

FTA



FEDERAL TRANSIT ADMINISTRATION

Agency Safety Plan Lessons Learned – Part I: Safety Risk Management

October 22, 2020



U.S. Department of Transportation
Federal Transit Administration

Webinar Objectives

- Today's webinar is the first in a **two-part series** that highlights lessons learned from FTA's voluntary Agency Safety Plan (ASP) reviews
 - Today's webinar – ASP Lessons Learned Part 1 – presents lessons learned for Safety Risk Management (SRM)
 - November's webinar – ASP Lessons Learned Part 2 – will present lessons learned for Safety Assurance and Safety Promotion
- This series will share insights and recommendations for developing and implementing ASPs based on the results of over 230 voluntary ASP reviews

Lessons Learned in Today's Webinar

1. SRM versus Hazard Management
2. SRM Terminology, including Hazards and Consequences
3. Other SRM Lessons
 - a. SRM Authorities, Accountabilities and Responsibilities
 - b. Safety Risk Acceptance
 - c. Use of Data and Information for SRM
 - d. Systemwide and Timely SRM
 - e. Use of Subject Matter Expertise in SRM
 - f. SRM Training and Qualification

FTA VOLUNTARY AGENCY SAFETY PLAN REVIEWS








Voluntary Agency Safety Plan Reviews

- FTA's PTASP Technical Assistance Center (TAC) offers transit agencies and State Departments of Transportation voluntary ASP reviews
 - Agencies may submit complete drafts or individual sections for review
- The TAC reviews submitted materials using a checklist of the requirements established in the PTASP regulation
 - Agencies receive the completed checklist, including recommendations for addressing elements that do not meet requirements and suggestions for voluntary additions to the ASP



Voluntary Agency Safety Plan Reviews

Submit your ASP for a voluntary review as soon as possible to receive a review prior to the December 31, 2020 deadline

		transit.dot.gov/PTASP-TAC
		1 - 877 - 827 - 7243
		PTASP-TAC@dot.gov
		PTASP Technical Assistance Center 943 Glenwood Station Lane, Suite 102 Charlottesville, VA 22901

Don't delay – the deadline to submit ASPs for PTASP TAC review is **November 13, 2020**

Icon Legend



PTASP requirement



There are resources about this topic in the PTASP Resource Library

AGENCY SAFETY PLAN LESSONS LEARNED





Safety Risk Management, Not Hazard Management

- Some draft ASPs do not describe Safety Risk Management (SRM) and/or the required processes under SRM
- These ASPs often describe Hazard Management instead

A transit agency must develop and implement an SRM process comprised of the following activities: safety hazard identification, safety risk assessment, and safety risk mitigation (§ 673.25(a))



Safety Risk Management

- A process within a transit agency's ASP for identifying hazards and analyzing, assessing, and mitigating safety risk (§ 673.5) 
- A transit agency must develop and implement an SRM process comprised of the following activities: safety hazard identification, safety risk assessment, and safety risk mitigation (§ 673.25(a)) 

Key Characteristics of Hazard Management and SRM

Hazard Management

- Identifies and manages specific hazards after safety events or noncompliance occurs
- Hazards are not prioritized for intervention
- No long-term monitoring for effectiveness

SRM

- Proactively manages safety risk in response to a changing environment
- Hazards prioritized for intervention
- Continuous monitoring of effectiveness of safety risk mitigations

How is Safety Risk Management different from Hazard Management?

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

Resources on Hazard Management and Safety Risk Management



[Hazard Management vs. Safety Risk Management](#) Guide



[Safety Risk Management Fact Sheet](#)



[Safety Risk Management](#) webinar, slide 5



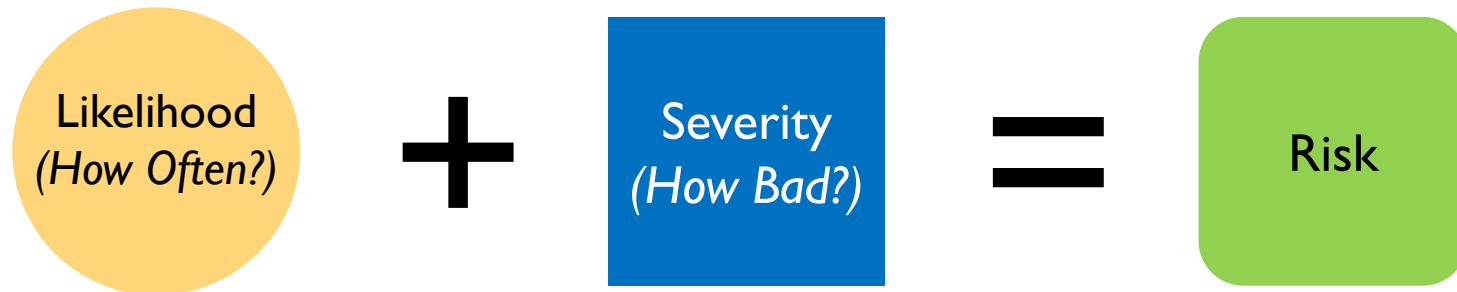
[PTASP Bus Workshop Participant Guide](#), version 5, page 25

Safety Risk Management Definitions

- Some draft ASPs do not reflect the SRM definitions in the regulation
- Although agencies are not explicitly required to utilize the same definitions, ASPs submitted by agencies that do not incorporate these definitions also tend not to fully address PTASP requirements
 - Adding and using these definitions can help agencies fully address PTASP requirements

Risk

- **Risk** means the composite of predicted severity and likelihood of the potential effect of a hazard (§ 673.5)
- In other words, how often (likelihood) and how badly (severity) a safety concern might impact people, systems, or the environment



Hazard

- **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
 - Damage to the environment (§ 673.5)
- A hazard is not an event!

Consequence

- 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

Consequence

- The potential effect of a hazard
- Is not a real or potential condition
- Has not yet occurred, but could be similar to something that previously occurred
- Under SRM, agencies allocate resources to mitigate the safety risk of the potential consequence or consequences of a hazard

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

(§ 673.25)(d))

Lesson 2: SRM Terminology

Event

- **Event** means any accident, incident, or occurrence (§ 673.5)
 - **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 (§ 673.5)
 - **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 (§ 673.5)





Event

- **Event** means any accident, incident, or occurrence (§ 673.5)
 - **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 (§ 673.5)

Lesson 2: SRM Terminology

Resources on Safety Risk Management Definitions

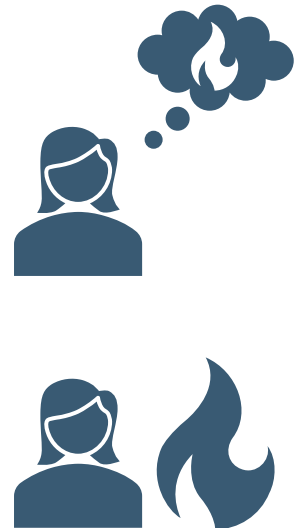


-  [Hazard Management vs. Safety Risk Management](#) Guide
-  [Safety Risk Management Fact Sheet](#)
-  [Safety Risk Management](#) webinar, slides 8-14
-  [PTASP Bus Workshop Participant Guide](#), version 5, pages 26-28

Lesson 2: SRM Terminology

The Importance of the Difference Between Consequences and Events

- **Consequence** means a potential effect of a hazard
 - Improperly terminated electrical connections could result in a fire
- **Event** already occurred, meaning the hazard's potential was realized
 - Improperly terminated electrical connections caused a fire with significant property damage



SRM is forward-looking – agencies allocate resources to proactively address what **could** happen

The Importance of the Difference Between Hazards and Consequences

- When an agency becomes aware of a safety concern, it is important to correctly identify the origin of the safety concern – that's the hazard
- If a consequence is mistaken for the hazard:
 - The agency might not fully understand the actual safety concern and its true potential (safety risk) and the condition could worsen
 - The agency may not identify other related consequences

Hazards and Consequences and Safety Risk Mitigation

In safety risk mitigation, agencies take action to reduce or eliminate the likelihood or severity of the **consequence**, not of the hazard

Resources on Hazards and Consequences



[Hazard Management vs. Safety Risk Management](#) Guide



[Safety Risk Management Fact Sheet](#)



[Safety Risk Management](#) webinar, slides 9-13



[Hazards and Consequences Self-Guided Learning Tool](#)



[PTASP Bus Workshop Participant Guide](#), version 5, pages 25-28

SRM Authorities, Accountabilities and Responsibilities

- Some draft ASPs do not identify authorities, accountabilities, and responsibilities for the SRM process
- Consider clarifying who:
 - Receives, tracks, and monitors safety concerns
 - Identifies potential consequences
 - Decides when to escalate hazards and potential consequences for safety risk assessment
 - Performs safety risk assessments, etc.

The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety (§ 673.23(d))



Lesson 3b: Safety Risk Acceptance

Safety Risk Acceptance

- Some draft ASPs do not assign management accountability for safety risk acceptance or for ensuring meaningful mitigations
- Consider describing the process and accountabilities for accepting safety risk and for ensuring that meaningful mitigations are developed and implemented

The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety (§ 673.23(d))



Lesson 3b: Safety Risk Acceptance

Safety Risk Acceptance



Accountable for accepting safety risk and ensuring mitigations are developed and implemented



Authorized to accept safety risk and determine adequacy of mitigations



Responsible for determining adequacy of safety risk assessments and developing mitigations

Use of Data and Information for SRM

- Some draft ASPs do not clearly identify sources of information for hazard identification and safety risk assessment
- However, documenting additional sources of hazard identification information and how this information is accessed can help clarify how the SRM process ensures its results accurately reflect the operations of the agency

(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. (§ 673.25(b))



Lesson 3c: Use of Data and Information for SRM

Use of Data and Information for SRM

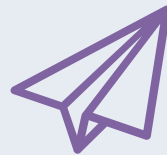
Flow of Condition Assessment Data at Straightline Transit



Mechanic
conducts
condition
assessment



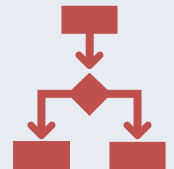
Supervisor
updates condition
assessment report



Supervisor
emails report to
Safety
Department




Safety analyst
adds report data
to database



Database used
to support SRM
process

Systemwide and Timely SRM

- Some draft ASPs do not describe an SRM process that identifies hazards systemwide or assesses risk in a timely manner
- Without systemwide hazard identification, we can leave areas of the system vulnerable to safety risk
- SRM cannot be effective if safety concerns are not addressed in a timely fashion

A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. (§ 673.25(a)) 

Subject Matter Expertise in SRM

- Some ASPs do not describe how the SRM process utilizes subject matter expertise to support the process
- Although there is no specific regulatory requirement to describe how the SRM process utilizes subject matter expertise, the process may work more effectively if the ASP clearly outlines how and when subject matter experts will be used to support SRM

SRM Training and Qualifications

- Some ASPs do not describe training or qualifications for all workers who the agency designates as directly responsible for safety
- Agencies may consider including training on SRM processes for those workers who support the process **and** are directly responsible for safety

*A transit agency must develop and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system.
(§ 673.25(a))*



Other SRM Topics



[Potential Sources of Hazard Information for Bus Transit](#)



[Safety Risk Management Fact Sheet](#)



[Safety Risk Management](#) webinar






[Safety Risk Management Agency Safety Plan Lessons Learned](#)
webinar




[PTASP Bus Workshop Participant Guide](#), version 5, pages 25-29

ASP Signature, Approval, and Certification

- Some draft ASPs mix up the requirements for ASP signature, approval, and certification
 - **Signature** – the Accountable Executive must **sign** the ASP (§ 673.11(a)(1)) 
 - **Approval** – the agency's Board of Directors or Equivalent Authority must **approve** the ASP (§ 673.11(a)(1)) 
 - If the agency is an RTA, the SSOA must also approve the ASP (§ 673.13(a))
 - FTA recommends agencies include information such as the name of the approving body and the date and method of approval in their ASPs
 - **Certification** – the **recipient** must certify their compliance with the PTASP regulation in FTA's Transit Award Management System (TrAMS) (§ 673.13(a)) 

ASP Certification

- ASP certification in TrAMS is critical – **your agency is not in compliance with regulation requirements until the recipient certifies compliance in TrAMS by no later than December 31, 2020** (§ 673.13(a)) 
- FTA recommends that agencies note the certification date in their ASP

Resources on ASP Signature, Approval, and Certification



[Certifying Compliance with the PTASP Regulation](#)



[Certification Fact Sheet](#)



[PTASP ASP Review, Approval, and Certification](#) webinar



[Understanding the Agency Safety Plan Review, Approval, and Certification Process](#)

Notice of Enforcement Discretion

- In light of the extraordinary operational challenges presented by the COVID-19 public health emergency, FTA issued a [Notice of Enforcement Discretion](#) effectively extending the PTASP compliance deadline from July 20, 2020 to December 31, 2020
- Visit [FTA's COVID-19 FAQs page for more information about the Notice](#)

Upcoming Webinars

ASP Lessons Learned – Part 2: Safety Assurance and Safety Promotion

– Thursday, November 19, 2020 at 2:00 PM ET

Transitioning to ASP Implementation

– Thursday, December 17, 2020 at 2:00 PM ET

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

The logo for the PTASP Technical Assistance Center, featuring a stylized blue pen nib and the text "PTASP TECHNICAL ASSISTANCE CENTER" in blue and orange.	A small orange icon of a laptop with a globe, representing a website.	transit.dot.gov/PTASP-TAC
	A small orange icon of a telephone handset, representing a phone number.	1 - 877 - 827 - 7243
	A small orange icon of an envelope with a '@' symbol, representing an email address.	PTASP-TAC@dot.gov
	A small orange icon of an envelope, representing a physical address.	PTASP Technical Assistance Center 943 Glenwood Station Lane, Suite 102 Charlottesville, VA 22901

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