New Jersey Department of Transportation (NJDOT)
Rail Transit State Safety Oversight (SSO) Program Standard (SSOPS)

Office of Fixed Guideway Safety and Security Oversight
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Version Tracking

VERSION	DATE	PURPOSE FOR CHANGES
1.0	March 2018	Re-organization and revision to reflect the requirements of 49 CFR Part 674 instead of 49 CFR Part 659, except the interim Agency Safety Plan continues to be the Part 659 compliant System Safety Program Plan, including the internal audits requirements. The content of the System Security Plan requirements and internal audits have been removed, and added to the list of minimum standards for safety. Standardization of formatting, headers, and footers. Incorporation of comments from RTA/RTS.

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Table of Contents

Version Tracking i
Signature Pages i
Table of Contents v
Tables vi
Figures vi
Appendices vi
Definitions viii
Acronyms and Abbreviations xi
Introduction/Background 1
Transition to the New SSO Rule (Part 674) 2
Certification of a SSO Program 4
Organization of this Program Standard 6
Section 1. Program Management 8
1.1 Establishing the Oversight Agency 8
1.2 NJDOT SSO Program RTAs/RTSs 12
1.3 NJDOT SSO Program Staff and Responsibilities 13
1.4 Grant Funding and the Part 674 SSO Program 14
1.5 SSO Agency Policies 16
1.6 SSO Agency Required Reporting 17
1.7 SSO Agency and RTA/RTS Communication and Coordination 17
1.8 NJDOT SSO Program Risk Monitoring of RTAs/RTSs 20
1.9 FTA Triennial Audit of NJDOT SSO Program 23
Section 2. Program Standard Development 24
2.1 NJDOT Rail Transit SSOPS 24
2.2 Minimum Standards for Safety 25
Section 3. Program Policy and Objectives 28
Section 4. Oversight of Agency Safety Plans and Transit Agencies' Internal Safety Reviews 30
4.1 Requirements for the Interim ASP/SSPP 31
4.2 Required Content of the RTA SSPP 32
4.2.1 Element 1. Policy Statement and Authority for SSPP 32
4.2.2 Element 2. Purpose, Goals and Objectives 32
4.2.3 Element 3. Overview of Management Structure 33
4.2.4 Element 4. SSPP Control and Update Procedure 35
4.2.5 Element 5. SSPP Implementation – Tasks and Activities 36
4.2.6 Element 6. Hazard Management Process 36
4.2.7 Element 7. Safety Certification 37
4.2.8 Element 8. Managing Safety in System Modifications 39
4.2.9 Element 9. Safety program data collection and analysis 40
4.2.10 Element 10. Accident/Incident Notification, Investigation, and Reporting 40
4.2.11 Element 11. Emergency Management Program 40
4.2.12 Element 12. Internal Safety Audits 42
4.2.13 Element 13. Rules Compliance 42
4.2.14 Element 14. Facilities and Equipment Inspections 42
4.2.15 Element 15. Maintenance Audits and Inspections 42
4.2.16 Element 16. Training and Certification Program for Employees and Contractors 43

4.2.17 Element 17. Configuration Management and Control 43
4.2.18 Element 18. Local, State, and Federal Requirements 43
4.2.19 Element 19. Hazardous Materials Program 44
4.2.20 Element 20. Drug and Alcohol Program 44
4.2.21 Element 21. Procurement Process 45
4.2.22 Element 22. Hours of Service 45
4.2.23 Element 23. Roadway Worker Protection 45
4.2.24 Element 24. Minimum Document Submission to the NJDOT SSO Program 45
4.3 Oversight of Internal Safety Audits 48
Section 5. Triennial SSO Agency Audits 50
Section 6. Event Notification 52
6.1 Accident Notification Requirements 52
6.2 Incident Notification Requirements 54
Significant Hazardous Conditions 54
6.3.1 (2) Hour Notification 56
6.3.2 (24) Hour Summary 56
6.4 RTA/RTS Reportable Event Notifications to Other Federal Agencies 56
Section 7. Accident Investigations 59
7.1 Investigations 60
7.2 Investigation Progress and Final Reports 61
Section 8. Corrective Actions 64
Section 9. Annual Reporting to FTA 66

Tables

Table 1. Cross-Walk Matrix FTA SSO Rule to this SSOPS 7
Table 2. SSO Program Grant Funding Allocations for New Jersey 16
Table 3. New Jersey RTA/RTS Communication and Coordination 19
Table 4. Notification Criteria for Accidents 53
Table 5. Notification Criteria for Incidents 54

Figures

Figure 1. Data and Information from Risk Monitoring in the Transit Industry 22
Figure 2. All-hazards Risk Management and Prioritization 23

Appendices

Appendix A. FTA SSO Regulation 49 CFR Part 674 and 659, 49 U.S.C. Section 5329 and 5330
Appendix B. New Jersey Statutes and Administrative Codes, Related to the SSO Program
Appendix C. Certification Checklist Items, Requirements from Part 674.13
Appendix D. NJDOT SSO Program Description and Procedures
Appendix E. New Jersey Transit Newark Light Rail Description and Contacts
Appendix F. New Jersey Transit RiverLINE Description and Contacts
Appendix G. New Jersey Transit Hudson-Bergen Light Rail Description and Contacts
Appendix H. Delaware River Port Authority Transit Corporation Description and Contacts

Appendix I. System Security Plan (SSP) and System Security and Emergency Preparedness Plan (SSEPP) Review and Approval Process
Appendix J. System Safety Program Plan (SSPP) Review and Approval Process
Appendix K. Hazard Management Plan Review and Approval Process
Appendix L. Internal Safety and Security Reviews Process
Appendix M. NJDOT SSO Program Inspections Procedure
Appendix N. Process for NJDOT SSO Program Triennial Audits of RTAs/RTSs
Appendix O. NJDOT SSO Program Investigation Procedures
Appendix P. CAPs Review and Approval Process

Definitions

These definitions are those provided in 49 CFR Part 674.7 with a few additional definitions.

2 Hour Notification	A phone call made to the designated NJ State Safety Oversight Program Manager and an email to the FTA and CC NJOFGSSO@dot.nj.gov as per Procedure SSO-003.
24 Hour Summary	A document supplied by the RTA/RTS to NJOFGSSO@dot.nj.gov in editable format as per Procedure SSO-003.
Accident	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 in Appendix A [of Part 674] to this part.
Accountable Executive	A single, identifiable individual who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.
Administrator	The Federal Transit Administrator or the Administrator's designee.
Contractor	An entity that performs tasks on behalf of FTA, a State Safety Oversight Agency, or a Rail Transit Agency, through contract or other agreement.
Corrective action plan (CAP)	A plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. Either a State Safety Oversight Agency or FTA may require a Rail Transit Agency to develop and carry out a corrective action plan.
Event	An Accident, Incident or Occurrence.
Federal Railroad Administration (FRA)	An agency within the United States Department of Transportation.
Federal Transit Administration (FTA)	An agency within the United States Department of Transportation.
Hazard	Any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a rail fixed guideway public transportation system; or damage to the environment.
Incident	An event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency. An incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in Appendix

	A to this part. If a rail transit agency or State Safety Oversight Agency later determines that an Incident meets the definition of Accident in this section, that event must be reported to the SSOA in accordance with the thresholds for notification and reporting set forth in Appendix A [of Part 674] to this part.
Incident and Occurrence Log	A document created by the RTA/RTS that lists operational and maintenance activities to be provided to the SSOA in editable spreadsheet format.
Investigation	The process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
National Public Transportation Safety Plan	The plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
National Transportation Safety Board (NTSB)	An independent Federal agency.
Occurrence	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.
Person	A passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a rail fixed guideway public transportation system.
Public Transportation Agency Safety Plan (PTASP)	The comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System. Until one year after the effective date of FTA's PTASP final rule, a System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 will serve as the rail transit agency's safety plan.
Public Transportation Safety Certification Training Program	Either the certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1).
Rail fixed guideway public transportation system	Any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.
Rail Transit Agency (RTA)	Any entity that provides services on a rail fixed guideway public transportation system.
Risk	The composite of predicted severity and likelihood of the potential effect of a hazard.
Risk mitigation	A method or methods to eliminate or reduce the effects of hazards.
Safety risk management	A process within a Rail Transit Agency's Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Serious injury	Any injury that: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves any burn (this a more encompassing definition than given in 674.7 definition of Serious injury).
State	A State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.
State Safety Oversight Agency (SSOA)	An agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in this part.
Vehicle	Any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

Acronyms and Abbreviations

	A
ALARP	As Low As Reasonably Practicable
APTA	American Public Transportation Association
AREMA	American of Railway Engineering and Maintenance of Way Association
ASP	Agency Safety Plan
	C
CAP	Corrective Action Plan
CFR	Code of Federal Regulations
CMP	Configuration Management Plan
COI	Conflict of Interest
CSO	Chief Safety Officer (or equivalent)
	D
DRPA	Delaware River Port Authority
	E
EOP	Emergency Operations Plan
	F
FAST	Fixing America's Surface Transportation Act
FEMA	Federal Emergency Management Agency
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTE	Full Time Equivalent
	M
MAP-21	Moving Ahead for Progress in the 21st Century
	N
N/A	Not Applicable
N.J.A.C.	New Jersey Administrative Code
NJDOT	New Jersey Department of Transportation
N.J.S.A.	New Jersey Statutes Amended
NJ Transit	New Jersey Transit
NLR	Newark Light Rail
NPRM	Notice for Proposed Rulemaking
NTD	National Transit Database
NTSB	National Transportation Safety Board
	O
OCS	Overhead Catenary (or Contact) System
OHA	Operational Hazard Analysis
	P
PATCO	Port Authority Transit Corporation
PHA	Preliminary Hazard Analysis

PPE	Personal Protective Equipment
PSR	Annual NJDOT Public Safety Report
PTASP	Public Transportation Agency Safety Plan
	R
RFGPTS	Rail Fixed Guideway Public Transportation System
RFGS	Rail Fixed Guideway System
ROW	Right-Of-Way
RTA	Rail Transit Agency
RTS	Rail Transit System
	S
SA	Safety Assurance
SEPP	Security and Emergency Preparedness Plan
SGR	State of Good Repair
SMS	Safety Management System
SOP	Standard Operating Procedure
SSCP	Safety and Security Certification Plan
SSCVR	Safety and Security Certification Verification Report
SSEPP	System Security and Emergency Preparedness Plan
SSO	State Safety Oversight
SSOA	State Safety Oversight Agency
SSOPS	State Safety Oversight Program Standard
SSP	System Security Plan
SSPP	System Safety Program Plan
	T
TAM	Transit Asset Management
TASP	Transit Agency Safety Plan
TSA	Transportation Security Administration
TSO	Transit Safety and Oversight
TTP	Technical Training Plan
	U
U.S.C.	United States Code

Introduction/Background

This document serves as the Program Standard for the New Jersey Department of Transportation (NJDOT) State Safety Oversight (SSO) program (NJDOT SSO program). This NJDOT program is required by the Federal Transit Administration (FTA) and applies to rail transit agencies (RTAs) and rail transit systems (RTSs) not solely regulated by the Federal Railroad Administration (FRA) in the State of New Jersey. The authorization for FTA's and NJDOT's SSO programs was initially in 49 United States Code (U.S.C.) Section 5330 (State Safety Oversight). FTA published their state safety oversight rule, Rail Fixed Guideway Systems; SSO; Final Rule, on December 27, 1995, codified as 49 Code of Federal Regulations (CFR) Part 659. On April 29, 2005, the FTA published a revised version of 49 CFR Part 659.

In 2012, as part of Moving Ahead for Progress in the 21st Century (MAP-21), the FTA safety programs were changed with significantly higher expectations and responsibilities for safety oversight and safety performance for the FTA, states, and the transit agencies (for all modes, not just rail), authorized as 49 U.S.C. Section 5329, shown in Appendix A along with the new SSO Rule (49 CFR Part 674). The new FTA safety programs are in the process of being developed to follow a transit-specific safety management system (SMS), which is the basis of these changes to the transit safety programs.

- *Safety Management Systems: Getting Ready*, https://www.transit.dot.gov/oversight-policy-areas/safety-management-systems-getting-ready

The MAP-21 version of FTA's safety programs currently include the following activities and rulemakings:

- **Safety Certification Training Program** – this program requires safety-related training for specific FTA, SSO Agency, and RTA staff responsible for safety and oversight. Currently, this program is in regulation as an Interim Final Rule and a notice for proposed rulemaking (NPRM) that is in process for a Final Rule as 49 CFR Part 672.
- **National Safety Plan** – A proposed National Public Transportation Safety Plan was released by FTA in the Federal Register in February 2016, and introduced the use of the transit-specific SMS framework, safety performance management, and concepts of managing risks and assuring safety performance at transit agencies that are proactive and based on SMS. This plan has also introduced the FTA's intended requirements for safety performance criteria that the transit agencies will be required to base their safety performance measures and targets on for improvements documented in their Agency Safety Plans. This document was finalized in January 2017.
- **Agency Safety Plan (ASP)** – the FTA intends to require the use of the transit-specific SMS framework through the Public Transportation Agency Safety Plan (PTASP), which has been released in NPRM in February 2016. As of the completion of this State Safety Oversight Program Standard (SSOPS), the Final Rule to be 49 CFR Part 673 has not yet been released.
- **Public Transportation Safety Program** – the FTA has completed rulemaking that establishes their procedural rules for administration of the comprehensive safety program

to improve and assure safety at transit agencies and states, published as a Final Rule in August 2016 as 49 CFR Part 670. This includes their authority to take over audits and inspections for an SSO Agency, such as the Tri-state Oversight Committee and their safety oversight of the Washington Metropolitan Area Transit Authority.

- **Transit Asset Management (TAM)** – FTA has completed rulemaking in July 2016 for their TAM processes that include state of good repair (SGR) and data collection, prioritization, and data delivery to the National Transit Database (NTD). The TAM final rule is 49 CFR Part 625 and changes made for TAM in the NTD requirements are in final rule as 49 CFR Part 630.
- **SSO** – the FTA has completed rulemaking in March 2016 for a new SSO regulation as 49 CFR Part 674 based on 49 U.S.C. Section 5329 instead of Section 5330. This new regulation for SSO went into effect on April 15, 2016, and states have three years to complete development and have approval from FTA through a certification process for their Part 674 compliant SSO program. After this three-year period, the current SSO regulation, 49 CFR Part 659, will be repealed along with its authorization, Section 5330.

This version of the NJDOT Rail Transit SSOPS includes all of the requirements from 49 CFR Part 674 in anticipation of being certified by the FTA. However, aspects of Part 659 are included to address the interim ASP (currently the System Safety Program Plan [SSPP]) as well as notification and reporting, which are focused on Part 674, but also include Part 659 until those reporting criteria that are different in Part 659 can be removed as requirements after certification.

FTA's authorization for the above safety program activities was further modified by the next surface transportation legislation, Fixing America's Surface Transportation (FAST) Act. Some clarifications and modifications were made by Congress based on experience from the multiple rulemakings and comments received from the transit industry. In addition, the FAST Act introduced a new activity for FTA to address development of appropriate and required minimum safety standards for the transit industry, for those areas where other Federal standards do not already apply. FTA has started this process by including it in the National Safety Plan and through a Transit Safety Standards Compendium available at https://www.transit.dot.gov/regulations-and-guidance/safety/transit-safety-standards. FTA has also convened a working group of transit industry experts to consider development and enforcement of minimum standards for safety that are not currently requirements by other federal agencies.

Transition to the New SSO Rule (Part 674)

The new SSO rule was authorized in 49 U.S.C. 5329(e) and is applicable to States with rail fixed guideway public transportation systems (RFGPTS), SSO agencies, and the entities that operate RFGPTS and receive financial assistance from FTA, as indicated in the purpose, applicability, and policy from Part 674, shown in the text box. Note that in this SSOPS the terms RFGPTS (used in Part 674), rail fixed guideway system (RFGS; used in Part 659), fixed guideway transit system, and RTA are used interchangeably meaning a RTS that is under the jurisdiction of a SSO Agency, and specifically the NJDOT SSO program.

49 CFR §674.1 Purpose
This part carries out the mandate of 49 U.S.C. 5329(e) for State safety oversight of rail fixed guideway public transportation systems.

49 CFR §674.3 Applicability
This part applies to States with rail fixed guideway public transportation systems; State safety oversight agencies that oversee the safety of rail fixed guideway public transportation systems; and entities that own or operate rail fixed guideway public transportation systems with Federal financial assistance authorized under 49 U.S.C. Chapter 53.

49 CFR §674.5 Policy

(a) In accordance with 49 U.S.C. 5329(e), a State that has a rail fixed guideway public transportation system within the State has primary responsibility for overseeing the safety of that rail fixed guideway public transportation system. A State safety oversight agency must have sufficient authority, resources, and qualified personnel to oversee the number, size and complexity of rail fixed guideway public transportation systems that operate within a State.

(b) FTA will make Federal financial assistance available to help an eligible State develop or carry out its State safety oversight program. Also, FTA will certify whether a State safety oversight program meets the requirements of 49 U.S.C. 5329(e) and is adequate to promote the purposes of the public transportation safety programs codified at 49 U.S.C. 5329.

In order to be certified to the new SSO regulation (Part 674), this SSOPS is required to be developed as a Part 674 compliant program standard, and those changes are now in this document. There are a couple of issues that need to be addressed in making this change to the new SSO regulation. These three issues will be further discussed and addressed in Section 4.

(1) The **ASP regulation is not yet a Final Rule**, and it may take several years before the RTAs/RTSs have a compliant ASP that includes the implementation of their SMS activities. The FTA has regulated (in 49 CFR Part 674.9) that the current SSPP compliant with Part 659 will serve as the interim ASP until the Final Rule and the processes supporting the new ASP are fully in effect and working.
(2) The ASP is required to now be approved by the RTA/RTS Board of Directors (or equivalent). This will mean that **the interim ASP (the SSPP) for calendar year 2018 (and beyond) must be approved by the RTA Board of Directors (or equivalent)**. This will be accomplished for 2018 with each RTA/RTS on a schedule agreed to by the RTA/RTS and the NJDOT SSO program (the current expectation is February 12th). This process will continue with the new ASP as soon as it is fully in effect and working or as required by FTA.
(3) A **Chief Safety Officer (CSO)** is required to be designated and that position must report to the Accountable Executive (Chief Executive Officer, Executive Director, or equivalent) at the RTAs/RTSs. **The criteria/requirements for the CSO are defined in SSO-011.**

49 CFR §674.9 Transition from previous requirements for State safety oversight

(a) Pursuant to section 20030(e) of the Moving Ahead for Progress in the 21st Century Act (Pub. L. 112–141; July 6, 2012) (''MAP–21''), the statute now codified at 49 U.S.C. 5330, titled ''State safety oversight,'' will be repealed three years after the effective date of the regulations set forth in this part.

(b) No later than three years after the effective date of the regulations set forth in this part, the regulations now codified at part 659 of this chapter will be rescinded.

(c) A System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 shall serve as the rail transit agency's safety plan until one year after the effective date of the Public Transportation Agency Safety Plan final rule, which will be codified in part 673 of this chapter.

Certification of a SSO Program

The conversion of this SSO program to the new regulation (Part 674) is in progress and awaiting the Part 673 Final Rule and full conversion to the ASP and SMS at each RTA/RTS. Starting in 2013, FTA developed their self-assessment for state certification and a Certification Work Plan for each SSO program that was not pre-certified compliant to what has now become Part 674. Only two state programs were pre-certified – California and Massachusetts, based on their ability to enforce the safety requirements at their RTAs.

The NJDOT SSO program has been working through its Certification Work Plan assignments; however, in July 2016, FTA provided a more detailed draft Certification Toolkit that now requires 31 topics/sub-topics to be addressed by providing programmatic evidence in order to be considered for Certification to Part 674. FTA's Certification Toolkit is based on Part 674.19 and other applicable requirements in Part 674. The high-level topics in the Certification Toolkit were the following:

- SSO Agency Independence (6 sub-topics)
- General Program Requirements (5 sub-topics)
- Enforcement Authority (5 sub-topics)
- Investigations and Audits (6 sub-topics)
- Staffing and Qualification of SSO Personnel and Contractors (3 sub-topics)
- Grants and Waivers (3 sub-topics)
- Program Standard (1 topic)
- ASP (1 topic)
- Major Oversight Activities (1 topic)

49 CFR §674.19 Certification of a State safety oversight program

(a) The Administrator must determine whether a State's SSO program meets the requirements of 49 U.S.C. 5329(e). Also, the Administrator must determine whether a SSO program is adequate to promote the purposes of 49 U.S.C. 5329, including, but not limited to, the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training Program, and the Public Transportation Agency Safety Plans.

(b) The Administrator must issue a certification to a State whose SSO program meets the requirements of 49 U.S.C. 5329(e). The Administrator must issue a denial of certification to a State whose SSO program does not meet the requirements of 49 U.S.C. 5329(e).

(c) In an instance in which the Administrator issues a denial of certification to a State whose SSO program does not meet the requirements of 49 U.S.C. 5329(e), the Administrator must provide a written explanation, and allow the State an opportunity to modify and resubmit its SSO program for the Administrator's approval. In the event the State is unable to modify its SSO program to merit the Administrator's issuance of a certification, the Administrator must notify the Governor of that fact, and must ask the Governor to take all possible actions to correct the deficiencies that are precluding the issuance of a certification for the SSO program. In his or her discretion, the Administrator may also impose financial penalties as authorized by 49 U.S.C. 5329(e), which may include:

(1) Withholding SSO grant funds from the State;

(2) Withholding up to five percent of the 49 U.S.C. 5307 Urbanized Area formula funds appropriated for use in the State or urbanized area in the State, until such time as the SSO program can be certified; or

(3) Requiring all rail fixed guideway public transportation systems governed by the SSO program to spend up to 100 percent of their Federal funding under 49 U.S.C. chapter 53 only for safety-related improvements on their systems, until such time as the SSO program can be certified.

(d) In making a determination whether to issue a certification or a denial of certification for a SSO program, the Administrator must evaluate whether the cognizant SSOA has sufficient authority, resources, and expertise to oversee the number, size, and complexity of the rail fixed guideway public transportation systems that operate within the State, or will attain the necessary authority, resources, and expertise in accordance with a developmental plan and schedule set forth to a sufficient level of detail in the SSO program.

Later, three of these categories were removed from the requirements of Part 674 Certification, but are expected to be added/required as part of the SSO program after or separately from certification. All requirements of the new Part 674 compliant SSO program are expected to be in place and operating by the next time FTA audits the SSO programs. The following three categories were removed from the Certification Toolkit.

- Grants and Waivers (3 sub-topics)
- ASP (1 topic)
- Major Oversight Activities (1 topic)

The NJDOT SSO program has been completing submissions and phone calls with FTA twice a month to assure that the program is progressing towards Part 674 Certification application by the

April 15, 2018 deadline imposed by FTA in order to assure time to process and approve the application prior to the certification deadline of April 15, 2019.

Organization of this Program Standard

As required in Part 674.27, this SSOPS is consistent with the National Public Transportation Safety Plan and the expected regulation for the PTASP. Currently, the SSPPs will be the interim ASPs as allowed in Part 674.9, as we transition to FTA's new safety programs and the transit-specific SMS. This SSOPS is adopted and provides all the processes and procedures used by the NJDOT SSO program to implement safety oversight of the New Jersey RTAs/RTSs. This SSOPS also provides the expectations and requirements of the NJDOT SSO program for the New Jersey RTA's/RTS's safety programs as allowed and required by federal and state regulation/law.

> **49 CFR §674.27(a) – State safety oversight program standards**
> An SSOA must adopt and distribute a written SSO program standard, consistent with the National Public Transportation Safety Plan and the rules for Public Transportation Agency Safety Plans. This SSO program standard must identify the processes and procedures that govern the activities of the SSOA. Also, the SSO program standard must identify the processes and procedures an RTA must have in place to comply with the standard.

This SSOPS follows the required nine sections for program standards as defined in Part 674.27, as well as introductory/background section, along with several appendices and procedures. Note that all aspects of this SSOPS are requirements for the NJDOT SSO program and the New Jersey RTAs/RTSs per N.J.S.A 27:25-8 and 48:2-15, as well as New Jersey Administrative Code (N.J.A.C.) 16:53E.

- Section 1. Program Management
- Section 2. Program Standard Development
- Section 3. Program Policy and Objectives
- Section 4. Oversight of Rail PTASPs and Transit Agencies' Internal Safety Reviews
- Section 5. Triennial State Safety Oversight Agency (SSOA) Audits of Rail PTASPs
- Section 6. Accident Notification
- Section 7. Investigations
- Section 8. Corrective Actions
- Section 9. Annual Reporting to FTA

Table 1 shows a cross-walk of where each section of Part 674 is covered in this NJDOT SSO Program SSOPS.

Table 1. Cross-Walk Matrix FTA SSO Rule to this SSOPS

FTA State Safety Oversight Final Rule (49 CFR Part 674), March 16, 2016	Corresponding Section in this SSOPS
Subpart A – General Provisions	
§ 674.1 Purpose	Introduction/Background
§ 674.3 Applicability	Introduction/Background
§ 674.5 Policy	Introduction/Background
§ 674.7 Definitions	Definitions
§ 674.9 Transition from previous requirements for State safety oversight	Introduction/Background
Subpart B – Role of the State	
§ 674.11 State safety oversight program	Section 1
§ 674.13 Designation of the oversight agency	Section 1 Waiver process not applicable
§ 674.15 Designation of oversight agency for multi-state system	Section 1
§ 674.17 Use of Federal financial assistance	Section 1
§ 674.19 Certification of a State Safety Oversight Program	Introduction/Background
§ 674.21 Withholding of Federal financial assistance for noncompliance	Introduction/Background
§ 674.23 Confidentiality of Information	Section 1
Subpart C – State Safety Oversight Agencies	
§ 674.25 Role of the State safety oversight agency	Sections 1, 2, 4, and 7
§ 674.27 State safety oversight program standards	Introduction/Background Sections 1-8
§ 674.29 Public Transportation Agency Safety Plans: general requirements	Section 4
§ 674.31 Triennial audits: general requirements	Section 5
§ 674.33 Notifications of accidents	Section 6
§ 674.35 Investigations	Section 7
§ 674.37 Corrective action plans	Section 8
§ 674.39 State Safety Oversight Agency annual reporting to FTA	Section 9
§ 674.41 Conflicts of interest	Section 1

Section 1. Program Management

The Program Management section of this SSOPS has been defined in Part 674.27(a)(1), and broken down into four general topics:

- Authority of the SSO Agency to oversee the RTA/RTS safety program and related activities
- Policies that govern safety oversight activities
- Reporting and data collection requirements
- Communication and Coordination

> **49 CFR §674.27(a)(1) – State safety oversight program standards**
> *Program management.* The SSO program standard must explain the authority of the SSOA to oversee the safety of rail fixed guideway public transportation systems; the policies that govern the activities of the SSOA; the reporting requirements that govern both the SSOA and the rail fixed guideway public transportation systems; and the 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.

1.1 Establishing the Oversight Agency

The general requirements for SSO programs are provided in Part 674.11, Part 674.13, and the NJDOT SSO program responses to these requirements are in state law, N.J.S.A 27:25-8 and 48:2-15, as well as N.J.A.C. 16:53E, and all are in Appendix B.

> **49 CFR §674.11 State safety oversight program**
> Within three years of April 15, 2016, every State that has a rail fixed guideway public transportation system must have a State Safety Oversight (SSO) program that has been approved by the Administrator. FTA will audit each State's compliance at least triennially, consistent with 49 U.S.C. 5329(e)(9). At minimum, an SSO program must:
> (a) Explicitly acknowledge the State's responsibility for overseeing the safety of the rail fixed guideway public transportation systems within the State;
> (b) Demonstrate the State's ability to adopt and enforce Federal and relevant State law for safety in rail fixed guideway public transportation systems;
> (c) Establish a State safety oversight agency, by State law, in accordance with the requirements of 49 U.S.C. 5329(e) and this part;
> (d) Demonstrate that the State has determined an appropriate staffing level for the State safety oversight agency commensurate with the number, size, and complexity of the rail fixed guideway public transportation systems in the State, and that the State has consulted with the Administrator for that purpose;
> (e) Demonstrate that the employees and other personnel of the State safety oversight agency who are responsible for the oversight of rail fixed guideway public transportation systems are qualified to perform their functions, based on appropriate training, including substantial progress toward or completion of the Public Transportation Safety Certification Training Program; and
> (f) Demonstrate that by law, the State prohibits any public transportation agency in the State from providing funds to the SSOA.

49 CFR §674.13 Designation of oversight agency
(a) Every State that must establish a State Safety Oversight program in accordance with 49 U.S.C. 5329(e) must also establish a SSOA for the purpose of overseeing the safety of rail fixed guideway public transportation systems within that State. Further, the State must ensure that:

(1) The SSOA is financially and legally independent from any public transportation agency the SSOA is obliged to oversee;
(2) The SSOA does not directly provide public transportation services in an area with a rail fixed guideway public transportation system the SSOA is obliged to oversee;
(3) The SSOA does not employ any individual who is also responsible for administering a rail fixed guideway public transportation system the SSOA is obliged to oversee;
(4) The SSOA has authority to review, approve, oversee, and enforce the public transportation agency safety plan for a rail fixed guideway public transportation system required by 49 U.S.C. 5329(d);
(5) The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State;
(6) At least once every three years, the SSOA audits every rail fixed guideway public transportation system's compliance with the public transportation agency safety plan required by 49 U.S.C. 5329(d); and
(7) At least once a year, the SSOA reports the status of the safety of each rail fixed guideway public transportation system to the Governor, the FTA, and the board of directors, or equivalent entity, of the rail fixed guideway public transportation system.

The New Jersey Statutes Amended (N.J.S.A.) sections and N.J.A.C. address these requirements for the NJDOT SSO program and are provided in the following text box. This SSOPS, compliant to the new SSO Rule (Part 674), is the document referenced in Executive Order #65 and N.J.A.C. 16:53E – NJDOT Standards for Fixed Guideway Safety Oversight.

State of New Jersey Executive Order #65 (1997)

1. The New Jersey Department of Transportation (NJDOT) is hereby designated as the agency to carry out the provisions of the FTA's State Safety Oversight of Fixed Guideway Systems in the State of New Jersey. It is empowered to protect and promote the public health, safety and welfare and is responsible for the oversight of Fixed Guideway Systems not regulated by the Federal Railroad Administration (FRA).
2. The NJDOT shall carry out its responsibilities as directed by and in compliance with 49 CFR Part 659, and shall promulgate Fixed Guideway Safety Standards for use by agencies in developing their safety programs.
3. The NJDOT is authorized to enter into such agreements and delegate its powers as necessary to effectuate the purposes of this Order.
4. Each light, heavy, rail rapid transit system, monorail, inclined plane, funicular, trolley, streetcar, or automated guideway (people mover) that is not regulated by the FRA and is operating within the State of New Jersey, or between the State of New Jersey and adjoining states, shall comply with the NJDOT Standards for Fixed Guideway Safety Oversight as established by the NJDOT and shall comply with all NJDOT rules, directives, and requirements issued pursuant thereto.
5. This Order shall take effect immediately.

New Jersey Administrative Code (N.J.A.C.)
Title 16. Department of Transportation
Chapter 53E. Fixed Guideway Systems State Safety and Security Oversight

Subchapter 1. Purpose and Scope
16:53E-1.1 Purpose
This chapter establishes rules concerning the State's oversight of the safety of rail fixed guideway systems through the Department of Transportation (Department), designated as the State's oversight agency by Executive Order No. 65 (1997). This chapter carries out the mandate of 49 U.S.C. 5329(e) for State safety oversight of rail fixed guideway public transportation systems. Rail fixed guideway public transportation systems are any fixed guideway system that: uses rail; is operated for public transportation; is within the jurisdiction of a State; and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway. The Office of Fixed Guideway Safety and Security Oversight in the Department is responsible for the administration of this chapter.

Subchapter 2. State Safety Oversight Program Standard

(a) The Department, in its role as the oversight agency, develops safety and security oversight program rules that establish processes and procedures that govern the conduct of the oversight agency and provide guidance to the regulated transit agencies and other fixed guideway systems regarding the content of the plans and procedures they must have in place in order to be in compliance with the State program.

16:53E-2.2 Incorporation by reference

(a) The New Jersey Department of Transportation adopts and incorporates by reference 49 CFR Part 674 as amended and supplemented.

The following descriptions address each of the requirements of the new SSO Rule for establishing the SSO Agency from Part 674.11.

(a) *Explicitly acknowledge the State's responsibility for overseeing the safety of the rail fixed guideway public transportation systems within the state.* The State of New Jersey has established the NJDOT as the SSOA for RTAs/RTSs in the state. This designation was

initially established in Executive Order #65, item #1 and acknowledged in N.J.A.C. 16:53E-1.1 Purpose.

(b) *Demonstrate the State's ability to adopt and enforce Federal and relevant State law for safety in rail fixed guideway public transportation systems.* In N.J.A.C. 16:53E-1.1 Purpose, the reference to 49 U.S.C. 5329(e) and 49 CFR Part 674 in 16.53E-2.2 are intended to establish and demonstrate this State capability and intent.

(c) *Establish a State safety oversight agency, by State law, in accordance with the requirements of 49 U.S.C. 5329(e) and this part.* N.J.A.C. 16:53E-1.1 Purpose directly establishes and references this requirement, along with Subchapter 2. State Safety Oversight Program Standard also addresses this requirement.

(d) *Demonstrate that the State has determined an appropriate staffing level for the State safety oversight agency commensurate with the number, size and complexity of the rail fixed guideway public transportation systems in the State, and that the State has consulted with the Administrator for that purpose.* NJDOT has negotiated with FTA via a workload assessment spreadsheet to determine an appropriate staffing level of 5 full time equivalents (FTEs) staff per year. This level of effort is above the federal SSO grant and state match funding, as required/suggested by FTA due to the complexity of the state's RTAs and rail systems.

(e) *Demonstrate that the employees and other personnel of the State safety oversight agency who are responsible for the oversight of rail fixed guideway public transportation systems are qualified to perform their functions, based on appropriate training, including substantial progress toward or completion of the Public Transportation Safety Certification Training Program.* NJDOT SSO program staff have completed a significant portion of the required safety certification training program. Contractor staff are planned for the NJDOT SSO program and these requirements also apply to them. In addition, all required NJDOT SSO program staff, including contractor staff, will complete Technical Training Plan (TTP) awareness training, as required by the Training Plan.

(f) *Demonstrate that by law, the State prohibits any public transportation agency in the State from providing funds to the SSOA.* This has been addressed in State law in N.J.A.C. 16:53E-1.1 Purpose by directly referencing the requirements of 49 U.S.C. 5329(e) and 49 CFR Part 674 in 16.53E-2.2. The SSOA is prohibited from accepting funds in areas such as: administrative expenses, consultant services, support vehicles, and miscellaneous equipment.

The following are the responses from the NJDOT SSO program for designation of the SSO Agency based on the requirements in Part 674.13.

(1) *The SSOA is financially and legally independent from any public transportation agency the SSOA is obliged to oversee*. NJDOT has provided FTA with letters and organization charts to explain the separation of NJDOT and New Jersey Transit (NJ Transit), and this information is provided in Appendix C.

(2) *The SSOA does not directly provide public transportation services in an area with a rail fixed guideway public transportation system the SSOA is obliged to oversee.* NJDOT SSO program has provided a letter to FTA with a determination of compliance with this requirement, provided in Appendix C.

(3) *The SSOA does not employ any individual who is also responsible for administering a rail fixed guideway public transportation system the SSOA is obliged to oversee.* The NJDOT monitors for COI of employees via required form PR-102. This requirement is enforced via N.J.A.C 16:53E for the SSO program staff and contractors.

(4) *The SSOA has authority to review, approve, oversee, and enforce the public transportation agency safety plan for a rail fixed guideway public transportation system required by 49 U.S.C. 5329(d).* This requirement is met through N.J.A.C. 16:53E in general and in particular as part of Subchapter 2. State Safety Oversight Program Standard.

(5) *The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State.* This requirement is met through N.J.A.C. 16:53E in general and as part of this SSOPS (specifically Sections 4 and 7) and the RTA/RTS safety plan requirements.

(6) *At least once every three years, the SSOA audits every rail fixed guideway public transportation system's compliance with the public transportation agency safety plan required by 49 U.S.C. 5329(d).* This requirement is met through N.J.A.C. 16:53E in general and as part of this SSOPS, specifically Section 5.

(7) *At least once a year, the SSOA reports the status of the safety of each rail fixed guideway public transportation system to the Governor, the FTA, and the board of directors, or equivalent entity, of the rail fixed guideway public transportation system.* This requirement is addressed in general in N.J.A.C. 16:53E and specifically as part of this section, subsection SSO Agency Required Reporting.

1.2 NJDOT SSO Program RTAs/RTSs

The New Jersey RTAs and RTSs, including all parties listed below, are subject to the NJDOT SSO program:

- NJ Transit Newark Light Rail (NLR) system.
- NJ Transit RiverLINE light rail system, operated and maintained by the Southern New Jersey Rail Group, LLC / Bombardier Transportation, under contract.
- NJ Transit Hudson-Bergen Light Rail system, operated and maintained by the 21st Century Rail Corporation, under contract.
- Delaware River Port Authority (DRPA) Port Authority Transit Corporation (PATCO) heavy rail system.

The NJDOT SSO program includes safety oversight of any rail system capital project related to these RTAs/RTSs or any new RTS capital project planned and/or built with any FTA funding and not on the general freight rail system/fully under the jurisdiction of the FRA.

The State of New Jersey and Commonwealth of Pennsylvania have agreed that the NJDOT SSO program is responsible for the safety oversight for PATCO, including the infrastructure and operation on the Philadelphia, Pennsylvania side of the Delaware River. This agreement and the application of the single SSO Agency for the multi-state RTA satisfies Section 674.15(b), shown in the following text box.

Originally, the DRPA was the SSO Agency when the SSO Rule was initially implemented. In 2000, the DRPA had a reorganization that caused a conflict in being the SSO Agency. At that time, through a series of letters (included in Appendix B), the single SSO Agency became the NJDOT SSO program, and was agreed to by FTA. Since that time, NJDOT and Pennsylvania DOT have agreed to a memorandum of agreement for state safety oversight, which is also in Appendix B.

> **49 CFR §674.15 Designation of oversight agency for multi-state system**
> In an instance of a rail fixed guideway public transportation system that operates in more than one State, all States in which that rail fixed guideway public transportation system operates must either:
> (a) Ensure that uniform safety standards and procedures in compliance with 49 U.S.C. 5329 are applied to that rail fixed guideway public transportation system, through an SSO program that has been approved by the Administrator; or
> (b) Designate a single entity that meets the requirements for an SSOA to serve as the SSOA for that rail fixed guideway public transportation system, through an SSO program that has been approved by the Administrator.

1.3 NJDOT SSO Program Staff and Responsibilities

The NJDOT SSO Team includes NJDOT and contractor staff. This program is designed with the contractor staff serving as an extension of the NJDOT staff, as allowed in N.J.A.C 16:53E-1.2(c). For interactions with RTAs/RTSs and the FTA, the contractor staff report to the NJDOT SSO Program Manager for anything that requires NJDOT approval and act on behalf of the NJDOT SSO program based on this SSOPS, as well as state and federal law/regulation.

> **49 CFR §674.25 Role of the State safety oversight agency**
> (e) An SSOA may enter into an agreement with a contractor for assistance in overseeing accident investigations; performing independent accident investigations; and reviewing incidents and occurrences; and for expertise the SSOA does not have within its own organization.
> (f) All personnel and contractors employed by an SSOA must comply with the requirements of the Public Transportation Safety Certification Training Program as applicable.

The NJDOT SSO Program is planned to be staffed at approximately 5 FTEs, including contractor support staff. As mentioned earlier, FTA has requirements for training of SSO staff and contractors in their Safety Certification Training Program Interim Final Rule. (See Procedure SSO-011) The NJDOT SSO program has a TTP that describes requirements and tracks progress of NJDOT and contractor staff towards completing the Training Plan and maintaining currency as called for in the TTP. The TTP also addresses access to any rail expertise needed by the NJDOT SSO program to complete investigations, inspections, and/or audits at the New Jersey RTAs/RTSs.

Responsibilities of the NJDOT SSO program staff include:

- Requiring RTAs/RTSs to develop an ASP that complies with NJDOT's SSOPS and federal regulation.
- Requiring RTAs/RTSs to develop and follow minimum safety standards based on an all hazards approach for operations, command and control, and maintenance of the rail systems.

- Requiring RTAs/RTSs to develop, document, and administer a process for performing internal safety program compliance reviews/audits and for submitting checklists and procedures to the NJDOT SSO program for review and potential participation in the actual compliance audits.
- Conducting on-site compliance audits of the RTAs'/RTSs' safety program under the NJDOT SSO program jurisdiction once every three (3) years to assess the RTA's/RTS's implementation of its safety programs based on the ASP. At the conclusion of the review, the NJDOT SSO program prepares and issues a report containing findings and recommendations, which, at a minimum, include an analysis of the effectiveness and accuracy of the ASP and a determination of whether or not it is being followed and also if it should be updated.
- Requiring RTAs/RTSs to notify the NJDOT SSO program (and FTA) within a required timeframe of any reportable event or significant hazard, as defined in the SSOPS.
- Requiring RTAs/RTSs that share track with the general railroad system and are subject to FRA notification requirements to notify the NJDOT SSO program (and FTA) within the time for which the RTA/RTS must notify the FRA.
- Investigating, or causing to be investigated, at a minimum, any reportable event or significant hazard as defined in the SSOPS.
- Requiring RTAs/RTSs to develop corrective action plans (CAPs) for results from investigations (performed by the National Transportation Safety Board [NTSB], FTA, NJDOT SSO, or RTA/RTS), in which identified causal factors and findings are determined by the RTA/RTS or the NJDOT SSO program as requiring corrective actions; and for findings and recommendations from safety program audits performed by the RTA/RTS, the NJDOT SSO program, the FTA, or other external audits/investigations.
- Tracking progress and evidence of resolving CAPs and monitoring identified safety risks at the RTAs/RTSs on a regular basis with monthly status reports and quarterly on-site meetings, as well as other visits to the RTAs/RTSs.
- Providing required and requested information, data, and reports to FTA.
- Participating in capital projects related to rail transit and safety program aspects of the project including design through safety and security certification and successful transition from the project to revenue operations and maintenance. This specifically includes NJDOT SSO program participation in extension and new RTS capital projects, as well as major purchases/contracting for the rail systems, such as purchasing new or major refurbishment of rail vehicles or significant upgrades to rail infrastructure, such as electrical substations and passenger stations.

1.4 Grant Funding and the Part 674 SSO Program

Since its inception up until 2013, the FTA SSO program had been an unfunded mandate/requirement for states. Enforcement of this mandate/requirement has been based on FTA's authority to withhold up to 5% of the state's annual urbanized transit agency grant funding (these grants are described in 49 U.S.C. Section 5307) for states that are not compliant with the FTA SSO program requirements. However, the unfunded mandate has changed with MAP-21, continuing into the FAST Act. MAP-21 and FAST Act enhance FTA's safety program

responsibilities and authority, but also provide funding for the SSOAs at an 80% federal to 20% state match.

Part 674.17 describes FTA's grant funding and the apportionment strategy used to allocate available grant funding for the state SSO programs. Part 674.21 describes FTA's authority to withhold this grant funding for noncompliance of the state SSO program as well as a state's loss of all transit grant funding if the Part 674 compliant SSO program is not in place and certified or making acceptable progress towards certification by the end of the three-year transition period.

49 CFR §674.17 Use of Federal financial assistance

(a) In accordance with 49 U.S.C. 5329(e)(6), FTA will make grants of Federal financial assistance to eligible States to help the States develop and carry out their SSO programs. This Federal financial assistance may be used for reimbursement of both the operational and administrative expenses of SSO programs, consistent with the uniform administrative requirements for grants to States under 2 CFR parts 200 and 1201. The expenses eligible for reimbursement include, specifically, the expense of employee training and the expense of establishing and maintaining a SSOA in compliance with 49 U.S.C. 5329(e)(4).

(b) The apportionments of available Federal financial assistance to eligible States will be made in accordance with a formula, established by the Administrator, following opportunity for public notice and comment. The formula will take into account fixed guideway vehicle revenue miles, fixed guideway route miles, and fixed guideway vehicle passenger miles attributable to all rail fixed guideway systems within each eligible State not subject to the jurisdiction of the FRA.

(c) The grants of Federal financial assistance for State safety oversight shall be subject to terms and conditions as the Administrator deems appropriate.

(d) The Federal share of the expenses eligible for reimbursement under a grant for State safety oversight activities shall be eighty percent of the reasonable costs incurred under that grant.

(e) The non-Federal share of the expenses eligible for reimbursement under a grant for State safety oversight activities may not be comprised of Federal funds, any funds received from a public transportation agency, or any revenues earned by a public transportation agency.

49 CFR §674.21 Withholding of Federal financial assistance for noncompliance

(a) In making a decision to impose financial penalties as authorized by 49 U.S.C. 5329(e), and determining the nature and amount of the financial penalties, the Administrator shall consider the extent and circumstances of the noncompliance; the operating budgets of the SSOA and the rail fixed guideway public transportation systems that will be affected by the financial penalties; and such other matters as justice may require.

(b) If a State fails to establish a SSO program that has been approved by the Administrator within three years of the effective date of this part, FTA will be prohibited from obligating Federal financial assistance apportioned under 49 U.S.C. 5338 to any entity in the State that is otherwise eligible to receive that Federal financial assistance, in accordance with 49 U.S.C. 5329(e)(3).

Table 2 summarizes the NJDOT SSO program grant funding from FTA and the 20 percent state match for fiscal years 2013 through 2017.

Table 2. SSO Program Grant Funding Allocations for New Jersey

FISCAL YEAR	FEDERAL (80%)	STATE (20% IN TOLL CREDITS)
2013	897,116	224,279
2014	901,431	225,358
2015	884,496	221,124
2016	891,645	222,911
2017	892,610	223,153

1.5 SSO Agency Policies

FTA provided a list of topics to be addressed as policies of the NJDOT SSO program.

- Policy and procedures for Triennial Audits are covered in Section 5 of this SSOPS.
- Policy and procedures for Investigations are covered in Section 7 of this SSOPS.
- Inspections and meetings with the New Jersey RTAs/RTSs are discussed in this section as part of the communications discussion.

Two additional topics are addressed in this subsection regarding protection of information and conflicts of interest (COI).

Protection of Investigation and Audit Reports and Information is addressed in Part 674.23 and allows for the state to have protection for the investigation reports and related safety program information, as well as any protected security information from the RTA/RTS.

Confidentiality of Investigation Reports and Security Plans is exempt from the Open Public Records Act (OPRA) under N.J.S.A. 47:1A-3.a. Ongoing Investigations. Information required by the FTA safety program will be provided by the NJDOT SSO program in a de-identified form, as explained in Procedure SSO-006. All NJDOT SSO program procedures are described and provided in Appendix D.

> **49 CFR §674.23 Confidentiality of information**
> (a) A State, an SSOA, or an RTA may withhold an investigation report prepared or adopted in accordance with these regulations from being admitted as evidence or used in a civil action for damages resulting from a matter mentioned in the report.
> (b) This part does not require public availability of any data, information, or procedures pertaining to the security of a rail fixed guideway public transportation system or its passenger operations.

COI Management is addressed in Part 674.41 as shown in the following text box. The NJDOT SSO program has also developed a Procedure SSO-002 that provides a process for considering COI and requiring a record of the decisions made to manage any perceived significant COI that falls under the requirements of Part 674.41. COI is also addressed in N.J.A.C. 16:53E-1.3 COI and at NJDOT for employees via form PR-102.

49 CFR §674.41 Conflicts of interest

(a) An SSOA must be financially and legally independent from any rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).

(b) An SSOA may not employ any individual who provides services to a rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).

(c) A contractor may not provide services to both an SSOA and a rail fixed guideway public transportation system under the oversight of that SSOA, unless the Administrator has issued a waiver of this prohibition.

1.6 SSO Agency Required Reporting

This section provides a quick summary of the requirements for Federal and State reporting.

(1) **SSO Agency Annual Report to FTA** – these requirements are covered specifically in SSOPS Section 9, and include all of the data and information required to be delivered annually by the NJDOT SSO program to FTA via their electronic data collection system, by March 15th of the following year. Procedure SSO-006 also describes requirements for redacting RTA/RTS data and information provided to FTA.

(2) **SSO Agency Annual Public Safety Report (PSR)** – this requirement (Part 674.13(a)(7)) is covered in procedure SSO-005 and it describes that the State must ensure that at least once a year, the SSOA reports the status of the safety program of each RTA/RTS to: the Governor of New Jersey, the Governor of Pennsylvania, the FTA, and the board of directors, or equivalent entity, of the RTA/RTS.

(3) **SSO Agency Requirements for RTA/RTS Reporting to the SSO agency and FTA** – these requirements are covered in Sections 6 through 9 of this SSOPS, as well as procedures SSO-003 (notifications of reportable events) and SSO-007 (hazards/occurrences). This includes communications and coordination of investigations, audits, and hazards data collection and reporting, and summarized in the next subsection.

(4) **SSO Agency Requirements for Access to RTA/RTS Information** – these requirements are generally addressed in the next subsection and in a specific Appendix for each New Jersey RTA/RTS, Appendix E (NJ Transit NLR), Appendix F (NJ Transit RiverLINE), Appendix G (NJ Transit Hudson-Bergen Light Rail), and Appendix H (DPRA PATCO).

1.7 SSO Agency and RTA/RTS Communication and Coordination

The NJDOT SSO program expects and requires full access to and cooperation from each of the New Jersey RTAs/RTSs (per N.J.A.C. 16:53E and this SSOPS). This full access includes the rail system assets (vehicles, trackway/right-of-way [ROW], overhead catenary system [OCS], third rail power systems, substations, signals and signal huts, maintenance facilities, command and control systems, and any related data, information systems, standard operating procedures [SOPs], and standards/rules) and RTA/RTS staff at all levels (executives, directors, middle management, supervisors, and staff). The NJDOT SSO program staff are expected and required to follow all operations, maintenance, and safety requirements and procedures of the New Jersey RTAs/RTSs when accessing facilities and systems.

The RTA/RTS Safety Department is the NJDOT SSO program primary contact for coordination and planning of safety program oversight; however, contact and coordination with the rail-related departments within the RTA/RTS (Rail, Engineering, Command and Control, Training, Internal Audit, etc.) are also expected. The RTA/RTS Safety Director and Safety Staff often act as an extension of the NJDOT SSO program for investigations, audits, and development and tracking of CAPs at the RTA/RTS. Specific coordination activities and personnel involved with the NJDOT SSO program safety oversight are described in an Appendix for each New Jersey RTA/RTS – Appendix E through H.

The NJDOT SSO program maintains and ensures on-going communication with the RTAs/RTSs under its jurisdiction through various means including teleconferences (as needed) held with RTA/RTS personnel, monitoring RTA/RTS executive-level safety-related or risk-related meetings (often through minutes of those meetings and copies of handouts), holding quarterly meetings with program participants, and monthly status reports for all CAPs related to the NJDOT SSO program. These risk monitoring or hazard management activities are shown in Table 3 and designed to ensure active involvement of all parties in the NJDOT SSO program and monitoring of all safety-related activities identified at the RTA/RTS. In addition, the NJDOT SSO program tracks all relevant communications, reports, investigations, audits, and submissions made by each RTA/RTS in a monthly status report and tracking databases, as well as programmatic record keeping.

Data and Information Collection and Analysis. The NJDOT SSO program collects and tracks status of all reportable event notifications and investigations, internal audits, triennial audits, and the status of each CAP from these sources through closure, including evidence of closure. Other data and information includes tracking of hazards and daily incidents logs, as well as access to the RTA's/RTS's database systems for operations, maintenance, and command and control related to the rail systems. In addition, the NJDOT SSO program tracks some investigations that are not reportable to FTA, because of ongoing monitoring of safety performance at the RTA/RTS. This information is tracked in an Access database developed by the NJDOT SSO program. Information from the database is used to support the NJDOT SSO program annual submission to FTA and to develop analysis for risk monitoring or hazard management of the safety program at the RTAs/RTSs. This analysis activity is intended to support risk-based, data-driven decision-making for additional investigation or audit of the RTA/RTS safety program and related all-hazards minimum safety standards by the NJDOT SSO program.

The information collection activity is supplemented through periodic on-site visits by the NJDOT SSO program staff beyond the planned quarterly meetings. The NJDOT SSO program analyzes information collected to develop an annual data analysis (trends) report to be reviewed/shared with each of the RTAs/RTSs. In addition, a programmatic-level annual report is developed for the NJDOT SSO program that is made available for review by the RTAs/RTSs and ultimately released to the public (as now required in the Part 674 SSO program). These reports are expected to be available for review by March 31st of each year, with publication by June 30th of each year.

Table 3. New Jersey RTA/RTS Communication and Coordination

RISK MONITORING ACTIVITY	OUTPUT	NOTES
Reportable events and hazardous conditions – notification and investigation	Notification, fact sheet, draft status report, draft final report – includes CAPs, approved and adopted by NJDOT SSO program	Discussed further in Sections 6, 7, and 8
Annual internal audits	Checklists and procedures reviewed for internal audits (RTA annual report); development of all CAPs by RTA/RTS and approved by NJDOT SSO program	Discussed further in Sections 4 and 8
Monthly status reports for all open or recently closed CAPs and hazard tracking, including daily incident logs, as well as any significant communications with FRA inspectors and safety program	Monthly status report, hazard tracking, and daily incident tracking from RTA/RTS (including any significant communications with FRA inspectors and safety program) and summary monthly report by NJDOT SSO program based on the RTA/RTS information	None
Monthly RTA/RTS executive-level and other safety-related meetings	Meeting minutes and handouts provided to NJDOT SSO program for executive safety committee, configuration management committee, and other related safety program committee meetings; this also includes attendance by the NJDOT SSO program as needed and when possible	None
On-site quarterly meetings rotated amongst the RTAs/RTSs/Transit Police Departments/TSA to review open and recently closed CAPs and other topics related to the RTA's/RTS's safety program and activities	Agenda and handouts developed for the on-site meeting and results of discussions; use these meetings to discuss any major incidents at each property over the last quarter and review status of open and recently closed CAPs; includes review of check for SSO versus NTD reportable events and assure that the two data systems are synchronized, SSO discusses any new policies or practices it is looking to implement and shares any news from the FTA TSO.	None
Meetings and inspections at the RTAs/RTSs	Meetings and inspections planned during quarterly meeting visits and between quarterly meeting visits to monitor risk and review CAP closure evidence; these meetings/visits are also being used to monitor safety and security certification activities	None
Technical Training Plan for NJDOT SSO program staff	This includes RTA/RTS awareness training for NJDOT SSO program staff as defined in the Training Plan as well as on-site activities such as riding the rail system and participating in RTA/RTS safety efficiency and enforcement activities. Also includes relevant TSI courses and online trainings as required or appropriate	None
Annual RTA/RTS ASP update, review and approval by NJDOT SSO program	RTA/RTS annual update/internal approval for ASP including board of directors or equivalent; completed as part of the RTA/RTS annual report	Discussed further in Section 4
Review and approval of RTA/RTS minimum safety standards	RTA/RTS minimum safety standards include those standards defined by the RTA/RTS for safe operations and maintenance in selected Plans, Manuals, and SOPs	Discussed further in Section 2
NJDOT SSO program triennial audit of each RTA/RTS	Checklists, draft audit report, final audit report, CAPs developed by RTAs/RTSs and approved by NJDOT SSO program	Discussed further in Sections 5 and 8

Federal Information Requests to RTAs/RTSs. The NJDOT SSO program requires that the New Jersey RTAs/RTSs notify and share results of contact from federal agencies such as FTA, NTSB, FRA, or the Transportation Security Administration (TSA) in regards to the safety program at the RTA/RTS. The NJDOT SSO program will also provide any RTA/RTS-desired support, input, or review of responses that the RTAs/RTSs provide to these federal agencies. At a minimum, a courtesy copy of the correspondence and attachments is required. The NJDOT SSO program also intends to share any contact received from or responses required to federal agencies that includes or directly affects the RTAs/RTSs in the state, such as contact by the FTA investigators or TSA Surface Transportation Security Inspectors.

1.8 NJDOT SSO Program Risk Monitoring of RTAs/RTSs

FTA Transit Safety and Oversight (TSO) has not yet completed the implementation of their transit-specific SMS; however, the intent is to require it through the ASP regulation, Part 673. The NJDOT SSO program has always had a philosophy of safety oversight that is essentially the same as the expected oversight requirements of the new SSO Rule, ASP, and SMS through spending time onsite at the RTAs/RTSs meeting with staff, inspecting facilities and infrastructure, and riding the system as often as resources allowed. Safety Risk Management is essentially the same as the Hazard Management Program with a focus on more comprehensive hazard identification, while Safety Assurance (SA) provides for detailed safety performance measurement to understand the risk environment at the RTAs/RTSs. Safety Risk Management and SA are used together to develop capabilities for preventing potential safety events from occurring and managing safety risk to a level as low as reasonably practicable (ALARP).

Potential hazards are a larger category than the category of actual safety-related events, in that an event (accident, incident or occurrence) has already occurred and a hazard also includes potential events that have not yet occurred. An event is a culmination of potential hazard(s) that have aligned to cause a safety-related event.

The NJDOT SSO program completes risk monitoring in the same way as SMS SA monitors safety performance measures, data, and information such as those shown in Figure 1 from the National Safety Plan. The list in Figure 1 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
- Root causes 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 risk environment and provide a high-level understanding of safety culture at the RTAs/RTSs. The NJDOT SSO program also has an inspection process and procedure described in Appendix M.

Existing safety performance measures – The safety performance measures in Figure 1 already exist and are reported by transit agencies to the FTA's NTD and other federal and state agencies. Although these measures are currently in use, they would benefit significantly from better

definitions to improve consistency in data reporting as well as more discrete and finer granularity to better evaluate safety performance considering such factors as type of service and vehicle types and sizes. These performance measures also need to take the risk environment into account as a part of the calculations.

Results from investigations – For reportable events, transit industry investigations should include determinations of probable causes and contributing factors, as well as root cause analyses of organizational issues that influenced the causes or consequences of the events. Investigations should identify system safety deficiencies (e.g., poor system design, failed controls, and failed preventive/corrective actions).

Audits results – For the transit industry, the objective of internal safety compliance audits is to find and correct any safety-related programmatic or procedural non-conformances. External safety audits at transit agencies, such as FTA triennial audits, may be required for capital financing or, in the case of rail transit, for the SSO program by the state.

Risk monitoring information – Monitoring the safety program through investigations and compliance audits, and their concomitant corrective actions, is straight-forward. Monitoring the safety program by proactively collecting and analyzing data that may indicate future problems is more difficult. The bulleted items under "risk monitoring information" in Figure 1 identify areas within the safety program where these data and information may be collected. Having a proactive safety program requires significant attention to and monitoring of this group of activities.

Figure 1. Data and Information from Risk Monitoring in the Transit Industry

Existing safety performance measures (under NTD)

- **Casualties**
  - Fatalities (customers, employees, and the public)
  - Injuries (customers, employees, and the public)
- **Property and environmental damage**
- **Reportable events (Accidents)**
  - Train derailments (mainline, yard, side tracks)
  - Collisions (vehicle-to-vehicle, vehicle-to-person, vehicle-to-object)
  - Collisions at grade-crossings
  - Fires
  - Evacuations for life safety reasons

Results from reportable event (accident) investigations

- Probable cause
- Contributing factors
- Corrective actions

Audit results

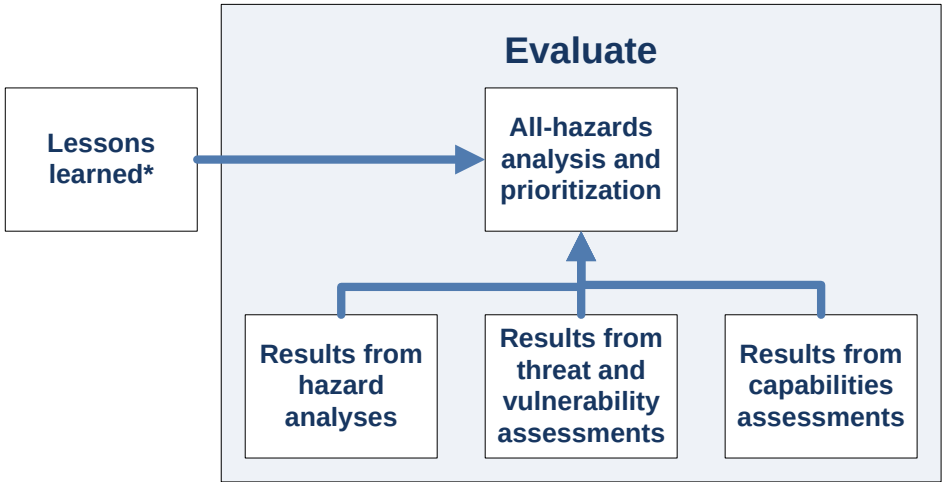
- Findings
- Corrective actions

Risk monitoring information

- Safety and security reporting from all levels of the organization
- Violations of operations and maintenance rules
- Job-based certification and awareness training
- All-hazards preparedness analyses
- Operations and maintenance performance, including SGR and TAM
- Monitoring of hazard logs
- Crime trends, such as trespassing, perimeter breaches, and fare evasion
- Fitness for duty, including drug/alcohol program results and hours of service
- Liability losses
- Customer complaint information
- Changes to management, operations, or maintenance
- Studies of hazardous materials, spills, and environmental concerns
- Ad hoc studies of hazards, threats, and vulnerabilities

All-hazard Analysis and Prioritization. Figure 2 highlights an all-hazards evaluation/analysis and prioritization to be completed by RTA/RTS staff/management. Three separate types of assessments are completed to address safety (hazard analyses), security (threat, vulnerability, and consequence assessments), and emergency preparedness (capabilities assessment) for risk management. Each assessment type has differing objectives, and the results are corrective action items for new or enhanced risk controls or mitigations to manage risk within the transit agency. Results from the three sets of assessments are prioritized from an all-hazards perspective by management consideration of lessons learned from ongoing operations and maintenance of the transit systems. The "lessons learned" here include the entire risk monitoring process already described above.

Figure 2. All-hazards Risk Management and Prioritization



* Lessons learned from recent accident investigations, drills and exercises, self-assessments, etc.

1.9 FTA Triennial Audit of NJDOT SSO Program

The FTA SSO program is required in Section 5329(e)(10)(B) to complete an audit of each state's SSO program at least every three years to assure compliance to Part 674 and Section 5329(e). During these triennial audits of the NJDOT SSO program, the FTA SSO program staff request a tremendous number of documents and amount of information ahead of the on-site activities, which typically occur at one or more of the RTAs/RTSs. The NJDOT SSO program staff will work directly with the RTAs/RTSs and the FTA SSO program staff to schedule and coordinate the on-site portion(s) of the FTA audit and the interviews and inspections that might be completed with RTA/RTS staff and on RTA/RTS property. The NJDOT SSO program intends to negotiate on behalf of the state and the RTAs/RTSs (with consultation) for all findings and recommendations documented in FTA's audit report, and work with the RTAs/RTSs to develop and approve corrective actions to be tracked to completion, as needed.

Section 2. Program Standard Development

The primary responsibility of the NJDOT SSO program is to develop and administer program standards that establish processes and procedures that govern the conduct of the safety oversight program at the state level. The program standard provides guidance to regulate RTAs/RTSs processes and procedures that are implemented to assure compliance to the safety program requirements. The NJDOT SSO program standard and procedures are required to be reviewed at least annually and any changes/revisions are required to be a part of the annual submission to the FTA, as described in Section 9. Annual Reporting to FTA.

The NJDOT SSO program standard is also required to address minimum standards for safety at the New Jersey RTAs/RTSs. These standards are intended to include rail safety-related practices and procedures such as the RTA's/RTS's ASP/SSPP, System Security Plan (SSP), and other related RTA/RTS documents and procedures associated with their safety program documentation. The minimum safety standards required by the NJDOT SSO program are industry-based, but additional RTA/RTS-developed safety standards are used by the properties and documented in their policies, program documents, plans, and procedures.

49 CFR §674.25(a) – Role of the State safety oversight agency
An SSOA must establish minimum standards for the safety of all rail fixed guideway public transportation systems within its oversight. These minimum standards must be consistent with the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training Program, the rules for Public Transportation Agency Safety Plans and all applicable Federal and State law.

49 CFR §674.27(a)(2) – State safety oversight program standards
Program standard development. The SSO program standard must explain the SSOA's process for developing, reviewing, adopting, and revising its minimum standards for safety, and distributing those standards to the rail fixed guideway public transportation systems.

2.1 NJDOT Rail Transit SSOPS

The NJDOT SSOPS describes the processes, procedures, interactions and requirements for the RTAs/RTSs and the state's responsibilities to the FTA. The SSOPS also includes a process for annual review, revision, approval, distribution and availability. The primary resource document from FTA for developing SSOPS is the *Program Standard Technical Assistance Guide*.

The SSO program manager is responsible for changes to this SSOPS, and these changes may originate from internal or external audits, policy changes, or organizational changes. All participants in the NJDOT SSO program are encouraged to offer comments and recommendations to the SSOPS. Each comment or recommendation will be reviewed and addressed in a timely manner. The revised SSOPS must be approved by the SSO Program Manager and Division Director.

The approved SSOPS will be distributed to the appropriate Safety Officer who is required to obtain all signatures on the acknowledgement page and send back to the NJDOT SSO program manager.

The finalized SSOPS will then be distributed electronically in Acrobat/pdf format and placed on NJDOT's website. Once the updated SSOPS has been finalized, it is the responsibility of the RTAs/RTSs to pass these requirements on to any appropriate staff or contractors.

This SSOPS has been designed with the appendices separate from the body of the program standard. Updates to the appendices and procedures will follow a separate update process that will include review by the RTAs/RTSs and approval by the NJDOT SSO Program Manager, and will not require the formal signatures or acknowledgement of the changes by the RTAs/RTSs. Updates to the appendices or procedures will be distributed electronically to the RTAs/RTSs and posted on the NJDOT website. A list of the appendices, procedures, and current version date will be listed in a version tracking table so that all NJDOT SSO program participants can assure that they have the current version of each Appendix. The update process for the SSOPS is also documented in Procedure SSO-001.

2.2 Minimum Standards for Safety

FTA has provided clarification to the NJDOT SSO program that the State is required to have the authority to develop, review, adopt, and revise minimum standards for safety at the New Jersey RTAs/RTSs, and this authority exists in N.J.A.C. 16:53E by incorporation of the requirements from 49 U.S.C. Section 5329(e) and 49 CFR Part 674.

Minimum standards for safety have been envisioned within the NJDOT SSO program to be those standards adopted and documented by the New Jersey RTAs/RTSs that govern the safe operations, command and control, and inspection and maintenance of the rail systems, including facilities, infrastructure, and rail-related vehicles. These safety-related standards generally already exist at the RTAs/RTSs; however, experience from accident investigations, audits, and updates of procedures may indicate a need to update or develop new safety standards for the RTA/RTS. In addition, all of these safety-related standards should be based on existing transit industry standards (such as from the American Public Transportation Association [APTA], National Fire Protection Association, American Railway Engineering and Maintenance of Way Association [AREMA], etc.) that have been customized for the RTA/RTS equipment, infrastructure, and operations. The existing transit industry related standards will also need to be checked for updates and then those updates will need to be integrated into the existing minimum safety standards documents.

The FAST Act added a requirement for FTA (in Section 5329) to include minimum standards for safety into their National Safety Plan as well as to develop a compendium of transit industry related safety standards. This compendium is available at https://www.transit.dot.gov/regulations-and-guidance/safety/transit-safety-standards. FTA has also convened a working group of transit industry experts to consider development and enforcement of minimum standards for safety that are not currently requirements by other federal agencies.

The general list of minimum standards for safety that are tracked by the NJDOT SSO program are listed next with a description of each type of document and then a specific document and version list is provided in the appendices for each New Jersey RTA/RTS (Appendix E through H). Note that for the minimum safety standards documents, the NJDOT SSO program requires direct access to these documents and any changes or when similar/related documents are developed by the RTA/RTS that the NJDOT SSO program must review and approve the final/updated document.

Each of these documents has its own process for update based on requirements or experience. Changes to the minimum standards for safety at each of the RTAs/RTSs will be based on their experience, investigations, audits, and/or transit industry experience. These new or updated minimum standards for safety will be mutually agreed to with the NJDOT SSO program through discussions or based on corrective actions defined by the New Jersey RTA/RTS and approved by the NJDOT SSO program.

- **NJDOT Rail Transit SSOPS** – this document provides a description of the processes used by the SSO program, requirements of the New Jersey RTAs/RTSs including minimum safety standards, and distributing the SSOPS and related minimum safety standards.
- **ASP/SSPP** – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS. This document and its requirements are discussed further in this SSOPS Section 4.
- **SSP/Security and Emergency Preparedness Plan (SEPP)** – this security program document describes the requirements for system security and emergency preparedness at the RTA/RTS. Note that the new SSO Rule no longer defines the content of the SSP/SEPP, its processes or procedures. However, the NJDOT SSO program will now consider this security program document as a minimum safety standard in terms of its overlap with the safety program at the RTA/RTS (risk assessment and management, and emergency preparedness). The NJDOT SSO program requires that the RTA/RTS develop an appropriate security program document and the NJDOT SSO program will provide oversight of that document and the processes that it represents, but only from the safety program (all-hazards) perspective.
- **Emergency Operations Plan (EOP) –** this document provides the coordination and preparedness activities inside and outside of the RTA/RTS.
- **Rail Operating Rule Book –** these are the rules that operators and others working around the rail system must follow.
- **Right-of-Way or Roadway Worker Protection Plan** – this document is related to the Rail Operating Rule Book from the perspective of the protections and procedures for workers on the rail ROW.
- **Command and Control/Train Control SOPs** – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and workers on the ROW. These SOPs should include troubleshooting information for frequent problems and managing emergencies on the rail system. These SOPs include the function of load/power control/management.
- **Investigation Procedures at the RTA/RTS** – this procedure includes a description of the types of events that need notification and investigation, who will perform those requirements, causal factor analysis, hazard analysis, and development of recommendations and corrective actions. This procedure is also required to be adopted and approved by the NJDOT SSO program in order to authorize the RTA/RTS to be the lead investigator for the SSO program. These procedures are also mentioned in this

SSOPS Sections 6 and 7. Refer to forms and checklists to be used by RTA/RTS in Appendix O, Exhibit A.

- **Procedure requiring review of SOPs related to Safety** – this procedure requires that the minimum safety standards at the RTA/RTS are also required to be reviewed, agreed to, and approved by the Safety Department.
- **Safety and Security Certification Plan (SSCP) –** this plan provides the required activities from the RTA/RTS safety program for assuring that safety certification is completed for capital projects, new equipment/infrastructure, or system refurbishment and modification that impact safety and are deemed necessary by the SSO program. The main topics for safety and security certification are related design criteria, participation of the Safety Department, and a process of the RTA/RTS assuring that all safety and security design criteria exist, were comprehensive, and were properly addressed, including integrated testing.
- **Configuration Management Plan (CMP) –** the Configuration Management Committee and processes are a required element/function within the RTA/RTS safety program, along with safety and security certification and system modifications, as well as safety-related requirements for procurement.
- **TAM Plan –** this is a new plan now required for RTAs/RTSs and it is related to the CMP, but with a focus on the state of good repair of transit assets.
- **Field Supervision SOPs** – these SOPs are for supervision out on the rail system for support of service delivery, responsiveness to passengers, and safety. The field supervisors will often be the first supervision to arrive at the scene of a safety event on the rail system, and provide at least initial investigation of events on the rail system.
- **Inspection and Maintenance Manuals, SOPs, and Standards** – these documents provide the requirements for inspection and maintenance of the rail system, including facilities, infrastructure, and related vehicles. These documents should have the customized requirements for preventive maintenance, inspection, and troubleshooting for equipment problems.

Section 3. Program Policy and Objectives

The design and implementation of the NJDOT SSO program includes a difference between being responsible for defining and executing the safety program at an RTA/RTS and the State providing oversight of the safety program at an RTA/RTS. It is the intent of NJDOT's SSO program to provide safety program oversight for RTAs/RTSs in the State and not to attempt to take control of or manage the RTA's/RTS's programs. NJDOT's SSO program is designed to be cooperative with the RTAs/RTSs in the State and with the FTA SSO program in order to encourage efficient and effective management of safety risk to an ALARP level within the resource constraints of these activities and programs. However, the NJDOT SSO program is also designed to provide proactive and progressive oversight in addressing emerging or uncontrolled safety risk at an RTA/RTS.

> **49 CFR §674.27(a)(3) – State safety oversight program standards**
> *Program policy and objectives.* The SSO program standard must set an explicit policy and objectives for safety in rail fixed guideway public transportation systems throughout the State.

Note that all parties that have signed this NJDOT Rail Transit SSOPS (at the front of the document) have agreed and committed in principle and intent to follow this SSOPS.

The objectives and expectations for the NJDOT SSO program include the following – the NJDOT SSO program:

- Takes full responsibility for this State's safety program authority and requirements from the federal requirements under Part 674.
- Commits to assuring qualifications and training for SSO program-related staff (NJDOT and contractor staff).
- Provides strategic, dynamic, and transparent safety oversight of the RTAs/RTSs.
- Works in partnership with the RTAs/RTSs in support of their safety program, which includes oversight and technical assistance for maintaining and improving safety performance.
- Requires that the RTA/RTS Management, Safety Department, and Staff are competent in executing their safety program and complying with the NJDOT SSO program.
- Commits to being responsible for the safety program-related-investigations and internal audits at the RTAs/RTSs with the expectation that the RTAs/RTSs are granted the responsibility to lead these investigations and internal audits. The NJDOT SSO program may, at its discretion, directly participate in (or lead) these safety program related activities, which may include independent or cooperative onsite investigations/audits at the RTAs/RTSs.
- Commits to the RTAs/RTSs owning their safety-related risk. This means that the SSO program staff will participate in and technically review safety-related investigations, internal audits, and complete independent investigations/audits, such as the triennial review/audit. SSO program staff will also make recommendations and provide input and technical assistance as needed or requested. However, the RTAs/RTSs must develop corrective actions in conjunction with their Safety Department. The NJDOT SSO

program must approve these corrective actions if they are deemed consistent and complete with respect to the findings of the investigations and audits.

- Commits to provide periodic reviews/audits as required and deemed necessary by the NJDOT SSO program.
- Commits to providing annual and periodic information and data to the FTA SSO program, as required and appropriate.

The FTA requires that the NJDOT SSO program must demonstrate that it has the authority to escalate enforcement up to and including removal of equipment or suspending RTA/RTS operations based on safety deficiencies. This enforcement escalation process is in Procedure SSO-004.

Section 4. Oversight of Agency Safety Plans and Transit Agencies' Internal Safety Reviews

At the time this SSOPS version was completed, the PTASP (or TASP or ASP) regulation has not yet been finalized (49 CFR Part 673). According to Part 674.9(c), an interim ASP will be a fully compliant Part 659 SSPP. Once the ASP regulation is final and the RTAs/RTSs are ready to convert to their ASP and SMS, then this SSOPS will be modified to fully address the Part 673 compliant ASP and its required processes.

49 CFR §674.25(b) – Role of the State safety oversight agency
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 a 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(d).

49 CFR §674.27(a)(4) – State safety oversight program standards
Oversight of Rail Public Transportation Agency Safety Plans and Transit Agencies' internal safety reviews. The SSO program standard must explain the role of the SSOA in overseeing an RTA's execution of its Public Transportation Agency Safety Plan and any related safety reviews of the RTA's fixed guideway public transportation system. The program standard must describe the process whereby the SSOA will receive and evaluate all material submitted under the signature of an RTA's accountable executive. Also, the program standard must establish a procedure whereby an RTA will notify the SSOA before the RTA conducts an internal review of any aspect of the safety of its rail fixed guideway public transportation system.

49 CFR §674.29 Public Transportation Safety Plans: general requirements
(a) In determining whether to approve a Public Transportation Agency Safety Plan for a rail fixed guideway public transportation system, an SSOA must evaluate whether the Public Transportation Agency Safety Plan is consistent with the regulations implementing such Plans; is consistent with the National Public Transportation Safety Plan; and is in compliance with the program standard set by the SSOA.
(b) In determining whether a Public Transportation Agency Safety Plan is compliant with 49 CFR part 673, an SSOA must determine, specifically, whether the Public Transportation Agency Safety Plan is approved by the RTA's board of directors or equivalent entity; sets forth a sufficiently explicit process for safety risk management, with adequate means of risk mitigation for the rail fixed guideway public transportation system; includes a process and timeline for annually reviewing and updating the safety plan; includes a comprehensive staff training program for the operations personnel directly responsible for the safety of the RTA; identifies an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the RTA; includes adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public transportation system; and sufficiently addresses other requirements under the regulations at 49 CFR part 673.
(c) In an instance in which an SSOA does not approve a Public Transportation Agency Safety Plan, the SSOA must provide a written explanation, and allow the RTA an opportunity to modify and resubmit its Public Transportation Agency Safety Plan for the SSOA's approval.

The SSOPS that is compliant with Part 674 does not include requirements for the content of the SSP or SEPP, and as mentioned in SSOPS Section 2, the RTA/RTS SSP/SEPP and EOP will be

included as part of the minimum standards for safety, with a focus on those aspects of the security program that overlap with the safety program (risk assessment, emergency preparedness, and emergency response planning). All currently approved SSP/SEPP content and processes will continue to be a part of the NJDOT SSO program. Appendix I includes the procedure and assessment table for the SSP/SEPP, as currently defined.

Appendix J provides an outline for the ASP based on the following: (1) FTA's NPRM for Part 673, (2) Section 5329, (3) FTA's SMS Framework, and (4) Part 674. It may be that the SSPP will continue with the ASP being defined as an SMS Framework and implementation document. It is anticipated that the review and approval of the ASP is generally the same as that for the Part 659 SSPP until the ASPs have been implemented at the RTAs/RTSs.

Beginning in 2019, the transition to an ASP will include the following topics: (1) document approval by the Board of Directors or equivalent (this is beyond the current SSPP process), and (2) designating an adequately trained person for the position of CSO. (See Procedure SSO-011)

4.1 Requirements for the Interim ASP/SSPP

The SSPP is intended to document the safety program at an RTA/RTS (or any other transit mode) including all of the activities within the safety program. The SSPP is used by the transit agency and the NJDOT SSO program to audit the safety program and activities to assure that both the program documentation is complete and accurate and that the transit agency is executing all of the program activities. In addition, this section describes the annual review and update process of the SSPP and the NJDOT SSO program process for approval of the SSPP. The primary resource documents from FTA for developing an SSPP are the following:

- *Implementation Guidelines for 49 CFR Part 659,* FTA, March 2006, http://www.fta.dot.gov/documents/Imp_Guidelines.pdf.
- *Resource Toolkit for State Oversight Agencies Implementing 49 CFR Part 659, Appendix E: Program Requirements for Development of a Rail Transit Agency System Safety Program Plan (SSPP),* FTA, March 2006, http://transit-safety.volpe.dot.gov/publications/sso/Imp_Guidelines/toolkit/pdf/AppendixE.pdf.

49 CFR §659.15 System safety program standard

(b)(8) *System safety program plan section*. This section shall specify the minimum requirements to be contained in the rail transit agency's system safety program plan. The contents of the system safety program plan are discussed in more detail in §659.19 of this part. This section shall also specify information to be included in the affected rail transit agency's system safety program plan relating to the hazard management process, including requirements for on-going communication and coordination relating to the identification, categorization, resolution, and reporting of hazards to the oversight agency. More details on the hazard management process are contained in §659.31 of this part. This section shall also describe the process and timeframe through which the oversight agency must receive, review, and approve the rail transit agency system safety program plan.

49 CFR §659.17 System safety program plan: general requirements

(a) The oversight agency shall require the rail transit agency to develop and implement a written system safety program plan that complies with requirements in this part and the oversight agency's program standard.

(b) The oversight agency shall review and approve the rail transit agency system safety program plan.

(c) After approval, the oversight agency shall issue a formal letter of approval to the rail transit agency, including the checklist used to conduct the review.

4.2 Required Content of the RTA SSPP

Minimum requirements for the development of an SSPP are specified by the FTA in §659.17 and §659.19 of the revised rule. In preparing the SSPP, the RTA/RTS will include the required minimum elements as identified by the following elements which follow. These elements are provided in this order to provide a sample format for a SSPP.

4.2.1 Element 1. Policy Statement and Authority for SSPP

The highest levels of RTA's/RTS's management set forth its policy embracing safety. The appropriate management approval is denoted by signature on the policy statement and circulation of the statement to all departments. As part of this section, top management provides direction to the RTA/RTS for the development of a SSPP that will encompass the safety policy statement in all facets of its operations.

4.2.2 Element 2. Purpose, Goals and Objectives

A clear definition of the goals and objectives for the RTA/RTS safety program and stated management responsibilities to ensure that they are achieved.

Include a statement of purpose. (An example - the system safety program plan is to show how the program fulfills the directives of the Policy Statement). Define the intent of the SSPP. Emphasize that the development of the System Safety Program complies with policy directives and integrates safety with all facets of the RTA/RTS functions. Summarize how the plan establishes the safety philosophy of the RTA/RTS and the means for implementing its philosophy during operations. The SSPP includes the following:

(1) A safety program and its means of enforcement on a system wide basis.
(2) The medium through which the RTA/RTS can display its commitment to safety.

(3) The framework for the Plan's implementation of policies and achievement of goals and objectives.
(4) How federal, state and local requirements are satisfied.
(5) How industry accepted standards are achieved.

Clearly define how system safety is manifested throughout the operational aspects of a fixed guideway transit system. Specify all SSPP definitions applicable to the operating system.

Specify system safety goals in accordance with the following guidance: The goal is long term. The goal is broad and continuing relevance throughout the operational life of a RTA/RTS. The goal is not as broad as to be meaningless; specific desired results are identified.

An example of relevance might be: A goal that states "to establish and maintain a high level of safety comparable to other operating fixed guideway transit systems in the U.S." In this example, the goal is long term, qualitative, and realizable. Other examples include: Identify, eliminate, minimize, and/or control all safety hazards. Provide appropriate actions and measures to obtain necessary safety-related agreements, permits, and approvals from outside agencies, where applicable.

Objectives of the SSPP are identified along with a description to achieve the appropriate goals. The objectives are quantifiable. They are meaningful and provide a framework for the day-to-day activities for safe and secure operations. Objectives can be expressed as a series of policy statements issued by the RTA/RTS management.

In specifying policies, the following are guidance to the RTA/RTS:

- The Policies set the framework for guiding the safety program, on a long-term basis.
- The Policies are achievable.
- The Policies are the method for reaching a specific objective(s), e.g., a safety policy can be stated to establish a safety program incorporating public, patron, employee, and property safety, including fire protection, loss prevention, and life safety requirements.
- Any policy developed by the RTA/RTS is related to the goals and objectives and its system safety philosophy.

4.2.3 Element 3. Overview of Management Structure

An overview of the management structure of the RTA/RTS, including (i) an organization chart; (ii) a description of how the safety function is integrated into the rest of the RTA/RTS organization; and (iii) clear identification of the lines of authority used by the RTA/RTS to manage safety issues.

Show the lines of authority and responsibility for operations, maintenance, and engineering as they relate to safety. Provide the following information to compliment the requirements of Element 5 – SSPP Implementation – Tasks and Activities.

- Detailed organizational diagrams with a title of each position
- Detailed diagrams of the structure of the system safety units identifying levels and key positions.

- Diagrams showing the relationship and lines of communications between the system safety unit and other units of the organization.
- The relationship of the RTA/RTS to political jurisdictions through which the fixed guideway transit system operates.

As an attachment or Appendix, the RTA/RTS must provide the names and positions of all management and key operations and maintenance personnel.

Overview
Describe the particular characteristics of the RTA/RTS. Include a graphical representation depicting the service area and location of facilities. Present the information in a manner that permits non-technical and non-transit persons to understand the system and its basic operations; include, as a minimum, the following elements in the System Description:

General Overview and History of RTS
Include a chronology of key events in the history or development of the RTA/RTS and a general overview of the system and its facilities. Describe the public safety/security provisions intended to minimize intrusions and protect property and other types of security/surveillance used to achieve a high level of safety for patrons, employees, and workers.

Scope of Transit Services
Describe the planned services and general operating characteristics of the fixed guideway transit system.

Physical Plant - Description, Safety Inspections, Quality Assurance, and Maintenance Programs.
Provide a description of the fixed facilities and include the regular cycle of inspections and maintenance programs for the safety-related facilities and equipment, listing which items are to be inspected.

Include:

- A description of the fixed guideway transit system including aerial, at-grade, tunnel/subway segments, and joint railroad-fixed guideway common corridor operations, railroad-fixed guideway shared use operation.
- Information pertaining to the number and types of vehicles and other data that sufficiently identifies the technical differences within the fleet.
- The maintenance facilities and storage yards and their respective locations.
- The built-in safety capabilities such as fire suppression systems, emergency ventilation, emergency communications equipment, passenger communication equipment (visual and audio), and flammable storage shelters, etc.
- Include a description of how identified hazards are entered into the hazard resolution process.

Operations
Provide a description of the role, the responsibilities and the organization of the operating departments. Include a general description of the type of operation and controls for the conduct of operation.

Operations - Schedules, Headway and Recovery
Provide a general description of operating schedules with approximate headway(s), dwell time(s), and consist size(s). Include methods of vehicle control, and procedures for selecting the methods to be used at any particular time in the operating schedule. Emphasize specific failure recovery philosophies for cases such as extended service delays/interruptions, major system shut-down/delays, and/or prolonged service outage due to modernization and construction.

Maintenance
This section should describe the role, the responsibilities, and the organization of the various maintenance departments. Provide a description of the maintenance process and practices. Include the controls and quality assurance measures for equipment and equipment manuals, shop/site specific procedures, maintenance records, parts and materials, tracking/resolving of problems identified during inspections, demand/preventative maintenance, and the following:

- The purpose and use of scheduled maintenance for all equipment.
- Maintenance tasks performed by the RTA/RTS personnel and tasks performed by outside contractors.
- Maintenance philosophy, scheduled maintenance activities, tracking in-service failures (according to pre-determined criteria), and provisions for corrective maintenance and emergency repairs are to be included (Place emphasis on any special maintenance practices, rules, and procedures used for safety critical equipment).
- Identify rules and procedures for assuring that vehicles are safe for use in revenue service.

Integration of Safety Function
Describe how the safety function is integrated into the rest of the RTA/RTS to ensure that safety program requirements are made known to all RTA/RTS departments, including those responsible for disseminating these requirements and measuring their compliance.

Lines of Authority for Safety
Describe the lines of authority for safety at the RTA/RTS, including the personnel, policies and procedures established for this authority.

4.2.4 Element 4. SSPP Control and Update Procedure
The process used to control changes to the SSPP, including (i) specifying an annual assessment of whether the SSPP should be updated; and (ii) required coordination with the NJDOT SSO program, including timeframes for submission, revision, and approval.

Sections of the SSPP will require updates or revisions to reflect SSPP document improvements, system changes, procedural modifications, organizational changes or safety methodology/task modifications. Describe the process used to control changes to the SSPP and associated procedures. Identify the frequency, either by demand or at selected intervals for update of the

SSPP. Describe the steps required for developing and issuing changes, including the role of the Safety Committee or a similar committee.

Upper management (Board approval necessary beginning in 2019) reviews and approves all changes in goals, objectives, or redirection of safety-related policies. Modifications to the SSPP, when completed, must be submitted for review and approval by the NJDOT SSO program.

The SSPP must be reviewed at least once each calendar year prior to May 30th to determine if changes are required. If no update is required, the RTA/RTS must submit a letter and a signed and dated SSPP coversheet. If an update is required, a letter must indicate so and provide a due date no later than August 1st for review and approval by the NJDOT SSO program.

4.2.5 Element 5. SSPP Implementation – Tasks and Activities

A description of the specific activities required to implement the RTA/RTS safety program, including (i) tasks to be performed by RTA/RTS safety function, by position and management accountability, specified in matrices and/or narrative format; and (ii) safety-related tasks to be performed by other RTA/RTS departments, by position and management accountability, specified in matrices and/or narrative format. The matrices and/or narrative should also specify associated schedules identifying the frequency in which the activity is performed (i.e., daily, weekly, monthly, quarterly, annually, or as needed).

4.2.6 Element 6. Hazard Management Process

A description of the process used by the RTA/RTS to implement its hazard management program, including activities for (i) hazard identification; (ii) hazard investigation, evaluation, and analysis; (iii) hazard control and elimination; (iv) hazard tracking; and (v) requirements for on-going reporting to the NJDOT SSO program relating to hazard management activities and status.

The hazard management process must identify all mechanisms, systems, and procedures in place at the RTA/RTS to identify hazards. The hazard management system must describe how identified hazards are investigated, evaluated, and analyzed, and how they are controlled or eliminated either through design, use of safety and/or warning devices, or provision of procedures. The hazard management process must also detail how hazards are tracked through resolution, and specify the RTA's/RTS's on-going reporting requirements for communicating this information to the NJDOT SSO program. FTA provided a hazard management clarification letter that is only available upon request.

- *49 CFR Part 659 Hazard Management Program Requirements, Clarification Letter*, FTA, September 2007, available only by request to the FTA SSO program.
- *Hazard Analysis Guidelines for Transit Projects*, FTA, January 2000, http://www.fta.dot.gov/documents/HAGuidelines.pdf.

49 CFR §659.31 Hazard management process

(a) The oversight agency must require the rail transit agency to develop and document in its system safety program plan a process to identify and resolve hazards during its operation, including any hazards resulting from subsequent system extensions or modifications, operational changes, or other changes within the rail transit environment.

(b) The hazard management process must, at a minimum:

(1) Define the rail transit agency's approach to hazard management and the implementation of an integrated system-wide hazard resolution process;

(2) Specify the sources of, and the mechanisms to support, the on-going identification of hazards;

(3) Define the process by which identified hazards will be evaluated and prioritized for elimination or control;

(4) Identify the mechanism used to track through resolution the identified hazard(s);

(5) Define minimum thresholds for the notification and reporting of hazard(s) to oversight agencies; and

(6) Specify the process by which the rail transit agency will provide on-going reporting of hazard resolution activities to the oversight agency.

The hazard management process requirements are described further in Appendix K.

4.2.7 Element 7. Safety Certification

This element provides a description of the safety and security certification process required by the RTA/RTS to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for any capital project to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment. This section and any plan or procedure should address the use of acceptance testing and assuring proper installation and operation once the capital project is near completion and ready for such acceptance testing. References to appropriate safety and security certification plans and procedures should be provided in this section. FTA has provided a few related resource documents listed here.

- *Handbook for Transit Safety and Security Certification*, FTA, November 2002, http://www.fta.dot.gov/documents/SSC.pdf.
- *Transit Security Design Considerations,* FTA, November 2004, http://www.fta.dot.gov/documents/ftasesc.pdf.
- *Safety and Security Management Guidance for Major Capital Projects, C5800.1,* FTA, August 2007
- *Safety and Security Management in Rail Transit Projects,* FTA, March 2009, available only by request to the FTA SSO program
- *Compliance Guidelines for States with New Starts Projects,* FTA, June 2000, http://www.fta.dot.gov/documents/NewStarts.pdf.
- *FTA Research Report No. 0015, Construction Project Management Handbook,* FTA, March 2012, http://www.fta.dot.gov/documents/FTA_Report_No._0015.pdf.

- *Project and Construction Management Guidelines,* FTA, July 2012, http://www.fta.dot.gov/FTA_Project_and_CM_Guidelines_-_July_2011_Update_12-01-26.pdf.

Describe the safety certification and sign-off process used to verify the operational readiness of a new RTS, major system modification, system expansion, new equipment, and facilities, enabling the RTA/RTS to consider the system safe for operations, prior to entering revenue service. The process requires the development of a SSCP, Certifiable Items List, the use of Checklists to record compliance to criteria, standards, specifications, codes, and recommended guidelines relevant to safety and security, issuance of Certificates of Compliance for each certifiable element, and issuance of self-certification by the RTA/RTS.

This section of the SSPP should also identify the final authority to approve the certification of the RTA's/RTS's major projects, extensions, etc. The role of the system safety function and safety committee should also be described, including activities to be performed to ensure that:

(1) Facilities and equipment have been constructed, manufactured, inspected, installed, and tested, in accordance with safety and security requirements in the design criteria and contract specifications;
(2) Operations and maintenance procedures and rules have been developed and implemented to ensure safe and secure operations;
(3) Training documents have been developed for the training of operating personnel, and emergency response personnel;
(4) Transportation and maintenance personnel have been trained and qualified/certified;
(5) Emergency response agency personnel have been prepared to respond to emergency situations in or along the ROW;
(6) Safety and security-related system integration tests have been conducted; and
(7) Security for the segments in operation and the Yard and Shop are addressed.

When all required certifiable system elements are certified, a system safety and security certification statement, signed by RTA/RTS Senior Management is issued along with a Safety and Security Certification Verification Report (SSCVR). The RTA/RTS should also identify the major components that form the baseline for certification including, Manuals of Design Criteria, Standard and Directive Drawings, Contract Final Designs, and the System Verification Report and Test Plans. Note that these changes and additions to the rail systems need to be included in Element 17 Configuration Management as well.

A formal process must also be identified for portions of a system which may not be available on time, or for equipment that is placed into service with safety mitigations/exceptions. For such cases, the RTA/RTS top management must determine the needs are absolutely necessary and provide the required directive. Safety mitigations/exceptions must be signed off by all RTA/RTS Departments involved, indicating they fully understand the nature of the exception and what temporary measures are in place to mitigate any potential side effects.

For such conditions, the NJDOT SSO program may issue conditional approval to the RTA/RTS to operate with safety mitigations/exceptions. Thereafter, the RTA/RTS must notify the NJDOT SSO

program every thirty (30) days of the status of the safety mitigations/exceptions until they are fully removed.

As previously stated, the RTA/RTS needs to develop a formal standalone certification plan for the RTS. This plan should describe in detail the certification process. The plan needs to include at least the following:

- How projects are to be described
- How and when preliminary hazard analysis (PHA)/operational hazard analysis (OHA) for a project will be completed
- The development of the Certification checklists, including:
    - How they will be developed, and
    - How they will be approved by the RTA/RTS
- After the checklists have been developed and approved, they will need to be submitted directly by the RTA/RTS to the NJDOT SSO program for its records
- A set of project plans needs to be submitted directly to the NJDOT SSO program for review,
- The plan needs to describe how and when coordination with the NJDOT SSO program and the project team will be done,
- When ready, project walk-downs with the NJDOT SSO program will be scheduled,
- Describe how **Temporary Use Notice** (and its limitations) will be used for non-certified elements of the project,
- Describe the process of how upon completion of the project all approved checklists and Certificate of Compliance, a system safety and security certification statement, signed by RTA/RTS Senior Management is issued along with a SSCVR will be submitted to the NJDOT SSO program as part of the Self-Certification process.
- Finally, the plan needs to address how any open items will be addressed, and tracked, along with the issuance of an updated SSCVR that will be issued to the NJDOT SSO program on a monthly basis.

4.2.8 Element 8. Managing Safety in System Modifications

Provide an overview of the process to ensure safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification, but which may have safety impacts. Include the following:

- Maintenance and construction activities that do not require formal safety certification but that do require safety inspections and sign-offs.
- Identification of the Department and Personnel responsible for ensuring that hazards associated with system modifications are included in the Hazard Management Process.
- The process used to ensure the end-product conforms to criteria, standards, and specifications prepared for the system modification.
- A program that documents how design/build activities integrated safety into the end-product, so that the system modifications meets industry standards, codes, regulations, and is capable of being certified as safe for operation.

Both capital and operating programs are to be included in the change process and must address both hardware and software elements. The changes in this element must also be included in Element 17, Configuration Management, as needed/required.

4.2.9 Element 9. Safety program data collection and analysis

Include a description of how the RTA/RTS collects, maintains, and analyzes, incidents and events, and distributes safety data to determine trends or patterns in system operation. The process should be integrated with the Hazard Management Process. Describe the procedures used to monitor and follow-up action items until there is a resolution and the action item is closed/resolved. In addition, describe the management process used to ensure that other departments within the RTA/RTS provide required data to the system safety function and management.

4.2.10 Element 10. Accident/Incident Notification, Investigation, and Reporting

A description of the process used by the RTA/RTS to perform reportable event or hazardous condition notification, investigation, and reporting, including (i) notification thresholds and processes for internal and external organizations; (ii) investigation process and references to procedures; (iii) the process used to develop, implement, and track corrective actions that address investigation findings; (iv) reporting to internal and external organizations; and (v) coordination with the NJDOT SSO program. This SSPP section must be consistent with SSOPS sections 6, 7, and related procedures. Since the RTA/RTS conducts essentially all of the investigations required for the NJDOT SSO program, formal procedures for this notification, investigation, and reporting are required to be developed and adopted and approved by the NJDOT SSO program.

4.2.11 Element 11. Emergency Management Program

A description of the process used by the RTA/RTS to develop an approved, coordinated schedule for all emergency management program activities, which include (i) meetings with external agencies; (ii) emergency planning responsibilities and requirements; (iii) process used to evaluate emergency preparedness, such as annual emergency field exercises; (iv) after action reports and implementation of findings; (v) revision and distribution of emergency response procedures; (vi) familiarization training for public safety organizations; and (vii) employee training. As appropriate, participation in grant programs (and compliance with grant requirements) should be noted. In addition, this section of the SSPP should describe the joint activities and shared responsibilities with the security department/program, and if appropriate, reference the appropriate portions of the RTA/RTS SSP or EOP.

FTA has a few resource documents that are related to this topic and listed here. The last document is from the Federal Emergency Management Agency (FEMA) and directly related to standardized EOPs.

- *The Public Transportation System Security and Emergency Preparedness Planning Guide,* FTA, January 2003, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/PlanningGuide.pdf .
- *Security and Emergency Preparedness Action Items for Transit Agencies,* FTA and TSA, 2014, https://www.transit.dot.gov/oversight-policy-areas/security-and-emergency-preparedness-action-items-transit-agencies.

- *Transit Agency Security and Emergency Management Protective Measures,* FTA, November 2006 (this document is in the process of update in 2014), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/ProtectiveMeasures.pdf.
- *Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide 101, Version 2.0,* FEMA, November 2010, http://www.fema.gov/media-library-data/20130726-1828-25045-0014/cpg_101_comprehensive_preparedness_guide_developing_and_maintaining_emergency_operations_plans_2010.pdf.

The SSPP should describe the emergency response plan and emergency procedures. It should include a description of the process used to develop an approved, coordinated schedule for all emergency management program activities including meetings with external agencies; develop and evaluate emergency planning and requirements, evaluate emergency preparedness and employee emergency related training. It should discuss the process for revision and distribution of emergency response procedures.

The RTA/RTS should offer familiarization training for local public safety organizations. The SSPP should describe the process(s) that the RTA/RTS use(s) to provide familiarization training. A listing of the organizations trained and date of training, sign-in sheets for all those trained, with the instructor(s) noted, should be maintained for the next NJDOT SSO program triennial audit.

It is recognized that the familiarization training may have to be flexible to meet the needs of the various emergency response organizations. However, the primary safety goals and objectives that the RTA/RTS wants to convey to the public safety organizations in the familiarization training should be reviewed by the System Safety Manager, System Security Manager (if there is one) and transit police and/or emergency responder representatives. These goals and objectives should be approved by the safety committee, with the approval noted in the minutes of the safety committee meeting. They should be reviewed annually by the System Safety and System Security Managers and Police/emergency responders, updated as necessary, and re-approved by the Safety Committee with the re-approval noted in the safety committee minutes.

The SSPP should explain the process used to develop the annual emergency management drill and exercise program for each year. It should include, or have in an Appendix, a list of all the drills or exercises to be performed each year citing the law or regulation.

One full scale exercise must be held each calendar year. It should involve, as available, various local police, fire and other emergency services. The RTA/RTS should develop annually related to that exercise specific written objectives for the RTA/RTS positions exercised that test the RTA's/RTS's emergency procedure's effectiveness and the staff's knowledge of the procedures. **An after action report is required for the RTA/RTS portion of all drills/exercises. A CAP should be developed, as needed.** The actions should be included in the monthly report to the NJDOT SSO program. The RTA/RTS should attempt to acquire other participating agencies' after action reports, especially that information relating to the RTA/RTS procedures, operations and facilities, to understand problems and issues for possible resolution.

The NJDOT SSO program must be notified a minimum of 30 days in advance of all drills and exercises, when possible.

4.2.12 Element 12. Internal Safety Audits

A description of the process used by the RTA/RTS to ensure that scheduled internal safety (and safety-related security program) reviews are performed (by RTA/RTS employees or contractors) to evaluate compliance with the SSPP, including (i) identification of departments and functions subject to review; (ii) responsibility for scheduling reviews; (iii) process for conducting reviews, including the development of checklists and procedures and issuing of findings; (iv) review of reporting requirements; (v) tracking the status of implemented recommendations; and (vi) coordination with the NJDOT SSO program.

4.2.13 Element 13. Rules Compliance

A description of the process used by the RTA/RTS to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including (i) identification of operating and maintenance rules and procedures subject to review; (ii) techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing; (iii) techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and (iv) process for documenting results and incorporating them into the hazard management program.

4.2.14 Element 14. Facilities and Equipment Inspections

A description of the process used for facilities and equipment safety inspections, including (i) identification of facilities and equipment subject to regular safety-related inspection and testing; (ii) techniques used to conduct inspections and testing; (iii) inspection schedules and procedures; and (iv) description of how results are entered into the hazard management process. Applicable procedures should be referenced in the SSPP.

4.2.15 Element 15. Maintenance Audits and Inspections

A description of the maintenance audits and inspections program including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process. Applicable procedures should be referenced in the SSPP.

The RTA/RTS should include in their SSPP a description of the inspections and tests (including checklists) performed on operating equipment and facilities after each preventative or corrective maintenance action. Additionally, the RTA/RTS performs periodic inspections and/or tests at regularly scheduled intervals to provide a reasonable degree of assurance that equipment and facilities are safe for operations. At minimum, these inspections/tests include the following sub-systems and the associated checklists:

- Vehicle Inspection
- Elevator/Escalator
- Fixed Facilities Including Stations/Shelter Stops, Bridges, Tunnels/Passageways, and Other Structures.
- Automated Guideway (People Mover)
- Track System and Track System and Right-of-Way
- Wayside (Signals and Communications, Traction Power and Substations)

- Fire Protection/Suppression Systems
- Guideway/Non-Guideway Support Vehicles

The SSPP should discuss the process for the integration of identified problems found during maintenance audits and inspections into the hazard management process and hazard tracking log.

4.2.16 Element 16. Training and Certification Program for Employees and Contractors

A description of the training and certification program for employees and contractors, including (i) categories of safety-related work requiring training and certification; (ii) a description of the training and certification program for employees and contractors in safety-related positions; (iii) process used to maintain and access employee and contractor training records; and (iv) process used to assess and assure compliance with training and certification requirements.

4.2.17 Element 17. Configuration Management and Control

A description of the configuration management (including asset management) control process, including (i) the authority to make configuration changes; (ii) process for making changes; and (iii) assurances necessary for formally notifying all involved departments.

Describe the configuration management process that ensures that all property, equipment, systems design elements, etc. are documented to configuration, accurately and completely. The process includes changes to an individual subsystem, expansive change to fleet/inventory, and recordings on as-built drawings in a timely and effective manner. As part of the process there are procedures for authority to make configuration changes, the process of incorporating these changes into all appropriate documentation, and a means to ensure that all necessary units (including system safety & security) are formally notified of changes. The process includes a section on design and procurement to track design changes, verification of as-built drawings, first article (1st production unit) and final configuration (end-product meeting specifications).

Describes how the RTA/RTS maintain the highest level of safety when performing modifications and changes to the system. The description includes a change process, pertaining to hardware and software from both capital and operating perspectives. As a minimum, it includes how changes are developed, implemented, documented, and evaluated for their impact on the safety and security of system elements and the overall system.

There is a description of the management hierarchy, levels of responsibility, and internal and external organizational interfaces during the change process. This SSPP Element is also integrated with Element 7 Safety (and Security) Certification and Element 8 System Modification, and related to Element 21 Procurement.

4.2.18 Element 18. Local, State, and Federal Requirements

A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements, including (i) safety requirements that employees and contractors must follow when working on, or in close proximity to, RTA/RTS-controlled property; and (ii) processes for ensuring the employees and contractors know and follow the requirements. This section should include a description of how employee and contractor safety requirements are assessed during audit and rules compliance activities.

Fixed Guideway Transit System Employees
This section includes a description of the employee safety program that incorporates the applicable New Jersey Public Employees Occupational Safety and Health Act (N.J.S.A.34: 6A-25 et. seq.), Safety and Health Standards for Public Employees (N.J.A.C.12: 100) and Federal Occupational Safety and Health Act requirements.

These requirements include the elements of Employee Right To Know; Personal Protective Equipment (PPE); Work In Confined Spaces; Lockout and Tag out; Materials Handling, Storage, Use, and Disposal; Hazardous Materials, etc. Safety Data Sheets for all chemical and other hazardous materials that are being considered for purchase and use must be reviewed and evaluated by the RTA's/RTS's System Safety Function for approval, prior to use.

Contractor and Subcontractor Safety Coordination
This section includes a description of the background checks, safety procedures and instructions to contractors. It includes how the information is disseminated to contractors/subcontractors such as construction/procurement specifications, standards, meetings or other means. The procedures include a mandatory pre-activity conference for Contractor(s) that is used to review safe practices while performing work on or near the operating system, passenger facilities and in RTA/RTS maintenance facilities. Instructions to Contractor(s) require the log in/out of all personnel involved in activities on or near the operating system, visual identification label and I.D. system and require the use of RTA/RTS flag persons when the Contractor(s) is granted access to the operating ROW.

4.2.19 Element 19. Hazardous Materials Program
A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements and include hazardous spill response training. This description should include an explanation of how this information is conveyed to employees and contractors through training programs and evaluated through inspections and audits, and rules compliance activities.

This section includes a description of the employee safety program that incorporates the applicable State of New Jersey Public Employees Occupational Safety and Health Act (N.J.S.A.34:6A-25 et. seq.), Safety and Health Standards for Public Employees (N.J.A.C.12:100) and Federal Occupational Safety and Health Act.

4.2.20 Element 20. Drug and Alcohol Program
A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements. This description should also explain how implementation of this program is evaluated through inspections and audits, and rules compliance activities. FTA's drug and alcohol program documents and information are available on their website at: https://transit-safety.fta.dot.gov/DrugAndAlcohol/Default.aspx.

This section requires a description of the Drug & Alcohol Abuse Program in place at the RTA/RTS and the process used to ensure knowledge of, and compliance with the program requirements by workers and management. The program must meet both State and Federal Department of Transportation requirements. Additionally, this section should describe the RTA's/RTS's Employee Assistance Program and/or Substance Abuse Program.

4.2.21 Element 21. Procurement Process

A description of the measures, controls, and assurances in place to ensure that safety principles and requirements are included in the RTA/RTS procurement process. The scope of the procurement process is comprehensive and includes acquisition of services, materials, training curricula, maintenance documentation and equipment, as well as new systems. Standard procurement procedures are established that enforce and preclude the introduction of unauthorized hazardous materials and supplies, as well as defective or deficient equipment.

A Quality Assurance Program, that includes preparation of specifications, design reviews, audits, quality testing, calibration, analysis, design/production/completed product reviews of hardware and software components, assemblies, and products. The process precludes faults and/or failures that cause safety or security to be compromised, assures optimum reliability, minimum repair/replace time, energy efficient systems, and user-friendly interface.

Internal reviews include checks to ensure that proper procedures are followed and materials received meet the procurement requirements. In addition, the SSPP must describe the process used by the RTA/RTS to ensure all hazardous materials are procured in a safe and controlled manner. The procurement of hazardous materials must follow all state and federal regulations.

4.2.22 Element 22. Hours of Service

This section requires a description of the RTA's/RTS's Hours of Service Policy that is in place at the RTA/RTS for all operations and maintenance employees, and the process used to ensure knowledge of and compliance with the policy.

4.2.23 Element 23. Roadway Worker Protection

This section requires a description of the RTA's/RTS's Roadway Worker Protection Policy and plan that is in place at the RTA/RTS for all operations and maintenance employees, and the process used to ensure knowledge of, and compliance with the policy and plan. The NJDOT SSO program recommends that each RTA/RTS follows the FRA's regulation 49 CFR Part 214 for Roadway Worker Protection; however, it is acceptable to follow the APTA standard RT-OP-S-016-11 Rev 1.

4.2.24 Element 24. Minimum Document Submission to the NJDOT SSO Program

This section requires a description of the RTA's /RTS's procedures to ensure the timely submission of all required documents to the NJDOT SSO program. The following is the minimum documentation required for submission to the NJDOT SSO program:

- Annual report of Safety & Security Reviews, due no later than February 12th of each year, including CEO certification;
- Monthly Reports, including
    - Listing of Accidents, Incidents and Injuries;
    - Hazard Management;
    - Status of Safety Certification;
    - CAPs;
    - Internal Safety and Security Audits

- Annual Review/Update of SSPP and SEPP/SSP;
- Updates to Plans and Procedures as required by the SSPP;
- Accident/Incident Report submitted within 30 day of the Accident/Incident or a status update of the Accident/Incident in the event that the report cannot be completed, including CAP for each Accident/Incident (if required);
- Internal Audit Checklists;
- Copies of all monthly and annual reports submitted to the FRA from each RTS which operates with a FRA Shared Use Waiver;
- Copies of all inspection reports received from the FRA for each RTS which operates with a FRA Shared Use Waiver;
- Copies of all correspondence from/or to the FRA regarding a RTS's Shared Use Waiver.

NJDOT SSO Program Review and Approval of RTA/RTS SSPPs. Based on the requirements of the NJDOT Rail Transit SSOPS and 49 CFR Part 659, the RTA/RTS is required to submit an initial SSPP, any significant updates/modifications to a previously approved SSPP, and annual reviews and updates (if needed) to the NJDOT SSO program for review and approval.

> **49 CFR §659.25 Annual review of system safety program plan and system security plan**
>
> (a) The oversight agency shall require the rail transit agency to conduct an annual review of its system safety program plan and system security plan.
>
> (b) In the event the rail transit agency's system safety program plan is modified, the rail transit agency must submit the modified plan and any subsequently modified procedures to the oversight agency for review and approval. After the plan is approved, the oversight agency must issue a formal letter of approval to the rail transit agency.
>
> (c) In the event the rail transit agency's system security plan is modified, the rail transit agency must make the modified system security plan and accompanying procedures available to the oversight agency for review, consistent with requirements specified in §659.23(e) of this part. After the plan is approved, the oversight agency shall issue a formal letter of approval to the rail transit agency.

Per the SSO regulation, the RTA/RTS is required to review its SSPP at least annually and make any modifications, as needed to assure that the SSPP is current and accurate. The RTA/RTS completes the annual review for the previous calendar year and submits an updated draft SSPP to the NJDOT SSO program for review and approval. Each updated draft SSPP submitted to the NJDOT SSO program by an RTA/RTS should include a summary that identifies and explains the changes. If there are no changes required for the SSPP, it should be indicated at this point in the review and approval process.

The SSPP must be reviewed at least once each calendar year to determine if changes are required. The RTA/RTS must address when, during the calendar, the SSPP will be reviewed. The review cannot be later than June 30th of each calendar year. After the annual review has been conducted, all revisions to the SSPP must be completed and submitted to the NJDOT SSO program no later than September 30th of each calendar year for review and approval by the NJDOT SSO program. If after the annual review of the SSPP no changes are required, then the RTA/RTS must submit a

letter to the NJDOT SSO program no later than June 30th of each year stating that the SSPP has been reviewed and that no changes are required at this time. Each RTA/RTS is required to submit the SSPP directly to the NJDOT SSO program for review and approval.

The NJDOT SSO program staff reviews the draft SSPP update to determine if there are any issues or if the draft SSPP is ready for approval. The NJDOT SSO program uses a conformance checklist for the review of the SSPP (included in Appendix J), and determines if the SSPP meets the federal and state program requirements based on this SSOPS. If there are any issues with the draft SSPP, the NJDOT SSO program staff will contact the RTA/RTS and negotiate appropriate modifications to the SSPP. The NJDOT SSO program or the RTA/RTS may request a meeting to review and discuss SSPP issues to assure an understanding of the needed changes, and negotiate the timing of any needed modifications to the draft SSPP.

Once the draft SSPP has been determined to be ready for approval, the NJDOT SSO program staff will indicate that status to the appropriate RTA/RTS staff, and provide the checklist used for the review. At this point in the update process, the RTA/RTS can finalize their updated SSPP with appropriate signatures and transmittal letter, and submit the final SSPP to the NJDOT SSO program. This submittal is required to be completed by February 12th each year to coincide with the RTA's/RTS's annual report to the NJDOT SSO program as discussed in the next subsection on internal safety audits. Upon receipt of the final RTA/RTS SSPP, the NJDOT SSO program will issue written approval of the SSPP to the RTA/RTS within thirty (30) calendar days.

The NJDOT SSO program may require on-demand changes to an SSPP based on revisions to the NJDOT Rail Transit SSOPS, 49 CFR Part 659, audit results, investigations, or changing trends in safety and security data and information analysis. Upon receipt of a written notification from the NJDOT SSO program for SSPP modifications, the RTA/RTS and the NJDOT SSO program will negotiate a timeframe and set a deadline for completing the revision. In the event the RTA/RTS significantly modifies its SSPP for its own purposes and needs, the RTA/RTS will submit the modified SSPP to the NJDOT SSO program for review and approval within thirty (30) calendar days of the effective date of the change. Note that all operating rules, procedures, and materials referenced in the RTA/RTS SSPP should also be submitted to the NJDOT SSO program with the SSPP to ensure an efficient and complete review of the RTA's/RTS's safety program, as documented in the SSPP.

Initial submittals. An RTA/RTS new (or extension) rail system capital project is required to make an initial submittal of an SSPP (or appropriate modification to an existing SSPP) to the NJDOT SSO program at least one-hundred eighty (180) calendar days before beginning revenue service operations. The initial SSPP will be reviewed and approved by the NJDOT SSO program in writing as part of the new rail system capital project safety and security certification process. The review and approval process for initial submittals generally follows the SSPP update review and approval process discussed next, but is generally a more thorough review and may take several revision cycles to complete. This is the reason for the long-lead time for the initial submittal.

An RTA/RTS New Starts project is required to submit to the NJDOT SSO program an SSPP and associated procedures/referenced materials at least 180 calendar days before beginning passenger service operations. The initial SSPP will be reviewed and approved by the NJDOT SSO program and adopted by the RTA/RTS as part of the projects safety and security certification process. The

NJDOT SSO program will use the SSPP Conformance Checklist and will transmit a formal letter of approval to the RTA/RTS with the completed checklist. As necessary, the NJDOT SSO program may require additional information/documentation as part of the review, and may request meetings or teleconferences to address identified issues.

Specific to New Starts projects, the NJDOT SSO program may conduct on-site Readiness Reviews to assess the capabilities of the RTA/RTS to implement its SSPP during passenger operations. This assessment may be conducted in conjunction with the NJDOT SSO program's review and approval of the initial SSPP submission.

4.3 Oversight of Internal Safety Audits

As part of the NJDOT SSO program, each New Jersey RTA/RTS is required to develop a three-year cycle of internal compliance audits of all 24 elements of the SSPP (the interim ASP), covering approximately one-third of these elements each year. The purpose of the internal safety audits is to compare the content of the safety program document to the activities that the RTA/RTS actually executes. Findings and changes might require the program documentation or minimum standards for safety be updated to reflect current activities or activities might need to be changed or added so that the documents and activities match. Each RTA/RTS is required to provide the NJDOT SSO program with an annual report and certification letter of compliance along with the RTA's/RTS's current SSPP (interim ASP) by February 12th of each year.

Internal Audit Schedule and Checklists. The NJDOT SSO program requires that each RTA/RTS provide a three-year schedule of internal safety audits at the beginning of that three-year cycle (required by March 31st of the year starting the three-year cycle) with a schedule of each of the three years of audits for the safety program. This schedule of internal safety audits can change as needed so long as the overall three-year requirement of completing all elements is met. The schedule and progress of internal safety audits each year is tracked as part of the monthly status tracking of CAPs. Appendix L provides a description and procedure for RTA/RTS conduct of internal functional safety and security reviews compliant with the NJDOT SSO Program.

The RTA/RTS develops procedures and documents the process for the performance of on-going internal safety audits. Each year, checklists, procedures, and documents are developed/collected for each audit at the RTA/RTS and provided/submitted to the NJDOT SSO program for review and notification at least thirty (30) days before the intended internal audit so that the NJDOT SSO program staff has the opportunity to participate in reviews and audits at their discretion. In order to address COI and to protect the independent nature of the internal audit processes, the RTA/RTS staff in charge of each audit cannot be the department in charge of implementing the activities being audited.

Based on the results of each audit/review conducted, the RTA/RTS must prepare a written report documenting recommendations and any corrective actions identified as a result of the audit/review. The RTA/RTS must also prepare an Internal Safety and Security Audit/Review Findings Log to track through implementation all findings, recommendations, and corrective actions developed as a result of the internal safety and a security audit/review process. This log will be made available to the NJDOT SSO program and can be referenced during activities performed in support of the Hazard Management Process.

The NJDOT SSO program requires that the internal audit reports produced for each audit be provided for review. This requirement is intended to help address any issues with the internal audit findings and CAPs developed in order to streamline the approval of the RTA's/RTS's annual report and certification letter.

RTA/RTS Annual Report. The RTA/RTS is required annually to submit a report to the NJDOT SSO program by February 12th of each year. The report, prepared by the RTA/RTS includes results of the Internal Safety and Security Audit Process and includes other audits performed during the preceding year.

The Annual Report must include:

(1) A listing of the internal safety and security audits/reviews conducted for that year;
(2) A discussion of where the RTA/RTS is in meeting its three-year audit/review schedule;
(3) An updated schedule for the next year's audit's/reviews;
(4) The status of all findings, recommendations and corrective actions resulting from the audit/reviews conducted that year; and
(5) Any challenges or issues experienced by the RTA/RTS system safety or security/police function in obtaining action from/compliance with these findings, recommendations and corrective actions during that year

The NJDOT SSO program will review and approve the report within thirty (30) days. The NJDOT SSO program may request additional information, clarifications or revisions from the RTA/RTS while conducting its review. If required, meetings and/or teleconferences will be conducted to address any issues identified by the NJDOT SSO program during its review of the Annual Report. In addition to the annual report, the RTA/RTS must submit a formal Letter of Certification, signed by Senior Management stating that based on the evaluation performed during the internal safety and security audit/review process during the previous year, the RTA/RTS is in compliance with its SSPP and SSP/SEPP.

If the annual report is approved by the NJDOT SSO program, no further actions relative to the annual report will be required, and the NJDOT SSO program will provide an approval letter to the RTA/RTS. If the NJDOT SSO program disapproves the annual report, the NDOT SSO program will notify the RTA/RTS in writing and identify the specific deficiencies in the report. The RTA/RTS will have thirty (30) calendar days, upon receipt of disapproval of the report, to develop a CAP or methodology to correct the identified deficiencies. The CAP must identify the noted audit deficiency; identify a process, plan, or mechanism to address and resolve the deficiency; establish a timeframe for implementation of a plan of action; identify department(s) and person(s) who will be responsible for implementation, and other critical pertinent information. The NJDOT SSO program and RTA/RTS will work together to assure that the CAP is sufficient to address the deficiencies identified in the internal audits. This CAP will become a part of the RTA's/RTS's monthly tracking of all open CAPs until fully implemented. Once any corrective actions are defined, the NJDOT SSO program will provide their approval in writing for the RTA/RTS annual report.

Section 5. Triennial SSO Agency Audits

The NJDOT SSO program will conduct an on-site safety compliance review/audit of the RTA/RTS implementation of its safety program as documented in their interim ASP/SSPP, including the minimum standards for safety and related documentation, at least once every three (3) years, beginning with initiation of the RTA/RTS passenger operations. At the conclusion of the on-site review/audit, the NJDOT SSO program will prepare and issue a report containing findings and recommendations resulting from the review and audit. Findings and recommendations might require the program documentation (interim ASP/SSPP) to be updated to reflect current activities or activities might need to be changed or added so that the documents and activities match. The RTA/RTS will be required to develop CAPs as needed based on those findings and recommendations. Appendix N provides the NJDOT SSO program review/audit process and procedure, including expectations/requirements of the New Jersey RTAs/RTSs.

49 CFR §674.27(a)(5) – State safety oversight program standards
Triennial SSOA audits of Rail Public Transportation Agency Safety Plans. The SSO program standard must explain the process the SSOA will follow and the criteria the SSOA will apply in conducting a complete audit of the RTA's compliance with its Public Transportation Agency Safety Plan at least once every three years, in accordance with 49 U.S.C. 5329. Alternatively, the SSOA and RTA may agree that the SSOA will conduct its audit on an on-going basis over the three-year timeframe. The program standard must establish a procedure the SSOA and RTA will follow to manage findings and recommendations arising from the triennial audit.

49 CFR §674.31 Triennial audits: general requirements
At least once every three years, an SSOA must conduct a complete audit of an RTA's compliance with its Public Transportation Agency Safety Plan. Alternatively, an SSOA may conduct the audit on an on-going basis over the three-year timeframe. At the conclusion of the three-year audit cycle, the SSOA shall issue a report with findings and recommendations arising from the audit, which must include, at minimum, an analysis of the effectiveness of the Public Transportation Agency Safety Plan, recommendations for improvements, and a corrective action plan, if necessary or appropriate. The RTA must be given an opportunity to comment on the findings and recommendations.

In conducting the three-year review, the NJDOT SSO program will establish a review team and prepare a schedule, procedures and a checklist to guide the review process. Criteria will be established through which the NJDOT SSO program can evaluate the RTA's/RTS's implementation of its SSPP and minimum standards for safety and other related documents and procedures.

The RTA/RTS is required to show verification that:

- The ASP is an integral part of the RTA's/RTS's overall management, engineering, operating and maintenance practice
- The ASP is reviewed, at a minimum, on an annual basis
- The RTA/RTS regularly monitors compliance with the ASP through ongoing internal safety and security audit/review processes
- The RTA/RTS identifies potentially serious conditions and hazards, security issues, and that measures to control them are implemented

- Investigations are conducted following established procedures adopted by the RTA/RTS
- Specific activities and tasks identified in the ASP are being carried out as specified in these plans and/or identification of deficiencies or areas requiring improvement.

The NJDOT SSO program will develop and maintain a schedule of three-year safety reviews/audits of each RTA/RTS under its jurisdiction, and will schedule the three-year safety review/audit of each RTA/RTS at least sixty (60) calendar days in advance of the on-site portion of the review/audit. The NJDOT SSO program will schedule a pre-review meeting with the RTA/RTS for clarification of any questions and concerns, and coordination of daily schedules with the RTA/RTS (typically as part of an existing quarterly meeting at the RTA/RTS). This triennial review/audit process is intended to be flexible in scheduling and changes to that schedule will be made as needed by the RTA/RTS or the NJDOT SSO program.

The NJDOT SSO program team will develop a database that contains data from the previous three years in order to thoroughly check all investigations, audits, and CAPs. The NJDOT SSO program three-year review and audit checklists will be risk-based, and data-driven for reviewing and auditing the safety program at the RTAs/RTSs. The NJDOT SSO program team will transmit these checklists to the RTA/RTS at least thirty (30) calendar days prior to the start date of the on-site portion of the review/audit.

During the on-site review/audit week, the NJDOT SSO program team will schedule entrance and exit meetings with the RTA/RTS staff to explain the planned on-site activities, to resolve any issues that may exist, and provide any observations or issues from the review/audit at the end of the on-site week. Both of these meetings with the RTA/RTS will provide a description of the next steps and provide an opportunity for discussion of any issues. These NJDOT SSO program reviews/audits are intended to be an open and collaborative process with the RTAs/RTSs.

After the on-site review has been completed, the NJDOT SSO program staff will issue a draft report detailing its findings and recommendations. The RTA/RTS will have an opportunity to comment on the content of the report including the findings and recommendations. The NJDOT SSO program team will make revisions as needed and distribute the final safety review/audit report.

Once the review/audit report has been completed, the RTA/RTS is required to develop a CAP or methodology to correct identified deficiencies. The NJDOT SSO program will formally approve those CAPs via letter. The CAP development and approval process is described further in SSOPS Section 8.

The NJDOT SSO program will submit its completed report for the three-year safety review to FTA as part of its Annual Submission.

Section 6. Event Notification

This section addresses those safety-related events that might require notification by the RTA/RTS to the SSOA. The requirements for notification often coincide with the safety-related events that need to be investigated by the SSOA either directly or through the RTA/RTS Safety Department.

> **49 CFR §674.27(a)(6) – State safety oversight program standards**
> *Accident Notification Requirements.* The SSO program standard must establish requirements for an RTA to notify the SSO agency of accidents on the RFGPTS. 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 SSO agency.
>
> **49 CFR §674.33 Notification of accidents**
> (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 RFGPTS.
> (b) FRA notification. In any instance in which an RTA must notify the FRA of an accident as defined by 49 CFR 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.

The new FTA safety programs have a new set of definitions for a safety-related event, taken from Part 674.7.

For Reference:

- SSOPS "Definitions" section for Accidents, Incidents, Occurrences and Serious injury.
- SSOPS Appendix A for Event Notifications and Examples from Part 674.
- SSO-003 Event Notifications

6.1 Accident Notification Requirements

The new SSO Rule (Part 674) only requires notification of events that meet the definition of an accident, and these criteria are similar, but slightly different from Part 659, as shown in SSOPS Appendix A. This SSOPS focuses on the Part 674 reportable event criteria, but also includes the Part 659 reportable event criteria (as a union of the two sets of criteria), because the NJDOT SSO program has not yet been certified by FTA. Once the NJDOT SSO program is certified by FTA to Part 674, the Part 659 reportable criteria will no longer be required and an amended SSOPS will be issued. The removed Part 659 criteria based reportable safety events will continue to be notified and potentially investigated as incidents, as defined by the NJDOT SSO program.

Table 4. Notification Criteria for Accidents

Part 659 Criteria	Part 674 Criteria
Any incident involving a rail transit vehicle or taking place on rail transit-controlled property	No related language, but implied that the scope is all of the rail system, operations, command and control, and maintenance
A fatality at the scene; or where an individual is confirmed dead within thirty (30) days of a rail transit-related incident	Same, clarified to match as described in Appendix
Injuries requiring immediate medical attention away from the scene for two or more individuals	One or more "serious injury", definition provided above.
Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities and non-transit property that equals or exceeds $25,000	No related language, Appendix implies that it requires another criterion to be met – collision or derailment; however, significant damage will likely continue to be a reportable safety event and require investigation.
An evacuation due to life safety reasons	Same
A collision at a grade crossing	Same, but Appendix example implies that it requires a serious injury to be an accident
A main-line derailment	Expanded to all derailments on any part of the rail system whether in or out of service, passenger or work vehicle
A collision with an individual on a rail right of way	Same, but Appendix example implies that it requires a serious injury to be an accident
A collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle	Same
N/A	Appendix also indicates that a collision with an object that causes a serious injury
N/A	Runaway Train
N/A	Appendix also indicates that a fire on the rail system that causes a serious injury
RTA/RTS Actions 1. 2 Hour Notification to SSOA (SSOA may call FTA) 2. 24 Hour SSOA Summary 3. 30 day NTD & SSOA Investigation Report 4. Includes on monthly safety report to SSOA 5. Discusses at monthly safety meetings	**RTA/RTS Actions** 1. 2 Hour Notification to SSOA 2. 2 Hour FTA Notification 3. 24 Hour SSOA Summary 4. 30 day NTD & SSOA Investigation Report 5. Includes on monthly safety report to SSOA 6. Discusses at monthly safety meetings

6.2 Incident Notification Requirements

NJDOT SSO program requires incidents to follow the notification process. The following table contains a list of incidents that require an investigation to the NJDOT SSO program:

Table 5. Notification Criteria for Incidents

Part 674 Criteria
One serious injury
Damage to the OCS or third rail that disrupts service – includes significant OCS damage or pull downs, chipped/damaged pantographs, or significant third rail power system damage.
Evacuation of a rail vehicle to the right of way or into street/traffic, not for a life safety reason
Collision of a rail vehicle with a motor vehicle, not at a grade crossing (excludes mirror strikes)
Yard derailment – rail revenue vehicle or work vehicle
Collision of a rail vehicle with a person, resulting in minor or no injury
Close calls/Near Misses 1. Rail vehicle to rail vehicle, including rail work equipment 2. Rail vehicle to motor vehicle or object 3. Rail vehicle to workers on the right of way
Hard couple (causing some damage) in a yard
Split switch – rail revenue vehicle or work vehicle
RTA/RTS Actions 1. 2 Hour Notification to SSOA 2. 24 Hour SSOA Summary 3. 30 day NTD 4. Includes on monthly safety reporting 5. Discusses at monthly safety meetings

Significant Hazardous Conditions

Must provide 2 Hour Notification and 24 Hour Summary to the NJDOT SSO program per Procedure SSO-003. The NJDOT SSO program has the right to require the RTA/RTS to conduct and submit an investigation. Any and all investigations conducted by the RTA/RTS are to be reported to the NJDOT SSO program.

Note:

Experience has shown that some events become reportable to the NJDOT SSO program based on further information beyond the 2-hour time limit, and this will continue to be an expected situation for the program. Example specific reportable events include security events where two or more persons transported away from the scene for medical assessment. Another situation that is often difficult to notify in a timely fashion is accurately and quickly assessing damage above $25,000. In some cases, an event appears to be reportable, and then is later determined to not meet the

reportable event criteria. Each of these situations will be managed on a case-by-case basis. In each case, the notification and reporting should be made as soon as possible or as needed. It is also expected that occasionally a notification or set of progress reports for an event might be removed from the NJDOT SSO program event investigation process, because it is later determined to be outside of the reporting criteria.

This discussion of Event Notification will be further revised to only the Part 674 criteria and state requirements after FTA certifies the NJDOT SSO program.

6.3 Occurrence Notification Requirements

Part 674 also requires RTAs/RTSs to collect information from the rail system operations and maintenance activities of Occurrences. This information is typically collected through the Control Center of the RTA/RTS, should be stored in an Occurrence Log and shared weekly with the SSOA in an editable format. At a minimum, the Occurrence Log should record the following topics, along with service related activities:

Table 6. Notification Criteria for Occurrences

Part 674 Criteria
Safety Rule Violations 1. Red signal violation 2. Rail vehicle doors open wrong side at platform 3. Berthing train at platform not at proper location 4. Wrong/unintended route (switch set in unexpected direction)
Rail system damage/problems that may disrupt service 1. Broken rail/track buckle 2. Railcar braking system failure 3. Door faults/doors opening wrong side Signal system failure/problems 4. Flooding/ice on or near the right of way 5. Damage to the OCS or third rail 6. Mirror strikes
Emergency/hard braking of rail revenue vehicle
Vehicles blocking the right of way, not a close call
Person(s) too close to rail dynamic envelope or trespassing on the right of way, not a close call
Person(s) at station platform too close to rail dynamic envelope, not a close call
RTA/RTS Actions 1. Provide Occurrence Log to SSOA weekly 2. Discusses at monthly safety meetings

The NJDOT SSO program will be working with each RTA/RTS to explore capturing this information and fully developing the Incident/Occurrence Log. Several of these topics/events are expected by FTA to be reported by the SSO program as hazards of the rail system.

6.3.1 (2) Hour Notification

The New Jersey RTAs/RTSs are required to contact the NJDOT SSO Program Manager by phone and email, as listed in Procedure SSO-003. The initial phone call is intended for the RTA/RTS staff to provide any known facts about the safety event that has occurred. A discussion is completed about whether or not the event is required to be notified, investigated, and reported. In some cases, the notification ends with this phone call if it is deemed that additional action is not required. However, if it is agreed that the safety event warrants communication with the FTA, then the NJDOT SSO program staff member will contact FTA with a brief description of the safety event.

6.3.2 (24) Hour Summary

The NJDOT has developed a standardized form to capture information as detailed below. This completed form, in editable format, will be emailed to NJOFGSSO@nj.dot.gov within 24 hours of the 2 Hour Notification, or as directed, as listed in Procedure SSO-003. If the information is not pertinent to the event, the item should be identified on the Initial Notification Form as "not applicable" (N/A).

- Name and job title of person reporting and name of RTA/RTS
- Event type (fatality, injuries, property damage, evacuation, derailment or other)
- Location, time, and date
- Notification time for NJDOT SSO program
- Fatalities
- Injuries
- Rail transit vehicle(s) involved (type, number)
- Other vehicle(s) involved (type, number)
- Property damage estimate
- NTSB, FRA, TSA reportable
- RTA/RTS primary person (i.e., Chief Investigator) conducting the investigation (name, title, phone and fax numbers, email address)
- Short description of the event.

The RTA/RTS may be required to provide additional information at the NJDOT SSO program's request. The RTA/RTS should maintain a current list of contact information for all primary and alternate contact personnel, including email addresses, telephone, and cell phone. This information is also located in Procedure SSO-003.

6.4 RTA/RTS Reportable Event Notifications to Other Federal Agencies

Additional notifications to federal agencies may also be required. The RTAs/RTSs may be required to notify NTSB or TSA for events listed in 49 CFR Part 840[1] and 49 CFR Part 1580[2], and the specific sections are shown in the following text boxes. For all notifications to other federal

[1] Available at http://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol7/pdf/CFR-2011-title49-vol7-part840.pdf

[2] Available at http://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol9/pdf/CFR-2011-title49-vol9-part1580.pdf

agencies (FRA[3], NTSB, and TSA), the NJDOT SSO program requires that the RTA/RTS share those notifications and any additional information requested by those other federal agencies. This may be as easy as just adding these potential notifications to the Initial Notification Form. For TSA notifications and because the RTA/RTS may notify from the security department, a separate Initial Notification Form is acceptable.

49 CFR §840.3 Notification of railroad accidents
The operator of a railroad shall notify the Board by telephoning the National Response Center at telephone 800-424-0201 at the earliest practicable time after the occurrence of any one of the following railroad accidents:

(a) No later than 2 hours after an accident which results in:
  (1) A passenger or employee fatality or serious injury to two or more crewmembers or passengers requiring admission to a hospital
  (2) The evacuation of a passenger train
  (3) Damage to a tank car or container resulting in release of hazardous materials or involving evacuation of the general public
  (4) A fatality at a grade crossing

(b) No later than 4 hours after an accident which does not involve any of the circumstances enumerated in paragraph (a) of this section but which results in:
  (1) Damage (based on a preliminary gross estimate) of $150,000 or more for repairs, or the current replacement cost, to railroad and non-railroad property
  (2) Damage of $25,000 or more to a passenger train and railroad and non-railroad property.

(c) Accidents involving joint operations must be reported by the railroad that controls the track and directs the movement of trains where the accident has occurred.

(d) Where an accident for which notification is required by paragraph (a) or (b) of this section occurs in a remote area, the time limits set forth in that paragraphs shall commence from the time the first railroad employee who was not at the accident site at the time of its occurrence has received notice thereof.

[3] FRA notification requirements for commuter rail or shared track are 49 CFR §225.9, §233.5, and §234.7, if applicable.

49 CFR §1580.203 Reporting significant security concerns

(a) Applicability. This section applies to:

(1) Each passenger railroad carrier, including each carrier operating light rail or heavy rail transit service on track that is part of the general railroad system of transportation, each carrier operating or providing intercity passenger train service or commuter or other short-haul railroad passenger service in a metropolitan or suburban area (as described by 49 U.S.C. 20102), and each public authority operating passenger train service.

(2) Each passenger railroad carrier hosting an operation described in paragraph (a)(1) of this section.

(3) Each tourist, scenic, historic, and excursion rail operator, whether operating on or off the general railroad system of transportation.

(4) Each operator of private cars, including business/office cars and circus trains, on or connected to the general railroad system of transportation.

(5) Each operator of a rail transit system that is not operating on track that is part of the general railroad system of transportation, including heavy rail transit, light rail transit, automated guideway, cable car, inclined plane, funicular, and monorail systems.

(b) Each person described in paragraph (a) of this section must immediately report potential threats and significant security concerns to DHS by telephoning the Freedom Center at 1-866-615-5150.

(c) Potential threats or significant security concerns encompass incidents, suspicious activities, and threat information including, but not limited to, the following:

(1) Interference with the train or transit vehicle crew.

(2) Bomb threats, specific and non-specific.

(3) Reports or discovery of suspicious items that result in the disruption of rail operations.

(4) Suspicious activity occurring onboard a train or transit vehicle or inside the facility of a passenger railroad carrier or rail transit system that results in a disruption of rail operations.

(5) Suspicious activity observed at or around rail cards or transit vehicles, facilities, or infrastructure used in the operation of the passenger railroad carrier or rail transit system.

(6) Discharge, discovery, or seizure of a firearm or other deadly weapon on a train or transit vehicle or in a station, terminal, facility, or storage yard, or other location used in the operation of the passenger railroad carrier or rail transit system.

(7) Indications of tampering with passenger rail cars or rail transit vehicles.

(8) Information relating to the possible surveillance of a passenger train or rail transit vehicle or facility, storage yard, or other location used in the operation of the passenger railroad carrier or rail transit system.

(9) Correspondence received by the passenger railroad carrier or rail transit system indicating a potential threat to rail transportation.

(10) Other incidents involving breaches of the security of the passenger railroad carrier or the rail transit system operations or facilities.

Section 7. Accident Investigations

By SSO regulation and the N.J.A.C., the NJDOT SSO program is responsible for all reportable event investigations at each RTA/RTS. However, in nearly every investigation, the RTA/RTS will be the lead investigator and complete the notification, investigation, and reporting on behalf of the NJDOT SSO program. The RTA/RTS must have appropriately trained and competent safety professionals at the RTAs/RTSs that can provide capabilities for the purposes of performing the safety event investigations and providing standardized investigation reports for the NJDOT SSO program (as well as for internal RTA/RTS needs and requirements).

49 CFR §674.25 Role of the State safety oversight agency

(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.

49 CFR §674.27(a)(7) - Investigations

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 CFR §674.35 Investigations

(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.

(b) Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTA's 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 SSOA's 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.

(c) All personnel and contractors that conduct investigations on behalf of an SSOA must be trained to perform their functions in accordance with the Public Transportation Safety Certification Training Program.

(d) The Administrator may conduct an independent investigation of any accident or an independent review of an SSOA's or an RTA's findings of causation of an accident.

Note that Part 674.25(c) and (d) describe that the NJDOT SSO program is responsible for investigations of noncompliance of the ASP and for accidents at the RTAs/RTSs. These two

regulatory requirements account for both the investigations required based on the notification regulatory requirement and the state required hazardous condition topics to be investigated.

7.1 Investigations

Reportable safety events, NJDOT SSO program additional reportable hazardous condition events, and hazardous conditions requiring investigations and reports are described/listed in SSOPS Section 6. The reportable safety events are generally safety-related, but could also be security-related. In all cases, the RTA/RTS will be the lead investigator at least initially even if there is a need for the NJDOT SSO program, FTA, or the NTSB to lead the investigation. Since the RTA/RTS will be the lead investigator, it is required that the RTA/RTS has investigation procedures that follow industry practice for investigations and are reviewed, approved, and adopted by the NJDOT SSO program. These procedures have been designated a minimum safety standard and tracked for updates, as well as following the transit industry standard from APTA.

- *Rail Transit Accident/Incident Investigation,* APTA RT-OP-S-002-02 Rev. 2, March 2012, http://www.apta.com/resources/standards/Documents/APTA-RT-OP-S-002-02.pdf.

The NJDOT SSO program staff may go to an RTA/RTS-led investigation as a resource or observer depending on the severity of the safety event that caused the investigation. In all cases, when the NJDOT SSO program staff intends to go to an RTA/RTS investigation, the RTA/RTS will be notified and the NJDOT SSO program staff will coordinate with the RTA/RTS staff. Only under unusual circumstances will the NJDOT SSO program staff take over and lead the investigation.

In the cases where the NJDOT SSO program staff lead or participate in the investigation, the NJDOT SSO program staff will follow the RTA's/RTS's investigation procedures as approved and adopted, and reporting will follow the process described in this section. Appendix O describes the NJDOT SSO program procedures for participating or leading an investigation. First and foremost, the NJDOT SSO staff going onsite for the investigation will follow all safety practices and procedures of the RTA/RTS. In addition, if the NJDOT SSO program staff takes over an investigation, the RTA/RTS will continue to be included in the investigation at least as a resource.

The NJDOT SSO program investigators are required to be trained according to the FTA Safety Certification Training Program and the RTA/RTS Roadway Worker Protection Plan and other applicable procedures and requirements. The RTA/RTS investigators are also required to have the appropriate training and experience for performing these investigations at the RTA/RTS. Also note that the expectation is that the investigation team will include the appropriate rail system expertise to successfully and thoroughly investigate the safety event that has occurred.

If the FTA decides to go onsite at the RTA/RTS and take over an investigation, the RTA/RTS will support that FTA investigation, as required. If the NTSB decides to go onsite at the RTA/RTS and take over an investigation, the RTA/RTS will support that NTSB investigation, as required. The NJDOT SSO program staff intends to also go onsite to support the RTA/RTS, FTA, and/or the NTSB as a resource or observer. Both the RTA/RTS and the NJDOT SSO program staff will follow the requirements and rules of the FTA or NTSB investigation. The NJDOT SSO program and the RTA/RTS will review (and comment on) the FTA or NTSB findings, draft and final

reports, and the RTA/RTS will develop CAPs as appropriate and agreed to by the NJDOT SSO program.

7.2 Investigation Progress and Final Reports

The APTA standard indicates that the purpose of an accident/incident investigation is to gather and assess facts in order to determine cause(s); and to identify corrective measures to prevent recurrence. Accident/incident investigation is not intended to affix blame, or subject people to liability for their actions, or to recommend disciplinary action. This purpose statement is consistent with FTA's transit-specific SMS.

The accident/incident investigation outcomes or objectives and the data and information collection onsite and offsite the scene need to address an organizational accident approach including the following:

- **Safety Performance of the Rail Operator** – before, during, and after the safety event being investigated.
- **Safety Performance of the controller and Field Supervision (or others responding to the event)** – before, during, and after the safety event being investigated.
- **Securing the train/scene of the safety event and assuring there are no additional hazards** – need to assess the safety performance of those involved in this critical activity including the Rail Operator, Controller, Field Supervision, and any additional RTA/RTS personnel responding to the safety event. An example is the performance and following procedure and/or command to lower the pantograph or removing OCS or third rail power. This also includes control of any train movement or single-tracking.
- **Safety Performance of any Passenger Evacuation** – this may be at a platform or on the ROW to a platform; special attention should be given to control of an evacuation on the ROW (other RTA/RTS trains, freight rail traffic, if nearby) and passengers with disabilities.
- **Consideration of future prevention of the safety event and/or any additional capabilities that would increase safety performance and emergency response.**

The above topics need to be evaluated from a safety performance perspective, including individuals and the organization, for:

- Staff recognizing the event or a potential event,
- Following procedures (and whether or not those procedures were appropriate),
- Problem-solving, and
- Communication and coordination.

An analysis is required to develop the primary cause and contributing factors, typically based on the outcome of completing the above analysis of outcomes and objectives. Typical corrective actions are training/retraining, changing or adding procedures, awareness information (bulletins, orders, etc.) and activities, and/or adding/enhancing capabilities.

As an investigation proceeds from notification to completion, the SSOA requires progress and final reports as follows:

- An initial facts report within 24 hours (24 Hour Summary), which includes all key information regarding the safety event compiled at the scene by the RTA/RTS
- A status report identifying the preliminary cause of the safety event, once this preliminary cause is established, and updates of progress every 30 days until the draft final investigation report is submitted, including CAPs with assignments and due dates

The NJDOT SSO program requires that the RTA/RTS investigation reports be standardized, and include at least the following topics (or as needed based on the safety event and investigation):

Investigation Report General Outline

- Safety event description
- Notification, Incident Response, and Incident Command
- Initiating Event
- Immediate Corrective Actions
    - Operator Information – Fatigue Evaluation and Training
    - Investigation
    - Operator event report
    - Field supervision report
    - Employee record/history
    - Post-accident safety inspection
    - Video analysis
    - Communications analysis
- Findings, Potential Causal Factors, and Recommendations (CAPs)
- Investigator
- Date of Report
- Distribution

If the NJDOT SSO program staff is the lead investigator, progress and investigation reports will follow the same process and content as described in this section. The RTA/RTS can provide input and comments based on the progress and investigation reports, before the investigation report is finalized. This may require a meeting between the NJDOT SSO program and RTA/RTS staff to resolve any discrepancies and comments.

Note that Part 674 has added clarity for the responsibilities of the NJDOT SSO program in terms of accident investigations and reporting – "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."

For RTA/RTS-led investigations, the RTA/RTS will submit the progress reports and then a draft final investigation report (when completed) to the NJDOT SSO program, which will review the report and either adopt and approve it, or require specific additional information from the RTA/RTS. The NJDOT SSO program has N.J.A.C. requirements to protect investigation-related and audit-related information from automatic public release. If revisions to the draft final investigation report are required, the time frame for revising the report will be determined jointly by the NJDOT SSO program and the RTA/RTS, on a case-by-case basis. The revisions to an investigation report might be due to incomplete information or issues with having CAPs that match and address all root causes for the safety event (discussed further in SSOPS Section 8 regarding CAPs). After the NJDOT SSO program provides adoption and approval of the investigation report (via formal letter), the final report (no longer draft final) will serve as the formal NJDOT SSO program investigation document.

Section 8. Corrective Actions

For the NJDOT SSO program, CAPs are developed for the following activities: investigation reports (from RTA/RTS, NJDOT SSO program, FTA, or NTSB), internal safety compliance audits, and three-year safety compliance reviews and audits (from the NJDOT SSO program or FTA triennial compliance audit of the NJDOT SSO program). CAPs may also be developed from other sources such as hazard identification and analyses, risk assessments, and risk monitoring by the RTA/RTS or the NJDOT SSO program. The sources of all of these CAPs have already been discussed in the previous sections of this SSOPS.

49 CFR §674.27(a)(8) – State safety oversight program standards
Corrective Action Requirements. The program standard must explain the process and criteria by which the SSOA may order an RTA to develop and carry out a Corrective Action Plan (CAP), and a procedure for the SSOA to review and approve a CAP. Also, the program standard must explain the SSOA's policy and practice for tracking and verifying an RTA's compliance with the CAP, and managing any conflicts between the SSOA and RTA relating either to the development or execution of the CAP or the findings of an investigation.

49 CFR §674.37 Corrective action plans

(a) In any instance in which an RTA must develop and carry out a CAP, the SSOA must review and approve the CAP before the RTA carries out the plan; however, an exception may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given timely notification, and the SSOA provides subsequent review and approval. A CAP must describe specifically, the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP, the schedule for taking those actions, and the individuals responsible for taking those actions. The RTA must periodically report to the SSOA on its progress in carrying out the CAP. The SSOA may monitor the RTA's progress in carrying out the CAP through unannounced, on-site inspections, or any other means the SSOA deems necessary or appropriate.

(b) In any instance in which a safety event on the RTA's rail fixed guideway public transportation system is the subject of an investigation by the NTSB, the SSOA must evaluate whether the findings or recommendations by the NTSB require a CAP by the RTA, and if so, the SSOA must order the RTA to develop and carry out a CAP.

Although Part 674 indicates the RTA/RTS cannot carry out a CAP prior to approval by the SSOA, the NJDOT SSO program provides permission in this SSOPS for the RTA/RTS to initiate CAPs as the RTA/RTS determines appropriate without our permission. However, the NJDOT SSO program will provide an independent review of the RTA/RTS CAPs and offer requests for any changes or additional CAPs needed, along with formal approval of each CAP developed. If there is a dispute regarding a CAP between the NJDOT SSO program and an RTA/RTS, the NJDOT SSO program is the authority in this process; however, the RTA/RTS is always encouraged to explain their position and the NJDOT SSO program intends to be reasonable. At the end of these discussions, the NJDOT SSO program has the final approval and authority. The independent CAP review and approval process is described in Appendix P.

Depending on the source of the CAP, a separate development, review, and approval process has been defined including for investigations (Section 6), internal safety audits (Section 4), and triennial audits by the NJDOT SSO program (Section 5). Each of these processes for the different

sources of CAPs includes a process for the NJDOT SSO program to negotiate changes to proposed CAPs and addition of CAPs, as needed, as well as approval of the CAPs. The NJDOT SSO program may request changes to or additions of CAPs based on root causes of the safety event or programmatic/organizational deficiencies identified, and whether or not the CAPs fully resolve the issues identified based on experience from risk monitoring or previous CAPs that were indicated as implemented. The NJDOT SSO program expects that the RTA/RTS CAP assignments have agreement with the responsible parties regarding content and due date for any CAP. Should there be an internal RTA/RTS disagreement with the content and/or due date for any CAP developed by Safety for the NJDOT SSO program, that disagreement should be noted with the submission of the CAP to the NJDOT SSO program.

Each CAP must identify:

- The hazard or programmatic deficiency
- The action to be taken by the RTA/RTS;
- An implementation schedule
- The individual(s) and department(s) responsible for the implementation
- Any other critical information, such as interim/short-term steps taken while awaiting longer-term mitigations to be implemented.

Any recommendations received from FTA or the NTSB will be developed into CAPs as required or determined jointly by the NJDOT SSO program and the RTA/RTS to be appropriate. Any recommendations from FTA or the NTSB that apply to the NJDOT SSO program will be considered and CAPs developed as needed.

The RTA/RTS will maintain a CAP monitoring process and document to be updated and provided to the NJDOT SSO program on a monthly basis (described in Section 1). The tracking document should include documentation of monthly updates by individual CAP and any corrective action progress towards closure or revision to the due date (with an explanation of due date changes) until the CAP is closed. The content/scope, person responsible, or due date of each CAP cannot be changed once approved without formal agreement from the NJDOT SSO program.

All open or recently closed CAPs will also be discussed at quarterly meetings with the RTA/RTS (described in Section 1). When a CAP is ready for closure, the RTA/RTS is required to provide the evidence used (or explanation) for closure and the date that closure was achieved. CAPs may also be agreed to be closed as part of the quarterly meetings, and evidence or explanation of closure will be documented as part of those meetings. The CAP closure documentation will be used as part of the NJDOT SSO program risk monitoring activity and will be included in the annual internal data and information analysis report (described in Section 1). During the triennial audits by the NJDOT SSO program of the RTA/RTS, all of the CAPs (investigations and all audits) during the previous three-year internal audit cycle will be checked/verified (as described in Section 5). Also note that CAP closures may be reviewed during any on-site visits as part of or between quarterly meetings (described in Section 1).

Section 9. Annual Reporting to FTA

The NJDOT SSO program completes its annual reporting to the FTA by March 15th of the following year, as required by 674.39 including all of the required information and data. The objective of these reporting requirements is to provide the FTA with information regarding the operation of the NJDOT SSO program. All submissions to the FTA must be made electronically using a reporting system specified by the FTA.

- Program standard updates and annual review (per Procedure SSO-001)
- Progress towards completion of requirements for the FTA Public Transportation Safety Certification Training Program
- Data and information submission for each RTA/RTS – investigations, CAPs, RTA/RTS certification of compliance (including internal audits), ASP updates and evidence of review, and level of effort expended by the NJDOT SSO program.
- Triennial compliance audit progress reports and updates
- Certification letter that the NJDOT SSO program is in compliance with the SSO Rule.

49 CFR §674.39 – State Safety Oversight Agency annual reporting to FTA

(a) On or before March 15 of each year, an SSOA must submit the following material to FTA:

(1) The SSO program standard adopted in accordance with §674.27, with an indication of any changes to the SSO program standard during the preceding twelve months;

(2) Evidence that each of its employees and contractors has completed the requirements of the Public Transportation Safety Certification Training Program, or, if in progress, the anticipated completion date of the training;

(3) A publicly available report that summarizes its oversight activities for the preceding twelve months, describes the causal factors of accidents identified through investigation, and identifies the status of corrective actions, changes to Public Transportation Agency Safety Plans, and the level of effort by the SSOA in carrying out its oversight activities;

(4) A summary of the triennial audits completed during the preceding twelve months, and the RTAs' progress in carrying out CAPs arising from triennial audits conducted in accordance with §674.31;

(5) Evidence that the SSOA has reviewed and approved any changes to the Public Transportation Agency Safety Plans during the preceding twelve months; and

(6) A certification that the SSOA is in compliance with the requirements of this part.

(b) These materials must be submitted electronically through a reporting system specified by FTA.

49 CFR §674.27(b) – State safety oversight program standards

At least once a year an SSOA must submit its SSO program standard and any referenced program procedures to FTA, with an indication of any revisions made to the program standard since the last annual submittal. FTA will evaluate the SSOA's program standard as part of its continuous evaluation of the State Safety Oversight Program, and in preparing FTA's report to Congress on the certification status of that State Safety Oversight Program, in accordance with 49 U.S.C. 5329.

Each of the New Jersey RTAs/RTSs are required to provide updates for investigations, audits, and CAPs of all types on at least a monthly basis, so there is no special request of information for this annual submission to FTA. Accuracy of data and information shared between the NJDOT SSO

program and the New Jersey RTAs/RTSs is completed on a monthly basis and during quarterly meetings at each RTA/RTS. Prior to submission of investigations, compliance audits, and CAPs to FTA, the information is de-identified as described in Procedure SSO-006 and in accordance with state law protection of investigations and audits per N.J.A.C. In addition, the NJDOT SSO program annual program status report is separate from this annual reporting to FTA, and the process/procedure is provided in Procedure SSO-005.

Version Tracking and Contents

NJDOT Rail Transit State Safety Oversight Program Standard (SSOPS) - Appendices

APPENDIX	CURRENT VERSION
A. FTA SSO Regulation 49 CFR Part 674 and 659, 49 U.S.C. Section 5329 and 5330	1.0
B. New Jersey Statutes and Administrative Codes, Related to the SSO Program	1.0
C. Certification Checklist Items, Requirements from Part 674.13	1.0
D. NJDOT SSO Program Description and General Procedures (a) SSO-001 NJDOT Program Standard Update (b) SSO-002 Conflict of Interest (COI) Management (c) SSO-003 Safety Event Notifications (d) SSO-004 Enforcement Escalation (e) SSO-005 Annual Public Safety Report (f) SSO-006 Data De-identification (g) SSO-007 All Hazard Data Reporting (h) SSO-008 RTA/RTS Safety Oversight and Enforcement Risk Monitoring (i) SSO-009 Investigation for Allegations of RTA Noncompliance with ASP Procedure (including public input) (j) SSO-010 Investigation Reporting (k) SSO-011 Minimum Training Requirements (l) SSO-012 Distribution List (m) SSO-013 Record Retention	1.0
E. New Jersey Transit Newark Light Rail Description and Contacts	1.0
F. New Jersey Transit RiverLINE Description and Contacts	1.0
G. New Jersey Transit Hudson-Bergen Light Rail Description and Contacts	1.0
H. Delaware River Port Authority Port Authority Transit Corporation Description and Contacts	1.0
I. System Security Plan (SSP) and System Security and Emergency Preparedness Plan (SSEPP) Review and Approval Process (a) Exhibit A – SSP Summary Conformance Checklist (b) Exhibit B – SSP Detailed Conformance Checklist (c) Exhibit C – SSP Supplemental Security Review Checklist	1.0
J. System Safety Program Plan (SSPP) Review and Approval Process (a) Exhibit A – SSPP Summary Conformance Checklist (b) Exhibit B – SSPP Detailed Conformance Checklist	1.0
K. Hazard Management Plan Review and Approval Process	1.0
L. Internal Safety and Security Reviews Process	1.0

APPENDIX	CURRENT VERSION
M. NJDOT SSO Program Inspections Procedure (a) Exhibit A – Station Inspection Checklist (b) Exhibit B – Train Inspection Checklist (c) Exhibit C – Emergency Exit Inspection Checklist (d) Exhibit D – Shop Inspection Checklist (e) Exhibit E – Workplace Inspection Checklist	1.0
N. Process for NJDOT SSO Program Triennial Audits of RTAs/RTSs (a) Exhibit A – Three Year Safety & Security Review Summary Conformance Checklist (b) Exhibit B – Three Year Safety & Security Review Detailed Conformance Checklist (c) Exhibit C – Three Year Safety & Security Review Supplemental Form	1.0
O. NJDOT SSO Program Investigation Procedures (a) Exhibit A – SSO Program Investigation Forms	1.0
P. CAPs Review and Approval Process	1.0

Appendix A

Federal Transit Administration (FTA)

State Safety Oversight Regulation (49 CFR Part 674 and Part 659)

and Authority (49 U.S.C. Section 5329, updated by FAST Act, and Section 5330)

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49 CFR Part 674

"State Safety Oversight; Final Rule"
March 16, 2016

Subpart A – General Provisions

§ 674.1 Purpose

This part carries out the mandate of 49 U.S.C. 5329(e) for State safety oversight of rail fixed guideway public transportation systems.

§ 674.3 Applicability

This part applies to States with rail fixed guideway public transportation systems; State safety oversight agencies that oversee the safety of rail fixed guideway public transportation systems; and entities that own or operate rail fixed guideway public transportation systems with Federal financial assistance authorized under 49 U.S.C. Chapter 53.

§ 674.5 Policy

(a) In accordance with 49 U.S.C. 5329(e), a State that has a rail fixed guideway public transportation system within the State has primary responsibility for overseeing the safety of that rail fixed guideway public transportation system. A State safety oversight agency must have sufficient authority, resources, and qualified personnel to oversee the number, size, and complexity of rail fixed guideway public transportation systems that operate within a State.

(b) FTA will make Federal financial assistance available to help an eligible State develop or carry out its State safety oversight program. Also, FTA will certify whether a State safety oversight program meets the requirements of 49 U.S.C. 5329(e) and is adequate to promote the purposes of the public transportation safety programs codified at 49 U.S.C. 5329.

§ 674.7 Definitions

As used in this part:

- ***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 in Appendix A to this part.
- ***Accountable Executive*** means a single, identifiable individual who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in

accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

- ***Administrator*** means the Federal Transit Administrator or the Administrator's designee.
- ***Contractor*** means an entity that performs tasks on behalf of FTA, a State Safety Oversight Agency, or a Rail Transit Agency, through contract or other agreement.
- ***Corrective action plan*** means a plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. Either a State Safety Oversight Agency or FTA may require a Rail Transit Agency to develop and carry out a corrective action plan.
- ***Event*** means an Accident, Incident or Occurrence.
- ***FRA*** means the Federal Railroad Administration, an agency within the United States Department of Transportation.
- ***FTA*** means the Federal Transit Administration, an agency within the United States Department of Transportation.
- ***Hazard*** means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a rail fixed guideway public transportation system; or damage to the environment.
- ***Incident*** means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency. An incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in Appendix A to this part. If a rail transit agency or State Safety Oversight Agency later determines that an Incident meets the definition of Accident in this section, that event must be reported to the SSOA in accordance with the thresholds for notification and reporting set forth in Appendix A to this part.
- ***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.
- ***National Public Transportation Safety Plan*** means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- ***NTSB*** means the National Transportation Safety Board, an independent Federal agency.
- ***Occurrence*** means 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.
- ***Person*** means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a rail fixed guideway public transportation system.
- ***Public Transportation Agency Safety Plan*** **(PTASP)** means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on a Safety Management System. Until one year after the effective date of FTA's PTASP final rule, a System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 will serve as the rail transit agency's safety plan.

- ***Public Transportation Safety Certification Training Program*** means either the certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1).
- ***Rail fixed guideway public transportation system*** means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway.
- ***Rail Transit Agency (RTA)*** means any entity that provides services on a rail fixed guideway public transportation system.
- ***Risk*** means the composite of predicted severity and likelihood of the potential effect of a hazard.
- ***Risk mitigation*** means a method or methods to eliminate or reduce the effects of hazards.
- ***Safety risk management*** means a process within a Rail Transit Agency's Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- ***Serious injury*** means any injury which:
  - (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;
  - (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
  - (3) Causes severe hemorrhages, nerve, muscle, or tendon damage;
  - (4) Involves any internal organ; or
  - (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- ***State*** means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.
- ***State Safety Oversight Agency (SSOA)*** means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in this part.
- ***Vehicle*** means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

§ 674.9 Transition from previous requirements for State safety oversight

(a) Pursuant to section 20030(e) of the Moving Ahead for Progress in the 21st Century Act (Pub. L. 112–141; July 6, 2012) (''MAP–21''), the statute now codified at 49 U.S.C. 5330, titled ''State safety oversight,'' will be repealed three years after the effective date of the regulations set forth in this part.

(b) No later than three years after the effective date of the regulations set forth in this part, the regulations now codified at part 659 of this chapter will be rescinded.

(c) A System Safety Program Plan (SSPP) developed pursuant to 49 CFR part 659 shall serve as the rail transit agency's safety plan until one year one year after the effective date of the Public Transportation Agency Safety Plan final rule, which will be codified in part 673 of this chapter.

Subpart B—Role of the State

§ 674.11 State Safety Oversight Program

Within three years of April 15, 2016, every State that has a rail fixed guideway public transportation system must have a State Safety Oversight (SSO) program that has been approved by the Administrator. FTA will audit each State's compliance at least triennially, consistent with 49 U.S.C. 5329(e)(9). At minimum, an SSO program must:

(a) Explicitly acknowledge the State's responsibility for overseeing the safety of the rail fixed guideway public transportation systems within the State;
(b) Demonstrate the State's ability to adopt and enforce Federal and relevant State law for safety in rail fixed guideway public transportation systems;
(c) Establish a State safety oversight agency, by State law, in accordance with the requirements of 49 U.S.C. 5329(e) and this part;
(d) Demonstrate that the State has determined an appropriate staffing level for the State safety oversight agency commensurate with the number, size, and complexity of the rail fixed guideway public transportation systems in the State, and that the State has consulted with the Administrator for that purpose;
(e) Demonstrate that the employees and other personnel of the State safety oversight agency who are responsible for the oversight of rail fixed guideway public transportation systems are qualified to perform their functions, based on appropriate training, including substantial progress toward or completion of the Public Transportation Safety Certification Training Program; and
(f) Demonstrate that by law, the State prohibits any public transportation agency in the State from providing funds to the SSOA.

§ 674.13 Designation of oversight agency

(a) Every State that must establish a State Safety Oversight program in accordance with 49 U.S.C. 5329(e) must also establish a SSOA for the purpose of overseeing the safety of rail fixed guideway public transportation systems within that State. Further, the State must ensure that:
    (1) The SSOA is financially and legally independent from any public transportation agency the SSOA is obliged to oversee;
    (2) The SSOA does not directly provide public transportation services in an area with a rail fixed guideway public transportation system the SSOA is obliged to oversee;
    (3) The SSOA does not employ any individual who is also responsible for administering a rail fixed guideway public transportation system the SSOA is obliged to oversee;
    (4) The SSOA has authority to review, approve, oversee, and enforce the public transportation agency safety plan for a rail fixed guideway public transportation system required by 49 U.S.C. 5329(d);

(5) The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State;
(6) At least once every three years, the SSOA audits every rail fixed guideway public transportation system's compliance with the public transportation agency safety plan required by 49 U.S.C. 5329(d); and
(7) At least once a year, the SSOA reports the status of the safety of each rail fixed guideway public transportation system to the Governor, the FTA, and the board of directors, or equivalent entity, of the rail fixed guideway public transportation system.

(b) At the request of the Governor of a State, the Administrator may waive the requirements for financial and legal independence and the prohibitions on employee conflict of interest under paragraphs (a)(1) and (3) of this section, if the rail fixed guideway public transportation systems in design, construction, or revenue operations in the State have fewer than one million combined actual and projected rail fixed guideway revenue miles per year or provide fewer than ten million combined actual and projected unlinked passenger trips per year. However:
(1) If a State shares jurisdiction over one or more rail fixed guideway public transportation systems with another State, and has one or more rail fixed guideway public transportation systems that are not shared with another State, the revenue miles and unlinked passenger trips of the rail fixed guideway public transportation system under shared jurisdiction will not be counted in the Administrator's decision whether to issue a waiver.
(2) The Administrator will rescind a waiver issued under this subsection if the number of revenue miles per year or unlinked passenger trips per year increases beyond the thresholds specified in this subsection.

§ 674.15 Designation of oversight agency for multi-state system

In an instance of a rail fixed guideway public transportation system that operates in more than one State, all States in which that rail fixed guideway public transportation system operates must either:

(a) Ensure that uniform safety standards and procedures in compliance with 49 U.S.C. 5329 are applied to that rail fixed guideway public transportation system, through an SSO program that has been approved by the Administrator; or
(b) Designate a single entity that meets the requirements for an SSOA to serve as the SSOA for that rail fixed guideway public transportation system, through an SSO program that has been approved by the Administrator.

§ 674.17 Use of Federal financial assistance

(a) In accordance with 49 U.S.C. 5329(e)(6), FTA will make grants of Federal financial assistance to eligible States to help the States develop and carry out their SSO programs. This Federal financial assistance may be used for reimbursement of both the operational and administrative expenses of SSO programs, consistent with the uniform administrative requirements for grants to States under 2 CFR parts 200 and 1201. The expenses eligible for reimbursement include, specifically, the expense of employee training and the expense of establishing and maintaining a SSOA in compliance with 49 U.S.C. 5329(e)(4).

(b) The apportionments of available Federal financial assistance to eligible States will be made in accordance with a formula, established by the Administrator, following opportunity for public notice and comment. The formula will take into account fixed guideway vehicle revenue miles, fixed guideway route miles, and fixed guideway vehicle passenger miles attributable to all rail fixed guideway systems within each eligible State not subject to the jurisdiction of the FRA.

(c) The grants of Federal financial assistance for State safety oversight shall be subject to terms and conditions as the Administrator deems appropriate.

(d) The Federal share of the expenses eligible for reimbursement under a grant for State safety oversight activities shall be eighty percent of the reasonable costs incurred under that grant.

(e) The non-Federal share of the expenses eligible for reimbursement under a grant for State safety oversight activities may not be comprised of Federal funds, any funds received from a public transportation agency, or any revenues earned by a public transportation agency.

§ 674.19 Certification of a State Safety Oversight Program

(a) The Administrator must determine whether a State's SSO program meets the requirements of 49 U.S.C. 5329(e). Also, the Administrator must determine whether a SSO program is adequate to promote the purposes of 49 U.S.C. 5329, including, but not limited to, the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training Program, and the Public Transportation Agency Safety Plans.

(b) The Administrator must issue a certification to a State whose SSO program meets the requirements of 49 U.S.C. 5329(e). The Administrator must issue a denial of certification to a State whose SSO program does not meet the requirements of 49 U.S.C. 5329(e).

(c) In an instance in which the Administrator issues a denial of certification to a State whose SSO program does not meet the requirements of 49 U.S.C. 5329(e), the Administrator must provide a written explanation, and allow the State an opportunity to modify and resubmit its SSO program for the Administrator's approval. In the event the State is unable to modify its SSO program to merit the Administrator's issuance of a certification, the Administrator must notify the Governor of that fact, and must ask the Governor to take all possible actions to correct the deficiencies that are precluding the issuance of a certification for the SSO program. In his or her discretion, the Administrator may also impose financial penalties as authorized by 49 U.S.C. 5329(e), which may include:

(1) Withholding SSO grant funds from the State;

(2) Withholding up to five percent of the 49 U.S.C. 5307 Urbanized Area formula funds appropriated for use in the State or urbanized area in the State, until such time as the SSO program can be certified; or

(3) Requiring all rail fixed guideway public transportation systems governed by the SSO program to spend up to 100 percent of their Federal funding under 49 U.S.C. chapter 53 only for safety-related improvements on their systems, until such time as the SSO program can be certified.

(d) In making a determination whether to issue a certification or a denial of certification for a SSO program, the Administrator must evaluate whether the cognizant SSOA has

sufficient authority, resources, and expertise to oversee the number, size, and complexity of the rail fixed guideway public transportation systems that operate within the State, or will attain the necessary authority, resources, and expertise in accordance with a developmental plan and schedule set forth to a sufficient level of detail in the SSO program.

§ 674.21 Withholding of Federal financial assistance for noncompliance

(a) In making a decision to impose financial penalties as authorized by 49 U.S.C. 5329(e), and determining the nature and amount of the financial penalties, the Administrator shall consider the extent and circumstances of the noncompliance; the operating budgets of the SSOA and the rail fixed guideway public transportation systems that will be affected by the financial penalties; and such other matters as justice may require.

(b) If a State fails to establish a SSO program that has been approved by the Administrator within three years of the effective date of this part, FTA will be prohibited from obligating Federal financial assistance apportioned under 49 U.S.C. 5338 to any entity in the State that is otherwise eligible to receive that Federal financial assistance, in accordance with 49 U.S.C. 5329(e)(3).

§ 674.23 Confidentiality of information

(a) A State, an SSOA, or an RTA may withhold an investigation report prepared or adopted in accordance with these regulations from being admitted as evidence or used in a civil action for damages resulting from a matter mentioned in the report.

(b) This part does not require public availability of any data, information, or procedures pertaining to the security of a rail fixed guideway public transportation system or its passenger operations.

Subpart C—State Safety Oversight Agencies

§ 674.25 Role of the State safety oversight agency

(a) An SSOA must establish minimum standards for the safety of all rail fixed guideway public transportation systems within its oversight. These minimum standards must be consistent with the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training Program, the rules for Public Transportation Agency Safety Plans and all applicable Federal and State law.

(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 a 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(d).

(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.

(e) An SSOA may enter into an agreement with a contractor for assistance in overseeing accident investigations; performing independent accident investigations; and reviewing incidents and occurrences; and for expertise the SSOA does not have within its own organization.

(f) All personnel and contractors employed by an SSOA must comply with the requirements of the Public Transportation Safety Certification Training Program as applicable.

§ 674.27 State safety oversight program standards

(a) An SSOA must adopt and distribute a written SSO program standard, consistent with the National Public Transportation Safety Plan and the rules for Public Transportation Agency Safety Plans. This SSO program standard must identify the processes and procedures that govern the activities of the SSOA. Also, the SSO program standard must identify the processes and procedures an RTA must have in place to comply with the standard. At minimum, the program standard must meet the following requirements:

(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; the policies that govern the activities of the SSOA; the reporting requirements that govern both the SSOA and the rail fixed guideway public transportation systems; and the 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.

(2) *Program standard development.* The SSO program standard must explain the SSOA's process for developing, reviewing, adopting, and revising its minimum standards for safety, and distributing those standards to the rail fixed guideway public transportation systems.

(3) *Program policy and objectives.* The SSO program standard must set an explicit policy and objectives for safety in rail fixed guideway public transportation throughout the State.

(4) *Oversight of Rail Public Transportation Agency Safety Plans and Transit Agencies' internal safety reviews.* The SSO program standard must explain the role of the SSOA in overseeing an RTA's execution of its Public Transportation Agency Safety Plan and any related safety reviews of the RTA's fixed guideway public transportation system. The program standard must describe the process whereby the SSOA will receive and evaluate all material submitted under the signature of an RTA's accountable executive. Also, the program standard must establish a procedure whereby an RTA will notify the SSOA before the RTA conducts an internal review of any aspect of the safety of its rail fixed guideway public transportation system.

(5) *Triennial SSOA audits of Rail Public Transportation Agency Safety Plans.* The SSO program standard must explain the process the SSOA will follow and the criteria the SSOA will apply in conducting a complete audit of the RTA's compliance with its Public Transportation Agency Safety Plan at least once every three years, in accordance with 49 U.S.C. 5329. Alternatively, the SSOA and RTA may agree that

the SSOA will conduct its audit on an on-going basis over the three-year timeframe. The program standard must establish a procedure the SSOA and RTA will follow to manage findings and recommendations arising from the triennial audit.

(6) *Accident notification.* The SSO program standard must establish requirements for an RTA to notify the SSOA of accidents on the RTA's 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.

(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.

(8) *Corrective actions.* The program standard must explain the process and criteria by which the SSOA may order an RTA to develop and carry out a Corrective Action Plan (CAP), and a procedure for the SSOA to review and approve a CAP. Also, the program standard must explain the SSOA's policy and practice for tracking and verifying an RTA's compliance with the CAP, and managing any conflicts between the SSOA and RTA relating either to the development or execution of the CAP or the findings of an investigation.

(b) At least once a year an SSOA must submit its SSO program standard and any referenced program procedures to FTA, with an indication of any revisions made to the program standard since the last annual submittal. FTA will evaluate the SSOA's program standard as part of its continuous evaluation of the State Safety Oversight Program, and in preparing FTA's report to Congress on the certification status of that State Safety Oversight Program, in accordance with 49 U.S.C. 5329.

§ 674.29 Public Transportation Agency Safety Plans: general requirements

(a) In determining whether to approve a Public Transportation Agency Safety Plan for a rail fixed guideway public transportation system, an SSOA must evaluate whether the Public Transportation Agency Safety Plan is consistent with the regulations implementing such Plans; is consistent with the National Public Transportation Safety Plan; and is in compliance with the program standard set by the SSOA.

(b) In determining whether a Public Transportation Agency Safety Plan is compliant with 49 CFR part 673, an SSOA must determine, specifically, whether the Public Transportation Agency Safety Plan is approved by the RTA's board of directors or equivalent entity; sets forth a sufficiently explicit process for safety risk management, with adequate means of risk mitigation for the rail fixed guideway public transportation system; includes a process and timeline for annually reviewing and updating the safety plan; includes a comprehensive staff training program for the operations personnel directly responsible for the safety of the RTA; identifies an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the RTA; includes adequate methods to support the execution of the Public Transportation Agency Safety Plan by all employees, agents, and contractors for the rail fixed guideway public

transportation system; and sufficiently addresses other requirements under the regulations at 49 CFR part 673.

(c) In an instance in which an SSOA does not approve a Public Transportation Agency Safety Plan, the SSOA must provide a written explanation, and allow the RTA an opportunity to modify and resubmit its Public Transportation Agency Safety Plan for the SSOA's approval.

§ 674.31 Triennial audits: general requirements

At least once every three years, an SSOA must conduct a complete audit of an RTA's compliance with its Public Transportation Agency Safety Plan. Alternatively, an SSOA may conduct the audit on an on-going basis over the three-year timeframe. At the conclusion of the three-year audit cycle, the SSOA shall issue a report with findings and recommendations arising from the audit, which must include, at minimum, an analysis of the effectiveness of the Public Transportation Agency Safety Plan, recommendations for improvements, and a corrective action plan, if necessary or appropriate. The RTA must be given an opportunity to comment on the findings and recommendations.

§ 674.33 Notifications of accidents

(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 as required in § 674.39(b), and in appendix A.

(b) *FRA notification.* In any instance in which an RTA must notify the FRA of an accident as defined by 49 CFR 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.

§ 674.35 Investigations

(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.

(b) Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTA's 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 SSOA's 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.

(c) All personnel and contractors that conduct investigations on behalf of an SSOA must be trained to perform their functions in accordance with the Public Transportation Safety Certification Training Program.

(d) The Administrator may conduct an independent investigation of any accident or an independent review of an SSOA's or an RTA's findings of causation of an accident.

§ 674.37 Corrective action plans

(a) In any instance in which an RTA must develop and carry out a CAP, the SSOA must review and approve the CAP before the RTA carries out the plan; however, an exception may be made for immediate or emergency corrective actions that must be taken to ensure immediate safety, provided that the SSOA has been given timely notification, and the SSOA provides subsequent review and approval. A CAP must describe, specifically, the actions the RTA will take to minimize, control, correct, or eliminate the risks and hazards identified by the CAP, the schedule for taking those actions, and the individuals responsible for taking those actions. The RTA must periodically report to the SSOA on its progress in carrying out the CAP. The SSOA may monitor the RTA's progress in carrying out the CAP through unannounced, on-site inspections, or any other means the SSOA deems necessary or appropriate.

(b) In any instance in which a safety event on the RTA's rail fixed guideway public transportation system is the subject of an investigation by the NTSB, the SSOA must evaluate whether the findings or recommendations by the NTSB require a CAP by the RTA, and if so, the SSOA must order the RTA to develop and carry out a CAP.

§ 674.39 State Safety Oversight Agency annual reporting to FTA

(a) On or before March 15 of each year, an SSOA must submit the following material to FTA:

(1) The SSO program standard adopted in accordance with § 674.27, with an indication of any changes to the SSO program standard during the preceding twelve months;

(2) Evidence that each of its employees and contractors has completed the requirements of the Public Transportation Safety Certification Training Program, or, if in progress, the anticipated completion date of the training;

(3) A publicly available report that summarizes its oversight activities for the preceding twelve months, describes the causal factors of accidents identified through investigation, and identifies the status of corrective actions, changes to Public Transportation Agency Safety Plans, and the level of effort by the SSOA in carrying out its oversight activities;

(4) A summary of the triennial audits completed during the preceding twelve months, and the RTAs' progress in carrying out CAPs arising from triennial audits conducted in accordance with § 674.31;

(5) Evidence that the SSOA has reviewed and approved any changes to the Public Transportation Agency Safety Plans during the preceding twelve months; and

(6) A certification that the SSOA is in compliance with the requirements of this part.

(b) These materials must be submitted electronically through a reporting system specified by FTA.

§ 674.41 Conflicts of interest

(a) An SSOA must be financially and legally independent from any rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).

(b) An SSOA may not employ any individual who provides services to a rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).

(c) A contractor may not provide services to both an SSOA and a rail fixed guideway public transportation system under the oversight of that SSOA, unless the Administrator has issued a waiver of this prohibition.

Appendix to Part 674—Notification and Reporting of Accidents, Incidents, and Occurrences

EVENT/ THRESHOLD	HUMAN FACTORS	PROPERTY DAMAGE	TYPES OF EVENTS (EXAMPLES)	ACTIONS
Accident: RTA to Notify SSOA and FTA within two hours	- Fatality (occurring at the scene or within 30 days following the accident) - One or more persons suffering serious injury	- Property damage resulting from a collision involving a rail transit vehicle; or any derailment of a rail transit vehicle	- A collision between a rail transit vehicle and another rail transit vehicle - A collision at a grade crossing resulting in serious injury or fatality - A collision with a person resulting in serious injury or fatality - A collision with an object resulting in serious injury or fatality - A runaway train - Evacuation due to life safety reasons - A derailment (mainline or yard) - Fires resulting in a serious injury or fatality	- RTA to notify SSOA and FTA within 2 hours; Investigation required - RTA to report to FTA within 30 days via NTD - RTA to record for SMS Analysis
Incident: RTA to Report to FTA (NTD) within 30 days	- A personal injury that is not a serious injury - One or more injuries requiring medical transportation away from the event	- Non-collision-related damage to equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency	- Evacuation of a train into the right-of-way or onto adjacent track; or customer self-evacuation - Certain low-speed collisions involving a rail transit vehicle that result in a non-serious injury or property damage - Damage to catenary or third-rail equipment that disrupts transit operations. - Fires that result in a non-serious injury or property damage - A train stopping due to an obstruction in the tracks/"hard stops" - Most hazardous material spills	- RTA to report to FTA within 30 days via the NTD - RTA to record for SMS Analysis
Occurrence: RTA to record data and make available for SSO and/or FTA review	- No personal injury	- Non-collision-related damage to equipment, rolling stock, or infrastructure that does not disrupt the operations of a transit agency	- Close Calls/Near Misses - Safety rule violations - Violations of safety policies - Damage to catenary or third-rail equipment that do not disrupt operations - Vandalism or theft	- RTA will collect, track and analyze data on Occurrences to reduce the likelihood of recurrence and inform the practice of SMS

Section 5329 (as updated by FAST Act)

§ 5329. Public transportation safety program

(a) DEFINITION.—In this section, the term 'recipient' means a State or local governmental authority, or any other operator of a public transportation system, that receives financial assistance under this chapter.

(b) NATIONAL PUBLIC TRANSPORTATION SAFETY PLAN.—

(1) IN GENERAL.—The Secretary shall create and implement a national public transportation safety plan to improve the safety of all public transportation systems that receive funding under this chapter.

(2) CONTENTS OF PLAN.—The national public transportation safety plan under paragraph (1) shall include—

(A) safety performance criteria for all modes of public transportation;

(B) the definition of the term 'state of good repair' established under section 5326(b);

(C) minimum safety performance standards for public transportation vehicles used in revenue operations that—

(i) do not apply to rolling stock otherwise regulated by the Secretary or any other Federal agency; and

(ii) to the extent practicable, take into consideration—

(I) relevant recommendations of the National Transportation Safety Board; and

(II) recommendations of, and best practices standards developed by, the public transportation industry;

(D) minimum safety standards to ensure the safe operation of public transportation systems that –

(i) are not related to performance standards for public transportation vehicles developed under subparagraph (C);

(ii) to the extent practicable, take into consideration –

(I) relevant recommendations of the National Transportation Safety Board;

(II) best practices standards developed by the public transportation industry;

(III) any minimum safety standards or performance criteria being implemented across the public transportation industry;

(IV) relevant recommendations from the report under section 3020 of the Federal Public Transportation Act of 2015; and

(V) any additional information that the Secretary determines necessary and appropriate

(E) a public transportation safety certification training program, as described in subsection (c).

(c) PUBLIC TRANSPORTATION SAFETY CERTIFICATION TRAINING PROGRAM.—

(1) IN GENERAL.—The Secretary shall establish a public transportation safety certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation

systems and employees of public transportation agencies directly responsible for safety oversight.

(2) INTERIM PROVISIONS.—Not later than 90 days after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall establish interim provisions for the certification and training of the personnel described in paragraph (1), which shall be in effect until the effective date of the final rule issued by the Secretary to implement this subsection.

(d) PUBLIC TRANSPORTATION AGENCY SAFETY PLAN.—

(1) IN GENERAL.—Effective 1 year after the effective date of a final rule issued by the Secretary to carry out this subsection, each recipient or State, as described in paragraph (3), shall certify that the recipient or State has established a comprehensive agency safety plan that includes, at a minimum—

(A) a requirement that the board of directors (or equivalent entity) of the recipient approve the agency safety plan and any updates to the agency safety plan;

(B) methods for identifying and evaluating safety risks throughout all elements of the public transportation system of the recipient;

(C) strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions;

(D) a process and timeline for conducting an annual review and update of the safety plan of the recipient;

(E) performance targets based on the safety performance criteria and state of good repair standards established under subparagraphs (A) and (B), respectively, of subsection (b)(2);

(F) assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient; and

(G) a comprehensive staff training program for the operations personnel and personnel directly responsible for safety of the recipient that includes—

(i) the completion of a safety training program; and

(ii) continuing safety education and training.

(2) INTERIM AGENCY SAFETY PLAN.—A system safety plan developed pursuant to part 659 of title 49, Code of Federal Regulations, as in effect on the date of enactment of the Federal Public Transportation Act of 2012, shall remain in effect until such time as this subsection takes effect.

(3) PUBLIC TRANSPORTATION AGENCY SAFETY PLAN DRAFTING AND CERTIFICATION.—

(A) SECTION 5311.—For a recipient receiving assistance under section 5311, a State safety plan may be drafted and certified by the recipient or a State.

(B) SECTION 5307.—Not later than 120 days after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall issue a rule designating recipients of assistance under section 5307 that are small public transportation providers or systems that may have their State safety plans drafted or certified by a State.

(e) STATE SAFETY OVERSIGHT PROGRAM.—

(1) APPLICABILITY.—This subsection applies only to eligible States.

(2) DEFINITION.—In this subsection, the term 'eligible State' means a State that has—
(A) a rail fixed guideway public transportation system within the jurisdiction of the State that is not subject to regulation by the Federal Railroad Administration; or
(B) a rail fixed guideway public transportation system in the engineering or construction phase of development within the jurisdiction of the State that will not be subject to regulation by the Federal Railroad Administration.

(3) IN GENERAL.—In order to obligate funds apportioned under section 5338 to carry out this chapter, effective 3 years after the date on which a final rule under this subsection becomes effective, an eligible State shall have in effect a State safety oversight program approved by the Secretary under which the State—
(A) assumes responsibility for overseeing rail fixed guideway public transportation safety;
(B) adopts and enforces Federal and relevant State laws on rail fixed guideway public transportation safety;
(C) establishes a State safety oversight agency;
(D) determines, in consultation with the Secretary, an appropriate staffing level for the State safety oversight agency that is commensurate with the number, size, and complexity of the rail fixed guideway public transportation systems in the eligible State;
(E) requires that employees and other designated personnel of the eligible State safety oversight agency who are responsible for rail fixed guideway public transportation safety oversight are qualified to perform such functions through appropriate training, including successful completion of the public transportation safety certification training program established under subsection (c); and
(F) prohibits any public transportation agency from providing funds to the State safety oversight agency or an entity designated by the eligible State as the State safety oversight agency under paragraph (4).

(4) STATE SAFETY OVERSIGHT AGENCY.—
(A) IN GENERAL.—Each State safety oversight program shall establish a State safety oversight agency that—
(i) is financially and legally independent from any public transportation entity that the State safety oversight agency oversees;
(ii) does not directly provide public transportation services in an area with a rail fixed guideway public transportation system subject to the requirements of this section;
(iii) does not employ any individual who is also responsible for the administration of rail fixed guideway public transportation programs subject to the requirements of this section;
(iv) has the authority to review, approve, oversee, and enforce the implementation by the rail fixed guideway public transportation agency of the public transportation agency safety plan required under subsection (d);
(v) has investigative and enforcement authority with respect to the safety of rail fixed guideway public transportation systems of the eligible State;

(vi) audits, at least once triennially, the compliance of the rail fixed guideway public transportation systems in the eligible State subject to this subsection with the public transportation agency safety plan required under subsection (d); and

(vii) provides, at least once annually, a status report on the safety of the rail fixed guideway public transportation systems the State safety oversight agency oversees to—

(I) the Federal Transit Administration;

(II) Governor of the eligible State; and

(III) the board of directors, or equivalent entity, of any rail fixed guideway public transportation system that the State safety oversight agency oversees.

(B) WAIVER.—At the request of an eligible State, the Secretary may waive clauses (i) and (iii) of subparagraph (A) for eligible States with 1 or more rail fixed guideway systems in revenue operations, design, or construction, that—

(i) have fewer than 1,000,000 combined actual and projected rail fixed guideway revenue miles per year; or

(ii) provide fewer than 10,000,000 combined actual and projected unlinked passenger trips per year.

(5) PROGRAMS FOR MULTI-STATE RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEMS.—An eligible State that has within the jurisdiction of the eligible State a rail fixed guideway public transportation system that operates in more than 1 eligible State shall—

(A) jointly with all other eligible States in which the rail fixed guideway public transportation system operates, ensure uniform safety standards and enforcement procedures that shall be in compliance with this section, and establish and implement a State safety oversight program approved by the Secretary; or

(B) jointly with all other eligible States in which the rail fixed guideway public transportation system operates, designate an entity having characteristics consistent with the characteristics described in paragraph (3) to carry out the State safety oversight program approved by the Secretary.

(6) GRANTS.—

(A) IN GENERAL.—The Secretary shall make grants to eligible States to develop or carry out State safety oversight programs under this subsection. Grant funds may be used for program operational and administrative expenses, including employee training activities.

(B) APPORTIONMENT.—

(i) FORMULA.—The amount made available for State safety oversight under section 5336(h) shall be apportioned among eligible States under a formula to be established by the Secretary. Such formula shall take into account fixed guideway vehicle revenue miles, fixed guideway route miles, and fixed guideway vehicle passenger miles attributable to all rail fixed guideway systems not subject to regulation by the Federal Railroad Administration within each eligible State.

(ii) ADMINISTRATIVE REQUIREMENTS.—Grant funds apportioned to States under this paragraph shall be subject to uniform administrative requirements for grants and cooperative agreements to State and local governments under part 18 of title 49, Code of Federal Regulations, and shall be subject to the requirements of this chapter as the Secretary determines appropriate.

(C) GOVERNMENT SHARE.—

(i) IN GENERAL.—The Government share of the reasonable cost of a State safety oversight program developed or carried out using a grant under this paragraph shall be 80 percent.

(ii) IN-KIND CONTRIBUTIONS.—Any calculation of the non-Government share of a State safety oversight program shall include in-kind contributions by an eligible State.

(iii) NON-GOVERNMENT SHARE.—The non-Government share of the cost of a State safety oversight program developed or carried out using a grant under this paragraph may not be met by—

(I) any Federal funds;

(II) any funds received from a public transportation agency; or

(III) any revenues earned by a public transportation agency.

(iv) SAFETY TRAINING PROGRAM.—Recipients of funds made available to carry out sections 5307 and 5311 may use not more than 0.5 percent of their formula funds to pay not more than 80 percent of the cost of participation in the public transportation safety certification training program established under subsection (c), by an employee of a State safety oversight agency or a recipient who is directly responsible for safety oversight.

(7) CERTIFICATION PROCESS.—

(A) IN GENERAL.—Not later than 1 year after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall determine whether or not each State safety oversight program meets the requirements of this subsection and the State safety oversight program is adequate to promote the purposes of this section.

(B) ISSUANCE OF CERTIFICATIONS AND DENIALS.—The Secretary shall issue a certification to each eligible State that the Secretary determines under subparagraph (A) adequately meets the requirements of this subsection, and shall issue a denial of certification to each eligible State that the Secretary determines under subparagraph (A) does not adequately meet the requirements of this subsection.

(C) DISAPPROVAL.—If the Secretary determines that a State safety oversight program does not meet the requirements of this subsection and denies certification, the Secretary shall transmit to the eligible State a written explanation and allow the eligible State to modify and resubmit the State safety oversight program for approval.

(D) FAILURE TO CORRECT.—If the Secretary determines that a modification by an eligible State of the State safety oversight program is not sufficient to certify the program, the Secretary—

(i) shall notify the Governor of the eligible State of such denial of certification and failure to adequately modify the program, and shall request that the Governor take all possible actions to correct deficiencies in the program to ensure the certification of the program; and

(ii) may—

(I) withhold funds available under paragraph (6) in an amount determined by the Secretary;

(II) withhold not more than 5 percent of the amount required to be appropriated for use in a State or urbanized area in the State under section 5307 of this title, until the State safety oversight program has been certified; or

(III) require fixed guideway public transportation systems under such State safety oversight program to provide up to 100 percent of Federal assistance made available under this chapter only for safety-related improvements on such systems, until the State safety oversight program has been certified.

(8) FEDERAL SAFETY MANAGEMENT –

(A) In General – If the Secretary determines that a State safety oversight program is not being carried out in accordance with this section, has become inadequate to ensure the enforcement of Federal safety regulation, or is incapable of providing adequate safety oversight consistent with the prevention of substantial risk of death, or personal injury, the Secretary shall administer the State safety oversight program until the eligible State develops a State safety oversight program certified by the Secretary in accordance with this subsection.

(B) Temporary Federal Oversight – In making a determination under subparagraph (A), the Secretary shall –

(i) Transmit to the eligible State and affected recipient or recipients, a written explanation of the determination of subsequent finding, including any intention to withhold funding under this section, the amount of funds proposed to be withheld, and if applicable, a formal notices of a withdrawal of State safety oversight program approval; and

(ii) Require the State to submit a State safety oversight program or modification for certification by the Secretary that meets the requirements of this subsection

(C) Failure to Correct – If the Secretary determines in accordance with subparagraph (A), that a State safety oversight program or modification required pursuant to subparagraph (B)(ii), submitted by a State is not sufficient, the Secretary may –

(i) Withhold funds available under paragraph (6) in an amount determined by the Secretary;

(ii) Beginning 1 year after the date of the determination, withhold not more than 5 percent of the amount required to be appropriated for use in a State or an urbanized area in the State under section 5307, until the State safety oversight program or modification has been certified; and

(iii) Use any other authorities authorized under this chapter considered necessary and appropriate.

(D) Administrative and Oversight Activities – To carry out administrative and oversight activities authorized by this paragraph, the Secretary may use grant funds apportioned to an eligible State, under paragraph (6), to develop or carry out a State safety oversight program.

(9) EVALUATION OF PROGRAM AND ANNUAL REPORT.—The Secretary shall continually evaluate the implementation of a State safety oversight program by a State safety oversight agency, and shall submit on or before July 1 of each year to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report on—

(A) the amount of funds apportioned to each eligible State; and

(B) the certification status of each State safety oversight program, including what steps a State program that has been denied certification must take in order to be certified.

(10) FEDERAL OVERSIGHT.—The Secretary shall—

(A) oversee the implementation of each State safety oversight program under this subsection;

(B) audit the operations of each State safety oversight agency at least once triennially; and

(C) issue rules to carry out this subsection.

(f) AUTHORITY OF SECRETARY.—In carrying out this section, the Secretary may—

(1) conduct inspections, investigations, audits, examinations, and testing of the equipment, facilities, rolling stock, and operations of the public transportation system of a recipient;

(2) make reports and issue directives with respect to the safety of the public transportation system of a recipient or the public transportation industry generally;

(3) in conjunction with an accident investigation or an investigation into a pattern or practice of conduct that negatively affects public safety, issue a subpoena to, and take the deposition of, any employee of a recipient or a State safety oversight agency, if—

(A) before the issuance of the subpoena, the Secretary requests a determination by the Attorney General of the United States as to whether the subpoena will interfere with an ongoing criminal investigation; and

(B) the Attorney General—

(i) determines that the subpoena will not interfere with an ongoing criminal investigation; or

(ii) fails to make a determination under clause (i) before the date that is 30 days after the date on which the Secretary makes a request under subparagraph (A);

(4) require the production of documents by, and prescribe recordkeeping and reporting requirements for, a recipient or a State safety oversight agency;

(5) investigate public transportation accidents and incidents and provide guidance to recipients regarding prevention of accidents and incidents;

(6) at reasonable times and in a reasonable manner, enter and inspect equipment, facilities, rolling stock, operations, and relevant records of the public transportation system of a recipient; and

(7) issue rules to carry out this section.

(g) ENFORCEMENT ACTIONS.—

(1) TYPES OF ENFORCEMENT ACTIONS.—The Secretary may take enforcement action against a recipient, that does not comply with Federal law with respect to the safety of the public transportation system, including—

(A) issuing directives;

(B) requiring more frequent oversight of the recipient by a State safety oversight agency or the Secretary;

(C) imposing more frequent reporting requirements;

(D) requiring that any Federal financial assistance provided under this chapter be spent on correcting safety deficiencies identified by the Secretary or the State safety oversight agency before such funds are spent on other projects; and

(E) withholding not more than 25 percent of financial assistance under section 5307.

(2) USE OR WITHHOLDING OF FUNDS.—

(A) IN GENERAL.—The Secretary may require the use of funds or withhold funds in accordance with paragraph (1)(D) or (1)(E) only if the Secretary finds that a recipient is engaged in a pattern or practice of serious safety violations or has otherwise refused to comply with Federal law relating to the safety of the public transportation system.

(B) NOTICE.—Before withholding funds from a recipient, the Secretary shall provide to the recipient—

(i) written notice of a violation and the amount proposed to be withheld; and

(ii) a reasonable period of time within which the recipient may address the violation or propose and initiate an alternative means of compliance that the Secretary determines is acceptable.

(h) RESTRICTIONS AND PROHIBITIONS—

(1) Restrictions and Prohibitions – The Secretary shall issue restrictions and prohibitions by whatever means are determined necessary and appropriate, without regard to section 5334(c), if, through testing, inspection, investigation, audit, or research carried out under this chapter, the Secretary determines that an unsafe condition or practice, or a combination of unsafe conditions and practices, exist such that there is a substantial risk of death or personal injury.

(2) Notice – The notice of restriction or prohibition shall describe the condition or practice, the subsequent risk and the standards and procedures required to address the restriction or prohibition.

(3) Continued Authority – Nothing in this subsection shall be construed as limiting the Secretary's authority to maintain a restriction or prohibition for as long as is necessary to ensure that the risk has been substantially addressed..

(i) CONSULTATION BY THE SECRETARY OF HOMELAND SECURITY.—The Secretary of Homeland Security shall consult with the Secretary of Transportation before the Secretary of Homeland Security issues a rule or order that the Secretary of Transportation determines affects the safety of public transportation design, construction, or operations.

(j) ACTIONS UNDER STATE LAW.—

(1) RULE OF CONSTRUCTION.—Nothing in this section shall be construed to preempt an action under State law seeking damages for personal injury, death, or property damage alleging that a party has failed to comply with—
   (A) a Federal standard of care established by a regulation or order issued by the Secretary under this section; or
   (B) its own program, rule, or standard that it created pursuant to a rule or order issued by the Secretary.
(2) EFFECTIVE DATE.—This subsection shall apply to any cause of action under State law arising from an event or activity occurring on or after the date of enactment of the Federal Public Transportation Act of 2012.
(3) JURISDICTION.—Nothing in this section shall be construed to create a cause of action under Federal law on behalf of an injured party or confer Federal question jurisdiction for a State law cause of action.

(k) NATIONAL PUBLIC TRANSPORTATION SAFETY REPORT.—Not later than 3 years after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall submit to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report that—
(1) analyzes public transportation safety trends among the States and documents the most effective safety programs implemented using grants under this section; and
(2) describes the effect on public transportation safety of activities carried out using grants under this section.

49 CFR Part 659

"Rail Fixed Guideway Systems; State Safety Oversight; Final Rule" April 29, 2005

Subpart A – General Provisions

§ 659.1 Purpose

This part implements 49 U.S.C. 5330 by requiring a state to oversee the safety and security of rail fixed guideway systems through a designated oversight agency.

§ 659.3 Scope

This part applies to a state that has within its boundaries a rail fixed guideway system, as defined in this part.

§ 659.5 Definitions

- **Contractor** means an entity that performs tasks required by this part on behalf of the oversight or rail transit agency. The rail transit agency may not be a contractor for the oversight agency.
- **Corrective action plan** means a plan developed by the rail transit agency that describes the actions the rail transit agency will take to minimize, control, correct, or eliminate hazards, and the schedule for implementing for those actions.
- **FRA** means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.
- **FTA** means the Federal Transit Administration, an agency within the U.S. Department of Transportation.
- **Hazard** means any real or potential condition (as defined in the rail transit agency's hazard management process) that can cause injury, illness, or death; damage to or loss of a system, equipment or property; or damage to the environment.
- **Individual** means a passenger; employee; contractor; other rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property.
- **Investigation** means the process used to determine the causal and contributing factors of an accident or hazard, so that actions can be identified to prevent recurrence.
- **New Starts Project** means any rail fixed guideway system funded under FTA's 49 U.S.C. 5309 discretionary construction program.
- **Oversight Agency** means the entity, other than the rail transit agency, designated by the state or several states to implement this part.
- **Passenger** means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.
- **Passenger operations** means the period of time when any aspect of rail transit agency operations are initiated with the intent to carry passengers.

- **Program standard** means a written document developed and adopted by the oversight agency, that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.
- **Rail fixed guideway system** means, as determined by FTA, any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway that:
  - (1) Is not regulated by the Federal Railroad Administration; and
  - (2) Is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336); or
  - (3) Has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).
- **Rail transit agency** means an entity that operates a rail fixed guideway system.
- **Rail transit-controlled property** means property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.
- **Rail transit vehicle** means the rail transit agency's rolling stock, including, but not limited to passenger and maintenance vehicles.
- **Safety** means freedom from harm resulting from unintentional acts or circumstances.
- **Security** means freedom from harm resulting from intentional acts or circumstances.
- **State** means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.
- **System safety program plan** means a document developed by the rail transit agency, describing its safety policies, objectives, responsibilities, and procedures.
- **System security plan** means a document developed by the rail transit agency describing its security policies, objectives, responsibilities, and procedures.

Subpart B – Role of the State

§ 659.7 Withholding of funds for noncompliance

(a) The Administrator of the FTA may withhold up to five percent of the amount required to be distributed to any state or affected urbanized area in such state under FTA's formula program for urbanized areas, if:

(1) The state in the previous fiscal year has not met the requirements of this part; and

(2) The Administrator determines that the state is not making adequate efforts to comply with this part.

(b) The Administrator may agree to restore withheld formula funds, if compliance is achieved within two years (See 49 U.S.C. 5330).

§ 659.9 Designation of oversight agency

(a) *General requirement*. Each state with an existing or anticipated rail fixed guideway system regulated by this part shall designate an oversight agency consistent with the provisions of this section. For a rail fixed guideway system that will operate in only one state, the state must designate an agency of the state, other than the rail transit agency, as the oversight agency to implement the requirements in this part. The state's designation or

re-designation of its oversight agency and submission of required information as specified in this section, are subject to review by FTA.

(b) *Exception.* States which have designated oversight agencies for purposes of this part before May 31, 2005 are not required to re-designate to FTA.

(c) *Timing*. The state designation of the oversight agency shall:

(1) Coincide with the execution of any grant agreement for a New Starts project between FTA and a rail transit agency within the state's jurisdiction; or

(2) Occur before the application by a rail transit agency for funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).

(d) *Notification to FTA*. Within (60) days of designation of the oversight agency, the state must submit to *FTA* the following:

(1) The name of the oversight agency designated to implement requirements in this part;

(2) Documentation of the oversight agency's authority to provide state oversight;

(3) Contact information for the representative identified by the designated oversight agency with responsibility for oversight activities;

(4) A description of the organizational and financial relationship between the designated oversight agency and the rail transit agency; and

(5) A schedule for the designated agency's development of its State Safety Oversight Program, including the projected date of its initial submission, as required in §659.39(a).

(e) *Multiple states.* In cases of a rail fixed guideway system that will operate in more than one state, each *affected* state must designate an agency of the state, other than the rail transit agency, as the oversight agency to implement the requirements in this part. To fulfill this requirement, the affected states:

(1) May agree to designate one agency of one state, or an agency representative of all states, to implement the requirements in this part; and

(2) In the event multiple states share oversight responsibility for a rail fixed guideway system, the states must ensure that the rail fixed guideway system is subject to a single program standard, adopted by all affected states.

(f) *Change of designation*. Should a state change its designated oversight agency, it shall submit the information *required* under paragraph (d) of this section to FTA within (30) days of its change. In addition, the new oversight agency must submit a new initial submission, consistent with § 659.39(b), within (30) days of its designation.

§ 659.11 Confidentiality of investigation reports and security plans

(a) A state may withhold an investigation report that may have been prepared or adopted by the oversight agency from being admitted as evidence or used in a civil action for damages resulting from a matter mentioned in the report.

(b) This part does not require public availability of the rail transit agency's security plan and any referenced procedures.

Subpart C – Role of the State Oversight Agency

§ 659.13 Overview

The state oversight agency is responsible for establishing standards for rail safety and security practices and procedures to be used by rail transit agencies within its purview. In addition, the state oversight agency must oversee the execution of these practices and procedures, to ensure compliance with the provisions of this part. This subpart identifies and describes the various requirements for the state oversight agency.

§ 659.15 System safety program standard

(a) *General requirement.* Each state oversight agency shall develop and distribute a program standard. The program standard is a compilation of processes and procedures that governs the conduct of the oversight program at the state oversight agency level, and provides guidance to the regulated rail transit properties concerning processes and procedures they must have in place to be in compliance with the state safety oversight program. The program standard and any referenced program procedures must be submitted to FTA as part of the initial submission. Subsequent revisions and updates must be submitted to FTA as part of the oversight agency's annual submission.

(b) *Contents.* Each oversight agency shall develop a written program standard that meets the requirements specified in this part and includes, at a minimum, the areas identified in this section.

(1) *Program management section*. This section shall include an explanation of the oversight agency's authority, policies, and roles and responsibilities for providing safety and security oversight of the rail transit agencies within its jurisdiction. This section shall provide an overview of planned activities to ensure on-going communication with each affected rail transit agency relating to safety and security information, as well as FTA reporting requirements, including initial, annual and periodic submissions.

(2) *Program standard development section*. This section shall include a description of the oversight agency's process for the development, review, and adoption of the program standard, the modification and/or update of the program standard, and the process by which the program standard and any subsequent revisions are distributed to each affected rail transit agency.

(3) *Oversight of rail transit agency internal safety and security reviews*. This section shall specify the role of the oversight agency in overseeing the rail transit agency internal safety and security review process. This includes a description of the process used by the oversight agency to receive rail transit agency checklists and procedures and approve the rail transit agency's annual reports on findings, which must be submitted under the signature of the rail transit agency's top management.

(4) *Oversight agency safety and security review section*. This section shall lay out the process and criteria to be used at least every three years in conducting a complete review of each affected rail transit agency's implementation of its system safety program plan and system security plan. This section includes the process to be used by the affected rail transit agency and the oversight agency to manage findings and

recommendations from this review. This also includes procedures for notifying the oversight agency before the rail transit agency conducts an internal review.

(5) *Accident notification section*. This section shall include the specific requirements for the rail transit agency to notify the oversight agency of accidents. This section shall also include required timeframes, methods of notification, and the information to be submitted by the rail transit agency. Additional detail on this portion is included in §659.33 of this part.

(6) *Investigations section*. This section contains the oversight agency identification of the thresholds for incidents that require an oversight agency investigation. The roles and responsibilities for conducting investigations shall include: coordination with the rail transit agency investigation process, the role of the oversight agency in supporting investigations and findings conducted by the NTSB, review and concurrence of investigation report findings, and procedures for protecting the confidentiality of investigation reports.

(7) *Corrective actions section*. This section shall specify oversight agency criteria for the development of corrective action plan(s) and the process for the review and approval of a corrective action plan developed by the rail transit agency. This section shall also identify the oversight agency's policies for the verification and tracking of corrective action plan implementation, and its process for managing conflicts with the rail transit agency relating to investigation findings and corrective action plan development.

(8) *System safety program plan section*. This section shall specify the minimum requirements to be contained in the rail transit agency's system safety program plan. The contents of the system safety plan are discussed in more detail in § 659.19 of this part. This section shall also specify information to be included in the affected rail transit agency's system safety program plan relating to the hazard management process, including requirements for ongoing communication and coordination relating to the identification, categorization, resolution, and reporting of hazards to the oversight agency. More details on the hazard management process are contained in § 659.31 of this part. This section shall also describe the process and timeframe through which the oversight agency must receive, review, and approve the rail transit agency system safety program plan.

(9) *System security plan section*. This section shall specify the minimum requirements to be included in the rail transit agency's system security plan. More details about the system security plan are contained in §§ 659.21 through 659.23 of this part. This section shall also describe the process by which the oversight agency will review and approve the rail transit agency system security program plan. This section also shall identify how the state will prevent the system security plan from public disclosure.

§ 659.17 System safety program plan: general requirements

(a) The oversight agency shall require the rail transit agency to develop and implement a written system safety program plan that complies with requirements in this part and the oversight agency's program standard.

(b) The oversight agency shall review and approve the rail transit agency system safety program plan.

(c) After approval, the oversight agency shall issue a formal letter of approval to the rail transit agency, including the checklist used to conduct the review.

§ 659.19 System safety program plan: contents

The system safety plan shall include, at a minimum:

(a) A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the system safety program plan.
(b) A clear definition of the goals and objectives for the safety program and stated management responsibilities to ensure they are achieved.
(c) An overview of the management structure of the rail transit agency, including:
  (1) An organization chart;
  (2) A description of how the safety function is integrated into the rest of the rail transit organization; and
  (3) Clear identification of the lines of authority used by the rail transit agency to manage safety issues.
(d) The process used to control changes to the system safety program plan, including:
  (1) Specifying an annual assessment of whether the system safety program plan should be updated; and
  (2) Required coordination with the oversight agency, including timeframes for submission, revision, and approval.
(e) A description of the specific activities required to implement the system safety program, including:
  (1) Tasks to be performed by the rail transit safety function, by position and management accountability, specified in matrices and/or narrative format; and
  (2) Safety-related tasks to be performed by other rail transit departments, by position and management accountability, specified in matrices and/or narrative format.
(f) A description of the process used by the rail transit agency to implement its hazard management program, including activities for:
  (1) Hazard identification;
  (2) Hazard investigation, evaluation and analysis;
  (3) Hazard control and elimination;
  (4) Hazard tracking; and
  (5) Requirements for on-going reporting to the oversight agency relating to hazard management activities and status.
(g) A description of the process used by the rail transit agency to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification but which may have safety impacts.
(h) A description of the safety certification process required by the rail transit agency to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment.
(i) A description of the process used to collect, maintain, analyze, and distribute safety data, to ensure that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program.

(j) A description of the process used by the rail transit agency to perform accident notification, investigation and reporting, including:
   (1) Notification thresholds for internal and external organizations;
   (2) Accident investigation process and references to procedures;
   (3) The process used to develop, implement, and track corrective actions that address investigation findings;
   (4) Reporting to internal and external organizations; and
   (5) Coordination with the oversight agency.

(k) A description of the process used by the rail transit agency to develop an approved, coordinated schedule for all emergency management program activities, which include:
   (1) Meetings with external agencies;
   (2) Emergency planning responsibilities and requirements;
   (3) Process used to evaluate emergency preparedness, such as annual emergency field exercises;
   (4) After action reports and implementation of findings;
   (5) Revision and distribution of emergency response procedures;
   (6) Familiarization training for public safety organizations; and
   (7) Employee training.

(l) A description of the process used by the rail transit agency to ensure that planned and scheduled internal safety reviews are performed to evaluate compliance with the system safety program plan, including:
   (1) Identification of departments and functions subject to review;
   (2) Responsibility for scheduling reviews;
   (3) Process for conducting reviews, including the development of checklists and procedures and the issuing of findings;
   (4) Review of reporting requirements;
   (5) Tracking the status of implemented recommendations; and
   (6) Coordination with the oversight agency.

(m) A description of the process used by the rail transit agency to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including:
   (1) Identification of operating and maintenance rules and procedures subject to review;
   (2) Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing;
   (3) Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
   (4) Process for documenting results and incorporating them into the hazard management program.

(n) A description of the process used for facilities and equipment safety inspections, including:
   (1) Identification of the facilities and equipment subject to regular safety-related inspection and testing;
   (2) Techniques used to conduct inspections and testing;

(3) Inspection schedules and procedures; and
(4) Description of how results are entered into the hazard management process.

(o) A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process.

(p) A description of the training and certification program for employees and contractors, including:
(1) Categories of safety-related work requiring training and certification;
(2) A description of the training and certification program for employees and contractors in safety-related positions;
(3) Process used to maintain and access employee and contractor training records; and
(4) Process used to assess compliance with training and certification requirements.

(q) A description of the configuration management control process, including:
(1) The authority to make configuration changes;
(2) Process for making changes; and
(3) Assurances necessary for formally notifying all involved departments.

(r) A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements, including:
(1) Safety requirements that employees and contractors must follow when working on, or in close proximity to, rail transit agency property; and
(2) Processes for ensuring the employees and contractors know and follow the requirements.

(s) A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements.

(t) A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.

(u) A description of the measures, controls, and assurances in place to ensure that safety principles, requirements and representatives are included in the rail transit agency's procurement process.

§ 659.21 System security plan: general requirements

(a) The oversight agency shall require the rail transit agency to implement a system security plan that, at a minimum, complies with requirements in this part and the oversight agency's program standard. The system security plan must be developed and maintained as a separate document and may not be part of the rail transit agency's system safety program plan.

(b) The oversight agency may prohibit a rail transit agency from publicly disclosing the system security plan.

(c) After approving the system security plan, the oversight agency shall issue a formal letter of approval, including the checklist used to conduct the review, to the rail transit agency.

§ 659.23 System security plan: contents

The system security plan must, at a minimum address the following:

(a) Identify the policies, goals, and objectives for the security program endorsed by the agency's chief executive.
(b) Document the rail transit agency's process for managing threats and vulnerabilities during operations, and for major projects, extensions, new vehicles and equipment, including integration with the safety certification process;
(c) Identify controls in place that address the personal security of passengers and employees;
(d) Document the rail transit agency's process for conducting internal security reviews to evaluate compliance and measure the effectiveness of the system security plan; and
(e) Document the rail transit agency's process for making its system security plan and accompanying procedures available to the oversight agency for review and approval.

§ 659.25 Annual review of system safety program plan and system security plan

(a) The oversight agency shall require the rail transit agency to conduct an annual review of its system safety program plan and system security plan.
(b) In the event the rail transit agency's system safety program plan is modified, the rail transit agency must submit the modified plan and any subsequently modified procedures to the oversight agency for review and approval. After the plan is approved, the oversight agency must issue a formal letter of approval to the rail transit agency.
(c) In the event the rail transit agency's system security plan is modified, the rail transit agency must make the modified system security plan and accompanying procedures available to the oversight agency for review, consistent with requirements specified in § 659.23(e) of this part. After the plan is approved, the oversight agency shall issue a formal letter of approval to the rail transit agency.

§ 659.27 Internal safety and security reviews

(a) The oversight agency shall require the rail transit agency to develop and document a process for the performance of on-going internal safety and security reviews in its system safety program plan.
(b) The internal safety and security review process must, at a minimum:
    (1) Describe the process used by the rail transit agency to determine if all identified elements of its system safety program plan and system security plan are performing as intended; and
    (2) Ensure that all elements of the system safety program plan and system security plan are reviewed in an ongoing manner and completed over a three-year cycle.
(c) The rail transit agency must notify the oversight agency at least thirty (30) days before the conduct of scheduled internal safety and security reviews.
(d) The rail transit agency shall submit to the oversight agency any checklists or procedures it will use during the safety portion of its review.
(e) The rail transit agency shall make available to the oversight agency any checklists or procedures subject to the security portion of its review, consistent with § 659.23(e).
(f) The oversight agency shall require the rail transit agency to annually submit a report documenting internal safety and security review activities and the status of subsequent findings and corrective actions. The security part of this report must be made available for oversight agency review, consistent with § 659.23(e).

(g) The annual report must be accompanied by a formal letter of certification signed by the rail transit agency's chief executive, indicating that the rail transit agency is in compliance with its system safety program plan and system security plan.
(h) If the rail transit agency determines that findings from its internal safety and security reviews indicate that the rail transit agency is not in compliance with its system safety program plan or system security plan, the chief executive must identify the activities the rail transit agency will take to achieve compliance.
(i) The oversight agency must formally review and approve the annual report.

§ 659.29 Oversight agency safety and security reviews

At least every three (3) years, beginning with the initiation of rail transit agency passenger operations, the oversight agency must conduct an onsite review of the rail transit agency's implementation of its system safety program plan and system security plan. Alternatively, the on-site review may be conducted in an on-going manner over the three year timeframe. At the conclusion of the review cycle, the oversight agency must prepare and issue a report containing findings and recommendations resulting from that review, which, at a minimum, must include an analysis of the effectiveness of the system safety program plan and the security plan and a determination of whether either should be updated.

§ 659.31 Hazard management process

(a) The oversight agency must require the rail transit agency to develop and document in its system safety program plan a process to identify and resolve hazards during its operation, including any hazards resulting from subsequent system extensions or modifications, operational changes, or other changes within the rail transit environment.
(b) The hazard management process must, at a minimum:
  (1) Define the rail transit agency's approach to hazard management and the implementation of an integrated system-wide hazard resolution process;
  (2) Specify the sources of, and the mechanisms to support, the on-going identification of hazards;
  (3) Define the process by which identified hazards will be evaluated and prioritized for elimination or control;
  (4) Identify the mechanism used to track through resolution the identified hazard(s);
  (5) Define minimum thresholds for the notification and reporting of hazard(s) to oversight agencies; and
  (6) Specify the process by which the rail transit agency will provide on-going reporting of hazard resolution activities to the oversight agency.

§ 659.33 Accident notification

(a) The oversight agency must require the rail transit agency to notify the oversight agency within two (2) hours of any incident involving a rail transit vehicle or taking place on rail transit-controlled property where one or more of the following occurs:
  (1) A fatality at the scene; or where an individual is confirmed dead within thirty (30) days of a rail transit-related incident;
  (2) Injuries requiring immediate medical attention away from the scene for two or more individuals;

(3) Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities and non-transit property that equals or exceeds $25,000;
(4) An evacuation due to life safety reasons;
(5) A collision at a grade crossing;
(6) A main-line derailment;
(7) A collision with an individual on a rail right of way; or
(8) A collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle.

(b) The oversight agency shall require rail transit agencies that share track with the general railroad system and are subject to the Federal Railroad Administration notification requirements, to notify the oversight agency within two (2) hours of an incident for which the rail transit agency must also notify the Federal Railroad Administration.

(c) The oversight agency shall identify in its program standard the method of notification and the information to be provided by the rail transit agency.

§ 659.35 Investigations

(a) The oversight agency must investigate, or cause to be investigated, at a minimum, any incident involving a rail transit vehicle or taking place on rail transit-controlled property meeting the notification thresholds identified in § 659.33(a).

(b) The oversight agency must use its own investigation procedures or those that have been formally adopted from the rail transit agency and that have been submitted to FTA.

(c) In the event the oversight agency authorizes the rail transit agency to conduct investigations on its behalf, it must do so formally and require the rail transit agency to use investigation procedures that have been formally approved by the oversight agency.

(d) Each investigation must be documented in a final report that includes a description of investigation activities, identified causal and contributing factors, and a corrective action plan.

(e) A final investigation report must be formally adopted by the oversight agency for each accident investigation.

(1) If the oversight agency has conducted the investigation, it must formally transmit its final investigation report to the rail transit agency.

(2) If the oversight agency has authorized an entity other than itself (including the rail transit agency) to conduct the accident investigation on its behalf, the oversight agency must review and formally adopt the final investigation report.

(3) If the oversight agency does not concur with the findings of the rail transit agency investigation report, it must either:

(i) Conduct its own investigation according to paragraphs (b), (d) and (e)(1) of this section; or

(ii) Formally transmit its dissent to the findings of the accident investigation, report its dissent to the rail transit agency, and negotiate with the rail transit agency until a resolution on the findings is reached.

(f) The oversight agency shall have the authority to require periodic status reports that document investigation activities and findings in a time frame determined by the oversight agency.

§ 659.37 Corrective action plans

(a) The oversight agency must, at a minimum, require the development of a corrective action plan for the following:
   (1) Results from investigations, in which identified causal and contributing factors are determined by the rail transit agency or oversight agency as requiring corrective actions; and
   (2) Findings from safety and security reviews performed by the oversight agency.

(b) Each corrective action plan should identify the action to be taken by the rail transit agency, an implementation schedule, and the individual or department responsible for the implementation.

(c) The corrective action plan must be reviewed and formally approved by the oversight agency.

(d) The oversight agency must establish a process to resolve disputes between itself and the rail transit agency resulting from the development or enforcement of a corrective action plan.

(e) The oversight agency must identify the process by which findings from an NTSB accident investigation will be evaluated to determine whether or not a corrective action plan should be developed by either the oversight agency or rail transit agency to address NTSB findings.

(f) The rail transit agency must provide the oversight agency:
   (1) Verification that the corrective action(s) has been implemented as described in the corrective action plan, or that a proposed alternate action(s) has been implemented subject to oversight agency review and approval; and
   (2) Periodic reports requested by the oversight agency, describing the status of each corrective action(s) not completely implemented, as described in the corrective action plan.

(g) The oversight agency must monitor and track the implementation of each approved corrective action plan.

§ 659.39 Oversight agency reporting to the Federal Transit Administration

(a) *Initial submission*. Each designated oversight agency with a rail fixed guideway system that is in passenger operations as of April 29, 2005 or will begin passenger operations by May 1, 2006, must make its initial submission to FTA by May 1, 2006. In states with rail fixed guideway systems initiating passenger operations after May 1, 2006, the designated oversight agency must make its initial submission within the time frame specified by the state in its designation submission, but not later than at least sixty (60) days prior to initiation of passenger operations. Any time a state changes its designated oversight agency to carry out the requirements identified in this part, the new oversight agency must make a new initial submission to FTA within thirty (30) days of the designation.

(b) An initial submission must include the following:
   (1) Oversight agency program standard and referenced procedures; and
   (2) Certification that the system safety program plan and the system security plan have been developed, reviewed, and approved.

(c) *Annual submission*. Before March 15 of each year, the oversight agency must submit the following to FTA:

(1) A publicly available annual report summarizing its oversight activities for the preceding twelve months, including a description of the causal factors of investigated accidents, status of corrective actions, updates and modifications to rail transit agency program documentation, and the level of effort used by the oversight agency to carry out its oversight activities.
(2) A report documenting and tracking findings from three-year safety review activities, and whether a three-year safety review has been completed since the last annual report was submitted.
(3) Program standard and supporting procedures that have changed during the preceding year.
(4) Certification that any changes or modifications to the rail transit agency system safety program plan or system security plan have been reviewed and approved by the oversight agency.

(d) *Periodic submission*. FTA retains the authority to periodically request program information.
(e) *Electronic reporting*. All submissions to FTA required in this part must be submitted electronically using a reporting system specified by FTA.

§ 659.41 Conflict of interest

The oversight agency shall prohibit a party or entity from providing services to both the oversight agency and rail transit agency when there is a conflict of interest, as defined by the state.

§ 659.43 Certification of compliance

(a) Annually, the oversight agency must certify to the FTA that it has complied with the requirements of this part.
(b) The oversight agency must submit each certification electronically to FTA using a reporting system specified by FTA.
(c) The oversight agency must maintain a signed copy of each annual certification to FTA, subject to audit by FTA.

Section 5330

In accordance with section 20030(e) of MAP-21: Effective 3 years after the effective date of the final rule issued by the Secretary of Transportation under section 5329(e) of title 49, United States Code, as amended by MAP-21, section 5330 of title 49, United States Code, is repealed.

§ 5330. State safety oversight

(a) Application.--This section shall only apply to--

(1) States that have rail fixed guideway public transportation systems that are not subject to regulation by the Federal Railroad Administration; and

(2) States that are designing rail fixed guideway public transportation systems that will not be subject to regulation by the Federal Railroad Administration.

(b) General authority.--The Secretary of Transportation may withhold not more than 5 percent of the amount required to be appropriated for use in a State or urbanized area in the State under section 5307 of this title for a fiscal year beginning after September 30, 1994, if the State in the prior fiscal year has not met the requirements of subsection (c) of this section and the Secretary decides the State is not making an adequate effort to comply with subsection (c).

(c) State requirements.--A State meets the requirements of this section if the State--

(1) establishes and is carrying out a safety program plan for each fixed guideway public transportation system in the State that establishes at least safety requirements, lines of authority, levels of responsibility and accountability, and methods of documentation for the system; and

(2) designates a State authority as having responsibility--

(A) to require, review, approve, and monitor the carrying out of each plan;

(B) to investigate hazardous conditions and accidents on the systems; and

(C) to require corrective action to correct or eliminate those conditions.

(d) Multistate involvement.--When more than one State is subject to this section in connection with a single public transportation authority, the affected States shall ensure uniform safety standards and enforcement or shall designate an entity (except the public transportation authority) to ensure uniform safety standards and enforcement and to meet the requirements of subsection (c) of this section.

(e) Availability of withheld amounts.--(1) An amount withheld under subsection (b) of this section remains available for apportionment for use in the State until the end of the 2d fiscal year after the fiscal year for which the amount may be appropriated.

Appendix B

New Jersey Statutes and Administrative Codes

Related to the State Safety Oversight Program

Submitted for approval on 1/9/2018

Current Administrative Code due for renewal on 2/11/2018

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

Documents included in this appendix

(1) Reorganization Plan for the Board of Public Utilities and the Department of Transportation
(2) New Jersey Statutes Annotated (N.J.S.A.) 27:25-8
(3) N.J.S.A. 48:2-15
(4) State of New Jersey Executive Order #65
(5) New Jersey Administrative Code (N.J.A.C.) Title 16, Chapter 53E

Authority for the NJDOT and SSO program

Initially, authority for transportation oversight was in the Department of Public Utilities. The authorities related to the Board of Public Utilities related to transportation were transferred to the NJDOT as part of the Reorganization Plan for the Board of Public Utilities and the Department of Transportation, October 5, 1978, effective January 1, 1979.

With respect to the functions, powers and duties hereby transferred to the Department of Transportation, whenever in any law, rule, regulation, contract, document, judicial or administrative proceeding or otherwise, reference is made to the Board of Public Utilities, the same shall mean and refer to the Department of Transportation.

N.J.S.A. [New Jersey Statutes Annotated] 27:25-8. Corporation not public utility, authority relative to fares, services; notice, public hearing.

Paragraph c. Notwithstanding any other provisions of P.L.1979, c.150 (C.27:25-1 et seq.) [New Jersey Public Transportation Act of 1979], all vehicles used by any public or private entity pursuant to contract authorized by P.L.1979, c.150 (C.27:25-1 et seq.), and all vehicles operated by the corporation directly, shall be subject to the jurisdiction of the department with respect to maintenance, specifications, and safety to the same extent that jurisdiction is conferred upon the department by Title 48 of the Revised Statues.

Note that corporation refers to New Jersey Transit and department refers to the NJDOT.

N.J.S.A. 48:2-15. Authority over interstate commerce; interstate co-operation

Paragraph (b). The board shall have all the power, and shall exercise its authority to regulate the transportation by any carrier for hire of passengers and property by land, water or air, between any place in this State and any place in another State or between places in this State whether or not partly through another State, including regulation of the adequacy of service and the safety of operation and equipment, except power and authority which has been heretofore expressly reserved to the United States by a valid enactment of the Congress of the United States, or which

is hereafter so reserved by such an enactment of the Congress under powers delegated to the United States by the Constitution of the United States.

Executive Order #65, January 31, 1997

This EO was completed for the initial 49 CFR Part 659, and was not updated for the 2005/2006 update of Part 659. This EO continues to be used as the establishing authority for the SSO program.

New Jersey Administrative Code
Title 16. Department of Transportation
Chapter 53E. Fixed Guideway Systems State Safety and Security Oversight
N.J.A.C. 16:53E

Currently Expires on February 11, 2018

This administrative code has recently been updated to clearly designate the program standard as the set of requirements for the SSO program and the safety program requirements for the state's rail transit agencies (RTAs). This new administrative code clearly includes 49 U.S.C. Section 5329 and 49 CFR Part 674. The expiration date will be extended.

TITLE 16. DEPARTMENT OF TRANSPORTATION

CHAPTER 53E. FIXED GUIDEWAY SYSTEMS STATE SAFETY AND SECURITY OVERSIGHT

Authority: N.J.S.A. 27:1A-5, 27:1A-6, 27:25-8c, 48:2-12 and 52:14D-6; 49 U.S.C. 5329(e); 49 CFR Part 674; October 5, 1978 Executive Reorganization Plan; and Executive Order No. 65(1997)

EXPIRES ON FEBRUARY 11, 2018

SUBCHAPTER 1. PURPOSE AND SCOPE

16:53E-1.1 Purpose

This chapter establishes rules concerning the State's oversight of the safety of rail fixed guideway systems through the Department of Transportation (Department), designated as the State's oversight agency by Executive Order No. 65 (1997). This chapter carries out the mandate of 49 U.S.C. 5329(e) for State safety oversight of rail fixed guideway public transportation systems. Rail fixed guideway public transportation systems are any fixed guideway system that: uses rail; is operated for public transportation; is within the jurisdiction of a State; and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway. The Office of Fixed Guideway Safetyand Security Oversight in the New Jersey Department of Transportation is responsible for the administration of this chapter.

16:53E-1.2 Application and scope

(a) This chapter applies to rail fixed guideway public transportation systems that operate exclusively within the boundaries of this State or between New Jersey and adjacent states; and entities that own or operate rail fixed guideway public transportation systems with Federal financial assistance authorized under 49 U.S.C. Chapter 53.
(b) This chapter is applicable to every transit agency operating exclusively within the boundaries of this State or between New Jersey and adjacent states. The Department may designate other fixed guideway systems to which this rule shall apply.
(c) Except as provided in N.J.A.C. 16:53E-1.3, nothing in this chapter prevents the transit agency or the Department from using contractors or consultants (public, non-profit or private) to assist with their respective duties under this chapter or in the course of their respective business operations.

16:53E-1.3 Conflict of interest

(a) A party or entity is prohibited from providing services to both the Department and the transit agency when a conflict of interest, as determined by the Department, exists.
(b) A transit agency may not be a contractor for the Department under the State safety oversight program.

SUBCHAPTER 2. STATE SAFETY OVERSIGHT PROGRAM STANDARD

16:53E-2.1 State Safety Oversight Program Standard

(a) The Department, in its role as the oversight agency, develops safety and security oversight program rules that establish processes and procedures that govern the conduct of the oversight agency and provide guidance to the regulated transit agencies and other fixed guideway systems regarding the content of the plans and procedures they must have in place in order to be in compliance with the State program.

(b) A transit agency shall not operate a fixed guideway system unless the Department has provided written approval of, and the transit agency has implemented, its safety plan for that system.

(c) Every transit agency shall develop and implement a written safety plan that complies withthe requirements of the New Jersey Department of Transportation Safety Oversight Program Standard (NJDOT SSOPS) for each fixed guideway system it operates. Copies of the NJDOT SSOPS may be obtained on the Department's website at:
http://www.state.nj.us/transportation

or in person at:

New Jersey Department of Transportation
Office of Fixed Guideway Safety and Security Oversight PO Box 600
Trenton, New Jersey 08625-0600
phone: 609 530-2551
fax: 609 530-6397

or by e-mail at:
njofgsso@dot.state.nj.us

16:53E-2.2 Incorporation by reference

(a) The New Jersey Department of Transportation adopts and incorporates by reference 49 CFR Part 674 as amended and supplemented.

State of New Jersey
Executive Order #65

Governor Christine Todd Whitman

WHEREAS, on December 18, 1991, the United States Congress enacted P.L. 102-240, entitled the "Intermodal Surface Transportation Efficiency Act of 1991" and added section 28 to the Federal Transit Act (codified at 49 U.S.C. 1994) which required the Federal Transit Administration to issue regulations creating a state oversight program for rail fixed guideway systems; and

WHEREAS, on December 27, 1995, the Federal Transit Administration promulgated a final rule codified at 49 CFR Part 659, and entitled, Rail Fixed Guideway Systems; State Safety Oversight; Final Rule; and

WHEREAS, these federal regulations require each state having an operational fixed guideway system that is not regulated by the Federal Railroad Administration (FRA) to designate a State Oversight Agency to be responsible for overseeing the rail fixed guideway system's safety practices; and

WHEREAS, the designated State safety oversight agency must develop fixed guideway system safety oversight standards, investigate accidents and hazardous conditions, and conduct periodic safety audits; and

WHEREAS, the State safety oversight agency must make annual reports and certify compliance to the Federal Transit Administration (FTA) of the State's progress in safety oversight, or the State risks loss of up to 5 percent of a fiscal year*s apportionment of federal funding under FTA's formula program for urbanized areas;

NOW, THEREFORE, I, CHRISTINE TODD WHITMAN, Governor of the State of New Jersey, by virtue of the authority vested in me by the Constitution and by the Statutes of this State, do hereby ORDER and DIRECT:

1. The New Jersey Department of Transportation (NJDOT) is hereby designated as the agency to carry out the provisions of the FTA's State Safety Oversight of Fixed Guideway Systems in the State of New Jersey. It is empowered to protect and promote the public health, safety and welfare and is responsible for the oversight of Fixed Guideway Systems not regulated by the Federal Railroad Administration (FRA).

2. The NJDOT shall carry out its responsibilities as directed by and in compliance with 49 CFR Part 659, and shall promulgate Fixed Guideway Safety Standards for use by agencies in developing their safety programs.

3. The NJDOT is authorized to enter into such agreements and delegate its powers as necessary to effectuate the purposes of this Order.

4. Each light, heavy, rail rapid transit system, monorail, inclined plane, funicular, trolly, street car, or automated guideway (people mover) that is not regulated by the FRA and is operating within the State of New Jersey, or between the State of New Jersey and adjoining states, shall comply with the NJDOT Standards for Fixed Guideway Safety Oversight as established by the NJDOT and shall comply with all NJDOT rules, directives, and requirements issued pursuant thereto.

5. This Order shall take effect immediately.

GIVEN, under my hand and seal
this 31st day of January in the Year
of Our Lord, One Thousand Nine
Hundred and Ninety Seven, and of
the Independence of the United States,
the Two Hundred and Twenty-First.

/s/ Christine Todd Whitman
Governor

Attest:

/s/ Michael P. Torpey
Chief Counsel to the Governor

REORGANIZATION PLAN FOR THE BOARD OF PUBLIC UTILITIES AND THE DEPARTMENT OF TRANSPORTATION

The functions, powers, and duties including, but not limited to, investigatory and punitive powers heretofore exercised and performed by the Board of Public Utilities pursuant to the provisions of Chapters 4, 12, and 15 inclusive of Title 48 of the Revised Statutes, as amended and supplemented, and the provisions of Chapters 2 and 3 of Title 48 of the Revised Statutes, as amended and supplemented as they apply to autobuses, charter and special bus operations, railroads, street railways, traction railways and subways (except that no function, power or duty set forth in P. L. 1968, c. 173, (C. 48:2–59 to 48:2–72) is hereby transferred) and R. S. 39:3–4.1, R. S. 39:3–19, R. S. 39:3–61(m), R. S. 39:3–64(b), R. S. 39:4–128(d), R. S. 39:8–1, R. S. 40:55–50, R. S. 40:62–1, R. S. 40:62–2(c), R. S. 40:121–1, R. S. 40:121–5, R. S. 40:121–12, R. S. 40:121–13, R. S. 40:183–55, R. S. 40:183–61 to 40:183–65, R. S. 40:183–69, R. S. 40:183–71 to 40:183–74 are hereby transferred to and shall be exercised and performed by the Department of Transportation effective January 1, 1979.

All appropriations, grants, and other monies available to and to become available to the Board of Public Utilities attributable to and derived from the functions, powers, and duties which have been transferred by this plan to the Department of Transportation are hereby transferred to the Department of Transportation and shall be available for the objects and purposes for which appropriated or otherwise made available subject to any terms, restrictions, limitations or other requirements imposed by the State or Federal law.

Such employees of the Board of Public Utilities engaged in the functions, powers, and duties which have been transferred by this reorganization plan are hereby transferred to the Department of Transportation.

With respect to the functions, powers and duties hereby transferred to the Department of Transportation, whenever in any law, rule, regulation, contract, document, judicial or administrative proceeding or otherwise, reference is made to the Board of Public Utilities, the same shall mean and refer to the Department of Transportation.

This reorganization plan shall not affect the tariffs, orders, agreements, rules and regulations heretofore made or promulgated by the Board of Public Utilities relating to the functions, powers and duties which have been transferred to the Department of Transportation but such tariffs, orders, agreements, rules and regulations shall continue with full force and effect until amended or repealed pursuant to law and shall be administered by the department.

This reorganization plan shall not affect actions or proceedings, civil or criminal, brought by or against the Board of Public Utilities relating to the functions, powers, and duties which have been herein transferred by this plan, and which are pending on the effective date of this plan, but such actions or proceedings may be prosecuted and defended in the same manner and to the same effect by the Department of Transportation as if the foregoing provisions had not taken effect; nor shall this reorganization plan affect any order or recommendation made by, or other matters or proceedings before, the Board of Public Utilities relating to the functions, powers, and duties which have been herein transferred, and all such matters or proceedings pending before such Board of Public Utilities on the effective date of this reorganization plan shall be continued by the Department of Transportation, provided that any hearings commenced by the Board of Public Utilities, prior to the effective date of this reorganization plan shall continue before the hearing officer of that board under the applicable rules of the Board of Public Utilities. However, upon completion of the hearings and proceedings before the hearing officer and unless waived by the parties or certified to the Department of Transportation by its own action, the hearing officer shall make his report and recommendations to the Department, serving copy of said report and recommendations upon all parties, who have participated in the hearings as provided in the Rules of Practice. With respect to such hearings, whenever reference is made to the Board of Public Utilities it shall mean and refer to the Department of Transportation.

Unless specifically otherwise provided in this reorganization plan or by an operative law, whenever, pursuant to existing law, consents, approvals, reports, certifications, petitions, applications, or requests are required from or permitted to be made to the Board of Public Utilities relating to those functions, powers, and duties which are transferred by this reorganization plan, such consents, approvals, reports and certifications shall hereafter be required to be filed with, and such petitions, applications or requests shall

hereafter be made to the Department of Transportation to which such transfer has been made under this reorganization plan.

The transfer directed by this reorganization plan with respect to the Board of Public Utilities shall be made pursuant to the "State Agency Transfer Act," P. L. 1971, c. 375 (C. 52:14D–1 et seq.).

If any provisions of this reorganization plan or the application thereof to any person, or circumstances, or the exercise of any power, or authority thereunder is held invalid or contrary to law, such holding shall not affect other provisions or applications of the reorganization plan which can be given effect without the invalid provisions or applications or affect other exercises of power of authority under said provisions not contrary to law, and to this end, the provisions of this reorganization plan are declared to be severable.

This reorganization plan is intended to protect and promote the public health, safety and welfare, and shall be liberally construed to obtain the objectives and effect the purposes thereof.

All Acts and parts of Acts inconsistent with any of the provisions of this reorganization plan are superseded to the extent of such inconsistencies. Any provisions of this plan which conflict with Federal law are null and void.

In accordance with the provisions of the Executive Reorganization Act of 1969, P. L. 1969, c. 203 (C. 52:14C–2), I find and declare that this transfer and reorganization is necessary:

1. To promote the better execution of the laws and the more efficient management of the Executive Branch and of its agencies and functions;

2. To increase the efficiency of the operations of the Executive Branch to the fullest extent practicable;

3. To group, coordinate and consolidate agencies and functions of the Executive Branch as nearly as practicable according to major purposes; and

4. To eliminate overlapping and duplication of effort.

All Acts and parts of Acts inconsistent with any of the provisions of this reorganization plan are superseded to the extent of such inconsistencies. All transfers directed by this reorganization plan shall be effected pursuant to the "State Agency Transfer Act," P. L. 1971, c. 375 (C. 52:14D–1 et seq.).

/s/ BRENDAN BYRNE,
Governor.

Filed October 5, 1978.

N.J. Stat. § 27:25-8

This section is current through New Jersey 217th First Annual Session, L. 2016, c. 69, and J.R. 7

LexisNexis® New Jersey Annotated Statutes > Title 27. Highways > Subtitle 8. New Jersey Public Transportation Act; Resident Transportation Assistance Act; South Jersey Transportation Authority; Traffic Control > Chapter 25. New Jersey Public Transportation Act of 1979; Senior Citizen and Disabled Resident Transportation Assistance Act

§ 27:25-8. Corporation not public utility, authority relative to fares, services; notice, public hearing.

a. The corporation or any subsidiary thereof shall not be considered a public utility as defined in R.S.48:2-13, and except with regard to subsection c. of this section, subsection b. of R.S.48:3-38, section 2 of P.L.1989, c.291 (C.27:25-15.1), and R.S.48:12-152, the provisions of Title 48 of the Revised Statutes shall not apply to the corporation or any subsidiary thereof.

b. The authority hereby given to the corporation pursuant to section 6 of P.L.1979, c.150 (C.27:25-6) with respect to fares and service, shall be exercised without regard or reference to the jurisdiction formerly vested in the Department of Transportation regarding rates and rate schedules under R.S.48:2-21; discontinuance, curtailment, or abandonment of service under R.S.48:2-24; and the issuance of a certificate of public convenience and necessity under R.S.48:4-3, and transferred to the New Jersey Motor Vehicle Commission by P.L.2003, c.13 (C.39:2A-1 et al.). The New Jersey Motor Vehicle Commission shall resume jurisdiction over service and fares upon the termination and discontinuance of a contractual relationship between the corporation and a private or public entity relating to the provision of public transportation services operated under the authority of certificates of public convenience and necessity previously issued by the New Jersey Motor Vehicle Commission or its predecessors; provided, however, that a private entity shall not be required to restore any service discontinued or any fare changed during the existence of a contractual relationship with the corporation, unless the New Jersey Motor Vehicle Commission shall determine, after notice and hearing, that the service or fare is required by public convenience and necessity.

c. Notwithstanding any other provisions of P.L.1979, c.150 (C.27:25-1 et seq.), all vehicles used by any public or private entity pursuant to contract authorized by P.L.1979, c.150 (C.27:25-1 et seq.), and all vehicles operated by the corporation directly, shall be subject to the

jurisdiction of the department with respect to maintenance, specifications, and safety to the same extent that jurisdiction is conferred upon the department by Title 48 of the Revised Statutes.

d. Before implementing any fare increase for any motorbus regular route or rail passenger services, or any curtailment or abandonment of those services, the corporation shall hold a public hearing in the area affected during evening hours, except that the corporation shall not be required to hold a public hearing for a change in service that does not: (1) increase fares; (2) eliminate a current motorbus regular route or any rail passenger service; or (3) change the time of a motorbus regular route or rail passenger service by more than two hours from the corporation's currently adopted schedule or timetable, so long as these services are provided at least three times daily, excluding holidays. Notice of the hearing shall be given by the corporation at least 15 days prior to the hearing to the governing body of each county whose residents will be affected and to the clerk of each municipality in the county or counties whose residents will be affected; the notice shall also be posted at least 15 days prior to the hearing in prominent places on the railroad cars and buses serving the routes to be affected.

e. Notice of its intent to discontinue, curtail, or abandon any motorbus regular route service or rail passenger service shall be given by the corporation to the governing body of each county whose residents will be affected and to the clerk of each municipality in the county or counties whose residents will be affected at least 45 days prior to implementation of the change in service.

History

L. 1979, c. 150, § 8; amended 1989, c. 291, § 3; 1997, c. 309, § 2, eff. Jan. 8, 1998; 2009, c. 259, § 1, eff. Jan. 17, 2010; 2016, c. 52, § 1, eff. Sept. 14, 2016.

LexisNexis® New Jersey Annotated Statutes
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End of Document

N.J. Stat. § 48:2-15

This section is current through New Jersey 217th First Annual Session, L. 2016, c. 70, and J.R. 7; and also includes c. 77 and 79

LexisNexis® New Jersey Annotated Statutes > Title 48. Public Utilities > Chapter 2. Department of Public Utilities; Board of Commissioners > Article 2. Jurisdiction, Powers and Duties > A. Jurisdiction

§ 48:2-15. Authority over interstate commerce; interstate co-operation

(a) The board or the members thereof, whenever authorized by an Act of Congress to exercise any power or authority over interstate commerce, shall have full power and authority to administer the provisions of such act within this State, and in cases authorized under such act, in co-operation with boards of other States and the Interstate Commerce Commission.

(b) The board shall have all the power, and shall exercise its authority to regulate the transportation by any carrier for hire of passengers and property by land, water or air, between any place in this State and any place in another State or between places in this State whether or not partly through another State, including regulation of the adequacy of service and the safety of operation and equipment, except power and authority which has been heretofore expressly reserved to the United States by a valid enactment of the Congress of the United States, or which is hereafter so reserved by such an enactment of the Congress under powers delegated to the United States by the Constitution of the United States.

(c) The board, in exercising the power and authority granted to it by this section, shall co-operate with any similar duly constituted agency of any adjoining State in respect to the transportation of passengers and property between any place in this State and any place in an adjoining State or between places in this State partly through an adjoining State, and the board shall enforce the decision of any such agency of any adjoining State in respect to any such transportation through or within this State unless it shall affirmatively find that the action or omission to act required by the decision of any such agency of any adjoining State (1) is not required for the public convenience and necessity and (2) is detrimental to the best interest of the people of this State.

History

Amended by L. 1957, c. 13, p. 31, 1, eff. April 3, 1957.

N.J. Stat. § 48:2-15

LexisNexis® New Jersey Annotated Statutes
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End of Document

Safety Oversight of Port Authority Transit Corporation (PATCO)
Letters between New Jersey, Pennsylvania, and FTA

December 13, 2000 – DRPA to NJDOT that DRPA made organizational changes and could no longer serve as the SSOA for PATCO

February 1, 2001 – NJDOT to PennDOT that NJDOT had taken over safety oversight of PATCO and suggested that NJDOT could provide safety oversight of PATCO for both states. The intent was for both state DOTs to send similar letters to the FTA explaining the safety oversight of PATCO.

April 30, 2001 – PennDOT to FTA that NJDOT will continue to be the single entity providing safety oversight of PATCO under Part 659.

May 4, 2001 – NJDOT to FTA that NJDOT will continue to be the single entity providing safety oversight of PATCO under Part 659.

May 9, 2001 – NJDOT to FTA Office of Safety and Security that notified FTA that both states had agreed to NJDOT providing safety oversight for PATCO.

August 17, 2001 – FTA Office of Safety and Security to NJDOT that provided approval of the safety oversight of PATCO being provided by NJDOT.

June 6, 2007 – NJDOT to PennDOT that updated the agreement to change the PennDOT designee. This letter explains at a high level what the agreement is for safety oversight of PATCO.

July 6, 2007 – NJDOT to the General Manager PATCO that requests signature on the letter from June 6, 2007.

Intergovernmental Memorandum of Agreement Regarding State Safety Oversight

Effective Date: 1/31/2018

This memorandum of agreement formalizes and supersedes the above chain of letters, and allows for the NJDOT SSO program to have full responsibility for state safety oversight of the Port Authority Transit Corporation (PATCO) in New Jersey and on the Pennsylvania side of the Delaware River in Philadelphia. The MOA describes the roles and responsibilities of the Pennsylvania Department of Transportation (PennDOT) and the NJDOT in overseeing the safety and security of the PATCO High Speed Line, a rail fixed guideway public transportation system owned by the Delaware River Port Authority (DRPA).

EFFECTIVE DATE: 1-31-18 (PennDOT will insert)

AGREEMENT NO.: MOANJDOT2018
NJDOT FEDERAL I.D. NO.: 21-6000928

INTERGOVERNMENTAL MEMORANDUM OF AGREEMENT REGARDING STATE SAFETY OVERSIGHT

This Intergovernmental Memorandum of Agreement Regarding State Safety Oversight ("MOA") is made by and between the Commonwealth of Pennsylvania, acting through its Department of Transportation ("PennDOT"),

and

the State of New Jersey, acting through its Department of Transportation ("NJDOT").

BACKGROUND

PennDOT and NJDOT are subject to State Safety Oversight ("SSO") requirements relating to rail fixed guideway public transportation systems under 49 CFR Part 659 and 49 CFR Part 674. When a rail fixed guideway public transportation system operates in more than one state, the regulations require all states where that system operates to assure the application of uniform safety standards and procedures in compliance with federal transportation law to that rail fixed guideway public transportation system.

This MOA is intended to describe the roles and responsibilities of PennDOT and NJDOT in overseeing the safety and security of the PATCO High Speed Line ("Line"), a rail fixed guideway public transportation system owned by the Delaware River Port Authority ("DRPA") and operated by the Port Authority Transit Corporation ("PATCO") in New Jersey and Pennsylvania, in a way that avoids duplication of effort, work, and expense while assuring full compliance with SSO requirements.

The parties, intending to be legally bound, agree as follows:

1. **Term.**

(a) **Effective Date.** This MOA shall become effective on (i) January 1, 2018 or (ii) the date the Agreement is fully executed, whichever occurs last. The Agreement shall be fully executed when the authorized representatives of PennDOT and NJDOT and all approvals required by contracting procedures of the Commonwealth of Pennsylvania and the State of New Jersey are obtained. The date of full execution shall be the date of the last signature affixed. The MOA shall remain in effect until revoked by either party, as provided below in subsection (b). PennDOT will insert the effective date at the top of Page 1.

(b) **Revocation.** The party wishing to revoke the MOA shall submit written notice ninety (90) days in advance of the effective date of revocation. Upon revocation, each party shall be responsible for SSO requirements on that portion of the Line located within its state.

2. **Responsibilities.**

(a) **NJDOT's Responsibility.** As the designated State Safety Oversight agency for New Jersey, pursuant to 49 U.S.C. 5329(e), NJDOT is responsible for overseeing the safety and security of the Line, which comprises a total of 14.2 track miles and associated physical assets, facilities, land, and equipment owned or leased by DRPA and operated by PATCO or appurtenance used by PATCO and any future owner/operator. Of this total mileage, 1.5 miles span the Ben Franklin Bridge, 2.3 miles are located within the City of Philadelphia, and the rest is located within various municipalities in the State of New Jersey.

(b) **Sole Responsible Agency.** NJDOT shall be solely responsible for overseeing the safety and security of the Line including the associated physical assets, facilities, land, and equipment owned or leased by DRPA and operated by PATCO or appurtenance used by PATCO and any future owner/operator.

2

(c) **Funding and Financial Responsibility.** NJDOT shall receive all grant funding made available by the Federal Transit Administration ("FTA") under 49 U.S.C. § 5329 specifically identified for safety and security oversight of the Line. PennDOT has no financial responsibility and no obligation to reimburse NJDOT for safety and security oversight activities concerning the Line. NJDOT has sole financial responsibility for these activities.

(d) **New Jersey Laws and Regulations.** The parties agree that the laws and regulations of the State of New Jersey, as they pertain to SSO oversight of the Line in accordance with the requirements and approvals of the FTA, shall apply to the entirety of the Line and PATCO. Any administrative actions or actions in a court of law shall be filed in New Jersey.

3. **Amendments.**

(a) **Amendment to MOA.** Either party may, from time to time, request amendments to this MOA. Amendments to this MOA shall be accomplished through a formal written document signed by the parties with the same formality as this MOA.

(b) **Updates to Federal Regulations.** Updates to federal regulations or FTA guidance may compel modifications to SSO program requirements under this MOA. In such cases, necessary changes resulting from these updates will become effective upon issuance of such regulations or guidance. If necessary, the parties shall amend the MOA in accordance with subsection (a) above to reflect the updates to the SSO program requirements.

4. **Sovereign Immunity.** This MOA does not waive, modify, or otherwise affect the sovereign immunity of either the Commonwealth of Pennsylvania or the State of New Jersey.

3

5. **Personal Liability.** No commissioner, officer, agent, or employee of PennDOT or NJDOT shall be charged personally by the other party with any liability, or held personally liable to that party, under any term or provision of this MOA, or because of its execution or attempted execution, or because of any breach, or attempted breach, thereof.

6. **No Third-Party Beneficiaries.** The terms and provisions of this MOA are intended solely for the benefit of each party to it and their respective successors and permitted assigns, and it is not the intention of the parties to confer third-party beneficiary rights upon persons or entities not a party to this MOA.

7. **Assignment.** This MOA may not be assigned, transferred, nor any interest in it delegated, without the prior written consent of PennDOT and NJDOT and, if necessary, the FTA.

8. **Successors and Assigns.** This MOA shall be binding upon and shall inure to the benefit of PennDOT and NJDOT, their successors and assigns.

9. **No Waiver:** Either party may elect not to enforce its rights and remedies under this MOA in the event of a breach by the other party of any term or condition of this MOA. In any event, the failure by either party to enforce its rights and remedies under this MOA shall not be construed as a waiver of any subsequent breach of the same or any other term or condition of this MOA.

10. **Severability.** The provisions of this MOA shall be severable. If any phrase, clause, sentence, or provision of this MOA is declared to be contrary to the Constitution of Pennsylvania, of New Jersey, or of the United States or of the laws of the Commonwealth of Pennsylvania or of the State of New Jersey and the applicability thereof to any government, agency, person, or circumstance is held invalid, the validity of the

4

remainder of this MOA and the applicability thereof to any government, agency, person, or circumstance shall not be affected thereby.

11. **Force Majeure.** Neither party shall be liable for failure to perform under this Agreement if such failure to perform arises out of causes beyond the control and without the fault or negligence of the nonperforming party. Such causes may include, but are not limited to, acts of God or the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, and unusually severe weather. This provision shall become effective only if the party failing to perform immediately notifies the other party of the extent and nature of the problem, limits delay in performance to that required by the event, and takes all reasonable steps to minimize delays. This provision shall not be effective unless the failure to perform is beyond the control and without the fault or negligence of the nonperforming party.

12. **Right-to-Know Law and Open Public Records Act.** The parties acknowledge that this MOA is subject to the Pennsylvania Right-to-Know Law, 65 P.S. §§ 67.101--3104 and the New Jersey Open Public Records Act, N.J.S.A. 47:1A-1, et seq.

13. **Titles Not Controlling.** Titles of sections are for reference only, and shall not be used to construe the language in this MOA.

14. **Notices.** All notices and reports arising out of, or from, the provisions of this MOA shall be in writing and given to the parties at the addresses provided below, either by regular mail, facsimile, e-mail, or delivery in person, at the following addresses:

If to PennDOT:

Title:	Deputy Secretary for Multimodal Transportation
Address:	PO Box 3643 400 North Street, 8th Floor Harrisburg, PA 17105-3643
Phone:	(717) 787-8197

5

E-mail: tfauver@pa.gov

With a copy to:

Title: Director of Office of Penn Ports and Passenger Rail
Address: PO Box 3151
400 North Street, 6th Floor
Harrisburg, PA 17105-3151
E-mail: ebonini@pa.gov

If to NJDOT:

Title: Director, Division of Multimodal Service
Address: New Jersey Department of Transportation
1035 Parkway Avenue
Trenton, New Jersey 08625
Phone: (609) 530-2080
Email: nicole.minutoli@dot.nj.gov

or to such other person or address as the parties may provide to each other in writing.

15. **Execution in Counterparts:** This MOA may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

16. **Integration and Merger.** This MOA and, if applicable, any attachments and exhibits, when executed, approved, and delivered, shall constitute the final, complete, and exclusive MOA between the parties containing all the terms and conditions agreed on by the parties. All representations, understandings, promises, and agreements pertaining to the subject matter of this MOA made prior to or at the time this MOA is executed are superseded by this MOA unless specifically accepted by any other term or provision of this MOA. There are no conditions precedent to the performance of this MOA except as expressly set forth herein.

6

The parties have executed this Agreement to be effective as of the date of the last signature affixed below.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

BY: _____ 1/12/18
Deputy Secretary of Transportation — Date

STATE OF NEW JERSEY
DEPARTMENT OF TRANSPORTATION

BY: _____ 1/3/18
Michael Russo — Date
Assistant Commissioner
NJ Dept. of Transportation

ATTESTED:

BY: _____ 1/3/18
Anika James — Date
Secretary, NJ Dept. of Transportation

APPROVED AS TO LEGALITY AND FORM

BY: _____ 1/11/18
For Chief Counsel — Date

BY: _____ 1/17/18
Deputy General Counsel — Date

BY: _____ 1/31/18
Deputy Attorney General — Date

CHRISTOPHER S. PORRINO
ATTORNEY GENERAL OF NEW JERSEY

BY: _____ 1/2/18
David M. Kahler
Deputy Attorney General

18-004

7

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O.Box 600
Trenton, New Jersey 08625-0600

JON S. CORZINE
Governor

KRIS KOLLURI, Esq.
Commissioner

RECEIVED
DEPT. OF TRANSPORTATION
JUN 07 2007
BUREAU OF PUBLIC TRANSPORTATION

June 6, 2007

David F. Barber, P.E.
Bureau of Public Transportation
Pennsylvania Department of Transportation
PO Box 3151
Harrisburg, PA 71720

Subject: Safety Oversight Matters
Port Authority Transit Corporation – Rapid Transit System
Memorandum of Record: Re-issue of Original Letter

Dear Dave,

The re-issue of the May 10, 2002 letter is to update the new Pennsylvania Department of Transportation (PennDot) designee. All other matters remain unchanged.

Thank you for the letter of November 8, 2001, related to safety oversight of the Port Authority Transit Corporation Rapid Transit System (PATCO-RTS) and follow-up meeting held in Philadelphia on Monday, January 28, 2002.

We are pleased to have your support for safety oversight activities of the PATCO-RTS. During our meeting, we were able to address key issues listed in your letter that will ease some of the New Jersey Department of Transportation (NJDOT) Safety Oversight Agency (SOA) tasks related to oversight of PATCO. The items discussed and follow-up actions are as follows:

1. Philadelphia, PA underground rail station complex serving SEPTA and PATCO-RTS.

   Under the PennDot Rail Transit Safety Review Program (RTSRP), the NJDOT Safety Oversight Agency (SOA) will receive support by the RTSRP contractor in performing safety oversight activities in the Philadelphia area where rail station complexes are used by PATCO-RTS or both SEPTA and PATCO-RTS. During scheduled and non-scheduled inspections, the contractor may inspect, observe, and report matters relating to safety and security of passenger, employee, and valued assets and all unacceptable hazardous conditions in areas utilized by the public and PATCO-RTS employees.

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2. Inspections of track, signals, structures, elevators, and escalators.

   NJDOT- SOA will inspect track and signals.

   RTSRP contractor will observe and/or inspect structures, elevators, and escalators in areas defined in No. 1 above. All reports and findings are to be reported to the SOA.

3. The RTSRP contractor will notify the SOA of any Unacceptable Hazardous Conditions when performing inspections or observing safety and security issues within the area defined in No.1 above.

   Should an accident/incident occur in the station complex, the RTSRP contractor may investigate, provide supporting information, and or assist the SOA in the performance of investigations for any occurrence that meets the NTSB or FTA thresholds.

In the event that certain unusual or unforeseen issues or matters present themselves in the performance of these support services, the observer or inspector should, as soon as practical, notify both David F. Barber, PennDOT, and Robert P. Sedlock, NJDOT. Upon notification, the parties will proceed in a timely fashion to find resolution of the matter.

The designated parties, by signature below, concur with the contents of this memorandum of record.

(NAME) Robert A. Box

(TITLE) General Manager, PATCO - RTS

(DATE) June 6, 2007

(NAME)

(TITLE) Manager, Fixed Guideway Safety and Security Oversight – PENNDOT

(DATE) June 6, 2007

(NAME) Robert P. Sedlock

(TITLE) Manager, Fixed Guideway Safety and Security Oversight – NJ DOT

(DATE) June 6, 2007

MemRecPATCOsoaPA-NJ4-25-02.doc

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

JON S. CORZINE
Governor

KRIS KOLLURI, Esq.
Commissioner

July 6, 2007

Robert A. Box
General Manager
PATCO - DRPA
PO Box 4262
Lindenwold, NJ 08021-0218

Re: Letter June, 6 2007: Safety Oversight Matters: PATCO-RTS Memorandum of Record: Re-issue of original Letter

Dear Mr. Box:

I have been asked to forward the referenced and attached letter to you for your signature and return to Mr. Sedlock. Please note that it has already been signed by Mr. Sedlock and the PENNDOT representative. Should you have any questions, please don't hesitate to contact Mr. Sedlock at 609-530-2551.

Thank you for your assistance in this matter.

Sincerely,

Lance E. Weight

Lance E. Weight, PP, AICP (Alt. NJDOT EMC)
Section Chief,
Office of Fixed Guideway Safety/Security Oversight

RECEIVED
JUL - 9 2007
OFFICE OF
GENERAL MANAGER

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December 13, 2000

Honorable James Weinstein
Commissioner - Transportation
New Jersey Department of Transportation
1035 Parkway Ave., Box CN-600
Trenton, NJ 08625

Re: Rail Fixed Guideway System, State Safety Oversight
Port Authority Transit Corporation (PATCO)

Dear Commissioner Weinstein:

This is a follow-up to our recent discussion regarding the Rail Fixed Guideway System, State Safety Oversight Program for the Port Authority Transit Corporation (PATCO). In our conversation, I advised you that the DRPA is in the process of implementing changes that will impact the DRPA's ability to serve as the Safety Oversight Agency for PATCO and suggested that perhaps this function could be performed by New Jersey DOT. You asked that I recap how the DRPA came to be designated as the Safety Oversight Agency for PATCO.

The United States Congress enacted P.L.102-240, entitled the "Intermodal Surface Transportation Efficiency Act of 1991" and added Section 28 to the Federal Transit Act (codified at 49 U.S.C. 1994), which required the Federal Transit Administration to issue regulations creating a State Oversight Program for Fixed Rail Guideway Systems. On December 27, 1995, the Federal Transit Administration promulgated a final rule codified at 49 C.F.R. Part 659 entitled, "Rail Fixed Guideway Systems: State Safety Oversight; Final Rule". These Federal Regulations require each State having an Operational Fixed Guideway System that is not regulated by the Federal Railroad Administration (FRA) to designate a State Oversight Agency to be responsible for overseeing the Rail Fixed Guideway Systems' safety practices. The designated State Safety Oversight Agency must develop Fixed Guideway System Safety Oversight Standards, investigate accidents and hazardous conditions, and conduct periodic safety audits.

Most systems that came under the new ruling operated within the boundaries of their respective States, and that State was required to designate a Safety Oversight Agency for those systems. It is my understanding that the State of New Jersey designated New Jersey DOT to be the State Oversight Agency for New Jersey Transit. There were a relatively small number of transit agencies that fell under the new ruling that operated in more than one State; and PATCO was one such agency.

When the State Safety Oversight regulations were enacted, I requested that my staff review the potential options for complying with the regulations and requested that staff recommend how PATCO could be brought into compliance with the regulations. Staff recommended that the most effective way to accomplish the Safety Oversight would be for DRPA to provide this function for PATCO much the same as

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O.Box 600
Trenton, New Jersey 08625-0600

DONALD T. DIFRANCESCO
Acting Governor

JAMES WEINSTEIN
Commissioner

February 1, 2001

David Barber
Pennsylvania Department of Transportation
Bureau of Public Transportation
Forum Place, 8th Floor
555 Walnut Street, Harrisburg, PA 17101

Dear Mr. Barber

As we discussed on January 22, 2001, the Delaware River Port Authority (DRPA) implemented organizational and functional changes as part of its Enterprise Initiative. Although the DRPA may realize significant efficiencies through these changes, the DRPA can no longer perform Safety Oversight of the Port Authority Transit Corporation (PATCO), and maintain sufficient separation of the entities as required by the Federal Transit Administration's State Safety Oversight Program.

Further to our discussion, I advised you that, considering the best interest of both States (Pennsylvania and of the New Jersey), the New Jersey Department of Transportation – Safety Oversight Agency agreed with the DRPA to assume the functions of safety oversight over PATCO until both States concur in this matter.
In this manner, we can avoid a situation whereby the FTA could consider both States non-compliant, with the absence of safety oversight over PATCO.

Additionally, subject to concurrence by the Commonwealth of Pennsylvania, it is our intent to continue the safety oversight of PATCO. Providing this matter is agreeable to all concerned, a formal response to the FTA will be required indicating that both States agree that New Jersey Department of Transportation is the designated oversight agency for the Port Authority Transit Corporation.

To expedite this matter, I have enclosed a draft of the proposed response (similar to our previous letters designating the DRPA as the oversight agency) to the FTA for your review.

Should you have any questions, or require additional information, please contact me at (609) 292-6893.

Sincerely,

Robert P. Sedlock
Manager, Fixed Guideway Safety Oversight

Enc.
Cc: Theodore H Matthews, Executive Director
Aeronautics and Freight Systems

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May 08 01 01:19p Bureau of PublicTrans. 717-772-2985 p.2

April 30, 2001

Mr. Hiram J. Walker
Associate Administrator
Federal Transit Administration
Nassif Building
400 7th Street, S.W.
Washington, D.C. 20590

Re: Pennsylvania/New Jersey Joint Designation
For Safety Oversight of PATCO

Dear Mr. Walker:

The Commonwealth of Pennsylvania and the State of New Jersey herein jointly designate the New Jersey Department of Transportation (NJ DOT) as the oversight agency for the Port Authority Transit Corporation (PATCO) pursuant to Federal Transit Administration's (FTA) Safety Oversight Program requirements contained in 49 CFR Part 659. PATCO is a bi-state rail transit entity having operations in Pennsylvania and New Jersey. 49 CFR Section 659.21 (b) allows states to designate a single entity in cases where a transit system has multi-state operations.

On January 22, 2001, the Delaware River Port Authority (DRPA) informed the FTA and both States of changes impacting its ability to serve as the Safety Oversight Agency for PATCO. Acting in the interests of both States, the DRPA and NJ DOT, immediately, agreed on an orderly transfer of functions and Program Documents to NJ DOT, ensuring a continuous oversight of the PATCO operations until both States agree on the designated oversight agency. The Pennsylvania Department of Transportation was notified of this arrangement by NJ DOT on February 5, 2001 and concurred with its implementation.

Following these actions and considerations, both States agree that New Jersey continue its oversight of the PATCO system as the designated safety oversight agency. Pennsylvania and New Jersey safety oversight agencies will coordinate PATCO safety and security issues as appropriate.

I trust this letter satisfies FTA's requirements of 49 CFR Part 659. Should you have any questions, or require additional information, please contact David Barber, Manager of Pennsylvania's Oversight Program at (717) 787-1207.

Sincerely,

Bradley L Mallory

Bradley Mallory, Secretary
Pennsylvania Department of Transportation

May 08 01 01:19p Bureau of PublicTrans. 717-772-2985 p.3

620/DFB
cc: Richard Peltz
J. Dockendorf
✓ D. Barber
Donald T. DiFrancesco, Acting Governor, NJ
Theodore H. Matthews, NJDOT
Paul Drayton, Jr., Chief Executive Officer, DRPA
RF

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O.Box 600
Trenton, New Jersey 08625-0600

DONALD T. DIFRANCESCO
Acting Governor

JAMES WEINSTEIN
Commissioner

May 4, 2001

Mr. Hiram J. Walker, Associate Administrator
Federal Transit Administration
Nassif Building
400 7th Street, S.W.
Washington, D.C. 20590

Re: Pennsylvania/New Jersey, Safety Oversight Program, Designation for PATCO

Dear Mr. Walker:

The Commonwealth of Pennsylvania and the State of New Jersey herein jointly designate the New Jersey Department of Transportation (NJ DOT) as the oversight agency for the Port Authority Transit Corporation (PATCO) pursuant to Federal Transit Administration's (FTA) Safety Oversight Program requirements contained in 49 CFR Part 659. PATCO is a bi-state rail transit entity having operations in Pennsylvania and New Jersey. 49 CFR Section 659.21 (b) allows states to designate a single entity in cases where a transit system has multi-state operations.

Recently (letter dated January 22, 2001), the Delaware River Port Authority (DRPA) informed the FTA and both States of changes impacting its ability to serve as the Safety Oversight Agency for PATCO. Acting in the interests of both States, the DRPA and NJ DOT, immediately, agreed on an orderly transfer of functions and Program Documents to NJ DOT, ensuring a continuous oversight of the PATCO operations until both States agree on the designated oversight agency.

Following these actions and considerations, both States agreed that New Jersey continue its oversight of the PATCO system as the designated safety oversight agency. Pennsylvania and New Jersey safety oversight agencies will coordinate PATCO safety and security issues as appropriate.

I trust this letter satisfies FTA's requirements. Should you have any questions, or require additional information, please contact Dave Barber of Pennsylvania DOT at (717-787-7540) and Robert Sedlock of New Jersey DOT at (609-292-6893) respectively.

Sincerely,

Theodore H. Matthews
Executive Director
Division of Aeronautics and Freight Systems

c: Governor Tom Ridge
Acting Governor Donald T. DiFrancesco
Paul Drayton, Jr., Chief Executive Officer, DRPA

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State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O.Box 600
Trenton, New Jersey 08625-0600

DONALD T. DIFRANCESCO
Acting Governor

JAMES WEINSTEIN
Commissioner

Mr. Harry Saporta
Office of Safety and Security
Federal Transit Administration
400 7th Street, S.W.
Washington, D.C. 20590

May 9, 2001

Subject: State Safety Oversight of Rail Fixed Guideway Systems
Designated Safety Oversight Agency
Port Authority Transit Corporation (PATCO)

Recently, the Delaware River Port Authority (DRPA) informed the Federal Transit Administration (FTA) and the States, Pennsylvania and New Jersey, of changes impacting its ability to serve as the Safety Oversight Agency for PATCO.

New Jersey, acting on behalf of both States for the interim, assumed the oversight of PATCO. Following these actions, both States agreed that New Jersey continue its oversight of the PATCO system as the designated safety oversight agency.

I am including copies of the letters signed by both States, formally agreeing to the above actions and related correspondence for your information and file.

Best regards,

Robert P. Sedlock

Robert P. Sedlock, Manager
Manager, Fixed Guideway Safety Oversight

Enclosures:

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c: Roy Field, FTA Staff
Jim Caton, Boyd, Caton & Grant
Transportation Group, Inc.
Letitia Thompson, FTA Region 2
Susan Schruth, FTA Region 3
Theodore H. Matthews, Executive Director
Aeronautics and Freight Systems

cc: Dev Soni, FTA Region 3

ftaHarrS PANJlet5-9-01drpa.doc

Oct-10-02 15:07 From-FTA TPM 2023667951 T-253 P.01/01 F-455

U.S. Department
of Transportation
Federal Transit
Administration

Headquarters

400 Seventh St., S.W.
Washington, D.C. 20590

August 17, 2001

Mr. Theodore H. Matthews
Executive Director
Division of Aeronautics and Freight Systems
New Jersey Department of Transportation
P.O. Box 600
Trenton, NJ 08625-0600

Re: Pennsylvania/New Jersey Joint State Safety Oversight Agency Designation, Port Authority Transit Corporation (PATCO)

Dear Mr. Matthews:

I am writing in response to your letter, which documents the joint decision made by the States of Pennsylvania and New Jersey to designate the New Jersey Department of Transportation (NJ DOT) as the State Safety Oversight Agency for the Port Authority Transit Corporation (PATCO). FTA approves this designation and commends both agencies on your commitment to support the safe operations of PATCO and comply with 49 Part 659 requirements.

FTA requests that when finalized, NJ DOT submit its revised Program Standard, as well as PATCO's revised System Safety Program Plan and Security Plan, to FTA's Office of Safety and Security.

Thank you for your efforts to bring a timely resolution to this matter. FTA looks forward to its continued partnership with NJ DOT.

If you have any question regarding the requested submissions, please do not hesitate to call Mr. Roy Field of FTA's Office of Safety and Security at (202) 366-2896.

Sincerely,

Harry Saporta
Director, Office of Safety and Security

cc: Susan Schruth, FTA Region 3 Administrator

ROY FIELD

Appendix C

Certification Checklist Items

Requirements from Part 674.13

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New Jersey Department of Transportation (NJDOT)

State Safety Oversight (SSO) Program

Documents included in this appendix

(1) Letter from NJDOT to FTA regarding Certification Work Plan – New Jersey State Safety Oversight, Financial Independence of NJDOT from NJ Transit, October 31, 2014
(2) NJ Legislature separate funding of NJDOT and NJ Transit
(3) NJDOT Organization Chart Division of Multimodal Services, May 12, 2017
(4) NJDOT Organization Chart Capital Investment Planning & Grant Administration, April 2017
(5) Letter from NJDOT, Ms. Diane Gutierrez-Scaccetti, Acting Commissioner to Joseph D. Bertoni, Deputy Commissioner: Acting Commissioner Recusal from the State Safety Oversight Rail Fixed Guideway Safety/Security System Program, February 2, 2018
(6) Letter from NJDOT, Mr. Joseph D. Bertoni, Deputy Commissioner, to Mr. Richard T. Hammer, Commissioner: Deputy Commissioner Joseph Bertoni Recusal from all New Jersey Transit Official Matters Concerning the State Safety Oversight Rail Fixed Guideway Safety/Security Systems Program, July 13, 2017
(7) Letter from NJDOT, Mr. Kevin Conover, SSO Program Manager to Dr. Thomas Littleton, FTA Associate Administrator: FTA SSO Certification (Overlap of Transportation Services – Certification Checklist Item 1.11), September 7, 2017

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

JAMIE FOX
Commissioner

October 31, 2014

Thomas Littleton, Associate
Administrator for Safety and Oversight
Federal Transit Administration
1200 New Jersey Ave. S.E.
Washington, DC 20590

Dear Mr. Littleton:

Re: Certification Work Plan-New Jersey State Safety Oversight
Financial Independence of NJDOT from NJ Transit.

I write to you concerning the State of New Jersey's certification work plan for the State Safety Oversight program, and specifically about the degree of financial independence that exists between the Department of Transportation (NJDOT) and NJ Transit (NJT).

In New Jersey, the finances of the NJDOT) and NJT are completely separate. This arrangement recognizes NJT's status as an independent authority, as established in the Public Transportation Act of 1979. Organizationally, NJ Transit is housed "in but not of" the NJDOT purely for administrative purposes, as the State Constitution (Article V, Section IV, paragraph 5) requires all agencies to be associated with one of the primary departments of State government. Nonetheless, NJT was to be "…independent of any supervision or control by the department or by any body or officer thereof."

As a result, the annual Appropriations Act provides separate appropriations to NJDOT and NJT in the following manner:

- Separate line item for NJT's state subsidy for operating purposes.

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- Separate allocations from NJ's Transportation Trust Fund for capital projects, with line item appropriations for each individual project separately listed for highways and mass transit.
- Federally supported capital from the Federal Highway Administration (FHWA) is discretely appropriated in specific line items for highway projects. Since federal capital for mass transit is provided directly to NJT by the Federal Transit Administration, those projects do not appear in NJ's annual Appropriations Act.
- Budget language specific to each entity conditions how the operating and capital funds may be spent.

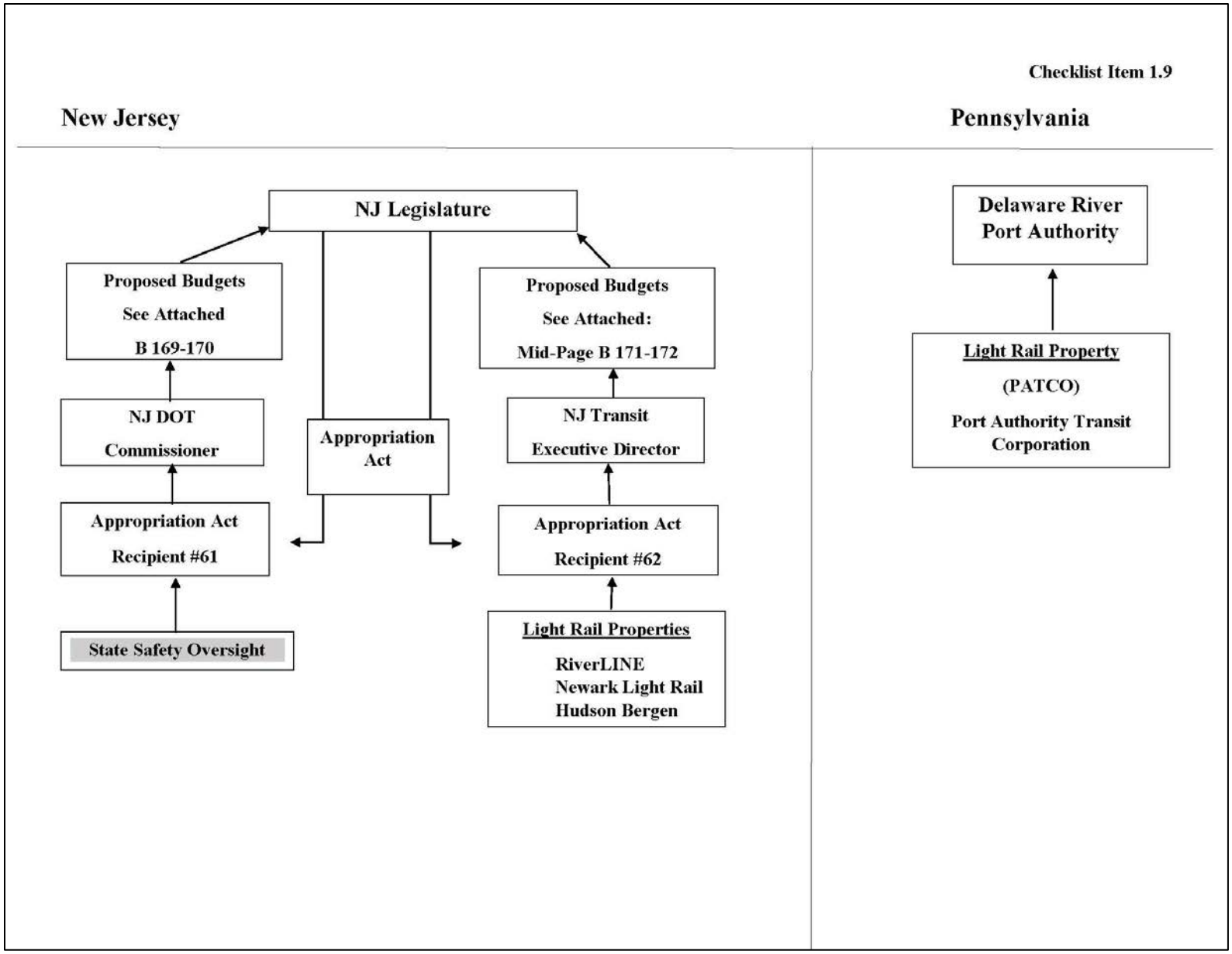
While the NJDOT Commissioner serves as chairman of NJT's Board of Directors, the NJT Executive Director controls its budget and finances.

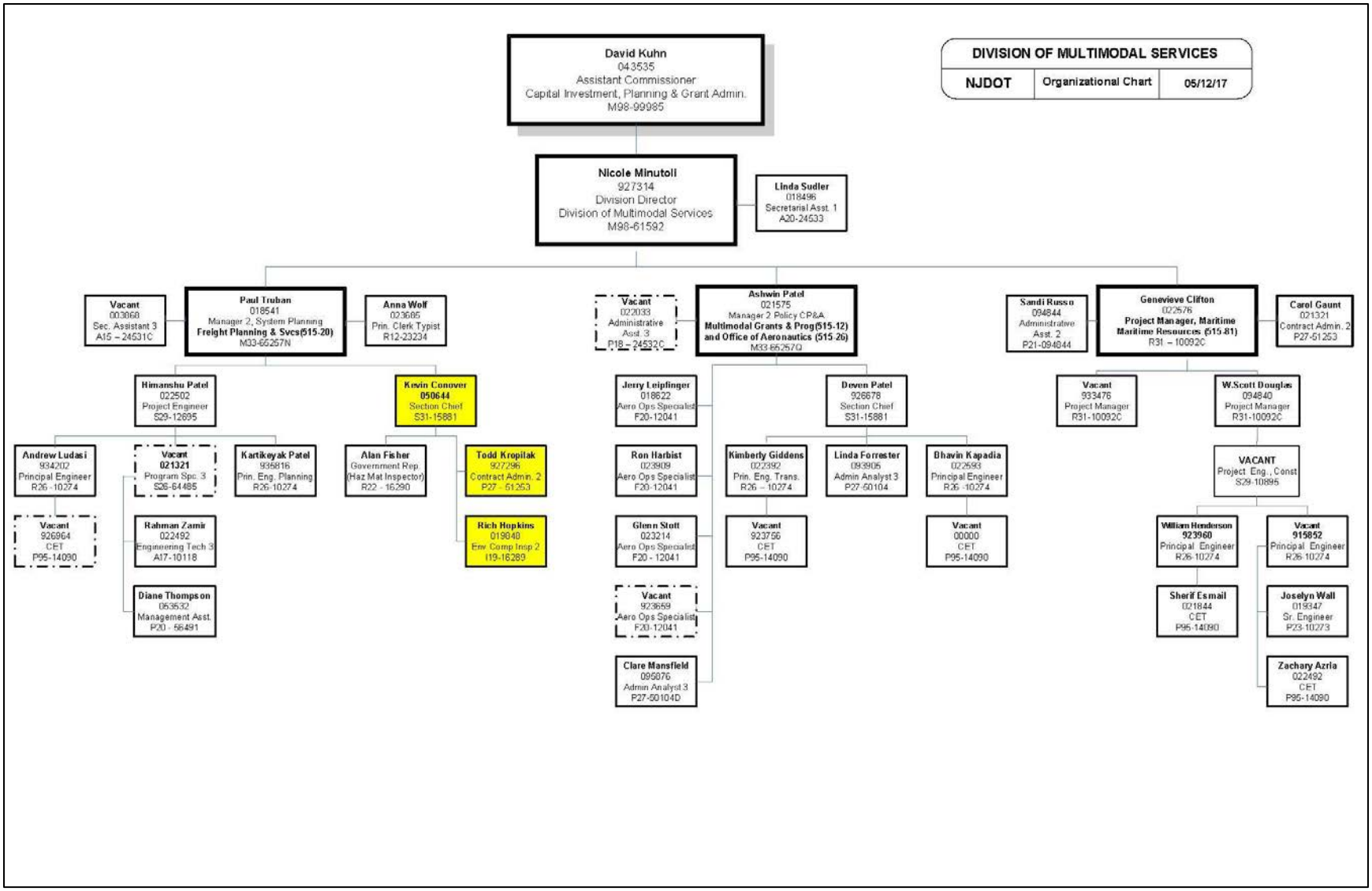
I hope that this information helps clarify the organizational and fiscal arrangement that exists in New Jersey.

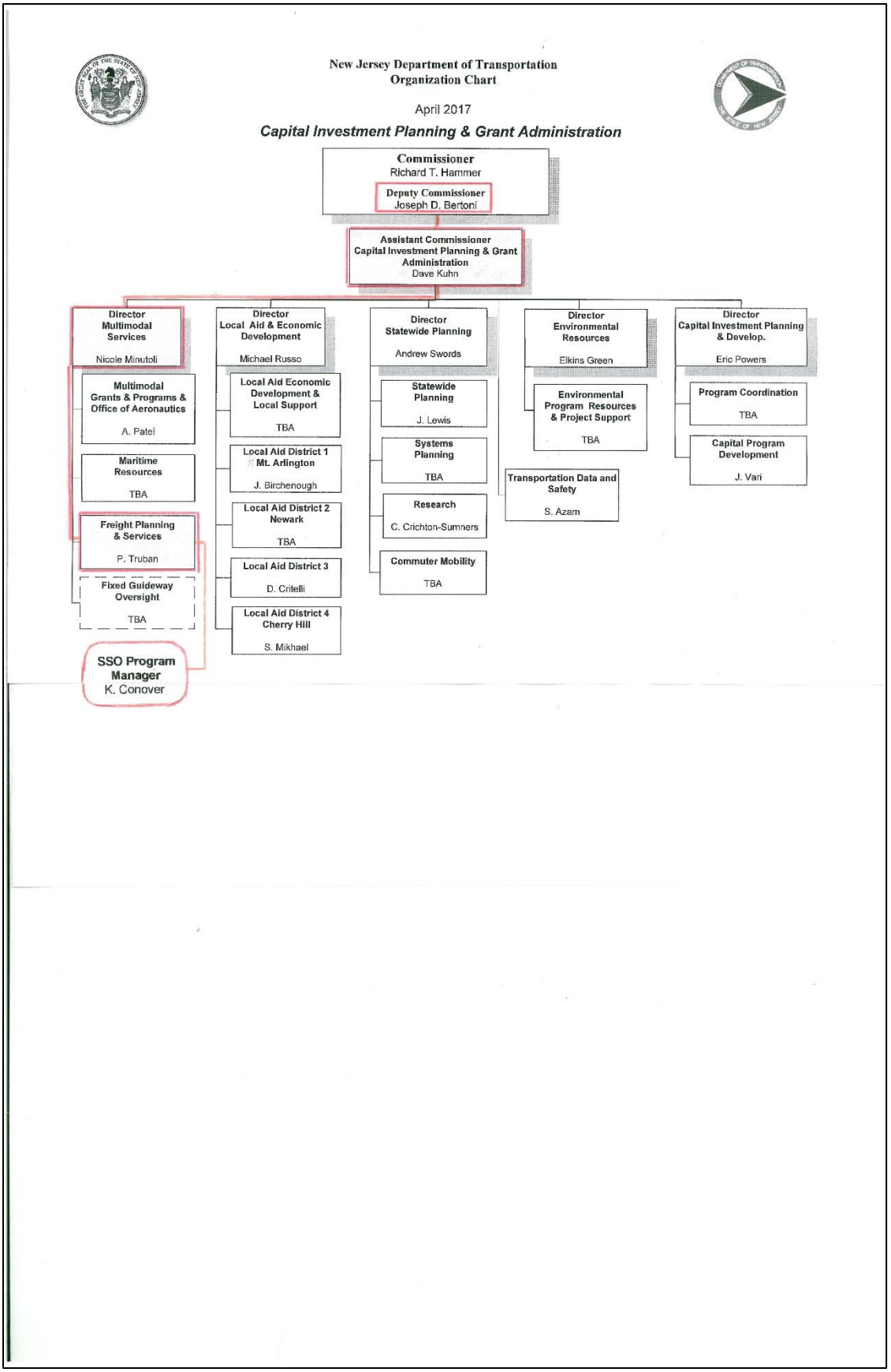
Sincerely,

Gary J. Brune
Chief Financial Officer
NJ Department of Transportation

C: Angela Dluger – Deputy Associate Administrator, Federal Transit Administration
Marilyn G. Shazor - Regional Administrator, FTA Region 2
Anthony G. Carr - Deputy Regional Administrator, FTA Region 2
Hans Point Du Jour - Regional Engineer, FTA Region 2
Todd Kropilak - State Safety Oversight Manager, New Jersey Department of Transportation


Checklist Item 1.9
New Jersey
Pennsylvania
NJ Legislature
Proposed Budgets
See Attached
B 169-170
Proposed Budgets
See Attached:
Mid-Page B 171-172
NJ DOT
Commissioner
Appropriation Act
NJ Transit
Executive Director
Appropriation Act
Recipient #61
Appropriation Act
Recipient #62
State Safety Oversight
Light Rail Properties
RiverLINE
Newark Light Rail
Hudson Bergen
Delaware River
Port Authority
Light Rail Property
(PATCO)
Port Authority Transit
Corporation


DIVISION OF MULTIMODAL SERVICES
NJDOT
Organizational Chart
05/12/17
David Kuhn
043535
Assistant Commissioner
Capital Investment, Planning & Grant Admin.
M98-99985
Nicole Minutoli
927314
Division Director
Division of Multimodal Services
M98-61592
Linda Sudler
018496
Secretarial Asst. 1
A20-24533
Vacant
003660
Sec. Assistant 3
A15 – 24531C
Paul Truban
018541
Manager 2, System Planning
Freight Planning & Svcs(515-20)
M33-66257N
Anna Wolf
023685
Prin. Clerk Typist
R12-23234
Vacant
022033
Administrative Asst. 3
P18 – 24532C
Ashwin Patel
021575
Manager 2 Policy CP&A
Multimodal Grants & Prog(515-12) and Office of Aeronautics (515-26)
M33-66257Q
Sandi Russo
094844
Administrative Asst. 2
P21-094844
Genevieve Clifton
022576
Project Manager, Maritime
Maritime Resources (515-81)
R31 – 10092C
Carol Gaunt
021321
Contract Admin. 2
P27-51253
Himanshu Patel
022502
Project Engineer
S29-12695
Kevin Conover
050644
Section Chief
S31-15881
Jerry Leipfinger
018622
Aero Ops Specialist
F20-12041
Deven Patel
926678
Section Chief
S31-15881
Vacant
933476
Project Manager
R31-10092C
W.Scott Douglas
094840
Project Manager
R31-10092C
Andrew Ludasi
934202
Principal Engineer
R26 - 10274
Vacant
021321
Program Spc. 3
S26-64485
Kartikeyak Patel
936816
Prin. Eng. Planning
R26-10274
Alan Fisher
Government Rep.
(Haz Mat Inspector)
R22 - 16290
Todd Kropilak
927296
Contract Admin. 2
P27 - 51253
Ron Harbist
023809
Aero Ops Specialist
F20-12041
Kimberly Giddens
022392
Prin. Eng. Trans.
R26 – 10274
Linda Forrester
093905
Admin Analyst 3
P27-50104
Bhavin Kapadia
022593
Principal Engineer
R26 -10274
VACANT
Project Eng., Const
S29-10895
Vacant
926964
CET
P95-14090
Rahman Zamir
022492
Engineering Tech 3
A17-10118
Rich Hopkins
019040
Env. Comp Insp 2
I19-16289
Glenn Stott
023214
Aero Ops Specialist
F20 - 12041
Vacant
923756
CET
P95-14090
Vacant
00000
CET
P95-14090
William Henderson
923960
Principal Engineer
R26-10274
Vacant
915852
Principal Engineer
R26-10274
Diane Thompson
063532
Management Asst.
P20 - 56491
Vacant
923659
Aero Ops Specialist
F20-12041
Sherif Esmail
021844
CET
P95-14090
Joselyn Wall
019347
Sr. Engineer
P23-10273
Clare Mansfield
096076
Admin Analyst 3
P27-50104D
Zachary Azrla
022492
CET
P95-14090


New Jersey Department of Transportation
Organization Chart
April 2017
Capital Investment Planning & Grant Administration
Commissioner
Richard T. Hammer
Deputy Commissioner
Joseph D. Bertoni
Assistant Commissioner
Capital Investment Planning & Grant Administration
Dave Kuhn
Director
Multimodal Services
Nicole Minutoli
Multimodal Grants & Programs & Office of Aeronautics
A. Patel
Maritime Resources
TBA
Freight Planning & Services
P. Truban
Fixed Guideway Oversight
TBA
SSO Program Manager
K. Conover
Director
Local Aid & Economic Development
Michael Russo
Local Aid Economic Development & Local Support
TBA
Local Aid District 1 Mt. Arlington
J. Birchenough
Local Aid District 2 Newark
TBA
Local Aid District 3
D. Critelli
Local Aid District 4 Cherry Hill
S. Mikhael
Director
Statewide Planning
Andrew Swords
Statewide Planning
J. Lewis
Systems Planning
TBA
Research
C. Crichton-Sumners
Commuter Mobility
TBA
Director
Environmental Resources
Elkins Green
Environmental Program Resources & Project Support
TBA
Transportation Data and Safety
S. Azam
Director
Capital Investment Planning & Develop.
Eric Powers
Program Coordination
TBA
Capital Program Development
J. Vari

RECEIVED
FEB 05 2018
OFFICE OF
INSPECTOR GENERAL

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DIANE GUTIERREZ-SCACCETTI
Acting Commissioner

February 2, 2018

Joseph D. Bertoni, Deputy Commissioner
New Jersey Department of Transportation
1035 Parkway Avenue
Trenton, NJ 08625

RE: ACTING COMMISSIONER DIANE GUTIERREZ-SCACCETTI RECUSAL FROM THE STATE SAFETY OVERSIGHT RAIL FIXED GUIDEWAY SAFETY/SECURITY SYSTEMS PROGRAM

Dear Mr. Bertoni:

The New Jersey Department of Transportation (NJDOT) has been designated as the agency to carry out the provisions of the Federal Transit Administration's State Safety Oversight of Fixed Guideway Systems in New Jersey pursuant to Executive Order No. 65 (Whitman 1997). As Acting Commissioner of the Department of Transportation, I serve as Chairperson of the NJ Transit Board of Directors pursuant N.J.S.A. 27:25-4d. In order to avoid any potential conflict of interest, I am recusing myself from any and all involvement in official matters concerning the Office of State Safety Oversight of Rail Fixed Guideway Safety/Security Systems Program.

I am delegating all responsibility and authority for handling any such matters to you. Further, I am designating you, Deputy Commissioner, as the Signatory Authority for the State Safety Oversight of Rail Fixed Guideway Systems Program. Please ensure that I am screened from any information or communications on any such matters.

By copy of this letter, I am instructing my administrative staff, to ensure that I do not receive any communications on any matters affecting State Safety Oversight of Rail Fixed Guideway Safety/Security Systems Program.

This recusal will remain in effect indefinitely.

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Sincerely,

Diane Gutierrez-Scaccetti
Acting Commissioner

c: Steven H. Santoro, Executive Director, New Jersey Transit Corporation
Joyce Zuczek, Board Secretary, New Jersey Transit Corporation
Thomas Littleton, Associate Administrator, Safety and Oversight, Federal Transit Administration
Nicole Minutoli, Director Multimodal Services, New Jersey Department of Transportation
Lisa Adams, Administrative Assistant 1, Office of the Commissioner, New Jersey Department of Transportation
Sharon Caffey, Administrative Assistant 1, Office of the Commissioner, New Jersey Department of Transportation
Mark Holmes, Acting Executive Director, New Jersey State Ethics Commission
Elizabeth H. Ferencevych, Ethics Liaison Officer, New Jersey Department of Transportation

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

RICHARD T. HAMMER
Commissioner

July 13, 2017

Steven H. Santoro, Executive Director
New Jersey Transit
One Penn Plaza East
Newark, New Jersey 07105

RE: DEPUTY COMMISSIONER JOSEPH BERTONI RECUSAL FROM ALL NEW JERSEY TRANSIT OFFICIAL MATTERS CONCERNING THE STATE SAFETY OVERSIGHT RAIL FIXED GUIDEWAY SAFETY/SECURITY SYSTEMS PROGRAM

Dear Mr. Santoro:

The New Jersey Department of Transportation (NJDOT) has been designated as the agency to carry out the provisions of the Federal Transit Administration's (FTA's) State Safety Oversight of Fixed Guideway Systems in New Jersey pursuant to Executive Order No. 65 (Whitman 1997). I have been delegated ultimate authority over NJDOT's State Safety Oversight of Rail Fixed Guideway Safety/ Security Systems Program by Commissioner Richard T. Hammer.

As NJDOT Deputy Commissioner, I may also serve as an alternate for Commissioner Hammer as Chairman of the NJ Transit Board of Directors. N.J.S.A. 27:25-4d. In order to avoid any potential conflict of interest, I am recusing myself from any and all involvement in New Jersey Transit official matters concerning the State Safety Oversight of Rail Fixed Guideway Safety/Security Systems Program. Please ensure that I am screened from any information or communications on any such matters.

This recusal will remain in effect indefinitely.

Sincerely,

Joseph Bertoni
Deputy Commissioner

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cc: Richard T. Hammer, Commissioner, New Jersey Department of Transportation
Nicole T. Minutoli, Director, Multimodal Services, New Jersey Department of Transportation
Thomas Littleton, Associate Administrator, Transit Safety and Oversight, FTA
Sharon Caffey, Secretary, New Jersey Department of Transportation
Joyce Zuczek, Board Secretary, New Jersey Transit Corporation
Mark Holmes, Executive Director, New Jersey State Ethics Commission
Elizabeth H. Ferencevych, Ethics Liaison Officer, New Jersey Department of Transportation

State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

RICHARD T. HAMMER
Commissioner

September 7, 2017

Dr. Thomas Littleton
Associate Administrator
FTA Office of Transit Safety and Oversight
1200 New Jersey Avenue SE
East Building, E33-312
Washington, DC 20590

Re: FTA SSO Certification (Overlap of Transportation Services – Certification Checklist Item 1.11)

Dear Dr. Littleton:

A review of New Jersey Department of Transportation records indicated that the Department does not directly provide public transportation services in any area with a Fixed Guideway Transit System (FGTS) over which it holds jurisdiction, however, research did indicate that in 2014, the Department entered into a temporary agreement with a ferry service provider to alleviate traffic caused by the Department's Pulaski Skyway overhaul project. This ferry service connected Atlantic Highlands with Jersey City and Hoboken, two locations where Hudson Bergen Light Rail also provides service. This service has since been suspended.

Regardless of the above, since the FTA generally does not consider single-point interfaces such as ferry terminals located within the FGTS service area as overlapping public transportation service with the FGTS, the Department does not appear to have any overlap of transportation services.

Should you have any additional questions or comments, please feel free to contact me at 609-530-3482.

Sincerely,

Kevin Conover, PE, PTOE
Section Chief / SSO Program Manager
Bureau of Freight Planning and Services

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Appendix D

NJDOT SSO Program Description and General Procedures

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NJDOT Multimodal Services Division – Description

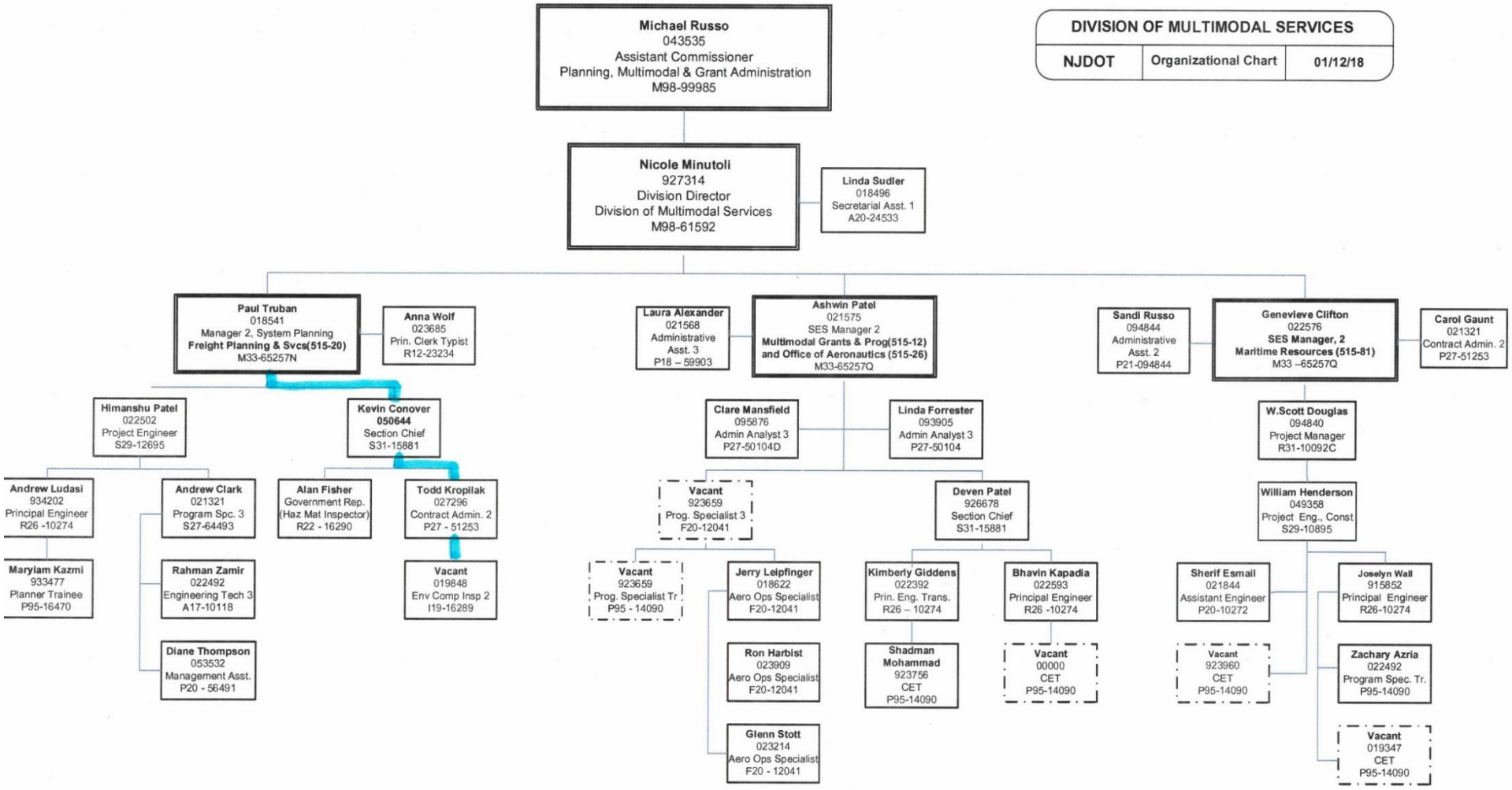

Figure D-1. NJDOT Organization Chart

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NJDOT SSO Program Team Contact Information

Division of Multimodal Services
Office of Fixed Guideway Safety and Security Oversight
1035 Parkway Avenue
P.O. Box 600
Trenton, NJ 08625-0600

Email: NJOFGSSO@dot.nj.gov

Nicole Minutoli
Division Director
Phone: (609) 530-2080
Email: Nicole.Minutoli@dot.nj.gov

Kevin Conover
SSO Program Manager
Phone: (609) 530-3482
Cell: (609) 900-5267
Email: Kevin.Conover@dot.nj.gov

Todd Kropilak
Contract Administrator
Phone: (609) 530-2551
Cell: (609) 273-5169
Email: Todd.Kropilak@dot.nj.gov

NJDOT SSO Program General Procedures

The General Procedures included as part of this appendix have been developed in addition to related processes and procedures described in the SSOPS and appendices. These procedures are intended to formalize existing activities and procedures in order to address expectations from FTA and the enhanced NJDOT SSO program based on the new SSO rule (49 CFR Part 674). The following procedures are described here and then available in separate downloadable files.

- **SSO-001. Program Standard Update Procedure** – this procedure explains timing and philosophy of updates for the program standard. Updates of actual policy in the body of the SSOPS will require approval and sign-offs from all of the program participants. However, an administrative or minor change to the body of the SSOPS will be notified and no approvals will be necessary. In addition, appendices of the SSOPS will be updated at will, and only a simple review and concurrence process is required. The timing of these updates will be based on program need, changes to FTA regulations, and changes required based on external audits of the NJDOT SSO program. Each December, a check for any needed updates of the SSOPS will be made, as required by FTA.
- **SSO-002. Conflict of Interest (COI) Review Procedure** – this procedure explains the identification of potential NJDOT SSO program conflicts of interest (COI), review of these potential COIs, and the determination and documentation of decision-making based on the review of the potential COIs. This procedure also includes a template form to capture the potential COI and any decisions and notes from the review of that potential COI. Completed template forms will become formal records to be tracked as part of the NJDOT SSO program.
- **SSO-003. Event Notification Procedure** – this procedure provides instructions to the New Jersey RTAs/RTSs for reportable events that occur at the RTAs/RTSs and must be notified to the NJDOT SSO program.
- **SSO-004. Enforcement Escalation Procedure** – this procedure explains the process that the NJDOT SSO program will use to track potential unmitigated safety (or security) risk at the New Jersey RTAs/RTSs and interactions with the RTAs/RTSs to assure that these potential unmitigated safety (or security) risks are appropriately addressed. The focus for this procedure is on how the NJDOT SSO program will escalate this type of situation if there are disagreements or a lack of responsiveness from the New Jersey RTAs/RTSs. This escalation of enforcement might provide a remedy through the New Jersey Attorney General's office should a New Jersey RTA/RTS be unresponsive to resolution issues required by the NJDOT SSO program.
- **SSO-005. Annual Public Safety Report Development Procedure** – this procedure provides a process for developing and completing the annual NJDOT Public Safety Report (PSR). The procedure includes a scope and outline for this annual report as well as the review and approval process to be followed. Ultimately, this report is required to be delivered annually to the FTA, Governor of the State of New Jersey, Governor of the State of Pennsylvania, and the boards of directors (or equivalent) of each of the RTAs/RTSs over which New Jersey has jurisdiction.
- **SSO-006. Data De-identification Procedure** – this procedure explains the process and requirements for the RTA/RTS event investigations, internal audits, and corrective action

plans (CAPs) data and information to be de-identified, coded, and delivered to the FTA on an annual or as-needed/periodic basis. The focus of this procedure is assuring that the data and information provided to the FTA is both responsive to FTA's requirements while at the same time not providing any sensitive or personally specific information that is not necessary to meet the FTA's requirements.

- **SSO-007. Annual Hazard Data Reporting Procedure** – This procedure provides scope for collecting Hazard data from the New Jersey RTAs/RTSs as currently required by FTA under Part 659. Hazard data are to be collected monthly from the New Jersey RTAs/RTSs. Data include state only reportable events (defined in Procedure SSO-003), hazard log data, and daily incident logs (red signal violations, broken rail/kinks, railcar braking failures, near misses with automobiles/pedestrians, and door faults/doors opening wrong side). Additional hazard related data will continue to be collected from the New Jersey RTAs/RTSs to support risk monitoring. Hazard data submission will follow requirements in Procedure SSO-006.
- **SSO-008. RTA/RTS Safety Oversight and Enforcement Risk Monitoring Procedure** – This procedure explains the process and requirements for the activities that make up the NJDOT SSO program risk monitoring of the New Jersey RTAs/RTSs. 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.
- **SSO-009. Investigation for Allegations of RTA/RTS Noncompliance with Agency Safety Plan (ASP) Procedure (including public input)** – This procedure addresses receipt of allegations of RTA/RTS noncompliance with their ASP from others such as the public, patrons, employees, Safety Department, SSO Program FTA, or others. The NJDOT SSO program also uses this procedure for addition of investigations beyond those required by FTA for accidents as state reportable events.
- **SSO-010. Investigation Reporting Process** – This procedure describes the NJDOT SSO Program process for safety event investigations at the New Jersey RTAs/RTSs. At this time, the NJDOT SSO program requires notification and investigation for criteria from both SSO Rules and a few additional significant hazardous conditions as defined in Procedure SSO-003 and Section 6 of the program standard. Safety event investigations are covered in Section 7 of the program standard.
- **SSO-011. Minimum Training Requirements** – This procedure details Minimum Training Requirements based on Job Category.
- **SSO-012. Distribution Lists –** This procedure details email/mail distribution lists.
- **SSO-013. Record Retention** – This procedure details record retention.

Procedure SSO-001

Updated Procedure for the NJDOT Rail Transit State Safety Oversight (SSO) Program Standard (SSOPS)

Current Version: February 13, 2018

Scope: This procedure explains the types of and timing for updates of the NJDOT Rail Transit SSOPS.

Design Philosophy for SSOPS: The NJDOT Rail Transit SSOPS describes the NJDOT SSO program processes and procedures, interactions, and requirements for the New Jersey rail transit agencies (RTAs)/rail transit systems (RTSs), and the program's responsibilities to the FTA SSO program. Changes to this SSOPS are made within the NJDOT SSO program and result from internal or external audits, policy changes, requirement changes from FTA or the state, and/or organizational changes. The SSOPS is to be reviewed in December for update each year. In addition, the SSOPS is to be kept up-to-date on an as-needed basis between annual reviews for update. All participants involved in the NJDOT SSO program are welcome to offer changes or additions to the SSOPS. Each comment or recommendation received will be reviewed by the NJDOT SSO program in a timely manner.

SSOPS Body Update – Significant Change: A significant change to the SSOPS body would include any changes to policy or requirements of the NJDOT SSO program or the New Jersey RTAs/RTSs. Updates of actual policy in the body of the SSOPS will require approval and sign-offs from all of the program participants. This type of change will cause a full Version number change in the first digit, e.g., Version 3.1 would change to Version 4.0. A row will be added on the Version Tracking page to explain the update.

Proposed changes to this SSOPS will be circulated for review in draft form to applicable NJDOT SSO program management and staff and the New Jersey RTAs/RTSs. Following review and comment, draft changes must be approved by the Director, Division of Multimodal Services and incorporated into the final revision of the SSOPS.

Once the final/updated SSOPS has been approved within NJDOT, each of the New Jersey RTAs/RTSs will receive a copy for review and will be required to acknowledge the updated SSOPS by filling in the signature page for the chief executive officer, lead for the safety program, lead for the security program, and any other appropriate parties at the RTA/RTS and sending the signed pages back to the NJDOT SSO program. Any corrections or issues at this point in the process will be reviewed and appropriate changes will be made as needed and approved by the NJDOT Director, Division of Multimodal Services.

The finalized SSOPS will then be notified to the NJDOT SSO program staff and New Jersey RTAs/RTSs and available electronically in Acrobat/pdf format and placed on NJDOT's website at www.state.nj.us/transportation. Once the updated SSOPS has been finalized, it is the responsibility of the New Jersey RTAs/RTSs to pass these requirements on to any appropriate staff or contractors.

SSOPS Body Update – Administrative Change: An administrative change to the SSOPS body are minor in nature without any substantial policy change or expectations of the NJDOT SSO program or the New Jersey RTAs/RTSs. Administrative changes will follow a separate update process that will include review by appropriate staff at the New Jersey RTAs/RTSs and approval by the NJDOT SSO Program Manager, and will not require the formal signatures or acknowledgement of the changes by the New Jersey RTAs/RTSs. This type of change will cause the Version number to change in the second digit, e.g., Version 3.0 to Version 3.1. A row will be added on the Version Tracking page to explain the update.

This Administrative Change will be notified to the NJDOT SSO program staff and the New Jersey RTAs/RTSs and then available electronically in Acrobat/pdf format and placed on NJDOT's website at www.state.nj.us/transportation. Once the updated SSOPS has been finalized, it is the responsibility of the New Jersey RTAs/RTSs to pass these requirements on to any appropriate staff or contractors.

SSOPS Appendices Update: The NJDOT Rail Transit SSOPS has been designed with the appendices and procedures separate from the body of the program standard. Updates to the appendices and procedures will follow a separate update process that will include review by appropriate staff at the New Jersey RTAs/RTSs and approval by the NJDOT SSO Program Manager, and will not require the formal signatures or acknowledgement of the changes by the New Jersey RTAs/RTSs. When an appendix or procedure is updated, the version date will reflect the update and be changed on the version tracking list for the appendices and procedures.

Updates to the appendices or procedures will be notified to the NJDOT SSO program staff and New Jersey RTAs/RTSs and available electronically in Acrobat/pdf format and placed on NJDOT's website at www.state.nj.us/transportation.

A list of the appendices, procedures, and current version date is available at the front of the appendices and online so that all NJDOT SSO program participants can assure that they have the current version of each appendix or procedure.

SSOPS Updates Submission to FTA: Any changes to the NJDOT Rail Transit SSOPS since the last annual submission to FTA must be provided to FTA via the next annual submission by March 31st. If the SSOPS has not been changed in the previous year, documentation of the annual check will be provided to FTA as part of the annual submission.

Updates:

- January 5, 2018 – initial release

Procedure SSO-002

Conflict of Interest (COI) Review and Resolution Procedure

Current Version: March 5, 2018

Scope: This procedure explains the identification of potential NJDOT SSO program conflicts of interest (COI), review of these potential COIs, and the determination and documentation of decision-making based on the review of the potential COIs. An example of the use of this potential COI process will be when NJDOT is involved in providing grant funding to any of the New Jersey rail transit agencies (RTAs) or rail transit systems (RTSs) related to the rail systems. This procedure also includes a template form to capture the potential COI and any decisions and notes from the review of that potential COI. Completed template forms will become formal records to be tracked as part of the NJDOT SSO program.

Conflict of Interest Requirements: No individual or entity may provide services to both the NJDOT SSO program and an RTA/RTS when there is a conflict of interest (COI) or an appearance of a conflict. A potential COI situation occurs when an individual or entity performing work for a New Jersey RTA/RTS or the NJDOT SSO program is unable, or potentially unable to render impartial assistance or advice on the development or implementation of the standards and provisions of the NJDOT SSO program, or to objectively perform such work without bias. Each contractor is subject to full disclosure on all present and potential conflicts of interest in its activities or relationships prior to being awarded or during a contract with NJDOT or RTA/RTS within the state.

FTA's new safety program authorization in 49 U.S.C. Section 5329 (from MAP-21) and 49 CFR Part 674 further describes financial independence that prohibits funding from the RTA/RTS to the NJDOT SSO program, and requires management of potential COI situations when the NJDOT Division of Multimodal Services participates in funding projects at an RTA/RTS. The NJDOT SSO program does not receive funding from any of the New Jersey RTAs/RTSs and is hereby prohibited from doing so.

§ 674.41 Conflicts of interest.

(a) An SSOA must be financially and legally independent from any rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).
(b) An SSOA may not employ any individual who provides services to a rail fixed guideway public transportation system under the oversight of the SSOA, unless the Administrator has issued a waiver of this requirement in accordance with § 674.13(b).
(c) A contractor may not provide services to both an SSOA and a rail fixed guideway public transportation system under the oversight of that SSOA, unless the Administrator has issued a waiver of this prohibition.

COI Identification, Assessment, and Resolution: Potential COI situations are required to be actively identified, disclosed, assessed, and resolved for the NJDOT SSO program. For any

situation that might arise that could be a potential COI situation as described in the requirements above, a staff member of the NJDOT SSO program must assess and determine if the COI situation poses an actual conflict or violation of the SSO regulation (49 CFR Part 659 or 49 CFR Part 674). This assessment and determination may require discussions with other staff, NJDOT Legal, and/or NJDOT management. Ultimately, for each COI assessment occurrence, the following form must be filled in to describe the potential COI situation, the assessment and resolution determined as part of this procedure, and what the next steps might be, if any. If there are next steps, when those steps are taken, another COI Review and Assessment form should be used to continue the assessment and resolution process.

As a part of this COI assessment procedure, each filled in COI Review and Assessment form becomes a record to be kept on file as part of the NJDOT SSO program.

NJDOT SSO Program
Conflict of Interest (COI) Review and Assessment

Date: _____

Potential COI Description: _____

_____

_____

Staff Reviewer: _____

Assessment and Resolution: _____

_____

_____

_____

_____

_____

Next Steps: _____

_____

_____

_____

Procedure SSO-003

Notification of Incidents, Accidents, and Hazards

Current Version: March 5, 2018

Scope

This section provides the contact information and checklists to be used by the RTAs for reportable events (accidents/incidents) that occur on the RTA rail systems and rail-related property.

CONTACT PERSON	TELEPHONE NUMBER	EMAIL/ADDRESS
Kevin Conover, NJDOT Program Manager	609-530-3482 (office) 609-900-5267 (cell)	1035 Parkway Avenue Ewing, NJ 08625
NJDOT email		NJOFGSSO@dot.nj.gov
FTA email		FTAAccidentNotifications@dot.gov

Attached Forms

- Exhibit A: Summary Conformance Checklist: Procedures for Notification of Incidents, Accidents and Hazards
- Exhibit B: Notification of Accident/Incident and Hazardous Conditions Form
- Exhibit C: Use for New, Updated or Changed Information Accident, Incident and Hazardous Condition Form

Exhibit A

SUMMARY CONFORMANCE CHECKLIST

PROCEDURES FOR NOTIFICATION OF INCIDENTS, ACCIDENTS AND HAZARDS

FIXED GUIDEWAY SYSTEM: _____ _____ REV. NO: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE	PLAN TITLE: _____ _____ DATE: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE
1	Procedures for notification			11			
2	Methods by which the procedures are made known to FGTS/RTS Departments			12			
3	Notification Criteria Timeline Thresholds notification information and update criteria			13			
4	Defined responsibilities within the FGTS/RTS organization for the notification			14			
5	Methods by which notifications are linked to the Hazard Management process as defined in the approved SSPP			15			
6	Role of the System Safety and System Security Managers			16			
7	Documentation			17			
8	External notification - OSSO, NTSB, local regulatory agencies			18			
9	OSSO Coordination - Methods by which the FGTS/RTS coordinate with the OSSO on additional information after the initial notification			19			
10				20			

PROCEDURES FOR NOTIFICATION OF INCIDENTS, ACCIDENTS AND HAZARDS

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:**_____

APPROVED BY: _____ **DATE:**_____

Conformance Checklist Form
(For NJDOT Use Only)

Comments

Exhibit B

NOTIFICATION OF ACCIDENT/INCIDENTAND HAZARDOUS CONDITION

DATE OF REPORT: _____ **TIME OF REPORT**: _____ (24 HOUR TIME)

REPORTED BY: _____ **FAX/E-MAIL/OTHER**: _____

TELEPHONE: _____ **CONTACT PERSON**: _____

VEHICLE No.:_____ **TRAVEL DIRECTION/LINE**: _____

RAIL TRANSIT SYSTEM: _____

DATE OF ACCIDENT: _____ **TIME OF ACCIDENT**: _____ AM PM

LOCATION: [Nearest Station/Stop Location-City (Boro., Twp., Etc.)]: _____

TYPE OF ACCIDENT/INCIDENT:

I. FATALITY _____ II. INJURY [Evacuation to Hospital] _____

III. EMERGENCY EVACUATION FROM TRANSIT VEHICLE _____ IV. MINOR INJURY _____ PROPERTY DAMAGE _____

V. OTHER _____ VI. PRELIMINARY ESTIMATE $_____ OF DAMAGE

[Check mark or circle those that apply and insert the number involved.]

DESCRIPTION OF INCIDENT (Collision, Derailment, Fire): _____

_____

_____

_____

_____

_____

EVENT/COMMENTS: _____

_____

_____

Attach additional sheets as necessary, use the "# of #" protocol for page numbering

Exhibit C

Use for NEW, UPDATED OR CHANGED Information

ACCIDENT, INCIDENT AND HAZARDOUS CONDITION

DATE OF REPORT: _____ **TIME OF REPORT**: _____ (24 HOUR TIME)

REPORTED BY: _____ **FAX/E-MAIL/OTHER**: _____

TELEPHONE: _____ **CONTACT PERSON**: _____

VEHICLE No.: _____ **TRAVEL DIRECTION/LINE**: _____

RAIL TRANSIT SYSTEM: _____

DATE OF INCIDENT: _____ **TIME OF INCIDENT**: _____ (24 HOUR TIME)

DESCRIPTION OF INCIDENT (Collision, Derailment, Fire): _____

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EVENT/COMMENTS: _____

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Procedure SSO-004

Enforcement Escalation Procedure

Current Version: March 5, 2018

Scope: This procedure explains the process that the NJDOT SSO program uses to track potential unmitigated safety (or security) risk at the New Jersey Rail Transit Agencies (RTAs)/ Rail Transit Systems (RTSs) and interactions with the RTAs/RTSs to assure that these potential unmitigated safety (or security) risks are appropriately addressed. The focus for this procedure is on how the NJDOT SSO program may escalate this type of situation if there are disagreements or a lack of responsiveness from the New Jersey RTAs/RTSs. This escalation of enforcement may provide a remedy through the New Jersey Attorney General's office should a New Jersey RTA/RTS be unresponsive to resolving issues required by the NJ DOT SSO program.

New Jersey Enforcement Generally: New Jersey Statute Annotated, N.J.S.A. 48:2-15(b) provides the NJDOT with the authority to regulate the RTAs/RTSs including the regulation of the adequacy of service and safety of operation and equipment. The NJDOT SSO program has enforcement authority in administrative code N.J.A.C. 16:53E.

Background – Hazard Management and Risk Monitoring: With limited budgets and resources, the NJDOT SSO program focuses on issues that have been identified through safety event notifications and investigations, audit results, and risk monitoring of various safety and security related activities and issues. For each of the New Jersey RTAs/RTSs, there is a list of hazard and mitigation topics that are tracked and monitored to assure that mitigation is working and no new risk has been introduced by that mitigation.

Prioritization of hazard/risk issues is based on a concept of if you see or become aware of one issue/concern that might become a hazard, it is noted and tracked. If the potential hazard is observed (or reported) a second time, then it is tracked as a potential unmitigated risk that needs more attention. If observed (or reported) a third time, the response is escalated to an onsite visit to conduct interviews and collect relevant data, such as through inspections. This approach is used by the NJDOT SSO program to manage the limited resources for tracking potentially unmitigated risk. If at any time the potential hazard becomes a significant hazardous condition, the NJDOT SSO program will work with the RTA/RTS Safety Department to respond right away. This is an ongoing or continuous process of tracking, analysis, observing, and communicating with each of the New Jersey RTAs/RTSs to be aware of the risk environment. One extremely important and related issue is that the New Jersey RTA/RTS should always own their own risk, not the NJDOT SSO program, so care is required in this process to assure responsibility of the New Jersey RTA/RTS for managing and mitigating its own risk.

Failure to mitigate a risk will result in a Notice of Violation (NOV). A NOV will be classified as either Administrative or Operational.

Administrative violations will result from the New Jersey RTA/RTS failing to meet any procedure that is in the NJDOT State Standards or the System Safety Program Plan (SSPP) that is developed by the RTA/RTS and approved by the SSO agency.

Operating violations will relate to the movement and maintenance of a rail vehicle, mobile and fixed maintenance equipment and all related appurtenances that is in conflict with RTA/RTS established procedures, rules or original equipment manufacturers (OEM) guidelines.

Enforcement

(1) *Administrative NOVs*

The SSO program manager will formally document an administrative NOV to the RTA/RTS Safety Department. After receipt of the notice, the RTA/RTS has 30 days to address and correct the violation. If the violation is not addressed, a second NOV will be issued to the Safety Department and the General Manager of the RTA/RTS. If after 30 days the NOV is not addressed or corrected, the SSO manager will send a letter to the Board of Directors requesting assistance in compelling the RTA/RTS to correct the violation.

(2) *Operational NOV's*

Once the NJDOT SSO program staff identify something that appears to be a potentially significant hazardous condition, this situation is discussed directly with RTA/RTS staff and management. Often, there are several issues at the same time that are discovered and considered important for RTA/RTS attention and resolution. These risk-related issues are typically and almost always resolved at this level of discussion and interaction. The NJDOT SSO program staff documents these observations, inspections, interviews, planned resolutions, and continues to monitor for resolution and whether or not the risk issues are properly resolved over time.

First Notice of Hazardous Condition. If after some appropriate period of time, the NJDOT SSO program staff continue to observe a pattern of potentially significant risk issues already communicated to the New Jersey RTA/RTS, formal communication will be made with the New Jersey RTA/RTS. A NOV will be issued from the NJDOT SSO program to the proper executive (General Manger) of the New Jersey RTA/RTS. This letter provides the risk issues that were of concern to the NJDOT SSO program staff with a formal request of corrective action plan within 10 to 30 days (depending on the complexity of the identified hazard) including an explanation of how the New Jersey RTA/RTS plans to address the identified concerns. If the explanations from the New Jersey RTA/RTS are reasonable/acceptable, the issues and responses are documented and risk monitoring continues.

Second Notice of Hazardous Condition. If after some appropriate period of time, the NJDOT SSO program staff continue to observe a pattern of potentially significant risk issues already communicated to the RTA/RTS, further communication will be made with the RTA/RTS. This is typically performed through a formal letter from the NJDOT senior management to the Chief (Accountable) Executive of the RTA/RTS. This letter provides the risk issues that were of concern to the NJDOT SSO program staff with a formal request to respond to the letter including an explanation of how the RTA/RTS plans to address the identified concerns from the NJDOT SSO program. If the explanations from the RTA/RTS are reasonable/acceptable, the issues and responses are documented and risk monitoring continues. If the RTA/RTS determines that the identified risk issues need more attention, then the NJDOT SSO program requires the RTA/RTS to develop appropriate corrective actions that are agreed to and then tracked to completion. The

response to a letter from the NJDOT SSO program might require a response from one to four weeks depending on the complexity of the identified risks.

Final Notice of Hazardous Condition. Based on the requirements in New Jersey Administrative Code (N.J.A.C.) 16:53E-2.1, if the RTA/RTS does not properly respond (in scope or timeframe) to requests and direction provided by the NJDOT senior management in terms of risk identification and proper resolution, the ultimate responsibility for enforcement will escalate over some period of time to the New Jersey Attorney General's Office for enforcement of the NJDOT's NOV.

Immediate Enforcement Due to Imminent Threat to Public Safety. If at any time the NJDOT SSO Program staff become aware of an Imminent Threat to Public Safety at a New Jersey RTA/RTS, immediate communications between NJDOT Office of Fixed Guideway management and the RTA/RTS Safety Department (and other appropriate RTA/RTS departments, as needed) will determine if the threat is truly imminent and what the next steps might be. If the NJDOT SSO Manager and NJDOT Commissioner's designee concur on severity of the threat, immediate actions to address the imminent threat to public safety up to and including removing RTA/RTS equipment from service or ultimately shutting down the rail system at the New Jersey RTA/RTS will be ordered.

Procedure SSO-005

Annual Public Safety Report

Current Version: March 5, 2018

Scope: This procedure provides a process for developing and completing the annual NJDOT Public Safety Report (PSR). The procedure includes a scope and outline for this annual report as well as the review and approval process to be followed. Ultimately, this report is required to be delivered annually to the FTA, Governor of the State of New Jersey, Governor of the State of Pennsylvania, and the boards of directors (or equivalent) of each of the rail transit agencies (RTAs)/rail transit systems (RTSs) over which New Jersey has jurisdiction.

Requirement: The PSR is required based on 49 CFR Part 674.13(a)(7) – The State must ensure that at least once a year, the SSOA reports the status of the safety of each rail fixed guideway public transportation system to the Governors, the FTA, and the board of directors, or equivalent entity, of the rail fixed guideway public transportation system.

Scope of PSR: The scope of this report will include accomplishments of the NJDOT SSO program, interactions and status of the rail safety program at each of the New Jersey RTAs/RTSs. Status of the New Jersey RTA/RTS rail safety programs will include total number of reportable investigations and numbers of corrective actions being tracked as part of the NJDOT SSO program for the reporting year. This status report will cover activities for the previous calendar year and the final status report will be distributed to the required parties no later than **June 30th** of the following year.

Outline – PSR: The following is a general outline for this status report:

- Title page
- Executive Summary
- Introduction
- Accomplishments of the NJDOT SSO Program
- Each RTA/RTS

Review Process for Draft PSR: The draft report will be completed by **March 31st** for the previous calendar year. Reviews of the draft status report are requested from NJDOT and each of the New Jersey RTAs/RTSs. These reviewers should include any additional reviews needed by others at each RTA/RTS and within NJDOT. After the review process, all comments and changes will be made to the draft PSR. NJDOT management will be responsible for taking the updated draft report up the NJDOT chain of command for review and comment. Once the draft PSR is finalized, NJDOT management will coordinate delivery of the final report to the New Jersey Governor's Office and to the Pennsylvania Governor's Office. Each of the New Jersey RTAs/RTSs will coordinate delivery of the final report to their boards of directors (or equivalent), and provide evidence back to the NJDOT SSO program of that delivery. The NJDOT SSO program will post the final PSR to their website and coordinate delivery of the final PSR to the FTA Associate Administrator of the Office of Safety and Oversight.

Procedure SSO-006

Data De-Identification Procedure

Current Version: March 5, 2018

Scope: This procedure explains the process and requirements for the RTA/RTS safety event investigations, internal audits, and corrective action plans (CAPs) data and information to be de-identified, coded, and delivered to the FTA on an annual or as-needed/periodic basis. The focus of this procedure is assuring that the data and information provided to the FTA is both responsive to FTA's requirements while at the same time not providing any sensitive or personally specific information that is not necessary to meet the FTA's requirements.

Data to be De-identified: The following are the data record types that need to be reviewed and de-identified:

(1) **Investigation information and data** – all personal information should be removed and only a summary of the investigation detail should be provided to FTA. Individual's names in the report should be redacted to only their title (e.g. Operator, Supervisor, Maintainer, Contractor, Passenger/Patron, Pedestrian, Bicycle Operator, or other), as appropriate. The shortened description of the investigation should not include names.
(2) **Corrective actions** – the SSO is required provide the name of the responsible person and his/her department when submitting CAPs to the FTA Annual Report.
(3) **Triennial reviews/audits** – the new SSO rule now indicates that only a summary of the triennial report should be provided to FTA, not the entire report, as has been the requirement in the past.
(4) **Sensitive Security Information (SSI)** – all transmittals shall follow the established practices in "Sensitive Security Information (SSI): Designation, Markings and Control" published by the FTA in March 2009.

Procedure SSO-007

All Hazard Data Reporting Procedure

Current Version: March 5, 2018

Scope: This procedure details for collecting all hazard data from the RTAs/RTSs as currently required by FTA under Part 659. Hazard data to be collected monthly from the RTAs/RTSs are as follows:

- **State-only reportable events** – significant hazardous conditions beyond the FTA defined reportable accidents, as defined in Procedure SSO-003, and any related Corrective Actions
- **RTA/RTS Hazard Log records from the reporting year** – required to be provided on at least a monthly basis from each RTA/RTS, as documented in the RTA/RTS System Safety Program Plan.
- **Hazards and Occurrences from Daily Incident Logs** – required to be provided on at least a monthly basis from each RTA/RTS
  - **Red Signal Violations** – this includes traffic signals, flagging signals, and signal tests performed by the control center. As appropriate, this includes work crews and equipment.
  - **Broken Rail/Kink** – as defined by the New Jersey RTA/RTS.
  - **Railcar braking failure** – an indication that the braking has been reduced enough to have the railcar taken out of service for safety and maintenance reasons
  - **Close calls with automobiles/pedestrians** – these safety events are intended to be only those that require a response from the RTA/RTS to avoid a potential incident (such as declaring an emergency on the rail system for persons near or on the right of way and ticketing/towing for automobiles too close to or on the rail system). In addition, any significant close call with a vehicle (automobile, truck, or other rail vehicle, including work equipment) that requires action either by control center or the rail operator (an example would be an emergency broadcast for a potential rail to rail collision, block on block); however, many of these are already defined in Procedure SSO-003 and will already require separate investigation.
  - **Door faults/doors opening wrong side** – these are significant door hazards such as a door opening during operation/movement and opening of door(s) on the opposite side from the station.
- **Additional safety event/incident/occurrence data** – the New Jersey RTA/RTS Incident Logs are expected to include additional topics and data collection that will allow appropriately extensive Oversight Risk Monitoring and will be collected, reviewed, and analyzed by the NJDOT SSO program. The above Hazard Related data are a minimum requirement. In addition, the new FTA regulations (Part 673 Agency Safety Plan and Part 674 SSO) and safety management system (SMS) will require additional data collection and analysis including an RTA/RTS Occurrence Log that will be auditable by the state and FTA.

Process for Hazard Related Data Collection and Submission to FTA: On at least a monthly basis, the NJDOT SSO program will review New Jersey RTA/RTS Daily Incident Logs and railcar status reporting. On a monthly basis, the NJDOT SSO program will extract data from the Hazard Log and Daily Incident Log and store in a database for review, analysis, and ultimately submission to FTA in their online/web data collection tool, by March 15th of the following calendar year. Annual data submission (including Hazard Data) by the NJDOT SSO program for FTA will follow de-identification requirements as defined in SSO-006.

Procedure SSO-008

Rail Transit Agency (RTA)/Rail Transit System (RTS) Safety Oversight and Enforcement Risk Monitoring Procedure

Current Version: March 5, 2018

Scope: This procedure explains the process and requirements for the activities that make up the NJDOT SSO program risk monitoring of the RTAs/RTSs under the jurisdiction of New Jersey. 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 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.

Risk Monitoring Related Requirements: Risk Monitoring is used by the NJDOT SSO program to stay informed about the risk environment at each New Jersey RTA/RTS, as well as to be informed about changes in the risk environment, safety performance, and safety culture. This knowledge is used for systematic oversight and enforcement of the RTA/RTS safety program (as documented in the interim Agency Safety Plan and related minimum standards for safety). Risk Monitoring is accomplished through data and information collection and analyses and visits to the New Jersey RTAs/RTSs on a regular basis for meetings, investigations, audits, and inspections, as well as follow-up review of RTA/RTS corrective action plan (CAP) completion and effectiveness of those CAPs in mitigating the identified safety issues.

In order to perceive changes in the risk environment at the RTA/RTS, some time is needed between risk monitoring visits. In addition, this allows for the RTA/RTS to own their risk and time to continue their risk management and assessment processes.

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

§ 674.25 Role of the State safety oversight agency.

(a) 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).

(b) 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.

(c) 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 (Section 6 and Appendix O)
   b. Internal Audits (Section 4)
   c. Triennial Audits (Section 5 and Appendix N)
   d. Daily Incident Log (RTA/RTS Communication and Coordination and Section 9)
   e. Hazard Log (RTA/RTS Communication and Coordination and Section 9)

(2) Analyses of the tracking issues based on these and other sources of risk information from the RTA/RTS

(3) The NJDOT SSO program staff also maintain a register of specific issues at each RTA/RTS that are being tracked as potential sources of risk. This list typically contains topics that indicate an actual or perceived risk may require mitigation. If an identified topic progresses to a point at which an immediate threat emerges, it will be addressed by the RTA/RTS 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/RTS.
   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/RTS 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 by the Safety Department and potentially the SSOA staff.

(4) Current events at the RTA/RTS, current safety performance – collected through committee meetings and on-site activities.

Scope of On-site Activities for Risk Monitoring: The NJDOT SSO program staff visit the New Jersey RTAs/RTSs for quarterly meetings and at least once in between quarterly meetings. The content of these visits is defined by an agenda that focuses the information collection and meetings. These visits 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) **Quarterly Meetings** – these meetings are used to go over CAPs status/progress and to go over current events at the RTA/RTS or with the SSO program.
(2) **Additional Meetings** – these 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.
(3) **Audits and inspections** – these are usually targeted based on existing investigations or high-priority CAPs (open or closed). This activity might also include participation in internal audit activities or follow-up of those activities.
(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 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.
(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.
(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.

Internal Audits, SSO Program Audits and Inspections, and the Triennial Audit: The RTA/RTS internal audits and the SSO program Risk Monitoring audits and inspections 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 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 minimum standards for safety).

Sample Agenda for Risk Monitoring Visits, Separate from and in Addition to Quarterly Meetings

- Review ongoing risk issues being monitored
- Select at least 5 CAP closures for review onsite, record of these onsite reviews will then be recorded in the tracking database; the CAPs selected should be topics that can be reviewed by inspection, demonstration, or interview
- Collect photographs (without people in them)
  - Rail vehicles and work equipment
  - Buildings – office and shops
  - Yards
- Consider a need for any Technical Training Plan (TTP) activities due for SSOA staff

Procedure SSO-009

Investigation for Allegations of Rail Transit Agency (RTA)/Rail Transit System (RTS) Noncompliance with Agency Safety Plan (ASP) Procedure (including public input)

Current Version: March 5, 2018

Scope: This procedure addresses receipt of allegations of RTA/RTS noncompliance with their ASP.

Agency Safety Plan Investigation of Noncompliance Requirement

§ 674.25(c). An SSOA has primary responsibility for the investigation of any allegation of noncompliance with a Public Transportation Agency Safety Plan.

Sources of Allegations of RTA ASP Noncompliance: The following are potential sources of allegations of RTA/RTS ASP noncompliance:

- Public
- Patrons
- RTA Employees
- RTA Safety Department
- SSO Program
- Federal Transit Administration (FTA)
- Any safety notification made to a RTA
- Others

The SSO program requirements, processes and procedures are intended to be transparent. The program standard and contacts for the SSO program staff are publicly available on the NJDOT webpage describing the SSO program. This information is published with the acknowledgement that anyone can contact the SSO program staff with any concerns, including allegations of RTA/RTS noncompliance with their ASP/safety program.

PROPERTY	SSO PROGRAM HOTLINE	RTA EMPLOYEE HOTLINE
Newark Light Rail	1-844-RAILSAFE	877-806-8283
Hudson-Bergen Light Rail	1-844-RAILSAFE	877-806-8283
RiverLINE	1-844-RAILSAFE	877-806-8283
Port Authority Transit Corporation	1-844-RAILSAFE	None available

The NJDOT SSO program also uses this regulatory requirement to add investigations beyond those required by FTA for accidents as state/significant hazardous condition reportable events.

Investigation Procedure for RTA/RTS ASP Noncompliance: All allegations of RTA/RTS noncompliance with their ASP will be properly reviewed and investigated, as prescribed in the following tables. If an allegation requires investigation, it will follow the procedures described in Appendix O of this program standard and/or the adopted and approved RTA/RTS investigation procedures. The SSO program may require the RTA/RTS Safety Department to complete the investigation for the program under the same authority as any other safety event investigations. The investigation report and any issues or recommendations required will be communicated and coordinated between the SSO program and the RTA/RTS Safety Department for resolution (and other RTA/RTS departments, as needed). The RTA/RTS will be required to develop a corrective action plan (CAP) or explanation of no need for a CAP. If CAP(s) are developed by the RTA/RTS, the SSO program will review, approve and adopt the CAP(s) in the same manner as any other investigation report and CAP(s), including a formal review of the CAP(s). Any investigations for allegation of noncompliance with the RTA/RTS will be designated a significant hazardous condition investigation and follow standard record-keeping for that type of investigation.

Responding to RTA/RTS ASP Noncompliance:

In the event that a safety complaint is received by the SSOA, the person receiving the notification must initiate a response based on the following table.

	RESPONSE	STATUS OF HAZARDOUS OPERATION	EXAMPLES OF POTENTIAL SEVERITY	SSO ACTIONS
1	Immediate	Hazardous operation is continuing	Rules Violation Near Miss Derailment Property/environmental damage > $25k	Alert Safety Manager Call Control Center Deployment to site Full investigation
2	Subsequent (Within 24 hours)	Hazardous operation to resume	Potential injury Property/environmental damage <$25k	Establish field observation in conjunction with/without Safety Department Direct Observation or Full investigation
3	As Available (greater than 24 hours)	Hazardous operation completed	No immediate injury or damage	Alert Safety Manager Collect/review available data Full investigation if substantiated by data

The person receiving the notification should also consider whether Federal/State/Local laws or regulations or operating rules are being violated.

Procedure SSO-010

Investigation Reporting

Current Version: March 5, 2018

Scope: This procedure describes the NJDOT SSO Program process for safety event investigations at the Rail Transit Agencies (RTAs)/Rail Transit Systems (RTSs) under the jurisdiction of New Jersey.

Safety Event Investigations Requirements

§ 674.35 Investigations.

(a) An SSOA [State Safety Oversight Agency] 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.

(b) Within a reasonable time, an SSOA must issue a written report on its investigation of an accident or review of an RTA's 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 SSOA's 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.

§ 674.39 State Safety Oversight Agency annual reporting to FTA.

(b) These materials must be submitted electronically through a reporting system specified by FTA. [this includes investigation reports and corrective actions from these investigations]

Scope of Safety Event Investigations: At this time, the NJDOT SSO program requires notification and investigation for criteria from both SSO Rules and a few additional significant hazardous conditions as defined in Procedure SSO-003 and Section 6 of the program standard. Safety event investigations are covered in Section 7 of the program standard.

Safety Event Investigation Procedure: Each New Jersey RTA/RTS has developed standard investigation procedures, and those procedures are adopted and approved by the NJDOT SSO program to allow the RTA/RTS to complete these investigations for the state. These investigation procedures are designated as minimum standards for safety and the current version of those documents are tracked in an appendix for each state RTA/RTS – Appendix E through H. The

NJDOT SSO program has the authority to join and/or lead any of these investigations, and is required to follow the local RTA/RTS investigation procedures and reporting requirements in Section 7 of the program standard.

As an investigation proceeds from notification (Initial Notification Form), start of investigation, and completion of the investigation, the NJDOT SSO program requires progress and final reports as follows:

- An initial facts report within one working day, which includes all key information regarding the event compiled at the scene by the RTA/RTS.
- A status report identifying the preliminary cause of the event, once this preliminary cause is established, and updates of progress every 30 days until the draft final investigation report is submitted, including corrective action plans (CAPs) with assignments and due dates.

The NJDOT SSO program requires that an RTA/RTS investigation report be standardized, and include at least the following topics (or as needed based on the safety event and investigation):

Investigation Report General Outline

- Event description
- Notification, Incident Response, and Incident Command
- Initiating Event
- Immediate Corrective Actions
- Operator Information – Fatigue Evaluation and Training
- Investigation:
  - Operator event report
  - Field supervision report
  - Employee record/history
  - Post-accident safety inspection
  - Video analysis
  - Communications analysis
- Findings, Potential Causal Factors, and Recommendations (including CAPs)
- Investigator
- Date of Report
- Distribution

If the NJDOT SSO program staff is the lead investigator, progress and investigation reports will follow the same process and content. The RTA/RTS can provide input and comments based on the progress and investigation reports before the investigation report is finalized. This may require a meeting between the NJDOT SSO program and RTA/RTS staff to resolve any discrepancies and comments.

If the RTA/RTS completed the draft final investigation report, the NJDOT SSO program is required to independently review and agree to the content and conclusions of the investigation

report, including primary cause and contributing factors of the safety event being investigated. The NJDOT SSO program also independently reviews and approves any CAPs developed and requires additional evaluation if it is determined that additional or different CAPs are needed.

Once the RTA/RTS (or the NJDOT SSO program) indicates that the investigation report is ready for final review, the NJDOT SSO program is required to complete any independent review, discussions with the RTA/RTS about content and any changes with the investigation or CAPs, and provide the adoption and approval letter and documentation within 90 days of completion/receipt of the draft final report. The final adopted and approved investigation report and CAPs are the source of required data reporting to FTA on an annual basis, usually by March 15th of the following year. De-identification of that information for the annual report to FTA follows Procedure SSO-006 and is applied prior to the final report being complete.

Procedure SSO-011

Minimum Training Requirements

Current Version: March 5, 2018

Scope: This procedure explains the requirements for minimum training.

ROLE	MINIMUM TRAINING REQUIREMENTS
SSOA personnel and contractors (SSOA/RTA) who conduct safety audits and examinations of rail fixed guideway public transportation systems not subject to FRA regulation.	Effectively Managing Transit Emergencies Transit Rail System Safety Transit System Security Transit Rail Incident Investigation SMS Awareness (ELearning) SMS Safety Assurance (Live Virtual ELearning) SMS Principles for Transit SMS Principles for SSO Programs (*) SMS GAP for TSSP (**) Technical Training Program (TTP) (***)
RTA/RTS employees who are directly responsible for safety oversight; Directly responsible means safety staff who participate in the development, implementation or maintenance of the requirements of the oversight agency's program standard.	Effectively Managing Transit Emergencies Transit Rail System Safety Transit System Security Transit Rail Incident Investigation SMS Awareness (ELearning) SMS Safety Assurance (Live Virtual ELearning) SMS Principles for Transit SMS GAP for TSSP (**)
RTA/RTS Chief Safety Officer (CSO)	**College Degree** **OR** **(10) years of experience** in a RTA's/RTS's safety program with full-understanding of (SSPP)
	AND Effectively Managing Transit Emergencies Transit Rail System Safety Transit System Security Transit Rail Incident Investigation SMS Awareness (ELearning) SMS Safety Assurance (Live Virtual ELearning) SMS Principles for Transit SMS GAP for TSSP (**)

(*)- SMS Principles for SSO Programs is under development. Participants will have 3 years to complete course once it is available.
(**) - SMS GAP for TSSP- Course is not developed, participants will not be negatively affected due to completion requirements.
(***) - Guidance on Technical Training Plans: TTP Guidance

Resources

FTA Website - FTA Safety Training Website Notice of Final Interim Provisions - Final Interim Provisions

Training Period

Employees currently in the positions listed above must meet all requirements within 12 months of the effective date of this SSOPS.

Employees hired or promoted into the positions listed above must meet all requirements within 24 months.

Contractors must meet all requirements.

Procedure SSO-012

Distribution Lists

Current Version: March 5, 2018

All Hazard Notification

Hudson-Bergen Light Rail

TO: Neal Fitsimmons
nfitsimmons@njtransit.com

CC: Phil Maccioli
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Kevin Conover
kevin.conover@dot.nj.gov
njofgsso@dot.nj.gov

RiverLINE

TO: Neal Fitsimmons
nfitsimmons@njtransit.com

CC: Noah Heulitt
noah.heulitt@rail.bombardier.com

Kevin Conover
kevin.conover@dot.nj.gov
njofgsso@dot.nj.gov

Newark Light Rail

TO: Neal Fitsimmons
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CC: Joseph Tassiello
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Kevin Conover
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njofgsso@dot.nj.gov

PATCO

TO: John Rink
jdrink@drpa.org

CC: Dave Fullerton
ddfullerton@drpa.org

Kevin Conover
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njofgsso@dot.nj.gov

Procedure SSO-013

Record Retention

Current Version: March 5, 2018

Permanent Records

Audit Checklists

CAPs

Annual Report

Investigation Reports and all supporting documentation

Appendix E

New Jersey Transit Newark Light Rail (NLR)

Description and Contacts

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Newark Light Rail (NLR) system

The NLR system is owned by New Jersey Transit (NJ TRANSIT) and operates for approximately 5.9 route miles of double-track between Bloomfield, NJ and Newark, NJ. The NLR line provides service to approximately 22,000 people daily while running 20 hours a day, 7 days a week. From seventeen designated NLR stations, passengers can connect to NJ TRANSIT bus and rail lines as well as Port Authority New York and New Jersey (PATH) and Amtrak rail service.

Description of Line

The double-tracked light rail line includes 1.7 miles of in underground light rail with 4 stations and 4.7 miles above ground or in depressed open cut right-of-way and twelve stations. The light rail stations in the underground tunnel proceeding outbound are located at Penn Station, Military Park, Washington Street and Warren Street. Continuing outbound, the stations in open cut and at grade are Norfolk Street, Orange Street, Park Avenue, Bloomfield Avenue, Davenport Avenue, Branch Brook Park, Silver Lake and Grove Street. The stations proceeding outbound in the street-running segment are NJ PAC, Atlantic Street, Broad Street and Washington Park on the inbound alignment. A special event stop is provided at the Riverfront Stadium, a raised sidewalk provides accessibility to the light rail vehicles (LRVs). Embedded tracks is used in the street-running segment and the critical curves are protected with girder rail.

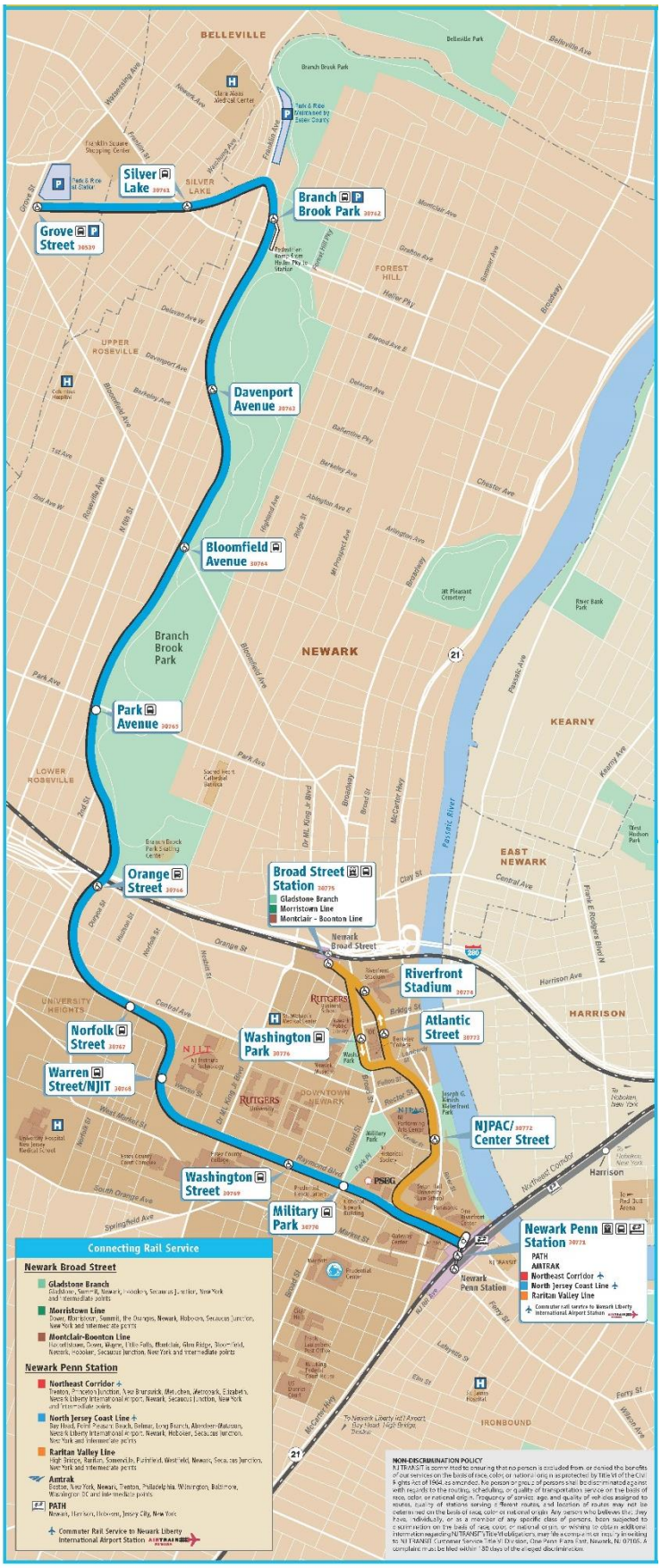
FRA Shared Right-of-Way

Access to the NLR Vehicle Base Facility (VBF) extends along a portion of the Norfolk Southern (NS) Orange Industrial Track (MP-9.156 and MP-9.83) of which a 0.24 mile portion is utilized by both NLR and the freight carrier. This portion is under FRA Waiver 2000-7335 (expiration: 12/31/2040).

Bridges

There are ten overhead auto/pedestrian bridge crossings of the NLR right-of-way. Fencing and screening have been added to all crossings to reduce the possibility of a person throwing or discarding objects onto the vehicles or the right-of-way. The NLR system crosses over the NJ TRANSIT Morris & Essex commuter rail lines at Orange Street in Newark. The two bridges are equipped with high-fencing to minimize trespassing and throwing objects on to the commuter rail-right-of-way. Iron rod, fluted panels, steel plates and concrete parapet walls have been used as fencing. Wire mesh is used to supplement the fencings in areas where there is a high rate of incidents.

The 750 volt DC overhead contact system (OCS) is insulated from the bridge structure through the use of K&M arms mounted on either wood or inverted fiberglass U-channels. The channel is continuous for the length of the OCS and extends on both sides of the crossings to reduce the chances of objects hitting or contacting the wire.


BELLEVILLE
Silver Lake
Grove Street
Branch Brook Park
Davenport Avenue
Bloomfield Avenue
Branch Brook Park
NEWARK
Park Avenue
Orange Street
Broad Street Station
Gladstone Branch
Morristown Line
Montclair - Boonton Line
Riverfront Stadium
Atlantic Street
Washington Park
Norfolk Street
Warren Street/NJIT
NJPAC/ Center Street
Washington Street
Military Park
Newark Penn Station
KEARNY
HARRISON
EAST NEWARK
IRONBOUND
Connecting Rail Service
Newark Broad Street
Gladstone Branch
Morristown Line
Montclair-Boonton Line
Newark Penn Station
Northeast Corridor
North Jersey Coast Line
Raritan Valley Line
Amtrak
PATH
NON-DISCRIMINATION POLICY

Electrification

The purpose of the electrification system is to supply and distribute electric traction power for the NLR system. The electrification provides all related functions including conversion and switching of traction power, negative return, and auxiliary power. Critical physical components of the electrification include: Sub-station connections to incoming utility (Public Service Enterprise Group – PSE&G) power, connections at the rialto impedance bond leads and traction power bonding, and connections to the auxiliary power equipment located in train control, station and shop systems as well as line feed switches and jumpers. Traction power stations are protected with a fire detection system and security intrusion alarms. Overhead Catenary isolation switches are located along the right-of-way to control power to sections of the power distribution system.

The major components within the electrification system include but are not limited to:

- Substation and power distribution – including all traction power feeder cables to the OCS as well as the return cable.
- Overhead Catenary System – including catenary poles, overhead wire, and sectionalized by-pass switches, pole mounted surge arrestors. And cast-in-place foundations. The overhead catenary wire is installed within the dynamic outline of the tracks with a vertical height from top of rail between 12.3 to 22 feet.
- Stray current mitigation – including bonding and isolation equipment, which includes rail bonding.

Traction Power Substations (TPSS) are spaced along the right-of-way at approximately 1-1/2 mile intervals. The NLR system has a total of six (6) substations, the Substations have traction power rectification equipment and switch gear to supply 750 volts DC to the OCS. Normal operations can be maintained with one TPS inoperative and/or out of service. All Traction Power Stations are equipped with an internal fire detection system and an intrusion alarm system that is monitored by the NLR OC through the SCADA network.

SCADA/Supervisory System is remotely connected to train control, traction and ventilation systems. It allows OC to monitor in real-time, the status of aforementioned systems including the train movements. Certain remote control functionalities of the systems are allowed as long as they do not violate the fail-safe principle configured on each system. The supervisory system is considered “non-vital” because it cannot override the vital systems in the field

The Penn Station and Grove TPSS are equipped with two (2) power feeds from separate circuits from the local power supplier. All other TPSs have a single power supply from the local power company.

Each TPS is equipped with an automatic trip resent feature. Tripped circuit breakers will automatically resent, after a brief interval, two (2) times before they must be manually reset.

The power distribution system conducts current from the traction power substation to the vehicle pantograph. The track system forms the return side of the circuit back to the substation due to its role in the interaction between the pantograph and the contact wire.

All metallic system elements that support the OCS are grounded and provide protection against the buildup of electrical ground faults.

Emergency Trip Stations (ETS) are located at each traction power substation and at the rail entrances to the Shop Building and LRV Storage Shed at the VBF. At the substations, the ETS are mounted on the building wall adjacent to the entrance door and are secured in a locked box. When the button is pushed, the track current to the catenary is de-energized. The ETS for the Shop Building and LRV Storage Shed act only on the single DC breaker supplying the catenary in the respective building. ETS are intended for the rapid de-Energization of the OCS by maintenance or possibly emergency response personnel.

Regular visual and functional tests of traction power equipment are accomplished in accordance with best industry practice. The NLR Superintendent is directly responsible for inspection and testing activities as well as preventative maintenance of the electrification system.

Train Control

The Train Control System provides the primary functions of train routing at the five (5) interlockings and the power operated crossovers on the NLR Systems as well as train separation at all locations other than in the yard. The system also provides the function of on-board speed sensor enforcement through the cab signaling system acting on the LRV's traction power and braking control system. The train control system is an audio frequency track circuit controlled system which displays the necessary commands in the vehicle cab. The vehicle is manually controlled by an operator who must comply with the displayed commands. In the event that the operator does not comply with the displayed commands, an audible warning sounded to alert the operator to take appropriate action. Further disregard of the displayed command results in the system bringing the train to a safe condition automatically.

The Automatic Train Protection (ATP) provides full train "stop: protection and speed control in either direction on either track. The NLR operation is bi-directional with reverse signaling. The available speeds for operation are in increments between 5 and 50 MPH.

The train control system also insures that conflicting routes cannot be set, either manually or automatically. Once a train is routed, all other conflicting moves are prevented by the automated system. These features are provided at all controlled track switches where conflicting train movements cold be initiated, otherwise known as interlockings. These interlock locations are also equipped with wayside signals which provide additional visual directions to the operator. Noncompliance with a wayside signal will result in activation of the ATP.

The train control system also includes Train-to-Wayside (TWC) communications which provides for routing requests at interlockings and supplemental information regarding train location.

A functional check of the operation of all signaling and train control equipment and verification of software integrity is performed as required to meet safety and service availability requirements. The NLR Superintendent is responsible for the inspection and verification of train control equipment.

Traffic Operating System

This system includes all traffic control software, computer hardware, and devices which control the movement of LRVs and motor vehicles at highway and track intersections. The Traffic Operating System (TOS) interrupts the normal motor vehicle traffic control device cycle (via use of pre-emption or priority) upon approach of an LRV. The traffic control device is cycled to stop motor vehicle traffic to allow passage of the LRV. LRV movements are governed by a separate bar signal system that is displayed perpendicular to the motor vehicle traffic control devices. All NLR LRVs and special purpose vehicles stop at all highway/track intersections and proceed after visual verification that all motor vehicles have stopped clear of the intersection.

All trains, stations and communications (normal and emergency) are monitored through Controllers in the Operations Control Center. Controllers are responsible for all operations on the tracks and at the stations. Transportation Clerks have the ability to communicate with passengers through CCTV cameras and phone connections at multiple station locations, to help aid in decisions for safe operation, answer questions or direct actions during station platform emergencies. The Alternate Operations Control Center is located in Newark Penn Station and is exercised by NLR controllers once a month. The software was upgraded since the last Triennial Survey in 2014. The Survey Team acknowledges the importance of keeping the Alternate Operations Control Center active and up-to-date.

Track

The primary purpose of the fixed guideway is to provide support and guidance to trains. NLR utilizes three types of track which are:

- Ballasted Track – consisting of 115 lb. AREMA rail installed on wood ties fastened with a spring-loaded Pandroil clip
- Slab (Direct Fixation) – consisting of 115 lb. AREMA rail fastened directly to cast-in-place track plinths. The rail rests on resilient plates which are in turn bolted to the plinths. Special effort is made to provide electrical isolation of the rai from the concrete.
- Embedded Track – consisting of 115 lb. AREMA girder rail implanted into the guideway so that it is flush with the roadbed.

Switches/Crossovers

Electric crossovers are located throughout the system to provide operational flexibility. LRV movements through these power operated crossovers are automatically routed from normal operation through the Train Control System. Wayside home signals are present to provide the LRV Operators with color aspects that indicate stop and wait as well as aspects for turn-out and through moves. Train to Wayside (TWC) equipment on board the LRV and antennae receivers near the crossovers allow the LRV Operator to align the switches for either turn-out or through movements. An Automatic Train Protection (ATP) system with positive train stop prevents conflicting LRV movements at interlocking and crossovers. In Penn Station, the crossovers are controlled by electro-pneumatic switch machines.

Maintenance and Storage Areas

The Vehicle Based Facility (VBF), located in Bloomfield, NJ, is the primary maintenance facility for the LRV fleet. The VBF site includes the LRV Maintenance Shop, the LRV Storage Building, Maintenance of Way (MOW) Storage, an electrical substation, and three (3) Central Instrument Houses (CIHs).

The LRV Maintenance Shop is a one story building with a mezzanine. The maintenance shop contains four (4) tracks and all the necessary shop equipment and service pits to accomplish all maintenance and repairs of the LRV fleet, including: paint booth, car wash, car inspection/repair area, heavy repair area with car lifts, wheel truer, and parts/supplies warehouse. Since the major components are located on the roof of the LRVs raised platforms have been installed to provide access to the roof, additionally, and electric hoist, on a fixed guideway, has been installed to transport components from the LRV roof to the repair area. OCS isolation switches are provided to control power to the individual shop tracks. Lock Out/Tag Out procedures are established to ensure employee safety when working near the high voltage catenary wires.

The LRV Storage Building provides weather protection for the fleet. This building has three (3) tracks and is open at either end to allow the free movement of LRVs through the building. Peak service pull outs typically occur from the storage building. Additionally, off-peak interior cleaning and pre-trip inspection are performed in this area.

The MOW Storage Building provides additional storage for larger components and allows forklift access to storage racks.

Light Rail Cars

NLR uses a fleet of twenty-one (21) bi-directional LRVs for revenue service. The LRVs are 70% low floor articulated vehicles, 9 feet wide, and 12 feet high. The LRV is equipped with doors on each side of the vehicle to allow passenger access/egress and one door on each side to the Operator's compartment. The vehicle has spaces for wheel chairs and is compliant with the accessibility provisions of the Americans with Disabilities Act (ADA).

NLR Vehicle Description

	3 CAR	5 CAR
MANUFACTURER	KINKISHARYO International	KINKISHARYO International
QUANTITY	11	10
YR. DELIVERED (LAST)	1999/2004	2015/2016
BODY TYPE	6 axle double articulated	8 axle quadruple articulated
TRAIN LENGTH	90 ft. (27 m)	127ft. (39 m)
EMPTY WEIGHT	99180 lbs. (45000 kg)	128000 lbs. (58059 kg)
SEATS	68 passengers	102 passengers*
MINIMUM RADIUS	60 ft. (18 m)	60 ft. (18 m)
VOLTAGE (VDC)	750 DC	750 DC
MAXIMUM SPEED (BALANCE)	50 MPH	50 MPH
FULL ACCELERATION	3.0 mphps (1.34 m/s2)	3.0 mphps (1.34 m/s2)
DECELERATION, SERVICE	3.0 mphps (1.34 m/s2)	3.0 mphps (1.34 m/s2)
HIGH/LOW PLATFORM	Low	Low
ADA ACCESSIBILITY	Level Boarding	Level Boarding
MAXIMUM CARS TO TRAIN LINE	3	3
NOISE LEVEL AT 40 MPH & 50F	75 dBA	75 dBA

**denotes 40% increase in passenger seating capacity.*

The vehicle may operate at speeds up to 50 MPH and is powered by 750 volts DC by means of a pantograph contacting the overhead catenary system. The vehicles are equipped with several braking systems. At higher speeds, the braking action is achieved by the dynamic brakes which use the resistance of the traction motors to slow the vehicle. The dynamic brakes are blended with mechanical disc (friction) brakes as low speeds are reached until all braking is supplied by the disc brakes as the train comes to a full stop. In the event of an emergency requiring maximum braking effort, the dynamic and disc brakes are supplemented by the track brakes. The track brake is operated by a console push button and applies a magnetic iron core to the running rail surface.

Tunnel Safety Features

The underground tunnel, is built of concrete and steel, is approximately 1.7 miles in length starting at Penn Station, Newark proceeding to Warren Street, Newark. An 800' section of tunnel was added as part of the Broad Street alignment extension with the portal located at Center Street in Newark.

A dry standpipe system has been installed in the tunnel for use by the Fire Department for fire suppression activities. The standpipe system is not connected to a water source and must be supplied by fire apparatus. Six (6) Fire Department connections are strategically located to charge the standpipe system. Standard 2-1/2" outlets are provided in the tunnel at approximately 300' intervals for Fire Department hose connections. The outlets are equipped with pressure reducers to provide safe operating pressure for Fire Department personnel.

The tunnel is equipped with a mechanical ventilation system designed to aid in fire and smoke control. The system has an environmental mode for routine ventilation. The system incorporates 115 bi-directional axial fans and 10 bi-directional jet fans to achieve optimal flexibility and air flow management. Critical system components are hardened to withstand high temperature for a minimum of one hour. Materials for electrical conduits, raceways, ducts, equipment enclosures, and their surface finish materials can withstand elevated temperatures for a minimum of one hour and will not support or contribute to combustion.

Power for the ventilation system is provided from two separate and distinct utility sources fed from different power grids. The primary power source is from the Warren Street sub-station and a secondary feed from the Mulberry Street sub-station is totally isolated from the main system feeds to provide a reliable redundant power supply.

Thirty-three (33) of the axial fans have two-speed capability. These fans may be used for routine environmental ventilation as well as smoke control and extraction.

Fluorescent lighting is provided throughout the tunnel and station areas. Each light fixture contains two fluorescent tubes normally powered by the auxiliary AC power distribution system. One tube in each fixture is powered from a battery back -up for emergency lighting in the event of a power outage.

Right-Of-Way Safety Features

From Warren Street to the VBF, the track way is located either in depressed open-cut or at grade right of way. The entire mainline segment is fenced to deter access to the right of way and secure non-operating sections of the platforms, except where the line crosses city streets at grade. A gate is located in the vicinity of the Bloomfield Avenue Station for maintenance and emergency access.

Inter-track fences are located at seven (7) stations. These sliding gates allow passengers to cross the track in the event of an emergency.

The Broad Street Extension (BSE) is a mixed street-running segment where automobile traffic operates parallel to the guideway. The guideway is separated from the traffic lanes by a mountable granite curb 6" high. The extension alignment has fourteen grade and pedestrian crossings. These intersections are protected by traffic control devices that are integrated with the train control system to give priority to the LRVs and to prevent conflicting signals and unsafe vehicular movement. Each intersection is marked in accordance with the provisions of the US Department of Transportation Manual of Uniform Traffic Control Devices and the NJ Department of Transportation diagnostic team recommendations.

Station Platforms

Closed Circuit Television (CCTV) units ae used to monitor activity on the station platforms. CCTV transmissions are monitored at the NJ TRANSIT Police Central Communications Center and the NLR Operations Control Center.

Each station platform edge is identified by a high-visibility safety line or with a tactile surface. Frequent Automated public address announcements e made to remind customers of safety-related advisories. Additionally, warning signs and No Trespassing signs are located at the ends of each station platform and at pedestrian crossings t deter unauthorized access onto the right-of-way.

NLR Contacts

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Bloomfield, NJ 07003

Joe Word, Director – Light Rail Operations
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NLR Minimum Standards for Safety

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSOPS	**NJDOT Rail Transit SSOPS**	**1/23/2018**	**Version 1.0**	**FALSE**
ASP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.		Future	TRUE
CMP	Configuration Management Plan (CMP) – the Configuration Management Committee and processes are a required element/function within the RTA/RTS safety program, along with safety and security certification and system modifications.			TRUE
EOP	Emergency Operations Plan (EOP) – this document provides the coordination and preparedness activities inside and outside of the RTA/RTS.			TRUE
I&M	Inspection and Maintenance (I&M) Manuals, SOPs, and Standards – these documents provide the requirements for inspection and maintenance of the rail system, including facilities, infrastructure, and related vehicles. These documents should have the custom			FALSE
Investigation Procedures	Investigation Procedures at the RTA/RTS – this procedure includes a description of the types of events that need notification and investigation, who will perform those requirements, causal factor analysis, hazard analysis, and development of recommendation.	6/1/2013	Accident Investigation Guide for NJ Transit, Book #20	FALSE
RORB	Rail Operating Rule Book (RORB) – these are the rules that operators and others working around the rail system must follow.			FALSE
RWP	Right-of-Way or Roadway Worker Protection (RWP) Plan – this document is related to the RORB from the perspective of the protections and procedures for workers on the rail right of way.	10/4/2017		FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SOPs - Command and Control	Command and Control/Train Control Standard Operating Procedures (SOPs) – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and workers on the right of way. These SOPs should include troubleshooting information for frequent problems and managing emergencies on the rail system. These SOPs include the function of load control/management.		Newark Light Rail – Route Learning System (2/28/2017)	TRUE
SOPs - Field Supervision	Field Supervision SOPs – these SOPs are for supervision out on the rail system for support of service delivery, responsiveness to passengers, and safety. The field supervisors will often be the first supervision to arrive at the scene of a safety event on the rail system, and provide at least initial investigation of events on the rail system.			FALSE
SOPs - Safety	Procedure requiring review of SOPs related to Safety – this procedure requires that the minimum safety standards at the RTA/RTS are also required to be reviewed, agreed to, and approved by the Safety Department.			FALSE
SSCP	Safety and Security Certification Plan (SSCP) – this plan provides the required activities from the RTA/RTS safety program for assuring that safety and security certification is completed for certain capital projects for new equipment/infrastructure or refurbishment of existing equipment/infrastructure. The main topics for safety and security certification are related design criteria, participation of the Safety Department, and a process of the RTA/RTS assuring that all safety and security design criteria exist, were comprehensive, and were properly addressed including integrated testing of the final products.			FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSP/SEPP	System Security Plan (SSP)/Security and Emergency Preparedness Plan (SEPP) – this security program document describes the requirements for system security and emergency preparedness at the RTA/RTS. Note that the new SSO Rule no longer defines the content of the SSP/SEPP and its processes and procedures. However, the NJDOT SSO program will now consider this security program document as a minimum safety standard in terms of its overlap with the safety program at the RTA/RTS (risk assessment and management, and emergency preparedness). The NJDOT SSO program no longer has requirements for the content of the SSP/SEPP, but does require that the RTA/RTS develop an appropriate security program document and the NJDOT SSO program will provide oversight of that document and the processes that it represents, but only from the safety program (all-hazards) perspective.			FALSE
SSPP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.		SSPP Rev 11, 4/21/2014 SSPP Rev 11a. 2/1/2017	TRUE
TAM	Transit Asset Management (TAM) Plan – this is a new plan now required for RTAs/RTSs and it is related to the CMP, but with a larger context.		Not due until Oct 2018. Internally discussing how we will proceed with this requirement.	FALSE

Appendix F

New Jersey Transit RiverLINE

Description and Contacts

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RiverLINE

Formerly known as Southern New Jersey Light Rail Transit System (SNJLRTS)

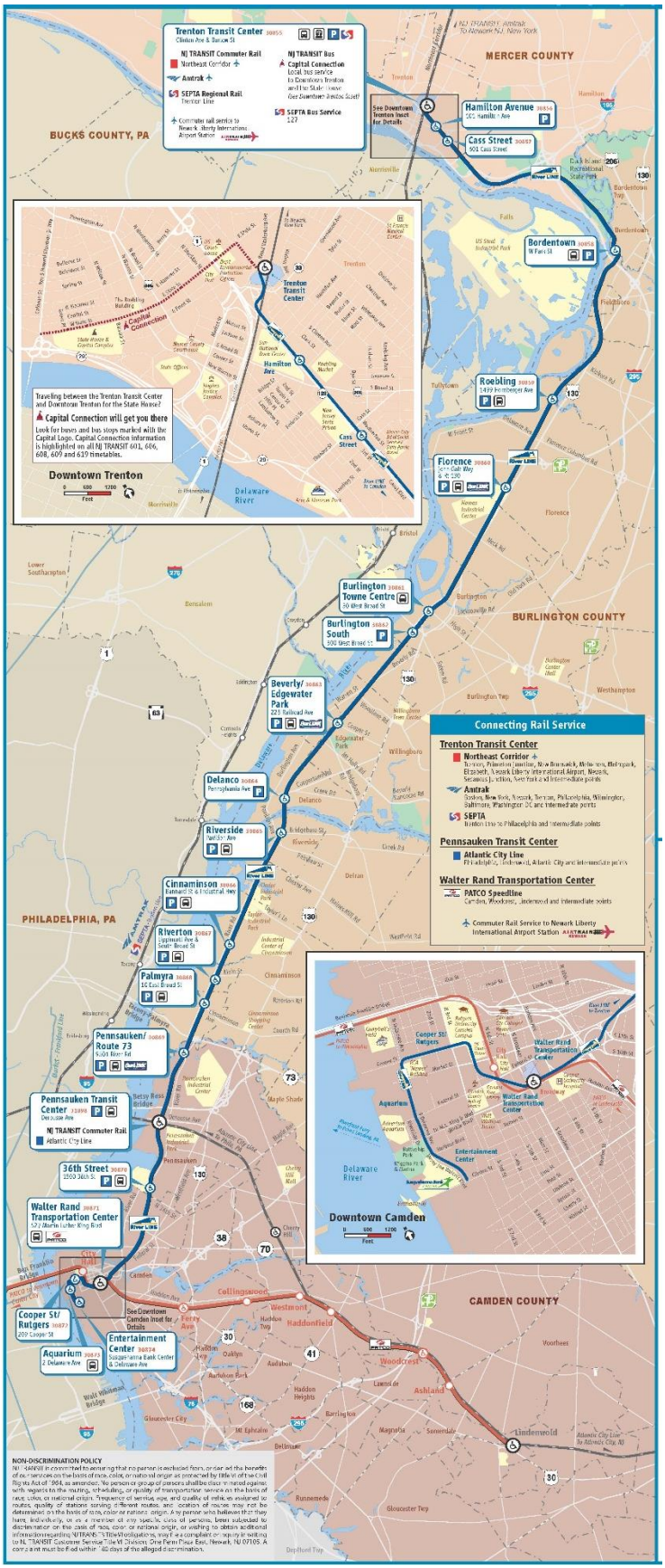
System Description

Overview

The RiverLINE is a light rail transit system operating for a distance of approximately 34 miles between the cities of Trenton and Camden, New Jersey. The RiverLINE provides service to major activity centers including the Waterfront Entertainment Center, the Adventure Aquarium, Rutgers University, Cooper Medical Center, and Walter Rand Transportation Center in Camden City, Delaware River waterfront towns in Burlington County; Waterfront Stadium, Sovereign Bank Arena, and the Trenton Transportation Center in Trenton.

The route is a mix of historic and new, urban and suburban, residential and commercial/ industrial corridors. The alignment has 72 grade crossings, 21 station stops, and 23 rail bridges. The RiverLINE service operates using lightweight diesel-electric railcars, commonly referred to as Light Rail Vehicles (LRVs). Each LRV is configured to provide seating for 90 Customers and space for an additional 94 standees. Individual cars can be connected into trains with all cars being controlled by the operator in the first car. A train length of two or more cars is technically feasible, but in practice, train length is limited to two LRV s because of station platform length limitations, and other operating considerations such as operating in the street in Camden.

The RiverLINE runs mostly along a lightly-used freight railroad line that has been upgraded for passenger service with new track and stations. It uses self-propelled diesel-electric articulated cars built by a partnership of Stadler Rail AG and Bombardier Transportation. Similar cars are used on some European branch lines. Therefore one might at first consider this to be a lighter version of the commuter rail lines that NJT also operates. However, the Stadler/Bombardier cars do not meet U. S. Federal Railroad Administration (FRA) standards for crashworthiness, and are not allowed to run in mixed traffic with normal railroad trains in the U.S. They must be used either on lines that are separated from the normal railroad system, or during completely separate time periods from normal railroad trains. Therefore, on the RiverLINE, passenger service operates during the day and early evening, while freight service operates only at night (with some variation on weekends). Therefore, the RiverLINE is considered to be a light-rail operation similar to those that have been built in many U. S. cities since the 1970s. It is the first light rail line in the U. S. to use on-board diesel-electric power instead of electric power from overhead wire or third rail.


Trenton Transit Center
Clinton Ave & Duncan St
NJ TRANSIT Commuter Rail
Northeast Corridor
Amtrak
SEPTA Regional Rail
Trenton Line
Commuter rail service to Newark Liberty International Airport Station
NJ TRANSIT Bus
Capital Connection
Local bus service to Downtown Trenton and the State House
See Downtown Trenton Insert for Details
SEPTA Bus Service
127
MERCER COUNTY
BUCKS COUNTY, PA
Hamilton Avenue
Cass Street
Bordentown
Roebling
Florence
Burlington Towne Centre
Burlington South
BURLINGTON COUNTY
Beverly/ Edgewater Park
Delanco
Riverside
Cinnaminson
Riverton
Palmyra
Pennsauken/ Route 73
Pennsauken Transit Center
NJ TRANSIT Commuter Rail
Atlantic City Line
36th Street
Walter Rand Transportation Center
Cooper St/ Rutgers
Aquarium
Entertainment Center
PHILADELPHIA, PA
CAMDEN COUNTY
Connecting Rail Service
Trenton Transit Center
Northeast Corridor
Amtrak
SEPTA
Pennsauken Transit Center
Atlantic City Line
Walter Rand Transportation Center
PATCO Speedline
Commuter Rail Service to Newark Liberty International Airport Station
Downtown Trenton
Traveling between the Trenton Transit Center and Downtown Trenton for the State House?
Capital Connection will get you there
Look for buses and bus stops marked with the Capital Logo. Capital Connection information is highlighted on all NJ TRANSIT 601, 606, 608, 609 and 619 timetables.
Downtown Camden
NON-DISCRIMINATION POLICY

FRA Authority

As the RiverLINE right-of-way (ROW) is considered part of the General System of Railroads, Federal Railroad Administration (FRA) Regulations are considered of primal importance. 49 CFR parts 200-299 apply to the joint territory on the RiverLINE ROW, as modified by approved FRA waivers.

Under the terms of the FRA Temporal Separation Waiver, the RiverLINE is also subject to oversight by the New Jersey Department of Transportation (NJDOT). The waiver places the RiverLINE under Federal Transit Administration Regulation, 49CFR, Part 659--Rail Fixed Guideway Systems; State Safety Oversight. This regulation requires each State with rail fixed guideway transit systems to develop and implement standards and procedures for a System Safety Program Plan (SSPP).

In compliance with this regulation, NJ TRANSIT, as the Owner of The RiverLINE, has delegated responsibility for development and implementation of a comprehensive SSPP to SNJRG

Physical Plant & Systems

The RiverLINE's major maintenance, operational control, train storage, and management functions are housed in the Camden Light Rail Complex (CLRC) adjacent to passenger-only right-of-way south of CP 45. Most of the remaining route to Trenton is on joint-use Temporally Separated (passenger and freight) right-of-way consisting of single track with passing sidings.

The RiverLINE operates on track shared with ConRail freight operations from MP 4.5 in Pennsauken to MP 32.9 in Trenton. Additionally, a section north of Cass St Station on #1 track and #2 track north of CP 329 to Trenton Station is restricted to passenger-only operation.

A facility for overnight layover and minor servicing of two LRVs is located in Burlington (known as the Burlington City Yard), at the former Burlington Generation Siding. A third facility, for storage, overnight layover and minor servicing of eight LRVs (known as the Trenton Layover Facility), is located between the Trenton and Hamilton Avenue stations. Both of these facilities are equipped with trackside power, so vehicles can be stored overnight in cold weather with the diesel engine shut off.

Haines Yard located at MP 6.6 on #1 tract north of Pennsauken/Route 73 station for the storage of maintenance of way (MOW) equipment. The MOW yard includes storage for two Jackson 6500 Tampers, a ballast regulator, and seven ballast hopper cars.

LRV Vehicles

The RiverLINE diesel-electric rail vehicle is a GTW 2/6 lightweight diesel-electric railcar and is not certified for use in tunnels. The LRV is double articulated being 102 ft. 6 in. long, 9 ft. 10 in. wide, and 12 feet 10 inches high measured from top of rail. The LRV combines low and high level seating areas. The Operator makes use of mirrors for side visibility. There are two (2) doors per side, each vehicle has a customer to Operator communication system, spaces for wheelchairs/strollers, and bicycle racks for a maximum of three (3) bicycles in each vehicle.

The vehicle is configured to provide seating for 90 Customers with room for additional 94 standees (crush load 184 Customers). The vehicle is ADA compliant. Individual cars can be connected into trains with all cars being controlled by the operator in the lead car. Cars and trains can operate bi-directionally. The body of the LRV has three sections (A, B and C car) and three trucks, the center truck being directly mounted to the center body section. The center section (C Car) contains the diesel electric propulsion system.

Braking

The vehicle is equipped with several forms of braking. At higher speeds, braking is achieved by using the resistance of the traction motors, known as dynamic braking. This form of braking, having no frictional contact, produces less wear and heat, and is blended with mechanical disc brakes as lower speeds are reached until all braking effort is applied by the discs as the vehicle comes to a halt.

In the event of an emergency requiring maximum braking effort, the friction and dynamic brakes can be supplemented by the track brake, which is a bar arrangement, magnetically applied to the running rail surface. Additionally, to avoid adhesion problems, sand can be selectively applied beneath the vehicle wheels. Slip slide sensing is also built into the vehicle's systems to mitigate low wheel/rail adhesion problems that can occur under some climatic conditions.

Safety and Security Features of the Light Rail Vehicle

Safety and Security Features of the Light Rail Vehicle include various features that provide for operator and customer safety, including:

- Automatic Train Stop - Activates LRV brakes in response to trackside magnetic train stop devices at Stop signals.
- "Dead Man" Controls -Activates LRV brakes if the operator is incapacitated.
- CCTV with remote monitoring, on-board DVR and download capabilities. Six cameras in each passenger compartment, one observing the LRV operator and one forward-facing.
- Door Circuitry I Sensitive Door Edges - The doors open if two edges do not close due to an obstruction.
- Manual Door Release Controls-The LRV's have manual door releases on the interior and exterior, which enable the doors to open, if required in an emergency.
- Handholds And Stanchions - Provides added stability for Customers while moving about the LRV.
- Anti-Climbers -Increased protection during an LRV to LRV/Stop bumper collision.
- Safety Glazing-To prevent injury to the Customers because of splintering of glass.
- Normal And Emergency Lighting - Automatic switch over from normal lighting to emergency lighting during an emergency.
- Train Radio and Customer Intercom, are ways the operator can communicate with the customers in an emergency from the LRV.
- Materials Selected For Resistance To Flame Spread And Smoke Generation.
- Door interlocks
- Car equipped with turn signals
- Fire extinguisher in each cab
- Coupling capability to tow a disabled train
- Event recorder
- LRV's are operated as a single unit when coupled into a multi car consists.
- Silent Alarm for communicating to the Control Center in an onboard security situation
- Running and railroad lights

Track

The primary purpose of the track system is to provide support and guidance to trains. The guidance also includes train routing at interlockings.

LRT and Joint Use track is constructed of continuous welded rail. Freight only track is constructed of jointed rail.

There are three types of track and appurtenances utilized on the RiverLINE system. These are:

- Ballasted Track, consisting of Re 115 AREMA rail installed on ties (monoblock concrete or wooden). The rail is fastened to the tie using Pandrel clips. This type of track is utilized in the dedicated right-of-way mainline and sidings.
- Slab (Direct) Fixation Track, consisting of Re 115 AREMA rail fastened directly to cast in place track plinths. The rail rests on resilient plates, which in tum are fastened to the

plinths by the application of bolts. This type of track is used in selected areas including bridge structures.

- Embedded Track, consisting of Re 115 AREMA rail, which is directly supported in concrete and then encased in a second pour. Special effort is made to assure isolation of the rail, through the use of a rubber boot. This type of track is primarily used in the street running section. Slab Track and Embedded Track may appear to be similar; however, they are entirely different in their construction and their methods of bearing trainloads.

Related sub-system elements of the track include special appurtenances within interlockings such as turnouts and derails. Other special elements include guarded curve elements and station slab track segments.

The switches at interlockings and crossovers are dual control. Normally they are power operated by Central Control. In the event of a loss of power, these switches can be manually operated under the direction of Central Control. The switches into freight sidings and freight only track are electrically locked and manually operated.

Stations

The RiverLINE has 21 station stops, located at grade. There are four station stops located in the street running section in Camden; WEC (Waterfront Entertainment Center), Aquarium, Cooper Street / Rutgers, and Walter Rand Transportation Center (WRTC). WEC and WRTC Stations are set in dedicated LRT only sections. Aquarium and Cooper Street / Rutgers stations are positioned on either side of the street (Delaware A venue and Cooper's Street respectively) with road vehicle and LRT traffic passing between the platforms. The remaining station stops are located on the dedicated railroad right-of-way.

The passenger stations have side or center platforms, not more than 200 feet long, with a height of 23 inches above top of rail. Station stops have simple shelters close to the center of each platfo1m. Minimal platform end ramps provide ADA mandated access to the platforms. All station platforms are at the same height as the floor of the LRV at the LRV door. Station stops are designed to provide ease of access for disabled and elderly customers. In all instances they meet or exceed compliance with both the spirit and the letter of the Americans with Disabilities Act (ADA). Graphics and signs are uniform in placement and presentation, and are well illuminated to maintain safety and security.

Station stops are unattended. Fare collection is handled through a self-service, proof-of-payment system. Local police and NJ TRANSIT Police, in cooperation with SNJ Rail Group, (SNJRG) provide station stop security.

Customer Service telephones with direct access to the NJTPD dispatcher desk, and the control center are located at each platform.

During adverse weather conditions, Stations including platforms, footpaths and SNJRL TS parking lots are kept clear of snow and ice.

Safety and Security Features of Stations and Parking Areas include:

- Adequate lighting
- CCTV on the Station Platforms
- Public address and variable message signs are provided
- Telephones with access to NJTPD dispatch desk
- Customer information telephones are provided at stations
- A tactile warning strip is provided at platform edges, compliant with ADA requirements
- Parking Lots are designed for maximum visibility of all parts of the lot from surrounding areas
- Provisions are made for security of revenue collection equipment.

Operations Control and Maintenance Facilities and Yards

The CLRC is located at 700 Beideman Avenue, Camden, New Jersey south of the 36th Street station. The Operations Control Center is located at the principal maintenance facility and yard, known as the Camden Light Rail Complex (CLRC) near the 36th Street station in Camden, the Haines MOW yard MP 6.6, and two (2) smaller facilities, the "Trenton Layover Facility" MP 32.9 and "Burlington City Yard" MP 17 are located in the center and northern end of the alignment.

The CLRC contains buildings, rail yards, and other facilities to store, fuel, maintain and clean the entire fleet of 20 light rail vehicles. Inspections, preventive and corrective maintenance, painting, and car washing are done at this facility. Three yard tracks located to the north of the shop building are intended for interior cleaning, inspecting and minor repairs. Four tracks located within the shop building are intended for heavy maintenance, painting, washing, fueling, and sanding of the LRV's. The CLRC is also the headquarters for The RiverLINE. The CLRC contains the headquarters for the maintenance department. The operations and management offices are located at the CLRC.

Safety and Security Features of Maintenance Facilities include:

- Surveillance camera system
- Adequate lighting of all maintenance and yard storage areas
- Water spray and eye wash facilities provided at relevant areas in the shop
- Fuel delivery systems are provided with safeguards and protection against ignition and spillage
- Warning signs, devices and/ or barriers provided at all vehicle maintenance pits
- Positive mechanical exhaust ventilation system is provided in the shop
- Fire hydrants are provided throughout the yard
- Security fencing with deterrent lighting is provided around the perimeter of the yard

Camden Light Rail Complex (CLRC), and Operations Control Center

The Operations Control Center (OCC) is located at the CLRC. Staffed and operated by SNJRG personnel, the OCC provides for direct radio communication with LRV operators, freight

operators, and field personnel. Other capabilities of the control center include control of main line duel control switches, derails, and interlocking signals, identification of LRV location, and automated customer assistance (via a voice response system).

The OCC is the nerve center of The RiverLINE Operation. It is staffed 24 hours a day, 365 days per year. The Control Center dispatches and controls all train activity in the LRT exclusive use and joint-use (freight I passenger) tracks between WEC and Trenton dispatching both light rail vehicles and freight trains. Among other functions, the OCC assures that freight and LRV operation maintain temporal separation.

The OCC is under the direction of the Supervisors of Train Operations (STO) who report to the Superintendent of Transportation and Service Delivery. The two STOs oversee the controllers. The STOs are qualified as controllers and are available to relieve the controllers, as well as being responsible to manage unusual events and special operations. There is at least one Controller on duty in the control center at all times.

OCC Primary Functions

The primary functions of the control center staff is as follows:

LRT and Freight Train Control and Dispatch

- Monitoring and control of operations
- Identifying and correcting problems
- Activity and performance reporting

Freight Coordination

- Coordinating with daily freight operations
- Freight activity reporting Train Operator Management
- Spare board and cover management • Record fueling
- Monitor fuel status of all active vehicles

Failure Management

- Design and maintain contingency plans for infrastructure, vehicle, and crew failures execute contingency plans as required.
- Evaluate effectiveness of plans in action and make corrections as required.

Emergency Management

- Maintain contingency plans for fires, customer trouble, trespass, floods, etc., and execute contingency plans as required.
- Evaluate effectiveness of plans in action and make corrections as required. Customer Information
- Maintain Voice Response System data to reflect service conditions.

Safety and Security Features of Operations Control Facility includes:

- Communication with all rail vehicles operating on The RiverLINE
- Positive train detection for dedicated right-of-way sections

Other Facilities

- HAINES MAINTENANCE OF WAY YARD MP 6.6 PENNSAKEN SIDING - Located in Pennsauken just north of the Route 73 station, the Haines MOW Yard has a facility for storage of maintenance of way equipment and supplies. The yard is not used for storage of any light rail equipment at this time.
- BURLINGTON CITY YARD - Located MP 17 in the center of the alignment, the RiverLINE has a yard facility (with wayside power), for storage of two LRVs. BURLINGTON BRIDGE OFFICE - This is an office signup location MP 17.6 for operations and maintenance personnel north of the Burlington City Yard.
- TRENTON LAYOVER FACILITY - In addition to the CLRC, the TLF, MP 32.9 near Hamilton Avenue in Trenton, provides capacity for the overnight storage (and limited servicing) of eight vehicles. This capacity is necessary to meet the required operating schedules.
- Safety and Security Features of the Trenton Layover Facility include: • Security fencing with deterrent lighting provided around perimeter of the yard. • Surveillance camera system

Signal and Control System

The RiverLINE utilizes an FRA compliant Automatic Block Signal (ABS) System to operate the trains safely over joint-use track. In areas of street running, Bar Signals are tied into the Vehicular Traffic Signals via a system of traffic preemption, providing trains with a clear signal when motor vehicle traffic lights are in the stop (red) position for oncoming traffic.

The double track and single track segments of the RiverLINE are interlocked by control points (CP's). These CP's allow the Rail Traffic Controllers (Controllers) to control the operation of trains on the alignment. The CP' s are identified by their mile post location therefore CP 105 is located at MP 10.5 and CP 05 is located at MP 0.5. In addition there are 3 named interlocking, CP-Blizz located at MP 3.5, CP-Ross located at MP 5 and CP-Del located at MP 22

Between WRTC and Trenton, operation of all rail vehicles are governed by "automatic block", a railroad traffic control and signal system that enables trains to operate safely in either direction on all segments.

The wayside signal system includes equipment to inform light rail and freight train operators of safe train movements and speeds. This permits parallel running in doubletrack segments.

The street-running segment in the City of Camden operates in mixed traffic. It is controlled by traffic signals supplemented by bar signals per MUTCD standards. Camden and Burlington street running segments have LRV bar signals to control the LR V movement. The traffic lights in these two areas are interconnected with the bar signals and they provide pre-emption for the safe movement of LRVS

Safety and Security Features of the Signal and Control System include: • Positive route integrity at CP's • Train stops to arrest LRV's movement, when a stop signal has been passed located at all home signals.

Grade Crossing Warning Devices. A grade crossing warning system includes automatic flashing lights; bells and automatic crossing gates (at the majority of crossings) to warn the auto and pedestrian traffic at highway crossings.

Lunar Lights. Lunar white lights are prominently displayed to trains approaching grade crossings on The RiverLINE. These indicators serve to inform LRV operators of the status of the crossing warning system.

A flashing lunar light indication is initiated by the warning system, (simultaneously with initiation of the grade crossing flashing red lights and bell) and turns to a solidly illuminated state only after the gate is down. The steadily illuminated lunar white indication on either side of the crossing indicates the grade crossing warning system is correctly warning highway traffic, the operator must approach grade crossings and stop short of fouling the crossing, if the crossing is not functioning in accordance with LRT Rule 13 8. The grade crossings in many areas are synchronized with the traffic control signals. Where synchronized, the traffic controls and grade crossing interfaces have been optimized to provide the necessary protection while minimizing impact on traffic on adjacent streets, as well as the street crossing the track. In Burlington City the crossings are preemption synchronized traffic control only with cross bucks on the street approaches to rail crossings.

Safety and Security Features of the Grade Crossing warning devices. Safety and Security Features of the Grade Crossing warning devices include:

- Positive indication to rail vehicle operator of crossing warning device status
- Warning lights/Warning bells
- Crossing gates on public crossings along the dedicated right-of-way with the exception of grade crossings within the confine of the City of Burlington, the Pavilion crossing in Riverside and between Haddon Ave and Harbor Blvd in the city of Camden
- Traffic signals synchronized to assure safety of traffic (e.g. clear out periods to assure traffic not stopped on the track when the gates activate)
- Grade crossings are identified by AAR/DOT numbers to allow identification of the crossing in the event failures are reported.
- The telephone number for reporting failures of grade crossings is located at each grade crossing

Communications

The Communication System provides the infrastructure link between signaling systems, grade crossing protection and traffic control systems; and the indication and control systems available in the Control Center.

It is noted that audio (PA system), video systems (VMS), and communications systems (customer service phone), are maintained by NJ TRANSIT. The RiverLINE does surveillance on these systems and reports any deficiency to NJ TRANSIT for repair.

The Safety and Security Features of the communications system includes:

- A public address system on the passenger vehicles;
- A customer assistance intercom on the passenger vehicles;
- Smoke detectors and fire alarms in yard, shop, and control center;
- Carbon Monoxide detectors in the shop
- Fixed and/or portable radios for operations, maintenance, yard, security, and management personnel, as well as freight operators.

Separation of Freight and Passenger Operations

The RiverLINE light rail transit only trackage is physically separated from freight operations. Passenger and freight operations are temporally separated on the shared trackage. The LRV's do not use freight-only sidings connected to shared trackage and are prevented from entering those sidings by the use of electric lock switches. The electric lock switches are only active during the freight operation. This period of activity is controlled via the Control Center computer system under the direction of Rail Traffic Controllers. The controller must convert the system from passenger mode (where the electric locks are inactive) to freight mode in order to enable the locks. The sliding block and split rail derails are locked during passenger operation at the following locations:

- Conrail's No. 2 Running Track at CP 45,
- Conrail's Minson freight siding,
- Colorite/Rimtec freight siding,
- Conrail's Burlington Yard south lead at CP 184,
- Burlington yard crossover at mile 19.8 (interlocked with CP 196),
- Burlington freight yard lead at CP 211 A,
- Conrail's Robbinsville Industrial Track at mile 27
- Conrail's Port Running Track at CP 329.
- Pioneer Siding,
- Dependable Siding,
- AFG Siding,
- Ball Glass Siding,
- Shea Lumber Siding,
- NVR Siding
- Distributec Siding,
- Burlington Generation Station Siding,
- Land-0-Lakes Siding,

- Church Brick Siding,
- Stephen Chemical Siding
- Haines Yard

Shared trackage includes single and double track sections beginning at MP 4.5 in Pennsauken to MP 32.9 in Trenton. Within shared Trackage, freight is excluded from track one (the East track) between Trenton Station and Cass St. crossover at MP 32.3 North, and on track two (the West track) between Trenton Station and CP 329. Freight trains are prohibited from operating on the LRT only track, South of CP-45.

Logic at the Control Center provides positive separation between LRV traffic and freight operations. During passenger operations, this logic assures that it is not possible to:

- Call a freight route across joint use territory that conflicts with an LRT route already established,
- Call a freight route across LRT territory that does not end in Freight territory,
- Call a route from LRT territory into Freight-only territory, • Call a route from Freight into LRT-only territory

The standard freight-only operating window is 10:00 p.m. through 5:45 a.m. and the standard LRV operating window is 5:45 a.m. to 10:00 p.m. By agreement, NJ TRANSIT permits Conrail to perform freight operations (after clearing off all LRV's and establishing freight operations per LRT Operating rule 906, Temporal Separation); in the event Conrail's main line becomes blocked.

RiverLINE Operations

The RiverLINE alignment - The main features of the alignment (South to North) are described in the following sections.

Track Layout

TRACK TYPE	START MP	MUNICIPALITY	FINISH MP	MUNICIPALITY
Double Track	MPO.O	Camden	MP 3.5	Pennsauken
Single Track	MP3.5	Pennsauken	MP5.0	Pennsauken
Double Track (Pennsauken siding)	MP 5.0	Pennsauken	MP7.0	Palmyra
Single Track	MP7.0	Palmyra	MP8.7	Riverton
Double Track	MP 8.7	Riverton	MP 10.5	Cinnaminson (Riverton siding)
Single Track	MP 10.5	Cinnaminson	MP 11.8	Riverside
Double Track	MP 11.8	Riverside	MP 14.0	Delanco (Rancocas siding)
Single Track	MP 14.0	Delanco	MP 15.0	Edgewater Park
Double Track (South Burlington siding)	MP 15.0	Edgewater Park	MP 17.5	Burlington City
Single Track	MP 17.5	Burlington City	MP 19.6	Burlington Township

TRACK TYPE	START MP	MUNICIPALITY	FINISH MP	MUNICIPALITY
Double Track (Florence siding)	MP 19.6	Burlington Township	MP 21.1	Florence Township
Single Track	MP 21.1	Florence Township	MP 24.2	Mansfield Township
Double Track (Roehling siding)	MP 24.2	Mansfield Township	MP 26.9	Bordentown Township
Single Track	MP 26.9	Bordentown Township	MP 28.9	Bordentown Township
Double Track	MP 28.9	Bordentown Township	MP 33.9	Trenton

Headways

Headways are run at a maximum of 3 0 minutes in both directions throughout the day with 15-minute headways during weekday peak periods until 9:00 AM and from 4:00 PM to 7:00 PM. Nominal dwell times are 20 seconds at all enroute stations except 120 seconds northbound at WRTC. Service in both directions begins at (just prior to) 6:00 AM each day and continues until the last northbound train departs WEC at 9:00 PM and the last southbound train departs Trenton at 9:30 PM

Camden Street Rail Territory

The southern portion of The RiverLINE runs along 1.5 miles of double track street railway in downtown Camden, NJ. This portion of the alignment begins at the Waterfront Entertainment Center (WEC), the site of concerts and other events. The WEC station is within walking distance of the restored Battleship New Jersey. The street running alignment in Camden has station stops at the Adventure Aquarium and a campus of Rutgers University. LRV operations on the street railroad alignment are controlled by Bar Signals that are interconnected with the street traffic light system for street vehicles and pedestrians. The LRV operator obeys the Bar Signals in addition to staying visually aware of adjacent vehicle and pedestrian traffic. The RiverLINE transitions from street rail to a separated right-of-way north of Haddon Ave MP 1.5 located north of the Walter Rand Transportation Center (WRTC).

Dedicated Right-of-Way Territory

The RiverLINE alignment transitions from street running to dedicated railroad right-of-way (ROW) at MP 1.5. The remaining alignment from MP 1.5 to the north terminus in Trenton runs solely over dedicated ROW. From MP 1.5 to MP 4.5 the ROW is limited to LRV use. This section runs alongside the Conrail Pavonia Yard, with tracks separated by distance, or with intrusion (displaced load, derailed vehicle) detection systems to protect the light rail system. A permanent, active IDS is in service in the "Cooper River Zone" and another in the "36th Street Zone." Each system comprises two detectors, one at each of the two entry points, which will detect the condition of a ConRail engine, train, or equipment, including shifted loads, swinging doors, derailed equipment, etc., that may create a fouling hazard for LRT operations.

Joint Freight – Passenger Territory

To the North of the start of single track, at mile post 4.5, is the beginning of the shared access territory with Conrail. Freight and passenger operations are temporally separated. Freight only operation is restricted to between the hours of 1:00 A.M. and 5:30 A.M. (Sunday through Friday nights). The RiverLINE control center controls this separation. There is one railroad crossings at grade (diamond) located at CP-45 (in Pennsauken) that may be used by Conrail during passenger operation hours to provide access to Conrail customers. Use of these crossings by Conrail is controlled by an automated interlocked system of signals, derails, and magnetic train stop devices, which precludes simultaneous access by freight trains and LRV's. The RiverLINE tracks are grade-separated from Conrail's Delair overhead bridge that carries freight traffic and NJ TRANSIT's Atlantic City Line.

The alignment continues north through the communities of Palmyra, Riverton, Cinnaminson, Delran, and Riverside. North of Riverside Station a fixed-span bridge that was installed in 2002.

South of the City of Burlington, a signup facility has been created in the former Burlington Bridge Station and a yard facility (Burlington City Yard) has been created on the former PSE&G Generation Siding.

In Burlington City, the alignment travels through the center of town in close proximity to street traffic. LRV bar signals, interconnected with the street traffic lights, are used to inform LRV operators of the status of the street traffic control systems and the condition of the highway warning devices.

Trenton Vicinity

The RiverLINE is double-tracked for approximately five miles on the northern end from CP-28.9 north of Bordentown to the end-of-track in Trenton immediately across the street from NJ TRANSIT's Trenton Transportation Center that is also served by Amtrak, SEPTA and NJT commuter rail trains, and NJ TRANSIT bus operations. Within the city of Trenton, there are station stops at Cass Street and Hamilton Avenue within walking distance of the Waterfront Stadium and the Sun Bank Arena. Freight service is not permitted at any time on either track between CP Cass and Trenton Station.

Maintenance

This section provides an overview of the maintenance philosophy at SNJRG and the maintenance practices used throughout the life of the operating and maintenance period of the RiverLINE contract.

Proper maintenance is a key element in creating a safe, secure and reliable operating environment minimizing the possibility of accidents, incidents or other emergencies, throughout the RiverLINE. SNJRG has developed a series of maintenance plans for each of the five elements of The RiverLINE infrastructure:

(1) Light Rail Vehicles (M1 – M11)

(2) Track and alignment (MW-4)
(3) Railroad signaling, highway grade crossing & traffic control systems (S-27, S24)
(4) Control room systems (audio/video -NJ TRANSIT Responsibility)
(5) Bridges and Culverts (MW-5)

SNJRG emphasizes the following in its maintenance plans:

- Frequent inspections
- Proactive scheduled (Preventive) maintenance.
- Effective and timely performance of corrective maintenance.
- The ability to make "immediate action" repairs when situations dictate.
- A certification program for the personnel, equipment, and procedures used to perform maintenance.
- Use of data recorders both as proactive predictors of maintenance needs before they occur and as an analytical tool to suggest appropriate design and/or procedure changes.
- An ongoing program of modifications and updates to both equipment and specifications.
- Failure analysis/Hazard analysis.
- Investigations, and
- Record keeping and documentation of maintenance trends.

RiverLINE Contacts

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RiverLINE Minimum Standards for Safety

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSOPS	**NJDOT Rail Transit SSOPS**	**1/23/2018**	**Version 1.0**	**FALSE**
ASP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.		Future	TRUE
CMP	Configuration Management Plan (CMP) – the Configuration Management Committee and processes are a required element/function within the RTA/RTS safety program, along with safety and security certification and system modifications.	6/22/2016	SSPP - Revision 17 – Sec. 17, pages 93-96	FALSE
EOP	Emergency Operations Plan (EOP) – this document provides the coordination and preparedness activities inside and outside of the RTA/RTS.	5/5/2017	TN-SNJ-10 - RiverLINE Incident Handling Plan	FALSE
I&M	Inspection and Maintenance (I&M) Manuals, SOPs, and Standards – these documents provide the requirements for inspection and maintenance of the rail system, including facilities, infrastructure, and related vehicles. These documents should have the custom		There are far too many manuals, inspections, procedures, plans, etc. to list throughout the departments.	FALSE
Investigation Procedures	Investigation Procedures at the RTA/RTS – this procedure includes a description of the types of events that need notification and investigation, who will perform those requirements, causal factor analysis, hazard analysis, and development of recommendation.	12/10/2013	SF-SNJ-17 – Accident, Incident & Injury Procedure	FALSE
RORB	Rail Operating Rule Book (RORB) – these are the rules that operators and others working around the rail system must follow.	11/20/2015	LRT Rules 5th Edition	FALSE
RWP	Right-of-Way or Roadway Worker Protection (RWP) Plan – this document is related to the RORB from the perspective of the protections and procedures for workers on the rail right of way.	11/20/2015	RiverLINE RWP Rules 11-20-2015	FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SOPs - Command and Control	Command and Control/Train Control Standard Operating Procedures (SOPs) – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and w	11/20/2015	RiverLINE Operating Procedures 11-20-2015	FALSE
SOPs - Command and Control	Command and Control/Train Control Standard Operating Procedures (SOPs) – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and w		TN-SNJ-04 – Customer Service Plan (current revision 11-21-17) TN-SNJ-05 – Continuity of Service Plan (current revision 11-21-17) TN-SNJ-06 – RiverLINE 49 CFR Part 217.9 Program (current revision 12-4-17) TN-SNJ-09 – LRV Handling & Troubleshooting Procedure	FALSE
SOPs - Field Supervision	Field Supervision SOPs – these SOPs are for supervision out on the rail system for support of service delivery, responsiveness to passengers, and safety. The field supervisors will often be the first supervision to arrive at the scene of a safety event o		TN-SNJ-04 – Customer Service Plan (current revision 11-21-17) TN-SNJ-05 – Continuity of Service Plan (current revision 11-21-17) TN-SNJ-06 – RiverLINE 49 CFR Part 217.9 Program (current revision 12-4-17) TN-SNJ-09 – LRV Handling & Troubleshooting Procedure	FALSE
SOPs - Safety	Procedure requiring review of SOPs related to Safety – this procedure requires that the minimum safety standards at the RTA/RTS are also required to be	11/20/2015	RiverLINE Safety Rules 11-20-2015	FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
	reviewed, agreed to, and approved by the Safety Department.			
SSCP	Safety and Security Certification Plan (SSCP) – this plan provides the required activities from the RTA/RTS safety program for assuring that safety and security certification is completed for certain capital projects for new equipment/infrastructure or r	6/22/2016	SSPP - Revision 17 – Sec. 7, pages 59-60	FALSE
SSP/SEPP	System Security Plan (SSP)/Security and Emergency Preparedness Plan (SEPP) – this security program document describes the requirements for system security and emergency preparedness at the RTA/RTS. Note that the new SSO Rule no longer defines the content	4/6/2017	RiverLINE SSP Part 1 (2)	FALSE
SSPP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.	6/22/2016	Revision 17	TRUE
TAM	Transit Asset Management (TAM) Plan – this is a new plan now required for RTAs/RTSs and it is related to the CMP, but with a larger context.		Not due until Oct 2018. Internally discussing how we will proceed with this requirement.	FALSE

Appendix G

New Jersey Transit Hudson-Bergen Light Rail

Description and Contacts

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Hudson–Bergen Light Rail (HBLR)

Overview

The Hudson–Bergen Light Rail (HBLR) is a light rail system in Hudson County, New Jersey, United States. Owned by New Jersey Transit (NJT) and operated by the 21st Century Rail Corporation, it connects the communities of Bayonne, Jersey City, Hoboken, Weehawken, Union City (at the city line with West New York), and North Bergen. The system began operating its first segment in April 2000, expanded in phases during the next decade, and was completed with the opening of its southern terminus on January 31, 2011. The line generally runs parallel to the Hudson River and Upper New York Bay, while its northern end and its western branch travel through the lower Hudson Palisades. HBLR has twenty-four stations along a total track length of just over 34 miles (55 km) and serves over 54,000 weekday passengers. There are plans for expansion through extensions and additional stations.

Physical Plant

The HBLR rail system's major maintenance, operational control, train storage, and vehicle wash track are housed at the Caven Point Avenue Maintenance Facility. In addition to shop and yard facilities, the HBLR administrative offices are located here.

All trains, stations and communications (normal and emergency) are monitored through Controllers at The 20 Office.

Vehicles

The Hudson–Bergen Light Rail system has 52 electrically powered air-conditioned vehicles built by Kinkisharyo International and numbered in the 2000 series. The cars were assembled in Harrison, New Jersey. Each vehicle is 90 feet (27 m) long and has four sets of double-opening doors on each side, with seats for 68 passengers and standing room for another 122 passengers (crush load is 240 passengers). The Newark Light Rail system uses the same type of vehicle, with slight modifications to the trucks and wheels due to the different rails used. The body of the LRV has three sections and three trucks. The center truck is directly connected to the center body section without independent steering rotation. This truck features low clearance because it does not employ through axles between the pairs of wheels, and therefore accommodated the required low floor above it. The center truck is not equipped with propulsion motors.

On July 3, 2013, NJ Transit released lengthened light rail car 2054 as a prototype. The expanded car consists of two new sections, increasing length by 37 feet (11 m) to a total of 127 feet (39 m). Seating capacity is increased from 68 passengers to 102 passengers, with standing capacity increased accordingly as well. Overall capacity increases from approximately 200 per vehicle to 300 per vehicle. The prototype was placed on rotations through the three lines of the system over the next 6 months, after which, NJ Transit started to expand 26 cars in total, or half of the total fleet. The contract to expand the remaining balance of 25 cars was approved on July 9, 2014. The expanded cars are being renumbered to the 5000 series.

TONNELLE AVENUE
Bergenline Avenue
Port Imperial
Lincoln Harbor
Secaucus Junction
Frank R. Lautenberg Rail Station
Northeast Corridor
North Jersey Coast Line
Bergen County Line
Main Line
Gladstone Line
Morristown Line
Montclair - Boonton Line
Pascack Valley Line
Raritan Valley Line
Commuter rail service to Newark Liberty International Airport Station
HOBOKEN TERMINAL
Bergen County Line
Main Line
Pascack Valley Line
Gladstone Line
Morristown Line
Montclair - Boonton Line
North Jersey Coast Line
9th Street-Congress Street
2nd Street
Newport
Harsimus Cove
Harborside
Exchange Place
Essex Street
Marin Boulevard
Jersey Avenue
Liberty State Park
Martin Luther King Drive
Garfield Avenue
WEST SIDE AVENUE
Richard Street
Danforth Avenue
45th Street
34th Street
22nd Street
8TH STREET
Hudson
River
Upper New York Bay
Newark Bay
Connecting Rail Service
Secaucus Junction
Hoboken Terminal
NON-DISCRIMINATION POLICY

Electrification

The purpose of the electrification system is to receive public utility power to a series of substations and distribute electric traction power for HBLR. It provides all related functions including conversion and switching of traction power, negative return, and auxiliary power. Critical physical boundaries for the electrification system include substation connections to incoming utility, Public Service Electric and Gas (PSE&G) power. Connections at the rail-to-impedance bond leads and traction power bonding, and connections to the auxiliary power equipment located in the train control, station and shop systems. Critical equipment also includes line feed switches and jumpers. The most visible and critical interface for electrification is between the Overhead Contact System (OCS) and the LRV pantograph.

The major subsystems within electrification include:

- Substation and power distribution, which include all traction power feeder cables to the feeders on the OCS as well as return cable;
- Overhead Contact System (OCS), which include catenary poles, overhead wire, sectionalizing bypass switches, pole-mounted disconnect switches, pole-mounted surge arresters, and cast-in-place foundations; and
- Stray current mitigation subsystem, which includes bonding and isolation.

Traction Power Substations (TPSS) are spaced along the right-of-way, approximately one mile apart. The substations have traction power rectification equipment and switch gear to supply 750 Volts Direct Current (VDC) power to the OCS. Normal operations can be maintained with one TPSS being inoperative/out of service.

The power distribution system conducts current from the traction power substation to the vehicle pantograph. The track system forms the return side of this circuit back to the substation.

The OCS provides consistent reliable service for a range of climatic conditions while presenting a low visual impact to the surrounding community.

All metallic system elements that support the OCS are grounded.

Emergency Trip Stations (ETS), for removal of power are located at each traction power substation and at the rail entrances to the Shop building. At the substations, the ETS are mounted on the building wall beside the entrance door. When the mushroom button is pushed, the track current to the catenary is de-energized and transfer tripping takes down adjacent substations. The ETS in the shop building act only on the single DC breaker supplying the Shop catenary. ETS are not located at the passenger shelter stops or along the Right-of-Way (ROW). ETS are intended for rapid de-energization of the system by maintenance or possibly Emergency Service personnel.

Track

The primary purpose of the fixed guideway is to provide support and guidance to trains. The HBLR system utilizes three types of track which are:

- *Ballasted Track* – consisting of 115 lb. AREA rail installed on monoblock concrete ties fastened with a spring-loaded Pandrol clip. This type of track is utilized on the private right-of-way portions of the mainline. A modified form of ballasted track, utilizing wood ties, is used in selected yard areas and within interlockings.
- *Slab (Direct Fixation)* – consisting of 115 lb. AREA rail fastened directly to cast-in-place track plinths. The rail rests on resilient plates which are in turn bolted to the plinths. Special effort is made to provide electrical isolation of the rai from the concrete. This type of track is used in selected areas of at-grade private ROW and viaduct structures.
- *Embedded Track* – consisting of 115 lb. rail, which is directly supported on concrete and is then encased in a second pour. Special effort is made to achieve isolation of the rail through the use of rubber "boot". This type of track is primarily utilized in locations where "in-street" running occurs. This portion of the HBLR track system is generally not provided with broken rail protection through the use of track circuits (track circuits are utilized only in a short embedded track section south of Canal Interlock). The embedded track and slab track may appear similar; however, they are entirely dissimilar in their method of construction and in their method of accommodating train loads

Related subsystem elements of the track include special appurtenances within interlockings such as turnouts and slip switches. Other special elements include guarded curve segments and station slab track segments. Crossover tracks and pocket tracks are located at suitable locations to permit trains to turn back at both ends of the system and at selected mid-line locations. Terminal and pocket tracks are used for holding "hot spare" vehicles during peak hours, and will provide capability for temporary storage of malfunctioning trains and permit reverse running in contingency situations.

Operation Control Center (OCC)

The OCC is located on the upper mezzanine of the Communipaw Yard & Shop Building. It is the centralized control point for the entire HBLR system and is staffed 24 hours a day, 7 days per week by qualified Controllers. It is operated under the direct authority of the Lead Controller who reports to the Transportation Superintendent, who in turn reports to the Deputy Director, Rail Operations.

The OCC has authority over all transportation and maintenance activities that may occur on or near the alignment. Four separate, but redundant, work stations are in the OCC. Each workstation includes two-way radio systems, telephones, public address system, and other advanced control systems to provide Controllers with the ability to manage all operations by:

- Monitoring the direction and location of all trains;
- Monitoring and controlling all signals and switches;
- Monitoring and controlling all traffic signals in street running sections;
- Monitoring and controlling the traction power system;
- Monitoring and responding to all fire and intrusion alarms;
- Monitoring and responding to all elevator alarms as well as remote control operation of elevators;
- Monitoring and responding to the Call-for-Aid telephone and CCTV systems; and
- Implementing Emergency Management Procedures (EMPs) and Station protocols when required.

The OCC Controllers have primary responsibility for failure response, notification to emergency response agencies, TFCRS management, NJ Transit, and other authorities as required by state or federal regulations.

Train Control System

The Train Control System (TCS) provides the primary functions or train routing and train separation at all locations other than in the Yard and in-street running. This system also provides the functions of on-board speed enforcement. Speed enforcement is applied for reasons of civil restrictions, train touring and train separation and for protection against broken rails. The TCS is not deployed on in-street running territory. The LRV Operator must assure operation at the proper speed in these locations.

The TCS is designed to Fail Safe or Vital principles. These principles recognize a single fault, or a series of faults, and cause the system to adopt a safe state. The system, in response to a failure, prevents the movement of a stationary train or imposes a braking action on a moving train which brings it to a stop independent of any Operator action.

The TCS employed on the HBLR is an audio frequency track circuit controlled system which displays the necessary commands in the vehicle cab. However, the train is manually controlled by an Operator in response to these commands, the Operator will receive an audible warning to take action. Failure to respond to cab displays will result in the system bringing the train to a safe

condition, automatically. The system provides full train protection and speed control in either direction on either track.

The HBLR operation is bi-directional with reverse signaling. The available speeds for operation are in increments between 5 and 55-mph. Two additional speed control limits are available for specific circumstances, namely a 15-mph Yard speed and a 35-mph Street Running mode. Neither of these special modes are automatically enforced and the operator is entirely responsible for train separation and observance of speed limits.

In addition to train speed and separation protection, the Train Control system ensures that conflicting routes cannot be set, either manually or automatically. Once a train is routed, all other conflicting moves are prevented by the logic incorporated into the wayside Central Instrument Houses (CIH). These features are provided at all interlockings where conflicting train movements could be initiated. The interlockings are provided with wayside signals which indicate where a train must stand, indicate an event of restrictive indication, and indicate the route to be followed in the event of a permissive display. Because non-compliance with a stop command at these locations would be extremely dangerous, the wayside signals are enforced by a 5-mph approach speed when a restrictive aspect is displayed. Over-running the signal location will cause the train to come to an immediate stop. The placement of the signal ensures that a train ignoring the restrictive command will stop short of the fouling point for other train movements.

The Communication System provides a link between signal locations and the OCC for supervision and control. The TCS also includes Train-to-Wayside (TWC) communications, which provides for routing requests at interlockings and supplemental information regarding train location. TWC devices are also located in street-running territory as a means of providing the OCC with information regarding train location. Train location provided by TWC is considered as non-vital and is not utilized by the TCS for any safety-related functions.

Intrusion detection is installed on fencing where the adjacent freight line runs parallel to the LRT alignment and in the Palisades area for falling rock protection. This fence is equipped with detection devices that are activated if the fence is displaced more than 30-degrees to the vertical. Should this event occur the tilt switch sends a warning to the TCS. This system shuts down the operations in the affected area.

Traffic Operating System

This system includes all traffic control software, computer hardware, and devices which control the movement of LRVs and road traffic across roadway and track intersections. High speed grade crossings with railroad-styled gated crossings are not included; such equipment exists on the West Side Branch at Pacific Avenue and Halladay Street and is part of the TCS described above.

TOS equipment in the field, including bar signals, is used to convey a non-vital aspect to the train regarding the status of the intersection or crossings. At certain locations (e.g., Wilson Street) the railway or highway configuration requires special rules on interpreting bar signals and wayside railroad signals that are in close relationship to each other. Such coordinated functionality is considered during the inspection and testing and preventive maintenance. At the OCC, the TOS includes a computer which indicated the status of crossings and is capable of exerting control of

the intersection. Coordination of supervisory control of train movements and traffic is through the OCC Controllers.

Integrated Control System

The Integrated Control System (ICS) is a state-of-the-art centralized Supervisory Control and Data Acquisition (SCADA) system located in the OCC. The primary purpose of the ISC is the supervision and control of the train movements, train control, traction power, and overhead catenary systems. It also provides the status of the Fire and Intrusion alarm systems.

Communications Infrastructure

The Communications System provides the infrastructure link between traction power, train control, traffic systems, and telephone systems in the field, and the indication, control, and communications functions available in the OCC. Much of the indication, control and communications functions available in the OCC are provided by the Integrated Control System (ICS). The Remote Terminal Unit (RTU) provided the ICS with communications connection to the Station Platforms for the purposes of intrusion detection at Ticket Vending Machines, Communications Lockers, Standalone Validators, Elevator Tower Rooms and fire detection equipment in Elevator Tower Rooms. A Passenger Information System (PIS) is used to communicate voice and data messages from the OCC to the Control Computer and vehicle radios and modems.

The Telephone Subsystem used the Communications Backbone to connect field Emergency Trip Station Telephones, Emergency Telephones, and Domestic Telephones to the Private Branch Exchange (PBX) located at the OCC.

Computerized Maintenance Management System (CMMS)

This system includes the Management Information Subsystem (MIS), the Maintenance Management Subsystem, payroll subsystems, and other subsystems which support HBLR administration. Included in this system are special dedicated hardware and peripherals, as well as software. The MIS in use is a specialized package referred to as a CMMS. Additionally, the CMMS is being updated to capture inspection information from NJDOT inspections, so that deficiencies are tracked until resolved. Reports are provided by the CMMS on maintenance actions taken, time between noted repairs and restoration, system element downtime, and materials, supplies, and other factors keeping the system element from service. In the event that a system element is permitted to operate with degraded performance, the report will note this as an outstanding maintenance action.

Right-of-Way

This system is composed of all at-grade, sub-grade, and drainage structures. It also includes duct bank and buried conduit, but does not include cable. ROW supports the track (the physical interface to ballasted track is at top of the sub-grade), and shelter stops/stations (interface is also at top of sub-grade). A secondary function of ROW is to provide drainage; this is not independent of the support function as adequate drainage is essential to the strength of the geo-structure. In

recognition of this, particular attention is devoted to cleaning and maintenance of drainage facilities. Special attention is directed to inspection of fences and of drainage adjacent to or beneath the track structure.

Deep foundations other than those associated with Elevator Guideway (Viaduct) are part of the ROW, as are culverts, drainage pipes and short span bridges. The viaduct and the tunnel are each considered as separate systems; however, and are not considered as part of the ROW.

Tunnel

A double track tunnel of approximately one mile in length exists. The Weehawken Tunnel runs beneath the municipalities of Weehawken Township, Union City, and North Bergen Township. It was designed to accommodate two transit tracks, and is equipped with electrical and mechanical systems to make it a vital part of the Hudson-Bergen Light Rail Transit System (HBLR). A new underground station, referred to as Bergenline Avenue Station, is constructed under Bergenline Avenue in Union City to serve the local populace of Union City and contiguous portions of West New York, North Bergen and Weehawken. The station platform is located approximately 160 feet below the surface.

All of the tunnel systems meet the requirements of the National Fire Protection Association (NFPA) 130 – Standard for Fixed Guideway Transit and Passenger Rail Systems.

Elevated Guideway (Viaduct)

The elevated guideway consists of special-built structures whose purpose is to elevate the tracks for distance longer than the length of a bridge. There are four elevated guideways on the HBLR: The viaduct which grade separates the rail from automotive traffic in portions of downtown Jersey City, Weehawken and the bridge, which spans Long Slip, providing entry into Hoboken Terminal.

Direct fixation track is used on the downtown Jersey City and Weehawken viaducts. On the Ling Slip Bridge, the physical division between track and guideway is between the track plate and the bridge timber.

Clearance for individuals is provided on the guideway structures for routine and emergency access and for limited clearance from train movement. Interlockings exist on, or are immediately adjacent to, guideway sections. Shelter stops or stations are not located on the guideway.

Yard & Shop

The HBLR LRV Maintenance and Administrative Building, is the 21-acre Communipaw Yard & Shop located in Jersey City, just south of Communipaw Avenue. These areas contain the various service, maintenance, repair support and administrative areas. The Communipaw Yard & Shop Site includes the LRV Service and Maintenance Shop in a one-story building with two mezzanines. The Main Shop includes the following areas: Paint Preparation and Car Body Repair, Paint Booth, Car Wash, Car Inspection, Car Maintenance/Repair, and Parts/Supplies. The Lower Mezzanine includes Administrative Areas and a Bulk Storage Area. The Upper Mezzanine includes Administrative Areas, the OCC, and the UPS area.

The LRV Storage Building provides weather protection for the light rail vehicles. This building has eight tracks and is open at each end to allow free movement of the vehicles into and out of the building. A total of 48 vehicles can be stored in this building. The Substation is sized to supply power for the yard catenary, yard lighting, and building requirements.

The Yard consists of all of the ROW and equipment at Communipaw Yard outside of the limits of Yard South (YS), Yard North (YN), and Yard West (YW) interlockings, with the exception of equipment which are within the tracks and traction power systems, and the hydraulic switch machines. All Yard operations are under the authority of the OCC.

Mechanical rooms, storage spaces, and industrial working environments are only accessible to qualified workers as delineated by job description.

HBLR Contacts

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HBLR Minimum Standards for Safety

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSOPS	**NJDOT Rail Transit SSOPS**	**1/23/2018**	**Version 1.0**	**FALSE**
ASP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.			TRUE
CMP	Configuration Management Plan (CMP) – the Configuration Management Committee and processes are a required element/function within the RTA/RTS safety program, along with safety and security certification and system modifications.	5/20/2013	TFC-OP-3, Rev 02	TRUE
EOP	Emergency Operations Plan (EOP) – this document provides the coordination and preparedness activities inside and outside of the RTA/RTS.	5/1/2013	TFC-SS-20	TRUE
I&M	Inspection and Maintenance (I&M) Manuals, SOPs, and Standards – these documents provide the requirements for inspection and maintenance of the rail system, including facilities, infrastructure, and related vehicles. These documents should have the custom		Fixed Plant: TFC-MW-01_Rev 10_5-2017 (5/10/2017) LRV: TFCRC-LRVM-0001 Rev. H (10/30/2008) Signal Testing: MW-21, Rev. O Instructions for Testing Signal Apparatus and Signal Systems (12/15/2016)	FALSE
Investigation Procedures	Investigation Procedures at the RTA/RTS – this procedure includes a description of the types of events that need notification and investigation, who will perform those requirements, causal factor analysis, hazard analysis, and development of recommendation.			FALSE
RORB	Rail Operating Rule Book (RORB) – these are the rules that operators and others working around the rail system must follow.			FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
RWP	Right-of-Way or Roadway Worker Protection (RWP) Plan – this document is related to the RORB from the perspective of the protections and procedures for workers on the rail right of way.			FALSE
SOPs - Command and Control	Command and Control/Train Control Standard Operating Procedures (SOPs) – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and workers on the right of way. These SOPs should include troubleshooting information for frequent problems and managing emergencies on the rail system. These SOPs include the function of load control/management.		TFC-TP-30, Rev 03, May 2013 (5/15/2013)	TRUE
SOPs - Field Supervision	Field Supervision SOPs – these SOPs are for supervision out on the rail system for support of service delivery, responsiveness to passengers, and safety. The field supervisors will often be the first supervision to arrive at the scene of a safety event on the rail system, and provide at least initial investigation of events on the rail system.			FALSE
SOPs - Safety	Procedure requiring review of SOPs related to Safety – this procedure requires that the minimum safety standards at the RTA/RTS are also required to be reviewed, agreed to, and approved by the Safety Department.		TFC-SS-10 (7/18/2016) TFC-SI-01 (7/18/2016)	FALSE
SSCP	Safety and Security Certification Plan (SSCP) – this plan provides the required activities from the RTA/RTS safety program for assuring that safety and security certification is completed for certain capital projects for new equipment/infrastructure or refurbishment of existing equipment/infrastructure. The main topics for safety and security certification are related design criteria, participation of the Safety Department, and a process of the RTA/RTS assuring that all safety and security design criteria exist, were comprehensive, and were properly addressed including integrated testing of the final products.			FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSP/SEPP	System Security Plan (SSP)/Security and Emergency Preparedness Plan (SEPP) – this security program document describes the requirements for system security and emergency preparedness at the RTA/RTS. Note that the new SSO Rule no longer defines the content of the SSP/SEPP and its processes and procedures. However, the NJDOT SSO program will now consider this security program document as a minimum safety standard in terms of its overlap with the safety program at the RTA/RTS (risk assessment and management, and emergency preparedness). The NJDOT SSO program no longer has requirements for the content of the SSP/SEPP, but does require that the RTA/RTS develop an appropriate security program document and the NJDOT SSO program will provide oversight of that document and the processes that it represents, but only from the safety program (all-hazards) perspective.	4/1/2013	TFC-SEPP-01, Rev. 03	FALSE
SSPP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.	6/1/2013	TFC-SSPP-1 Rev. 02	TRUE
TAM	Transit Asset Management (TAM) Plan – this is a new plan now required for RTAs/RTSs and it is related to the CMP, but with a larger context.		Not due until Oct 2018. Internally discussing how we will proceed with this requirement.	FALSE

Appendix H

Delaware River Port Authority (DRPA)

Port Authority Transit Corporation (PATCO)

Description and Contacts

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Delaware River Port Authority (DRPA)
Port Authority Transit Corporation (PATCO)

The Port Authority Transit Corporation (PATCO) rail transit line was built by the Delaware River Port Authority (DRPA) between Lindenwold, New Jersey and Center City Philadelphia, Pennsylvania, a distance of 14.5 miles. The line utilizes the former Camden – Philadelphia "Bridge Line", built by the Delaware River Joint Commission, predecessor of the DRPA. The Bridge Line opened in 1936, connecting 8th and Market Streets Station in Philadelphia with City Hall and Broadway Stations in Camden, via subways and a crossing of the Delaware River on the Benjamin Franklin Bridge. The Bridge is 140 feet above the water, and 1.5 miles in length.

The balance of the line in Philadelphia utilizes a City-owned subway, constructed in the 1930s but not opened until February 15, 1953. The balance of the line in New Jersey utilizes a former railroad corridor that first became operational on July 4, 1854.

Description of the Line

The double-tracked transit line operated by PATCO includes 2.3 miles in downtown subway, with seven stations (one of which, Franklin Square, is permanently closed), and 12.2 miles above ground, with seven stations (one of which, Haddonfield, is a deep open cut). Thus thirteen stations are spread over 14.5 miles of line. Supporting the two main tracks are fourteen interlockings, turn back tracks at three locations, tail or storage tracks at four locations, ten electrical substations for providing traction power, one electrical switching station, and a central control facility.

The substations supply direct current propulsion power at a nominal potential of 750 volts direct current from rectifier//transformer units. Alternating current to these substation s is obtained from three feeder lines from Public Service Energy Group in New Jersey at 26,400 volts. Two are identified as primary-use lines, and the third as an emergency backup. Additionally, two 13,200 volt alternating current lines of Philadelphia Electric Company provide additional backup.

Railroad lines operate within the PATCO right-of-way at two locations. In Camden, Conrail's line into South Jersey parallels PATCO's eastbound main track for a distance of about half a mile. Between the west end of Haddonfield and Lindenwold Station, New Jersey Transit's Atlantic City Line parallels PATCO's westbound man track, a distance about five and one half miles. The respective agencies, Conrail and New Jersey Transit, are responsible for the operation and maintenance of their rail facilities.

Maintenance and Other Facilities

Primary maintenance facilities are located within the Lindenwold Shop Building. The area for maintaining transit cars consists of four shop tracks and a wash track. The Car Wash was expanded and upgraded as part of a major renovation that also included a major component part washing facility, blow-down building and electrical substation, all of which were accepted and put into service in 2005. Each of the tracks can accommodate four cars with the ship doors closed. Two of the four ship tracks are serviced by three overhead cranes, one of 5-ton capacity and two of 17-ton capacity. The other two tracks are over service pits. A two-car in-floor car-hoist system was installed in 1993, at the east end of No, 1 track. Just outside the east end of the shop are a blowing pit and an inspection pit. The balance of the car maintenance area consists of a welding shop, a machine shop, and electronics shop, administrative offices, and locker and wash rooms. Adjacent to the offices is a storeroom, which supports PATCO maintenance activities. Outside storage of material is also provide near the Shop Building.

Also within the Ship Building, supporting the maintenance of all PATCO facilities and equipment except the transit cars and fare collection equipment, are a radio repair ship, and electronics and signal shop, plus administrative offices, locker and wash rooms, and the boiler room for the entire Shop Building.

Outside the man Shop Building is a storage and maintenance building for on-track work equipment.

Storage Yard

Lindenwold Yard is located adjacent to the Shop Building. It consists of 17 storage and running tracks, an east end yard throat bypass track, plus a wye/test track and a three-track Way & Power storage yard, and is connected to the main line by an ascending, double-track loop at is east end. At its west end is a physical connection to a siding off the Atlantic City Rail Line, to enable delivery of carload freight and rail vehicles. A stub-ended portion of the siding connecting track also serves as a yard lead, facilitating placement of cars into the west end of the shop from the storage tracks.

Rail Vehicles

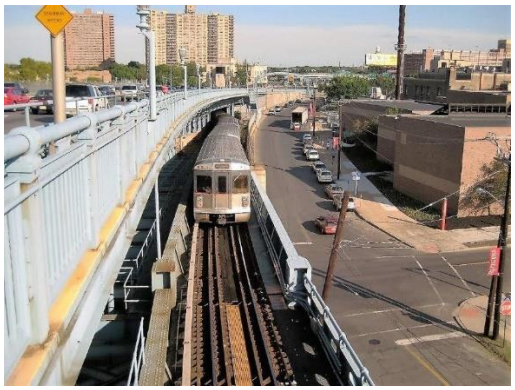
PATCO's transit car fleet consists of 95 fully compatible, multiple unit-type, high performance, electrically propelled vehicles. The original 75 (67 remaining in service) cars were built and

delivered by the Budd Company in 1968. This portion of the fleet consists 25 single units and 25 married pairs. The single units have an operating compartment at each end, and provide 72 seats. The married pairs have one operating compartment per car and provide 80 seats.

All of the cars in the fleet are 67 feet 6 inches over the anti-climbers, 10 feet wide, and 12 feet 4 inches high.

In March of 2011 the first 26 cars were shipped by truck to the Alstom ships in Hornell, New York for rehabilitation.

PATCO operates 121 67-foot (20.42 m) cars which were acquired in two separate orders, labeled PATCO I and PATCO II. The original PATCO I cars were designed and manufactured by Budd of Philadelphia, PA in 1968. Cars numbered 101-125 are single units, and cars numbered 201-250 are in permanently coupled married pairs. The PATCO II cars were delivered in 1980 (in parallel with the opening of the Woodcrest Park and ride facility) and consisted of married pairs numbered 251-296. The PATCO II cars were manufactured by Vickers Canada under a license from Budd, but are nearly indistinguishable from the PATCO I's, the only differences being that the PATCO II cars have a fixed partition behind the operator's booth and lack a stainless steel shroud below the door line to ease access to traction components.



The single units differ from the married pairs by having an extra single leaf door located behind each operator’s booth. This was installed before the fare collection system was finalized and there was a possibility of operators collecting fares on board during the late night hours.

The PATCO I cars were originally fitted with WABCO Model N-2 MU couplers. Because of reliability issues these were replaced by Tomlinson type couplers manufactured by Ohio Brass Company. The original electrical system in the PATCO I cars was found to have certain reliability issues and was completely rebuilt after the PATCO II cars arrived to the PATCO II standard.

PATCO cars use camshaft resistance type motor controllers common to DC powered rapid transit vehicles up through the 1980s. The unique whine of the motors and gear assemblies can lead many to mistake the cars for using thyristor drive or even a variable-frequency drive, but this is not the case. Bogies are of the Budd designed Pioneer III variety and while lightweight, provide for a very bouncy ride. The married pair cars share a single motor control unit and automatic operation box. Many PATCO Car design features also appeared in the M1/M3 class of MU railcars for the Long Island Rail Road which provides for a similar riding experience.

Operation

PATCO was one of the first transit systems to incorporate automatic train operation for regular service. The PATCO ATO is an analogue system that makes use of pulse code cab signaling supplied by Union Switch and Signal. The cab signals supply one of five different speeds (20 mph or 32 km/h, 30 mph or 48 km/h, 40 mph or 64 km/h, 65 mph or 105 km/h and 0 mph or 0 km/h) and the on-board ATO gear will supply maximum acceleration or maximum braking force to reach that target speed. The frequent use of such high acceleration and deceleration rates makes for a quick ride, yet one that can occasionally be perilous for non-seated passengers. Automatic station stops are handled by track mounted transponders and can be overridden by the operator for non-stopping trains.

Trains are normally operated in the semiautomatic ATO (Automatic Train Operation) mode. In this mode, the operator closed the doors (as is required in all modes) and pushes a :START: button. The train then accelerates, maintains speed, adheres to signal and speed commands, and stops at the next station automatically. The operator then opens the doors.

In the ATC (Automatic Train Control)-Manual mode, the train Operator controls the acceleration and braking rates and maintains speed by use of a master controller. Pulling the controller handle backward accelerates the train. Pushing the controller handle forward bakes the train. With the handle centered, the train coasts. The controller handle also incorporates a “deadman” feature. In the ATC-Manual mode, the ATC features prevent the Train Operator from violating signal or speed commands, and provide safe train separation, as is also the case in the ATO Mode.

The third and final mode of operation available to the Train Operator is the Manual Mode. In this mode the Train Operator is responsible for the safety of the train by operating in compliance with the rules and procedures and, if on the main line, the Dispatcher’s orders. It is the only mode of operation used in Lindenwold Yard.

The ATO Mode is the normal method of vehicle control for trains in revenue service. However, Train Operators are required to make at least one trip a day in the Manual-ATC Mode, and this mode is also the normal method of control when required in failure-recovery or other special operation situations.

The system suffers from problems handling slippery track conditions and human operators are required to take control in any sort of precipitation. Because of the ATO limitations, drivers must make one trip per day under manual operation to stay in practice and are not penalized for running their trains manually at any time of their choosing. In practice, most operators prefer automatic operation as not only is it less effort, but it also tends to result in faster trips.

The system was designed for one person train operation by exclusively utilizing island platforms and right-handed operation with operators sitting on the left side of the vehicle where they can open their window and monitor the boarding process. Where trains have to use the "wrong" side, mirrors are provided to give the operator a proper view. The operator's booth is not isolated from the passenger cabin, instead being surrounded by a low partition. Operators wishing privacy can pull a curtain closed during operation, but are still on call to answer inquiries from passengers. When not in use, a lockable cover sits over the console controls. Operators are responsible for

making station announcements, opening and closing the doors, sounding the horn, starting the train from station stops and full manual operation of the train (when necessary).

Trains operate at a maximum of 65 mph (105 km/h) on the surface portion of the system and 40 mph (64 km/h) in the subway portion and over the bridge. Trains used to have a top speed of 75 mph (121 km/h) on the surface portion, but this caused excessive wear on the traction motors and was cut back to 65 mph (105 km/h) in the 1970s.

PATCO runs the majority of its trains in 2-, 4- or 6-car configurations. Single-unit trains were occasionally seen late at night (before of the Alstom rebuild), while 3- or 5-car trains are encountered only when not enough cars are available to meet the load line. All stations are capable of handling 7- or 8-car trains, but these lengths have never been run except for brief testing and for the annual holiday "Santa Train" special for children. In an effort to contain costs, PATCO actively manages its consist length as opposed to running trains in fixed sets. Train length is matched to the demand level for that particular time of day. In peak periods trains are 6 cars long, on "shoulder" periods they are 4 cars long, off peak they are 2 cars long, and overnight sometimes single units are run alone (this is no longer possible as the single units have since been converted into 2-car married pairs as part of the Alstom rebuild). Due to recent capital improvements, weekend and mid-day headways have grown, prompting PATCO to run 4-car trains all day, albeit less frequently than the 2-car trains.

Signaling

PATCO trains are governed by a pulse code cab signaling, which transmits signal codes to the trains via the running rails. Wayside signals are located only at interlockings and consist of two lamps on a single signal head, one lunar white and the other red. There are three typical signal indications, Red for "Stop", Lunar for "proceed under cab signals on main route" and flashing lunar for "proceed under cab signals on diverging route".

There are 5 cab signals, each corresponding to a speed. The cab signals are displayed to the operator via a series of 5 lamps above the speedometer, red for Stop, yellow/red for 20 mph, yellow for 30 mph, yellow/green for 40 mph and green for 65 mph. These lamps correspond to the same cab signals in use by various northeastern railroads. Even when the Automatic Train Operation System is not in use, the cab signal speed control function is still enabled and if an operator goes

above the permitted speed, the power is cut and the brakes are applied until the speed is back within the limit.

The entire PATCO system is run from Center Tower, centrally located above a substation near the Broadway stations in Camden, NJ. Center Tower is staffed by two operators at peak periods and a single operator otherwise. Wayside signals are marked with their corresponding lever in the old US&S fashion with R signals indicating a "right" lever motion and L signals indicating "left". Signals and switches are numbered in ascending order from west to east with 15th/16th Locust using levers 1-4 and Lindenwold using levers 73-76. The interlocking at Woodcrest, which was added in 1980, uses levers 87-98.

PATCO's Central Control Facility, Center Tower

Center Tower is the nerve center for all PATCO train and station operations. Built-in communications are designed to enhance both safety and operations. A hard-wire communications system links elevators in PATCO stations to a monitoring and control console. A telephone system includes direct lined to emergency response agencies in Jew Jersey and the 911 emergency network n Philadelphia. A four-channel radio network provides communication with trains and Transit Services personnel, DRPA Transit Unit Police officers and vehicles, and maintenance personnel and vehicles.

Onboard the transit cars, the radio units provide the Train Operator with communications to Center Tower which provides redundancy to the radio carried by each Operator. This maintains communications capability with the Dispatcher in Center Tower during abnormalities. The built-in handset (train phone) on the operating console has a public address mode, enabling the Train Operator to transmit routine and emergency messages and instructions throughout the train. Passenger emergency alarms in each car are audibly linked to the operating cab, with visual indicators outside the car where the alarm was actuated. The operating rules require the Train Operator to stop the train with an emergency brake application upon receipt of an emergency alarm, notify the Dispatcher in Center Tower, and then investigate.

Vehicle Safety Features

Additional built-in safety features on the transit care are extensive. Included area a "deadman" feature on the master controller, causing an emergency stop in a manual mode of operation should the Train Operator release the handle with brake cylinder pressure lower than 25 psi; sliding side door interlocks, preventing movement with a door open, and stopping the train should a door open while the train is moving; automatic emergency stopping tin the event of automatic train control (ATC) or speed sensor failure; automatic enforcement of speed commands in both automatic train operation (ATO) and manual-ATC operating modes; and automatic emergency braking in the event of an uncoupling (pull-apart) or rupture of emergency pipes. The cab signal system provides for train operation at maximum scheduled speeds regardless of visibility. Operation without ATC protection is allowed only under the direction and supervision of the Dispatcher in Center Tower in compliance with the Rules.

Underground Safety Features

A number of safety capabilities have been built into or incorporated in various aspects of the PATCO line. The downtown subway segments in Philadelphia and Camden are relatively shallow, and were built using the cut-and-cover technique. They are naturally ventilated through street/concourse level gratings. Side-wall emergency exits extend from track level to the sidewalk, with but three exceptions. The two exits under the Broad Street Subway of SEPTA, the lowest part of the line at approximately minus 50 feet, lead to mezzanine-level concourses. At Franklin Square Station, the exit is in what was the former main entrance area.

Key underground stations have been identified for the installation of undercar deluge sprinkler system as well a smoke and fire detection and alarm system. The undercar deluge is a dry pipe system designed to be used by responding fire personnel in connection with a dry standpipe system also added to the underground station in 2004.

Portable fiberglass ladders, called "emergency ladders" are located at all the subway emergency exits and at or near both ends of all station platforms. Their purpose is to assist in evacuation of passengers from a train stalled or disabled between stations through the end doors to the right -of-way.

DRPA PATCO Contacts

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PATCO Minimum Standards for Safety

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSOPS	**NJDOT Rail Transit SSOPS**	**1/23/2018**	**Version 1.0**	**FALSE**
ASP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.		Future	TRUE
CMP	Configuration Management Plan (CMP) – the Configuration Management Committee and processes are a required element/function within the RTA/RTS safety program, along with safety and security certification and system modifications.			TRUE
EOP	Emergency Operations Plan (EOP) – this document provides the coordination and preparedness activities inside and outside of the RTA/RTS.		(2013) Operating Procedures SSPP App. 2: Dispatchers Standard and Emergency Operating Procedures	TRUE
I&M	Inspection and Maintenance (I&M) Manuals, SOPs, and Standards – these documents provide the requirements for inspection and maintenance of the rail system, including facilities, infrastructure, and related vehicles. These documents should have the custom		W&P Signal/Switch SOP/I&M (XX/XX/XXXX) W&P Track SOP/I&M (9/5/2008)	FALSE
Investigation Procedures	Investigation Procedures at the RTA/RTS – this procedure includes a description of the types of events that need notification and investigation, who will perform those requirements, causal factor analysis, hazard analysis, and development of recommendation.	10/1/2010	SSPP App. 1: Accident Incident Investigation Manual	FALSE
RORB	Rail Operating Rule Book (RORB) – these are the rules that operators and others working around the rail system must follow.			FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
RWP	Right-of-Way or Roadway Worker Protection (RWP) Plan – this document is related to the RORB from the perspective of the protections and procedures for workers on the rail right of way.		Worker Protection - PATCO Operating Manual Rules (705-718) Governing Track Work & Power Removal and Transit Services Dept's Line Operations Instruction C-27	FALSE
SOPs - Command and Control	Command and Control/Train Control Standard Operating Procedures (SOPs) – these SOPs are used by the command and control staff/supervision to manage operations on the rail system for both usual and unusual operations, as well as managing maintenance and workers on the right of way. These SOPs should include troubleshooting information for frequent problems and managing emergencies on the rail system. These SOPs include the function of load control/management.		PATCO hazardous material control plan (9/1/2012) W&P SOP 92-073 Removal of Interlocking from Service	TRUE
SOPs - Field Supervision	Field Supervision SOPs – these SOPs are for supervision out on the rail system for support of service delivery, responsiveness to passengers, and safety. The field supervisors will often be the first supervision to arrive at the scene of a safety event on the rail system, and provide at least initial investigation of events on the rail system.			FALSE
SOPs - Safety	Procedure requiring review of SOPs related to Safety – this procedure requires that the minimum safety standards at the RTA/RTS are also required to be reviewed, agreed to, and approved by the Safety Department.			FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSCP	Safety and Security Certification Plan (SSCP) – this plan provides the required activities from the RTA/RTS safety program for assuring that safety and security certification is completed for certain capital projects for new equipment/infrastructure or refurbishment of existing equipment/infrastructure. The main topics for safety and security certification are related design criteria, participation of the Safety Department, and a process of the RTA/RTS assuring that all safety and security design criteria exist, were comprehensive, and were properly addressed including integrated testing of the final products.			FALSE
SSP/SEPP	System Security Plan (SSP)/Security and Emergency Preparedness Plan (SEPP) – this security program document describes the requirements for system security and emergency preparedness at the RTA/RTS. Note that the new SSO Rule no longer defines the content of the SSP/SEPP and its processes and procedures. However, the NJDOT SSO program will now consider this security program document as a minimum safety standard in terms of its overlap with the safety program at the RTA/RTS (risk assessment and management, and emergency preparedness). The NJDOT SSO program no longer has requirements for the content of the SSP/SEPP, but does require that the RTA/RTS develop an appropriate security program document and the NJDOT SSO program will provide oversight of that document and the processes that it represents, but only from the safety program (all-hazards) perspective.	7/12/2013	SEPP	FALSE

MINIMUM STANDARD	DOCUMENT DESCRIPTION	DOCUMENT DATE	DOCUMENT VERSION NO	SSI
SSPP	Agency Safety Plan (ASP)/System Safety Program Plan (SSPP) – the ASP is not yet in a final rule, so the interim ASP is the current SSPP. The ASP/SSPP contains the requirements for the safety program and related activities at the RTA/RTS.	7/12/2013	Revision 9	TRUE
TAM	Transit Asset Management (TAM) Plan – this is a new plan now required for RTAs/RTSs and it is related to the CMP, but with a larger context.		Not due until Oct 2018. Internally discussing how we will proceed with this requirement.	FALSE

Appendix I

System Security Plan (SSP) and

Security and Emergency Preparedness Plan (SEPP)

Review and Approval Process

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System Security Plan (SSP) and Security and Emergency Preparedness Plan (SEPP) Requirements

The new State Safety Oversight (SSO) Rule (Part 674) no longer specifically requires the system security plan (SSP) or the security and emergency preparedness plan (SEPP). However, the SSP is now included as part of the SSO program as a minimum standard for safety as part of the NJDOT SSO program all-hazards approach to the system safety program. The NJDOT SSO program continues to require the SSP documentation, but no longer has jurisdiction over the content of the SSP. The following SSP standard is provided as an example of the content of an SSP for the New Jersey rail transit agencies (RTAs)/rail transit systems (RTSs).

Objective

This section sets forth the NJDOT SSO program's standard for the System Security Plan (SSP), which is to be developed by the RTA/RTS and formally approved reviewed and approved by the NJDOT SSO program. The SSP should identify the legislative authority that created the RTA/RTS, (or an organization contracted by a duly authorized transit authority or other governmental agency), and a policy statement, endorsed by upper management, that embraces security. The plan should describe the controls that are used to coordinate, communicate, and maintain liaison with the NJDOT SSO Program on security matters.

Each RTA/RTS submits (or makes available for review) its SSP and/or SEPP and subsequent revisions thereto, to the NJDOT SSO program for review and approval. The NJDOT SSO program, upon completing an initial review, is available for informal discussions to resolve any comments with the RTA/RTS. A resolution or other order is approval of a SSP.

System Security Plan Example Contents

Example contents of an SSP developed for an RTA/RTS operating under the NJDOT SSO Program is identified as follows:

At a minimum, the System Security Plan and/or Security and Emergency Preparedness Plan developed by the RTA/RTS should:

(a) Identify the policies, goals, and objectives for the security program endorsed by the agency's chief executive;
(b) Document the RTA's/RTS's process for managing threats and vulnerabilities during operations, and for major projects, extensions, new vehicles and equipment, including the integration with the safety certification process;
(c) Identify controls in place that address the personal security of passengers and employees;
(d) Document the RTA's/RTS's process for conducting internal security reviews to evaluate compliance and measure the effectiveness of the SSP; and
(e) Documents the RTA's/RTS's process for making its SSP and accompanying procedures available to the oversight agency for review and approval.

Sample Format for System Security Plans

System Security Plan Introduction

RTAs/RTSs are primarily vulnerable to certain types of crimes, including vandalism, graffiti, pick pocketing and purse snatching, fare avoidance, trespassing, and other security-related problems; however, transit systems have become potential targets for acts of terrorism. It is, therefore, necessary to identify these security threats and reduce the system's vulnerability to them to a practicable level. To emphasize the importance of security in all aspects of a RTA/RTS, a set of comprehensive security activities should be established and documented in the System Security Plan. The overall goal of the security program is to maximize the level of security afforded to passengers, employees, and property.

To be effective, the security aspects of the SSP/SEPP are oriented toward identifying potential security problems and implementing remedial and/or mitigating measures before security problems arise. It is also important to recognize the sensitivity of security-related plans and procedures, as they are tactical in nature, and treated with a reasonable degree of confidentiality. For this reason, the security elements of the SSP/SEPP identify items, which need to be considered, but does not provide specific tactical related information.

Security Policy Statement

The highest levels of RTA/RTS management set forth its policy embracing security. The appropriate management approval is denoted by signature on the policy statement and circulation of the statement to all departments. As part of this section, top management provides direction to the agency for the development of a SSP/SEPP that encompasses the RTA's/RTS's security policy statement in all facets of its operations.

Purpose of Security Program

The SSP/SEPP must identify the purpose of the security program endorsed by the RTA's/RTS's Chief Executive. The purpose of the SSP/SEPP should ensure a planned, documented, organized response to actual and potential security threats to the system, and to address these threats with proactive measures and response techniques that manage and minimize the outcome of security breaches or related events.

Goals and Objectives

This SSP/SEPP should identify the goals of the security and emergency preparedness programs endorsed by the RTA's/RTS's chief executive. Goals should be realistic and presented in qualitative terms.

Scope of Security Program

Provide the scope of the Security Program to cover all agency personnel and be applicable to all agency operations:

- Each department/function that supports the rail RTA's/RTS's SSP/SEPP and cooperates in achievement of the SSP/SEPP security objectives; each RTA/RTS employee cooperates with the system safety and security/police functions and provides security with any information requested to aid in any threat or vulnerability identification, assessment or resolution, and/or security investigation; and
- Accountability for security and emergency preparedness of the rail transit system rests with each employee, supervisor, manager and director

The scope includes the coordination and integration of emergency response plans with the RTA/RTS and jurisdictions in the system's service area.

Security and Law Enforcement

This section of the SSP/SEPP describes the approach used by the RTA/RTS for security and law enforcement functions including management and support for the implementation of the SSP/SEPP. An overview of the RTA/RTS Law Enforcement (Police Department) should be provided, along with an overview of the department's activities.

When the RTA/RTS employs its own security (non-sworn) force or purchases security services from a private company, the plan should provide an overview of these security services and identify the cooperation with local law enforcement agencies in the transit system's service area.

Where Memorandum of Understanding (MOU's) exists, the SSP/SEPP should discuss what arrangements are in place. The RTA/RTS should indicate how information regarding response to incidents, planning and deployment, joint operations, special events, and threat and crime information is shared.

Management Authority and Legal Aspects

This section of the SSP/SEPP describes the authority which oversees the operation and management of the RTA/RTS, including its police/security function.

The section identifies the charter or legislation which created the rail transit system, and addresses the roles of the Board of Directors, General Manager, other executive leadership, and the manager of the security/police function in executing the SSP/SEPP. The roles and responsibilities of middle management and line personnel may be briefly introduced and described (i.e., management within the transit security/police function, as well as the roles of supervisors and operations and maintenance personnel).

The section briefly discusses the ordinances, codes, rules and other laws enforced on the rail transit system (i.e., felonies and misdemeanors applicable to the RTA's/RTS's service area, fare evasion, vandalism, unlawful entry (trespass) upon transit property or vehicles, interference with movement of or access to transit vehicles, disorderly conduct on transit property or in transit vehicles, and offensive physical contact with a transit passenger, employee, agent, security or police agency.

Government Involvement

This section of the SSP/SEPP describes how the SSP/SEPP interfaces with local, state and federal authorities to ensure security and emergency preparedness for the RTA/RTS.

This section of the SSP/SEPP introduces and briefly describes the local, state and federal agencies with whom the RTA/RTS coordinates for security and emergency preparedness. For example, at the federal level, the RTA/RTS may coordinate with government agencies for funding support and to ensure compliance with security regulations and grant requirements. Federal partners may include: Federal Transit Administration (FTA), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), Department of Homeland Security (DHS), and its subsidiary bureaus, including the Federal Emergency Management Agency (FEMA) and Transit Security Administration (TSA).

Security Acronyms and Definitions

Identify all of the acronyms and definitions used in the SSP/SEPP.

System Description

Background & History of System

Briefly describe the system's characteristics. Include a description of when and how the transit system was established, history of service delivery, major milestones in the transit system's history, and the modes of service provided. A system map and reference to the RTA's/RTS's website should also be provided.

Organizational Structure

This section of the SSP/SEPP should provide organizational charts showing the lines of authority and responsibility as they relate to security and emergency preparedness.

Include the following information as part of the SSP/SEPP:

- Detailed organizational diagrams for the RTA/RTS showing the title of each position.
- Detailed diagram of the structure of the security/police function identifying the key positions at all levels.
- Diagrams showing the relationship and lines of communications between the security/police function and other units of the organization.
- The relationship of the transit system to local political jurisdictions, including law enforcement and emergency management agencies.

Human Resources

This section of the SSP/SEPP provides a categorization and break-down of all employees and contractors who work for/on the RTA/RTS.

(This information may be referenced to the responsible RTA/RTS Department for review)

Passengers

This section of the SSP/SEPP provides a description of the ridership. Annual ridership statistics for the most recent year should be provided. Ridership may be broken down by mode of service and day of the week. Weekly and annual totals should be provided.

(This information may be referenced to the responsible RTA/RTS Department for review)

Service and Operations

This section of the SSP/SEPP describes the RTA/RTS operations and services. Information should be provided on the size, location, and function of the agency's physical assets including: maintenance facilities, offices, stations, vehicles, signals, and structures for all modes.

Operating Environment

This section of the SSP/SEPP describes the RTA/RTS operating environment, including traffic conditions, rail alignment, weather, issues associated with special events or other activities, safety issues associated with the RTA/RTS, and levels of crime in the communities served by the RTA/RTS.

Integration with Other Plans and Programs

This section of the SSP/SEPP describes how the SSP/SEPP integrates with other plans and programs maintained by the RTA/RTS, including the System Safety Program Plan (SSPP), Safety Certification Plan, Emergency Operations Plan, and other documents and programs that affect security and emergency preparedness.

Describe the interface of the Security Department in its role for the safety certification and sign-off process, used to verify the operational readiness of a new fixed guideway transit systems, major system modifications, system expansions, new equipment, and facilities, enabling the RTA/RTS to consider the system safe and secure for operations, prior to entering revenue service. The process illustrates the use of checklists to record compliance to criteria, standards, specifications, codes, and recommended guidelines and practices.

Current Security Conditions

Provide a description of the current security conditions at the RTA/RTS and the types of security incidents experienced by the RTA/RTS and their frequency of occurrence. This section should describe current security conditions and issues at the RTA/RTS including incidents of crime experienced on the system and relevant information on passenger perceptions of security. Crime data should be provided, documenting the most recent year for which it is available. The types of security incidents (including Part I and Part II offenses and ordinance violations) and their frequency of occurrence on the RTA/RTS should be included. Additionally, this section should provide context for this information, including a comparison of crime rates at the RTA/RTS over time and/or a comparison of crime rates from the RTA/RTS with crime rates in the municipalities of the RTA/RTS service areas.

Capabilities and Practices

This section of the SSP/SEPP should summarize the methods and procedures, devices, and systems utilized to prevent or minimize security breaches, including passenger education, campaigns, delay, detection, and assessment devices used to minimize security incidents throughout the RTA/RTS. In preparing this section, the RTA/RTS may consider theft and vandalism at stations, parking lots, and terminal locations; drug dealing at stations/facilities; fare evasion; disruptive behavior, etc.

SSP Management Activities

Responsibility for Mission Statement and System Security Policy

This section of the SSP/SEPP should define the authority and responsibility for the RTA's/RTS's Security Organization, including but not limited to, designating and listing the individual(s) responsible for determining security policy on behalf of the RTA/RTS, and for carrying out the activities of the SSP/SEPP, and defining the Security/Police functions' mission and role in the organization.

Describe the role of the General Manager/CEO in preparing, revising, reviewing and signing the policy statement and the role of the head of Security/Police function and staff in preparing, revising, and reviewing the SSP/SEPP.

Management of the SSP Program

The SSP/SEPP should identify the person(s) with overall responsibility for transit security and emergency preparedness, including day-to-day operations, SSP/SEPP-related internal communications, liaison with external organizations, and identifying and resolving SSP/SEPP-related concerns.

The SSP/SEPP should be reviewed at least once each calendar year to determine if changes are required. In this section, the RTA/RTS should address when during the calendar the SSP/SEPP will be reviewed. The review should not be later than June 30th of each calendar year. After the annual review has been conducted all revisions to the SSP/SEPP should be completed and submitted to the NJDOT SSO program no later than September 30th of each calendar year for review and approval. If after the annual review of the SSP/SEPP no changes are required, then the RTA/RTS should submit a letter to the NJDOT SSO program no later than June 30th of each year stating that the SSP/SEPP has been reviewed and that no changes are required at this time. Each RTA/RTS submits (or makes available for review) the SSP/SEPP directly to the NJDOT SSO program for review and approval.

Specifically, this section should address who is responsible for the following critical SSP/SEPP management activities, as a minimum:

(1) Defining ultimate responsibility for secure rail transit system operations.
(2) Communicating that security is a priority for all rail transit employees.

(3) Advocating for, and allocating security program resources; directing day-to-day security operational activities (including tactics, intelligence and analysis); and assessing security performance.
(4) Developing and explaining relations with outside organizations that contributes to the RTA's/RTS's security and emergency preparedness program.
(5) Developing relations with local, state and federal security-related agencies, including security oversight roles of FTA's State Safety Oversight and Project Management Oversight (PMO) programs, security oversight role of DHS TSA, and emergency preparedness roles of DHS, the state Agency of Homeland Security, the region's emergency management group or committee, and Urban Area Security Initiative, Point-of-Contact Working Group.
(6) Explaining the mechanism for bringing security concerns to the attention of the appropriate RTA/RTS official or group.
(7) Identifying potential security concerns in any part of the RTA's/RTS's operations, through internal or external audits.
(8) Actively soliciting the security concerns of employees.
(9) Explaining the liaison between transit system employees and other security and emergency preparedness groups, committees and functions at the RTA/RTS, for the purpose of addressing employees' security concerns.
(10) Ensuring the RTA's/RTS's security and emergency preparedness program is carried out on a daily basis.

Division of Security Responsibilities

Provide a listing of the system security related responsibilities of the personnel who work within the RTA's/RTS's Security/Police Department should be provided. This section should present a detailed description of the security/police function, including staff, the qualifications of the personnel, any planned short or long-term additions to the security organization's mission, and any additional staff which may be required. Specific roles and responsibilities should also be identified.

As part of the security organization, the RTA/RTS should consider forming two committees: a Proactive Security Committee and a Security Breach Review Committee; the former responsible for identifying and neutralizing security risks; and the latter responsible for identifying security issues, investigation of incidents and development of corrective action (countermeasures). Both committees reside within the RTA's/RTS's Security/Police Department.

The Proactive Security Committee conducts system-wide security assessments and ensures that new procedures and facilities incorporate security in their design. The committee reviews training curriculum geared to security. Additionally, this committee determines:

- Compliance with management policies, rules, procedures and assigned security responsibilities
- Identifies organizational issues that may contribute to security incidents, or less effective response to incidents
- Actively promotes security awareness campaigns and award programs

Staffing of this committee should be a combination of RTA/RTS and local community representatives.

The Security Breach Review Committee identifies security breaches and investigates these breaches to understand the deficiencies in the security program. Unlike the Proactive Security Committee, this committee focuses on incidents that have already happened. It is acknowledged that the breaches and incidents investigated by this committee are controversial and sensitive. Such incidents may involve violence, criminal activity, or wrong doing by RTA/RTS staff.

The Security Breach Review Committee reviews security incidents to determine whether the breach occurred because of:

- Incorrect policies or procedures
- Staff not following procedures
- An accepted risk, unforeseen technology, or action against the FGTS/RTS

SSP Program Description

Planning

This section of the SSP/SEPP identifies the activities and programs in place at the RTA/RTS to support planning for system security and emergency preparedness. Planning for the SSP/SEPP includes developing internal agency plans to address SSP/SEPP issues during operations, budgeting for system security and emergency preparedness functions, addressing security requirements in system design and safety/security certification for extensions and major projects, renovations and rehabilitations; and coordinating with local emergency management agencies and public safety agencies to ensure integration of the rail transit system into the response community plans for major incidents.

Organization

This section of the SSP/SEPP identifies the SSP/SEPP-related activities and programs and the ability to coordinate with external agencies. The RTA/RTS should identify its Incident Command Management System (ICS) based on the National Incident Management System (NIMS) and the capabilities of the agency to respond to major crimes, terrorism and natural disaster emergencies. Capabilities should be coordinated and integrated with external jurisdictions and regional emergency preparedness plans.

Equipment

Provide a description of the equipment used to support implementation of the system security program. Equipment required to support its capabilities to detect, prevent, respond to and recover from security and terrorism events and to manage natural disasters should also be required.

Training and Procedures

Describe the system security program related training and procedures to ensure employee proficiency. Training typically addresses rules, polices, and procedures as well as many hazards in the RTA's/RTS's operating environment. An overview of the training applicable to the RTA/RTS include, but not limited to; SOPs, EOPs, Safety Rules, Security Awareness, Security Systems (Facilities and Vehicles), Emergency First Responder Training, Introduction to ICS/NIMS, Incident Command Training, Interagency Training, Weapons of Mass Destruction/Chemical, Biological, Radiation, Nuclear, and Explosive (CBRNE), CPR, Blood-Borne Pathogens, First Aid, and Hazardous Material Awareness. The RTA/RTS must also identify the specific procedures for Homeland Security threat level changes.

Emergency Exercises and Evaluation

Describe the system security-related activities to ensure the conduct of emergency exercises and evaluation. These exercises should address the RTA's/RTS's response to incidents which may be intentional (bomb threats, fire/arson, security breaches, etc.), unintentional (hazmat spills, accidental property/vehicle damage, etc.), or naturally occurring (high winds, floods, snowstorms, etc.).

Threat and Vulnerability Identification, Assessment, and Resolution

Threat and Vulnerability Identification

This section of the SSP/SEPP describes the RTA's/RTS's methods and activities to identify security-related threats and vulnerabilities. Include the identification and prioritize the RTA's/RTS's assets based on security data collection and analysis in addition to:

- The value of the asset, including current and replacement value;
- The value of the asset to a potential adversary;
- Where the asset is located;
- How, when, and by whom an asset is accessed and used; and
- The impact, if there assets are lost, on passenger, employees, public safety organizations, the general public and the public transportation operation.

Threat and Vulnerability Assessment

Provide a description of the RTA's/RTS's methods and activities to assess the likely impacts of identified threats and vulnerabilities on the system and to identify particular vulnerabilities which require resolution. Once threats and vulnerabilities are identified, their impact on the total system must be assessed to determine whether to accept the risk of a particular danger, and the extent to which corrective measures can eliminate or reduce its severity.

Responsibility for assessment of these threats and vulnerabilities is assigned to personnel qualified in security deployment practices. Threat and vulnerability assessment considers:

- Experienced personnel (with knowledge of the RTA/RTS) to be responsible for security assessment
- Analysis of the RTA/RTS, familiarity with the communities, and knowledge of statistical methods
- Dissemination of security information to interested organizations (Management, Local Police, etc.)

Threat and Vulnerability Resolution

This section of the SSP/SEPP describes the RTA's/RTS's development of response strategies, both short and long term, to prioritized vulnerabilities, including the decision process used to determine whether to eliminate, mitigate, or accept security problems. Based on the results of the assessment, the RTA/RTS can identify effective countermeasures to reduce vulnerabilities identified as unacceptable to management. Countermeasures include physical security, planning, coordination with local law enforcement agencies, and training and security exercises.

Threat and vulnerability resolution as a minimum includes:

- The mechanisms for activating certain types of emergency response including those authorized to respond, what levels of response are possible, and the duration the emergency response is capable of being maintained
- The methods employed to investigate security breaches including the circumstances that led to the breach
- The in-depth research of threats and vulnerabilities to determine if the risk(s) can be managed, and to provide criteria for long-term improvements in identified security risk areas
- The considerations of alternatives associated with security problems including eliminating the problem through design, retraining or procedural changes; minimizing the problem by increasing surveillance, changing procedures; increasing the presence of security forces; or accepting the security risk in those instances where the incident likelihood is remote, or impact to the system is so minor that it does not warrant action.

Internal Security Audit Process

The Internal Security Audit Process, a formal process of managing a security program, ensures that all elements of the security program are in place and performing as required. The Internal Security Audit Process is the method used to determine if all organizational elements, equipment, procedures, and functions are performing as intended from a security perspective. Security management and good overall management are inseparable concepts. The audit process is be part of the program and includes an approved implementation plan using checklists. The plan contains, as a minimum, the following:

Audit Responsibility

The RTA/RTS should identify the unit or divisions of responsibility for oversight of the

Internal Security Audit Process. The unit responsible for the conduct of the audit should not be the unit in charge of implementation of the items being audited.

Employee and Contractor Security Program

The RTA/RTS should identify the program in place to ensure employee and contractor compliance with the security requirements applicable to RTA/RTS and contractor on-site work activities at the RTA/RTS or on its operating property.

Related to the Contractor Security Program, the RTA/RTS issues written security procedures, conducts security orientation meetings, and monitors contractor employees on or near the RTA/RTS.

The internal security audit includes the verification of employee and contractor security or security awareness training, certification, and retraining programs as appropriate. A periodic review of the programs verifies that instructions and course contents meet the expectations of the training and certification requirements.

Audit Reporting

The audit report, an official document, provides a working level status of system elements to all levels of management. As part of the formal reporting, the chief executive officer receives a departmental summary report.

The RTA/RTS conducts internal audits in a cooperative manner and includes an administrative process for resolving problems or disagreements.

Audit Completeness

Audits should be done on a coordinated basis with full management support, on an ongoing basis rather than an annual basis. The RTA/RTS includes the following elements, as part of the audit procedure:

- **Cycle/Schedule**. A three-year audit schedule must be developed, reviewed, maintained and updated to ensure that all SSP/SEPP elements are reviewed during the audit cycle. The audited departments know when to expect audits. Audits are scheduled to be unobtrusive. Unannounced inspections or spot audits are approved as part of the overall audit process with concurrence of general management.
- **Checklists**. A unit conducting an audit prepares a list of security items to be audited in advance and issues the checklist to the department, under review. Each department, subject to review, produces the necessary documentation. This does not preclude spot check of individual records such as maintenance records or personnel qualification records. A cooperative nature is maintained throughout the audit process.
- **Documentation**. A unit conducting an audit maintains the formal documentation of all aspects of the internal audit process. As part of the formal documentation, general management and respective departments receive all necessary reports.

- **Follow-up/Corrective Action**. Each audit report process includes a list of recommended corrective actions, as appropriate. Management approves the corrective actions to be tracked by the Safety and/or Security Department for compliance. Each corrective action item receives an implementation schedule and monitored to completion.

The RTA/RTS submits appropriate reports, corrective action plans, and schedules for implementation to the NJDOT SSO program, regarding investigations, three year safety reviews, internal security audits, safety certification processes, and reviews performed by the NJDOT SSO program. The RTA/RTS consolidates all corrective action items and monitors the open items to completion, providing the information in its monthly reports to the NJDOT SSO program.

Three Year Security Review

The NJDOT SSO program conducts an onsite review of the RTA/RTS to determine the extent to which the RTA/RTS is meeting the requirements of its SSP/SEPP, the effectiveness of the SSP/SEPP, and whether the document should be updated. In preparation for this review, the RTA/RTS and NJDOT SSO program establishes a schedule including notification to the RTA/RTS, conduct of a pre-review meeting with the RTA/RTS, preparation of draft and final reports, and required corrective action plans by the RTA/RTS, if required.

The RTA/RTS is required to show verification that:

- The SSP/SEPP is an integral part of the RTA's/RTS's overall management, engineering, operating and maintenance practice;
- The SSP/SEPP is reviewed, at a minimum, on an annual basis;
- the RTA/RTS regularly monitors compliance with the SSP/SEPP through ongoing internal security audit/review processes;
- The RTA/RTS identifies potential security issues, threats and vulnerabilities and that measures to control them are implemented;
- Investigations are conducted following established procedures adopted by the RTA/RTS;
- The RTA's/RTS's emergency preparedness and security programs are being implemented in accordance with the SSP/SEPP and associated procedures; and
- Specific activities and tasks identified in the SSP/SEPP are being carried out as specified in these plans and/or identification of deficiencies or areas requiring improvement

If following the review, the RTA/RTS is required to provide a corrective action plan; the RTA/RTS will have 30 days to provide the NJDOT SSO program with this plan. The plan will identify the security issue or condition found to be deficient during the review, planned activities or action to resolve the deficiency or condition, and the responsible RTA/RTS department for implementing the corrective action, and the schedule completion dates for implementation.

Modification of System Security Plan and Emergency Procedures

Initiation

This section of the SSP/SEPP provides a description of the process used to initiate revisions to the security plan and emergency procedures, gather input for the revisions, procedures for updating the security plan and associated procedures, and the identification of responsible person(s).

System Security Plan and/or System Emergency Preparedness Plan Review Process

Describe the process used to review and revise the security plan as necessary, including frequency of reviews, and responsible person(s). This section of the SSP/SEPP should identify the RTA's/RTS's process for making the SSP/SEPP and companying procedures available to the NJDOT SSO program for review and approval. At least every three (3) years, the NJDOT SSO program will conduct an on-site review of the RTA's/RTS's implementation of the system security plan.

Implementation Modifications

This section of the SSP/SEPP describes the process for communicating, disseminating, and implementing new and revised procedures of the security plan to appropriate RTA/RTS staff.

Initial Review and Approval of the System Security Plan (SSP)

The NJDOT SSO program will receive, review and approve in writing the RTA/RTS SSP/SEPP. With the SSP/SEPP, the RTA/RTS may submit any referenced materials, including procedures, checklists and training materials for each SSP/SEPP required process. Using the Conformance Checklist (included in this appendix) for review of the SSP/SEPP, the NJDOT SSO program determines if the submitted plan meets the Federal and State Program requirements. Within thirty (30) days, the NJDOT SSO program issues its formal approval of the RTA's/RTS's SSP/SEPP and provides a record copy of the Conformance Checklist.

Should the NJDOT SSO program determine the SSP/SEPP does not meet the Program Standards and Procedures, the NJDOT SSO program notifies the RTA/RTS, of those elements requiring update or modification, using the "Conformance Checklist". The RTA/RTS within fifteen (15) days after notification of an unacceptable SSP/SEPP may request a meeting to discuss those elements. Sufficient documentation and supporting evidence is formally submitted regarding consideration of changes or modification to the Program Documents.

Upon review and within fifteen (15) days, the NJDOT SSO program may issue its findings and conclusions. Alternatively, the NJDOT SSO program within ten (10) days after receipt of a request to review findings may conduct meetings with the RTA/RTS for further discussion and consideration of the matter. Within ten (10) working days, the NJDOT SSO program issues its final decision.

Subsequent Reviews of the RTA's/RTS's SSP/SEPP

After approval of a RTA's/RTS's SSP/SEPP, the RTA/RTS will conduct an annual review of its SSP/SEPP and update it as necessary to ensure that the SSP/SEPP is current. In the event that no changes are made to the plan, the RTA/RTS notifies the NJDOT SSO program, in writing, that the agency performed its annual review of the SSP/SEPP and determined that no revisions were necessary. If additional time is required to complete revisions to the documents, the RTA/RTS notifies the NJDOT SSO program, in writing, that the agency performed its annual review and additional time is required to prepare revisions. The notification to the NJDOT SSO program contains a summary of the elements requiring revision and a time frame for completion of the activities.

SSP and/or SEPP Submittals from New Starts Projects

An RTA/RTS New Starts project is required to submit to the NJDOT SSO program, an SSP/SEPP and associated procedures/referenced materials at least 180 calendar days before beginning passenger service operations. The initial SSP/SEPP will be reviewed and approved by the NJDOT SSO program, and adopted by the RTA/RTS as part of the project's safety certification process. The NJDOT SSO program will use the SSP/SEPP Conformance Checklist, and will transmit a formal letter of approval to the RTA/RTS with the completed checklist. As necessary, the NJDOT SSO program may require additional documentation as part of the review, and may request meetings or teleconferences to address identified issues.

SSP and/or SEPP Readiness Review

Specific to New Starts Projects, Major Projects or extensions, the NJDOT SSO program may conduct on-site Readiness Reviews to assess the capabilities of the RTA/RTS to implement its SSP/SEPP during passenger operations. This assessment may be conducted in conjunction with the NJDOT SSO program's review and approval of the initial SSP/SEPP submission.

Procedure for Review and Approval of SSPs/SEPPs

Description

This procedure establishes a procedure for the review and approval process conducted by the NJ Department of Transportation (NJDOT) State Safety Oversight (SSO) program of a Rail Transit Agency's (RTA's)/Rail Transit System's (RTS's) System Security Plan (SSP) or Security and Emergency Preparedness Plan (SEPP).

Purpose

Use of these procedures provides a uniform process for the oversight agency in the receipt, review, and approval of SSPs/SEPPs.

Process

The NJDOT SSO program and the RTA/RTS have the responsibility for the implementation of this procedure.

Periodically, the NJDOT SSO program sends out documents and requires the RTA/RTS to update its SSP/SEPP. The RTA/RTS formally acknowledges receipt of the requirement to update their SSP/SEPP by letter or email. Following receipt and within thirty (30) days, the RTA/RTS submits its SSP/SEPP for review by the NJDOT SSO program.

During the "Initial Submission" of a SSP/SEPP for major modifications, system improvements, or start-up of New Fixed Guideway Systems, the RTA/RTS is encouraged to submit drafts of the SSP/SEPP prior to a formal submission of its SSP/SEPP. The RTA/RTS contacts the NJDOT SSO program to initiate this process. As the SSP/SEPP is being developed the NJDOT SSO program reviews the RTA's/RTS's draft SSP/SEPP and provides comments to assist in the development of the final SSP/SEPP. Additionally, the NJDOT SSO program is receptive to meeting with the RTA/RTS or transit police from time to time for the purpose of review and discussion regarding the draft SSP/SEPP.

When the final SSP/SEPP is submitted to the NJDOT SSO program by the RTA/RTS and it is accepted by the NJDOT SSO program, the NJDOT SSO program will issue a letter of acceptance along with the checklist(s). Note: for the SSP/SEPP, the NJDOT SSO program may agree to do all reviews at the RTA/RTS or police offices, based on the document being designated as sensitive security information (SSI).

The NJDOT SSO program may undertake a review of the SSP/SEPP at any time to assure that it is in compliance and conformance. When notified by the NJDOT SSO program that updating of the SSP/SEPP is necessary the RTA/RTS will update the SSP/SEPP and submit it within 30 days unless another timeframe is agreed upon.

A review of a SSP/SEPP is performed in cooperation with the submitting RTA/RTS to resolve issues that do not meet the safety oversight standards for a SSP/SEPP.

To the extent that the SSP/SEPP does not comply with the NJDOT SSO program safety oversight standards, 49 CFR Part 674 or other FTA, NTSB, TSA, DHS, or other laws, regulations, rules, guidelines or industry best practices, the RTA/RTS makes all necessary revisions and resubmits its SSP/SEPP. Usually, revisions of the SSP/SEPP are done once per year but audits, reviews or changes in laws, regulations, rules, guidelines or industry best practices may cause the RTA/RTS to update the SSP/SEPP on its own, or the NJDOT SSO program may request the RTA/RTS to do an update.

The RTA/RTS, within fifteen (15) days after notification of an unacceptable SSP/SEPP, may request a meeting to discuss the findings. Sufficient documentation and supporting information must be formally submitted to the NJDOT SSO program, regarding consideration of changes or modifications to the Security Program Documents. Alternatively, the NJDOT SSO program, within ten (10) days after receipt of a request to review findings, may conduct meetings with the RTA/RTS for further discussion and consideration of the matter. Within ten (10) workdays after review and meetings, the NJDOT SSO program issues its final decision.

Within forty-five (45) days following the completion of the review process, the NJDOT SSO program issues its letter of approval, along with a completed copy of the checklist, to the RTA/RTS.

Copies of the most recent approved RTA's/RTS's SSP/SEPP review checklist and letter of approval are maintained in a permanent file established for each fixed guideway system.

After the initial approval process of a transit system's SSP/SEPP, the RTA/RTS, on an annual basis or sooner, as required, reviews its SSP/SEPP and performs updates or modifications.

In the event that no changes are made to the SSP/SEPP, the RTA/RTS notifies the NJDOT SSO program, in writing, that the system performed its annual review of the SSP/SEPP and determined that no revisions were necessary. If additional time is required to complete revisions to a SSP/SEPP, the RTA/RTS notifies the NJDOT SSO program, in writing, that the system performed its annual review of the SSP/SEPP and additional time is required to prepare revisions.

The notification to the NJDOT SSO program contains a summary of the elements requiring revision and a time frame for completion of the activities. The RTA/RTS notifies the NJDOT SSO program of its completed annual review of the SSP/SEPP by December 1st, of the year.

The NJDOT SSO program reviews the SSP/SEPP for conformance with the SSO Program Standards and Procedures, FTA, DHS, TSA, NJSP, NJOHSP guidance and industry practices using the various SSP/SEPP checklists in this appendix to make notes and comments.

Items Reviewed for the Approval of the SSPs/SEPPs

The RTA's/RTS's SSP/SEPP complies with the guidance provided by FTA and the NJDOT SSO program standards and procedures.

The SSP/SEPP includes:

(1) A summary of legislative action(s) that created the fixed guideway
(2) A security policy statement signed by top management and evidence of how the policy is distributed throughout the organization. A clear definition of the security goals/objectives and stated management responsibilities to ensure that they are achieved.
(3) A definition of the system including historical background, scope of service, identification of fixed facilities, type of operation and control, emergency planning/coordination/simulations, rules and procedures, training/certification/ retraining, re-certification, and a program for data acquisition and analysis.
(4) A description of the SSP/SEPP management activities including the responsibility for the RTA/RTS security program, Security/Police responsibilities, security responsibilities of other departments/functions, job-specific security responsibilities matrix, and Security Committees established.
(5) A description of the training and certification program for employees and contractors in security-related positions.
(6) A description of the implementation of the security program, addressing planning, organization, equipment, training, procedures, and emergency exercises and evaluation.
(7) A description of the activities to identify security-related threats and vulnerabilities on the fixed guideway transit system.
(8) A process that assures security concerns is included in the review of new additions and modifications to their existing system.
(9) A detailed description and diagrams illustrating the organizational structure and key positions for security.
(10) The relationship between the fixed guideway system and law enforcement and emergency response agencies through which the fixed guideway operates.
(11) The process used to control security changes to the SSP/SEPP and its frequency of update.
(12) A description of the manner in which a fixed guideway system identifies and documents security incidents that occur during operation and maintenance, of the system, and a description of the analysis and assessments and subsequent action(s) taken to resolve these incidents.
(13) A formal policy identifying how security incidents are investigated, including a time-frame for those investigations, and who has leadership responsibility for the investigation. A description of the procedures used for performing investigations, including follow-up actions.
(14) The system's security incidents notification and reporting process, both internal and external.

(15) An explanation of the major sources of funding and any encumbered rules, regulations, terms or conditions that may have impacts on security.
(16) A configuration management plan that controls changes and monitors modifications to the system during design, procurement, construction, and ongoing operations that are security related.
(17) A description of the security aspects included in the RTA's/RTS's procurement process.
(18) A description of the internal and external communication process to disseminate security information including the use of a Public Security Awareness Program for users of the fixed guideway transit system, and others who may come into contact with the system.
(19) A formal process for the audit and management of the SSP/SEPP which identifies the responsible unit for each division of an audit, reporting procedures, a schedule of audits and the process for follow-up action.
(20) A description of security-sensitive employee certification, re-certification, and decertification programs including criteria for automatic de-certification.

System Security Plan (SSP) Summary Conformance Checklist

SUMMARY CONFORMANCE CHECKLIST

FOR SYSTEM SECURITY PLANS

FIXED GUIDEWAY SYSTEM:_____ REV. NO: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE	PLAN TITLE: _____ DATE: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE
1	Security Policy Statement. Description and Authority Establishing the Security Program			9	Management of the Security and Emergency Preparedness Program		
2	Describe Legal Responsibilities and Jurisdictions for Service, Extensions and Improvements. Description of Purpose for the System Security Plan			10	SSP Program Activities – Planning, Organization, Equipment, Training and Procedures		
3	Clearly Stated Goals for the System Security Plan			11	Emergency Exercises and Evaluation		
4	Identifiable and Attainable Objectives			12	Interdepartmental/Interagency Coordination and Communications		
5	System Description/Organizational Structure, Security Sensitive Employee Certification, Re-Certification and De-Certification			13	Employee and Contractor Security Program		
6	System Security Plan Control and Update Procedures			14	Internal Security Audit/Review Process		
7	Threat & Vulnerability Identification, Assessment, and Resolution Process			15	SSP Review/Revision Process		
8	Security Incident Reporting & Investigation			16	Procurement – Security processes		

THE SYSTEM SECURITY PLAN IS:

_____ **ACCEPTABLE**

_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:**_____

APPROVED BY: _____ **DATE:**_____

Conformance Checklist Form
(For NJDOT Use Only)

Comments

System Security Plan (SSP) Detailed Conformance Checklist

FIXED GUIDEWAY SYSTEMS - DETAILED CONFORMANCE CHECKLIST FOR SYSTEM SECURITY PLANS

TRANSIT SYSTEM: _____

REVISION: _____ **DATE:** _____

REVIEWER: _____ **DATE:** _____

#	Checklist	SSP/SEPP Requirements Does the Plan Contain or Provide for:	Included		Page Ref.	Comments
			Y	N		
1	**Security Policy Statement. Description and Authority Establishing the Security Program**	a. Approval of the SSP/SEPP by the Highest Level of Management? Regular Progress reviews on a Periodic Scheduled Basis by Top Management to Assure That the Security Program Stays Current with Changing Conditions? b. Preparation and Maintenance of the SSP/SEPP by a Specific Department or Person for Security? c. A Statement Emphasizing the Importance of Security in all Aspects of the FGTS/RTS's Operations?				
2	**Describe Legal Responsibilities and Jurisdictions for Service, Extensions and Improvements. Description of Purpose for the System Security Plan**	a. A Statement of Security Objectives That Are Quantifiable and Achievable Through the Implementation of Policies and Procedures? b. A Statement That Top Management Establishes Security Policies? c. A Statement That Addresses the Personal Security of Passengers and Employees? d. Description of the Responsibilities and Extent of Powers for Security? e. An Explanation of the major sources of funding and any encumbered rules, regulations, terms or conditions that may have impacts on security. f. An Explanation of the Purpose of the Plan, Relating to Security? g. How the Plan Complies With Policy Directives? h. A Description of the Shared Responsibilities for Security by the Operations, Maintenance, and Engineering Departments?				
3	**Clearly Stated Goals for the System Security Plan**	a. A Statement of Security Goals within the FGTS/RTS over a reasonable period of Operations?				
4	**Identifiable and Attainable Objective**	a. An identification of Objectives That Are Quantifiable and Achievable through the Implementation of Policies and Procedures?				

#	CHECKLIST	SSP/SEPP REQUIREMENTS DOES THE PLAN CONTAIN OR PROVIDE FOR:	INCLUDED		PAGE REF.	COMMENTS
			Y	N		
5	**System Description / Organizational Structure** **Security Sensitive employee certification, re-certification and de-certification.**	b. A System Description? c. Organization Charts Showing the Lines of Authority and Responsibility for Security? d. A categorization or breakdown of employees and contractors in security sensitive positions with relevant statuses of their certification?				
6	**System Security Plan Control and Update Procedures**	a. A Maximum Time Interval Between Documented Plan Reviews to Determine Whether or Not the Plan Needs to Be Revised to Meet Changed Conditions and Requirements? b. A Description of the Mechanism by Which Security Issues and Incidents are identified within the FGTS/RTS Security function for action? c. A Statement That the State DOT SOA Staff Will Be Notified of changes to the Security Plan? d. Identification of Who is responsible for Preparation and Maintenance of the SSP/SEPP; Including Periodic Reviews and Updates?				
7	**Threat & Vulnerability Identification, Assessment, and Resolution Process**	a. Provide a Description of the FGTS/RTS's methods and activities to identify security and terrorism related threats and vulnerabilities? b. Identify the assignment of these threats and vulnerabilities to responsible security parties for resolution? c. Assess the best methods by which to minimize or eliminate these identified threats and vulnerabilities? d. Identify how near and long term security strategies are developed to enhance the security of the FGTS/RTS? e. Describe security integration with safety certification process?				
8	**Security Incident Reporting & Investigation**	a. A Description of how security incidents are reported and investigated? b. A Description of the Security parties in charge of the investigation? c. The Formation of Proactive and Security Breach Committees to address security incidents reported and investigated? d. A Description of how additional Law Enforcement Agencies participate or may participate in security incident investigations?				

#	CHECKLIST	SSP/SEPP REQUIREMENTS DOES THE PLAN CONTAIN OR PROVIDE FOR:	INCLUDED		PAGE REF.	COMMENTS
			Y	N		
9	**Management of the Security and Emergency Preparedness Program**	a. Is the individual or party responsible for managing the SSP/SEPP and Emergency Preparedness Programs identified? b. Is the method by which security information is communicated within the FGTS/RTS identified? c. Is the development with outside Agencies which contribute to the security of the FGTS/RTS identified? d. Is the mechanism for bringing security concerns to FGTS/RTS Security personnel identified? e. Is the security concerns of FGTS/RTS employees actively solicited? f. Is the SOA made aware of changes to the Security Plan or Program?				
10	**SSP/SEPP Program Activities – Planning, Organization, Equipment, Training and Procedures**	a. Provide a description of the activities and programs in place at the FGTS/RTS to support planning for system security and emergency preparedness? b. Provide a description of the coordination with external agencies on matters of security? c. Provide a description of equipment used to support implementation of the system security program? d. Describe the system security program related training and procedures to ensure employee proficiency?				
11	**Emergency Exercises and Evaluation**	a. Describe the system security-related activities to ensure the conduct of emergency exercises and evaluation?				
12	**Interdepartmental / Interagency Coordination and Communications**	a. Is the integration of the SSP/SEPP with activities and tasks of internal and external departments/agencies on security matters identified? b. Is the coordination with the SOA clearly identified on matters relevant to security program oversight?				
13	**Employee and Contractor Security Program**	a. Provide a description of the employee and contractor security requirements, if applicable? b. Provide a description of relevant security awareness training for employees and contractors?				

#	CHECKLIST	SSP/SEPP REQUIREMENTS DOES THE PLAN CONTAIN OR PROVIDE FOR:	INCLUDED		PAGE REF.	COMMENTS
			Y	N		
14	**Internal Security Audit/Review Process**	a. Planned and Scheduled Internal Security Audits to Be Performed by the FGTS/RTS to Evaluate Compliance and Measure the Effectiveness of Its SSP/SEPP on Security? b. The Use of Written Checklists? c. Auditors That Are Independent from the First Line of Supervision Responsible for the Activity Being Audited? d. Documenting the Audit Findings in Written Reports That Include an Evaluation of the Adequacy and Effectiveness of the SSP/SEPP? e. A Twelve Month Annual Audit Report Issued to SSO annually, Summarizing the Results of the Individual Audits, Including a Summary of Required Corrective Action, If Any, and Provisions for Follow-up to Ensure Timely Implementation? This Report Submitted to State DOT Staff for Review?				
15	**SSP/SEPP Review/Revision Process**	a. Provide a description of the process to initiate revisions to System Security Plan and Emergency Response Procedures b. Identify the person or party responsible for conducting the review of the SSP/SEPP and revising the plan as necessary? c. Describe the process used to review and revise the plan prior to submission to the SOA for review and approval? d. Identify the on-site review of the FGTS/RTS's implementation of the plan, by the SOA? e. Methods by which updated plans and procedures are disseminated within the FGTS/RTS?				
16	**Procurement – Security Processes**	a. Security Measures/Controls for Procurement of security sensitive products and materials? b. Receiving Inspection of Procured Materials and Equipment to Prevent Receipt of hazardous substances/materials or products for use with malicious intent?				

THE SYSTEM SECURITY PLAN IS:

_____ **ACCEPTABLE**

_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

System Security Plan (SSP) Supplemental Review Checklist (Includes Best Practices & Cyber Security)

SYSTEM SECURITY PROGRAM REVIEW CHECKLIST	AUDITOR(S):	DATES OF AUDIT:
SYSTEM SECURITY PLAN SECTION NUMBER:	TITLE:	NJDOT CONTROL NUMBER:

Column Definitions **A**: item implementation in accordance with Safety & Security Program Plan(s) **I**: implementation area of concern (see supplemental form included in this report) **U**: unable to review (see reason/reference in "remarks" column)

ITEM NO.	NJDOT Best Practices		SUPPL PARA N0.	AUDITABLE ENTITY	DEPARTMENT	ITEM DESCRIPTION	A	I	U	REMARKS
	Sec.	pp.								
S1	Assessment	5	4	Vulnerability Assess.	Mgmt./Assess Team	Did the system perform the first pre-assessment? The assessment? The post assessment?				
S2	Criticality factor	5	A1	Criticality Assessment	Mgmt./Assess Team	Did the team develop all-inclusive lists of transit assets? Identify groups of assets? Establish critical asset factors/assign values?				
S3	Criticality factor	6	B1	Vulnerability Assessment	Mgmt./Assess Team	Identify and evaluate critical assets re: susceptibility & consequences of attack. Was history of past terroristic activity considered? Did the team document assumptions made in developing an approach to threat characterization?				
S4	Criticality factor	6	B2	Vulnerability Assessment	Mgmt./Assess Team	Did the team develop vulnerability factors for critical assets? What values were used?				
S5	Asses Criticality with Vulnerability	6	C1	Criticality w/ Vulnerability assessment	Mgmt./Assess Team	Is there a priority listing of critical assets based on a criticality/vulnerability matrix?				
S6	Best Security Practice	7	2	Best Security Practice	Mgmt./Assess Team	Status of "Eyes and Ears" campaign – updated reports?				
S7	Criticality factor	7	3	Best Security Practice	Mgmt./Assess Team	OEM joint NJDOT-NJT plan – is the plan updated re: roles, responsibilities/operations of discrete emergency support functions (27 Federal Agencies/17 State Dept/24 state & volunteer agencies)? *Reference: checklist #82 (Updates), #70, #71, #75 (Roles & Responsibilities)*				
S8	Top 20 List	1	B1	Security/Emerg. Management Plan	Mgmt./Transit Police	1. Written Security Program & Emergency Management Plans are established. *Reference: Checklist #74 section 9 -are there plans and programs in place to achieve security goals and objectives?* *Reference Checklist #84 (Security Program Procedures & Emergency Response)*				

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ITEM NO.	NJDOT Best Practices		SUPPL PARA N0.	AUDITABLE ENTITY	DEPARTMENT	ITEM DESCRIPTION	A	I	U	REMARKS
	Sec.	pp.								
S9	Top 20 list	1	B2	Security/Emerg. Management Plan	Mgmt./Transit Police	2. The Security/Emergency Management Plans are updated to reflect anti-terrorist measures/current threat conditions. *Reference checklist #91*				
S10	Top 20 List	1	B3	Security/Emerg. Management Plan	Mgmt./Transit Police	3. The Security and Emergency Management Plans are an integrated system program, incl. regional coord. w/other agencies, security design criteria in procurements and org. charts for incident command and management. systems. *Reference Checklist # 75 Sec 9 Paragraph 9.2* *Reference Checklist # 66 Sec 10 Paragraph 10.1* *Does the security plan include organization charts for incident command and management systems?*				
S11	Top 20 List	1	B4	Security/Emerg. Management Plan	Mgmt./Transit Police	4. The security and emergency management plans are signed, endorsed and approved by top management. Reference Checklist #2, #72 (Endorsed & Approved)				
S12	Top 20 List	1	B5	Security/Emerg. Management Plan	Mgmt./Transit Police	The security and emergency management programs are assigned to a senior level manager. *Reference Checklist #82, #83, #85, (Security & Emergency Management programs --- add Senior Level)*				
S13	Top 20 List	1	B6	Security Responsibilities	Mgmt./Transit Police	Security responsibilities are defined and delegated for management through to the front line employees *Reference Checklist #70, #75, #77 (Security/Management Responsibilities defined and delegated)*				
S14	Top 20 List	1	B7	Security Responsibility/ Accountability	Mgmt./Transit Police	All operations and maintenance supervisors, forepersons, and mangers are held accountable for security and emergency management issues under their control *Reference Checklist #72, #75, #77, #79, #84, #85 (Responsible – And Accountable)*				
S15	Top 20 List	2	B8	Threat/ Vulnerability	Mgmt./Transit Police	A threat/vulnerability assessment resolution process is established and used. *Reference Checklist #87, #88, #89, #91 (Established & Used)*				
S16	Top 20 List	2	B9	Sensitive Intelligence Information Sharing & Reporting is Improved	Mgmt./Transit Police	Security sensitive intelligence information sharing is improved by joining the FBI Joint Terrorism Task Force (JTTF) or other regional anti-terrorism task force; the Surface Transportation Intelligence Sharing & Analysis Center (ISAC); and security information is reported through the National Transit Database (NTD) *Reference Checklist #75 (Identification/Responsibility/Reporting)* *Add above information as appropriate.)*				
S17	Top 20 List	2	B10	Background Checks of new Oper? Maint?	Mgmt./Transit Police/Oper/ Maint	Background investigations are conducted on all new front-line operations and maintenance employees				

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	Sec.	pp.								
S18	Top 20 List	2	B11	Criteria Background Checks	Mgmt./Transit Police/Oper/ Maint	Criteria for background investigations are established				
S19	Top 20 List	2	B12	Training Security Orientation	Mgmt./Transit Police/Oper/ Maint	Security orientation or awareness materials are provided to all front-line employees				
S20	Top 20 List	2	B13	Training Safety &- Security Emerg Procedures	Mgmt. /Transit Police/Oper./ Maint.	Ongoing training programs on safety, security and emergency procedures by work place are provided				
S21	Top 20 List	2	B14	Public Awareness	Mgmt. /Transit Police/Oper./ Maint.	Public awareness materials are developed and distributed on a system wide basis.				
S22	Top 20 List	2	B15	Audits Policy/ Procedures	Mgmt. /Transit Police/Oper./ Maint.	Periodic audits of security and emergency management policies and procedures are conducted				
S23	Top 20 List	2	B16	Tabletop and Drills	Mgmt. /Transit Police/Oper./ Maint.	Tabletop and functional drills are conducted at least once every six months and full-scale exercises, coordinated with regional emergency response providers, are performed at least annually.				
S24	Top 20 List	2	B17	Controlled Access	Mgmt. /Transit Police/Oper./ Maint.	Access to documents of security critical systems and facilities are controlled				
S25	Top 20 List	2	B18	Security Sensitive Documents	Mgmt. /Transit Police/Oper./ Maint.	Access to security sensitive documents is controlled				
S26	Top 20 List	2	B19	Investigate/ Background Checks Contractor & ID Badge-Visitors -- All	Mgmt. /Transit Police/Oper./ Maint.	Background investigations are conducted of contractors or others who require access to security critical facilities, and id badges are used for all visitors, employees and contractors to control access to key facilities				
S27	Top 20 List	2	B20	Protocols	Mgmt. /Transit Police/Oper./ Maint.	Protocols have been established to respond to the office of homeland security threat advisory levels				
CS 1	Cyber Security	1	A. 1	Organization	Management	Did the organization assign a management official to be responsible for the security program?				
CS 2	Cyber Security	1	A. 1	Organization	Management	Are there provisions for the management official to access the executive management to implement and monitor security programs and procedures?				
CS 3	Cyber Security	1	A. 2	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Does the organization have security policies, standards & guidelines to specify measures to safeguard information and systems against unauthorized use, disclosure, modification, damage or loss?				

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	Sec.	pp.								
CS 4	Cyber Security	2	A. 2 A.	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Does the standard include the classification of data based on its criticality to the organization and the risks that unauthorized access or modification would pose? More critical - more stringent security precautions?				
CS 5	Cyber Security	2	A. 2 B.	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Standard – is the access to information that could be of aid to terrorists restricted? Are locations of schematics and diagrams of critical infrastructure restricted from public web sites?				
CS 6	Cyber Security	2, 3	A. 2 C.	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Does the asset classification scheme require specific security measures based on the risk of unauthorized access or damage to the asset or property? Standard – most stringent, measures greatest risk of loss to critical assets or harm to individuals?				
CS 7	Cyber Security	3	A 3	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Standard - are there measures in place to detect and respond to breaches of non-compliance with security policies, standards, and guidelines?				
CS 8	Cyber Security	3	A 4	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Standard – is there a security training and awareness program that demonstrates company's core values and promulgates official company policies regarding security?				
CS 9	Cyber Security	3	A 5	Policy Standards & Guidelines	Mgmt. /Transit Police/Oper./ Maint.	Is there participation in professional organizations and liaison with state and federal law enforcement as well as other security-related agencies to remain aware of security trends and treats?				
CS 10	Cyber Security	4	A 5	Policy Standards & Guidelines	Mgmt./Transit Police/Oper/ Maint	Standard – does the system participate in professional organizations, and liaison with law enforcement, state and federal organizations?				
CS 11	Cyber Security	4	B 1	System Access Controls	Mgmt. /Transit Police/Oper./ Maint.	Standard - does the system require user id's and passwords to restrict access to that required by an individual user and accountability for use of the user ID?				
CS 12	Cyber Security	4	B 2	System Access Controls	Management	Standard – are passwords changed periodically to prevent the use of compromised passwords?				
CS 13	Cyber Security	5	B 3	System Access Controls	Management	Standard – are passwords required to consist of combinations of characters and numbers and not be easily guessable?				
CS 14	Cyber Security	5	B 4	System Access Controls	Management	Standard – does the system require strong authentication where the risk and probability of unauthorized access and resulting harm (financial, harm to employees, etc.) is high?				
CS 15	Cyber Security	5	B 5	System Access Controls	Management	Standard – are password files encrypted?				
CS 16	Cyber Security	5	B 6	System Access Controls	Management	Standard – does the system require access control or encryption on sensitive information?				
CS 17	Cyber Security	6	B 7	System Access Controls	Management	Standard – does the system limit the number of users with unrestricted or super-user privileges?				

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	Sec.	pp.								
CS 18	Cyber Security	6	B 8	System Access Controls	Mgmt./Transit Police	Standard – is there a monitoring program that is used when the system is in the process of removing or terminating users?				
CS 19	Cyber Security	6	B 9	System Access Controls	Management	Standard – is there a process for modifying access controls when users change jobs?				
CS 20	Cyber Security	6	B 10	System Access Controls	Management	Are there secure measures in place for employees connectivity to the agencies network via the internet to prevent sign-on codes and passwords from being intercepted? Contractors? Patrons? Other agencies?				
CS 21	Cyber Security	7	B 11	System Access Controls	Management	Does the system use data encryption when using wireless connectivity to its network?				
CS 22	Cyber Security	7	B 12	System Access Controls	Management	Does the system employ firewalls to restrict access to critical networks from the internet, preventing unauthorized activity from entering the network?				
CS 23	Cyber Security	7	B 13 & 4	System Access Controls	Management	Is the system monitored to detect unauthorized access attempts? When detected, are there additional protective measures employed?				
CS 24	Cyber Security	8	B 15	System Access Controls	Management	Does the system employ intrusion detection to detect unauthorized access from the internet? Are there additional protective measures taken following occurrences?				
CS 25	Cyber Security	8	B 16	System Access Controls	Management	Does the system employ hardening measures (such as host-based intrusion detection, access lists, etc.?) To detect unauthorized activity on critical servers? When unauthorized attempts occur, does the system take additional protective measures?				
CS 26	Cyber Security	9	B 17	System Access Controls	Management	Does the system employ measures to select unauthorized traffic on the system's network?				
CS 27	Cyber Security	9	C 1	Computer, Process Control & Network	Management	Are procedures in place to guide the system when an incident occurs to minimize losses? Continue operations? Prevent further occurrences?				
CS 28	Cyber Security	9	C 2	Computer, Process Control & Network	Management	Is there a protocol for reporting cyber attacks (criminal or terroristic) to relevant authorities to permit analysis of potential mass attacks and viruses? To permit development of new virus signature or intrusion detection for system files				
CS 29	Cyber Security	10	C 3	Computer, Process Control & Network	Management	Are there hardening procedures in place for critical computer systems and processes to limit computer services and functionality to that which is needed? Have security patches been applied? Prevention/detection tools employed?				
CS 30	Cyber Security	10	C 4	Computer, Process Control & Network	Management	Does the system apply security patches to close system weaknesses and vulnerabilities within reasonable time periods?				
CS 31	Cyber Security	10	C 5	Computer, Process Control & Network	Management	Does the system employ anti-virus software on network-connected systems? Are updates performed frequently to virus definition files? Does the system have administrators to monitor the business environment and apply virus definition updates as soon as possible when a new major virus or trojan is reported?				

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	Sec.	pp.								
CS 32	Cyber Security	11	C 6	Computer, Process Control & Network	Management	Does the system employ browser security settings to detect and alert for unauthorized access to user's PCs?				
CS 33	Cyber Security	11	C 7	Computer, Process Control & Network	Management	Does the system employ network management systems to detect failures or unauthorized connections?				
CS 34	Cyber Security	12	C 8	Computer, Process Control & Network	Management	If the system employs web-based critical applications, is the data and the ability to process transactions fully protected from direct access on the web site?				
CS 35	Cyber Security	12	C 9	Computer, Process Control & Network	Management	Are regular backups performed for critical mission systems? Does the system utilize off-site storage for retaining back-up data? Can the system process transactions or data for critical systems offsite?				
CS 36	Cyber Security	12	D 1	Computer, Process Control & Network	Management	Does the system perform background checks and other screening for employees in sensitive positions? What screening is performed?				
CS 37	Cyber Security	13	D 2	Computer, Process Control & Network	Management	What types of screening and background checks does the system perform for contractors and consultants in sensitive positions?				
CS 38	Cyber Security	13	E 1	Compliance/ Assurance	Management	Does the system have an information assurance program to monitor compliance with security policies?				
CS 39	Cyber Security	14	E 2	Compliance/ Assurance	Management	When does the system perform computer vulnerability assessments for internet? Connectivity to identify weaknesses due to complexity and dynamically changing internet environments?				
CS 40	Cyber Security	14	E 3	Compliance/ Assurance	Management	Does the system perform periodic computer vulnerability assessments for internal systems to identify weaknesses?				
CS 41	Cyber Security	15	F 1	Business Continuity/ Disaster Recovery	Management	Does the system have a business continuity/disaster recovery plans for mission critical processes?				
CS 42	Cyber Security	15	F 2	Business Continuity/ Disaster Recovery	Management	When does the system test its business continuity/disaster recovery plan for mission critical processes to assure their viability?				
CS 43	Cyber Security	15	G 1	Outsourced Systems	Management	Does the system assure that outsourced service providers comply with its security policies, standards, and procedures for access to critical systems and processes?				

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Appendix J

System Safety Program Plan (SSPP)

Review and Approval Process

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Procedure for Review and Approval of System Safety Program Plans (SSPPs)

DESCRIPTION

This procedure is for the review and approval process conducted by the New Jersey Department of Transportation (NJDOT) Rail Transit State Safety Oversight (SSO) program for each New Jersey rail transit agency (RTA) and rail transit system (RTS).

PURPOSE

Use of this procedure provides a uniform process for the NJDOT SSO program for the receipt, review, and approval of System Safety Program Plans (SSPPs) from RTAs/RTSs.

PROCESS

The NJDOT SSO program and the RTA/RTS have the responsibility for the implementation of this procedure.

Periodically, the NJDOT SSO program sends out documents and requires the RTA/RTS to update its SSPP. The RTA/RTS formally acknowledges receipt of the requirement to update their SSPP by letter or email. Following receipt and within thirty (30) days, the RTA/RTS submits its System Safety Program Plan for review by the NJDOT SSO program. If the NJDOT SSO program issues comments on the redrafted SSPP the RTA/RTS have 10 days to resubmit the SSPP for review.

Initial Submission. Also, during the "Initial Submission" of a System Safety Program Plan for major modifications, system improvements, or start-up of New Fixed Guideway Systems, the RTA/RTS is encouraged to submit drafts of the SSPP prior to a formal submission of its SSPP. The RTA/RTS contacts the NJDOT SSO program to initiate this process. As it is being developed the NJDOT SSO program reviews the RTA's/RTS's draft SSPP and provides comments to assist in the development of the final SSPP. Additionally, the NJDOT SSO program is receptive to meeting with the RTA/RTS from time to time for the purpose of review and discussion regarding the draft SSPP.

Review and Acceptance. When the final SSPP is submitted to the NJDOT SSO program by the RTA/RTS, and it is accepted by the NJDOT SSO program, the NJDOT SSO program will issue a letter of acceptance along with the checklist(s).

The NJDOT SSO program may undertake a review of the SSPP at any time to assure that it is in compliance and conformance. When notified by the NJDOT SSO program that updating of the SSPP is necessary, the RTA/RTS shall update the SSPP and submit it within 30 days of the NJDOT SSO program notice. If another redraft is necessary, the redraft shall be submitted within 10 days for review.

A review of a SSPP is performed in cooperation with the submitting RTA/RTS to resolve issues that do not meet the safety oversight standards for a SSPP.

To the extent that the SSPP does not comply with the NJDOT SSO program safety oversight standards, 49 CFR Part 659 or other FTA, NTSB, OSHA or other laws, regulations, rules, guidelines or industry best practices, the RTA/RTS makes all necessary revisions and resubmits its SSPP. Usually, revisions of the SSPP are done once per year but audits, reviews or changes in laws, regulations, rules, guidelines or industry best practices may cause the RTA/RTS to update the SSPP on its own, or the NJDOT SSO program to request the RTA/RTS to do an update.

Copies of the most recent approved RTA's/RTS's SSPP review checklist and letter of approval are maintained in a permanent file established by the NJDOT SSO program for each fixed guideway system.

After the initial approval process of a rail transit system's SSPP, the RTA/RTS, on an annual basis or sooner, as required, reviews its SSPP and performs updates or modifications.

Immediately at the end of its review, the RTA/RTS notifies the NJDOT SSO program, in writing, that the system performed its annual review of the SSPP and determined that revisions are necessary or that no revisions were necessary. If additional time beyond the thirty days are required to complete revisions to a SSPP, the RTA/RTS notifies the NJDOT SSO program, in writing, that the system performed its annual review of the SSPP and additional time is required, stating the additional time, to prepare revisions.

The notification to the NJDOT SSO program contains a summary of the elements requiring revision and a time frame for completion of the activities. The RTA/RTS notifies the NJDOT SSO program of its completed annual review of the SSPP not later than November 1st, of the year, which means the review of the SSPP must be accomplished in the first ten months of the year. **Note: if the NJDOT SSO program finds the systems are updating the SSPPs in the last months of the year it may assign specific SSPP review due completion dates to each system.**

Items Reviewed for the Approval of SSPPs

The NJDOT SSO program uses *Exhibit A: the Summary Conformance Checklist* and *Exhibit B: the Conformance Checklist* along with the NJDOT SSO program Standards and Procedures and any guidance from the FTA and current federal and New Jersey laws, regulations and rules, and federal, state, local, NJDOT SSO program audits and reviews to evaluate the RTA/RTS SSPP.

The following may assist in understanding some of the areas considered during the review.

The RTA/RTS's SSPP must comply with the guidance provided by 49 CFR 659 and the NJDOT SSO program's Standards and Procedures.

The SSPP includes:

(1) A summary of legislative action(s) that created the fixed guideway system.
(2) A policy statement signed by top management and evidence of how the policy is distributed throughout the organization.

(3) A clear definition of the safety goals/objectives and stated management responsibilities to ensure that they are achieved.

(4) A definition of the system including historical background, scope of service, identification of fixed facilities, type of operations and controls, emergency planning/ coordination/simulations, rules and procedures, training/certification/de-certification, retraining, re-certification, and a program for data acquisition and analysis.

(5) A description of maintenance processes, configuration process, quality assurance measures, contract maintenance philosophy, practices, rules and procedures, tasks performed internally and externally, scheduled maintenance activities along with corrective actions and emergency repairs.

(6) A description of the training and certification program for employees and contractors in safety-related positions.

(7) An inspection, test program, and tracking system that is used to ensure equipment and facilities are maintained according to schedule and safe and secure for conducting passenger carrying operations.

(8) A safety certification/verification process that ensures safety and security concerns are included in the review of new additions and modifications to the existing system.

(9) A detailed description and diagrams illustrating the organizational structure and key positions with personnel assignments for safety.

(10) The relationship between the fixed guideway system and political subdivisions through which the fixed guideway operates.

(11) The process used to control safety changes to the SSPP and the frequency for updates.

(12) A description of the manner in which a fixed guideway system identifies and documents hazards that occur during the design, construction, testing, and operation/ maintenance of the system, and a description of the analysis and subsequent corrective action(s) taken to resolve hazards and the hazard tracking system.

(13) A description of the system certification process shall be included.

(14) A formal policy identifying how the safety hazards are investigated, the threshold limit(s) for hazards to be investigated immediately and who has leadership responsibility for each specific level of investigation; hazard tracking and hazard reporting to the OSSO shall be included. A procedure for accident and incident investigation, analysis and report development including providing accident and incident reports to the NJDOT SSO program shall be included.

(15) A description of the procedures used for reporting, logging and tracking, performing investigations, follow-up corrective actions, and resolution of hazards.

(16) The system's accident, incident, and hazardous condition notification and reporting process, both internal and external. A clear statement of the responsibility for notifying NJDOT SSO program for 49 CFR Part 659 required notifications of incidents within the two hour threshold.

(17) An explanation of the major sources of funding and any encumbered rules, regulations, terms or conditions that may have impacts on safety.

(18) A configuration management plan that controls changes and monitors modifications to the system during design, procurement, construction, and ongoing operations.

(19) A description of the procurement process that tracks, enforces, and restricts the purchase and use of hazardous/non-hazardous materials and supplies, and defective or deficient equipment.

(20) A quality assurance program, that includes preparation of specifications, design reviews, audits, quality testing, calibration, analysis, design/production/completed product reviews of hardware and software components, assemblies, and products.

(21) A description of the internal and external communication process to disseminate safety information.

(22) A Public Awareness program that provides information for the general welfare of the public, system users, and employees and first responders shall be described.

(23) An employee occupational health and safety program that is compliant with the State of New Jersey and U.S. Government OSHA requirements.

(24) A formal process for the audit and management of the SSPP which identifies the responsible unit for each division of an audit, reporting and approval procedures, a schedule of audits and the process for follow-up of corrective actions.

(25) A description of the drug and alcohol abuse program and the process that audits and enforces compliance with the program.

(26) A description of safety-sensitive employee certification, re-certification, and de-certification programs including criteria for automatic de-certification.

Appendix J. Agency Safety Plan Outline

December 28, 2017

Background: This outline is based on FTA's SMS Framework, FTA's proposed National Safety Plan, and the Section 673 NPRM. SMS could be implemented via a framework document for the management system separate from the System Safety Program Plan (SSPP) sections and just indexed as listed in this requirements analysis. This analysis includes all 24 elements of the NJDOT SSO program SSPP requirements.

Public Transportation Agency Safety Plan

Title Page
Table of Contents

Introduction – describe if this ASP is for an individual transit agency or the scope and process for the state-level joint ASP. Acknowledge National Safety Plan, Safety Performance Criteria, and voluntary and required Standards from the National Safety Plan.

673.11 General Requirements (Agency Safety Plan)

Certification of compliance – includes approval by board of directors and Accountable Executive. Unknown who must approve for a State-Level ASP.

673.13 Certification of compliance.

Section 5329 (d)(1)(A) A requirement that the board of directors (or equivalent entity) of the recipient approve the agency safety plan and any updates to the agency safety plan.

Performance Measures and Statewide Planning

- Safety Performance Measures and Targets based on the National Safety Plan
- State of Good Repair Performance Measures and Targets
- Coordination with MPO planning processes

673.15 Coordination with metropolitan, statewide, and non-metropolitan planning processes

Section 5329 (d)(1)(E) Performance targets based on the safety performance criteria and state of good repair standards.

Background and Status of SMS Implementation
673.21 General Requirements (SMS)

Safety Management Policy
673.23 Safety management policy

(1) *Safety Management Policy Statement* – This sub-component clearly frames the fundamentals upon which a transit agency will build and operate its SMS. It documents executive management's commitment to the SMS, and places the management of safety at the same level as a transit agency's topmost business processes. FTA indicates that this policy statement includes the non-punitive safety reporting system.

SSPP Element 1. Policy statement and authority
SSPP Element 2. Goals and objectives

(2) *Safety Accountabilities and Responsibilities* – This sub-component defines the accountabilities and responsibilities for the performance of the SMS. It describes the relationships between the Accountable Executive and a transit agency's governance structure.

Sub-component 2. Section 5329 (d)(1)(F) Assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient.

SSPP Element 3. Overview of management structure
SSPP Element 5. SSPP implementation activities and responsibilities

(3) *Integration with Public Safety and Emergency Management* – This sub-component ensures integration of programs that have input into, or output from, the SMS. Each transit agency will identify and describe the necessary coordination with both external organizations and internal departments for dealing with emergencies and abnormal operations, as well as the return to normal operations. This sub-component addresses the various internal and external programs that may affect safety management and includes an index of the plans and procedures that support the transit agency's public safety and emergency management activities.

SSPP Element 11. Emergency Management

Entire Emergency Operations/Management Plan and/or Procedures (also required as a separate document per Part 673 NPRM)

(4) *SMS Documentation and Records* – This sub-component includes the activities for the documentation of SMS implementation, the tools required for day-to-day SMS operation, and the management of new or revised safety requirements, regulatory or otherwise.

673.31 Safety plan documentation.
673.33 Safety plan records.

SSPP Element 24. Minimum document submission to the NJDOT SSO program

Safety Risk Management
673.25 Safety Risk Management.

(5) *Hazard Identification and Analysis* – As the first two steps in the Safety Risk Management process, hazard identification and analysis identify and address hazards before they escalate into incidents or accidents. They also provide a foundation for the risk evaluation and mitigation activities that follow.

Sub-component 5. Section 5329 (d)(1)(B) Methods for identifying and evaluating safety risks throughout all elements of the public transportation system of the recipient.

SSPP Element 6. Hazard management process.
SSPP Element 8. Safety (and Security) certification
Includes TVA input from SEPP

(6) *Safety Risk Evaluation and Mitigation* – Following hazard identification, a transit agency implements activities and tools to evaluate safety risks associated with identified hazards, and subsequently develops mitigations to reduce safety risk exposure.

Subcomponent 6. Section 5329 (d)(1)(C) Strategies to minimize exposure of the public, personnel, and property to hazards and unsafe conditions.

SSPP Element 6. Hazard management process.
SSPP Element 8. Safety (and Security) certification
Includes TVA input from SEPP

Safety Assurance
673.27 Safety assurance.

(7) *Safety Performance Monitoring and Measurement* – SMS generates data and information that senior management needs in order to evaluate whether implemented safety risk mitigations are appropriate and effective, and how well an agency's safety performance is in line with established safety objectives and safety performance targets. Safety performance monitoring does not focus on monitoring individuals, but rather monitoring the safety performance of a transit agency itself through routine monitoring of operations and maintenance activities.

SSPP Element 9. Safety (and security) data collection and analysis.
SSPP Element 10. Accident/incident Investigations.
SSPP Element 12. Internal safety audits.
SSPP Element 13. Rules compliance
SSPP Element 14. Facilities and equipment inspections.
SSPP Element 15. Maintenance audits and inspections.
SSPP Element 18. Local, state, and federal requirements.
SSPP Element 19. Hazardous materials program.
SSPP Element 20. Drug and alcohol program
SSPP Element 22. Hours of Service
SSPP Element 23. Roadway Worker Protection

(8) *Management of Change* – Change may introduce new hazards and safety risk into transit operations. Therefore, agencies should establish the criteria that define when a change

must be evaluated through the Safety Risk Management process. If a proposed or identified change meets or triggers those criteria, the agency uses Safety Risk Management to review existing mitigations to determine if they are sufficient or if new mitigations are necessary. It is important that a transit agency leverage its field monitoring activities (under the Safety Performance Monitoring and Measurement sub-component) to support the identification of changes in a system that may not be planned.

SSPP Element 7. System modification.
SSPP Element 8. Safety (and security) certification.
SSPP Element 17. Configuration management and control.
SSPP Element 21. Procurement

(9) *Continuous Improvement* – Evaluation of the SMS is necessary to ensure that it effectively and efficiently allows the agency to meet safety objectives and performance targets. Transit agencies should address any identified weaknesses in SMS organizational structures, processes, and resources in a timely manner, and also complete annual reviews of overall safety performance.

Sub-component 9. Section 5329 (d)(1)(D) A process and timeline for conducting an annual review and update of the safety plan of the recipient.

SSPP Element 4. SSPP control and update procedure.

Includes update of the SEPP and Emergency Operations/Management Plan and/or Procedures

Safety Promotion
673.29 Safety promotion.

(10) *Safety Communication* – A two-way feedback loop between frontline employees and management about safety information is crucial in establishing a positive safety culture. Effective safety communication makes personnel aware of safety priorities and initiatives and ensures that feedback is captured and acted upon as appropriate. Safety-related information must be actively and routinely communicated, and must focus on raising awareness of hazards and potential safety risks. Regular discussion of safety concerns promotes an environment that encourages employees to report concerns and demonstrates management commitment to both the employees and the agency's safety performance objectives.

SSPP Element 9. Safety (and security) data collection and analysis.
SSPP Element 18. Local, state, and federal requirements.
SSPP Element 19. Hazardous materials program.
SSPP Element 20. Drug and Alcohol Program

This also includes public safety communication coordinated with security program.

(11) *Competencies and Training* – Training of all employees with respect to their role and responsibilities as they relate to agency safety performance is perhaps the most critical driver for successful SMS implementation. It also shapes employee perception of

executive management's commitment to safety. Achieving appropriate levels of competency for each staff level enables the consistent application of their skills to help the transit agency achieve its safety performance objectives.

Sub-component 11. Section 5329 (d)(1)(G) A comprehensive staff training program for the operations personnel directly responsible for safety of the recipient.

Need to reference IFR and Part 672 when final on Safety Certification Training requirements.

SSPP Element 16. Training and certification program for employees and contractors.

Includes Training and Drills and Exercises from SEPP, as appropriate

Appendices

- Final 49 CFR Part 673 including the Definitions
- List and short description of each of the Transit Agencies participating if this is the State-level ASP

System Safety Program Plan (SSPP) Summary Conformance Checklist

SUMMARY CONFORMANCE CHECKLIST
FOR SYSTEM SAFTEY PROGRAM PLANS

FIXED GUIDEWAY SYSTEM:_____

_____

REV. NO: _____

NO. _____ **ITEM** _____

PLAN TITLE: _____

_____

DATE: _____

NO. _____ **ITEM** _____

		ACCEPTABLE	*UNACCEPTABLE*			*ACCEPTABLE*	*UNACCEPTABLE*
1	Executive Policy Statement. Description and Authority Creating the Fixed Guideway System			13	Rules Compliance/Procedures Review		
2	Purpose, Goals and Objectives–Describe Legal Responsibilities and Jurisdictions for Service, Extensions and Improvements. Description of Purpose for the System Safety Program Plan			14	Facilities and Equipment Inspections		
3	Management Structure–Overview, History of FGTS/RTS, Scope of Services, Operations, and Maintenance			15	Maintenance Audits/Inspections		
4	SSPP Review and Modification–Review Schedule, Control and update of Procedures, SOA Review, SSPP Change Management			16	Training and Certification Review/Audit		
5	SSPP Implementation – Tasks and Activities			17	Configuration Management		
6	Hazard Management Process			18	Compliance with Local, State, and Federal Requirements		
7	Safety Certification			19	Hazardous Materials Program		
8	Managing Safety in System Modifications			20	Drug & Alcohol Abuse Program		
9	Safety Data Acquisition			21	Procurement		
10	Accident/Incident Notification, investigation and Reporting			22	Hours of Service		
11	Emergency Response Planning/Coordination/Training			23	Roadway Worker Protection		
12	Internal Safety Audit Process			24	Minimum Document Submission to the OSSO		

THE SYSTEM SAFETY PLAN IS:

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Concurrence by Manager/Supervisor, OFGSSO: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

System Safety Program Plan (SSPP) Detailed Conformance Checklist

FIXED GUIDEWAY SYSTEMS - DETAILED CONFORMANCE CHECKLIST FOR SYSTEM SAFETY PROGRAM PLAN (SSPP)

TRANSIT SYSTEM: _____

REVISION: _____ **REVISION DATE:** _____

REVIEWER: _____ **DATE:** _____

#	Checklist	SSPP Requirements Does the Plan Contain or Provide for the Following:	Included		Page Ref.	Comments
			Y	N		
1	**Policy Statement**	a. A policy statement is developed for the System Safety Program Plan (SSPP). b. The policy statement describes the authority that establishes the system safety program plan. c. The policy statement is signed and endorsed by the rail transit system's chief executive.				
2	**Purpose, Goals and Objectives**	a. The purpose of the SSPP is defined. b. Goals are identified to ensure that the SSPP fulfills its purpose. c. Objectives are identified to monitor and assess the achievement of goals. d. Stated management responsibilities are identified for the safety program to ensure that the goals and objectives are achieved.				
3	**Management Structure**	a. An overview of the management structure of the rail transit system is provided including an organization chart. b. Organizational structure is clearly defined and includes: a. History and scope of service, b. Physical characteristics, and c. Operations and Maintenance. c. A description of how the safety function is integrated into the rest of the rail transit organization is provided. d. Clear identification of the lines of authority used by the rail transit system to manage safety issues is provided.				
4	**Plan Review and Modification**	a. An annual assessment of whether the system safety program plan should be updated is specified. b. The process used to control changes to the system safety program plan is described. c. Specific departments and persons responsible for initiating, developing, approving, and issuing changes to the SSPP are identified. d. Required coordination with the oversight agency regarding plan modification, including timeframes for submission, revision, and approval, is addressed.				

#	Checklist	SSPP Requirements Does the Plan Contain or Provide for the Following:	Included		Page Ref.	Comments
			Y	N		
5	**Plan Implementation**	a. A description of the specific activities required to implement the system safety program plan is included. b. Tasks to be performed by the rail transit safety function, by position and management accountability, are identified and described. c. A description of the methodologies used by the system safety function to achieve their safety responsibilities should be provided. d. Safety-related tasks to be performed by other rail transit departments, by position and management accountability, are identified and described. e. A task matrix (or an equivalent narrative description) showing: all identified safety responsibilities, interfaces among all rail transit units responsible for each task, and the key reports or actions required, should be provided.				
6	**Hazard Management Process**	a. The process used by the rail transit system to implement its hazard management program, including the role of the oversight agency in providing on-going communication, is described. b. The hazard management process includes activities for: hazard identification, hazard investigation, evaluation, and analysis, hazard control and elimination, hazard tracking. c. Requirements for on-going reporting to the oversight agency relating to hazard management activities and status are specified.				
7	**Safety Certification Process**	a. A description of the safety certification process required by the rail transit system to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment.				
8	**System Modifications**	a. The process used by the rail transit system to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification, but which may have safety impacts, is described.				
9	**Safety Data Acquisition**	a. The process used to collect, maintain, analyze, and distribute safety data is clearly defined. b. The management process for ensuring that the safety function within the rail transit organization receives the necessary information to support implementation of the system safety program is clarified.				

#	Checklist	SSPP Requirements Does the Plan Contain or Provide for the Following:	Included		Page Ref.	Comments
			Y	N		
10	**Incident Notification, Investigation and Reporting**	a. A description is provided regarding the process used by the rail transit system to perform 2 Hour Notification, investigation and reporting. b. Criteria for determining what accidents/incidents require investigation, and who is responsible to conduct specific investigations are developed. c. A description of the procedures for performing investigations, including proper documentation and reporting of findings, conclusions reached, use of hazard resolution process to develop corrective action recommendations, and follow-up to verify corrective action implementation is provided. d. Notification thresholds for internal departments/functions are defined. e. Criteria are specified for notifying external agencies (NTSB, state oversight agency) of accidents and incidents. f. Procedures are established for documenting and reporting on accident investigations. g. Process used to develop, implement, and track corrective actions that address investigation findings is specified. h. Coordination with the oversight agency is specified.				
11	**Emergency Management Program**	a. The system's emergency planning responsibilities and requirements are identified. b. A description of the process used by the rail transit system to develop an approved, coordinated schedule for emergency management program activities is provided. c. Required meetings with external agencies regarding the emergency management program are specified. d. The process used to evaluate emergency preparedness, such as annual emergency field exercises, is documented. e. After action reports and implementation of findings are required. f. The process is explained to be used by the rail transit system for the revision and distribution of emergency response procedures. g. The system's responsibilities for providing employee training are identified. h. The system's responsibilities for providing familiarization training to local public safety organizations are identified.				

#	Checklist	SSPP Requirements Does the Plan Contain or Provide for the Following:	Included		Page Ref.	Comments
			Y	N		
12	**Internal Safety Audit Program**	a. A description of the process used by the rail transit system to ensure that planned and scheduled internal safety audits are performed to evaluate compliance with the SSPP is included. b. Identification of departments and functions subject to audit is performed. c. Auditors must be independent from the first line of supervision responsible for the activity being audited. d. A three-year audit schedule must be developed, reviewed, maintained and updated to ensure that all 24 SSPP elements are reviewed during the audit cycle. e. The process for conducting audits, including the development of checklists, and procedures for conducting audits and issuing of findings is described. f. The SSPP must describe the requirement of an annual audit report that summarizes the results of individual audits performed during the previous year and includes the status of required corrective action items. This report must be submitted to the state oversight agency for review and approval. g. The process for resolving problems and disagreements, report distribution, and follow-up on corrective action procedures is described. h. The ISAP process and reporting must be coordinated with the state oversight agency. i. The ISAP process should be comprehensive.				
13	**Rules Compliance**	a. Operating and maintenance rules and procedures that affect safety are identified. b. Operating and maintenance rules and procedures that affect safety are reviewed for their effectiveness and determinations are made regarding their need to be updated. c. Description of process for developing, maintaining, and ensuring compliance with operating and maintenance rules and procedures. d. Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing/compliance checks. e. Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules. f. Process for documenting results and incorporating them into the hazard management program.				
14	**Facilities and Equipment Inspections**	a. Identification of the facilities and equipment that are subject to regular safety related-inspection and testing is provided. b. A description of how safety-related equipment and facilities are included in a regular inspection and testing program is provided. c. Use of a written checklist for conducting facility inspections. d. Descriptions of how identified hazardous conditions are entered				

#	Checklist	SSPP Requirements Does the Plan Contain or Provide for the Following:	Included		Page Ref.	Comments
			Y	N		
15	**Maintenance Audit and Inspection Program**	a. A list of systems and facilities subject to a maintenance program, along with established maintenance cycle and required documentation of maintenance performed for each item, is provided. b. A description of the process for tracking and resolving problems identified during inspections is provided. c. Use of a written checklist for conducting maintenance audits is required.				
16	**Training and Certification Program**	a. A description of the training and certification program for employees and contractors is provided. b. Categories of safety-related work requiring training and certification are identified. c. Description of the training and certification program for employees and contractors in safety-related positions is provided. d. Description of the training and certification program for contractors is provided. e. The process used to maintain and access employee and contractor training records is described. f. The process used to assess compliance with training and certification requirements is described.				
17	**Configuration Management Process**	a. A description of the configuration management control process is provided and appropriate references are made to other rail transit system documents governing this process. b. Process for making changes is described. c. Authority to make configuration changes is described and assurances are provided for formal notification of all involved departments.				
18	**Compliance with Local, State and Federal Safety Requirements**	a. A description of the safety program for employees and contractors that incorporates the applicable local, state, and federal requirements is provided. b. Safety requirements that employees and contractors must follow when working on, or in close proximity to, rail transit system controlled property are identified. c. Processes for ensuring the employees and contractors know and follow the requirements are described.				
19	**Hazardous Materials Program**	a. A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements is provided.				
20	**Drug and Alcohol Program**	a. A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements is provided.				
21	**Procurement**	a. A description of the measures, controls, and assurances in place to ensure that safety principles, requirements, and representatives are included in the rail transit system procurement process.				

#	CHECKLIST	SSPP REQUIREMENTS DOES THE PLAN CONTAIN OR PROVIDE FOR THE FOLLOWING:	INCLUDED		PAGE REF.	COMMENTS
			Y	N		
22	**Hours of Service**	a. A description of the Rail Transit System's Hours of Service policy.				
23	**Roadway Worker Protection**	a. A description of the Rail Transit Systems' Roadway Worker Protection Policy.				
24	**Minimum Document Submission to the OSSO**	a. Annual Report Submission b. Monthly Reports c. Annual Review of SSPP d. Annual Review of SSP/SEPP e. Update to Plans and Procedures as required by the SSPP f. Accident/Incident Reporting g. Internal Audit Check Lists h. Copies of all Monthly and Annual reports submitted to the FRA (Shared Use Properties only) i. Copies of all FRA Inspection Reports (Shared Use Properties Only) j. Copies of all correspondence from/or to the FRA (Shared Use Properties Only)				

THE SYSTEM SAFETY PLAN IS:

_____ **ACCEPTABLE**

_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Concurrence by Manager/Supervisor, OFGSSO: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

Appendix K

Hazard Management Plan

Review and Approval Process

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HAZARD MANAGEMENT PROCESS

This section of the Program Standard Documents and Procedures introduces the NJDOT SSO Program's requirements for the Hazard Management Process which must be developed by the RTA/RTS, and formally reviewed by the NJDOT SSO program. Note that in the future, the hazard management process will be included/integrated as part of the Safety Management System (SMS) Safety Risk Management (SRM) and Safety Assurance (SA) processes.

Objective

The objective of the Hazard Management process is to provide the NJDOT SSO program with an ongoing role in overseeing the RTA's/RTS's identification, assessment and resolution of hazards.

Minimum Requirements

The NJDOT SSO program requires each RTA/RTS to develop and document a process to identify and resolve hazards for new start projects, extensions, or modification of existing systems, operational or environmental changes, or from hazards discovered during reviews, compliance audits, inspections, and investigations.

The hazard management process must, at a minimum:

(1) Define the RTA's/RTS's approach to hazard management and the implementation of an integrated system-wide hazard resolution process
(2) Specify the sources of, and the mechanisms to support, the on-going identification of hazards. This includes problems identified during maintenance audits and inspections.
(3) Define the process by which identified hazards will be evaluated and prioritized for elimination and control
(4) Identify the mechanism used to track the identified hazards through resolution
(5) Define the minimum thresholds for the notification and reporting of hazards to the NJDOT SSO program
(6) Specify the process by which the RTA/RTS will provide on-going reporting of hazard resolution activities to the NJDOT SSO program
(7) Provide a monthly report of corrective actions for hazards which include the date the corrective action will be implemented; later changes to the implementation date shall be included without eliminating the original implementation date.

Hazard Tracking Log

Each RTA/RTS must establish a Hazard Tracking Log which reflects the consolidation of information in the hazard management process. The log must contain all hazards identified through the various methods used by the RTA/RTS. The Hazard Tracking Log will contain, as a minimum, the following information:

- Assigned hazard number
- Date hazard identified

- Hazard Title
- Hazard Description
- Source from which it was identified
- The element of the RTA's/RTS's operation affected by the hazard.
- Initial Hazard Classification
- Current Hazard Classification
- Corrective Action Plan

The Hazard Log shall be updated regularly to reflect its current status and be part of the RTA's/RTS's monthly report. This report must be submitted to the NJDOT SSO program no later than the 15th of each month. The Hazard Tracking Log shall be maintained permanently. Corrections should be able to be made but the original record not changed or altered.

Quarterly Meetings on the Hazard Management Process

The NJDOT SSO program requires the RTA/RTS to host quarterly meetings to review the Hazard Tracking Log and the other activities associated with the hazard management process. The NJDOT SSO program will review and approve the agenda prepared for these meetings, making any modifications as appropriate.

During the quarterly meetings, the NJDOT SSO program may request and review any records maintained by the RTA/RTS documenting the results of its hazard management process. If these records are not available at the meetings, they will be transmitted to the NJDOT SSO program Point-of-Contact in electronic copy via email or in hard copy via mail or fax.

Meeting minutes from each quarterly meeting will be prepared by the RTA/RTS and submitted to the NJDOT SSO program no later than two weeks after each quarterly meeting.

Hazard Management Process Methodologies

This section identifies the process by which the RTA/RTS identifies, analyzes, categorizes, resolves, and documents hazards occurring in operations, maintenance, and engineering. The process, accessible to all levels of the organization, includes analysis of potential impacts on the operating system, and a means to resolve the identified impacts, acceptable to management. A Hazard Management Process consists of three primary components:

- Hazard Identification
- Hazard Classification
- Hazard Resolution

Hazard Identification

Describe the methods used to ensure that a systematic effort is made to identify all hazards and they are entered into the Hazard Management Process. These methods may include such exercises as Preliminary Hazard Analysis (PHA), Operating Hazard Analysis (OHA), Critical/Catastrophic

Items List (CCIL), Fault Tree Analysis, Subsystem Interface Analysis, various Human Factors Analysis and Joint Railroad - Fixed Guideway Corridor Operations.

New systems, with minimum history available for analyses of the existing operations, require Contractors (performing design, construction and procurement services) to conduct hazard analysis as part of contract services.

Systems that have operated over a period of years may elect to use the input of operations and maintenance personnel as sufficient for the hazard analysis process. In both cases, the process remains formal to sufficiently document a procedure with appropriate sign-off and checks and balances. The process, available to all units of the organization, is reviewed, administered on a routine basis, and has high level visibility and participation. Hazard Identification is an ongoing process, viable throughout the system life cycle. Previously unidentified hazards associated with accidents and incidents, must enter the Hazard Management Process. Hazards and problems identified during maintenance audits and inspections shall be integrated into the hazard management process (659.19(o)).

Hazard Classification

Once a hazard is identified, an analysis to determine its potential severity and probability of occurrence is performed. The RTA/RTS standardizes the process for this analysis and documents the approved procedure. While developing a qualitative methodology for this type of analysis is possible, the most practical method for fixed guideway transit system application is simple deductive reasoning, applied on a collective or organizational basis. The composite management staff of all key line and staff departments, administered by the safety unit, can effectively determine the severity of all but the most difficult or unusual hazards.

The following sections represent a methodology adopted from the Military Standard 882E (MIL-STD-882E). Hazards are rated in terms of their effects on employees, passengers, transit system, property and/or the environment.

Hazard Severity

Hazard Severity relates to the subjective measure of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies, and/or procedural deficiencies for system, subsystem, or component failures or malfunctions, categorized as follows:

- **I (Catastrophic)** - Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies may cause death or major system/property/environmental loss.
- **II (Critical)** - Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies may cause severe injury or illness or major system/property/environmental damage.
- **III (Marginal)** - Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies may cause minor injury or illness or minor system/property/environmental damage.

- **IV (Negligible)** - Operating conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies will result in less than minor illness or injury or negligible system/property/ environmental damage.

Hazard Probability

This is the probability that a specific hazard will occur during the planned life expectancy of the system element, subsystem, or component. It can be described subjectively in potential occurrences per unit, events, population, items, or activity, ranked as follows:

- **A – (Frequent)** - Likely to occur frequently in life of an item; continuously experienced in fleet/inventory.
- **B – (Probable)** - Will occur several times in life of an item; will occur frequently in fleet inventory.
- **C – (Occasional)** - Likely to occur sometime in the life of an item; will occur several times in fleet/inventory.
- **D – (Remote)** - Unlikely but possible to occur in life of an item; unlikely but it can be expected to occur in fleet/inventory.
- **E – (Improbable)** - So unlikely, it can be assumed the occurrence may not be experienced; unlikely to occur, but possible in fleet/inventory.

The combination of severity and probability associated with a hazard is defined as hazard risk. The hazard risk can be described using the alphanumeric identifier established using the definitions provided above.

It is important to determine in advance the exact mechanism for implementation of this process. The plan provides for an administrative review process, should a consensus on categorizing a specific hazard prove too difficult to achieve. Included in the administrative review process, the plan provides for a mechanism that may provide for outside assistance, as necessary.

Hazards identified on an ongoing basis enter the formal process, the same as those identified by formal analyses techniques associated with new procurement and new system construction. All employees involved in the hazard identification process know and understand their respective roles.

Hazard Resolution

Hazard Resolution is the analysis and subsequent actions to reduce to the lowest level practical, the risk associated with an identified hazard. Hazard Resolution is not synonymous with hazard elimination. In the fixed guideway transit systems environment, some hazards are impossible to eliminate and others are highly impractical to eliminate. Using protective and warning devices or special procedures are ways to consider a reduction of risk. Some hazards present unacceptable risks because of severity and high probability. These hazards are the first priority for risk reduction through mitigation and hazard management.

Part of the Hazard Resolution procedure is a predetermined matrix prescribing which identified hazards are acceptable, undesirable (acceptable with mitigation), and unacceptable. Once this matrix is defined by the RTA/RTS, deviation from the prescribed resolution process should occur only through approved, predetermined channels. The Figure below provides a Sample Hazard Resolution Matrix - provided for use by the RTA/RTS.

Figure Hazard Resolution Matrix (Sample)

Hazard Resolution Matrix				
	I ***Catastrophic***	***II*** ***Critical***	***III*** ***Marginal***	***IV*** ***Negligible***
A **Frequent**	**UNACCEPTABLE**	**UNACCEPTABLE**	**UNACCEPTABLE**	***Acceptable(WR1)***
B **Probable**	**UNACCEPTABLE**	**UNACCEPTABLE**	UNDESIRABLE	***Acceptable(WR1)***
C **Occasional**	**UNACCEPTABLE**	UNDESIRABLE	UNDESIRABLE	**ACCEPTABLE**
D **Remote**	UNDESIRABLE	UNDESIRABLE	***Acceptable(WR1)***	**ACCEPTABLE**
E **Improbable**	***Acceptable(WR1)***	***Acceptable(WR1)***	***Acceptable(WR1)***	**ACCEPTABLE**
Acceptable(WR1)**—ACCEPTABLE with review by management staff**				

Coordinating with the State Oversight Agency

Hazards shall be reported in a monthly report to the NJDOT SSO program so that the NJDOT SSO program stays informed about hazard status and corrective action plans undertaken to reduce hazard risk. The monthly reports must be submitted to the NJDOT SSO program no later than the 15th of each month. The corrective actions shall be reported with the anticipated date of the correction being implemented. That initial corrective action implementation date shall not be deleted in subsequent monthly reports. Should the implementation date change, that changed implementation date shall be added to subsequent reports.

Unacceptable Hazardous Conditions

Notification of UNACCEPTABLE Hazardous Conditions

During the application of the hazard management process, should the RTA/RTS determine that the current risk assessment of the hazard identified is "unacceptable" using the criteria and assessment process specified in its SSPP, the RTA/RTS must notify the NJDOT SSO program Point-of-Contact within twenty four (24) hours or by 5:00 p.m. on the next regular working day following the determination that the hazard is unacceptable. Documentation of the unacceptable hazard must also be transmitted to the NJDOT SSO program.

Investigation of Significant Hazardous Conditions

The RTA/RTS must investigate a hazard reported to the NJDOT SSO program as unacceptable in accordance with the provisions specified in its SSPP and the Accident/Incident Procedure submitted to and approved by the NJDOT SSO program. The RTA/RTS maintain a file of hazards reported to the NJDOT SSO program and make them available to the NJDOT SSO program upon request.

The RTA/RTS must submit an initial report of its investigation of the unacceptable hazard within seven (7) calendar days of the hazard being reported to the NJDOT SSO program. Status Reports are thereafter required to be submitted to the NJDOT SSO program to provide updates until the investigation is completed. A final investigation report of the unacceptable hazard is prepared upon completion of the investigation and includes a description of activities, findings, identified causal factors and a corrective action plan.

The report is submitted to the NJDOT SSO program for review, and within thirty (30) days of receipt, the NJDOT SSO program will issue to the RTA/RTS written approval of the report. In the event the NJDOT SSO program does not accept the report, the NJDOT SSO program will communicate in writing the area(s) of disagreement or concern. The report shall not be considered final until all conditions are met and the report is approved by the NJDOT SSO program.

As required, the RTA/RTS will develop a Corrective Action Plan to correct those elements or activities identified as deficient. Procedures associated with the development of corrective action plans are also submitted to the NJDOT SSO program for review and approval of corrective action plans are also submitted to the NJDOT SSO program for review and approval.

At all times, the NJDOT SSO program reserves the right to conduct independent investigations of identified unacceptable hazards. If the NJDOT SSO program determines that an investigation is required, the NJDOT SSO program will notify the RTA/RTS no later than seven (7) calendar days following receipt of the RTA's/RTS's initial report.

NJDOT SSO Review of Hazard Management Process

The NJDOT SSO must periodically review the RTS/RTA Hazard Management Process using the attached Conformance Checklist, to ensure that it contains the following:

(1) The description in the System Safety Program Plan (SSPP) must contain the required elements.
(2) It must be executed in accordance with the description in the SSPP.
(3) The Hazard Tracking Logs contain necessary content and are being updated regularly.
(4) Deliverables are provided to the SSO on time.
(5) Meetings are being held and minutes adequately documented.
(6) Hazards are being resolved according to prioritization.

SUMMARY CONFORMANCE CHECKLIST
FOR REVIEW AND APPROVAL OF HAZARD MANAGEMENT PROCESS

FIXED GUIDEWAY SYSTEM:_____

_____

REV. NO: _____

NO. _____ **ITEM** _____

PLAN TITLE: _____

_____

DATE: _____

NO. _____ **ITEM** _____

		ACCEPTABLE	UNACCEPTABLE			ACCEPTABLE	UNACCEPTABLE
1	Clearly stated Hazard Management Process: - Identification - Assessment - Resolution and Corrective Actions - -Hazard Management Log - -Notification to OSSO and other agencies - -Reporting to OSSO and other agencies			13	Does the FGT System have a monthly safety meeting of department managers including the System Safety Manager and System Security Manager and police at which all accidents, incidents, hazards and security concerns are discussed?		
2	Defined responsibilities of FGTS/RTS personnel for the implementation and management of the Hazard Management Process						
3	Specific sources of and the mechanisms and methods to support the hazard management process						
4	Defined process for the assessment of identified hazards						
5	Methods for notification to OSSO, NTSB, OSHA and, or other agencies for incidents meeting the reporting thresholds						
6	Mechanisms for tracking hazards from identification to closure						
7	Methods by which ongoing reporting is provided to OSSO and other regulatory parties						
8	Verification of a Hazard Tracking Log for organized tracking of identified hazards						
9	Methods by which FGTS/RTS departments participate in the reporting of hazards						
10	Established hazard identification, assessment, and resolution criteria as stated in the SSPP and associated procedures						
11	Identification of the investigation process in response to hazardous conditions						
12	Report hazards: Does the monthly report to the OSSO contain accidents, incidents, hazards together with their corrective actions						

THE HAZARD MANAGEMENT PROCESS IS:

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

Appendix L

Internal Safety and Security Review Process

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Procedure for Conducting Internal Safety and Security Compliance Reviews/Audits

Purpose

The purpose of this procedure is to provide guidelines by which the rail transit agencies (RTAs)/rail transit systems (RTSs) conduct functional internal safety and security compliance reviews/audits. These compliance reviews ensure the implementation of the RTA's/RTS's System Safety Program Plan (SSPP) and System Security Plan (SSP)/Security Emergency Preparedness Plan (SEPP) and evaluates whether or not the implementation of these programmatic activities are performing as intended. The results of internal safety and security reviews are reviewed and approved by the New Jersey Department of Transportation (NJDOT) State Safety Oversight (SSO) program – Office of Fixed Guideway Safety and Security Oversight (OSSO). Among the purposes of this procedure is that the RTA/RTS complies with 49 CFR Part 659 subsections 659.23, 659.25 and 659.27.

Scope

The scope of this procedure requires the RTA/RTS to conduct annual internal safety and security audits/reviews to evaluate compliance with the SSPP and SSP/SEPP, measure their effectiveness, and summarize in a report safety and security activities that have been undertaken, on an ongoing basis throughout the year. The RTA/RTS submits a copy of its Annual Safety Activities Report and Safety and Security Audit Report to the NJDOT SSO program by February 12th of the following year. The report includes the results of the internal safety and security audit/review process and includes other audits performed during the preceding year. The safety and security annual reports may be separate documents.

Internal Safety and Security Audit/Review Process

Requiring the Internal Safety and Security Audit/Review Process

The Internal Safety and Security Audit/Review Process, a formal process of managing a safety and security program ensures that all elements in a given transit system's environment are in place and performing as specified. The internal safety and security audit/review process is used to determine if all organizational elements, equipment, procedures, and functions are performing as intended from a safety and security perspective. As described in the RTA's/RTS's SSPP and SSP/SEPP, the process is a part of the overall safety and security programs implemented to provide safe and secure transportation of fixed guideway transit system passengers, employees, operations, maintenance personnel, contractor programs, and the protection of property. The RTA/RTS describes its process to ensure that planned and scheduled internal safety and security reviews are performed to evaluate compliance with the SSPP and SSP/SEPP including:

- Identification of RTA/RTS Departments and functions subject to review
- Responsibility for scheduling reviews
- Process for conducting reviews, including the development of checklists and procedures and the issuing of findings

- Review of reporting requirements
- Tracking the status of implemented recommendations
- Coordination with the NJDOT SSO program

Conducting the Internal Safety and Security Audit/Review

The RTA/RTS should notify the NJDOT SSO program at least thirty (30) days before conducting an audit/review and provide the checklist. The NJDOT SSO program may attend the audits so the SSO program staff must be advised of any schedule changes date and time of audits. All elements of the safety and security programs are to be completed within a three-year cycle. An annual report documenting the safety and security audit/review activities and the status of subsequent findings, recommendations and corrective actions must be provided to the NJDOT SSO program.

Audit/Review Responsibility

The RTA/RTS identifies the unit or divisions of responsibility for oversight of the internal safety and security audit/review process. The unit responsible for the conduct of the audit/review should not be the unit in charge of the implementation of the SSPP and SSP/SEPP items being audited. The same audit team does not have to be used for all of the audits and may vary depending on the department being audited. All members of the audit team(s) should have their name listed on the audit checklist(s). A consultant or contractor may do the audit but the Safety or Security department management are responsible for the respective internal audits. The NJDOT SSO program staff are required to be invited to each audit and may be represented by SSO or consultant staff.

Employee and Contractor Safety and Security Programs

Verification of employee compliance with the requirements of the safety and security programs is accomplished through surveys, inspections and analysis of injury and illness reports, and incident reports.

Verification of Contractor compliance is accomplished through reviews of contract specifications, testing, and inspection of contractor performed work activities at the RTA/RTS, and at sites controlled or owned by the RTA/RTS.

Internal Safety and Security Audit/Review Procedures

Schedule: A three-year audit/review schedule must be developed by the RTA/RTS which addresses all required 24 elements of the SSPP and all five (5) required topics of the SSP/SEPP. The safety and security elements and topics should be generally equally divided over the three years. It is the RTA's/RTS's General Manager's/chief executive officer's responsibility for internal safety and security audits for the year to be completed before the start of the NJDOT SSO program Triennial review/audit.

Checklists

The RTA/RTS Department conducting the audit/review prepare a list of items from the approved SSPP and SSP/SEPP that will be the subject of the audit/review. The items are provided on a checklist to the department under audit/review, which then produces the necessary documentation. Checklists should be developed to ensure that each of the 24 SSPP elements and 5 SSP/SEPP elements and topics audited clearly identified and sufficient criteria to assess compliance are included. A requirement for the spot checking of individual records, such as maintenance records or personnel qualifications and certifications can be included.

For the security program developed checklists which require the review and/or release of security-sensitive information, the required precautions to ensure the protection of this information must be followed.

Audit checklists are part of the permanent record of the agency together with the audit corrective actions/tracking and the annual report(s).

Reporting of the Internal Safety and Security Audit/Review Process

The RTA/RTS Department conducting the audit/review receives the formal documentation of the audit/review. Results of audits/reviews are reported to General Management and relevant departments impacted by the audit. Audit/Review reports must list the observations and findings and required corrective actions. Corrective actions are to be developed and tracked by the assigned RTA/RTS Department for compliance and in accordance with an identified schedule to completion. Over the course of the year, the NJDOT SSO program should be sent a copy of each signed audit check list, the report, supporting documentation and corrective actions when each individual audit is completed. If necessary, the NJDOT SSO program will request additional information, clarifications or revisions from the RTA/RTS. This report should be sent to the NJDOT SSO program even if the NJDOT SSO program staff attended the audit.

Audit corrective actions are to be shown in the monthly reports to the NJDOT SSO program.

The NJDOT SSO program should receive copies of all audits, reviews and inspections and any corrective actions necessary.

Internal Safety and Security Audit/Review Annual Report is (separate safety and security annual reports may be submitted) submitted to the NJDOT SSO program not later than February 12th of the following year. Contents of this report relevant to the safety and security audit/review process include, but are not limited to:

- A listing of the internal safety and security audits/reviews conducted that year
- A discussion of where the RTA/RTS is in meeting its three-year internal safety and security audit/review schedule, including any issues regarding meeting the schedule and any proposed mitigation measures
- An updated schedule for the next year's audits/reviews
- The status of all findings, recommendations and corrective actions resulting from the suits/reviews conducted that year

- Any challenges or issues experienced by the RTA/RTS in obtaining action from or compliance with the findings, recommendations and corrective actions during that year. This applies to both safety and security related program elements.

The NJDOT SSO program will review and approve annual report(s) within thirty days of submission of the report(s). If necessary, the NJDOT SSO program will request additional information, clarifications or revisions from the RTA/RTS. The NJDOT SSO program will accommodate meeting with the representatives of the RTA/RTS to address any issues identified by the NJDOT SSO program during its review of the report.

The annual report(s) must be accompanied by a formal letter of certification signed by the RTA's/RTS's General Manager or chief executive indicating the RTA/RTS is performing in compliance with the SSPP and SSP/SEPP. If areas of noncompliance are identified, the chief executive must identify the activities the RTA/RTS will take to achieve compliance. The certification is reviewed and approved by the NJDOT SSO program.

Internal Safety and Security Review Summary Conformance Checklist

SUMMARY CONFORMANCE CHECKLIST
FOR CONDUCTING INTERNAL SAFETY AND SECURITY REVIEWS

FIXED GUIDEWAY SYSTEM:_____ _____ REV. NO: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE	PLAN TITLE: _____ _____ DATE: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE
1	Is the purpose of the review clearly stated in the System Safety Program Plan (SSPP) and System Security Plan (SSP)?			9	Verification of checklists for conducting Internal Audits/Reviews of each of the SSPP and SSP elements. Were checklists and supporting documents provided reasonably in advance to the OSSO?		
2	Scope of the review to address all elements of the SSPP and SSP. Is/Are the audit team(s) properly staffed with the system safety manager and other suitable individuals (or an appropriate police audit team).			10	Verification of formal documentation and reporting of the audit findings, observations, and any corrective Actions Required. Was the OSSO sent a copy of the individual audit checklists/reports as they were completed?		
3	Are all elements of the SSPP and SSP performing or functioning as Intended?			11	Overall schedule for audits/reviews. Did the OSSO receive the schedule for the audit at least 30 days in advance of the audit?		
4	Are the Fixed Guideway Transit System, PD personnel responsible for the implementation of the SSPP and SSP Identified?			12	Verification of submission of annual reports. Was the OSSO sent the annual report(s) by the FGTS/RTS (or Police)?		
5	Verification of employee compliance with the requirements of the Safety and Security Programs.			13	Verification of formal letter of certification from FGTS/RTS CEO / Police Chief indicating compliance with the requirements of the SSPP and SSP.		
6	Are departments to be audited notified of the audit schedule? Is this a surprise audit? Is notification to the OSSO given 30 days prior to the audit?			14	Identification of any areas in need of Improvements in order to meet the requirements of the SSPP and SSP. Are corrective actions set out with a schedule and the person responsible identified?		
7	Are departments to be audited of aware of their responsibilities under the Safety and Security programs established?			17			
8	Verification of Individual records, qualifications, and personnel qualifications.			18			

THE SYSTEM SAFETY PLAN IS:

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Concurrence by Manager/Supervisor, OFGSSO: _____ **DATE:** _____
Conformance Checklist Form (For NJDOT Use Only)

Comments

Appendix M

NJDOT SSO Program Inspections Procedure

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Inspection Program

Overview

As part of ongoing risk monitoring (described SSOPS Section 1 and in Procedure SSO-008), the NJDOT State Safety Oversight (SSO) program intends to conduct independent inspections of issues that have been identified either by the Rail Transit Agency/ Rail Transit System (RTA/RTS) or from data/information tracking and analysis (risk-based, data-driven). The SSO program will inform and schedule with the RTA/RTS any inspections which should include appropriate RTA/RTS staff such as for safely inspecting track or catenary/third rail locations. Other planned on-site interviews, discussions, or inspections will be coordinated by the SSO program. If during these onsite inspections, a concern arises that constitutes an immediate threat to safety on the rail system, the RTA/RTS staff and management will be required to respond immediately and appropriately to reduce that safety hazard to an appropriate level. Any issues or findings will be provided to the RTA/RTS in writing as a request for explanation from the RTA/RTS of appropriate risk controls or mitigations. Any CAPs needed will be developed according to standard procedures and as discussed in SSOPS Section 8.

Objective

To document a RTA's/RTS's existing field inspection, maintenance, emergency repair and capital improvement procedures are in accordance to public safety and applicable operating rules. In addition the inspection program documents the condition of passenger stations, infrastructure, operating facilities, rail passenger vehicles, rail maintenance equipment, emergency exits to ensure they are in accordance to public safety and applicable operating rules. To accurately and thoroughly record, observations made during an inspection, in a report as evidence in support of found deficiencies and hazards. Inspections will be both announced and unannounced to the RTA/RTS.

This document seeks to standardize the Inspection Program as much as possible as well as to standardize the items deemed critical for public safety. This document will also assist staff in evaluating which conditions shall be the focus of the inspection, identifying and documenting hazards observed, notifying the properties of identified hazards to be mitigated, tracking mitigation and documenting close out of the hazards once they have been successfully mitigated.

This document identifies a minimum standard for accomplishment of all types of inspections made by the Office of Fixed Guideway Safety and Security Oversight (SSO) and tracking mitigation of all hazards by the RTA/RTS.

Frequency of Inspection

All RTA/RTS passenger stations, infrastructure, operating facilities, rail passenger vehicles, rail maintenance equipment and emergency exits should be inspected at least once annually.

All RTA/RTS existing field inspection, maintenance, emergency repair and capital improvement and revenue service procedures should be observed and inspected as opportunity presents itself or at least once annually.

Preparation for Inspection

If available the last inspection report(s) should be reviewed in order to familiarize staff with known deficiencies. Prior to the inspection, if possible, make a working copy of the last inspection report in order to follow up on previously known observations, hazards and comments.

For more difficult inspections, a team approach may be appropriate in order to capture the information properly and safely.

Notify the properties' Safety Officer and Operations Control Center in advance to make them aware of locations of the inspectors intended presence, intended purpose, types of inspections to be conducted, taking photographs and recording observations.

Specific preparation for each type of inspection would be as follows:

- **Passenger Station Inspections** – Review previous inspection reports. Secure appropriate form or checklist. Determine if there are any active capital improvement projects planned or underway, determine if there are any unique operating circumstances that could be observed while conducting the inspection. Review and familiarize yourself with the Systems Safety Plan for specific references for the infrastructure and to help determine if there are any observations that conflict.
- **Infrastructure Inspections -** Review previous inspection reports. Secure appropriate form or checklist. Determine if there are any unique operating circumstances that could be observed while conducting the inspection. Determine if there is repair or maintenance work scheduled for the infrastructure. Obtain a copy of any available plans to assist in orientation. Review and familiarize yourself with the Systems Safety Plan for specific references for the infrastructure and to help determine if there are any observations that conflict.
- **Operating Facility Inspections -** Review previous inspection reports. Secure appropriate form or checklist. Determine if there are any active capital improvement projects planned or underway, determine if there are any unique operating or maintenance activities that could be observed while conducting the inspection. Obtain a copy of a plan view of the facility to assist in orientation. Review and familiarize yourself with the Systems Safety Plan for specific references for the facility and its operations to help determine if there are any observations that conflict.
- **Passenger Vehicle Inspections -** Review previous inspection reports. Secure appropriate form or checklist. Review and familiarize yourself with the Systems Safety Plan for specific references for the facility and its operations to help determine if there are any observations that conflict.
- **Maintenance Vehicle Inspections -** Review previous inspection reports. Secure appropriate form or checklist. Obtain a copy of a plan or vehicle specifications to assist in orientation. Review and familiarize yourself with the Systems Safety Plan for specific references for the vehicle and its operation to help determine if there are any observations that conflict.
- **Revenue Service Operation Inspections -** Review previous inspection reports. Secure appropriate form or checklist. Secure a copy of the Vehicle specifications to assist in

orientation. Review and familiarize yourself with the Systems Safety Plan for specific references for Revenue Service Operations to help determine if there are any observations that conflict.

- **Field Maintenance, Repair and Improvement procedure inspections -** Review previous inspection reports. Secure appropriate form or checklist. Determine if the activity to be observed is routine maintenance, capital improvement or emergency repairs and obtain a copy of the overall scope of work and description of the work planned for the date of inspection. Determine if there are any unique operating circumstances that could be observed while conducting the inspection. Obtain a copy of any available project plan to assist in orientation. Review and familiarize yourself with the Systems Safety Plan for specific references for the infrastructure in question to help determine if there are any observations that conflict.

Conducting Inspections

Proper identification and personal protective equipment must be worn while conducting the inspection and all inspectors are required to complete the specific property's own Railway Worker / On Track Protection Safety training.

During the inspection, address each item on the standardized checklist or form. If a written comment is insufficient to accurately describe a deficiency, then a photo and/or measurement should be taken and included in the finished report in order to accurately document the inspection is suggested.

All parts of the inspection checklist or form should be properly filled out in order to accurately document the inspection.

Any serious safety or security concerns should be documented an immediate notification should be made to the rail system property's Operations Control Center.

Post Inspection Process

All recorded observations and photographs are to be entered into an electronic version of the standard inspection form and submitted internally to the inspection program administrator within three (3) working days of the inspection being conducted. This should include: the inspection report, notes, comments and photos and any other information collected at the time of inspection. The reports will be reviewed, edited and a final copy printed and signed by the NJDOT Administrator for the Office of Safety and Security Oversight (SSO). The fully approved and signed copy will be filed in the current year's deficiency log folder and all hazards entered into the SSO's Accident and Incident Database (ACID).

The approved final inspection report(s) will be sent to the RTA/RTS requesting a response and intended corrective action for each of the hazards listed. This report should be sent no later than 10 business days from the date of inspection.

All reports will be sent to the people named in SSO-012.

Tracking Deficiencies and Hazards

After the Inspection reports have been received by the RTA/RTS, they are required to track all hazards reported. These safety hazards will be tracked and reported in the RTA's/RTS's monthly report to NJDOT SSO. The hazards need to be identified by the inspection number, list any corrective actions required to mitigate the hazard, and report the current status.

The SSO's ACID report will be used to track progress, responses and discussions held regarding each of the hazards indicated on the inspection report. All hazards will be discussed, updated, and closed by the RTA/RTS during their monthly safety meetings, which is captured in minutes and shared with the SSOA.

At the determination of the SSOA, all hazard close outs are subject to verification.

Station Inspection Checklist

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Station Inspection Checklist

Item	OK	N/A	N/I	Exc	Comment
Housekeeping – Station is clean with no excessive debris or spilled substances.					
Platforms – Surfaces are free of tripping hazards. Tactile warning edges are in good condition.					
Graffiti					
Handrails – Are they secure & functional, overall condition					
Seating – Surfaces are in good structural condition and are clean and usable.					
Windscreens – Clean with no broken glass					
Stairs and Ramps - Surfaces are free of tripping hazards.					
Stairway – In good condition with no defects in treads or nosing					
Signage – Signs are in good condition and well maintained.					
Signage - is adequate and consistent with established standards and from station to station.					
Warnings – Warnings of specific hazards are adequate to attract attention.					
Trash receptacles – Appear to be maintained and meet accepted standards.					
Life Safety Equipment (if any) – Is available marked and maintained.					
Fire Suppression – Any equipment is identified, appropriately placed and inspections are up-to-date.					
Storage – Facilities are locked and secure.					
Platform Guardrails – In place where appropriate with any necessary warnings in place.					
Station Public Address System – Is properly working.					
Variable Message Sign – Is properly working.					
Call for Aid Phone – Is properly working and well-marked.					

Notations

OK – Condition Acceptable
N/A – Not Applicable
N/I – Not Inspected
Exc – Exception Noted; see Comments

Item	OK	N/A	N/I	Exc	Comment
Emergency Communications (If any) – Working and well-marked.					
Payphones – In working order					
Station Lighting – Lighting appears adequate and working.					Daytime inspection
ELEVATOR INSPECTION					
Housekeeping – Elevator is clean with no excessive debris or spilled substances.					
Signage – Signs are in good condition and well maintained.					
Call for Aid Phone – Is properly working and well-marked.					
Elevator Car – Stops levels with outside floor at each floor stop.					
General Condition					
ESCALATOR INSPECTION					
Housekeeping – Escalator is clean with no excessive debris or spilled substances.					
Signage – Signs are in good condition and well maintained.					
General Condition					
PARKING LOT INSPECTION					
Parking Lot Lighting – Appears adequate and working.					
Parking Lot Surfaces – In good condition and free of debris and other hazards.					
Sidewalks – In good condition and free of hazards.					
Curbing – In good condition.					
Parking Lot Signage – Appropriate and in good condition.					
Painted Surface Warnings – Are in place and in good condition.					
Call for Aid Phone – Is properly working and well-marked.					
Miscellaneous – Other deficiencies noted					

Notations

OK – Condition Acceptable
N/A – Not Applicable
N/I – Not Inspected
Exc – Exception Noted; see Comments

Comment No.				
Classification:	☐	**Comment**	☐	**Hazard**
Location / Track				
Comment:				
Required Action:				
Photo 1			**Photo 2**	

Notations

OK – Condition Acceptable *N/I – Not Inspected*
N/A – Not Applicable *Exc – Exception Noted; see Comments*

Comment No.				
Classification:	☐	**Comment**	☐	**Hazard**
Location / Track				
Comment:				
Required Action:				
Photo 1			**Photo 2**	

Notations

OK – Condition Acceptable *N/I – Not Inspected*
N/A – Not Applicable *Exc – Exception Noted; see Comments*

NJDOT Inspector:		**Reviewed by:**	
			Signature
Date:		**Date:**	
Notification sent:		**Updated in ACID:**	

Notations

OK – Condition Acceptable *N/I – Not Inspected*
N/A – Not Applicable *Exc – Exception Noted; see Comments*

Train Inspection Checklist

RAIL VEHICLE CHECKLIST

RAIL SYSTEM: _____ **INSPECTION NUMBER:** _____

DATE: _____

FROM STATION: _____ **TIME** _____

TO STATION: _____ **TIME** _____

AS THE TRAIN ENTERS THE STATION OBSERVE THE FOLLOWING:
Leading Car No.: _____ **Number of Cars:** _____

ITEM	YES	NO	COMMENTS
Railroad Light – On			
Headlights – On			
Warning Sound Entering Station			
Warning Sound Departing Station			
Train Exterior Clean			

EQUIPMENT

CAR NUMBER	YES	NO	N/I*	DOOR NUMBERS
Car 1:				
Car 2:				
Car 3:				
Car 4:				
Car 5:				
Car 6:				

** N/I – Not Inspected*

CAR INTERIOR

ITEM	PASS	FAIL	COMMENTS
Cleanliness			
Seats			
Windows			
Floors			
Walls			
Graffiti			

CAR INTERIOR			
ITEM	**PASS**	**FAIL**	**COMMENTS**
Public Information System			
Volume			
Clarity			
Lighting			
Heating			
Air Conditioning			

OPERATOR OBSERVATIONS						
ITEM	**PASS**	**FAIL**	**COMMENTS**			
At Terminal Stations Operator is in Cab before Departure Time						
Announcements						
Clear						
Informative						
Volume						
Station Stops						
Stops Properly on Platform						
Makes Station Announcements						
Opens All Doors						
Interaction w/Public						
Operator Using Cellphone						
Police/Fare Enforcement on Board						
Ride Quality						
Sudden Starts/Stops Jerking Passengers						
Operator Observations	**1**	**2**	**3**	**4**	**5**	**COMMENTS**
Smooth Ride						
Entering Station						
Exiting Station						
Infrastructure (Track)						
Smooth Ride						

1 – Rough Ride to 5 – Smooth Ride

SAFETY DEFICIENCY OBSERVATIONS

COMMENTS/OBSERVATIONS

NJDOT INSPECTOR: ______________________ DATE: ______________

Emergency Exit Inspection Checklist

EMERGENCY EXIT INSPECTION CHECKLIST

LOCATION:_____ **INSPECTED BY:** _____

DATE: _____

NOTATIONS **OK** – Condition Acceptable **N/I** – Not Impacted
N/A – Not Applicable **Exc.** – Exception Noted; see Comments

ITEM	OK	N/A	N/I	Exc.	COMMENTS
Cleanliness – exit walkways and/or stairs are clean and free of wetness and debris					
Lighting – Lighting is in working condition and appears to be adequate					
Signage - Is adequate and consistent with established standards.					
Identification – Any lighted signage, "Blue Lights", etc. are lighted.					
Communication – Communication system is working and instructions for use are well marked.					
Warnings – Warnings of specific hazards are adequate to attract attention.					
Life Safety Equipment (if any) – Is available marked and maintained.					
Fire Suppression – Any equipment is identified, appropriately placed and inspections are up-to-date.					
Emergency Lighting – Is back-up lighting available and working					
Walking surfaces – In good condition and suitable for walking					
Stairs – In good condition					
CCTV – If any, is working.					
Doors – Equipped with crash bars to exit outward. Doors and operating mechanisms work freely					
Painted Surface Warnings – Are in place and in good condition.					

Shop Inspection Checklist

SHOP INSPECTION CHECKLIST

LOCATION:_____ **INSPECTED BY:** _____

DATE: _____ **TIME** _____

**inspect all equipment before use*

ITEM	IN COMPLIANCE	NOT IN COMPLIANCE	COMMENTS
MACHINES			
Guards in place			
Secured to floor or bench top			
Electrical cords in good condition			
Anti-restart & e-stop button within easy reach			
Barrier guards on moving machinery parts			
Belts/pulleys enclosed			
Bench grinders (1/8" tool rest, 1/4" tongue guard maximum clearances)			
WELDING			
Gas welding torches equipped with flashback arrestors			
Arc welders properly grounded			
HOUSEKEEPING			
Fire extinguishers inspected annually and monthly			
Oily rags kept in a labeled metal bin			
Is the worksite clean and orderly			
Waste containers kept clean and emptied daily			
Shop floor free from slip, trip, and fall hazards (water, oil, debris, etc.)			
Flammable and combustible liquids stored in fire cabinets when not in use			
Aisles and exit doors (means of egress) properly marked and kept clear			
Fire extinguishers, electrical cabinets and emergency equipment unblocked with a clear path			

ITEM	IN COMPLIANCE	NOT IN COMPLIANCE	COMMENTS
ELECTRICAL			
All plugs and cords are free from splices with insulation in good condition			
Extension cords have grounding conductors			
All electrical cabinets are kept closed			
PORTABLE TOOLS			
Electrical hand tools in good operating condition			
Tools free from cracks and broken parts			
Guards in place			
Hand-tools effectively grounded or an approved double insulated type			
LADDERS			
Ladders free from dents, splinters, grease, dirt etc.			
Ladders stored and secured			
Ladder feet are in good condition			
GAS CYLINDERS			
Cylinders legibly marked			
Cylinders stored secured upright and with valve protector caps			
Stored away from heat sources and falling objects			
Fuel gas and oxygen cylinders stored at least 20 feet apart or separated by a firewall			
HOISTS			
Load rating is marked and visible			
Hoists and load-bearing structures load tested and annually certified			
FALL PROTECTION			
Safety harnesses are free of damage and frays			
Gates to prevent falls are kept in the closed position			
MISCELLANEOUS			
Safety Data Sheets are available for all chemicals			

Workplace Inspection Checklist

WORKPLACE INSPECTION CHECKLIST

FACILITY:_____ **INSPECTED BY:** _____

DATE: _____

NOTATIONS **OK** – Condition Acceptable **N/I** – Not Impacted
N/A – Not Applicable **Exc.** – Exception Noted; see Comments

ITEM	OK	N/A	N/I	Exc.	COMMENTS
Housekeeping – work area should be clean and orderly. Floors free of debris, slipping and tripping hazards.					
Obstructions – walkways should be clear with no obstructions to safety equipment or exits.					
First Aid – Kits/stations should be well marked, maintained and easily accessible.					
Eye Wash/Shower Stations – Stations should be well identified, access clear and kept clean.					
Evacuation Plan –Evacuation plans posted. Do documents reflect drills and training					
Fire Extinguishers – Equipment is identified, appropriately placed and inspections are up-to-date.					
Machine Tool Guarding – Tool guards are in place and any interlocks are working.					
Equipment condition – Equipment is clean and in apparent state of good repair.					
Hand Tools – Hand tools are stored, kept clean and in good state of repair, not left lying about.					
Guardrails – Guardrails and toerails should be in place to prevent falls and falling/striking hazards					
Walkways – Marking and overall condition					
Postings – Information is relevant timely and postings are well maintained.					
Blue Light Protection – Rules and equipment for protection of personnel working on equipment.					
Blue Flag Protection – Rules and Equipment protecting of standing equipment on track.					
Hearing Conservation – High noise levels have been identified and protection is used where necessary. Safeguards are in place to protect workers when it in use. (Is hearing protection included as part of P.P.E.?)					

ITEM	OK	N/A	N/I	Exc.	COMMENTS
Lockout/Tagout – LOTO issues have been addressed and a program is in place. Unusual circumstances have been addressed.					
P.P.E. –There is a program established for P.P.E. and it appears to be working. P.P.E. is in use where needed.					
Spill Control – A spill control plan is in place and people have been trained.					
Cranes – Cranes and lifting devices are in good state of repair. There is a program of inspection and maintenance and are inspections up-to-date.					
Forklifts – Forklifts should be properly maintained with training provided					
HazMats – Hazmats are identified in storage and in use. MSDS info is readily available. Disposal of Hazmats have been addressed and communicated to employees.					

Appendix N

Process for Triennial Audits of RTAs/RTSs

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Procedure for NJDOT SSO Program Triennial Audit of RTA/RTS Safety Programs

The Part 674 approach to the rail transit agency (RTA)/rail transit system (RTS) Triennial Audit is essentially the same as the intended full Triennial Review required in Part 659 and described in the Federal Transit Administration's (FTA) best practices document – Recommended Best Practice (RBP) for States Conducting Three-Year Safety Reviews (March 2009), https://www.transit.dot.gov/oversight-policy-areas/sso-three-year-review-recommended-best-practices-march-26-2009-final.

Purpose

The purpose of a three-year safety and security review is to evaluate the RTA's/RTS's implementation of its SSPP and its SSP and/or SEPP. The three-year safety and security review involves examining:

- If the RTA's/RTS's SSPP and SSP/SEPP complies with the requirements of the NJDOT SSO program standard
- The adequacy of the RTA's/RTS's implementation of its SSPP and SSP/SEPP
- Fulfillment of 49 CFR Part 659 and employment of FTA's guidelines and guidance
- The RTA's/RTS's method of conducting its internal safety and security audit program including the identification, tracking, resolution of hazards and system safety and security program deficiencies.

The Safety and Security Review is done by the NJDOT SSO program to ascertain if the RTA/RTS, first, has a safety and security program that complies with the NJDOT SSO program standard and, second, that the RTA/RTS is implementing its SSPP and SSP/SEPP.

Through the performance of external safety and security reviews or audits by the NJDOT SSO program, the management of the RTA/RTS receives independent evaluations of the status of its safety and security effort, FTA's RBP (pages 4 and 5) identifies eight (8) distinct verification methods that are currently used by SSO agencies during their Three-Year Safety Reviews:

Triennial Audit Methodology

The Triennial Audit of the RTA's/RTS's rail transit system requires the successful completion of the following tasks, which are summarized in the following subsections:

(1) Building Knowledge and Tools
(2) Planning and Preparation
(3) Completing Onsite Activities
(4) Reporting and Corrective Actions.

This Triennial audit approach is intended to be transparent as well as efficient, effective, and sustainable, allowing the required activities to be completed within current grant funding levels

now and for future Triennial Audits and ongoing Risk Monitoring activities (as required in Part 674) at each RTA/RTS.

Building Knowledge and Tools

(1) **Triennial Audit Plan**. The SSO program audit team will meet with NJDOT SSO staff to go over the preparation and analysis activities, and develop the Triennial Audit Plan. Once the Triennial Audit activities commence, the Triennial Audit Plan will be used to manage schedule and resources, tracking progress of all planned activities to completion.

(2) **Audit Scope**. The NJDOT SSO program defines the triennial time period to match the RTA/RTS last three years of internal safety program audits. The NJDOT SSO program triennial audit includes at least the RTA/RTS last three years of internal safety audits, investigations, and resolution of CAPs to be reviewed and physically checked for appropriate resolution. This audit scope is intended to be synergistic with ongoing risk monitoring activities at the RTA/RTS.

(3) **RTA/RTS Notification**. In the year that the triennial audit is due, the NJDOT SSO program will communicate with the RTA/RTS to determine an appropriate timeframe for the triennial audit. The NJDOT SSO program will notify and schedule with the RTA/RTS for the planned on-site portion of the triennial audit, at least 60 days in advance of the on-site activities. This is typically done as part of existing on-site quarterly meetings.

(4) **Documentation Collection**. A list of documents will be collected to be reviewed and analyzed for the Triennial Audit. Primary documents of interest include RTA/RTS rail transit programmatic and process level documents related to operations, maintenance, infrastructure and vehicle issues, and safety (and security), with a focus on the RTA's/RTS's minimum standards for safety.

<u>Documentation List</u> (see existing list used in 2017)

(a) System Safety Program Plan (SSPP)
(b) System Security Plan (SSP)
(c) Organizational Chart
(d) Safety and Security Policy Statements
(e) Operating Rulebooks
(f) Emergency Response Procedures
(g) System safety and security statistics for the most recent three year period prior to the review.
(h) Inspection and Maintenance Manuals, including standards (this request would be targeted to the rail systems and infrastructure being audited)
(i) SOPs related to the rail systems and infrastructure being audited, including command and control
(j) Other relevant documentation, as determined by the analyses activities and discussions with ODOT.

(5) **Complete Document Review Verification for Triennial Audit**. Once the documentation is collected, it is reviewed and analyzed to address the requirements of the RBP for the Document Review verification method across all 24 elements of the SSPP.

(6) **Complete Detailed Review of Program Plans** (see page 9) – A detailed review of the System Safety Program Plan (SSPP) is required to be completed using the NJDOT SSPP Checklist (Appendix J, Exhibit B). The Security Program Plan (SSP) is also required to be completed separately using the NJDOT SSP Checklist (Appendix I, Exhibit A)

(7) **Collect Risk Data and Analysis**. The NJDOT SSO program collects significant safety information from the RTA/RTS rail systems. The following data and information will be collected, reviewed, and analyzed to support the sampling used in the Triennial Audit.

(a) All RTA/RTS investigations, including reports and related CAPs for the previous three years, as well as the current year.

(b) All safety/security program related internal audits for the current and previous three-year cycle, including all Audit Reports and CAPs. This includes the related findings and recommendations.

(c) The previous Triennial Audit report, completed templates, and CAPs.

(d) All Investigation and Audit CAP closure data and evidence for the previous three years.

(e) Close call/Occurrence/Hazard data and information for the previous three years.

(f) The RTA's/RTS's safety data and information analyses from the previous three years, such as from the executive safety committee meetings.

(g) FTA Audits of the SSO program – the previous two FTA Audits. This activity will focus on the findings and recommendations directed towards the RTA/RTS, and SSO program progress towards completing the corrective actions (what was determined to be an appropriate response and what was actually accomplished to close the CAPs).

(8) **Complete Data Analysis to Identify High-Priority Topics for Triennial Audit**. The audit team will complete an analysis of these compiled data sets to determine the Triennial Audit sampling of topics within each of the safety program elements/topics, including the minimum standards for safety. This analysis is documented in a separate report, updated annually. The use of this analysis will maximize audit effectiveness and efficiency by placing priority on previously-identified areas of risk, including a check for implementation and effectiveness of related and closed CAPs. The close call data that was used for the FTA's Safety Advisories and for Hazard data reporting will be used to focus on potential emerging risk and an opportunity to be predictive. This analysis activity will be further enhanced over time through experience and developing the Part 674 Risk Monitoring capabilities. Previous safety-related events and internal audit findings will be reviewed and assessed for effectiveness of resulting changes and mitigations.

(9) **Complete Rules and Records Verification for Triennial Audit**. In addition, based on the FTA RBP for the Rules and Records verification categories, the audit team will analyze the RTA/RTS rules and records across all elements and topics of the safety program documents and minimum safety standards, as appropriate. Results of this part of the audit will be used to advise the rest of the Verification methods for the audit. The

amount of records reviewed will be expanded in Triennial Audits over time based on lessons learned through this audit and ongoing Risk Monitoring.

Planning and Preparation

(10) **Progress Meeting at NJDOT**. The audit team will meet with NJDOT to review the analyses and progress through the first three Verification Categories (Documents, Rules, and Records Reviews) and preparation for the on-site portion of the Triennial Audit.

(11) **Audit Template Development and Schedule.** For each of the program documentation elements or groups of elements, a template is used to document details to be checked, interviews of RTA/RTS staff (and other related staff), and inspections of locations, equipment, and/or documents (Appendix N, Exhibit B). The completed audit templates should be shared with the RTA/RTS at least 30-days in advance of the on-site visit. The draft templates are provided ahead of time to facilitate the scheduling of interviews, inspections, and documentation review. Invitations to FTA headquarters and regional offices and the Transportation Security Administration (TSA) should be made with sufficient time for them to schedule the time to attend. All of this information is a part of the Audit Plan. The NJDOT SSO program audit team typically coordinates with the RTA/RTS Safety Department staff for all scheduling.

(12) **Coordination with the RTA/RTS.** The NJDOT SSO program audit team continues to communicate with the RTA/RTS as the triennial audit on-site week approaches to share information about any changes, to provide the list of team members that will attend, and to update the interview times and personnel schedule for each interview/inspection. The on-site activities will be planned ahead of time, but will need to be flexible because of conflicting schedules and activities at the RTA/RTS during the on-site visit.

(13) **Complete Update of Triennial Audit Plan**. The Triennial Audit Plan will be a living document, providing flexibility as some activities are completed and other activities are scheduled/re-scheduled until all required Triennial Audit reviews, interviews, and inspections are completed.

Completing Onsite Activities

(14) **Contractor Safety Training.** All members of the NJDOT SSO program audit team will need to have current track access training from the RTA/RTS. Typically, the RTA/RTS will need to be available on the first day to provide track safety training to all of the team members prior to the start of the data collection on-site inspections and interview events that require access to the RTA/RTS Facilities and Right-of-Way locations.

(15) **Observation Ride.** At least one member of the audit team will ride a major portion of the RTS and observe its equipment, stations and how it is operated. Observations should be written for future documentation.

(16) **On-site Briefings.** The NJDOT SSO program on-site audit team will provide opening and closing briefings for the RTA/RTS staff during the on-site visit. These briefings will be focused on sharing activities to be completed and any observations from the preparation and completion of the on-site interviews and inspections. The entire Triennial Audit is intended to be transparent, with all aspects shared with the RTA/RTS management and staff.

(17) **Complete Interviews (Senior, Safety, and Other Staff); Field Observations; and Control, Logistics, Office and Maintenance Facility Inspections and Measurements Verification for Triennial Audit.** The Triennial Audit Team will complete all on-site activities based on an approved schedule and checklists. This will include a team of 3 to 5 people (NJDOT and contractor staff). The audit team typically covers all of the interviews and inspections in two groups to assure that all topics and issues can be covered. Each audit team member is responsible for taking notes, collecting documentation, and taking photos of all activities completed. This documentation is then added to the templates each evening of the on-site activities. At least one person on the audit team will be responsible for consolidating all of the notes and documentation for each topic of the on-site audit activities. An additional trip may be required to follow up on questions or rescheduled activities.

Reporting and Corrective Actions

(18) **Complete Triennial Audit Draft Report.** The draft triennial audit report will be completed and shared internally with NJDOT management and with the RTA/RTS for review, input, and edit. The report will include both findings and recommendations. The effort to draft this report typically takes 30-45 days after the on-site visit.

(19) **Draft Triennial Audit Report for RTA/RTS Review**. If there is a need to meet to discuss issues or questions from the draft report, this will be completed either via teleconference or in person as scheduled by the RTA/RTS and the NJDOT SSO program team. Any disputes of specific findings or recommendations will either be resolved via communications between the parties or will be documented in the report if not resolved. Any changes or corrections from the RTA/RTS will be incorporated into the Triennial Audit Report at this point.

(20) **Final Triennial Audit Report and CAPs.** Once the triennial review and audit report is finalized (including internal approval by NJDOT management), it is delivered to all parties – NJDOT SSO program team, RTA/RTS staff, and any other participants (such as FTA staff). With the delivery of the final triennial report, the RTA/RTS will be requested to develop appropriate CAPs to address all findings and recommendations. This is usually accomplished within 30 days after delivery of the final triennial report.

(21) **CAPs Approval**. The RTA/RTS will submit the CAPs developed from the final triennial report for the NJDOT SSO program team to review and approve. If there are any issues or questions with these CAPs, the NJDOT SSO program team will contact the RTA/RTS staff to share specific comments and issues. A CAPs tracking table will be developed and include the recommendation/finding, CAP developed by the RTA/RTS, any comments from the NJDOT SSO program, RTA/RTS person assigned responsibility, and date CAP is due to be resolved. Once the CAPs are agreed to, the NJDOT SSO program will formally approve the RTA/RTS CAPs via letter. At that point, the CAPs will be added to the RTA/RTS monthly CAP status document and tracked until completion and evidence of completion collected.

Verification Methods

FTA's RBP (pages 4 and 5) identifies eight (8) distinct verification methods that are currently used by SSO agencies during their Three-Year Safety Reviews:

- **Document Review**: Sampling the RTA's/RTS's SSPP and referenced and/or supporting procedures to ensure that each required element of the State's Program Standard and 49 CFR Part 659 is addressed.
- **Rules Review**: Sampling the RTA's/RTS's operating rules and bulletins and maintenance rules and procedures to determine if they have been reviewed and updated on a regular basis, if they have been distributed to appropriate RTA/RTS personnel as specified in the SSPP, if training has been offered, and if this process has been tracked.
- **Records Review**: Sampling of the RTA's/RTS's records for evidence of implementation of the SSPP and referenced or supporting procedures. Records reviewed and/or sampled may include, but are not limited to, training records, records of employee rules compliance checks, internal safety audit reports, maintenance inspection reports, minutes of safety committee meetings, etc.
- **Interviews with RTA/RTS Senior Management**: Discussions held with senior RTA/RTS management, including the RTA's Chief Executive Officer (CEO), to assess their knowledge of the RTA's/RTS's safety program, as specified in the SSPP and referenced or supporting procedures, and to gauge their commitment to the safety program.
- **Interviews with RTA/RTS Safety Personnel**: Discussions held with RTA/RTS safety personnel, including the Chief Safety Officer, to assess implementation of the RTA's/RTS's safety program, to identify issues in its implementation, and to highlight areas of compliance and non-compliance with Part 659 requirements.
- **Interviews with Other RTA/RTS Personnel**: Discussions held with other RTA/RTS personnel (including a representative sample of rank and file operations and maintenance personnel) to verify their understanding of requirements specified in SSPP and referenced or supporting procedures.
- **Field Observations**: Observations and sampling conducted on-site at the RTA/RTS to observe implementation of the processes and procedures described in the SSPP and supporting or referenced documents, procedures and materials related to the RTA's/RTS's safety program.
- **Inspections and Measurements**: Inspections and measurements conducted on-site at the RTA/RTS to ensure that the RTA's/RTS's infrastructure and equipment is maintained to the specifications identified in the RTA's/RTS's standards, procedures, and manuals.

Each of these verification methods has specific strengths and limitations. To adequately assess implementation of each of the 21 SSPP elements required in § 659.19, FTA believes that more than one verification method should be used.

Sampling Rate

The RBP indicates that a sampling approach should be developed, but it does not indicate what that sampling rate should be. The audit process is not expected to be 100% of the rail system, and generally, the higher the sampling rate, the higher the cost will be for the Triennial Audit. The Triennial Audit approach described here addresses all of FTA's verification methods described in the RBP focused on the interim Agency Safety Plan (ASP), which is the Part 659 compliant RTA/RTS SSPP. In the future, this process will mature, along with Risk Monitoring described in

the program standard and procedure SSO-008, and focus on the Agency Safety Plan and the safety management system (SMS) as these processes are developed and implemented at the RTA/RTS.

The point of this full Triennial Audit will be to address Part 659 compliance, and then build on that experience to make future Triennial Audit cycles more sophisticated and effective at measuring the risk environment and identifying potentially unmitigated risk at the RTA/RTS. As a focus in developing this proposed Triennial Audit process, there is a need to build "corporate knowledge" of the RTA/RTS rail transit systems' safety performance and risk environment through experience, data collection, and analysis of risk-related information. This information includes experience with investigations, internal audits, close calls/hazards, and completion of CAPs. At first, these analyses will be used to corroborate lagging indicators and then can be developed into leading indicators to be used in preventing future safety events. Further, the results of this data and information analyses will be used in targeting/developing the audit sample sets, focused on safety events that have occurred (rather than based on a random sample principle) and explore the effectiveness of CAPs implementing mitigations to control risk experienced within the rail transit system.

This sampling approach allows the Triennial Audit process to be systematic and provide a programmatic feedback loop to address any remaining unmitigated risk or address mitigations that are not fully successful in managing risk to a level as low as reasonably practicable (ALARP). This approach also enables the SSO program to get a jump-start on developing the Part 674 compliant risk monitoring data and information analysis tools and activities, including verification of CAPs implementation evidence and effectiveness (risk monitoring also discussed in procedure SSO-008).

Current Procedure for Conducting the Three-Year Safety and Security Reviews

This procedure for the three-year safety and security reviews is focused on how each element of the RTA's/RTS's system safety program plan (SSPP) and topic of the system security plan (SSP)/security and emergency preparedness plan (SEPP) will be reviewed by the NJDOT SSO program.

Safety and Security Review Process

The NJDOT SSO program informs the RTA/RTS several months in advance of the start-up of the three year review.

The following steps outline the process used to perform a safety and security review of the RTA's/RTS's implementation of its SSPP and SSP/SEPP:

- Review the fixed guideway transit system's SSPP and SSP/SEPP for compliance with the NJDOT SSO Standards and Procedures.
- Employ the safety and security review checklist(s). The NJDOT SSO program reviews the checklist(s) updated them as necessary to assure they are reflective of recent laws, regulations and FTA, NTSB, DHS or industry guidance.
- The Safety and Security Review process, when completed, will consist of a report with a series of checklists and any corrective actions.

Safety and Security Review Schedule

The audit review usually ranges from about four to eight days depending on what documents have been reviewed in advance. When the audit team determines who it wants to meet with and what it wants to see during the review, the schedule of review activities is developed in coordination with RTA/RTS at least ten (10) working days in advance of the review. The RTA/RTS is to prepare its staff members for oral questioning and to furnish supporting documentation that verifies implementation of the SSPP and SSP/SEPP. On the first day scheduled day for start of the review, the NJDOT SSO program team meets with, briefs the RTA/RTS staff and coordinates changes to the detailed schedule of activities for conducting the review.

During review the NJDOT SSO program team receives information required for completion of the Safety Review Checklist from responsible staff. The team conducts direct examination of documentation, inspection of facilities, and/or observation of safety and security - critical processes as described in the SSPP and SSP/SEPP.

Safety and Security Review Forms

Two (2) standard forms are used in the safety and security review process:

- **Summary Conformance Checklist**: This checklist contains the major areas under review and may be used by the auditors to summarize the review, area-by-area, to show quickly if the auditors found concerns in that area. (Appendix N, Exhibit A)
- **Detailed Checklist:** It contains the detailed items which the NJDOT SSO program team reviews in depth to determine whether the implementation for each item meets the various requirements. (Appendix N, Exhibit B)

Checklist Forms

The checklist forms contain three (3) alphabetic columns at the right of the form used to indicate the rating given each item. An “X” in the (A) column indicates the Checklist item is being implemented as the SSPP or SSP/SEPP requires.

An “X” in the (I) column indicates the NJDOT SSO program team staff considers the item not being sufficiently implemented to meet the requirements and needs improvement. This is considered an EXCEPTION for SSPP or SSP/SEPP purposes and requires completion of a Supplemental Form detailing the reasons for the “AREA OF CONCERN” found by the NJDOT SSO program team or some other means of explanation such as the remarks column.

An “X” in the (U) column indicates the RTA/RTS did not provide the NJDOT SSO program team with sufficient information to review the item. The remark column of the Checklist Form identifies the NJDOT SSO program team’s reason for the rating.

Supplemental Form

The Supplemental Form can be used to provide information on any Checklist item not in compliance with the provisions of the SSPP and SSP/SEPP. There are two (2) Sections on the

Form for providing descriptive information on the status or condition of the "EXCEPTION", as observed by the NJDOT SSO program team. The second Section provides reviewer's recommendation for compliance to the SSPP and SSP/SEPP.

Note: The NJDOT SSO program generally engages a contractor to act as the three year review auditor and support the NJDOT SSO program. The NJDOT SSO program and the contractor will review the checklist; update it as necessary before the audit. Also, the lack of a particular question on the checklist does not preclude the auditor or NJDOT SSO program from questioning or looking into a particular area or subject.

Procedure for Review of Safety and Security Plans

The overall responsibility for the use of this procedure belongs to the NJDOT SSO program. Each fixed guideway system in the State of New Jersey within this program operates under the guidance of a SSPP and SSP/SEPP. The RTA/RTS prepares its SSPP and SSP/SEPP to meet the minimum standards set forth in the Program Standard.

Follow-up on the Corrective Action(s)

To follow-up recommended corrective actions, the NJDOT SSO program refers to appropriate sections of the report and tracks each corrective action, according to its pre-determined scheduled time to complete. Ninety days from the audit the RTA/RTS issues a Corrective Action Report detailing the status of each corrective action. This is done based on the draft audit report if the final report has not been issued by the auditors. The RTA/RTS submits monthly progress reports of each prolonged activity that cannot be completed within ninety (90) days. The NJDOT SSO program tracks and conducts follow-up activities on all-corrective actions until they are satisfactorily closed-out. The NJDOT SSO program may have follow-up verification meetings at the RTA/RTS to verify "closed" items asking to see any documents to verify that the action was closed.

REVIEW OF THE SSPP *(Please see Checklist)*

NJDOT SSO Program Triennial Audit Report Outline

(1) Summary of Triennial Audit Results
(2) Introduction
(3) Rail System Description
(4) Triennial Process and Schedule
(5) Analysis for Triennial Audit
(6) Review of Safety Program Documents and Activities
(7) Outbrief
(8) Appendix – Schedule On-Site Triennial Activities
(9) Appendix – Triennial Review and Audit Forms

Corrective Actions Table Headings

(1) Number
(2) Recommendation
(3) Corrective Action
(4) NJDOT SSO Comments
(5) Responsibility
(6) Due Date

Three Year Safety and Security Review Summary Conformance Checklist

SUMMARY CONFORMANCE CHECKLIST
FOR THREE YEAR SAFETY & SECURITY REVIEW

FIXED GUIDEWAY SYSTEM:_____ _____ REV. NO: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE	PLAN TITLE: _____ _____ DATE: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE
1	Policy Statement & Authority for System Security Program Plan (SSPP) and System Security Plan (SSP)			10	Verification of the FGTA S/RTS compliance with the Accident Notification, investigation and Reporting requirements of the approved SSPP and SSP		
2	Description of Purpose, Goals, and Objectives of SSPP and SSP			11	Verification of the effective management of the safety and security program implemented		
3	Safety and Security Policy disseminated within FGTS/RTS			12	Training Program and Requirements		
4	Authority for the development of the FGTS/RTS clearly identified			13	Verification of the annual review of the SSPP and SSP/SEPP and associated documents		
5	Safety and security philosophy defined			14	Verification of the methods by which the FGTS/RTS monitors compliance with the requirements of the SSPP and SSP/SEPP		
6	Stated management responsibilities for the implementation of the safety and security programs			15	Verification that investigations are conducted in accordance with established procedures adopted by the FGTS/RTS, and that deficiencies are identified and corrective actions taken		
7	Coordination between the safety and security functions with other departments			16	Verification of the establishment and implementation of emergency preparedness program plans as specified in the SSPP and SSP/SEPP		
8	Established objectives by which to monitor the effectiveness of the safety and security program goals			17			
9	Verification of the FGTS/RTS's implementation of a Hazard Management Process			18			

THE SYSTEM SAFETY AND SYSTEM SECURITY PLANS ARE:

_____ **ACCEPTABLE**

_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

Three Year Safety and Security Review Detailed Conformance Checklist

FIXED GUIDEWAY SYSTEMS - DETAILED CONFORMANCE CHECKLIST FOR THREE YEAR SAFETY & SECURITY REVIEW

SYSTEM SAFETY PROGRAM PLAN/SYSTEM SECURITY PLAN

SECTION NUMBER: _____ TITLE: _____

NJDOT CONTROL NUMBER: _____ **AUDIT DATE(S)**: _____

REVIEWER: _____ **DATE**: _____

COLUMN DEFINITIONS **A:** Item implementation in accordance with safety & security program plan(s) **I:** Implementation area of concern (see supplemental form included in this report) **U:** Unable to review (see reason/reference in "remarks" column)

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
1	2	All		SSPP	Safety/Trans. Police	Does the SSPP meet the state safety oversight standards?				
2	2.2	(1)		Safety Policy	Safety/Mgmt	Has the SSPP been approved by top management for implementation?				
3	2.1	All		Authority	Safety	Does the SSPP identify the system's authority regarding safety & security (statutes, legislation, etc.)?				
4	2.2	(2)		Precepts & Purpose	Safety	Does the SSPP identify the precepts and of the system & the purpose's purpose?				
5	2.2	(2)		Goals & Objectives	Safety	Are measurable goals and objectives for the system's SSPP established?				
6	2.2	(1)		Safety Policy	Safety	Has the SSPP been distributed to all departments for implementation? Management, Operations Finance/Admin., Maintenance Control Center, Training Public Affairs, Transit Police Engineering				
7	2.2	(1)		Safety Policy	All	Is there clear identification of management roles in safety? Management, Operations Finance/Admin., Maintenance Control Center, Training Public Affairs, Transit Police Engineering				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
8	2.2	(3.5.1)		Inspection & Test	Operations & Maintenance	Are there daily inspections and tests for operations for: Signaling System — Emergency Systems Emergency Trip Stations — Fire Protection/Suppression Equipment Control center status alarms for: Fire — Signals Traction Power — Interlockings Maintenance inspections/tests for: Track — Ballast Ties/Fasteners — Right-of-Way				
9	2.2	(4)		SSPP Rev. & Update	Safety	Is there evidence that the SSPP is being periodically reviewed and updated?				
10	2.2	(5)		Organization. Structure	Safety	Does the SSPP identify responsibility for administering the safety program?				
11	2.2	(3.1.5)		Maint. Inspect. & Tests	Safety	Review safety department: • Fire protection/suppression inspections • Operations inspections and audits accid./unaccept. • Hazard condition investigations				
12	2.2	(3)		Organization Structure	All	Review safety responsibilities of departments: Management — Operations Maintenance Training — Safety Public Affairs — Finance/Admin. Operations Control Center				
13	2.2	(3.1.5)		Maint. Inspect. & Tests	Maintenance	Review quality assurance audit & inspection documents & procedures				
14	2.2	(3.1.5)		Maint. Inspect. & Tests s	Maintenance	Review prev. maintenance schedules and performance documentation for: Civil (Track & Structures) — Traction Power Systems Support Services — Vehicles Fire Protection/Suppression (Gen. Maint.)				
15	2.2	(3)		Organization Structure	Safety	Review documentation of System Safety Dept. staff qualifications and performance of responsibilities				
16	2.2	(5)		Oper/Maint Training	Safety/Training	Review documentation of operationally-related safety training				
17	2.2	(3.2)		Oper/Maint Training	Training	Review training program curriculum for emphasis on safety				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
18	2.2	(5) (11)		Emerg Resp. Planning.	Safety/Operations	Review emergency preparedness planning procedures				
19	2.2	(12.1) (12.2)		Internal Audit Process	Safety/Training	Review documentation of process & implementation of standard operating procedures, rules, maintenance procedures and verify staff compliance				
20	2.2	(3.4.1)		Public Awareness Program	Public Affairs	Review public affairs – public awareness programs				
21	2.2	(17)		Config. Control	Safety	Review documentation of evidence that safety reviews new systems & equipment				
22	2.2	(17)		Config. Control	Safety	Review configuration management and configuration control documentation for safety impacts				
23	2.2	(2)		Purpose	Operations, Safety Training, Maintenance	Interview and determine that each department is cognizant of their responsibility toward safety; discuss responsibilities assigned to: Operations Maintenance Training Safety				
24	2.2	(6)		Hazard Identification/ Resolution Process	Operations, Maintenance, Safety, Training, Engineering	Is there a process for identifying hazards, performing hazard analysis, determining criticality, and a resolution process? Operations Maintenance Training Engineering Safety				
25	2.2	(17)		Config. Mgmt.	Operations, Maintenance, Safety, Engineering	Is there a process for review of specifications to assure that operational considerations toward designing to minimize hazards, incorporation of safety devices, or special procedures? Operations Maintenance Safety Engineering				
26	2.2	(21)		Procurement	Operations, Maintenance, Safety, Engineering	Is compatibility, "fail-safe" design, hazard reduction, ease of maintenance, and danger warnings considered during procurement, of equipment & facilities?				
27	2.2	(8)		Syst. Mod. Review & Approval Process	Procurement, Maintenance, Safety, Engineering	Are safety considerations included in design reviews for replacement parts, new services procured, modifications, or rehabilitation of equipment & facilities? Procurement Engineering Safety Maintenance				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
28	2.2	(3) (3.1.5)		Maint. Inspection & Tests	Engineering, Procurement, Safety, Maintenance	Are acceptance tests and inspections for all equipment and facilities performed prior to use in operations?				
29	2.2	(17)		Config. Mgmt.	Engineering, Procurement, Maintenance	Are there requirements for controlling and managing the configuration of equipment and facilities? Are support documents and procedures kept current? Is the safety department a participant in the modification effort?				
30	2.2	(6)		Hazard Ident/ Resolut. Process	Operations, Maintenance	Upon receipt of an accident or hazardous condition report, does operations attempt to determine causes and take corrective action? Does maintenance attempt to determine causes and take corrective action?				
31	2.2	(6)		Hazard Identification/ Resolution Process	Safety	Does the safety department evaluate other department accident/hazardous condition reports to determine further action?				
32	2.2	(10)		Accident/ Incident Report & Investigate	Safety	Does the safety department investigate accidents, serious incidents and unacceptable hazardous conditions? Is there an established procedure for conducting investigations?				
33	2.2	(10)		Accident/ Incident Report & Investigate	Operations, Maintenance	Is there evidence that staff having direct knowledge of an accident, incident or hazardous condition has filed a report? Operations Maintenance				
34	2.2	(10.2)		Criteria	Operations, Maintenance	Are the reports submitted to the safety department?				
35	2.2	(10)		Accident/ Incident Report & Investigation	Safety	Does the safety department investigate accidents, incidents and hazardous conditions that statistics indicate repetitiveness and exceed safety goals? Are the affected departments involved to determine corrective measures?				
36	2.2	(3.1.5)		Maint. Inspection/ Tests	Operations, Maintenance, Safety	Are safety and fire protection inspections and tests performed on system equipment and facilities by: Operations Maintenance Safety				
37	2.2	(13)		Rules & Procedures Review	Operations, Maintenance, Safety	Have all affected departments reviewed the rulebook? Are special orders and/or general orders reviewed by affected departments? Operations Maintenance Safety				
38	2.2	(13)			Operations, Maintenance, Safety	Is there a process for facilitating revisions to the rulebook?				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
39	2.2	(12)		Internal Audit Process	Safety	Does the safety department conduct periodic reviews of operations and maintenance activities to identify equipment, procedural or training changes that are required to eliminate safety deficiencies and hazards?				
40	2.2	(12)		Internal Audit Process	Operations, Maintenance, Safety	Is there evidence that all staff are following established rules and procedures in these departments: Operations Maintenance Safety				
41	2.2	(11)		Emergency Resp. Plng.	Operations	Is there a formal process for planning and responding to system emergencies?				
42	2.2	(11)		Emergency Resp. Plng.	Operations, Maintenance, Safety	Are the following departments involved in the planning, coordination and response process to emergencies? Operations Maintenance Safety				
43	2.2	(18.1) (18.2)		Employee & Contractor Safety Program	Safety	Does the safety department monitor compliance to applicable codes, standards & regulations?				
44	2.2	(18.1)		Transit System Employees	Safety	Is there evidence that the safety department has assisted in determining safety measures for working in confined spaces? Has the safety department assisted in training staff for confined space working?				
45	2.2	(11)		Emergency Response Planning Coord. Training	Operations, Maintenance, Safety	Are fire protection/suppression, life safety, and elect. safety requests coordinated with outside agencies? Are joint operational plans, training and emergency drills coordinated between safety, operations, maintenance, security, medical, fire, command control & communications? Maintenance: electrical safety audit(s)? Safety: joint operating plans for emergencies, drills, and emergency response?				
46	2.2	(19)		Hazardous Materials Program	Operations, Maintenance, Safety	Has a hazardous materials management program been established and implemented by: Operations Maintenance Safety				
47	2.2	(18.1)		Employee Contractor Safety Program	Operations, Maintenance, Safety	Is personal protection equipment provided and used? Are appropriate departments monitoring the use: Operations Maintenance Safety				
48	2.2	(9)		System Data Acquisition Analysis Follow-Up	Safety	Is there a safety information and data analysis system within the safety department that collects the following? Critical/catastrophic hazards? Safety documentation? Accident, incident and hazardous condition reports?				

ITEM NO.	NJDOT STANDARDS		SSPP/ SSP PARA NO.	AUDITABLE ENTITY	DEPARTMENT	ITEM DESCRIPTION	A	I	U	REMARKS
	SECT	PARA								
49	2.2	(3.2)		Inter-Dept. & Inter- System Coordination	Safety	Is there evidence that the safety department is providing appropriate departments with information and periodic follow-up reports regarding: Passenger & employee injuries? Safety performance reports? Accident/hazardous condition recommendation status? Investigations of accidents, incidents and unsafe conditions?				
50	2.2	(6.3) (10.6) (12.3.5)		Interdep. & Inter System Coordination	Operations, Maintenance, Safety	Are appropriate reports being disseminated to outside agencies as required on a: Monthly basis Quarterly basis Annual basis				
51	2.2	(16) (19)		Training & Certification	Operations, Maintenance, Safety	Has an occupational safety related training program been established and implemented?				
52	2.2	(12)		Internal Audit Program	Safety	Does the safety department monitor training content in courses of instruction for appropriate emphasis on safety?				
53	2.2	(18.1) (18.2)		Employee & Contract Safety Program	Safety	Are there training programs established and implemented for mitigating chemical, physical and/or biological hazards?				
54	2.2	(18.1)		Contract/ Subcontract. Safety Coord.	Operations, Maintenance, Safety	Are contractors/subcontractors who perform work on the system required to attend safety orientation classes?				
55	2.2	(3.1.5)		Training & Certificat.	Maintenance, Training, Safety	Do maintenance workers who perform work on critical systems attend classroom training? Do they receive on-the-job or in-service training?				
56	2.2	(3.1.4) (3.1.5)		Training & Certificat.	Operations, Maintenance, Safety	Is operations & maintenance staff appropriately trained in following safety rules and procedures applicable to their work?				
57	2.2	(2)		Descript. of Purpose	Operations, Maintenance, Safety, Human Resources	Is there a progressive discipline process for staff that violates safety rules and procedures? Is it enforced by all departments?				
58	2.2	(2) (5)		Public Awareness Program	All	Is there an internal safety awareness program that ensures establishing safety goals and measures their achievement?				
59	2.2	(2) (5)		Public awareness program	Safety public relations	Is there a coordinated public awareness program for the public that places emphasis on safety?				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
60	2.2	(3.1.5)		Maint., Inspections, & Tests	Maintenance	Review maintenance documentation to ensure that safety-critical inspections and tests have been performed on: • Signal system (wayside and on rail car), electrical and control sub-systems of guideway vehicles, emergency ventilation, lighting, exits, exit ways, ups, communications, emergency trip stations & telephones, monitoring fire protocol, suppression systems • OCC status alarms for: signaling, fire, traction power, interlockings track, wayside maintenance and inspections power, escalators, elevators, kiosks, stations, lay up areas and remote vehicle storage locations				
61	2.2	(3.1.4)			Operations Control Center	Review control center documentation to ensure safety critical inspections and tests are performed: • Service departure tests of guideway vehicles • Station status alarms • Control systems and alarm monitoring				
62	2.2	(3.1.5)		Maint. Inspect. & Tests	Maintenance	Review quality assurance audit, inspection and test procedures of the maintenance and support departments for: fixed guideway vehicles systems civil and structures support services				
63	2.2	(3.1.4) (3.1.5)		Training and Certification	Operations, Maintenance, Engineering	Review evidence of coordination regarding certification, re-certification and de-certification that enforce violations and control changes to system equipment & facilities				
64	2.2	(2)		Drug & Alcohol Abuse Program	Personnel Admin.	Is there a program established and implemented for monitoring, counseling, and enforcing alcohol and substance abuse in the work place?				
65	2.2	(21)		Procurement	Maintenance, Procurement, Engineering, Safety	Review procurement documents for critical software programming requirements. Have engineering and safety reviewed the software analysis?				
66	2.2	(22)		Hours of Service	Safety, Training, Transportation, Maintenance	Is there evidence that an hours of service policy has been established and implemented for monitoring, training and enforcing hours of service.				
67	2.2	(23)		Roadway Worker Protection	Safety & Training	Is there evidence that an roadway worker protection policy has been established and implemented for monitoring, training and enforcing roadway worker protection?				
68	2.2	(24)		Docs. on Submission to OSSO	Safety	Review evidence that required documentation is being submitted to the OSSO as required.				
69	2.2	(12.3.1)		Audit Response	Safety	Review the safety department for compliance regarding internal safety program audits				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
70	2.2	(12.3.5)		Audit Reporting	Safety	Review documentation for management awareness of safety deficiencies & follow-up by: Operations Maintenance Safety Training				
71	3	(3.2) (1.1)		Policy Statement	All	Is there a clear statement of the transit system's commitment toward security in all aspects of operations?				
72	3	(3.2) (2.1)		Description of Purpose	Transit Police	Does the program plan provide an explanation of the security program's purpose?				
73	3	(3.2) (1.1)		Policy Statement	Safety Transit Police	Does the SSP outline and discuss the process the transit system has adopted for implementation regarding security? Is there a clearly stated policy toward security and has it been endorsed by top management and disseminated to all departments?				
74	3	(3.2) (1.3)		Objectives	Transit Police	Are there clearly stated security program goals and objectives?				
75	3	(3.2) (1.4)		General	Transit Police	Are there plans and programs in place to achieve security goals and objectives?				
76	3	(3.2) (2.2) (2.7) (3.1) (3.2) (3.3)		Security Program Implement. Requirements	Transit Police	A description of the role of the security program, identification of who is responsible for the security program, staff involved (number), staff functions, and position/reporting relationship within the transit system organization. Does the plan include a description of how the security forces interface with other law enforcement agencies functionally, communicate, and share jurisdictional responsibility?				
77	3	All		Requirements for SSPP	Transit Police	Does the security program recognize NJDOT's authority and responsibility for overseeing implementation of the security program by reviewing records, witnessing inspections and tests, inspecting facilities, participating in training sessions, observing work practices, and auditing total program implementation?				
78	3	(3.2) (2.2)		Security	Transit Police	Is there an organization chart showing the relationship between safety and security, and other transit system departments?				
79	3	(3.2) (6.0)		Audit Completes	Safety Transit Police	Are there requirements for conducting periodic reviews and internal audits to determine compliance with the security portion of the SSPP?				
80	3	(3.2) (5.1)		Threat & Vulnerable Identification Assess. & Resolution	Transit Police	Is there a summary of current efforts to ensure the security of passengers and employees with respect to proactive programs and response measures?				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
81	3	(3.2) (2.5) (2.6)		Security Operating Activities	Operations Maintenance Safety Security	Does the security program include a description or tabulation of the major facilities and a description of the security devices and procedures to protect the facilities?				
82	3	(3.2) (5.1)		Threat & Vulnerable Identification. Assess. & Resolution	Transit Police	Is there a description of current conditions regarding crime rates and security breaches, by location?				
83	3	(3.2 – All)		Organizational Structure	Transit Police	Is the responsibility for preparation and maintenance of the security portion of the SSP including periodic reviews and update identified?				
84	2	(2.2) (17)		Config. Mgmt.	Operations, Maintenance, Safety, Security	Are there configuration controls to ensure that management before adoption properly evaluates modifications? Are the configuration controls in written form? Are they distributed to all appropriate parties? Is the configuration control process formally documented and complied with?				
85	3	(3.2) (4.4)		Security Operating Activities	Operations, Maintenance, Safety, Security	Does the SSP identify by title and description each of the implementation procedures included in the security portion of the SSP including procedures for security program planning, proactive measures, emergency response measures and training?				
86	3	(3.2) (3.1)		Security	Operations, Maintenance, Safety, Security	Is identification of the specific departments and individuals responsible for the preparation, modification, and implementation of each of the procedures identified in item # 81 above?				
87	3	(3.2) (6.2)		Security Training	Transit Police	Does the SSP describe the training and certification programs for employees whose duties include in whole or in part, their security role?				
88	3	(3.2) (5.2)		Threat & Vulnerability Identification, Assess & Resolution	Transit Police	Are the methods used to identify threats and vulnerabilities of the transit system identified?				
89	2	(2.2) (17)		Config. Management	Operations, Maintenance, Safety Security	Are there requirements for conducting assessments of transit system modification and extensions as part of the design process with respect to security?				
90	3	(3.2) (5.3)		Threat. & Vulnerability Identification	Operations, Maintenance, Safety, Security	Does the SSP include a program for the testing of security-related equipment and facility inspections to assess their vulnerability to security threats?				

Item No.	NJDOT Standards		SSPP/ SSP Para No.	Auditable Entity	Department	Item Description	A	I	U	Remarks
	Sect	Para								
91	3	(3.2) (3.3)		Threat. & Vulnerability Identification	Transit Police	Acquire a description of security data collection and distribution to persons on a need-to-know basis				
92	3	(3.2) (5.3)		Threat & Vulnerability Identification, Assess & Resolution	Transit Police	Does the security element of the SSP describe the manner and who analyzes security information to assess the probability and severity of threats and vulnerability? Does the plan provide a description of the security reports routinely prepared and the method of distribution? Is the method of resolving identified threats and vulnerabilities by elimination, mitigation, and acceptance described? Are regular progress reviews scheduled on a periodic basis by top management to assure that the security program remains current?				

THE SYSTEM SAFETY PLAN IS:

_____ **ACCEPTABLE**

_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments

Three Year Safety and Security Review Supplemental Form

SYSTEM SAFETY & SECURITY PROGRAM REVIEW SUPPLEMENTAL FORM	
TRANSIT SYSTEM:_____	**REVIEWED BY:** _____ **DATE:** _____
AREA OF CONCERN NO.: _____ **DESCRIPTION OF CONDITION:**	**STATUS:** [ ] Open [ ] Accepted With Conditions [ ] Awaiting Supporting Documentation [ ] Unacceptable; Corrective Action Needed [ ] Unable To Audit
FIXED GUIDEWAY TRANSIT SYSTEM RESPONSE:	

Appendix O

NJDOT SSO Program Investigation Procedures

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Procedure for NJDOT SSO Program Investigations

The NJDOT SSO program may choose to participate in or lead an investigation at a New Jersey rail transit agency (RTA)/rail transit system (RTS). In all cases, it is assumed that the RTA/RTS will be at least the initial investigator, even if the NJDOT SSO program joins or leads the investigation. If and when the NJDOT SSO program team participates or leads an investigation, the adopted and approved investigation procedures from the RTA/RTS will be used, as well as applicable RTA/RTS safety procedures, as documented in the minimum safety standards.

In establishing these procedures, FTA expects that the SSO agency will address the following:

- Options to observe RTA/RTS investigation activities. The SSO agency may observe RTA/RTS staff during portions of the investigation, such as on-scene response or records reviews, attend and observe all meetings of the investigation team, and review all versions of reports and briefs resulting from investigation into safety events.
- Performing a checklist-based review of all accident investigations to ensure all required elements are included in the report.
- Performing an audit of accident investigations to examine: how evidence collected during the investigation is reflected in content of the final investigation report, strength of causal analysis determinations, and comprehensiveness of investigations.
- Performing an audit of the investigation process, including adherence to notification protocols, submission of draft reports, status updates, and final reports within required timeframes, and record keeping of final reports among other items.

There are several technical rail system and vehicle topics for which the NJDOT SSO team (including contractors and/or New Jersey Federal Railroad Administration Inspectors) might provide technical assistance and/or investigation services (as needed and resources allow), for topics such as the following:

- Track – rails, ties, road bed, switches
- Structures, Tunnels, and supporting infrastructure (e.g., ventilation, end-of-line devices and braking strategies)
- Stations and access areas
- Substations/power – to include grounding issues and safety placarding
- Power/Load Control/SCADA
- Overhead catenary/contact system (OCS)
- Third rail and contact system
- Radio control and communications
- Signals and control systems (including wayside signal huts and rooms)
- Rail vehicles
- Rail vehicle maintenance facilities and special maintenance equipment – including Yard movement and control
- Rules and procedures for operations, maintenance, and command and control (including Right-of-Way Worker Protection – RWP)

- Capital projects and safety and security certification and auditing/inspections

Notification

(1) The NJDOT SSO program will inform the RTA/RTS of its decision to conduct or participate in an investigation, using investigation personnel distinct from the RTA/RTS staff.
(2) The NJDOT SSO program will advise the RTA/RTS as to the personnel who will be participating or leading the investigation.
(3) All NJDOT SSO program authorized investigation personnel are granted authority, under the New Jersey Statutes Amended (N.J.S.A.) and New Jersey Administrative Code (N.J.A.C.), to access records, materials, data, analysis, and other information which is pertinent to the investigation. The RTA/RTS is expected to provide the NJDOT SSO program investigation team with the resources and information necessary to conduct the investigation in an effective and efficient manner.
(4) The NJDOT SSO program investigation team will arrive at the RTA/RTS as soon as practicable, which will generally be within 5-6 hours. The NJDOT SSO program investigation team will wait until the RTA/RTS and/or other emergency response personnel have secured the scene before commencing its participation in the investigation. The NJDOT SSO program reserves the right to request that the RTA/RTS preserve the scene to the maximum extent feasible until arrival and start of participation in the investigation.

Information Collection and Analysis

(1) The NJDOT SSO program investigation team will observe or participate in field analysis, operational surveys, interviews, record checks, data analysis, and other on-site and off-site tasks that may be necessary for a comprehensive investigation.
(2) The NJDOT SSO program investigation team will observe or participate in assessing physical evidence of the scene and document the environmental and physical factors of the scene through measurements, diagrams, and photographs.
(3) As part of the investigation, the NJDOT SSO program investigation team will observe or participate in assessing compliance with operating rules and procedures; conducting follow-up interviews (if required); analyzing employee records and the results of post-accident drug and alcohol tests; and conducting vehicle and equipment inspections.
(4) If the NJDOT SSO program investigation team requires information or analysis which is not readily available, or which may require additional resources by the RTA/RTS, it will request this information or analysis in a written request to the RTA/RTS.

Reporting and Recommendations

(1) Upon completion of the on-site and off-site investigation requirements, the NJDOT SSO program investigation team will participate or lead in preparing a draft investigation report.
(2) All information gathered from the investigation will be documented and included in the investigation report.

(3) The NJDOT SSO program investigation team and the RTA/RTS will coordinate review and completion of the investigation report. The progress and final reports will follow the process described in SSOPS Section 7. Any disagreements between the NJDOT SSO program investigation team and the RTA/RTS will be either resolved through discussion or documented as part of the investigation report.

(4) A final investigation report will be adopted and approved or issued by the NJDOT SSO program and shared with the RTA/RTS.

Follow Up

(1) The final investigation report may contain findings and recommendations for addressing all deficiencies or unsafe conditions identified during the investigation process. The RTA/RTS will be responsible for developing appropriate CAPs for these issues from the investigation report, and the NJDOT SSO program will adopt and approve the agreed-to CAPs.

Procedure for Accident/Incident and Hazardous Condition Investigation, Analysis and Report Development

Purpose

The purpose of this procedure is to provide investigation and report development guidance for accidents/incidents and hazardous conditions that occur on, involve the equipment or personnel, or during the construction, testing, maintenance or operation of a rail transit system (RTS) or involve the public and an RTS. The RTA/RTS should include detailed guidance and a process in its System Safety Program Plan (SSPP), or prepare a separate procedure, for investigation, analysis and report development for accidents/incidents and hazardous conditions that occur on, at or as a result of its RTA/RTS.

Scope

This procedure provides guidance to the NJDOT SSO program when it is advised of accidents/incidents and hazardous conditions on a RTA/RTS. It provides guidance to an RTA/RTS and specifies that the RTA/RTS must assure that accidents/incidents and hazardous conditions: 1) are be reported to the NJDOT SSO program; 2) will be thoroughly investigated; 3) the most probable cause and contributing factors will be determined; 4) a procedure and process is in place for preparing and submitting appropriate corrective actions that mitigate or minimize the recurrence of an accident/incident or hazardous condition; and 5) a comprehensive report (identifying probable cause, other contributing factors, corrective actions, and a plan for implementing the corrective actions) is formally prepared and submitted to the NJDOT SSO program for review and concurrence.

General Requirements – RTAs/RTSs

Accidents, incidents and hazardous conditions must be reported to the NJDOT SSO program by the RTA/RTS. An operator of a fixed guideway transit system shall notify the NJDOT SSO program, by telephone or cell phone at the earliest practicable time upon the occurrence of a fixed guideway accident, incident, or hazardous condition, as specified in the Standards (N.B: there is a two hour mandatory timing window for the notification for 49 CFR 659.33 incidents which must be done by phone).

For very minor incidents or conditions an initial email or fax is satisfactory (typically done for ill passengers and slips, trips and falls of a minor nature and never done for crashes, derailments or serious hazards or injuries).

Each RTA/RTS investigates accidents, incidents and hazardous conditions, according to its approved SSPP and NJDOT SSO program approved procedure. Procedures used by the RTA/RTS must be approved by the NJDOT SSO program and are to be submitted annually with the RTA/RTS SSPP. The NJDOT SSO program at all times can participate in a RTA/RTS investigation. Each RTA/RTS must review its accident/incident procedures on an annual basis with the review being completed no later than June 30th of each calendar year. Any changes that are required in the procedures must be completed and submitted directly to the NJDOT SSO

program by the RTA/RTS no later than September 30th of each calendar year for review and approval by the NJDOT SSO program.

The RTA/RTS is required to fully cooperate with the NJDOT SSO program in its investigation of accidents, incidents, and hazardous conditions.

In the event that the NJDOT SSO program decides to investigate, the RTA/RTS is required to maintain the scene in an undisturbed manner to preserve all information possibly applicable to or associated with the accident investigation.

After the comprehensive investigation, the RTA/RTS then develops an in depth, comprehensive report which includes the scenario, facts, analysis, data and results, probable cause and the corrective actions with the schedule and responsible person and section for completing the corrective action. The Corrective Action part of the report shall be a separate section from the findings and recommendations. If there are "No" corrective actions it should be noted that there are "No Corrective Actions." For minor grade crossing accidents which do not have any injuries and the damage is less than $9600.00, NJDOT has developed a Short Form Accident Report, a copy of which is attached. The short form will still require all of the required attachment as identified below.

Interim reports must be provided to the NJDOT SSO program when requested by the NJDOT SSO program. Interim reports may include but are not limited to the following:

- Minutes of any meeting held by the RTA/RTS regarding the incident/accident
- List and schedule of activities that have occurred and are anticipated
- Disclosure of any immediate corrective actions RTA/RTS has planned or completed
- Principal issues or items currently being evaluated
- Overall progress and status of the investigation.

The NJDOT SSO program is notified about and the NJDOT SSO program may, at its option, elect to participate in the following activities, or receive documents regarding:

- Meetings with investigating teams, consultants, review boards, etc.
- Visual examination and measurements of individual items and component parts
- Non-destructive examinations by radiographic, ultrasonic, magnetic particle and liquid dye penetrate testing
- Equipment and facilities testing and inspection
- Review maintenance procedures and historical events
- Review of employee training and certification records
- Review of photographs, drawings, and sketches
- Review of operating rules and procedures
- Review of drug and alcohol test results
- Review of hours of service records
- Review of recorded operational data, event recorders, and communications

- Review of police and coroner reports
- Other similar investigation activities.

The RTA/RTS when conducting an investigation, documents and safe guards all information. The RTA/RTS, must submit a draft accident/incident investigation report to the NJDOT SSO program within thirty (30) days following the completion of the investigation.

The RTA/RTS must submit as part of the monthly report to the NJDOT SSO program a substantive status update of all ongoing investigations until the final reports are issued.

Having the RTA/RTS conduct the investigation does not preclude the NJDOT SSO program from conducting an investigation at a later date.

The NJDOT SSO program reviews each investigation report to confirm that the probable cause, findings, and corrective action plan have been included.

The RTA/RTS are referred to the Conducting the Investigation, Investigation Process and The Investigation Report parts of this procedure, as well as the forms and checklists which are all pertinent and germane, are expected to strongly influence the RTA's/RTS's SSPP and procedure.

The report and all supporting documentation shall be captured digitally. The report and all supporting documents and all other digital information shall become part of the permanent record of the RTA/RTS and shall be protected by the fixed guideway system and not destroyed. It shall be available so that if there is a similar occurrence it will be available for reference.

The hazard log is required to be updated with the results of the investigation and corrective action plan.

NJDOT SSO Program – Decision to undertake Investigation

The NJDOT SSO program is responsible for the investigation of accidents/incidents and hazardous conditions occurring on fixed guideway transit systems, unless it delegates that responsibility to the RTA/RTS or the NTSB will investigate.

It is the practice of the NJDOT SSO program to "automatically" delegate to the RTA/RTS the responsibility to conduct accident, incident or hazard investigations unless advised by the NJDOT SSO program that the NJDOT SSO program will join the investigation, and complete the detailed analysis and comprehensive report development.

Based upon information received from the RTA/RTS, the NJDOT SSO program determines to: 1) defer its' investigation to the NTSB; 2) conduct its own investigation; or 3) participate in the RTA's/RTS's investigation; or 4) continue its normal practice of delegating the investigation to the RTA/RTS.

The NJDOT SSO program reviews information, transmitted by the RTA/RTS, as received (initial notification required within two [2] hours of the occurrence for 49 CFR Part 659 required notification). The NJDOT SSO program determines whether to perform (or not perform) an independent investigation of the occurrence.

Criteria – Accident/Incident Investigations. Upon notification of an accident, incident or hazardous condition, the NJDOT SSO program is guided heavily by the following in determining whether to undertake an investigation:

- The occurrence is an event that involves serious injuries, fatalities, or major property damage/loss on a Fixed Guideway Operating System (this includes new construction and modifications to existing systems).
- Significant information is provided to indicate safety or security was compromised.
- It is a repetitive occurrence.
- There is potential for involvement of either jurisdictional or highly sensitive matters related to the occurrence.

If the NJDOT SSO program chooses NOT to have the RTA/RTS conduct the investigation on its behalf, the NJDOT SSO program will instruct the RTA/RTS immediately of the NJDOT SSO program's intent verbally by phone or in person and then in writing, via letter, email, or fax, that the NJDOT SSO program will conduct the investigation. Having the RTA/RTS conduct the investigation does not preclude the NJDOT SSO program from conducting an investigation at a later date. The RTA/RTS must safeguard all data, records, photographs, test information, etc. relating or potentially relating to the situation under investigation.

If the NJDOT SSO program conducts the investigation, the NJDOT SSO program will:

(1) Will advise the RTA/RTS as to the personnel who will be conducting the independent investigation.
(2) Will provide a preliminary schedule as to the investigation process to the extent possible.
(3) Expects the RTA/RTS to safeguard all records, materials, data, equipment, analysis, and other information which could be in anyway possibly pertinent to the investigation.
(4) Expects that RTA/RTS arrange for the incident/accident scene be secured to the maximum extent feasible using police or security forces until the OSSO's accident investigation team has completed its on-site investigation.

Actions of the NJDOT SSO Program in Response to Accidents/Incidents and Hazardous Conditions

After each notification, for each accident, incident or hazardous condition, the NJDOT SSO program makes an entry in its log assigning each log/case a number. The log contains a listing of activities tracking these reports from submittal to approval and close-out. The NJDOT SSO program records information about the situation in the log, as information becomes available from the RTA/RTS in the log. Based upon information received from the RTA/RTS, the NJDOT SSO program determines to:

(1) Defer its investigation to the NTSB
(2) Conduct its own investigation
(3) Participate in the RTA/RTS's investigation
(4) Continue its normal practice of delegating the investigation to the RTA/RTS.

In any case, the NJDOT SSO program should be notified about and the NJDOT SSO program may, at its option, elect to participate in the following activities as the investigation develops on an ad hoc basis, and in any case receive the documents:

- Meetings with investigating teams, consultants, review boards, etc.
- Visual examination and measurements of individual items and component parts
- Non-destructive examinations by radiographic, ultrasonic, magnetic particle and liquid dye penetrate testing
- Equipment and facilities testing and inspection
- Review maintenance procedures and historical events
- Review of employee training and certification records
- Review of photographs, drawings, and sketches
- Review of operating rules and procedures
- Review of drug and alcohol test results
- Review of hours of service records
- Review of recorded operational data, event recorders, and communications;
- Review of police and coroner reports
- Other similar investigation activities.

The contents for each report submitted directly by a RTA/RTS is reviewed for the following information:

- Pertinent facts were gathered and properly analyzed
- The most probable cause and other contributing factors were identified
- An appropriate corrective action plan was developed
- A reasonable schedule was adopted for implementing the corrective action plan
- A comprehensive investigation report was prepared.

After receipt of the final report, the NJDOT SSO program tracks any open items until completion and enters the results in the appropriate case file.

If a RTA/RTS issues its final report before agreement on the draft working papers, the NJDOT SSO program prepares a response stating the areas of agreement as well as areas of disagreement and issues a report for reconciliation by the RTA/RTS. Further action may be required by the NJDOT SSO program to resolve any outstanding differences before the case file can be closed. A case report may be heard by an appointed committee with the findings issued to the RTA/RTS. In case the parties cannot reach an agreement, the final report issued by each party will be filled and the case will remain open. All safety and security findings (corrective actions) must be resolved by using the Hazard Management Process and submitted to the NJDOT SSO program. Failure to comply with this part will result in a withdrawal of the Safety Certification for the RTA/RTS.

The RTA/RTS may elect to submit its investigation report in two parts:

(1) Covering the determination of the most probable cause and additional contributing causes in one report
(2) Covering the corrective action plan and schedule in a separate second follow-up report.

The NJDOT SSO program keeps the case file open until the RTA/RTS completes its investigation and submits and completes its corrective action plan and schedule. The NJDOT SSO program issues a final notification upon completion of the corrective action plan.

An NJDOT SSO program case file will be considered "closed" upon completion of the following action items:

- All entries have been made. (Such as areas of disagreement with RTA's/RTS's investigation report).
- The NJDOT SSO program determines the action items to be complete and enters the appropriate signature as to completion of all entries.
- The NJDOT SSO program issues its approval and notifies the RTA/RTS.

Conducting the Investigation

When conducting an investigation of an accident/incident or hazardous condition, the RTA/RTS, and the NJDOT SSO program are guided by the following:

- FRA Railroad Investigator's Handbook
- Transit Rail Accident Investigation (TSI) guidance
- Train Derailment Cause Finding (AAR, FRA, RPI, and TDC)
- Industry best practices

Data, analysis and analytical reports must be protected by the RTA/RTS from loss and alteration. This includes operator, witness reports, recorded or video statements; also all photographic film, photos or electronic files or records deemed relevant or not. SCADA data, black boxes, event recorders, etc. and their records and down loaded information must be protected.

The Investigator must document that all tests, reconstruction, simulations, photographs and documents related to the event are complete and secured under his/her jurisdiction. A log of all materials, records files, data and reports should be made, maintained and retained as part of the permanent record. When conducting an independent investigation, the investigator(s) documents and safe guards all information gathered from the accident/incident investigation, and establishes a schedule for the completion of the on-site and off-site accident investigation requirements.

The System Safety Manager or system manager should provide potential system investigators and system department managers the Checklist for Reviewing Fixed Guideway System Accident Investigation Reports and Supporting Documentation in advance of investigating accidents, incidents and hazards as part of a training session.

It is the responsibility of the RTA/RTS to assure that the total scene is secure. Immediately, police, EMS or fire officers may secure parts of the scene to assist the injured or gather evidence. However, they may not be concerned with the whole scene and they are not concerned with the system safety, security or NTSB investigation. This also may involve the RTA/RTS negotiating with private land owners and the local police or fire department to secure the scene. Securing the accident scene means using local police under contract, transit police or employing trained security guards to protect the site and its contents from the intrusion of the public or any non-authorized persons. It may also mean physically protecting the scene using tests, tarps or other suitable coverings. After discussions with the police, fire, NJDOT SSO program (and NTSB if they are involved) it could mean moving the scene contents to a protected site such as a warehouse to facilitate analysis which would still involve securing that site. In some cases rail or other vehicles or equipment must be impounded.

Investigation Process

The investigation process includes an assessment of the incident/accident and a review of potential causal and/or contributing factors. The incident/accident scene must be secured to the maximum extent feasible until on-site investigation is completed. Vehicles, data, equipment, etc. that were part of the accident or impacted by the accident must be kept secure and protected from damage, the weather, non-qualified or non-approved interested parties, theft or vandalism.

An assessment of an incident/accident includes:

- Assessing physical evidence of the accident scene including: damage and debris analysis; skid mark analysis; the use of measurements, diagrams and photographs, and the documentation of the environmental and physical factors of the accident scene.
- Assessing as part of the investigation, compliance with operating rules and procedures; conducting follow-up interviews (if required); analyzing employee records and the results of post-accident drug and alcohol tests; and conducting vehicle and equipment inspections.

A complete photographic record (film or digital) of the whole scene, from every direction and perspective is critical. This also includes shots toward the center of the scene wide angle and telephoto; and from the center of the scene outward. It would include all buildings, vehicles, facilities and equipment from a gross as well as a detailed perspective. All damage to the site, be it fixed guideway equipment, landscape, furniture must be captured photographically. The location of injured persons must be captured photographically both on the outside and inside fixed guideway vehicles, other vehicles or buildings or outside (if the photos capture individuals they must be safeguarded from spurious viewing). If the incident happened at night or during inclement weather the scene will have to be re-photographed to capture what might have been missed. Video photography may certainly be helpful but can't replace still photography.

At grade crossing or in-street-running situations where a motor vehicle, bicycle, or pedestrian is involved with fixed guideway vehicles, then that non-fixed guideway component of the accident must be thoroughly investigated for cause. Police investigations may be limited to fault and do not always focus on cause.

Therefore, the reasons causing the motor vehicle, bicycle, or pedestrian crash must be thoroughly explored including but certainly not limited to traffic control devices, pavement condition, lighting, glare. (FTA/TSI offers Bus Collision Investigation courses which discuss motor vehicle aspects of crashes, incidents and accidents.)

The NJDOT SSO program may identify areas of concern regarding causal factors and/or findings relating to an occurrence

The investigator(s) catalogue all information of any sort gathered during the investigation. That catalog becomes part of the permanent record and should be an appendix to the report.

Data and analysis and analytical reports must be protected from loss and alteration. This includes operator, witness statements, reports, recorded or video statements; also all photographic film, photos or electronic files or records. The relevance of anything cannot be determined until after the whole process including the report acceptance by the NJDOT SSO program is completed. SCADA data, black boxes, event recorders, etc. and their records and down loaded information must be protected.

No destructive testing may be done unless approved by the NJDOT SSO program.

At any point the NJDOT SSO program may request that additional investigation be undertaken.

The Investigation Report

At the completion of the investigation activities the NJDOT SSO program if it lead the investigation will issue a draft report and consult with the RTA/RTS; and then finalize the report. Based on the NJDOT SSO program's report (or the NTSB report and findings), the RTA/RTS develops the corrective action plan. Each corrective action should include an implementation schedule and the department/section and person responsible.

Upon completion of investigation activities, the RTA/RTS prepares and submits its draft report to the NJDOT SSO program for review and approval. It should include a corrective action plan including an implementation schedule and department/section and person responsible for each corrective action.

Investigation reports provided to the NJDOT SSO program will be reviewed in accordance with the *Detailed Checklist for Reviewing Fixed Guideway Accident Investigation Reports and Supporting Documentation*. The NJDOT SSO program may conduct a meeting to discuss the draft report with the RTA/RTS, and may request the report be revised based in the comments from the RTA/RTS.

The NJDOT SSO program is to be made aware as interim information is available and is to be provided to the NJDOT SSO program, as determined necessary by the NJDOT SSO program. Interim reports may include:

- Minutes of any meeting held by the RTA/RTS regarding the incident/accident
- Disclosure of any immediate corrective actions RTA/RTS has planned or completed

- Police reports
- Injury reports
- Crash analysis
- Deaths after the accident
- Detailed scientific, engineering or technical data and the analysis
- Principal issues or items currently being evaluated
- Overall progress and status of the investigation.

The RTA/RTS must include a status report for all accidents, incidents and hazards in the RTA/RTS monthly report, subsequent to the occurrence, until the final report is issued.

A final investigation report is provided to the NJDOT SSO program for review and approval. It must be comprehensive and must include a description of investigation activities, resultant findings, identified causal factors, and a corrective action plan with the responsible person and schedule set out. It must be signed (and dated) by the investigating team members, and accepted by the system safety manager (or security manager if a security incident) and accepted by the system general manager. A corrective action plan, submitted by the RTA/RTS, sets forth in detail the actions by their organization to minimize, control, correct, or eliminate and investigate unsafe or hazardous conditions.

Parts of the report:

(a) Executive Summary;
(b) Sequence of Events, (prior to the accident/incident, the accident/incident, subsequent to the accident/incident);
(c) Description of the injuries, including: Nature of the injuries
(d) Where the injured were located on the vehicle (use of a vehicle diagram is acceptable) Number of persons transported for medical treatment and where they were transported to.
(e) Analysis/Findings: discussions of technical, engineering or scientific tests including pertinence and relevance
(f) Conclusions
(g) Probable Cause
(h) Contributory Causes
(i) Recommendations
(j) Corrective Action Plan
(k) Appendices:
    - Data
        i. Including SCADA Downloads,
        ii. VHLC Downloads
        iii. Vehicle Event Recorder downloads (if the vehicle is equipped with more than one event recorder than all of the event recorder data must be included)
        iv. Vehicle Inspection reports (Include the most current prior to the incident and the post incident inspection)

v. Last Track inspection report
vi. Last Switch inspection report
vii. Last Signal/Grade crossing inspection report

- Supporting memos,
- Technical and engineering and other analytical reports,
- Charts,
- Graphs,
- Field Sketch (with geographic North indicate on drawing),
- Pictures of the incident scene, including photos of damage and other information,

(l) Police, fire, coroner, fire marshal, ems, and other agency investigative report(s).

Depending on the size of the report, a table of contents for the report body and appendices is very helpful or necessary.

The report should include various a location map, site diagram, photos, charts, graphs and other explanatory material. It the incident deals with machinery or equipment site and equipment photos and equipment exploded diagrams or drawings may be necessary.

The RTA/RTS must submit its accident/incident investigation report directly to the NJDOT SSO program within thirty (30) days of the incident.

Investigation reports provided to the NJDOT SSO program will be reviewed in accordance with the *Checklist for Reviewing Fixed Guideway System Accident Investigation Reports and Supporting Documentation*. If necessary the NJDOT SSO program may conduct a meeting to discuss the draft report with the FGTS/RTS, and may request the report be revised based in the comments from the RTA/RTS.

The final report issued by the RTA/RTS may be separated into two parts:

- **Part 1** – contains the description of investigation activities, investigation findings, and a determination of the most probable cause and additional contributing causes;
- **Part 2** – contains recommendations to prevent recurrence, including a Corrective Action Plan developed and implemented in accordance with the RTA/RTS's approved System Safety Program Plan (SSPP), and/or System Security Plan (SSP).

The NJDOT SSO program issues a letter to approve the report. The contents for each report submitted by a RTA/RTS is reviewed for the following information:

- Pertinent facts were gathered and properly analyzed.
- The most probable cause and other contributing factors were identified.
- An appropriate corrective action plan was developed.
- A reasonable schedule was adopted for implementing the corrective action plan
- A comprehensive investigation report was prepared.

If a RTA/RTS issue its final report before agreement on the draft working papers, the NJDOT SSO program prepares a response stating the areas of agreement as well as areas of disagreement and issues a report for reconciliation by the RTA/RTS. Further action may be required by the NJDOT SSO program to resolve any outstanding differences before the case file can be closed. A case report may be heard by an appointed committee with the findings issued to the RTA/RTS. In case the parties cannot reach an agreement, the final report issued by each party will be filled and the case will remain open. All safety and security findings (corrective actions) must be resolved by using the Hazard Management Process and submitted to the NJDOT SSO program. Failure to comply with this part will result in a withdrawal of the Safety Certification for the RTA/RTS.

An NJDOT SSO program case file will be considered "closed" upon completion of the following action items:

- All entries have been made. (Such as areas of disagreement with RTA's/RTS's investigation report).
- The investigation report is approved by the NJDOT SSO program and the letter is issued.
- The NJDOT SSO program determines the corrective action items to be complete and enters the appropriate signature as to completion of all entries.
- The NJDOT SSO program issues its approval to the closure of the corrective action(s) and notifies the RTA/RTS.

The report and supporting documents shall be maintained by the NJDOT SSO program.

NTSB Investigations

The NTSB may investigate an accident to achieve its primary function to promote safety in transportation. In such case, the NTSB is responsible for the investigation, determination of facts, conditions, and circumstances and the cause or probable cause or causes of the accident; and, makes recommendations to reduce the likelihood of recurrence of the accident.

Any employee of the NTSB, upon presenting appropriate credentials, is authorized to enter any property wherein a transportation accident has occurred or wreckage from any such accident is located and do all things necessary for proper investigation, including examination or testing of any vehicle, rolling stock, track, or any part of any such item when such examination or testing is determined to be required for purposes of such investigation.

The NTSB will designate an Investigator-In-Charge (IIC) who shall organize, conduct, control, and manage the field investigation. The IIC has the authority to supervise and coordinate all resources and activities of all personnel, both NTSB members and non-members, involved in the investigation.

The IIC designates parties to participate in the investigation. Parties shall be limited to persons, governmental agencies, companies and associations whose employees, functions, activities, or products were involved in the accident or incident and who can provide suitable qualified personnel to actively assist in the investigation. The NJDOT SSO program Investigator may be designated a party representative by the IIC.

The Investigator, if designated a party representative to participate in the investigation, shall be responsive to the direction of the NTSB representatives and comply with assigned duties. Failure to comply may result in loss of party status. The Investigator must inform the NTSB of the roles and responsibilities, regarding accident and incident investigation, of the agency represented. In the event, the NJDOT SSO program determines to conduct an independent investigation, the NTSB must be informed. The Investigator, as a party representative, may submit written proposed findings to be drawn from the evidence produced; a proposed probable cause(s); and/or, proposed safety recommendations to prevent future accidents to the IIC.

Any examination or testing shall be conducted in such a manner so as not to interfere with or obstruct unnecessarily the transportation services provided by the owner or operator of such vehicle, rolling stock, or track, and shall be conducted in such a manner so as to preserve, to the maximum extent feasible, any evidence relating to the transportation accident, consistent with the needs of the investigation and with the cooperation of such owner or operator. The employee may inspect, at reasonable times, records, files, papers, processes, controls, and facilities relevant to the investigation of such accident. Each inspection shall be commenced and completed promptly and the results of such inspection, examination, or test made available to the parties.

The NJDOT SSO program will assist the NTSB, if possible, by providing information about the RTA's/RTS's safety critical practices and other matters as appropriate. Providing the NTSB releases preliminary findings and recommendations, the NJDOT SSO program will be available for any discussions and reviews with the participating parties. The NJDOT SSO program will assess the NTSB findings, draft, and final reports and make a determination whether or not to adopt the NTSB recommendations. Should the NJDOT SSO program adopt the NTSB recommendations, a notification will be issued to the RTA/RTS for implementation. The RTA/RTS will be required to follow related procedures, as defined in other parts of this Standard.

The RTA/RTS is responsible for the timely briefing of the NJDOT SSO program on NTSB investigation activities including meeting, reviews, requests for data, functional testing, examination of equipment and facilities, and the results of drug and alcohol tests. Additionally the RTA/RTS must provide the NJDOT SSO program with a copy of all written correspondence to the NTSB concerning a reportable incident or investigation, and provide the NJDOT SSO program with a copy of all NTSB reports and recommendations concerning the event or its investigation, when this information is received by the RTA/RTS.

FORMS and CHECKLISTS

- Notification of Accident/Incident and Hazardous Condition
- Notification of Accident/Incident and Hazardous Condition (Additional Information)
- Checklist for Reviewing Fixed Guideway Accident and Incident Investigation Reports and Supporting Documentation
- Detailed Checklist for Reviewing Fixed Guideway Accident and Incident Investigation Reports and Supporting Documentation

Procedure for Accident/Incident and Hazardous Condition

SUMMARY CONFORMANCE CHECKLIST
FOR INVESTIGATION, ANALYSIS AND REPORT DEVELOPMENT

FIXED GUIDEWAY SYSTEM: _____ REV. NO: _____ NO. _____ ITEM _____		ACCEPTABLE	UNACCEPTABLE	PLAN/PROCEDURE TITLE: _____ DATE: _____		ACCEPTABLE	UNACCEPTABLE
1	Procedures for conducting investigations and developing investigation reports			7	Process by which accidents, incidents and hazardous conditions are assessed in accordance with the approved SSPP		
2	Methods by which the procedures are made known to FGTS/RTS Departments			8	Report Items Criteria: a-Sequence of Events, b- Analysis/Findings, c-Conclusions, d-Probable Cause, e-Contributory Cause, f-Official System Reports (PD), g-Recommendations, h-Corrective Action Plan		
3	Defined responsibilities within the FGTS/RTS organization for the conduct, and reporting of investigations			9	OSSO Coordination: - Methods by which the FGTS/RTS coordinate with the OSSO on the investigation of accidents/incidents as outlined in the SSPP and procedure		
4	Investigation training: a-rail b-motor vehicle c-other fixed guideway			10	Verification of corrective actions taken in response to an accident/incident or hazardous condition		
5	Methods by which investigations are linked to the Hazard Management process as defined in the approved SSPP			11			
6	Methods of investigation: a- analysis, test b- interviews c-evidence gathering d-other			12			

THE PROCEDURE FOR CONDUCTING, AND REPORTING INVESTIGATIONS ARE:

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Concurrence by Manager/Supervisor, OFGSSO: _____ **DATE:** _____
Conformance Checklist Form (For NJDOT Use Only)

Comments

Exhibit A

NOTIFICATION OF ACCIDENT/INCIDENTAND HAZARDOUS CONDITION

DATE OF REPORT: _____ **TIME OF REPORT**: _____ (24 HOUR TIME)

REPORTED BY: _____ **FAX/E-MAIL/OTHER**: _____

TELEPHONE: _____ **CONTACT PERSON**: _____

VEHICLE No.:_____ **TRAVEL DIRECTION/LINE**: _____

RAIL TRANSIT SYSTEM: _____

DATE OF ACCIDENT: _____ **TIME OF ACCIDENT**: _____ AM PM

LOCATION: [Nearest Station/Stop Location-City (Boro., Twp., Etc.)]: _____

ENVIRONMENTAL CONDITIONS: _____

TYPE OF ACCIDENT/INCIDENT:

I. FATALITY _____ II. INJURY [Evacuation to Hospital] _____

III. EMERGENCY EVACUATION FROM TRANSIT VEHICLE _____ IV. MINOR INJURY _____ PROPERTY DAMAGE _____

V. OTHER _____ VI. PRELIMINARY ESTIMATE $_____ OF DAMAGE

[Check mark or circle those that apply and insert the number involved.]

DESCRIPTION OF INCIDENT (Collision, Derailment, Fire): _____

_____

_____

_____

_____

_____

EVENT/COMMENTS: _____

_____

_____

Attach additional sheets as necessary, use the "# of #" protocol for page numbering
FORM OSSO A&I N10-5-F2

Exhibit B

NOTIFICATION OF ACCIDENT/INCIDENT
AND HAZARDOUS CONDITION
(Additional Information)

DATE OF REPORT: _____ **TIME OF REPORT**: _____ (24 HOUR TIME)

REPORTED BY: _____ **FAX/E-MAIL/OTHER**: _____

TELEPHONE: _____ **CONTACT PERSON**: _____

VEHICLE No.: _____ **TRAVEL DIRECTION/LINE**: _____

RAIL TRANSIT SYSTEM: _____

DATE OF ACCIDENT: _____ **TIME OF ACCIDENT**: _____ (24 HOUR TIME)

DESCRIPTION OF ACCIDENT (Collision, Derailment, Fire): _____

_____

_____

_____

_____

_____

_____

_____

_____

EVENT/COMMENTS: _____

_____

_____

_____

_____

_____

_____

_____

FORM OSSO A&I N10-5-F2A

NJDOT, OFFICE OF FIXED GUIDEWAY SAFETY AND SECURITY OVERSIGHT

SUMMARY CHECKLIST FOR REVIEWING FIXED GUIDEWAY ACCIDENT AND INCIDENT INVESTIGATION REPORTS AND SUPPORTING DOCUMENTATION

FIXED GUIDEWAY SYSTEM:_____ **REVIEWER(S):** _____

EVENT DATE: _____ **INVESTIGATION REPORT:** _____

EVENT DESCRIPTION: _____ **REQUIREMENTS:** _____

DATE SUBMITTED._____ _____

COMMENT SUMMARY			
Facts/Sequence of Events (Y/N – N/A)			
Y/N	Location of reportable event and/or hazard	**Y/N**	Weather conditions
Y/N	Injuries to persons	**Y/N**	Other environmental factors
Y/N	Other damage	**Y/N**	Fire
Y/N	Operator information	**Y/N**	Tests and research
Y/N	Train information, including method of operation	**Y/N**	Other information
Analysis (Y/N)		**Recommendations (Y/N)**	
Y/N	Are analytic methods and results identified?	**Y/N**	Are they feasible and supported by findings?
Y/N	Have facts, conditions, circumstances and inferences been properly reviewed and evaluated?	**Y/N**	Are they itemized/specific enough to facilitate corrective actions?
Y/N	Were people, procedures, equipment, facilities, and environmental factors considered in the analysis?	**Y/N**	Are they directed toward correcting a particular area and assigned to specific individuals and/or departments for action?
Appendices		**Y/N**	Do they establish specific target dates on a schedule for implementation or completion?
Y/N	Supporting documentation		
Y/N	Drawings, photographs		
Y/N	Interviews		
Y/N	Inspections		
Y/N	Data Downloads		
Y/N	Other (specify)		

Inspections/data downloads:

Comments:

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

(See: Detailed Checklist for Reviewing Fixed Guideway Accident and Incident Investigation Reports and Supporting Documentation)

NJDOT, OFFICE OF FIXED GUIDEWAY SAFETY AND SECURITY OVERSIGHT (OSSO)

DETAILED CHECKLIST FOR REVIEWING FIXED GUIDEWAY ACCIDENT AND INCIDENT INVESTIGATION REPORTS AND SUPPORTING DOCUMENTATION

FIXED GUIDEWAY SYSTEM: _____

EVENT DATE:_____ **EVENT DESCRIPTION**: _____

REVIEWER(S): _____ **DATE**: _____

Overview

This checklist identifies a set of activities that should have been performed by the fixed guideway System or rail transit System in conducting an investigation of accidents meeting thresholds specified by OSSO. Since each accident may be different, the tasks and procedures detailed in this checklist will not necessarily be applied to, nor required for, every investigation. In applying this checklist, OSSO staff should carefully assess which elements of the checklist are applicable to the particular investigation, and address only those elements.

Review Elements

Notification:

(1) Did the system notify SOA of the accident within the required two-hour timeframe?

Yes No Partially NA

Notes:

(2) Was the system Initial Notification complete, and did it address the required points of information?

Yes No Partially NA

Notes:

(3) Was the system's internal notification process appropriately applied, ensuring that all system personnel who needed to be informed of the accident were so notified?

Yes No Partially NA

Notes:

Initial Response:

(4) Upon notification of an accident, did responsible modal supervisory personnel respond to the scene and establish, as necessary, the system's on-site Incident Management Organization or Incident Command (IC)?

Yes No Partially NA

Notes:

(5) Did the responsible modal supervisory personnel coordinate appropriately with the onsite Incident Command established by outside emergency responders and become a resource to the emergency responder Incident Commander?

Yes No Partially NA

Notes:

(6) If appropriate, did the system implement its Emergency Operations Plan and/or emergency response procedures to manage the accident?

Yes No Partially NA

Notes:

Investigator-in-Charge:

(7) Did the system designate an Investigator in Charge (IIC) to conduct the investigation in accordance with the system's SSPP and Accident/Incident Investigation Procedure?

Yes No Partially NA

Notes:

(8) Upon notification of an accident/incident meeting RTA investigation thresholds, did the IIC respond to the scene in a timely manner?

Yes No Partially NA

Notes:

(9) While on-scene, did the IIC have sufficiency authority to initiate, coordinate, and conduct an independent on-site investigation of the accident?

Yes No Partially NA

Notes:

(10) Did the system support the IIC with an accident investigation team?

Yes No Partially NA

Notes:

(11) Upon arriving on the scene, did the IIC serve as the point of contact/communication with any responding regulatory system, including SOA?

Yes No Partially NA

Notes**:**

Accident Scene:

(12) If not in conflict with any authority having jurisdiction, did the IIC secure the scene in order to preserve site conditions and evidence to ensure accurate data development?

Yes No Partially NA

Notes:

(13) Did the IIC follow the system's designated procedure for securing the scene?

Yes No Partially NA

Notes:

(14) Did the IIC coordinate with the RTA on-scene response to obtain, as needed, technical assistance/expertise in conducting required post accident/incident assessments of vehicles, infrastructures, physical plant, and/or equipment?

Yes No Partially NA

Notes:

(15) What specific technical assistance/expertise did the IIC request at the scene from system personnel? Examples of technical assistance/expertise include, as applicable, inspection, testing, and operational assessment of the following: signals, track, power, communications, and vehicle and equipment.

NA

Notes:

(16) If the IIC requested technical assistance/expertise, did the Incident Commander ensure that the required technical assets are made available and deployed to the scene in a timely manner?

Yes No Partially NA

Notes:

(17) Did the IIC meet his or her objectives when initially responding to an accident scene? Objectives specified in system procedures include: securing the scene to ensure safety and prevent a second accident, preserving short term and long term physical evidence, developing a preliminary sequence of events to determine what happened, and identifying employees, passengers, and other eyewitnesses to obtain preliminary statements and contact information.

Yes No Partially NA

Notes:

(18) Did the system response effectively ensure that short term information, which becomes quickly perishable as an accident scene is recovered (e.g. equipment or obstructions are moved or re-arranged, equipment controls are repositioned, witnesses "disappear", etc.), was documented to the greatest extent possible?

Yes No Partially NA

Notes:

Accident Photography:

(19) Upon arrival on the accident scene, did the IIC arrange to have the scene photographed as soon as possible from a "panoramic" view, preferably before the accident scene is restored?

Yes No Partially NA

Notes:

(20) Did this panorama view include camera photographic shots of the involved vehicle(s) in full view, nearby infrastructure features, and any evident significant obstructions, objects, or conditions?

Yes No Partially NA

Notes:

(21) Were accident scene photographs taken using a '4 point compass' method?

Yes No Partially NA

Notes:

(22) Was the entire scene photographed from multiple vantage points?

Yes No Partially NA

Notes:

(23) Did the photographer attempt to provide sufficient depth-of-field to show relative positioning of objects and subjects for later comparison with diagrams?

Yes No Partially NA

Notes:

(24) Did the photographer arrange to have specific objects or subjects photographed as soon as possible from both normal periphery and close-up views, preferably before the accident scene was restored?

Yes No Partially NA

Notes:

(25) Did the photographer attempt to ensure appropriate depth-of-field to sufficiently record subject material?

Yes No Partially NA

Notes:

(26) Did the photographer attempt to include, as appropriate:

(a) each vehicle involved, exterior four sides, including vehicle number(s);	Yes	No	Partially	NA
(b) each vehicle involved, interior compartment;	Yes	No	Partially	NA
(c) each vehicle involved, operating control compartment;	Yes	No	Partially	NA
(d) resting position of wheels if off track, including evidence of sanding;	Yes	No	Partially	NA
(e) all visible points of vehicle damage;	Yes	No	Partially	NA
(f) evidence of wheel marks on rail;	Yes	No	Partially	NA
(g) all visible points of infrastructure damage;	Yes	No	Partially	NA
(h) any visibly evident contributing obstructions, objects, or conditions;	Yes	No	Partially	NA
(i) position of casualties, if stationary;	Yes	No	Partially	NA
(j) any other subject that appears out of the ordinary?	Yes	No	Partially	NA

Notes:

Initial Documentation:

(27) Was initial documentation prepared for the investigation, including:

(a) the location of the accident,	Yes	No	Partially	NA
(b) the date of occurrence,	Yes	No	Partially	NA
(c) the time of occurrence,	Yes	No	Partially	NA
(d) the time of arrival of IIC, supervision, responders	Yes	No	Partially	NA
(e) the visibility conditions (dawn, day, dusk, dark)	Yes	No	Partially	NA
(f) the weather (clear, rainy, foggy, snowing)	Yes	No	Partially	NA
(g) the approximate temperature at the scene	Yes	No	Partially	NA

Notes:

Witness

(28) Was eyewitness information obtained at the scene as quickly as possible? Information should include:

(a) witness name;	Yes	No	Partially	NA
(b) witness address,	Yes	No	Partially	NA
(c) witness telephone number;	Yes	No	Partially	NA
(d) status of witness (observer or principal involved in accident);	Yes	No	Partially	NA
(e) brief description or account of what was or was not observed.	Yes	No	Partially	NA

Notes:

(29) Was the damage and condition of the vehicle(s) documented appropriately, including monetary damage estimate? Elements to be considered may include: (1) car body condition (visible damage), (2) positions of all operator controls (controller & brake handles, headlight and other switches, air gauge readings, etc.), (3) wheels, axles, trucks, and/or sanders, (4) brake systems – friction, electric (dynamic), track, (5) door positions or other entry/exit location conditions, and (6) headlights, marker lights, indicator lights status.

Yes No Partially NA

Notes:

(30) Was evidence appropriately documented relative to vehicle travel/speed to include, as a minimum, the following: (1) ensure event log data (where in service) is secured, (2) identify wheel marks on track, (3) identify evidence of sanding, (4) identify evidence indicating area of contact/collision, (4) determine line-of-sight distances, and (6) ensure arrangement to secure recorded communication data?

Yes No Partially NA

Notes:

(31) Were damage to and condition of the infrastructure and environmental conditions appropriately documented, including monetary damage estimate? Items to consider include the following: (1) damage (observable) to track, signals, bridges, structures, buildings, other infrastructure equipment or machinery, (2) damage (observable) to crossing protection apparatus, if relevant, (3) roadway approaches, visible pedestrian approaches (unauthorized or otherwise), if relevant, (4) evidence (observable) of recent environmental alteration (washout, landslide, etc.), (5) evidence (observable) of recent miscreant alteration (vandalism), and (6) point of derailment, collision, or other incident.

Yes No Partially NA

Notes:

Sketch of Accident Scene:

(32) Was the scene sketched, as appropriate, regarding the relative location of track(s), vehicle(s), signals, equipment, apparatus, buildings, bridges, other structures? Include noteworthy landmark features, such as roadways, waterways, pathways, flora, etc.?

Yes No Partially NA

Notes:

(33) Was the diagram alignment relative to geographic north?

Yes No Partially NA

Notes:

(34) Were points of reference indelibly marked in the field (e.g. paint or chalk markings)?

Yes No Partially NA

Notes:

(35) Was correlation of points of reference documented with regard to resting positions of objects or subjects?

Yes No Partially NA

Notes:

(36) Were "feet" used as a standard unit of measure?

Yes No Partially NA

Notes:

Casualty Information:

(37) Was the status of all known casualties documented?

Yes No Partially NA

Notes:

(38) Did this include: (1) total number of injuries, (2) total number of fatalities, (3) identification of emergency response units that treated or transported casualties, and (4) identification of hospitals where casualties were transported?

Yes No Partially NA

Notes:

Drug and Alcohol Testing:

(39) The rail transit system is mandated by 49 CFR Part 655, "Prevention of Alcohol Misuse and Prohibited Drug Use in Transit Operations," to conduct toxicological testing based upon regulatory requirements, collective bargaining agreements, or standard policy. Did system field supervisory personnel make appropriate determinations regarding which employees, if any, were subject to testing based upon the criteria?

Yes No Partially NA

Notes:

(40) Did the system identify the authorization to conduct the test, and the type of test that was required? Authorization and type includes the following: (1) FTA (For Cause, Post Accident), (2) FRA (For Cause, Post Accident), (3) System (For Cause, Post Accident), and Police.

Yes No Partially NA

Notes:

Off-Scene Accident Investigation:

(41) Once the accident scene had been recovered, did the system IIC pursue the three objectives specified in system procedures for accident investigation data development: (1) to collect remaining applicable non-perishable data, (2) to conduct interim research and analysis of all collected data to date to reconstruct the event, and (3) to determine probable cause and contributing factors?

Yes No Partially NA

Notes:

(42) In the aftermath of an accident, long term information that is non-perishable must be collected (e.g. operational speeds and conditions, maintenance and inspection records, damage estimates, etc.) The primary task of off-site data collection is to coordinate documentation to support evaluation of system, vehicle, and employee performance. Did the IIC coordinate needed post-accident research and analysis with all support departments and independent outside agencies?

Yes No Partially NA

Notes:

(43) Did the IIC arrange for providing specialized technical support within the respective discipline(s) and/or departments?

Yes No Partially NA

Notes:

Off-Scene Vehicle Investigation:

(44) Did the IIC arrange to conduct and/or document post-accident inspections/tests on vehicles as needed to determine if pre-existing conditions contributed to the accident? Applicable components to be tested may include, as a minimum, the following: (1) operator controls, (2) wheels/axles/trucks/sanders, (3) braking systems friction, electric (dynamic), track, (4) on-board signal/speed control systems, (5) communication system, (6) lights, and (7) whistle/horn/gong.

Yes No Partially NA

Notes:

(45) Were all applicable engineering specifications and drawings obtained to support the investigation?

Yes No Partially NA

Notes:

(46) Was the prior maintenance history of vehicle(s) or component(s) involved in the accident researched to determine if any significant conditions or performance levels existed prior to the accident?

Yes No Partially NA

Notes:

(47) Were RTA procedures appropriately followed in accessing this information?

Yes No Partially NA

Notes:

(48) Was systems performance data (inspections/tests, maintenance history) compared with prescribed engineering limits/specifications to determine if there were any contributing factors to the accident?

Yes No Partially NA

Notes:

(49) Were vehicle damage and repair costs verified?

Yes No Partially NA

Notes:

(50) Was event log data recovered from the vehicle to determine actual vehicle performance prior to and at the time of the event?

Yes No Partially NA

Notes:

(51) Was recorded radio or other communication data recovered to determine if flow of information was of significance?

Yes No Partially NA

Notes:

Off-Scene Infrastructure Investigation:

(52) Were timely post-accident inspections/tests on infrastructure conducted as needed to determine if pre-existing conditions contributed to the accident? This activity might have included tests for: (1) track structure, (2) traction power system, (3) signal systems, (4) routing systems, (5) buildings and other structures, (6) bridges, (7) grade crossing protection apparatus, and (8) other equipment or machinery.

Yes No Partially NA

Notes:

(53) Was data recovered from any off-vehicle event recorders such as signal system event recorders or other software driven records systems?

Yes No Partially NA

Notes:

(54) Was the prior maintenance history of all systems involved in the accident researched to determine if any conditions/performance levels existed prior to the accident?

Yes No Partially NA

Notes:

(55) Were designed RTA procedures followed in accessing this information?

Yes No Partially NA

Notes:

(56) Was systems performance data (inspections/tests, maintenance history) compared against prescribed engineering limits/specifications to determine if there were any contributing factors to the accident?

Yes No Partially NA

Notes:

(57) Were infrastructure damage and repair costs verified?

Yes No Partially NA

Notes:

Off-Scene Operating Procedures/Instructions Investigation:

(58) Were all applicable operating instructions identified for the location of accident? These include, but are not limited to, the following: (1) maximum authorized speed and speed restrictions, (2) operating signs and locations, (3) wayside signal locations and aspects capable of being displayed, (4) bulletins or other special operating orders in effect at time of accident, (5) automatic signal systems in effect (train control, cab signals, interlockings, automatic block, etc.), and (6) any special operating conditions.

Yes No Partially NA

Notes:

(59) Were applicable federal and state rules/regulations obtained and researched to determine compliance and effect on accident dynamics? As applicable, these should include, as a minimum, the following: (1) motor vehicle code, (2) operating standards and practices, (3) equipment standards, (4) qualification/certification level requirements, (5) inspection/maintenance standards, and (6) safety standards and practices.

Yes No Partially NA

Notes:

Off-Scene Interviews:

(60) Were detailed face-to-face interviews conducted as needed to determine sequence of events leading up to and at time of the accident? If possible, these interviews should have been tape recorded and supported by a signature from interviewee attesting to the accuracy of the statement.

Yes No Partially NA

Notes:

(61) At a minimum, did interviews include: crew members, other employees directly or indirectly involved in the sequence of events, non-employee accident principals, passengers and bystander witnesses?

Yes No Partially NA

Notes:

(62) Was interview data obtained from other independent sources (i.e., law enforcement)?

Yes No Partially NA

Notes:

(63) Were applicable reports obtained from operators and supervisors for the investigation?

Yes No Partially NA

Notes:

(64) Were other applicable reports of investigation obtained from outside agencies and law enforcement?

Yes No Partially NA

Notes:

Off-Scene Employee Records Review:

(65) Were employee records researched for performance history or incidents relating to accident dynamics? These records should include, but are not limited to, the following: (1) operating and safety practices compliance, (2) qualification/certification levels and experience, (3) training and continuing education history, (4) accident/incident history, (5) toxicological and medical history, and (6) attendance/discipline history.

Yes No Partially NA

Notes:

(66) Were employee hours of service before the accident researched and documented? This should include the following: (1) time employee reported for duty, (2) elapsed time from on-duty time until time of accident, (3) break periods before accident, (4) available off-duty hours before reporting for assignment, (5) number of consecutive days worked prior to day of accident, and (6) nature of off-duty activity prior to accident.

Yes No Partially NA

Notes:

(67) Was the employee's fitness for duty researched and documented? This should include the following: (1) visual acuity, (2) pre-existing medical conditions, and (3) consumption of prescription/non-prescription medication.

Yes No Partially NA

Notes:

(68) Were all aspects of employee performance considered comparative to operating conditions, vehicle and infrastructure conditions, and human physical limitations?

Yes No Partially NA

Notes:

Off-Scene Casualty Investigation: No Reports of Injuries

(69) Were hospitals contacted to verify casualties?

Yes No Partially NA

Notes:

(70) Was the following information obtained:

(a) number of casualties	Yes	No	Partially	NA
(b) identities of casualties	Yes	No	Partially	NA
(c) severity of casualties *(injuries vs. fatalities [include Medical Examiner reports])*	Yes	No	Partially	NA

Notes:

Off-Scene Trespasser Investigation:

(71) Was additional research conducted for trespasser events?

Yes No Partially NA

Notes:

(72) Did the RTA investigate reports prepared by law enforcement agencies related to indications of suicide or foul play?

Yes No Partially NA

Notes:

(73) Did the RTA obtain and review Medical Examiner toxicological reports?

Yes No Partially NA

Notes:

(74) Did the RTA compare research data to event log and communication data to determine performance level?

Yes No Partially NA

Notes:

Analysis of Collected Investigation Information:

(75) Did the RTA IIC document vehicle, infrastructure, or operating conditions that could have contributed to casualties, or increased severity of same?

Yes No Partially NA

Notes:

(76) Did the RTA IIC obtain results of post-accident toxicological testing?

Yes No Partially NA

Notes:

(77) Did the RTA IIC obtain determination of toxicological significance, if available?

Yes No Partially NA

Notes:

(78) As considered relevant, did the RTA IIC reconstruct the accident dynamics and sequence of events based upon all data from on-site investigation and off-site research?

Yes No Partially NA

Notes:

(79) Did the RTA IIC establish facts that were contributory to the accident?

Yes No Partially NA

Notes:

(80) Did RTA IIC fact-finding identify the following: actual vehicle performance, actual infrastructure performance, actual employee performance, performance data or mathematical calculations to determine vehicle speeds and/or impacts, scale drawings/diagrams, and photographic evidence?

Yes No Partially NA

Notes:

(81) Once the readily obtainable information for the investigation was assembled, did the ICC ensure that all existing evidence was evaluated prior to making a general determination as to the contributing factors and probable cause of the accident?

Yes No Partially NA

Notes:

(82) In determining the contributing factors and probable cause of the accident, is it clear that the RTA IIC and/or the RTA accident team reviewed the following: initial accident report, operator and supervisor reports, interview reports, technical reports (vehicle, infrastructure, other), outside agency reports, data contained on employee records, handwritten statements, event log data, radio/communication tapes and/or transcripts, maps, drawings, or diagrams, and photographs or videos?

Yes No Partially NA

Notes:

Investigation Report and Corrective Action Plan

(83) Did the RTA IIC prepare a draft report detailing the data and analysis to support a determination of cause and recommended corrective action, where needed?

Yes No Partially NA

Notes:

(84) Was the draft report completed within the timeframe specified by the SOA and the RTA SSPP and Accident Investigation Procedure?

Yes No Partially NA

Notes:

(85) Did the draft report contain the following sections:

(a) Executive Summary;	Yes	No	Partially	NA
(b) Sequence of Events, (prior to the accident/incident, the accident/incident, subsequent to the accident/incident);	Yes	No	Partially	NA
(c) Findings/Analysis	Yes	No	Partially	NA
(d) Conclusions	Yes	No	Partially	NA
(e) Probable Cause	Yes	No	Partially	NA
(f) Contributory Causes	Yes	No	Partially	NA
(g) Recommendations	Yes	No	Partially	NA
(h) Corrective Action Plan?	Yes	No	Partially	NA

Notes:

(86) Did the RTA IIC and/or RTA accident team coordinate with affected departments to draft a corrective action plan for implementing recommendations specified in the draft accident investigation report?

Yes No Partially NA

Notes:

(87) Did the RTA prepare a corrective action plan for all recommendations developed following an accident/incident investigation?

Yes No Partially NA

Notes:

(88) Did the system corrective action plan contain the following information: activity to meet objectives of the plan, responsible department/individual for plan implementation and task activity, scheduled completion dates, estimated cost, required follow-up, process to ensure that recommendation is implemented, and process to ensure that recommendation does not result in other safety issues?

Yes No Partially NA

Notes:

(89) Did the system prepare an internal status report of corrective action plan activity and completion status?

Yes No Partially NA

Notes:

(90) Did the system provide this report to the senior manager of each part of the system organization responsible for implementation of the corrective action?

Yes No Partially NA

Notes:

(91) Did the system schedule a follow-up review to check that the corrective actions have been implemented?

Yes No Partially NA

Notes:

(92) Does the system have a verification process in place to ensure that departments and/or individuals designated as the responsible party for specific action plan objectives have completed the assigned tasks?

Yes No Partially NA

Notes:

Protocol for Maintaining Evidence:

(93) For this investigation, did the system establish a protocol to retain, secure, and store physical evidence and documentation developed pursuant to investigations for future criminal, tort, or other action? Issues that may be addressed include: (1) chain of custody procedure, (2) validation of photographs/videotapes and control center tapes, (3) physical evidence retention procedure, and (4) procedure for destructive/non-destructive testing.

Yes No Partially NA

Notes:

(94) Has the system established a system for archiving and indexing the evidence collected for the investigation?

Yes No Partially NA

Notes:

Evaluation of Emergency Response to Accident:

(95) If applicable, did the system conduct an after action briefing on the emergency response to the accident?

Yes No Partially NA

Notes:

(96) If applicable, did the system prepare a formal after action report documenting its response to the accident?

Yes No Partially NA

Notes:

(97) If applicable, was this after action report made available to the SOA as part of the accident investigation report or as another submission?

Yes No Partially NA

Notes:

Other

(98) Was there a monetary damage estimate(s)?

Yes No Partially NA

Notes:

(99) Was there a corrective action plan (CAP)?

Yes No Partially NA

a. Was the action clearly stated?

Yes No Partially NA

b. Was there a schedule for delivery?

Yes No Partially NA

c. Was the person responsible for the action identified?

Yes No Partially NA

Notes:

END

Appendix P

Corrective Action Plans (CAPs)

Review and Approval Process

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Procedure for Review and Approval of Corrective Action Plans (CAPs)

Purpose

The purpose of this procedure is to provide guidelines for reviewing and approving Corrective Action Plans (CAPs) prepared by the rail transit agency (RTA)/rail transit system (RTS). A CAP is required to be prepared by the RTA/RTS to address hazards or deficiencies identified as a result of an accident, incident, hazard investigation, the hazard management process, internal and external safety and security audits/reviews performed by the RTA/RTS, their auditor, the New Jersey Department of Transportation (NJDOT) State Safety Oversight (SSO) program or another public agency such as OSHA, TSA or NJDCA.

Scope

This procedure identifies the process for requiring, reviewing, approving and tracking to close out CAPs prepared by the RTA/RTS. This procedure further identifies the NJDOT SSO program policies for the verification and tracking of the implementation of the corrective action plan, and the process for managing conflicts with the RTA/RTS relating to investigation findings and CAP development.

Corrective Action Plan – General Requirements

After the occurrence of an accident/incident or the discovery of a hazardous condition the RTA/RTS is required to do an investigation, identify the cause, submit a report to the NJDOT SSO program which includes a CAP that sets forth in detail the actions the RTA/RTS will take to minimize, control, correct or eliminate the conditions. A corrective action may be necessary because of an internal or external inspection, audit or review by the RTA/RTS, a third party, the NJDOT SSO program or another public agency. That report must be provided to the NJDOT SSO program. Corrective actions must be developed by the RTA/RTS and submitted to the NJDOT SSO program using the same time line for review and approval. If a CAP is not necessary, the report must state that a CAP is not necessary and it must be accepted by the NJDOT SSO program.

For all reports not submitted to the NJDOT SSO program by thirty (30) days, the RTA/RTS submits a status in the Monthly Report to the NJDOT SSO program until the report is submitted. If the report is submitted but because of the complexity of the issue requiring corrective action, additional time may be granted to the RTA/RTS to prepare the CAP by the NJDOT SSO program. However, the Monthly Report must track the non-issuance of the CAP until it is delivered to and accepted by the NJDOT SSO program.

Submitted CAPs MUST have an implementation schedule and identify the individual in the specific section or department at the RTA/RTS responsible for the implementation.

In the event the RTA/RTS participates in an investigation by the National Transportation Safety Board (NTSB) following an accident/incident or hazardous condition, the NJDOT SSO program may review the findings of the investigation to determine whether or not a corrective action plan

is required. When a corrective action plan is required, the RTA/RTS must submit the plan within thirty (30) days of the review.

Reviewing and Approving Corrective Action Plans

The NJDOT SSO program reviews CAPs and notifies the RTA/RTS in writing within Thirty (30) days regarding the approval or disapproval of the plan. In the event the CAP is disapproved, the NJDOT SSO program will indicate the reasons and recommend revisions.

In the event the NJDOT SSO program and the RTA/RTS disputes the need, findings, or enforcement of a CAP, the NJDOT SSO program will allow the RTA/RTS to submit within fifteen (15) days its objections to a requested corrective action. The objections are then reviewed by the NJDOT SSO program before final direction is issued regarding the implementation of the CAP.

In reviewing the CAP, the NJDOT SSO program will ensure that the RTA/RTS has clearly identified the hazard or deficiency; planned activities or actions to resolve the hazard or deficiency; personnel or departments responsible for implementing corrective actions; and scheduled completion dates for implementation.

The NJDOT SSO program requires the RTA/RTS and/or its Contractor to identify events or deficiencies of the Safety and Security Programs to assess the need for a CAP. Program processes include accident/incident investigations, the hazard management process, deficiencies in the RTA's/RTS's System Safety Program Plan (SSPP) or System Security Plan (SSP), or System Emergency Preparedness Plan (SEPP) or via recommendations from the NJDOT SSO program.

Verification and Tracking of Corrective Action Plan Implementation

The RTA/RTS is required to develop and maintain a Corrective Action Monitoring Log (this may be part of the Hazard Log) which identifies all CAPs submitted and approved by the NJDOT SSO program, and presents their status. The NJDOT SSO program tracks these items internally with information provided by the RTA/RTS through monthly corrective action implementation updates. Corrective actions tracked include those resulting from investigation reports, annual audits, three-year safety and security reviews, FTA Program audits, hazard analyses or safety and security reviews performed at the request of the NJDOT SSO program, or other related external reviews. The Corrective Action Monitoring Log must be a permanent protected record of the system.

As CAPs are closed out, the NJDOT SSO program requires the RTA/RTS to submit written verification that the hazard or deficiency has been mitigated in accordance with the approved CAP, or that a proposed alternative action(s) approved by the NJDOT SSO program, has been implemented. This verification is provided with the monthly CAP Tracking Log provided by the RTA/RTS via electronic means or hard copy to the NJDOT SSO program.

The RTA/RTS corrective action is subject to independent on-site verification by the NJDOT SSO program. In the event the NJDOT SSO program requests this verification, the NJDOT SSO program will notify the RTA/RTS in advance of the verification activity.

SUMMARY CONFORMANCE CHECKLIST
FOR REVIEW AND APPROVAL OF CORRECTIVE ACTION PLANS

FIXED GUIDEWAY SYSTEM:_____ _____ **REV. NO:** _____ **NO.** _____ **ITEM** _____		*ACCEPTABLE*	*UNACCEPTABLE*	**PLAN TITLE:** _____ _____ **DATE:** _____ **NO.** _____ **ITEM** _____		*ACCEPTABLE*	*UNACCEPTABLE*
1	Development and implementation of a Corrective Action Plan in accordance with the system's approved SSPP			**10**			
2	Evidence that results from investigation which identified causal and contributing factors are used in the development of the plan			**11**			
3	Findings from the OSSO, and/or other regulatory agencies are used in the development of the plan			**12**			
4	Submission of the Corrective Action Plan to the OSSO for review and approval			**13**			
5	Verification that the corrective actions were implemented in accordance with the OSSO approved Corrective Action Plan			**14**			
6	Alternate actions requiring OSSO review and approval are submitted for approval			**15**			
7	Identification of FGTS/RTS Personnel responsible for the implementation of the plan and tracking of assigned actions			**16**			
8	Updating the OSSO on the progress of the corrective actions and when completed			**17**			
9	Monthly reports submitted to OSSO that include the Corrective Action Plan item(s) initial date, rescheduled date and responsible person			**18**			

THE PROCEDURES FOR REVIEW AND APPROVAL OF CORRECTIVE ACTION PLANS ARE:

_____ **ACCEPTABLE**
_____ **UNACCEPTABLE, REVISE AND RESUBMIT**

REVIEWED BY: _____ **DATE:** _____

APPROVED BY: _____ **DATE:** _____

Conformance Checklist Form (For NJDOT Use Only)

Comments