

October 19-20, 2021



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

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.

CODE OF FEDERAL
REGULATIONS

49

Transportation



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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FTA Joint State Safety Oversight and Rail Transit Agency Virtual Workshop

Accident Investigation Oversight:
Best Practices and Lessons Learned

October 20, 2021

Introduction

Martin Shutt

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Office of Homeland Security, Emergency Management, and Rail Safety
Maryland Department of Transportation

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

Criterion	Definitions
Fire or smoke on a track, on a vehicle, or in a facility that does not meet the accident or incident criteria	Such an event may involve smoke that dissipates or a fire that is immediately extinguished, but does not result in evacuation.
Evacuation of a train into the right of-way or onto adjacent track for a non-life safety reason	Includes customer self-evacuation or transfer of passengers to rescue vehicles or alternant 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.
Signal violations or overruns	Includes violation of stop signal provided by roadway worker
Split/trailed switch without derailment	N/A
Vehicle door openings on the wrong side, off station platforms, or during train movement	N/A
Incapacitated operator in service	An operator loses consciousness, falls asleep, or otherwise becomes physically incapable of operating the rail transit vehicle during revenue or non-revenue service.
Runaway rail transit maintenance vehicle	Excludes runaway trains, which are defined in the accident category per FTA requirements

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

MARYLAND TRANSIT ADMINISTRATION
OFFICE OF SAFETY MANAGEMENT AND RISK CONTROL
FINAL FACT REPORT - RAIL

NOTE: THIS DOCUMENT IS BEING PREPARED IN ANTICIPATION OF LITIGATION

Mode: ☐ Light Rail ☐ Metro ☐ MARC ☐ Other:

Select Information:
 MTA ID Number:
 Report Type: Accidents:
 Event Date:
 Event Time:
 Location Address:
 Location Type:
 Train Control Utilized: N/A
 Grade Crossing Warning Devices Utilized: N/A
 Emergency Notification Sign Displayed (Grade Cro):
 Track Speed: N/A
 Track Geometry: N/A
 Lighting Conditions:
 Surface Condition: N/A
 Weather Conditions: N/A
 Temperature Conditions:
 State Safety Oversight Notification Time:
 State Safety Oversight Notification:
 FTA Notification: N/A
 NTSB Notification: N/A
 Rolling Stock Information (V1):
 Metro Train #: N/A
 Railcar #: N/A
 Direction: N/A
 Vehicle Action: N/A
 Inspection/Impound/Quarantine: N/A
 Involved Vehicle Description/Action:
 Vehicle Involvement: N/A
 Operator Information (O1):
 Badge Number: N/A
 Disciplinary points prior to event: N/A
 Employee's Certification(s) Current: N/A
 Post-Accident Testing: N/A
 Time Employee Began Work: N/A
 Time Employee Ended Previous Shift: N/A
 Was fatigue ruled out as a contributing factor? N/A
 Additional Operator(s) and MTA Employee(s):
 N/A N/A

MTA Final Fact Report - October 2020

Injuries:

Involvement: Select	Injuries: Select	Transported: Select	Hospital: Select
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Damage:

Vehicle Involvement: Select	Severity: Select	Estimate: <input type="text"/>
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Representatives on Location:

Select	Select
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Evidence:

Select	Select
---------------	---------------

Police Attach:

Select	Select
---------------	---------------

Invest finding:

Select	Select
---------------	---------------

Probable Contrib:

Select	Select
---------------	---------------

Evidence List:

- Select
- Rules violations/Human factors
- Equipment failure
- Poor maintenance
- Slips and falls
- Action of motorist
- Imprudent customer actions
- Pedestrian actions
- Suicides
- Trespassing
- Medically related
- Other:
- N/A

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

MTA is submitting the following corrective action plans for review and formal approval by MDOT:									
MTA ID Number	Priority/Risk	Source	Finding Summary	Corrective Action Summary	Responsible Person	Scheduled Close Date	CAP Approved by Safety?	CAP Approved by MDOT?	MDOT Comments
MC.351.1	3-D-18	MI.05.08.21.1	The sliding glass door at the entrance of Milford Mill Station makes contact with a bench when it is pushed open in an emergency situation.	Metro Facilities Mnt. will move the bench at Milford Mill station and ensure there are no additional obstructions that may affect the door when the breakaway feature is activated.	Mike Gilhooly Joe Trapani	October 2021	Yes	Yes	(8/16/2021) The SSOA approves this CAP and suggests the following verification documents: 1. Photographs of completed work, or Safety Officer verification of site visit stating the work was completed.
MC.351.2	3-D-18	MI.05.08.21.1	It is unclear if this situation is present at other Metro stations that are equipped with emergency breakaway doors.	Metro Facilities Mnt. will assess the rest of the system where emergency breakaway doors are present and ensure they are also free of obstructions when the breakaway feature is activated.	Mike Gilhooly Joe Trapani	October 2021	Yes	Yes	(8/16/2021) The SSOA approves this CAP and suggests the following verification documents: 1. Assessment determination (e.g., brief report/memo ensuring all breakaway doors were assessed and clear of obstructions, if found)

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

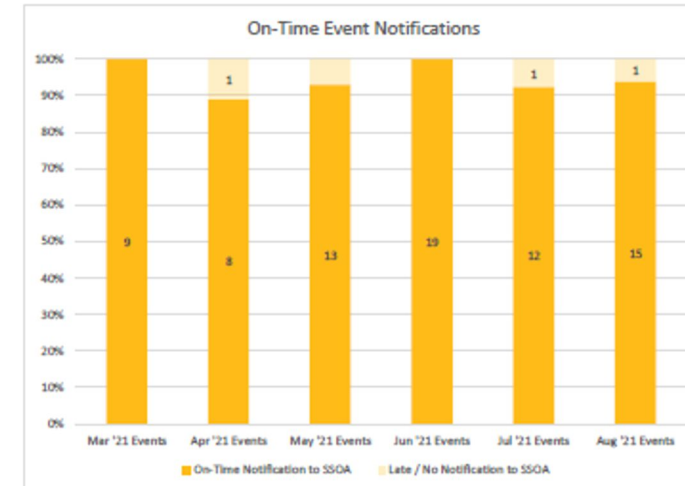
State Safety Oversight Agency
Key Performance Indicator Monthly Report



September 14, 2021 | Data as of August 31, 2021

Safety Events

	Mar '21	Apr '21	May '21	Jun '21	Jul '21	Aug '21
Accidents	0	3	4	5	5	7
Incidents	3	1	7	10	0	2
Occurrences	0	0	1	1	1	0
Serious Occurrences	3	3	2	2	6	3
Not yet determined	1	2	0	1	1	4
Total	9	9	14	19	13	16



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