# **State Safety Oversight Program Standard**

August 2025 Rail Division



# **Contents**

Program	Program Standard Approval 5		
Documer	nt Revision Record	6	
Section 1	L: Program Management	7	
1.1	Purpose and Organization of State Safety Oversight Program	7	
1.2	SSOA Authority	7	
1.3	Allegations of Noncompliance	8	
1.4	SSOA Policies	9	
1.5	Internal Agency Policies	9	
1.6	SSOA Annual Report to FTA	10	
1.7	TxDOT SSO Program Annual Status Report	11	
1.8	TxDOT Monitoring of RTAs	11	
1.9	TxDOT and RTA Communications	11	
1.10	Public Transportation Safety Certification Training Program	12	
1.11	Infrastructure Investment and Jobs Act Required Training	15	
1.12	Risk-based Inspections	16	
1.13	S Vehicle Maintenance and Testing	16	
Section 2	2: Program Standard Development	17	
2.1	Program Standard Development	18	
2.2	Program Standard Review and Revision	18	
2.3	Program Standard Distribution	18	
Section 3	3: Program Policy and Objectives	18	
3.1	SSO Agency Policy for RTA Safety	18	
3.2	SSO Agency Objective for RTA Safety	19	
Section 4	1: RTA Minimum Safety Standards	19	
4.1	Public Transportation Agency Safety Plans (PTASP)	19	
4.2	PTASP General Requirements	19	
4.3	Safety Management Systems	24	
4.4	PTASP Review by TxDOT	24	
4.5	PTASP Initial Submittals for New Rail Systems	25	
4.6	Ensuring Safety in New or Modified Rail Systems	25	
4.7	RTA Internal Safety Reviews	28	
Section 5	5: Triennial SSO Agency Audits	29	
5.1	SSOA Triennial Audit Schedule	29	
5.2	SSOA Triennial Audit Activities	29	
5.3	SSO Agency Triennial Audit Report	31	

Section 6:	Safety Event Definitions and Notification Requirements	31
6.1	FTA and SSO Accident Notification Requirements and Method	31
6.2	Accident Notification Procedure	33
6.3	Non-Reportable Safety Events	34
6.4	Incident and Occurrence Tracking and Reporting	34
6.5	Other Federal Agency Notifications	34
Section 7:	Accident Investigations	35
7.1	Accident Investigation Process	35
7.2	Accident Investigation Procedures	36
7.3	Accident Investigation Report	36
7.4	SSO and NTD Safety Event Reconciliation	37
Section 8:	Hazard Management	38
8.1	RTA Safety Risk Management	38
8.2	RTA Hazard Identification and Risk Assessment	38
8.3	RTA Management of Hazards	39
8.4	Hazard Corrective Action Plan	39
8.5	Final Hazard Report	40
8.6	Monitoring of RTA Hazards and Safety Risk Mitigations	40
8.7	Data Collection	41
Section 9:	Corrective Actions	42
9.1	CAP Development	42
9.2	CAP Submission	42
9.3	TxDOT Review and Approval of Proposed Corrective Action Plans	43
9.4	CAP Extensions	43
9.5	Verification of CAP Implementation and Closure	44
9.6	Monitoring of Open Corrective Action Plans	
Section 10	D: Escalation of Enforcement Action	44
10.1	Escalation of Enforcement Action	44
Section 1	1: Roadway Worker Protection (RWP) and Manual	45
11.1	RWP Program	45
11.2	RWP Manual	45
11.3	RTA's Responsibilities	45
11.4	Transit Worker Responsibilities	45
11.5	SSOA Responsibilities	45
11.6	Roadway worker in charge requirements	46
11.7	Job safety briefing policies	
11.8	Lone worker	
11.9	Good faith safety challenge	
11.10		

		RWP training and qualification program	
	11.12	RWP compliance monitoring program	47
	11.13	Recordkeeping	47
Appe	endix A:	State Safety Oversight Definitions	48
Appe	ndix B:	State Safety Oversight Abbreviations	<b>57</b>
Appe	endix C:	TxDOT Organizational Charts	<b>59</b>
Appe	ndix D:	PTASP Review Checklist	62
Appe	endix E:	Accident Investigation Review Checklist	83
Appe	ndix F:	Guidance on Evacuations	87
Appe	ndix G:	: Risk-based Inspection Program	90
Appe	ndix H:	Two-Hour Safety Event Notification Guide	236

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### **Section 1: Program Management**

#### 1.1 Purpose and Organization of State Safety Oversight Program

The Texas Department of Transportation (TxDOT) is designated as the State Safety Oversight Agency (SSOA) in Texas responsible for carrying out the functions of the federal State Safety Oversight (SSO) Program to oversee and enforce the safety of the rail transit agencies (RTAs) within the state. This Program Standard describes those responsibilities and functions, as well as each RTA's responsibilities for implementing program requirements. The Program Standard also contains additional supplemental information including guidance, forms, and checklists as appendices and references them throughout the document as appropriate.

#### 1.2 **SSOA Authority**

In 1997, the Texas Legislature, following the enactment of Senate Bill (S.B.) 735 designated TxDOT as the SSOA. TxDOT derives its authority from the Texas Transportation Code, Chapter 455, General Powers and Duties of Department of Transportation Regarding Mass Transportation.

During the 85<sup>th</sup> Regular Legislative Session, The Texas Legislature enacted S.B. 1523 on June 1, 2017, which provides TxDOT the authority to establish and enforce minimum standards for the safety of all RTAs within its oversight. These standards are consistent with the National Public Transportation Safety Plan (NPTSP), Public Transportation Safety Certification Training Program (PTSCTP), rules for Public Transportation Agency Safety Plans (PTASPs), and all other applicable federal and state laws.

Chapter 7, Subchapter E. - Rail Fixed Guideway System State Safety Oversight Program, of the Texas Administrative Code (TAC) describes how TxDOT will carry out its SSO Program responsibilities consistent with both state and federal requirements. It provides a legal framework, consistent with the Program Standard, for each RTA in Texas to follow to create, implement, and administer program requirements for their respective agencies, including, provisions for requiring immediate and milestonebased corrective action plans (CAPs) to resolve identified deficiencies in the agency's implementation of its PTASP and to address identified hazards and safety concerns requiring mitigation.

TxDOT's SSO Program authority applies to each RTA located within the state of Texas that is operated for public transportation and not subject to the jurisdiction of the Federal Railroad Administration (FRA), or any such system in the engineering or construction phase. Such agencies shall include rapid rail, heavy rail, light rail, monorails, trolleys, inclined planes, funiculars, and automated quideways.

The RTAs in Texas qualifying for SSO oversight include:

- 1. Dallas Area Rapid Transit DART
- 2. City of Dallas Dallas Streetcar DSC

- 3. McKinney Avenue Transit Authority MATA
- 4. Houston METRO
- 5. City of Galveston Galveston Island Trolley GIT
- 6. City of El Paso El Paso Streetcar EPSC

#### The TxDOT SSO Program:

- Is financially and legally independent from any RTA it oversees;
- Does not directly provide public transportation services in an area with an RTA;
- Does not employ any individual who is also responsible for administering an RTA;
- Has authority to audit, review, approve, oversee, and enforce an RTA's PTASP;
- Has authority and capability to enter the facilities of each rail fixed guideway public transportation system that the SSOA oversees to inspect infrastructure, equipment, records, personnel, and data, including the data that the RTA collects when identifying and evaluating safety risks; and to conduct inspections of the rail fixed guideway public transportation system, including access for inspections that occur without advance notice to the RTA.
- Has investigative, enforcement, and inspection authority with respect to the safety of all RTAs within the State of Texas.

More specifically, TxDOT has the enforcement and investigative authority to:

- Enforce federal and state laws on all RTAs in the state of Texas;
- Review, approve, oversee, and enforce the required PTASP;
- Oversee the implementation of an RTA's PTASP;
- Investigate and enforce the safety programs of the RTA during announced and unannounced site visits or inspections by TxDOT employees and its contractors;
- Coordinate all enforcement responsibilities with other governmental entities as needed;
- Issue an emergency order to temporarily shut-down RTA operations in response to an imminent threat to the safety of the general public;
- Issue an emergency order to an RTA to remove persons, equipment, or facilities from service;
- Seek a temporary injunction to enforce an emergency order.

The mitigation of identified RTA deficiencies will rely on the agencies' timely implementation of comprehensive CAPs to which both the SSO and RTA must agree. In the event of an RTA's nonresponsiveness, TxDOT will follow the escalation procedure described in Section 10 in this manual.

### **Allegations of Noncompliance**

TxDOT has primary responsibility for the investigation of any allegations of noncompliance with an RTA's PTASP. TxDOT will use the following criteria to evaluate allegations to determine whether they constitute noncompliance:

- The RTA takes action that directly violates published content within its PTASP.
- An RTA transit worker takes action that directly violates published content within its PTASP.

Any person may submit an allegation electronically via TxDOT's TRACKS complaint system at <a href="https://www.txdot.gov/about/contact-us/complaints.html">https://www.txdot.gov/about/contact-us/complaints.html</a> or by email at <a href="mailto:sso\_reporting@txdot.gov">sso\_reporting@txdot.gov</a> or by telephone at (512) 486-5977. Allegations reported electronically or via telephone must adhere to the following guidelines:

- 1. Provide your information to the responding SSO Program Manager
- 2. Persons notifying TxDOT of allegations of non-compliance may do so anonymously but are encouraged to provide contact information in case TxDOT needs additional information to investigate the allegation.
- 3. Provide sufficient detail for TxDOT staff to determine whether TxDOT SSO has jurisdiction over the allegation, as well as, to determine the pertinent facts of the allegation.

The TxDOT SSO Program Manager will acknowledge receiving the allegation, manage the investigation of the allegation, and submit a report and findings of the investigation to the TxDOT Public Transportation Division leadership within 30 calendar days. Extensions may be granted for valid investigation purposes by the division leadership.

TxDOT may investigate allegations or refer them to the affected agency's Chief Safety Officer (CSO) for investigation. In either case, TxDOT will ensure the completion of a thorough, impartial investigation and investigation report within 30 calendar days.

If TxDOT determines the allegation does not constitute noncompliance with the RTA's PTASP. but rather an issue the RTA can address through its safety risk management process, TxDOT will notify the complainant accordingly.

### 1.4 SSOA Organization

The SSO Program is managed by SSO Transit Safety Program Management staff who work in the Rail Safety Section of the TxDOT Rail Division (RRD). The SSO Program Managers report to the Rail Safety Section Director, who in turn reports to the RRD Division Director. The RRD Division Director reports to the Director of Planning and Modal Programs in the Texas Department of Transportation.

Appendix C includes an organizational chart showing the various reporting relationships under the TxDOT Executive Director, who serves as the highest-ranking state transportation agency official in Texas.

### 1.5 Internal Agency Policies

#### **Conflict of Interest**

No individual or entity may provide services to both the SSOA and the RTA when there is a conflict of interest or an appearance of a conflict. A conflict of interest occurs when an individual or entity performing work for an SSOA or the RTA is unable, or potentially unable, to render impartial assistance or advice on the development or implementation of the standards and provisions or to perform such

work without bias. A third-party contractor to the FTA, the SSOA or an RTA may not have an unfair competitive advantage over other contractors. Each contractor is subject to full disclosure of all present and potential conflicts of interest in its activities or relationships prior to the award of a contract with the FTA, TxDOT or an RTA.

### On-Site Visit Provisions and RTA Roadway Worker Protection (RWP)

When needed, an RTA transit worker will accompany TxDOT employees and contractors during any onsite inspection in non-publicly accessible areas and establish necessary RWP protections when necessary. TxDOT employees and contractors will be comply with FTA guidance on regulation of RWP Training.

### **SSOA Confidentiality**

The following documents an RTA submits to TxDOT are confidential and not subject to disclosure, inspection, or copying under Chapter 552, Texas Government Code: investigation reports, security documents and reports, audit reports, operational reports, and security plans and reports. These documents may not be admitted in evidence or used for any purpose in any action or proceeding arising out of any matter referred to in an investigation except in an action or a proceeding the State of Texas institutes.

### 1.6 SSOA Annual Report to the FTA

On or before March 15<sup>th</sup> of each year, an SSOA must submit an annual report to the FTA in compliance with 49 CFR Part 674.39. TxDOT must submit the annual report data and documentation electronically to the FTA using the FTA's State Safety Oversight Reporting System (SSOR System). In the event of an SSOR System outage, TxDOT will coordinate with its FTA Program Manager to ensure timely submission of the annual report.

TxDOT must submit the following materials as part of its Annual Report to the FTA:

- The SSO Program Standard adopted in accordance with 49 CFR Part 674.27, with an indication of any changes to it during the previous twelve months;
- Evidence that TxDOT designated personal have completed the requirements of the PTSCTP or,
   if in progress, the anticipated completion date of the training;
- A publicly available report that summarizes its oversight activities for the preceding twelve months; describes the causal factors of safety events identified through investigation; and identifies the status of CAPs, changes to PTASPs, and the level of effort by TxDOT in carrying out its oversight activities;
- Final investigation reports for all safety events meeting one or more of the criteria specified in 49 CFR Part 674.33;
- A summary of the internal safety reviews conducted by RTAs during the previous twelve months, and the RTAs progress in carrying out CAPs arising under 674.37 (a)(3);
- A summary of the Triennial Audits completed during the preceding twelve months, and the

RTA's progress in carrying out CAPs arising from triennial audits conducted in accordance with 49 CFR Part 674.31;

- Evidence that TxDOT has reviewed and approved any changes to the RTA's PTASPs during the preceding twelve months;
- A certification that TxDOT is in compliance with the requirements of this part;

By January 15th, TxDOT will review the required items and notify the RTA Safety Staff of any missing or outdated documents or data the RTA must be corrected prior to TxDOT submitting the annual report to the FTA.

No later than February 1<sup>st</sup>, the RTA must make all requested data corrections and submit any requested documentation to TxDOT. TxDOT SSO Program Managers will coordinate with RTA staff until all document and data requests are completed so TxDOT may submit the annual report by FTA's March 15<sup>th</sup> deadline.

### 1.7 TxDOT SSO Program Annual Status Report

By May 31st of each calendar year, TxDOT shall report each RTA's safety status to the Governor, the FTA, and the governing body of each RTA system under the Department's oversight. TxDOT shall submit the report to FTA; email it to each RTA's Accountable Executive (AE), CSO, and Board; and post it online at https://www.txdot.gov/business/resources/rail-safety/state-safety-oversight-program.html.

### 1.8 TxDOT Monitoring of RTAs

TxDOT will monitor each RTA's execution of its PTASP using methods such as desk reviews, data analyses, inspections, onsite reviews, observations, triennial audits, risk-based inspections (RBIs), and/or by any other means deemed appropriate.

Within 30 calendar days of any monitoring activity, TxDOT will provide a report to the RTA's CSO including a summary of completed monitoring activities and any findings of non-compliance. TxDOT may also include best practice recommendations within the monitoring report.

### 1.9 TxDOT and RTA Communications

TxDOT will continue to engage in and encourage proactive two-way communication among current and future RTAs, and federal and state elected officials. The Rail (RRD) – TxDOT SSO Program staff and contractors will serve as the coordinators of those communications. Communication methods include, but are not limited to, United States Postal Service (USPS) mail, electronic mail (e-mail), telephone calls, Virtual/online meetings, and conference calls. TxDOT will host annual or semi-annual meetings with all covered RTAs to review program requirements and updates and provide all involved parties an opportunity to exchange information.

### 1.10 Public Transportation Safety Certification Training Program

The FTA's requirements for the certification and training of State Safety Oversight Agency employees and contractors who conduct rail safety reviews, inspections, and examinations, and other safety oversight activities of rail fixed guideway public transportation system, are located within 49 CFR Part 672. In addition to PTSCTP training, SSO personnel also complete training requirements stated within TxDOT's Technical Training Plan (TTP).

### **Designation of RTA Staff Directly Responsible for Safety**

In accordance with 49 CFR 672.13, RTAs employees and contractors who are directly responsible for safety oversight of a fixed guideway public transportation system.

Each RTA shall designate its employees and contractors who must comply with the applicable training requirements of this part and the PTSCTP curriculum. Each RTA must designate employees and contractors who are directly responsible for safety oversight of rail modes. Each RTA shall ensure that each designated individual is enrolled in the PTSCTP within 30 days of the individual's designation. Each rail transit agency shall ensure the compliance of designated participants with the applicable training requirements of this part and the PTSCTP curriculum. Employees and contractors designated under section 1.10 shall complete applicable training requirements of this part and the PTSCTP curriculum within three (3) years of their initial PTSCTP enrollment. Thereafter, upon completion of the PTSCTP curriculum, designated personnel must complete recertification every two (2) years.

#### Required recertification training shall consist of two elements:

- (1) Specific recertification training defined by FTA, and
- (2) Recertification training defined by the rail transit agency, which must include, at a minimum, one
- (1) hour of safety oversight training.

### Training Requirements for Designated RTA Staff

As specified in 49 CFR 672, the FTA requires designated RTA staff to complete the following training requirements within three (3) years of their initial designation.

Course Name	Course Length
SMS Awareness	1 hr.
Safety Assurance	2 hrs.
SMS Principles for Transit	20 hrs.
TSSP Curriculum:  - Rail System Safety - Effectively Managing Transit Emergencies - Rail Incident Investigation	36 hrs. 32 hrs. 36 hrs.

### **Evaluation of Prior Certification and Training**

PTSCTP participants or an identified point of contact described in § 672.21(b) may request that FTA evaluate safety training or certification previously obtained from another entity to determine if the training satisfies an applicable training requirement of this part. Individuals requesting FTA evaluation of previously obtained training or certification must provide FTA with an official transcript or certificate of the training, a description of the curriculum and competencies obtained, and a brief statement detailing how the training or certification satisfies the applicable requirements of this part. The required information must be submitted using an equivalency credit request via electronic means defined by FTA. FTA will evaluate the submission and determine if a training requirement of this part may be waived. If a waiver is granted, designated personnel are responsible for completing all other applicable requirements of this part.

### Refresher Training Requirements

Designated RTA staff must complete refresher training every two (2) years, which, must include a minimum of one, (1) hour of safety oversight training. It is the RTA's responsibility to determine appropriate refresher training requirements, document those requirements within the PTASP, and ensure refresher training is completed.

### Record Keeping

General requirement. Each recipient subject to the requirements of this part shall ensure that its designated personnel:

- (1) Are enrolled in the PTSCTP;
- (2) Complete the initial training specified in the PTSCTP curriculum within three (3) years of their enrollment as a designated participant; and
- (3) Complete required recertification every two (2) years upon completion of the PTSCTP curriculum.

*Point of contact identification*. Each recipient, subject to the requirements of this part, shall identify a single point of contact (POC) for communication with FTA regarding PTSCTP information. The recipient shall provide FTA and TxDOT, via electronic method defined by FTA, at a minimum, the POC's name, title, phone number, and email address.

Point of contact responsibilities. Each POC will serve as a liaison between the recipient and the FTA and TxDOT to inform the FTA and TxDOT of changes in designated personnel participating in the PTSCTP, enroll new participants, submit proof of recertification for the recipient's designated personnel, and address any other program documentation or communications needs.

Semiannual reporting. Semiannually, between January 1st and January 31st and between July 1st and July 31st of each calendar year, the identified POC must submit documentation to the FTA and TxDOT, via electronic method defined by the FTA, that identifies.

- 1. All employees and contractors of the recipient who are designated as PTSCTP participants; and
- 2. The course or courses the recipient has identified as required recertification training for their designated personnel. The agency identified recertification training must include, at a minimum, one (1) hour of safety oversight training. The documentation must include the complete name and length of each course, as well as the name of the course training provider.

Oversight of RTA Compliance with PTSCP. TxDOT will review the RTA's semi-annual reporting submission to ensure compliance with the PTSCPT compliance. TxDOT will have 30 calendar days to review the submission. If TxDOT has questions over the submission, TxDOT will coordinate with the RTA PTSCPT POC.

### SSOA requirement

TxDOT shall retain a record of the technical training completed by its designated personnel in accordance with the technical training requirements under 49 CFR 672.21(e).

### **SSO Training Requirements**

State Safety Oversight Agency must designate employees and contractors who conduct safety reviews, inspections, examinations, and other safety oversight activities of rail fixed guideway public transportation systems.

TxDOT shall designate its employees and contractors that must comply with the applicable training requirements of this part and the Public Transportation Safety Certification Training Program (PTSCTP) curriculum. Each SSOA must designate employees and contractors who conduct reviews, inspections, examinations, and other safety oversight activities of public transportation systems, including appropriate managers and supervisors of such personnel.

TxDOT shall ensure that each designated individual is enrolled in the PTSCTP within 30 days of the individual's designation. Each SSOA shall ensure the compliance of designated participants with the applicable training requirements of this part and the PTSCTP curriculum.

Employees and contractors designated under this section 1.10 shall complete applicable training requirements of this part and the PTSCTP curriculum within three (3) years of their initial PTSCTP enrollment. Thereafter, upon completion of the PTSCTP curriculum, designated personnel shall complete recertification every two (2) years. Required recertification training shall consist of two elements:

- 1. Recertification training defined by FTA, and
- 2. Recertification training defined by the SSOA, which must include, at a minimum, one (1) hour of safety oversight training.

TxDOT SSO Program Managers and all support contractors are designated staff and therefore must complete the following PTSCTP training requirements within three (3) years of their initial designation:

### Required Curriculum for SSO Designated Staff

Course Name	Course Length
SMS Awareness	1 hr.
SMS-Safety Assurance (VLT)	2 hrs.
SMS Principals for Transit	20 hrs.
SMS Principals for SSO Programs	16 hrs.
Transit Rail System Safety	36 hrs.
Effectively Managing Transit Emergencies	32 hrs.
Transit Rail Incident Investigation	36 hrs.

### Required Curriculum for SSO Designated Staff

Designated TxDOT staff and support contractors may satisfy the refresher training requirement located in 49 CFR 672 Subpart B by attending the FTA's Annual Joint SSO-RTA Workshop or completion of TxDOT's PTSCTP SSO refresher training. TxDOT will document refresher training through a completion certificate or other similar documentation.

### SSO Record Keeping

TxDOT will retain a record of the technical training TxDOT designated personnel complete and retain said record for at least five (5) years from the date the record was created.

### 1.11 Infrastructure Investment and Jobs Act Required Training

In the case of an RTA receiving assistance under section 5307 that serves an urbanized area with a population of 200,000 or more, the RTA must document within its PTASP and implement a comprehensive staff training program for operations and maintenance personnel, as well as personnel directly responsible for safety of the recipient, including the following elements:

- (I) The completion of a safety training program;
- (II) Continuing safety education and training; and
- (III) De-escalation training; and
- (IV) In the case of a recipient receiving assistance under section 5307 that serves an urbanized area with a population of 200,000 or more, a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the National Transit Database (NTD) under 49 United States Code (U.S.C) Section 5335.

### 1.12 Risk-Based Inspections

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA), which continues the public transportation safety program. The IIJA amended 49 U.S.C Section 5329 to require SSOAs to conduct risk-based inspections (RBIs) of the RTAs they oversee. The IIJA also added a provision directing the FTA to issue a Special Directive to each SSOA on the development and implementation of RBI programs.

On October 21, 2022, under the authority of 49 U.S.C. Section 5329 (k) and 49 CFR Part 670, the FTA issued Special Directive 22-47 to TxDOT requiring the Department, as the SSOA, to develop and implement an RBI program using qualitative and quantitative data analysis to prioritize inspections to address safety concerns and hazards associated with RTA safety risk.

Special Directive 22-47 requires TxDOT to have an FTA approved RBI program by October 2024. The FTA, through the RBI Toolkit, requires SSOAs to submit their RBI programs for FTA review and approval by May 2024. TxDOT successfully submitted its RBI Program to the FTA in May 2024. FTA approved TxDOT's RBI Program (see Appendix G) on August 7, 2024, and TxDOT has one year to demonstrate at least six months of implementation. TxDOT developed its RBI Program to address the Department's authority and capability to enter and conduct inspections of each RTA, including those that occur with and without advance notice. Additionally, TxDOT's program includes information regarding inspection access to and data collection from each RTA to support its risk- based inspection monitoring and prioritization activities, including data the RTA collects when identifying and evaluating safety risk.

# **1.13 Vehicle Maintenance and Testing Purpose**

This establishes the procedures and criteria by which the SSOA will review and oversee the RTA's rail transit vehicle maintenance program. The intent is to ensure compliance with safety standards, identify potential latent failures, and promote the safe operation of rail transit vehicles.

### Scope

This applies to all fixed guideway public transportation systems under the SSOA's jurisdiction, as required under 49 CFR Part 674.27(a)(13). The policy covers both preventive maintenance practices and periodic testing related to the performance and reliability of vehicle braking systems.

### Responsibilities

- The **SSOA** shall:
  - Review and approve the RTA's written maintenance program procedures as part of the Program Standard.
  - Conduct audits, inspections, and targeted reviews of maintenance records, brake testing documentation, and corrective action tracking.
  - Verify the RTA is testing braking systems in accordance with OEM specifications and/or industry best practices, with a particular focus on periodic testing and performance of all

rail transit vehicle braking systems. Require corrective actions where deficiencies or latent failures are identified.

#### The RTA shall:

- Maintain a comprehensive rail vehicle maintenance plan, including detailed procedures for inspecting, testing, and maintaining braking systems.
- Perform and document periodic brake system testing according to its approved maintenance plan and frequencies.
- Provide maintenance records and test results upon SSOA request or during routine oversight activities.

#### **Review Process**

The SSOA will implement the following process:

### 1. Document Review:

- Annually review and assess the RTA's vehicle maintenance plan and related standard operating procedures for compliance with regulatory requirements and industry standards.
- Ensure that the maintenance plan includes a schedule and procedures for brake system testing.

#### 2. Audit and Inspection:

- Conduct routine audits of maintenance practices, which will include sampling records of completed brake tests.
- o Conduct field inspections to observe brake testing and maintenance procedures.

### 3. Brake System Testing Oversight:

- Verify that brake system performance tests include deceleration measurements, emergency brake functionality, and redundancy system checks.
- o Confirm testing is conducted at appropriate intervals (e.g., mileage-based or time-based).
- Evaluate the RTA's methods for identifying and addressing latent brake system failures, including condition-based monitoring and trend analysis.

### 4. Corrective Action and Follow-Up:

- If deficiencies are identified, require the RTA to develop a Corrective Action Plan (CAP) with measurable milestones.
- Monitor implementation of CAPs and verify resolution through follow-up inspections or documentation review.

#### 5. Reporting and Documentation

- Findings from reviews will be documented in an Oversight Review Report.
- All records will be maintained in accordance with the SSOA's record retention policy and shared with the Federal Transit Administration upon request.

### 6. Policy Updates

This policy shall be reviewed and updated at least annually, or as regulatory changes occur.

### **Section 2: Program Standard Development**

The TxDOT SSO Program Standard is consistent with the NPTSP and 49 CFR Part 674. The standard includes an explanation of TxDOT's processes for developing, reviewing, adopting, and revising minimum standards for safety, and distributing those standards to the RTAs in Texas. These

processes will provide reasonable opportunities for open and transparent communication, with the expectation that each RTA shall fully implement the TxDOT Program Standard in compliance with both federal and state law.

### 2.1 Program Standard Development

The focus of the Program Standard is to establish and clearly communicate the minimum safety standards established by 49 CFR Parts 672, 673, and 674, the Texas Administrative Code, and FTA SSO program guidance.

This Program Standard was reviewed and discussed with RTAs under TxDOT oversight; with opportunities provided for comment throughout development, including the RTA AE, CSO, and Rail Safety Transit Workers.

### 2.2 Program Standard Review and Revision

Annually, by August 31<sup>st</sup>, the SSO Program Standard will be reviewed and updated, including changes to minimum safety standards. All RTAs will have an opportunity to review and comment on those proposed changes as appropriate and necessary. TxDOT will log and review all comments the RTAs provide. TxDOT will provide feedback to the comments within 30 days of receiving the comments. The RRD Division Director will approve all updates to the SSO Program Standard, on recommendation by the RRD Section Director. By March 15<sup>th</sup> each year TxDOT will report to FTA, in accordance with § 674.27, of changes made to the Program Standard during the preceding twelve months.

### 2.3 Program Standard Distribution

The SSO Program Standard is available electronically for download from the TxDOT website (https://www.txdot.gov/business/resources/rail-safety/state-safety-oversight-program.html). The current version of the Standard will be available for downloading, except when necessary to upload updated versions, or during routine website maintenance activities. Revisions to the TxDOT SSO Program Standard are communicated via email to the RTA AE, CSO, and designated safety transit workers. RTA AE and CSO will receive an electronic version of the Program Standard following each annual update.

### **Section 3: Program Policy and Objectives**

### 3.1 SSO Agency Policy for RTA Safety

The Mission of the Texas Department of Transportation is *Connecting You with Texas*. Two overarching goals of the Department related to the SSO responsibility are to *Promote Safety* and to *Foster Stewardship*.

The Rail Division implements rail-related policies; performs infrastructure and operational analysis and rail project planning; monitors potential rail line abandonments; oversees rail-highway safety, rail inspections and the State Safety Oversight Program; and manages the state-owned South Orient Railroad.

The Program Standard provides the commitment to actions that TxDOT is authorized and prepared to take to oversee and enforce RTA implementation of the Agency Safety Plans. It was created to establish minimum standards, procedures, and technical assistance for the current RTAs operating within Texas, and those in engineering and construction. As such, the Program Standard communicates expectations, roles and responsibilities of the Department and RTA in carrying out safety requirements of 49 CFR 674.

### 3.2 SSO Agency Objective for RTA Safety

Each RTA shall comply with all requirements of the Program Standard. At a minimum, each RTA shall:

- Notify appropriate parties of safety events that meet designated thresholds;
- Conduct accident investigations;
- Prepare accident investigation reports;
- Investigate unacceptable hazardous conditions;
- Prepare unacceptable hazardous condition reports;
- Implement a hazard management process;
- Prepare and submit corrective action plans;
- Coordinate hazard management program activities with state oversight;
- Maintain and submit to TxDOT SSO required safety data, including RBI Data.
- Develop annual safety performance targets based on the safety performance measures established under the NPTSP.
- Make submissions to TxDOT and FTA on an annual and as needed basis.

### **Section 4: RTA Minimum Safety Standards**

### 4.1 Public Transportation Agency Safety Plans (PTASP)

Each RTA must have a TxDOT-approved PTASP. Any RTA under construction must have a compliant PTASP 180 days prior to revenue service operations. TxDOT will review each PTASP as described in section 4.4 using the PTASP review checklist provided in Appendix D.

### 4.2 PTASP General Requirements

The PTASP must comply with 49 CFR 673.11 General Requirements; which include the following elements:

(1) The PTASP, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority.

- (a) For a large urbanized area provider, the Safety Committee established pursuant to § 673.19, followed by the transit agency's Board of Directors or an equivalent entity; or
- (b) For all other transit agencies, the transit agency's Board of Directors or an equivalent entity.
- (2) The PTASP must document the processes and activities related to Safety Management System (SMS) implementation, as required under Subpart C of 49 CFR 673.
- (3) The PTASP must include annual safety performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Safety performance targets for the safety risk reduction program are only required for large urbanized area providers. NOTE: the RTA must coordinate with their MPO and State to communicate their safety performance measures.
- (4) The PTASP must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the NPTSP. Compliance with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C) is not required until standards have been established through the public notice and comment process.
- (5) Each transit agency must establish a process and timeline for conducting an annual review and update of the PTASP.
- (6) A rail transit agency must include or incorporate by reference in its PTASP Plan:
  - a) An emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of transit worker responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.
  - b) Any polices and procedures regarding rail transit workers on the roadway the rail transit agency has issued; and
  - c) The transit agency's policies and procedures developed in consultation with the SSOA to provide access and required data for the SSOA's RBI program.
- (7) The PTASP of each large urbanized area provider must include a safety risk reduction program for transit operations to improve safety performance by reducing the number and rates of safety events, injuries, and assaults on transit workers. The safety risk reduction program must, at a minimum:
  - a) Address the reduction and mitigation of vehicular and pedestrian safety events involving transit vehicles that includes safety risk mitigations consistent with § 673.25(d)(3);
  - b) Address the reduction and mitigation of assaults on transit workers that includes safety risk mitigations consistent with § 673.25(d)(4);
    - Include the safety performance targets set by the Safety Committee pursuant to §673.19(d)(2) for the safety risk reduction program performance measures established in SSO Program Standard | 20

the NPTSP. These targets must be set—

- Based on a three-year rolling average of the data submitted by the large urbanized area provider to the National Transit Database (NTD);
- ii. For all modes of public transportation; and
- iii. Based on the level of detail the large urbanized area provider is required to report to the NTD. The Safety Committee is not required to set a target for a performance measure until the large urbanized area provider has been required to report three years of data to the NTD corresponding to such performance measure.
- c) Include or incorporate by reference the safety risk mitigations identified and recommended by the Safety Committee as described in § 673.25(d)(5).
- d) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service not subject to safety regulation by another Federal entity.
- e) A transit agency must maintain its PTASP in accordance with the recordkeeping requirements in subpart E of this part.

#### Safety Plan and SMS Documentation Requirements

In accordance with 673.31 Safety Plan Documentation, a rail transit agency, must at all times, maintain documents that set forth its PTASP, including those related to the implementation of its SMS, and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the transit agency uses to carry out its PTASP. These documents must be made available upon request by FTA or other Federal entity, or a State or State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.

### Coordination with metropolitan, Statewide, and non-metropolitan planning processes:

Rail transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations (MPO) to aid in the planning process. To the maximum extent practicable, a rail transit agency must coordinate with States and MPOs in the selection of State and MPO safety performance targets.

Rail transit agencies must state, within their PTASP, their process for State and MPO coordination. Coordination must include the name State and MPO, department or section that the rail transit agency coordinates with, how coordination occurs, timeframes associated with coordination, and how coordination in documented.

### Safety Committees and Cooperation with Frontline Transit Worker Representatives

In accordance with the requirements of 49 CFR Part 673, rail transit agencies must meet requirements based on their designation as a large urbanized area provider. Large urbanized area providers have more requirements than rail transit agencies that are not large urbanized providers.

### **Cooperation with Frontline Transit Worker Representatives:**

Each large urbanized area provider must establish a Safety Committee that meets the requirements of § 673.19.

- (1) Each transit agency that is not a large urbanized area provider must:
  - a) Develop its PTASP, and subsequent updates, in cooperation with frontline transit worker representatives; and
  - b) Include or incorporate by reference in its PTASP a description of how frontline transit worker representatives cooperate in the development and update of the PTASP.

### **Safety Committees:**

Rail transit agencies that are large urbanized area providers must meet all safety committee requirements established by 49 CFR Part 673.19 Safety Committees.

- a. Establishing the Safety Committee.
  - (1) Each large urbanized area provider must establish and operate a Safety Committee that is:
    - (i) Appropriately scaled to the size, scope, and complexity of the transit agency; and
    - (ii) Convened by a joint labor-management process.
  - (2) Each transit agency that is not a large urbanized area provider must:
    - (i) Develop its Public Transportation Agency Safety Plan, and subsequent updates, in cooperation with frontline transit worker representatives; and
    - (ii) Include or incorporate by reference in its Public Transportation Agency Safety Plan a description of how frontline transit worker representatives cooperate in the development and update of the Public Transportation Agency Safety Plan.
- b. Safety Committee membership. The Safety Committee must consist of an equal number of frontline transit worker representatives and management representatives. To the extent practicable, the Safety Committee must include frontline transit worker representatives from major transit service functions, such as operations and maintenance, across the transit system.
  - (1) The labor organization that represents the plurality of the transit agency's frontline transit workers must select frontline transit worker representatives for the Safety Committee.
  - (2) If the transit agency's frontline transit workers are not represented by a labor organization, the transit agency must adopt a mechanism for frontline transit workers to select frontline transit worker representatives for the Safety Committee.
- c. Safety Committee procedures. Each large urbanized area provider must include or incorporate by reference in its PTASP procedures regarding the composition, responsibilities, and operations of the Safety Committee which, at a minimum, must address:
  - (1) The organizational structure, size, and composition of the Safety Committee and how

- it will be chaired;
- (2) How meeting agendas and notices will be developed and shared, and how meeting minutes will be recorded and maintained;
- (3) Any required training for Safety Committee members related to the transit agency's PTASP and the processes, activities, and tools used to support the transit agency's SMS;
- (4) The compensation policy established by the agency for participation in Safety Committee meetings;
- (5) How the Safety Committee will access technical experts, including other transit workers, to serve in an advisory capacity as needed; transit agency information, resources, and tools; and submissions to the transit worker safety reporting program to support its deliberations;
- (6) How the Safety Committee will reach and record decisions;
- (7) How the Safety Committee will coordinate and communicate with the transit agency's Board of Directors, or equivalent entity, and the AE;
- (8) How the Safety Committee will manage disputes to ensure it carries out its operations. The Safety Committee may use the dispute resolution or arbitration process from the transit agency's Collective Bargaining Agreement, or a different process that the Safety Committee develops and agrees upon, but the AE may not be designated to resolve any disputes within the Safety Committee; and
- (9) How the Safety Committee will carry out its responsibilities identified in <u>paragraph (d)</u> of this section.
- d. Safety Committee responsibilities. The Safety Committee must conduct the following activities to oversee the transit agency's safety performance:
  - (1) Review and approve the transit agency's PTASP and any updates as required at § 673.11(a)(1)(i);
  - (2) Set annual safety performance targets for the safety risk reduction program as required at § 673.11(a)(7)(iii); and
  - (3) Support operation of the transit agency's SMS by:
    - (i) Identifying and recommending safety risk mitigations necessary to reduce the likelihood and severity of potential consequences identified through the transit agency's safety risk assessment, including safety risk mitigations associated with any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program;
    - (ii) Identifying safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended, including safety risk mitigations associated with any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program; and
    - (iii) Identifying safety deficiencies for purposes of continuous improvement

as required at § 673.27(d), including any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program.

### 4.3 Safety Management Systems

Each transit agency must establish and implement a SMS as required by 49 CFR 673. A transit agency SMS must be appropriately scaled to the size, scope and complexity of the transit agency and include the following elements:

- (a) Safety Management Policy as described in §673.23;
- (b) Safety Risk Management as described in §673.25;
- (c) Safety Assurance as described in §673.27; and
- (d) Safety Promotion as described in §673.29.

### 4.4 PTASP Review by TxDOT

TxDOT will review and evaluate each PTASP for compliance with 49 CFR Part 673, the TxDOT Program Standard, and the NPTSP. At the time the PTASP is submitted for initial approval and for subsequent updates, the RTA will submit referenced materials and supporting procedures to document that each required element is addressed. Examples of referenced materials and supporting procedures include but are not limited to: standard operating procedures; training plans; rule books and bulletins; hazard management plans; maintenance rules and procedures; emergency response plans and agreements; and compliance programs. On-site meetings, inspections, and teleconferences may be conducted to address issues identified during the review of the PTASP. The PTASP and supporting procedures shall be submitted by email or via a method specified by TxDOT.

### **Annual PTASP Review**

No later than September 1<sup>st</sup> each year, each RTA shall conduct a review of its PTASP and notify TxDOT via email if the PTASP is current or requires an update. If the RTA determines the PTASP must be updated, the notification shall summarize the areas requiring an update and the anticipated date the revised PTASP will be submitted to TxDOT.

TxDOT requires each RTA to submit the revised draft PTASP for TxDOT review before seeking approval from the AE and Board. Draft revised PTASPs must be submitted to TxDOT by November 15<sup>th</sup>. The revised PTASP must be approved by each RTA and submitted to TxDOT no later than January 31<sup>st</sup>.

#### **PTASP Review Sequence and Approval**

- RTAs may not submit PTASPs to their board/equivalent body for approval until TxDOT has rendered conditional approval.
- TxDOT will complete the draft PTASP review and provide review comments, including areas requiring revisions, to the RTA within 21 calendar days of PTASP receipt.

- TxDOT and the RTA will reach a mutually agreeable date for the resubmission of PTASPs that require revisions. Upon receipt of requested revisions, the process will continue.
- Upon approval, TxDOT will send an approval letter via email to the Accountable Executive and the Chief Safety Officer.

### **Modifications to PTASP**

With prior email approval by TxDOT, an RTA can modify and implement processes described within the PTASP prior to the annual PTASP update. An RTA must email their SSO Program Manager with the current section of the PTASP and the proposed changes. TxDOT will review the proposed changes within 10 days and respond with approval or request additional information needed for approval. Upon approval, the RTA may implement the change. The RTA must include the modification within the PTASP at the next update.

### 4.5 PTASP Initial Submittals for New Rail Systems

Each new RTA entering the SSO program shall make submit their initial PTASP and all referenced materials and supporting procedures a minimum of 180 days prior to the target date of pre-revenue operations.

TxDOT will review the initial PTASP submission according to process outlined in Section 4.4. While conducting its initial PTASP review, TxDOT may request additional information, clarifications, or revisions to the PTASP and referenced materials and supporting procedures. Upon approval of the initial PTASP submission TxDOT will issue a formal letter of approval to the AE and CSO.

### 4.6 Ensuring Safety in New or Modified Rail Systems

Each RTA shall ensure safety concerns and impacts are documented, analyzed, and addressed in accordance with TxDOT and RTA policies and procedures for new or modified systems, which may include vehicles, equipment, system extensions, or other areas of change.

### Notification of New Rail System or Modified Rail System

TxDOT requires the RTA CSO or delegate to email their respective SSO Program Manager notification of the RTA's intent to begin a new rail system or modification to an existing rail system. This notification must occur prior to entry into the preliminary engineering phase of a new or modified system project. Upon receipt of notification, the SSO Program Manager will coordinate with the CSO or delegate to ensure TxDOT requirements, including those below, are satisfied 674.25(c) review.

Projects that require notification to TxDOT include:

- Any area of change that significantly alters a part, component, or subcomponent of the system.
- Any project, including projects implemented by other entities, that may have significant impact of RTA operations and safety.

- New starts or system extensions, expansions, new stations, or rail yards
- Reconstruction of existing lines
- Major redesign and installation of system components
- New or significantly reconstructed maintenance and operating facilities
- New vehicle procurements or major overhauls (e.g., mid-life overhaul)
- Any new or rehabilitative work associated with signals, power, control center, or other safety critical system components
- Major capital project, defined by FTA in 49 CFR Part 633, involving the construction, expansion, rehabilitation, or modernization of a fixed guideway having a total project cost of \$300 million or more and receives \$100 million of federal funds, and is not exclusively for the acquisition, maintenance, or rehabilitation of vehicles or other rolling stock.

### **New or Modified Rail System Requirements**

TxDOT requires RTAs to develop and submit a safety and security certification plan (SSCP) for TxDOT concurrence for new or modified rail systems. For smaller projects that do not involve preliminary engineering or engineering, RTAs must submit the SSCP prior to commencing the project. For larger projects that follow a traditional project develop phases, TxDOT requires the SSCP to be submitted not later than the end of the preliminary engineering phase. In either case, TxDOT will coordinate with the RTA to reach a mutually agreeable date for the submission of the SSCP.

The SSCP is a scalable, project specific plan which describes the activities the RTA will complete to ensure safety concerns and hazards are adequately addressed prior to the initiation of revenue operations. TxDOT will review the SSCP within 30 days of submission. Common elements found within an SSCP are:

- Project description.
- Certifiable elements list.
- Design criteria are developed to identify specifications that must be met.
- Design Conformance Checklists are completed to verify compliance of the design criteria.
- Integrated tests are completed to verify all systems and components function as intended.
- Operations and maintenance manuals are developed.
- Training is developed and provided to transit operations and maintenance staff.
- Agency staff are trained on rules, procedures, safety, and emergency operations.
- Public safety personnel are familiarized and trained to manage their activities safely.
- Emergency preparedness drills and exercises are conducted.
- Hazard and vulnerability assessments are performed to track and resolve safety concerns.
- PTASP development and approval by TxDOT.

- Safety and Security Certification Verification Report is prepared to document the transit project successfully complies with identified safety and security requirements.
- RTA issued "Certificate of Safety" is completed to verify the project is safe for revenue service.
- Completion of a TxDOT led on-site pre-revenue review.

TxDOT will coordinate with the RTA and provide technical assistance, as needed, during the development of the SSCP. FTA has developed resources such as the Handbook for Transit Safety and Security Certification (November 2002), to provide guidelines and recommendations for the development of safety and security certification plan. The FTA Handbook for Transit Safety and Security Certification is located at: <a href="https://www.transit.dot.gov/regulations-and-quidance/safety/publications">https://www.transit.dot.gov/regulations-and-quidance/safety/publications</a>

### **Coordination During Pre-Revenue Project Implementation**

TxDOT will monitor the RTA's project implementation and compliance with the SSCP by attending project meetings and by conducting on-site review activities and observations. TxDOT's monitoring during this pre-revenue period will evaluate the RTA's readiness for passenger operations and assess the RTA's implementation of its PTASP, SSCP, internal procedures and standards, and TxDOT's Program Standard. On-site meetings and teleconferences may be conducted to address any issues identified during the pre-revenue review period.

### Safety and Security Certification Verification Report (SSCVR)

At least 60 calendar days prior to revenue service or non-revenue/operational use, an RTA must submit a SSCVR to TxDOT for review.

The SSCVR is the final report verifying that the project complies with all safety requirements identified by the agency's SSCP. The SSCVR shall contain:

- Executive summary of the project status
- Summary of Activities Performed:
  - o Certifiable items list
  - o Completed conformance checklists and certificates
  - Integrated testing results
  - Updated manuals, SOPs, and procedures
  - Operations and maintenance training
  - Hazard Assessments, including associated hazard logs
- List of open items or logs, restrictions, and hazards, and the plan, including actions required, responsibility, and schedule for resolving open items, restrictions, and hazards
- Certificate of Safety verifying project is safe for revenue service

### **TxDOT Concurrence**

TxDOT will review the SSCVR within 30 days to determine project conformance with the SSCP and PTASP, and to assess if the RTA is compliance with TxDOT requirements. During the review period, TxDOT may conduct readiness review activities including on-site reviews, observations, meetings, and teleconferences. Additional information, documentation, or clarification may be requested by TxDOT

before concurrence is provided. At the conclusion of the review period, TxDOT will provide a letter of concurrence to the CSO stating the project has satisfied TxDOT SSO requirements.

#### 4.7 **RTA Internal Safety Reviews**

Each RTA shall develop and implement a process for the performance of on-going internal safety reviews (ISRs) in compliance with 49 CFR 673.27(d). The internal safety review evaluates the following:

- Effectiveness of RTA PTASP implementation
- Identification of deficiencies in the RTA's SMS
- Identification of deficiencies in the transit agency's performance against safety performance targets.
- For large urbanized area providers, the ISR must also address the role of the RTA's Safety Committee, and include the identification of deficiencies in the transit agency's performance against annual safety targets.

At the discretion of TxDOT, TxDOT employees, or contractors may observe the review onsite.

Each RTA shall develop and annually submit to TxDOT, for approval, a package which addresses the review of all areas of the PTASP over a three-year cycle. This review package shall be submitted in time to receive TxDOT approval not less than 30 days prior to conducting the ISR. The review package shall include the following information:

- Identify the departments, employees, and contractors responsible for scheduling, managing, and conducting the annual review;
- PTSCTP Certification for personnel conducting the internal safety review;
- Identify the departments and functions subject to review;
- At a minimum, the annual approval package shall identify the RTA personnel participating in the review, contact information, interview schedules, and a listing of the on-site audit locations;
- Develop templates, checklists, and procedures for conducting the ISR. These materials shall include sufficient criteria to determine if all audited elements are implemented as intended.

### **RTA Internal Safety Review Package Approval Sequence**

- RTA submits ISR packet at least 60 days before the planned ISR date.
- TxDOT will review and provide comments to the RTA within 10 business days.
- In the event revisions are needed, TxDOT and the RTA will reach a mutually agreeable date for the resubmission of revised items. Upon receipt of the requested revision the review process will continue.
- TxDOT approval of the ISR packet will be made via a formal letter to the CSO.

### **RTA Internal Safety Review Report**

Each RTA shall submit the ISR final report to TxDOT within 60 days of the closeout meeting. In no case shall the RTA submit the ISR final report later than February 1<sup>St</sup>.

TxDOT requires the following two items to be submitted by the above referenced deadlines:

- 1. A formal letter or an electronic communication signed by the RTA's AE that:
  - The rail transit agency shall submit a report documenting internal safety review activities that have been performed since the last report and the findings and status of corrective actions.
- 2. The ISR final report, must contain the following content:
  - A listing of the safety elements conducted during the calendar year;
  - Identification of the departments and functions reviewed;
  - An update of the RTA' three-year schedule ISR schedule;
  - Findings of noncompliance and recommendations as applicable

All findings shall be tracked by the RTA until closure.

### **Section 5: Triennial SSO Agency Audits**

#### **SSOA Triennial Audit Schedule** 5.1

At least once every three years, TxDOT shall conduct a Triennial Audit of the RTA's implementation of its PTASP. The triennial is considered conducted as of the date TxDOT holds an audit exit debrief with the RTA. It will be at TxDOT's discretion whether the Triennial Audit will be conducted as a single onsite assessment or in an on-going manner over the three-year cycle.

### 5.2 SSOA Triennial Audit Activities

TxDOT, or its designated contractor, will prepare the audit checklists based on the RTA's PTASP and supporting procedures, records, and plans. Verification of checklist items will occur, but not limited to, through interviews, document reviews, data analysis, field observations, testing, measurements, spot checks, and demonstrations provided by the RTA transit workers and contractors. To assess compliance with the agency's safety program the audit team will sample accident reports, internal review reports, documentation from the RTAs safety risk management Program, SMS Implementation, and corrective action plans in relation to 49 CFR Part 674 and the TxDOT SSO Program Standard. The audit team may also use Drug and Alcohol Audits, Triennial Reviews, and Safety and Security Readiness Reviews to support its assessment of compliance in areas previously investigated and audited by FTA.

Whether TxDOT conducts the Triennial Audit as a single on-site assessment or in an on-going manner over the three-year cycle, the following steps will be employed by TxDOT and its contractors before, during, and after the audit.

### **Triennial Audit Planning and Coordination**

- Notify RTA AE and CSO of intent to conduct Triennial Audit.
- Coordinate with the RTA safety points of contact to develop the audit schedule no less than 60 calendar days before the audit is scheduled;
- Finalize the interview schedule in coordination with the RTA points-of-contact, no less than 30 calendar days prior to the audit;
- Designate a TxDOT audit team leader and team members;
- Prepare an audit plan that includes all elements identified in the RTA's PTASP and supporting documents and procedures;
- Request and review RTA safety documents;
- Prepare audit checklists and templates based on the RTA's PTASP and supporting documents prior to the on-site audit;
- Identify methods of verification appropriate to each checklist item.

### **Conducting the Triennial Audit**

- Conduct an entrance meeting with the RTA AE, Operations management, Maintenance management CSO, and Rail Safety Transit Workers;
- Conduct interviews with appropriate RTA transit workers and contractors;
- Evaluate documents and data maintained on-site;
- Observe on-site operations and maintenance activities of the RTA;
- Take measurements and conduct spot checks as appropriate;
- Rate checklist items for compliance;
- Conduct an exit debriefing with RTA management at the conclusion of the audit to provide an overview of initial findings and observations.

### **Triennial Audit Report Shall**

- Cite authority and purpose of the audit;
- Evaluate the implementation of the PTASP and supporting procedures;
- Identify findings which shall be addressed by the RTA;
- Make recommendations to the RTA to update its PTASP and supporting procedures.

### **Final Report Submission and Audit Closeout**

- TxDOT will issue a draft audit report within 60 calendar days of the completion of the on-site audit and submit to the RTA for review and comment;
- RTA shall submit comments within 30 calendar days of receipt of draft triennial audit report.
- TxDOT will issue triennial audit report within 15 calendar days of receipt of RTA draft report comments.
- RTA must develop CAPs to address findings within 30 calendar days of report issuance;
- TxDOT will review RTA proposed corrective action plans within 30 calendar days of receipt;
- TxDOT will monitor RTA's progress on implementing CAPs and closing the audit findings;
- TxDOT will notify the RTA when all findings have been addressed and the audit is closed.

### 5.3 SSO Agency Triennial Audit Report

TxDOT shall issue a Triennial Audit which shall include, at minimum, findings of noncompliance, recommendations, and analysis of the effectiveness of the PTASP and supporting documentation and procedures.

Findings will be issued for areas in which the RTA is not in compliance with federal and state requirements or the PTASP policies or procedures.

Recommendations can include areas that, while in compliance with applicable requirements and standards, may be improved based upon the review team's professional judgment and knowledge of best practices. Recommendations do not require a corrective action plan.

Recommendations may include safety risk which must be tracked be the RTA within their internal hazard log, managed through the safety risk management process, and may require a documented risk mitigation plan. Unaddressed recommendations that include safety risk may require management through a corrective action plan. TxDOT will notify the RTA of recommendations that include a safety risk.

# Section 6: Safety Event Definitions and Notification Requirements

### **6.1 FTA and SSO Accident Notification Requirements and Method**

The RTA must notify the FTA and TxDOT within two (2) hours of any safety event occurring on a rail fixed guideway public transportation system that results in one or more of the following:

- Fatality
- Two or more injuries
- Derailment
- Collision resulting in one of more injuries
- Collision between two rail transit vehicles
- Evacuation for life safety reason (See below for evacuation criteria)
- Unintended train movement

NOTE: The two-hour window starts at the time the accident occurred and two-hour notification requirement excludes criminal actions that result in fatalities or injuries, such as homicides and assaults.

For a collision, if:

- There was one or more injuries (transport) NOTIFICATION REQUIRED
- The collision was between two rail transit vehicles NOTIFICATION REQUIRED
- The collision resulted in disabling damage to the rail transit vehicle NOTIFICATION REQUIRED

Note: If an automobile involved in the collision requires towing, the event does not require 2hour notification - unless another threshold is met (injury, fatality, disabling damage to the rail transit vehicle, etc.)

Injury means any harm to persons as a result of a safety event that requires immediate medical attention away from the scene. Does not include harm resulting from a drug overdose, exposure, to the elements, illness, natural causes, or occupational safety events occurring in administrative building.

Disabling damage means damage to a rail transit vehicle resulting from a collision and preventing the vehicle from operating under its own power.

1. Inclusion. Damage to a rail vehicle, where the vehicle could have been driven, but would have been further damaged if so driven.

#### 2. Exclusions.

- (i) Damage that can be remedied temporarily at the scene of the accident without special tools or parts.
- (ii) Tire disablement without other damage even if no spare tire is available.
- (iii) Headlamp or tail light damage.
- (iv) Damage to turn signals, horn, or windshield wipers, which makes the vehicle inoperable.

An evacuation for a life safety reason occurs when a person departs from a transit vehicle or facility due to a threat to their life or limb. A life safety reason may include, but is not limited to, a fire, the presence of smoke or noxious fumes, a fuel leak, a vehicle fuel leak, an electrical hazard, a bomb threat, discharge of a weapon, a suspicious item, or other situation that constitutes a potential danger. An evacuation for a life safety reason may be transit-directed or passenger self-evacuations.

Evacuations of vehicles or facilities are reportable even if the event is off property. For example, a security event such as a shooting on adjacent property can trigger an evacuation for a life safety reason. Similarly, a bomb threat, gas leak, or fire on adjacent property may also cause an evacuation for a life safety reason.

As clarified by FTA in their August 2025Two-Hour Accident Notification Guide (Appendix H), RTAs are not to provide two-hour notifications due to a loss of life that results from natural causes or assaults resulting in homicides. And the regulation also excludes an injury that results from natural causes or criminal assaults under Part 674.

RTA staff must use their best judgment in determining if an evacuation for a life safety reason occurred. If unsure, RTAs are advised to provide an initial two-hour notification to TxDOT and FTA.

On February 25, 2025, TxDOT provided SSO Guidance regarding Evacuations. See Appendix F.

#### **Accident Notification Procedure** 6.2

The RTA must provide the two-hour initial accident notification to FTA by contacting the U.S. DOT Transportation Operations Center (TOC) by email or phone:

EMAIL:	TOC-01@DOT.GOV	TxDOT SSO Program Manager MUST be copied on all FTA
(preferred)		notifications sent via email.
PHONE:	(202) 366-1863	The date and time of the phone call must be documented

### FTA notifications must include:

- Summary of the event
- Location
- Number of fatalities
- Injury or injuries
- Primary and secondary event types (e.g., collision, derailment, fire, etc.)
- Point of contact for follow-up inquiries

The RTA must also report the accident to TxDOT using the SSO Tracker reporting system within the two (2) hour reporting requirement. The SSO Tracker reporting system allows RTAs to complete the accident notification three different ways, which include the SSO Tracker App, SSO Tracker Website, and the SSO Tracker Public Webform.

In effort to monitor compliance with the 2-hour notification requirement, TxDOT SSO will closely monitor and track safety event notifications. In an instance in which a RTA misses the notification timeframe, TxDOT will require the RTA to develop a CAP to address the cause of the late report. In addition to the required CAP when a 2-hr notification is late, TxDOT will send a letter to the CSO for first late notice, then from the Division Director to the AE for second late notice in a calendar year. Subsequent late notices will result in meetings between Division and RTA leadership and may include escalated enforcement actions in accordance with the Program Standard and the TAC.

In the event of reporting difficulties entirely out of the control of the RTA, agencies may notify TxDOT through a telephone phone or email notification to the SSO Program Managers and the corresponding SSO support services contractor.

### The SSO Program Manager are listed below:

- Carter Sieber: <a href="mailto:carter.sieber@txdot.gov">carter.sieber@txdot.gov</a> or (512) 915-9155
- Eric Rangel: Eric.Rangel@txdot.gov or (512) 983-6680

Phone or email notifications must meet the two-hour notification requirement, and must include a summary of the event, location, injuries or fatalities, and a point of contact. In addition, an RTA must complete an SSO Tracker notification with 24 hours of issue resolution for any notifications made through phone or email.

Please refer to the SSO Tracker User Manual for detailed instructions on using the SSO Tracker system: www.txdot.gov/inside-txdot/division/public-transportation/state-safety-oversight.html

#### 6.3 **Non-Reportable Safety Events**

TxDOT recognizes events that an RTA initially thought to be SSO reportable may turn out to not be SSO reportable. An RTA must update TxDOT Rail Division when the RTA discovers an event no longer meets the definition of an accident. TxDOT will in turn update the FTA.

#### 6.4 Safety Events Tracking and Reporting

Rail agencies shall report events to FTA via the National Transit Database (NTD) within 30 days. Please refer to the Title 49 U.S.C. 5335(a) for additional NTD regulatory requirements.

#### 6.5 **Other Federal Agency Notifications**

Additional notifications to federal agencies may also be required. The RTAs may be required to notify National Transportation Safety Board (NTSB) or TSA for events listed in 49 CFR Part 840 (see below) and 49 CFR Part 1580. For all notifications to other federal agencies (FRA, NTSB, and TSA), the TxDOT SSO Program requires that the RTA share those notifications and any additional information requested by those other federal agencies.

49 CFR Part 840.3 requires the operator of a railroad shall notify the Board by telephoning the National Response Center at telephone 800-424-0201, at the earliest practical time after the occurrence of any one of the following railroad accidents:

- a. No later than 2 hours after an accident which results in:
  - A passenger or employee fatality or serious injury to two or more crewmembers or passengers requiring admission to a hospital.
  - The evacuation of a passenger train; or
  - A fatality at a grade crossing.
- b. No later than 4 hours after an accident which does not involve any of the circumstances listed above, but which results in:
  - Damage (based on a preliminary gross estimate) of \$150,000 or more for repairs, or the current replacement cost, to the railroad and nonrailroad property.
  - Damage of \$25,000 or more to a passenger train and railroad and nonrailroad property.

### **Section 7: Accident Investigations**

### **Accident Investigation Process**

TxDOT must investigate, or cause to be investigated, at a minimum, any accident meeting the notification thresholds identified in the Program Standard Section 6, Safety Event Definitions and Notification Requirements. The FTA Administrator may conduct an independent investigation of any accident or a review of an SSOA's or an RTA' findings of causation of an accident. TxDOT will support the Administrator's independent accident investigation or findings and recommendations resulting from an independent investigation. TxDOT will evaluate whether the findings or recommendations by the FTA require a corrective action plan by the RTA. If so, TxDOT will require the RTA to develop and carry out a corrective action plan. TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT will support external investigations conducted by the NTSB or the FTA.

### **Independent TxDOT Investigations**

TxDOT, at its discretion, may choose to conduct an independent investigation of any event meeting the thresholds specified in Program Standard Section 6.1, FTA and SSOA Accident Notification Requirements and Method.

TxDOT will notify the RTA as to the personnel who will be conducting the independent investigation and provide a preliminary schedule as to the investigation process. TxDOT personnel and contractors, certified in the Public Transportation Safety Certification Program, are granted authority under the SSO program to conduct an investigation and evaluate records, materials, data, analysis, and other information that is pertinent to the investigation. The TxDOT investigation team will incorporate the American Public Transportation Association (APTA) Standard for Rail Transit Accident/Incident Investigation (APTA RT-OP-S-002-02 Rev 3) operating practice as applicable. The RTA will provide to the TxDOT investigation team the resources and information necessary to conduct the investigation in an effective and efficient fashion. The TxDOT investigation report will be submitted to the RTA within 45 days of the completion of the investigation. If the RTA disagrees with TxDOT's investigation, then the RTA may submit a written dissent from the report, which TxDOT will include in the final investigation report, The RTA must submit their dissent via email to their SSO Program Manager within 15 days of TxDOT's completion of the investigation report.

### **National Transportation Safety Board Investigations**

The NTSB is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in the other modes of transportation including railroad, highway, marine, and pipeline and issuing safety recommendations aimed at preventing future accidents.

The NTSB is responsible for the investigation; the determination of facts; the cause or probable cause; and recommendations to reduce the likelihood of recurrence. TxDOT will support the NTSB as a member of its Party System. The RTA shall be responsible for timely briefing of TxDOT on all activities including meetings, interviews, requests for data, functional testing, examination of equipment, and the results of drug and alcohol tests. The RTA shall provide TxDOT with a copy of all written correspondence to the NTSB and shall provide a copy of all NTSB reports and any recommendations concerning the event or its investigation, upon receipt by the RTA. TxDOT will assist the NTSB by providing information requested about the RTA practices and other matters as appropriate. TxDOT is authorized to participate in any discussions and reviews with the RTA and NTSB. TxDOT will evaluate whether the findings or recommendations by the NTSB require a corrective action plan by the RTA. If so, TxDOT will require the RTA to develop and carry out a corrective action plan.

### 7.2 Accident Investigation Procedures

TxDOT has authorized each RTA to conduct the on-site investigation on its behalf and reserves the option to participate in the investigation process. All personnel and contractors that conduct investigations on behalf of TxDOT shall be trained to perform their functions in accordance with the PTSCTP. The RTA shall use accident investigation procedures approved by TxDOT. The accident investigation procedures shall adequately address the necessary activities to discern root cause and contributing factors and be procedurally oriented so as to not allow supposition or conjecture during the investigation. The procedures shall succinctly describe the roles and responsibilities of each RTA department, such as safety, operations, and transportation, during the on-scene investigation as well as define the process for completing and issuing the final report to TxDOT for review and adoption. Subsequent updates and revisions to the accident investigation procedures shall be submitted to TxDOT for approval.

TxDOT's Review Process for RTA's Accident Investigation Procedures:

- TxDOT will complete a review within 30 calendar days
- After the review period, TxDOT will provide review comments to the RTA; including areas that require revisions to achieve compliance. TxDOT may also include best practice recommendations with review results.
- TxDOT will work with the RTA to establish a mutually agreeable timeline to receive procedures which have incorporated TxDOT's requested revisions.
- Upon approval, TxDOT will send an approval letter via email to the CSO.

### 7.3 Accident Investigation Report

Each RTA accident investigation conducted by the RTA on behalf of TxDOT must be documented in a final investigation report that includes a description of investigation activities, findings, identified causal and contributing factors, and a corrective action plan if necessary. The final investigation report shall be submitted to TxDOT, through SSO Tracker system, within 30 days of the occurrence of the

accident. On a case-by-case basis, SSO Program Managers may grant extensions to the accident investigation due dates. Such extensions are coordinated between TxDOT and RTA through email or phone, and formally documented within the SSO Tracker system as part of the accident investigation report. Please refer to the: SSO Tracker User Manual for detailed instructions on using the SSO Tracker to submit an accident investigation report. The SSO Tracker User Manual is located on the TxDOT SSO Program webpage at: <a href="https://www.txdot.gov/inside-txdot/division/public-transportation/state-safety-oversight.html">www.txdot.gov/inside-txdot/division/public-transportation/state-safety-oversight.html</a>

At any time during an investigation, the RTA shall be prepared to provide a written briefing on the known circumstances of the event and status of their investigation activities. The final investigative report must include supporting investigation documentation. This may include, but is not limited to, video, digital pictures, police reports, supervisor reports, accident scene diagrams, maintenance and inspection records, drug and alcohol decision forms, fitness for duty information, operator hours of service and internal testing reports including assessments and analyses. accident documentation, data, and/or video will be required for submission as part of the accident investigation report.

No later than 30 calendar days after the RTA's submission of the final accident investigation report, TxDOT will review the report using the TxDOT Accident Investigation Review Checklist (Appendix E). The review will ensure the submitted investigation report is complete, accurate, reasonable given the accident circumstances, is compliant with the RTA accident investigation procedures, includes a description of investigation activities, findings, identified causal factors, and, if necessary, provides a CAP.

If questions arise during the investigation review, TxDOT will seek clarification from RTA staff responsible for the investigation. Upon receipt of clarification or correction TxDOT will complete the accident investigation review. After the conclusion of the review, and resolution of questions or concerns, TxDOT shall adopt the RTA's accident investigation and close the investigation in the TxDOT SSO Tracker System.

In the event TxDOT and the RTA cannot reach agreement on the investigation report content or conclusions, TxDOT may issue its own accident investigation report consistent with the process described in the Independent TxDOT Investigations section of this chapter.

## 7.4 SSO and NTD Safety Event Reconciliation

No less than quarterly, TxDOT will compare and reconcile past accident data reported within the SSO Tracker System to RTA accident data reported to the National Transit Database (NTD). TxDOT completes the reconciliation using FTA's State Safety Oversight Reporting System (SSOR System). The SSOR System is a web-based data reporting system that is linked to the NTD. Any rail-related accidents, as defined by 49 CFR 674, reported by the RTA to the NTD are displayed in the SSOR system.

The data reconciliation review will ensure the RTA's accident investigation data submitted to both TxDOT, through the SSO Tracker system, and FTA, through the NTD, match. Examples of common

issues discovered by a reconciliation review include errors in the number or type of injuries reported, the event time or location, and late notifications.

No later than 15 days after the end of quarter, TxDOT will complete the reconciliation review and inform each RTA of the results. If data revisions are required, the SSO Program Manager and/or the SSO support contractors will state which safety event requires revision and why a revision is warranted.

TxDOT may require a corrective action plan if the safety event reconciliation indicates non-compliance with accident reporting requirements.

# **Section 8: Hazard Management**

#### 8.1 **RTA Safety Risk Management**

Each RTA shall document in the PTASP a safety risk management process to identify and resolve hazards including, but not limited to, those reported, discovered, or observed during engineering, construction, operations, maintenance, and modification of the rail system. An RTA's hazard management process must encompass all hazardous conditions encountered by any department of the agency, and any process that could result in the detection of hazardous conditions.

A 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.

Each RTA's hazard management process must document in the PTASP the following requirements:

- Define the RTA's approach to system-wide hazard management
- Identify all committees, working groups, and task forces involved in hazard management.
- Describe hazard identification methods and processes, which must address change management processes to identify and assess changes that may introduce new hazards.
- Explain how hazards are assessed and prioritized for control or elimination.
- Describe how hazards are documented and tracked.
- Define minimum thresholds requiring notification to TxDOT.
- Explain how the RTA and TxDOT coordinate on hazardous conditions.

#### RTA Hazard Identification and Risk Assessment 8.2

RTAs may use a variety of methods to identify hazards encountered anywhere on the system, from any source, and through any process or activity.

Activities and processes that identify hazards include, but are not limited to, RBI, transit worker reporting programs, safety violation allegations, safety officer observations, internal safety reviews, contractor reviews, engineering assessments, data analyses, event investigations, after action reviews, inspections, and passenger reports or complaints. Hazard reporting may also be received from external sources including TxDOT, FTA, FRA, and the NTSB. Hazards received from external entities will be documented and managed in compliance with the safety risk management processes documented within the PTASP.

Each RTA must define their methodology to investigate and assess hazards to understand pertinent details, determine probability and severity, and prioritize for control or elimination. Assessment methods such as the Military Standard 882 is commonly used in the transit industry. Whichever approach is selected, the RTA shall document, within the PTASP, the method and processes for hazard identification, safety risk assessment and safety risk mitigation. TxDOT encourages each RTA to reflect its genuine practices rather than idealized techniques.

#### 8.3 **RTA Management of Hazards**

#### **Notifying TxDOT of Unacceptable Hazards**

TxDOT requires hazardous conditions assessed as "unacceptable" by the RTA to be reported to TxDOT within 24 hours using the SSO Tracker system and managed in coordination with TxDOT.

An unacceptable hazard is a hazard assessed by the rail transit agency as the most serious or highest rating when using the RTAs assessment methodology. Within the PTASP, RTAs must state what constitutes an unacceptable assessment rating that requires notification to TxDOT.

TxDOT will review hazard notification reports and follow-up with the RTA with any questions or concerns related to the reported hazard.

Please refer to the SSO Tracker User Manual for detailed instructions on using the SSO Tracker system to submit an initial hazard notification and final hazard report. The SSO Tracker User Manual is located on the TxDOT SSO Program webpage at: https://www.txdot.gov/business/resources/rail-safety/statesafety-oversight-program.html

#### **RTA Management of Hazards Not Requiring Reporting to TxDOT**

Hazards that do not meet the RTA's threshold for reporting to TxDOT as an unacceptable hazard must be documented, tracked, managed, and if necessary, mitigated in compliance with each RTA's safety risk management processes described within the PTASP.

TxDOT will coordinate with each RTA on hazards not requiring reporting to TxDOT through periodic hazard log reviews and hazard data reviews as described with section 8.6 of this chapter.

#### 8.4 **Hazard Corrective Action Plan**

All "unacceptable" hazards reported to TxDOT must be addressed by the RTA with a CAP managed incoordination with TxDOT.

The CAP must describe the actions the RTA will take to control or eliminate the hazard identified, the schedule for taking action, and the individuals or department responsible for taking those actions.

TxDOT may choose to participate in the RTA's process to assess and resolve hazardous conditions identified by the RTA. If warranted, TxDOT shall order the RTA to develop and carry out a CAP or modify a proposed corrective action plan. If the RTA disputes TxDOT's decision related to a corrective action plan, the RTA may appeal TxDOT's decision as outlined with Section 9: Corrective Action Plans. For information on the CAP process, including preparation, submission, TxDOT approval, and the appeal requirements, please refer to Section 9: Corrective Action Plans.

#### 8.5 **Final Hazard Report**

Following the implementation of a corrective action plan, the RTA must provide a final hazard report within the SSO Tracker system. The final report shall include a re-assessment of the hazard after implementation of a CAP according to the RTA's Hazard Assessment methodology, and a summary of the hazard investigation. RTAs are encouraged to include attachments such as analyses, assessment reports, committee minutes, or photographs as part of the final hazard report.

TxDOT will review final hazard reports, including the re-assessment and report attachments, and inquire with the RTA if questions arise. TxDOT will concur and close the Hazard after the RTA's implementation of Corrective Actions. TxDOT will also review the corrective action plan within the SSO Tracker system to ensure the corrective action plan has been managed according to RTA and TxDOT requirements.

#### 8.6 Monitoring of RTA Hazards and Safety Risk Mitigations

On a monthly basis, TxDOT will require each RTA to submit a consolidated hazard log or equivalent documentation for hazards discovered during the previous month and hazards that remain open. Equivalent documentation may include any format that communicates the TxDOT required hazard information as described within this section.

The log must contain hazards encountered by all departments of the agency, and any source including but not limited to, transit worker reporting program, safety officer observations, internal reviews, contractor reviews, analyses, and investigations, hazards identified from SSO personnel, passenger complaints, after action reviews of safety events, and safety concerns identified through safety data reviews.

In addition to RTA discovered hazards, TxDOT places an emphasis on RTAs detecting, documenting, analyzing, and mitigating risk that may be experienced at a regular frequency. To ensure that each RTA notifies TxDOT of all hazards affecting rail safety, each RTA shall, on monthly hazard log submissions, include a summary of the preceding months hazardous conditions that meet the criteria listed below:

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

The hazard log, including hazardous condition data, must contain, at a minimum, the following information:

- Date hazard discovered or occurred
- Summary or description of hazard, including location.
- Hazard assessment including probability and severity
- Responsible RTA department or transit worker tasked with resolving the hazard
- Safety risk Mitigations (actions to improve safety by lessening risk)
- Status of hazard resolution (open or closed)

TxDOT will complete a review of the hazard log to review the RTAs safety risk mitigation status and effectiveness within 15 calendar days of each hazard log submission and will follow-up with the RTA's CSO if questions arise. TxDOT's hazard log review will focus on communication on RTA's internal hazards, and coordination as each RTA implements their safety risk management processes. TxDOT may require a corrective action plan if the hazard log review indicates non-compliance with hazard management requirements.

#### 8.7 **Data Collection**

TxDOT's Data Collection Program is in Appendix G of the RBI Program under Category 3: Data Sources and Collection.

## **Section 9: Corrective Actions**

RTA's will coordinate with TxDOT on the management of the RTA's CAPs. The SSO Tracker system is the required method for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs.

Please refer to the SSO Tracker User Manual for detailed instructions on using the SSO Tracker system to submit corrective action plans. The SSO Tracker User Manual is found on the TxDOT SSO webpage at: <a href="https://www.txdot.gov/inside-txdot/division/public-transportation/state-safety-oversight.html">https://www.txdot.gov/inside-txdot/division/public-transportation/state-safety-oversight.html</a>

### 9.1 CAP Development

RTAs shall develop and implement CAPs to address risks, hazards, and findings identified through investigations, the hazard management process, audit findings, internal safety review findings, and instances of non-compliance with federal and state requirements or the PTASP policies or procedures.

A CAP shall describe the actions the RTA will take to minimize, control, correct, or eliminate identified risks and hazards, the schedule for taking those actions, and the individual(s) and or department(s) responsible for taking those actions.

In any instance in which a safety event on the rail system is the subject of an investigation by the NTSB or FTA, TxDOT will evaluate whether the findings or recommendations require a CAP. If warranted, TxDOT shall order the RTA to develop and carry out a CAP.

Each RTA shall develop CAPs for the following:

- Results from safety event investigation in which identified causal and contributing factors are determined by the RTA or TxDOT as requiring corrective actions. Examples may include, but are not limited to, operator retraining in the event of human error, developing, or revising a policy or procedure, or repair or corrective maintenance in the event equipment failure, damage, or poor maintenance;
- Findings of non-compliance identified through RTA internal safety reviews, inspections or audits;
- SSO reportable hazards identified through the RTA hazard management process;
- Findings from the Triennial Audits and targeted safety audits performed by TxDOT;
- RTA risk assessments.

#### 9.2 CAP Submission

RTA's will submit CAPs through the SSO Tracker system within 30 calendar days of discovering an issue or deficiency requiring corrective action or TxDOT's notification to the RTA that a CAP is required. Depending on the complexity of the issue, and at TxDOT's discretion, additional time may be granted to prepare the CAP. TxDOT must review and approve all proposed corrective actions before the RTA implements the CAP.

An exception is made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that TxDOT is notified within 48 hours of implementation.

The RTA CAP notification shall contain the following:

- Source of the CAP,
- Location, if applicable,
- Summary of issue or deficiency requiring corrective action,
- Proposed corrective actions,
- If the CAP is an immediate or emergency corrective action,
- Date the issue requiring corrective action was discovered,
- Estimated start date,
- Estimated completion date, and
- Responsible Party and department(s) responsible.

TxDOT will review and approve both regular and emergency/immediate CAPs in accordance with the following section.

# 9.3 TxDOT Review and Approval of Proposed Corrective Action Plans

TxDOT will notify the RTA of its approval or rejection of a CAP within 15 calendar days of receipt. In the event TxDOT rejects a CAP, TxDOT will state its reasons in writing and recommend revisions. The RTA shall submit a revised CAP to TxDOT no later than 14 calendar business days following the rejection. TxDOT will work with the RTA to resolve any disputes relating either to the development or execution of the CAP or the findings of an investigation. In the event of a dispute concerning TxDOT's decision related to a CAP, no later than 30 calendar days after receipt of the written decision, the RTA may request an on-site meeting or conference call with the TxDOT SSO Program Manager and RRD leadership to discuss the proposed CAP. The goal of these discussions is to reach agreement on the CAP in dispute. The RTA may request an Administrative Review as specified in 43 TAC 7.93 to appeal the rejection or approval of a CAP. The Administrative Review will be decided by the TxDOT Executive Director or Deputy Executive Director and will be the final decision regarding the CAP.

## 9.4 Verification of CAP Implementation and Closure

RTAs may implement the corrective action plan once TxDOT approval is received. During CAP implementation, any significant changes to the approved CAP must be discussed with the SSO Program Manager or support contractor by telephone or email for approval. Upon SSO approval of proposed changes, the RTA must update the CAP within the SSO Tracker system. Significant changes may include changes to the identified actions, person, or departments responsible for implementation or completion date.

The RTA must request TxDOT to close the CAP once identified actions have been fully implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan, all required fields within the SSO Tracker are completed, and that evidence of CAP implementation is uploaded within the system. TxDOT will close the CAP upon verifying its implementation. TxDOT may also use site visits, RTA interviews, and documentation review to verify CAP implementation. Documentation may include, but not limited to: construction records, safety committee reports, standard operating procedures; training plans; training records, rule books, and bulletins; hazard management plan; maintenance procedures; emergency response plans and agreements; rules compliance programs; or independent assessment.

Upon verification and acceptance by TxDOT, the SSO Program Manager will close the CAP.

#### 9.5 CAP Extension

CAP extensions must be requested no closer than 7 calendar days of Estimated Completion Date.

#### 9.6 Monitoring of Open Corrective Action Plans

The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time. RTAs must ensure all CAP information within the system is kept up to date. Should TxDOT develop concerns regarding the RTA's management of open CAPs then these concerns will be addressed through communication with the RTA's staff responsible for CAP management.

## **Section 10: Escalation of Enforcement Action**

The escalation of enforcement action may be used if a RTA fails to comply with a corrective action plan, administrative action notification, an emergency order, and/or recommendations.

#### 10.1 Escalation of Enforcement Action

In instances of violation of federal or state regulation, TXDOT may initiate an administrative action; beginning with a written notification of violation provided to the RTA. The notification will specify violations, administrative actions to be taken by TXDOT, compliance action needed to address the violation, and information concerning administrative review of TXDOT's determination should the RTA disagree with the notification.

The RTA shall submit documentation to TXDOT to demonstrate compliance with the requested actions needed to address the violation or request administrative review to appeal TXDOT's determination. TXDOT will make a final determination of the appeal within 60 calendar days of receipt of the appeal.

Failure to act as required will lead to escalation of enforcement action, which may include TXDOT rescinding approval of the RTA's agency safety plan, issuance of an emergency order to address imminent public safety and seeking a temporary injunction to enforce emergency orders.

Complete information on the Administrative Actions, Administrative Review, and Escalation of Enforcement Action may be found in the Texas Administrative Code, Chapter 7, Subchapter E. - Rail Fixed Guideway System State Safety Oversight Program.

## **Section 11: Roadway Worker Protection (RWP) and Manual**

The purpose of this part is to set forth the applicability of the rail transit Roadway Worker Protection (RWP) regulation. This part applies to rail transit agencies (RTA) that receive Federal financial assistance authorized under 49 U.S.C. chapter 53; and to State Safety Oversight Agencies (SSOA) that oversee the safety of rail fixed guideway public transportation systems.

### 11.1 RWP Program

Each RTA must adopt and implement an approved RWP program as referenced under 49 CFR 671.11.

And each RTA must submit its RWP manual and subsequent updates to TxDOT for review and approval as described in Section 11.5.

#### 11.2 RWP Manual

Each RTA must establish and maintain a separate, dedicated manual documenting its RWP program as referenced under 49 CFR 671.13.

Following initial approval of the RWP manual by TxDOT, not less than every two years, the RTA must review and update its RWP manual to reflect current conditions and lessons learned in implementing the RWP program and information provided by TxDOT and FTA. The RTA must update its RWP manual and track access guide as necessary and as soon as practicable upon any change to the system that conflicts with any element of either document. And the RWP manual must be distributed to all transit workers who access the roadway and redistributed after each revision.

### 11.3 RTA's Responsibilities

Each RTA must establish procedures as referenced under 49 CFR 671.21(a).

## 11.4 Transit Worker Responsibilities

Each transit worker must follow the requirements of the RTA's RWP program by position and labor category as referenced under 49 CFR 671.23.

## 11.5 SSOA Responsibilities

**Review and approve RWP program elements:** TxDOT must review and approve the RTA's RWP manual and any subsequent updates for each RTA.

#### TxDOT must:

- 1. Coordinate with the RTA on the initial review and approval of the RWP program elements so that the RWP program is established and approved within one calendar year from December 2, 2024.
- 2. Submit all approved RWP program elements for each RTA, and any subsequent updates, to FTA within 30 calendar days of approving them.

**RWP program oversight:** The SSOA must update its program standard to explain the role of the SSOA in overseeing an RTA's execution of its RWP program.

**Annual RWP program audit:** TxDOT must conduct an annual audit of the RTAs as referenced under 49 CFR 672.25(c).

#### 11.6 Roadway worker in charge requirements

The RTA must designate one roadway worker in charge, that may be an RTA employee or contractor, for each roadway worker group whose duties require fouling a track. If a contractor is used, the RTA must provide the SSO with contractual worker in charge performance requirements and oversight plan, RTA-RWP qualifications, and training certifications for review and approval as part of the RWP program.

### 11.7 Job safety briefing policies

The RTA must ensure the roadway worker in charge provides any roadway worker who must foul a track with a job safety briefing prior to fouling the track as referenced under 49 CFR 671.33.

#### 11.8 Lone worker

The RTA may authorize lone workers to perform limited duties that require fouling a track as referenced under 49 CFR 671.35.

#### 11.9 Good faith safety challenge

Each RTA must document its procedures that provide to every roadway worker the right to challenge and refuse in good faith any assignment they believe is unsafe or would violate the RTA's RWP program as referenced under 49 CFR 671.37.

### 11.10 Risk-based redundant protections

Each RTA must identify and provide redundant protections for each category of work roadway workers perform on the roadway or track and must establish redundant protections to ensure on-track safety for multiple roadway work groups within a common work area as referenced under 49 CFR 671.39.

### 11.11 RWP training and qualification program

Each RTA must adopt a RWP training program as referenced under 49 CFR 671.41.

Initial RWP training for both RTA employees and contractors is to be conducted on site at the RTA facility, either computer based (with an instructor/trainer available to answer questions) or instructor led with the on hands portion taking place the same day but no later than the following day.

Refresher training may be completed online and remote with the on hands portion taking place no later than one business day following the completion of the online portion.

### 11.12 RWP compliance monitoring program

Each RTA must adopt a program for monitoring its compliance with the requirements specified in its RWP program as referenced under 49 CFR 671.43.

### 11.13 Recordkeeping

As refenced under 49 CFR 671.51, each RTA must:

- 1. Maintain the documents that set forth its RWP program; documents related to the implementation of the RWP program; and results from the procedures, processes, assessments, training, and activities specified in this part for the RWP program.
- 2. Maintain records of its compliance with this requirement, including records of transit worker RWP training and refresher training, for a minimum of three years after they are created.
- 3. Documents regarding RWP must be made available upon request by the FTA or other Federal entity, or TxDOT.

# **Appendix A**

**Definitions** 



Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a transit agency; responsibility for carrying out the transit agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the transit agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the transit agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

Administrator means the Federal Transit Administrator or the Administrator's designee.

Ample time means the time necessary for a roadway worker to be clear of the track zone or in a place of safety 15 seconds before a rail transit vehicle moving at the maximum authorized speed on that track could arrive at the location of the roadway worker.

Assault on a transit worker means, as defined under 49 U.S.C. 5302, a circumstance in which an individual knowingly, without lawful authority or permission, and with intent to endanger the safety of any individual, or with a reckless disregard for the safety of human life, interferes with, disables, or incapacitates a transit worker while the transit worker is performing the duties of the transit worker.

*Audit* means a review or analysis of records and related materials, including, but not limited to, those related to financial accounts.

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.

Collision means any impact between a rail transit vehicle and any other vehicle, object, or any person.

Commission means the Texas Transportation Commission.

*Contractor* means an entity that performs tasks on behalf of FTA, a State Safety Oversight Agency, or a Rail Transit Agency, through contract or other agreement.

Consultation means the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters.

Corrective action plan (CAP) means 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.

Department means the Texas Department of Transportation.

Derailment for the purposes of this part means a safety event in which one or more wheels of a rail transit vehicle unintentionally leaves the rails.

Designated personnel means:

- (1) Employees and contractors identified by a recipient whose job functions are 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 functions require them to conduct reviews, inspections, examinations, and other safety oversight activities of the rail fixed guideway public transportation systems subject to the jurisdiction of the agency.

Direct recipient means an entity that receives Federal financial assistance directly from the Federal Transit Administration.

Directly responsible for safety oversight means 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.

Disabling damage means damage to a rail transit vehicle resulting from a collision and preventing the vehicle from operating under its own power.

Emergency means, as defined under 49 U.S.C. 5324, a natural disaster affecting a wide area (such as a flood, hurricane, tidal wave, earthquake, severe storm, or landslide) or a catastrophic failure from any external cause, as a result of which the Governor of a State has declared an emergency and the Secretary has concurred; or the President has declared a major disaster under section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5170).

Equivalent entity means an entity that carries out duties similar to that of a Board of Directors, for a recipient or subrecipient of FTA funds under 49 U.S.C. chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.

Equivalent protection means alternative designs, materials, or methods that the RTA can demonstrate to the SSOA will provide equal or greater safety for roadway workers than the means specified in this part.

Evacuation for life safety reasons means a condition that occurs when persons depart from transit vehicles or facilities for life safety reasons, including self-evacuation. A life safety reason may include a situation such as a fire, the presence of smoke or noxious fumes, a fuel leak from any source, an electrical hazard, or other hazard to any person. An evacuation of passengers into the rail right of way (not at a platform or station) for any reason is presumed to be an evacuation for life safety reasons.

Examination means a process for gathering or analyzing facts or information related to the safety of a public transportation system.

Fatality means a death confirmed within 30 days of a safety event. Fatalities include suicides, but do not include deaths in or on transit property that are a result of drug overdose, exposure to the elements, illness, or natural causes.

Flag person means a roadway worker designated to direct or restrict the movement of rail transit vehicles or equipment past a point on a track to provide on-track safety for roadway workers, while engaged solely in performing that function.

Foul time protection is a method of establishing working limits in which a roadway worker is notified by the control center that no rail transit vehicles will be authorized to operate within a specific segment of track until the roadway worker reports clear of the track.

Fouling a track means the placement of an individual or an item of equipment in such proximity to a track that the individual or equipment could be struck by a moving rail transit vehicle or on-track equipment, typically within four feet of the outside rail on both sides of any track.

FRA means the Federal Railroad Administration, an agency within the United States Department of Transportation.

FTA means the Federal Transit Administration, an agency within the United States Department of Transportation.

*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.

*Individual rail transit vehicle detection* means a process by which a lone worker acquires on-track safety by visually detecting approaching rail transit vehicles or equipment and leaving the track in ample time.

*Injury* means any harm to persons as a result of a safety event that requires immediate medical attention away from the scene. Does not include harm resulting from a drug overdose, exposure to the elements, illness, natural causes, or occupational safety events occurring in administrative buildings.

*Inspection* means a physical observation of equipment, facilities, rolling stock, operations, personnel, or records for the purpose of gathering or analyzing facts or information.

Inspection data means data that includes, but is not limited to, inspection records and report forms, records of failures and defects with severity, records of speed restrictions, including the reason for applying, incident and safety risk mitigation verification, adherence to inspection schedules, including reports/documentation of inspections not performed, and capital project schedules and progress.

*Initial training* means the group of specific courses an individual must complete within three (3) years of enrollment in the Public Transportation Safety Certification Training Program to receive their first program certificate.

*Investigation* means the process of determining the causal and contributing factors of a safety event or hazard, for the purpose of preventing recurrence and mitigating safety risk.

Job safety briefing means a meeting addressing the requirements of this part that is conducted prior to commencing work by the Roadway Worker in Charge, typically at the job site, to notify roadway workers or other transit workers about the hazards related to the work to be performed and the protections to eliminate or protect against those hazards. Alternatively, briefings can be conducted virtually for those individuals who are working remotely on the job site.

Joint labor-management process means a formal approach to discuss topics affecting transit workers and the public transportation system.

Large urbanized area provider means a recipient or subrecipient of financial assistance under 49 U.S.C. 5307 that serves an urban area with a population of 200,000 or more as determined by the most recent decennial Census.

Lone worker means an individual roadway worker who is not afforded on-track safety by another roadway worker, who is not a member of a roadway work group, and who is not engaged in a common task with another roadway worker.

Maintenance data means data that includes, but is not limited to, major maintenance activity schedule and progress, adherence to maintenance schedules, including reports/documentation of deferred maintenance, records of failures and defects with severity if applicable, and records of revenue vehicles out of service, including causal information.

Maximum authorized speed means the highest speed permitted for the movement of rail transit vehicles established by the rail transit vehicle control system, service schedule, and operating rules. This speed is used when calculating ample time.

Minor tasks mean those tasks performed without the use of tools during the execution of which a roadway worker or other transit worker can hear and visually assess their surroundings at least every five (5) seconds for approaching rail transit vehicles and that can be performed without violating ample time.

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.

Near-miss means a narrowly avoided safety event.

On-track safety means a state of freedom from the danger of being struck by a moving rail transit vehicle or other equipment, and other on-track hazards, as provided by operating and safety rules that

govern track occupancy by roadway workers, other transit workers, rail transit vehicles, and on-track equipment.

Operator of a public transportation system means a provider of public transportation.

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.

*Person* means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a rail fixed guideway public transportation system.

*Place of safety* means a space an individual or individuals can safely occupy outside the track zone, sufficiently clear of any rail transit vehicle, including any on-track equipment, moving on any track.

Potential consequence means the effect of a hazard.

*Pre-revenue Operations* means operation of the rail fixed guideway public transportation system prior to revenue service that includes identification and performance of tests, drills, exercises, and audits designed to verify the functional capability and readiness of the system.

*Public transportation* means, as defined under 49 U.S.C. 5302, regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income; and does not include:

- intercity passenger rail transportation provided by the entity described in 49 U.S.C. chapter 243 (or a successor to such entity);
- intercity bus service;
- charter bus service;
- school bus service;
- · sightseeing service;
- · courtesy shuttle service for patrons of one or more specific establishments; or
- intra-terminal or intra-facility shuttle services.

*Public Transportation Agency Safety Plan (PTASP)* means the documented comprehensive agency safety plan for a transit agency that is required by <u>49 U.S.C. 5329</u> and this part.

Public Transportation Safety Certification Training Program (PTSCTP) means 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).

*Publicly accessible areas* means stations, platforms, vehicles in revenue service, roadways, sidewalk, park, walkway, or other areas open to the general public.

Qualified means a status attained by a roadway worker or other transit worker who has successfully completed required training (including refresher training) for, has demonstrated proficiency in, and is authorized by the RTA to perform the duties of a particular position or function.

Rail fixed guideway public transportation system (RFGPTS) means any fixed guideway system, or any such system in engineering or construction, 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. These include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.

Rail transit agency (RTA) means any entity that provides services on a rail fixed guideway public transportation system.

Rail transit vehicle means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

Rail transit vehicle approach warning means a method of establishing on-track safety by warning roadway workers of the approach of rail transit vehicles in ample time for them to move to or remain in a place of safety in accordance with the requirements of this part.

Recertification means the process of renewing an individual's Public Transportation Safety Certification Training Program certification for two years.

Recertification training means the training courses or activities designated personnel must complete within two (2) years of completing the Public Transportation Safety Certification Training Program curriculum to maintain certification and every two (2) years thereafter.

*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.

Redundant protection means at least one additional protection beyond individual rail transit vehicle detection to ensure on-track safety for roadway workers. Redundant protections may be procedural, physical, or both.

Revenue service means the operation of the rail fixed guideway public transportation system to carry passengers that pay fares, provide payment through a contractual arrangement, or have the fares subsidized by public policy. Vehicles operated in fare free service are considered in revenue service.

Revenue vehicle means a rail transit vehicle used to provide revenue service for passengers. This includes providing fare free service.

Risk-based inspection (RBI) means an inspection conducted as part of a risk-based inspection program.

*Risk-based inspection data management system* means a physical or digital system that follows administrative policies and procedures that identify data storage, organizational, and management processes for risk-based inspections.

Risk-based inspection program means an inspection program that uses qualitative and quantitative data analysis to inform ongoing inspection activities. Risk-based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk.

Roadway means land on which rail transit tracks and support infrastructure have been constructed to support the movement of rail transit vehicles, excluding station platforms.

Roadway maintenance machine means a device which is used on or near rail transit track for maintenance, repair, construction or inspection of track, bridges, roadway, signal, communications, or electric traction systems. Roadway maintenance machines may have road or rail wheels or may be stationary.

Roadway worker means a transit worker whose duties involve inspection, construction, maintenance, repairs, or providing on-track safety such as flag persons and watchpersons on or near the roadway or right-of-way or with the potential of fouling track.

Roadway work group means two or more roadway workers organized to work together on a common task.

Roadway worker in charge means a roadway worker who is qualified under this part to establish ontrack safety.

Roadway Worker Protection (RWP) means the polices, processes, and procedures implemented by an RTA to prevent safety events for transit workers who must access the roadway in the performance of their work.

RWP manual means the entire set of the RTA's on-track safety rules and instructions maintained together, including operating rules and other procedures concerning on-track safety protection and ontrack safety measures, designed to prevent roadway workers from being struck by rail transit vehicles or other on-track equipment.

Safety means freedom from harm resulting from unintentional acts or circumstances.

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.

Safety Committee means the formal joint labor-management committee on issues related to safety that is required by 49 U.S.C. 5329 and this part.

Safety event means an unexpected outcome resulting in injury or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

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 for the management of safety.

Safety Management System (SMS) means the formal, 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 hazards and safety risk.

Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.

Safety performance target means a quantifiable level of performance or condition, expressed as a value for the measure, related to safety management activities, to be achieved within a specified time period.

Safety Program Data means data that includes, but is not limited to, event data, hazard data, safety risk ratings, mitigation data, CAP data, near miss data, and ongoing monitoring data.

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.

Safety review means a review or analysis of safety records and related materials.

Safety risk means the composite of predicted severity and likelihood of a potential consequence of a hazard.

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.

Safety risk management means a process within a Rail Transit Agency's Safety Plan for identifying hazards and analyzing, assessing, and mitigating the safety risk of their potential consequences.

Safety risk mitigation means a method or methods to eliminate or reduce the severity and/or likelihood of a potential consequence of a hazard.

Safety set-aside means the allocation of not less than 0.75 percent of assistance received by a large urbanized area provider under 49 U.S.C. 5307 to safety-related projects eligible under 49 U.S.C. 5307.

Security means freedom from harm resulting from intentional acts or circumstances.

Sight distance means the length of roadway visible ahead for a roadway worker.

Small public transportation provider means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service across all non-rail fixed route modes or in any one non-fixed route mode and does not operate a rail fixed guideway public transportation system.

State means a state of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

State of good repair means the condition in which a capital asset is able to operate at a full level of performance.

State Safety Oversight Agency (SSOA) 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 this part.

State Safety Oversight Reporting (SSOR) system is a web-based system created by FTA for SSO Agencies to submit their annual report requirements to FTA.

Subrecipient means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

Track access guide means a document that describes the physical characteristics of the RTA's track system, including track areas with close or no clearance, curves with blind spots or restricted sight lines, areas with loud noise, and potential environmental conditions that require additional consideration in establishing on-track safety.

*Track zone* means an area identified by the RTA where a person or equipment could be struck by the widest equipment that could occupy the track.

*Transit agency* means an operator of a public transportation system that is a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 or a rail transit agency.

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.

Transit worker means any employee, contractor, or volunteer working on behalf of the transit agency.

Transit Worker Safety Reporting Program means the process required under § 673.23(b) that allows transit workers to report safety concerns, including transit worker assaults, near-misses, and unsafe acts and conditions to senior management, provides protections for transit workers who report safety conditions to senior management, and describes transit worker behaviors that may result in disciplinary action.

*Unintended Train Movement* means any instance where a revenue vehicle is moving and is not under the control of a driver (whether or not the operator is physically on the vehicle at the time). This applies regardless of whether the event occurred in revenue service.

*Urbanized area* means, as defined under  $\underline{49 \text{ U.S.C.}}$  5302, an area encompassing a population of 50,000 or more that has been defined and designated in the most recent decennial census as an urban area by the Secretary of Commerce.

Vehicle means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

*Voluntary participant* means an individual participating in the Public Transportation Safety Certification Training Program that is not subject to the requirements of this part, including:

- (1) Employees and contractors of an applicable recipient that have not been designated under  $\S$  672.11(a) or  $\S$  672.13(a), and
- (2) Individuals who are not employees or contractors of an applicable recipient.

Watchperson means a roadway worker qualified to provide warning to roadway workers of approaching rail transit vehicles or track equipment whose sole duty is to look out for approaching rail transit vehicles and track equipment and provide at least 15 seconds advanced warning plus time to clear based on the maximum authorized track speed for the work location to transit workers before the arrival of rail transit vehicles.

Working limits means a segment of track with explicit boundaries upon which rail transit vehicles and on-track equipment may move only as authorized by the roadway worker having control over that defined segment of track.

Work zone means the immediate area where work is being performed within the track zone.

# **Appendix B**

**Abbreviations** 



AE Account Executive

APTA American Public Transportation Association

CAP Corrective Action Plan
CDC Centers for Disease Control
CFR Code of Federal Regulations

CSO Chief Safety Officer

FRA Federal Railroad Administration
FTA Federal Transit Administration

IIJA Infrastructure Investment and Jobs Act

ISR Internal Safety Review
ITP Individual Training Plan

MPO Metropolitan Planning Organizations

NTD National Transit Database

NTSB National Transportation Safety Board
NPTSP National Public Transportation Safety Plan

PTN Public Transportation Division

PTASP Public Transportation Agency Safety Plan

PTSCTP Public Transportation Safety Certification Training Program

POC Point of Contact

RBI Risk-based Inspection

RRD TXDOT Rail Division

RTA Rail Transit Agency

RWP Right-of-way Worker Protection
SMS Safety Management System
SOP Standard Operating Procedures
SSCP Safety and Security Certification Plan

SSCVR Safety and Security Certification Verification Report

SSO State Safety Oversight

SSOA State Safety Oversight Agency
SSOR State Safety Oversight Reporting system

TAC Texas Administrative Code

TOC Transportation Operations Center

TTP Technical Training Plan

TxDOT Texas Department of Transportation

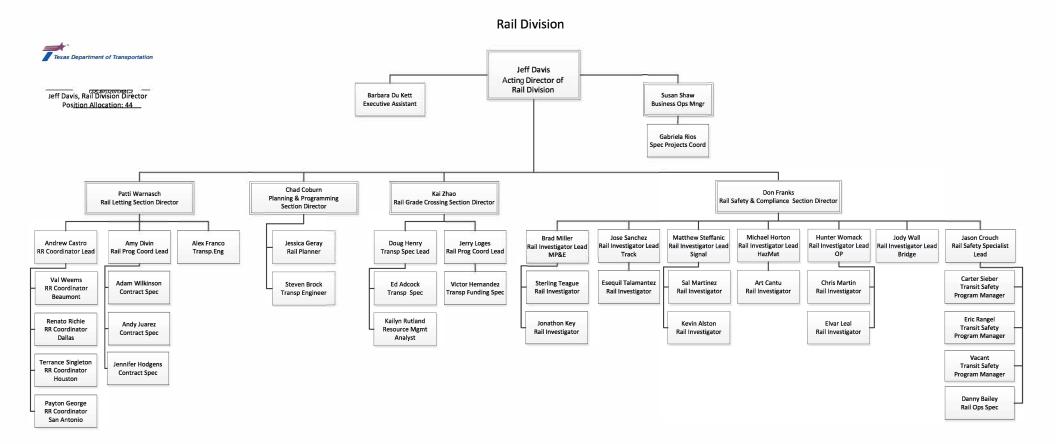
U.S.C. United States Code

USPS United States Postal Service

# **Appendix C**

**TxDOT Organizational Charts** 





# **Appendix D**

PTASP Review Checklist



# Public Transportation Agency Safety Plan Review Checklist

(Effective 8/31/2024, v2)

RTA:		
Safety Plan Version	ວກ:	
Reviewer:		
Review Date:		

Each RTA must establish a Public Transportation Agency Safety Plan (PTASP) that is in compliance with 49 CFR 673 and TxDOT's Program Standard.

Item Fed/State Req	Requirements	Review Questions	Pages	Compliant: Y/N	Comments/Notes:
RTA Information					
FTA PTASP Review Checklist  A.1  TxDOT SSO Authority: Program Standard Section 1.2	Rail Transit Agency Information	Does the PTASP contain:  - Agency name - Address - PTASP version information and date Statement regarding agency service area: large urbanized area or small urbanized area? - Modes of Service (directly operated or contracted service) - FTA Funding Types and Amounts Received - Transit service provided by the transit agency on behalf of another transit agency or entity, including a description of the arrangement(s) SSOA details and SSO program authority - An Accountable Executive who meets requirements of 49 CFR 673 A Chief Safety Officer or Safety Management System (SMS) Executive who meets requirements of 49 CFR 673.			

<b>673.1</b> 1	673.11 General Requirements (Safety Plan Development, Approval, and Updates)							
B.1		A transit agency must establish a PTASP that meets the requirements of this part and, at a minimum, consists of the following elements:	Has the RTA established a PTASP?					
B.2		(1) The PTASP, and subsequent updates, must be signed by the Accountable Executive and approved by—	Does the PTASP contain the Accountable Executive signature and date of signature?					
B.3		F	Does the PTASP demonstrate Safety Committee approval of the ASP and date of approval?					
B.4		(ii) For all other transit agencies, the transit agency's Board of Directors or an equivalent entity.	Does the PTASP demonstrate Board of Directors or equivalent entity approval and date of approval?					

	673.11(a)(2)	(2) The PTASP must document the processes and activities	Does the PTASP document the processes and activities	
B.5			related to SMS implementation as required by 673 subpart D?	
B.5	673.11(a)(3)  National Public Transportation Safety Plan	related to SMS implementation, as required by 673 subpart D.  (3) The PTASP must include annual safety performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.  Safety performance targets for the safety risk reduction program are only required for large urbanized area providers.	related to SMS implementation as required by 673 subpart D?  For large urbanized area providers:  Does the PTASP include safety performance measures required by the National Public Transportation Safety Plan?  Does the PTASP document safety performance targets for the safety risk reduction program?  Are the total vehicle revenue miles used to determine performance measure rates clearly stated?  Safety Performance Measures  - Major Events - Major Events Rate - Collision Rate* - Pedestrian Collision Rate* - Vehicular Collision Rate* - Fatalities - Fatality Rate - Transit Worker Fatality Rate*	
			<ul> <li>Injuries</li> <li>Injury Rate</li> <li>Transit Worker Injury Rate*</li> <li>Assaults on Transit Workers*</li> <li>Assaults on Transit Workers Rate*</li> <li>System Reliability</li> </ul> *denotes new performance measures added with the	
			April 2024 National Public Transportation Safety Plan update.	
B.7		(4) The PTASP must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan.	Does the PTASP address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan?	
		Compliance with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C) is not required until standards have been established through the public notice and comment process.		
B.8	673.11(a)(5) PS Section 4.4	(5) Each transit agency must establish a process and timeline for conducting an annual review and update of the PTASP.  Annual PTASP Update Requirements:	The process and timeline for conducting an annual review and update of the ASP, including coordination with the SSOA, the ASP version number, and other relevant information.	
			Does the PTASP update process document the RTA's	

		and notify TxDOT via email if PTASP needs updating. If the RTA determines the PTASP must be updated, the	internal process for updating the PTASP?	
		notification shall summarize the areas requiring an update and the anticipated date the revised PTASP will be submitted to TxDOT. The revised PTASP must be approved by each RTA no later than December 31st and	Does the PTASP update process state that all safety related items, including items within the PTASP and items associated by reference, have also been review and updated?	
		submitted to TxDOT no later than January 31 <sup>st</sup> .  PTASP Review Sequence and Approval	Does the PTASP update process include a provision allowing for modification of the PTASP prior to the	
		<ul> <li>RTA to submit draft PTASP by Nov 15<sup>th</sup>.</li> </ul>	annual PTASP review and update process?	
		<ul> <li>TxDOT will acknowledge receipt of a PTASP submission within 10 days.</li> </ul>	Does the PTASP update process document RTA and SSO coordination during PTASP update?	
		<ul> <li>TxDOT will complete the PTASP review and provide review comments, including areas requiring revisions, to the RTA within 30 days of PTASP receipt.</li> <li>TxDOT and the RTA will reach a mutually agreeable</li> </ul>	Does the PTASP update coordination include SSO's review of the final draft before Board and AE approvals are sought?	
		<ul> <li>date for the resubmission of PTASPs that require revisions. Upon receipt of requested revisions, the process will continue.</li> <li>Upon approval, TxDOT will send an approval letter via email to the Accountable Executive and the Chief Safety Officer.</li> </ul>	Does the PTASP update coordination include the following actions and deadline requirements?  a. By Sep 1 <sup>st</sup> , notify TxDOT of PTASP review, if update is needed, and areas requiring update.  b. Nov 15 <sup>th</sup> , draft revised PTAPs must be	
		Modifications to PTASP	submitted to TxDOT  c. Jan 31 <sup>st</sup> , PTASP submitted to TxDOT.	
		With prior email approval by TxDOT, an RTA can modify and implement processes described within the PTASP prior to the annual PTASP update. An RTA must email their SSO Program Manager with the current section of the PTASP and the proposed changes. TxDOT will review the proposed changes within 10 days and respond with approval or request additional information needed for approval. Upon approval, the RTA may implement the change. The RTA must include the modification within the PTASP at the next update.		
B.9	673.11(a)(6)(i)	The PTASP must include or incorporate by reference: An emergency preparedness and response plan or procedure that addresses, at a minimum:  • The assignment of transit worker responsibilities during an emergency; and	<ul> <li>Does the ASP include or incorporate by reference:</li> <li>Assignment of worker responsibilities during an emergency?</li> <li>Coordination with Federal, State, regional, and local officials with roles and responsibilities for</li> </ul>	
		<ul> <li>Coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the RTA's service area.</li> </ul>	emergency preparedness and response in the RTA's service area?	
B.10	673.11(a)(6)(ii)	<ul> <li>The PTASP must include or incorporate by reference:</li> <li>Any policies and procedures regarding rail transit workers on the roadway the rail transit agency has issued</li> </ul>	<ul> <li>Does the ASP include or incorporate by reference:</li> <li>Any RWP policies or procedures the RTA has issued?</li> </ul>	

B.11	673.11(a)(6)(iii)	<ul> <li>The PTASP must include or incorporate by reference:</li> <li>The transit agency's policies and procedures developed in consultation with TxDOT to provide access and required data for the TxDOT SSO's RBI program.</li> </ul>	Does the ASP include or incorporate by reference:  RTA's policies or procedures developed in consultation with TxDOT to provide access and required data for TxDOT's RBI Program?	
B.12		include a safety risk reduction program for transit operations to improve safety performance by reducing the	For large urbanized area providers:  Does the PTASP document a safety risk reduction program?	
B.13		Does the safety risk reduction program:  (i) Address the reduction and mitigation of vehicular and pedestrian safety events involving transit vehicles that includes safety risk mitigations consistent with § 673.25(d)(3);	Does the safety risk reduction program address the reduction and mitigation of vehicular and pedestrian safety events involving transit vehicles that includes safety risk mitigations consistent with § 673.25(d)(3)?	
B.14		(ii) Address the reduction and mitigation of assaults on transit workers that includes safety risk mitigations consistent with § 673.25(d)(4);	Does the safety risk reduction program address the reduction and mitigation of assaults on transit workers that includes safety risk mitigations consistent with § 673.25(d)(4);	
B.15	National Public Transportation Safety Plan			

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673.11(a)(7)(w)(h)  8.17  673.11(a)(7)(w)(h)  8.17  673.11(a)(7)(w)(h)  8.18  673.11(a)(7)(w)(h)  8.19  673.11(a)(7)(w)(h)  8.10  8.				<u> </u>	
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B.19  Reference: 673.25(d)(5)- When a large urbanized area provider's Safety Committee, as part of the transit agency's Safety risk reduction program, identifies and recommends under 6 673.19(6) Safety risk mitigations, including mitigations, including mitigations, including mitigations, based on a safety risk assessment conducted under 6 673.25@, the transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under 6 673.25@, the transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under 6 673.25@, the transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under 6 673.25@, the transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under 6 673.25@, the transit vehicles or assaults on transit workers, based on a safety risk mitigations in the safety risk mitigations in its ASP pursuant to § 373.11(a)(7)(iv).  B.20  673.11(b)  (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service or a PTASP for separate modes of service o					
B.19  B.19  B.19  B.19  B.19  B.19  B.20					
B.19  B.19  B.19  B.20  B.20  B.20  A transit agency may develop one PTASP for each mode of service not subject to safety regulation by another Federal entity.  B.20  National Public Transportation Safety Plan  B.21  FTA's Public Transportation Safety Program  A transit agency may develop and the National Public Transportation Safety Plan.  B.21  B.21  B.21  B.22  B.23  B.24  B.25  B.26  B.27  B.28  B.29  B.29  B.29  B.29  B.20				Reference: 673.25(d)(5)- When a large urbanized area	
B.20    Commends under § 673.19©(6) safety risk mitigations relating to vehicular and pedestrian safety events involving transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under § 673.25©, the transit agency must include or incorporate by reference these safety risk mitigations in its ASP pursuant to § 673.11(a)(7)(iv).    B.20   G73.11(b)				provider's Safety Committee, as part of the transit	
B.20    B.20   Fecomments under 9 of 3-3.19(b) safety Plan   Safety Plan	D 10			agency's safety risk reduction program, identifies and	
and pedestrian safety events involving transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under § 673.25©, the transit agency must include or incorporate by reference these safety risk mitigations in its ASP pursuant to § 673.11(b)  B.20  (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service or any develop a PTASP for each mode of service not subject to safety regulation by another Federal entity.  Did the RTA develop one PTASP for separate modes of service not subject to safety regulation by another federal subject to safety regulation by another federal entity?  National Public Transportation Safety Plan  National Public Transportation Safety Plan compliance.  FTA's Public Transportation Safety Plan compliance.  Transportation Safety Plan.  Does the PTASP address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan.	B.19			recommends under § 673.19©(6) safety risk	
or assaults on transit workers, based on a safety risk assessment conducted under § 673.25@, the transit agency must include or incorporate by reference these safety risk mitigations in its ASP pursuant to § 673.11(a)(7)(iv).  B.20  (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service or any develop a PTASP for each mode of service or a PTASP for separate modes of service not subject to safety regulation by another Federal entity.  National Public Transportation Safety Plan  National Public Transportation Safety Plan compliance.  FTA's Public Tra				mitigations, including mitigations relating to vehicular	
B.20    B.20   Contact   C				and pedestrian safety events involving transit vehicles	
B.20    B.20   G73.11(b)   (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service not subject to safety regulation by another Federal entity.    B.21   National Public Transportation Safety   FTA's Public Transportation Safety   Plan   Safety Plan   FTA's Public Transportation Safety   Plan   Safety Plan   FTA's Public Transportation Safety   Plan   Safety Pl				or assaults on transit workers, based on a safety risk	
B.20   G73.11(b)   (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service or the subject to safety regulation by another Federal entity.   Does the PTASP address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Plan				assessment conducted under § 673.25©, the transit	
B.20 673.11(b) (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service or may develop a PTASP for each mode of service or a PTASP for separate modes of service or a PTASP for separat					
B.20 (b) A transit agency may develop one PTASP for all modes of service or may develop a PTASP for each mode of service not subject to safety regulation by another Federal entity.    National Public Transportation Safety Plan					
B.20 Of service or may develop a PTASP for each mode of service not subject to safety regulation by another Federal entity.  National Public Transportation Safety Plan  B.21 FTA's Public Transportation Safety Program  FTA's Public Transportation Safety Plan compliance.  FTA's Public Transportation Safety Plan compliance.  FTA's Public Transportation Safety Plan compliance.  FTA's Public Transportation Safety Plan.  Safety Plan.  Does the PTASP address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan.					
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		FTA's Public Transportation Safety		Transportation Safety Plan.	
673.11(c) (c) A transit agency must maintain its PTASP in accordance Does the PTASP state the RTA will maintain its PTASP		Program			
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with the recordkeeping requirements in 673 Subpart E. in accordance with the recordkeeping requirements in				in accordance with the recordkeeping requirements in	
B.22 673 Subpart E?	B.22		, , ,	, - ,	
Reference: 49 CFR 673.31 (Subpart E)-				Reference: 49 CFR 673.31 (Subpart E)-	

		At all times, a transit agency must maintain documents that set forth its PTASP, including those related to the implementation of its SMS, and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the transit agency uses to carry out its PTASP.  These documents must be made available upon request by FTA or other Federal entity, or a State or SSOA having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.					
573.15 Coordination with Metropolitan, Statewide, and Non-Metropolitan Planning Processes							
673.15(a)	A State or transit agency must make its safety performance targets available to States and	Does the plan include:  a. process to make safety performance targets					

6/3.1	o Coordination with Metrop	iolitan, Statewide, and Non-Metropolitan Plan	ning Processes	
C.1	673.15(a)	A State or transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process.	Does the plan include:  a. process to make safety performance targets available to the State and MPO?  This section must include specific information on	
			the process including who is responsible for making the targets available, to whom the targets are provided to, and when the targets are provided.	
	673.15(b)	To the maximum extent practicable, a State or transit agency must coordinate with States and Metropolitan Planning Organizations in the selection of State and MPO safety performance targets.	Does the plan include:  b. process to coordinate with the State and  MPO in the selection of safety performance targets?	
C.2			This section must include specific information on the coordination process when selecting safety performance targets. This must include how coordination occurs, who is responsible for the coordination, when the coordination occurs, and how the coordination is documented.	

673.1	573.17 Safety Committees and Cooperation with Frontline Transit Worker Representatives							
	673.17(a)	(a) Each large urbanized area provider must establish a Safety Committee that meets the requirements of §	For large urbanized area providers:					
D.1		673.19.	Does the PTASP document the establishment of a safety committee that meets the requirements of 673.19?					
	673.17(b)	<ul><li>(b) Each transit agency that is not a large urbanized area provider must:</li><li>(1) Develop its PTASP, and subsequent updates, in cooperation with frontline transit worker representatives;</li></ul>	For an agency that is <u>not</u> a large urbanized area provider:  Does the PTASP state that the RTA will develop its					
D.2		and (2) Include or incorporate by reference in its PTASP a description of how frontline transit worker representatives cooperate in the development and update of the PTASP.	PTASP, and subsequent updates, in cooperation with frontline transit worker representatives?  Does the PTASP include or incorporate by reference a description of how frontline transit worker					

	representative cooperate in the development and		
	update of the PTASP?		

673.19	573.19 Safety Committees							
	673.19(a)	(a) Establishing the Safety Committee.	For large urbanized area providers:					
E.1		operate a Safety Committee that is: (1) Appropriately scaled to the size, scope, and complexity	Does the PTASP document that the RTA has established and operates a safety committee that is appropriately scaled to the size, scope, and complexity of the transit agency?  Does the PTASP document that the RTA has established and operates a safety committee that is convened by a joint-labor management process?					
E.2	673.19(b)	frontline transit worker representatives and management representatives. To the extent practicable, the Safety Committee must include frontline transit worker representatives from major transit service functions, such as operations and maintenance, across the transit system. (1) The labor organization that represents the plurality of the transit agency's frontline transit workers must select frontline transit worker representatives for the Safety Committee.	Does the Safety Committee consist of an equal number of frontline transit worker representatives and management representatives?  To the extent practicable, does the Safety Committee include frontline transit worker representatives from major transit service functions, such as operations and maintenance, across the transit system?  Are transit workers represented by a labor organization? If yes, does the labor organization that represents the plurality of the transit agency's frontline transit workers select frontline transit worker representatives for the Safety Committee?  If the transit agency's frontline transit workers are not represented by a labor organization, has the RTA adopted a mechanism for frontline transit workers to select frontline transit worker representatives for the Safety Committee?					
E.3	673.19(c)	incorporate by reference in its PTASP procedures regarding	For large urbanized area providers:  How does the RTA document procedures regarding safety committees' composition, responsibilities, operations of the safety committee?  — Included within PTASP, or					
E.4	673.19c)1)	(1) The organizational structure, size, and composition of the Safety Committee and how it will be chaired;	<ul> <li>Incorporate by reference?</li> <li>Do the safety committee procedures include within the PTASP or incorporate by reference the following information: <ul> <li>organizational structure,</li> <li>size,</li> <li>safety committee composition and</li> <li>how the safety committee will be chaired?</li> </ul> </li> </ul>					
E.5	673.19(c)(2)	(2) How meeting agendas and notices will be developed and shared, and how meeting minutes will be recorded and maintained;	Do the safety committee procedures include within the PTASP or incorporate by reference the following information:  — How meeting agendas and notices will be					

			developed and shared	
			<ul> <li>How meeting minutes will be recorded and maintained?</li> </ul>	
E.6		(3) Any required training for Safety Committee members related to the transit agency's PTASP and the processes, activities, and tools used to support the transit agency's SMS;	Do the safety committee procedures include within the PTASP or incorporated by reference the following information:  - Any required training for Safety Committee members related to the transit agency's PTASP  - The processes, activities, and tools used to support the transit agency's SMS.	
E.7	673.19(c)(4)	(4) The compensation policy established by the agency for participation in Safety Committee meetings;	Do the safety committee procedures include within the PTASP or incorporated by reference the following information:  - The compensation policy established by the agency for participation in Safety Committee meetings.	
E.8		experts, including other transit workers, to serve in an	Do the safety committee procedures include within the PTASP or incorporated by reference how the Safety Committee will access:  - technical experts, including other transit workers, to serve in an advisory capacity as needed,  - transit agency information, resources, and tools  - submissions to the transit worker safety reporting program to support its deliberations	
E.9	673.19(c)(6)	(6) How the Safety Committee will reach and record decisions;	Do the safety committee procedures include within the PTASP or incorporated by reference:  - How the Safety Committee will reach and record decisions.	
E.10		(7) How the Safety Committee will coordinate and communicate with the transit agency's Board of Directors, or equivalent entity, and the Accountable Executive;	Do the safety committee procedures include within the PTASP or incorporated by reference:  - How the Safety Committee will coordinate and communicate with the transit agency's Board of Directors, or equivalent entity, and  - The Accountable Executive.	
E.11		ensure it carries out its operations.  The Safety Committee may use the dispute resolution or arbitration process from the transit agency's Collective Bargaining Agreement, or a different process that the Safety Committee develops and agrees upon, but the Accountable Executive may not be designated to resolve any disputes within the Safety Committee; and	Do the safety committee procedures include within the PTASP or incorporated by reference:  — How will the Safety Committee manage disputes to ensure it carries out its operations?	
E.12	· , , , ,	responsibilities identified in paragraph (d) of this section.	Does the RTA's Safety Committee procedures describe how the RTA will carry out its responsibilities identified in 673.19(d).	
E.13		(d) Safety Committee responsibilities.  The Safety Committee must conduct the following activities to oversee the transit agency's safety	Does the safety committee responsibilities, included within the PTASP or incorporated by reference, state that the safety committee with do the following:  — Review and approve the agency's PTASP and	

		performance:	any updates as required at § 673.11(a)(1)(i);	
		(1) Review and approve the agency's PTASP and any updates as required at § 673.11(a)(1)(i);	Reference: 673.11(a)(1)(i):  (a) A transit agency or State must establish a Public  Transportation Agency Safety Plan that meets the requirements of this part and, at a minimum, consists of the following elements:	
			(1) The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the Accountable Executive and approved by—	
			(i) For a large urbanized area provider, the Safety Committee established pursuant to § 673.19, followed by the transit agency's Board of Directors or an equivalent entity; or	
E.14	673.19(d)(2)	The Safety Committee must conduct the following activities to oversee the transit agency's safety performance:  (2) Set annual safety performance targets for the safety risk reduction program as required at § 673.11(a)(7)(iii); and	Does the safety committee responsibilities, included within the PTASP or incorporated by reference, state that the safety committee will set annual safety performance targets for the safety risk reduction program as required at § 673.11(a)(7)(iii)?  Reference: 673.11(a)(7)(iii):  (a) A transit agency or State must establish a PTASP that meets the requirements of this part and, at a minimum, consists of the following elements:  (7) The PTASP of each large urbanized area provider must include a safety risk reduction program for transit operations to improve safety performance by reducing the number and rates of safety events, injuries, and assaults on transit workers. The safety risk reduction program must, at a minimum:  (iii) Include the safety performance tagets set by the Safety Committee pursuant to § 673.19(d)(2) for the safety risk reduction program performance measures established in the National Public Transportation Safety Plan. These targets must be set—  (A) Based on a three-year rolling average of the data submitted by the large urbanized area provider to the National Transit Database (NTD);  (B) For all modes of public transportation; and  (C) Based on the level of detail the large urbanized area provider is required to report to the NTD. The Safety Committee is not required to set a target for a performance measure until	
			the large urbanized area provider has been required to report three years of	

		data to the NTD corresponding to such performance measure.	
E.15		Does the safety committee activities, included within the PTASP or incorporated by reference, state that the safety committee will:  - Identify and recommend safety risk mitigations necessary to reduce the likelihood and severity of potential consequences identified through the agency's safety risk assessment, including safety risk mitigations associated with any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program	
E.16	(ii) Identifying safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended, including safety risk mitigations associated with any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program; and	Does the safety committee activities, included within the PTASP or incorporated by reference, state that the safety committee will:  - Identify safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended, including safety risk mitigations associated with any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program	
E.17		Does the safety committee activities, included within the PTASP or incorporated by reference, state that the safety committee will:  - Identify safety deficiencies for purposes of continuous improvement as required at § 673.27(d), including any instance where the transit agency did not meet an annual safety performance target in the safety risk reduction program.	

673.2	73.21 Safety Management Systems						
	673.21		Does the PTASP document the agency's establishment and implementation of safety management system?				
F.1		Safety Management System must be appropriately scaled to the size, scope and complexity of the transit agency and include the following elements:  (a) Safety Management Policy	Does the PTASP document a safety management system (SMS) that is appropriately scaled to the size,				

673.23	673.23 Safety Management Policy							
G.1	673.23(a)	Safety Management Policy	Has the RTA established and documented within the					

	1		PTASP:	
		(a) A transit agency must establish its organizational accountabilities and responsibilities and have a written statement of Safety Management Policy that includes the transit agency's safety objectives and a description of the transit agency's Safety Committee or approach to cooperation with frontline transit worker representatives.	<ul> <li>organizational accountabilities and responsibilities?</li> <li>Written statement of Safety Management Policy, which includes:         <ul> <li>the transit agency's safety objectives,</li> <li>description of the transit agency's Safety Committee or approach to cooperation with frontline transit worker representatives.</li> </ul> </li> </ul>	
G.2		process that allows transit workers to report safety concerns, including assaults on transit workers, nearmisses, and unsafe acts and conditions to senior management, includes protections for transit workers who report, and includes a description of transit worker behaviors that may result in disciplinary action.	Has the RTA established and documented within the PTASP:  — a process that allows transit workers to report safety concerns, including assaults on transit workers, near-misses, and unsafe acts and conditions to senior management,  — Does the process include protections for transit workers who report, and includes a description of transit worker behaviors that may result in disciplinary action?	
G.3		, , , ,	Does the PTASP describe how the Safety Management Policy is communicated throughout the transit agency?	
G.4		(d) The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals or groups within its organization, as they relate to the development and management of the transit agency's SMS:	Does the PTASP document that the RTA has established the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals or groups within its organization, as they relate to the development and management of the transit agency's SMS?	
G.5	673.23(d)(1)	The transit agency must identify an Accountable Executive. The Accountable Executive is accountable for ensuring that the transit agency's SMS is effectively	authorities, accountabilities, and responsibilities align with the requirements of 673, including:  — Accountable Executive may delegate specific responsibilities, but the ultimate	

	673.23(d)(2)	(2) Chief Safety Officer or SMS Executive.	Does the PTASP identify the Chief Safety Officer or SMS Executive by position and name?	
G.6		The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of a transit agency's SMS. The Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive. A transit agency	Does the description of the Chief Safety Officer or SMS Executive authorities, accountabilities, and responsibilities align with the requirements of 673	
		may allow the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive.		
G.7	673.23(d)(3)	A large urbanized area provider must establish a joint labor-management Safety Committee that meets the	Does the PTASP document that the RTA has established a joint labor-management Safety Committee that meets the requirements of 673.19?  Reference: 673.11(a)(7)(iii):	
G.8	673.23(d)(4)	(4) Transit agency leadership and executive management.  A transit agency must identify those members of its leadership or executive management, other than an		
G.9	673.23(d)(5)	(5) Key staff.  A transit agency may designate key staff, groups of staff, or committees to support the Accountable Executive, Chief Safety Officer, Safety Committee, or SMS Executive	Officer, Safety Committee, or SMS Executive in	

673.25	Safety Risk Management			
H.1	673.25(a)		Does the PTASP document that the RTA has developed and implemented a Safety Risk Management process for all elements of its public transportation system?  Is the Safety Risk Management process comprised of the following activities: hazard identification, safety risk assessment, and safety risk mitigation?	
H.2	673.25(b)	<ul> <li>(b) Hazard identification.</li> <li>(1) A transit agency must establish methods or processes to identify hazards and potential consequences of the hazards.</li> <li>(2) A transit agency must consider, as a source for hazard identification:</li> <li>(i) Data and information provided by an oversight authority, including but not limited to FTA, the State, or as applicable, the State Safety Oversight Agency having jurisdiction;</li> <li>(ii) Data and information regarding exposure to infectious disease provided by the CDC or a State health authority; and</li> </ul>	Does the PTASP document that the RTA has establish methods or processes to identify hazards and potential consequences of the hazards?  Does the RTA consider, as a source for hazard identification:  - Data and information provided by an oversight authority, including but not limited to FTA, the State, or as applicable, the State Safety Oversight Agency having jurisdiction,  - Data and information regarding exposure to infectious disease provided by the CDC or a State health authority,	t

		(iii) Safety concerns identified through Safety Assurance	Safety concerns identified through Safety	
		activities carried out under § 673.27.	Assurance activities carried out under 673.27.	
H.3	673.25(c)(1)-(2)	<ul> <li>(c) Safety risk assessment.</li> <li>(1) A transit agency must establish methods or processes to assess the safety risk associated with identified hazards.</li> <li>(2) A safety risk assessment includes an assessment of the likelihood and severity of the potential consequences of identified hazards, taking into account existing safety risk mitigations, to determine if safety risk mitigation is necessary and to inform prioritization of safety risk mitigations.</li> <li>(d) Safety risk mitigation.</li> <li>(1) A transit agency must establish methods or processes to identify safety risk mitigations or strategies</li> </ul>	Does the PTASP document that the RTA has establish methods or processes to assess the safety risk associated with identified hazards?  Does the safety risk assessment include an assessment of the likelihood and severity of the potential consequences of identified hazards, taking into account existing safety risk mitigations, to determine if safety risk mitigation is necessary and to inform prioritization of safety risk mitigations?  Does the PTASP document that the RTA has establish methods or processes to identify safety risk mitigations or strategies necessary as a result of the	
Н.4		the potential consequences.	transit agency's safety risk assessment to reduce the likelihood and severity of the potential consequences?  For large urbanized area providers, do these methods or processes address the role of the safety committee?	
H.5	673.25(d)(2)	, ,	Does the PTASP document that the RTA considers, as a source for safety risk mitigations:  • Guidance provided by an oversight authority, if applicable,  • FTA, and  • Guidelines/strategies to prevent or control exposure to infectious diseases provided by the CDC or a State health authority	
Н.6	673.25(d)(3)	including to address a missed safety performance target set by the Safety Committee under § 673.19(d)(2), each large urbanized area provider and its Safety Committee must consider mitigations to reduce visibility impairments for transit vehicle operators that contribute to accidents, including retrofits to vehicles in revenue service and specifications for future procurements that reduce visibility impairments.	For large urbanized area providers:  When identifying safety risk mitigations for the safety risk reduction program related to vehicular and pedestrian safety events involving transit vehicles, including to address a missed safety performance target set by the Safety Committee under § 673.19(d)(2), does the RTA:  — Does the PTASP document that the RTA considers mitigations to reduce visibility impairments for transit vehicle operators that contribute to accidents, including retrofits to vehicles in revenue service and specifications for future procurements that reduce visibility impairments?	
Н.7	673.25(d)(4)	performance target set by the Safety Committee under § 673.19(d)(2), each large urbanized area provider and its Safety Committee must consider deployment of	When identifying safety risk mitigations for the safety risk reduction program related to assaults on transit	

		transit vehicles and in transit facilities.  Assault mitigation infrastructure and technology includes barriers to restrict the unwanted entry of individuals and objects into the workstations of bus operators.	infrastructure and technology on transit vehicles and in transit facilities?		
H.8	673.25(d)(5)	mitigations relating to vehicular and pedestrian safety events involving transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under § 673.25(c), the transit agency must include or	For large urbanized area providers:  Has the RTA included within the PTASP or incorporated by reference, safety risk mitigations identified and recommended by the safety committee, including mitigations relating to vehicular and pedestrian safety events involving transit vehicles or assaults on transit workers, based on a safety risk assessment conducted under § 673.25(c)?		
Н.9	673.25(d)(6)	the safety risk mitigation, the Accountable Executive must prepare a written statement explaining their decision, pursuant to recordkeeping requirements at § 673.31.  The Accountable Executive must submit and present this explanation to the transit agency's Safety	For large urbanized area providers:  Does the PTASP include the requirement that the AE must prepare a written statement explaining their decision when the AE decides not to implement a safety risk mitigation, unrelated to the safety risk reduction program, recommended by the safety committee?  Does the PTASP state the AE must submit and present the explanation to the safety committee and Board of Directors or equivalent entity?		

673.27	7 Safety Assurance			
1.1	673.27(a)	(a) Safety Assurance process.  A transit agency must develop and implement a Safety Assurance process, consistent with this subpart. A rail fixed guideway public transportation system, and a recipient or subrecipient of Federal financial assistance under 49 U.S.C. chapter 53 that operates more than one hundred vehicles in peak revenue service, must include in its Safety Assurance process each of the requirements in paragraphs (b), (c), and (d) of this section.  A small public transportation provider only must	Does the RTA operates more than one hundred vehicles in peak revenue service?	
		include in its Safety Assurance process the requirements in paragraphs (b) and (d) of this section.		
	673.27(b)	(b) Safety performance monitoring and measurement.	Does the PTASP document that the RTA has developed and established activities to:	
1.2		A transit agency must establish activities to:	Monitor its system for compliance with, and	
		(1) Monitor its system for compliance with, and	sufficiency of, the transit agency's procedures for	

		sufficiency of, the transit agency's procedures for operations and maintenance;  (2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. For large urbanized area providers, these activities must address the role of the transit agency's Safety Committee;  (3) Conduct investigations of safety events to identify causal factors; and  (4) Monitor information reported through any internal safety reporting programs.	operations and maintenance?  2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended.  a. For large urbanized area providers, these activities must address the role of the transit agency's Safety Committee;  3) Conduct investigations of safety events to identify causal factors?  4) Monitor information reported through any internal safety reporting programs?	
	673.27(c)	(c) Management of change.	Does the PTASP document that the RTA:	
1.3		<ul> <li>(1) A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance.</li> <li>(2) If a transit agency determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its Safety Risk Management process.</li> </ul>	Has developed and established a process to identify and assess changes that may introduce new hazards or impact the transit agency's safety performance?  If the RTA determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its Safety Risk Management process?	
	673.27(d)(1)(i-iii)	(d) Continuous improvement.	Does the PTASP document a <i>process</i> to assess its	
1.4	Program Standard Section 4.7	<ul> <li>(1) A transit agency must establish a process to assess its safety performance annually.</li> <li>(i) This process must include the identification of deficiencies in the transit agency's SMS and deficiencies in the transit agency's performance against safety performance targets required in § 673.11(a)(3).</li> <li>(ii) For large urbanized area providers, this process must also address the role of the transit agency's Safety Committee, and include the identification of</li> </ul>	Does the process include the identification of deficiencies in the agency's SMS and performance against safety performance targets required by 673.11(a)(3)?  For large urbanized area providers, does the process address the role of the transit agency's Safety Committee, and include the identification of deficiencies in the transit agency's performance against annual safety performance targets set by the Safety Committee under § 673.19(d)(2) for the safety risk reduction program required in § 673.11(a)(7)?	
		(iii) Rail transit agencies must also address any specific internal safety review requirements established by their SSOA.	Does the Annual Internal Safety Review Process include the following key details:  - RTA shall submit the ISR package at least 60 days prior to conducting ISR.  - Does the ISR process state the items required to be submitted as part of the ISR package?  - Does the ISR process state the package approval milestones and associated dates?  - Does the ISR process state required ISR report	

			submission requirements, including required	
			report contents, required submission items,	
			and associated deadlines?	
	673.27(d)(2)	(2) A large urbanized area provider must monitor safety	For large urbanized area providers:	
		performance against annual safety performance		
1.5		, ,	Does the PTASP document a <b>process</b> to monitor safety	
			performance against annual safety performance	
		673.11(a)(7).	targets for the safety risk reduction program?	
	673.27(d)(3)	(3) A large urbanized area provider that does not meet an	For large urbanized area providers:	
		established annual safety performance target set by		
		the Safety Committee under § 673.19(d)(2) for the	Does the PTASP document the following, if the the RTA	
		, , , , ,	doesn't meet a risk reduction program annual safety	
			performance target:	
		(i) Assess associated safety risk, using the methods or	<ul> <li>RTA must assess associated risk using methods</li> </ul>	
		processes established under § 673.25(c);	or processes established by 673.25(c)?	
			<ul> <li>RTA must mitigate associated safety risk based</li> </ul>	
		(ii) Mitigate associated safety risk based on the results	on the results of a safety risk assessment using	
		of a safety risk assessment using the methods or	the methods or processes established under §	
1.6		processes established under § 673.25(d). The transit	673.25(d)?	
1.0		agency must include these mitigations in the plan	<ul> <li>Mitigations must be included within</li> </ul>	
		described at § 673.27(d)(4) and in the Agency Safety	the AE directed plan to address	
		Plan as described in § 673.25(d)(5); and	deficiencies as required by	
			673.27(d)(4), and	
		(iii) Allocate its safety set-aside in the following fiscal	<ul> <li>Included within the PTASP.</li> </ul>	
		year to safety-related projects eligible under 49 U.S.C.		
		5307 that are reasonably likely to assist the transit	Does the PTASP document that the RTA with allocate	
			its safety set-aside in the following fiscal year to	
		the future.	safety-related projects eligible under 49 U.S.C. 5307	
			that are reasonably likely to assist the transit agency in	
			meeting the safety performance target in the future?	
	673.27(d)(4)	(4) A transit agency must develop and carry out, under the		
1.7		l · · · · · · · · · · · · · · · · · · ·	and carry out, under the direction of the Accountable	
'''		address any deficiencies identified through the safety	Executive, a plan to address any deficiencies identified	
		performance assessment as described in this section.	through the safety performance assessment?	

673.2	573.29 Safety Promotion						
J.1	673.29(a)	<ul> <li>(a) Competencies and training.</li> <li>(1) A transit agency must establish and implement a comprehensive safety training program that includes de-escalation training, safety concern identification and reporting training, and refresher training for all operations transit workers and transit workers directly responsible for safety in the transit agency's public transportation system. The training program must include refresher training, as necessary.</li> <li>(2) Large urbanized area providers must include maintenance transit workers in the safety training program.</li> </ul>	Does the PTASP document or incorporate by reference a comprehensive safety training program?  Does the safety training program include:  De-escalation training?  Safety concern identification and reporting training?  Refresher training for all operations and transit workers directly responsible for safety?  Refresher training, as necessary?  For large urbanized area providers, are maintenance transit workers included in the safety training program?				
J.2	673.29(b)	(b) Safety communication.	Does the PTASP document safety communication requirements including the following items?				

		information on hazards and safety risk relevant to transit workers' roles and responsibilities and informs transit workers of safety actions taken in response to reports submitted through a transit worker safety reporting program.  A transit agency must also communicate the results of cooperation with frontline transit worker representatives as described at § 673.17(b) or the Safety Committee activities described in § 673.19	Information on hazards and safety risks relevant to transit workers' roles and responsibilities?  Informs transit workers of safety actions taken in response to reports submitted through a transit worker safety reporting program?  Communicate of the results of cooperation with frontline transit worker representatives as described at § 673.17(b) or the Safety Committee activities described in § 673.19.	
673.31	1 Safety Plan Documentatio	on and Recordkeeping.		
K.1	673.31			
673.5	Definitions			
L.1	673.5	49 CFR 673.5 Definitions  Definitions used in the PTASP and associated documentation must be consistent with CFRs, FTA, and TxDOT requirements.	Are the definitions of terms used in the PTASP consistent with 673, other FTA safety regulations, and the SSO Program Standard?	
TxDO1	Γ SSO Requirements			
M.1	PS Section 1.3	Allegations of Non-Compliance	Does the PTASP document the process and associated requirements related to TxDOT SSO's management of allegations of non-compliance?  Does the PTASP document:  Notification requirements?  Key staff accountability/responsibilities?  Required coordination with SSO?	

		<ul><li>Required submissions to SSO?</li><li>Timelines and deadlines?</li></ul>	
PS Section 1.6	SSOA Annual Report to FTA	Does the PTASP document the process and associated requirements related to TxDOT SSO's and the RTA's coordination on Annual Report to FTA requirements?	
M.2		Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	
PS Section 1.10	Public Transportation Safety Certification Tra	ining Program  Does the PTASP document or incorporate by reference staff who are directly responsible for safety oversight and contractors assigned to specific safety responsibilities, such as conducting the annual Internal Safety Review.	
M.3		Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	
PS Section 1.13	Vehicle Maintenance and Testing	Does the RTA maintain a comprehensive rail vehicle maintenance plan, including detailed procedures for inspecting, testing, and maintaining braking systems? Does the PTASP perform and document periodic brake system testing according to its approved maintenance plan and frequencies?  Does the PTASP provide maintenance records and test results upon SSOA request or during routine oversight activities?	
		Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	

	PS Section 4.6	Ensuring Safety in New or Modified Rail Systems	Does the PTASP document requirements for managing safety of new or modified rail systems? Requirements must include key tasks/actions and associated deadlines.	
M.5			Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	
	PS Section 5	Triennial Audits of RTAs	Does the PTASP document requirements for Triennial Audits conducted by TxDOT SSO?	
M.6			Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	
M.7	PS Section 8.6	Monitoring of RTA Hazards and Safety Risk Mitigations	Does the PTASP document requirements for RTA and TxDOT SSO coordination and monitoring of RTA hazard?	
			Does the PTASP document:	
			<ul> <li>Notification requirements?</li> <li>Key staff accountability/responsibilities?</li> <li>Required coordination with SSO?</li> <li>Required submissions to SSO?</li> <li>Timelines and deadlines?</li> </ul>	
	PS Section 9 43 TAC, Part 1, Ch 7, Subchapter E Rule 7.93	Corrective Action Plans	Does the PTASP document requirements for RTA and TxDOT SSO coordination and monitoring of RTA corrective actions?  Does the PTASP document the TxDOT SSO Administrative Review process for when an RTA disagrees with a TxDOT decision on a corrective	
M.8			action?  Does the PTASP document:  - Notification requirements?  - Key staff accountability/responsibilities?  - Required coordination with SSO?  - Required submissions to SSO?  - Timelines and deadlines?	

	PS Section 10	Escalation of Enforcement Action	Does the PTASP document the TxDOT SSO Escalation	
			of Enforcement Action process?	
	43 TAC, Part 1, Ch 7, Subchapter E	,		
	Rule 7.92, 7.93, and 7.94		Does the PTASP document:	
M.9			<ul><li>Notification requirements?</li></ul>	
			<ul><li>Key staff accountability/responsibilities?</li></ul>	
			<ul><li>Required coordination with SSO?</li></ul>	
			<ul><li>Required submissions to SSO?</li></ul>	
			– Timelines and deadlines?	
	PS Section 10.1	Emergency Order to Address Imminent Public Safety	Does the PTASP document the TxDOT SSO Emergency	
		Concerns	Order to Address Imminent Public Safety Concerns	
	43 TAC, Part 1, Ch 7, Subchapter E	,	process?	
	Rule 7.95			
N4 10			Does the PTASP document:	
M.10			<ul><li>Notification requirements?</li></ul>	
			<ul><li>Key staff accountability/responsibilities?</li></ul>	
			– Required coordination with SSO?	
			<ul><li>Required submissions to SSO?</li></ul>	
			<ul><li>Timelines and deadlines?</li></ul>	

# **Appendix E**

Accident Investigation Review Checklist



### **Accident Investigation Review Checklist**

**Objective**: Complete an independent review of investigation activities and reports to assure sufficiency and thoroughness, per Part 674.35, as well as conduct an independent review of the findings of causation.

Topic	Investigation Report Information
Investigation Data and Analysis	
Operator/Conductor Event Report	
Field Supervision Report	
Employee record/history	
Interviews (on-scene, off-scene)	
Police Activities/Report	
On-Scene Conditions Summary Description –	
vehicles, infrastructure, signals	
Post-Accident Safety Inspections – Vehicles,	
Infrastructure	
Inspection, Maintenance, State of Good Repair	
Analysis – vehicles, infrastructure	
Video Analysis/Review	
Event Recorder Analysis/Review	
Communications Analysis	
Pictures, drawings, measurements, and visual	
documentation	
Special technical services – metallurgy, analytical	
services	
Reconstruction of Safety Event	
Damage/Maintenance, Return to Service	
Description of damage – vehicles, stations,	
infrastructure, facilities, signals, crossing gates,	
switches, track	
Labor and Material cost to bring system back to a	
state of good repair	
Status for the vehicles	
Status for infrastructure elements damaged	
<b>Determination of Safety Performance and Need for</b>	Improvements**
Staff recognizing the event or potential event	
Following procedures/effectiveness of procedures	
Problem-solving – Rail Operator/Conductor, Field	
Supervision, Controllers	
Communication and coordination – Rail	
Operator/Conductor, Field Supervision, Controller(s)	
Process of securing the train/scene – problems or	
issues	
Safety performance of any Passenger/Patron	
Evacuation – Police, EMS, field supervision	
Process of return to service	
Safety Performance of others responding in the field	
Findings, Causal, and Contributing Factors	
List the findings, causal, and contributing factors	
Do the findings, causal, and contributing factors	
identified appear to be appropriate and complete?	
Decommendations and Comment Actions	
Recommendations and Corrective Actions	
List the Recommendations and Corrective Actions	
Do the recommendations appear to address all of the findings and factors?	
Are additional recommendations/corrective actions	
required to address issues reported in the	
investigation?	
mresagadon.	

Topic	Investigation Report Information				
Reference Reports and Exhibits and Distribution					
List reports and exhibits related to the investigation					
report – For each document, list owner department or					
division, person if provided, and date completed					
List Requests for Information (RFIs) and Requests for					
Additional Information (RFAIs) required to complete					
this investigation review – Case Numbers, Drug and					
Alcohol testing information, information that was					
missing, any other interactions with the RTA to					
complete this review.					
Additional Remarks, Comments, and Observations					
Report Distribution List – was everyone that had a					
role in the investigation, approving management, or					
receiving recommendations included in the					
distribution?					
Independent Investigator Review					
Investigator Completing the Independent Review					
Date Review was Completed					
Affirmation of investigation sufficiency and					
thoroughness, and Concurrence with findings of					
causation [Electronic Signature]					

Note: Review of Findings, Factors, Recommendations, and Corrective Actions require the review of the other aspects of the investigation, safety performance during and after safety event, and potential improvements that should be considered to assure better response capabilities and/or potential for prevention in the future.

# **Appendix F**

Guidance on Evacuations



TxDOT SSO is providing the following clarification regarding reporting of evacuations for life safety reasons. This guidance provides examples of evacuations that must be reported and examples of evacuations that must not be reported. You must view each scenario on a case-by-case basis and make reportability decisions using best available information within the 2-hr reporting window.

TxDOT SSO is providing this guidance because agencies have experienced a significant increase in single individuals stopping trains to exit when there is no life safety reason. If a passenger stops the train to leave and there is no life safety reason present then the passenger's conduct could be construed as a violation of rider conduct, a malicious/imprudent customer action, or even criminal conduct. It is not the intent of the FTA and TxDOT SSO reporting process to report criminal conduct that is absent of life safety reasons.

**Do NOT report** to FTA or TxDOT if the evacuation scenario contains the following circumstances:

- Occurs in street-running territory when the individual was able to step out of the dynamic envelop of the train and directly onto a street or sidewalk, and there was no life safety reason.
- A lone individual, with no life safety reason, while committing a presumed malicious/criminal act, only has a minor presence in the right-of-way. A minor presence in the right-of-way, when viewed in the totality of the circumstances, does not place the individual at risk of collision, fall, or electrocution.

#### Examples include:

- A passenger stops the train without a life/safety reason and exits at the end of the platform.
   This is non-reportable because there was not a life safety reason to depart the train, and the person exited the train to a platform.
- A passenger stops the train without a life/safety reason and exits the train onto a public street. This is non-reportable because there was not a life safety reason to depart the train, and the individual did not violate the controlled right-of way. The street is a public street and as soon as the person stepped out of the dynamic envelop of the train they were on a public street and clear of danger from the train.
- A passenger stops the train without a life/safety reason and exits 30 feet past the station platform. The passenger is observed stepping back onto the platform and leaving the station. This is non-reportable because there was not a life safety reason to depart the train, the individual did not commit a significant violation of the controlled right-of way, and the individual was at no risk of collision, fall, or electrocution. Through the totality of circumstances, the operator confirmed the individual was not in danger, cleared the right-of-way, and the situation was a nuisance/criminal act rather than an evacuation.

**You MUST report** to FTA and TxDOT if the individual commits a significant violation of the controlled right-of-way that places the individual in *risk* of being struck by a rail vehicle, fall, or electrocution regardless if the individual's intent was imprudent, malicious, or criminal. The passenger's presence in the controlled right-of-way and significant risk of being injury is presumed to be an evacuation for life-safety reason, and the event must be reported.

#### Examples of reportable evacuations include:

 A passenger stops the train without a life/safety reason and exits the train in a controlled right-of-way between stations in double track territory with active train movement. This is

- reportable as an evacuation because the individual placed themself in an area of significant risk of being struck by train movement while in the right-of-way.
- A passenger stops the train without a life/safety reason, exits the train on a bridge, and begins walking. This is reportable as an evacuation because the individual placed themself in an area of significant risk while in the right-of-way.
- Individuals depart the train or platform due to smoke, fumes, fire, fuel, or electrical hazard. The evacuation may be a self evacuation or agency directed, and the presence of smoke, fumes, fire, fuel, or electrical hazard is an indication of life safety cause. This is reportable as an evacuation because individuals left the train or station for life safety reason caused by the presence of smoke, fumes, fire, fuel, or electrical hazard.
- A passenger offload from one train into the right of way in a double track area to board a
  rescue train or to walk back to a station, and in doing so end up in an area of risk of being
  struck by a rail vehicle while in the right-of-way. This is reportable as an evacuation because
  the individuals were in an area of risk of being struck by train movement while in the right-ofway as they offloaded the train.
- A shooting, stabbing, arson event, threat, or other criminal action causes individuals to depart a train or station for a life safety reason. The evacuation is reportable as a secondary event since the evacuation was for a life safety reason. The criminal act and injuries/fatalities are not reportable but the evacuation is reportable.

# **Appendix G**

Risk-based Inspection Program



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# **Risk-based Inspection Program**

TxDOT State Safety Oversight Program Rail Division



# **Contents**

Introduction	1
Category 1: SSO Authority	2
Category 2: Risk-Based Inspection Policies and Procedures	3
Category 2(a): RTA Access Policies	3
Category 2(b): Inspection Practices	6
Category 3: Data Sources and Collection	12
Category 3(a): RTA Data Sharing	12
Category 3(b): Additional Safety Data	14
Category 3(c): RBI Data Management System	14
Category 4: Inspection Prioritization	16
Prioritization of Safety Concerns to Inform Inspections	16
TxDOT Prioritization Committee	20
Inspection Prioritization Process	21
Category 5: RBI Program Commensurate with RTA Number, Size, and Com	ıplexity 23
Category 6: SSO Staffing, Qualification, and Training	25
RTA Risk-based Inspection Procedures	26
Houston METRO	26
Category 2(a): Houston METRO Property Access and Inspection Procedures	28
Category 2(B) Houston METRO Inspection Practices	31
Category 3(a): Houston METRO Data Procedures	39
Dallas Streetcar	43
Category 2(a): Dallas Streetcar Property Access and Inspection Procedures	45
Category 2(b): Dallas Streetcar Inspection Practices	49
Category 3(a): Dallas Streetcar Data Procedures	57
Dallas Area Rapid Transit	62
Category 2(a): DART Property Access and Inspection Procedures	64
Category 2(b): DART Inspection Practices SOP	68
Category 3(a): DART Data Procedures	76
El Paso Streetcar	80
Category 2(a): El Paso Streetcar Property Access and Inspection Procedures	82

Category 2(b): EPSC Inspection Practices SOP	86
Category 3(a): EPSC Data Procedures	93
McKinney Avenue Transit Authority	98
Category 2(a): McKinney Avenue Transit Authority Property Access and Inspecti	on Procedures100
Category 2(b): MATA Inspection Practices SOP	104
Category 3(a): MATA Data Procedures	111
Galveston Island Trolley	115
Category 2(a): GIT Property Access and Inspection Procedures	117
Category 2(b): GIT Inspection Practices SOP	120
Category 3(a): GIT Data Procedures	128
Appendices	132
Appendix 1: Definitions	132
Appendix 2: RBI Inspection Report Template	137
Annendix 3: Pick Prioritization Committee Charter	130

## **Introduction**

The Texas Department of Transportation (TxDOT) State Safety Oversight (SSO) Risk-based Inspection Program (RBI Program) uses qualitative and quantitative data monitoring and analysis to detect changes in rail transit agency (RTA) safety performance, shifts in risk, and adherence to maintenance, inspection, and safety policies.

This RBI Program document contains the policies and procedures jointly developed between TxDOT and RTAs and follows the Federal Transit Administration (FTA) RBI Toolkit format as follows:

Category 1: Authority to Perform Risk-Based Inspections

Category 2: Risk-Based Inspection Policies and Procedures

Category 3: Data Sources and Collection

Category 4: Inspection Prioritization

Category 5: Risk-Based Inspection Commensurate with Number, Size, and Complexity of RTAs

Category 6: SSO Staffing, Qualifications, and Training

TxDOT's policies are provided in Categories 1-6 and the procedures describing the implementation of the RBI Program are provided in the individual rail agency specific sections of this document. Combined, the TxDOT Policies and unique RTA Procedures explain how TxDOT, and the rail agencies will implement the risk-based inspection program.

#### **Infrastructure Investment and Jobs Act**

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA), which provided funding additional funding for infrastructure and enhanced the public transportation safety program requirements. The BIL amended 49 U.S.C § 5329 to require State Safety Oversight Agencies (SSOA) to perform risk-based inspections of the RTAs that the states oversee. The BIL also added a provision directing FTA to issue a Special Directive to each SSOA on the development and implementation of risk-based inspection programs.

#### FTA Special Directive 22-47 and the Risk-based Inspection Toolkit

On October 21, 2022, FTA issued Special Directive 22-47, under authority of 49 U.S.C. § 5329 (k) and 49 CFR Part 670, requiring TxDOT, as the SSOA for the State of Texas, to develop and implement a risk-based inspection program by October 2024.

To assist SSOAs in development of risk-based inspection programs, FTA developed a risk-based inspection toolkit in October 2022. The toolkit is a guide to help SSOAs address the necessary components of risk-based inspection programs.

# **Category 1: SSO Authority**

In 1997, the Texas Legislature enacted Senate Bill (S.B.) 735, which designated the TxDOT as the SSOA for the State of Texas. TxDOT derives its authority through the Texas Transportation Code, Chapter 455, General Powers and Duties of Department of Transportation Regarding Mass Transportation.

#### Senate Bill 1523

During the 85th Regular Legislative Session, S.B. 1523 was enacted on June 1, 2017. This statute provides TxDOT with the authority to establish and enforce minimum standards of safety for rail agencies within its oversight. These standards are consistent with the National Public Transportation Safety Plan, Public Transportation Safety Certification Training Program, rules for Public Transportation Agency Safety Plans, and all other applicable federal and state laws.

#### **Texas Administrative Code**

Chapter 7, Subchapter E. - Rail Fixed Guideway System State Safety Oversight Program, of the Texas Administrative Code (TAC) describes how TxDOT will carry out its SSO Program responsibilities consistent with both State and Federal requirements. It provides a legal framework, consistent with the Program Standard, for each RTA in Texas to follow to create, implement, and administer FTA and TxDOT SSO program requirements, including risk-based inspections.

TxDOT SSO's Texas Administrative Code was updated in April 2024 to demonstrate the necessary risk-based inspection authorities.

#### **TxDOT SSO Program Standard**

The TxDOT SSO Program Standard describes the roles and responsibilities of TxDOT and each RTA for implementing State Safety Oversight program requirements. Annually, by August 31st, the TxDOT SSO Program Standard will be reviewed and updated. All RTAs are provided an opportunity to propose revisions and to review and comment on TxDOT's proposed changes.

TxDOT will update the Program Standard to incorporate the TxDOT RBI Program into the Program Standard. The current TxDOT SSO Program Standard is located at: <a href="https://www.txdot.gov/business/resources/rail-safety/state-safety-oversight-program.html">https://www.txdot.gov/business/resources/rail-safety/state-safety-oversight-program.html</a>

# Category 2: Risk-Based Inspection Policies and Procedures

TxDOT, in consultation with each RTA, developed policies and procedures to detail the process used to access RTA property and data, and to assess and prioritize risk necessary to conduct inspections, both with and without notice. TxDOT's over-arching RBI policies are described below, and RTA specific procedures are provided as part of each RTA's procedures. Combined, the TxDOT Policies and the RTA-specific procedures explain how TxDOT, and each RTAs will implement the risk-based inspection program.

### Category 2(a): RTA Access Policies

#### **Notifications to the RTA to Conduct Inspections**

TxDOT will conduct at least four inspections per year at each rail agency. TxDOT may conduct additional inspections, both with and without notice, as determined by TxDOT's data analysis, risk prioritization process, and other ongoing monitoring processes.

#### **Inspections With Notice Notifications**

Inspections with notice will occur with 1 calendar day or more notice. TxDOT's Lead Inspector will notify the RTA's designated personnel via email to conduct an inspection with notice. The notification will include the inspection agenda, purpose, risk prioritization, date, time, locations, data needed for inspection, requested escorts, and RTA staff requested to attend.

TxDOT will abide by each RTA's property access procedures, which includes track allocation processes and timelines to access areas that require adherence to track allocation procedures. Although TxDOT may schedule inspections with 1 calendar day or more notice, TxDOT prefers to provide adequate time to allow TxDOT and the RTA to prepare for inspections. In instances when track allocation is needed for an inspection with notice, TxDOT will coordinate track access through each rail agency's track allocation process, which could require up to 7 calendar days advance notice.

Whenever practicable and as determined by the inspection purpose and assessed risk, TxDOT will seek to minimize disruptions to the rail agency. Minimizing service disruptions may include conducting inspections outside of peak revenue service hours during times such as non-peak hours, overnight hours, or non-revenue service hours. TxDOT may also consider utilizing foul-time during revenue operations if inspection activities can be completed safely within allotted foul-time authorization at each agency. Depending on the rail agency, utilization of foul-time maybe by limited to 15 to 30 minutes on the right of way.

Inspections with notice may require TxDOT to request data during the inspections in addition to requesting data prior to the inspection. TxDOT will coordinate data requests to allow adequate time for the rail agency to provide the requested data. Depending on inspection purpose, TxDOT may request

data submission up to 10 calendar days prior to the date of the inspection. TxDOT will seek a mutually agreeable data submission date determined by the inspection purpose, assessed risk, and level of effort needed to compile and submit requested data.

Inspections with notice must begin within 15 minutes of the scheduled time. If the RTA is unable to provide track allocation or required escorts for an inspection with notice, then TxDOT may consider delaying the inspection while track allocation or escort issues are resolved. TxDOT requires rail agencies to make good faith efforts to promptly resolve all issues with the potential to delay inspections. Repeat issues in beginning announced inspections at the scheduled date and time could result in Administrative Action as described with Section 7.92 of the Texas Administrative Code and Escalation of Enforcement Action as described in Section 7.94 of the Texas Administrative Code.

#### **Inspections Without Notice Notifications**

Inspections without notice will occur with no notice to the rail agency. Upon arrival at the RTA property, TxDOT's Lead Inspector will provide notice of TxDOT's unannounced inspection to the agreed upon RTA personnel. TxDOT's notification will occur onsite, at any RTA location. The notification will include an agenda stating inspection purpose, risk prioritization, date, time, locations, requested escorts, and RTA staff requested to attend. Specific notification procedures, including personnel and contact methods are noted within the procedures for each individual rail agency.

Upon notification of an inspection without notice, the rail agency staff must accommodate TxDOT's request as follows.

- Within 15 minutes of TxDOT inspection notification, RTA personnel must begin implementing RBI procedures including informing agency staff and mobilizing required staff and resources.
- Within 2 hours of TxDOT inspection notification, RTA personnel must be present and ready to begin inspection activities in accordance with RBI procedures. This may include designating escorts, securing track allocation, including foul-time or emergency allocation, and providing mobile or stationary work zones in compliance with the agency roadway worker protection requirements.
- TxDOT's Lead Inspector may allow additional mobilization time to allow RTA staff to deal with extenuating circumstances beyond their control.

TxDOT understands that rail agencies may need additional time to provide required staff, gather needed documentation, equipment, protective gear, secure track access, and travel to the designated muster point. TxDOT may allow reasonable additional time to safely mobilize and begin an inspection.

Inspections require TxDOT to strictly adhere to the agreed upon inspection procedures and timeframes.

#### **Commencing Inspections:**

TxDOT risk-based inspections must begin no later than 2 hours after TxDOT inspection notification.

If an RTA is unable to begin an inspection within 2 hours of notification, then TxDOT may:

- invoke Texas Administrative Code Section 7.95 Emergency Order to Address Imminent
   Public Safety Concerns to remove from service affected infrastructure, equipment, facilities,
   or personnel until TxDOT can inspect those items. Or,
- initiate Administrative Actions as defined by Texas Administrative Code Section 7.92 to resolve issues causing non-compliance with risk-based inspection procedures and timeframes. Continued risk-based inspection non-compliance may also result Escalation of Enforcement Action (Texas Administrative Code Section 7.94) which may include rescinding Public Transportation Agency Safety Plan approval and halting operation of the agency's rail fixed guideway system.

#### **Access to RTA Properties**

Rail agencies must provide TxDOT SSO personnel, including project contractor staff, full access to infrastructure, equipment, records, facilities, data, and personnel through key, key card, badge, or code. Access details for each rail agency are noted within the procedures for each individual agency.

#### **Inspections of Publicly Accessible Areas**

TxDOT may conduct inspections of publicly accessible areas without notice to the RTAs. Examples of publicly accessible areas include stations, platforms, vehicles in revenue service, roadways, sidewalk, park, walkway, or other areas open to the public. At its discretion, TxDOT may provide notice to the RTA of inspections of publicly accessible areas and may invite RTA personnel to accompany TxDOT on the inspection.

#### **Access Procedures and Escorts**

TxDOT SSO personnel, including TxDOT SSO support contractor staff, will have full access to rail agency infrastructure, equipment, records, facilities, data, and personnel through key card, key, or code. TxDOT requires an escort when accessing non-public areas of RTA property, including hazardous or security sensitive areas. TxDOT will not attempt to access RTA property, including hazardous or security sensitive areas, without an escort. Specific details covering access procedures and escorts are provided in the individual RTA procedures section of this document.

Hazardous areas may include, but not limited to, right-of-way, maintenance yards or storage yards, tunnels, bridges, aerial structures, electrical infrastructure, and confined spaces. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations or police activity associated from safety events.

When arriving at RTA's property, TxDOT staff will gather at a safe location as agreed upon in the rail agency specific access procedures, which generally will be a main entrance, reception area, or security desk of the area to be inspected. After providing the notification of inspection, TxDOT's Inspector(s) will await an RTA escort at the designated locations

In the event an RTA cannot provide an escort as agreed to in the procedures, TxDOT may consider allowing additional time for the RTA to provide an escort. TxDOT may invoke authorities necessary to cease operation (Emergency Order under TAC 7.95) until an escort is available and the inspection is completed.

#### **Certification and Training of Inspection Personnel**

TxDOT will comply with all safety procedures established by both TxDOT and the FTA for conducting inspections of RTA properties. The SSOA will ensure that all personnel conducting inspections have been trained to perform their assigned tasks and certified according to FTA specification to safely access RTA properties and alignments. TxDOT will document and abide by all RTA access requirements when conducting inspections on track, tunnels, bridges, arial structures, and electrical infrastructure. The specific safety and training details for accessing each RTA property and conducting inspections is provided in the individual RTA procedures and documented within TxDOT's Technical Training Plan.

### **Category 2(b): Inspection Practices**

#### **Inspections Scheduling and Timeframes**

TxDOT will schedule a minimum of four inspections with notice per year at each RTA. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter. TxDOT may conduct additional inspections, both with and without notice, as determined by TxDOT's risk prioritization process.

TxDOT's Lead Inspector will provide an inspection notification to the CSO and other designated RTA personnel for both inspections with notice and without notice. The notification will include an agenda containing:

- Inspection purpose
- Prioritization assessment (with notice or without notice)
- TxDOT Inspector Team Lead and other TxDOT personnel,
- Functional areas or locations to be inspected,
- Department or staff participation needed for the inspection,
- Description of what records or other materials will be required during the inspection, and
- Request for RTA escort, if needed.

TxDOT will provide notification according to the timeline as follows:

- Inspection with notice requests will be provided with at least 1 day notice. However, TxDOT will seek to provide reasonable advance notice depending on the prioritization of the inspection.
- Inspection without notice notifications will be delivered onsite with no advance notice.
- TxDOT may conduct inspections of publicly accessible areas without notice to the RTAs.

TxDOT understands inspections of track, signals, overhead contact, tunnels, bridges, or aerial structures require adherence to track allocation processes specific to each RTA. TxDOT may seek foul-time, emergency track access, or may invoke authorities necessary to cease operation (emergency order under TAC 7.95) to gain access to complete inspection activities.

#### **Inspection Reports**

Within 30 calendar days of inspection completion, the TxDOT SSO Program Managers or designated SSO Support Contractor will email an inspection report draft to the designated RTA staff for review. Inspection reports will aggregate the inspection activities into one report. Reports will use objective language and reference objective data to document the inspection.

The RTA will have 10 calendar days to review and comment via email. TxDOT will review any RTA comments and send the final report via email to the RTA no later than 10 calendar days after the RTA's deadline to comment on the draft inspection report. TxDOT will upload the final Inspection Report into the RBI Module within the SSO Tracker system. A copy of the inspection report template is included as Appendix 2. At a minimum, the report will include:

- Executive Summary
- Date and Time of inspection
- Inspection Purpose
- Location or Items Inspected
- TxDOT SSO and RTA Personnel Present
- Issues or Deficiencies Observed
- Photographs, documentation, measurements, or diagrams
- Recommendations,
- Corrective Actions

#### **Inspection Personal Protective Equipment**

TxDOT inspectors will abide by RTA, TxDOT, and Contractor personal protective equipment requirements while conducting inspections. Requirements generally include the following items, with RTA specific requirements noted within the inspection procedures for each RTA.

- Name badges,
- 2) Roadway Worker Protection training certificate or card,
- 3) steel-toe,
- 4) appropriate clothing for inspection to be completed,
- 5) RTA approved safety vests,
- 6) protective eyewear,
- 7) hearing protection,
- 8) gloves, and
- 9) hardhats/bumps CAPs.

#### **Immediate Safety Concerns**

Each member of the TxDOT Inspection team can raise an immediate safety concern at any point in the planning, preparation for, or conducting of an inspection. TxDOT SSO defines an immediate safety concern as any real or potential condition, practice, or violation that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a rail fixed guideway public transportation system; or damage to the environment.

If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present, which may include not entering the inspection area, pausing the inspection, or departing the inspection area until the safety concern is resolved.

Examples of safety concerns may include, but not limited to:

- a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
- b. Inclement weather or threat of inclement weather,
- c. Personnel conduct including disregard for rules, safety procedures or suspected fatigue or impairment,
- d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including but not limited to:
  - i. Rail defects, track related damage, or obstructions.
  - ii. Overhead contact damage, malfunction, or other observed safety concern
  - iii. Signal related damage or malfunction,

- iv. Vehicle damage or component malfunction
- Facility safety concerns such as fire, electrical, or other life/safety concerns
- e. Any other concern judged by inspection personnel as an immediate safety concern.

TxDOT Inspection team members who observe an immediate safety concern will notify the TxDOT Lead Inspector, who will then notify the RTA escort. The TxDOT Lead Inspector will initiate a safety pause to begin evaluating the safety concerns and required next steps. Depending on the circumstances, the Lead Inspector or RTA escort may need to notify train control, dispatch, law enforcement personnel, or the safety department. The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are physically safe and appropriate personnel are notified as described in the RTA specific procedures.

If the inspection cannot safely continue, then the TxDOT Lead Inspector or the RTA may cancel the inspection. Inspections cancelled for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete, depending on how much of the inspection was accomplished prior to the safety concern, or may re-schedule the inspection soon as practical to complete the inspection.

If the inspection can safely continue, then the TxDOT Lead Inspector will document and photograph the safety concerns observed and discuss the issue with the RTA personnel present. At the conclusion of the inspection, the TxDOT Lead Inspector will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard.

The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### Inspections of Equipment, Infrastructure, Personnel & Practices Specific to Each RTA

TxDOT may inspect all infrastructure, equipment, locations, records, personnel, and data of rail systems under the safety oversight of TxDOT State Safety Oversight Program. Any property or personnel (employee or contractor) performing work related to the agency's rail system could be subject to inspection. The RTA specific procedures will define the equipment and infrastructure present (broad) and the inspection frequencies and practices (specific) of each RTA.

#### **Event Verification**

TxDOT and RTAs coordinate throughout the accident investigation process as described in the TxDOT SSO Program Standard, Section 7: Accident Investigation. The following section summarizes how TxDOT oversees investigations and conducts event verification as it relates to the RBI program.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed accident investigations. TxDOT reviews the RTA's findings of causation and determines if a corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal

characteristics. These metrics aid in understanding causal and contributing factors, and guide identification of hazards and safety risk that may require action through corrective actions or mitigations.

TxDOT also requires RTAs to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair needed to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include work orders, repair summaries, photographs, or other documentation. TxDOT may also verify repairs and return to service processes damaged items as part of inspection activities, both with and without notice.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the twoyear period. To establish the two-year cycle, TxDOT first assessed each RTA to determine the functional areas based on infrastructure, equipment, facilities, and procedures in use at each system. TxDOT then divided the functional areas into a two-year cycle with one functional area planned for inspection each calendar quarter. Sample functional areas are noted below.



TxDOT maintains a monitoring inspection calendar, which is created no later than 90 calendar days before the start of the two-year period. TxDOT and the RTA will coordinate to ensure each required quarterly inspection with notice is planned, scheduled, conducted, and documented according to the agency specific RBI procedures. TxDOT may also utilize additional inspections with and without notice as determined through TxDOT's risk prioritization process.

In addition to ongoing inspections with notice throughout the two-year period, TxDOT conducts monthly conference calls to discuss events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items. Additional monitoring activities include oversight of the internal safety review process and SSO conducted triennial audits.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitoring efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination through on-going monitoring or coordination. Key monitoring activities, including inspections performed are tracked and reported as part of TxDOT SSO's Annual Status Report.

#### **Defects and Corrective or Remedial Actions**

TxDOT will monitor RTA defects, corrective action and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT will track significant defects by instance and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

#### **Corrective Action Plan and Safety Risk Mitigation Verification**

TxDOT routinely coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

#### **CAP Verification**

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,

non-compliance with RTA policies or procedures, or

FTA or SSO direction.

The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT close a CAP once the agreed upon actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, attached documentation, uploaded pictures, or onsite review verifying completion.

#### **Safety Risk Mitigation Verification**

The Program Standard, Section 8.6 Monitoring of RTA Hazards requires RTAs to submit monthly hazard logs that summarize safety risk mitigation information including:

Date issue discovered.

Summary or description of safety risk, including location.

Assessment including probability of occurrence and severity of consequences.

Responsible RTA department or employee tasked with resolving the issue.

mitigations or corrective actions implemented.

Status of hazard or risk resolution (open or closed).

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative nature such as policy, procedure, and documentation improvements may be monitored and verified through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure may be verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices may be monitored through observation-based inspections.

TxDOT may verify safety risk mitigations and corrective action implementation at any time. However, TxDOT may select completed safety risk mitigations and CAPs to be verified as part of each regularly scheduled quarterly RBI inspection with notice.

# **Category 3: Data Sources and Collection**

Category 3(a): RTA Data Sharing

TxDOT requires RTAs to submit already collected data needed to conduct quantitative and qualitative data analysis to detect changes in RTA safety performance, shifts in risk, and assure adherence to operation, maintenance, and safety policies.

Agencies will submit data used for the identification and assessment of safety risk, which will involve submission of monthly safety data and quarterly maintenance and inspection data used for the identification and assessment of safety risk.

Category 5 describes the differences in size and complexity between light rail and streetcar systems, and how those differences are factored into the RBI policies and procedures. Regardless of size of complexity, RTA data submissions for both light rail and streetcar systems will encompass the full spectrum of RTA activities including safety management, maintenance, inspection, and other safety activities as outlined in the RBI toolkit.

RTA data sets may contain, but not limited, to the data from the categories listed below. The RTA specific data required from each RTA as part of the data used to identify hazards and analyze, assess, and mitigate safety risk is explained within each RTA's RBI Procedures.

#### **Safety Program Data**

- Safety Events,
- Hazard records, including RTA internal hazards and SSO reportable hazards.
- Safety risk mitigation records.
- Corrective action plans.
- Records of near misses.

#### **Maintenance Data**

- Inspection and maintenance records and report forms.
- Work orders.
- Records of failures and defects.
- Records of revenue vehicles out of service.
- Major maintenance activity schedule and progress.
- Adherence to maintenance schedules, including deferred maintenance.

#### **Inspection Data**

Inspection records and report forms.

- Records of failures and defects.
- Records of speed restrictions.
- Safety event risk mitigation verification.
- Adherence to inspection schedules, including inspections not performed.
- Capital project schedules and progress.

### Category 3(b): Additional Safety Data

RTA specific data required from each RTA as part of the data used to identify hazards and analyze, assess, and mitigate safety risk is explained within each RTA's RBI Procedures. Additional safety data may include, but not limited to:

#### **Additional Safety-related Data**

- Annual report data,
- Audits,
- National Transit Database (NTD) data,
- Safety Assessment,
- Engineering assessments
- Patron and Customer feedback and complaints,
- Security data

The specific additional safety data required from each RTA is contained within each RTA's procedures.

### Category 3(c): RBI Data Management System

TxDOT has used an SSO data management system (SSO Tracker) since 2019 to effectively administer the SSO Program. The SSO Tracker system will be expanded to serve as an RBI hub for TxDOT and the RTAs. As of May 2024, TxDOT SSO is in negotiations with a safety data management vendor that will assist TxDOT in the design, configuration, testing, and on-going support of the expanded SSO Tracker system.

The SSO Tracker system will have an RBI module to be used for the submission of data, documenting inspection prioritization, and maintaining inspection reports. The RBI module is in addition to the accident, hazard, corrective action modules used for SSO and RTA ongoing coordination and management of those areas.

The SSO Tracker system is compliant with the Texas Risk and Authorization Management Program (Tx-RAMP), which defines the processes, procedures, and compliance requirements relating to the use of cloud computing services by Texas state agencies. The SSO Tracker System is designed as a Level 2 system which is the highest level of security, meaning the system can safely store data defined as confidential within 1 Texas Administrative Code Section 202.1. Examples of confidential data includes names, dates of birth, license plate data, sensitive personal information, regulated data, and information excepted from disclosure requirements of Government Code Chapter 552, such as SSO investigation reports.

In limited circumstances, RBI Program documents or records may be transmitted via email. TxDOT's Information Technology Division maintains email systems in accordance with email security best practice standards including proactive malware and spam detection, multifactor authentication, and email user training. RBI documents transmitted via email may include, but are not limited to, inspection notifications, inspection report reviews, safety concern notifications, and correspondence documents. The TxDOT SSO team will ensure key RBI documents are uploaded into the SSO Tracker System RBI module.

TxDOT procedures for data organization and storage will define procedures for the following data elements:

#### How data sets will be stored and used for analysis:

TxDOT will store data sets in the SSO Tracker system and data will be accessible by TxDOT, contractors, and RTA staff. TxDOT will use the data sets submitted for inspection prioritization purposes as described in the Inspection Prioritization section of this document.

#### Where the data sets will be stored:

The RTAs will upload their data into the SSO Tracker system. TxDOT will upload items such as prioritization analysis, inspection agendas, and inspection reports into the SSO Tracker RBI module.

RBI data within the SSO Tracker system will be viewable by TxDOT and the RTA staff. If corrective actions result from an inspection, then those corrective actions will be associated with the inspection and will be managed within the SSO Tracker system.

#### How the data will be organized:

The RBI data is organized by RTA, year, and quarter. The data is further organized by data type including safety, maintenance, inspection, and other safety data. Other data such as prioritization analysis, inspection agendas, and inspection reports will be associated by the RTA and by date completed.

#### How long records must be retained:

TxDOT must retain RBI data for 3 years in accordance with 49 CFR 674. Training records must be retained for 5 years in accordance with 49 CFR 672.

#### How and when records are disposed:

RTA RBI data must be retained for 3 years in accordance with 49 CFR 674, and TxDOT training records must be retained for 5 years in accordance with 49 CFR 672. Records are disposed of in accordance with TxDOT records retention and disposition polices, which includes coordination with the Public Transportation Division Records Coordinator to ensure compliant record retention and disposal.

#### How the SSOA will ensure the system is maintained:

The TxDOT SSO Program staff will maintain the SSO Tracker system. The Public Transportation Director of Administration and Program Support assures the system is maintained through supervision of the Transit Safety Manager. Though not anticipated, TxDOT can seek system maintenance assistance from the TxDOT Technology Division (ITD) or the vendor that provides the SSO Tracker system to TxDOT.

#### How the SSOA will ensure the system accurately stores records:

The SSO Tracker system maintains data submitted into the system. TxDOT can prevent users from modifying submitted data. In addition, the system allows for activity logs to be generated to audit user actions within the system. The data stored in the RBI module, including data sets, risk prioritization, and inspection reports and will be accessible by TxDOT, contractors, and the RTA staff. These items can be reviewed, and this level of transparency will allow both TxDOT and RTAs to ensure the RBI program is administered accurately and in accordance with the jointly developed RBI Program policies and procedures.

# **Category 4: Inspection Prioritization**

# **Prioritization of Safety Concerns to Inform Inspections**

TXDOT will prioritize inspection activity through analysis of safety, maintenance, and inspection data each RTA uses to identify hazards and analyze, assess, and mitigate safety risk as required in 49 U.S.C. § 5329(k)(2).

In general, rail agencies will submit monthly safety data and quarterly maintenance and inspection data for TxDOT's data analysis and prioritization processes. TxDOT will convene a Safety Risk Management Committee to use qualitative and quantitative methods to identify safety concerns and prioritize inspections so that the highest risk conditions are addressed first.

The RTA specific data required from each RTA used to identify hazards and analyze, assess, and mitigate safety risk is explained within each RTA's RBI Procedures. TxDOT's prioritization process including data metrics are described below.

#### **Safety Data Metrics:**

TxDOT may use the following safety data metrics to prepare data for analysis and inspection prioritization.

# **Safety Events:**

- Number of events.
- Safety Event Type.
- Location (line, crossing, station, facility, etc.)
- Vehicle identification number and operator number.
- Date and Time (year, month, day, and time).
- Probable cause and contributing factors.
- Heat maps.

#### **Hazard Records:**

- Number.
- Type (organizational, environmental, or technical).
- Location (if applicable).
- Date and Time (day, month, year).
- Assessment data (probability and severity).
- Causal and contributing factors.
- Time to resolution/closure.

### **Safety Risk Mitigation Records:**

- Number.
- Source (event, audit, inspection, etc.)
- Causal factors and contributing factors.
- Status (open or closed).
- Time to resolution/closure.

#### **Corrective Action Plans:**

- Number.
- Source of CAPs (Event, Audit, Inspection, etc.)
- Area requiring correction.
- Causal factors.
- Status (open or closed).
- Time to resolution/closure.

#### **Near Miss Records:**

- Number.
- Location (line, crossing, station, facility, etc.)
- Date and Time (year, month, day, and time).
- Probable cause and contributing factors.
- Heat maps.

### **Inspection and Maintenance Data Metrics:**

TxDOT may use the following inspection and maintenance metrics to prepare data for analysis and inspection prioritization.

#### **Adherence to Maintenance and Inspection Requirements:**

- Planned inspections vs completed inspections by item (vehicle, system, facility, etc.)
  - Mileage, time-based, and condition-based
- Planned maintenance vs completed maintenance (vehicle, system, facility, etc.)
  - Mileage, time-based, and condition-based

### **Significant Defects and Failures Identified:**

- Total count.
- Defect and Failure type.
- Vehicle number or physical location.
- Assessment data (probability and severity).

- Status (open or closed).
- Time to resolution/closure.

## **Work Orders and Defect Repair:**

- Total count
- Work order or defect type
- Repair type
- Vehicle number or defect location
- Assessment data (probability and severity)
- Status (open and closed)
- Time to resolution/closure

#### **Vehicles Out of Service:**

- Total count
- Vehicle number
- Reason for out of service
- Time out of service (date out of service and date returned to service)

### **Speed Restrictions:**

- Total count
- Location
- Reason for speed restriction
- Date speed restriction began
- Date speed restriction to end

# **Capital Project List and Progress**

- **Total Count**
- Project summary
- Project status

#### **TxDOT Identified Deficiencies:**

- Total count
- Source
- Deficiency type (organizational, environmental, or technical)
- Vehicle number or physical location
- Assessment data (probability and severity)
- Time to resolution/closure

#### **Recurring Deficiencies:**

- Total count
- Source
- Frequency or recurrence

#### **Inspections Conducted:**

- Total count
- Type (with notice, without notice)

#### **TxDOT Prioritization Committee**

TxDOT utilizes a Safety Risk Management Committee (SRM Committee) to review rail agency data and safety performance to categorize safety concerns for inspection decision-making purposes. The SMR

Committee is made up of TxDOT SSO staff and SSO Support Contractors, including subject matter experts with expertise in rail infrastructure and operation. The Risk Prioritization Committee Charter, provided as Appendix 3, states the committee's purpose and responsibilities in the risk prioritization process.

The SRM Committee will meet at the following intervals:

- Annually for streetcar systems,
- Semi-annually for light rail systems, and
- As needed determined by ongoing monthly monitoring of RTA safety data.

The SRM Committee will review each agency's data and safety performance, including:

- Review RBI data and metrics (RTA dashboard)
- Assess risk revealed through metrics and data analysis (probability and severity)
- Prioritize/rank risk for inspection decision-making purpose, (prioritization)
- Document committee recommendations and decisions (documentation).

SRM committee meetings will review of safety, inspection, and maintenance data and associated metrics to determine potential consequences and frequency data. Next the safety risk will be discussed and rated using TxDOT's assessment methodology. The committee will compare the highest rated safety risks for each category including safety data, inspection data, and maintenance, using quantitative and qualitative data, including professional judgement, to determine which safety risk will be prioritized highest.

The safety risk rated as the highest, combined with SRM Committee input, will determine risk resolution methods, which may include inspection, both announced or unannounced, the timeline for inspection, and inspection methods utilized.

# **Inspection Prioritization Process**

TxDOT will prioritize inspections based on assessed risk as determined by likelihood of occurrence and severity of consequence. Likelihood and severity of consequence ratings will be combined within a Risk Assessment Matrix to arrive at an assessment rating. The assessment rating is compared to Resolution Guidance to aid in risk resolution decision-making. The SRM Committee will consider the risk assessment results in relation to other previous and current risk and determine required actions and associated timelines.

#### **Likelihood of Occurrence**

The likelihood of a particular safety risk occurring may be determined by estimating, based on best available information, the most probable frequency the risk occurs or is expected to occur. The SRM Committee will assess safety risk likelihood using the time/frequency measurements described below.

Likelihood	
Description	Probability
Continual (A)	Weekly basis
Frequent (B)	Monthly
Occasional (C)	Quarterly
Not Very Often (D)	Annually

Rarely (E)	Multi-year

#### **Severity of Consequences**

The severity of consequences of a particular safety risk is the worst probable consequence should the safety risk occur. The SRM Committee will assess safety risk consequences using the injury and damage guidelines described below.

Consequence				
Description	Injury Factors	Property Damage		
Major (1)	Death	Major Damage		
Serious (2)	Serious injury	Substantial damage		
Moderate (3)	Moderate Injury	Damage present		
Minor (4)	Minor injury	Minor Damage		

#### **Risk Assessment Matrix**

The SRM Committee will use a risk assessment matrix to determine a safety risk assessment rating, which represents the Likelihood rating combined with the Consequence rating. The safety risk assessment rating is described below.

Risk Assessment Matrix		Consequer	Consequence				
		Major (1)	Serious (2)	Moderate (3)	Minor (4)		
	Continual (A)	High	High	Serious	Medium		
	Frequent (B)	High	High	Serious	Medium		
Likelihood	Occasional (C)	High	Serious	Medium	Low		
	Not Very Often (D)	Serious	Medium	Medium	Low		
	Rarely (E)	Medium	Medium	Medium	Low		

## **Safety Risk Resolution Guidelines**

The SRM Committee will use the following guidelines to assist in risk resolution decision-making.

Resolution Guidance			
Description	Recommended Action		
High	Immediate inspection may be required.		
Serious	Inspection may be necessary.		
Medium	Monitor through routine methods.		
Low	Acceptable risk.		

#### **Ongoing Process for Inspection Prioritization**

TxDOT's data analysis and prioritization process is designed to detect changing safety performance. As part of ongoing monitoring, TxDOT will prepare monthly safety data dashboards which are provided via email to TxDOT SRM committee members and all other TxDOT SSO Staff and Contractor personnel. TxDOT SSO personnel will review the monthly dashboard, and based on the results of the review, personnel may make a recommendation to SSO PM Lead to hold an ad hoc SRM committee meeting.

The TxDOT SSO Program Managers will decide if an ad hoc SRM committee is needed, and if needed, will schedule an ad hoc SRM committee meeting. SSO Support Contractor Project Managers may also request the TxDOT SSO Program Manager schedule an ad hoc SRM committee meeting to assess risk and determine appropriate next steps.

Ad hoc SRM committee meetings may occur as frequently as needed to prioritize oversight activities, including inspections.

# Category 5: RBI Program Commensurate with RTA **Number, Size, and Complexity**

TxDOT utilizes NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity.

Rail agency characteristics such as mode, vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between light rail and streetcar systems. NTD Profile Data demonstrates that light rail systems operate more hours per day, more days per week, more vehicles per day, over greater distances, and at higher speeds.

#### Summarized 2022 NTD Profile Data:

Agency	Mode	Vehicles Operated in Max Service	Annual Vehicle Revenue Miles	Annual Vehicle Revenue Hours	Directional Route Miles
Dallas Area Rapid Transit	Light Rail	89	9,593,071	505,134	182.4
Houston Metro	Light Rail	46	2,884,288	246,735	43.6
McKinney Avenue Trolley	Streetcar	4	69,748	15,350	4.53
Dallas Streetcar	Streetcar	2	91,133	13,078	4.7
El Paso Streetcar	Streetcar	4	26,249	3,887	4.8
Galveston Island Trolley	Streetcar	2	6,386	1,710	4.2

#### **Perform Consistent and Ongoing Risk-Based Inspections**

TxDOT will conduct a minimum of four inspections with notice per year at each RTA. Inspections are scheduled as part of a two-year cycle with an inspection occurring each calendar quarter. TxDOT may conduct additional inspections, both with and without notice, as determined by TxDOT's data analysis and risk prioritization process.

Consistent and ongoing site inspections, in addition to monthly safety data analysis, will ensure TxDOT verifies an RTA's adherence to safety requirements, detects shifts in risk, and changes in safety performance. Such changes may result in additional announced and unannounced inspections beyond the four inspections with notice.

#### **Inspect the Full Spectrum of Activities**

Inspections may include, but not limited to, all infrastructure, equipment, records, personnel, and data, including the data each RTA collects when identifying hazards and analyze, assess, and mitigate safety risks. Inspections will be prioritized based on relevant data including safety program, maintenance, and inspection data collected by the SSOA. These may include items such as:

- Inspection schedules
- Inspection reports
- Immediate safety concerns
- Inspections of equipment, infrastructure, and practices specific to each RFGPTS
- Event verification
- Ongoing monitoring (procedures, maintenance, and operations)
- Defects and corrective or remedial actions

• CAP and safety risk mitigation verification

# Category 6: SSO Staffing, Qualification, and **Training**

The TxDOT SSO program personnel are skilled and qualified to implement and manage an effective risk- based inspection program. To ensure adequate staffing and resources; the SSO workload assessment, inspection personnel qualifications, and a technical training plan will be reviewed and updated annually. These three elements are discussed below.

#### **SSO Workload Assessment**

The TxDOT SSO Workload Assessment helps to determines the staffing levels needed based on the requirements of the SSO oversight program. TxDOT conducts an annual workload review and update to ensure that staff resources remain sufficient to efficiently conduct safety oversight and risk-based inspections. TxDOT staff are augmented by two SSO Support contractor firms with contracts in place through September 2026. The TxDOT SSO Workload Assessment is updated annually as part of the Annual Report to FTA.

#### **Technical Training Plan**

TxDOT's Technical Training Plan (TTP) identifies the necessary FTA, TxDOT, and each RTA training needed for TxDOT staff and support contractors to implement the risk-based inspection program. Training includes functional training pertinent to assigned duties, roadway worker protection training, and other training required to access tunnels, signals, or traction electrified systems, if required.

TxDOT tracks training by employee to ensure required training is completed timely and upcoming refresher deadlines are met to remain in compliance with all required training. The TxDOT TTP is reviewed at least annually as part of the Program Standard update and updated by August 31st of the current year if an update is needed.

#### **Inspection Personnel Qualification Verification**

TxDOT will maintain a training matrix to track personnel training requirements. The training matrix will be reviewed annually for needed revisions and updated as needed as part of the Program Standard update process. TxDOT periodically update the training matrix to document completed training to ensure training is completed timely and documented on the matrix.

# **RTA Risk-based Inspection Procedures**

The following section provides risk-based inspection procedures specific to each RTA within the TxDOT State Safety Oversight Program. Because this document is publicly available TxDOT has omitted names, phone numbers, and email addresses from this document. Individuals are identified by position.

# **Houston METRO**

The TxDOT SSO and Houston METRO Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT and Houston METRO staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT and Houston METRO staff. The following procedures will be reviewed annually and if necessary updated using a collaborative process defined within the Program Standard and PTASP.

#### **Houston METRO System Overview**

Houston METRO provides light rail service via its Red, Green, and Purple Lines. The Red Line operates along Main and Fannin Streets, serving 24 stations with terminal stops at the Northline Transit Center (TC)/Houston Community College (HCC) and Fannin South Stations. The Green Line is a 3.3-mile line with 9 stations from Theater District Station eastward towards the Magnolia Transit Center. The Purple Line is a 6.1-mile line with 10 stations that runs from Theater District Station in downtown Houston southeastward towards the Palm Center Transit Center.

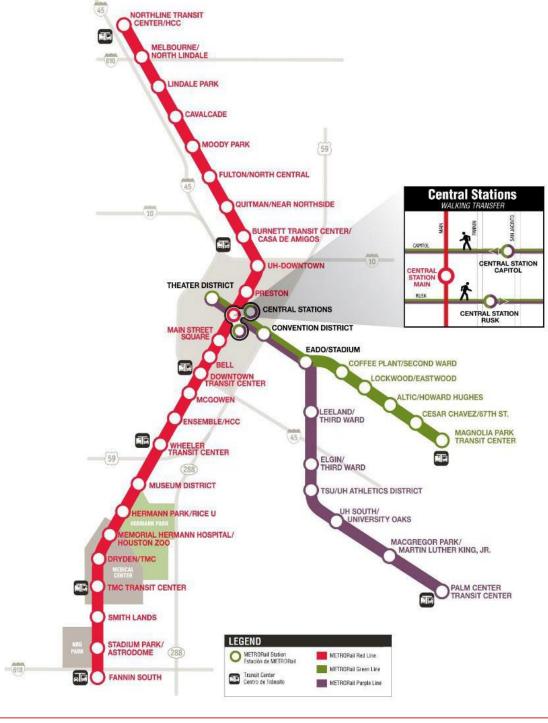
#### **Houston METRO Service Summary**

Line	Days Operated	Hours Operated	Headways
Red	Monday to Sunday	5am to Midnight	Mon – Fri: 6 minutes
			Sat - Sun: 12 minutes
Green	Monday to Sunday	5am to Midnight	Mon – Fri: 12 minutes
			Sat - Sun: 18 minutes
Purple	Monday to Sunday	5am to Midnight	Mon - Fri: 12 minutes
			Sat - Sun: 18 minutes

METRO opened the original 7.8- mile segment of the Red Line between Fannin South and University of Houston (UH)-Downtown Station in January 2004. The 5.3-mile Red Line extension from UH-Downtown to Northline TC/HCC Station opened in December 2013, and the Purple and Green Line extensions opened in May 2015.

METRO operates approximately 90 light rail vehicles (LRVs); consisting of three series, two of which are manufactured by Siemens; the third manufactured by CAF. METRO uses an internal nomenclature of "H1," "H2,", "H3", and "H4" to distinguish the three series of LRVs. The electric-powered LRVs operate on steel rail in an urban environment on both embedded and ballasted track and receive power through an overhead contact system (OCS). METRO signal equipment provides input to city traffic equipment for signal preemption at intersections. Train-to-wayside communications equipment throughout the system provides train location information.

#### **Houston METRO System Map**



# Category 2(a): Houston METRO Property Access and Inspection **Procedures**

The following procedures apply to TxDOT's access to Houston METRO to infrastructure, equipment, records, personnel, and data.

#### **Scheduling Inspections**

TxDOT will schedule a minimum of four inspections with notice per year at each RTA. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter.

At its discretion, and as guided by METRO's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

#### **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection which may require additional time fulfill data requests and securing track allocation, if necessary.

#### **Inspection with Notice (Announced) Procedure and Timeline**

- 1) The TxDOT Lead Inspector will notify the Chief Safety Officer (CSO), Director of Safety, Director, Safety Management Systems, and Manager, Rail Safety by email 1 calendar day or more before intended inspection.
  - a. CSO
  - b. Director of Safety
  - c. Manager, Rail Safety
- 2) The TxDOT Lead Inspector may also call Houston METRO staff to plan inspection activities and discuss required data or track allocation.
- 3) The RTA CSO or delegated staff will ensure required escort(s), data, and track allocation is provided by the start time of the inspection.
- 4) The TxDOT inspection team with gather at the agreed upon location on the inspection date and time. Meeting locations are listed within the Access procedures below.

#### **Scheduling Inspections Without Notice**

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel when arriving onsite to conduct an unannounced inspection. Information included with the inspection notification is stated in the Inspection Notification Information below.

Inspection Without Notice Procedure and Timeline:

- 1) The TxDOT Lead Inspector will notify the CSO, Director of Safety, Director, Safety Management Systems, and Manager, Rail Safety. Contact information is provided on the Key Contacts List on the last page of this document.
- 2) The RTA CSO or delegated staff will ensure required escort(s), data, and track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins. Meeting locations are listed within the Access procedures below.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT's notification, and the inspection must begin within 2 hours or less of TxDOT's Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide an inspection notification that contain the following information:

- inspection agenda,
- inspection purpose,
- risk prioritization,
- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

#### Access procedures, including all areas, and required escorts:

The TxDOT SSO staff and SSO Support Contractors have full access through key card to Houston METRO's property, including infrastructure, equipment, records, facilities, data, and personnel. However, TxDOT will not attempt to access RTA property, including hazardous or security sensitive areas, without an escort. Furthermore, TxDOT will abide by Houston METRO's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

Hazardous areas may include right-of-way, maintenance or storage yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations or police activity associated with safety events.

When arriving at the RTA's property for inspections, both with and without notice, the TxDOT inspectors will gather at agreed upon locations and await an RTA escort.

- 1) The TxDOT inspectors will gather in a safe location at the time stated in the notification and await the arrival of Houston METRO escorts. The following locations shall serve as gathering spots:
  - a. Admin offices: 1900 Main St, Houston, TX 77002 (Lobby)
  - b. Rail Operations Center (ROC): 1601 W. Bellfort Ave, Houston TX 77054
  - c. Service & Inspection (S&I) Facility: 5880 Harrisburg, Houston, TX 77011
  - d. Rail Control Center (RCC): Houston TranStar, 6922 Katy Rd. Houston, TX 77024
  - e. Grade Crossings: Nearest public sidewalk adjacent to the crossing.
  - f. Stations: Within the publicly accessible platform area
- 2) The RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 3) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT's notification, and inspection must begin within 2 hours or less of TxDOT's Inspections notification.

If track allocation is need then TxDOT will follow Houston METRO's track allocation process. The process, pertinent details, and times are as follows:

- Normal track allocation: Houston METRO requires track allocation requests to be submitted by 5pm on Tuesday for track allocation the following week. Details can be found at: www.ridemetro.org/about/business-to-business/track-access
- Foul time- Requested through the Chief Safety Officer, Director of Safety, or Manager,
   Rail Safety.
- Emergency track allocation: Requested through the Chief Safety Officer, Director of Safety, or Manager, Rail Safety.

#### **Verification of SSO Inspector Certifications and Trainings:**

The following procedures apply TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and RTA safety protocol and requirements.

- 1) The TxDOT Lead Inspector will conduct a pre-inspection briefing with the Houston METRO escort to review and discuss the inspection details including agenda, purpose, TxDOT personnel present.
- 2) The TxDOT Lead Inspector will request each inspection team member physically displays METRORail Identification Card to the Houston METRO escort. Displaying valid METRORail Identification Card demonstrates each inspection team member is authorized to enter locations requiring such certifications.
  - a. Inspectors unable to display valid METRORail Identification Card will not enter areas requiring certification.
- 3) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the Houston METRO escort the required personal protective gear, which may include:
  - i. steel-toe or composite-toe boots,
  - ii. appropriate clothing for inspection to be completed,
  - iii. Houston METRO approved safety vests
  - iv. protective eyewear,
  - v. hearing protection,
  - vi. gloves, and
  - vii. hard hats/bump caps.
- 4) The TxDOT Lead Inspector will request a safety briefing from the Houston METRO escort to inform or discuss with TxDOT and Houston METRO personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 5) The inspection will begin only when the TxDOT Lead Inspector and the Houston METRO escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

# Category 2(B) Houston METRO Inspection Practices

TxDOT will schedule four inspections with notice at Houston METRO each calendar year. At its discretion, and as guided by METRO's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section above.

#### **Inspection Reports Procedure:**

TxDOT and Houston METRO will implement the following Inspection Report procedure.

- 1) The TxDOT PM or Contractor will email the Houston METRO CSO, Director of Safety, and Manager, Rail Safety a draft version of Inspection Report no later than 30 calendar days after completion of the inspection.
- 2) Houston METRO will have 10 calendar days to review and respond via email to the TxDOT SSO PM with any correction, clarification, or revision requests.
- 3) TxDOT will factor in Houston METRO's response and then send the final Inspection Report Houston METRO CSO via email not later 10 calendar days after Houston's draft Inspection Report response. TxDOT will also upload the Inspection Report into the Houston METRO RBI Module within the SSO Tracker system.

The Inspection Report provided to Houston METRO will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns.
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.

#### **Immediate Safety Concerns**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify inspection personnel present. Depending on the circumstances, the inspector may need to notify:

- Rail Control Center
- METRO Police Dispatch
- Law enforcement (e.g., 911)

The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are in a safe location and to reassess the safety of the inspection team. If the inspection cannot safely continue, then

TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### **Ensuring the Safety of Inspection Personnel:**

- 1) TxDOT or RTA inspection team members have the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include, but not limited to:
  - a. Security concerns such as criminal activity, suspicious person or package, or unsafe location,
  - b. Inclement weather or threat of inclement weather,
  - c. Personnel conduct including disregard for safety procedures, suspected fatigue, or impairment,
  - d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including, but not limited to:
    - i. Rail defects, track related damage, or obstructions.
    - ii. Overhead contact damage, malfunction, or other observed safety concern
    - iii. Signal related damage or malfunction,
    - iv. Vehicle damage or component malfunction
    - v. Facility safety concerns such as fire, electrical, or other life/safety concerns
  - e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or RTA personnel observing a safety concern must immediately report the safety concern to the TxDOT Lead Inspector.
- 3) The TxDOT Lead Inspector will immediately notify all personnel present, including TxDOT and RTA personnel.

- 4) The TxDOT Lead Inspector, with the assistance of RTA personnel, will initiate a safety pause and immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector, with assistance from RTA personnel, will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector will determine if additional RTA personnel must be immediately notified including Train Control, Houston METRO PD, Safety Department, or other staff.
- 8) The TxDOT Lead Inspector will contact Houston METRO contacts as described below:
  - a. METRO Rail Control Center
  - b. Houston METRO Police:
    - i. Emergency
    - ii. Non-emergency
  - c. Safety staff
  - d. Other designated staff
- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or RTA personnel may cancel the inspection and depart Houston METRO property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and RTA, that the issue is has been resolved, and the inspection will resume.

#### **Communicating Safety Concerns to RTA**

- 1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, via email within 24 hours, and as part of the inspection report.
- 2) Within 24 hours of inspection conclusion, the TxDOT Lead Inspector will send via email to the Chief Safety Officer, Director of Safety, and Manager, Rail Safety, a summary of the safety concern observed, an explanation of why it is a safety concern, and photographs or other documentation pertinent to the concern.
- 3) TxDOT will also include the immediate safety concern within the inspection report.

4) TxDOT will coordinate with the CSO and safety staff to ensure the safety concern is managed in accordance with safety risk management requirements within the SSO Program Standard and METRO's PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from RTA personnel including RTA safety staff or the RTA safety committee.

#### Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure will define the Houston METRO equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT may be consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, and personnel that is part of Houston METRO's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection. Houston METRO's data used for the identification and assessment of safety risk is also subject to inspection by TxDOT.

The Houston METRO rail system is comprised of the following areas:

- 1) Rail Vehicles includes 90 light rail vehicles and non-revenue/maintenance vehicles.
- 2) Track inspection and maintenance consists of 43.6 miles mainline and yard track structures including ballasted track, embedded track, direct fixation track, and bridges.
- 3) Traction Power System consists of two functional subsystems: Traction Power Substations and Overhead Contact System.
- 4) Signals consist of interlockings, main line train control, conventional and audio track circuits, axle counters, highway crossings devices, centralized traffic control, PA/PIS, and cameras.
- 5) Facilities include stations, rail operation centers, storage yards, and landscaped rail medians.
- 6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

Additional Houston METRO practices are referenced within the Ongoing Monitoring section below.

### **Event Verification**

TxDOT and RTAs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT may also require information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair needed to return damaged items to service. TxDOT may verify repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the twoyear period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process:

- 1) The TxDOT PMs and SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into calendar guarters, and each quarter will be assigned a functional area of Houston METRO.
  - a. Houston METRO is functional areas include, but not limited to:
    - i. Track
    - ii. Signals

- iii. Traction Power Systems
- iv. Vehicles
- v. Facilities
- vi. Training
- vii. PTASP compliance, including associated documents, policies, SOPs, and practices.
- 3) During each quarter TxDOT will perform at least one inspection with notice to observe and inspect the functional area selected for review. The inspection may consist of the following activities, but not limited to:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of Safety event, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report within 30 days of monitoring activities.

#### **Defects and Corrective or Remedial Actions**

TxDOT may monitor RTA defect, corrective, and remedial action detection, tracking, and resolution as part of the data Houston METRO uses in the identification and assessment of safety risk RBI. TxDOT may track significant defects by number and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also result in documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

#### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures.
- FTA or SSO direction.

Hazards reported to TxDOT will be evaluated to determine needs for CAP creation. The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT to close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section 8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit monthly hazard logs that summarize safety risk management information including:

- Date issue discovered,
- Summary or description of safety risk, including location,
- Assessment including probability and severity,
- Responsible RTA department or employee tasked with resolving the issue,
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and

corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

# Category 3(a): Houston METRO Data Procedures

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between light rail and streetcar systems.

Light rail systems operate more vehicles per day, more hours per week, and over greater distances at higher speeds. As a light rail system, Houston METRO will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and Houston METRO will share data according to the procedures below.

#### **Data Submission Method, Schedule, and Acceptable Formats:**

- 1) Houston METRO shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) Houston METRO will submit data as follows:

#### a. Safety Data:

- i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Monthly: 30 calendar days after the end of the month.

#### b. Maintenance and Inspection Data:

- i. Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30th.
  - 2. Quarter 2: Apr, May, and Jun. Data due on July 30th.
  - 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30<sup>th</sup>.
  - 4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30th.
- 3) Data shall be submitted in the SSO Tracker system in the following acceptable formats:

- Microsoft Excel
- b. .CSV files
- Tableau
- d. Other formats agreed upon.

#### **Safety Data**

Each month Houston METRO will submit safety data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. Safety data may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses. Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting. TxDOT will not request METRO to resubmit data already in TxDOT's possession. METRO will submit Safety data each month using the procedure below.

- 1) The Director of Safety or Rail Safety Manager will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 calendar days after the end of month.
- 2) Safety Data sets, including summary reports, used to identify hazards and analyze, assess, and mitigate safety risk submitted by Houston METRO will include:
  - a. Summary Report of safety events from Risk Management Information System (RMIS)
  - b. Near-miss Records.
  - Train Control Center logs
  - d. SAP database- hazard log information
  - e. Tableau trend analysis- 12-Month Rolling Average
  - Safety committee minutes
  - Labor Management Safety Committee Minutes
  - h. FTA/PMOC Monthly Review Meeting Presentations
  - FTA/PMOC Quarterly Review Meeting Presentations i.
- 3) Safety Data TxDOT possesses and will use as RBI data:
  - a. Accidents investigation reports
  - b. SSO reportable hazards,

- c. RTA internal hazard logs,
- d. Corrective action plans,
- e. Safety risk mitigations
- NTD data f.
- g. SSO Triennials Audit Reports
- h. Internal Safety Review Reports
- i. Public Safety, Customer Service & Operations Monthly Report (METRO Board Committee)

#### **Maintenance and Inspection Data**

Each quarter Houston METRO will submit maintenance and inspection data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. METRO will submit Safety data quarterly using the procedure below.

- 1) The Director of Safety or Manager, Rail Safety will submit maintenance and inspection data sets in the SSO Tracker system no later than 30 calendar days after the end of quarter.
- 2) Maintenance and Inspection data sets, including summary data used to identify hazards and analyze, assess, and mitigate safety risk may include:
  - a. Records of failures and defects
  - b. Work Orders
- 3) Maintenance and Inspection Data TxDOT possesses and will use as RBI data:
  - a. SSO Inspection Reports completed quarterly
  - b. SSO Triennials Audit Reports
  - c. Internal Safety Review Reports
  - d. Labor Management Safety Committee minutes
  - e. Employee reporting

		Office		
Name	Job Title	Phone	Mobile	Email
Boukhriss,	Director of Safety	(713)739-	(713)380-	mohammed.boukhriss@rid
Mohammed		3892	8579	emetro.org
Garcia, Lidia	Safety Compliance &Analysis Administrator	(713)615- 6428	N/A	lidia.garcia@ridemetro.org
Denny, Thomas	Manager, Rail Safety	(713)652- 8921	(832)491- 7033	thomas.denny@ride metro.org
Osorio, Santiago	Chief Safety Officer	(713) 615- 7011	(832)870- 8224	santiago.osorio@rideme tro.org
Rail Control Center	Chief Controller on duty	(713)843- 5499		
METRO Police Department	Non-emergency Number	(713)224- 2677		

## **Key Addresses:**

Admin offices: 1900 Main St, Houston, TX 77002 (Lobby)

Rail Operations Center: 1601 W. Bellfort Ave, Houston TX 77054 S&I Facility: 5880 Harrisburg,

Houston, TX 77011

Rail Control Center: Houston TranStar, 6922 Katy Rd. Houston, TX 77024 Grade Crossings: Nearest

public sidewalk adjacent to the crossing.

Stations: Within the publicly accessible platform area

# **Dallas Streetcar**

The TxDOT SSO and Dallas Streetcar Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT, City of Dallas, and DART staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT, City of Dallas, and DART staff. The following procedures will be reviewed and if necessary, updated annually using a collaborative process defined within the Program Standard and PTASP.

#### **Dallas Streetcar System Overview**

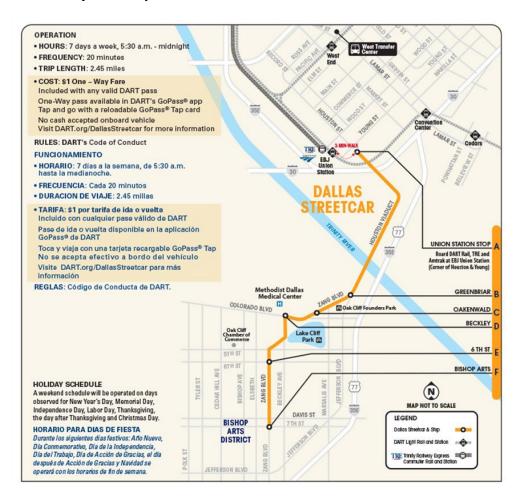
The Dallas Streetcar is a modern streetcar system to operates 4 streetcars to serve 6 stations along a 2.45 of track between Union Station and Bishop Arts across the Trinity River in Dallas, Texas. The streetcars are electric-powered and run on both an overhead contact system (OCS) and car-borne batteries, the combination of which power the streetcar propulsion. The streetcars operate on embedded surface rail in an urban environment with line-of-sight and bar signals tied to civil traffic signal system.

The Dallas Streetcar is owned by the City of Dallas (COD) but is operated and maintained by Dallas Area Rapid Transit (DART) through an interlocal agreement at its Central Rail Operating Facility (CROF). DART provides staffing for operations, maintenance, safety, and remaining administrative functions.

#### **Dallas Streetcar Service Summary**

Line	Days Operated	Hours Operated	Headways
Streetcar	Monday to Sunday	5:30am to Midnight	Every 20 minutes

## **Dallas Streetcar System Map**



# Category 2(a): Dallas Streetcar Property Access and Inspection **Procedures**

The following procedures apply to TxDOT's access to Dallas Streetcar (DSC) to infrastructure, equipment, records, personnel, and data.

#### **Scheduling Inspections:**

TxDOT will schedule a minimum of four inspections with notice per year at the Dallas Streetcar. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter.

At its discretion, and as guided by the Dallas Streetcar's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

#### **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 calendar day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection which may require additional time to accommodate data requests and securing track allocation, if necessary.

Inspection with Notice (Announced) Procedure and Timeline:

- 1) The TxDOT Lead Inspector will notify the CSO, Director of Safety, and Rail Safety Manager by email 1 calendar day or more before intended inspection. (Contact information provided with Key Contact section)
  - a. Chief Safety Officer
  - b. Director of Safety
  - c. Rail Safety Manager
- 2) The TxDOT Lead Inspector may also call Dallas Streetcar staff to plan inspection activities and discuss required data or track allocation.
  - a. In accordance with DART policy, DART Agency Safety & Compliance personnel who are Roadway Transit Worker Protection (RTRWP)-certified may escort TxDOT inspection team personnel along the DART right-of-way for up to 30 minutes at a time without requiring prior track allocation.
  - b. For inspection activities requiring prior track allocation, such as inspection activities requiring the inspection team to be in Dallas Streetcar right-of-way for over 30 minutes, the TxDOT inspection team will submit a request to DART for track

allocation. In accordance with DART policy, the inspection team will submit the track allocation request to DART no later than DART's 12:00 noon Central Time Tuesday for that week's track allocation. TxDOT will submit this request the week prior to the week inspection activities will take place. DART's track allocation meeting takes place weekly on Wednesdays at 2:00 pm Central Time, at which time DART will assign track allocation activities.

- 3) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 4) The TxDOT inspection team will gather at the agreed upon location at the date and time of the inspection.
- 5) Inspections with notice will begin at the agreed upon time.
  - a. Unless otherwise specified, inspections will begin at DART's CROF maintenance facility, which is also the Dallas Streetcar maintenance facility.

#### Scheduling Inspections Without Notice

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel of the intent to conduct an unannounced inspection. TxDOT will abide by each RTA's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

Inspections Without Notice Procedure and Timeline:

- 1) The TxDOT Lead Inspector will notify the following RTA staff using contact information at the end of these procedures:
  - a. CSO,
  - b. Director of Safety, and
  - c. Rail Safety Manager.
  - d. City of Dallas Streetcar Representative
  - e. Director, Reliability Engineering & Streetcar
  - f. DART Safety On-Call Staff Member
- 2) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins.

- a. The inspection team will gather at DART's CROF maintenance facility, which is also the Dallas Streetcar maintenance facility.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and the inspection must begin within 2 hours or less of TxDOT Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide notifications as described in the Notifications sections above. Notifications, both with and without notice, will contain the following information, but not limited to:

- inspection agenda,
- inspection purpose,
- risk prioritization,
- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

#### Access procedures, including all areas, and required escorts:

TxDOT SSO staff and SSO Support Contractors have full access through key card and badge to DART's property, including infrastructure, equipment, records, facilities, data, and personnel. However, TxDOT will not attempt to access DART property, including hazardous or security sensitive areas, without an escort.

Hazardous areas may include right-of-way, yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations or police activity associated from safety events.

When arriving at the RTA's property for inspections, both with and without notice, TxDOT inspectors will gather at an agreed upon locations such as a main entrance, reception area, or other area requested by the RTA, and await an RTA escort.

- 1) The TxDOT inspectors will gather in a safe location at the time stated to in the notification and await the arrival of DART escorts. The following locations shall serve as gathering spots:
  - a. Admin offices.

- b. Maintenance yard.
- c. Storage Yard.
- d. Grade Crossings. Meet DART personnel at DART CROF, then deploy to grade crossing.
- e. Stations. Within the publicly accessible platform area of selected station
- 2) RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 3) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspection must begin within 3 hours or less of TxDOT Inspections notification.

If track allocation is need then TxDOT will follow DART's track allocation. The process, pertinent details, and times are as follows:

- Normal track allocation:
  - Request deadline: 12:00 noon Tuesday
  - Meeting: 2:00 pm Central Wednesdays
- Emergency track allocation:
  - o DART department requesting emergency entry provides briefing to chief controller; qualified DART escort then calls in to TCC, escorts crew on right-ofway (ROW).
- Foul time:
  - DART Agency Safety & Compliance can call into TCC and request foul time. The request need not specify a specific duration, but foul time entry is permitted for only up to 30 minutes. Entries into the ROW over 30 minutes require establishment of a formal work zone.
    - DART counts any hold of rail traffic for over 10 minutes as a service delay.

# **Verification of SSO Inspector Certifications and Trainings:**

The following procedures apply to TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and RTA safety protocol and requirements.

1) The TxDOT Lead Inspector will conduct an inspection briefing with the DART escort to review and discuss the following inspection details:

- a. The TxDOT team lead will provide the agenda and verbally inform the DART of the TxDOT personnel present, inspection purpose, locations to inspect, and schedule.
- 2) The TxDOT Lead Inspector will next ensure each team member physically displays Roadway Worker Protection (RWP) verification to the DART escort. Displaying valid LRWPP demonstrates each inspection team member is authorized to enter locations requiring such certifications.
  - a. Inspectors unable to display valid LRWPP will not enter areas requiring certification.
- 3) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the DART escort the required personal protective gear, which may include, but not limited to:
  - i. name badges,
  - ii. RTRWP cards,
  - iii. steel-toe or composite-toe boots,
  - iv. appropriate clothing for inspection to be completed,
  - v. RTA approved safety vests (Class III Safety Vests)
  - vi. protective eyewear,
  - vii. hearing protection,
  - viii. gloves, and
  - ix. hardhats/bumps CAPs.
- 4) The TxDOT Lead Inspector will request a safety briefing from the DART escort to inform or discuss with TxDOT and DART personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 5) The inspection will begin only when the TxDOT Lead Inspector and the Dallas Streetcar escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

# Category 2(b): Dallas Streetcar Inspection Practices

TxDOT will schedule four inspections with notice at Dallas Streetcar each calendar year. At its discretion, and as guided by DSC's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section above.

#### **Inspection Reports Procedure:**

TxDOT and Dallas Streetcar will implement the following Inspection Report procedure.

- 1) TxDOT will email the DART CSO; DART Director of Agency Safety and Compliance; DART Senior Manager of Safety Data and Compliance; DART Senior Safety Program Managers; the DART AVP Streetcar-Systems Engineer; and City of Dallas Streetcar Representative a draft of Inspection Report no later than 30 calendar days after completion of the inspection.
- 2) DART and Dallas Streetcar will have 10 calendar days to review and respond via email to the TxDOT SSO PM and Contractor Project Manager with any correction, clarification, or revision requests.
- 3) TxDOT will factor in DART and Dallas Streetcar's response and the TxDOT will send the final Inspection Report Dallas Streetcar via email not later 10 calendar days after DART/DSC's draft Inspection Report response.
- 4) TxDOT will also upload the Inspection Report into the Dallas Streetcar RBI Module within the SSO Tracker system.

#### **Inspection Reports:**

TxDOT will prepare an Inspection Report and complete the procedure as described in this section. The Inspection Report provided to Dallas Streetcar will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns.
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.
- 1) The TxDOT SSO Program Manager will draft and transmit via email a draft Inspection Report to Dallas Streetcar CSO, Director or Safety, and Rail Safety Manager no later than 30 calendar days after the conclusion of the Inspection. Inspection is considered conducted after the verbal debrief has been concluded by the TxDOT Lead Inspector.
- 2) The Dallas Streetcar CSO, Director of Safety, and Rail Safety Manager will review the draft Inspection Report and comment via email to the TxDOT SSO PM and Support Contractor Project Manager within 10 days of the date TxDOT transmitted the draft report.

3) TxDOT will review the comments and issue the final Inspection Report no later than 10 calendar days after DSC's deadline to submit comments. The TxDOT SSO PM and Support Contractor Project Manager will email the final Inspection Report via to the Dallas Streetcar CSO, Director or Safety, and Rail Safety Manager and upload the report into the SSO Tracker system.

#### **Immediate Safety Concerns**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring the safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify all TxDOT and personnel present. Depending on the circumstances, the inspector may need to notify:

- DART Train Control Center, Chief Controller on Duty
- DART Police
- DART Safety Staff on Call

The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are in a safe location and to reassess the safety of the inspection team. If the inspection cannot safely continue, then TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

### **Ensuring the Safety of Inspection Personnel:**

1) TxDOT or RTA inspection team members have the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include, but not limited to:

- a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
- b. Inclement weather or threat of inclement weather,
- c. Personnel conduct including disregard for safety procedures or suspected fatigue or impairment,
- d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including, but not limited to:
  - i. Rail defects, track related damage, or obstructions.
  - ii. Overhead contact damage, malfunction, or other observed safety concern
  - iii. Signal related damage or malfunction,
  - iv. Vehicle damage or component malfunction
  - v. Facility safety concerns such as fire, electrical, or other life/safety concerns
- e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or RTA personnel observing a safety concern must immediately report the safety concern to the TxDOT Lead Inspector and RTA escort.
- 3) The TxDOT Lead Inspector will immediately notify all personnel present, including TxDOT and RTA personnel.
- 4) The TxDOT Lead Inspector and RTA personnel will immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector will determine if additional RTA must be immediately notified including Dallas Streetcar Police, Train Control, or the Chief Safety Officer.
- 8) The TxDOT Lead Inspector will contact DART contacts as described below:
  - a. DART Police:
    - i. Emergency.

- ii. Non-emergency.
- b. Train Control.
- c. DART Safety Staff on Call
- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or RTA personnel may cancel the inspection and depart the property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and RTA, that the issue is resolved, and the inspection will resume.
- 12) Inspection may resume upon resolution of safety concern.

#### **Communicating Safety Concerns to RTA**

- 1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, during the inspection conclusion, via email, and as part of the inspection report.
- 2) The TxDOT Lead Inspector will also explain any safety concerns discovered as part of a verbal debrief after the inspection is complete.
- 3) Within 24 hours of inspection conclusion, the TxDOT Lead Inspector will send via email to the DART CSO and designees the City of Dallas Department of Transportation Assistant Engineer, and DART AVP, Streetcar-Systems Engineering, a summary of the safety concern observed, an explanation of why it is a safety concern, and photographs or other documentation pertinent to the concern.
- 4) TxDOT will also include the immediate safety concern within the inspection report.
- 5) TxDOT will coordinate with the CSO and safety staff to ensure the safety concern is managed in accordance with safety risk management requirements within the Program Standard and PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from RTA personnel including RTA safety staff or the RTA safety committee.

#### Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure will define the Dallas Streetcar equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT will consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, personnel, and data of Dallas Streetcar's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection.

The Dallas Streetcar rail system is comprised of the following areas:

- 1) Rail Vehicles includes 4 streetcar rail vehicles. The streetcars operate on embedded surface rail in an urban environment with line-of-sight and bar signals tied to civil traffic signal system.
- 2) Track inspection and maintenance consists of 2.45 miles spanning 6 stations in addition to yard track structures including ballasted track, embedded track, direct fixation track, and bridges.
- 3) Traction Power System consists of two functional subsystems: Traction Power Substations and Overhead Contact System.
- 4) Signals consists of interlockings, main line train control, conventional and audio track circuits, axle counters, highway crossings devices, centralized traffic control, PA/PIS, and cameras.
- 5) Facilities include stations, rail operation centers, and storage yards. (Note: Dallas Streetcars shares DART's CROF maintenance facility with DART light rail)
- 6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

#### **Event Verification**

TxDOT and RTAs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes safety events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT also requires the RTAs to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair need to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the two-year period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process:

- 1) TxDOT and the SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into quarters, and each quarter will be assigned a functional area of Dallas Streetcar.
  - a. Dallas Streetcar is functional areas include:
    - i. Track
    - ii. Signals
    - iii. Traction Power Systems
    - iv. Vehicles
    - v. Facilities
    - vi. Training
    - vii. PTASP compliance, including plans, documents, policies, and procedures.

- 3) During the quarter, TxDOT will perform an announced inspection to observe and inspect the functional area selected for review. The inspection will consist of the following activities, but not limited to:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of safety events, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report 30 calendar days after monitoring activities.

#### **Defects and Corrective or Remedial Actions**

TxDOT will monitor RTA defects, corrective and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT requires RTAs to provide share data on the most severe defects discovered and the efforts leading to defect resolution. TxDOT will track defects by number and severity to ensure each

RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

#### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from, but not limited to:

- investigations,
- risk-based investigations
- hazard management process,

- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures, or
- FTA or SSO direction.

Hazards identified for mitigation reported to TxDOT will be evaluated to determine needs for CAP creation. The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section 8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit quarterly logs that summarize safety risk management information including:

- Date issue discovered.
- Summary or description of safety risk, including location.
- Assessment including probability and severity.
- Responsible RTA department or employee tasked with resolving the issue.
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

# **Category 3(a): Dallas Streetcar Data Procedures**

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between streetcar and light rail systems.

Light rail systems operate more vehicles per day, more hours per week, and over greater distances at higher speeds. As a streetcar system, Dallas Streetcar operates less vehicles per day, less hours per week, and over shorter distances as slower speeds.

Dallas Streetcar will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and Dallas Streetcar will share data according to the procedures below.

#### **Data Submission Method, Schedule, and Acceptable Formats:**

- 1) Dallas Streetcar shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) Dallas Streetcar will submit data as follows:

#### a. Safety Data:

- i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Monthly: 30 calendar days after the end of the month.

#### b. Maintenance and Inspection Data:

- Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30th.
  - 2. Quarter 2: Apr, May, and Jun. Data due on July 30<sup>th</sup>.
  - 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30<sup>th</sup>.
  - 4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30<sup>th</sup>.
- 3) Data shall be submitted in the SSO Tracker system in the following acceptable formats:
  - a. Microsoft Excel
  - b. .CSV files

- Microsoft Word
- d. Tableau
- e. Other formats agreed upon such as PDFs, handwritten records, etc.

#### **Safety Data**

Each month Dallas Streetcar will submit safety data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. Safety data may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses. Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting.

DSC will submit Safety data each quarter for the requested segments using the procedure below.

- 1) The Director of Safety or Safety Program Manager will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 days after the end of the month, unless a different interval is noted.
- 2) Safety Data sets, including summary reports, submitted by Dallas Streetcar will include:
  - a. Operations Control Center (OCC) Logs (submitted daily)
  - b. Safety committee minutes
  - c. Key performance indicators
- 3) Safety Data sets TxDOT possesses and will use include, but not limited to:
  - a. Accidents,
  - b. SSO reportable hazards,
  - c. RTA internal hazard logs,
  - d. Correct action plans,
  - e. Safety risk mitigations,
  - f. NTD data
  - SSO Triennials Audit Reports
  - h. Internal Safety Review Reports

## **Maintenance and Inspection Data**

Each quarter DART/Dallas Streetcar will submit maintenance and inspection data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. DART/Dallas Streetcar will submit Safety data quarterly using the procedure below.

- 1) The Director of Safety or Safety Program Manager will submit data sets in the SSO Tracker system no later than 30 calendar days after the end of quarter.
- 2) Maintenance and Inspection data sets, including summary data, used to identify hazards and analyze, assess, and mitigate safety risk may include:
  - a. Records of failures and defects
  - b. Work Orders
- 3) Maintenance and Inspection Data TxDOT possesses and will use as RBI data:
  - a. SSO Inspection Reports completed quarterly
  - b. SSO Triennials Audit Reports
  - c. Internal Safety Review Reports

## **Key Dallas Streetcar Contact Information and Addresses**

Name	Job Title	Office Phone	Mobile	Email
Donna Johnson	Chief Safety Officer	(214) 749-3334	(214)837-	djohnson2@dart.
			2470	<u>org</u>
Bret Clayborne	Assistant Vice President, Agency	(214) 749-3685	(945)536-	bclayborne@dart
	Safety & Compliance		0645	.org
Meselech Damte	Senior Manager, Safety Data	(214) 749-3304	(214) 952-	mdamte@dart.or
	&Compliance		1648	<u>g</u>
Julio Aguilar	Director Agency Safety & Compliance		(469) 815- 4275	JAguilar@dart.or g
William	Senior Safety Program Manager	(214) 654-4207	(469) 815-	wsteinberger
Steinberger			2951	@dart.org
Kris Johnson	City of Dallas Streetcar		(214) 713-	kristopher.johns
	Representative		4173	on@dallas.gov
Jamie Aleman	Director Reliability Engineering		(469) 394-	
	& Streetcar		8837	<u>Jaleman@dart.co</u> <u>m</u>
On Call Safety	DART On-Call Staff Member		(469) 271-	
Staff			4083	
DART Train	Chief Controller on duty	(214) 928-6067		
Control (TCC)				
DART Police	Non-emergency Number	(214) 928-6300		

## **Key Addresses:**

Admin offices: DART Headquarters, 1401 Pacific Ave., Dallas, TX 75202

Maintenance yard: DART Central Rail Operations Facility (CROF), 3021 Oak Lane, Dallas, TX 75226

Storage Yard: DART CROF, 3021 Oak Lane, Dallas, TX 75226

Grade Crossings: Meet DART personnel at DART CROF, 3021 Oak Lane, Dallas, TX 75226, and then deploy to grade crossings from CROF.

Stations: Meet DART personnel at DART CROF, 3021 Oak Lane, Dallas, TX 75226, and then deploy to station from CROF.

# **Dallas Area Rapid Transit**

The TxDOT SSO and Dallas Area Rapid Transit Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT and DART staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT and DART staff. The following procedures will be reviewed annually and if necessary, updated using a collaborative process defined within the Program Standard and PTASP.

#### **Dallas Area Rapid Transit System Overview**

The Dallas Area Rapid Transit (DART) rail system is a modern light rail system operating four light rail lines serving 102 stations with approximately 93 rail miles located throughout the Dallas-Fort Worth Metroplex. Rail lines include the Red, Blue, Green, and Orange Lines. The light rail vehicles used in this system are Siemens S70 and Kinki Sharyo vehicles, which are electrically powered and operate on a standard gauge track. Each vehicle has a capacity of up to 242 passengers.

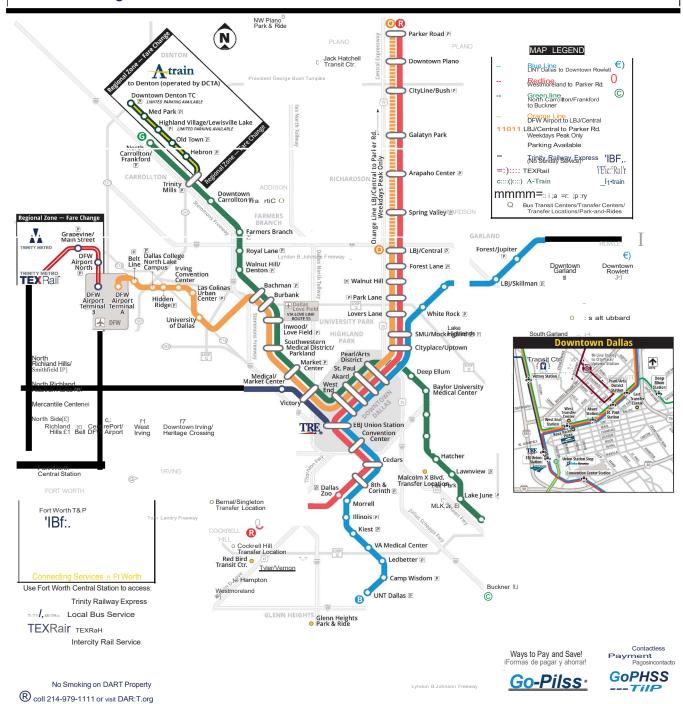
The DART system uses various signaling technologies to ensure safe and efficient operations. The specific signal type used may vary depending on the different sections of the rail network. Common signaling systems include Auto Blocking Signaling (ABS), Automatic Train Protection (ATP) and Positive Train Control (PTC) systems. It should be noted that the below Figure includes the Trinity Rail Express and the DCTA A-train which are not portions of the rail system that TxDOT oversees.

#### **DART Service Summary**

Line	Days Operated	Hours Operated	Headways
Red	Monday to Friday	5am to 1am	Mon – Fri: 15 minutes
	Saturday and Sunday	3am to 1am	Sat – Sun: 20 minutes
Blue	Monday to Sunday	3am to 2am	Mon – Fri: 15 minutes
			Sat - Sun: 20 minutes
Green	Monday to Friday	3am to 2am	Mon – Fri: 15 minutes
	Saturday and Sunday	4am to 2am	Sat – Sun: 20 minutes
Orange	Monday to Sunday	4am to 2am	Mon – Fri: 15 minutes
			Sat – Sun: 20 minutes

#### **DART System Map**

# Rail System Map



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## Category 2(a): DART Property Access and Inspection Procedures

The following procedures apply to TxDOT's access to DART infrastructure, equipment, records, personnel, and data.

#### **Scheduling Inspections:**

TxDOT will schedule a minimum of four inspections with notice per year at the DART. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter.

At its discretion, and as guided by the DART's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

#### **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 calendar day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection which may require additional time to accommodate data requests and securing track allocation, if necessary.

Inspection with Notice (Announced) Procedure and Timeline:

- 1) The TxDOT Lead Inspector will notify the CSO, Director of Safety, and Rail Safety Manager by email 1 day or more before intended inspection. (Contact information provided with Key Contact section)
  - a. Chief Safety Officer
  - b. Director of Safety
  - c. Rail Safety Manager
- 2) The TxDOT Lead Inspector may also call DART staff to plan inspection activities and discuss required data or track allocation.
  - a. In accordance with DART policy, DART Agency Safety & Compliance personnel who are Roadway Transit Worker Protection (RTRWP)-certified may escort TxDOT inspection team personnel along the DART right-of-way for up to 30 minutes at a time without requiring prior track allocation.
  - b. For inspection activities requiring prior track allocation, such as inspection activities requiring the inspection team to be in DART right-of-way for over 30 minutes, the TxDOT inspection team will submit a request to DART for track allocation. In accordance with DART policy, the inspection team will submit the track allocation request to DART no later than DART's 12:00 noon Central Time Tuesday for that

week's track allocation. TxDOT will submit this request the week prior to the week inspection activities are to take place. DART's track allocation meeting takes place weekly on Wednesdays at 2:00 pm Central Time, at which time DART will assign track allocation activities.

- 3) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 4) The TxDOT inspection team with gather at agreed upon location at the date/time of the inspection.
- 5) Inspections with notice will begin at the agreed upon time.
  - a. Unless otherwise specified, inspections will begin at DART's CROF maintenance facility, which is also the DART maintenance facility.

#### **Scheduling Inspections Without Notice**

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel of the intent to conduct an unannounced inspection. TxDOT will abide by each RTA's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

#### **Inspections Without Notice Procedure and Timeline:**

- 1) The TxDOT Lead Inspector will notify the:
  - a. Chief Safety Officer
  - b. Director of Safety, and
  - c. Rail Safety Manager.
  - d. City of DART Representative
  - e. DART Safety On-Call Staff Member
- 2) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins.
  - a. The inspection team will gather at DART's CROF maintenance facility, which is also the DART maintenance facility.

4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and the inspection must begin within 2 hours or less of TxDOT Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide notifications as described in the Notifications sections above. Notifications, both with and without notice, will contain the following information, but not limited to:

- inspection agenda,
- inspection purpose,
- risk prioritization,
- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

#### Access procedures, including all areas, and required escorts:

The TxDOT SSO staff and SSO Support Contractors have full access through key card or badge to DART's property, including infrastructure, equipment, records, facilities, data, and personnel. However, TxDOT will not attempt to access DART property, including hazardous or security sensitive areas, without an escort.

Hazardous areas may include right-of-way, yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations/crime scenes associated from safety events.

When arriving at RTA's property for inspections, both with and without notice, TxDOT inspectors will gather at an agreed upon locations such as a main entrance, reception area, or other area requested by the RTA, and await an RTA escort.

- 4) The TxDOT inspectors will gather in a safe location at the time stated to in the notification and await the arrival of DART escorts. The following locations shall serve as gathering spots:
  - a. Admin offices:
  - b. Maintenance yard:
  - c. Storage Yard:

- d. Grade Crossings: Meet DART personnel at DART CROF, then deploy to grade crossing.
- e. Stations: within the publicly accessible platform area of selected station
- 5) The RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 6) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspection must begin within 3 hours or less of TxDOT Inspections notification.

If track allocation is need then TxDOT will follow DART's track allocation. The process, pertinent details, and times are ss as follows:

- Normal track allocation:
  - Request deadline: 12:00 noon Tuesday
  - Meeting: 2:00 pm Central Wednesdays
- Emergency track allocation:
  - DART department requesting emergency entry provides briefing to chief controller; qualified DART escort then calls in to TCC, escorts crew on right-ofway (ROW).
- Foul time:
  - DART Agency Safety & Compliance can call into TCC and request foul time. The request need not specify a specific duration, but foul time entry is permitted for only up to 30 minutes. Entries into the ROW over 30 minutes require establishment of a formal work zone.
    - DART counts any hold of rail traffic for over 10 minutes as a service delay.

#### **Verification of SSO Inspector Certifications and Trainings:**

The following procedures apply to TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and RTA safety protocol and requirements.

- 1) The TxDOT Lead Inspector will conduct an inspection briefing with the DART escort to review and discuss the following inspection details:
  - a. The TxDOT team lead will provide the agenda and verbally inform the DART of the TxDOT personnel present, inspection purpose, locations to inspect, and schedule.

- 2) The TxDOT Lead Inspector will next ensure each team member physically displays Roadway Worker Protection (RWP) verification to the DART escort. Displaying valid LRWPP demonstrates each inspection team member is authorized to enter locations requiring such certifications.
  - a. Inspectors unable to display valid LRWPP will not enter areas requiring certification.
- 3) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the DART escort the required personal protective gear, which may include:
  - i. name badges,
  - ii. RWP cards,
  - iii. steel-toe or composite-toe boots,
  - iv. appropriate clothing for inspection to be completed,
  - v. RTA approved safety vests
  - vi. protective eyewear,
  - vii. hearing protection,
  - viii. gloves, and
  - ix. hardhats/bumps CAPs.
- 4) The TxDOT Lead Inspector will request a safety briefing from the DART escort to inform or discuss with TxDOT and DART personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 5) The inspection will begin only when the TxDOT Lead Inspector and DART escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

# Category 2(b): DART Inspection Practices SOP

TxDOT will schedule four inspections with notice at the DART each calendar year. At its discretion, and as guided by the DART's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section above.

#### **Inspection Reports Procedure:**

TxDOT will prepare an Inspection Report and complete the procedure as described in the is section. The Inspection Report provided to the RTA which will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns.
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.
- 1) The TxDOT SSO Program Manager will draft and transmit via email a draft Inspection Report to the RTA CSO, Director or Safety, and Rail Safety Manager no later than 30 calendar days after the conclusion of the Inspection. Inspection is considered conducted after the verbal debrief has been concluded by the TxDOT Lead Inspector.
- 2) The RTA CSO, Director or Safety, and Rail Safety Manager will review the draft Inspection Report and comment via email to the TxDOT SSO PM and Support Contractor Project Manager within 10 calendar days of the date TxDOT transmitted the draft report.
- 3) TxDOT will review the comments and issue the final Inspection Report no later than 10 calendar days after the RTA's deadline to submit comments. TxDOT SSO PM and Support Contractor Project Manager will email the final Inspection Report via to the RTA CSO, Director or Safety, and Rail Safety Manager. TxDOT will upload the Inspection Report into the RBI Module within the SSO Tracker system.

#### **Immediate Safety Concerns**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring the safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify all TxDOT and personnel present. Depending on the circumstances, the inspector may need to notify:

- DART Train Control Center, Chief Controller on Duty
- DART Police
- DART Safety Staff on Call

The TxDOT Lead Inspector will work with RTA staff to ensure personnel are safe and to reassess the safety of the inspection team. If the inspection cannot safely continue, then TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### **Ensuring the Safety of Inspection Personnel:**

- 1) The TxDOT or RTA inspection team members have the right to raise a safety concern(s) at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include, but not limited to:
  - a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
  - b. Inclement weather or threat of inclement weather,
  - c. Personnel conduct including disregard for safety procedures or suspected fatigue or impairment,
  - d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including but not limited to:
    - i. Rail defects, track related damage, or obstructions.
    - ii. Overhead contact damage, malfunction, or other observed safety concern
    - iii. Signal related damage or malfunction,
    - iv. Vehicle damage or component malfunction
    - v. Facility safety concerns such as fire, electrical, or other life/safety concerns
  - e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or RTA personnel observing a safety concern(s) must immediately report the safety concern to the TxDOT Lead Inspector.

- 3) The TxDOT Lead Inspector will notify all personnel present, including TxDOT and RTA personnel.
- 4) The TxDOT Lead Inspector, with the assistance of RTA personnel, will initiate a safety pause and immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector will determine if additional RTA must be immediately notified including Dallas Streetcar Police, Train Control, or the Chief Safety Officer.
- 8) The TxDOT Lead Inspector will contact DART contacts as described below:
  - a. DART Police:
    - i. Emergency: 911
    - ii. Non-emergency (phone)
  - b. Train Control (phone)
  - c. DART Safety Staff on Call (phone)
- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or RTA personnel may cancel the inspection and depart the property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and RTA, that the issue has been resolved, and the inspection will resume.
- 12) Inspection may resume upon resolution of safety concern.

#### **Communicating Safety Concerns to RTA**

- 1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, during the inspection conclusion, via email, and as part of the inspection report.
- 2) The TxDOT Lead Inspector will also explain any safety concerns discovered as part of a verbal debrief after the inspection is complete.

- 3) Within 24 hours of inspection conclusion, the TxDOT Inspection Lead will send via email, to the CSO and Director of Safety, a summary of the safety concern observed, including details of what the safety concern, explanation of why it is a safety concern, photographs, or other documentation pertinent to the concern.
- 4) TxDOT will also include the immediate safety concern within the inspection report.
- 5) TxDOT will coordinate with the CSO and safety staff to ensure the safety concern is managed in accordance with safety risk management requirements within the Program Standard and PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from RTA personnel including RTA safety staff or the RTA safety committee.

#### Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure will define the DART equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT will consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, personnel, and data of the RTA's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection.

The DART rail system is comprised of the following areas:

- 1) Rail Vehicles includes 163 light rail vehicles.
- 2) Track inspection and maintenance consists of 93 miles spanning 102 stations in addition to yard track structures including ballasted track, embedded track, direct fixation track, and bridges.
- 3) Traction Power System consists of two functional subsystems: Traction Power Substations and Overhead Contact System.
- 4) Signals consists of interlockings, main line train control, conventional and audio track circuits, axle counters, highway crossings devices, centralized traffic control, PA/PIS, and cameras.
- 5) Facilities including stations.
- 6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

#### **Event Verification**

TxDOT and RTAs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if a corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes safety events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT also requires the RTAs to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair need to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the twoyear period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process.:

- 1) The TxDOT and SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into quarters, and each quarter will be assigned a functional area of the RTA.

- a. DARTS's functional areas include:
  - i. Track
  - ii. Sianals
  - iii. Traction Power Systems
  - iv. Vehicles
  - v. Facilities
  - vi. Training
  - vii. PTASP compliance, including plans, documents, policies, and procedures.
- 3) During the quarter, TxDOT will perform an announced inspection to observe and inspect the functional area selected for review. The inspection will consist of the following activities:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of safety events, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report within 30 days of monitoring activities.

#### **Defects and Corrective or Remedial Actions**

TxDOT will monitor RTA defects, corrective and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT requires RTAs to provide share data on the most severe defects discovered and the efforts leading to defect resolution. TxDOT will track defects by number and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

#### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from, but not limited to:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures, or
- FTA or SSO direction.

The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT to close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section 8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit quarterly logs that summarize safety risk management information including:

- Date issue discovered.
- Summary or description of safety risk, including location.
- Assessment including probability and severity.
- Responsible RTA department or employee tasked with resolving the issue.
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and

documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

## Category 3(a): DART Data Procedures

As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between light rail and streetcar systems.

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. DART operates less vehicles per day, less hours per week, and over shorter distances as slower speeds. As a light rail system, DART will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and DART will share data according to the procedures below.

#### Data Submission Method, Schedule, Quantity, and Acceptable Formats:

- 1) DART shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) DART will submit data no later than 30 calendar days after the end of the reporting period.

#### a. Safety Data:

- i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Monthly: 30 calendar days after the end of the month.

#### b. Maintenance and Inspection Data:

- Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30th.
  - 2. Quarter 2: Apr, May, and Jun. Data due on July 30th.
  - 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30th.

4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30th.

#### c. Additional Safety Data:

- i. As requested.
- 3) Data shall be submitted in the SSO Tracker system in the following acceptable formats:
  - a. Microsoft Excel
  - b. .CSV files
  - c. Tableau
  - d. Other formats agreed upon.

#### **Safety Data**

Each month the RTA will submit safety data summaries and detailed safety data sets, used to identify hazards, and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. Safety data sets may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses. Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting. The RTA will submit Safety data each month using the procedure below.

- 1) Director of Safety or Safety Program Manager will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 calendar days after the end of quarter, unless otherwise noted.
- 2) Safety Data sets, including summary reports, submitted by DART will include:
  - a. Unusual occurrence Logs (submitted daily)
  - b. Safety committee minutes
  - c. Key performance indicators
- 3) Safety Data sets TxDOT possesses and will use include:
  - a. Accidents,
  - b. SSO reportable hazards,
  - c. RTA internal hazard logs,
  - d. Corrective action plans,

- e. Safety risk mitigations,
- f. Near miss reporting,
- g. NTD data,
- h. SSO Triennials Audit Reports,
- i. Internal Safety Review Reports.

#### **Maintenance and Inspection Data**

Each quarter DART will submit maintenance and inspection data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. DART will submit maintenance and inspection data sets quarterly using the procedure below.

- 1) Director of Safety or Safety Program Manager will submit maintenance and inspection data in the RBI Module, Rail Vehicle section in SSO Tracker no later than 30 days after the end of quarter.
- 2) Maintenance and Inspection data sets, including summary data, used to identify hazards and analyze, assess, and mitigate safety risk may include:
  - f. Records of failures and defects
  - g. Work Orders
- 3) Maintenance and Inspection Data TxDOT possesses and will use as RBI data:
  - a. SSO Inspection Reports completed quarterly
  - b. SSO Triennials Audit Reports
  - c. Internal Safety Review Reports
  - d. Safety Committee minutes

## **Key DART Contact Information and Addresses**

Name	Job Title	Office	Mobile	Email
		Phone		
		(24.4) 7.40	(0.4.4) 0.07	diabassa 2@dart o
Donna Johnson	Chief Safety Officer	(214) 749-	(214) 837-	djohnson2@dart.o
		3334	2470	<u>rg</u>
Bret Clayborne	Assistant Vice President, Agency	(214) 749-	(945) 536-	bclayborne@dart.
	Safety & Compliance	3685	0645	<u>org</u>
Meselech Damte	Senior Manager, Safety Data	(214) 749-	(214) 952-	mdamte@dart.org
	&Compliance	3304	1648	
Julio Aguilar	Director Agency Safety & Compliance		(469) 815- 4275	JAguilar@dart.com
William	Senior Safety Program Manager	(214) 654-	(469) 815-	wsteinberger@dar
Steinberger		4207	2951	t.org
On Call Safety	DART On-Call Staff Member		(469) 271-	
Staff			4083	
DART Train Control	Chief Controller on duty	(214) 928-		
(TCC)		6067		
DART Police	Non-emergency Number	(214) 928-		
		6300		
		1		

## **Key Addresses**

Admin offices: DART Headquarters, 1401 Pacific Ave., Dallas, TX 75202

Maintenance yard: DART Central Rail Operations Facility (CROF), 3021 Oak Lane, Dallas, TX 75226

Storage Yard: DART CROF, 3021 Oak Lane, Dallas, TX 75226

Grade Crossings: Meet DART personnel at DART CROF, 3021 Oak Lane, Dallas, TX 75226, and then deploy to grade crossings from CROF.

Stations: Meet DART personnel at DART CROF, 3021 Oak Lane, Dallas, TX 75226, and then deploy to station from CROF.

# **El Paso Streetcar**

The TxDOT SSO and El Paso Streetcar Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT and EPSC staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT and EPSC staff. The following procedures will be reviewed annually and if necessary, updated using a collaborative process defined within the Program Standard and PTASP.

#### **El Paso Streetcar System Overview**

The El Paso Streetcar is a heritage streetcar system that operates in downtown El Paso, Texas. The streetcar vehicles used in this system are vintage Presidents' Conference Committee (PCC) streetcars, which were originally built in the 1930s and 1940s. The 4.8-mile route serving 27 stops serves the community from Wednesday to Saturday. The streetcars have been restored and equipped with modern amenities such as air conditioning, wheelchair access, and bike racks. The system includes signaling and communication systems, platform doors, and fare collection equipment.

#### **El Paso Streetcar Service Summary**

Line	Days Operated	Hours	Headways
		Operated	
Streetcar	Monday-Thursday Friday Saturday Sunday	7am to 7pm 7am to 11pm 7am to 11pm Noon to 6pm	Every 20 minutes

## **EPSC System Map**



# Category 2(a): El Paso Streetcar Property Access and Inspection **Procedures**

The following procedures apply to TxDOT's access to El Paso Streetcar (EPSC) infrastructure, equipment, records, personnel, and data.

#### **Scheduling Inspections:**

TxDOT will schedule a minimum of four inspections with notice per year with the El Paso Streetcar. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter.

At its discretion, and as guided by the EPSC's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

#### **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 calendar day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection, which may require additional time to accommodate data requests and securing track allocation, if necessary.

#### **Inspection with Notice (Announced) Procedure and Timeline:**

- 1) The TxDOT Lead Inspector will notify the following individuals by email 1 day or more before intended inspection. (Contact information provided with Key Contact section)
  - a. Chief Safety Officer
  - b. Rail Safety Officer
- 2) The TxDOT Lead Inspector may also call EPSC staff to plan inspection activities and discuss required data or track allocation.
- 3) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 4) The TxDOT inspection team with gather at the agreed upon location at the date and time of the inspection.
- 5) Inspections with notice will begin at the agreed upon time.

#### **Scheduling Inspections Without Notice**

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel of the intent to conduct an unannounced inspection. TxDOT will abide by each RTA's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

#### **Inspections Without Notice Procedure and Timeline:**

- 1) The TxDOT Lead Inspector will notify the:
  - a. Chief Safety Officer,
  - b. Streetcar Safety Manager,
  - c. Streetcar Superintendent of Operations by email, telephone, or in-person at the time of the inspection.
- 2) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins.
  - a. The inspection team will gather at EPSC's maintenance facility.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and the inspection must begin within 2 hours or less of TxDOT Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide notifications as described in the Notifications sections above. Notifications, both with and without notice, will contain the following information:

- inspection agenda,
- inspection purpose,
- risk prioritization,
- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

#### Access procedures, including all areas, and required escorts:

The TxDOT SSO staff and SSO Support Contractors have full access through key card to EPSC's property, including infrastructure, equipment, records, facilities, data, and personnel. However, TxDOT will not attempt to access EPSC property, including hazardous or security sensitive areas, without an escort.

Hazardous areas may include right-of-way, yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations/crime scenes associated from safety events.

When arriving at the RTA's property for inspections, both with and without notice, TxDOT inspectors will gather at an agreed upon locations such as a main entrance, reception area, or other area requested by the RTA, and await an RTA escort.

- 1) The TxDOT inspectors will gather in a safe location at the time stated to in the notification and await the arrival of EPSC escorts. The following locations shall serve as gathering spots:
  - a. Maintenance and Storage Facility (MSF): 601-A Santa Fe St. El Paso, TX 79901
  - b. Grade Crossings: (nearest public sidewalk adjacent to the crossing)
  - c. Stations: (within the publicly accessible platform area)
- 2) The TxDOT Lead Inspector will facilitate team introductions between the TxDOT and El Paso Streetcar escorts and team
- 3) The RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspection must begin within 3 hours or less of TxDOT Inspections notification.

If track allocation is need then TxDOT will follow EPSC's track allocation. The process, pertinent details, and times are ss as follows:

- Normal track allocation:
- Emergency track allocation:
- Foul time:

In instances when track allocation or required escorts cannot accommodate an unannounced inspection TxDOT may consider rescheduling the inspection at a mutually agreeable time. In emergency or exigent circumstances TxDOT may invoke authorities necessary to cease operation (emergency order under TAC 7.95), gain emergency track allocation or foul time, and conduct inspections on TxDOT's schedule

#### **Verification of SSO Inspector Certifications and Trainings**

The following procedures apply to TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and EPSC safety protocol and requirements.

- 1) The TxDOT Lead Inspector will conduct an inspection briefing with the EPSC escort to review and discuss the following inspection details:
- 2) The TxDOT team lead will provide the agenda and verbally inform the RTA of the TxDOT personnel present, inspection purpose, locations to inspect, and schedule.
- 3) The TxDOT Lead Inspector will next ensure each team member physically displays Roadway Worker Protection (RWP) verification to the RTA escort. Displaying valid RWP demonstrates each inspection team member is authorized to enter locations requiring such certifications.
  - a. Inspectors unable to display valid RWP will not enter areas requiring certification.
- 4) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the DART escort the required personal protective gear, which may include:
  - a. name badges,
  - b. RWP cards,
  - steel-toe or composite-toe boots,
  - d. appropriate clothing for inspection to be completed,
  - e. RTA approved safety vests,
  - f. protective eyewear,
  - g. hearing protection,
  - h. gloves, and
  - hardhats/bumps CAPs.
- 5) The TxDOT Lead Inspector will request a safety briefing from the RTA escort to inform or discuss with TxDOT and RTA personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 6) The inspection will begin only when the TxDOT Lead Inspector and the RTA escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

## Category 2(b): EPSC Inspection Practices SOP

TxDOT will schedule four inspections with notice at El Paso Streetcar each calendar year. At its discretion, and as guided by EPSC's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the sections above.

#### **Inspection Reports Procedure**

TxDOT and the EPSC will implement the following Inspection Report procedure.

- 1) TxDOT will email the Streetcar Safety Manager, Chief Streetcar Officer, or Streetcar Superintendent of Operations a word version of Inspection Report no later than 30 days after completion of the inspection.
- 2) The RTA will have 10 days to review and respond via email to the TxDOT SSO PM and Contractor Project Manager with any correction, clarification, or revision requests.
- 3) TxDOT will factor in the RTA's response and the TxDOT will send the final Inspection Report via email not later than 10 days after the RTA's draft Inspection Report response.
- 4) TxDOT will also upload the Inspection Report into the RTA RBI Module within the SSO Tracker system.

The Inspection Report provided to the RTA which will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns,
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.

#### **Immediate Safety Concerns**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify all TxDOT and personnel present. Depending on the circumstances, the inspector may need to notify:

- dispatch,
- law enforcement personnel, or
- Streetcar Safety Manager

The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are in a safe location and to reassess the safety of the inspection team. If the inspection cannot safely continue, then TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### **Ensuring the Safety of Inspection Personnel:**

- 1) Inspection team members have the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include:
  - a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
  - b. Inclement weather or threat of inclement weather,
  - c. Personnel conduct including disregard for safety procedures or suspected fatigue or impairment,
  - d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including but not limited to:
    - i. Rail defects, track related damage, or obstructions.
    - ii. Overhead contact damage, malfunction, or other observed safety concern
    - iii. Signal related damage or malfunction,

- iv. Vehicle damage or component malfunction
- v. Facility safety concerns such as fire, electrical, or other life/safety concerns
- e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or EPSC personnel observing a safety concern must immediately report the safety concern to the TxDOT Lead Inspector and EPSC escort.
- 3) The TxDOT Lead Inspector will immediately notify all personnel present, including TxDOT and EPSC personnel.
- 4) The TxDOT Lead Inspector and EPSC personnel will immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector and escort will determine if additional individuals require notification.
- 8) The TxDOT Lead Inspector will notify the EPSC contacts below:
  - a. El Paso Police Department:
    - i. Emergency.
    - ii. Non-emergency.
  - b. Streetcar Safety Manager
  - c. Chief Streetcar Officer
  - d. Streetcar Superintendent of Operations
- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or EPSC personnel may cancel the inspection and depart the property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and EPSC, that the issue is resolved, and the inspection will resume.
- 12) Inspection may resume upon resolution of safety concern.

#### **Communicating Safety Concerns to EPSC**

- 1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, during the inspection conclusion, via email, and as part of the inspection report.
- 2) The TxDOT Lead Inspector will also explain any safety concerns discovered as part of a verbal debrief after the inspection is complete.
- 3) Within 24 hours of inspection conclusion, the TxDOT Inspection Lead will send via email, to the Streetcar Safety Manager and Chief Streetcar Officer, a summary of the safety concern observed, including details of what the safety concern, explanation of why it is a safety concern, photographs, or other documentation pertinent to the concern.
- 4) TxDOT will also include the immediate safety concern within the inspection report.
- 5) TxDOT will coordinate with the CSO and safety staff to ensure the safety concern is managed in accordance with safety risk management requirements within the Program Standard and PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from EPSC personnel including safety staff or the safety committee.

## Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure defines the EPSC equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT will consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, personnel, and data of the RTA's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection.

The El Paso Streetcar rail system is comprised of the following areas:

- 1) Six vintage PCC Streetcars
- 2) Track inspection and maintenance consists of 4.3 miles of embedded track spanning 27 stations in addition to yard track and bridges.
- 3) Traction Power System consists of four Traction Power Substations and Overhead Contact System.
- 4) Signals consist of two interlockings, and five bar signals.
- 5) Facilities include 27 stations.

6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

#### **Event Verification**

TxDOT and EPSCs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes safety events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT also requires EPSC to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair need to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the twoyear period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process.:

- 1) TxDOT and the SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into quarters, and each guarter will be assigned a functional area of the RTA.
  - a. EPSC's functional areas include:
    - i. Track
    - ii. Signals
    - iii. Traction Power Systems
    - iv. Vehicles
    - v. Facilities
    - vi. Training
    - vii. PTASP compliance, including plans, documents, policies, and procedures.
- 3) During each quarter, TxDOT will perform an announced inspection to observe and inspect the functional area selected for review. The inspection will consist of the following activities:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of safety events, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report within 30 days of monitoring activities.

# **Defects and Corrective or Remedial Actions**

TxDOT will monitor EPSC defects, corrective and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT requires RTAs to provide share data on the most severe defects discovered and the efforts leading to defect resolution. TxDOT will track defects by number and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial

actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

#### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from, but not limited to:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures, or
- FTA or SSO direction.

Hazards identified for mitigation reported to TxDOT will be evaluated to determine needs for CAP creation. The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section 8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit quarterly logs that summarize safety risk management information including:

- Date issue discovered
- Summary or description of safety risk, including location.

- Assessment including probability and severity
- Responsible RTA department or employee tasked with resolving the issue
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

# Category 3(a): EPSC Data Procedures

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between streetcar and light rail systems.

Light rail systems operate more vehicles per day, more hours per week, and over greater distances at higher speeds. As a streetcar system, El Paso Streetcar operates less vehicles per day, less hours per week, and over shorter distances at slower speeds.

EPSC will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and EPSC will share data according to the procedures below.

#### Data Submission Method, Schedule, Quantity, and Acceptable Formats:

- 1) El Paso Streetcar shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) El Paso Streetcar will submit data as follows:

#### a. Safety Data:

i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.

1. Monthly: 30 days after the end of the month.

# b. Maintenance and Inspection Data:

- Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30th.
  - 2. Quarter 2: Apr, May, and Jun. Data due on July 30th.
  - 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30<sup>th</sup>.
  - 4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30<sup>th</sup>.
- 3) Data shall be submitted in the following acceptable formats:
  - a. Microsoft Excel
  - b. .CSV files
  - c. Microsoft Word
  - d. Tableau
  - e. Other formats agreed upon such as PDFs, handwritten records, etc.

# **Safety Data**

Each month EPSC will submit safety data sets used to identify hazards and analyze, assess, and mitigate safety risk, including summary data reports, as part of TxDOT's RBI data requirements. Safety data sets may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses. Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting. EPSC will submit Safety data each quarter for the requested segments using the procedure below.

- 1) The Streetcar Safety Manager will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 calendar days after the end of the month, unless a different interval is noted.
- 2) Safety Data sets, including summary reports, submitted by El Paso Streetcar will include:
  - a. Observation Ride checks
  - b. DVR Pull Communication Log
  - c. Daily Operations Summary (Dispatch Log)

- d. Employee/Occupational Injury reports (Employee Incident Log)
- e. Monthly Hazard Logs
- f. Master Log, which include the following information
  - i. Blockages
  - ii. SMS Employee Reporting
  - iii. Assaults to Transit Employees
- g. System Reliability (EPSC Reliability Report)
- h. Internal Safety Review Reports (Per TxDOT SSOPS Section 4.7)
- 3) Safety Data sets TxDOT possesses and will use include:
  - a. SSO Tracker Data
    - i. Accidents,
    - ii. SSO reportable hazards,
    - iii. Corrective Action Plans
    - iv. Safety Risk Mitigations
  - b. NTD data
  - c. SSO Triennials Audit Reports

## **Maintenance and Inspection Data**

Each quarter El Paso Streetcar will submit maintenance and inspection data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk.

1) Streetcar Safety Manager or Designee will submit data sets in the SSO Tracker system no later than 30 calendar days after the end of quarter.

- 2) Maintenance and Inspection data sets, including summary data, used for the identification and assessment of safety risk may include:
  - a. Master Log
- 3) Maintenance and Inspection data TxDOT possesses and will use as RBI data may include:
  - a. SSO Inspection Reports completed quarterly
  - b. SSO Triennials Audit Reports
  - c. Internal Safety Review Reports

# **Key EPSC Contact Information and Addresses**

Name	Title	Office Phone	Mobile	Email
Johnny	Streetcar Safety	(915) 212-3466	(915) 255-	BalcazarJM@elpasot
Dominy	Streetcar Salety	(915) 212-3466	(915) 255-	<u>BaiCaZarJiM@eipasoc</u>
Balcazar	Manager/Interim SMS		6085	exas.gov
	Executive			
Anthony	Director of Mass Transit	915.212.3306	(915) 979-	DekeyzerAR@elpaso
Dekeyzer			6330	<u>texas.gov</u>
Everett	Chief Streetcar Officer	915.212.3464		EsparzaEX@elpasotex
Esparza				as.gov
Felix Minjarez	Streetcar Superintendent of	915-212-3455	915-873-	MinjarezFH@elpasot
	Operations		7605	exas.gov
Jaime Ortega	Streetcar Maintenance			Ortega]]@elpasotexa
	Supervisor			s.gov
	Transit Safety and		915-255- 6094	FerriolaNL@elpasotexas.
Nick Ferriola	Security Officer	915-212-3465		32.
		915-212-3460		
		915-212-3461		
Dispatch	EPSC Dispatch	915-212-3454		
After Hours	EPSC After Hours Dispatch	915-212-3425		
Dispatch				

# **Key Addresses:**

EPSC Dispatch: 601-A Santa Fe St., El Paso, TX 79901

Maintenance and Storage Facility (MSF): 601-A Santa Fe St. El Paso, TX 79901 Grade Crossings:

(nearest public sidewalk adjacent to the crossing)

Stations: (within the publicly accessible platform area)

# **McKinney Avenue Transit Authority**

The TxDOT SSO and McKinney Avenue Transit Authority (MATA) Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT and MATA staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT and MATA staff. The following procedures will be reviewed annually and if necessary updated using a collaborative process defined within the Program Standard and PTASP.

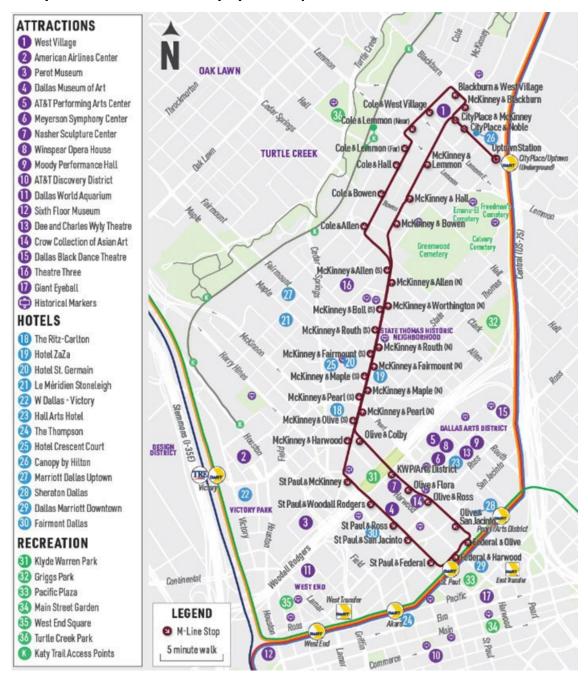
# **McKinney Avenue Transit Authority System Overview**

The McKinney Avenue Transit Authority (MATA) rail system is a heritage rail system that operates along the McKinney Avenue corridor in the Uptown area of Dallas. The system features seven historic streetcars, two of which are Presidents' Conference Committee (PCC) trolleys and serves a 4.6-mile route.

## **McKinney Avenue Transit Authority Service Summary**

Line	Days Operated	Hours Operated	Headways
Streetcar	Monday-Thursday	7am to 10pm	Every 20 minutes
	Friday	7am to 12pm	
	Saturday	10am to 12pm	
	Sunday	10am to 10pm	

### **McKinney Avenue Transit Authority System Map**



# Category 2(a): McKinney Avenue Transit Authority Property Access and Inspection Procedures

The following procedures apply to TxDOT's access to McKinney Avenue Transit Authority (MATA) infrastructure, equipment, records, personnel, and data.

## **Scheduling Inspections:**

TxDOT will schedule a minimum of four inspections with notice per year with the McKinney Avenue Transit Authority. Inspections are scheduled as part of a two-year cycle with one inspection with notice occurring each calendar quarter.

At its discretion, and as guided by the MATA's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

## **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 calendar day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection, which may require additional time to accommodate data requests and securing track allocation, if necessary.

#### **Inspection with Notice (Announced) Procedure and Timeline:**

- 1) The TxDOT Lead Inspector will notify the following individuals by email 1 day or more before intended inspection. (Contact information provided with Key Contact section)
  - a. Chief Safety Officer James (Jim) Kenny, jkenny@mata.org, (858) 204-8577 (mobile)
  - b. President Victor (Vic) Cervantes, vcervantes@mata.org, (972) 567-1024 (mobile)
  - c. Director of Maintenance Doug Johnston, djohnston@mata.org (325) 721-1787 (mobile)
  - d. Vice President of Systems and Technology John Landrum, jlandrum@mata.org, 727-2919 (mobile)
- a. e RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- b. The TxDOT inspection team with gather at the agreed upon location at the date and time of the inspection.

- 5) Inspections with notice will begin at the agreed upon time.
  - a. Unless otherwise specified, inspections will begin at the MATA trolley barn at 3153 Oak Grove Ave., Dallas, TX 75204

# **Scheduling Inspections Without Notice**

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel of the intent to conduct an unannounced inspection. TxDOT will abide by each RTA's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

# **Inspections Without Notice Procedure and Timeline:**

- 1) The TxDOT Lead Inspector will notify the:
  - a. Chief Safety Officer James (Jim) Kenny, <a href="mailto:ikenny@mata.org">ikenny@mata.org</a>, (858) 204-8577 (mobile)
  - b. President Victor (Vic) Cervantes, vcervantes@mata.org, (972) 567-1024 (mobile)
  - c. Director of Maintenance Doug Johnston, djohnston@mata.org (325) 721-1787 (mobile)
  - d. Vice President of Systems and Technology John Landrum, <a href="mailto:ilandrum@mata.org"><u>ilandrum@mata.org</u></a>, (214) 727-2919 (mobile)
- 2) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins.
  - a. The inspection team will gather at the MATA trolley barn at 3153 Oak Grove Ave., Dallas, TX 75204.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspections must begin within 2 hours or less of TxDOT Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide notifications as described in the Notifications sections above. Notifications, both with and without notice, will contain the following information:

- inspection agenda,
- inspection purpose,
- risk prioritization,

- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

#### Access procedures, including all areas, and required escorts:

The TxDOT SSO staff and SSO Support Contractors have full access through key, key card, or code to MATA's property, including infrastructure, equipment, records, facilities, data, and personnel. However, TxDOT will not attempt to access MATA property, including hazardous or security sensitive areas, without an escort.

Hazardous areas may include right-of-way, yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations/crime scenes associated from safety events.

When arriving at the RTA's property for inspections, both with and without notice, TxDOT inspectors will gather at an agreed upon locations such as a main entrance, reception area, or other area requested by the RTA, and await a MATA escort.

- 1) The TxDOT inspectors will gather in a safe location at the time stated to in the notification and await the arrival of MATA escorts. TxDOT inspectors will gather at the MATA trolley barn at 3153 Oak Grove Ave., Dallas, TX 75204.
- 2) The TxDOT Lead Inspector will facilitate team introductions between the TxDOT and McKinney Avenue Transit Authority escorts and team
- 3) The RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspection must begin within 3 hours or less of TxDOT Inspections notification.

If track allocation is need then TxDOT will follow MATA's track allocation. The process, pertinent details, and times are ss as follows:

- Normal track allocation:
- Emergency track allocation:
- Foul time:

In instances when track allocation or required escorts cannot accommodate an unannounced inspection TxDOT may consider rescheduling the inspection at a mutually agreeable time. In emergency or exigent circumstances TxDOT may invoke authorities necessary to cease operation (emergency order under TAC 7.95), gain emergency track allocation or foul time, and conduct inspections on TxDOT's schedule

# **Verification of SSO Inspector Certifications and Trainings:**

The following procedures apply to TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and MATA safety protocol and requirements.

- 1) The TxDOT Lead Inspector will conduct an inspection briefing with the MATA escort to review and discuss the following inspection details:
- 2) The TxDOT team lead will provide the agenda and verbally inform the RTA escort of the TxDOT personnel present, inspection purpose, locations to inspect, and schedule.
- 3) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the MATA escort the required personal protective gear, which may include:
  - a. name badges,
  - b. RWP cards,
  - c. steel-toe or composite-toe boots,
  - d. appropriate clothing for inspection to be completed,
  - e. RTA approved safety vests
  - f. protective eyewear,
  - g. hearing protection,
  - h. gloves, and
  - hardhats/bumps CAPs.
- 4) The TxDOT Lead Inspector will request a safety briefing from the MATA escort to inform or discuss with TxDOT and RTA personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 5) The inspection will begin only when the TxDOT Lead Inspector and the MATA escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

# Category 2(b): MATA Inspection Practices SOP

TxDOT will schedule four inspections with notice at McKinney Avenue Transit Authority each calendar year. At its discretion, and as guided by MATA's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the sections above.

### **Inspection Reports Procedure:**

TxDOT and the MATA will implement the following Inspection Report procedure.

- 1) TxDOT will email the CSO, President, Director of Maintenance, and VP of Systems and Technology a Microsoft Word version of the Inspection Report no later than 30 calendar days after completion of the inspection.
- 2) The RTA will have 10 calendar days to review and respond via email to the TxDOT SSO PM and Contractor Project Manager with any correction, clarification, or revision requests.
- 3) TxDOT will factor in the RTA's response and the TxDOT will send the final Inspection Report via email not later than 10 calendar days after the RTA's draft Inspection Report response.
- 4) TxDOT will also upload the Inspection Report into the RTA RBI Module within the SSO Tracker system.

The Inspection Report provided to the RTA which will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns,
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.

# **Immediate Safety Concerns:**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring the safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify all TxDOT and personnel present. Depending on the circumstances, the inspector may need to notify:

- Mata Chief Safety Officer, or
- law enforcement personnel

The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are in a safe location and to reassess the safety of the inspection team. If the inspection cannot safely continue, then TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### **Ensuring the Safety of Inspection Personnel:**

- 1) TxDOT or MATA inspection team members have the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include, but not limited to:
  - a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
  - b. Inclement weather or threat of inclement weather,
  - c. Personnel conduct including disregard for safety procedures or suspected fatigue or impairment,
  - d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including but not limited to:
    - i. Rail defects, track related damage, or obstructions.
    - ii. Overhead contact damage, malfunction, or other observed safety concern
    - iii. Signal related damage or malfunction,

- iv. Vehicle damage or component malfunction
- v. Facility safety concerns such as fire, electrical, or other life/safety concerns
- e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or MATA personnel observing a safety concern must immediately report the safety concern to the TxDOT Lead Inspector and MATA escort.
- 3) The TxDOT Lead Inspector will immediately notify all personnel present, including TxDOT and MATA personnel.
- 4) The TxDOT Lead Inspector and MATA personnel will immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector and escort will determine if additional individuals require notification.
- 8) The TxDOT Lead Inspector will contact MATA contacts as described below:
  - a. Dallas Police Department:
    - i. Emergency: 911
  - b. Chief Safety Officer: (858) 204-8577
- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or MATA personnel may cancel the inspection and depart the property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and MATA, that the issue is resolved, and the inspection will resume.
- 12) Inspection may resume upon resolution of safety concern.

# **Communicating Safety Concerns to MATA**

1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, during the inspection conclusion, via email, and as part of the inspection report.

- 2) The TxDOT Lead Inspector will also explain any safety concerns discovered as part of a verbal debrief after the inspection is complete.
- 3) Within 24 hours of inspection conclusion, the TxDOT Inspection Lead will send via email, to the Streetcar Safety Manager and Chief Streetcar Officer, a summary of the safety concern observed, including details of what the safety concern, explanation of why it is a safety concern, photographs, or other documentation pertinent to the concern.
- 4) TxDOT will also include the immediate safety concern within the inspection report.
- 5) TxDOT will coordinate with the CSO and safety staff to ensure the safety concern is managed in accordance with safety risk management requirements within the Program Standard and PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from MATA personnel including safety staff or the safety committee.

#### Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure will define the McKinney Avenue Transit Authority equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT will consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, personnel, and data of the RTA's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection.

The McKinney Avenue Transit Authority rail system is comprised of the following areas:

- 1) Revenue rail vehicles fleet includes eight historic streetcars.
- 2) Track inspection and maintenance consists of 4.6 miles of mainline track structures, including embedded and direct fixation track.
- 3) Traction Power System consists of two functional subsystems: Traction power substations and overhead contact system.
- 4) Signals consist of City of Dallas civil traffic signals and bar signals tied into the City of Dallas civil traffic signals.
- 5) Facilities include a maintenance/operations/administration facility and an administration/storage facility.
- 6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

## **Event Verification**

TxDOT and MATAs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes safety events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT also requires MATA to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair need to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the twoyear period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process.:

- 1) TxDOT and the SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into quarters, and each quarter will be assigned a functional area of the RTA.

- a. MATA's functional areas include:
  - i. Track
  - ii. Traction Power Systems
  - iii. Vehicles
  - iv. Facilities
  - v. Training
  - vi. PTASP compliance, including plans, documents, policies, and procedures.
- 3) During each quarter, TxDOT will perform an announced inspection to observe and inspect the functional area selected for review. The inspection will consist of the following activities:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of safety events, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report within 30 days of monitoring activities.

### **Defects and Corrective or Remedial Actions**

TxDOT will monitor MATA defects, corrective and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT requires RTAs to provide share data on the most severe defects discovered and the efforts leading to defect resolution. TxDOT will track defects by number and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures, or
- FTA or SSO direction.

Hazards identified for mitigation reported to TxDOT will be evaluated to determine needs for CAP creation. The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section

8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit quarterly logs that summarize safety risk management information including:

- Date issue discovered.
- Summary or description of safety risk, including location.
- Assessment including probability and severity.
- Responsible RTA department or employee tasked with resolving the issue.
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

# Category 3(a): MATA Data Procedures

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between streetcar and light rail systems.

Light rail systems operate more vehicles per day, more hours per week, and over greater distances at higher speeds. As a streetcar system, McKinney Avenue Transit Authority operates less vehicles per day, less hours per week, and over shorter distances at slower speeds.

MATA will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and MATA will share data according to the procedures below.

# Data Submission Method, Schedule, Quantity, and Acceptable Formats:

- 1) McKinney Avenue Transit Authority shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) McKinney Avenue Transit Authority will submit data as follows:

# a. Safety Data:

- i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Monthly: 30 calendar days after the end of the month.

#### b. Maintenance and Inspection Data:

i. Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.

- 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30<sup>th</sup>.
- 2. Quarter 2: Apr, May, and Jun. Data due on July 30<sup>th</sup>.
- 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30th.
- 4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30th.
- 3) Data shall be submitted in the following acceptable formats:
  - a. Microsoft Excel
  - b. .CSV files
  - c. Microsoft Word
  - d. Tableau
  - e. Other formats agreed upon such as PDFs, handwritten records, etc.

## **Safety Data**

Each month MATA will submit safety data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. Safety data sets may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses. Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting.

MATA will submit Safety data each month for the requested segments using the procedure below.

- 1) The Streetcar Safety Manager will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 calendar days after the end of the month, unless a different interval is noted.
- 2) Safety Data sets, including summary reports, submitted by McKinney Avenue Transit Authority will include:
  - a. Event Log (including safety events)
  - b. Delay Log
- 3) Safety Data sets TxDOT possesses and will use include:
  - a. Accidents,
  - b. SSO reportable hazards,

- c. RTA internal hazard logs,
- d. Correct action plans,
- e. Safety risk mitigations,
- f. NTD data
- SSO Triennials Audit Reports
- h. Internal Safety Review Reports

## **Maintenance and Inspection Data**

Each quarter McKinney Avenue Transit Authority will submit maintenance and inspection data sets used to identify hazards and analyze, assess, and mitigate safety risk, including summary data reports, as part of TxDOT's RBI data requirements according to the procedure below.

- 1) Chief Safety Officer or Designee will submit data sets in the SSO Tracker system no later than 30 calendar days after the end of quarter.
- 2) Maintenance and Inspection data sets, including summary data, used to identify hazards and analyze, assess, and mitigate safety risk may include:
  - b. Safety data as described in the previous section.
- 3) Maintenance and Inspection Data TxDOT possesses and will use as RBI data:
  - d. SSO Inspection Reports completed quarterly
  - e. SSO Triennials Audit Reports
  - f. Internal Safety Review Reports

# **Key MATA Contact Information and Addresses**

Name	Job Title	Office Phone	Mobile	Email
James	Chief Safety Officer	(214) 855-0006	(858) 204-8577	jkenny@mata.org
(Jim)Kenny				
Victor	President	(214) 855-0006	(972) 567-1024	vcervantes@mata
(Vic)Cervantes				.org
John Landrum	Vice President of Systems	(214) 855-0006	(214) 727-	jlandrum@mata.o
	and Technology		2919(mobile	<u>rg</u>
Doug Johnston	Director of Maintenance	(214) 855-0006	(325) 721-1787	djohnston@mata.
				<u>org</u>
Dallas Police	Non-emergency:	(214) 744-4444		
Dallas Police	Emergency:	911		

# **Key Addresses**

MATA Admin Offices and Trolley Barn: 3153 Oak Grove Ave., Dallas, TX 75204.

Grade Crossings: Meet MATA personnel at Trolley Barn, 3153 Oak Grove Ave., Dallas, TX 75204, and then deploy to grade crossings

Trolley Stops: Meet MATA personnel at Trolley Barn, 3153 Oak Grove Ave., Dallas, TX 75204, and then deploy to trolley stops.

# **Galveston Island Trolley**

The TxDOT SSO and Galveston Risk-based Inspection Procedures were developed through coordination and consultation between TxDOT and Galveston Island Trolley staff. Coordination and consultation included onsite meetings, conference calls, email correspondence, and document reviews conducted between TxDOT and Galveston staff. The following procedures will be reviewed and if necessary, updated annually using a collaborative process defined within the Program Standard and PTASP.

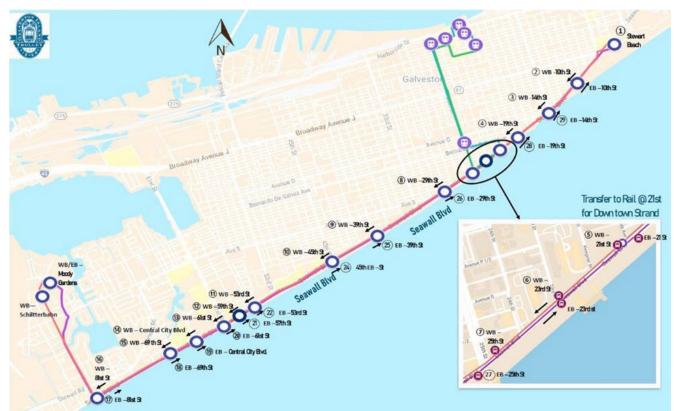
# **Galveston Island Trolley System Overview**

The Galveston Island Transit (GIT) trolley system operates primarily North-South between the Gulf of America and Galveston Bay with two primary routes: a downtown loop and a cross island connection along Seawall Boulevard, totaling 6.8 miles of service. The system features three vintage-inspired diesel rail cars.

# **Galveston Island Trolley Service Summary**

Line	Days Operated	Hours Operated	Headways
Trolley Service	Thursday	10am to 5pm	30 minutes
	Friday to Sunday	10am to 7pm	

# **Galveston Island Trolley System Map**



# Category 2(a): GIT Property Access and Inspection Procedures

The following procedures apply to TxDOT's access to Galveston Island Trolley (GIT) infrastructure, equipment, records, personnel, and data.

# **Scheduling Inspections:**

TxDOT will schedule a minimum of four inspections with notice per year with the Galveston Island Trolley. Inspections are scheduled as part of a two-year cycle with one inspection with a notice occurring each calendar quarter.

At its discretion, and as guided by the GIT's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the RTA section below.

## **Scheduling Inspections with Notice**

Inspections with notice will occur with 1 calendar day or more notice. Although TxDOT may schedule inspections with notice with 1 calendar day or more notice, TxDOT prefers to provide additional notice to allow the RTA time to prepare for the inspection, which may require additional time to accommodate data requests and securing track allocation, if necessary.

Inspections with Notice (Announced) Procedure and Timeline:

- 1) The TxDOT Lead Inspector will notify the following individuals by email 1 day or more before intended inspection. (Contact information provided with Key Contact section)
  - a. James Oliver, General Manager joliver@galvestontx.gov; (409) 797-3914 (office); (409) 739- 6463 (cell)
  - b. Jessica Hawkinson, Assistant General Manager- <a href="mailto:jhawkinson@qalvestontx.gov">jhawkinson@qalvestontx.gov</a>; (409) 797- 3903 (office); (409) 739-3987 (cell)
  - c. Kenneth Kirkland, Chief Safety Officer kkirkland@galvestontx.gov; (409) 797-3904 (office) (409) 739-6159 (cell)
- 2) The TxDOT Lead Inspector may also call GIT staff to plan inspection activities and discuss required data or track allocation.
- 3) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 4) The TxDOT inspection team with gather at the agreed upon location at the date and time of the inspection.
- 5) Inspections with notice will begin at the agreed upon time.

### **Scheduling Inspections Without Notice**

Inspections without notice will occur with no notice. TxDOT will notify the RTA's CSO and other designated personnel of the intent to conduct an unannounced inspection. TxDOT will abide by each RTA's track allocation procedures and timelines to access areas that require adherence to track allocation procedures.

# **Inspections Without Notice Procedure and Timeline:**

- 1) TxDOT Lead Inspector will notify the:
  - a. James Oliver, General Manager joliver@galvestontx.gov; (409) 797-3914 (office); (409) 739-6463 (cell)
  - b. Jessica Hawkinson, Assistant General Manager- <a href="mailto:jhawkinson@galvestontx.gov">jhawkinson@galvestontx.gov</a>; (409) 797- 3903 (office); (409) 739-3987 (cell)
  - c. Kenneth Kirkland, Chief Safety Officer kkirkland@galvestontx.gov; (409) 797-3904 (office) (409) 739-6159 (cell)
- 2) The RTA CSO or delegated staff will ensure required escort(s), and data or track allocation is provided by the start time of the inspection.
- 3) The TxDOT inspection team with gather at the agreed upon location until inspection begins.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and the inspection must begin within 2 hours or less of TxDOT Inspections notification.

#### **Inspection Notification Information**

The TxDOT Lead Inspector will provide notifications as described in the Notifications sections above. Notifications, both with and without notice, will contain the following information:

- inspection agenda,
- inspection purpose,
- risk prioritization,
- date and time of inspections,
- locations to be inspected,
- data needed for inspection,
- requested escorts, and
- RTA staff requested to attend.

### Access procedures, including all areas, and required escorts:

TxDOT SSO staff and SSO Support Contractors have full access through key, key card, or code to GIT's property, including infrastructure, equipment, facilities, records, data, and personnel. However, TxDOT will not attempt to access GIT property, including hazardous or security sensitive areas, without an escort.

Hazardous areas may include right-of-way, yard, tunnels, bridges, and electrical infrastructure. Security sensitive areas may include train control or operation centers, police facilities, emergency operations centers, or criminal investigations/crime scenes associated from safety events.

When arriving at RTA's property for inspections, both with and without notice, TxDOT inspectors will gather at an agreed upon locations such as a main entrance, reception area, or other area requested by the RTA, and await a GIT escort.

- 1) The TxDOT inspectors will gather in a safe location at the time stated to in the notification and await the arrival of GIT escorts. TxDOT inspectors will gather at the:
  - a. GIT trolley barn at 214 28th St., Galveston, TX 77550
  - b. Admin Office: 3115 Market St., Galveston, TX 77550
- 2) The TxDOT Lead Inspector will facilitate team introductions between the TxDOT and Galveston Island Trolley escorts and team
- 3) The RTA CSO or delegated staff will ensure required escort(s) and track allocation is provided by the start time of the inspection.
- 4) The RTA must begin implementing RBI Procedures within 15 minutes of TxDOT notification, and inspection must begin within 3 hours or less of TxDOT Inspections notification.

If track allocation is need then TxDOT will follow GIT's track allocation. The process, pertinent details, and times are ss as follows:

- Normal track allocation:
- Emergency track allocation:
- Foul time:

In instances when track allocation or required escorts cannot accommodate an unannounced inspection TxDOT may consider rescheduling the inspection at a mutually agreeable time. In emergency or exigent circumstances TxDOT may invoke authorities necessary to cease operation (emergency order under TAC 7.95), gain emergency track allocation or foul time, and conduct inspections on TxDOT's schedule

### **Verification of SSO Inspector Certifications and Trainings**

The following procedures apply TxDOT inspectors' pre-inspection briefing, confirmation of adherence to all TxDOT and GIT safety protocol and requirements.

- 1) The TxDOT Lead Inspector will conduct an inspection briefing with the GIT escort to review and discuss the following inspection details:
- 2) The TxDOT team lead will provide the agenda and verbally inform the RTA escort of the TxDOT personnel present, inspection purpose, locations to inspect, and schedule.
- 3) The TxDOT Lead Inspector will ask inspection team member to demonstrate to the GIT escort the required personal protective gear, which may include:
  - a. name badges,
  - b. RWP cards,
  - c. steel-toe or composite-toe boots,
  - d. appropriate clothing for inspection to be completed,
  - e. RTA approved safety vests
  - f. protective eyewear,
  - g. hearing protection,
  - h. gloves, and
  - hardhats/bumps CAPs.
- 4) The TxDOT Lead Inspector will request a safety briefing from the GIT escort to inform or discuss with TxDOT and RTA personnel any information necessary for a safe inspection, including any known hazards or safety concerns, and personal electronic device policies.
- 5) The inspection will begin only when the TxDOT Lead Inspector and the GIT escort have confirmed each step of the inspection briefing, training and PPE verification, and safety briefing.

# Category 2(b): GIT Inspection Practices SOP

TxDOT will schedule four inspections with notice at Galveston Island Trolley each calendar year. At its discretion, and as guided by GIT's safety performance and TxDOT's risk prioritization process, TxDOT may conduct additional announced and unannounced inspections. Inspection scheduling will occur as described in the Notifications to the sections above.

#### **Inspection Reports Procedure**

TxDOT and the GIT will implement the following Inspection Report procedure.

- 1) TxDOT will email the GIT's General Manager and CSO a Microsoft Word version of the Inspection Report no later than 30 calendar days after completion of the inspection.
- 2) The RTA will have 10 calendar days to review and respond via email to the TxDOT SSO PM and Contractor Project Manager with any correction, clarification, or revision requests.
- 3) TxDOT will factor in the RTA's response and the TxDOT will send the final Inspection Report via email not later than 10 calendar days after the RTA's draft Inspection Report response.
- 4) TxDOT will also upload the Inspection Report into the RTA RBI Module within the SSO Tracker system.

The Inspection Report provided to the RTA which will include the following sections:

- Date and time of inspection,
- TxDOT personnel present, including Inspection Team Lead, and RTA personnel present,
- Location and functional area inspected,
- Description of issues or deficiencies noted, including immediate safety concerns,
- Photographs, documentation, measurements, or diagrams, if necessary, and
- Corrective actions required or recommendations.

# **Immediate Safety Concerns**

Each member of the TxDOT Inspection team has the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. If an immediate safety concern is identified by the TxDOT inspectors, their priority will be to ensure the safety of all personnel present. Ensuring the safety of all personnel present may include delaying, pausing, or cancelling the inspection, not entering inspection areas, or departing the inspection areas until the safety concern is resolved.

When a safety concern is observed the individual will notify the TxDOT Lead Inspector, who will then notify all TxDOT and personnel present. Depending on the circumstances, the inspector may need to notify:

- GIT Chief Safety Officer,
- law enforcement personnel, or
- General Manager

The TxDOT Lead Inspector will work together with RTA staff to ensure personnel are in a safe location and to reassess the safety of the inspection team. If the inspection cannot safely continue, then TxDOT or the RTA may immediately cancel the inspection. Cancelled inspections for safety concerns will be documented within the inspection report. TxDOT may consider the inspection complete or may re-scheduled at a future date.

If the inspection can safely continue, then the TxDOT inspection team will document and photograph the safety concern observed and immediately discuss the issue with the TxDOT and RTA present. At the conclusion of the inspection, TxDOT will email the CSO and other designated staff within 24 hours to explain the immediate safety concern observed. TxDOT requires immediate safety concerns to be managed in compliance with the PTASP prescribed safety risk management processes and the TxDOT Program Standard. The specific procedures regarding immediate safety concerns are provided in the individual RTA procedures section of this document.

#### **Ensuring the Safety of Inspection Personnel:**

- 1) TxDOT or GIT inspection team members have the right to raise a safety concern at any point in the planning, preparation for, or conducting of an inspection. Examples of safety concerns may include:
  - a. Security concerns such as criminal activity, suspicious person and/or package, or unsafe location,
  - b. Inclement weather or threat of inclement weather,
  - c. Personnel conduct including disregard for safety procedures or suspected fatigue or impairment,
  - d. Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including but not limited to:
    - i. Rail defects, track related damage, or obstructions.
    - ii. Overhead contact damage, malfunction, or other observed safety concern
    - iii. Signal related damage or malfunction,
    - iv. Vehicle damage or component malfunction
    - v. Facility safety concerns such as fire, electrical, or other life/safety concerns
  - e. Any other concern judged by inspection personnel as an immediate safety concern.
- 2) TxDOT or GIT personnel observing a safety concern must immediately report the safety concern to the TxDOT Lead Inspector and GIT escort.

- 3) The TxDOT Lead Inspector will immediately notify all personnel present, including TxDOT and GIT personnel.
- 4) The TxDOT Lead Inspector and GIT personnel will immediately assess the safety concern to determine if inspection personnel must stop inspection activities and move to a different location to ensure safety.
- 5) The TxDOT Lead Inspector will ensure all personnel are in a safe location.
- 6) The inspection shall not continue until the safety concern has been resolved.
- 7) The TxDOT Lead Inspector and escort will determine if additional individuals require notification.
- 8) The TxDOT Lead Inspector will contact GIT contacts as described below:
  - a. Emergency: 911
  - b. Dispatch: (409) 797-3900
  - c. GIT Personnel

James Oliver, General Manager - joliver@galvestontx.gov; (409) 797-3914 (office); (409) 739- 6463 (cell)

Jessica Hawkinson, Assistant General Manager-jhawkinson@galvestontx.gov; (409) 797- 3903 (office); (409) 739-3987 (cell)

Kenneth Kirkland, Chief Safety Officer - kkirkland@galvestontx.gov; (409) 797-3904 (office) (409) 739-6159 (cell)

- 9) If the safety concern cannot be resolved, then the TxDOT Lead Inspector or GIT personnel may cancel the inspection and depart the property.
- 10) If the safety concern can be resolved, then the Inspection will resume as soon as the safety issue is resolved.
- 11) The TxDOT Lead Inspector will inform all personnel, including TxDOT and GIT, that the issue is resolved, and the inspection will resume.
- 12) Inspection may resume upon resolution of safety concern.

#### **Communicating Safety Concerns to GIT**

1) The TxDOT Lead Inspector will verbally communicate the immediate safety concern upon discovery as described above, during the inspection conclusion, via email, and as part of the inspection report.

- 2) The TxDOT Lead Inspector will also explain any safety concerns discovered as part of a verbal debrief after the inspection is complete.
- 3) Within 24 hours of inspection conclusion, the TxDOT Inspection Lead will send via email, to the Chief Safety Officer and General Manager, a summary of the safety concern observed, including details of what the safety concern, explanation of why it is a safety concern, photographs, or other documentation pertinent to the concern.
- 4) TxDOT will also include the immediate safety concern within the inspection report.
- 5) TxDOT will coordinate with the CSO to ensure the safety concern is managed in accordance with safety risk management requirements within the Program Standard and PTASP. Such actions could include documentation of a hazard, corrective action, including an emergency corrective action, and further investigation from GIT personnel including safety staff or the safety committee.

#### Inspections of Equipment, Infrastructure, & Practices Specific to Each RTA

The following procedure will define the Galveston Island Trolley equipment, infrastructure, and practices present (broad) and the inspection frequencies and practices (specific) that TxDOT will consider when determining inspection areas.

TxDOT may conduct inspections of any infrastructure, equipment, locations, records, personnel, and data of the RTA's rail system. Any property or personnel (employee or contractor) performing work related to the rail system could be the subject of a TxDOT SSO inspection.

The Galveston Island Trolley rail system is comprised of the following areas:

- 1) Revenue rail vehicles fleet includes eight historic streetcars.
- 2) Track inspection and maintenance consists of 4.6 miles of mainline track structures, including embedded and direct fixation track.
- 3) Traction Power System consists of two functional subsystems: Traction power substations and overhead contact system.
- 4) Signals consist of City of Galveston civil traffic signals.
- 5) Facilities include a maintenance/operations/administration facility and an administration/storage facility.
- 6) Public Transportation Agency Safety Plan and associated plans, documents, policies, and procedures.

#### **Event Verification**

TxDOT and GITs coordinate throughout the accident investigation process as described in Section 7: Accident Investigation of the TxDOT SSO Program Standard. The following section summarizes how TxDOT conducts Event Verification to RBI related investigation and safety risk identification processes.

TXDOT has delegated investigative responsibility to each RTA but reserves the right to conduct independent investigations at its discretion. TxDOT has ultimate responsibility for the sufficiency and thoroughness of RTA completed investigations. As part of accident oversight, TxDOT reviews the RTA's findings of causation and determines if corrective action plan is required because of the accident.

As part of the investigation review process, TxDOT carefully analyzes accident details to understand if similar characteristics or dynamics exist within the RTA's system. For example, TxDOT analyzes safety events individually and aggregated using the metrics described within Category 4: Inspection Prioritization to determine commonalities in organizational, environmental, technical, or geospatial/temporal characteristics. These metrics aid in understanding probable and contributing causes, and guide identification of safety risk.

TxDOT also requires GIT to provide information on damaged infrastructure, equipment, or property and subsequent corrective maintenance or repair need to return damaged items to service. TxDOT verifies repairs and return to service through review of documentation which may include workorders, repair summaries, or photographs. TxDOT may also verify repairs and return to as part of inspection activities.

#### **Ongoing Monitoring**

TxDOT will conduct a minimum of four inspections per year at each rail agency. Inspections will be planned based on a two-year cycle so that all areas of the rail agency are inspected during the two-year period. To establish the two-year cycle, TxDOT first assesses each RTA to determine the functional areas and associated infrastructure, equipment, facilities, and procedures of each system. TxDOT then divides the functional areas into a two-year cycle divided into calendar quarters.

In addition to ongoing monitoring throughout the two-year period, TxDOT conducts monthly conference calls to discuss safety events, safety risk management, corrective actions, audits, reviews, management of change, and inspection related items.

TxDOT factors in analysis resulting from safety, inspection, and maintenance data to guide ongoing monitor efforts. Ongoing monitoring could indicate the need for additional inspections with notice or without notice, or additional RTA coordination related to risk profile.

To establish the ongoing monitoring inspection schedule, TxDOT uses the following process.:

- 1) TxDOT and the SSO Support Contractors will develop a two-year calendar prior to implementation of the RBI program.
- 2) The two-year calendar will be divided into quarters, and each quarter will be assigned a functional area of the RTA.

- a. GIT's functional areas include:
  - i. Track
  - ii. Vehicles (diesel powered)
  - iii. Facilities
  - iv. Training
  - v. PTASP compliance, including plans, documents, policies, and procedures.
- 3) During each quarter, TxDOT will perform an announced inspection to observe and inspect the functional area selected for review. The inspection will consist of the following activities:
  - a. Review of past and current data
  - b. Discussions with RTA staff
  - c. Observations of task performance
  - d. Inspection of infrastructure, equipment, vehicles, or data.
  - e. Verification of safety event, corrective action, or mitigation implementation.
- 4) Inspection activities are documented with an inspection report within 30 days of inspection.

#### **Defects and Corrective or Remedial Actions**

TxDOT will monitor GIT defects, corrective and remedial action detection, tracking, and resolution as part of the RBI process. TxDOT requires RTAs to provide share data on the most severe defects discovered and the efforts leading to defect resolution. TxDOT will track defects by number and severity to ensure each RTA manages these items in compliance with the safety risk management processes defined within the PTASP and TxDOT Program Standard.

RTAs will detect, document, and resolve defects, corrective, or remedial actions through established inspection, trouble-shooting, and corrective maintenance practices. Defects, corrective, or remedial actions may also require documentation on hazard logs, resolution through safety committees' coordination, and submitting monthly hazard logs to TxDOT for review. Safety concerns that meet or exceed TxDOT's reporting threshold require corrective actions that must be reported to TxDOT using the SSO Tracker information system and managed in accordance with TxDOT's Program Standard.

### **CAP and Safety Risk Mitigation Verification**

TxDOT coordinates with each RTA on corrective action plan and safety risk mitigation development, implementation, and verification as described below.

As specified in the Program Standard, Section 9.1 Corrective Action Plans, RTAs shall develop and implement corrective action plans (CAPs) resulting from:

- investigations,
- risk-based inspections,
- hazard management process,
- audit findings,
- internal safety review findings,
- engineering or construction of RTA projects,
- non-compliance with RTA policies or procedures, or
- FTA or SSO direction.

Hazards identified for mitigation reported to TxDOT will be evaluated to determine needs for CAP creation. The SSO Tracker system will be used for RTAs to submit CAPs for TxDOT review and approval, to request CAP closure, and to keep TxDOT informed on the status of open CAPs. The SSO Tracker system allows TxDOT to monitor and track the status of open CAPs in real time.

The RTA must request TxDOT to close a CAP once identified actions have been implemented. TxDOT will verify that the CAP has been implemented in compliance with the approved plan by reviewing evidence provided either as a description of actions taken, an attached documentation, uploaded pictures verifying completion, or onsite review verifying completion.

TxDOT also requires coordination on safety risk mitigations as specified in the Program Standard, section 8.6 Monitoring of RTA Hazard. To summarize, TxDOT requires RTAs to submit quarterly logs that summarize safety risk management information including:

- Date issue discovered
- Summary or description of safety risk, including location.
- Assessment including probability and severity
- Responsible RTA department or employee tasked with resolving the issue
- Status of hazard or risk resolution, including mitigations or corrective actions implemented.

TxDOT monitors and verifies the successful implementation of safety risk mitigations and corrective actions using various methods. Issues of an administrative issue such as policy, procedure, and documentation improvements are monitored and verified primarily through documentation reviews. Safety risk mitigations and corrective actions involving equipment, facilities, and infrastructure are verified through a combination of documentation reviews and onsite inspections. Mitigations and corrective actions involving implementation operations, maintenance, or safety practices are monitored through observation-based inspections referenced with the Ongoing Monitoring section above.

## **Category 3(a): GIT Data Procedures**

TxDOT recognizes the differences in size and complexity between light rail and streetcar systems. As described in Category 5, TxDOT uses NTD Profile Data to ensure the RBI Program is commensurate with RTA number, size, and complexity. Rail agency characteristics such as vehicles in service, directional route miles, and operational characteristics including revenue hours and revenue miles demonstrate a clear difference between streetcar and light rail systems.

Light rail systems operate more vehicles per day, more hours per week, and over greater distances at higher speeds. As a streetcar system, Galveston Island Trolley operates less vehicles per day, less hours per week, and over shorter distances at slower speeds.

GIT will submit data used to identify hazards and analyze, assess, and mitigate safety risk that encompasses a full spectrum of RTA activities. TxDOT and GIT will share data according to the procedures below.

#### Data Submission Method, Schedule, Quantity, and Acceptable Formats:

- Galveston Island Trolley shall submit RBI data within the SSO Tracker system. The data will be submitted within the RBI module, in the appropriate data section (Safety, Maintenance, Inspection, or Additional Safety), and within the appropriate calendar quarter.
- 2) Galveston Island Trolley will submit data as follows:

#### a. Safety Data:

- i. Safety Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Monthly: 30 calendar days after the end of the month.

#### b. Maintenance and Inspection Data:

- i. Maintenance and Inspection Data used to identify hazards and analyze, assess, and mitigate safety risk.
  - 1. Quarter 1: Jan, Feb, and Mar. Data due on April 30th.
  - 2. Quarter 2: Apr, May, and Jun. Data due on July 30<sup>th</sup>.

- 3. Quarter 3: Jul, Aug, and Sept. Data due on Oct 30<sup>th</sup>.
- 4. Quarter 4: Oct, Nov, and Dec. Data due on Jan 30<sup>th</sup>.
- 3) Data shall be submitted in the following acceptable formats:
  - a. Microsoft Excel
  - b. .CSV files
  - c. Microsoft Word
  - d. Tableau
  - e. Other formats agreed upon such as PDFs, handwritten records, etc.

#### **Safety Data**

Each month GIT will submit safety data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements. Safety data sets utilized by GIT in the identification and assessment of safety risk may include safety events, hazards, corrective action plans, safety risk mitigations, and records of near misses.

Through routine SSO activities TxDOT has access to RTA accident data, SSO reportable hazards, internal hazard tracking, corrective action plans, safety risk mitigations, and near miss reporting.

GIT will submit Safety data each month for the requested segments using the procedure below.

- 1) The CSO will submit safety data sets in the RBI Module, Safety Data section in SSO Tracker no later than 30 days after the end of the month, unless a different interval is noted.
- 2) Safety Data sets, including summary reports, submitted by Galveston Island Trolley will include:
  - a. Trolley schedule file
- 3) Safety Data sets TxDOT possesses and will use include:
  - a. Accidents,
  - SSO reportable hazards,
  - RTA internal hazard logs,
  - d. Correct action plans,
  - e. Safety risk mitigations,
  - f. NTD data

- g. SSO Triennials Audit Reports
- h. Internal Safety Review Reports

## **Maintenance and Inspection Data**

Each quarter Galveston Island Trolley will submit maintenance and inspection data sets, including summary data reports, used to identify hazards and analyze, assess, and mitigate safety risk as part of TxDOT's RBI data requirements according to the procedure below.

- 1) Chief Safety Officer or Designee will submit data sets in the SSO Tracker system no later than 30 days after the end of quarter.
- 2) Maintenance and Inspection data sets, including summary data used to identify hazards and analyze, assess, and mitigate safety risk may include:
  - a. Inspection and maintenance records and report forms
  - b. Work orders
  - c. Records of defects
- 3) Maintenance and Inspection Data TxDOT possesses and will use as RBI data:
  - a. SSO Inspection Reports completed quarterly
  - b. SSO Triennials Audit Reports
  - c. Internal Safety Review Reports

## **Key Galveston Contact Information and Addresses**

Name	Job Title	Office Phone	Mobile	Email
James Oliver	General Manager	(409) 797-	(409) 739-	joliver@galvestontx.gov
		3914	6463	
Jessica	Assistant General	(409) 797-	(409) 739-	jhawkinson@galvestontx.gov
Hawkinson	Manager	3903	3987	
Kenneth	Chief Safety Officer	(409) 797-	(409) 739-	kkirkland@galvestontx.gov_
Kirkland		3904	6159	
Dispatch	Dispatcher	(409) 797-		
		3900		
Galveston	Non-emergency Number			
Police				

## **Key Addresses**

Admin Office: 3115 Market St., Galveston, TX 77550

Maintenance Facility (Trolley Barn): 214 28th St., Galveston, TX 77550

Grade Crossings: Meet Galveston personnel at the Maintenance Facility, 3115 Market St., Galveston, TX 77550, and then deploy to grade crossings

Trolley Stops: Meet Galveston personnel at Maintenance Facility, 3115 Market St., Galveston, TX 77550, and then deploy to trolley stops.

## **Appendices**

## **Appendix 1: Definitions**

Accident

An Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; 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.

Audit

A review or analysis of records and related materials, including, but not limited to, those related to financial accounts.

Corrective Action Plan (CAP)

A plan developed by a rail agency that describes the actions the RTA 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 an RTA to develop and carry out a Corrective Action Plan.

CFR

Code of Federal Regulations

Consultation

The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters.

Day

A Day means a calendar day.

FRA

Federal Railroad Administration

FTA

Federal Transit Administration

Hazard

Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a rail fixed guideway public transportation system; or damage to the environment.

Immediate Safety Concern

Any real or potential condition, practice, or violation that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a rail fixed guideway public transportation system; or damage to the environment.

Incident

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 rail transit agency.

Inspection

A physical observation of equipment, facilities, rolling stock, operations, or records for the purpose of gathering or analyzing facts or information.

Inspection Data

Data that includes, but is not limited to, inspection records and report forms, records of failures and defects with severity, records of speed restrictions, including the reason for applying, incident and safety risk mitigation verification, adherence to inspection schedules, including reports/documentation of inspections not performed, and capital project schedules and progress.

Investigation

The process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

NTD

National Transit Database

Maintenance Data

Data that includes, but is not limited to, major maintenance activity schedule and progress, adherence to maintenance schedules, including reports/documentation of deferred maintenance, records of failures and defects with severity if applicable, and records of revenue vehicles out of service, including causal information.

Public Transportation Agency Safety Plan (PTASP)

The comprehensive Agency Safety Plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. § 5329(d) and based on a Safety Management System.

Publicly Accessible Areas include stations, platforms, public sidewalks adjacent to right of way, and pedestrian crosswalks at stations.

Public Transportation Safety Certification Training Program (PTSCTP)

The certification training program for Federal and State employees or other designated personnel who conduct safety audits and examinations of public transportation systems. Employees of public transportation agencies directly responsible for safety oversight are also required to complete the PTSCTP.

Rail Fixed Guideway Public Transportation System (RFGPTS)

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. RFGPTSs include, but are not limited to, rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.

Rail Transit Agency (RTA)

Any entity that provides services on a rail fixed guideway public transportation system.

Roadway Worker Protection (RWP)

The policies, processes, and procedures implemented by an RTA to prevent safety events

for transit workers who must access the roadway in the performance of their work.

Risk

The composite of predicted severity and likelihood of the potential effect of a hazard.

Risk-Based Inspection

An inspection conducted as part of a risk-based inspection program.

Risk-Based Inspection Data Management System

A physical or digital system that follows administrative policies and procedures that identify data storage, organizational, and management processes for risk-based inspections.

Risk-Based Inspection Program

A risk-based inspection program uses qualitative and quantitative data analysis to inform ongoing inspection activities. Risk-based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk.

Risk Mitigation

A method or methods to eliminate or reduce the effects of hazards.

Safety Assurance

The 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.

## Safety Event

An unexpected outcome resulting in injury or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

Safety Event:

Accidents as defined by FTA.

Incidents as defined by FTA.

Occurrences as defined by FTA, including near-misses, red signal overrun, improper door operation, wrong route, and unexpected service shut down for a safety reason.

Safety Management System (SMS)

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

Safety Program Data

Data that includes, but is not limited to, event data, hazard data, safety risk ratings, mitigation data, CAP data, near miss data, and ongoing monitoring data.

Safety Risk Assessment

The formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.

Safety Risk Management (SRM)

A process within a rail transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

State Safety Oversight Agency (SSOA)

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.

State

A State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

TTP

Technical Training Plan

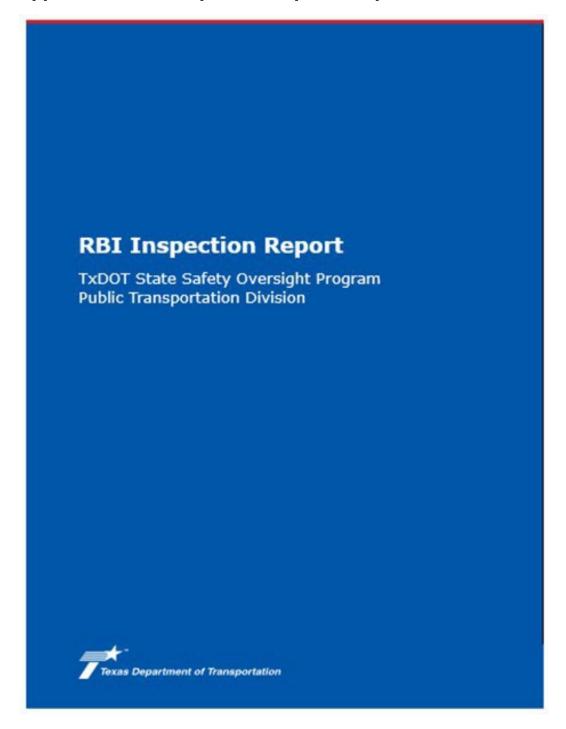
U.S.C.

United States Code

Vehicle

Rolling stock used on a rail fixed guideway public transportation system, including, but not limited to, passenger and maintenance vehicles.

## **Appendix 2: RBI Inspection Report Template**



# **RBI Inspection Report Contents**

Executive Summary	. 1
Date and Time of Inspection	
Inspection Purpose	. 1
Location or Items Inspected	. 1
TXDOT SSO and RTA Personnel Present	. 1
Issues or Deficiencies Observed, if applicable	. 1
Photographs, Documentation, or Diagrams	. 1
Recommendations	. 1
Corrective Actions	. 1

## **Appendix 3: Risk Prioritization Committee Charter**

#### **TxDOT SSO Risk Prioritization Committee Charter**

#### **Purpose**

TxDOT will convene Risk Prioritization Committees to review each rail agency's quantitative and qualitative data to prioritize TxDOT SSO RBI inspections.

#### **Objectives**

The committee has three objectives:

- 1) Meet semi-annually, annually, or as needed to prioritize risk for each agency.
- 2) Prioritize RBI Inspections based on RTA data analysis and safety performance.
- 3) Document committee decisions.

#### **Meeting Frequency:**

Committee will meet a minimum of twice a year for large Light Rail systems and once a year for smaller Streetcar systems.

> Light Rail Systems (Large) Dallas Area Rapid Transit **Houston Metro**

Streetcar Systems (Small) McKinney Avenue Transit Authority **Dallas Streetcar** El Paso Streetcar Galveston Island Trolley

#### Representatives

The committee will have five voting representatives that will serve continuously.

- Two representatives from either Vital Assurance or Transportation Resource Associates.
  - Project Principal
  - o Project Manager
- Three representatives from the TxDOT SSO Program.
  - o Transit Safety Program Manager
  - o Transit Safety Program Manager
  - SSO Data Analyst

#### **Attendance and Alternates**

Each representative will attend scheduled committee meetings. Any representative unable to attend a meeting will inform the chair before the meeting and will appoint an alternate. An alternate attending a meeting on behalf of a regular representative will be a voting representative for that meeting.

#### **Chair and Vice-Chair**

The committee will have two officers: Chair and Vice-chair

- Chair is the Transit Safety Program Manager
- Vice-chair is Transit Safety Program Manager.

#### **Chair Duties:**

- Schedule committee meetings,
- Develop meeting agendas,
- Conduct the committee meeting, and
- Supervise the preparation of meeting summaries
- Document risk prioritization decisions and next steps.

#### **Vice-Chair Duties:**

- In the absence of the chair, assume the duties of the chair,
- Prepare meeting materials with assistance of data analyst,
- Perform other duties as directed by the chair.

## **Voting quorum**

Five voting representatives constitute a quorum. A majority vote of representatives is required to approve committee decisions.

#### **Meeting Documentation:**

Meetings will be summarized to include decisions and action items.

# **Appendix H**

Two-Hour Safety Event Notification Guide





## **Two-Hour Safety Event Notification Guide**

The Federal Transit Administration's (FTA) <u>State Safety Oversight (SSO)</u> regulation (<u>49 CFR Part 674</u>) establishes definitions and minimum notification thresholds for safety events. Part 674 defines a "safety event" and requires a rail transit agency (RTA) to notify its State Safety Oversight Agency (SSOA) and the FTA within two hours of any safety event that meets certain thresholds. This Two-Hour Notification Guide is designed to help RTAs identify those events and notify FTA. This document updates prior guidance (issued on September 24, 2021) to incorporate the changes adopted in FTA's SSO final rule, which published on October 18, 2024 (89 FR 83981).<sup>1</sup>

## What is a "Safety Event"?

"Safety event means an unexpected outcome resulting in injury or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment." 49 CFR § 674.7.

## Notifications of Certain Safety Events - 49 CFR 674.33(a)

An RTA must notify FTA and the SSOA within two hours of any safety event occurring on a rail fixed guideway public transportation system that results in one or more of the following:

- 1) Fatality
- 2) Two or more injuries
- 3) Derailment
- 4) Collision resulting in one or more injuries
- 5) Collision between two rail transit vehicles
- 6) Collision resulting in disabling damage to a rail transit vehicle
- 7) Evacuation for life safety reasons
- 8) Unintended train movement

What is the requirement to notify the SSOA and FTA of a Safety Event?

<sup>&</sup>lt;sup>1</sup> This guidance document is not legally binding in its own right and the Federal Transit Administration will not rely upon it as a separate basis for affirmative enforcement actions or other administrative penalty. Conformity with this document (as distinct from existing statutes and regulations) is voluntary only, and nonconformity will not affect rights and obligations under existing statutes and regulations.



In addition to the requirements for safety event notification set forth in any SSO program standard, an RTA must notify both the SSOA and the FTA within two hours of any safety event occurring on its rail fixed guideway public transportation system that meets any of the thresholds defined above. Please provide safety event notifications at the earliest practicable time after the occurrence of any one of the defined safety events and no later than two-hours after the safety event has occurred.

## How do I notify FTA of a safety event?

Contact the U.S. Department of Transportation's Transportation Operations Center (TOC) within two hours of a reportable safety event, by email (recommended method) or phone:

## **TOC-01@dot.gov** or 202-366-1863

When providing two-hour notifications, please submit safety event information details as specified in your SSOA's program standard. The SSO required notifications may include, but are not limited to, a summary of the event and pertinent details such as:

- Safety event date, time, location, and name of the Rail Transit Agency (RTA) providing the notification.
- When an RTA has more than one rail mode, provide the rail mode and/or line involved in the safety event (Heavy Rail/Subway, Light Rail, Streetcar, etc.).
- Number of fatalities or injuries of persons requiring immediate medical attention away from the scene.
- After a Rail Transit Vehicle (RTV) related collision, was there disabling damage of any RTV?
- Primary and secondary event types (e.g. collision, derailment, fire, etc.).

#### How do I classify an event that includes multiple safety event types?

When an event includes multiple safety event types, in your notification, please classify the safety event type based on the safety event that occurred first.

### Example 1:

If a streetcar collides with a truck and subsequently derails, the safety event would be classified as a collision, although the derailment was a result of the collision.

#### Example 2:

If a train collides with a person and results in a fatality, the safety event would be classified as a collision, although the fatality was a result of the collision.



# Must I provide notification of a loss of life that results from natural causes or assaults resulting in homicides under Part 674?

No. The regulation excludes deaths resulting from drug overdose, exposure to the elements, illness, or natural causes from the notification requirement. It also excludes fatalities resulting from criminal actions such as assaults or homicides (§§ 674.7; 674.33(b)).

# Must I provide notification of an injury that results from natural causes or criminal assaults under Part 674?

No. The regulation excludes injuries resulting from a drug overdose, exposure to the elements, illness, natural causes, occupational safety events occurring in administrative buildings, and injuries resulting from criminal actions such as assaults from the notification requirement. ((§§ 674.7; 674.33(b)).

## Must I report a collision between two rail transit vehicles?

Yes. RTAs are required to provide two-hour notification of all collisions between two rail transit vehicles. Collisions with motor vehicles or persons that result in injuries, death, derailment, or disabling damage to the rail transit vehicle also remain reportable. (§ 674.33(a)).

#### What is "Disabling damage"?

"Disabling damage means damage to a rail transit vehicle resulting from a collision and preventing the vehicle from operating under its own power." (§ 674.7).

Disabling damage includes damage which adversely affects the structural strength, performance, or operating characteristics of the rail transit vehicle and prevents the vehicle from operating under its own power. Disabling damage excludes damage such as hairline cracks in windows, dents, minor bends, small puncture holes in the body, or broken lights or mirrors that, under agency policy, allows the vehicle to remain in service. It also excludes vehicles removed from service for minor repair or maintenance, testing, or video and event recorder download.



#### What is "unintended train movement"?

"Unintended train movement means any instance where a revenue vehicle is moving and is not under the control of a driver (whether or not the operator is physically on the vehicle at the time). This applies regardless of whether the event occurred in revenue service." (§ 674.7).

**Example**: A train rolling freely, unresponsive to operator commands, (e.g., loss of brakes) is a reportable event, regardless whether the direction of travel is an intended path.

## What is an "evacuation for a life safety reason"?

"Evacuation for life safety reasons means a condition that occurs when persons depart from transit vehicles or facilities for life safety reasons, including self-evacuation. A life safety reason may include a situation such as a fire, the presence of smoke or noxious fumes, a fuel leak from any source, an electrical hazard, or other hazard to any person. An evacuation of passengers into the rail right of way (not at a platform or station) for any reason is presumed to be an evacuation for life safety reasons." (§ 674.7).

**Example**: Passengers that self-evacuate or are evacuated to the right-of-way and walk to or are escorted to a platform or other place of safety, (e.g., a rescue train) is a reportable event.

#### What is a "derailment"?

"Derailment for the purposes of this part means a safety event in which one or more wheels of a rail transit vehicle unintentionally leaves the rails." (§ 674.7).

**Example 1**: A train splits a switch and travels in an opposing direction without leaving the rail head is not a derailment.

**Example 2**: A streetcar riding on embedded rail hits debris in the flangeway gap and leaves the rail is a derailment, even if the train corrects itself and returns to the rail.



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Certificate Pages: 2 Initials: 0

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Envelope Originator: Barbara DuKett

125 E. 11th Street Austin, TX 78701

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Barbara.DuKett@txdot.gov

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**Signer Events** 

Jeffrey Davis

Jeffrey.Davis@txdot.gov Chief Administrative Officer

Texas Department of Transportation

Security Level: Email, Account Authentication

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Intermediary Delivery Events Status Timestamp

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Donald.Franks@txdot.gov

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Eric Rangel

eric.rangel@txdot.gov Special Projects Cord.

Texas Department of Transportation

Security Level: Email, Account Authentication

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