



Guide to the Sample Safety Risk Register

for Rail Transit Agencies and State Safety Oversight Agencies

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Version 1.1

The Federal Transit Administration's (FTA) Sample Safety Risk Register and Guide are tools designed to support implementation of SMS in the public transportation industry. The guidance in this document is not legally binding in its own right and will not be relied upon by FTA as a separate basis for affirmative enforcement action or other administrative penalty. Use of this tool is voluntary only, and noncompliance will not affect rights and obligations under existing statutes and regulations.



What Is a Safety Risk Register?

A Safety Risk Register is an information management tool you may choose to use to document your transit agency's Safety Risk Management and Safety Assurance activities. It records the hazards identified by the transit agency, the potential consequences associated with these hazards, initial safety risk ratings, new mitigations implemented to eliminate or minimize the risk associated with the hazard, revised safety risk rating, and mitigation monitoring measures and activities to ensure the implementation and effectiveness of mitigations.

What Is Its Purpose?

The Safety Risk Register serves a dual purpose:

- It provides managers with an on-going, up-to-date assessment of (a) the overarching safety concerns that the agency faces during transit service delivery and supporting operations, and (b) the controls (safety risk mitigations) put in place to address them, and
- It allows personnel involved in the agency's Safety Management System (SMS) to (a) formally document hazards, potential consequences of the hazards, safety risk assessment results, and anticipated safety risk mitigations; and (b) track the status of implemented safety risk mitigations.

Description of FTA's Sample Safety Risk Register

FTA developed a Sample Safety Risk Register in Microsoft Excel to help transit agencies explore the benefits of this tool. This register is illustrative only; each transit agency may determine the tool or method that best suits its SMS documentation and tracking needs.

FTA's Sample Safety Risk Register is comprised of five (5) separate tabs, discussed below:

Tab 1: Instructions

This tab describes the Sample Safety Risk Register and how to use it.

Tab 2: Definitions

This tab defines the column titles and terms used in the Sample Safety Risk Register.

Tab 3: Safety Risk Assessment

This tab includes information about hazards and their analyses, including:

- The potential consequences (worst possible, worst credible, or most likely) of the hazards,
- The safety risk assessment for each potential consequence, and



- Safety risk mitigation actions, including responsibilities and timelines for their implementation.

This tab is meant to be dynamic, meaning that an agency would anticipate it changing to document newly added hazards and the results of analyses and safety risk assessments. The *Safety Risk Assessment* tab would be updated every time a new hazard is identified and analyzed, all the way up to and including the proposal of safety risk mitigations, and/or when responsibilities for implementation of the safety risk mitigation change. The tab could also serve as a way to report on safety risk assessment activities to executive leadership.

Tab 4: Safety Risk Mitigation

This tab provides information to support tracking the actual status as well as the effectiveness of the implemented safety risk mitigations. It includes:

- The safety risk mitigation monitoring parameters (safety performance indicator(s) and target(s)),
- Associated time frame,
- Monitoring activities, and
- The responsibilities for monitoring.

The *Safety Risk Mitigation* tab would be updated every time a safety risk assessment results in the identification of needed safety risk mitigations. It would also be updated to reflect any changes in monitoring parameters for a safety risk mitigation, when the timelines for safety risk mitigation are not met or a safety risk mitigation is modified, and/or when responsibilities for monitoring of a safety risk mitigation change.

Tab 5: Safety Risk Matrix and Tables

This tab provides illustrative tables to estimate the likelihood of occurrence and the severity of potential consequences, as well as the safety risk tolerability matrix. FTA has developed separate voluntary guidance on how to define safety risk assessment matrices for your transit agency. Each transit agency ultimately will determine the safety risk matrix and corresponding levels of likelihood and categories of consequence most appropriate for the size and complexity of their operations.



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