



Appendix M

Version: 10/01/2021

NJDOT SSO Program Risk Monitoring Meetings and Examinations Program

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Safety Risk Monitoring

Overview

This document explains the process and requirements for the activities that make up the NJDOT SSO program safety risk monitoring of the New Jersey RTA/RFGPTS. **Safety Risk Monitoring** is a process used to address safety oversight and enforcement of a transit agency's Safety Management System (SMS) Safety Assurance (and some aspects of Safety Risk Management) activities. As defined by the Federal Transit Administration (FTA), Safety Assurance (SA) means the processes within a transit agency's SMS that function to ensure the implementation and effectiveness of safety risk mitigation and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.

The NJDOT SSO program completes safety risk monitoring in the same way as SMS SA monitors safety performance measures, data, and information such as those from the National Safety Plan. The list of data and information can also be used as a framework for transit-specific safety performance measures and assess:

- The effectiveness of risk controls in agencies' operations and safety programs.
- Conformance to expectations and/or the objectives of agencies' safety programs or policies.
- Causes and contributing factors of non-conformances and potential new hazards or threats.
- Improvements for agencies' operations and safety programs.

The risk monitoring data, information and analyses are used to fully understand the state of the safety risk environment and provide a high-level understanding of safety culture at the RFGPTS. The NJDOT SSO program needs to have a body of knowledge of each RTA/RFGPTS that it provides safety oversight in order to fully understand the safety risk environment and as a part of the required Technical Training Plan (TTP). As part of ongoing safety risk monitoring, the NJDOT SSO program intends to conduct on-site meetings and inspections of issues that have been identified either by the RTA/RFGPTS or from data/information tracking and analysis (risk-based, data-driven).

The NJDOT SSO program will inform and schedule with the RTA/RFGPTS (and CSO) any meetings and inspections which should include appropriate RTA/RFGPTS staff such as for safely inspecting track or catenary locations. Other planned on-site interviews, discussions, or inspections will be coordinated by the NJDOT SSO program.

If during these on-site inspections, a concern arises that constitutes an **immediate threat** to safety on the rail system, this situation will be communicated immediately to the RTA/RFGPTS staff and management for appropriate actions, as well as the CSO. If issues are identified, a summary report of any on-site visit to a rail system will be provided for review by the CSO within thirty (30) days of the visit.



In order to perceive changes in the safety risk environment at the RTA/RFGPTS, some time is needed between safety risk monitoring visits. The NJDOT SSO program will determine the amount of appropriate time required for the RTA/RFGPTS to adjust, respond, or plan any required mitigation and include that time when noting a proposed date to follow up on risk monitoring. This will allow for the RTA/RFGPTS to own their risk and time to continue their safety risk management and assessment processes.

The following are the requirements related to conduct of RTA/RFGPTS Safety Risk Monitoring (investigations, audits, and inspections) as defined in 49 CFR Part 674.

§ 674.25 Role of the State safety oversight agency.

(b) An SSOA must review and approve the Public Transportation Agency Safety Plan for every rail fixed guideway public transportation system within its oversight. An SSOA must oversee an RTA's execution of its Public Transportation Agency Safety Plan. An SSOA must enforce the execution of its Public Transportation Agency Safety Plan, through an order of a corrective action plan or any other means, as necessary or appropriate. An SSOA must ensure that a Public Transportation Agency Safety Plan meets the requirements at 49 U.S.C. 5329(f).

(c) An SSOA has primary responsibility for the investigation of any allegation of noncompliance with a Public Transportation Agency Safety Plan. These responsibilities do not preclude the Administrator from exercising his or her authority under 49 U.S.C. 5329(f) or 49 U.S.C. 5330.

(d) An SSOA has primary responsibility for the investigation of an accident on a rail fixed guideway public transportation system. This responsibility does not preclude the Administrator from exercising his or her authority under 49 U.S.C. 5329(f) or 49 U.S.C. 5330.

Scope of Data and Information Collection and Analyses: The following are the data and information collection and analysis sources and activities.

1. Tracking issues from results of, content of, or CAPs resolution from:
 - a) Investigations (Program Standard Sections 6 and 7, and Appendix O)
 - b) Internal Audits (Program Standard Section 4 and Appendix L)
 - c) Triennial Audits (Program Standard Section 5 and Appendix N)
 - d) Daily Incident/Safety Event Log (Program Standard RTA/RFGPTS Communication and Coordination and Section 9)
 - e) Hazard Log (Program Standard RTA/RFGPTS Communication and Coordination Section 9 and Appendix K)
2. Analysis of issues based on these and other sources of safety risk information from the RTA/RFGPTS.
3. The NJDOT SSO program staff also maintain a register of specific issues at each RTA/RFGPTS that are being tracked as potential sources of risk (see the Safety Risk Monitoring Log template). This list typically contains topics that indicate an actual or perceived risk may require new or improved mitigation. If an identified topic progresses to a point at which an immediate threat emerges, it will be addressed by the RTA/RFGPTS in a timely fashion, as warranted. This monitoring is for potentially emerging or ongoing safety risks and is accomplished through a process as follows:



- a) If a specific potential safety issue is identified or **experienced once**, a note of that issue is made on the register along with any response or reaction from the RTA/RFGPTS.
 - b) If the specific or related potential safety issue is **experienced again**, or if the risk appears to be increasing to the point that it is becoming hazardous, then the NJDOT SSO program staff actively start monitoring that potential risk through data collection and discussions with the appropriate RTA/RFGPTS staff.
 - c) If the specific or related potential safety issue is experienced a third time, this will require a visit by the NJDOT SSO program staff to inspect, assess, and audit this situation. In some cases, these safety issues become state reportable events, and are required to be fully investigated in accordance with **Appendix O**.
4. Current events at the RTA/RFGPTS, current safety performance – collected through committee meetings and on-site activities.

Scope of Activities for Risk Monitoring: The NJDOT SSO program staff participate with the New Jersey RTAs/RFGPTS for meetings. The content of these visits is defined by an agenda that focuses the information collection and meetings. These activities also include follow-up to previous visits, meetings, and review of safety performance (and culture). Activities typically completed during these visits are some or all of the following:

1. **Monthly Internal RTA/RFGPTS Safety Meetings** – these internal meetings may include any or all levels of executive management, management, supervision, and staff related to the rail system operations, maintenance, command and control, and projects. As an example, these meetings are used by the RTA/RFGPTS to go over CAPs status/progress, hazards, ongoing construction activities, accidents and to go over current events at the RTA/RFGPTS.
2. **Monthly CSO Safety Meetings (CSO and/or RTA/RFGPTS staff)** – These meetings include the CSO and may include all levels of the RTA/RFGPTS executive management, management, supervision, and staff related to the rail system. These meetings are used to review/address items related to the NJDOT SSO program, including investigations, internal/external audits, observations/inspections, training, hazard tracking, and CAPs. At a minimum, the Monthly CSO Safety meeting must include the items on the **Monthly CSO Safety Meeting Agenda** which is included as part of this Appendix.

Note meetings are held to review/address items related to the NJDOT SSO program for each of the RTA/RFGPTSs. Meeting minutes, documenting action items from each monthly meeting will be prepared by the CSO and submitted to the NJDOT SSO program no later than two weeks after each monthly meeting.

3. **Audits and examinations** – these are usually targeted based on existing investigations or high-priority CAPs (open or closed), see Section 8 and **Appendix P** on CAPs. This activity might also include participation in internal audit activities or follow-up of those activities, see **Appendix L** on Internal Safety Audits.



4. **CAP closures** – reviewing CAP closure evidence and effectiveness of the mitigations. It may be sufficient to just review records if the CAP was about training or completing a work assignment that is then recorded on a work order. The review of CAP closure evidence should be topics where an in-person inspection can be completed, a demonstration might be provided, or a follow-up discussion would provide additional information about the success of the CAP implementation. There is no intent to inspect every CAP in the field, see also Section 8 and [Appendix P](#) on CAPs.
5. **Checking for new issues** – these new issues are collected through meetings and by visiting the rail systems, facilities, and infrastructure. Some of these activities are scheduled to assure that the entire rail system is visited and experienced by the NJDOT SSO program staff over a certain period of time or a particular review topic may be selected. Some new issues may become apparent through news or social media sources. The FTA often asks the SSO program questions based on current notifications or news releases.
6. **Current state of the rail system** – it is critical that the NJDOT SSO program staff have experience with the current state of the rail systems and related infrastructure, including operations, maintenance, command and control, and projects. Monitoring the TAM Plan and the status of maintaining the rail system are an important part of this process.
7. **Internal Audits, SSO Program Audits and Inspections, and the Triennial Audit:** The RTA/RFGPTS internal audits and the SSO program Safety Risk Monitoring audits and examinations are intentionally independent, but also synergistic. In addition, CAPs resolution, closure, and assurance of success of those CAPs are related to those activities. The SSO Triennial Audit (described in Program Standard Section 5 and [Appendix N](#)) integrates with all of these audit and inspection activities and is used to assure that safety oversight and enforcement are applied to the entire safety program (including the safety program related control documents/minimum standards for safety).

Monthly CSO Safety Meetings Minimum Standards

The following outlines the minimum standards (discussion & reporting topics) to be covered during **Monthly CSO Safety Meetings**:

- I. **Safety Committee Activities:**
Provide an update for Safety Committee Activities. Examples of Safety Committee Activities are as follows:
 - a) Executive Safety Committee
 - b) Configuration Management Committee
 - c) Fire/Life Safety Committee
 - d) Rules Committee
 - e) Other
- II. **Management of Change:**
 - a) Safety Certification:



Provide an update for ongoing, recently completed (in the interval between the last monthly meeting), and future projects requiring Safety Certification, including the scheduling and status.

b) **Configuration Management & Control:**

Provide an update for ongoing, recently completed (in the interval between the last monthly meeting), and future projects requiring Configuration Management & Control, including the scheduling and status.

III. Emergency Management:

Provide an update for Emergency Management activities. Examples are as follows:

- a) First Responder/Familiarization Training
- b) Emergency Exercises/Drills (Tabletop, Full Scale, After Action, etc.)
- c) Scheduled Training/Exercises

IV. NEW Reporting Items (Safety Events/CAPs/Injuries)

Provide information on new reportable items (in the interval between the last monthly meeting). Discussion items are as follows:

- a) Accidents
- b) Incidents
- c) Occurrences (Rule Violations, Near-Misses, etc.)
- d) Hazards
- e) CAPs
- f) Employee Injuries
- g) Lost Time Injuries

V. Ongoing (Existing) Reporting Items (Safety Events/CAPs/Injuries):

Provide an update for open and recently closed items. Discussion items are as follows:

- a) Accidents
- b) Incidents
- c) Occurrences (Rule Violations, Near-Misses, etc.)
- d) Hazards
- e) CAPs
- f) Employee Injuries
- g) Lost Time Injuries

VI. Internal Audits:

Provide an update for Internal Audits as follows:

- a) New Audits
- b) Scheduled Audits
- c) Status of Annual/Triennial (% completed)

VII. Other:

Provide an update for other items with safety impact. Examples are as follows:

- a) **Planned Outages/Capital Projects:**
Provide an update for any planned outages affecting transit operations, including any operational changes. An example is an outage to accommodate track replacement.
- b) Bulletins/Safety Advisories/etc.:



Provide an update for any new communications with direct safety impact. This includes changes to the operation, discontinuation of routine inspections/maintenance activities, audit programs, etc. An example is a bulletin formalizing an operational change such as a slow speed order, or a new temporary or permanent wayside signal.

c) Minimum Safety Standards documentation reviews/updates:

Provide an update for the status of required annual review/updates (if needed) as follows:

- i. Agency Safety Plan
- ii. Accident Investigation Procedure
- iii. SSP/SSEPP

VIII. SSOA Observations:

Provide an update for SSOA Observations as follows:

- a) Scheduling
- b) New Observations (in the interval between the last monthly meeting)
- c) Prior Observations

IX. PTASP Performance Targets (Quarterly):

Provide an update/analysis of progress towards meeting performance targets/goals as outlined in PTASP.

X. Safety Assurance Updates/Reporting:

Provide performance updates of safety performance for departments/divisions (Maintenance of Way, Mechanical, Transit Operations, OHS/OSS, Human Resources, etc.). Examples are as follows:

- a) MOW Inspections (Track, Signals, Traction Power)
- b) Mechanical (Scheduled Maintenance Inspections)
- c) Safety Observations/Efficiency Testing Programs
- d) Environmental Activities/Audits
- e) Drug & Alcohol Testing Programs (Random)
- f) Right-of-Way/Track Safety Briefings
- g) Station Inspections (routine)

NOTE: The NJDOT SSO Program will also cover any FTA SSOR discrepancies/issues during this meeting.

Additional documents in this Appendix

- Safety Risk Monitoring Topics Log Template
- Direct Observation and Station Inspection Planner Template
- Monthly CSO Safety Meeting Example Formatting

Updates:

- March 5, 2018 – initial release as part of Version 1.0



**New Jersey Department of Transportation
State Safety Oversight (SSO) Program Standard
Appendix M**

- October 1, 2021 – rewrite and conversion from enforcement to safety risk monitoring; included Monthly CSO Safety Meetings & agenda; revised rail property to RFGPTS



**New Jersey Department of Transportation (NJDOT)
Fixed Guideway State Safety Oversight (SSO) Program**

**RTA/RFGPTS:
Risk Monitoring Topics
Updated: 10/01/2021**

Category	Risk Topic	Last Update	Priority	Next Check In	Notes
Political Environment Issues					
Administrative Issues					
Rules, Procedures, Efficiency Testing, and Training					
Rail Operations (Hot spots and issues on routes)					
Command and Control					
Rail Vehicles Maintenance					
Rail Facilities					



**New Jersey Department of Transportation
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Category	Risk Topic	Last Update	Priority	Next Check In	Notes
Track and Switches					
OCS/Third Rail					
Substations					
Signals					
Structures					
Capital Projects					
Ride Log					



**New Jersey Department of Transportation
State Safety Oversight (SSO) Program Standard (SSOPS)
Appendix M**

Risk Monitoring Topic Status Tracking

State: NJDOT SSO Program
RTA/RFGPTS:

Risk Topic Title:

Risk Description (what is the issue being tracked):
How is it a risk to the rail system safety program?

Related Investigations:

Related Internal Audits:

Related CAPs:

These three are tracked in the table above

Last Updated:

Current Risk Rating:

Next Check-In Time Frame:

Follow-Up Status Information

Direct Observation	Details	Format
Observation_Date Direct_Observation_Type Inspector Service_Line Observation_Start_Time Observation_End_time Type_of_Work Track Number_of_Crew_Members Designated_Employee_in_Charge Location Equipment_In_Use		XX / XX / XXXX *Military Time (xx:xx) *Military Time (xx:xx)
Safety_Briefing_Type Briefing_Location Briefing_Time Personal_Protective_Equipment Method_of_Protection Watchman/Flagman_Names Watchman/Flagman_Equipments Outage_Limits		
Timed_Observations		
Safety_Issues_Found		
Safety_Concern_1		
Safety_Concern_2		
Safety_Concern_3		
Safety_Concern_4		
Safety_Concern_5		
Safety_Concern_6		
Safety_Concern_7		
Safety_Concern_8		
Safety_Concern_9		
Safety_Concern_10		
Additional Comments		

SAMPLE

*Reference your photos in the Safety Concern(s) section and then add the spreadsheet and photos to a zip file and send them over to the drop box: NJOFSSO@dot.nj.gov

I. Safety Committee Activities	# of Meetings/Activities	Date(s) of Meeting/Activity	Description (Outcome/Significant Discussion Items)
a) Executive Safety Committee			
b) Configuration Management Committee			
c) Fire/Life Safety Committee			
d) Rules Committee			
e) Other			

II. Management of Change
a) Safety Certification
b) Configuration Management & Control

III. Emergency Management	Date(s)	Attendees (Police, Fire Dept., etc.)	Description
a) First Responder/Familiarization Training			
b) Emergency Exercises			
c) Scheduled Training/Exercises			

IV. NEW Reporting Items	# of NEW Events/Items	Event/CAP ID(s)	Description	Status
a) Accidents				
b) Incidents/Significant Hazardous Conditions				
c) Occurrences				
d) Hazards				
e) CAPs				
f) Employee Injuries				
g) Lost Time Injuries				

V. Ongoing (Existing) Reporting Items	# of Events/Items	Event/CAP ID(s)	Description	Status
a) Accidents				
b) Incidents/Significant Hazardous Conditions				
c) Occurrences				
d) Hazards				
e) CAPs				
f) Employee Injuries				
g) Lost Time Injuries				

VI. Internal Audits	# of Audits	ASP Section/Grouping	Description	Status
a) New Audits				
b) Scheduled Audits				
c) Status of Annual/Triennial				% Completed

VII. Other
a) Planned Outages/Capital Projects
b) Bulletins/Safety Advisories/Etc.
c) Document Reviews/updates
i. Agency Safety Plan
ii. Accident Investigation Procedure
iii. SSP/SSEPP

VIII. SSOA Observations	Date/Location	Observations/Difficiencies	Corrective Action(s) by RTA	Status*
a) Scheduling				
a) New Observations				
b) Prior Observations				

IX. PTASP - Performance targets Analysis (Quarterly)



X. Safety Assurance Updates/Reporting				
	Task	Scheduled or Required	Actual	% Completed
a) Maintenance of Way (Track, Way and Power, etc.)	Safety Observations			
	Safety Meetings			
b) Mechanical Dept./Equipment	Task	Scheduled or Required	Actual	% Completed
	Safety Observations			
c) Transit Operations/Services	Safety Meetings			
	Operating Rules Check			
	Operating Checks			
	Task	Scheduled or Required	Actual	% Completed
d) Occupational Health & Safety/System Safety/Human Resources	Environmental Audits			
	Random Drug & Alcohol Testing			
e) Passenger Services	Task	Scheduled or Required	Actual	% Completed
	Safety Observations			
f) Office of the General Manager	Station Checks			
	Task	Scheduled or Required	Actual	% Completed
	Station Observations			
	Train Observations			