Monitoring Compliance and Sufficiency of Procedures

September 16, 2020
Webinar Objectives

• To review the requirements for monitoring compliance with and sufficiency of maintenance and operations procedures (monitoring procedures) in the Public Transportation Agency Safety Plan (PTASP) regulation at 49 CFR Part 673

• To provide examples of activities transit agencies may undertake to meet this requirement
PTASP REQUIREMENTS FOR MONITORING PROCEDURES
PTASP Regulation Requirements

Agency Safety Plan
Develop and certify an Agency Safety Plan

Safety Management System (SMS)
Implement and operate a Safety Management System

PTASP Documentation
Maintain documentation related to the Agency Safety Plan, SMS implementation, and results from SMS processes and activities
SMS Components

Safety Promotion

Safety Risk Management
(Identify, Assess, & Mitigate)

Safety Management Policy
(Leadership Commitment & Accountability)

Safety Assurance
(Measure, Monitor, & Evaluate)

(Communication & Training)
What is Safety Assurance?

Safety Assurance means processes within a transit agency’s SMS that function to ensure:

- The implementation and effectiveness of safety risk mitigation, and

- That the transit agency meets or exceeds its safety objectives, through the collection, analysis, and assessment of information (§ 673.5)
Three Safety Assurance Processes

Safety Performance Monitoring and Measurement

Management of Change

Continuous Improvement

Not required for small public transportation providers

Unsure whether your agency counts as a small public transportation provider? See FTA’s applicability webinar (January 2020) for more information.
Safety Performance Monitoring and Measurement

Monitor Procedures

Monitor Safety Risk Mitigations

Conduct Safety Event Investigations to Identify Causal Factors

Monitor Internal Safety Reporting Programs
A transit agency must establish activities to monitor its system for **compliance with**, and **sufficiency of**, the agency’s procedures for operations and maintenance (§ 673.27(b)(1))
Four Parts of the PTASP Requirement for Monitoring Procedures

1. Monitor system for compliance with operations procedures
2. Monitor system for sufficiency of operations procedures
3. Monitor system for compliance with maintenance procedures
4. Monitor system for sufficiency of maintenance procedures
MONITORING PROCEDURES IN PRACTICE
Monitoring Compliance with Procedures

Monitoring compliance with procedures means asking, for example:

“Do our workers perform their job duties as described in our procedures?”

Did the technician empty the canister into the labeled can?
- Yes
- No

Did the technician clean the canister prior to reinstalling?
- Yes
- No
Compliance Testing and Monitoring

Compliance with Procedures

• Many transit agencies already perform regular compliance testing
  – Commonly used in operator or mechanic certifications and recertifications, job observations, and other standard forms of employee evaluation

• Your agency may use these existing compliance testing processes to develop your compliance monitoring process
Why does monitoring compliance with procedures matter?

• We want workers to perform their job duties exactly as described in our procedures

• However, an agency may not achieve 100-percent compliance 100-percent of the time

• Monitoring compliance helps the agency identify variations in the rate of compliance, which can point to potential safety concerns

<table>
<thead>
<tr>
<th>Month</th>
<th>Compliance Rate</th>
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<tbody>
<tr>
<td>Jan. 2020</td>
<td>99.6</td>
</tr>
<tr>
<td>Feb. 2020</td>
<td>99.8 ↑</td>
</tr>
<tr>
<td>Mar. 2020</td>
<td>99.7 ↓</td>
</tr>
<tr>
<td>Apr. 2020</td>
<td>99.8 ↑</td>
</tr>
<tr>
<td>Jun. 2020</td>
<td>99.6 ↓</td>
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</table>
What information can we get from monitoring compliance with procedures?

• Monitoring compliance establishes individual data points and allows the agency to assess compliance rates over time, by department, etc.

• Variations in compliance rates can indicate an unresolved safety concern, such as:
  – A discrepancy between day and night shift compliance rates due to different employees providing on-the-job training for day and night shifts, differing management styles, or staffing levels between the shifts, etc.
  – Downward trends in compliance due to workers identifying a more efficient way to perform a process, practical drift, or a lack of refresher training, etc.
What can monitoring compliance with procedures tell us about our agency?

• Monitoring compliance with procedures helps to show whether workers perform their jobs as intended
  – Performing jobs as intended is a major part of ensuring safety

• Noncompliance can indicate a need to retrain workers, retire outdated procedures, rewrite procedures to be more explicit or reflect new equipment or conditions, etc.
Monitoring Sufficiency of Procedures

- Monitoring the sufficiency of procedures means asking, for example:

  “Do our procedures have the desired outcome?”
  
  - What does this procedure ensure or prevent?
  - What indicators tell us whether we successfully ensured or prevented that outcome?

Procedure 6: Safety-Critical Work Order: Time to Complete

- Complete safety-critical work orders within 24 hours
Why does monitoring the sufficiency of procedures matter?

• When we establish procedures, we hope that they achieve the expected results when implemented.

• However, many procedures will need to be revised over their lifetime to make sure they are sufficiently precise and effective.

• Monitoring the sufficiency of procedures helps determine when and how we need to revise procedures.
What can monitoring the sufficiency of procedures tell us about our agency?

• Monitoring the sufficiency of procedures helps determine whether our procedures do what we expect them to

• Once an agency identifies a deficiency in a procedure, it takes action to correct the deficiency
  – This may mean revising existing procedures, creating new procedures, putting in controls to prevent or ensure certain outcomes, etc.
How can we monitor the sufficiency of our procedures?

• One way to monitor the sufficiency of a procedure is to identify the intended outcome(s) of the procedure and identify data points that you may already collect that can indicate whether or not the procedure produces the intended outcome.
  – What outcome is this procedure designed to ensure or prevent?
  – What indicators tell us whether the procedure ensured or prevented the intended outcome?
How can we monitor the sufficiency of our procedures?

• Another way agencies can identify procedures that are insufficient is to review data they regularly collect against their expectations
  
  – For example, an agency expects to see work orders for fastener replacement closed within 24 hours, but the data shows that the majority of work orders take longer than 24 hours to complete
Example of Monitoring Sufficiency of Procedures

• In our example, a rail transit agency has a procedure that requires work orders for track fastener replacements to be completed within 24 hours
  – The procedure is designed to ensure that the agency completes safety-critical repairs in a timely fashion

• Maintenance managers notice that replacements are being deferred, which could result in a derailment

• The agency reviews 6 months of maintenance records to determine the extent to which the agency maintains its 24-hour time frame
Example of Monitoring Sufficiency of Procedures, cont.

- They find that only 45% of these work orders are completed within 24 hours.
- They also review the procedure compliance data and find a high rate of compliance with the individual steps of the procedure:
  - The procedure is carried out as intended, but not within the required time frame.

<table>
<thead>
<tr>
<th>Track Fastener Replacement Work Order Review: January – June 2020</th>
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<tbody>
<tr>
<td><strong>Time to Complete</strong></td>
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<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Within 24 hours</td>
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<tr>
<td>Within 1 week</td>
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<tr>
<td>Within 1 month or more</td>
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Example of Monitoring Sufficiency of Procedures, cont.

This indicates that the procedure is not sufficient to ensure that safety-critical work orders for track fastener replacement are completed within 24 hours.

<table>
<thead>
<tr>
<th>Time to Complete</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Within 24 hours</td>
<td>45%</td>
</tr>
<tr>
<td>Within 1 week</td>
<td>30%</td>
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<tr>
<td>Within 1 month or more</td>
<td>25%</td>
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Example of Monitoring Sufficiency of Procedures, cont.

The agency can then take action to ensure that track fastener replacements occur within the required time frame

• For example, the agency may take direct action, such as revising steps in the procedure to replace time-consuming paper signatures with electronic signatures or email confirmation

• The agency may decide to enter the safety concern into its Safety Risk Management process
Compliance, Sufficiency, and Documentation

- ASPs must outline the agency’s process for monitoring compliance with and sufficiency of operations and maintenance procedures.

- An agency is not required to monitor all operations and maintenance procedures in the same way; the agency can prioritize and tailor monitoring based on agency characteristics, safety risk, and other factors.

- The agency must document the results of its compliance and sufficiency monitoring programs and maintain the documentation for at least three years.
Resources on Monitoring Operations and Maintenance Procedures

Joint SSO and RTA PTASP Workshop Participant Guide, pages 26–27

PTASP Bus Workshop Participant Guide, version 5, page 39
Resources on Monitoring Operations and Maintenance Procedures, cont.

Safety Assurance webinar, July 2019, slide 17

Safety Assurance Lessons Learned webinar, March 2020, slides 29–34
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 Webinar

ASP Reviews Lessons Learned
– Thursday, October 22, 2020 at 2:00 PM EDT
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

Don’t delay – the deadline to submit Agency Safety Plans for PTASP TAC review is November 13, 2020