#### **ATTACHMENT "A"**

# **Sun Metro Agency Safety Plan**

**Revision 0** 

Sun Metro | City of El Paso 10151 Montana El Paso, TX 79925

Approved on:\_\_\_\_\_





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## **Plan Approval Documentation**

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Name of Entity	Sun Metro		
Approval by the	Name of Individual/Entity That Approved This Plan	Date of Approval	
Board of Directors or an Equivalent	Mass Transit Board		
Authority	Relevant Documentation (title and location)		
	Approval resolution		
Certification of Compliance	Name of Individual/Entity That Certified This Plan  Date of Certification		
Compliance			



## **PTASP Revision History Table**

Date	Revision	Description of Change
April 2020	0	Original Document



#### TERMS AND ABBREVIATIONS

- 1. **Accident** means an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation 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.
- 2. Accountable Executive means a single, identifiable person 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.
- 3. Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.
- 4. **Contractor**: An entity that performs tasks on behalf of FTA, a State Safety Oversight Agency, or a Rail Transit Agency, through contract or other agreement
- 5. Corrective Action Plan (CAP): A plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. Either a State Safety Oversight Agency or FTA may require a Rail Transit Agency to develop and carry out a Corrective Action Plan
- 6. **Designated personnel** means:
  - Employees and contractors identified by a recipient whose job function is directly responsible for safety oversight of the public transportation system of the public transportation agency; or
  - (2) Employees and contractors of a State Safety Oversight Agency whose job function requires them to conduct safety audits and examinations of the rail fixed guideway public transportation systems subject to the jurisdiction of the agency.
- 7. **Directly responsible for safety oversight** means public transportation agency personnel whose primary job function includes the development, implementation and review of the agency's safety plan, and/or the SSOA requirements for the rail fixed guideway public transportation system pursuant to 49 CFR parts 659 or 674.
- 8. Equivalent Authority means an entity that carries out duties similar to that of a Board of Directors, for a recipient or sub recipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or sub recipient's Public Transportation Agency Safety Plan.
- 9. Event means any Accident, Incident, or Occurrence.
- 10. **Examination** means a process for gathering or analyzing facts or information related to the safety of a public transportation system.



- 11. FRA: The Federal Railroad Administration is an agency within the United States Department of Transportation
- 12. FTA means the Federal Transit Administration.
- 13. **Hazard** means 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.
- 14. **Hazard Analysis:** The method by which hazards are identified and analyzed as to their possible effects upon the safe operation of the entire system (i.e.: Failure Mode and Effect Analysis, Fault Tree Analysis, Stress Analysis, etc.)
- 15. **Hazard Identification**: formal activities to analyze potential consequences of hazards during operations related to provisions of service
- 16. **Hazardous Condition:** An immediate condition that could cause an accident involving personal injuries or death
- 17. **Incident** means 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.
- 18. **Injury:** Any physical damage or harm to persons as a result of an incident that requires immediate medical attention away from the scene
- 19. **Investigation** means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
- 20. **Mode Safety Manager**: Safety Manager assign to a specific transportation mode in Sun Metro
- 21. National Public Transportation Safety Plan means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- 22. NTSB: National Transportation Safety Board, an independent federal agency
- 23. Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.
- 24. Operator of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302(14) *Public transportation agency* means an entity that provides public transportation service as defined in 49 U.S.C. 5302 and that has one or more modes of service not subject to the safety oversight requirements of another Federal agency.
- 25. **Performance measure** means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- 26. **Performance target** means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).
- 27. **Person**: A passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a rail's fixed guideway public transportation system



- 28. Public Transportation Agency Safety Plan (PTASP) means the documented comprehensive agency safety plan for a transit agency that is required by 49 U.S.C. 5329 and this part.
- 29. Public Transportation Safety Certification Training Program: Either 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 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1)
- 30. Rail fixed guideway public transportation system means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, 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.
- 31. Rail transit agency means any entity that provides services on a rail fixed guideway public transportation system
- 32. **Recipient** means a State or local governmental authority, or any other operator of a public transportation system receiving financial assistance under 49 U.S.C. chapter 53.
- 33. Reportable Incident: Existence of one or more of the following:
  - (1) A fatality confirmed within 30 days (including suicide)
  - (2) An injury requiring immediate medical attention away from the scene for one or more persons (partial exception in the case of Other Safety Occurrences Not Otherwise Classified)
  - (3) Estimated property damage equal to or exceeding \$25,000
  - (4) An evacuation for due to or under hazardous conditions or to the rail Right-Of-Way
  - (5) Collisions involving transit vehicles that require towing away of a transit roadway vehicle or other non-transit roadway vehicle
  - (6) Rail transit vehicle collisions occurring at a grade crossing
  - (7) Rail transit vehicle collisions with an individual on the rail right of-way or another revenue or non-revenue rail transit vehicle
  - (8) A mainline or yard derailment of revenue or non-revenue vehicles
  - (9) Security incidents
  - (10) Terrorism-related events
  - (11) Bomb threat (Credible)
  - (12) Bombing (Occurring)
  - (13) Chemical / Biological / Radiological / Nuclear release
    - Other system security events:
      - Arson
      - Sabotage
      - Hijacking
      - Cyber-Attack
    - Other personal events:



- Aggravated assault
- Rape
- Suicide
- Attempted suicide (Survives attempt)
- Vandalism (See dollar limits)
- Robbery (See dollar limits)
- Burglary (See dollar limits)
- Motor vehicle theft (Proven by Police)
- Larceny / theft (See dollar limits)
- Homicide
- 34. **Risk** means the composite of predicted severity and likelihood of the potential effect of a hazard.
- 35. **Risk Mitigation** means a method or methods to eliminate or reduce the effects of hazards.
- 36. **Sabotage**: The deliberate destruction of transit property or the slowing down of public transit operations by employees with the intention of damaging business or the economic condition of the transit agency
- 37. **Safety Assurance** means processes within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- 38. **Safety Audit** means a review or analysis of safety records *and related* materials, including, but not limited to, those related to financial accounts.
- 39. **Safety Management Policy** means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.
- 40. **Safety Management System (SMS)** means 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.
- 41. Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.
- 42. **Safety Performance Target** means a Performance Target related to safety management activities.
- 43. **Safety Promotion** means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
- 44. Safety Risk Assessment means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.
- 45. **Safety Risk Management** means a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- 46. Serious Injury means any injury which:



- (1) Requires hospitalization for more than 48 hours, commencing within 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 noses);
- (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 5 percent of the body surface.
- 47. **SSOC:** Safety & Security Operations Committee
- 48.**SSPP:** System Safety Program Plan, document replaced by the Public Transportation Agency Safety Plan.
- 49. **SSP:** System Security Plan
- 50. **State of Good Repair** means the condition in which a capital asset is able to operate at a full level of performance.
- 51. State Safety Oversight Agency means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674.
- 52. **Transit Agency** means an operator of a public transportation system.
- 53. **Transit Asset Management Plan** means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR part 625.
- 54. Subsystem: An element of a system that, in itself, may constitute a system
- 55. **Vehicle:** Any rolling stock used on a rail's fixed guideway public transportation system, including, but not limited to, passenger and maintenance vehicles



#### 1. Introduction

#### 1.1. Organization

To meet the population growth, Sun Metro offers fixed route and paratransit - Living Independently Facilitated by Transit (LIFT) services. It is one of the largest city departments with 638 employees and a 2019 annual budget of \$73.5 million. Its fixed route and LIFT bus services are also offered within El Paso County and the neighboring City of Sunland Park, New Mexico. Its fixed routes and LIFT bus services traveled 10.2 million revenue miles in 2016.

The fixed route service consists of 59 routes with 169 vehicles transporting passengers. These routes provide about 15 million bus passenger trips a year. The LIFT service consists of 65 LIFT vehicles and 8,000 participants that made 298,881 trips last year. Sun Metro operates a large natural gas fueled fleet, fueled 100% through alternative fuels – CNG, including all passenger support vehicles.

On November 12, 2018, the El Paso Streetcar began service. The El Paso Streetcar route highlights all the wonderful things that make El Paso downtown and uptown a unique place to visit. The 4.8 mile-route runs in two loops through El Paso's uptown and downtown areas. Both loops interconnect through a single-tracked corridor, an international bridge, an array of businesses, restaurants, government buildings, convention center, downtown ballpark, and the University of Texas at El Paso among many other prominent locations. As part of this project, six vintage streetcars (the same vehicles that ran on El Paso streets until 1974) were restored for the rigors of daily service. While the cars are decades old, they are outfitted with modern amenities including:

- Seating for approximately 35 people and additional space for standing riders
- Free Wi-Fi
- ADA accessibility
- Bike racks
- Air conditioning
- Heating
- Upgrades for safety
- Modern propulsion
- Streetcar branding along the route and signage at designated stops
- Pavement, sidewalk and driveway improvements at designated stops



El Paso Streetcar



The highest transportation priority for both the City and Sun Metro is the implementation of a four-line, citywide BRT/TOD corridor system that connects with other regional and local bus services as well as rail, air and ground transportation. Corridors include:

- ➤ International/Downtown/Central El Paso serviced by the other four corridors, services the International border area to Glory Road and University of Texas at El Paso campus.
- Mesa/Westside Corridor services Northwest El Paso and Southeast New Mexico.
- Alameda/North Loop/Mission Valley Corridor – services Alameda Street and far-Southeast El Paso, connecting to an



**Brio Roadway and TOD Stations** 

El Paso County operated Rural Transit line that provides limited fixed route service to the East Montana and the Mission Valley area incorporated cities.

- ➤ Montana Corridor services East and Far East El Paso to George Dieter.
- Dyer Corridor services Northeast El Paso and Fort Bliss.

Brio is Spanish for excitement, verve and energy and is the term used to describe and brand El Paso's BRT system. In addition to Transit Terminals, each BRT Corridor has several Brio stations that are well lit and rider friendly. Amenities include Wi-Fi hotspots;

automated Brio status information boards; and prepaid ticket vending machines. The stations comply with all City, State and Federal regulations. Where feasible. public art displays



Sixty-foot Articulated Brio Bus



selected or designed by the City's Museums and Cultural Affairs Department Public Art Division are included either as standalone pieces or as components of improvements throughout each corridor.

The 60-foot articulated Brio buses run on CNG fuel with a 400-mile capacity and seven-minute fill-up time. They are well equipped to keep the modern- day rider comfortable and informed of their destination while staying in touch with work, family and friends, or just enjoying the ride with amenities such as announcement monitors, Wi-Fi, and bike racks.



### 2. Annual PTASP Review and Update Process

#### 2.1. Control and Update Procedures

Any change or modification to the rail system has the potential for affecting passenger and/or employee safety, therefore any change or modification to the rail system will be a reason to review and update the Sun Metro PTASP. Changes to the system in the revenue service period will be conducted in accordance with TxDOT, EPSC & Sun Metro policies.

The Sun Metro PTASP is reviewed annually based upon a baseline date of December 1<sup>st</sup> and/or **updated periodically** on an as-needed basis to:

- Review progress on the tasks accomplished as the system matures.
- Refine and improve the current task descriptions and activities.
- Identify new tasks that may be required as the system progresses.
- Identify system safety, fire / life / safety-related responsibilities.

The following process is used to update and support the Sun Metro PTASP:

- I. The City of El Paso and Sun Metro personnel will work cooperatively with the Chief Safety Officer, Accountable Executive and Sun Metro Management to update their safety record and to evaluate the Sun Metro PTASP effectiveness.
- II. The Sun Metro Safety Managers will review the Sun Metro PTASP and advance proposed updates to the Chief Safety Officer for review and approval.
- III. The Chief Safety Officer will forward the updated Sun Metro PTASP and the Streetcar section to TxDOT SSO for their review and comments.
- IV. The TxDOT SSO will return the Sun Metro PTASP with the Streetcar section with comments to the Chief Safety Officer:
- V. The TxDOT-SSO comments of Sun Metro PTASP with the Streetcar section will be reviewed by of the Accountable Executive, Chief Safety Officer, Sun Metro Director of Mass Transit, Associate Director for Streetcar Operations & the SSST Manager.
- VI. If TxDOT-SSO has no comments they will submit a letter of approval of the Sun Metro PTASP and the Streetcar section. At that moment, the document will be copied and distributed in accordance with EPSC Sun Metro PTASP and the Streetcar section distribution list.
- VII. The approved plan will be published and distributed to all Sun Metro Managers and pertinent Sun Metro members for implementation according to an established distribution list.

#### 2.2. Implementation Activities and Responsibilities

EPSC & Sun Metro have defined specific tasks to implement the goals and objectives of the EPSC System Safety Program Plan. The personal safety and security of passengers and employees are Sun Metro's highest priorities.



#### 2.3. Annual Sun Metro PTASP Review

Before December 1<sup>st</sup> each year, Sun Metro will conduct a review of its Sun Metro PTASP to ensure it is current and in compliance with federal rules and the TxDOT SSO Program Standard (for the Streetcar). Sun Metro will must submit a formal letter of certification to TxDOT, by December 1<sup>st</sup>, signed by the Deputy City Manager for Public Works as the Accountable Executive indicating the Sun Metro PTASP is current and in compliance with the SSO Program Standard (for the streetcar only).

If the Accountable Executive determines the Sun Metro PTASP is not current, the letter shall detail the activities that will be taken to achieve compliance, and the internal deadline for submitting the Sun Metro PTASP and supporting materials to TxDOT for approval.

The Chief Safety Officer is responsible for the preparation, maintenance, and updating of the Sun Metro PTASP. The Sun Metro PTASP evaluation process for Sun Metro will consist of the following steps:

- I. Sun Metro will submit an updated/revised version of the Sun Metro PTASP to the Accountable Executive for review.
- II. After approval from the Accountable Executive (AE), the Chief Safety Officer (CSO) will submit the PTASP to TxDOT.
- III. TxDOT will acknowledge receipt of a Sun Metro PTASP submission.
- IV. If the submission is approved, TxDOT will acknowledge acceptance within 45 days.
- V. If the submission is not approved, TxDOT will notify Sun Metro to request additional documentation or clarification. Upon receipt of the requested documentation or clarification the process will begin anew.
- VI. If the Sun Metro PTASP does not comply with federal rules or the TxDOT SSO Program Standard for El Paso Streetcar, the CSO & AE will be notified via a formal letter. A completed checklist identifying the required changes and any required documentation will be included.
- VII. Upon TxDOT final acceptance, approval will be communicated via a formal letter to the Accountable Executive.

#### 2.3.1. Control of Documents

Sun Metro will establish a process for Control and Distribution of Plans, Manuals, Policies and Procedures. The controls needed for implementation are:

- I. Approve documents for adequacy prior to issue
- II. Review and update as necessary and re-approve documents
- III. Ensure changes and the current revision status of documents are identified
- IV. Ensure current versions of applicable documents are available at points of use
- V. Ensure documents remain legible and readily identifiable
- VI. Prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose



Employees & Subcontractors shall use the specified or latest revision of specifications or controlled documents to include documents of external origin.

The employees and contractors will be retrained each time the Sun Metro PTASP is updated. In addition, the distribution list of the Sun Metro PTASP will be used to guarantee every party has the latest version of the Sun Metro PTASP.

Each time the Sun Metro PTASP is updated, all personnel included in the Sun Metro PTASP distribution list and subcontractors will be notified via e-mail. This notification will also include the date when they can pick up the updated version.

#### 2.3.2. Control of Records

Records are established and maintained to provide evidence of conformity to requirements, and for the effective operation of the quality management system. Records shall remain legible, readily identifiable, and retrievable. Sun Metro Control of Public Records defines the controls needed for the identification, storage, protection, retrieval, retention time, and disposition of records.

The type of document used will vary depending on the type of activity. The following is a list of activities and the type of document used to document it:

Activity	Type of Document		
	Checklist		
Inspections	Photos		
	Evidence that finding have been corrected		
	Notification letters		
Audits	Auditing Checklist		
Audits	Auditing report with supportive documentation		
	Corrective Actions generated by the audit		
Sofoty Mootings	Agendas		
Safety Meetings	Attendant Sheet		
	Agenda		
Training	Attendant sheet		
_	Training material		

Official documents must be kept for a period of no less than 3 calendar years.



### 3. Safety Management Policy Chapter (CFR 673.23)

#### 3.1. Safety Management Policy Overview

All employees and contractors are charged with responsibility for the safety of passengers, employees, property, and those who come in contact with our systems. In addition, ALL employees are accountable for the safety performance of Sun Metro.

Specific accountability for safety performance rests with those responsible for the management of each transit mode operated under Sun Metro.

#### 3.2. Safety Management Policy Section

It is our mission to connect people and places, support economic development and improve quality of life in the region. Because of this, Safety is of paramount concern.

All personnel and contractors are charged with responsibility for the safety of passengers, employees, property, and those who come in contact with our systems. Specific accountability for safety rests with those responsible for the management of each function or location. Sun Metro management will review Safety Program effectiveness and provide resources needed to correct deficiencies and work with the Texas Department of Transportation and other agencies involved in the oversight of safety to achieve the safest and highest quality system possible.

The Chief Safety Officer is tasked to devise, implement, and administer a comprehensive, integrated and coordinated Public Transit Agency Safety Program Plan (PTASP). It is the responsibility of the Chief Safety Officer and Sun Metro Key Staff to implement and execute SMS to prevent, eliminate, control and/or reduce hazards of any system under the jurisdiction of Sun Metro. The Chief Safety Officer will perform, oversee, and/or review all activities related to hazard management. Management of hazards includes the legitimate right, in coordination with the affected department manager, to stop unsafe operations when the hazard identified poses an imminent danger to life and/or property

The Chief Safety Officer will perform, oversee, and/or review all activities related to hazard management. Management of hazards includes the legitimate right, in coordination with the affected department manager, to stop unsafe operations when the hazard identified poses an imminent danger to life and/or property.

It is the Sun Metro & the City of El Paso policy to fully support an on-going Safety Program in which preventive concepts are utilized in identifying and resolving hazards. However, the success of the Safety Program depends on the sincere and cooperative efforts and active participation of all employees. It is, therefore, the responsibility of each Sun Metro employee and Contractor to actively participate in the safety process, provide requested information, and to support and aid in any investigations

Approved By Signature Date

Monica Lombrana Accountable Executive



#### 3.3. Performance Target (based on Nat. Pub. Trans Safety Plan)

Safety performance measurement will help the City of El Paso and Sun Metro monitor their safety performance. The measurement and evaluation of safety performance requires a carefully structured program of planning, setting targets, identifying valid measures, conducting proper data analysis, and implementing appropriate follow-up activities. Safety performance measurement is a key aspect of a safety management process and provides the basis for continuous safety improvement.

Pursuant to comply with 49 U.S.C. § 5329(d), Sun Metro Agency Safety Plan must include safety performance targets based on the safety performance measures in the FTA National Safety Plan. The safety performance measures are:

- 1. FATALITIES: Total number of reportable fatalities and rate per total vehicle revenue miles by mode
- 2. INJURIES: Total number of reportable injuries and rate per total vehicle revenue miles by mode
- 3. SAFETY EVENTS: Total number of reportable events and rate per total vehicle revenue miles by mode
- 4. SYSTEM RELIABILITY: Mean distance between major mechanical failures by mode

Successful performance targets are <u>specific, measurable, attainable, relevant, and time-bound</u> (SMART). As part of the annual review of Sun Metro Agency Safety Plan, Sun Metro shall reevaluate its safety performance measures and determine how the measures should be refined, sub-measures developed, and performance targets selected annually.

If the Safety Targets are not met it will be the responsibility of the City Of El Paso and Sun Metro Management to assess the situation and determine the root cause. Once the root cause has been determined the appropriate Safety Manager in coordination with the CSO will develop the corrective actions needed to mitigate the situation.

All Sun Metro employees are responsible for following all rules and procedures established by management to achieve the performance measures establish in this document.

#### 3.3.1. 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, which result from illness or other natural causes.

#### 3.3.2. Injuries

Injuries are defined as any damage or harm to persons as a result of an event that requires immediate medical attention away from the scene. In addition, FTA has



established the term "Serious Injury". A Serious Injury is defined at 49 C.F.R. § 674.7 as any injury that:

- 1. Requires hospitalization for more than 48 hours, commencing within 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; or
- 5. Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

#### 3.3.3. Safety Events

The Safety Events measure captures all reported safety events that occurred during transit operations and the performance of regular supervisory or maintenance activities. 49 CFR 673.5 defines an Event as any Accident, Incident, or Occurrence.

The 49 CFR 673.5 also defines an Accident as an Event that involves any of the following:

- A loss of life;
- A report of a serious injury to a person;
- A collision of public transportation 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.

49 CFR 673.5 defines an Incident as 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.

49 CFR 673.5 defines an Occurrence as an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt in any way the operations of a transit agency.

#### 3.3.4. 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 is maintained and operated.

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#### 3.3.5. Performance Measures

Performance Measures – Fix Route Per every 100,000 miles		Fiscal Year			
		2019	2020	2021	2022
FATALITIES		0	0	0	0
INJURIES		50	45	40	35
0.455777	Accidents	178	50	45	45
SAFETY EVENTS	Incidents		78	70	65
EVENTS	Occurrences		50	45	45
SYSTEM RELIABILITY		82864	80000	74000	70000
(Mean Distance Between Failures)		Miles	Miles	Miles	Miles

Performance Measures – Streetcar		Fiscal Year			
Per every 100,000 miles		2019	2020	2021	2022
INJURIES		9	7	6	5
	Accidents	2	1	1	0
SAFETY EVENTS	Incidents	9	7	6	5
	Occurrences	9	7	6	5
SYSTEM RELIABILITY		2879 hrs.	2500 hrs.	2400 hrs.	2300 hrs.
(Mean Distance Between Failures)		20131113.	2000 1113.	2700 1113.	2000 1113.

Performance Measures – Paratransit		Fiscal Year			
Per every 100,000 miles		2019	2020	2021	2022
INJURIES		8	8	6	5
SAFETY EVENTS	Accidents	20	17	15	12
	Incidents	25	22	19	15
	Occurrences	32	25	23	20
SYSTEM RELIABILITY		87019	82000	79000	77000
(Mean Distance Between Failures)		miles	miles	miles	miles

For this initial ASP the data used to develop the performance measures was the data for Fiscal Year 2019. Sun Metro Performance measures are based on the previous year data. Data acquisition is discuss in Section 5.2.1.3 of this document.

All performance measures and PTASP updates will be submitted to TxDOT (for Streetcar) and the MPO before February 1 of each year as part of our requirement under section 1.6 of TxDOT State Safety Oversight Program Standard (Aug 2019).



#### 3.4. Sun Metro Key Staff - Accountabilities and Responsibilities

The following Key Staff positions are responsible for the implementation of Sun Metro ASP. The Key Staff responsible for implementing the ASP in their individual areas and assure that all their personnel understand their individual roles and responsibilities.

#### 3.4.1. Chief Operations & Transportation Officer (Accountable Executive)

The Chief Operations and Transportation Officer has been designated as the **Accountable Executive** responsible for directing and coordinating all activities affecting safety within Sun Metro. The Accountable Executive who, irrespective of other functions, satisfies the following:

- (1) The Accountable Executive is the final authority over all operations authorized to be conducted on the Sun Metro System.
- (2) Controls the financial resources required for the operations.
- (3) Controls the human resources required for the operations authorized to be conducted.
- (4) Retains ultimate responsibility for the safety performance of the operations conducted.

The accountable executive must accomplish the following:

- (1) Ensure SMS is properly implemented and performing in all areas.
- (2) Approved and sign the safety policy.
- (3) Communicate the safety policy throughout the organization.
- (4) Regularly review the safety policy to ensure it remains relevant and.
- (5) Regularly review the safety performance of the organization and direct actions necessary to address substandard safety performance

#### 3.4.2. Sun Metro Director of Mass Transit

The Director of Mass Transit has full authority to speak and act on behalf of the Authority on all operations and maintenance matters including those involving the safety of passengers, employees, and service property. It is the responsibility of the Director of Mass Transit to ensure the organization achieves the system safety goals.

As part of this effort, the Director of Mass Transit assists the Safety & Security Review Committee (SSRC) in reviewing and approving the SSPP, at a minimum, on an annual basis. The Director of Mass Transit schedules and attends meetings with the appropriate internal and external staff to exchange information, assess the safety performance of the El Paso Streetcar, discuss any safety issues, and is the media contact for the streetcar and safety-related inquiries. The Director of Mass Transit is responsible for the performance of all subordinate staff and for ensuring the entire staff's safety responsibilities are consistently carried-out in a professional and effective manner.



#### 3.4.3. Mass Transit Department Chief Safety Officer

The Mass Transit Department Chief Safety Officer is responsible for overseeing (inspect, audit and follow up) the implementation of the Sun Metro Agency Safety Plan. Reporting directly to the Accountable Executive, this position will be responsible for the development and implementation of the Public Transit Agency Safety Plan as established in 49 CFR 673 and 674. As defined in 49 CFR 673.5 the Chief Safety Officer is an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. The Chief Safety Officer will not serve in other operational or maintenance capacities.

Among the duties the Chief Safety Officer are:

- Directing/overseeing the safety program both on-site and on-road in coordination with Homeland Security, State, and Local Law Enforcement for EPSC
- Serve as the point of contact between the SSOA and the City of El Paso
- Coordinate the development and implementation of Sun Metro Agency Safety Plan
- Review and update the Agency Safety Plan under 674
- Monitor hazards reported in Sun Metro through the mechanism discuss in Sun Metro ASP
- Track reported hazards and how they are being mitigated
- Monitoring the effectiveness of the mitigations already implemented for effectiveness/
- Monitor the different logs listed below
  - I. Hazard
  - II. Corrective Action Plan
  - III. Accident
  - IV. Incident
  - V. Occurrence
  - VI. Unusual
  - VII. Blockage

#### The CSO must accomplish the following:

- I. Ensure SMS is properly implemented and performing in all areas.
- II. Develop the safety policy.
- III. Communicate the safety policy throughout the organization.
- IV. Regularly review the safety policy to ensure it remains relevant and.
- V. Regularly review the safety performance of the organization and direct actions necessary to address substandard safety performance

#### 3.4.4. Streetcar Safety (SSM) Manager

EPSC Safety and Security compliance fall under the responsibility of the Streetcar Safety, (SSM) Manager. Under the supervision of the Chief Safety Officer, the SSM verifies and assesses the daily operations of EPSC. This position is based at the EPSC Maintenance & Storage Facility (MSF). From this location, the SSM can monitor the safety of the system.



The SSM has the authority to stop any work or operation if it represents an imminent hazard.

#### The SSM Manager's duties include:

- Assists in accident investigation,
- Performs investigation of security breaches,
- Conducts random inspections,
- · Performs annual safety audits,
- Manages hazard analysis,
- Provides safety & security training,
- · Conducts threat and vulnerability assessments, and
- Responsible for all System Safety regulatory reporting requirements.
- Ensure SMS is properly implemented and performing in El Paso Streetcar.
- Develop the safety policy for El Paso Streetcar.
- Communicate the safety policy throughout the El Paso Streetcar.
- Regularly review the safety policy to ensure it remains relevant and.
- Regularly review the safety performance of El Paso Streetcar and direct actions necessary to address substandard safety performance

The SSM responsibilities in the day-to-day activities may include, but are not limited to:

- Directing/overseeing the overall safety operations of job sites and onboard systems that include reporting and conducting safety meetings.
- Directing/overseeing the development and implementation of training programs (i.e. new streetcar operator, safety policy courses, passenger/assistance service sensitivity classes, etc.)
- Directing/overseeing the security program for all facilities (including on-road), remote surveillance and onboard camera systems
- Training staff
- Developing and monitoring contents of classroom training to ensure compliance
- Investigate incidents, accidents, hazardous conditions and work-related injuries including; accident reports, accident files, accident register, and following up with the claims' office and adjusters as needed
- Planning, scheduling and conducting monthly safety meetings based on Sun Metro safety and security training goals and objectives
- Setting up regular accident review committees to determine preventability of accidents
- Addressing employee safety complaints.
- Developing and maintaining the Operational Hazard Analysis Log
- Assisting the Chief Safety Officer with Corrective Action Plans (CAP's) implementation and follow-up



#### 3.4.5. Sun Metro Lift Safety and Operations Manager

The Lift Safety and Operations Manager manages the safety program of local operations in compliance with State and Federal regulations and Corporate and Client policies. This position ensures:

- All operators are current with company and contractor training requirements.
- All operators are adequately certified, and certification records and files are kept up to date.
- All employees are current with the training required for general safety programs and practices.
- Local facility is operated in compliance with OSHA and EPA regulations.
- All new hire candidates meet minimum general qualifications and receive all required training prior to being placed into revenue service.
- Liability and Worker's Compensation Claims aer handled appropriately, in a timely manner, and in conjunction with contractor staff and resources.
- The Drug and Alcohol Testing program is implemented and meets Federal and TxDOT or EPSC standards.
- Employee turnover is minimized through initial and ongoing training aimed at improving operator skill level as well as through a complete and appropriate screening process.
- Consistent reductions in preventable and non-preventable vehicle and non-vehicle accidents.
- Dynamic and appropriate ongoing training programs for all operators.
- EPSC Safety Incentives and programs are managed effectively and consistently, including assignment of Safety Points.
- A consistent Safety Culture throughout the location that incorporates operations, safety and maintenance departments and emphasizes the team approach and individual responsibility of all employees to achieve the common goal.
- Successful completion of all related audits including those conducted by EPSC, state and federal regulatory agencies.
- Recruit and screen potential new hire operator candidates to be placed into training ensuring that efforts meet the staffing needs of the project.
- New hire and veteran operator training programs are managed to ensure all operators receive the minimum initial training and all employees receive required annual and on-going training.
- Community outreach is implemented to identify potential new hire candidates as well as the most appropriate recruiting sources.
- Provide and/or manage classroom and behind the wheel instruction according to EPSC specifications in all aspects of vehicle operation in the course of passenger transportation, including defensive driving, service area familiarization, passenger loading, unloading and securement, proper manifest documentation, use of on-



board equipment, accident and emergency procedures, dispatch and radio communications, and passenger sensitivity.

- Provide and/or manage monthly or annual ongoing/refresher training in topics relevant to the service and service area and in a timely manner.
- Respond to and/or provide for trained staff response to operator accidents and incidents, ensuring appropriate collection of information, documentation of events, and reporting per EPSC policy.
- Review all vehicular, passenger and employee accidents/incidents for determination
  of cause and preventability, identifying potential trends to be addressed in future
  training efforts as well as ensuring retraining and safety points are assessed
  according to EPSC policy.
- In conjunction with EPSC staff, manage all aspects of the Drug and Alcohol Testing program including pre-employment, random and post-accident testing requirements. Conduct regular reviews of local testing facilities ensuring compliance with City, MV corporate and federal policy.
- Establish functional Safety Committees of operators and staff to review safety concerns and make recommendations to management for potential additional safety efforts.
- Assist operations and maintenance departments in identifying additional or refresher training needs based on current trends within the employee base.
- Ensure complete and accurate documentation of all training activities and accurate completion of all training related employee records.
- Establish relationships with key client agency personnel to identify additional training needs, resources and opportunities.
- Work with City & MV corporate claims staff to ensure all liability and worker's compensation claims are handled promptly and effectively in an effort to reduce financial liability as well as recoup on all claims, which can be subrogated.
- Proactively manage all employee injury claims to minimize lost time and modified duty claims. Work with local medical facilities to ensure injured employees are returned to full-duty status promptly.
- Conduct regular audits of employee training files, vehicle maintenance files and facility safety audits ensuring compliance with OSHA and EPA regulations and related MV corporate policies.
- Ensure operator performance reviews, ride along, road checks and evaluations are conducted according to local policies and MV corporate policy and requirements. Provide feedback and follow up for operator performance reviews and identify individual training needs where necessary.
- Hire and manage all safety department employees including classroom and behind the wheel instructors, ensuring all safety staff have all appropriate qualifications, certifications and training and staff assignments are made in consideration of applicable budget line items.
- Ensure all project training materials are current, necessary supplies are available and inventories are secured and kept up to date.



 Provide regular reports to local and MV corporate management staff of safety department efforts, claims status, training efforts, accident history, worker's compensation claims status, and other required information.

#### 3.4.6. Transit Safety Manager (Fix Route)

Under the supervision of the Chief Safety Officer, the Transit Safety Manager verifies and assess the daily operations of Sun Metro Bus operations (Fix Route). This position is based at Sun Metro Transit Operation Center (TOC). From this location, the Transit Safety Manager can monitor the safety of the system. The Transit Safety Manager manages the activities of the division and establishes policies and procedures.

The Transit Safety Manager has the authority to stop any work or operation if it represents an imminent hazard. This position is responsible for:

- Departmental compliance with federal, state and City safety ordinances and laws and administer safety policies and procedures.
- Planning and conducting research and prepare technical transit safety research and analysis.
- Evaluating findings, identify significant issues, determine options and develop recommendations on complex transit safety projects.
- Evaluating project compliance with safety requirements.
- Managing claim litigation and coordination of accidents and incidents involving transit personnel and/or property. Draft, review and recommend revisions to departmental insurance policies. Write specifications for insurance quotations.
- Overseeing the cost of insurance, accidents, and claim settlements to initiate cost containment programs and prepare management reports outlining cost reduction strategies.
- Overseeing safety training classes and safety meetings of subordinate personnel.
- Managing environmental compliance activities.
- Overseeing the compliance activities related to environmental protection.
- Recommending corrective actions related to environmental protection.
- In coordination with the CSO direct federal safety audits and respond to external agencies' audit findings. Complete and submit safety reports to regulatory agencies.
- With the support of the CSO, serve as a liaison with federal, state and City agencies and departments.
- Perform preliminary assessments such as identifying environmental conditions.
- Overseeing and coordinating environmental assessments performed by outside consultants.
- Reviewing environmental impact statements completed by consultants. Evaluate project compliance with environmental requirements.
- Represent the City at various meetings, conferences and formal proceedings and interact with a wide range of officials, regulatory agencies, civic and professional organizations, the media, department directors, coworkers and the public.



- Testifying in formal proceedings regarding insurance related matters, subrogation, litigation, and accident/injury investigation.
- Conducting presentations pertaining to the status of operational plans to elected officials, steering and policy advisory committees, civic and business groups and the public.
- Serving as technical adviser to contractors and City officials.
- Advising higher level supervisors in a timely manner of situations or issues that have or could lead to deviation from expected results, and recommend appropriate solutions or options.
- Performing division general and fiscal administration and miscellaneous professional and managerial functions as required.
- Involves:
  - Participate in setting performance goals and priorities that contribute to departmental mission.
  - Monitor and approve allocation of operational expenses for area of responsibility.
  - With the support of the CSO, prepare recommendations and justify division program and capital funding to assist in preparation of department budget and control expenditures.
  - Plan, develop, implement and administer components of information system to establish and maintain timely and accurate reporting and recording pertaining to functions managed.
  - Perform duties of higher level supervisor, peers or subordinates to ensure continuity of operations.
  - o Ride transit vehicles as a passenger periodically to observe operations. Oversee preparation of activity reports.
- Supervising assigned personnel.
- Scheduling, assigning and checking work.
- Conducting employee performance appraisals and review evaluations by subordinate supervisors.
- Provide for training and development.
- Enforcing personnel rules and regulations and work behavior standards firmly and impartially.
- Meeting with staff on a regularly scheduled basis.
- Counseling, motivating staff and maintaining harmony.
- Interviewing applicants.
- Recommending hiring, termination, transfers, discipline, and merit pay or other employee status changes.

#### 3.4.7. Sun Metro Chief Streetcar Officer

The Chief Streetcar Officer acts as the <u>direct point of contact</u> for the day-to-day management of the El Paso Streetcar system. As a Sun Metro employee, this managerial position reports to the Director of Mass Transit. The position directs and manages all streetcar staff and contractors to ensure compliance with established streetcar system policies, directives, regulations and ordinances (city, state and federal) and both the

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Standard Operating Procedures (SOP) and Standard Maintenance Procedures (SMP) in all phases of operation and maintenance, as well as the direct supervision of all operational and maintenance staff to provide a safe, dependable, timely and courteous fixed rail transit service.

#### Among their duties are:

- Directs and coordinates all operational personnel by establishing and monitoring program and project objectives, The Director of Mass Transit will supervise the development and implementation of the processes and procedures, reviewing performance, completing required status changes and timekeeping documents, implementing and monitoring training, coordinating efforts with internal Sun Metro departments. This position will oversee the safety programs, manage budgets, compiling and reporting data, supervising the hiring process, developing goals and objectives, and implementing team-building processes.
- Maintains reliable and high-quality streetcar service by ensuring the scheduling of personnel, facilities, and training, monitoring of ridership trends, analyzing data, compliance with all regulations and manufacturers. Verify the correct implementation of the processes for operations, evaluating staff performance, recommending and completing service upgrades and modifications, monitoring workflow, monitoring expenditures, coordinating operational requirements with the maintenance staff, reporting equipment failures, establishing and monitoring service standards, and developing short- and long-range plans.
- Completes related administrative tasks by reviewing and analyzing data and statistics, coordinating and managing the budget process, addressing and resolving labor relations issues, monitoring training and safety, developing and presenting information, writing papers, memos and other correspondence, and investigating accidents and promoting safety.
- Administers contractual agreements with El Paso Streetcar's contractors and their personnel as assigned to the El Paso Streetcar Project, including supervisory, operations and maintenance personnel. Oversee day-to-day issues, working with the contractor's manager, including safety, service quality, training, development, scheduling, discipline, and similar functions. Literally, to provide the highest level of customer service possible.
- Develops, refines, and ensures implementation of the El Paso Streetcar's operations and maintenance plan, and related standards and documents such as rules and procedures. This position oversees job and position expectations for supervisory, operations, and maintenance personnel. Coordinates and oversees the data and reports regarding El Paso Streetcar operations and maintenance, including key performance indicators, accident/incident reports, personnel measurements, and statistics related to any contractor's El Paso Streetcar contract compliance.
- Works through the Sun Metro's Director of Mass Transit, as necessary, to ensure the El Paso Streetcar support functions are being adequately provided.
- The position is responsible for identifying solutions for deviations from the Service Plan and related agreements, within the parameters of the Inter-Governmental Agreement.
- Take every reasonable precaution given the circumstances to ensure the protection



of employees, patrons, and members of the public. Identify and inform employees of hazards in the workplace. Determine safe work methods and ensures employees are notified of new and modified methods. Ensures employees are trained on safety policies and procedures. Ensures employees follow procedures. Responds to health and safety concerns of employees in a timely manner.

#### 3.5. Employee Safety Reporting

Safety reporting is an essential part of SMS. Sun Metro must foster an atmosphere of trust that encourages and rewards employees for providing safety-essential information to Senior Management, even if it is self-incriminating, without fear of reprisal. Reports and concerns are communicated to management & Senior Management, so they are assessed and mitigated. If required, the hazard or concern could be elevated to upper management for additional actions.

As we know self-reporting is a process that if what happened was a real mistake, the focus will be on re-education and not on the punitive action.

There are many ways employees can report safety conditions:

- Report conditions directly to the dispatcher, who will add them to the daily Operations Log.
- Report conditions anonymously via a locked comment box in the driver area.
- Report conditions using their name or anonymously to hazard@elpasotexas.gov
- Report conditions directly to any supervisor, manager, or director.

CSO discusses actions taken to address reported safety conditions during the quarterly SSRC Meetings. Additionally, if the reporting employee provided his or her name during the reporting process, the CSO or designee follows up directly with the employee when Sun Metro determines whether or not to take action, and after any mitigations are implemented

Hazards reported by employees are inform to the CSO and the Mode Safety Manager. The Mode Safety Manager is responsible for directly addressing the reported hazard. The CSO will provide support and track the management of the reported hazard. The CSO will report to upper management how the hazards reported are manage.

An effective SMS empowers employees with the confidence to raise concerns that may lead to serious safety/quality error and assures them that someone will listen to them and investigate their issues or concerns in a professional manner — all without fear they will face unduly harsh penalties for admitting to genuine mistakes.

A robust employee safety reporting system will provide:

- Unique Information you can't get any other way
- Authentic Individuals who know best are directly providing the information
- Timely Direct reporting overcomes time lag of mandatory reporting processes
- Diverse Information from different individuals with different experiences and perspectives



 Comprehensive – Multiple reports over time reveal patterns, trends, and the scope of an issue

The Sun Metro will implement an Employee Self Reporting program that will:

- Incentive employees to report any safety related situation
- · Emphasize benefits for safety, not safety record
- Establishes clear guidelines for unacceptable behavior
- Balance learning and accountability
- Establishes several methods for employees to report safety issues.

The following table presents a guideline in cases of safety events:

Human Error	At-Risk Behavior	Reckless Behavior
An inadvertent action – slip,	A choice – risk not	Conscious disregard of unreasonable risk
lapse, mistake	recognized or believed justified	unreasonable risk
Manage through:	Manage through:	Manage through:
Processes & procedures	Increase situational	Remedial action
Checklists	awareness	Punitive action
Training	Remove incentives for	
Design	at-risk behavior	
	Create incentives for	
	safe behavior	

Employees are expected to tell others when witnessing unsafe work practices or conditions. When employees are not comfortable discussing these unsafe conditions with fellow employees, they are encouraged to discuss the situation with management or report it in writing.

What is important to emphasis is that any cultural change in the organization will take time (months to years) to be fully implemented and see the results of these changes.

#### 3.5.1. Disciplinary policy

To ensure a culture of open reporting in Sun Metro, in the majority of the cases, no disciplinary action will be taken against any employee who <u>reports</u> a safety hazard or concern using the proper channels provided by Sun Metro and the City of El Paso. If the reporting of the hazard or concern indicates, <u>beyond any reasonable doubt</u> an <u>illegal act</u>, <u>gross negligence or a deliberate / willful disregard for Sun Metro or City of El Paso rules and regulation the employee will be subject to disciplinary actions.</u>

The Sun Metro Rules and Regulation Manual will serve as the guidelines for the implementation of disciplinary actions regarding Events. The Human Resources Department of Sun Metro will be responsible of interpreting and determining any disciplinary action if necessary.



#### 3.5.2. Employee Reporting Methods

If a Sun Metro employee is involved in a near miss or determines something they deem to be a hazard, Sun Metro and their contractors ask for their help in reporting the event so we all may learn the lessons from it and perhaps prevent a collision or injury from occurring in the future.

- Near miss: An event you witnessed where no harm was caused, but there was the potential to cause injury or ill health; a dangerous occurrence.
- Hazard: Anything that may cause harm in the near future.

If an employee is involved in a near miss or determines something they deem to be a hazard, we ask for their help in reporting the event so we all may learn the lessons from it and perhaps prevent a collision or injury from occurring in the future

If the safety or security hazard requires immediate attention, dispatch is notified immediately. If immediate attention is not required, the employee is encouraged to submit the information to management by the end of their workday. Our managers then initiate conversations with employees about their observations of both safe and unsafe behaviors.

The employee's contribution to the cause of the injury or collision is considered in disciplinary action, up to and including termination. If after analysis it has been determined the incident resulted from an overt decision, disciplinary action is indicated. If not, then the appropriate counseling and/or training is indicated.

The following methods will be used by Sun Metro to allow employees to report hazards or near misses. The methods are:

- Reporting boxes: Using a Near/Hazard Notification form, the employee can fill the form and deposit it in the reporting boxes that will be located at strategic locations on Sun Metro facilities. The locations will be selected in a way that the employees feel comfortable using this method. Each mode will develop a Standard Operating Procedure.
- 2. **Open door policy**: Each safety manager and the CSO have an open door policy where the employee is encouraged to contact their corresponding manager to report any hazard or safety situation in their work area.

Refer to section 6.2 – Safety Communication for more details on Sun Metro Communication process.



#### 3. **E-mail**:





#### 3.6. Safety Management Policy Communication

Each safety manager is responsible to communicate the safety policies establish in this PTASP to their employees. The Safety Manager must communicate the safety policy within 30 days after the PTASP has been approved by the Mass Transit Board.

The Safety Manager can use any or all the methods listed below to communicate the Safety Policy:

- E-mail
- Safety bulletins
- Toolbox meetings
- General notices
- Formal classroom training

The safety manager is responsible for documenting in writing which method it was used and that all employees were formally notified and acknowledged that they received the information.

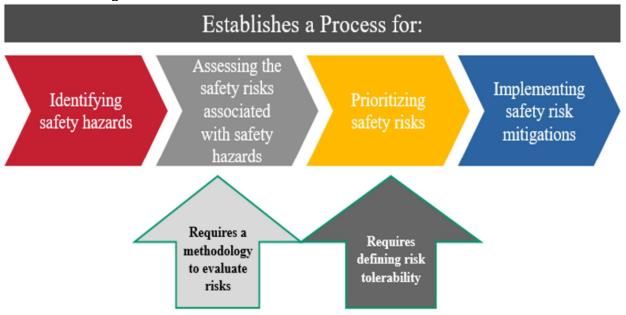


## 4. Safety Risk Management (49 CFR 673.25)

#### 4.1. Safety Risk Management Overview

The objective of this section is to establish a process to manage hazardous conditions that exist across <u>all transit modes</u> operated by Sun Metro. The process will identify hazards, assess the hazards, develop corrective action to mitigate or eliminate the hazard, and assess the success of the corrective actions in eliminated or minimized to an acceptable risk status by the mitigations.

Refer to the diagram below:



Sun Metro defines a hazard as 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 the public transportation system; or damage to the environment.

The Chief Safety Officer & the Safety Manager of each mode are directly responsible for the implementation and ongoing management of Sun Metro Hazard Management process. This includes:

- 1. Developing, updating and auditing the program
- 2. Training all designated Sun Metro employees and contractors on the hazard management process
- 3. Documenting and tracking all identified hazards to resolution.

The hazard resolution process is from 'cradle to grave' and can be applied throughout the 5 phases of the system life cycle.

- 1. Planning
- 2. Design
- 3. Construction
- 4. Operations



#### 5. Decommissioning

Hazard analysis attempts to determine the set of primary events in the hazard generation process. Upon identification of these events, Sun Metro will undertake measures to mitigate, control or eliminate the generation of hazards in ways that can reduce their risk to an acceptable level. Hazard resolution is the corrective action taken in response to the hazard identification and assessment process, but time and resource restrictions may determine the level of resolution that can be accomplished.

The following are actions for hazard resolution:

- 1. Eliminate the hazard, if possible
- 2. Implement training, procedural strategies or technology approaches, as appropriate, to reduce the hazard
- 3. Provide training to educate the workforce of possible hazards
- 4. If the hazard cannot be eliminated, reduce exposure to it
- 5. Monitor the Hazard mitigation to determine if the risk has been managed at an acceptable level so that it does not re-occur"

#### 4.2. Safety Hazard Identification

Hazard identification encompasses a set of methodologies that first search throughout the system for anything with the potential to do harm. Identification of hazards is the responsibility of all divisions and is the key to system safety. Identified hazards are analyzed for severity, occurrence frequency, and cost feasibility of remedial action required to eliminate or reduce the hazard to the lowest practical level. The Safety Manager of each mode shall review all hazards identified and log them into the Hazard Tracking Log.

Hazards can be identified in several ways such as:

- 1. Design Review
- 2. Accidents, Incidents, and System Reliability, and Failure Reports
- 3. Ride Checks and Proficiency Checks
- 4. System Inspections, Audits, and Regulatory Inspections
- 5. Customer, Contractor, and Employee Complaints
- 6. Safety Committee
- 7. Transit Industry Experience
- 8. Federal Transit Administration
- 9. Texas Department of Transportation (TxDOT-SSOA)

Sun Metro will use a hazard identification and analysis process before purchasing and accepting new equipment and modifications of existing facilities, systems or rolling stock, & infrastructure elements.

#### 4.3. Safety Risk Assessment

Hazard Risk Assessment is a quantitative calculation based on largely subjective judgments used to determine the risk associated with each hazard and thus the urgency



for implementing corrective measures to eliminate or reduce risk to a level of acceptability. Risk Assessment is comprised of evaluating hazard severity (categorizing the hazard) and evaluating hazard probability.

The factors considered in this analysis include system safety, schedule, and the impact on the public's perception of safety on the system in the community where the Streetcars operate.

#### 4.3.1. Hazard Analysis

Analysis of a hazard is based on both the probability of occurrence and the severity of an event. Hazards with the greatest potential to cause serious injury are given the highest priority for immediate resolution. Hazard analysis also attempts to reduce the severity of accident events by introducing protective devices and equipment, procedures and/or forms, or system modifications that reduce the amount of human and property damage in an accident event.

While identifying, every hazard is virtually impossible, there are two methods for orderly identification of hazards: inductive and deductive analysis.

The <u>inductive</u> hazard identification process consists of an analysis of system components to identify their respective failure modes and the effects they may have on the total system. This process assumes the failure of single elements or events and, through analysis, determines the potential consequential effects on the system or subsystem. The <u>deductive</u> hazard identification process involves defining an undesired effect (e.g. collision, fire) and then deducing the possible conditions or system component faults (or combinations of them) that are necessary to cause the undesired effect.

The CSO and the Safety Manager of each mode will continually evaluate the transit operation using the methods described above to identify new hazards. This will be documented as described in this document.

For existing infrastructure elements, vehicles, procedures/processes Sun Metro should consider using audits – either ad hoc or structured - based on identified safety issues to identify existing hazards and hazard potentials.

The Chief Safety Officer and the Safety Manager of each mode will be charged with performing the hazard analysis for that operation.

#### 4.3.2. Hazard Severity

Hazard severity is a subjective determination. As data is accumulated over time, an objective determination applicable specifically to Sun Metro can be derived. The determination reflects a credible mishap that could be anticipated to result from human error, procedural deficiencies, design inadequacies, component failure or malfunction. Hazard Severity at Sun Metro is based on the U.S. Department of Defense Military Standard for Systems Engineering (MIL-STD-882E) as follows:



<u>Category 1, Catastrophic</u> – Death, system loss, or severe disruption of service systemwide.

<u>Category 2, Critical</u> – Severe injury, severe occupational illness, major system damage, or major system-wide disruption of service.

<u>Category 3, Marginal</u> – Minor injury, minor occupational illness, minor system damage, or minor system disruption of service.

<u>Category 4, Negligible</u> – Less than a minor injury, occupational illness, system damage, or less than minor system disruption of service.

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 personal or system safety.

If the El Paso Streetcar Safety Manager and/or the CSO identify any Category 1 Catastrophic and Category 2 Critical hazards on the streetcar system, the TxDOT-SSOA will be immediately notified using "TxDOT Industry Safe" software.

The OHA and/or PHA for all transit modes in Sun Metro will be continually updated to ensure the hazards have been mitigated, reduced or controlled to acceptable levels. The Safety Manager of each transit mode is responsible for updating the OHA and/or PHA.

#### 4.3.3. Hazard Probability

The probability of an event or hazard occurring may be defined as a ratio of the number of times a specific event occurs to the total number of trials in which this event may occur during the planned life expectancy of a system. Generally, hazard probability is described qualitatively in potential occurrences per unit of time, miles, trips/runs or passengers carried. The Table below identifies the probability thresholds used by the Sun Metro. A hazard probability may be derived from the analysis of transit system operating experience, evaluation of Sun Metro safety data, or historical safety data from other passenger rail systems.

#### **Hazard Assessment Probability Levels**

Hazard Probability	Probability Levels
A = Frequent	Likely to occur frequently to an individual item. Continuously experienced in the system. MTBE* is less than 1000 operating hours
B = Probable	May occur several times in the life of an item. May occur frequently in the system. MTBE is equal to or greater than 1000 operating hours and less than 100,000 operating hours
C = Occasional	Likely to occur sometime in the life of an item. May occur several times in the system. MTBE is equal to or greater than 100,000 operating hours and less than 1,000,000 operating hours



Hazard Probability	Probability Levels
D = Remote	Unlikely, but possible to occur in the lifetime of an item. Unlikely, but can be expected to occur at some time in the system. MTBE is greater than 1,000,000 operating hours and less than 100,000,000 operating hours
E = Improbable	So, unlikely to occur, it can be assumed occurrence may not be experienced. Unlikely, but possible to occur in the system. MTBE is greater than 100,000,000 operating hours
F = Eliminated	Incapable of occurrence. This category is used when potential hazards are identified and later eliminated

<sup>\*</sup> MTBE = Mean Time between Events

The Risk Assessment Process is used to prioritize hazardous conditions and focus available resources on the most serious hazards requiring immediate resolution. Sun Metro will use MIL-STD-882-E DOD Standard Practice for System Safety dated May 11, 2012, to assess the level of risk for each identified hazard to determine what action(s) must be taken to correct or document the hazard risk. This risk assessment system is incorporated into the formal System Safety analysis, which enables Sun Metro decision-makers to understand the amount of risk involved in accepting the hazard in relation to the cost (schedule, cost, operations) to reduce the hazard to an acceptable level.

The Risk Assessment Matrix informs the Risk Assessment Index based on potential severity and probability. The criteria for defining further actions are based upon that index. Follow-up actions resulting from the Risk Assessment are as follows:

- ✓ Unacceptable: The hazard must be mitigated in the most expedient manner possible 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.
- ✓ **Undesirable**: A hazard at this level of risk must be mitigated unless a documented decision to manage the hazard until resources are available for full mitigation is issued by executive management and forwarded to Sun Metro CSO for review and approval/disapproval.
- ✓ Acceptable with Review: The CSO must determine if the hazard adequately controlled or mitigated as is.
- ✓ Acceptable without Review: The hazard does not need to be reviewed by management and does not require further mitigation or control.

#### **Risk Assessment Matrix**

	Safety Risk Assessment Matrix					
MIL-STD-882-E		Severity				
		Catastrophic 1	Critical 2	Marginal 3	Negligible 4	
	A - Frequent	1A	2A	3A	4A	
	B - Probable	1B	2B	3B	AB	
bility	C - Occasional	1C	2C	3C	4C	
Probability	D - Remote	1D	2D	3D	4D	
_ ₾	E – Improbable	1E	2E	3E	4E	
	F - Eliminated	1F	2F	3F	4F	

#### **Risk Assessment Index**

1A, 1B, 1C, 2A, 2B	HIGH	Unacceptable	
1D, 2C, 3A, 3B	SERIOUS Undesirable with management decision required		
1E, 2D, 2E, 3C, 3E, 3D, 4A, 4B	MEDIUM	Acceptable with review by management	
4C, 4D, 4E	LOW	Acceptable without review	
1F, 2F, 3F, 4F	NONE	Incapable of occurrence. This category is used when potential hazards are identified and later eliminated	

#### 4.4. Safety Risk Mitigation

The mitigation of hazards utilizes the results of the Risk Assessment Process. The objectives of the hazard resolution process are to:

Identify areas where hazard resolution requires a change in the system design, installation of safety devices or development of special procedures;

Verify hazards involving interfaces between two or more systems have been resolved; and

Verify the resolution of a hazard in one system does not create a new hazard in another system.

Sun Metro uses the following methodology to ensure system safety objectives to eliminate or control hazards. These controls are implemented throughout design, construction, procurement, and operations:

- 1. Design out hazards or design to minimize hazard severity. To the extent permitted by cost and practicality, identified hazards are eliminated or controlled by the design of equipment, systems, and facilities.
- 2. Develop mitigating provisions for hazards that cannot reasonably be eliminated or controlled through design which are controlled to an acceptable level through the use of fixed, automatic, or other protective safety design features or devices. Provisions are made for the periodic performance of functional checks of safety devices and training for employees to meet system safety objectives.
- 3. When design, training and safety devices cannot reasonably nor effectively eliminate or control an identified hazard, safety warning devices are used (to the extent practicable) to alert persons to the hazard.
- 4. Where it is impossible to reasonably eliminate or adequately control a hazard through design or the use of safety and warning devices, procedures and training are used to control the hazard. Precautionary notations are standardized for use by all persons involved and safety-critical issues require certification of authorized personnel.

The Initial Risk Index defines the magnitude of any specific hazard item without the implementation of design, construction, procurement or operational measures to control or mitigate the risk. The Safety Manager by mode will identify sets of proposed mitigation actions to eliminate or control each identified risk and evaluate the Residual Risk Index. Based on those mitigating actions, to assess the potential effectiveness and inform the Sun Metro Associate Director of Streetcar Operations, a determination of whether the hazard is adequately controlled or mitigated will be made.



#### 5. Safety Assurance (49 CFR 673.27)

#### **5.1.** Safety Assurance Process Overview

This section describes the different processes used to track the implementation of Sun Metro Safety Management System.

This includes but not limited to:

- Formal audits
- Inspections
- Monitoring Rule and Standard Operating Procedure (SOP) compliance.
- Constant evaluation of hazards already mitigated.
- Monitor Sun Metro operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended.

Sun Metro understands that hazard management is not only the management of new hazards but also the management of the mitigated hazards. Sun Metro will evaluate mitigations already implemented to verify their effectiveness.

This table is a simplify explanation of Sun Metro Safety Assurance section:

Safety Assurance Process	If yes, then		
Procedures Monitoring and Measurement			
Inadequate compliance?	Address non-compliance		
Insufficient?	Evaluate hazards through Risk Management Process		
Safety Risk Mitigation Monitoring and Measurement			
Ineffective?	Evaluate hazards through Risk Management Process		
Inappropriate?	Identify new mitigation under Risk Management Process		
Not implemented?	Address non-compliance		
Safety Event Investigations			
Causal factors identified?	Evaluate hazards through Risk Management Process		
Information collected?	Use to monitor and measure through other Safety Assurance processes		
Internal Reporting Programs Monitoring and Measurement			
Safety concerns identified?	Evaluate hazards through Risk Management Process		



Safety Assurance Process	If yes, then
Information collected?	Use to monitor and measure through other SA processes

#### 5.2. Safety Performance Monitoring and Measurement Section

## 5.2.1. Process to monitor compliance with operation and maintenance procedures

This section describe how Sun Metro will monitor:

- Compliance with and sufficiency of operations and maintenance procedures.
- Operations to identify safety risk mitigations that may be:
  - Ineffective, could re-analyze the hazard(s) and consequence(s) the mitigation was intended to address through Risk Management.
  - o Inappropriate, could identify new mitigation options.
    - The mitigation may not be feasible.
  - Not implemented as intended, could consider alternative mitigations or alternative approaches to implementation.

Sun Metro Key Staff will assess the information gather using the processes described in this section and evaluated how to address it.

#### 5.2.1.1. Facilities and Equip Inspections

Please reference the Operations Maintenance Plan (OMP) of each mode for more detailed information on the topics presented.

#### **Facility Inspections**

Periodic safety inspections are performed on all Sun Metro facilities to detect and resolve hazards in order to effectively safeguard employees, visitors, and passengers. The Safety Manager of the specific mode and/or maintenance staff perform safety Inspections of the Sun Metro facilities.

The Safety Manager of the specific mode is responsible for ensuring hazards are addressed and corrective actions are captured and logged in the consolidated Hazard Tracking log of that mode. The Safety Manager of the specific mode must complete at a minimum one quarterly safety inspection that covers a variety of EPA, FTA, and OSHA 1910 and 1926 topics in the facility under their supervision. The inspection will include but is not limited to housekeeping, fire extinguishers, and guard rails/stair rails in the proper place.

#### **Equipment Inspections**

Inspections of facility equipment are made in accordance with appropriate maintenance manuals and procedures. The Safety Manager of the specific mode works with the Mode Maintenance personnel and Sun Metro Facilities to ensure equipment and facilities are maintained at an optimum level of safety. Hazards identified during inspections are



entered into the Hazard Tracking Log of the mode as appropriate and tracked until closure is achieved.

#### **5.2.1.2.** Maintenance Inspections

Each mode is responsible for developing and implementing a Maintenance Inspection program. This program will be implemented by the Safety Manager of the specific mode with the support of Sun Metro CSO and the City of El Paso Office of Risk Management and Safety.

Each Sun Metro facility inspection report is sent to the responsible party to create the appropriate work orders. It identifies specific areas and targets specific recommendations for corrective action. Identified unacceptable hazards are reported to the CSO. Hazards identified during these inspections are entered into the Hazard Tracking Log of the specific mode as appropriate.

Work Orders are generated in Fleet Net software for defects identified during Streetcar Maintenance, Sun Metro Facilities Management and EPSC Systems Maintenance inspections. Fleet Net is the software used by Sun Metro to generate, track and close all work orders generated by the appropriate departments. Hazards identified during these inspections are entered into the Hazard Tracking Log as appropriate and evaluated by the Safety Manager of the mode. Mitigation of Hazards are tracked to closure using the mode Hazard Tracking Log.

Checklists for Facilities are included in the Facility Maintenance Plan, Vehicle Maintenance Plan, or other specific SOP. The checklists are created by the Mode Maintenance Department with the assistance of Safety and Operations of the mode.

At random the Safety Manager of the mode and/or Chief Safety Officer will perform inspections to verify previous inspections and maintenance were performed in accordance with OEM recommendations. If areas of improvement are found, the Facility and Maintenance department will be required to present CAP's to the CSO. Those CAPs will be included in the CAP Log for tracking and closure.

#### **5.2.1.3.** Safety Data

The Chief Safety Officer & the Safety Manager of the mode will monitor the safety performance of the various Sun Metro operations. Accident, incident, injury and other safety data are collected throughout the division and analyzed to determine trends within the organization. The safety data collected is analyzed to determine if safety performance meets established safety goals outlined annually.

The accident and incident data also help to identify service areas that generate a higher percentage of accidents or potential for higher accident rates. Safety data collected includes injuries to passengers, Sun Metro personnel and the public; hazardous equipment failures; unacceptable hazardous conditions; vandalism and security hazards; and rules and procedures violations. The Safety and Security Division analyzes safety-



related data for the purpose of implementing corrective action to assist in preventing or mitigating the reoccurrence of hazards.

#### **Data Acquisition**

Information regarding accidents, incidents, and hazardous conditions of Sun Metro is obtained from several different reporting sources.

These include, but are not limited to the following reports or logs:

- a. Accident/Injury Reports
- b. Blocking log
- c. Audits
- d. Inspections
- e. Ride checks
- f. Unusual Situations Reports
- g. Event Reports
- h. Daily Operations Summary
- i. Employee/Occupational Injury reports
- j. National Transit Database (NTD) Safety and Security reporting module

#### Data Analysis

Hazard data is used to identify trends. Trends are then further analyzed and/or investigated by the Chief Safety Officer and/or Safety Manager of the mode to determine causal factors. Interviews with personnel in the affected division(s) may also be conducted. The various safety teams identify hazards, areas susceptible to accidents, traffic problems, and other critical factors to develop corrective actions for hazards.

#### Reports

The Safety Manager of the mode analyzes the data from reports, incident investigations, safety committees, field inspections, Police Reports and Risk Management. The Safety Manager of the mode also uses the data acquisition and analysis process to identify system trends and to monitor safety and security program performance. The Safety Manager of the mode provides monthly safety program performance reports to CSO.

Currently, safety performance reports (in conformance with those submitted to the National Transit Database - NTD) are submitted to FTA on a monthly and annual basis. The reports contain injury data regarding passengers, Sun Metro personnel, and customer/public accidents and incidents.

Sun Metro uses this report to establish safety performance goals and objectives for each coming year.

## 5.3. Process to conduct investigations of safety events to identify casual factors

Each mode is responsible for developing a specific accident investigation procedure. The safety manager of each mode will develop and/or update their individual accident



investigation procedure. Each procedure will be submitted to Sun Metro CSO and AE for review and approval.

Each accident/incident is investigated as specified in the latest version of the Sun Metro Accident Investigation Procedures. The Procedures will comply with 49 CFR Part 672, 673 & 674, State Rail Safety Oversight Rule (for streetcar) for rail incidents/accidents, and 49 CFR Part 1580 U.S. Department of Homeland Security Rule affecting transit systems. For streetcar, please refer to SOP 700.1 Revision 1 as approved by TxDOT for details on safety event investigation

All Sun Metro employees and contractors are expected to comply with Sun Metro accident and incident reporting procedures and use the forms prescribed. Roles, responsibilities, and accident reporting thresholds are outlined in the procedures, including accident notification, reporting, and investigation throughout the organization. The level of investigation required is dependent on the seriousness of the event.

The accident investigation procedures will be revised on <u>annually or any time</u> there is a change in the FTA or TxDOT regulations and requirements. In addition to the accident investigation procedure, Sun Metro has several SOP's to address accident notification & event management.

#### 5.3.1. Accident Notification

All Safety Managers are required to develop an accident notification procedure specific for their mode. As a minimum, the following notifications must be done:

- Internal Notification: develop a process to notify Sun Metro Management in case of accidents or events that may require upper management notification.
- External Notification: At minimum the following external agencies will require notification within 2 hrs. as applicable:
  - o Notification to FTA will be submitted by: <a href="mailto:cmc-01@dot.gov">CMC-01@dot.gov</a> / 202-366-1863
  - The notification will be submitted using TxDOT Industry Safe Web form for initial Accident Notification (for Streetcar within 2 hrs.).
  - The National Transportation Safety Board will be notified by telephoning the National Response Center at 1-800-424-0201

#### **5.3.2. Accident Investigation Methods**

The following investigative methods will be included but are not inclusive of the investigation process:

- o On-site inspection of the incident scene;
- o Review (if necessary) of:
  - Maintenance, operations, or employee training records and
  - > The results of post-accident drug and alcohol tests
  - Camera footage, audio recordings, and other data downloaded from electronic devices and recorders
- Collection of all pertinent facts and evidence available, or near the scene of the accident/incident;



- Conduct of interviews of employees involved or other witnesses at the site when appropriate;
- Observe employees in the performance of work
- Assemblage of all pertinent reports, data, and records associated with the accident/incident,
- Conduct follow-up interviews, and/or re-enactment to complete the accident investigation
- Perform analysis as required to determine the causative factor(s) for each accident/incident;

#### 5.3.3. Photographs

All accident investigations scene must be photographed as soon as possible from a panoramic view, preferably before the accident scene is disturbed. Scene photographs should be taken using a '4-point compass' method. The entire scene should be photographed from multiple vantage points. The photographer should attempt to provide sufficient depth-of-field to show the relative positioning of objects and subjects for later comparison with diagrams.

Arrange to have specific objects or subjects photographed as soon as possible from both normal periphery and close-up views, preferably, before the accident scene is disturbed. These photographs should attempt to include, at a minimum:

- a. Each vehicle involved, exterior four sides, including a number
- b. Each vehicle involved, interior compartment
- c. Each vehicle involved, operating control compartment
- d. Resting position of wheels if off track, including evidence of sanding
- e. All visible points of vehicle damage
- f. Evidence of wheel marks on the rail
- g. All visible points of infrastructure damage
- h. Any visibly evident contributing obstructions, objects, or conditions
- i. Position of casualties, if stationary
- i. Any other subject that appears out of the ordinary

#### 5.3.4. Reports

It will be the responsibility of each Safety Manager to prepare an event report. All Event Investigation Reports will be review and approved by the Mass Transit Chief Safety Officer or designee.

The Event Investigation Reports must compile the accident/incident information; findings evaluated during the investigation process and will include the recommendations to prevent recurrence with the corrective action plan.

For Streetcar, the report will be prepare using TxDOT Industry Safety software. Refer to Streetcar SOP 700.1 for details.



#### 5.4. Continuous Improvement Section

#### **5.4.1. Internal Safety Audit**

The purpose of internal system safety audits is to perform an official evaluation of accomplishments, problems, and trends related to total Sun Metro safety and to evaluate the effectiveness of the implementation of the PTASP.

The CSO is responsible for the direction of the safety reviews and audits of Sun Metro divisions and contractors to determine performance related to the System Safety goals and objectives.

All Sun Metro divisions and contractors are subject to safety audits. The critical nature of certain operations requires rigorous development of reviews and audits. These include training, maintenance, and operations activities. Both periodic and no-notice inspections are undertaken to address all aspects of the activity including documentation, practices, and compliance with the PTASP, Sun Metro policies and other requirements.

The CSO reviews training, practices, and procedures to correct deficiencies identified while conducting audits or other safety activities, including inspections and emergency drills.

#### 5.4.1.1. Purpose and Scope

The purpose of internal safety audits is to confirm all safety elements are in place and assigned safety tasks and activities are being accomplished. This provides an additional means of documentation for senior management to verify how well each division is fulfilling its safety-related goals and objectives as required in the PTASP.

#### 5.4.1.2. Safety Audit Process

The Chief Safety Officer with the help of the Office of Risk Management of the City of El Paso is responsible for the management of the Internal Safety Audit Program. All Sun Metro divisions are required to cooperate fully with Safety and Security personnel. Executive and senior managers ensure their divisions participate fully in the safety audit process. Office of Risk Management of the City of El Paso is responsible to submitting to TxDOT the auditing checklist for Streetcar a minimum of 30 days in advance of a scheduled safety audit

#### 5.4.1.3. Integrity of Review Process

To maintain the integrity of the review process, an audit team is used to conduct safety audits. The Safety Manager of the mode does not perform audits/reviews of those functions and elements for which they are directly responsible to implement. These elements are audited by the Chief Safety Officer and Office of Risk Management of the City of El Paso, an outside contractor, or an independent member of the audit team. No team member shall audit a function or activity for which they are responsible.

#### 5.4.1.4. Cycle/Schedule

Over a three-year period, all the elements of the PTASP must be audited at least once. Sun Metro Internal Safety Audit Process is intended to be an ongoing, continuous safety



review process. The CSO must develop and annually submit a comprehensive Internal Safety Audit schedule detailing when it will audit these elements over the three-year period.

Annual audit schedule must be developed, reviewed, maintained and updated to ensure all elements of the PTASP are reviewed during the audit cycle.

The Chief Safety Officer and/or Safety Manager notifies the division/organization and TxDOT (for streetcar) a minimum of 30 days in advance of a scheduled safety audit.

#### 5.4.1.5. Checklists and Performance of Safety Audits

Audit checklists are developed in advance for each transit mode. The checklists include the elements on which the department will be audited. Checklists are prepared during the review of the PTASP section, documents referenced in the SSPP section, previous audits and corrective actions.

The El Paso Streetcar auditing checklists must be submitted to TxDOT for review and approval. The Audit Checklists are provided to TxDOT 30 days in advance, at minimum, for their review and input. Audit checklists are then provided to the organization being audited as soon as possible after receiving TxDOT's approved checklist(s).

Pre-audit and post-audit conferences are held by the audit team with the entity being audited. The safety audits are comprised of record reviews, interviews, field observations, and inspections and measurements to verify the accuracy of documentation and spot inspections of facilities and equipment to verify compliance with the PTASP, procedures, codes, and regulations.

The following list of documents may be used to support the development of the audit checklists:

- PTASP
- Rule Book, bulletins, and/or procedures
- Standard and emergency operating procedures
- Training program documentation
- Management and/or administrative plans/procedures
- Design standards and criteria
- Accident and investigation reports
- Hazard tracking logs
- Corrective Action Plans
- Previous audit reports
- Other sources as determined by TxDOT SSO upon request

#### 5.4.1.6. Audit Report

Upon completion of each audit report, the Chief Safety Officer will issue a final report of the results and specify areas of deficiency, prepare recommendations, identify the need for corrective action plans, and distribute copies of the report to the Sun Metro Management staff and the audited Division. Responsible Divisions are expected to



develop corrective actions, though the audit team may make recommendations and must approve corrective actions.

The results of the audit will be used for positive corrective action, and not as an internal regulatory process. Safety Audit coordination meetings and management briefings are to be held to review areas of concern or disagreement over findings and evaluate possible corrective actions. Safety Manager will monitor and track corrective actions with the affected divisions to ensure implementation.

The Chief Safety Officer will provide a draft safety audit report to TxDOT SSO for the El Paso Streetcar 30 days AFTER the audit. TxDOT SSO will make additional recommendations to the audit report prior to the final issue of the report. Office of Risk Management of the City of El Paso will submit the auditing reports to the Accountable Executive. The AE is responsible for signing the report submitting it to TxDOT.

#### 5.4.1.7. Annual Report Review

An annual safety activity report and Safety and Security audit report must be provided to the Director and to the TxDOT SSO for review and approval on or before December 1<sup>st</sup>.

Sun Metro must also include a formal letter signed by the Executive Director certifying its PTASP. If the safety audit's findings indicate noncompliance with its PTASP, the Executive Director must identify in the formal letter the nature of the noncompliance and the steps Sun Metro will take to achieve compliance. An implementation schedule detailing when compliance will be achieved may also be provided.

#### 5.4.1.8. Coordination with TxDOT

As noted above, the following aspects of the Internal Safety Audit Process are coordinated with TxDOT regarding the streetcar:

- Internal Safety Audit Cycle and Schedule
- Safety Audit Checklists
- Dates of Completion of each Safety Audit
- Each Safety Audit Report
- Corrective Action Plans
- The Annual Safety Audit Report
- The Director of Annual Certification

#### 5.4.1.9. Review Completeness

The CSO (or other entity performing safety audits) is responsible for ensuring the Safety Audit Checklists provide for a complete review of each of the PTASP Elements. In addition, the Safety and Security Division (or other entity performing safety audits) shall ensure the required Safety Audit/Review reports are comprehensive and accurate

#### **5.4.2. Rules Compliance**

Each Sun Metro mode is required to have and implement a Rules and Regulations Manual. These manuals are distributed to all new employees upon new-recruit



orientation. On-going training is provided through the rulebooks and procedures during operations and in maintenance training courses.

#### **5.4.2.1.** Review of Rules and Procedures

Policies, plans, rulebooks referenced above, and procedures are reviewed periodically to verify they meet the needs of the transit system in normal and emergency conditions. Accordingly, Sun Metro Instructors target safety practices intended to instill a safety culture in its workforce.

The Chief Safety Officer and each mode safety and operations manager coordinates additions to or deletions from these documents which impact the safe operation of the system. Sun Metro Manuals, Policies, and Procedures by mode stipulate control and distribution, including the three-year review process.

The length of time needed for the review may vary based on the document being reviewed but no reviewer should delay the evaluation/review process more than thirty (30) days. The section managers may issue a Bulletin, Notices, General Orders, and Operating Orders when an immediate update is required to an operating rule or procedure. Sun Metro safety committees, accidents/incidents, and audit reviews are additional opportunities for rules review.

#### **5.4.2.2. Process for Rules Compliance**

Each Sun Metro Supervisors (regardless of the mode) shall conduct ride checks of each operator at a rate determine by each individual mode.

Each mode uses a specific **Ride Check Forms** to evaluate the operators in a standardized way. Ride Checks provide an opportunity for retraining employees to an acceptable level of compliance regarding specific rules.

#### 5.4.2.3. Compliance Techniques – Operations and Maintenance Personnel

Compliance techniques include observation of work activities and tasks and making pop questions regularly to employees about their knowledge of the respective rulebooks and handbooks. During initial training, employees are formally tested on their knowledge of applicable rules and procedures through written examinations.

#### **5.4.2.4. Compliance Techniques – Supervisory Personnel**

The Safety Manager of each mode conducts ride checks to evaluate the effectiveness of compliance methods utilized by supervisory personnel. The ride checks asses' employees' knowledge of rules and procedures and validates the success of Sun Metro's employee training programs.

Ride check forms completed are forwarded to the Mode Operations Manager to be included in employee performance reviews. Recommendations for improvement of the compliance methods are submitted.



#### 5.4.2.5. Documentation

The results of the proficiency checks performed by operations and maintenance supervisors are documented on the appropriate form and are made available to the Safety Manager & Chief Safety Officer. Hazards identified during these operations and maintenance rules compliance checks and assessments are captured within the Hazard Tracking Log and subsequently tracked to closure.

All Ride Checks are performed following the transit mode SOP for Ride Checks. All forms will be included in the employees' training folder.

#### 5.4.3. Local, State, and Federal Rules Compliance

Sun Metro is committed to a dedicated to a safety program covering all applicable federal, State and local regulatory requirements to ensure a safe and healthy work environment.

The Safety Manager of each mode has the primary responsibility of safety program implementation and enforcement to ensure that employees in their respective mode are aware of job-related hazards through an ongoing process of training, job briefings and departmental notices located throughout all affected areas.

#### 5.5. Corrective Actions

This section describe the general process of how Sun Metro will manage all Correctives actions generated after the occurrence of an accident and subsequent investigation; the development of recommendations, the identification of an unacceptable hazardous condition, or hazards along with deficiencies identified through internal or external safety reviews/audits.

The Mode Safety Manager will notify the CSO and develop a CAP within 5 days of entering the CAP into Sun Metro CAP Log. The CSO will track and update the CAP Log at a monthly basis. Mode Safety Manager may request additional time to prepare the CAP for complex issues.

The corrective action plan will include:

- The hazard or deficiency identified and investigation (if relevant to the CAP);
- Proposed Corrective Actions
- Proposed Timeline

Proposed actions planned to minimize, control, correct, or eliminate the unsafe or hazardous condition, including interim action if required;

- Scheduled date of completion of implementation;
- Division and individual responsible for implementing the CAP; and
- Comments subsequently added pursuant to review and closure of the CAP.

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The status of each Corrective Actions is reported at FLSC Meetings. All corrective actions are prioritized for implementation using the risk assessment matrix and they are assigned a responsible person to lead the corrective action effort and close the corrective action after resolution. TxDOT requires that El Paso Streetcar CAPS are uploaded and track using the IndustrySafe.

Each mode is required to develop an SOP on how the mode will manage their specific CAP's. However, all SOP's must be approved by the CSO for compliance with SUN Metro ASP requirements

#### **5.6.** Management of Change

The Management of Change addresses the processes to be followed to evaluate the risk of any changes proposed at all levels of the organization. The overall purpose of this process is to provide assurance that any proposed changes which impact operations will not increase safety risk; or where additional risk is identified that controls are put in place prior to the changes being implemented.

Changes to organizational structure; the nature or extent of operations; or to facility or equipment assets; as well as mergers and acquisitions of new businesses are proactively managed through this process to avoid introducing or increasing safety risks.

- The resources required to complete the validation process, in terms of people, finance and materials is included in this validation process.
- The allocation of responsibilities considers the competence of the individuals that are required to carry out the safety validation roles.
- All employees who may be affected by the proposed changes are consulted as part of the process.

The extent and scope of safety validation applied to any change proposal is proportional to the risks (safety, operational, and other risks) associated with its introduction

In the case of smaller, less complex or well understood changes, the safety validation of change process may be implemented as part of normal operations, using existing organizational arrangements and meeting structures to deliver the required level of assurance.

Changes shall be classified as either Class I or Class II levels of safety validation. The originator may make an initial determination of the class of a proposed change, however, the Accountable Executive or the Chief Safety Officer may make changes to the original classification. The Accountable Executive has final decision-making authority as to the Class of the configuration change.

#### Class I Changes

Class I changes shall be developed and individually submitted for each proposed change through a standardized Engineering Change Request (ECR) document, and/or through some other approved documented request process of the EPSC. The ECR or



documented request will provide detailed information and any other related data to support the formal change approval, which will effect a change to the configuration of an asset. Class I changes directly affect the following:

- a. Form, fit, or function of an asset
- b. Safety of the transit system
- c. Warranty provisions of the test
- d. Acquisition or support costs of an asset or future spare parts

#### Class II Changes

Class II changes are all changes which are not classified as a Class I change. Generally, Class II changes are those required to amend, update, or add clarification to documents and drawings. All Class II changes are to be submitted individually on a standardized form, and/or through a documented request, with a detailed description of the proposed change

The process is generally described in the following chart.

Safety Validation of Change Process			
Main Steps	Main Steps Key Activities		
Identify Proposal for Change	<ul> <li>Raise change proposal (including Capital Expenditure Approval)</li> <li>Inform relevant functional Manager(s)</li> </ul>	Change proposer	
2. Determine Classification of Change Significance	<ul> <li>Classify level of safety validation required</li> <li>Ensure the extent and scope of validation is proportional to the level of risk</li> </ul>	Change proposer	
3. Allocate Roles & Responsibilities	<ul> <li>Formally allocate change sponsor and change authorizer</li> <li>Identify other required resources and roles for consultation</li> </ul>	Change proposer (with guidance)	
Submit C	Change proposer		
Decide whether sa	fety validation should proceed	Change proposer	
Decide whether sa 4. Prepare Safety Validation of Change Case	Prepare safety validation documentation     Complete risk assessment of proposed change     Submit for review     Revise and finalize documentation	Change proposer & Mode Safety Manager	
4. Prepare Safety Validation of Change Case	Prepare safety validation documentation     Complete risk assessment of proposed change     Submit for review	Change proposer &	
4. Prepare Safety Validation of Change Case  Submit Safety Validation Change Case	Prepare safety validation documentation     Complete risk assessment of proposed change     Submit for review     Revise and finalize documentation	Change proposer & Mode Safety Manager	



As part of the process to ensure specific safety concerns have been identified and addressed.

Additional responsibilities in the Safety Validation of Change process include:

- CSO provides safety expertise/support to those carrying out the safety validation.
- Safety Managers:
  - o Reviews and approves each safety validation of change process.
  - o Decides on the level of safety validation required (consulting with other functional heads as necessary).
  - Provides safety expertise/support during safety validation activities as required.
  - o Provides safety expertise/support to those carrying out the safety validation.

An electronic log of all proposed changes, whether approved or not, are maintained by the Mode Safety Manager.

Each mode is responsible for developing their own Management of Change SOP based on the process described previously. These SOP's will be submitted to the CSO and AE for review and approval.

The process described previously in this section for monitoring safety data incorporates continuous improvement. As safety risk is identified, then reported on, a determination is made as to whether the risk can be mitigated immediately or requires more time and resources.

Risk mitigations that can address the safety concerns immediately are carried out but still reported. The reporting of these concerns includes the mitigation steps that have been taken. Monitoring of the risk continues to ensure that the mitigation strategy is effective.

The Safety Risk Management section of this document describes the risk assessment and mitigation procedures used that determine how to proceed with improvement strategies that require more time and resources. Which improvement strategies to implement for longer term issues is based on severity and probability of risk occurrence. Additionally, safety hazard identification data is used to implement immediate corrective actions and to proactively identify hazards before they cause future accidents or incidents.

The objective of hazard identification is to distinguish those conditions that can cause an accident or create an unsafe condition. Sun Metro routinely analyzes records from our operation to identify accident causation based on history. Current traffic conditions are periodically analyzed, and management inspections of established prevention processes are routinely performed.



#### 6. Safety Promotion Chapter (49 CFR 673.29)

#### 6.1. Competencies and Training Section

Instructions on safe methods of operation and safety procedures are included in rulebooks, manuals, handbooks, and other documentation developed for the training and certification of operations and maintenance personnel. Training systems have been developed to include in-house classroom training, field training, on-the-job training, and testing.

Each Mode is responsible for establishing specific safety-training requirements for its employees & contractors. The Mode Safety Manager is responsible for providing / coordinating new and revised safety training programs to the Chief Safety Officer for approval.

Each mode Training Plan must be compliant with 49 CFR 672 Public Transportation Safety Certification Training Program. As required, the Mode Training Plan must identify the safety sensitive positions, their safety curriculum per position including required retraining

#### **6.1.1. Training and Certification Program**

Each Mode Safety Manager is responsible for the development and implementation of their individual Training and Certification Plan.

(FTA) Public Transportation Safety Program includes two separate requirements for Sun Metro's Training and Certification Plan

- FTA's Public Transportation Safety Certification Training Program regulation, 49 CFR Part 672, specifies "a uniform safety certification training curriculum and requirements to enhance the technical proficiency of individuals who conduct safety audits and examinations of public transportation systems and those who are directly responsible for safety oversight of public transportation agencies." (§672.1(a))
- FTA's Public Transportation Agency Safety Plan (PTASP) regulation, 49 CFR Part 673, requires Sun Metro to "establish and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system." The training program "must include refresher training, as necessary." (§673.29(a))

The training plans as a minimum must cover:

1) Safety sensitive positions cover on the mode Training Plan. This could include employees and contractors who work as part of the agency's safety function, such as safety officers and analysts, as well as operations and maintenance functions, such as managers, supervisors, and front-line employees



- 2) Curriculum per safety sensitive positions (initial training, refresher training and re-training)
- 3) Teaching strategies
- 4) Recordkeeping

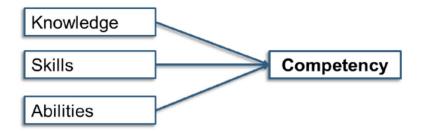
El Paso Streetcar has a Training Plan already develop, submitted and reviewed by TxDOT.

Each plan must be submitted to the Mass Transit Chief Safety Officer for review and concurrence. Each plan must be reviewed annually by the Safety Manager of the mode.

#### 6.1.2. Competency

Competency combines the knowledge, skills, and abilities required to effectively fulfill job roles

- 1) May cross various job roles and functions
- 2) May be useful as an employee training topic
- 3) Can be developed from a variety of sources



The safety managers of each mode are responsible for the competency of their employees and the compliance with their individual Training Plan. The specific mode Training Plan must discuss what tools will be used to measure the competency of the personnel. Some examples are:

- Written test
- OJT test
- Exercises

#### 6.1.3. Hazardous Materials Training

Sun Metro is fully aware of the importance of employee chemical safety programs and the duty to comply with legally mandated hazardous materials rules and regulations. To this end, Sun Metro has implemented a materials acceptance/rejection program to monitor and control chemicals, which are brought on to Sun Metro property to be used by employees.

El Paso Streetcar Hazard Communication Program (rev 0) comply with Title 29 Code of Federal Regulations Part 1910.1200, Hazard Communication Program. El Paso Streetcar Hazard Communication Program covers the procurement, receipt, storage, and

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disposal of hazardous materials. It also documents the maintenance of Safety Data Sheet (SDS) binders and employee training.

Hazardous waste/chemical safety inspections are included in the responsibilities for safety inspections. Sun Metro has contracted the services of a properly licensed hazardous waste contractor for the removal of hazardous materials. When necessary, consultants may be hired for special projects such as indoor air quality, chemical vapor, and particulate sampling.

The Safety Manager by Mode reserves the right to reject a product if it is deemed either too hazardous for employee use or Sun Metro is unable to provide adequate safeguards or protection.

#### 6.1.4. Drug and Alcohol Program / Training

Sun Metro is certified as a drug-free workplace and complies with all provisions of the U.S. Department of Transportation, Federal Transit Administration, 49 CFR Part 655, Prevention of Alcohol Misuse in Transit Operations and 49 CFR Part 40 Procedures for Transportation Workplace Drug and Alcohol Testing Programs. All Sn Metro Transit Modes follow the Sun Metro Substance Abuse Policy dated April 1, 2018.

Covered employees will receive a minimum of 60 minutes of training on the effects and consequences of prohibited drug use and additional training on the effects of alcohol on personal health, safety, and the work environment, and on the signs and symptoms that may indicate prohibited drug use. Supervisors will, in addition to the covered employee training, receive an additional minimum of 60 minutes of training on the physical, behavioral, speech and performance indicators of probable drug use. Supervisors will receive a minimum of an additional 60 minutes of training on the physical, behavioral, speech, and performance indicators of probable alcohol misuse.

City Human Resources, along with the EPSC / Sun Metro Safety Managers and Sun Metro Human Resources Section are responsible for administering City Policy Drug and Alcohol-Free Workplace regulations.

Drug and alcohol testing is required under the following circumstances:

- Pre-Employment, including placement of an existing employee in a safety-sensitive position (drug test only)
- Reasonable suspicion that an employee has used a prohibited drug or misused alcohol
- Post-accident following certain types of accidents
- Random testing for safety-sensitive personnel
- Return to duty following completion of drug/alcohol rehabilitation program
- Follow-up testing for employees who have sought and completed a treatment program



Under the FTA drug testing regulations for employees in safety-sensitive positions, laboratory tests on urine specimens are conducted for five types of drugs or their metabolites. These drugs are:

- Marijuana
- Cocaine
- Phencyclidine (PCP)
- Amphetamines (e.g. racemic amphetamine, dextroamphetamine, and methamphetamine)
- Opiates (e.g. heroin, morphine, codeine)

Sun Metro assist city employees with personal or related problems that could affect job performance through the Employee Assistance Program. On-site contractors working in Safety Sensitive positions on Sun Metro property or ROW must have a drug and alcohol policy that complies with DOT guidelines.

#### 6.1.5. Recordkeeping

All Sun Metro employees training records are maintained by the City of El Paso Human Resources Department.

Contractor training records are kept by following the individual companies' policies. However, these records must be available to Sun Metro at any time for inspection or audit.

#### 6.2. Safety Communication:

At Sun Metro communication program goals are:

- Conveys information on hazards and safety risks relevant to Sun Metro employees & contractor's roles and responsibilities.
- Informs Sun Metro employees & contractors of safety actions taken in response to reports submitted through Sun Metro employee safety reporting program

Safety communication IS data sharing. This data sharing happens in several ways:

- Sharing data with compliance authorities;
- Sharing data with other service providers; and
- Sharing data with employees and contractors.

Safety communication has significant implications in safety culture and transparency. You might even say that transparency is simply how much information you communicate.

These are important points because the term "safety communication" does not quite capture the fact that what we are really talking about is:

- The type of safety culture management practices;
- The type of relationship management has with front line employees and other organizations; and
- How much trust management has in employees?

Some best practices for communicating safety are:



- Having very clear internal rules or guidelines on role-based access to data i.e., who can see what;
- Having many ways of implicitly and explicitly communicating data, such as:
  - o Implicit: an issue manager which displays reported issue summaries;
  - Explicit: Sending out monthly newsletters
- Be as transparent with safety information as possible, as sharing too little or too much can hurt your safety culture.

At Sun Metro, the safety communication will be implemented using the following tools to spread information throughout the system.

- Monthly Safety Meetings: Participation on this meeting is <u>mandatory</u> for all employees and supervisors. This meeting is led by the Mode Safety Manager and the CSO. The monthly safety meeting will be the forum where employees will be kept inform them how Sun Metro was managing the hazards and what mitigating actions are being implemented.
- Maintenance safety toolbox: This is a monthly meeting of the maintenance staff to discuss safety issues and also present the monthly safety video for maintenance.
- Toolbox: the supervisors will perform toolbox meetings to discuss any new train order, rule or SOP. These toolboxes are documented by the supervisor.
- Job briefings: Every time a non-routine work is perform a job briefing is held to discuss the hazards associated with the task.
- Safety Boards: Each mode will develop and keep update a billboard that will be used to communicate with the employees. The billboard must be kept up to date by the Safety Manager of the mode.



Example of a Safety Communication Board to deliver key safety messages to employees

#### **6.2.1. Safety Committees**

The Sun Metro Fire/Life Safety Committee (FLSC) consists of representative of every department and external agencies. This committee meets on a monthly basis.

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This committee is used by the areas to:

- Bring specific concerns to the attention of the CSO.
- Ensure that all major accidents/incidents, hazards, and internal safety issues are reviewed and resolved
- Conduct internal safety reviews and inspections
- Report unacceptable hazardous conditions to Sun Metro executive management as soon as possible
- Work with modal operations and maintenance staff on a daily basis to ensure all System Safety Program requirements are being implemented and Program goals and objectives are being achieved
- Develop Corrective Action Plans (CAP) that result from accident/incident investigations, hazard analyses, and safety reviews and audits, and tracking corrective actions through fruition to ensure all identified deficiencies are adequately eliminated or controlled
- Ensure the A, CSO, Mode Safety Managers and other upper management personnel are immediately notified of hazards of imminent danger or as other problems are identified or arise
- Ensure recommendations are followed upon and corrected
- Review findings and comprehensive reports with recommendations, findings, and actions that cannot be resolved by staff. Develop action plans and monitor the implementation of any corrective action plan pursuant to any reports and recommendations
- Review, approve, or recommend changes to the reports and corrective action plans, prepared by the Committee for safety hazards and threat and vulnerabilities audit findings and corrective actions, prior to submittal of the final reports to the responsible parties for implementation
- Review, approve, or recommend changes to corrective action plans that are developed in response to recommendations of the TxDOT.
- Review, approve, or recommend changes to the annual reports of the internal safety review process required for submission to the TxDOT.
- Review, approve, or recommend changes to Sun Metro safety rules and procedures established to implement the requirements and programs defined in the SSPP



#### 7. Emergency Preparedness and Response Plan

Major incidents such as accidents, fires, floods, violent crime, and terrorist attacks present significant challenges for public transit agencies. To successfully manage these events, personnel from multiple disciplines and agencies work together to promote the highest level of safety and to execute tasks such as perimeter control; rescuing or evacuating passengers; supporting the transportation of emergency responders and equipment; managing victims and their families; controlling crowds; repairing facilities; communicating with the media; and restoring service.

Sun Metro management recognizes that safety, security, and emergency preparedness encompass, not only the system, including employees, facilities, passengers, and operations, but the local responders, planning organizations, and mutual aid partners within the communities it serves. Sun Metro has developed a coordinated emergency response program and a schedule of planned activities and exercises that encompasses local emergency responders, and relevant planning agencies, and establishes a working partnership that allows all entities to work together to identify vulnerabilities that may impact our respective ability to respond and recover from a major emergency incident. This effort is a continuous process that employs four integral functions: planning, interagency coordination, training, and exercises.

#### 7.1. Planning

#### 7.1.1. Sun Metro Emergency Preparedness and Continuity Plan

Sun Metro has a comprehensive System Security & Emergency Preparedness Plan (SSEPP). The SSEPP guides all activity and response during a system emergency or community event.

Sun Metro maintains Facility Emergency Plans for the following:

- Building Evacuation General
- Fire
- Medical Emergencies
- Elevator Emergencies
- Bomb threats
- Biohazards or suspicious items
- Hazardous Materials Spills
- Workplace violence
- Other emergency conditions

#### 7.2. Responsibilities for Emergency Preparedness

Sun Metro has adopted the Incident Command System (ICS) structure to respond to and manage an emergency event. The ICS Primary and Secondary Management functions and responsibilities are shown below

**ICS Management Functions** 



ICS Management Function	Responsible Party
Command	Assistant Director of Streetcar Operations
Safety & Security	Streetcar Safety, Security & Training Manager or Chief Safety Officer.
Operations	Streetcar Operation Superintendent or Transit
	Supervisor
Technology	Sun Metro IT
Planning	Sun Metro Planning
Logistics	Streetcar Operation Superintendent or Transit
_	Supervisor
Finance	Chief Financial Officer and Accountable Executive
Public Information	Sun Metro Marketing and City PIO

#### 7.2.1. Crisis Communications Plan

A crisis is a sudden, unexpected event or set of circumstances that require immediate action. For this reason, Sun Metro has a Crisis Communications Plan that allows the organization to deal with each situation at hand and be prepared to communicate under crisis conditions. The Crisis Communications Plan allows the organization to go from a position of response and reaction to one of relative control.

A key step in preparing for a crisis is selecting the team of employees who formulate and implement Sun Metro's response. The Crisis Communications Team assumes responsibility for handling the response so that other employees can maintain normal functions of the office with as few disruptions as possible.

Below are the core team members responsible for formulating Sun Metro messages during a crisis:

- Sun Metro Executive Director
- Mass Transit Chief Safety Officer
- Safety Managers by mode
- Sun Metro Operations and Maintenance Manager by mode
- \*Others notified depending on the severity of the crisis

#### 7.3. Coordinated Schedule

#### 7.3.1. Interdepartmental / Interagency Coordination

Sun Metro Executive Director, Chief Safety Officer and Sun Metro Department Managers will coordinate the schedule for emergency preparedness exercises; development of After-Action Reports and implementation of findings; procedure development and training with the stakeholder agencies.

In the table below are the major federal, state, and local agencies and their primary responsibility to Sun Metro safety and emergency preparedness.

Table 9: Federal, State and Local Agencies Primary Responsibilities



Agency	Reporting	Oversight	Support	Policy
Federal Transit Administration	X	X	X	Х
Texas Department of Transportation	X	X	X	Х
Transportation Security Agency	X	X	X	Х
Department of Homeland Security		X	X	
El Paso Police Department	X		X	
El Paso Fire Department	X		X	
Emergency Management Office	X		Х	
El Paso Public Works			Х	
City Attorney's Office			Х	

#### 7.4. Emergency Drills and Exercises

Sun Metro/ FLSC conduct or participate in a minimum of two emergency drill annually. The drills may include a full-scale evacuation of the system and a Table Top Exercise. Community first-responders including the El Paso Fire Department, El Paso Police Department, local FBI, TxDOT, and El Paso Emergency Management may assist the transit system in planning, coordinating, and training to prepare for the drills.

Detailed scenarios are developed by the participants' management to ensure that the exercises are realistic, comprehensive, and effectively evaluate the emergency preparedness of the participants. Observers are assigned to each participant group to evaluate the effectiveness of the response to the exercise scenario.

After actual incidents, there is an assessment to return the system to 100% functionality in the shortest time possible. All divisions are responsible for executing this plan. The purpose of this phase is to make certain that all areas have been addressed in an appropriate manner and Sun Metro can sustain operations indefinitely. This phase is a self-assessment to determine ways to improve our processes, procedures and to update all disaster-related plans. The following are examples of items that will be reviewed during this process:

- Division managers will provide the records to support all expenses associated with the emergency
- Each division will provide an update on the status of personnel, equipment, and facilities
- Division managers should provide a list of proposed changes to the comprehensive System Security & Emergency Preparedness Plan (SSEPP). to Sun Metro's Safety Managers
- Division managers should follow the SSEPP to achieve 100% functionality in their assigned area
- Division managers will identify any shortfalls or limiting factors that will prevent them from achieving 100% functionality
- Emergency supplies and equipment used during an emergency will be replenished

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Immediately after completion of an exercise, the participants will debrief and discuss the observations made during the exercise. An after-action report is prepared and distributed to the participants for follow-up with each participant group. The after-action report is used to determine the need for modifications to plans, procedures, and processes. The Sun Metro FLSC performs follow-up with all participant groups to develop a coordinated schedule for implementation of corrective actions for the closure of identified after-action items. These corrective actions will be submitted to TxDOT and included in the Corrective Action Plan. The Chief Safety Officer and the corresponding safety manager will be responsible for the implementation of these CAPs.

#### 7.5. Emergency Procedures

Emergency Response Procedures are reviewed and revised in accordance with Sun Metro Plans, Manuals, Policies, and Procedures. This procedure stipulates control and distribution, including the three-year review process. The length of time needed for the review may vary based on the document being reviewed but the review should not exceed 30 days.

#### 7.5.1. Emergency Preparedness Training

Employees receive emergency training during their initial indoctrinations. In addition, all employees receive training to respond to specific emergencies in accordance with the appropriate Standard Operating Procedures.

#### 7.6. Familiarization Training

All fire department personnel have been provided familiarity training on Sun Metro buses and the streetcar system. All new fire department and emergency medical department recruits are provided classroom training and hands-on training on emergency preparedness for the Sun Metro system. The Safety and Security Division provided train-the-trainer instruction

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### **Appendices**

#### **RESOLUTION**

## NOW THERFORE, BE IT RESOLVED BY THE MASS TRANSIT DEPARTMENT BOARD FO THE CITY OF EL PASO:

The Agency Safety Plan attached to this resolution as Attachment "A" is approved and adopted. Further, that the City Manager, or designee, be authorized to submit the Agency Safety Plan to the Federal Transit Administration, the Texas Department of Transportation, and/or the State Safety Oversight Agency. Further, that the City Manager, or designee, be authorized to execute any documents and perform any actions necessary to effectuate the Agency Safety Plan. Further, to the extent allowed by law that the City Manager is authorized to make any changes to the Agency Safety Plan.

APPROVED this	day of _	,2020.
		MASS TRANIST BOARD:
ATTEST:		Dee Margo, Chairman
Laura D. Prine, Secretary		
APPROVED AS TO FORM:		APPROVED AS TO CONTENT:
0_6		Monica Lombrana
Omar A. De La Rosa		Monica Lombraña
Assistant City Attorney		Chief Operations and Transportation Officer

(Attachment "A" on the following pages)



# Public Transportation Agency Safety Plan (PTASP)

- The PTASP requirement is established in 49 C.F.R. Part 673
- Applicable to
  - ✓ Operators of Transit Systems that are recipients or sub-recipients of FTA:
    - Section 5307
    - o All rail transit operators, regardless of FTA funding source
- TxDOT updated their State Safety Oversight Agency (SSOA) Program Standard as required by 49 CFR 674 to include PTASP
- PTASP must be approved by TxDOT by July 20, 2020
- Sun Metro has consolidated and developed one PTASP for Fixed Route and Streetcar into one document





## PTASP Approval

- PTASP requires approval by the Mass Transit Board
  - ✓ This requirement is establish in TxDOT SSOA Program Standard Section 5.2 (1) "(1) The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority".
- Once the PTASP is approved by the Mass Transit Board, it will be submitted to TxDOT for final approval.

