

# MINNESOTA DEPARTMENT OF PUBLIC SAFETY



## Office of State Safety Oversight Light Rail Program 2019 Annual Report to the Governor

### Mission

The mission of the Office of State Safety Oversight (OSSO) is to ensure a safe and secure environment for riders and the general public who interact with the Light Rail Public Transportation System through collaborative partnerships, providing guidance, and conducting audits, reviews and inspections.

### Overview

The Federal Transit Administration (FTA) requires states with “rail fixed guideway public transportation systems” (RFGPTS) within the state to oversee the safety of those systems. The Department of Public Safety is the designated agency for safety oversight of RFGPTS in Minnesota.

The FTA requirement for the OSSO for much of 2019 focused on system safety processes surrounding the Rail Transit Agency’s System Safety Program Plan (SSPP) and Security & Emergency Preparedness Plan (SEPP). Later in the year, new federal regulations required the transit agency to develop a Public Transportation Agency Safety Plan (PTASP) which replaced the SSPP and SEPP plans. The Minnesota Rail Safety Oversight Program Procedures and Standards document describes the minimum content that the OSSO requires for the PTASP, as well as associated procedures for reviewing the plan and assessing its implementation.

The overall objectives of the OSSO are to reduce the potential for safety incidents and to increase safety awareness at the Rail Transit Agency (RTA). The Minnesota Procedures and Standards document includes minimum requirements for safety practices to reduce the likelihood of unintentional acts or circumstances that may lead to death, injury, or property damage.

In April 2016, the FTA issued a final rule, 49 CFR Part 674, for State safety oversight (SSO) of (RFGPTS) not regulated by the Federal Railroad Administration (FRA). This final rule replaced the current (SSO) rule contained in (49 CFR Part 659). The new rule strengthened a State Safety Oversight Agency’s (SSOA) authority to conduct inspections and investigate accidents, approve corrective action plans, and oversee an RTA’s implementation of its safety plan. The rule also gave FTA the authority to take enforcement actions against those states with non-existent or non-compliant safety oversight programs.

## **Background**

In July 2000, the U.S. Department of Transportation requested that the State of Minnesota designate an agency to establish safety requirements to comply with federal rule, 49 CFR Part 659. This designation was prompted by the FTA's approval and grant award for the Hiawatha Corridor Light Rail Line. In October 2000, the Minnesota Department of Public Safety Minnesota State Patrol was assigned the duties of State safety oversight.

The State Patrol's role included hiring and managing a contractor with technical expertise to conduct project oversight, and develop documents fulfilling the requirements outlined in 49 CFR Part 659. The State Patrol, with contractor support, provided oversight for the design, construction, and revenue service phases of Metro Transit's Blue Line "Hiawatha Line" and the design, construction, and revenue service phases of Metro Transit's Green Line "Central Corridor".

In 2014, the Minnesota Legislature passed Minnesota Statutes section 299A.017, which established the Office of State Safety Oversight (OSSO). On February 11, 2015, the OSSO began full time oversight duties with a program manager.

In 2016, the final SSO rule took effect, requiring states to attain certification of their SSO programs. The rule also gives the FTA authority to review and approve each state's SSO program and take enforcement actions against states with non-existent or non-compliant safety oversight programs. Minnesota became the second state in the nation to receive FTA certification on October 11, 2017.

## **Budget**

The OSSO is staffed by a program manager and funded with \$60,000 of state general funds each fiscal year and a \$240,000 federal match for a total annual budget of \$300,000; 20 percent state funding and 80 percent federal match.

## **Performance Measures**

The OSSO works primarily with the Metro Transit Rail Safety Department to accomplish the required objectives in the federal rule. Some of the activities include' but are not limited to:

- Audit compliance regarding specified elements in the Transportation Agency Safety Plan.
- Oversight of accident investigations.
- Monitoring of Metro Transit operations related to safety.
- Monitoring and approving corrective action plans from initiation to completion.
- Reviewing and approving the Transportation Agency Safety Plan.
- Reviewing and approving the Accident/Incident Investigation Plan.
- Assisting Rail Safety in conducting internal audits.

The OSSO oversees the safety certification process regarding the development of the Green Line - "Southwest Corridor" and the Blue Line - "Bottineau" extension projects. This includes oversight of the processes used by Metro Transit during the design, construction, and the pre-revenue service phases of the projects.

## **Accident Investigations**

Pursuant to the final SSO rule, the OSSO, is required to investigate certain accidents at the transit agencies it oversees. Under Minnesota's Rail Safety Oversight program, an "accident" is defined as an event meeting any of the following criteria:

1. A loss of life occurring at the scene or within 30 days following the accident;
2. A report of a serious injury to a person;
3. A collision involving a rail transit vehicle;
4. A runaway train;
5. An evacuation for life safety reasons; or
6. Any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

If an incident meets any of the criteria above, the transit agency must notify the OSSO within two hours of the occurrence. The SSOA must then investigate or require an investigation of any accident and is ultimately responsible for the sufficiency and thoroughness of the investigation, whether conducted by the SSOA or the RTA. Metro Transit currently conducts its own investigation and submits the final report to the OSSO.

Upon receipt of a final report, the OSSO will ensure it provides a thorough description of the investigation activities, identifies causal and contributing factors, and establishes and implements, if applicable, corrective actions. After this review, the OSSO formally approves and adopts the final investigation report and notifies the transit agency.

The Light Rail Oversight Program Manager may assist the transit agency in an investigation by interviewing operators, reviewing video footage, and reviewing documents in the investigation file.

The following table displays a three year summary of train miles traveled and collisions at Metro Transit. The table also displays the collision per 100,000 miles.

Light Rail Transit Collision Data Summary			
	Blue Line	Green Line	System Total
2017 Train Miles	2,781,957	2,612,312	5,394,269
2017 Collisions	12	24	36
2017 Collisions/100,000 Miles	0.43	0.91	0.66
2018 Train Miles	2,836,557	2,577,808	5,414,365
2018 Collisions	14	20	34
2018 Collisions/100,000 Miles	0.49	0.78	0.63
2019 Train Miles	2,978,278	2,421,808	5,400,086
2019 Collisions	16	31	47
2019 Collisions/100,000 Miles	0.53	1.28	0.87

The table below displays a three year summary of details regarding the type of collisions that have occurred at Metro Transit.

Light Rail Reportable Collision Details				
	Blue Line	Green Line	System Totals (3)	
2017 No Damage/No Injury	1	1	2	
2017 Property Damage Only	7	13	20	
2017 Personal Injury	4	9	13	5 LRV Passengers, 8 in Motor Vehicles, 5 Pedestrians
2017 Fatality	0	1	1	1 Motor Vehicle
2018 No Damage/No Injury	0	0	0	
2018 Property Damage Only	8	14	22	
2018 Personal Injury	4	5	9	3 LRV Passengers, 2 in Motor Vehicles, 6 Pedestrians
2018 Fatality	1	2	3	1 Bicyclist, 2 Pedestrian
2019 No Damage/No Injury	0	0	0	
2019 Property Damage Only	12	19	31	
2019 Personal Injury	3	11	14	7 LRV Passengers, 6 in Motor Vehicles, 6 Pedestrians
2019 Fatality	1	2	3	1 Bicyclist, 2 Pedestrian
(1) No damage/No injury – is a reportable crash with no visible property damage/no visible personal injury/hit and run vehicle with no damage to the train. (2) N/A - indicates information not available. (3) System Totals - total reportable collisions to light rail system. Injury and fatality totals may reflect multiple injuries in one or more vehicles.				

## Corrective Actions and Hazards

The transit agency must have a Hazard Management Program and an approved Corrective Action Plan (CAP) process that actively analyzes the agency's operating environment, policies and procedures, system modifications and extensions, and other areas affecting safety, for potential hazards. The hazard management process must identify, report, classify, resolve, and track safety hazards in a manner that is planned, consistent, and rigorous, as well as appropriate to the transit agency's size and operating situation.

CAPs are required for deficiencies identified through the on-site safety audits, accident and hazards investigations, internal safety reviews, or other means by which a hazard may be brought to the attention of the transit system. The transit agency maintains a CAP log and submits it to the OSSO on a monthly basis. The Program Manager meets on a regular basis with the Rail Safety Department to discuss items in the log. The Program Manager also reviews and approves any items that have been added or completed and enters the data in the Federal Transit Reporting website. Each month, after review, the Program Manager sends an approval letter to the transit agency regarding any changes to the CAP log.

Under the new certification criteria, OSSO maintains a tracking database that identifies all CAPs approved by the OSSO and proposed by the transit agency and their respective status.

Corrective Action and Hazards			
	2017	2018	2019
Corrective Action Plans	13	43	11
Identified Hazards	1	4	3

## On-Site Safety and Security Reviews

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 in accordance with SSO rule 49 CFR Part 674.31. Alternatively, the on-site review may be conducted in an on-going manner over a three year timeframe.

The OSSO has used an ongoing review process intended to address all 21 safety and security review items within the three-year period. All elements of the triennial audit have been completed for this period (2017-2019). The OSSO works with Metro Transit Rail Safety to complete the audits in a manner that is most convenient for operational demands.

The OSSO conducted on-site assessments and reviews to determine transit system compliance with its own System Safety Program Plan (SSPP) and its Security & Emergency Preparedness Plan (SEPP). The OSSO's on-site reviews were conducted primarily by contractors who coordinate closely with both the Program Manager and the transit system's managers.

Upon completion of a triennial on-site safety and security review, or a significant portion of it, the OSSO will complete a written report, typically submitted to the transit agency within 30 days after the on-site review. The report contains a summary of the review methodology, persons interviewed, records reviewed, and equipment/operations inspected. Depending on the outcome of the review, the report will also list any findings and observations identified by the OSSO.

“Findings” will include those items where the transit system is not in compliance with its own plans and procedures or with external guidelines with which it is bound to comply. “Observations” will include all other items, including those review results where the OSSO has concluded that the transit system could improve its agency safety plan, security and emergency preparedness plan, procedures, or practices.

It should be noted that the next three year cycle (2020-2022) of audits will be regulated by SSO rule 49 CFR 674, and Metro Transits Transportation Agency Safety Plan.

### **Internal Audits**

The OSSO also requires the transit agency to develop and document a process for the performance of ongoing internal safety audits to assess implementation of the System Safety Program Plan and the Emergency Preparedness Plan. The rail transit agency must notify the OSSO at least 30 days before conducting internal audits. The transit agency must also provide written checklists for each audit 30 days before any on-site audit activity. The OSSO may request to participate in transit agency internal audits from time to time each year and, the transit agency must submit to the OSSO a report of all internal audits performed in the previous calendar year. The final written report must be submitted to the OSSO on or before February 1 of each year. Within 30 days of receipt, the OSSO will issue a written response either accepting or rejecting the annual internal audit report.

If the OSSO rejects the report, the transit agency will address noted deficiencies and requested changes and submit a revised report within the timeframe specified by OSSO, typically 15 days. The OSSO, at its discretion, may arrange for a meeting with the transit agency to discuss the noted deficiencies and requested changes. Once approved, a final version of the report must be submitted in an unalterable format with all transit agency approval signatures visible.

The following table shows the triennial audits required by FTA and the year in which the element is scheduled.

<b>SSPP AUDIT ELEMENTS</b>	
1. Policy Statement	2017
2. Goals & Objectives	2017
3. Management Structure	2017
4. SSPP Change Control	2017
5. SSPP Implementation Activities	2017
6. Hazard Management Program & CAPs	2018
7. System Modifications	2018
8. Safety Certification	2018
9. Safety Data	2017
10. Accident Notif., Invest., Rptg.	2018
11. Emergency Management (see also security) (POETE)	2019
12. Internal Safety Reviews	2018
13. Operations, Rule Compliance, Mtc., Checks	2018
14a. Facil. & Equip. Safety Inspections: Structures	2018
14b. Facil. & Equip. Safety Inspections: Stations	2018
14c. Facil. & Equip. Safety Inspections: Maintenance	2018
15a. Maintenance Audits & Insp.: Track	2018
15b. Maintenance Audits & Insp.: Signals	2018
15c. Maintenance Audits & Insp.: Power	2018
15d. Maintenance Audits & Insp.: Vehicles - General (LRV)	2017
15e. Maintenance Audits & Insp.: Vertical Transp.	2018
15f. Maintenance Audits & Insp.: Communications	2018
16a. Employee & Contractor Training: Operations	2018
16b. Employee & Contractor Training: Maintenance	2018
17. Configuration Management	2017
18. Employee & Contractor Safety	2018
19. Hazardous Materials	2017
20. Drug & Alcohol Program	2018
21. Procurement	2017
<b>SEPP Audit Elements</b>	
1: Policies, goals, objectives, chief executive endorsement	2019
2: System Description	2019
3: SEPP Management Activities	2019
4: SEPP Program (Personal Security) A2	2019
5: Threats and vulnerabilities management	2019
6: Implementation of the SEPP	2019
7: SEPP and Accompanying Procedures access for oversight agency	2019
8: Corrective Action Plan (CAP) process	2019
Drills/Exercises	2019