2021 FTA Joint State Safety Oversight and Rail Transit Agency Virtual Workshop

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Accident Notification and Investigation

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Federal Transit Administration
Overview

• Authority
• Accident Notification
• Two-Hour Accident Notification Guide
• Accident Investigation Requirements
• Accident Investigation Reports
• Rail Transit Agency Investigation Requirements
Authority

49 C.F.R. § 674.27(a)(6)
Accident notification. The SSO program standard must establish requirements for an RTA to notify the SSOA of accidents on the RTAs rail fixed guideway public transportation system. These requirements must address, specifically, the time limits for notification, methods of notification, and the nature of the information the RTA must submit to the SSOA.

49 C.F.R. § 674.33(a)
Two-hour notification. In addition to the requirements for accident notification set forth in an SSO program standard, an RTA must notify both the SSOA and the FTA within two hours of any accident occurring on a rail fixed guideway public transportation system. The criteria and thresholds for accident notification and reporting are defined in a reporting manual developed for the electronic reporting system specified by FTA.

49 C.F.R. § 674.33(b)
FRA notification. In any instance in which an RTA must notify the FRA of an accident as defined by 49 C.F.R. 225.5 (i.e., shared use of the general railroad system trackage or corridors), the RTA must also notify the SSOA and FTA of the accident within the same time frame as required by the FRA.

49 C.F.R. § 840.3(a)(1)
The operator of a railroad shall notify the Board by telephoning the National Response Center at telephone 800-424-0201, no later than 2 hours after an accident which results in a passenger or employee fatality or serious injury to two or more crewmembers or passengers requiring admission to a hospital.
**Accident Notification**

**49 C.F.R. § 674.27(a)(6)**

*Accident* means an event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. An accident must be reported in accordance with the thresholds for notification and reporting set forth.

### EVENTS

#### Accidents

An Event that involves any of the following:
- Loss of life
- Serious injury
- RTV collision
- Runaway Train
- Evacuation for life safety reason
- Derailment

RTA to Notify SSOA and FTA within two hours

#### Incidents

An Event that involves any of the following:
- Personal injury that is not serious
- One or more injuries requiring medical transport
- Damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency

RTA to Report to FTA (NTD) within 30 days

#### Occurrences

An Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a rail transit agency.

RTA to record data and make available for review
Two Hour Accident Notification Guidance

Contact the U.S. Department of Transportation’s Transportation Operations Center (TOC) within two hours of a reportable accident:

Email (Recommended Method) or Phone
TOC-01@dot.gov / 202-366-1863

When providing two hour notifications, please submit accident information details as specified in your SSOAs program standard. The SSO required notifications may include, but are not limited to, a summary of the event and pertinent details such as:

- Accident date, time, location, and name of the RTA providing the notification
- When the RTA has more than one rail mode, providing the rail mode and/or line involved in the accident (Heavy Rail/Subway, Light Rail, Streetcar, etc.)
- Number of fatalities, serious injury, persons requiring immediate medical transport
- After an RTV related collision was there substantial damage or towing of RTV or POV
- Primary and secondary event types (e.g. collision, derailment, fire, etc.)
Accident Investigation Requirements

49 C.F.R. § 674.27(a)(7)
Investigations. The SSO program standard must identify thresholds for accidents that require the RTA to conduct an investigation. Also, the program standard must address how the SSOA will oversee an RTA’s internal investigation, the role of the SSOA in supporting any investigation conducted or findings and recommendations made by the NTSB or FTA, and procedures for protecting the confidentiality of the investigation reports.

49 C.F.R. § 674.35(a)
An SSOA must investigate or require an investigation of any accident and is ultimately responsible for the sufficiency and thoroughness of all investigations, whether conducted by the SSOA or RTA. If an SSOA requires an RTA to investigate an accident, the SSOA must conduct an independent review of the RTA’s findings of causation. In any instance in which an RTA is conducting its own internal investigation of the accident or incident, the SSOA and the RTA must coordinate their investigations in accordance with the SSO program standard and any agreements in effect.

SSOA Oversight Responsibilities:
- Identify Thresholds
- RTA Internal Investigations
- Roles
- Findings and Recommendations
- Sufficiency and Thoroughness of All Investigations
- Independent Review of Findings and Causation
- Investigation Coordination
**Accident Investigation Reports**

**49 C.F.R. § 674.27(a)(1)**
Program management. The SSO program standard must explain the authority of the SSOA to oversee the safety of rail fixed guideway public transportation systems, policies that govern the activities of the SSOA, reporting requirements that govern both the SSOA and the rail fixed guideway public transportation systems, and steps the SSOA will take to ensure open, on-going communication between the SSOA and every rail fixed guideway public transportation system within its oversight.

**49 C.F.R. § 674.35(b)**
Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTAs accident investigation in accordance with the reporting requirements established by the SSOA. The report must describe the investigation activities, identify the factors that caused or contributed to the accident, and set forth a corrective action plan, as necessary or appropriate. The SSOA must formally adopt the report of an accident and transmit that report to the RTA for review and concurrence. If the RTA does not concur with an SSOAs report, the SSOA may allow the RTA to submit a written dissent from the report, which may be included in the report, at the discretion of the SSOA.

**SSOA Oversight Responsibilities:**
- Clarify Authority
- Accident Investigation Policies
- Reporting Requirements
- Communication
- Establish Timelines
- Issue Written Report
- Investigation Activities
- Causal Factors
- Corrective Action Plan(s)
- Formally Adopt the Report
- Seek RTA Concurrence
- Dissents
Rail Transit Agency Investigation Requirements

**49 C.F.R. § 673.5**
Investigation means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

**49 C.F.R. § 673.27(b)(3)**
Conduct investigations of safety events to identify causal factors.

**RTA must:**
- Meet investigation requirements as outlined in Program Standard
- Ensure PTASP has a process for conducting investigations
- Identify causal factors
Contact Information

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Introduction

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Forrest Freeland
Deputy Chief Safety Officer - Operations,
Office of Safety Management & Risk Control
Maryland Transit Administration
Overall Goals

• Ensure Part 674 compliance
• Align processes and program documents with lessons learned and clarifications needed
• Improve standardization, consistency, and accuracy of NTD/SSOR reporting
• Adapt SSOA Program Standard requirements to current conditions and reflect RTA’s level of SMS maturity
Accident Notification

- Refinement of accident definitions
  - Added FTA guidance
  - Created Serious Occurrences category
  - Conducted workshop
  - Shared communications from FTA Accident Investigator

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Definitions</th>
</tr>
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<tbody>
<tr>
<td>Fire or smoke on a track, on a vehicle, or in a facility that does not meet the accident or incident criteria</td>
<td>Such an event may involve smoke that dissipates or a fire that is immediately extinguished, but does not result in evacuation.</td>
</tr>
<tr>
<td>Evacuation of a train into the right of-way or onto adjacent track for a non-life safety reason</td>
<td>Includes customer self-evacuation or transfer of passengers to rescue vehicles or alternate means of transportation due to obstructions, loss of power, mechanical breakdown and system failures, or damage. Evacuations for life safety reasons should instead be reported as an accident as described in the criterion above.</td>
</tr>
<tr>
<td>Signal violations or overrun</td>
<td>Includes violation of stop signal provided by roadway worker</td>
</tr>
<tr>
<td>Split/trailer switch without derailment</td>
<td>N/A</td>
</tr>
<tr>
<td>Vehicle door openings on the wrong side, off station platforms, or during train movement</td>
<td>N/A</td>
</tr>
<tr>
<td>Incapacitated operator in service</td>
<td>An operator loses consciousness, falls asleep, or otherwise becomes physically incapable of operating the rail transit vehicle during revenue or non-revenue service.</td>
</tr>
<tr>
<td>Runaway rail transit maintenance vehicle</td>
<td>Excludes runaway trains, which are defined in the accident category per FTA requirements</td>
</tr>
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Accident Investigation Tools

- Updates to accident report forms
  - Comprehensiveness
  - Consistency
  - Compliance with FTA requirements
- Weekly accident investigation update meetings
- Event tracking log
- Auto-generated email reminders
Root Cause

- Root Cause(s)
  - The reason(s) **why** the probable and contributing / secondary causes occurred

Possible Probable Cause:
Rules violation/human performance factors

Root Cause(s):
Rules/procedures are unclear
Training did not incorporate the rule/procedure
Employee had not recently been recertified
Employee was intoxicated or fatigued
Employee focused attention on something else
Personnel shortages led the employee to be overwhelmed
Lack of supervision/enforcement
Review and Communications

- Documentation Outputs:
  - Comment sheets
  - CAP submission forms
  - Adoption letters

- Discussion and Coordination:
  - Monthly hazard/event meetings

**MARYLAND TRANSIT ADMINISTRATION**
**OFFICE OF SAFETY MANAGEMENT AND RISK CONTROL**
CORRECTIVE ACTION PLAN SUBMISSION REPORT

<table>
<thead>
<tr>
<th>MTA ID</th>
<th>Priority/ Risk</th>
<th>Source</th>
<th>Finding Summary</th>
<th>Corrective Action Summary</th>
<th>Responsible Person</th>
<th>Scheduled Close Date</th>
<th>CAP Approved by MDTT</th>
<th>CAP Approved by MDOT</th>
<th>MOOT Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC.351.1</td>
<td>3-D-18</td>
<td>MD.05.00.311</td>
<td>The sliding glass door at the entrance of MDOT MD Station makes contact with a beam when it is pulled open in an emergency situation.</td>
<td>Metro Facilities will repair the door so that it closes properly.</td>
<td>Mike O’Dehsey</td>
<td>October 2021</td>
<td>Yes</td>
<td>Yes</td>
<td>($10,000) The MDOT approved this CAP and suggested the following verification documents: 1. Photographs of completed work. 2. Signed O’Dehsey verifies all work meeting the work was completed.</td>
</tr>
<tr>
<td>MIC.351.2</td>
<td>3-D-18</td>
<td>MD.05.00.311</td>
<td>It is unclear if this situation is present at other Metro stations that are equipped with emergency transfer doors.</td>
<td>Metro Facilities will assess the need for the transfer doors and report the decision.</td>
<td>Mike O’Dehsey</td>
<td>October 2021</td>
<td>Yes</td>
<td>Yes</td>
<td>($10,000) The MDOT approved this CAP and suggested the following verification documents: 1. Photographs of completed work. 2. Signed O’Dehsey verifies all work meeting the work was completed.</td>
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Key Performance Indicators

- Monitor RTA reporting efficiencies
  - Event totals by classification
  - On-time notifications
  - Final Report submission on time
  - Proposed CAPs still pending
  - Final Reports revised within 15 days
Contact Information

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