Public Transportation Agency Safety Plan (PTASPA) Mini Workshop

in association with

Missouri Public Transit Association
Session Topics

- PTASP regulation requirements for bus transit
- Role of State Departments of Transportation (DOT)
- Considerations for developing and carrying out an Agency Safety Plan (ASP)
Innovative approach to improving transit safety:

- Based on Safety Management System (SMS) principles and methods
- Risk and performance-based
- Flexible and scalable

Compliance deadline: **July 20, 2020**
## Applicability

<table>
<thead>
<tr>
<th>Applies to:</th>
<th>Does NOT Apply to:</th>
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<tbody>
<tr>
<td>Operators of transit systems that are recipients or subrecipients of FTA</td>
<td>✗ FTA recipients that do not operate transit systems</td>
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<tr>
<td>funds:</td>
<td>✗ Commuter rail service regulated by Federal Railroad Administration</td>
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<tr>
<td>✗ Section 5307</td>
<td>✗ Passenger ferry service regulated by U.S. Coast Guard</td>
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<tr>
<td>✗ Section 5310 &amp; 5311 (applicability deferred)</td>
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<tr>
<td>All rail transit operators, regardless of FTA funding source</td>
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Requirements

- **Agency Safety Plan**: Develop and certify an Agency Safety Plan.
- **Safety Management System (SMS)** *(Subpart C)*: Implement and operate a Safety Management System.
- **PTASP Documentation** *(Subpart D)*: Maintain documentation related to the ASP, SMS implementation, and results from SMS processes and activities.
Agency Safety Plan Requirements

• One plan for all modes, or one for each mode
  – Recommend excluding commuter rail subject to safety regulation by FRA from ASP due to data protection differences

• Must include:
  - SMS processes and activities
  - Safety performance targets
  - Emergency preparedness and response plan (rail only)
  - Process and timeline for annual review and update
Agency Safety Plan Requirements

✓ Must address all applicable requirements and standards in FTA’s Public Transportation Safety Program
✓ Must specify a Chief Safety Officer or SMS Executive
✓ Must be signed by the Accountable Executive
✓ Must be approved by the agency’s Board of Directors or an Equivalent Authority
The Accountable Executive

• A single, identifiable person who has ultimate responsibility for carrying out the Agency Safety Plan and the Transit Asset Management (TAM) Plan

• Has control or direction over the human and capital resources needed to develop and maintain the Agency Safety Plan and TAM Plan

• Accountable for ensuring that the agency’s SMS is effectively implemented, and action is taken, as necessary, to address substandard performance in the agency’s SMS

• Accountable Executive may be a contractor if these criteria are met
Chief Safety Officer (CSO) or SMS Executive

- An adequately trained individual with authority and responsibility for day-to-day implementation and operation of the SMS
- Designated as the CSO/SMS Executive by the Accountable Executive
- Direct line of reporting to the Accountable Executive
- May be a full-time or part-time employee of the transit system, or a contracted employee
- For non-rail modes, may serve functions other than safety, such as operations and maintenance
  - FTA recommends large public transportation agencies have a full-time CSO/SMS Executive who is fully dedicated to ensuring safety
Board of Directors and Equivalent Authority

• Equivalent Authority: Entity that carries out duties similar to that of a Board of Directors, including the authority to review and approve a recipient or subrecipient’s Agency Safety Plan

• Examples include a mayor, county executive, board of county commissioners, or a grant manager
Who is Responsible for Developing the Plan?

If the Section 5307 recipient or subrecipient is a:

Then:

- Small public transportation provider
  - State Department of Transportation (DOT)

- Bus transit provider
  - Bus transit provider

- Rail transit provider
  - Rail transit provider
Who is Responsible for Carrying Out and Annually Updating the Plan?

- Each transit agency must carry out and update its own plan, regardless of agency size or plan development approach.
What is a Small Public Transportation Provider?

1. 100 or fewer vehicles in revenue service during peak regular service **across all fixed route modes**

2. 100 or fewer vehicles in revenue service during peak regular service **in each non-fixed route mode**

3. Does not operate rail transit
Small Public Transportation Provider Examples

- 75 fixed route buses
- 81 demand response paratransit vehicles
- 55 demand response taxis

- 85 fixed route buses
- 15 fixed route vanpools
- 62 demand response paratransit vehicles

- 100 fixed route buses
- 1 ferry route

- 35 fixed route buses
- 2 commuter rail lines under FRA safety oversight

- 102 fixed route buses
- 65 demand response paratransit vehicles
- 12 demand response taxis

- 110 demand response paratransit vehicles

- 65 fixed route buses
- 55 fixed route vanpools
- 30 demand response paratransit vehicles

- 75 fixed route buses
- 50 deviated fixed route buses
- 6 demand response paratransit

- 37 fixed route buses
- 105 demand response paratransit vehicles
- 12 demand response taxis

- 22 fixed route buses
- 2 streetcar lines
Small Public Transportation Provider Opt-Out

- Small public transportation providers may opt out of a State-developed plan
- To opt-out, a small public transportation provider must **notify** the State that it will draft its own plan
- State should **maintain documentation** of small public transportation provider opt-out if the State doesn’t develop the plan
- If the State develops small public transportation provider plan and that provider later opts-out, the provider has one year from the notification date to draft and certify a plan
Safety Performance Targets

• Must **develop safety performance targets** based on the safety performance measures established in the National Public Transportation Safety Plan

• Must make safety performance targets **available to** States and Metropolitan Planning Organizations (MPO)

• Must **coordinate with** States and MPOs on the selection of State and MPO performance targets to the maximum extent practicable

• Targets are not reported to FTA at this time
### Safety Performance Targets

- **Fatalities**
  - Total number of reportable fatalities and rate per total vehicle revenue miles by mode

- **Injuries**
  - Total number of reportable injuries and rate per total vehicle revenue miles by mode

- **Safety Events**
  - Total number of reportable events and rate per total vehicle revenue miles by mode

- **System Reliability**
  - Mean distance between major mechanical failures by mode

- **Must develop 7 targets for the 4 measures in the National Public Transportation Safety Plan**

- **“Reportable” fatalities, injuries, and events are defined in the National Transit Database Safety and Security Reporting Manual**
  
SMS Components

Safety Promotion

Safety Risk Management
(Identify, Assess, & Mitigate)

Safety Management Policy
(Leadership
Commitment & Accountability)

Safety Assurance
(Measure, Monitor, & Evaluate)

(Communication & Training)
SMS Components – Key Differences

<table>
<thead>
<tr>
<th>Actions</th>
<th>Enablers</th>
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<tr>
<td>Safety Risk Management (SRM) and Safety Assurance (SA) are the key processes and activities for managing safety.</td>
<td>Safety Management Policy (SMP) and Safety Promotion (SP) provide the structure and supporting activities to make SRM and SA possible and sustainable.</td>
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</table>
SMS Requirements – Safety Management Policy

• Safety management policy, not all safety policy
• Includes information relevant to developing and carrying out the other SMS components
• Relevant resources:
  – SMP and SP webinar
  – Safety Management Policy Statement Checklist and Examples
  – Employee Safety Reporting Program webinar

§ 673.23
a) Safety Management Policy Statement, with safety objectives
b) Employee Safety Reporting Program
c) Safety Management Policy communication
d) Defined authorities, accountabilities, and responsibilities
Employee Safety Reporting Program

• Must establish and implement a process that allows all employees—including relevant contract employees—to report safety conditions to senior management
• Must specify protections for employees who report safety conditions to senior management
• Must describe employee behaviors that may result in disciplinary action, and therefore would not be covered by protections
• Must inform employees of safety actions taken in response to reports submitted through an employee safety reporting program

- Hotline
- Paper form
- Safety meetings or toolbox talks
- SharePoint site or form
- Phone or tablet app
- Third party information collection service
Sample Employee Reporting Process

Employee reports a safety condition

Safety condition is analyzed and addressed through the Safety Risk Management process

Safety action is documented and communicated

Reporter is protected, if applicable
Authorities, Accountabilities, and Responsibilities

• Must establish necessary authorities, accountabilities, and responsibilities for the development and management of the transit agency’s SMS:

<table>
<thead>
<tr>
<th>Authorities</th>
<th>Accountabilities</th>
<th>Responsibilities</th>
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<tbody>
<tr>
<td>• What is the position authorized to do?</td>
<td>• What is the position accountable for, which cannot be delegated?</td>
<td>• What must the position do or oversee the accomplishment of?</td>
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</tbody>
</table>

• Required positions or categories of positions include:

  • Accountable Executive
  • Chief Safety Officer or SMS Executive
  • Agency leadership and executive management
  • Key staff
Safety Promotion Requirements

- Includes **all safety topics**, not just safety management
- **Separate requirement** from the Public Transportation Safety Certification Training Program rule at 49 CFR Part 672
  - No requirements for bus transit in Part 672

§ 673.29
a) Competencies and training
b) Safety communication
Competencies and Training
§ 673.29(a)

- **Must** establish and implement a comprehensive safety training program for all agency employees **directly responsible for safety**
  - Part 673 does not define “directly responsible for safety”
  - Must include relevant contractors
  - Must include refresher training
  - May consider training for Board Members or others involved in approving or overseeing the ASP
Safety Communication
§ 673.29(b)

• Must demonstrate that safety and safety performance information is communicated throughout the agency’s organization
  – Must include information on hazards and safety risk relevant to employees’ roles and responsibilities
  – Must inform employees of safety actions taken in response to reports submitted through an employee safety reporting program
    • A safety action doesn’t have to mean implementing a new safety solution
    • Could communicate safety action information to a group of employees, not just the individual reporter
  – Must include relevant contractors
SMS Requirements – Safety Risk Management

• For **all** elements of a transit agency’s system

• Consider how you will develop, maintain, and make available required documents

• Consider defining scope of when SRM is conducted

• Relevant resources include:
  – SRM and SA webinar
  – Hazard and Consequences Self-Guided Training Tool

§ 673.25

a) A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system
Risk

- A measure of severity and likelihood, combined
- Predicted— in the future; hasn’t happened yet
- Measures the potential effects of a hazard, not the hazard itself
- Likelihood (how often) vs. severity (how bad)

§ 673.5 Definitions

Risk means the composite of predicted severity and likelihood of the potential effect of a hazard

- Avoid confusing risk with hazard
  - We often call something “a safety risk” when we mean “a hazard”
Hazard

• Real or potential condition—not an event
  – Real: Observable condition that exists in the transit system
  – Potential: Condition that doesn’t exist, but could exist if a change is made in the transit system

• Can cause consequences

§ 673.5 Definitions

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
Consequence

- Important to **distinguish hazards from consequences** for accurate safety risk assessment
- Potential consequences are the focus of safety risk assessment
  - Assess the severity and likelihood of potential consequences, **not** hazards
- A single hazard could cause multiple consequences

Not defined in § 673.5, but can be derived from the definition of *Hazard*. Transit agencies may choose to use the following definition:

> **Consequence** means an effect of a hazard, involving 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
Event

- **Something that happened, not a condition or system state**
- Important to distinguish from a hazard
- Safety event investigation may reveal hazards

§ 673.5 Definitions

*Event* means any accident, incident, or occurrence

- Used primarily for reporting, not SRM
  - Event definitions are based on type of event and magnitude of outcomes
Safety Hazard Identification

- Must establish how the agency will identify hazards and consequences
- All agencies must consider FTA and oversight authority information
- Some agencies must consider changes that may impact safety performance
- Information sources may include Employee Safety Reporting Programs and Safety Assurance outputs

§ 673.25

b) Safety hazard identification

1) A transit agency must establish methods or processes to identify hazards and consequences of hazards

2) A transit agency must consider, as a source for hazard identification, data and information provided by an oversight authority and the FTA
Example of Hazard vs. Consequence

HAZARD
Near-side bus stop

CONSEQUENCE
Bus pulls away from the near-side bus stop and the car, trying to turn right in front of the bus, collides with the bus
Safety Risk Assessment

- Must **assess likelihood and severity** of the consequences of hazards
  - Must include existing mitigations
- Must **prioritize hazards** based on the safety risk of their potential consequences
- Consider how you will select or prioritize hazards and potential consequences to undergo safety risk assessment

§ 673.25

c) Safety risk assessment

1) A transit agency must establish methods or processes to assess safety risks associated with identified safety hazards

2) A safety risk assessment includes an assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk
Benefits of Using a Safety Risk Matrix

- Communicates leadership guidance to support decision-making (e.g., what is unacceptable)
- Supports consistent assessment
- Leverages data analysis
- Can make it easier to communicate and track changes in safety risk
- Enables easier comparison of hazards
Safety Risk Mitigation

- Must have methods or processes to identify necessary mitigations or strategies
- Can reduce risk by reducing likelihood and/or severity
  - No requirement for a single mitigation to address both
- When identifying and choosing mitigations, consider mitigation monitoring needs

§ 673.25

d) Safety risk mitigation

A transit agency must establish methods or processes to identify mitigations or strategies necessary as a result of the agency’s safety risk assessment to reduce the likelihood and severity of the consequences
SMS Requirements – Safety Assurance

• Processes for the collection, analysis, and assessment of information

• Helps to ensure:
  – Safeguards are in place and actually effective
  – Early identification of potential safety issues
  – Safety objectives are met

• Relevant resources include:
  SRM and SA webinar

§ 673.5 Definitions

Safety Assurance means processes within a transit agency’s Safety Management System that function 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 Assurance Applicability (§ 673.27(a))

<table>
<thead>
<tr>
<th>Must meet requirements in (b), (c), and (d)</th>
<th>Must meet requirements in (b) only</th>
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</thead>
<tbody>
<tr>
<td>• Rail fixed guideway public transportation systems</td>
<td><strong>• Small public transportation providers</strong>—recipients or subrecipients of Federal financial assistance under 49 U.S.C. 5307 that have <strong>100 or fewer vehicles in peak regular service</strong> (across all fixed route modes or in any one non-fixed route mode) and <strong>do not operate a rail fixed guideway public transportation system</strong></td>
</tr>
<tr>
<td>• <strong>Recipients or subrecipients</strong> of Federal financial assistance under 49 U.S.C. Chapter 53 that operates more than one hundred vehicles in peak revenue service</td>
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FTA  
FEDERAL TRANSIT ADMINISTRATION
Safety Performance Monitoring & Measurement

- Focused on current agency processes and activities
- To validate expectations and identify system changes:
  - Do our assumptions match reality? Is there something we missed that could be a safety concern?
  - How is the system changing? Is the change a safety concern?

§ 673.27

b) Safety performance monitoring and measurement. A transit agency must establish activities to:
1) Monitor its system for compliance with, and sufficiency of, the 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;
3) Conduct investigations of safety events to identify causal factors; and
4) Monitor information reported through any internal safety reporting programs.
Monitoring Operations and Maintenance Procedures (§ 673.27(b)(1))

Must monitor system for **compliance** with and **sufficiency** of operations and maintenance procedures

- Could address **non-compliance** through training, coaching, and management oversight, among other approaches
- Could address **insufficient procedures** through Safety Risk Management
Monitoring Safety Risk Mitigations (§ 673.27(b)(2))

Must monitor operations to **identify safety risk mitigations** that may be **ineffective, inappropriate,** or were **not implemented as intended**

- If **ineffective**, could re-analyze the hazard(s) and consequence(s) the mitigation was intended to address through SRM
- If **inappropriate**, could identify new mitigation options
  - The mitigation may not be feasible
- If **not implemented as intended**, could consider alternative mitigations or alternative approaches to implementation
Safety Event Investigation (§ 673.27(b)(3))

- Transit agencies must **conduct investigations of safety events** to **identify causal factors**
- Safety events include **accidents**, **incidents**, and **occurrences**
- Identified factors could include rule violations and technical failures, among others
- Investigation is important, **whether or not the event is considered preventable**
- Identified causal factors **may reveal hazards** that could be addressed through SRM
- Investigations may be an additional **source of safety data**
Monitoring Internal Safety Reporting (§ 673.27(b)(4))

Transit agencies must **monitor information reported through any internal safety reporting programs**

- Including, but not limited to:
  - Employee safety reporting programs
  - Mandatory safety reporting programs (e.g., accident notification)

- **Could collect, analyze, and assess information** reported from programs over time

- May be an important **source of safety data**

- Analysis of reports **may lead to the identification of hazards** to address through Safety Risk Management
Management of Change

• Management of change, not change management
• Evaluates proposed or future changes
  – Once a change is made (e.g., new procedure implemented) it may be monitored through other SA activities
• Focused on non-safety changes
• Recommended, but not required for small public transportation providers

§ 673.27
b) Management of change

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

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
Continuous Improvement

• Focused on agency-wide safety performance
• Assessment could use:
  – Required safety performance targets (e.g., number of injuries)
  – Safety objectives
  – Additional agency-wide or mode-wide safety performance targets
• Recommended, but not required for small public transportation providers

§ 673.27

(1) Continuous improvement
   1) A transit agency must establish a process to assess its safety performance
   2) If a transit agency identifies any deficiencies as part of its safety performance assessment, then the transit agency must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies
PTASP Documentation and Recordkeeping

- Transit agencies must maintain documentation and recordkeeping of:
  - Establishing the ASP, including documents included in whole or by reference
  - Programs, policies, and procedures to carry out the ASP
  - SMS implementation activities
  - Results from SMS processes and activities

- Must maintain these documents for a minimum of **three years** after they are created and make these documents available upon request by the FTA, or other Federal entity
  - For rail transit agencies, also their applicable State Safety Oversight Agency
Could include:

**Descriptions** of how the transit agency meets Part 673 requirements

**References** to other documents, such as agency procedures, that establish or demonstrate compliance with Part 673 requirements

**Explanation** of how information in referenced documents satisfies Part 673 requirements

**Discussion** of how the transit agency has implemented, or plans to implement, Part 673 requirements described or referenced in the ASP
Federal funds may be used to develop and implement an Agency Safety Plan:

**Development**

- Section 5305 Statewide Transportation Planning Program
- Section 5307 Urbanized Area Formula Grants

**Implementation**

- Section 5307 Urbanized Area Formula Grants
- Section 5337 State of Good Repair Grants
- Section 5339 Grants for Bus and Bus Facilities Program
Agency Safety Plan Certification

- Applicable States and transit agencies must certify that they meet the PTASP regulation requirements.
- States and transit agencies will certify under the Certifications and Assurances process.
- FTA will provide further guidance on certifying PTASP compliance by **July 20, 2020**.
PTASP Oversight for Bus Transit

• FTA will conduct oversight through the Triennial Review process
• PTASP requirements will be added to comprehensive review guide
PTASP Technical Assistance Center Components

**Community of Practice**
- Online discussion forums to ask questions, share ideas and documents, and engage with posts
- Quick sign-up process to post
- Optional alerts when others post

**Resource Library**
- Voluntary technical assistance materials organized by agency type
- Hosted on FTA’s website
- Updated with new materials, based on industry needs

**One-on-One Technical Assistance**
- Agency Safety Plan reviews
- Help desk to answer questions and schedule assistance
- Staffed 9am-8pm ET, M-F, with a dedicated phone number, email and mailing address

**Onsite Technical Assistance**
- Conduct onsite trainings and provide assistance to help agencies meet PTASP regulation requirements

FEDERAL TRANSIT ADMINISTRATION
PTASP Technical Assistance Center (TAC) Links and Contact Information

Technical Assistance Center
  • www.transit.dot.gov/PTASP-TAC

PTASP Community of Practice
  • www.transit.dot.gov/PTASP-COP

Frequently Asked Questions
  • www.transit.dot.gov/PTASP-FAQs