Monitoring Safety Risk Mitigations

When transit agencies implement safety risk mitigations under 49 CFR 673.25(d), as discussed in the June *TSO Spotlight*, they are required, under **Safety Assurance**, to monitor whether mitigations are ineffective, inappropriate, or not performing as intended (49 CFR 673.27(b)(2)). Establishing Safety Performance Indicators (SPIs) and **Safety Performance Targets (SPTs)** can help agencies monitor mitigations.[1]

Resources
• Safety Risk Management Process
• Safety Risk Management Fact Sheet
• Developing and Monitoring Safety Risk Mitigations Webinar

- **An SPI is a signal or early warning sign** that measures inputs, outputs, outcomes, or impacts of a particular process or activity.

- **An SPT applies a quantitative threshold to help draw conclusions** from observed changes in an SPI over a specific time frame.

Example: Monitoring Mitigations for an Open Platform Edge

A rail transit agency determines it is not willing to accept the safety risk associated with falls on one of its open platforms. As a mitigation, the agency decides to increase platform monitoring to warn individuals to stay clear of the platform edge. This mitigation is intended to **reduce the likelihood** of the potential consequence of the hazard. Deploying platform agents to warn people to stay clear of the platform edge reduces the likelihood of someone being injured or killed by falling onto the right-of-way.

To monitor this mitigation, the agency can use a suite of performance measures, including defined SPIs and SPTs (see Example Mitigation and Monitoring plan, page 2).

Figure 1. Transit agencies with an open platform edge can establish a Safety Performance Indicator or Safety Performance Target to help monitor mitigations.

---

[1] The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies. Grantees and subgrantees should refer to FTA's statutes and regulations for applicable requirements.

This article was originally published in the July 2022 issue of the *Transit Safety & Oversight Spotlight* newsletter.

These measures may also help the agency determine when and under what conditions the mitigation is most effective. For instance, the agency may use the platform agents' reports on interventions to optimize the platform coverage schedule for the busiest times of day, inclement weather when floors may be slippery, and special events when crowding increases the risk of falls.

To keep track of their SPIs, SPTs, other mechanisms for safety risk mitigation monitoring, and other parts of their mitigation, an agency may use a **mitigation monitoring plan**. Mitigation monitoring plans allow an agency to document its approach to monitoring the implemented mitigations and track the status of the mitigation(s).

Example Mitigation Monitoring Plan	
Mitigation Description	Deploy platform agents to warn passengers to stay clear of the platform edge.
Implementation Roles and Responsibilities	• Rail Operations Supervision Department, Kelly Green (scheduling) • Training Department, Tim Smith (training update for station agents)
Defined SPIs and SPTs	• **Implementation Monitoring SPI**: Number of platform agents trained and deployed. • Implementation Monitoring **SPT**: All platform agents trained and deployed within three weeks of the mitigation start date. • Effectiveness Monitoring SPI: Number of platform agent reports of interventions to prevent or mitigate falls, including time of day, prevailing weather conditions, and crowding conditions. • Effectiveness Monitoring SPT: Zero falls from the platform over the next three months.
Implementation Time Frames	• Training complete for all station agents no later than July 15, 2022. • Additional station agents scheduled no later than August 1, 2022.
Method of Reporting Safety Performance	Monthly incident report from the safety department to the safety committee

Visit the PTASP Technical Assistance Center (TAC) Resource Library for guides, fact sheets, and webinars on the PTASP regulation. Contact the PTASP TAC at PTASP-TAC@dot.gov for assistance with any PTASP-related topic. See also the May TAC webinar, Developing and Monitoring Safety Risk Mitigations.