if Metro has obtained a signed Master Repurchase Agreement with the company with which the agreement is entered, as authorized by the Public Funds Investment Act or other applicable law;

(g) Commercial Paper with a stated maturity of 270 days or fewer from the date of issuance, and is rated not less than A-1 or P-1 or an equivalent rating by at least two nationally recognized credit rating agencies, as authorized by the Public Funds Investment Act or other applicable law;

(h) No-load money market mutual funds registered and regulated by the Securities Exchange Commission, with a dollar-weighted average stated maturity of 90 days or fewer, which provides investing entities with a prospectus and other information required by the Securities Exchange Act of 1934 (15 U.S.C. Section 78a et seq.) or the Investment Company Act of 1940 (15 U.S.C. Section 80a-1 et seq.) and which include in their investment objectives the maintenance of a stable net asset value of $1 for each share, as authorized by the Public Funds Investment Act.

(i) Guaranteed investment contracts and flexible repurchase agreements, as authorized by the Public Funds Investment Act or other applicable law.

(j) Local government investment pools that (i) meet the requirements of the Public Funds Investment Act; (ii) are rated no lower than AAA, or AAAm or an equivalent rating by at least one nationally recognized rating service; and (iii) seek to maintain a stable net asset value of $1 for each share, as authorized by the Public Funds Investment Act.

(k) Any other investment authorized by the Public Funds Investment Act.

Credit Downgrade Provision

An investment that requires a minimum rating under this policy does not qualify as an authorized investment during any period in which the investment does not have the minimum rating. All prudent measures consistent with this policy will be taken to liquidate an investment that is downgraded to less than the required minimum rating.

Securities Lending

Metro may enter into a securities lending program with an authorized broker/dealer or financial institution in order to enhance investment return. Metro may administer a securities lending program directly or, if conditions warrant, use an outside agent. Should an agent be used, one will be selected by the Board using appropriate criteria. Securities lending will only be transacted with a written agreement, approved by legal counsel, which details: (i) acceptable types of collateral; (ii) standards for collateral custody and control; (iii) collateral valuation and initial margin, accrued interest, marking to market, and margin calls; (iv) method for transmitting security income; and (v) acceptable methods for delivery of securities and collateral.

Approved List of Money Market Mutual Funds and Investment Pools and Federal Agencies

An approved list of money market mutual funds and investment pools is attached to this investment policy as Schedule 3. An approved list of federal agencies is attached to this investment policy as Schedule 4.

Not Authorized

The following types of investments are strictly prohibited.

(a) Obligations whose payment represents the coupon payments on the outstanding principal balance of the underlying mortgage-backed security collateral and pay no principal. (Commonly referred to as "IOs")

(b) Obligations whose payment represents the principal stream of cash flow from the underlying mortgage- backed security collateral and bears no interest. (Commonly referred to as "POs")

(c) Collateralized mortgage obligations that have a stated final maturity date of greater than 10 years.

(d) Collateralized mortgage obligations, the interest rate of which is determined by an index that adjusts opposite to the changes in a market index. (Commonly referred to as "Inverse Floaters")

Maximum Maturities

The longer the maturity of investments, the greater their price volatility. It is Metro's policy to concentrate its investment portfolio in shorter-term securities in order to limit principal risk caused by changes in interest rates.

Metro will attempt to match its investments with anticipated cash flow requirements. With the exception of investments made for Capital Projects Funds, Metro will not directly invest in securities maturing more than two (2) years from the date of purchase; however, the above described obligations, certificates or agreements may be collateralized using longer dated investments.

Because no secondary market exists for repurchase agreements, the maximum maturity shall be 120 days, except in the case of a guaranteed investment contract or flexible repurchase agreement for bond proceeds. The maximum maturity for such an investment shall be determined in accordance with project cash flow projections and the requirements of the governing bond order or resolution.

Diversification

It is the policy of Metro to diversify its investment portfolio. Metro recognizes that investment risks can result from issuer defaults, market price changes or various technical complications leading to temporary illiquidity. All funds shall be diversified to eliminate the risk of loss resulting from over-concentration of assets in a specific maturity, a specific issuer or a specific class of securities. In establishing specific diversification strategies, the following general policies and constraints shall apply:

(a) Limiting investments to avoid over-concentration in investments from a specific issuer or security type, excluding U.S. Treasury securities and other investments backed by the full faith and credit of the United States.

(b) Limiting investments that have higher credit risks (example: commercial paper).

(c) Investing in investments with varying maturities. Portfolio maturities shall be staggered in a way that avoids undue concentration of assets in a specific sector. Maturities shall be selected that provide for stability of income and reasonable liquidity.

(d) Continuously investing a portion of the portfolio in readily available funds such as local government investment pools (LGIPs), money-market funds or overnight repurchase agreements to ensure that appropriate liquidity is maintained in order to meet ongoing obligations.

The following maximum limits, by instrument, are established for Metro's total portfolio:

1.	U.S. Treasury Securities		100%
2.	Agencies and Instrumentalities		85%
	Per issuer maximum limits:		
	• FNMA, FHLMC, FHLB, FFBC	40%	
	• Other Federal Agency/GSE	10%	
3.	Certificates of Deposit		25%
4.	Corporate Commercial Paper		40%
5.	Municipal Commercial Paper		25%
6.	Municipal Bonds or Notes		25%
7.	Repurchase Agreements*		10%
8.	Money Market Mutual Funds		50%
9.	Authorized Investment Pools		75%

*Excluding flexible repurchase agreements for bond proceeds investments.

8.0 Selection of Banks and Broker/Dealers

Banks

Metro will maintain a list of qualified public depositories approved by the Board that are authorized to hold Metro funds. Deposits will only be placed with those institutions that have:

(a) Provided audited financial statements;

(b) Submitted a written request or completed an application to be an authorized depository;

(c) Been designated by the Board as an authorized depository;

(d) Signed an appropriate form of security or collateral agreement; and

(e) Provided collateral as required by applicable law.

An annual review of the financial condition of each depository holding Metro funds will be conducted by Metro. A current audited financial statement is required to be on file for each broker/dealer and financial institution that transacts any investment activities with Metro.

Broker/Dealers

Metro will maintain a list of approved broker/dealers and financial institutions that have been approved by the Board and are authorized to provide investment services in the State of Texas. Investments shall only be made with those firms who qualify under Securities & Exchange Commission Rule 15C3-1 (uniform net capital rule) and who have:

(a) Provided audited financial statements;

(b) Completed a response to all requested information in any Metro questionnaire relating to creditworthiness, experience and reputation;

(c) Acknowledged, in writing, that the policy has been thoroughly reviewed by qualified representatives dealing directly with Metro's account and that the organization has implemented reasonable procedures and controls in an effort to preclude investment transactions conducted between Metro and the organization that are not authorized by Metro's investment policy, except to the extent that this authorization depends on an analysis of the makeup of Metro's entire portfolio or requires an interpretation of subjective investment standards; and

(d) Met any qualifications and standards recommended and approved by the Board.

An annual review of the financial condition and registrations of authorized broker/dealers and financial institutions providing investment services will be conducted by Metro. In addition, the quantity of transactions conducted with each approved broker/dealer will be reviewed at least annually. The results of this review and the related recommendations shall be submitted to the Board. The Board shall, at least annually, review, revise, and adopt a list of qualified brokers that are authorized to engage in investment transactions with Metro.

Securities shall be purchased using the delivery vs. payment method with the exception of investment pools and mutual funds. Funds will be released after notification that the purchased security has been received.

Approved List

An approved list of banks and broker/dealers is attached to this investment policy as Schedule 5.

Competitive Quotes

Each investment transaction shall be based upon competitive quotations received from at least three (3) broker/dealers approved by Metro. Competitive quotes shall be documented and retained as part of the transaction record.

Investment Advisors

Metro may contract with an investment advisor, who shall adhere to the spirit, philosophy and specific term of this Policy and shall invest within the same "Standard of Care." The investment advisor must be registered with the Securities and Exchange Commission (SEC) under the Investment Advisor's Act of 1940 as well as with the Texas State Securities Board. Advisors may assist Metro with the management of its funds and other responsibilities including but not limited to, broker compliance, competitive bidding, reporting and security documentation.

An appointed Investment Advisor shall act solely in an advisory and administrative capacity, within the guidelines of this Investment Policy. At no time shall the advisor take possession of securities or funds or otherwise be granted discretionary authority to transact business on behalf of Metro except as delineated by Metro in the pools listed on Schedule 3 – Approved List of Investment Pool, Money Market Mutual Funds and Overnight Sweep Fund.

9.0 Safekeeping of Securities and Collateral

To protect against potential fraud and embezzlement, the financial assets of Metro shall be secured through safekeeping procedures. The Investment Officers shall be bonded to protect the public against possible embezzlement and malfeasance.

Securing Deposits of Authority Funds

Metro shall contract with a bank or banks for the safekeeping of securities either owned by Metro as part of its investment portfolio or held as collateral to secure demand or time deposits. Securities owned by Metro shall be held in Metro's name as evidenced by safekeeping receipts of the institution holding the securities.

Collateral for deposits will be held by a third party custodian designated by the entity and pledged to Metro as evidenced by safekeeping receipts of the institution with which the collateral is deposited. Original safekeeping receipts shall be obtained. Collateral may be held by the depository bank's trust department, a Federal Reserve Bank or branch of a Federal Reserve Bank, a Federal Home Loan Bank, or a third-party bank approved by Metro.

Collateral Policy

Consistent with the requirements of the Public Funds Collateral Act, it is the policy of Metro to require full collateralization of all Metro funds on deposit with a depository bank. In order to anticipate market changes and provide a level of security for all funds, the collateralization level will be 102% of market value of principal and accrued interest on the deposits less the amount insured by the FDIC. At its discretion, Metro may require a higher level of collateralization for certain security types. Securities pledged as collateral shall be held by an independent

third party with whom Metro has a current custodial agreement. Metro's Chief Financial Officer is responsible for entering into collateralization agreements with third-party custodians in compliance with this investment policy. The agreements are to specify the acceptable security types for collateral, including provisions relating to possession of the collateral, the substitution or release of collateral, ownership of collateral, and the method of collateral valuation. A clearly marked evidence of ownership (safekeeping receipt) must be supplied to Metro and retained in file. Collateral shall be reviewed at least monthly to assure that the market value of the pledged securities is adequate.

Collateral Defined

Metro shall accept only the following types of collateral:

- Obligations of the United States or its agencies and instrumentalities.
- Direct obligations of the State of Texas or its agencies and instrumentalities.
- Collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States, provided that these CMO's do not fall under the Not Authorized section listed above.
- Obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized rating firm not less than AA or its equivalent with a remaining maturity of ten (10) years or less.
- A surety bond issued by an insurance company rated as to investment quality by a nationally recognized rating firm not less than A.
- A letter of credit issued to the entity by the Federal Home Loan Bank.

Subject to Audit

All collateral shall be subject to inspection and audit by a Metro representative or Metro's independent auditors.

10.0 Performance

Performance Standards

Metro's investment portfolio will be managed in accordance with the parameters specified within this investment policy. The portfolio shall be designed with the objective of obtaining a reasonable market yield through budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow requirements of Metro.

Performance Benchmark

It is the policy of Metro to purchase investments with maturity dates coinciding with cash flow needs. Through this strategy, Metro shall seek to optimize interest earnings utilizing allowable investments available on the market at that time. Market value will be calculated on a quarterly basis on all securities owned and compared to current book value. Metro's portfolio shall be designed with the objective of attempting to meet or exceed the average yield on U.S. Treasury securities at a maturity level comparable to Metro's weighted average maturity in days.

11.0 Reporting

Methods

The Investment Officer shall prepare an investment report on a quarterly basis that summarizes investment strategies employed in the most recent quarter and describes the portfolio in terms of investment securities, maturities, and yield to maturity.

The quarterly investment report shall include a summary statement of investment activity prepared in compliance with generally accepted accounting principles. This summary will be prepared in a manner that will allow Metro to ascertain whether investment activities during the reporting period have conformed to this investment policy. The report will be provided to the Board. The report must:

- Describe in detail the investment position;
- Be prepared jointly by all Metro investment officers;
- Be signed by each investment officer;
- Contain a summary statement prepared in compliance with generally accepted accounting principles of each pooled fund group that states the: beginning market value for the reporting period; additions and changes to the market value during the period; ending market value for the period; fully accrued interest for the reporting period;
- State the book value and market value of each separately invested asset at the beginning and end of the reporting period by the type of asset and fund type invested;
- State the maturity date of each separately invested asset that has a maturity date;
- State the fund for which each individual investment was acquired;
- Include a statement of compliance of Metro's investment portfolio with state law and the investment strategy and policy approved by the Board.

An independent auditor will perform a formal annual review of the quarterly reports with the results reported to the governing body

Monitoring Market Values and Ratings

Market value of all securities in the portfolio will be obtained from a reputable and independent source such as Bloomberg and disclosed to the Board not less than quarterly in a written report. The Ratings of all investments requiring a minimum rating to be considered an acceptable investment will be verified from a reputable, independent source such as Bloomberg, Standard and Poors or Moody's Investor Services and any downgrades disclosed to the Board not less than quarterly in a written report. The Authority shall take all prudent measures that are consistent with its investment policy to liquidate any investment that does not maintain the minimum rating prescribed by the Texas Public Funds Investment Act.

12.0 Investment Policy Adoption

Metro's investment policy shall be adopted by resolution of the Board. It is Metro's intent to comply with all applicable state laws and regulations. Metro's investment policy shall be subject to revisions consistent with changinglaws, regulations, and needs of Metro. Metro shall adopt a resolution stating that it has reviewed the policy and investment strategies annually, approving any changes or modifications.

SCHEDULES

Schedule 1 — Metro Funds Specifically Exempted From Investment

Policy Schedule 2 — List of Investment Officers

Schedule 3 — Approved List of Money Market Mutual Funds and Investment

Pools Schedule 4 — Approved List of Federal Agencies

Schedule 5 — Approved List of Banks and Broker/Dealers

Schedule 6 — Approved Sources for Public Funds Investment Training

Schedule 1 — Metro Funds Specifically Exempted From Investment Policy

Construction Funds and balances in both the General Mobility Escrow and Real Estate Fund are specifically exempted from the maximum allocation guidelines set forth in Section 7.0 of the Investment Policy.

Schedule 2 — List of Investment Officers

George Fotinos	Chief Financial Officer
Philip Brenner	Deputy Chief Financial Officer
Sheila LeFang	Manager, Debt Service & Investments
Katy Wei	Management Analyst, Debt Service & Investments

Schedule 3 — Approved List of Investment Pools, Money Market Mutual Funds and Overnight Sweep Fund

Investment Pools:

TexStar
LOGIC
TexPool
Texas
DAILY
Texas
CLASS

Money Market Mutual Funds:

SEI Investments Government Fund
Invesco Government and Agency
Portfolio
Wells Fargo 100% Treasury Money Market Fund
Goldman Sachs Financial Square Government
Fund/Select BlackRock T-Fund Liquidity Fund

Overnight Sweep Fund:

Wells Fargo Public Institutional Bank Deposit Account

Schedule 4 — Approved List of Federal Agencies and Instrumentalities

All indirect obligations of the U.S. "such as" :

Federal Farm Credit
Bank Federal Home Loan
Bank
Federal Home Loan Mortgage Corporation
Federal National Mortgage Corporation
Federal Agricultural Mortgage
Corporation Federal National Mortgage
Association

"and other federal agency obligations, the principal and interest of which are unconditionally guaranteed or insured by or backed by the full faith and credit of the United States, its agencies or instrumentalities."

Direct Obligations of the State of Texas or any county, city, school district or other political subdivision of the State of Texas are also approved investments

Schedule 5 - Depository Banks and Broker/Dealers

Approved Depository Banks:

PNC Bank, National Association
East West Bank (For Certificates of Deposit
Only) Cadence Bank (For Certificates of Deposit
Only) TDECU (For Certificates of Deposit Only)
Affinity Bank MBE/WBE (For Certificates of
Deposit Only)
Wells Fargo

Approved Broker / Dealers

American Veterans Group BOK Financial Securities, Inc. Blaylock Van, LLC

Cabrera Capital Markets Crews & Associates

FHN Financial Capital Markets Great Pacific Securities

Hilltop Securities Insperex LLC Jefferies, LLC

Loop Capital Markets Memphis Capital

Mischler Financial Group, Inc.

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Multi-Bank Securities Piper Sandler & Co. PNC Capital Markets Ramirez & Co., Inc Raymond James

RBC Capital Markets

Rice Financial Products Co. Robert W. Baird & Co.

Stern Brothers & Co. Stifel

UMB

Wells Fargo Securities, LLC

Schedule 6 – Approved Sources for Public Funds Investment Training

American Women's Society of Certified Public
Accountants Chartered Financial Analyst Society
Government Finance Officers Association of
Texas Government Treasurers' Organization of
Texas Public Financial Management
Texas Public Employees Retirement System
Texas Society of Certified Public
Accountants Texas State University
The Texas Association of Counties
North Central Texas Council of Governments (NCTCOG) t

RESOLUTION 2023 – 134

A RESOLUTION

APPROVING THE UNION OTHER POST-EMPLOYMENT BENEFITS INVESTMENT POLICY AND STRATEGIES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, pursuant to Resolution 2023-03, the Metropolitan Transit Authority of Harris County, Texas ("METRO") Board of Directors ("Board of Directors") amended the financial parameters of the Fiscal Year 2023 Business Plan and Budgets to change the minimum reserve, and authorized staff to draft a policy and strategy to fund existing and future Other Post-Employment Benefits ("OPEB") obligations accruing under METRO's retirement benefit plans for its union employees in an equitable and sustainable manner in accordance with GASB standards and industry best practice for Board review and approval; and

WHEREAS, based on the foregoing, management recommends that the Board approve the Union OPEB Investment Policy and strategies attached hereto as Exhibit A.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby approves the Union Other Post-Employment Benefits ("OPEB") Investment Policy and strategies attached hereto as Exhibit A.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 135

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO AWARD, NEGOTIATE AND EXECUTE A CONTRACT WITH EACH OF THE BROWNS CONSULTING, CLINE STRATEGIC CONSULTING, LLC AND THOMPSON COBURN LLP FOR LEGISLATIVE PROFESSIONAL SERVICES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires legislative professional services to help METRO monitor and obtain advice on state and federal legislative changes that impact the agency, and to represent METRO at the state and federal levels; and

WHEREAS, pursuant to Section 451.111 of the Texas Transportation Code, the METRO Board of Directors ("Board of Directors") has discretion to award a contract for professional services to competent and responsible professionals available to advise and represent METRO on state and federal legislative changes without undergoing a competitive procurement, subject to the posting requirements therein; and

WHEREAS, management recommends that METRO enter into a one (1) year contract with The Browns Consulting to provide legislative professional services for state matters, and with each of Cline Strategic Consulting, LLC and Thompson Coburn LLP to provide legislative professional services for federal matters, with an aggregate maximum contract amount of $1,026,000.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby authorizes the President & CEO to award, negotiate and execute a one (1) year contract with The Browns Consulting to provide legislative professional services for state matters, and with each of Cline Strategic Consulting, LLC and Thompson Coburn LLP to provide legislative professional services for federal matters, with an aggregate maximum contract amount of $1,026,000, subject to applicable notice requirements.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 136

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A SOLE SOURCE CONTRACT WITH COPPERLEAF TECHNOLOGIES, INC, TO PROVIDE AN ASSET INVESTMENT AND DECISION SUPPORT SOFTWARE AND RELATED SERVICES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires an asset investment and decision support software and related services to improve METRO's ability to create, manage and visualize asset strategies that maximize business value and manage risk and resources; and

WHEREAS, Copperleaf Technologies, Inc is the only firm that can provide an asset investment and decision support software that is able to integrate with METRO's existing SAP system; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a three (3) year sole source contract with Copperleaf Technologies, Inc. to provide this asset investment and decision support software and related services, with a maximum contract amount of $497,583.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a three (3) year sole source contract with Copperleaf Technologies, Inc to provide an asset investment and decision support software and related services, with a maximum contract amount of $497,583.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 137

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH CENTRALSQUARE TECHNOLOGIES, LLC TO PROVIDE A COMPUTER-AIDED DISPATCH RECORD MANAGEMENT SYSTEM, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires a new Computer-Aided Dispatch and Records Management System for the METRO Police Department ("MPD") to store, retrieve and analyze documents, manage evidence, and dispatch officers efficiently; and

WHEREAS, METRO issued a Request for Proposals for such Computer-Aided Dispatch and Records Management System and the proposal from CentralSquare Technologies, LLC was determined to offer the most advantages and best overall value to METRO based on the evaluation criteria; and

WHEREAS, management recommends that METRO enter into a one (1) year contract with three (3) options to extend the contract term for an additional one (1) year period with CentralSquare Technologies, LLC to provide this Computer-Aided Dispatch and Records Management System for MPD, with a base contract amount of $2,156,527.96, and an owner-controlled contingency of $323,479.19, for a maximum contract amount of $2,480,007.15.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a one (1) year contract with three (3) options to extend the contract term for an additional one (1) year period with CentralSquare Technologies, LLC to provide a Computer-Aided Dispatch and Records Management System for the METRO Police Department, with a base contract amount of $2,156,527.96, and an owner-controlled contingency of $323,479.19, for a maximum contract amount of $2,480,007.15.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 138

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH EPI-USE AMERICA, INC TO PROVIDE IMPLEMENTATION SERVICES FOR THE UPGRADE OF METRO'S CURRENT SAP ENVIRONMENT TO SAP S/4HANA, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires implementation services for the upgrade of its existing SAP environment to SAP S/4HANA; and

WHEREAS, METRO issued a Request for Proposals for such implementation services and the proposal from EPI-USE America, Inc was determined to offer the most advantages and best overall value to METRO based on the evaluation criteria; and

WHEREAS, management recommends that METRO enter into a one (1) year contract with one (1) option to extend the contract term for an additional one (1) year period with EPI-USE America, Inc to provide these implementation services for the upgrade of METRO's current SAP environment to SAP S/4HANA, with a base contract amount of $7,830,107.84, and an owner-controlled contingency of $783,010.78, for a maximum contract amount of $8,613,118.62.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a one (1) year contract with one (1) option to extend the contract term for an additional one (1) year period with EPI-USE America, Inc to provide implementation services for the upgrade of METRO's current SAP environment to SAP S/4HANA, with a base contract amount of $7,830,107.84 and an owner-controlled contingency of $783,010.78, for a maximum contract amount of $8,613,118.62.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 139

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH DETERING CONSULTING INC. TO PROVIDE IMPLEMENTATION SERVICES TO ENHANCE WARRANTY FUNCTIONS IN METRO'S SAP PLANT MAINTENANCE MODULE, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires implementation services to enhance warranty functions in METRO's existing SAP Plant Maintenance module; and

WHEREAS, METRO issued a Request for Proposals for such implementation services and Detering Consulting Inc. was the only firm that submitted a bid and such bid was determined to be responsive, responsible and reasonably priced; and

WHEREAS, management recommends that METRO enter into a six (6) month contract with Detering Consulting Inc. to provide these implementation services to enhance warranty functions in METRO's existing SAP Plant Maintenance module, with a base contract amount of $571,320, and an owner-controlled contingency of $57,132, for a maximum contract amount of $628,452.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a six (6) month contract with Detering Consulting Inc. to provide implementation services to enhance warranty functions in METRO's existing SAP Plant Maintenance module, with a base contract amount of $571,320, and an owner-controlled contingency of $57,132, for a maximum contract amount of $628,452.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 140

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT MODIFICATION WITH HATCH ASSOCIATES CONSULTANTS, INC. TO INCREASE THE MAXIMUM CONTRACT AMOUNT FOR ENGINEERING SUPPORT CONSULTING SERVICES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, pursuant to Resolution 2020-85, the Metropolitan Transit Authority of Harris County, Texas ("METRO") entered into a contract with Hatch Associates Consultants, Inc. (formerly, LTK Engineering Services) to provide engineering support consulting services for METRO's Bus Rapid Transit and light rail systems, with a maximum contract amount of $4,000,000; and

WHEREAS, there is currently insufficient capacity under the above-referenced contract to provide the requisite engineering support for such projects, including additional rail safety services in compliance with federal requirements, and METRO is undergoing a new procurement for the services; and

WHEREAS, in order to complete the execution of work on key initiatives in progress by the consultant and to maintain continuity in alignment with METRO's business objectives, a modification to increase contract capacity is necessary while the new procurement is undertaken; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a modification of its existing contract with Hatch Associates Consultants, Inc. for these engineering support consulting services to increase the base contract amount by $1,324,000, resulting in a new maximum contract amount of $5,324,000.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a modification of its existing contract with Hatch Associates Consultants, Inc. for engineering support consulting services to increase the base contract amount by $1,324,000, resulting in a new maximum contract amount of $5,324,000.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 141

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT MODIFICATION WITH ATSER SYSTEMS INC. TO INCREASE THE MAXIMUM CONTRACT AMOUNT FOR SOFTWARE AND IMPLEMENTATION SERVICES FOR THE EXISTING PROGRAM MANAGEMENT INFORMATION SYSTEM, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, pursuant to Resolution 2020-96, the Metropolitan Transit Authority of Harris County, Texas ("METRO") entered into a contract with ATSER Systems Inc. to provide software and implementation services for a hosted Project Management Information System ("PMIS"), with a maximum contract amount of $956,000; and

WHEREAS, to be in compliance with new federal requirements to have a Disaster Recovery Services Plan, METRO requires such software and implementation services to add disaster recovery services to the existing PMIS; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a modification of its existing contract with ATSER Systems Inc. for these software and implementation services to add disaster recovery services to the existing PMIS and to increase the base contract amount by $57,000, resulting in a new maximum contract amount of $1,013,000.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a modification of its existing contract with ATSER Systems Inc. for software and implementation services to add disaster recovery services to the existing Project Management Information System and to increase the base contract amount by $57,000, resulting in a new maximum contract amount of $1,013,000.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 142

A RESOLUTION

AUTHORIZING METRO TO BECOME A VOTING MEMBER OF THE GULF COAST RAIL DISTRICT BOARD OF DIRECTORS, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Gulf Coast Rail District ("GCRD") was created to improve public safety and reduce vehicle delay created by rail operations and motor vehicles on intersecting highways, ensure context sensitive development of the freight and commuter rail network as the region and economic activity grows, and improve freight rail access, speed, reliability and safety commensurate with public benefits; and

WHEREAS, GCRD is governed by a fourteen (14) member Board of Directors, consisting of representatives of the member entities, the small municipalities in Harris County and Fort Bend County and the Port of Houston, and the Metropolitan Transit Authority of Harris County, Texas ("METRO") was added in 2011 as a non-voting ex-officio member; and

WHEREAS, the frequency, reliability, and safety of many of the services under the METRONext Plan will depend on grade separations with freight rail tracks crossing certain corridors, and bus routes may be adversely impacted by delays with at grade rail crossings across the METRO service area; and

WHEREAS, GCRD is instrumental in the identification of freight rail grade separations and other priority investments, demonstrating a sustained regional consensus, and developing funding partnerships needed for competitive grant applications like the federal funding available under the Bipartisan Infrastructure Law for safety and operational improvements to the nation's freight and passenger rail infrastructure; and

WHEREAS, METRO has the opportunity to participate in formal decisions and actions taken by the GCRD to accomplish the foregoing by becoming a voting member of the GCRD Board; and

WHEREAS, such membership requires the payment of an annual dues amount, which is currently set at $25,000 for METRO and subject to adjustment from time to time by the GCRD Board of Directors; and

WHEREAS, based on the foregoing, management recommends that the METRO Board authorize METRO to become a voting member of the GCRD Board of Directors and to remit the required annual dues amount.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes METRO to become a voting member of the Gulf Coast Rail District Board of Directors and to remit the annual dues amount.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 143

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH CLEAN ENERGY FUELS TO PROVIDE DESIGN AND CONSTRUCTION SERVICES FOR A CNG FUELING STATION AND FACILITY UPGRADES AT THE HIRAM CLARKE BUS OPERATING FACILITY, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires design and construction services for a CNG fueling station and facility upgrades at the Hiram Clarke Bus Operating Facility; and

WHEREAS, METRO was awarded funding under the Federal Transit Administration Bus and Low- and No-Emission Grant which allows METRO to enter into a contract with Clean Energy Fuels for these design and construction services without undergoing a competitive procurement; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a contract with Clean Energy Fuels to provide these design and construction services for a CNG fueling station and facility upgrades at the Hiram Clarke Bus Operating Facility, with a maximum contract amount of $15,963,674.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a contract with Clean Energy Fuels to provide design and construction services for a CNG fueling station and facility upgrades at the Hiram Clarke Bus Operating Facility, with a maximum contract amount of $15,963,674.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 144

A RESOLUTION

APPROVING THE PROPOSED JANUARY 2024 SERVICE CHANGES AND SERVICE EQUITY ANALYSIS EVALUATING SUCH CHANGES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") implements regular service changes during the year, typically in or around January, May/June, and August, after a public hearing is held in accordance with the requirements of the Federal Transit Administration Circular 4702.1B, including after analyzing the changes to ensure that they will not result in a disparate impact based on race, color, or national origin or disproportionate burdens to low income populations, or examining the availability of alternatives and avoiding, minimizing or mitigating impacts where practicable; and

WHEREAS, it is proposed that METRO make certain modifications including making layover bus service changes, extending certain bus routes, and addressing overloads and improving on time performance on local bus routes and Park & Ride services (collectively, the "January 2024 Service Changes"); and

WHEREAS, METRO has conducted a service equity analysis which determined that such changes will not have a disparate impact based on race, color, or national origin; and

WHEREAS, the proposed changes will create a disproportionate burden to low income populations by providing more weekday service on non-low income routes for the January 2024 Service Changes due to the phased restoration of additional service on three (3) Park & Ride bus routes which have higher trip lengths than local bus routes but this is offset by the higher service provided to non-low income routes during the previous service changes; and

WHEREAS, METRO held a public hearing on October 24, 2023 to discuss the proposed January 2024 Service Changes which are expected to have an estimated financial impact of $2,427,000 in operating costs in fiscal year 2024 and an annualized cost of $3,445,000 in fiscal year 2025; and

WHEREAS, following such public participation, management has reported the findings of the service equity analysis and a summary of the public comments on the proposed changes to the Public Safety, Customer Service and Operations Committee (the "Committee") of the METRO Board of Directors (the

"Board of Directors") and management and the Committee recommend that the Board of Directors approve the proposed January 2024 Service Changes and the service equity analysis evaluating such changes, after reviewing and considering such information.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby approves the proposed January 2024 Service Changes and service equity analysis evaluating such changes, as outlined in the presentation attached hereto as Exhibit A.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

January 2024 Service Enhancements

Public Safety, Customer Service, and Operations Committee
November, 2023

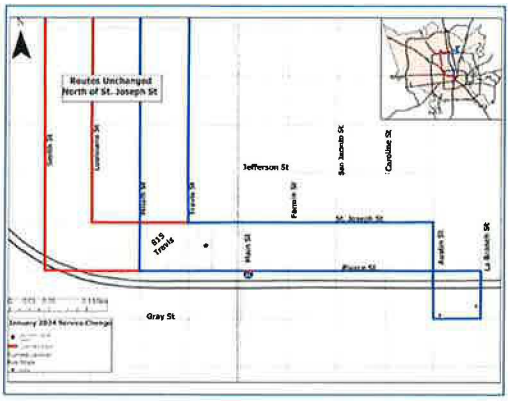
OVERVIEW – January 2024 Service Change

	Local Bus	Park & Ride Bus (Downtown)	Light Rail	curb2curb	Bus Rapid Transit
Between service changes	■				
Route extension	■				
Increase / adjust service	■	■			
Improve on-time performance	■				
Address overcrowding	■	■			

Based upon workforce and fleet availability

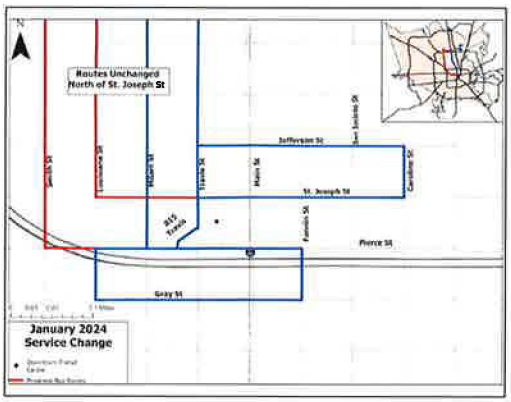
BETWEEN SERVICE CHANGES – 815 TRAVIS

Previous Layover



- Previous route layover not at METRO facility (LaBranch @ Gray or Gray @ Austin)
- No METRO restroom near these layover locations

New Layover



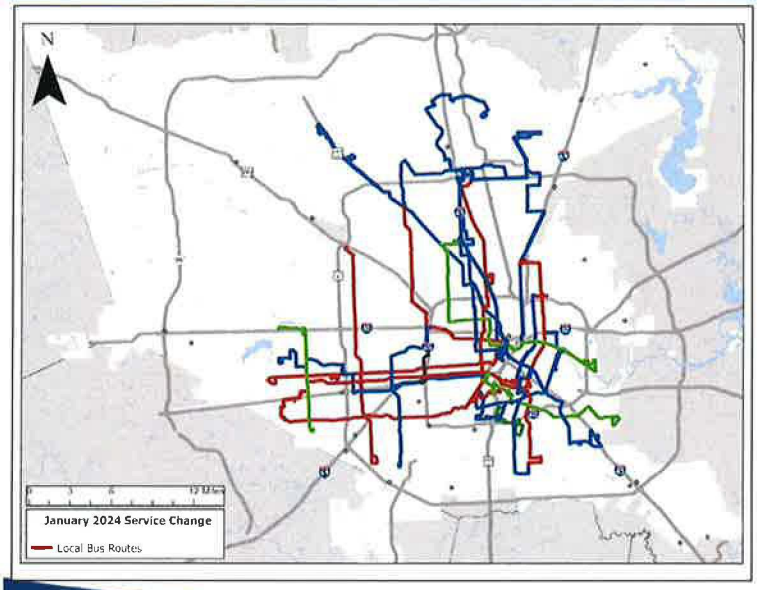
- New route layover at 815 Travis (across from 1900 Main)
- METRO restrooms on site

IMPACTED ROUTES
44 Acres Homes
85 Antoine/Washington
102 Bush IAH Express
108 Veterans Memorial

ROUTE EXTENSION – 67 DAIRY ASHFORD

- Extension requested by August 2023 Board speaker
- Extension proposed in New Bus Network and in METRONext
- Would provide operator restroom at METRO facility
- Lack of sidewalks on Park Row delayed implementation
- Verbal commitment by Energy Corridor to add bus pads at future date
- Proposed implementation would be limited stop between North Eldridge and Addicks Park & Ride pending construction of sidewalks and bus pads

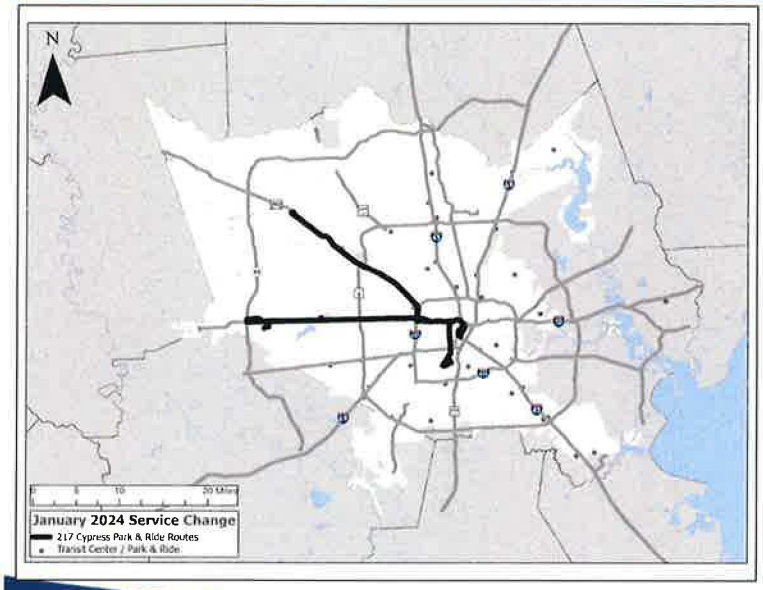
ADDRESS OVERLOADS / IMPROVE ON TIME PERFORMANCE / ADJUST RUNNING TIME - LOCAL



RESTORE SERVICE / ON TIME PERFORMANCE / ADD SERVICE FOR PASSENGER OVERLOADS	
4 Beechnut	56 Airline / Montrose
5 Southmore	60 Cambridge
6 Jensen / Greens	67 Dairy Ashford
25 Richmond	80 MLK / Lockwood
28 OST - Wayside	82 Westheimer
29 Cullen / Hirsch	85 Antoine / Washington
30 Clinton / Ella	99 Ella – FM1960
40 Telephone / Heights	102 Bush IAH
44 Acres Homes	153 Harwin Express
46 Gessner	360 Peerless
47 Hillcroft	433 METRO Rapid Silver Line

Based upon workforce and fleet availability

ADDRESS OVERLOADS - PARK & RIDES



Address Overloads
217 Cypress
222 Grand Parkway
298 Kingsland-Addicks-Northwest Transit Center/Texas Medical Center

Based upon workforce and fleet availability

ESTIMATED COSTS

	FY2024	Annualized
Route Extension	$ 22K	$ 32K
Adjust service / Address Overloads / On-Time Performance Local Bus	$1,821K	$2,585K
Address Overloads / On-Time Performance Park & Ride Bus	$ 584K	$ 828K
TOTAL	**$2,427K**	**$3,445K**

ESTIMATED RESOURCES

	Operators	Buses
Route Extension	N / A	N / A
Adjust service / Address Overloads / On-Time Performance Local Bus	17 operators 1 service driver	10 40' transit buses 1 New England Wheels
Address Overloads / On-Time Performance Park & Ride Bus	7 operators	7 45' suburban buses
TOTAL	**24 operators** **1 service driver**	**18 buses**

MAJOR SERVICE CHANGE CRITERIA

DEFINITION	YES / NO
Increase or decrease of more than 25% of the revenue hours or miles on a given transit route (bus or rail) for any weekday, Saturday, or Sunday service	**YES**
Increase or decrease to the span of service of two (2) or more hours on a given transit route (bus or rail) for any weekday, Saturday, or Sunday service	NO
Increase or decrease in a transit route's base frequency that alters its category or color	NO
Any new fixed-route transit service being introduced	NO

The extension of Route **67 Dairy Ashford** to the Addicks Park & Ride increases the revenue miles on that route by more than 25%.

TITLE VI / ENVIRONMENTAL JUSTICE

- There is no system wide disparate impact associated with the January 2024 Transit Service Change
- There is a system wide disproportionate burden associated with the January 2024 Transit Service Change as the January 2024 Transit Service Change does propose more Weekday service on non-low-income routes than on low-income routes
- The disproportionate burden is due to the phased restoration of three Park & Ride bus routes which have higher trip lengths than Local bus routes

TITLE VI / ENVIRONMENTAL JUSTICE

Proposed Change in Weekday Service Levels	Revenue Hours	Revenue Miles
Minority	104.63	552.74
Non-Minority	19.90	514.90
TOTAL	124.53	1,067.64
Disparate Impact?	NO	NO
Low-Income	104.34	350.22
Non-Low-Income	20.19	717.42
TOTAL	124.53	1,067.64
Disproportionate Burden?	NO	YES

There is a disproportionate burden in revenue miles due to the phased restoration of Park & Ride services which travel longer distances than local bus services.

KEY DATES

Item	January 2024 Service Change
Board Committee Briefing	Thursday, October 19, 2023
Public Hearing	Tuesday, October 24, 2023
Board Committee Briefing	Thursday, November 9, 2023
Board Approval	Thursday, November 16, 2023
Rail Operator Sign-up	TBD
Bus Operator Sign-up	Tuesday, December 5, 2023 – Friday, December 15, 2023
Service Change Implementation (Bus and Rail)	Sunday: January 21, 2024 Weekday: January 22, 2024 Saturday: January 27, 2024

RESOLUTION 2023 – 145

A RESOLUTION

APPROVING THE PROPOSED SERVICE STANDARDS POLICY, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Federal Transit Administration ("FTA") Circular 4702.1B requires fixed route providers of public transportation service to have system-wide service standards and policies for each specific fixed route mode of service they provide; and

WHEREAS, pursuant to Resolutions 2011-42 and 2015-69, the Metropolitan Transit Authority of Harris County, Texas ("METRO") Board of Directors ("Board of Directors") approved service standards for its fixed routes; and

WHEREAS, staff has reviewed and updated such service standards to add its curb2curb and bus rapid transit services, update all categories, and better match the service standards of peer transit agencies (the "Service Standards Policy"); and

WHEREAS, METRO held a public hearing on October 24, 2023 to discuss the proposed service standards updates, and adjustments were made to the Service Standards Policy based on comments received at the public hearing; and

WHEREAS, following such public participation, management has reported a summary of the public comments on the proposed service standards changes to the Public Safety, Customer Service and Operations Committee (the "Committee") of the Board of Directors and management and the Committee recommend that the Board of Directors approve the proposed Service Standards Policy, after reviewing and considering such information; and

WHEREAS, based on the foregoing, management recommends that the Board of Directors approve the proposed Service Standards Policy, attached hereto as Exhibit A.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby approves the proposed Service Standards Policy, attached hereto as Exhibit A.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

Point of Contact - Document Manager:	*Responsible Officer:*
First Last Name Date Title	**First Last Name** Date Title

1.0 POLICY STATEMENT

The Metropolitan Transit Authority of Harris County (METRO) strives to provide high quality transit service in an effective and efficient manner. The definition and application of service standards provides METRO the structure to achieve a balance between quality of service and the cost-effective use of limited public resources.

METRO regularly receives requests for changes to existing services, as well as requests for new service in growing areas within its jurisdiction and beyond. Additionally, over time with changing market conditions or rider preferences, some METRO services may not attract enough riders to justify their levels of service. For consistent evaluation of service proposals and to ensure that the service provided represents the most cost-effective use of labor, equipment, and other public resources, METRO has developed a set of service standards applicable to new and existing transit services.

METRO's service standards, and the process of service evaluation, are presented and described in this document. Since service standards are developed with the goals of optimizing usage of METRO's resources and maximizing ridership, they will be reviewed and updated periodically to reflect changes in METRO Board policy, the economics of

2.0 SCOPE AND APPLICABILITY

The Policy and Procedure applies to METRO and its fixed-route local bus, Park & Ride bus, and bus rapid transit along with curb2curb and rail services.

3.0 APPLICABLE LEGISLATION, REGULATIONS, AND BOARD RESOLUTIONS

The Policy and Procedure must comply with the latest amendments to the Americans with Disabilities Act (ADA) of 1990, Title VI of the Civil Rights Act of 1964 and Executive Order 12898 as well as the requirements of Federal Transit Administration Circulars 4702.1B and 9030.1E. The Bus Service Outside the METRO Service Area Policy document is OPS-POL-002.

4.0 SERVICE STANDARDS AND EVALUATION MEASURES

Application of Service Standards

The two primary applications for the ongoing use of service standards are for the evaluation and management of existing services and the evaluation and implementation of new services.

Evaluation of Existing Services

The application of service standards to existing services requires an adherence to standards pertaining to service design and the scheduling of service, as well as the use of evaluation measures to ensure continued productivity goals. Service standards are used to identify routes that require changes such as alignment restructuring to eliminate less productive segments or branches, frequency adjustments to reflect the demand for service, or the marketing of lower volume routes where appropriate. Routes that fail to meet standards are not automatically designated for elimination; alternative service delivery options and/or other adjustments can be explored to avoid complete elimination. However, elimination of a route may sometimes be the best option if no cost-effective actions are likely to improve the route's productivity, if the route does not serve valuable system connectivity, or no longer serves its original intended purpose.

Standards for existing routes do not preclude changes to routes that meet these minimum standards. It may often be possible to further improve the productivity of routes meeting minimum standards by making minor changes to headways or trip times.

Evaluation of New Service

The evaluation of new service proposals occurs as METRO receives proposals or identifies needs. New services will be expected to meet all applicable route design and schedule standards and will be expected to show a reasonable probability of meeting applicable evaluation standards by the end of the first two years. If the route does not display a reasonable probability of meeting its productivity standards within its first two years, discontinuation of the route will be considered.

4.1 METRO Transit Services

METRO operates four basic service types, each having a variety of offerings tailored to different markets and user needs. The categories of services within each service type are summarized below.

Service Type	Categories	Description
Exclusive Right-of-Way	METRORail	Light Rail Transit (LRT)
	METRORapid	Bus Rapid Transit (BRT)
Mixed-Flow Fixed-Routes	Red Network	All-Day Frequent Bus
	Blue Network	Standard Local Bus
	Green Network	Coverage Local Bus
	Quickline / Signature	Limited Stop Local
	Orange Network / Express	Limited Stop Express
Suburban Express	Park & Ride	Commuter Bus
Demand Response	METRO curb2curb	Zone-based Mobility On-Demand Shuttle
	METROLift	ADA Paratransit
	Guaranteed Ride Home	Voucher Service

4.1.1 Exclusive Right-of-Way Services

Exclusive Right-of-Way services operate at higher speeds over longer distances using dedicated lanes. Dedicated lanes allow transit service to avoid delays associated with traffic congestions and most intersections. Shared Right-of-Way may be necessary in major activity centers.

METRORail (Light Rail Transit)

METRORail is the name of the nearly 23-mile light rail network comprised of three lines each of which converge downtown in Houston's central business district.

Red Line (Main Street Line) – The original 7.5-mile long, 16-station Red Line extends south from downtown Houston to the Fannin South Transit Center and opened in 2004. The North Hardy extension of the Red Line in 2013 added nine stations to the north, terminating at the Northline Transit Center.

Green Line (East End Line) – Has nine stations from the Theater District in downtown Houston to the Magnolia Park Transit Center, which opened in 2015

*Purple Line (*Southeast *Line)* – Operates between the Theater District in downtown Houston to the Palm Center Transit Center. Includes four stations shared with the Green Line and five new stations beyond the split at EaDo/Stadium, which also opened in 2015

Peak headways are six minutes on the Red Line, and 12 minutes on the Green and Purple Lines, with off-peak headways of 12 and 18 minutes respectively. METRORail connects with numerous bus routes, particularly at stations designated as transit centers.

METRORapid (Bus Rapid Transit, BRT)

METRORapid Bus Rapid Transit service combines the comfort and speed of light rail transit service with the flexibility of bus service to deliver frequent, fast, and convenient transit service. Service is designed to emulate METRORail, providing smooth and comfortable, longer-distance, station-to-station connections with faster travel times than local bus.

METRORapid service features:

- Modern vehicle design offering 100% accessibility, wider doorways, and level boarding
- Stations and platforms designed to look and function like rail stations
- Dedicated, transit-only bus lanes to bypass traffic congestion
- Transit priority treatments at intersections to minimize delays

The METRORapid Silver Line (Route 433) which opened in 2020 is the first route in the planned, 75-mile METRORapid network. Service operates along Post Oak Boulevard and connects Uptown to two major transit centers, where connections can be made to additional service providing access to other areas of the Houston region. Buses come every 12 minutes during the day, and every 15 minutes after 9:30 p.m.

4.1.2 Mixed-Flow Fixed-Route Bus Service

Mixed-flow, fixed-route bus service operates in general traffic over a prescribed "fixed" path using specified streets on a predetermined schedule. This service type uses buses with a variety of passenger capacities tailored to corridor demand and constitutes most of METRO's transit service. Mixed-flow, fixed-route bus service is further classified into the following six categories.

Red Network (All-Day Frequent Local Routes)

Red Network routes are designed to sustain or generate high ridership by providing a frequent service useful to many people with a wide variety of travel needs and focuses on locations where transit has demonstrable high demand. Red Network routes provide direct, frequent service through complementary land uses, anchored at the route ends by destinations that generate many trips, or by a connection point to other useful transit services such as transit centers or light rail stations.

Routes in the Red Network are characterized by:

- Headways of 15 minutes or better during midday and peak periods for at least 15 hours daily
- At least three additional hours of evening/late night service with headways of 20 or 30 minutes

- 18-hour or greater total spans of service every day, including weekends

Blue Network (Standard Local Routes)

Blue Network routes have design and service characteristics like Red Network routes but at headways between 16 and 30 minutes. In some cases, Blue Network routes are continuations of service from where Red Network routes end. For example, every other trip on a Red Network segment at 15-minute headways continues traveling as a Blue Network service at 30-minute headways.

Routes in the Blue Network are characterized by:

- Headways between 16 to 30 minutes throughout the midday and evening/late-night, increasing to 15 or 20 minutes during the peak periods depending on demonstrated or anticipated demand
- 18-hour or greater weekday and weekend span

Green Network (Coverage Routes)

Green Network routes are designed to provide broad service coverage and basic access in areas where transit need is high, but transit demand is low. Headways are every 31 to 60 minutes. Green Network routes attempt to maximize the number of people who have access to service, regardless of their likely demand. Green Network routes are particularly important for ensuring that most existing riders in low productivity areas maintain access to service.

Routes in the Green Network are characterized by:

- Headways between 31 and 60 minutes throughout all periods of the day, increasing to 30-minute headways during peak periods on most routes
- 14-hour daily spans of service

Orange Network

Orange Network routes are those which operate during weekday peak periods primarily for the commuter market and are centered on Downtown Houston. Orange Network routes are comparable to Express routes in that they cover long distances for a portion of their alignment via limited-access highways.

Routes in the Orange Network are characterized by:

- Headways every 15 minutes or better
- Peak only, weekday-only service

Routes within the Orange Network are numbered within the 100 series.

Express Routes

Express routes cover long distances quickly, usually via limited-access highways, and typically pick up and drop off passengers at fewer stops than local buses. Express routes may partially operate as local service with several sequential stops, and partially as "closed-door" services along highways with no stops along the way except at subsequent Park and Ride lots in the same corridor. Service is typically anchored on one end at Park and Ride lots or transit centers and major employment centers at the other end. Express routes are tailored services and may have varying travel patterns or number of trips by time of day and day of week.

Express routes are also numbered within the 100 series.

Quickline / Signature Routes

Quickline / Signature routes overlay existing local routes and only serve select stops with high connectivity and ridership. Quickline / Signature routes operate with higher frequency and higher speeds than the local services they overlay. METRO currently operates one Quickline / Signature route — 402 Bellaire.

4.1.3 Suburban Express Service

Suburban Express Service primarily serves the suburban commuter market and connects outlying locations to major employment centers. This is accomplished with motorcoaches operating on fixed routes, as well as vanpool and carpool services.

Park & Ride Routes

Park & Ride routes serve long-distance commuters. These routes travel between METRO's Park & Ride lots around suburban (outside of the Inner Loop Highway) Houston and centralized major employment centers with few or limited passenger pickup/drop off locations along the way. This service type is characterized by high frequencies in the weekday peak periods and peak direction, with some reverse-peak trips and off-peak service as corridor demand warrants.

Park & Ride routes primarily serve major employment destinations including:

- Downtown Houston (for peak and off-peak service)
- Texas Medical Center (TMC)
- Uptown
- Greenway Plaza

These high quality Park & Ride routes offer convenient service with buses leaving Park & Ride lots at high frequencies, accessing high-occupancy vehicle (HOV) lanes through direct connection ramps, running nonstop to downtown, and then stopping near most central business district jobs. These routes are numbered within the 200 series.

4.1.4 Demand Response Services

Demand response services do not follow a fixed route, and instead adjust their routing dynamically based on passenger travel patterns. These services often require the passenger to summon a vehicle in real time or in advance to be picked up.

METRO curb2curb ("On Call" service)

METRO curb2curb is a zone-based, on-demand shared-demand transportation service that operates primarily without a defined route but has connectivity to METRO's local bus network, allowing for more flexibility to serve riders across the zone. Prior to January 2022, curb2curb was known as Community Connector service.

Passengers can either board the vehicle at scheduled pickup locations or schedule a pickup at their location. The shared-demand transportation service drops off passengers at their destinations within the service zone or at a nearby METRO facility where transfers are available to/from fixed-route bus services.

Service zones are based on area ridership demand, available vehicles, and available connection points into the METRO network, such as at fixed-route services, Park & Ride lots and transit centers. METRO currently provides curb2curb service in four zones:

- Acres Homes (Northwest METRO Service Area)
- Missouri City (Southwest METRO Service Area)
- Kashmere (Northeast METRO Service Area)
- Hiram Clarke (Southwest METRO Service Area)

METRO may implement curb2curb service as a new service or as a substitute for fixed-route service if the proposed location meets one or more of the following criteria:

- High concentrations of low-income residents
- High concentrations of elderly residents
- Poor or limited pedestrian amenities such as crosswalks, drainage, lighting, sidewalks
- Poor street infrastructure such as circuitous and disconnected street patterns and/or narrow streets which make it difficult for a traditional bus to navigate
- Shifting demographic trends
- Sparse employment and/or population
- Stagnant or declining fixed route ridership

- Is unserved by existing fixed-route bus service
- Is an area where implementation of demand response service can provide connections to the existing transit network

METRO curb2curb will provide service to as many passengers as possible within the existing budget, operator, and vehicle constraints. There are instances when it will be necessary to deny service because of high passenger demand in one of two ways: 1) denial of service during the specific time frame requested; or 2) denial of service during the specific date in question. In the even that the percentage of denials exceeds 10% on any given day, a review should be conducted, and a determination made as to whether additional resources should be provided or whether service should be capped to fit within existing budget, operator, or vehicle constraints.

METROLift (ADA Paratransit)

METROLift is a complementary paratransit service, in accordance with the 1990 Americans with Disabilities Act (ADA). METROLift provides transportation for persons with disabilities who cannot board, ride, or disembark from a regular METRO fixed-route bus, even if that bus is equipped with a wheelchair lift or ramp.

METROLift is currently a contracted service using METRO-owned vans with wheelchair lifts and METRO-owned, ramp-equipped minivans. Trips are scheduled in advance and provide curb-to-curb, door-to-door upon request, transportation for persons with disabilities who have applied for and are eligible for ADA paratransit service.

4.2 Design Standards

METRO has established design standards to ensure its transit services provide timely access to major activity centers and other important destinations with the highest level of accessibility and service coverage possible, while making the most efficient and productive use of METRO's available financial, physical, and labor resources.

The following section divides design standards into three categories:

- Service design standards
- Schedule design standards
- Other standards

Other design standards are relevant policies that do not exclusively fit into the first two categories but provide additional structure in designing METRO services.

4.2.1 Service Design Standards

Service design standards are METRO policies that ensure transit alignments are legible and in accordance with industry best practices. Included in this section are standards on area coverage, route design, and bus stop spacing.

4.2.1.1 Route Classifications

METRO's transit service is grouped by four overall service types. Each includes various service categories as outlined as follows:

Service	Category	Description
Exclusive Right-of-Way Services		
METRORail	Light Rail Transit (LRT)	Frequent, limited stop rail service operating in dedicated space.
METRORapid	Bus Rapid Transit (BRT)	Frequent, limited stop premium bus service operating in dedicated or semi-dedicated space.
Mixed-Flow Fixed Route Services		
Quickline / Signature	Limited Stop Local	Frequent, limited stop supplemental service.
Red Network	All-Day Frequent Local	Service scheduled every 15 minutes or better, at least 15 hours daily.
Blue Network	Standard Local	Service scheduled every 16 to 30 minutes, 18 or more hours daily.
Green Network	Coverage Routes	Service scheduled every 31 to 60 minutes, at least 14 hours daily. Offers broad coverage in areas with light ridership.
Suburban Express Services		
Orange Network	Peak Only, Limited Stop	Service operates during weekday peak periods (rush hour) only.
Express	Local, Limited Stop	Service operates with limited-stop segments / frequent local stops.
Park & Ride	Park & Ride Routes	Long distance routes operating between Park & Ride lots and key destinations.
Demand Response Services		
METRO curb2curb	Zone-Based Mobility On-Demand	A shuttle service available in certain communities without immediate access to a METRO bus route. Operates in a defined zone without a fixed route and typically anchored to fixed route services or facilities.
METROLift	ADA Paratransit	Complementary paratransit service offered in accordance with the ADA. Provides transportation for persons with disabilities who cannot board, ride, or disembark from a METRO fixed-route bus.

4.2.1.2 Area Coverage

The distance between parallel routes is referred to as route spacing. To enhance the attractiveness of transit service, the network should be designed to provide all segments of the region with good access from residential areas to concentrations of employment, essential services, and other passenger destinations. The distance people must walk to reach bus passenger loading areas is a good indicator of the area coverage provided by METRO.

Parallel routes that operate too close together (generally within 1/2 mile of each other) have the potential to split the demand for service. In areas of low demand, this can result in multiple routes competing for the same passengers with no route generating sufficient demand to support a higher level of service. Thus, providing the appropriate route spacing to attain good area coverage requires a tradeoff between walking distance and frequency of service provided in the region.

METRO's recommended route spacing standards are used only as general guidelines. Other factors such as evaluation standards, street layout, natural or man-made barriers, and other factors will also be considered when determining route spacing.

Service Type	General Spacing Guidelines
METRORail	No Standard
METRORapid	No Standard
Quickline / Signature	No Standard
Local Bus	
Red Network	½ mile
Blue Network	½ mile
Green Network	No Standard
Orange Network / Express	No Standard
Park & Ride	10 miles

Alternative services like METRO curb2curb are operated within a set geographic zone. To optimize equipment assignment and service reliability, an optimal zone size of between three and eight square miles is considered acceptable for peak service. A larger zone can be considered.

4.2.1.3 Route Design

Providing any level of service to an area depends on the productivity of that service, or the potential transit demand if a new service is being offered. However, poorly designed services can undermine the productivity of a service despite strong demand. Bus route design guidelines are established to ensure that METRO fixed route services are designed in a way that fully captures the demand in the area and provides high quality service to major activity centers or other passenger destinations with the highest level of accessibility

and service coverage possible, while making the most efficient and productive use of METRO's available financial, physical, and labor resources.

Route Branches and Turnbacks

It is sometimes more efficient to provide service to a certain area with one route having several branches than to operate several different routes. In addition, some bus trips on a route may not go to the end of the line due to very low ridership in that area at a particular time of day. This is called a "turnback" trip. However, these actions can result in a system that is much more difficult for current and new transit passengers to understand and use. To provide user-friendly service and to encourage maximum use of the system by all current and potential riders, the following standards for branches and turnbacks are strongly recommended:

- No new route should have more than one distinct branch
- No new route should have more than one turnback location
- METRORapid and Quickline / Signature routes should have no branches
- METRORapid and Quickline / Signature routes should have no turnback locations
- Reduction of existing branches and/or turnbacks will be reviewed periodically

Directness of Travel

METRO bus routes will be designed to operate as directly as possible between major destinations to minimize passenger travel time. Routes shall operate on major arterial streets as much as possible. However, there may be situations in which a route may deviate from the shortest, most direct routing. Such situations include a mid-route deviation to serve a particular trip generator or other high potential passenger area that does not have service, at the end of the line terminal loop, or for a route serving a small geographical area. When this occurs, the gain in convenience to those passengers who are boarding or alighting during the deviation must be balanced against the additional travel time for the passengers traveling through. How the potential deviation would affect the route's safety, reliability, and operational integrity must also be considered.

To quantify a potential deviation against potential benefits, METRO specifies a ratio of the distance between route terminal points and the shortest possible driving distance by service category.

$$\text{Directness Ratio} = \left(\frac{\text{Distance between route terminals}}{\text{Shortest possible driving distance}} \right)$$

This ratio should not be exceeded for each service category, specified below:

Service Category	Maximum Directness Ratio
METRORapid, Quickline, Red Network	125%
Blue Network	150%
Green Network	No Standard
Express Routes	No Standard

Alternative services like METRO curb2curb will operate as directly as possible between the requested pick-up and drop-off locations based upon trip level ridership and between the respective anchor points when there are no passengers. When there are other passengers, trip chaining, or grouping several passenger trips into one trip, will be pursued as much as reasonably possible to maximize the number of passengers served per revenue hour.

Park & Ride and Orange Network routes are intended to provide fast travel between Park & Ride lots and major destinations. Accordingly, these routes should not deviate, except to serve other Park & Rides and major destinations along the way.

4.2.1.4 Route Terminals (Layover Considerations)

When feasible, transit facilities (transit centers, park and rides, hubs), activity centers, or major trip generators should be used as end of lines. When this is not feasible, other locations should be reviewed at all times the route is operating for safety and security, availability of operator restrooms, operational feasibility, bicycle/pedestrian accessibility, and impacts on adjacent land uses.

4.2.1.5 Bus Stop Spacing & Placement

Bus Stop Spacing

Bus stops are spaced according to two main criteria: accessibility and travel speed. Close spacing of stops increases patron accessibility but increases transit trip time. Therefore, a balance must be made between these two criteria. The following standards define ideal stop spacing for each route classification.

Service Category	Average Stop Spacing (feet)
METRORail	2,600
METRORapid	2,600
Quickline	2,600
Signature	1,740
Local Bus	
Red Network	1,300 to 2,600
Blue Network	1,300 to 2,600
Green Network	800 to 2,600
Orange Network / Express	Collection: 1,300 to 2,600 Distribution: Every other block
Park & Ride	Distribution: Every two to four blocks

Bus Stop Placement

Bus stop placement and the configuration of the following or nearest intersection have implications for several factors including the safety of pedestrians and bus riders, the safety of bus operations, turning movements of traffic both behind and ahead of stopped buses, and delay to buses.

These placement configurations include far-side, in-lane stop; near-side, in-lane stop; mid-block, in-lane stop; far-side, pull-out stop; near-side, pull-out stop; and mid-block pull-out stop. For METRO in general, bus stops are located on the near-side (before signals) of intersections or far-side (after signals).

Alternative Services

The only fixed stops on alternative services are the anchor points that feed into the larger METRO existing fixed-route system. Wherever possible, alternative services will be specifically designed to connect to METRO's fixed-route system at transit centers to maximize potential transfer connections between alternative services and other service types. Alternative services should have at least one and possibly two anchor points to ensure that customers on METRO's fixed-route system can walk up as one of several options for boarding these types of services.

4.2.2 Schedule Design Standards

Schedule design standards are established to ensure that the level of service offered by METRO will be adequate to attract new riders to the system and maintain current riders. If existing or proposed services cannot meet the appropriate productivity standards, then METRO may elect not to provide the minimum level of service identified in this section. Included in this section is on-time percentage, minimum service spans, load factors, and vehicle assignments.

4.2.2.1 On Time Percentage (OTP) Definition and Targets

METRO aims to provide timely and reliable service for its users that accommodates their travel needs and allows for accurate trip planning. Because METRO's bus and rail networks are an integrated system, the ability of services to adhere to published schedules is a significant factor in how confidently users can rely on the network. On-time performance (OTP) is a critical service quality issue for customer satisfaction.

Transit operations, particularly services lacking transit priority treatments such as travel within exclusive rights-of-way, encounter many situations along the way that prevent precise adherence to schedules. Therefore, measurement standards must acknowledge this reality. Presently, the calculation of METRO's on-time performance is defined by mode. OTP is measured by METRO's Integrated Vehicle Operations Management System (IVOMS) which calculates data to the second.

To calculate OTP, "on time" is based on departures from scheduled timepoints unless otherwise noted and is defined as zero (0) minutes early to five (5) minutes and fifty-nine seconds late for fixed route services, and zero (0) minutes early to ten (10) minutes late for curb2curb trips operating from anchor points.

OTP standards are applied uniformly across services with some exceptions, noted below:

1. For local routes, no departures more than 59 seconds early are allowed, and late arrivals/departures are on-time within five minutes and 59 seconds of the scheduled time at timepoints.
2. For the Park & Ride routes, morning buses may depart the Park & Ride Lots early when all seats are filled by passengers
2. For METRORail, OTP is calculated based on departures from the beginning of the line and arrivals at the end of the line
3. For METRORapid, OTP is calculated based on headways with departures within 2 minutes of intended headway being on-time for headways less than 7 minutes and within 3 minutes of intended headway with headways between 8 and 15 minutes
4. For curb2curb, OTP is measured from the customers' scheduled pickup time or window on the day of service

OTP targets will be reviewed annually as part of the development of the METRO Business Plan. At this time, a target percentage for OTP service for the upcoming fiscal year will be established so that an acceptable level of OTP reliability can be maintained and ensure

that patronage is not discouraged by an unacceptable level of on time reliability. Targets by service class are defined as follows:

Route Category	OTP Target
METRORail	
Red	90%
Green	95%
Purple	95%
METRORapid	90%
Quickline / Signature	75%
Local Bus	
Red Network	75%
Blue Network	75%
Green Network	75%
Orange Network	75%
Express	75%
Park & Ride	75%
curb2curb	90%

Because of its unique service characteristics, METRO's Dynamic curb2curb service has OTP standards that vary from METRO's other fixed-route services:

- At least 90% of customers are picked up within twenty minutes equal to or after the stated pick-up time
- At least 90% of customers are dropped off by their stated appointment time

4.2.2.2 Time Periods & Minimum Span of Service

The time between the start of the first trip and the end of the last trip operated on a route is referred to as the span of service. For the development of span of service guidelines and to assist with service evaluation, the lengths of various service periods will be consistently defined as follows:

Day	Time Period	Span of Service
Weekday	A.M. Peak	6:00 a.m. – 8:30 a.m.
	Midday	8:31 a.m. – 3:00 p.m.
	P.M. Peak	3:01 p.m. – 6:30 p.m.
	Late Night	6:31 p.m. – 6:00 a.m.
Saturday	Base	6:00 a.m. – 6:00 p.m.
Sunday	Base	6:30 a.m. – 5:30 p.m.

Public transit must offer services at times that riders find useful and convenient. To maximize opportunities for passengers to avail themselves of the connectivity of METRO's bus service, and to give them the confidence that direct and connecting

service will be provided, a consistent span of service is needed. The recommended minimum span of service for each type of METRO bus service is as follows:

Service Category	Minimum Span (hours)
METRORapid	18
Quickline / Signature	6
Local Bus	
Red Network	18
Blue Network	18
Green Network	14
Express	14
Orange Network	6
Park & Ride	6
METRO curb2curb	
Daytime	14
Evening service, when offered	4

The recommended minimum span of service for METRORail is as follows:

Service Day	Span of Service
Monday – Thursday	4:30 a.m. – 11:40 p.m.
Friday	4:30 a.m. – 2:20 a.m.
Saturday	5:30 a.m. – 2:20 a.m.
Sunday	5:30 a.m. – 11:40 p.m.

If the average ridership on the first and/or last trip(s) on the schedule exceeds 65% of the seated capacity of the assigned bus, then extending the span of service on the route will be evaluated as part of the subsequent service change. If this occurs, it is advisable to add the early/late trips as soon as possible since a peak bus would not be required.

Not all Park & Ride routes have midday service since they have to be adjusted by peak shift time and their travel distance to their major employment activity center.

4.2.2.3 Minimum Service Frequency/Headway

The frequency of service on a particular route (or the related measure of bus headways, which is the time interval between vehicles) is primarily determined by demonstrated or projected passenger demand. However, for most routes, demand is not consistent throughout the day. During periods characterized by low passenger demand, adherence to frequency standards based solely on vehicle loads would result in a very low frequency of service, with excessively wide headways between trips. Therefore, minimum standards for service frequency are needed to ensure that a reasonable, reliable, and attractive level of transit activity is available throughout the day.

Typically, 30 minutes between bus arrivals during the peak service period is the minimum frequency at which transit provides an adequate level of basic mobility in a dense urban area. Service headways greater than 30 minutes are generally not attractive enough to develop a large, consistent base of ridership.

Minimum headway standards by service class for bus services, expressed as minutes between vehicles, shall be as follows:

Service Class	Weekday		Saturday	Sunday
	Peak	Off-peak		
METRORapid	15	15	15	15
Quickline / Signature	15	15	-	-
Local Bus				
Red Network	15	30	15	15
Blue Network	30	30	30	30
Green Network	60	60	60	60
Orange Network	20	30	-	-
Park & Ride	20	60	-	-
METRO curb2curb	60	60	60	60

Minimum headway standards for METRORail, expressed as minutes between vehicles shall be as follows:

Days	Span	METRORail Headways		
		Red	Green	Purple
Monday - Thursday	4:30 a.m. – 7:30 p.m.	6	12	12
	7:30 p.m. – 9:00 p.m.	12	12	12
	9:00 p.m. – 11:40 p.m.	18	18	18
Friday	4:30 a.m. – 7:30 p.m.	6	12	12
	7:30 p.m. – 9:00 p.m.	12	12	12
	9:00 p.m. – 2:20 a.m.	18	18	18
Saturday	5:30 a.m. – 10:00 a.m.	15	15	15
	10:00 a.m. – 9:00 p.m.	12	12	12
	9:00 p.m. – 2:20 a.m.	18	18	18
Sunday	5:30 a.m. – 10:00 a.m.	15	15	15
	10:00 a.m. – 9:00 p.m.	12	12	12
	9:00 p.m. – 11:40 p.m.	18	18	18

4.2.2.4 Passenger/Vehicle Load Factors

The intent of passenger load standards is to balance passenger comfort and safety with operating costs. METRO standards allow for standing loads on local and express (not Park & Ride) routes during peak periods as well as on midday / weekend periods. These standards define maximum passenger loads at different times of day, to ensure acceptable levels of rider comfort and safety, while providing METRO good operating

efficiencies. Recent experience has also shown the need for additional passenger spacing via social distancing under emergency circumstances. The values tabulated below represent the total number of riders as a percent of the number of seats on the bus as well as under social distancing procedures. The following passenger load standards are applicable for METRO's transit services:

Service	Load Factors	
	Based on Seated Capacity	**Based on Social Distancing (If needed)**
METRORail	250%	100%
METRORapid	135%	50%
Quickline / Signature	135%	50%
Local Bus		
Red Network	135%	50%
Blue Network	135%	50%
Green Network	135%	50%
Orange Network	135% (local streets) 100% (freeways)	50%
Park & Ride	100%	50%
METRO curb2curb	100%	50%

4.2.2.5 Vehicle Assignments

METRO operates a variety of different bus sizes suited for the various needs of its services based on the factors of safe operations, passenger comfort and expected ridership, accessibility, service efficiency, and availability, among others. METRO's bus vehicle fleet includes the following vehicles:

- 24-foot alternative service vehicles (operated by non-commercial driver's license operators)
- 29-foot compressed natural gas (CNG) buses
- 40-foot (standard length) transit buses
- 45-foot over-the-road suburban buses
- 60-foot articulated buses

Local service will typically be assigned 40-foot (standard length) buses. Commuter service will typically be assigned 45-foot over-the-road suburban buses. Select bus routes with high maximum passenger loads may be assigned 60' articulated buses. Beyond this, bus types are randomly assigned to routes daily. Alternative services can be operated using different vehicle types depending on expected or actual passenger loads. The largest vehicle that can be assigned to an alternative service is a 40-foot (standard length) bus.

4.2.2.6 Bus/Rail Transfer Scheduling Considerations

METRO strives to facilitate connections between bus routes and rail lines. For routes that operate at least every 30 minutes or better, transfers to/from METRORail can occur naturally. For routes that operate less than every 30 minutes (Some Blue Network routes, and all Green Network routes), timed transfers should be built into the schedule. For these routes, one (1) pulse point/timed connection should be built into the route, with additional connections as permitted. In planning these connections, priority should be given to connection between other Green Network routes (as connections to/from higher frequency services can occur naturally). Additionally, every attempt possible should be made to ensure Green Network route departures from METRORail stations and major transfer locations occur five (5) minutes after the higher frequency service is scheduled to depart to allow time for transfers and to account for minor schedule disruptions. In cases where several METRORail stations or major transfer locations are located on a Green Network route, locations with the highest existing or anticipated passenger volume should be prioritized. METRO will review late night pulsing frequency between bus and rail within the frequency parameter and resource constraints.

4.2.3 Other Standards

Other standards relate to ADA and reasonable modifications, detour policies during service interruptions, and provision of service outside of METRO's service area.

4.2.3.1 Americans with Disabilities Act (ADA) Features

Persons with disabilities tend to use transit at higher rates than the general population, primarily due to the independence that transit can provide. In recognition of this, and in accordance with ADA, numerous features exist on all METRO bus and rail vehicles and transit facilities.

METRO bus facilities feature the following features:

- Transit centers provide connecting bus services in neighborhoods across the region for safe and easy transfers.
- Bus pads, sidewalk links, and curb cuts at most bus stops.
- Solid-square bus poles at bus stops.
- Major bus transit centers in Northline, Downtown, Midtown, and in the Texas Medical Center that provide accessible connections to METRO bus services.

METRO buses feature the following features:

- Ramps or lifts on all buses, with standees permitted on lifts under the ADA.
- A vehicle kneeling feature, upon request, to assist with boarding at the front doors.
- Two, priority-seating areas for the elderly and people with disabilities
- At least two 30"x48" wheelchair securement areas in addition to an easy-to-reach call bell and special securement belts designed to secure the mobility devices of patrons who use a wheelchair or scooter.
- Automatic audio and visual announcements on buses at major stops, main intersections, and transfer points along the route.
- Large, bright destination signs on the front and sides of the bus
- Lighted "Stop Request" signs inside the bus for riders with hearing impairments.

METRORail features the following features:

- 100% accessible stations featuring audio and visual announcements explaining arrival of trains.
- Audio and visual announcements of stops inside the rail cars.
- Rail cars level with the station platform for easy boarding.
- Four areas for wheelchairs inside rail cars. No securements are required on the train. Riders using wheelchairs also may choose to sit in any space that is available to them.
- Automatic doors with a sensitive edge that prevents closing if an object or person is detected in their path.
- All station platforms are 100% ADA-compliant.
- Sloped ramp access from both ends of level boarding platforms.
- Variable message signs on all platforms.
- Exit left or right announcements in English and Spanish.
- Station platform edges marked with contrast-colored, 24-inch tactile warning strips with truncated domes.
- Accessible shuttle buses when rail is not operational.

4.2.3.2 Service Detours and Interruptions

METRO's objective is to operate a safe, reliable, and efficient multi-modal transportation network. Sometimes, however, circumstances arise that require detours and/or cause service interruptions.

For fixed-route service, all efforts shall be made to move routes to the closest adjacent street. If the affected area is in the central business district or another area with many one-way streets, then the detour shall be a maximum of two (2) blocks from the current routing, if possible.

For detours that are expected to last for two (2) weeks or longer (short-term and long-term), temporary bus stop signage shall be posted at the unserved stops during the time of the known detour. Signs informing passengers of long-term detours shall be placed at all regular bus stops several days prior to scheduled events. These signs will be posted as soon as possible if the conditions requiring a long-term detour occurs with short notice. Temporary bus stop signage shall be installed at the new stop locations the day prior to the change. In the case of unplanned events, temporary signage shall be provided at the new stops as soon as possible if the detour is going to last more than 24 hours. All efforts shall be made to return service to the streets that are identified on the public timetables within 24 to 48 hours after the disruption is over or removed.

The following defines the three types of detours experienced by our fixed-route bus service. Also described is the general strategy for service interruption for bus and rail.

Emergency/Temporary Bus Detours

Emergency/temporary bus detours result from unforeseen circumstances that prevent a bus from operating on its regular route. Examples of unforeseen circumstances which may cause an emergency or temporary bus detour are unplanned or unscheduled street repairs, fires, traffic accidents, blocked railroad crossings, temporary street closures, or unplanned or unscheduled closure of high occupancy vehicle (HOV) lanes. These detours generally last between one hour and one week.

Short-Term Bus Detours

Short-term bus detours result from planned changes to street conditions that prevent a bus from operating on its regular route. Planned changes to street conditions may be the result of utility work, street renovation or repairs, or other construction projects that cause the closure of a street section or an entire street. A department within a

city, county, or state agency, or a utility company generally initiates the planned changes. These detours generally last between one and three weeks.

Long-Term Bus Detours

Long-term bus detours also result from planned changes to street conditions that prevent a bus from operating on its regular route. The causes for long-term bus detours are generally the same as those for short-term bus detours. Planned changes for long-term detours are initiated in generally the same manner as planned changes for short term detours. These detours generally last between three weeks and six months. A detour that is in effect longer than twelve (12) months will be considered a permanent change to the route.

4.2.3.3 Provision of Service Outside Service Area

Governmental entities located beyond the boundary of the METRO service may inquire about METRO's willingness to operate and maintain bus service on their behalf to support the mobility needs of their residents and businesses. Such service expansions may increase METRO's operating costs while largely benefiting these entities which do not contribute financially to the operation of METRO with a 1% sales tax levy as our member jurisdictions do. Therefore, the costs to METRO of operating and maintaining any such bus service should be strictly borne by the governmental entity requesting bus service and not subsidized by the existing METRO member jurisdictions. Details on the circumstances under which METRO will consider entering into an agreement with a governmental entity to operate and maintain bus service in communities that are not part of METRO's current service area can be found in policy document OPS-POL-002: Bus Service Outside the METRO Service Area.

4.3 Evaluation Standards

METRO has established criteria used for the evaluation of route performance and the optimization of services. These standardized performance criteria provide measurable benchmarks to monitor and improve performance and assist in identifying routes and services that are unable to meet those standards. Once underperforming routes and services are identified, a response and plan of action for resolution can be created.

METRO performs two levels of analysis on all existing and proposed bus routes and services. The first level of analysis is a route performance evaluation that compares all services to one another. The second level of analysis evaluates routes classified as poor performers. These analyses provide key information on the relative performance of existing and proposed services.

4.3.1 Comparative Performance Evaluation: Route Ranking Model and Process

METRO conducts a comparative analysis through Service Evaluation (SE) to identify which services are top performers and which services are performing below standards. The Route Ranking Model methodology can also be used to determine whether a proposed service will likely be a high or low performer.

The general steps in the process are described below with examples of the specific methodology outlined:

1. Summarize average daily ridership (boardings), fare revenue, and service levels for each route. If a route is operated on weekdays, Saturdays, and Sundays, each service day is evaluated individually.

   Develop estimated annual ridership, fare revenue, service levels, and costs for each route. Three separate costs are derived:

   - variable cost – provides a measure of the out-of-pocket cost of the service
   - operating cost – operating cost is used to calculate the operating ratio
   - total cost – used to calculate the total subsidy per boarding indicator

2. Evaluate all existing routes across key productivity measures and rank the services from most productive to least productive. The comparative evaluation processes utilize four key performance indicators (described below) to provide a balanced analysis between effectiveness and efficiency measures. The routes are sorted by this composite score, from the best to the worst.
3. Identify "Maturing" routes (routes that have been in operation less than 2 years) for possible exclusion from the classification of "Poorly Performing Routes." "Maturing" routes can be granted an exception for up to the first two years of operation to allow for adequate marketing and public information efforts to promote the route to potential riders.
4. Identify "Poorly Performing Routes". "Poorly Performing Routes" are routes with total subsidies per boarding in excess of 100% above the average total subsidy per boarding for the respective service category. These routes are subject to productivity review up to and including proposed discontinuation during the upcoming year.

The four performance indicators evaluated in comparing routes, both existing and proposed are tabulated below in terms of service effectiveness or service efficiency:

Service Effectiveness	Service Efficiency
Passengers Per Revenue Hour	Operating Ratio
Passengers Per Revenue Mile	Subsidy Per Passenger

These four factors provide a balanced weighting between effectiveness measures (passengers per revenue hours and miles) and efficiency measures (operating ratio and subsidy per passenger). Equal weight is therefore given to usage-related indicators and cost-related indicators.

The development of these four factors requires the calculation of several pieces of data on a route level basis. The specific definitions for each indicator are:

Passenger Boardings per Revenue Mile

The number of average daily boardings per route divided by the daily number of revenue miles of service supplied on the route (total miles less "deadhead" miles, or the miles to and from the garage).

Passenger Boardings per Revenue Hour

The same information as the previous indicator except using revenue service hours instead of miles.

Operating Ratio

The operating ratio calculates the percentage of operating costs covered by a route's revenue.

Total Subsidy per Passenger Boarding

The net cost (total cost less revenue) of operating a route divided by the number of passengers. Total cost is determined by allocating all service-related expenses over three cost factors:

- *Total miles* – Revenue miles plus deadhead miles.
- *Total hours* – Revenue hours plus deadhead hours.
- *Peak vehicles* – Highest number of vehicles required for weekday service

The number of buses required to provide a route's weekday service typically exceeds weekend service demand, resulting in service planned to meet weekday travel. Since buses used during weekdays are already on hand for weekend use, no peak vehicle costs are allocated to weekend services.

The application of the comparative evaluation process provides a systemwide ranking of all routes. Routes are sorted from the most productive to the least productive based upon the four indicators identified above. Routes are grouped by quartile such that the first

quartile represents the top 25% of all routes while the fourth quartile represents the bottom 25% of all routes.

An absolute value is needed to measure route productivity and to establish an acceptable level of performance. METRO uses the total subsidy per passenger boarding as this value. METRO's guidelines for the total subsidy per passenger boarding analysis specify that for routes with total subsidy per boarding:

- 51% to 75% higher than the average subsidy for the service type, METRO will monitor the route and consider minor modifications to improve route performance.
- 76% or higher than the average subsidy for the service type, METRO will consider major restructuring or elimination.

METRORapid

At the time of this update, METRO has only one METRORapid line. When additional METRORapid lines are added, the proposed evaluation measures would be the same as those for Local and Park & Ride bus with the addition of an indicator based on on-time performance to reflect the focus on reliability and speed.

METRO curb2curb Evaluation Standards

The indicators for evaluating curb2curb are as follows:

- Passenger Boardings per Revenue Mile
- Passenger Boardings per Revenue Hour
- Operating Cost per Revenue Hour
- Operating Cost per Passenger Boarding
- Percentage of Trips with >1 Passenger Picked Up
- Percentage of Regular Application Users

curb2curb services with operating costs per passenger boarding in excess of 76% of the average operating cost per GREEN (Coverage) route will be considered for major restructuring or elimination.

4.3.2 Special Route Classifications

Part of the Service Evaluation route ranking model and application of service standards is to divide services into service types or service categories. METRO has developed definitions for certain services that are either exempt from or are targeted for the application of the analyses. "Maturing" services can be exempt from the analyses, while services that have significantly higher subsidies per boarding are classified as "Poorly Performing" and are subject to increased scrutiny. Exempt services include METRORail

and METRORapid which have high levels of capital investment and are not subject to elimination options.

Maturing Services

Maturing services are recently implemented bus routes that have not been in place long enough to reach the full level of ridership projected for the route. Maturing routes can be granted an exemption for up to two years of operation to allow for adequate marketing and public information to promote the route to potential riders.

Poorly Performing Services

Poorly performing bus routes are those with total subsidies per boarding exceeding 75% of the average total subsidy per boarding for a service category. These routes are subject to intense productivity review with targeted changes including substitution of operating mode and/or reduction in service levels up to and including discontinuation.

Further, for effective route evaluation, performance targets are established by category and or service type. During the individual route's ranking and evaluation process, the poorer the variance from the average performance within the service type, the more significant the corrective action that will be required.

4.3.3 Evaluation Timeline

Services that have been in operation for at least one (1) year are always evaluated as part of the comparative performance evaluation. Any new or modified services in operation for less than a year are excluded from the evaluation process to provide a period during which service can mature to achieve full ridership potential. This development and evaluation period spans two years.

If standards are not met after two (2) years, service should be reviewed for corrective action or discontinuation if corrective actions fail to improve demand. However, it should be stressed that factors such as equitable provision of service will be considered in conjunction with performance measures when route elimination appears necessary.

Curb2Curb Timelines

- Once every six (6) months to identify those services that are underperforming based on service metrics.

4.3.4 Operating Cost per Passenger

Operating costs refer to costs typically expended within the year to operate transit services. These expenses include labor, fringe benefits, materials and supplies, fleet maintenance, office space, equipment, and administrative costs. Operating costs per passenger is the cost of providing each individual passenger trip and are calculated as a way to assess cost effectiveness of a service and of the system as a whole.

Operating costs per passenger will vary by service type as core inputs in calculating these costs i.e., hours and miles, will vary by route classification and span of service. Therefore, as a measurement of service performance, the operating cost per passenger threshold cannot be set systemwide but will vary.

METRO incorporates operating cost per passenger in evaluating performance of its paratransit service, METROLift. For other modes, especially fixed routes and BRT, cost as an indicator of service performance is a secondary measure.

4.3.5 Boardings per Trip and Service Span

Boardings per Trip is defined as the number of average daily boardings per route divided by the daily number of completed trips on the route.

Service span is defined as the time between the start of the first trip and the end of the last trip operated on a route. Public transit must operate at times that riders will want or need to use the services being offered. To maximize the opportunities for passengers to avail themselves of the connectivity of METRO's bus service, and to give them the confidence that direct and connecting service will be provided, a consistent span of service is needed.

Using spans and number of trips completed by hour, service supply can be assessed. This can be evaluated against boardings per trip, to review and adjust service supply to service demand. This will result in using boardings per trip, and service span as additional tools to measure and evaluate service performance. These can be used as additional tools to complement the Route Ranking Model and is helpful when evaluating ridership demand on first and last trips.

4.3.6 Updates to Service Standards

Service standards and performance measures will be updated regularly to ensure that adopted standards, performance measures, and their associated processes are consistent with METRO's evolving goals and objectives.

METRO's standards and performance measures should be reviewed at minimum every five years (5) in coordination with updates to long-range system planning and updated as applicable.

5.0 TERMS AND DEFINITIONS

ADA = Americans with Disabilities Act of 1990.

Alighting = a single passenger existing a transit vehicle

Boarding = a single passenger getting onto a transit vehicle

Deadhead = Time or distance when a vehicle is in transit / moving but with no passengers (not open to the public for service). Typically includes time and distance when a vehicle is traveling to or from the bus / rail operating facility and a terminus point and travel from the end of service on one route to the beginning of another

Fare revenue = revenue earned from carrying passengers in regularly scheduled service.

Frequency = number of trips in the same direction of travel within an hour.

Headway = number of minutes between consecutive trips in the same direction of travel.

Load factor = ratio of utilized to offered vehicle capacity calculated by dividing the maximum total number of passengers onboard a vehicle by the total seating capacity of the vehicle.

Low-income = persons whose median household income is below the federal poverty level.

Minority = persons who self-identify as being of one or more of the following ethnic groups: American Indian and Alaska Native, Black or African America, Hispanic or Latino, Native Hawaiian and Other Pacific Islander.

On-Time Performance = expressed as a percentage of trips arriving on-time in accordance with the definition of "on time" for a particular mode.

Passenger load = the number of passengers on board a vehicle as a given time including both seated and standing passengers.

Passenger mile = a mile travelled by a single passenger on a transit service.

Revenue hour = time when a vehicle is operating scheduled trips along its route and available to the general public, including layover and dwell time but not deadhead.

Revenue mile = one vehicle traveling one mile in revenue service during a revenue hour.

Span of service = amount of time each day in which service is operating.

Total cost = all costs required to operate transit service including wages and benefits for operators and other personnel, fuel and power expenses, maintenance and repair costs, fare collection expenses, vehicle licensing and registration, insurance, general administrative costs, and peak vehicle depreciation.

Trip = The one-way operation of a revenue vehicle between two terminus points on a route.

6.0 ROLES AND RESPONSIBILITIES

Service Planning & Evaluation Division - Responsible for reviewing and evaluating service standards for new and modified services and recommending revisions on a regular basis, not to exceed five years. Responsible for conducting a public hearing to solicit comments from the public on the proposed service standards changes, bringing the feedback from the public to the METRO Board of Directors for review and approval.

7.0 POLICY REQUIREMENTS

There are no additional policy requirements.

RESOLUTION 2023 – 146

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH EACH OF SILSBEE TOYOTA AND ABC TEXAS BUS SALES, INC. FOR THE PURCHASE OF METROLIFT VEHICLES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires the purchase of twenty-five (25) Toyota Camry sedans and fifteen (15) Chrysler rear-load wheelchair vans to support its METROLift service; and

WHEREAS, pursuant to Resolution 2018-85, METRO entered into an Interlocal Agreement with Region VIII Education Service Center to participate in The Interlocal Purchasing System ("TIPS") and such purchases through TIPS satisfy METRO's procurement requirements because the underlying contracts with the vendors of TIPS are competitively procured; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a contract with each of Silsbee Toyota through its participation in TIPS for the purchase of these twenty-five (25) Toyota Camry sedans, with a base contract amount of $796,532.50, and an owner-controlled contingency of $79,653.25, for a maximum contract amount of $876,185.75, and ABC Texas Bus Sales, Inc. through its participation in TIPS for the purchase of these fifteen (15) Chrysler rear-load wheelchair vans, with a base contract amount of $1,008,448.40, and an owner-controlled contingency of $100,844.84, for a maximum contract amount of $1,109,293.24.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a contract with each of Silsbee Toyota through its participation in TIPS for the purchase of twenty-five (25) Toyota Camry sedans, with a base contract amount of $796,532.50, and an owner-controlled contingency of $79,653.25, for a maximum contract amount of $876,185.75, and ABC Texas Bus Sales, Inc. through its participation in TIPS for the purchase of these fifteen (15) Chrysler rear-load wheelchair vans, with a base contract amount of $1,008,448.40, and an owner-controlled contingency of $100,844.84, for a maximum contract amount of $1,109,293.24.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 147

A RESOLUTION

AUTHORIZING THE PRESIDENT & CEO TO NEGOTIATE AND EXECUTE A CONTRACT WITH EACH OF HOUSTON FREIGHTLINER, INC. AND SILSBEE FORD INC. FOR THE PURCHASE OF NON-REVENUE VEHICLES, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, the Metropolitan Transit Authority of Harris County, Texas ("METRO") requires the purchase of one (1) heavy duty bus wrecker, one (1) medium duty bus wrecker, four (4) high top vans, two (2) cargo vans, two (2) bucket trucks, eight (8) service body trucks, four (4) pressure washer trucks, one (1) crew cab pickup, thirty (30) pickups, nine (9) SUVs, and nine (9) police SUVs ("non-revenue vehicles") to support various METRO operations; and

WHEREAS, pursuant to Resolution 2018-85, METRO entered into an Interlocal Agreement with Region VIII Education Service Center to participate in The Interlocal Purchasing System ("TIPS"); and

WHEREAS, pursuant to Resolution 1998-148, METRO entered into an Intergovernmental Agreement with the Houston-Galveston Area Council ("H-GAC") for participation in H-GAC's Cooperative Purchasing Program; and

WHEREAS, purchases through TIPS and H-GAC's Cooperative Purchasing Program satisfy METRO's procurement requirements because the underlying contracts with the vendors of TIPS and H-GAC's Cooperative Purchasing Program are competitively procured; and

WHEREAS, based on the foregoing, management recommends that METRO enter into a contract with each of Houston Freightliner, Inc. through its participation in H-GAC's Cooperative Purchasing Program for the purchase of one (1) heavy duty bus wrecker and one (1) medium duty bus wrecker, with a base contract amount of $717,420, and an owner-controlled contingency of $71,742, for a maximum contract amount of $789,162, and Silsbee Ford Inc. through its participation in TIPS for the purchase of four (4) high top vans, two (2) cargo vans, two (2) bucket trucks, eight (8) service body trucks, four (4) pressure washer trucks, one (1) crew cab pickup, thirty (30) pickups, nine (9) SUVs, and nine (9) police SUVs, with a base contract amount of $4,682,490.25, and an owner-controlled contingency of $468,249.03, for a maximum contract amount of $5,150,739.28.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The METRO Board of Directors hereby authorizes the President & CEO to negotiate and execute a contract with each of Houston Freightliner, Inc. through its participation in H-GAC's Cooperative Purchasing Program for the purchase of one (1) heavy duty bus wrecker and one (1) medium duty bus wrecker, with a base contract amount of $717,420, and an owner-controlled contingency of $71,742, for a maximum contract amount of $789,162, and Silsbee Ford Inc. through its participation in TIPS for the purchase of four (4) high top vans, two (2) cargo vans, two (2) bucket trucks, eight (8) service body trucks, four (4) pressure washer trucks, one (1) crew cab pickup, thirty (30) pickups, nine (9) SUVs, and nine (9) police SUVs, with a base contract amount of $4,682,490.25, and an owner-controlled contingency of $468,249.03, for a maximum contract amount of $5,150,739.28.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

RESOLUTION 2023 – 148

A RESOLUTION

APPROVING AND ADOPTING THE PROPOSED 2024 METRO PUBLIC TRANSPORTATION AGENCY SAFETY PLAN, AND MAKING FINDINGS AND PROVISIONS RELATED TO THE FOREGOING SUBJECT

WHEREAS, pursuant to Resolution 2020-47, the Metropolitan Transit Authority of Harris County, Texas ("METRO") adopted an agency safety plan incorporating the principles and methods of Safety Management Systems as required by the Federal Transit Administration ("METRO Public Transportation Agency Safety Plan"); and

WHEREAS, Title 49 Part 673 of the Code of Federal Regulations requires annual review of the plan and Board approval of any subsequent updates to the plan; and

WHEREAS, METRO staff has reviewed the METRO Public Transportation Agency Safety Plan for 2024 and made changes to the plan to be consistent with current safety practices and other compliance updates including pursuant to the Bipartisan Infrastructure Law; and

WHEREAS, management recommends that the METRO Board of Directors ("Board of Directors") approve the proposed 2024 METRO Public Transportation Agency Safety Plan, attached hereto as Exhibit A.

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. The Board of Directors hereby approves and adopts the proposed 2024 METRO Public Transportation Agency Safety Plan, as outlined in Exhibit A.

Section 2. This Resolution is effective immediately upon passage.

I hereby certify that the above resolution is accurate in describing the action herein of the Board of Directors on the date below.

Cydonii V. Fairfax
Executive Vice President & General Counsel

PASSED this 16th day of November, 2023
APPROVED this 16th day of November, 2023

ATTEST:

Jessica Gonzalez
Assistant Secretary

Sanjay Ramabhadran
Chair

Metropolitan Transit Authority of Harris County

2024 Public Transportation Agency Safety Plan (PTASP)

METRO's Mission:

To provide safe, clean, reliable, accessible, and friendly public transportation services to our region.

Lee P. Brown Administration Building
1900 Main St., Houston, TX 77002

Version 5.0

TABLE OF CONTENTS

0.0 METRO'S SAFETY MANAGEMENT POLICY STATEMENT

Safety is a core value of the Metropolitan Transit Authority of Harris County (METRO), and managing safety is a core business function of the Authority. METRO is committed to developing, implementing, maintaining, and continuously improving processes to ensure the safety of its customers, employees, and the public. METRO aims to support a robust safety culture and achieve the highest level of safety performance, meeting all established safety standards. All management levels and all front-line employees are accountable for the delivery of the highest level of safety performance, starting with the President & Chief Executive Officer (CEO) of METRO.

METRO COMMITS TO:

Executive Commitment: Executive Management will lead to developing an organizational culture that promotes safe operations and provides appropriate resources for supporting this core management function. Executive Management will support the safety culture through fostering and ensuring safe practices, improving safety when needed, and encouraging effective employee safety reporting and communication. METRO will hold executives, managers, and employees accountable for safety performance.

Communication and Training: Communication systems will be put in place to enable greater awareness of METRO safety objectives and safety performance targets as well as provide on-going safety communication up, down, and across the organization. All management levels must proactively engage employees and work to keep the lines of safety communication honest and open. All employees will be aware of the importance of communicating safety-related items through training in safety reporting procedures.

Responsibility and Accountability: All management levels will be responsible for delivering safe and quality transit services. Managers will take an active role in supporting safety rules and regulations and ensure that safety functions are supported. Managers are responsible for promoting the agency's safety culture and developing safety performance measures for their operational areas of control.

Responsibility of Employees and Contractors: All employees and contractors will support safety management by ensuring that safety concerns are identified and reported.

Employee Reporting: Executive Management will establish a safety-reporting program as a viable tool for employees to voice their safety concerns. All employees and contractors will be responsible for utilizing this program as part of the Safety Management System (SMS). No action will be taken against any person who communicates a safety concern through the METRO safety-reporting program unless such disclosure indicates an illegal act, gross misconduct/negligence, or a deliberate or willful disregard of METRO rules, policies, and procedures.

Performance Monitoring and Measuring: METRO will establish realistic safety performance measures and set safety performance targets to ensure continual safety improvement. Managers will verify that the safety mitigations put in place are appropriate and effective.

Review and Evaluation: METRO will measure SMS performance by analyzing key safety performance indicators, reviewing inspections, investigations, corrective action reports, and auditing the processes that support the SMS. These activities will become the basis for revising or developing safety objectives, safety performance targets, and plans to achieve continuous safety improvement.

Thomas C. Lambert - President & CEO
signed 4/20/2020

METRO

1.0 CONCURRENCE & APPROVALS

APPROVAL	DATE	SIGNATURE
METRO's Board of Directors	November 16, 2023	Board Resolution
I, Thomas C. Lambert, President & CEO/Accountable Executive, do fully authorize and endorse METRO's Public Transportation Agency Safety Plan, Version 5.0.		

2.0 DOCUMENT REVISION HISTORY

VERSION NUMBER	SECTIONS/PAGES AFFECTED	DATE ISSUED
1.0	All Sections – Initial Release	March 2020
2.0	4.1, 5.2, 5.3, 6.4, 6.9, 6.10, 7.0, 7.1, 8.1, 810, 9.15, 9.2, 9.5, 9.6.1, 9.6.2, 10.2	January 2021
3.0	6.8.1, 8.0, 8.1, 8.2, 8.4, 8.5, 9.2, 9.3, 10.2, 10.3, Appendix C	January 2022
4.0	4.3, 5.2, 6.5,6.6, 6.7, 6.8.1, 6.10, 6.13, 7.0, 7.1, 8.4, 8.10, 9.6, 9.6.1, 9.11, 9.13, 9.16.4, 10.2, 10.3, 10.5.4, Appendix D	January 2023
5.0	5.0, 5.2, , 6.13, 8.10, 8.12, 9.2, 9.6.1, 9.7, 9.8, 9.9, 9.12.2.2, 9.12.7, 9.16.1, 9.18, 10.3, 10.4, 10.5.4, Appendix: A, B, D, and E	January 2024

3.0 EXECUTIVE SUMMARY

This document establishes METRO's Public Transportation Agency Safety Plan **(PTASP)**. The creation and implementation of METRO's Agency Safety Plan **(ASP)** is in response to the Department of Transportation's Federal Transit Administration **(FTA)** Title 49 Code of Federal Regulations **(CFR)** Part 673. The regulation focuses on establishing a Safety Management System (**SMS**) framework approach to administering safety throughout the organization and strategies for minimizing public, personnel, and property exposure to unsafe conditions.

The FTA defines an SMS as:

> *"the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards."*

METRO's ASP describes that an SMS framework is comprised of four foundational components:

- **Safety Management Policy (SMP)** is the Agency's documented commitment to safety; it defines the Agency's safety objectives and leadership accountabilities and responsibilities.
- **Safety Risk Management (SRM)** is the process of identifying hazards, assessing the hazards, and mitigating safety risks.
- **Safety Assurance** ensures the implementation and effectiveness of safety risk mitigation; ensures the Agency meets or exceeds its safety objectives through collecting, analyzing, and assessing information.
- **Safety Promotion** is the combination of training and communication of safety information to support the SMS.

The ASP demonstrates METRO's commitment to safety and will be used to identify programs and processes to minimize and mitigate injuries and accidents. Management's compliance with identified responsibilities in the ASP ensures that goals and objectives are achieved.

METRO's President & CEO is designated as the Accountable Executive, as defined by 49 CFR 670. The Accountable Executive is ultimately responsible for ensuring that the SMS is effectively implemented throughout the Agency.

4.0 BACKGROUND

4.1 Authority

In 1973, the Texas State Legislature authorized the creation of local transit authorities by passing Chapters 141 & 451 under the Acts of the 63rd Legislature, Regular Session, 1973. In 1978, Houston-area voters created METRO, approved a one-cent sales tax to support its operations, and METRO opened for business in January 1979.

Beginning as a bus-only system, today METRO is an extensive multi-modal system consisting of bus, vanpool, light rail, bus rapid transit, HOV/HOT lanes, and paratransit services in the City of Houston as well as most of Harris County. METRO's service area encompasses approximately 1,300 square miles.

The Intermodal Surface Transportation Efficiency Act of 1991 [codified 49 CFR Part 659 (Rail Fixed Guideway Systems – State Safety Oversight **(SSO)**, requires the state where rail systems operate unregulated by the Federal Railroad Administration **(FRA)** to designate a state agency to be responsible for the oversight of rail system safety.

In 1997, the Texas Legislature designated the Texas Department of Transportation **(TxDOT)** as the State Safety Oversight Agency **(SSOA)** responsible for carrying out the functions of the federal SSO Program. TxDOT derives its authority through the Texas Transportation Code, Chapter 455, General Powers and Duties of Department of Transportation Regarding Mass Transportation. Under Texas legislation, TxDOT required METRO to prepare, implement, and administer a Rail System Safety Program Plan that conforms to Texas State Safety Oversight Program requirements.

4.2 Moving Ahead for Progress in the 21st Century Act

On July 6, 2012, the President of the United States signed into law the Moving Ahead for Progress in the 21st Century Act **(MAP-21)**. Under the provisions of MAP–21, Congress directed the FTA to establish a comprehensive PTASP that strengthens the States' authorities to prevent and mitigate accidents and incidents on public transportation systems. In addition to the MAP-21 Act, the FTA implemented the following rulemakings to improve transit safety:

- **SSO Rule**: On March 16, 2016, the FTA issued 49 CFR. Part 674 for SSO to strengthen States' authority to investigate rail transit accidents and oversee rail transit system safety.
- **Public Transportation Safety Certification Training Program (PTSCTP) Rule**: The PTSCTP establishes a curriculum and minimum competencies for federal SSOA personnel and contractors who conduct safety audits and examinations of rail-fixed guideway public transportation systems. It also applies to designated transit agency personnel and contractors directly responsible for safety oversight of a recipient's rail-fixed guideway public transportation systems.
- **PTASP Rule**: This rule establishes requirements for federal transit funds recipients, regardless of transit mode, to develop a PTASP. The plans would include the recipient's strategies to minimize public, personnel, and property exposure to unsafe conditions and contain safety performance targets.

4.3 Public Transportation Agency Safety Plan

Under the FTA's PTASP Rule, each public transportation operator receiving federal financial assistance under 49 United States Code **(USC)** Chapter 53 must develop and implement a PTASP based on SMS principles. The PTASP must be updated and certified by the transit agency annually.

At a minimum, each PTASP must consist of the following elements:

- The PTASP, and subsequent updates, must be signed by the Accountable Executive and approved by both the Agency's Labor Management Safety Committee (**LMSC**) and the Board of Directors.
- The PTASP must document the processes and activities related to SMS implementation.
- The PTASP must include performance targets based on the FTA's National Public Transportation Safety Plan's safety performance measures.
- The PTASP must address all applicable requirements and standards set forth in the FTA's PTASP and National Public Transportation Safety Plan.
- Each transit agency must establish a process and timeline for conducting an annual review and update of the PTASP.
- A rail transit agency's PTASP must include or incorporate by reference an emergency preparedness and response plan.

4.4 Safety Management System

METRO has adopted an SMS framework approach to administering safety throughout the organization and its ASP. The SMS is a formal, top-down, data-driven, organization-wide approach to managing safety risks and assuring the effectiveness of safety risk mitigations. An SMS defines the safety culture (framework) of the organization. It includes senior leadership commitment, front-line engagement, management accountability, and continual safety process improvements derived from the data-driven Safety Risk Assessment **(SRA)**.

The SMS is flexible and adaptable to any transit agency's mode, size, and complexity in urban, suburban, or rural environments. The foundation of the SMS framework is comprised of four components (Table 1). SMS components interact with each other to provide an effective system of feedback.

SMS COMPONENT	DESCRIPTION
I. Safety Management Policy	The definition of safety policies, procedures, and organizational structure.
II. Safety Risk Management	The formal process for management of hazards to an acceptable level of risk.
III. Safety Assurance	The establishment of process measures, assessments, and controls to assess the effectiveness of risk control strategies.
IV. Safety Promotion	The safety training and risk communication practices to promote a culture of safety.

Table 1: METRO's SMS components and descriptions.

5.0 METRO'S AGENCY SAFETY PLAN MANAGEMENT

The development of METRO's ASP was completed in accordance with federal and state rules and regulations. The ASP is the system-wide governing safety document for all transit modes operated by METRO. The ASP introduces SMS to METRO through requirements outlined in the four key components of SMS:

1. Safety Management Policy
2. Safety Risk Management
3. Safety Assurance
4. Safety Promotion

The ASP consists of a series of policies and procedures which must be undertaken to ensure the safety of its customers, employees, contractors, emergency responders, and the general public. The ASP identifies METRO's safety policies and the authorities and responsibilities associated with system safety for all levels of METRO management and employees. The Chief Safety Officer **(CSO)** is authorized by METRO's President & CEO to prepare, update, and implement the ASP and coordinate efforts with other involved departments to document and implement SMS processes and activities.

The ASP emphasizes that accountability for safety lies with the Accountable Executive, but safety rests with each METRO employee. Therefore, all employees must strictly comply with the safety rules, procedures, and responsibilities established for their work duties.

METRO's ASP satisfies both 49 CFR Part 673 and the TxDOT SSO Program Standard. The ASP is reviewed through TxDOT Triennial Audits and METRO Internal Safety Reviews **(ISR)**. METRO supports the development and maturation of its SMS implementation through internal processes, internal assessments, safety committees, department involvement, and information data management.

The initial version of this plan became effective June 1, 2020, and supersedes all other system-wide agency safety plans, including the Rail/Bus System Safety Program Plan.

5.1 Applicability

Transit operators that receive federal financial assistance under 49 USC Chapter 53 are required to develop and implement an ASP based on the principles of SMS for all modes of transit they operate. The rule applies to recipients and sub-recipients of federal financial assistance. The rule does not apply to agencies that are subject to another federal agency's safety jurisdiction, including passenger ferry operators regulated by the U.S. Coast Guard and rail operators regulated by the FRA.

METRO's ASP applies to its employees, contractors, facilities, service areas, and modes of transit the Agency directly operates. METRO utilizes External Service Providers **(ESP)** (i.e., contractors) to provide transit service for the paratransit mode and a portion of the bus mode. Each ESP shall develop and implement an ASP applicable for the mode of transit it services on behalf of METRO. METRO is responsible for ensuring Part 673 requirements are satisfied for the ESP's PTASP.

- For PTASP details regarding METRO's paratransit mode of transportation, see First Transit's ASP: METROLift.
- For PTASP details regarding METRO's Northwest Bus Operations Facility, see First Transit's ASP: Northwest Bus Operating Facility.

5.2 Annual Agency Safety Plan Review & Update

No later than October 1st of each year, METRO shall conduct a review of its ASP to ensure it is current and complies with federal, state, local laws and regulations, and the TxDOT SSO Program Standard. METRO shall also notify TxDOT via email if the Plan is current or requires an update. If an update is required, the notification shall summarize the areas requiring an update and the date the revised PTASP will be submitted to TxDOT. The responsibility to update and review the ASP, assess its effectiveness, develop, propose changes, solicit internal and external reviews, implement and control the revisions, and distribute the changes rests with the CSO. METRO will conduct the annual review/update of the ASP at the beginning of each new fiscal year.

The CSO coordinates proposed revisions to the ASP with appropriate Division and Department personnel within METRO. Members of the Senior METRO Safety Committee **(SMSC)** participate in reviewing significant changes to the PTASP to ameliorate SMS. The process includes the LMSC, which is responsible for annually reviewing and approving METRO's PTASP updates. The revised ASP is then sent to METRO's Board of Directors for final approval.

No later than February 1st of each year, METRO shall submit an updated ASP to TxDOT for review and approval. The updated ASP must be signed by the Accountable Executive and approved by METRO's Board of Directors (Appendix A: Board Resolution). Along with the ASP submission, METRO shall submit all other METRO documents/procedures referenced in the updated ASP (Appendix B: List of Referenced Documents).

5.3 49 CFR 673.13 Certification of Compliance

METRO will self-certify the ASP via the FTA's Certifications and Assurances process. The FTA requires each transit agency, direct recipient, or state to self-certify that they have PTASPs that meet the requirements annually. As part of the FTA's Certification and Assurances process, METRO annually certifies that the rail fixed guideway public transportation system is:

A. Compliant with the requirements of 49 CFR part 672, "PTSCTP."

B. Compliant with the requirements of 49 CFR part 674, "SSO," and

C. SSO Program Standard Certification of Compliance.

When information, processes, or activities undergo significant changes, the Accountable Executive will submit the revised ASP to TxDOT for review and approval within 90 calendar days of the effective date of the change.

5.4 Safety Plan Documentation

METRO stores and maintains the documents that set forth the Agency's ASP, including documents related to SMS and results from SMS processes and activities that describe the programs, policies, and procedures used to carry out the Plan. These documents are made available to the FTA, other federal entities, and the SSOA as required. METRO maintains and stores all new, revised, and archived documents in the Agency's server libraries for a minimum of three years or per METRO's Records Management Policy.

6.0 SAFETY MANAGEMENT POLICY

This chapter describes how METRO will implement the SMS under the SMP requirements defined in the federal rulemaking. The SMP is the written foundation of the Agency's SMS. It formally and explicitly commits the Agency to develop and implement the organizational structures and resources necessary to sustain the SMS's safety management processes and activities. The SMP establishes senior leadership, employee accountabilities, and employee responsibilities for safety management throughout the Agency.

This SMP chapter consists of the following:

- **SMP Statement:** A transit agency must establish its organizational accountabilities and responsibilities and have an SMP written statement that includes the transit agency's safety objectives.
- **Management of Safety:** The transit agency must specify the necessary authorities, accountabilities, and responsibilities to manage safety amongst individuals within its organization related to developing and managing the transit agency's SMS.
- **Employee Safety Reporting Program:** A transit agency must establish and implement a process that allows employees to report safety conditions to senior management, protections for employees who report safety conditions to senior management, and describe employee behaviors that may result in disciplinary action.
- **SMP Communication:** The SMP must be communicated throughout the transit agency's organization.

6.1 Safety Management Policy Statement

METRO's SMP statement frames the fundamentals upon which the Agency will build and operate its SMS. It documents senior management's commitment to the SMS and places the management of safety at the same level as the Agency's topmost business processes.

METRO's SMP Statement outlines the following principles:

- Executive Commitment
- Communication and Training
- Responsibility and Accountability
- Responsibility of Employees and Contractors
- Employee Reporting
- Performance Monitoring and Measuring
- Review and Evaluation

Each of these guiding principles is essential to the development and continuous improvement of the SMS. The SMP Statement is communicated throughout the Agency through bulletin postings, email, METRO intranet, and New Employee Orientation. Please refer to METRO's SMP Statement in Section 0.0 above for further details.

6.2 Management of Safety

METRO has established the necessary authorities, accountabilities, and responsibilities to develop and manage the Agency's SMS. To meet this, METRO has defined the roles of the Accountable Executive, CSO, and SMS Key Staff to manage safety.

6.3 Accountable Executive

METRO has designated the President & CEO as the Accountable Executive responsible for ensuring the SMS is effectively implemented throughout the Agency. The Accountable Executive is responsible for ensuring that necessary actions are taken to address substandard METRO SMS performance. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive. The Accountable Executive will also ensure senior leadership is responsible for the following safety objectives:

- Upholding and promoting safety policies, ensuring SRM and Safety Assurance.
- Supporting Agency-wide safety performance measures and targets.
- Holding department directors and managers accountable for the safety performance within their respective divisions/departments.
- Fostering a strong safety culture.
- Allocating the appropriate staffing resources necessary to assure compliance with the SMS requirements.
- Identifying the necessary funds to meet the safety performance requirements and incorporating them into budgeting plans, prioritizing, and allocating expenditures according to safety risk.

6.4 Chief Safety Officer

METRO's Accountable Executive designated the CSO as the employee who has the oversight authority and responsibility for the day-to-day implementation and operation of METRO's SMS. The CSO holds a direct reporting line to the Accountable Executive and does not serve in any operational or maintenance capacities at METRO. The CSO is enrolled in the PTSCTP and meets all training requirements. Primary duties may include:

- Conducting monthly SMS update meetings with the Accountable Executive.
- Facilitating the full implementation of the SMS across METRO.
- Advocating for a comprehensive safety culture.
- Providing guidance on the strategic plan for the SMS implementation.
- Approving updates of all SMS processes based on experiences and lessons learned.
- Reviewing and approving the SMS Implementation Plan at least annually.
- Providing additional guidance material and industry best practices to strengthen and clarify the SMS processes.

- Monitoring the safety performance of METRO operations and activities through formal data collection and analysis.
- Tracking safety-critical issues and approving mitigation resources.
- Monitoring corrective action plans to their conclusion.

6.5 Safety Management System Director

METRO has designated the SMS Director as the employee who has the authority and responsibility for the day-to-day implementation and operation of METRO's SMS. The SMS Director coordinates the SMS activities with the Agency's executive leadership, directors, managers, contractors, and frontline employees. Primary duties may include:

- Coordinating with cross-departmental leadership regarding the SMS efforts.
- Ensuring procedures are consistent with federal, state, and local regulations and best practices.
- Determining and implementing countermeasures required to counteract safety risks and manage issues that negatively impact METRO's safety performance.
- Ensuring that all employees are trained in the SMS.
- Ensuring all system changes are coordinated with the Configuration Management Change Control Board **(CCB)** Committee and the SMSC.
- Managing the SRM and Safety Assurance processes and outputs.
- Facilitating coordination of SRM, evaluations, investigations, and controls with particular attention to cross-organizational impacts.
- Ensuring Safety Promotion efforts are in place through the Agency.

The SMS Director is also responsible for managing the Safety Compliance and Analysis group. The staff is responsible for the following:

- Leading internal safety audits with support from appropriate METRO divisions.
- Developing and coordinating the data and dashboards for tracking and monitoring safety performance.
- Developing and maintaining the safety training requirements and matrix.

6.6 Safety Management System Key Staff

METRO designates key staff, staff groups, or committees to support the Accountable Executive and the CSO in developing and implementing the Agency's SMS. Primary duties include:

- Ensuring the implementation of sufficient SRM, Safety Assurance, safety training, and communication protocols within their department.
- Conducting baseline risk assessments in their respective departments and documenting them in the hazard log.

- Overseeing the safety performance of all personnel and equipment under their supervision.
- Implementing and maintaining safety-related control measures and mitigations for employees with work-related safety requirements and hazardous conditions.
- Responding to identified hazards that may impact safety performance.
- Supporting and requiring employees within their department to participate in safety training activities.
- Reporting all mishaps and incidents to the reporting database and SMS leadership.
- Maintaining employees in the department safety training databases.

6.7 Safety Committees

METRO designates safety committees with subject matter responsibilities for specific areas. The committees include appropriate representatives from various METRO departments who work collaboratively on all safety-related items and system changes. They are also used to elevate issues to the executive level.

Safety committees within METRO consist of:

- Senior METRO Safety Committee
- Safety & Security Certification Review Committee
- Configuration Management Change Control Board Committee
- Rail Standard Operating Procedure Committee
- Public Safety Committee
- Labor Management Safety Committee

Safety committees involved in the Hazard Management process consist of:

- Safety & Security Certification Review Committee
- Configuration Management Change Control Board Committee
- Labor Management Safety Committee

6.8 Senior METRO Safety Committee

The SMSC is responsible for monitoring the safety goals and objectives, SMS implementation, formal reviews, and disposition of safety concerns that individual departments cannot satisfactorily resolve because of cost or authority reasons and coordinating system safety activities METRO. The committee meets at least monthly and is chaired by the Director of Safety Management System.

SMSC activities include:

- Monthly meetings to evaluate and resolve system safety-related issues.
- Report critical safety items and financial needs to executive leadership.
- Discuss the SMS implementation efforts and training.
- Review new projects and expansions to ensure that certification protocols are met.

- Review and discuss Agency-wide safety initiatives for departmental awareness.
- Review and discuss Agency and local events and their impacts on safety.
- ~~Review the monthly accident reports and discuss trends for minimization and mitigation.~~
- Review the Corrective Action Plan (**CAP**) report to ensure closures.
- Conduct special meetings as necessary at the request of senior management.

6.8.1 Senior METRO Safety Committee Members

DEPARTMENT	TITLE
Safety	• Chief Safety Officer • Director of Safety or Designee • Director of Safety Management System • Other safety personnel, as needed.
Police	• Chief of METRO Police or Designee
Operations	• EVP/Chief Operating Officer or Designee • VP, Bus Operations or Designee • VP, Rail Operations or Designee • VP, Facilities Maintenance, or Designee • Other operations personnel, as needed.
Planning, Engineering & Construction	• EVP, Planning Engineering & Construction or Designee • VP, Project Management and Engineering, or Designee • Other PEC personnel, as needed.
Administration	• Director of Labor Relations or Designee • Director of Contract Operated Services or Designee • Director Transit Asset Management or Designee
Other	• VP, Customer Service, or Designee • Director Materials Management or Designee • Deputy Chief Auditor or Designee • ESP, Safety Representative(s)

Table 2: List of METRO's Senior Safety Committee Members

6.9 Safety & Security Certification Review Committee

The Safety and Security Certification Review Committee (**SSCRC**) is formed to assure that major bus, bus rapid transit, and rail capital projects are operationally safe and secure for revenue service. The SSCRC meets routinely or on an as-project/as-needed basis. The SSCRC includes METRO personnel from Operations, PEC, Safety Department, and METRO Police. The SSCRC activities include:

- Ensure safety and security requirements and conformance checklists developed for the design of capital projects are formally reviewed and approved.

- Ensure safety and security requirements and conformance checklists developed for the construction of capital projects are formally reviewed and approved.

This committee meets during various Agency project phases or depending on specific Safety and Security Certification **(SSC)** needs. Further information on safety certification can be found in METRO's Safety and Security Certification Plan **(SSCP).**

6.10 Configuration Management Change Control Board Committee

The CCB Committee is responsible for approving or disapproving changes to a program/project baseline (i.e., configured element) throughout its life cycle. The Director of Program Management Support Services heads the committee. No changes are made without the approval of the Committee. The Committee is governed by formal procedures and represents multiple departments and disciplines. The Committee follows METRORail's Configuration Management and Procedures 001 with the Committee members from Operations, Safety, and PEC. The objectives of the CCB Committee include, but are not limited to:

- Configuration control and change management.
- Control of the baseline documents.
- Achieve standardization and uniformity of the product and/or operation.
- Integration of the various elements impacted.
- Identification of the impact(s) related to changes on specific projects and system-wide, including safety-critical items and safety certification requirements.
- Documentation of plans, calculations, studies, and reports needed to perform an integrated change.
- Documentation of formal approvals.

The CCB members are appointed and mutually agreed upon by the Executive Vice President **(EVP)** for Planning, Engineering, and Construction **(PEC)**, the EVP/Chief Operating Officer, and the CSO. The CCB Committee meets as needed, or at least quarterly, to evaluate all submitted change requests. The CCB Committee is comprised of the following departments and divisions:

- Safety
- Rail Operations
- Project Management
- Engineering
- Capital Planning
- Information Technology
- Facility Maintenance

6.11 Rail Standard Operating Procedure Committee

The purpose of the Rail Standard Operating Procedures Committee is to develop, modify, and implement Standard Operating Procedure **(SOP)** related to Rail Operations and Maintenance. The Committee is governed by SOP#001 – Development, Change, and Implementation of METRORail SOP. The Rail SOP Committee includes members from Safety, Rail Control, Rail Maintenance, and Rail Transportation. The

Rail SOP Committee is chaired by a Rail Operations member and meets at least monthly to review outstanding issues.

6.12 Public Safety Committee

The Public Safety Committee (**PSC**) is a Board Committee chaired by a Board Member, with five other members making up the committee. It includes the President & CEO, the EVP/Chief Operating Officer, the Chief Safety Officer, the Chief of Police, and other executive leadership. The Committee meets once a month before the general Board meeting to review safety and security data performance indicators. The Committee is provided with safety, security, customer service, and emergency management briefings and subsequently prepares items for the Board to review and approve.

6.13 Labor-Management Safety Committee

Labor Management Safety Committee members identify and recommend risk-based mitigation strategies to reduce the likelihood and severity of safety risks uncovered by the agency's safety risk assessment as well as mitigation strategies that are ineffective, inappropriate, or aren't being implemented as intended while identifying safety deficiencies for continuous improvement, as well as reviewing and approving PTASP updates. The purpose of the LMSC is to help promote a safe environment for all employees and visitors to our facilities through the involvement of all individuals with regard to education, communication, and safe work practices. The Committee is chaired by an elected member, with seven other members making up the committee. The LMSC consists of an equal number of frontline employee representatives selected by the labor organization representing the plurality of the frontline workforce employed by METRO or METRO's contractor and management representatives selected by the CSO and/or the Accountable Executive. The LMSC is governed by the Labor Management Safety Committee Charter. LMCS activities include but are not limited to the below:

- Review the Hazard Log to discuss mitigation strategies.
- Review accident reports and discuss trends for minimization and mitigation
- Identify and recommend risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment.
- Identify mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended.
- Identify safety deficiencies for purposes of continuous improvement
- Approving the updated PTASP.

7.0 EMPLOYEE SAFETY REPORTING PROGRAM

METRO is committed to providing a safe physical environment for its employees and contractors. Employees have firsthand expertise in the operating environment and serve as the primary source of knowledge regarding hazards. In support of METRO's SMS, all employees are required to report observed safety hazards or concerns. METRO has established multiple avenues for reporting. All imminent operating hazards must be reported to the appropriate control center (rail or bus). All other hazards and safety concerns must be reported directly to the appropriate supervisor or Safety Officer. METRO also offers the Ethics and Safety Hotline, a confidential and non-punitive reporting system managed by a third-party vendor (Lighthouse)that allows all employees and contract support to report workplace safety concerns and unsafe employee behaviors. Details regarding hotline use and management can be found in the Hotline Reporting Procedure.

The following are examples of safety concerns to report to the Ethics and Safety Hotline: non-imminent safety hazards in the operating environment; policies and procedures that are not working as intended; work practices or events that management may not be privy to; information about why a safety event may have occurred.

7.1 Safety Hotline Reporting Process

Step 1. Employee or contractor submits a report to the Ethics and Safety Hotline by calling the hotline, visiting the website, or using the mobile app.

Step 2. Report Entry and Tracking:

a. A report tracking number is assigned, and a receipt is sent to the reporting employee if known.

b. METRO Administrator is notified of the case via email, reviews it for completion, and routes it to the designated Investigator.

Step 3. The investigator reviews the case's facts and shares findings with the appropriate METRO Administrator.

Step 4. METRO Administrator takes appropriate actions and mitigation strategies to resolve the report.

Step 5. METRO Administrator responds to the report.

Step 6. The report is properly documented and closed.

Figure 1: METRO's confidential reporting hotline information.

METRO employees and contractors may use the Ethics and Safety Hotline 24 hours per day, seven (7) days a week. Reports can be made via email, on the website, with a live phone operator, and TTY/TDD.

No action will be taken against anyone who communicates a safety concern through the METRO safety-reporting program unless such disclosure indicates an illegal act, gross misconduct/negligence, or a deliberate or willful disregard of METRO rules, policies, and procedures.

7.2 Safety Policy Communication Method

The SMP Statement serves as METRO's documented commitment to safety and defines the Agency's objectives and its employees' accountabilities and responsibilities regarding safety. Therefore, communication of the SMP throughout the Agency is paramount to the success of SMS implementation. The METRO SMP is communicated to all employees and contractors through the following:

- Bulletin Boards
- Training
- Facility Document Postings
- Email Blast
- New Employee Orientation
- Onboarding of Contractors

If applicable, all revisions will be signed by the Accountable Executive and immediately followed by an agency-wide notification.

8.0 SAFETY RISK MANAGEMENT

This chapter describes how METRO will implement the SRM process for all transit system elements as defined in the requirements of 49 CFR Part 673.25(a). SRM is a hazard identification and evaluation process that manages hazards to an acceptable level of risk and evaluates the results to mitigate safety risks. METRO's SRM process develops a comprehensive and systematic hazard management procedure for all elements of our public transportation system. These elements identify, evaluate, track, and then eliminate or minimize safety hazards associated with the system operations.

As per the requirements of 49 CFR Part 673.25, METRO's SRM processes include the following activities:

- **Safety Hazard Identification:** METRO must establish methods or processes to identify credible hazards and consequences.
- **Safety Risk Assessment:** METRO must establish methods or processes to assess the safety risks associated with identified safety hazards in terms of severity and probability.
- **Safety Risk Evaluation:** METRO must establish a method to rank the safety risk in terms of acceptability. The level of risk is ranked as High, Serious, Medium, or Low. The corresponding acceptability is Unacceptable, Undesirable, Acceptable with Review, and Acceptable.
- **Safety Risk Mitigation:** METRO must establish methods or processes to identify mitigations or strategies necessary due to the transit agency's SRA to reduce the likelihood and severity of the consequences.

The SRM process applies to all elements of METRO's system, including employees and contractors, infrastructure, vehicles and equipment, revenue, and non-revenue service activities, to continually identify hazards in their work areas and report them through the appropriate channel. The continuous identification, assessment, monitoring, and mitigation of hazards is key to an effective SRM process for all METRO transportation modes.

Figure 2: METRO's Safety Risk Management Processes

The Safety Risk Management process also feeds into the Safety Assurance process by evaluating changes that may impact safety performance. A periodic safety risk assessment can identify changes to operations and maintenance procedures, existing systems configuration or service, organization structure or resources, new capital projects, and other changes due to METRO's internal and external environment. Safety Risk Management helps management evaluate the effectiveness of its safety risk mitigations over time.

The SRM process continuously monitors the effectiveness of mitigations and decision-making regarding priorities in allocating safety resources. SRM is the core process beneath the Safety Management System to determine and classify system-wide safety risks to develop appropriate risk mitigation strategies

8.1 Safety Hazard Identification

One goal of SRM is to develop and refine a METRO-wide, comprehensive, and systematic program to identify and minimize all safety hazards to acceptable risk thresholds. A hazard is defined as any real or potential condition that can cause:

- Personal injury, illness, or death.
- Damage to or loss of assets such as facilities, equipment, rolling stock, or infrastructure of a public transportation system and/or
- Damage to the environment.

Hazard identification is the process in which the hazards to passengers, employees, the general public, equipment, and transit system assets are identified. Once the hazards are identified and clearly understood, proper mitigations can be implemented to minimize or eliminate the hazard risk. Hazard identification sources throughout the Agency may include, but are not limited to:

- Safety Reporting Program
- Engineering Evaluations (Hazard Analyses including but not limited to Preliminary Hazard Analyses)
- Inspections and Audits
- Internal Safety Investigations
- Accident Reports
- Compliance Programs
- Committee Reviews
- Industry Data
- Governmental Sources (SSOA, FTA, NTSB)

In its Safety Reporting Program, METRO relies heavily upon its personnel's skills, experience, and training to ensure that appropriate and proven methods are employed to identify hazards and/or unsafe conditions.

METRO's Hazard Identification and Analysis protocols are based on the American Public Transportation Association's **(APTA)** guidelines, APTA's SMS Manual, U.S. Military Standard MIL 882, and federal, state,

and local requirements and regulations. To guide employees in hazard identification and analysis, METRORail has implemented procedures in SOP #803: Hazard Identification and Analysis. The METRO Industrial Safety Manual is an additional reference tool to assist tasks and activities intended to identify, eliminate or control hazards that promote a safe working environment throughout the Agency.

While identifying every hazard is virtually impossible, there are two basic, time-tested methods for the orderly identification of hazards: Inductive and Deductive Analysis.

- **Inductive Analysis** is a method that determines the effect of a particular event or component failure on a system. This "bottom-up" approach considers the consequences of a specific event or component occurrence/failure. For example, if a headlight switch fails, the operator may strike an unseen object on the track.
- **Deductive Analysis** is a method that analyzes a specific undesirable event to determine the possible causes of that event. This "top-down" approach considers what causes a specific event to occur.

A Preliminary Hazard Analysis **(PHA)** is a process and document used to identify and mitigate hazards and assess risks. The PHA is primarily used by Metro Safety, Operational Engineering, PEC, and their consultants, during the beginning of a project (e.g., Concept Planning and Engineering/Design). The PHA is used to analyze the hazards of a new facility before purchasing equipment and the associated risks in a project before investing significant amounts of effort, time, and funds. A PHA is a valuable process that can be utilized for a new project or new system functions/functionality or for modifications to existing assets, systems (including changes in function), business activities, etc., that meet a certain change level threshold, as determined by Safety and the CCB. Preliminary Hazard Analysis establishes the basis for the safety criteria in design, equipment, and performance specifications. Ultimately, the PHA identifies, and the Hazard Tracking Log shall verify that sufficient corrective or preventive measures or procedures were taken to minimize the hazard(s) risks (to within acceptable risk thresholds or lower) or to verify the hazard has been eliminated. Some samples sources of PHA are the following:

- Rail Manufacturers /Bus Vendors
- Contractors
- In-House (METRO)

Table 3 lists some potentially hazardous conditions to aid employees in hazard identification. The table is not an all-inclusive/exhaustive list, as hazards can result from many different modes and many different types of potential events.

METRO investigates all incidents involving individuals working in the transit agency-controlled right of way.

HAZARDOUS CONDITIONS LIST
Incidents involving individuals working in the transit agency-controlled right of way that the transit agency investigates.
Malfunctions of safety-critical systems that could result or have resulted in catastrophic or single-point failure.

HAZARDOUS CONDITIONS LIST
Broken or missing safety-critical equipment, infrastructure, or systems that could result or have resulted in employee or passenger injury or damage to METRO property.
Discovery of systemic or patterns of employee non-compliance with transit agency rules and procedures.
Near miss of rail vehicles with another rail vehicle, pedestrian, vehicle, or other object(s).
Automatic Grade Crossing Warning Devices malfunction.
Speed restriction or track closure due to track or facility damage.
Fire or smoke on the track, on a vehicle, or in a facility.
Broken or loose wheel or axle.
Fallen or dragging rail vehicle equipment.
Split switch without derailment.
Signal violation or overrun.
Train/vehicle uncoupling in revenue service.
Unauthorized train encroachment or overrun into the work zone.
Train/Vehicle door openings on the wrong side, off station platforms, or during train movement.
An incapacitated operator in revenue service.
Exposed energized electrical conductors or equipment that can be contacted by passengers or employees.
Hazardous Material spills.
Trespass.
Acts of God that result in the suspension of service.
Route Hazards include but are not limited to potholes, curbs in poor condition, and damaged bus shelters.

Table 3: METRO's list of hazardous conditions.

8.2 Safety Risk Assessment (SRA)

An SRA is a formal action whereby METRO determines SRM priorities by establishing the significance or value of its safety risk. The assessment is used to describe the overall process or method in all modes of transportation where the Agency employs the following techniques:

- **Hazard Identification:** Identification of hazards and risk factors that may potentially cause harm.
- **Risk Analysis and Risk Evaluation:** Analysis and evaluation of the risk associated with identified hazards.
- **Risk Control**: Determination of appropriate ways to eliminate the identified hazard or control the risk when the hazard cannot be eliminated.

The SRA process aims to evaluate hazards, remove them, or minimize their risk level by adding control measures as necessary. Risk assessments are critical as they form an integral part of the SRM process by helping to:

- Create awareness of hazards and risks.
- Identify who or what may be at risk (e.g., employees, cleaners, visitors, contractors, the public, assets, environment, etc.)
- Determine whether a control program is required for a particular hazard.
- Determine if existing control measures are adequate.
- Prevent injuries or illnesses, especially when done at the design or planning stage.
- Prioritize hazards and control measures.
- Meet legal requirements where applicable.

The Safety Department and the department where the hazard resides, with support from the Operational Engineering and/or PEC (as required), will assess the hazard to determine its potential severity and probability of occurrence.

8.3 Safety Risk Assessment Methodology

The SRA methodology is a generalized qualitative calculation mainly based on subjective judgments used to determine how much risk is associated with each hazard (i.e., the urgency for implementing corrective measures to eliminate or reduce the hazard to a level of acceptability).

The SRA method has two steps:

1. Evaluating hazard severity, and
2. Estimating hazard probability.

The factors considered in this analysis include system safety, schedule, potential loss of physical plant, and the impact on the public perception of safety in the community where the system operates.

8.4 Hazard Severity

Hazard Risk Severity is an assessment of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, and/or procedural efficiencies for a system, subsystem, or component failure or malfunction.

The categorization of hazards is consistent with risk-based criteria for severity: it reflects the principle that not all hazards pose an equal amount of risk to personnel safety. METRO follows these criteria, as do most respected transportation organizations, including the National Transportation Safety Board **(NTSB)**.

RISK SEVERITY LEVELS						
Severity Level		**Injury or Occupational Illness**	**Property Damage**	**System Disruption** *(Injury-related excluded)*	**Environment**	**Evacuation**
1	Catastrophic	Death	> $250k	> 24 hrs.	Irreversible significant environmental impact	Emergency evacuation is required to prevent loss of life or permanent total disability
2	Critical	Serious Injury	$250k – $100k	12 – 24 hrs.	Reversible significant environmental impact	Emergency evacuation required to prevent serious injury or illness
3	Marginal	Non-Serious Injury (Ambulance transport)	$100k – $25k	4 – 12 hrs.	Reversible moderate environmental impact	N/A
4	Negligible	Non-Serious Injury (No ambulance transport)	< $25k	< 4 hrs.	Reversible minimal environmental impact	N/A

Table 4: METRO's categorized risk safety levels and criteria.

8.5 Hazard Risk Probability

The probability of a particular event or a specific hazard occurring may be defined in qualitative or quantitative terms, such as a ratio of the number of times a specific event occurs to the total number of trials in which this event will occur during the planned life expectancy of a system.

"Qualitative" methods of probability evaluation use knowledge, experience, and logical reasoning to rationalize how often a hazard will occur – and is considered a rough/gross evaluation method. As an example, using MIL-STD-882, for a given hazard, the assessor may evaluate a hazard to be "Remote," which means they believe the probability of occurrence is low but believe the hazard may happen once within the life of a project/system – i.e., perhaps once in 30 years.

"Quantitative" methods of probability evaluation use logical reasoning AND empirical or theoretical data - entered into mathematical equations (such as failure rate calculations, Boolean/logic formulas, etc.) - to explicitly calculate numerical probabilities.

If available and valid, quantitative data can help assign probability categories with a higher confidence level to obtain an accurate assessment. Table 5 can be used as a guide to determine the appropriate analysis.

APPROPRIATE APPLICATIONS OF QUANTITATIVE & QUALITATIVE ANALYSES
▪ Quantitative Analyses: o High-consequence situations/hazards o Specific hazards/mishaps requiring additional examination o Probabilistic safety requirements
▪ Qualitative Analyses: o Less complex programs o Rapid acquisition programs o Hazards associated with less significant potential mishap outcomes (marginal/negligible severities) o Programs with limited or no failure/reliability data

Table 5: METRO's appropriate application of Qualitative and Quantitative probability levels.

Generally, hazard risk probability is described quantitatively in potential occurrences per unit of time, miles, passengers carried, or trips/runs. A hazard risk probability may be derived from analyzing transit system operating experience, evaluation of METRO safety data, or historical safety data from a similar system. Table 6 defines the probability levels for both qualitative and quantitative analysis.

Description	Probability Levels for Qualitative Method		Probability Levels for Quantitative Method
	Likelihood of Event in Life of Specific Item	Occurrence Within Fleet or Inventory	Quantitative Probability Levels
Frequent	Likely to occur often in the life of an item.	Continuously Experienced	Probability of occurrence greater than or equal to 10^-1.
Probable	Will occur several times in the life of an item.	Will Frequently Occur	Probability of occurrence less than 10^-1 but greater than or equal to 10^-2.
Occasional	Likely to occur sometime in the life of an item.	Will Occur Several Times	Probability of occurrence less than 10^-2 but greater than or equal to 10^-3.
Remote	Unlikely, but possible to occur in the life of an item.	Unlikely, but can be reasonably expected to occur.	Probability of occurrence less than 10^-3 but greater than or equal to 10^-6.
Improbable	So unlikely, it can be assumed occurrence may not be experienced in the life of an item.	Unlikely to occur, but possible.	Probability of occurrence less than 10^-6.
Eliminated	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.		

Table 6: METRO's Qualitative and Quantitative probability levels.

8.6 Hazard Risk Assessment and Evaluation

When the Hazard Risk Severity Index is combined with the Hazard Risk Probability Index, the result is the **Risk Assessment Matrix** (Table 7). The Risk Assessment Matrix identifies the risk assessment index based on hazard category and probability and outlines the criteria for defining further actions based on that index.

Substantial property damage, death, serious injuries, and evacuation for life safety reasons are considered major or severe consequences based on mandatory reporting and require a Hazard Category Rating of High (Unacceptable).

More severe incidents that result in Catastrophic and Critical consequences require a comprehensive investigation in which one or more safety analyses are performed to enable management to understand the level of risk involved and the consequences of accepting the risk relative to the cost of reducing or eliminating the risk.

Hazard Risk ratings will be labeled as HIGH, SERIOUS, MEDIUM, LOW, and ELIMINATED.

- **HIGH** risk hazards (1A, 1B, 1C, 2A, 2B) that receive an unacceptable initial hazard analysis made by management, the safety committee, or the safety compliance officer receive immediate attention/control. A high hazard rating requires corrective action. Hazards that receive a high hazard rating will be elevated from the local hazard log.
- **SERIOUS** hazards (1D, 2C, 3A, 3B) that are undesirable may require corrective action and management decisions. Hazards that receive a serious hazard rating will remain on the local hazard logs until resolved.
- **MEDIUM** (1E, 2D, 2E, 3C, 3D, 3E, 4A, 4B) hazards may be acceptable with management review. Events from a medium hazard are less likely to occur and are less severe in nature.
- **LOW** (4C, 4D, 4E) hazards do not require review and are acceptable.
- **ELIMINATED** hazard is no longer present.

RISK ASSESSMENT MATRIX		SEVERITY			
		1. Catastrophic	2. Critical	3. Marginal	4. Negligible
PROBABILITY	A. Frequent	High	High	Serious	Medium
	B. Probable	High	High	Serious	Medium
	C. Occasional	High	Serious	Medium	Low
	D. Remote	Serious	Medium	Medium	Low
	E. Improbable	Medium	Medium	Medium	Low
	F. Eliminated	Eliminated			

RESOLUTION REQUIREMENTS		
High	Unacceptable	Correction Required
Serious	Undesirable	Correction may be required; Decision by management.
Medium	Acceptable w/ Review	With review and documentation by management.
Low	Acceptable	Without Review
Eliminated	Acceptable	No Action Required

Table 7: METRO's Risk Assessment Matrix displays the probability and severity of risk, followed by the risk resolution requirements by severity.

8.7 Safety Risk Mitigation

METRO's Safety Risk Mitigation process is the analysis and subsequent action taken to reduce the risk associated with an identified hazard to the lowest practical level. The elimination and/or mitigation of the perceived risk to a level calculated to be as low as reasonably practical must occur. This process is known as safety risk mitigation. Therefore, mitigation may be considered any activities or measures that address the hazard and control the safety risk probability and consequence severity. The most effective safety risk control/mitigation strategies typically rely on implementing additional safety controls or reinforcing existing controls.

METRO groups safety controls using the Three (3) E's of Safety:

1. Engineering
2. Education
3. Enforcement

The order of precedence for satisfying system safety requirements and resolving identified hazards are as follows:

1. **Design for Minimum Risk:** Design new facilities and equipment to eliminate existing and potential hazards. If an identified hazard cannot be eliminated, its associated risks shall be reduced to an acceptable level (see Risk Assessment Methodology in Section 8.3) during the design selection.
2. **Utilization of Safety Devices:** If an identified hazard cannot be eliminated or its associated risk cannot be reduced through design selection, that risk shall be reduced to an acceptable level using protective safety features or devices. A provision shall be made, and the procedure shall be issued for periodic inspection and functional checks of safety devices.
3. **Warning Devices:** When neither design nor safety devices can effectively eliminate identified hazards or reduce risk to an acceptable level, warning devices shall be installed. The warning device must produce an effective signal to alert individuals of the hazard. Warning devices should be standardized to minimize the probability of an incorrect personnel response.
4. **Develop Special Procedures and Training:** When it is impossible or impractical to eliminate hazards through design selection or adequately reduce associated risks through safety or warning devices, approved procedures and special training programs shall be used. Procedures may include the use of Personal Protective Equipment **(PPE).** Precautionary notations and warning signs shall be standardized. METRO employees who perform critical tasks require certification of personal proficiency.

8.8 Hazard Resolution

Identified hazard risks are evaluated, eliminated, or controlled in accordance with a resolution schedule. The schedule listed below is utilized to ensure an optimum safety level and expedite hazard resolution.

Rail-specific changes brought before the CCB for items with a final rating of 'Acceptable with Review" do not need to be reviewed by the department heads. Instead, a standing member of the Committee from their department may sign the approval document.

CRITERIA	RESOLUTION
High (Unacceptable) – Correction required.	The hazard must be eliminated or mitigated in the most expedient manner possible to a lower risk level before normal service may resume. Interim corrective action may be required to mitigate the hazard to an acceptable level while the permanent resolution is in development.
Serious (Undesirable) – Correction may be required upon decision by management.	It is recommended that a hazard at this level of risk be eliminated unless there is a detailed and documented decision to manage the hazard (i.e., with proper mitigations) until such time that required resources/technological advancements are available. Serious hazards and a detailed rationale for acceptance shall be formally issued to METRO Safety and the CCB for review for concurrence.
Medium (Acceptable with review)	Management must determine if the hazard is adequately controlled or mitigated in its present state. Management's detailed rationale shall be submitted to METRO Safety for review for concurrence.
Low (Acceptable without review).	No action is required.

Table 8: METRO's hazard criteria and recommended resolutions by category.

8.9 Hazard Risk Control

Most hazards identified in the system by personnel in the field are reported to the Rail Control Center. They are entered immediately in a reporting system (Train Control Center Log), automatically notifying the appropriate department. The Control Center may also contact the appropriate department via phone or radio. These hazards are to be reviewed by METRO Safety and entered into the risk registry (as appropriate).

PEC and Operational Engineering are notified when hazards are identified while reviewing the plans and specifications for equipment or facility modifications. According to the Capital Improvement Program Quality Assurance Manual, the identified hazards and options for resolution must be discussed in a special-purpose Design Committee for that project. These hazards are to be reviewed by METRO Safety and entered into the risk registry as appropriate.

Hazards identified after accidents/incidents, during data analysis or inspection, or logged in a safety reporting system are submitted to the responsible departments and tracked via the Hazard Log.

Employees are encouraged to report any unsafe condition to their immediate supervisor or the appropriate safety reporting system. If a resolution is not achieved at the division level, the issue is brought to the director or vice president of the respective department.

8.10 Hazardous Conditions Reporting and Monitoring

Once a hazard risk is identified, the Safety Department and the department where the hazard resides, with support from the Operational Engineering and/or PEC (as required), will assess the hazard to determine

its potential severity and probability of occurrence. The hazard will then be entered into the Hazard Log and monitored until resolved.

METRO will submit to TxDOT **by the 15th of each month** a summary of the preceding month's hazardous conditions that meet the criteria listed below:

1. **Unexpected service shutdown** for all, or a portion of, the rail system due to a safety-related or hazard, including:
   - Infrastructure damage
   - Cyber-security or ransomware attacks
   - Severe weather or local, state, or federally declared disasters
   - Infectious disease or public health reasons
2. **Near-misses** or close-calls
   - Any situation with no property damage and no injuries but where damage or injury could have occurred, given a slight shift in time or position.
3. **Employee or Contractor non-compliance** with rules and procedures, including:
   - Signal violations or overruns
   - Wrong/unintended route selection
   - Improper rail vehicle door opening (e.g., the wrong side, while moving, etc.)

The monthly hazard data will contain the following summarized information:

- Number of instances occurring in the previous month
- Date hazard was discovered or occurred
- Summary or description of each instance, including locations
- Hazard assessment, including probability and severity
- Responsible METRO department or employee tasked with resolving the hazard
- Status of hazard resolution (open or closed)
- Safety risk mitigation (actions to improve safety by lessening risk)

At a minimum, hazardous conditions assessed as 'Unacceptable' will be reported to the SSOA. The initial notification will occur within 24 hours of the occurrence or discovery of an unacceptable hazard and be submitted via the SSO Tracker system. All reasonable and practical attempts shall be made within the 24-hr. period and after to help reduce the risk of the "High" hazard as much as reasonably and practically possible until more permanent measures can be in place.

On a monthly basis, METRO will submit a consolidated hazard log or equivalent documentation for hazards discovered during the previous month and hazards that remain open. The hazard tracking log , including hazardous condition data, must contain, at a minimum, the following information:

- Date hazard discovered
- Summary or description of hazard, including location
- Hazard assessment, including probability and severity
- Responsible METRO department or employee tasked with completing the CAP
- Status of hazard resolution

8.11 Hazardous Conditions Investigation

A formal investigation shall be conducted in accordance with the METRO Accident/Incident Investigation Procedures. METRO will furnish personnel information and aid in completing an investigation as needed by the oversight agency to support the above task.

8.12 Safety Risk Register and Hazard Event Log

The Safety Risk Register and Hazard Event Log are critical tools for effective risk management in any organization. The Safety Risk Register is used to identify, assess, and prioritize potential safety risks, while the Hazard Event Log is used to track and document any safety incidents that occur. By implementing these processes, organizations can proactively identify and mitigate potential safety risks, as well as track and analyze safety incidents to identify opportunities for further improvement. More information regarding the Respiratory Protection Program can be referenced in the Safety Risk Register and Hazardous Event Log (Appendix B: List of Referenced Documents).

9.0 SAFETY ASSURANCE

This chapter describes how METRO will implement the SMS under Safety Assurance requirements. Safety Assurance explains how the Agency will measure and review its processes to comply with federal rulemaking. It ensures the ongoing, integrated assessment of the Agency's safety performance goals across departments and functions. METRO meets its safety objectives and safety performance targets through active system monitoring, rule checks, safety reporting, routine workplace observations, inspections, audits, and other activities designed to support safety oversight and performance monitoring, measurements, and coordination. TxDOT assurance methodologies are also in place to ensure the implementation of the PTASP by all METRO employees, contractors, and ESPs.

Safety Assurance is comprised of the following:

- **Safety Performance Monitoring and Measurement:** A transit agency must establish activities to monitor its system for compliance with and sufficiency of its procedures for operations and maintenance. The Agency monitors its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or not implemented as intended. Furthermore, the transit agency must monitor information reported through all internal safety reporting programs
- **Management of Change:** A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance, then evaluate the proposed change through its SRM process.
- **Continuous Improvements:** A transit agency must establish a process to assess its safety performance, then develop and implement a plan to address the identified safety deficiencies under the direction of the Accountable Executive.

Figure 3: METRO's Safety Assurance Process

9.1 Safety Performance Monitoring & Measurement

This section addresses the monitoring and measurement process used to collect safety data within the Agency. The SMS generates data and information that senior management requires to evaluate whether implemented safety risk mitigations are appropriate and effective and how well the Agency's safety performance aligns with established safety objectives and safety performance targets. Safety performance monitoring does not focus on monitoring individuals but monitors the Agency's safety performance through routine examinations of operations and maintenance activities.

Examples of METRO's safety performance monitoring activities include the following:

- Monitor employee safety reporting program.
- Monitor service delivery activities (including field observations).
- Monitor operational and maintenance data.
- Conduct safety surveys.
- Conduct safety audits, studies, reviews, and inspections.
- Conduct safety investigations.

9.2 Federal Transit Administration's Safety Performance Targets

To capture the broad and varied nature of public transportation, the FTA relies on measures that can be applied to all modes of public transportation and are based on data that is now generally collected in the National Transit Database **(NTD)**. The FTA's safety performance measures improve transit safety performance by reducing safety events, fatalities, and injuries. The safety performance measures selected by the FTA are intended to provide "state of the industry" high-level measures and help focus individual agencies on developing specific performance indicators and measurable targets relevant to their operations.

METRO's ASP must establish seven mode-specific safety performance targets in four categories:

1. **Fatalities:** Total number of reportable fatalities and rate per total Vehicle Revenue Miles **(VRM)**.
2. **Injuries:** The total number of reportable injuries to NTD and the rate per total VRM.
3. **Safety Events:** Total number of reportable events and rate per total VRM, and
4. **System Reliability:** Mean distance between mechanical failures by mode.

METRO'S Safety Performance Targets							
Mode of Service	Fatalities (Total)	Fatalities (per 100K VRM)	Injuries (Total)	Injuries (per 100K VRM)	Safety Events (Total)	Safety Events (per 100K VRM)	System Reliability (Failures/ VRM)
Rail Transit	1	0.033	38	1.265	93	3.096	15,000
BusTransit	2	0.004	232	0.505	261	0.568	6,500
Bus Rapid Transit	0	0.000	0	0.000	1	0.348	4,000
ADA / Paratransit	0	0.000	34	0.227	36	0.240	22,000

METRO Safety Performance Targets FY2024 categorized by Mode of Service based on NTD data three-year rolling average.

9.2.1 Fatalities

Fatality is defined as a death or suicide confirmed within 30 days of a reported event. It does not include deaths in or on transit property resulting from illness or other natural causes.

9.2.2 Injuries

Injuries are defined as any damages or harm to a person(s) due to an event requiring immediate medical attention away from the scene. The FTA has also established the term "Serious Injury," defined as any injury that:

1. Requires hospitalization for more than 48 hours, commencing within seven (7) days from the date the injury was received.
2. Results in a fracture of any bone (except simple fractures of fingers, toes, or nose).
3. Causes severe hemorrhages, nerve, muscle, or tendon damage.
4. Involves any internal organ, or
5. Involves second or third-degree burns, or any burns affecting more than five (5%) percent of the body surface.

9.2.3 Safety Events

The safety events measure captures all reported safety events that occur during transit operations and the performance of regular supervisory or maintenance activities. A reduction in safety events will support efforts to reduce fatalities and injuries, and damages to transit assets. Measuring the number of safety events by mode over vehicle revenue miles provides a safety event rate from which future performance can be compared.

Per NTD, Safety Events are:

- Collisions
- Fires (suppression)
- Derailments (mainline and yard), including non-revenue vehicles
- Hazardous Material Spills
- Acts of God
- Other Safety Events (i.e., events that do not fall into any other categories yet meet a reporting threshold other than immediate transport for medical attention for one person.)

9.2.4 System Reliability

The system reliability measure expresses the relationship between safety and asset condition. The rate of vehicle failures in service, defined as the mean distance between major mechanical failures, is measured as revenue miles operated divided by the number of major mechanical failures. This measures how well a fleet of transit vehicles are maintained and operated.

Performance measurement is a key aspect of an SRM process and provides the basis for continuous safety improvement. As part of the ASP's annual review, METRO will reevaluate its safety

performance measures and determine how they should be refined, develop sub-measures, and select performance targets. While the Safety Department will be responsible for tracking this information, all METRO Departments will be responsible for providing the information to the Safety Department.

In addition to the FTA performance target requirements, METRO departments report internal Key Performance Indicators **(KPI)** to the METRO Board monthly. These KPIs focus on Service and Reliability, Accidents, Security Incidents, and Customer Service. The KPIs ensure the highest level of leadership awareness of safety events, help to measure both leading and lagging indicators, and provide continual improvements Agency-wide.

9.3 Relationship Between Safety Performance & Transit Asset Management

The safety and performance of a public transportation system depend, in part, on the condition of its assets. When transit assets are not in a state of good repair, the consequences include increased safety risks, decreased system reliability, higher maintenance costs, and lower system performance.

Transit asset management is a strategic approach to improving and maintaining the condition of transit capital assets. MAP-21 required the FTA to define the term "state of good repair," develop objective standards for measuring the condition of capital assets and establish performance measures based on the state of good repair. As a result, Metro's Transit Asset Management department' has developed risk-based performance measures for systems and equipment related to the state of good repair standards. Examples include:

- Maintain an accurate and up-to-date capital asset inventory.
- Provide condition assessments for all facilities, sites, infrastructure, and rail assets.
- Assignment of Useful Life Benchmark.
- Management of a condition based on the state of good repair backlog.
- Management of prioritized multi-year capital repairs, upgrades, and replacements.

Refer to the Agency's Transit Asset Management Plan for METRO State of Good Repair details.

9.4 Performance Target Coordination with State & Metropolitan Planning Organization

By February 1st of each year, METRO's performance targets are made available to and in coordination with TxDOT, the Houston-Galveston Area Council, and the local Metropolitan Planning Organization. This information is intended to aid in the planning process and, to the maximum extent practicable, coordinate with the State and Metropolitan Planning Organization to select relative safety performance targets. METRO will make the Agency's Safety Performance Targets available to TxDOT SSO and the Houston-Galveston Area Council by submitting this safety plan by the required reporting deadline.

9.5 Internal Safety Reviews

Internal safety reviews determine overall compliance with METRO's policies, practices, procedures, regulations, and industry best practices applicable to performed operations and work. METRO has developed and implemented a process for the performance of ongoing ISRs. The purpose of conducting ISRs is to evaluate the effectiveness of the implementation of the ASP. This process ensures the implementation of the ASP and continuous evaluation of the Plan's effectiveness. An ISR of the ASP (Rail – mandatory; Bus – voluntary) is conducted annually, and all ASP components are assessed on a three-year cycle. (Appendix D: METRORail Three (3) Year Internal Safety Review Schedule (2022 - 2024))

ISRs include reviewing SMS components, safety procedures and practices, training, and all related documentation storage and records retention. Organizational functions subject to the ISR process include:

- Facility Inspections
- Maintenance Audits and Inspections
- Review of Rules, SOPs, Special Bulletins, and Orders
- Review of Training/Re-Certification Programs
- Emergency Response Planning, Coordination, Training
- Configuration Management
- Systems Modifications (review and approval)
- Safety Data Analysis
- Employee Safety Programs
- Hazardous Materials Program
- Interdepartmental Safety Goals and Objectives
- Occupational Safety and Health Programs
- Contractor Safety
- Procurement and Specification Engineering
- Drug and Alcohol Testing Program, and
- Any aspect or responsibility as outlined in this document.

To maintain ISR process integrity, an internal and external audit team is used to conduct safety reviews. The Safety Department does not perform checks of those functions where it is directly responsible for implementation.

9.6 Internal Safety Review Process

The ISR review package shall include the following information for both Rail and Bus, as applicable:

- Identify the departments, employees, and contractors responsible for scheduling, managing, and conducting the annual review.
- PTSCTP Certification for personnel conducting the ISR.
- Identify the departments and functions subject to review.
- At a minimum, the annual approval request shall identify the RTA personnel participating in the review and include contact information, interview schedules, and a listing of the on-site audit locations.
- Develop templates, checklists, and procedures for conducting the ISR. These materials shall include sufficient criteria to determine if all audited elements are implemented as intended.

9.6.1 METRORail Internal Safety Review Process

METRO's CSO announces the mandatory ISR to ensure each department's full support and participation. Executive leadership and senior managers ensure that their areas fully participate in the ISR process. At the discretion of TxDOT, TxDOT employees or contractors may observe the ISR's on-site portion. METRO shall develop and annually submit to TxDOT for approval a review package

that addresses the elements of the ASP over a three-year cycle. This review package shall be submitted in time to receive TxDOT approval no less than 60 days before conducting the ISR.

METRO will submit the ISR final report to TxDOT within 60 days of the closeout meeting. In no event will METRO submit the ISR final report later than **February 1st**.

At a minimum, the annual approval request shall identify the METRO personnel participating in the review and include contact information, interview schedules, and a list of the on-site audit locations.

The report must include the following:

1. A formal letter signed by the Accountable Executive that:
    - Certifies METRO's compliance with its ASP, or
    - Specifies non-compliance with its ASP:
        - The activities that METRO will take to achieve compliance.
        - The date that those activities will be completed, and
        - The projected date that compliance will be achieved.
2. The ISR final report must contain the following:
    - A list of the ISRs conducted for that year.
    - Identification of the departments and functions reviewed.
    - An updated Three-Year ISR Schedule.
    - Findings of noncompliance and recommendations as applicable.

9.6.2 METRO Bus Internal Safety Review Process

Although not required by the FTA, TxDOT, or any other oversight agency, METRO will voluntarily conduct safety reviews on bus operations as an industry best practice. Historically, Bus ISRs have been conducted by APTA; however, through SMS implementation and continuous improvement, METRO will establish an ISR process that mirrors the Rail ISR.

9.7 Accident Investigation

The purpose of an Accident/Incident Investigation is to gather and assess facts to determine the cause(s) and identify corrective measures to prevent a recurrence. An Accident/Incident investigation intends not to affix blame or subject persons to liability for their actions nor to recommend disciplinary action.

Investigation results may be used to learn more about mechanical and other failures and human factors and correct unsafe conditions. Therefore, METRO's Safety Department will investigate accidents/Incidents that are not criminal in nature in accordance with METRORail Accident/Incident Investigation Procedures. The accident procedure complies with 49 CFR 674 and 673, TxDOT SSO Program Standard for rail incidents/accidents, and incorporates the APTA Standard for Rail Transit Accident/Incident Investigation operating practice as applicable.

There are separate investigation procedures for bus accidents and occupational incidents. Bus accidents are investigated using the 'Bus Accident/Incident Investigation Procedure' while occupational accidents are investigated using the 'Occupational Incident Investigation Procedure'. For more information, please refer to METRO's Occupational Incident Investigation Procedure.

9.8 Corrective Action Plan

A CAP is a set of actions to correct an issue, problem, non-compliance, or underperformance. It is essentially a plan to improve performance and/or reduce risk.

METRO shall develop and implement CAPs to address risks, hazards, and findings identified through investigations, the hazard management process, audit findings, ISR findings, and instances of non-compliance with federal and state requirements or the PTASP policies or procedures. The CAP shall describe actions the Agency will take to minimize, control, correct, or eliminate identified risks and hazards. It will also include the schedule for taking those actions and the individual(s) and or department(s) responsible for taking those actions.

All CAPs are managed and reviewed monthly by the Safety Department's Compliance and Analysis Group.

9.9 TxDOT State Safety Oversight Related Corrective Action Plans

METRO will coordinate with TxDOT to manage the Agency's rail CAPs. Federal Rule 49 CFR Part 674.7 defines a CAP as a plan developed by an RTA that describes the actions the RTA will take to minimize, control, correct, or eliminate risks and hazards and the schedule for taking those actions. The SSO Tracker system is the required method by which METRO submits CAPs for TxDOT review and approval, requests CAP closure, and informs TxDOT on the status of open CAPs.

METRO shall develop and submit to TxDOT CAPs for the following:

- Results from safety event investigation that identify causal and contributing factors.
- Findings or deficiencies identified through METRO safety reviews or audits.
- SSO reportable hazards are identified through METRO's hazard management process.
- Findings from the Triennial Audits and targeted safety audits performed by TxDOT, and
- METRO Risk Assessments.

TxDOT will evaluate whether the findings or recommendations require a CAP for any instance where a safety event on the rail system is the subject of an investigation by the NTSB or FTA. TxDOT shall order METRO to develop and carry out a CAP if warranted.

METRO will submit CAPs through the SSO Tracker system within 30 days of discovering an issue that requires corrective action. Depending on the issue's complexity and at TxDOT's discretion, additional time may be granted to prepare the CAP. TxDOT must review and approve all proposed corrective actions before METRO implements the CAP. An exception is made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that TxDOT is notified within 48 hours of implementation.

METRO may implement the CAP once TxDOT approval is received. During CAP implementation, any significant changes to the approved CAP must receive TxDOT approval before changes are made. Significant changes may include changes to the identified actions, personnel/departments responsible for implementation, or completion date.

METRO places great emphasis on the importance of responsible reporting and takes a proactive and constructive approach to ensuring the safety of its operations. In the event of any immediate or emergency corrective actions, METRO acts swiftly and effectively, notifying TxDOT within 48 hours of implementation.

All corrective actions are prioritized for implementation using the Risk Assessment Matrix. They are assigned a responsible department and person to lead the corrective action effort and close the corrective action upon resolution.

9.10 Safety Data Collection & Analysis

Safety data is collected through various sources, including near-miss information, accident investigation reports, ISRs, safety committee meetings, occupational injury reports, incident reports, accident matrix, system monitoring (including testing and inspection records), and hazard management program. The information collected from these sources is analyzed for trends and/or potential safety impacts. Identified areas of concern are reported to appropriate personnel in specific project reports, memos, and recommendations from the Safety Department and presented at various committees and staff meetings (i.e., PSC, SMSC, etc.).

The Safety Department collects, classifies, and analyzes accident/incident, occupational injury, and illness data to identify trends, hazards, or unsafe conditions. This data comes from multiple sources, such as Train Control Center Logs, inspections, audits, and the Employee Safety Reporting Program.

All METRO modes are responsible for maintaining effective statistical surveillance over the METRO System. The various modes identify accident trends and areas of concern or needed improvement and routinely communicate the findings to affected or interested METRO departments through periodic performance reports and immediately, when required, through exception reports.

Each mode collects and classifies all METRO accident and incident data and stores the data in a database. The modes also compare the current accident experience with the accident experience in previous years to identify trends and areas of concern or improvement. The databases also prepare reports and studies requested by other METRO departments or as required or mandated by external agencies such as the FTA, APTA, and TxDOT. The data can also be distributed to external public transit agencies upon request.

The monthly accident reports are transmitted to the Operations Department to aid in concentrating their efforts to eliminate or control the sources of accidents. The Directors/Managers can utilize these accident statistics to identify accident trends and initiate CAPs. Management may request studies and accident analysis to identify trends or areas where training effort or additional supervision should be directed.

9.11 Drug & Alcohol Program

METRO enforces a zero-tolerance policy regarding drug use and alcohol misuse. All employees are required to be free of prohibited drugs and/or alcohol when performing job duties. METRO's Drug and Alcohol Policy applies to employees in safety-sensitive positions, employees who may apply for or transfer into a safety-sensitive position, and contractors who perform safety-sensitive job functions.

METRO'S Drug and Alcohol Program complies with 49 CFR Part 40, 49 CFR 655, and all other applicable regulatory updates. The Drug and Alcohol Program is managed by the Director of Drug & Alcohol and supporting staff. Please see METRO's Drug and Alcohol Program for a detailed outline of METRO's Drug and Alcohol Program Policy.

Examples of Prohibited Drugs include:

- Marijuana/THC *(Be aware of CBD products)*
- Opioids *(Codeine/Morphine)*
- Phencyclidine *(PCP)*
- Amphetamines *(Ecstasy/METH)*
- Cocaine

DRUG & ALCOHOL TEST CATEGORIES	
Test Type	**Employee Applicability**
Pre- Employment	All applicants and employees off for 90+ days
Random	Safety-Sensitive employees only
Post-Accident	All employees
Reasonable Suspicion	All employees
Return to Duty /Follow-up	All employees who have successfully completed the SAP requirements after substance abuse rehabilitation.

Table 9: METRO Drug & Alcohol test categories and employee applicability.

9.12 Inspections

METRO conducts inspections to ensure that all systems, facilities, and equipment operate as required, or in the event of failure or degradation of functionality, operational safety is not compromised. In all modes of transportation at METRO, facilities and equipment are inspected routinely according to company policies, SOPs, guidelines, and recommendations required by federal, state, and local regulations. Hazards are identified, corrected, and monitored through the METRO inspection processes. The following sections outline the inspection processes by transportation mode.

9.12.1 METRORail Inspections

9.12.1.1 Facilities, Structures, & Equipment Inspections

Rail System Inspections are regular checks of all rail system elements that can affect safe operation. Major elements in the rail system that directly affect safety are:

- Rolling Stock
- Rail Guideway
- Overhead Power Distribution
- Signal System
- Rail Stations and Facilities

The goal is to maintain a readiness level that ensures safe, efficient, and reliable transit service. Preventive maintenance activities on wayside equipment and other safety-critical equipment are performed and documented in accordance with manufacturers' recommended practices, the APTA Manual of Standards and Recommended Practices for Rail Transit Systems, and other applicable regulations/guidelines. Checklists are used in conducting

inspections of facilities and equipment. METRORail maintains all rail system maintenance plans, manuals, and checklists on its Rail Operations intranet page.

Light rail vehicles are inspected and maintained in accordance with the manufacturer's recommended preventive maintenance schedule and the METRORail Vehicle Maintenance Plan. Periodically, rail cars are serviced outside of the interval period to utilize resources and ensure safety efficiently. These inspections include but are not limited to pantographs, lights, Deadman control, console horns, wheels, motors, brake system, shock absorbers, springs, couplers, windows, batteries, doors, floors, steps, and body. Additional information is listed on the Rail Vehicle Maintenance section of the Rail Operations Intranet page.

Track maintainers inspect the track for defects. This inspection includes rail, roadbed, spikes, and other rail fastening systems such as bolts, ties, welded and insulated joints, and switches. An inspection of the entire line is conducted weekly. Mainline switches are inspected monthly for defects. Ultrasonic rail flaw detection and geometry of mainline track gauge are performed annually. Major track maintenance is performed on a contractual basis. Additional information is listed on the Track section of the Rail Operations Intranet page.

Overhead contact wires, and Overhead Catenary System support structures (such as poles, balance weight inspections, grounding straps, and cantilever arms), are checked regularly (quarterly, semi-annual, or annually). These are maintained and checked for defects such as wire wear, broken or loose hangers, broken insulators, dislodged feeder taps, and obvious misalignment. The electrical distribution from the traction power substation to the overhead contact system is inspected and maintained monthly, with more in-depth inspections done quarterly and annually. PEC manages tests for stray current and corrosion control. Additional information is listed on the Traction Power section of the Rail Operations Intranet page.

The Signals and Communication Section maintains various components of the Light Rail System that follow either recommended or mandated tasks. For a detailed overview of the tasks, refer to the Signals & Communication Maintenance Plan, which can be found on the Rail Operations Intranet page.

PEC will routinely inspect all METRO bridges and structures. PEC will ensure that all inspections are carried out according to the METRO's Bridge Inspection Manual METRO complies with state and federal regulations relating to bridge inspections. Where a bridge is shared with a public roadway, METRO will only inspect and maintain the section of bridge that is directly loaded by METRO rail guideway and facilities. Although METRO does not directly coordinate with TxDOT to conduct inspections, METRO will notify TxDOT of any issues observed during a routine inspection.

Inspection and maintenance of facilities and related equipment are performed per manufacturers' manuals, codes, standards, and established procedures. Facility maintainers/cleaners, rail personnel, and/or MPD personnel perform a visual inspection of rail stations and facilities daily for safety hazards and ensure their security. Noted defects that affect passengers are reported to the Rail Operations Control Center. The appropriate department is contacted for repairs.

Regularly scheduled inspections and/or cleaning occurs for the following rail station items:

- Walking Surfaces (tactile strips, ramps, stairs, debris removal)
- Platform Surface/Railings/Pedestrian Poles
- Public and Safety Signage
- Emergency Call Station/Public Address System
- Lighting/Electrical
- Ceiling/Canopy
- Trash Cans
- Graffiti Removal
- Fire Extinguisher (where applicable)
- Restrooms (where applicable)
- Escalators/Elevators (where applicable)
- Guard Booth (where applicable)

This work practice is performed at all scheduled inspections and maintenance services to prolong the life of the equipment. Preventive Maintenance inspections and services are required to be performed daily, weekly, monthly, quarterly, or annually. The Preventive Maintenance program is based on a master list of essential equipment containing the facility's equipment density and frequency of inspection. Preventive Maintenance schedules and checklists are based on METRO experience and equipment manufacturer's service recommendations.

Work requirements beyond the capability or capacity of in-house cleaners and mechanics are performed through service contracts. They include areas such as:

- Landscape Maintenance
- Janitorial Services
- Elevator Maintenance
- Fire Protection System Inspection and Services
- Heating, Ventilating, and Air Conditioning Services
- Standby Generator Services
- Waste Removal Services

Critically hazardous conditions noted during inspections are immediately reported to the Rail Operations Control Center. The Rail Operations Control Center, in turn, reports the deficiency to the appropriate METRO department and the Safety Department. The deficit is recorded in the affected maintenance department's database. Defects not requiring immediate attention are logged in the appropriate maintenance department's database and scheduled for future repair or corrective action. The Safety Department tracks all deficiencies reported by the Rail Operations Control Center through the Hazard Management process. The adequacies of control measures for safety-critical equipment and systems are evaluated to ensure the proper corrective actions are in place to control potentially hazardous conditions for passengers, employees, contractors, and the general public.

9.12.1.2 Maintenance Activities & Inspections

Inspection and maintenance must be effective to ensure that all revenue and non-revenue vehicles, wayside systems, and equipment support safe and reliable operations. This way,

operational safety is not compromised in the event of failure or degradation of functionality. This aspect of inspection and maintenance directly impacts the safety of METRO customers, employees, contractors/subcontractors, emergency response agencies, and the general public.

Implementation of inspection and maintenance activities is under the direction of:

- Facilities Maintenance for plant equipment, stations, and buildings.
- Maintenance of Way Divisions for the signal system, track, overhead contact system, traction power substations, and System Control and Data Acquisition system.
- Rail Vehicle Maintenance Department maintains the light rail vehicles and support equipment, and
- The Support Vehicles Division maintains all other non-revenue vehicles.

Inspection and maintenance of all vehicles, equipment, and wayside systems are performed per manufacturers' manuals, codes, standards, and established procedures using written checklists. The goal is to maintain a readiness level that ensures safe, efficient, and reliable transit service. Preventive maintenance activities on light rail cars, vehicles, wayside equipment, and other safety-critical equipment are performed and documented in accordance with manufacturers' recommended practices. Inspection frequency and maintenance schedules of other safety-critical systems and structures (e.g., bridges, signal systems, facilities, etc.) are referenced in applicable maintenance plans administered by the responsible department (e.g., Bridge Inspection Manual issued by the PEC department).

The maintenance departments use a database system to track scheduled inspections and maintenance of vehicles and equipment. An active log of all in-service failures in the database and/or hardcopy is maintained. Although such failures may not necessarily lead to an incident or accident, all "in-service" failures are documented to review and determine causal factors. Corrective action of "in service" failures is coordinated with the various rail operations departments and the Safety Department, as appropriate.

Safety-critical equipment not meeting established requirements is removed from service and/or tagged or locked out. Vehicles or equipment involved in an accident are inspected by qualified personnel before being placed back into service.

9.12.1.3 METRO Bus Inspections

Major elements in the bus system that directly affect safety are:

- Vehicles
- Right of Way
- Bus Shelters
- Bus Stop Signs
- Transit Centers
- Park & Rides

The goal is to maintain a readiness level that ensures safe, efficient, and reliable transit service. Preventive maintenance activities on equipment and other safety-critical equipment are performed in accordance with manufacturers' recommended practices and the APTA Manual of Standards and Recommended Practices for Bus Transit Systems and are documented. Checklists are used in conducting inspections of facilities and equipment.

Inspections and maintenance of all vehicles, equipment, and wayside systems are performed per the manufacturer's manuals, codes, standards, and established procedures using written checklists. The goal is to maintain a readiness level that ensures safe, efficient, and reliable transit service. Preventive maintenance activities on vehicles and other safety-critical equipment are performed per manufacturers' recommended practices and documented.

Inspections and maintenance of facilities and related equipment are performed per manufacturers' manuals, codes, standards, and established procedures. Bus inspectors, facility maintainers/cleaners, and/or MPD personnel visually inspect bus shelters and facilities daily for safety hazards and assure their security. Noted defects that affect passengers are reported to System Control. The appropriate department is contacted for repairs.

Critically hazardous conditions noted during inspections are immediately reported to Bus Control. Bus Control, in turn, reports the deficiency to the appropriate METRO department and the Safety Department. The identified defect is reported to the appropriate maintenance manager for corrective action and recorded in the affected maintenance department's database. Deficiencies not requiring immediate attention are logged in the appropriate maintenance department's database and scheduled for future repair or corrective action. The Safety Department receives copies of all deficiency reports for tracking through the Hazard Management process. The adequacies of control measures for safety-critical equipment and systems are evaluated to ensure the proper corrective actions are in place for hazard resolution.

9.12.2 Hazardous Materials & Federal, State, & Local Regulations

METRO ensures its employees' health and well-being through routine inspections that identify, control, or eliminate health hazards in the workplace. Comprehensive health programs and policies have been established to protect METRO workers and comply with Occupational Safety and Health Administration regulations. In addition, the Drug & Alcohol Department contracts a third-party vendor to provide employee medical pre-employment and routine evaluations based on an individual's anticipated exposures to safety and health hazards.

METRO's Environmental Health & Safety Division is responsible for developing and implementing employee safety and health training programs. The following programs and activities are performed by METRO to fully comply with all local, state, and federal requirements relating to hazardous materials. Training of METRO personnel who handle hazardous materials is conducted via the training classes and programs identified in Sections 9.12.2.1 – 9.12.2.4 below. For more information, please refer to METRO's Industrial Safety Manual.

9.12.2.1 Hazard Communication Program

METRO's Hazard Communication Program complies with all applicable state and federal regulations. In addition, the Program is now aligned with the Globally Harmonized System of Classification and Labeling of Chemicals, which improves the quality and consistency of hazard information in the workplace. Such improvements ensure a safe workplace for employees by providing easily understandable information on the appropriate handling and safe use of hazardous chemicals and harmonizing U.S. hazard communication rules with those used internationally. Under this Program, the Procurement Department requires chemical vendors to place hazardous warning labels on their containers and provide METRO with product Safety Data Sheets (**SDS**). Furthermore, METRO requires all employees to utilize hazardous warning labels on all secondary chemical containers.

Before usage, the Safety Department must approve all chemicals at METRO facilities, including contractor-supplied chemicals. Waste streams are evaluated in accordance with environmental regulations, namely 30 TAC Chapter 335. Waste profiles and characterizations are documented and maintained as required. Waste streams are evaluated based on process, knowledge, and/or analytical results. SDS for all METRO chemicals are maintained on-site and are accessible to staff via the METRO Intranet.

9.12.2.2 Respiratory Protection Program

METRO's Respiratory Protection Program establishes a policy for selecting, using, and maintaining all respiratory protective equipment used in an industrial environment. The Program provides for any necessary medical evaluations to ensure the safe use of respirators. The requirement for using respirators is based on health hazard evaluations performed by the Safety Department. More information regarding the Respiratory Protection Program can be referenced in the Respiratory Protection Plan (Appendix B: List of Referenced Documents).

9.12.2.3 Bloodborne Pathogen Program

METRO's Bloodborne Pathogen Program provides guidelines that enable its employees to protect themselves from occupational exposure to blood and/or other potentially infectious materials that may contain certain viruses and bacteria.

9.12.2.4 Spill Prevention, Control, & Countermeasure Program

METRO's Spill Prevention, Control & Countermeasure **(SPCC)** Program sets forth spill response procedures to ensure all employees who work with hazardous chemicals are informed of the potential hazards. METRO's SPCC Plan outlines specific spill response procedures, including remediation activities, safety concerns, Agency contact information, and disposal procedures. Training is provided to spill response personnel annually as required by 40 CFR Part 112. Additionally, specific spill training is provided to personnel that responds to off-site spills, including leaks and spills from METRO buses and non-revenue vehicles. Training is conducted at each facility and during all shifts to ensure appropriate existing and new employees are adequately trained.

9.12.3 Hazardous Waste

METRO uses the Federal Hazardous Waste Uniform Manifest for all hazardous waste streams and utilizes a bill of laden for non-hazardous and universal waste streams. All METRO waste is transported and disposed of off-site. In addition, METRO personnel periodically collect analytical samples from waste streams with an unknown waste category status, such as potentially contaminated soil resulting from construction projects.

METRO waste disposal contractors collect field samples before picking up and transporting waste streams to ensure that other chemicals have not been inadvertently mixed in. METRO inspects contractors and their respective disposal facilities before issuing an environmental contract to ensure compliance with applicable regulations. Additionally, an environmental compliance clause is included in METRO contracts.

METRO promotes recycling and attempts to recycle and/or minimize waste streams, including used oil, oil filters, anti-freeze, tires, batteries, and used solvents to reduce employee exposure. Due to an extensive effort over the past decade in recycling efforts and waste minimization, METRO's current facilities are considered "Conditionally Exempt Small Quantity Generators." METRO complies with all reporting requirements, including Annual Waste Summary reporting, SARA Title III Tier Two reporting, and the Texas Waste Reduction Policy Act regulations, including Pollution Prevention Plans.

9.12.4 Storage of Hazardous Materials

Hazardous material storage will be done in accordance with federal, state, and local requirements. Large quantities of hazardous materials and/or fuels are stored in approved underground or above-ground storage tanks. Primarily unleaded gasoline, diesel fuel, and waste liquids are stored in these containers. Applicable regulations pertaining to Underground Storage Tanks and Aboveground Storage Tanks are adhered to, including 40 CFR Part 112, SPCC, and the State of Texas regulations codified in 30 TAC Chapter 334. Additionally, METRO adheres to the City of Houston Fire Marshall ordinances and permits for storing potentially hazardous materials, including liquid fuels and compressed gas cylinders.

9.12.5 Audits & Inspections

Audits regarding Hazardous Materials may or may not include all requirements listed in this ASP. Other audits, such as for wastewater, may be required by other federal, state, and local laws and requirements.

Safety Department personnel verifies compliance with safety and health programs. It audits PPE use through surveys and inspections of facilities and fieldwork sites; analysis of injury/illness reports, including collecting and classifying; and analyzing industrial or workplace injury and illness data.

METRO conducts periodic internal audits at work facilities to ensure all hazardous materials and waste streams are handled, stored, and disposed of properly. The internal audit involves a site walk-through, interviews with site personnel, a review of materials, and periodic review/renewal of waste disposal contracts handled by the Procurement Division. All internal audit findings are documented

and include specific information regarding potential concerns, contacted personnel, and a timeline to rectify potentially non-compliant issues.

Environmental inspections also evaluate storage containment areas, labeling and placarding, and safety concerns relating to hazardous materials. METRO periodically contracts outside consultants to assist in environmental compliance, including hazardous materials and waste management issues.

9.12.6 Waste Stream & Environmental Reporting Systems & Requirements

The State of Texas Environmental Electronic Reporting System **(STEERS)** is used by METRO to maintain waste streams and environmental reporting. The Environmental Compliance Officer (Safety Department) and Supervisor of Environmental Services (Facilities Maintenance) are responsible for updating information in STEERS on an as-needed basis. Additionally, METRO subscribes to an online environmental and safety service, which includes periodic regulatory updates that allow METRO to stay abreast of new requirements.

9.12.7 Risk-based Inspections

Risk based inspections (RBI) address TxDOT's authority and capability to enter and conduct inspections of the rail agencies, including access for inspections that occur with and without advance notice. Additionally, TxDOT policies and procedures will address inspection access and data collection from each RTA to support its risk-based inspection monitoring and prioritization activities, including data that the RTA collects when identifying and evaluating safety risk.

9.13 Employee Safety Survey

METRO's Safety Department conducts safety surveys to learn more about the current state of the Agency's safety culture. The surveys are administered Agency-wide via online or written forms. Information is captured from senior management, office administration staff, field and operator personnel, and the union.

Upon completion, the results from the safety surveys are collected, and the comments are analyzed to determine which areas METRO can focus on for improvement. METRO shares the results with the executive leadership and employees.

9.14 Rules Compliance

Rules Compliance is the state of being in accordance with established standards, processes, procedures, methods, and regulations. METRO has developed Rule Books, SOPS, and departmental procedures that govern safety and operations adherence.

The METRO Employee Performance Code and Work Rules govern operations during normal and abnormal conditions. Rules and procedures for individual departments, such as Maintenance rules and procedures, are contained in departmental bulletins and Manufacturers' Manuals.

Sections 9.14.1 and 9.14.2 below illustrate the rules compliance processes for METRO modes.

9.14.1 METRORail Rules Compliance

The METRO Rail Rules and Procedures for Rail Operations (hereafter referred to as METRORail Rule Book and METRORail SOPs govern rail operations during normal and abnormal conditions and are considered safety-critical documents. Rules and procedures for individual departments, such as maintenance rules and procedures, are contained in their departmental bulletins and Manufacturers' Manuals (subject to formal document control procedures). It is the responsibility of the Rail Transportation Department to establish the rules for operating and maintenance personnel through the issuance of bulletins and a biennial revision of the METRORail Rule Book. SOPs are also reviewed triennially for any updates or corrections.

The METRORail Rule Book and SOPs are also analyzed following an accident or incident to ensure they provide for the rail system's safe operation in routine and emergency conditions. The Rail SOP Committee is primarily responsible for developing, updating, distributing, and revising the SOPs for operating and maintenance personnel. Facilities Maintenance Management is responsible for developing, updating, and revising facility maintenance and inspection procedures.

Approved rule revisions are made through the issuance of Rail Bulletins. All METRORail Rule Book revisions are tracked through a revision page inserted by the document manager at the beginning of each book.

METRO has a process under which Operating Rules and Procedures are monitored continuously by Rail Supervisors, Superintendents/Assistant Superintendents, Chief Controllers, Directors, Rail Safety Officers, and Rail Training personnel. These groups are responsible for observing and evaluating proficiency and adherence to rules, policies, and procedures through periodic field and onboard observations. Each rail operator undergoes at least one ride check per quarter.

The field/onboard operational safety checks results are forwarded to the Superintendent(s) of Rail Transportation for review and follow-up for appropriate action as required.

Rail Supervisors advise Rail Control of flagging arrangements that need modification, Train Order restrictions that need amendment or cancellation, or work that needs suspension. All worksite observations are documented on the appropriate form.

In addition to operator proficiency evaluation, Operations Control Center personnel and Rail Supervisors undergo proficiency testing of rules and procedures on a biennial basis through written tests and simulations.

Management observes work practices to ensure compliance with rules and procedures. Observations include working along the right of way and yards; proper use of PPE; fire prevention practices; flagging procedures; traction power de-energizing; other safety-critical rules and procedures. Violations of rules and procedures are documented, reviewed, and addressed. Disciplinary action is taken if required. Exams are administered to employees to test their knowledge of various systems according to the employee's learning level. According to the Rail Maintenance Training plan, the Learning Levels are Basic, Intermediate, and Mastery. The exams help identify potential deficiencies in the administered training or if the employee needs additional training.

Non-Rail employees and contractors who work in the METRORail Safety Zone also receive track safety training. Rail Supervisors and Safety Department personnel monitor adherence to rules and procedures governing proper conduct while working in or adjacent to the rail right of way.

9.14.2 METRO Bus Rules Compliance

METRO has a process under which Operating Rules and Procedures are monitored continuously by Service Supervisors, Managers, Superintendents/ Chiefs of various departments, Directors, Safety Department Personnel, Bus Trainers, and Training Specialists. These observe and evaluate proficiency and adherence to rules, policies, and procedures through periodic field and random onboard observations. As a best practice, METRO routinely conducts ride checks of bus operators. The Bus Operator's safety ride checks are recorded and placed in the Operator's file. Safety's ride-check activity results are forwarded to the Bus Operating Facility Superintendent and Training Manager for review and follow-up for appropriate action, including disciplinary action, as required.

Bus Superintendents and Foremen observe shop maintenance, facilities maintenance, and work practices to ensure compliance with rules and procedures. Violations of rules and procedures are documented and reviewed, and disciplinary action is taken if required.

9.15 Procurement Procedures

The Procurement Department works in conjunction with Risk Management and Safety for the following tasks:

- Procurement of PPE and chemical products.
- Providing oversight of hazards introduced during the procurement process, and
- Outlining safety requirements in specific contracts and ensuring vendor compliance.

The purchasing process begins by preparing and submitting a request to the Procurement Department. Procurement planning considers the safety, technical, business, management, and other acquisition control issues of the request from inception to completion. The Risk Management Sr. Analyst consults with Safety Department management to ensure a safety review, procurements of safety-critical systems, and purchases that modify or change the configurations of the rail system. The Risk Management Sr. Analyst annotates the procurement system to document the Safety Department remarks. Please refer to the METRO Procurement Manual and Procurement Department guidelines for further details on the procurement process.

Operational and passenger safety are the highest priorities when defining vehicle design requirements. Design criteria are established to ensure all equipment meets or exceeds state and federal standards/regulations governing the equipment at the time of design conception. The contract specifications cover compliance verification, commencing with the design phase, and periodic inspections/testing during the construction phase, performed by qualified consultants. A thorough inspection and system testing are performed before the equipment is conditionally accepted.

Some of the Procurement Department's other responsibilities include:

- Ensuring that contractors meet requirements related to the safety of METRO employees, property, and the public.

- Annually reviewing inventory requirements for defined safety-critical items.
- Reviewing and coordinating with Risk Management, Safety Department, and Operations Training as required for each proposed contract to determine any safety implications, including whether safety performance standards should be specified, and
- Assigning responsibility for monitoring the safety provisions of each contract to the Project Manager/Contracting Officer, who will coordinate with the Safety Department.

9.16 Management of Change

Management of Change is critical to having an effective Safety Assurance program. Any change may introduce new hazards and safety risks into transit operations. METRO has established criteria that define when a change must be evaluated through the Safety Assurance process. When a proposed or identified change meets or triggers METRO-established criteria, METRO uses the Safety Assurance process to review existing mitigations to determine if they are sufficient or if new mitigations are necessary. METRO's Change Management process assures that changes to existing operations and extension projects, regardless of mode, are reviewed according to existing federal, state, and local standards and identify and assesses potential hazards before making changes. The following sections explain METRO's Change Management process:

1. System Modification and Expansions
2. Configuration Management
3. Safety & Security Certification

9.16.1 System Modifications & Expansions

The PEC Department is responsible for the rehabilitation, renewal, construction, and modernization of METRO facilities and physical plants. The EVP of PEC is responsible for ensuring that the hazard resolution process includes all hazards associated with system design expansions or modifications.

The Project Management Plan contains a system of planned actions and responsibilities that ensure requirements for capital development, procurement, design, construction, post-construction, and administrative activities of capital projects are appropriately carried out and produce quality results. The Project Manager is responsible for submitting the signed Design Review Comment Sheets to all METRO departments, the CSO, Chief Operating Officer (**COO**), and other department personnel responsible for documentation review.

All METRO departments or units responsible for managing or administering Capital Improvement Plan projects must comply with the Project Management Plan. Compliance with the uniform methods, standards, and procedures of the Capital Improvement Plan ensures the highest quality of Capital Program performance.

For METRORail, the Rail Vehicle Maintenance Department is responsible for overseeing the restoration, renewal, and modernization of METRO rail vehicles. The Sr. Project Manager of Rail Vehicle Maintenance is responsible for ensuring that the hazard resolution process includes the hazards associated with rehabilitation, modifications, and procurement of new rail vehicles.

The Director of Signal & Communications and the Chiefs of Track and Traction Electrification Systems are responsible for their specific areas. They are also responsible for ensuring the hazard resolution process includes the hazards associated with rehabilitation, modifications, and procurement of rail-related items.

Modifications are administered by the CCB Committee, which is responsible for reviewing and documenting approvals and modifications to all initiated and current baseline documents.

For METRO Bus, the Operations Department is responsible for overseeing METRO buses' rehabilitation, renewal, and modernization. Bus Operations Maintenance Department Technical Service Division is responsible for testing and approving modifications to buses. The PEC Department is responsible for the rehabilitation, renewal, and modernization of work facilities. In addition, both departments are responsible for ensuring that the hazard resolution process includes the hazards associated with rehabilitation, modifications, and procurement of new or refurbished equipment, systems, or facilities.

9.16.2 METRORail Configuration Management

METRO's Configuration Management process ensures appropriate documentation of the physical configuration and functional accuracy of all METRO facilities, vehicles, and equipment. Changes to the system and/or subsystem(s) will not be made without first determining, by the affected department and the Safety Department, how the changes might affect the system's safety. These changes may involve the existing system or proposed design and construction. If the proposed change is an item listed on the Certifiable Elements List, it must go through METRO's Safety Certification and the Configuration Management Process.

The CCB, which is responsible for reviewing and documenting approvals and modifications to all initiated and current baseline documents, implemented the following procedures to guide the Configuration Management Process:

- The Configuration Management of METRO Baseline Documents: 107 Administration provides a process that establishes and controls changes to program and project baseline documentation while ensuring that only the most current information is in use by the project participants.
- The METRORail Configuration Management Procedure 001 establishes methods to control changes made to the existing configuration. This includes all METRO Rail capital infrastructure, facilities, rolling stock, software, and other assets needed to operate facilities and equipment that provide service to METRO's customers.

Configuration Management is responsible for implementing changes to an existing facility, subsystem, or vehicle. Subsequently, it is the responsibility of the requesting Department or Division to record the change(s) on as-built drawings in a timely and effective manner.

Configuration information is maintained and tracked, including documents, tests, modifications of equipment and relevant serial numbers, and equipment installation dates. The PEC Department is responsible for tracking design changes and verifying that as-built drawings, specifications, testing

data, manuals, and other technical documentation for facilities are accurate and are received by the end of each project or as required on the supplier's contracts.

This department is also responsible for maintaining all information and documentation regarding the functional and physical characteristics of current METRO facilities/maintenance equipment. This includes:

- METRO Rail Facilities and Systems
- Rail Vehicles
- Design Changes, and
- Modifications.

Changes in physical or operational configurations are categorized according to their impact and functional importance to the operation of the Rail System:

- The Safety Department reviews changes in hardware, material, and software affecting vehicle/equipment performance and/or operating conditions for safety implications. They are submitted with appropriate documentation by the initiating department to the CCB for approval.
- Changes in hardware, material, or software that do not affect vehicle/equipment performance or specification requirements (i.e., Modification, Service, and Test Bulletins) are submitted to the Safety Department for comments and information only.

9.16.3 Safety & Security Certification

METRO utilizes an SSC process that verifies that the system, as designed and installed, meets or exceeds statutory requirements for safety, secure operations, and maintenance. The SSC process addresses conditions that could result in harm, whether unintentional (safety) or intentional (security). The SSC's application promotes an informed management decision-making process in project design, construction, testing, and initiation into revenue service.

A Preliminary Hazard Analysis and a Threat and Vulnerability Assessment are performed and documented during the design phase, as needed. The SSC Certifiable Elements List includes verification that a Preliminary Hazard Analysis and/or Threat and Vulnerability Assessment requirements are met. Another key component of SSC is a quality control and assurance program to ensure that the system is constructed and installed per design criteria and design specifications. Ongoing inspections and audits are conducted, followed by adjustments to facilities and systems as required. The SSC process allows METRO to meet all safety certification requirements as networks expand.

System Testing is also an essential component of the SSCP. Test data is collected, and test results are monitored to ensure that all system elements perform as required.

Checklists of safety requirements are developed, and the SSCRC systematically assures compliance with these requirements.

Regardless of when SSC is applicable, every change or modification to a system must go through METRO's Configuration Management and Document Control procedure. METRO's Configuration

Management is the repository for all changes and/or modifications pertaining to the SSC process. Please refer to METRO's SSCP for more information on the SSC process.

9.16.4 Notification of New Rail System or Modified Rail Systems

TxDOT requires METRO's Chief Safety Officer or delegate to email the SSO Program Manager notification of the Agency's intent to begin a new rail system or modification to an existing rail system. This notification must occur prior to entry into the preliminary engineering phase of a new or modified system project. Upon receipt of notification, the SSO Program Manager will coordinate with the Chief Safety Officer or delegate to ensure TxDOT requirements, including those below, are satisfied.

Projects that require notification to TxDOT include:

- Any area of change that significantly alters a part, component, or subcomponent of the system.
- Any project, including projects implemented by other entities, that may significantly impact METRO operations and safety.
- New starts or system extensions, expansions, new stations, or rail yards
- Reconstruction of existing lines
- Major redesign and installation of system components
- New or significantly reconstructed maintenance and operating facilities
- New vehicle procurements or major overhauls (e.g., mid-life overhaul)
- Any new or rehabilitative work associated with signals, power, control center, or other safety-critical system components
- Major capital project, defined by FTA in 49 CFR Part 633, involving the construction, expansion, rehabilitation, or modernization of a fixed guideway having a total project cost of $300 million or more and receives $100 million of federal funds, and is not exclusively for the acquisition, maintenance, or rehabilitation of vehicles or other rolling stock.

9.17 Continuous Improvement

The FTA defines continuous Improvement as a process by which a transit agency examines safety performance to identify safety deficiencies and implement a plan to address the identified safety deficiencies. METRO makes an ongoing effort to advance safety while simultaneously improving our services and operations.

Continuous Improvement is measured by monitoring METRO's safety performance indicators. Progress is related to the maturity and effectiveness of an SMS. The Safety Assurance processes support improvements to the SMS through continual verification efforts and follow-up actions using information gained from employees and Safety Assurance activities (including investigations, reviews, and audits) to identify areas that could be improved.

As METRO builds on its SMS, considerations will be made to the following industry best practices:

- Incorporating evidence from lessons learned into policy and procedures.
- Benchmarking METRO's SMS against other organizations and actively promoting the SMS within the transit industry.
- Seek and embrace industry best practices.
- Survey and assess organizational culture regularly and act upon survey results.
- Allow contractors to participate and share information in the SMS.

Other data sources for Continuous Improvement include comments from TXDOT, the FTA, and any other regulatory compliance agency.

9.18 Agency Safety Plan Annual Review Process

METRO is the principal authority for the ASP's development, implementation, and management. The Safety Department has the primary responsibility of implementing the ASP with oversight and review by TxDOT. An annual review of the ASP is mandatory.

Specific responsibilities required by federal regulations and SSO Program Standard within the ASP framework include, but are not limited to:

- **No later than October 1st** of each year, notify the SSOA of any recommended changes to the ASP for review and approval.
- If METRO determines the PTASP must be updated, the TxDOT notification shall summarize the areas requiring an update and the anticipated date the revised PTASP will be submitted to TxDOT.
- Revisiting the ASP annually to update changes in organizational structure and new systems that require significant changes in operation.
- Review progress on goals and objectives.
- Refine and improve on the current goals and objectives of the SMS program.
- Identify new tasks or objectives to respond to system growth or any new regulations that affect system safety, and
- Identify any additional safety-related tasks and responsibilities.

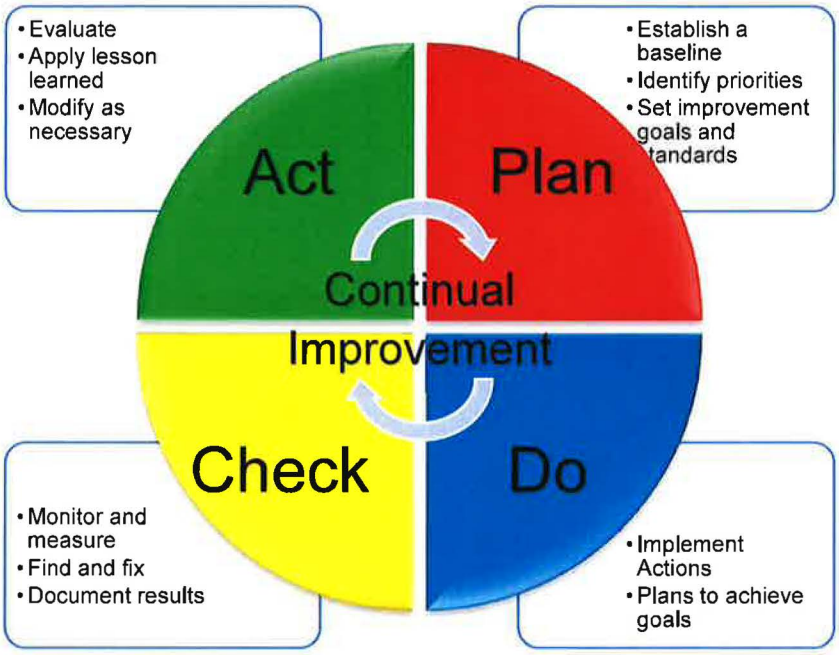


Figure 4: METRO's Agency Safety Plan Annual Review Process

- TxDOT PTASP review sequence and approval is conducted in accordance with the SSO program standard section 4.4.

10.0 SAFETY PROMOTION

This chapter describes how METRO will implement the SMS following Safety Promotion requirements as defined in federal rulemaking. The Safety Promotion component of this plan will serve a dual role in outlining METRO's Competencies and Training and the Agency's various Safety Communication processes.

Under Safety Promotion, METRO is required to maintain routine and relevant safety communications throughout the Agency. This information includes, but is not limited to, hazards and safety risk relevant to employees' roles/responsibilities and actions taken in response to reported safety concerns. METRO is also required to ensure that every level of staff receives comprehensive safety training. More specifically, employees and contractors directly responsible for the safety of METRO's system will receive both comprehensive and technical training to ensure safety competency. Select employees will fall under the PTSCTP Rule (49 CFR Part 672).

Safety Promotion is comprised of the following:

A. **Safety Competencies and Training:** A transit agency must establish and implement a comprehensive safety training program for all transit agency employees and contractors directly responsible for safety in the transit agency's public transportation system. The training must include refresher training, as necessary.

B. **Safety Communication:** A transit agency must communicate safety and safety performance information throughout the organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities. It also informs employees of safety actions taken in response to reports submitted through an employee safety reporting program.

C. **Emergency Preparedness Plan:** A rail transit agency must include or incorporate by reference in its PTASP and emergency preparedness and response plan or procedures that address, at a minimum, the assignment of employee responsibilities during an emergency and coordination with federal, state, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.

10.1 Safety Competencies

The role of each METRO employee varies in the level of safety-criticality based on the employee's daily functions. While the applicability of some safety competencies is cross-departmental, certain positions are more specialized and technical based on the employee's roles and responsibilities. For example, all METRO employees are trained and expected to report safety hazards for proper mitigation. However, an administrative employee's position will require a different set of competencies than a rail vehicle maintenance employee. Job competencies are listed in detail on each employee's job specification sheet and retained in designated Human Resources databases. Competencies are also identified in each department's respective training manuals and applicable guidelines.

10.2 Comprehensive Safety Training

The adoption of the FTA's SMS framework is an Agency-wide effort. Every level of METRO staff in the organization will be required to complete training based on their designated SMS role. The assignment of SMS roles ensures each employee understands the importance of safety, the fundamentals of SMS, safety reporting, and knowledge of their role within METRO's safety management structure. Training will include comprehensive safety training, de-escalation training, hazard identification, reporting, and full PTSCTP certification and biennial refresher training.

Through New Employee Orientation training, SMS training will be introduced to new METRO employees during the onboarding process. Current employees will receive training through online and/or in-class training. All courses required for PTSCTP certification are provided by the Transportation Safety Institute **(TSI)** in a classroom setting or online. TSI's website contains a full listing of courses and schedules. New users may sign up for a free account to review the catalog and register for classes.

Each department will be responsible for tracking the completion of required training and maintaining appropriate training records. In addition, departments will still be required to maintain other safety-critical training based on job responsibilities, such as Roadway Worker Protection, HAZCOM, and Drug & Alcohol. Therefore, the following sections serve as a comprehensive guideline for Agency-wide SMS role designation and training requirements. See Table 11 below for a list of the SMS roles summarized.

SMS ROLES	SUMMARY OF SMS ROLES
Executive Leader	Staff assigned to the Executive Leader category include METRO's CEO/Accountable Executive and EVPs and VPs that provide oversight to multiple departments/divisions and report directly to the CEO/Accountable Executive. Examples of staff assigned to this category include, but are not limited to, the Chief of Police, Chief Auditor, Chief Operating Officer, and Chief Communications Officer. Staff assigned to the Executive Leader category will also include Senior leaders within the Agency. This will consist of Directors, Managers, and Supervisory personnel who provide oversight to multiple departments and/or divisions with direct safety responsibilities, departments and/or divisions directly responsible for the Agency's transportation operation and maintenance, facilities maintenance, and engineering. METRO employees assigned to this category will be required to complete an SMS Awareness course at a minimum.
General Staff	Staff assigned to the General Staff category include the remaining personnel at METRO that do not fall under the Executive category. This category includes staff directly responsible for the operation, maintenance, administrative, facilities maintenance, and security functions within Agency operations. Staff assigned to this may consist of front-line personnel with direct safety responsibilities and front-line supervisory positions that provide direct oversight of personnel responsible for the operation, maintenance, administrative, facilities maintenance, and security functions over Agency operations. Examples of staff assigned to this category include but are not limited to Dispatchers, Chief Rail Controllers, BOF

	Superintendents, Quality Assurance Inspectors, Executive Assistants, Bus Operators, Mechanics, and Budget Analysts. METRO employees assigned to this category will be familiarized with their role in SMS through ongoing safety training and promotion activities provided agency-wide.

Table 10: METRO's SMS training roles summarized.

10.3 Public Transportation Safety Certification Training Program

The FTA mandates that designated personnel and contractors directly responsible for the safety oversight of rail fixed guideway comply with 49 CFR Part 672: PTSCTP, Final Rule. Per the mandate, staff that classifies as "*directly responsible for safety oversight*" are public transportation agency personnel whose primary job function includes:

- The development, implementation, and review of the ASP, and
- The development, implementation, and review of SSOA requirements for the rail fixed guideway public transportation system under 49 CFR Part 674.

The development, implementation, and review of METRO's Multi-Modal ASP is a cross-departmental responsibility that incorporates personnel across the Agency, including but not limited to staff within the Operations, PEC, and Safety Departments.

Per federal requirements, designated personnel shall complete certification over a three-year period, with a minimum one-hour refresher safety oversight training every two years following the completion of the initial certification. METRO determines the subject area and time for biennial refresher training. Conversely, per federal rule, bus transit system personnel with direct safety oversight responsibility may voluntarily participate in the PTSCTP. Table 12 below outlines the curricula for both the mandated and voluntary PTSCTPs.

PTSCTP REQUIRED CURRICULUM		PTSCTP VOLUNTARY CURRICULUM
Designated Personnel with Rail-Fixed Guideway Safety Oversight: • SMS Awareness – E-Learning delivery • Safety Assurance – Virtual Live Training (VLT) • SMS Principles for Transit – Virtual Live Training (VLT) • Transit Rail System Safety • Effectively Managing Transit Emergencies • Transit Rail Incident Investigation		Designated Personnel with Bus and Paratransit Safety Oversight: • SMS Awareness – E-Learning delivery • Safety Assurance – Virtual Live Training (VLT) • SMS Principles for Transit – Virtual Live Training (VLT) • Transit Bus System Safety • Effectively Managing Transit Emergencies • Fundamentals of Bus Collision Investigation
Refresher Training Requirement: • Attend FTA's Joint SSO-RTA Workshop or complete TSI's SMS Awareness course.		**Refresher Training Requirement:** • Complete TSI's SMS Awareness course.
METRO PERSONNEL UNDER THE PTSCTP		
SAFETY	• Chief Safety Officer • Director of Safety • Director of SMS • Manager of Rail Safety • Manager of Bus Safety *(Voluntary)* • Sr. Rail Safety Officer • Sr. Bus Safety Officer *(Voluntary)* • Rail Safety Officers	• Manager of Environmental Health & Safety • Environmental Health & Safety Officers • Environmental Compliance Officer • Safety Compliance & Analysis Administrator • Safety Compliance & Analysis Officer • Bus Safety Officers *(Voluntary)*

Table 11: METRO's PTSCTP required curriculum and personnel in the Safety Department.

SMS TRAINING	TRAINING DESCRIPTION
SMS Awareness (TSI E-Learning)	This course will introduce the participant to SMS, describe the four components of the FTA's SMS Framework, and identify the importance of Employee Safety Reporting Systems to the success of SMS.
SMS Principles for Transit (TSI Virtual Live Training)	This course introduces the principles and four (4) components of an SMS: Safety Policy, Safety Risk, Safety Assurance, and Safety Policy. Building upon traditional transit system safety, participants will learn about the FTA's SMS framework, including executive leadership and accountability for safety, creating a positive safety culture, preventive risk analysis, and building on an effective employee safety reporting program. At the end of this course, participants will have a greater awareness of critical safety practices available through SMS integration with transit system safety, including practical applications and exercises to begin SMS implementation.
SMS Safety Assurance (TSI Virtual Live Training)* – SMS Awareness is required before registration. In addition, SMS Principles for Transit is recommended.	This virtual live training course is designed to examine the Safety Assurance component within an SMS and discuss the three (3) key sub-components and essential Safety Assurance activities and tools necessary to verify the effectiveness of safety risk mitigations and that no new safety risks have been introduced through the implementation of mitigations or changes.

Table 12: METRO's list of SMS trainings and their description.

10.4 Safety Communication

METRO is committed to ensuring employees throughout the Agency are aware of any policies, activities, and procedures related to their roles and responsibilities. Maintaining multiple communication channels ensures routine briefing on safety-critical information relevant to employees and their respective roles and responsibilities. Management utilizes various channels to communicate safety information on hazards and safety risks, which may include, but are not limited to:

- Safety Meetings
- Weekly Safety Toolbox Topics/Safety Newsletters
- Hazard Alerts
- Rail Operations Bulletins
- Bus Operations Bulletins
- Safety Culture Survey
- Digital Bulletin Boards

It is critical to the SMS process that METRO maintains a continuous communication loop between frontline, managerial, and executive staff to ensure safety concerns are communicated, evaluated, and addressed promptly and effectively. Therefore, executive Leadership has established a safety reporting program for all METRO employees to voice safety concerns. Employees are responsible for utilizing the reporting program under METRO's SMS. Retaliation against any employee for communicating a safety concern is

prohibited. Action will not be taken against an employee unless such disclosure indicates an illegal act, gross misconduct/negligence, or a deliberate or willful disregard of METRO rules, policies, and procedures.

METRO utilizes Lighthouse Services, a third-party reporting system. METRO's non-punitive Employee Safety Reporting Program provides a mechanism for employees to voice safety concerns or violations, which may include but are not limited to:

- Rules Violations
- Environmental Hazards
- Close Calls
- Unsafe Working Conditions

Staff designated to receive and investigate reports from Lighthouse are required to complete a response to each submittal. This ensures the reporter is provided feedback regarding their concern and will encourage employees to utilize the system in place due to management's high level of responsiveness.

Furthermore, employees are trained to report imminent hazards to the impacted Control Center (Bus or Rail), their immediate supervisor, or the designated Safety Officer at the impacted facility. Reference the SRM process and the Hotline Reporting Procedure for additional hazard reporting and management details.

10.5 Emergency Preparedness & Response Plan

10.5.1 Emergency Management Plan

METRO is committed to providing safe, secure, and reliable public transit services for our region's customers, employees, and citizens. To carry out this commitment, METRO maintains an Emergency Management Plan **(EMP).** The EMP provides general guidance to mitigate, prepare for, respond to, and recover from any emergency to provide a safe environment for METRO employees, contractors, customers, and the public. The Plan complies with the federally required National Incident Management System to effectively coordinate emergency management and response operations with our city, county, state, federal, private sector, and non-governmental Response Partners.

10.5.2 Employee and Departmental Emergency Responsibility

The EMP is METRO's primary source document that outlines employee and departmental responsibilities during various types of emergency events, including but not limited to:

- Department roles during the mitigation and preparedness, response, and recovery phases of emergency management.
- Increased Readiness Actions (departmental guidance).
- Responsibilities of the Incident Management Teams, and
- Direction and control during a terrorist incident.

Multiple departments and METRO's contracted service vendors also have plans that detail their emergency response protocol. Please refer to the EMP and supplemental plans for additional details regarding employee and departmental responsibilities during emergency events.

10.5.3 Emergency Preparedness & Response Coordination with Federal, State, Regional & Local Officials

The EMP serves as a guideline for internal and external emergency management coordination. Emergencies may range from those that METRO can handle internally to major disasters that will require regional or national resources and coordination. The Plan serves as general guidance to METRO management, employees, and Response Partners about how METRO transportation services and other resources can assist communities within the METRO service area or the Houston region. Some examples of METRO coordination outlined in the Plan include:

- Integration with other plans.
- METRO's requesting and providing aid.
- Multi-Agency Coordination System.
- Joint Information System
- Biological Weapons Incident (medical community assistance).

The EMP also includes an Annex S – Transportation with the City of Houston, which outlines organizational arrangements, operational concepts, responsibilities, and procedures for transporting people, supplies, and materials during emergencies. METRO also periodically provides training to emergency responders and participates in exercises with external entities to ensure regional readiness to deal with emergencies. Please refer to the EMP and supplemental plans for additional details regarding emergency management coordination with METRO's federal, state, regional, and local partners.

10.5.4 Exposure to Infectious Diseases

METRO's Safety Department and safety personnel, designated as having safety oversight authority, will monitor the Centers for Disease Control and Prevention and the Texas Department of State and Health Services regularly for guidance on how to minimize exposure to infectious diseases, as amended. This guidance will assist METRO in effectively responding to unsafe conditions related to public health and safety.

Several aspects of an infectious disease emergency differentiate it from other emergencies and require variation in widespread planning, response, and recovery. The intent of this section is to provide safety risk management strategies to minimize the exposure of the public, personnel, and property to infectious diseases consistent with guidelines of the Centers for Disease Control and Prevention or a State health authority; however, nothing in this document precludes the primary parties (departments, management, employees, or key stakeholders) from modifying their actions to meet the unique conditions presented.

These unique actions and responses may be based on one or more of the following:

a) The current threat of disease in the world, region, state, and local area

b) The unique nature of the disease, including the incidence, morbidity, and mortality of the disease

c) The novel nature of the disease pathogen, particularly whether it mutates rapidly, has high virulence, and spreads easily from person-to-person

d) Mandates and/or orders by federal, state, or local public health or public safety authorities.

Key preparedness and safety risk management strategies include:

1. Coordinating with local and regional public health agencies to plan for surveillance, reporting, mass vaccination, antiviral/antibiotic distribution, isolation and quarantine, and implementation of disaster triage standards that direct resources to care for those with a potential for survival.

2. Monitoring disease burden among the local population to collect novel pathogen-related morbidity and mortality data that will be used to inform decision-making. This includes gathering real-time information from local, federal, and international public health partners and monitoring the disease burden in the region when feasible.

3. Communicating to METRO staff about the disease spread, what prevention actions individuals can take, and the operational status of the agency during various levels of the pandemic is essential. The agency will collaborate with local public health entities, as appropriate, to influence public behavior regarding basic infection-control measures such as handwashing or using sanitizing hand gel, maintaining respiratory etiquette, staying home when sick, and avoiding unnecessary contact with people who are ill.

4. Planning for business continuity by:

- Determining essential staff and services in the event non-essential operations are suspended
- Considering the provision of business continuance through technology when feasible
- Determining operational function at low staffing levels
- Implementing social distancing measures when deemed necessary
- Deciding when non-essential business travel to affected global areas is needed

5. Planning for recovery of operations so normal operations can be resumed when feasible.

APPENDIX: A – PTASP BOARD RESOLUTION

APPENDIX: B – LIST OF REFERENCE DOCUMENTS

NAME	DATE	OWNER
Accident/Incident Investigation Procedures	February 2021	Safety
Bridge Inspection Manual	March 2016	PEC
Capital Improvement Program Quality Assurance Manual	January 2011	PEC
Configuration Management of METRO Baseline Documents: 107 Administration	November 2012	PEC
Configuration Management Procedures 001	December 2015	PEC
Drug & Alcohol Policy	October 2019	Safety
Emergency Management Plan	December 2020	Operations
First Transit Agency Safety Plans	March 2020	ESP
Hotline Reporting Procedure	August 2020	Authority Compliance
Industrial Safety Manual	January 2021	Safety
Labor Management Safety Committee Charter	July 2022	Safety
METRORail Rule Book	December 2019	Operations
METRORail Vehicle Maintenance Plan	June 2014	Operations
Occupational Incident Investigation Procedure	March 2023	Safety
Procurement Manual & Department Guidelines	November 2020	Administration
Project Management Plan	Project Specific	PEC
Rail Maintenance Training Plan	September 2017	Operations
Records Management Policy	July 2020	Records Management
Respiratory Protection Plan	May 2023	Safety
Safety and Security Certification Plan	October 2020	Safety
Safety Risk Register and Hazardous Event Log	February 2023	Safety
Signals & Communication Maintenance Plan	August 2018	Operations
SOP #803: Hazard Identification and Analysis	September 2020	Operations
Spill Prevention, Control & Countermeasure Plan	February 2020	PEC
Transit Asset Management Plan	September 2019	Administration

APPENDIX: C – METRORail Three (3) Year Internal Safety Review Schedule (2022 - 2024)

YEAR	REVIEW COMPONENTS	ISR PACKAGE DEADLINE
2022	Safety Risk Management	Within 30 days of report completion and no later than February 1, 2023
2023	Safety Assurance	Within 30 days of report completion and no later than February 1, 2024
2024	Safety Management Policy Safety Promotion	Within 30 days of report completion and no later than February 1, 2025

APPENDIX: D – DEFINITIONS

Accident (Rail)	An event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision of rail transit vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.
Accountable Executive	A single, identifiable individual who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.
Assault on Transit Worker	a circumstance in which an individual knowingly, without lawful authority or permission, and with intent to endanger the safety of any individual, or with a reckless disregard for the safety of human life, interferes with, disables, or incapacitates a transit worker while the transit worker is performing the duties of the transit worker.
Capital Projects and Incorporated Zero-emission	For a joint development project, requires that if the equipment to fuel privately owned zero-emission cars is installed, the public transit agency shall collect fees to recover the costs of construction, maintenance, and operation of the equipment
Chief Safety Officer (CSO)	An adequately trained individual who has responsibility for safety and reports directly to the CEO, General Manager, President, or equivalent officer. A CSO may not serve in any other operational or maintenance capacity.
Corrective Action Plan (CAP)	A plan developed by the transit agency that describes the action the Agency will take to minimize, control, correct, or eliminate hazards and the schedule for implementing those actions.
Event	An Accident, Incident, or Occurrence.
Fatality	A death that results from an event occurs within 30 days after the date of the event.
Federal Transit Administration (FTA)	An agency within the United States Department of Transportation.
Hazard	Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.
Incident (Rail Mode)	An event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency. An incident shall be reported to the FTA's National Transit Database in accordance with the thresholds established by

	NTD. If a rail transit agency or SSOA later determines that an incident meets the definition of an Accident, that event shall be reported to the SSOA.
Investigation	The process of determining the causal and contributing factors of an accident, incident, or hazard to prevent recurrence and mitigate risk.
National Public Transportation Safety Plan	A plan to improve the safety of all public transportation systems that receive federal financial assistance under 49 USC Chapter 53.
National Transportation Safety Board (NTSB)	An independent federal agency.
Occurrence [Rail Mode]	An Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a rail transit agency
Public Transportation Agency Safety Plan (PTASP)	The comprehensive agency-wide safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 USC 5329(d) and based on an SMS.
Public Transportation Safety Certification Training Program (PTSCTP)	The certification training program for federal and state employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 USC 5329(c)(1).
Rail Fixed Guideway Public Transportation System (RFGPTS)	Any fixed guideway system that 1) uses rail, 2) is operated for public transportation, 3) is within the jurisdiction of a State, and 4) is not subject to the jurisdiction of the FRA or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway. A rail fixed guideway public transportation system is also a Rail Transit Agency (RTA).
Rail Transit Agency (RTA)	An entity that provides services on a Rail Fixed Guideway Public Transportation System (RFGPTS).
Revenue Service	Operation of the Rail Fixed Guideway Public Transportation System to carry passengers that pay fares, provide payment through a contractual arrangement, or have the fares subsidized by public policy. Vehicles operated in fare-free service are considered in revenue service.
Risk	The composite of predicted severity and likelihood of the potential effect of a hazard.
Risk Based Inspection	RBI is a decision-making methodology for optimizing inspection plans. A risk-based inspection program uses qualitative and quantitative data analysis to identify safety concerns and hazards associated with the highest levels of risk.
Risk Registry	Records the hazards identified by the transit agency, the potential consequences associated with these hazards, initial safety risk ratings, and new mitigations implemented to eliminate or minimize the risk associated with the hazard.
Safety	Freedom from harm resulting from unintentional acts or circumstances.

Safety Assurance	The process within a transit agency's SMS that functions to ensure the implementation and effectiveness of safety risk mitigation and that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
Safety Management Policy (SMP)	A transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees regarding safety.
Safety Management System (SMS)	The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
Safety Performance Target	A quantifiable level of performance or condition expressed as a value for a given performance measure achieved over a specified timeframe related to safety management activities.
Safety Promotion	A combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
Safety Risk Management (SRM)	A process within a Transit Agency's Safety Plan for identifying hazards, assessing the hazards, and mitigating safety risk.
Safety Risk Mitigation	The activities whereby a public transportation agency controls the probability or severity of the potential consequences of hazards.
Safety Risk Probability	The likelihood that a consequence might occur, taking as reference the worst foreseeable–but credible–condition.
Safety Risk Severity	The anticipated effects of a consequence, should it materialize, taking as reference the worst foreseeable–but credible–condition.
Serious Injury	Any injury which: 1) Requires hospitalization for more than 48 hours, commencing within seven (7) days from the date of the injury was received; 2) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); 3) Causes severe hemorrhages, nerve, muscle, or tendon damage; 4) Involves any internal organ; 5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
State of Good Repair	A condition sufficient for capital assets to operate at a full level of performance. This means the asset 1) Is able to perform its designated function, 2) Does not pose a known unacceptable safety risk, and 3) Has met or recovered lifecycle investments.
State Safety Oversight Agency (SSOA)	An agency established by a State that meets the requirements and performs the functions specified by 49 USC 5329(e) and the regulations set forth in this part.
Transit Asset Management Plan	A comprehensive plan that aids the transit provider in 1) Assessing the current condition of capital assets; 2) Determining what the condition and performance of its assets should be (if they are not already in a state of good repair); 3) Identifying the unacceptable risks, including safety risks in continuing to use an asset that is not in a state of good repair; and 4) Deciding how to best balance and prioritize reasonably anticipated funds

	(revenue from all sources) towards improving asset conditions and achieving a sufficient level of performance within those means.
Vehicle	Any rolling stock used on a Rail Fixed Guideway Public Transportation System, including but not limited to passenger and maintenance vehicles.

APPENDIX: E – LIST OF ACRONYMS AND ABBREVIATIONS

ACRONYM	TERMINOLOGY
APTA	American Public Transportation Association
ASP	Agency Safety Plan
CAP(s)	Corrective Action Plan(s)
CBD	Cannabidiol
CCB	Configuration Management Change Control Board
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
COO	Chief Operating Officer
CSO	Chief Safety Officer
EMP	Emergency Management Plan
ESP	External Service Provider
EVP	Executive Vice President
FRA	Federal Railroad Administration
FTA	Federal Transportation Administration
ISR	Internal Safety Review
KPI	Key Performance Indicator
LMSC	Labor Management Safety Committee
MAP-21	Moving Ahead for Progress in the 21st Century Act
METRO	Metropolitan Transit Authority of Harris County
MTBE	Mean Time Between Events
NTD	National Transit Database
NTSB	National Transportation Safety Board
PEC	Planning, Engineering, and Construction
PPE	Personal Protective Equipment
PSC	Public Safety Committee
PTASP	Public Transportation Agency Safety Plan
PTSCTP	Public Transportation Safety Certification Training Program
RBI	Risk Based Inspections
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheets
SMP	Safety Management Policy
SMS	Safety Management System
SMSC	Senior METRO Safety Committee
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, & Countermeasure
SRA	Safety Risk Assessment
SRM	Safety Risk Management
SSC	Safety and Security Certification
SSCP	Safety and Security Certification Plan
SSCRC	Safety and Security Certification Review Committee
SSO	State Safety Oversight
SSOA	State Safety Oversight Agency
STEERS	State of Texas Environmental Electronic Reporting System
TAC	Texas Administrative Code
THC	Tetrahydrocannabinol
TSI	Transportation Safety Institute
TxDOT	Texas Department of Transportation
USC	United States Code

VRM	Vehicle Revenue Miles
VP	Vice President