U.S. Department of Transportation
Federal Transit Administration

Joint State Safety Oversight (SSO) and Rail Transit Agency (RTA) Public Transportation Agency Safety Plan (PTASP) Workshop

PARTICIPANT GUIDE

2019

Version 1.1

2019

The guidance in this document is not legally binding in its own right and will not be relied upon by the Federal Transit Administration as a separate basis for affirmative enforcement action or other administrative penalty. Compliance with the guidance in this document (as distinct from existing statutes and regulations) is voluntary only, and noncompliance will not affect rights and obligations under existing statutes and regulations.

Table of Contents

Section 1: Public Transportation Agency Safety Plan Rule Overview

Session Objectives

- PTASP requirements for rail transit
- Resources to meet requirements

1.1 Public Transportation Agency Safety Plan Fundamentals

Public Transportation Agency Safety Plans (PTASP) Regulation at 49 C.F.R. Part 673

- 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

Applies to:	Does NOT Apply to:
Operators of transit systems that are recipients or subrecipients of FTA funds: ✓ Section 5307 II Section 5310 & 5311 (applicability deferred) ✓ All rail transit operators, regardless of FTA funding source	✗ FTA recipients that do not operate transit systems ✗ Commuter rail service regulated by Federal Railroad Administration ✗ Passenger ferry service regulated by U.S. Coast Guard

Impacted Agencies

65 Rail Transit Agencies

128 Large 5307 Bus Agencies

737 Small 5307 Bus Agencies

Multi-modal Transit Agencies

Oversight

Rail Transit Modes	Bus Transit Modes
• SSOAs are responsible for establishing and overseeing requirements based on Parts 673 and 674 through a Program Standard – SSOAs may establish additional requirements – SSOAs provide guidance for RTAs to meet Program Standard requirements • SSOAs cannot develop ASPs for rail transit agencies	• States are not responsible for overseeing or enforcing PTASP requirements • FTA will conduct oversight through the Triennial Review process • PTASP requirements will be added to comprehensive review guide • States cannot use State Safety Oversight formula funds to develop Agency Safety Plans for bus transit

Funding

Federal funds may be used to develop and implement an Agency Safety Plan.

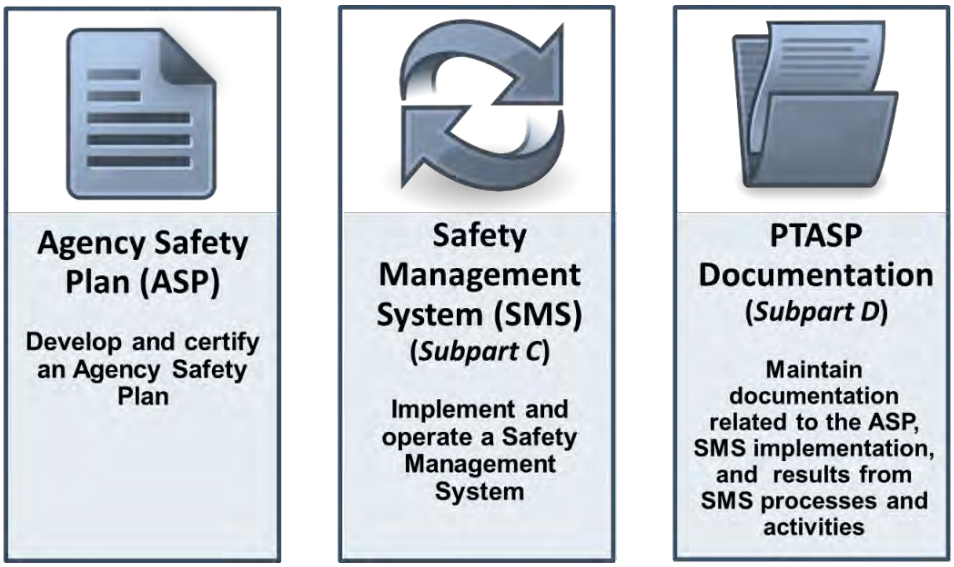
Development		Implementation		
Section 5305 Statewide Transportation Planning Program	Section 5307 Urbanized Area Formula Grants	Section 5307 Urbanized Area Formula Grants	Section 5337 State of Good Repair Grants	Section 5339 Grants for Bus and Bus Facilities Program

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

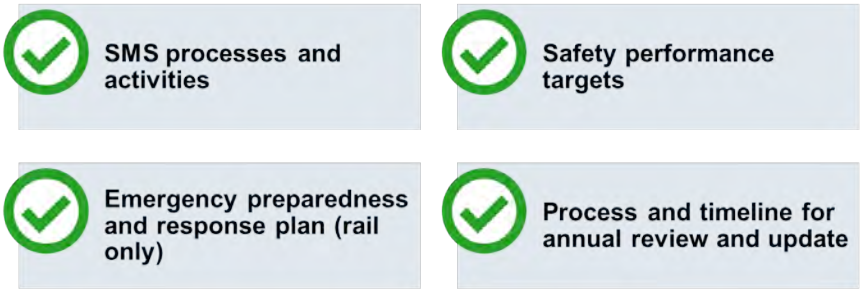
1.2 Public Transportation Agency Safety Plan Requirements

PTASP Requirements



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:



- 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

Program Standard vs. Regulation Text

- FTA establishes the interpretation of PTASP regulatory text
- SSOAs oversee the application of PTASP regulatory requirements
- SSOAs establish interpretation and oversee application of any additional requirements specified in the Program Standard that go above and beyond the PTASP regulation
- Additional requirements included by an SSOA in a Program Standard should be distinguishable from PTASP regulatory text

FTA Safety Program Applicable Requirements

- ASP must address applicable requirements of FTA's Safety Program based on 49 U.S.C. §5329
- Examples include:
  - Requirements established in regulations (Parts 670, 672, 673, 674)
  - General and special directives
  - Operator Assault
  - Standards in the National Public Transportation Safety Plan (not yet established)

The Accountable Executive

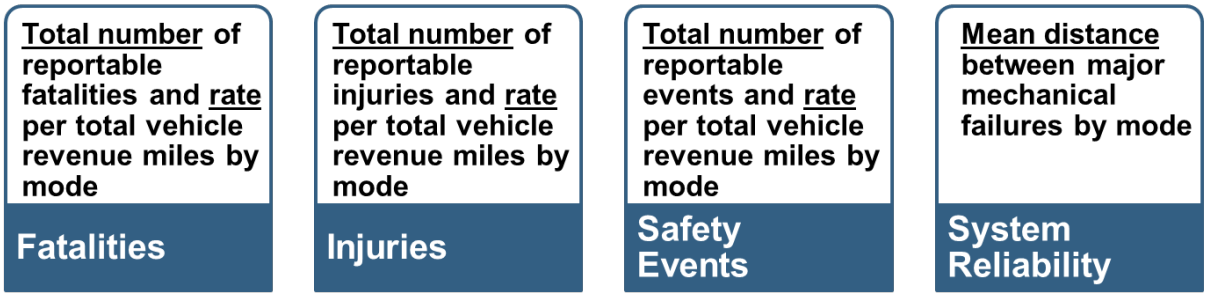
- A single, identifiable person who has ultimate responsibility for carrying out the Agency Safety Plan and the Transit Asset Management (TAM) Plan
- Has control or direction over the human and capital resources needed to develop and maintain the Agency Safety Plan and TAM Plan
- Accountable for ensuring 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 rail modes, may not serve in other operational or maintenance capacities unless those responsibilities have a nexus to safety, for example:
  - Security
  - Training
  - Transit asset management

Safety Performance Targets

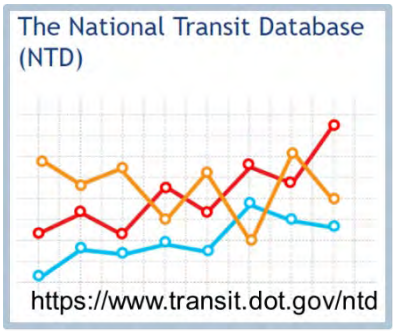
- Must develop safety performance targets based on the safety performance measures established in the National Public Transportation Safety Plan
- Must make safety performance targets available to States and Metropolitan Planning Organizations (MPOs)
- Must coordinate with States and MPOs on the selection of State and MPO performance targets to the maximum extent practicable
- Targets are not reported to FTA at this time



- 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

https://www.transit.dot.gov/regulations-and-guidance/safety/national-public-transportation-safety-plan

- Transit agencies can set targets for each measure based on, but not limited to:
    - Transit agency data and experience
    - Benchmarking against peer transit agencies
    - Leadership direction
    - Transit industry data



- Transit agencies may also choose to also set safety performance targets:
    - At a lower level of detail (e.g., by mode, event type)
    - Based on key areas of safety risk or leadership priorities

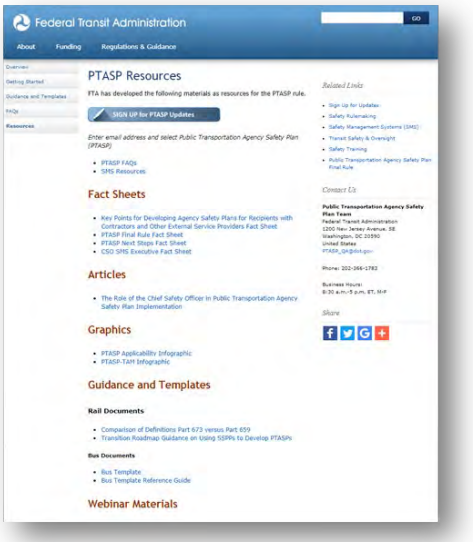
PTASP Documentation and Recordkeeping

- 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, other Federal agency or SSOA

1.3 Public Transportation Agency Safety Plan Resources

Preparing for July 20, 2020

- Resources available include:
  - Fact Sheets
  - Articles
  - Infographics
  - Guidance and Templates
  - Past Webinar Materials (Recordings and Presentations)
- Questions? Email PTASP_QA@dot.gov or call the TSO Main Number at 202-366-1783
- Resources page: https://www.transit.dot.gov/PTASPResources



Read, watch, and participate

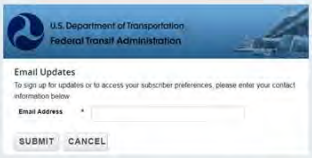
- Review the PTASP FAQs
- Visit the PTASP Resources page to view previous webinars and documents
- Participate in webinars explaining PTASP-regulations and guidance
- Read our newsletter, TSO Spotlight for PTASP-related articles

Attend a workshop

- FTA is holding PTASP workshops in July, August, and September 2019 for bus and rail transit agencies. The workshops will allow participants to learn more about the rule's requirements, how to implement SMS, and to share best practices
- Information on the workshops can be found on the FTA website under Calendar of Events and on FTA's PTASP page for registration updates

Sign up to receive updates

Sign up for GovDelivery:



- FTA announcements and new PTASP documents
- https://public.govdelivery.com/accounts/USDOTFTA/subscriber/new

Section 2: Developing the Safety Management System

Session Objectives

- PTASP regulation requirements for a transit agency's Safety Management System (SMS)
- Considerations for developing the SMS section of an agency's Agency Safety Plan
- Considerations for implementing an SMS

SMS Components

SMS Content in Agency Safety Plans

Could Include:

Descriptions of how the transit agency meets Part 673 requirements	References to other documents, such as agency procedures, that establish or demonstrate Part 673 requirements	Explanation of how information is 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

How are the SMS components Different?

Safety Risk Management (SRM) and Safety Assurance (SA) are the key processes and activities for managing safety	vs.	Safety Management Policy (SMP) and Safety Promotion (SP) provide the structure and supporting activities to make SRM and SA possible and sustainable
Actions		**Enablers**

2.1 Safety Management Policy

Safety Management Policy Requirements

- Safety **management** policy, <u>not all safety policy</u>
- Include information **relevant to** developing and carrying out the **other SMS components**
- Consider how you will **develop**, **maintain,** and **make available** required documents

§673.23

a) Written statement, with safety objectives

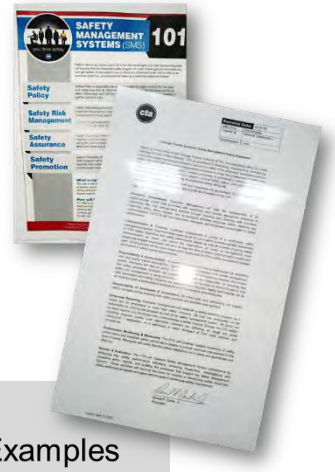
b) Employee safety reporting program

c) Safety management policy communication

d) Authorities, accountabilities, and responsibilities

The Safety Management Policy Statement §673.23(a)

- Presents the agency's safety objectives
- Can clarify and communicate:
  - Management and employee responsibilities for safety
  - Policies, procedures, and organizational structures necessary to accomplish the safety objectives
- To develop the statement, transit agencies could consider:
  - Relevant audiences
  - Key take-aways
  - Communication approaches
- May be part of, or referenced in, the ASP



Relevant Materials
- Safety Management Policy Statement Checklist and Examples

Safety Objectives §673.23(a)

- **Must be part of the written statement of safety management policy**
- **Part 673 does not specify what the safety objectives must include, be based on, or be used for**
    - No requirement to achieve safety objectives, but they can be a useful tool to drive safety improvements and priorities
- To develop safety objectives, transit agencies may find it useful to consider:

Leadership goals and priorities	**Local, regional, or State priorities**	**Concerns or targeted areas for improvement**	**Strategic and long-term planning documents**

Employee Safety Reporting Program § 673.23(b)

- Must establish and implement a process that allows **all employees**—including relevant contract employees—to **report safety conditions to senior management**
- Intended to help the Accountable Executive and other senior managers get important safety information from across the transit agency
- The program can be an agency's most important source of information
- Part 673 does not specify which methods should be used—transit agencies may consider:

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

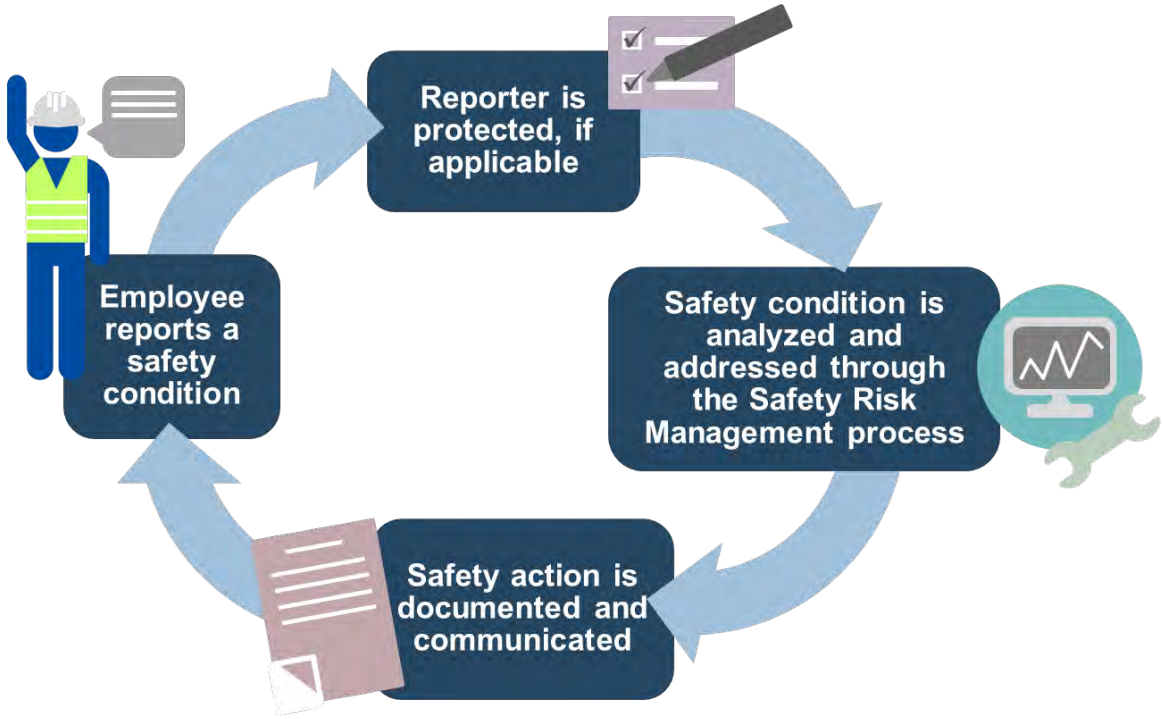
Employee Safety Reporting Program § 673.23(b)

- Reported **safety conditions** could include:

Hazards	Potential consequences of hazards	Other relevant safety information

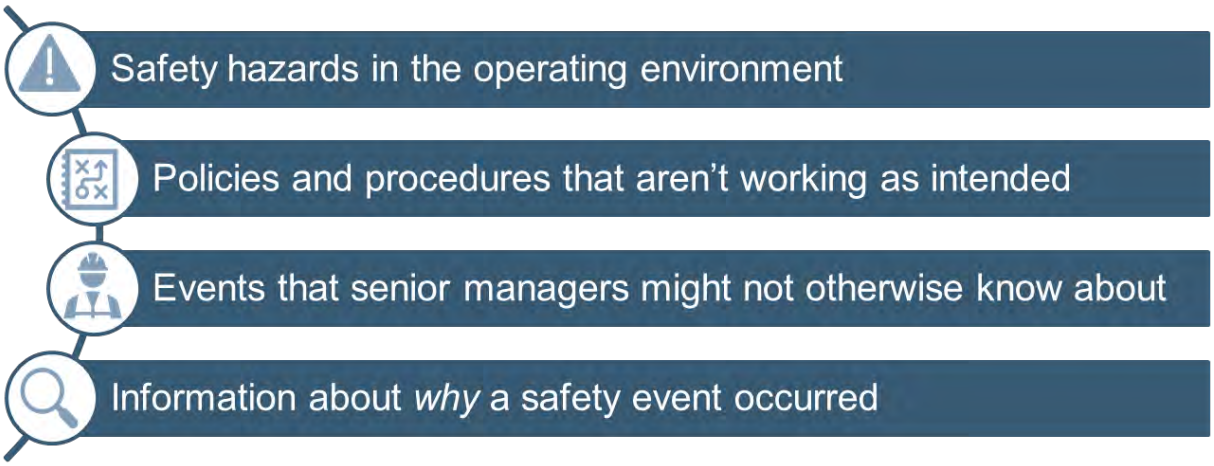
- Must **specify protections** for employees who report safety conditions to senior management
    - Part 673 does not specify what those protections must be
- Must **describe employee behaviors** that may result in disciplinary action, and therefore would not be covered by protections
- **Must inform employees of safety actions taken in response to reports** submitted through an employee safety reporting program § 673.29(b)

Protections and Communication can Encourage More Reporting



Employee Safety Reporting Program § 673.23(b)

- It may be helpful to **consider what safety information the agency needs from employees** when developing the process, methods, and protections for employee reporting, such as:



  - Note: Other industries may have helpful experience with effective safety reporting programs. Transit agencies should consider reaching out to local or partner organizations in rail, aviation, utilities, healthcare, etc., for relevant insights.

Authorities, Accountabilities, and Responsibilities § 673.23(d)

- Must establish necessary **authorities, accountabilities, and responsibilities for the development and management of the transit agency's SMS**

Authorities	Accountabilities	Responsibilities
• What is the position authorized to do?	• What is the position accountable for, which cannot be delegated?	• What must the position do or oversee the accomplishment of?

- Required positions or categories of positions include:
  - Accountable Executive
  - Chief Safety Officer or SMS Executive
  - Agency leadership and executive management
  - Key staff

Authorities, Accountabilities, and Responsibilities § 673.23(d)

- May choose to document authorities, accountabilities, and responsibilities in job or position descriptions, among other options
- Transit agencies are **responsible for ensuring that requirements specified for a role are met**
    - Both in §673.23(d) and in §673.5 Definitions
- It may be helpful to **consider all the requirements in Part 673** to identify what authorities, accountabilities, and responsibilities are necessary for the development and management of the SMS
- Using clear and concise language can help reduce confusion and misunderstanding, especially when implementing new processes and activities

2.2 Safety Promotion

Safety Promotion Requirements

- Includes **all safety topics**, not just safety management
- **Separate requirement** from the Public Transportation Safety Certification Training Program rule at 49 C.F.R. 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 <u>comprehensive</u> safety training program for all agency employees <u>directly responsible for safety</u>**
- 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

Competencies and Training § 673.29(a)

- "Directly Responsible for safety" could be individuals whose job titles extend beyond having "safety" in the job title
- Use existing training programs:
  - OSHA training requirements
  - Agency specific training
  - FTA Safety Training Curriculum
  - External agency developed Safety Training

Safety Certification Training Curriculum (49 C.F.R. Part 672)

In addition to establishing a comprehensive safety training program, **SSOAs and RTAs must designate employees and contractors** to complete the Safety Certification Training Curriculum described under the Public Transportation Safety Certification Training Program regulation (49 C.F.R. Part 672):

Steps:

1. Designate Personnel
2. Enroll in PTSCTP
3. Complete applicable training curriculum
4. Complete refresher training every two years

RTA Personnel

Personnel whose primary job function includes:

- Development, implementation, and monitoring of the RTA's System Safety Program Plan or the Public Transportation Agency Safety Plan, and/or
- Development, implementation, and review of any of the processes and procedures that are needed to comply with the SSOA program standard

SSOA Personnel

Personnel whose job function includes conducting safety examinations and audits of RTAs, or manage/supervise those who conduct safety examinations and audits of RTAs.

- Examination means a process for gathering or analyzing facts or information related to the safety of a public transportation system
- Audit means a review or analysis of safety records and related materials, including, but not limited to, those related to financial accounts

Safety Certification Training Curriculum (49 C.F.R. Part 672)

- SMS Awareness
- Safety Assurance
- SMS Principles for Transit
- SMS Principles for SSO Programs (SSOAs only)
- Courses offered through the Transit Safety and Security Program (TSSP) Certificate (Bus)
    - Effectively Managing Transit Emergencies
    - Transit Rail Safety
    - Transit Rail Incident Investigation

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

Safety Communication Example

2.3 Safety Risk Management

Safety Risk Management Definitions

- Enables a **proactive approach** to managing safety
- Helps **allocate resources to** areas of **highest safety risk** and/or unacceptable safety risk

§673.5 Definitions

Safety Risk Management means a process within a transit agency's Public Transportation Agency Safety Plan for **identifying hazards** and **analyzing, assessing, and mitigating safety risk**

How is Safety Risk Management different from Hazard Management?

Hazard Management	Safety Risk Management
• Assumes systems—as designed—are sufficient to prevent hazards • Focused on preventing system failures and the bad outcomes of those failures • Addresses failures through corrective actions	• Assumes systems are changing • Focused on the routine, ongoing capture and analysis of safety information to assess safety risk • Supports decision-making on managing safety risk and allocating safety resources

2.4 The Safety Risk Management Definitions

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**)
- **Avoid confusing** risk with hazard
    - We often call something "a safety risk" when we mean "a hazard"

§673.5 Definitions

Risk means the composite of predicted severity and likelihood of the potential effect of 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, <u>not</u> 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
- Used primarily for reporting, not **SRM**
  - Event definitions are based on type of event and magnitude of outcomes

§673.5 Definitions

Event means any accident, incident, or occurrence

Sample Tool: SRM Definitions Checklist

What is it?	A Potential Consequence
If you can select all 3 in one box, it's…	❑ Not a real or potential condition ❑ Can be caused by a hazard ❑ Hasn't happened yet, but could be similar to a past event
A Hazard	**An Event**
❑ Real or potential condition ❑ Can cause a consequence ❑ Not an event	❑ Accident, incident, or occurrence ❑ Not a real or potential condition ❑ Has already occurred

Example – Light Rail Grade Crossing

Categorizing Hazards

- Could use **a system to categorize and organize hazards** for analysis
- May adopt the method described in FTA's Sample Hazard Classification System
  - Organizational
  - Technical
  - Environmental

Relevant Materials
- Sample Hazard Classification System

Risk Mitigation

- **Solution** to a problem, not the problem itself
- Eliminates or reduces **likelihood and/or severity of consequences**
- Usually focused on **reducing safety risk to an acceptable level**, not getting the level of risk to zero

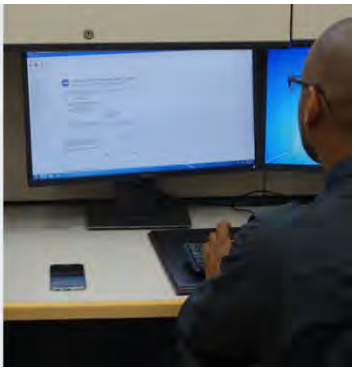
§673.5 Definitions

Risk mitigation means a method or methods to eliminate or reduce the effects of hazards

Engaging Employees in SRM

- Consistently and accurately distinguishing key terms can be challenging
- **Could use key terms for analysis, while using other words to** communicate about safety throughout the agency

For example, in its SRM Pilot, the Chicago Transit Authority **asks individuals to report** whatever concerns them regarding safety—**their safety concerns**. Safety specialists then ensure the safety concerns are properly characterized for analysis



2.5 The Safety Risk Management Process

Safety Risk Management Requirements

- For **all elements** of a transit agency's system
- Consider how you will **develop, maintain, and make available** required documents
- Detailed documentation can help **increase consistency**, and therefore **confidence** in the process and its results
- Consider defining **when** SRM is conducted

§673.25

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

Developing and Implementing the SRM Process

- SRM is a decision-making tool – the process should help managers make decisions
- Models for conducting SRM include:
  - **Centralized**: Safety Department leads the SRM process with input from subject matter experts across the agency
  - **Decentralized**: Personnel throughout the agency conduct SRM and the Safety Department assists

Safety Hazard Identification Requirements

- 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** § 673.27(c)(2)
- Information sources **may include employee safety reporting** and **Safety Assurance outputs** § 673.27

§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***

Sources of Hazards and Consequences Information

Hazards and potential consequences could be identified from:

- Single reports
- Analysis of data from multiple sources
- Trends of multiple data points

Documenting Hazards and Consequences

Could **consolidate** hazard and consequence information **in one location** for sorting and analysis

For example, a **Risk Register** (paper or electronic)

A	B	C	D	E	F
Hazard	**Type of hazard**	**Identification Date**	**Identification Source**	**Date of Analysis**	**Worst Credible Potential Consequence(s)**
Buses misaligned over maintenance pits	Maintenance	1/14/2018	Employee safety reporting	02/01/18	Bus falling into pit resulting in worker fatality
Near side bus stop at the intersection of First and Main	Operational	3/20/2018	Inspection report	3/22/2018	Car turning right in front and colliding with the bus as the bus pulls out of the stop

Relevant Materials

- Sample Safety Risk Register and Guide

Safety Risk Assessment Requirements

- 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 your agency will **select or prioritize** hazards and potential consequences **to undergo safety risk assessment**

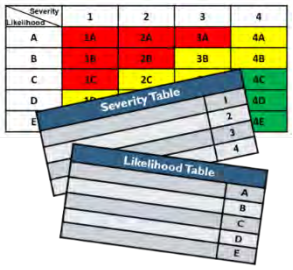
§673.25

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

Relevant Materials

- Sample Safety Risk Matrices for Rail Transit

Conducting Safety Risk Assessment with a Risk Matrix

1. Apply criteria to **identify the level of severity** (e.g., catastrophic) and **level of likelihood** (e.g., frequent) of a potential consequence

Severity Categories

Description	Severity Category	Cri
Catastrophic	1	Could result in death, per exceeding $250,000, sys more hours, or irreversibl damage that violates law
Serious	2	Could result in permanen occupational illness that r of at least one person, pr $25K but less than $250, lasting between 10 minut reversible environmental violation of law or regulati
Marginal	3	Could result in injury or o in one or more lost work to $25,000, system shutd minutes, or mitigatable er without violation of law or regulation.

Likelihood Levels

Description	Level	Individual item	System or Vehicle Fleet
Frequent	A	Likely to occur often in the life of an item.	Continuously experienced. Potential consequence may occur more than once in 500 operating hours.
Occasional	B	Will occur several times in the life of an item.	Will occur several times. Potential consequence may be experienced once in 500 to 60,000 operating hours.
Remote	C	Unlikely to occur in the life of an item.	Unlikely but possible. Potential consequence may be experienced once in 60,000 to 1,800,000 operating hours.

Assessing Severity

To determine severity, we figure out **how bad the potential consequence could be, based on the severity criteria**

- This is informed by, but not limited to historical information
- The worst credible outcome may not have happened yet

Assessing Likelihood

To determine likelihood, we figure out **how often a potential consequence could happen within the scope of the issue—**usually based on historical data

What do we need to know?

- **Scope**: Agency-wide or a particular rail yard? Over what time period? What type of equipment, etc.? Unique circumstances?
- **Exposure**: What is the number of possible opportunities for the consequence to happen? Usually in the unit used to measure likelihood (e.g., VRMs, operating hours, process cycles, etc.)
- **Experience**: What is the number of times the consequence has happened or is expected to happen?
- **What is the number of times the consequence has happened or is expected to happen?**

Conducting Safety Risk Assessment with a Risk Matrix

2. Based on identified levels of severity (e.g., catastrophic) and likelihood (e.g., frequent), **identify the safety risk index** (e.g., high)

Risk Assessment			
Likelihood/Severity	**Catastrophic (1)**	**Serious (2)**	**Marginal (3)**
Frequent (A)	HIGH (1A)	HIGH (2A)	MEDIUM (3A)
Occasional (B)	HIGH (1B)	MEDIUM (2B)	LOW (3B)
Remote (C)	HIGH (1C)	MEDIUM (2C)	LOW (3C)

3. **Identify next steps based** on the safety risk index (e.g., safety risk must be mitigated or eliminated)

Safety Risk Index	Criteria by Index
HIGH	Unacceptable – Action Required: Safety Risk must be mitigated or eliminated.
MEDIUM	Undesirable – Management Decision: Executive management must decide whether to accept safety risk with monitoring or require additional action.
LOW	Acceptable with Review: Safety Risk is acceptable pending management review.

Safety Risk Assessment Outcomes

Could Specify:

- Whether or not mitigation is necessary
- Specific next steps
- Position responsible for accepting risk or overseeing mitigation
    - Consider aligning accountability for safety risk to current authorities and responsibilities

Safety Risk Mitigation Requirements

- 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 need** §673.27(b)(2)

§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

Sample Guidance for Developing Mitigations

Consider providing guidance to help identify appropriate mitigations, such as:

MIL-STD-882E Risk Mitigation Measures

- Eliminate hazards
- Reduce risk through alteration
- Incorporate engineered features or devices
- Provide warning devices
- Incorporate signage, procedures, training, and personal protective equipment (PPE)

Safety Risk Mitigation Strategies

- Safety risk avoidance
- Safety risk reduction
- Safety risk segregation

2.6 Safety Assurance

Safety Assurance Definition

- Processes for the **collection, analysis, and assessment of information**
- Help to ensure:
  - Safeguards are in place and *actually* effective
  - Early identification of potential safety issues
  - Safety objectives are met

§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

2.7 Safety Performance Monitoring & Measurement

Safety Performance Monitoring and Measurement Requirements

- 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?

What Does Safety Performance Monitoring and Measurement Look Like?

- In the ASP, consider defining:
    - **Methods** to monitor and measure
        - Including roles and responsibilities
    - **Scope** (the focus and level of effort) of activities
    - **What happens next** when issues are identified

§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

Mapping Safety Performance Monitoring and Measurement Processes – Example

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

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 Performance

Safety Performance Indicator (SPI)	Safety Performance Target (SPT)
• A **signal** or **early warning sign** • Can measure inputs, outputs, outcomes, or impacts	• Level or extent of **expected change** in the SPI **over a period of time** • Quantifiable

Relevant Materials
- Introduction to Safety Performance Indicators and Targets

Types of SPIs for Safety Performance Monitoring and Measurement

Lagging Indicators	Leading Indicators
• Monitor **negative safety outcomes** the agency aims to prevent • Data may be more readily available	• Monitor conditions with **potential to become or contribute to negative safety outcomes** • Can be focused on monitoring operational and environmental conditions or agency processes • More useful for safety performance monitoring and measurement than lagging indicators

SPIs for Safety Risk Mitigation Monitoring - Example

- **Lagging Indicator:**
  - Number of collisions with pedestrians at crossings
- **Leading Indicators:**
  - Percentage of crossings modified with gates
  - Percentage of crossings modified with signage
  - Number of operator reports of pedestrian near-miss events at crossings

SPIs for Safety Risk Mitigation Monitoring – Example

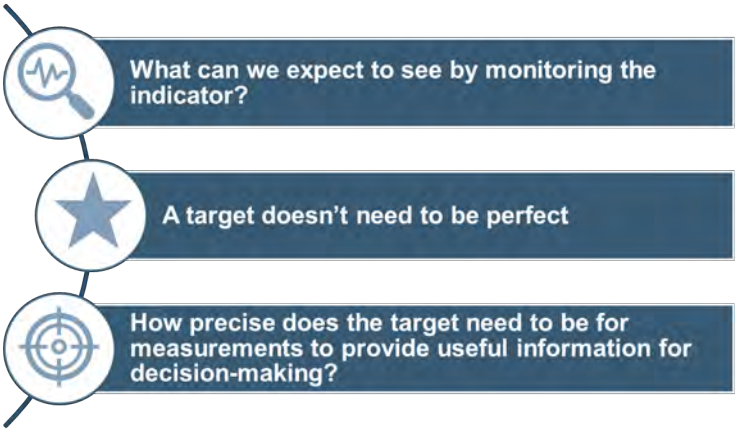
- **Lagging Indicator:**
  - Number of bicyclist injuries resulting from “stuck” tires
- **Leading Indicators:**
  - Number of signs installed along alignment with embedded track
  - Number customer and public complaints regarding “stuck” bicycle tires

Setting SPIs for Safety Performance Monitoring and Measurement

When establishing safety performance indicators, it may be helpful to consider:

- **What is a reliable indicator – or set of indicators – of what we are trying to monitor?**
    - Consider alternatives if an indicator isn't a reliable source of information
- **What is the minimum number of indicators needed?**
    - A large set of indicators can be resource-intensive to monitor over time
- **Are there existing data sources we can use to monitor the indicator?**
    - If not, consider allocating monitoring resources based on safety risk

Setting SPTs for Safety Performance Monitoring and Measurement



Corrective Action Plan vs Mitigation Monitoring Plan

Corrective Action Plan (CAP)

- Documents the corrective action
- Typically addresses short-term defects or compliance issues
- Helps ensure the corrective action is implemented

Mitigation Monitoring Plan (MMP)

- Documents mitigation(s) and monitoring activities
- Defines how the transit agency will monitor whether the mitigation is performing as intended—implemented, appropriate, and effective
- Helps the agency prioritize safety resource investments

Mitigation Monitoring Plans

Mitigation Monitoring Plans **help ensure safety performance monitoring and measurement activities are performed** to confirm that mitigations are effective, appropriate, and fully implemented

Contents of a Mitigation Monitoring Plan may include, but are not limited to:

Relevant Materials

- Guide to Safety Risk Mitigations vs Corrective Actions

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

2.8 Management of Change

Management of Change Requirements

- 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**
- 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

Identifying Changes (§673.27(c)(1))

Transit agencies must establish a process for **identifying and assessing changes** that **may introduce new hazards** or **impact** the transit agency's **safety performance**

- Examples of approaches include:
  - **Centralized** – A person or group assesses changes (all, or a certain type) to determine safety impacts
  - **Decentralized** – All departments evaluate if proposed changes have a safety impact, and the Safety Department provides guidance and oversight
- May use existing processes
- Could identify and assess different proposed changes in different ways
- Proposed changes can be initiated within or outside the transit agency

Assessing Changes (§673.27(c)(2))

Transit agencies must **evaluate proposed changes** that may impact safety performance **through the Safety Risk Management** process

Transit agencies may choose to:

Send all types of hazards through the agency's **standard SRM process**

Establish a **separate SRM process** for addressing proposed changes (all changes or certain types)

2.9 Continuous Improvement

Continuous Improvement Requirements

- 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 SPTs**
- Not required for small public transportation providers

§673.27

c) 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

Assessing Safety Performance (§673.27(d)(1))

Must establish a **process to assess safety performance**

- Part 673 **<u>does not</u>** specify **how to conduct** assessments **or which standard** to base assessments on
  - FTA may establish performance standards at a later time §673.11(a)(4))
- Should be sufficient for the Accountable Executive to know **when to take action** to address inadequate safety performance
- May choose to **develop SPIs and SPTs for safety objectives**
- Consider a **small set of meaningful SPIs and SPTs** to measure overall safety performance
- Safety performance assessment **might not show you *what* is wrong**, **only that *something* is wrong** that requires a closer look

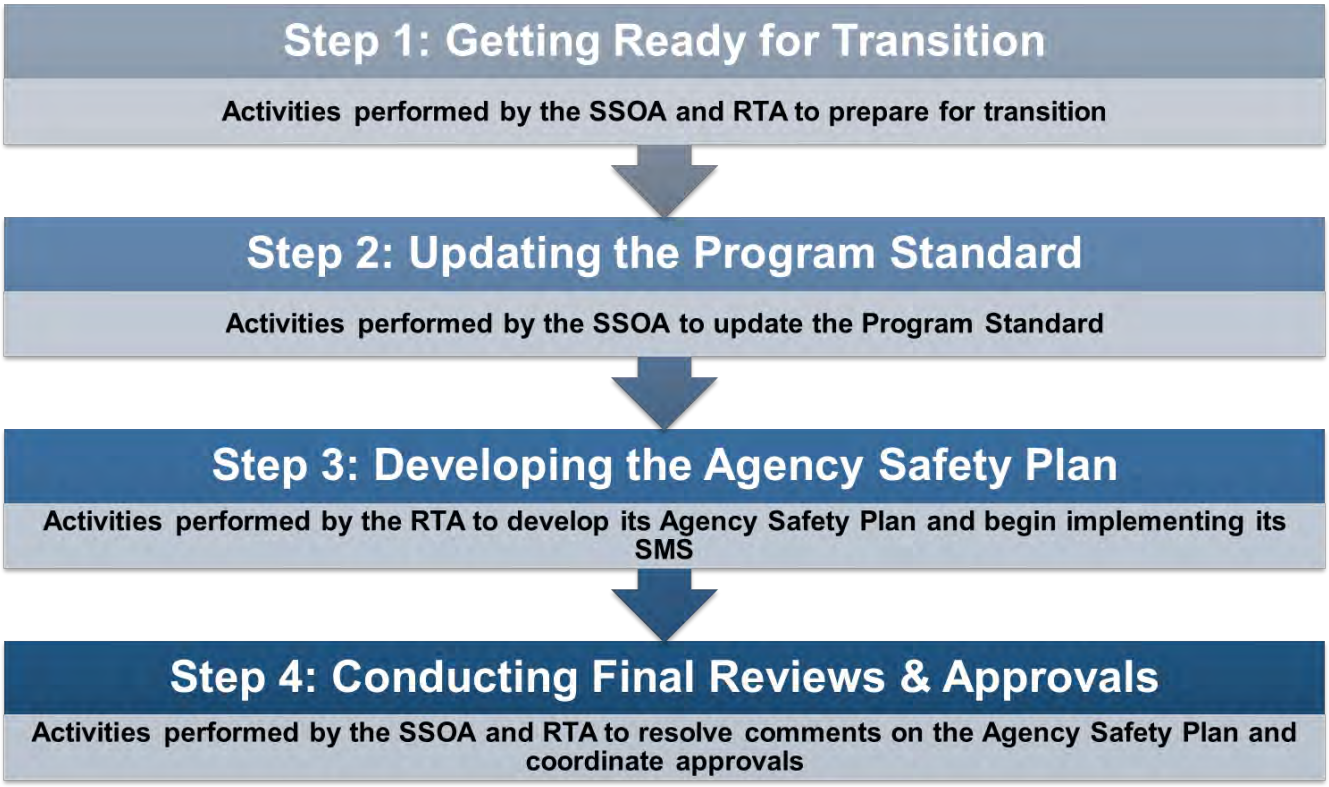
Addressing Safety Deficiencies (§673.27(d)(2))

Must **develop and carry out**, under the direction of the Accountable Executive, a **plan to address identified safety deficiencies**

- Safety deficiencies can be in the **transit agency's SMS or related to other agency processes and activities**
- A plan to address identified safety deficiencies could involve:
    - Addressing underlying hazards and potential consequences through Safety Risk Management
    - Changing data collection or analysis techniques to better understand what's really going on
    - Testing and evaluating new approaches to SMS processes

Section 3: Transition to Public Transportation Agency Safety Plans

PTASP Transition Steps



3.1 Step 1: Getting Ready for Transition

Getting Ready for Transition

- Establish team leads to manage the transition process
- Brief and engage executive leadership on transition activities and requirements
  - Connection between Program Standard and ASP
  - SSOA's role and authority
- Establish objectives and timeline for transition
  - Develop approach to meetings and draft materials review
  - Establish protocols for communication
- Provide training on requirements, as needed

3.2 Step 2: Updating the Program Standard

Updating the Program

- Determine what, if anything, needs to change in the Program Standard
- Consider categories of information
    - FTA requirements
    - State requirements
    - SSOA requirements
    - What the SSOA needs from the RTA to facilitate oversight
- Consider guidance to RTA concerning referencing documentation vs other approaches to including information in ASP
- Ensure adequate resources to support the update process
- Experienced safety oversight and technical personnel
- Appropriate time in the schedule
- A checklist of requirements and other items to include, including level of detail needed
- A matrix or other tool for formally addressing comments provided by the FTA and other stakeholders

3.3 Step 3: Developing the Agency Safety Plan

Developing the ASP – Reminder

- If a recipient or subrecipient operates rail, they are not considered a small public transportation provider
- Transit agencies that operate rail must develop and carry out their own Agency Safety Plan(s)
- Rail ASP must meet requirements established in the SSOA's Program Standard
- Can develop one plan for the entire agency, or a plan for each mode
    - Recommend not combining with FRA-regulated rail, due to FTA data protection limitations
    - May have similar or different activities and processes to meet PTASP requirements among different modes

Developing the ASP

- Could conduct a gap analysis or capabilities assessment to review RTA's current safety management practices and determine what new processes and procedures may be necessary
- Establish roles and responsibilities for ASP development
- Develop a strong project management approach, including a project plan with executive buy-in
- Establish working groups
- Engage stakeholders to build buy-in and bring in subject-matter expertise
- Identify existing datasets, information management systems, reports and other tools to support SMS processes

Planning for Development

- Recommend developing a project plan to meet milestones
- Content could include:

  - Purpose, scope, and objectives
  - Project management
    - Roles and responsibilities
    - Resources
    - Schedule
    - Document Management
    - Communications plan
  - Directory of participants
  - Detailed timeline
  - Development and implementation task list
  - Training plan
  - Plan management
    - Revisions and document control
    - Tracking plan execution

Gap Analysis or Capabilities Assessment

Could integrate a gap analysis or capabilities assessment into the plan, or create a plan based on a gap analysis

- Gather requirements and objectives regarding ASP contents and ASP development
  - Program Standard and relevant guidance
  - Previous findings and guidance from SSOA
  - Leadership goals and objectives
- Separate "must haves" from "nice to haves"

3.4 Step 4: Conducting Final Reviews & Approvals

Conducting Final Reviews and Certifying to FTA

- Establish a formal review and approval process
- Address new approval criteria in Part 674
- Coordinate with the Board of Directors or Equivalent Authority and SSOA on final approval process

Consideration 1 – RTA Involvement in Program Standard

- Drafting Program Standard cannot be a shared or collaborative activity
- No FTA requirement for SSOA to provide RTA with opportunity for review and comment
- Each SSOA establishes procedures for distributing the final Program Standard to RTAs in its jurisdiction (674.27(a)(2))
- RTA involvement through structured meetings or review can be helpful
    - Promotes greater understanding and, ultimately, compliance
    - Avoids unintended consequences and inconsistencies
- Consider facilitated meetings
- Focus on SSOA's explanation of its requirements and expectations
- RTA then discusses how requirements would affect its operations and safety outcomes, with SSOA making final determination to resolve comments

Consideration 2 - Potential Impacts of Program Standard Requirements

- SSOA should understand what its decisions to include additional requirements in Program Standard might mean
    - Benefits and drawbacks
    - Compliance challenges
    - Potential unintended consequences
    - SSOA's ability to oversee effectively

Consideration 3 – Setting Reasonable Expectations for Transition Program Standard and ASPs

- SSOA can include interim requirements to support RTA transition to SMS
- Could reserve the right to review a process or procedure later developed by the RTA, instead of including specific requirements now
- Could develop long term plan for Program Standard revisions, given long term goals for safety management

Consideration 4 – SSOA Involvement in Specifying ASP Content

- SSOAs are charged with *overseeing*, while RTA must *establish* and *manage* safety programs
- How detailed to make requirements?
    - Can make quick adjustments difficult
    - Can take some responsibility off of the RTA to improve or maintain safety performance
    - SSOA may be aware of historical weaknesses
    - SSOA may be concerned about RTA's ability to address an issue without specific requirements
- Could add mechanisms to course-correct if RTA practices and intended outcomes become misaligned
- Consider performance-based approach of FTA Safety Program
- Address safety concerns through performance monitoring and Safety Risk Management, rather than specification
- Ensure RTA has capability to monitor its own safety performance — identify hazards and consequences, and appropriately assess and mitigate risk
- Ensure SSOA has tools and info necessary for oversight

Appendix A: PTASP Regulatory Text

Subpart A – General

673.1 Applicability

a. This part applies to any State, local governmental authority, and any other operator of a public transportation system that receives Federal financial assistance under **49 U.S.C. Chapter 53.**

b. This part does not apply to an operator of a public transportation system that only receives Federal financial assistance under **49 U.S.C. 5310**, **49 U.S.C. 5311**, or both **49 U.S.C. 5310** and **49 U.S.C. 5311**.

673.3 Policy

The Federal Transit Administration (FTA) has adopted the principles and methods of Safety Management Systems (SMS) as the basis for enhancing the safety of public transportation in the United States. FTA will follow the principles and methods of SMS in its development of rules, regulations, policies, guidance, best practices, and technical assistance administered under the authority of **49 U.S.C. 5329**. This part sets standards for the Public Transportation Agency Safety Plan, which will be responsive to FTA's Public Transportation Safety Program, and reflect the specific safety objectives, standards, and priorities of each transit agency. Each Public Transportation Agency Safety Plan will incorporate SMS principles and methods tailored to the size, complexity, and scope of the public transportation system and the environment in which it operates.

673.5 Definitions

As used in this part:

Accident means an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

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

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 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.

Equivalent Authority 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.

Event means any Accident, Incident, or Occurrence.

FTA means the Federal Transit Administration, an operating administration 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.

Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Investigation means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

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.**

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

Operator of a public transportation system means a provider of public transportation as defined under **49 U.S.C. 5302 (14).**

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.

Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

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

Rail fixed guideway public transportation system means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.

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

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

Risk mitigation means a method or methods to eliminate or reduce the effects of hazards.

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 Management Policy means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.

Safety Management System (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.

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

Safety performance target means a Performance Target related to safety management activities.

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 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 transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Serious injury means any injury which:

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

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 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 means an agency established by a State that meets the requirements and performs the functions specified by **49 U.S.C. 5329(e)** and the regulations set forth in **49 CFR part 674.**

Transit agency means an operator of a public transportation system.

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.**

Subpart B – Safety Plans

673.11 General requirements.

a. A transit agency must, within one calendar year after July 19, 2019, 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 the agency's Board of Directors, or an Equivalent Authority.
   2. The Public Transportation Agency Safety Plan must document the processes and activities related to Safety Management System (SMS) implementation, as required under subpart C of this part.
   3. The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.
   4. The Public Transportation Agency Safety Plan must 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.
   5. Each transit agency must establish a process and timeline for conducting an annual review and update of the Public Transportation Agency Safety Plan.
   6. A rail transit agency must include or incorporate by reference in its Public Transportation Agency Safety Plan an emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.

b. A transit agency may develop one Public Transportation Agency Safety Plan for all modes of service, or may develop a Public Transportation Agency Safety Plan for each mode of service not subject to safety regulation by another Federal entity.
c. A transit agency must maintain its Public Transportation Agency Safety Plan in accordance with the recordkeeping requirements in subpart D of this part.
d. A State must draft and certify a Public Transportation Agency Safety Plan on behalf of any small public transportation provider that is located in that State. A State is not required to draft a Public Transportation Agency Safety Plan for a small public transportation provider if that agency notifies the State that it will draft its own plan. In each instance, the transit agency must carry out the plan. If a State drafts and certifies a Public Transportation Agency Safety Plan on behalf of a transit agency, and the transit agency later opts to draft and certify its own Public Transportation Agency Safety Plan, then the transit agency must notify the State. The transit agency has one year from the date of the notification to draft and certify a Public Transportation Agency Safety Plan that is compliant with this part. The Public Transportation Agency Safety Plan drafted by the State will remain in effect until the transit agency drafts its own Public Transportation Agency Safety Plan.
e. Any rail fixed guideway public transportation system that had a System Safety Program Plan compliant with **49 CFR part 659** as of October 1, 2012, may keep that plan in effect until one year after July 19, 2019.
f. Agencies that operate passenger ferries regulated by the United States Coast Guard (USCG) or rail fixed guideway public transportation service regulated by the Federal Railroad Administration (FRA) are not required to develop agency safety plans for those modes of service.

673.13 Certification of compliance.

a. Each transit agency, or State as authorized in **673.11(d)**, must certify that it has established a Public Transportation Agency Safety Plan meeting the requirements of this part one year after July 19, 2019. A State Safety Oversight Agency must review and approve a Public Transportation Agency Safety Plan developed by rail fixed guideway system, as authorized in **49 U.S.C. 5329(e)** and its implementing regulations at **49 CFR part 674**.

b. On an annual basis, a transit agency, direct recipient, or State must certify its compliance with this part.

673.15 Coordination with metropolitan, statewide, and non-metropolitan planning processes.

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.

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.

Subpart C – Safety Management Systems

673.21 General requirements.

Each transit agency must establish and implement a Safety Management System under this part. A transit agency 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 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.**

673.23 Safety management policy

a. A transit agency must establish its organizational accountabilities and responsibilities and have a written statement of safety management policy that includes the agency's safety objectives.

b. A transit agency must establish and implement a process that allows employees to report safety conditions to senior management, protections for employees who report safety conditions to senior management, and a description of employee behaviors that may result in disciplinary action.
c. The safety management policy must be communicated throughout the agency's organization.
d. The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's Safety Management System (SMS):
    1. *Accountable Executive*. The transit agency must identify an Accountable Executive. The Accountable Executive is accountable for ensuring that the agency's SMS is effectively implemented, throughout the agency's public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency's SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive.
    2. *Chief Safety Officer or Safety Management System (SMS) Executive*. 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 an agency's SMS. The Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive. A transit agency may allow the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive.
    3. *Agency leadership and executive management*. A transit agency must identify those members of its leadership or executive management, other than an Accountable Executive, Chief Safety Officer, or SMS Executive, who have authorities or responsibilities for day-to-day implementation and operation of an agency's SMS.

4. *Key staff*. A transit agency may designate key staff, groups of staff, or committees to support the Accountable Executive, Chief Safety Officer, or SMS Executive in developing, implementing, and operating the agency's SMS.

673.25 Safety risk management

a. *Safety Risk Management process*. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation.

b. *Safety hazard identification*.
   1. A transit agency must establish methods or processes to identify hazards and consequences of the hazards.
   2. A transit agency must consider, as a source for hazard identification, data and information provided by an oversight authority and the FTA.

c. *Safety risk assessment*.
   1. A transit agency must establish methods or processes to assess the 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.

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.

673.27 Safety assurance

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 include in its safety assurance process the requirements in paragraph (b) of this section.

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.

c. *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.

d. *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.

673.29 Safety promotion

a. *Competencies and training*. A transit agency must establish and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system. The training program must include refresher training, as necessary.

b. *Safety communication*. A transit agency must communicate safety and safety performance information throughout the agency's organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and informs employees of safety actions taken in response to reports submitted through an employee safety reporting program.

Subpart D – Safety Plan Documentation and Recordkeeping

673.31 Safety plan documentation

At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its Safety Management System (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 agency uses to carry out its Public Transportation Agency Safety Plan. These documents must be made available upon request by the Federal Transit Administration or other Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.

Appendix B: List of Resource Documents

PTASP Rule Overview Reference Materials

- Review Checklist for RTAs and SSOAs
- Transition Roadmap: Guidance on Using SSPPs to Develop ASPs
- PTASP Comparison of Definitions: Part 673 versus Part 659
- National Public Transportation Safety Plan, Safety Performance Measures

Developing the Safety Management System

- Developing the Safety Management Policy Statement: PTASP Implementation
- Sample Hazard Classification System: PTASP Implementation
- Guide to the Sample Safety Risk Register
- Sample Safety Risk Register
- Sample Safety Risk Assessment Matrices for RTAs
- Introduction to Performance Indicators and Targets
- Safety Risk Mitigations and Corrective Actions Guide
- Sample List of Documented Safety Risk Management and Safety Assurance Process Elements

Transition to PTASP

- Sample ASP Development, Review and Approval Timeline for RTAs and SSOAs