



## Developing Mitigations in Response to the Safety Risk Assessment

Transit agencies may choose to implement safety risk mitigations depending on the results of their Safety Risk Assessment process. Safety Risk Assessment (as discussed in the [May issue of the TSO Spotlight](#)) helps agencies determine the likelihood and severity of a potential consequence of a hazard to ascertain if mitigation is necessary (49 CFR § 673.25(c)(2)).<sup>1</sup>

### Example: Developing Mitigations for an Open Platform Edge

In this example, a rail transit agency determines it is not willing to accept the safety risk associated with falls on or from one of its open platforms. Passengers could fall into the right-of-way and potential consequences could include passenger injuries and fatalities resulting from either the fall, making contact with the energized third rail, or a collision between a fallen passenger and an oncoming train.

When deciding on a safety risk mitigation, the transit agency could identify a mitigation that reduces the potential consequence's likelihood, severity, or both likelihood and severity. Here are several ways the transit agency could mitigate this safety risk:

- **Increase platform monitoring to warn individuals to stay clear of the platform edge.** This mitigation **reduces the likelihood** of the potential consequence of the hazard. Having additional personnel to warn people to stay clear of the platform edge reduces the likelihood of someone being injured or killed by a fall onto the right-of-way.
- **Install sensors that feed into the Operations Control Center (OCC) to alert controllers when someone has fallen onto the right-of-way.** This mitigation **reduces the severity** of the potential consequence of the hazard. It allows the OCC to warn an incoming train to stop before entering the station, thus preventing a

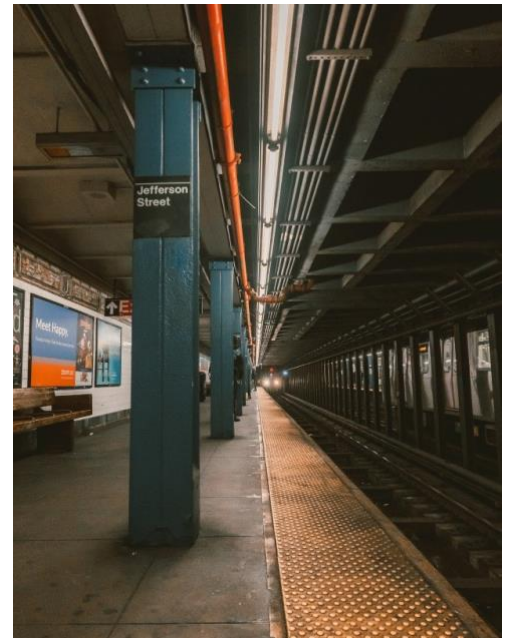


Figure 1. Transit agencies with an open platform edge can mitigate potential safety risks in various ways.

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<sup>1</sup> 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.

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collision. This limits the consequences to potential injuries from the fall (as opposed to additional injuries or fatalities due to a subsequent collision).

- **Install platform screens or barriers that prevent passengers from falling onto the right-of-way.** This mitigation **reduces both the likelihood and severity** of the consequences of the hazard. It reduces the likelihood by minimizing opportunities for passengers to fall onto the tracks. It reduces the severity, since slips and falls on the platform would result in passengers striking the screen or barrier, rather than falling onto the tracks.

As the agency decides whether, when, and how to mitigate the safety risk, the agency may consider whether it is more practical or cost effective to focus on reducing the likelihood, severity, or both the likelihood and severity of the hazard's potential consequences.

Once the mitigation is in place, an agency must track its effectiveness and whether it has been implemented as intended. The next issue of the TSO Spotlight will continue exploring this topic, focusing on mitigation documentation and monitoring.

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](mailto:PTASP-TAC@dot.gov) for assistance with any PTASP-related topic. See also the May TAC webinar, [Developing and Monitoring Safety Risk Mitigations](#).



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