Agency Safety Plan
Lessons Learned
Part 2: Safety Assurance and Safety Promotion

November 19, 2020
Webinar Objectives

• Today’s webinar is the second in a **two-part series** that highlights lessons learned from FTA’s voluntary Agency Safety Plan (ASP) reviews
  
  – Previously, the [ASP Lessons Learned Part 1 webinar](#) presented lessons learned for Safety Risk Management
  
  – Today’s webinar, ASP Lessons Learned Part 2 presents lessons learned for Safety Assurance and Safety Promotion

• The series shares 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. The role of monitoring in Safety Assurance
2. Identifying causal factors
3. Management of Change as a proactive process
4. Agency-wide safety communication
FTA VOLUNTARY AGENCY SAFETY PLAN REVIEWS
Voluntary Agency Safety Plan Reviews

• FTA’s Public Transportation Agency Safety Plan (PTASP) Technical Assistance Center (TAC) offers voluntary ASP reviews

• 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

• You may still submit your ASP for a voluntary review
  – Reviews are generally completed within two weeks

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
Icon Legend

PTASP requirement

There are resources about this topic in the PTASP Resource Library
AGENCY SAFETY PLAN
LESSONS LEARNED
Lesson 1: The Role of Monitoring in Safety Assurance

The Role of Monitoring in Safety Assurance

§ 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. **Monitor** information reported through any internal safety reporting programs
Lesson 1: The Role of Monitoring in Safety Assurance

Monitoring Compliance with and Sufficiency of Operations and Maintenance Procedures

- Some ASPs do not describe ongoing monitoring
- ASPs must outline a process for monitoring compliance with and sufficiency of operations and maintenance procedures

⚠️

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 (§ 673.25(b))
Lesson 1: The Role of Monitoring in Safety Assurance

Why is it important to routinely monitor procedures?

- Monitoring compliance with and sufficiency of agency operations and maintenance procedures provides only a snapshot of agency performance.
- Routine monitoring activities help update your “snapshot” and identify new or trending safety concerns.
Lesson 1: The Role of Monitoring in Safety Assurance

How often must agencies monitor procedures?

• The PTASP regulation does not specify how often agencies must monitor procedures.

• The ASP should specify how often your agency will conduct each monitoring activity.
  – Agencies may perform different activities at different frequencies.
Lesson 1: The Role of Monitoring in Safety Assurance

Monitoring Safety Risk Mitigations

• Some ASPs do not describe regular monitoring activities, or the approach or tools the agency will use, such as a safety risk register or other database.

• ASPs must outline a process for monitoring the effectiveness of safety risk mitigations.

A transit agency must establish activities to:
(2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended
(§ 673.25(b))
Lesson 1: The Role of Monitoring in Safety Assurance

Monitoring Safety Risk Mitigations

• The PTASP regulation does not specify how often agencies must monitor safety risk mitigations, or the approach or tools they must use to monitor them.

• Establishing a schedule and mechanism for monitoring can be an effective first step to meeting the regulatory requirement for monitoring.
Lesson 1: The Role of Monitoring in Safety Assurance

Why is it important to monitor safety risk mitigations?

Monitoring safety risk mitigations helps determine whether safety risk mitigations:

- Effectively manage the identified safety risk
- Are appropriate for the initial identified hazard
- Are implemented as intended (§ 673.27(b)(2))
Monitoring Safety Risk Mitigations as Part of Ongoing Safety Risk Management

Monitoring safety risk mitigations interfaces with the Safety Risk Management process as both an output and a potential input.
Monitoring Information Reporting Using Internal Safety Reporting Programs

- Some ASPs do not identify the agency’s internal safety reporting programs.

- ASPs must describe how the agency monitors information gathered through internal safety reporting programs.

A transit agency must establish activities to:

(4) Monitor information reported through any internal safety reporting programs (§ 673.25(b))
Lesson 1: The Role of Monitoring in Safety Assurance

Examples of Internal Safety Reporting Programs

- Some agencies may operate more than one internal safety reporting program
- Each agency must operate an Employee Safety Reporting Program (§ 673.23(b))
- Other programs may include:
  - Close call/near miss reporting program
  - Roadway worker protection program
  - Fatigue management program
  - Occupational safety and health program
Monitoring Information Reporting Using Internal Safety Reporting Programs

• Some ASPs do not describe how often they monitor information reported through internal safety reporting programs.

• Describing a schedule or approach is part of establishing this program.

A transit agency must establish activities to:
(4) Monitor information reported through any internal safety reporting programs (§ 673.25(b))
Resources on Monitoring and Safety Assurance

- **Monitoring Compliance with and Sufficiency of Operations and Maintenance Procedures**
- **Compliance Monitoring webinar**
- **PTASP Bus Workshop Participant Guide**, version 5, pages 34-40
Lesson 2: Identifying Causal Factors

Investigations and Causal Factors

• Some ASPs do not mention the requirement to identify causal factors as part of an investigation

• Some ASPs limit their causal factor identification to a narrow range of factors
  – There is no set requirement for how many or which causal factors agencies must consider
  – Limiting causal factor analysis to only a few factors can mean that the agency does not identify relevant safety concerns

A transit agency must establish activities to: Conduct investigations of safety events to identify causal factors (§ 673.27(b)(3))
Lesson 2: Identifying Causal Factors

Examples of Causal Factors

Example causal factors* may include:

- Human factors
- Equipment and infrastructure factors
- Environmental factors
- Organizational factors
- Outside factors

*These example causal factors are based on Volpe’s 2018 Causal Factors of Accidents presentation
## Lesson 2: Identifying Causal Factors

### Examples of Human Causal Factors

<table>
<thead>
<tr>
<th>Example Causal Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errors</td>
<td>Person(s) involved in the event did not intend their actions to result in an unsafe outcome</td>
</tr>
<tr>
<td>Violations</td>
<td>Person(s) involved in the event knowingly violated rules, policies, or procedures</td>
</tr>
<tr>
<td>Communication</td>
<td>Poor or ineffective communication contributed to the event</td>
</tr>
<tr>
<td>Condition</td>
<td>The condition of a person involved in the event contributed to the event (such as fatigue, distraction, impairment, or lack of necessary skills)</td>
</tr>
</tbody>
</table>
# Lesson 2: Identifying Causal Factors

## Examples of Equipment and Infrastructure Causal Factors

<table>
<thead>
<tr>
<th>Example Causal Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle</td>
<td>Train, bus, or other vehicle failed to function as intended and contributed to the event (such as mechanical, electrical, or design failures)</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Structural components of the transit system failed to function as intended and contributed to the safety event (such as mechanical, electrical, or design failures)</td>
</tr>
</tbody>
</table>
### Examples of Environmental Causal Factors

<table>
<thead>
<tr>
<th>Example Causal Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting Conditions</td>
<td>Insufficient or too much lighting contributed to the event</td>
</tr>
<tr>
<td>Weather or Visibility</td>
<td>Environmental circumstances other than lighting contributed to the event (such as by reducing visibility or impeding work)</td>
</tr>
<tr>
<td>Surface Conditions</td>
<td>The surface contributed to the safety event (such as slips and falls or loss of traction)</td>
</tr>
<tr>
<td>Extreme Environmental Conditions</td>
<td>Natural disasters or other exceptional natural occurrences contributed to the event</td>
</tr>
<tr>
<td>Obstructions</td>
<td>Obstructions in the environment contributed to the safety event (such as trips and falls or collisions)</td>
</tr>
</tbody>
</table>
# Examples of Organizational Causal Factors

<table>
<thead>
<tr>
<th>Example Causal Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>Supervisory decisions contributed to the event (such as inadequate supervision or failure to correct problems)</td>
</tr>
<tr>
<td>Resource Management</td>
<td>The allocation or misallocation of resources contributed to the event (such as human or equipment resources)</td>
</tr>
<tr>
<td>Organizational Culture and Climate</td>
<td>The agency’s organizational structure, policies, or culture contributed to the safety event</td>
</tr>
<tr>
<td>Organizational Processes</td>
<td>Decisions the transit agency made about establishing and maintaining policies, practices, or procedures contributed to the safety event</td>
</tr>
<tr>
<td>Organizational Contraventions</td>
<td>The agency contributed to the event by violating rules or regulations</td>
</tr>
</tbody>
</table>
Lesson 2: Identifying Causal Factors

Examples of Outside Causal Factors

<table>
<thead>
<tr>
<th>Example Causal Factor</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic, Political, Social, or Legal</td>
<td>Any other element entirely out of the agency’s control that contributed to the event</td>
</tr>
</tbody>
</table>
Lesson 2: Identifying Causal Factors

Events Don’t Occur in a Vacuum

• Events rarely have only one causal factor
• Consider how your investigation process supports a thorough review of all aspects of an event to identify all relevant causal factors
  – Failure to identify all relevant causal factors could result in an unsafe condition going unnoticed
Resources on Investigations and Causal Factors

- Safety Assurance webinar, slides 9-16
Lesson 3: Management of Change as a Proactive Process

Management of Change

• Some ASPs do not describe Management of Change as a proactive process
  – The regulation does not specify that this must be a proactive process
  – Transit agencies may benefit from using Management of Change as a proactive process to assess changes before they are implemented
• Rail and bus transit agencies that are not small public transportation providers must include Management of Change in their ASP

(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. (§ 673.27(c)(1))
The Benefits of Proactive Management of Change

• Management of Change process may be most effective if applied before a change is made
  – Could this change introduce new hazards or impact our safety performance?
  – Is the change “worth” the new hazard or impact to our safety performance?
  – Is there anything we can do to reduce negative impacts of the change?
Resources on Management of Change

- Guide to Developing the Safety Assurance Component of an Agency Safety Plan, page 3
- Safety Assurance webinar, slides 30-33
- Management of Change webinar
- PTASP Bus Workshop Participant Guide, version 5, pages 40-41
Lesson 4: Safety Communication

Safety Communication

- Some ASPs do not clearly describe how the agency will ensure all workers – employees and contractors – receive safety information relevant to their job.

- Safety communication applies to every person in the transit agency.

A transit agency must communicate safety and safety performance information throughout the agency’s organization... (§ 673.29(b))
How will your agency communicate about safety?

The ASP should describe the communication tools and processes your agency uses to:

- Ensure all workers receive safety communication
- Ensure all workers understand their safety responsibilities
- Provide feedback to workers who submit reports under the Employee Safety Reporting Program (§ 673.29 (a))
Resources on Safety Communication

- **Guide to Developing the Safety Promotion Component of an Agency Safety Plan**, page 2
- **Understanding PTASP Safety Training and Communication Requirements**, pages 2-3
- **Safety Management Policy and Safety Promotion webinar**, slides 25-27
Resources on Certification

- FY 2020 Certifications and Assurances
- Understanding the ASP Review, Approval, and Certification Process
- Certifying Compliance with the PTASP Regulation
- Certification Fact Sheet

For help with TrAMS or specific questions about the certification and assurances process, please contact the TrAMS Help Desk at FTA.TrAMS.help@dot.gov

- Phone: 703-677-9035
- Alternate Phone: 877-561-7466
Upcoming Webinar

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

PTASP Community of Practice

Frequently Asked Questions
  • [www.transit.dot.gov/PTASP-FAQs](http://www.transit.dot.gov/PTASP-FAQs)