

# METRO TRANSIT SYSTEM SAFETY

*PROGRAM EVALUATION AND AUDIT*



**METROPOLITAN  
COUNCIL**

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# Highlights

## Bus and Rail Compliant with Safety Regulations

### What We Found

#### *What's Working Well*

- Metro Transit generally complies with the requirements of 49 CFR Part 673, the Public Transportation Agency Safety Plan regulation.
- Metro Transit has implemented corrective action plans from the Minnesota Office of State Safety Oversight.
- Corrective action plans for hazards are documented in the Consolidated Hazard Matrices.

#### *What Needs Improvement*

- Documentation of commercial driver's license (CDL) checks and hazard analyses.
- There were discrepancies in the 2019 bus safety audits.

### What We Recommend

- Complete CDL checks once the system is operational.
- Implement standards for documenting hazards.
- Safety staff and management should determine how to keep work areas clean/organized and consider implementing a formal housekeeping program.



### Why We Did This Work

The Federal Transit Administration (FTA) issued a new regulation that required transit agencies to have a safety plan. Audit reviewed the safety program to promote public safety and review for compliance. The audit had three objectives:

- Determine compliance with 49 CFR Part 673.
- Follow-up on a 2020 State Safety Oversight review.
- Evaluate the implementation of the safety program.

### What We Reviewed

Audit reviewed the Public Transportation Agency Safety Plans for bus and parts of rail along with supporting documents. The review was limited to Metro Transit. Transit's implemented corrective actions in response to a state safety oversight audit were also reviewed.

### How We Did This Work

Audit interviewed safety management staff and safety specialists. Audit also performed a desk review and onsite audit.

## Summary of Findings

| Number | Description  | Recommendation   | Follow-up Action | Page               |
|--------|--|--|------------------|--------------------|
| 1      | CDL checks and hazard determination undocumented.            | Once the interagency agreement is complete, review operators' CDLs.                          | Confirmation     | <a href="#">11</a> |
|        |  | Create and implement a hazard documentation process.   | Confirmation     | <a href="#">12</a> |
| 2      | Discrepancy between planned and executed bus audits in 2019. | Prepare to speak on the discrepancies for the FTA Triennial.                                 | Confirmation     | <a href="#">12</a> |
| 3      | Workspace housekeeping could be improved.                    | Determine how to keep areas organized and consider implementing formal housekeeping methods. | Confirmation     | <a href="#">13</a> |

# Introduction

## *Background*

On July 19, 2018, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule 49 CFR Part 673, which requires certain operators of public transportation systems, including the Metropolitan Council, that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement safety management systems (SMS). FTA published multiple Notice of Enforcement Discretions that extended the compliance deadline from July 20, 2020 to July 21, 2021, due primarily to the COVID-19 pandemic.

49 CFR Part 673 also requires agencies to maintain documentation that set forth its agency safety plans (ASPs), including those related to the implementation of its SMS, and results from SMS processes and activities. It must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures it uses to carry out its ASPs. These documents must be maintained for a minimum of three years after they are created. In addition, plans must be certified annually.

Metro Transit has two ASPs – one for light rail and one for bus. Northstar is not subject to the PTASP requirement, as it is overseen by the Federal Railroad Administration (FRA). The safety plans detail responsibilities, goals, and the SMS.

The Minnesota Office of State Safety Oversight Program (MnOSSO) performed a Triennial Audit in September and October of 2020 per the FTA's requirements as the designated State Safety Oversight Agency (SSOA). In this capacity they oversee and monitor the compliance of rail fixed guideway public transportation systems with relevant regulations and requirements. As the designated SSOA, the MnOSSO is the agency responsible for performing triennial audits of Metro Transit's light rail program and providing ongoing oversight.

Further, the Council also has procedure HR9-1a, the Accident/Injury Prevention Programs Procedure. This procedure identifies the occupational safety and health programs used at the Metropolitan Council, of which most are required by Occupational Safety and Health Administration (OSHA). The procedure provides additional detail on each of the safety programs or items, responsibilities, and any necessary training requirements.

Finally, Metro Transit's Safety Department is primarily responsible for creating and implementing the safety plans for each mode. However, all departments and employees share a responsibility to create a safe work environment. The Safety Department consists of eleven full-time staff. The director and both safety managers are currently in acting roles.

## Objective

The audit had three objectives:

1. Determine bus ASP compliance with 49 CFR Part 673 – Public Transportation Agency Safety Plans and ensure documentation is maintained for documents set forth in the bus and rail ASPs.
2. Follow up on the Corrective Action Plans related to findings from the Minnesota State Safety Oversight Office's 2020 Triennial review of LRT safety.
3. Evaluate the strategies and methods used to ensure the effectiveness of Metro Transit's safety program and prevent employee injuries including reviewing the internal audit safety program, audits and results, and adherence to the Council's Accident/Injury Prevention Programs Procedure HR 9-1a.

The audit reviewed the ASPs for rail and bus for additional risk. The key risk areas for the audit were:

- Potential for compliance or legal risk if the Council's ASPs do not include all requirements from 49 CFR Part 673, creating non-compliant ASPs and exposing the Council to potential FTA findings.
- Potential for compliance or legal risk if Metro Transit has not responded to and implemented corrective actions resulting from the 2020 State Safety Oversight audit, creating safety and compliance gaps.
- Potential for operational risk if the Council is not implementing its safety control measures and maybe creating an unsafe environment for employees and the general public.

The audit also considered the Council's *Thrive MSP 2040* Outcomes and Principles. Specifically, it considered the *accountability* principle to the FTA for following regulations, to employees for providing a safe work environment, and to the public for providing a safe transportation mode. It also furthers Metro Transit's strategic goals to "provide service that is safe, welcoming, and comfortable."<sup>1</sup> It also furthers the core element of "evaluat[ing] our performance and foster[ing] innovation for continuous improvement."<sup>2</sup>

## Scope

For this review, audit reviewed the policies, procedures, processes, and records related to safety at Metro Transit. This includes the Safety Department's complaint logs, incident records, safety plans, and other documents for bus, rail, and commuter rail as applicable. The audit covered the most recent ASPs for bus and rail and was limited to Metro Transit operations. Metropolitan Transportation Services' operations are covered separately and were not reviewed as part of this audit.

The rail ASP was not reviewed for compliance with 49 CFR 673, apart from ensuring documentation was maintained, as the plan was previously approved by the MnOSSO in 2020.

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<sup>1</sup> "Stronger, Better: Metro Transit Strategic Plan 2021-2022."

<sup>2</sup> Ibid.

## *Methodology*

Audit used desk reviews and interviews to determine compliance with 49 CFR Part 673. Audit verified bus compliance with the regulation by using the FTA's PTASP checklist. Using keyword searches, Audit attempted to match FTA-provided checklist to relevant elements of the current bus ASP and 49 CFR Part 673. Auditors also spot-checked documentation for items listed in the bus and rail ASPs to ensure that the organization was meeting documentation requirements.

Audit reviewed the MnOSSO's audit report for corrective action plans to determine if Safety had responded appropriately. Audit also reviewed documentation to ensure that the corrective action plans were submitted to MnOSSO on-time and were subsequently approved. MnOSSO's CAP tracking log was used to validate approval.

In order to evaluate the strategies and methods Metro Transit used to implement the safety program, Audit reviewed several supporting documents and interviewed project staff. Audit reviewed Safety's Internal Safety Audit Program Plan, which describes the process for reviewing each mode's ASP. The Internal Audit Safety Program Plan requires the Safety Department to review elements of the ASP for compliance. Audit reviewed the audit quality and schedule to determine if audits were on-schedule.

The first step in verifying that Metro Transit complies to HR9-1a was to have the Safety Director identify the applicable parts of HR9-1a to Metro Transit. Initial Safety Program related materials such as Right to Know (RTK), Blood Borne Pathogens (BBP), Personal Protective Equipment (PPE), fire safety, were pulled from the Safety department's METNET page. Audit followed up with department staff and acquired access to Safety's shared drive for further documentation. With access to the safety folders additional safety program information was pulled and reviewed. Specifically, to assess the compliance with injury and illness reporting and recordkeeping, three locations were selected for review, one bus garage (Ruter), one light rail facility (LRT OMF), and one multipurpose site (Transfer Road). The OSHA 300 logs were reviewed and the information in the logs matched to the imaged incident reports for the three locations. This information was used to confirm the applicable requirements in the HR9-1A sections existed and were being followed.

To confirm that the training topics in HR9-1a were being performed, training materials and records were reviewed. Training materials were gathered from the Safety department's network folders, METNET, Learn, and were requested from safety staff when needed. For training records, a selection of employees from three locations were pulled to get a variety of job positions including two bus garages, Nicollet and Heywood, and the Green Line Operations and Maintenance Facility (OMF).

Additionally, Audit performed onsite interviews with program staff for additional information and to verify if safety practices were being implemented in the workplace. Audit visited Nicollet, Heywood and the Green Line OMF.

## *Limitations*

The COVID-19 pandemic limited in-person interaction.

## *Recognition*

The Safety Department was responsive to document requests and forthcoming in interviews. Audit would also like to thank the safety specialists and garage staff who participated in onsite interviews.



# Non-Finding Observations

## **The Council’s Agency Safety Plan for bus includes the elements required by 49 CFR Part 673.**

Through our review, we determined that the Council’s agency safety plan for bus includes the elements required by 49 CFR Part 673 including elements of safety risk management (as described in 49 CFR 673.25); safety assurance (as described in 49 CFR 673.27); and safety promotion (as described in 49 CFR 673.29).

## **Metro Transit has implemented Corrective Action Plans for the findings in the MN OSSO Triennial Audit.**

The findings identified in the MnOSSO triennial report have been addressed by MT Safety and the corrective actions approved by the MnOSSO.

## **Corrective Action Plans are consistently documented in the Consolidated Hazard Matrices for bus and rail.**

A goal of the SMS is to identify “hazards.”<sup>3</sup> When a hazard is identified, a corrective action plan may be required based on the hazard’s severity.<sup>4</sup> These corrective actions are documented in the consolidated hazard matrix, which also documents the issue, the source, due dates, and pre- and post-mitigation assessments. Documenting the corrective action plans is a positive management practice that encourages accountability and follow-up.

## **A useful regimen is in place to capture safety related incidents at each site sampled.**

OSHA 300 logs are maintained at each physical location sampled. OSHA 301 forms exist for each incident listed in the OSHA 300 logs sampled. Audit verified that these records are preserved, and the five-year retention requirement is met.

## **The Safety Department has had significant turnover due to retirements.**

Until recently, the Safety Department’s top-level management were all serving in acting roles. This included the Safety Director, Rail System Safety Manager, and Bus System Safety Manager. However, as of November 2021, the roles of Rail Systems Safety Manager and Bus System Safety Manager have been filled. The previous director retired in 2020 and the current acting director retired in October. Metro Transit has been attempting to fill the positions. For now, Metropolitan Transportation Services’(MTS) Chief Safety Officer is serving in a dual role as the Acting Safety Director for Metro Transit and retaining his MTS responsibilities.

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<sup>3</sup> Metro Transit defines “hazard” as “any real or potential condition that can cause injury, illness, or death to personnel; damage to or loss of system service, equipment or property; or damage to the environment.” *MT Bus ASP, 1.4.4 “Definitions”. MT Rail ASP 1.4.4 “Definitions”.*

<sup>4</sup> Metro Transit requires corrective action plans to mitigate hazards that are determined to be “Unacceptable” or “Undesirable.” Section 2.1.3.3 of the ASPs describe when a corrective action plan is required to mitigate the hazard. Maintaining a system for mitigating safety risks is required by 49 CFR Part 673.25(d).

**Metro Transit has all the necessary programs, procedures, and elements listed in HR9-1A.**

The HR9-1A procedure has several sections within it that outline what programs, procedures, or safety elements are needed. This includes items like a RTK program, a BBP program, a safety committee, testing eyewash stations, and having Emergency Action Plans. Through document reviews of the programs, procedures, plans, meeting notes, safety data sheets, and performing on-site reviews and interviews, it was determined that Metro Transit has all the programs, procedures, and safety elements noted in HR9-1A.

**Metro Transit is providing the necessary training to their employees and records are maintained.**

The HR9-1A procedure breaks out training into three requirement sections: “Required Annually”, “Required upon assessment of personnel, or when audit, performance review, injury/illness, or other means indicates retraining is needed”, and “Training that may enhance performance, or help minimize employee risk of injury or illness”. While it was not always clear which department or area was responsible for a training topic, all the materials for the training topics in HR9-1A were found in the Safety Department’s network folder, via LOD, on METNET, or were provided by Metro Transit staff. A sample of the annually required trainings, which included topics such as RTK, BBP, Fire Extinguishers, and Safety Data Sheets, was requested to and provided by Metro Transit staff. For all the other “non-annually required” training topics, a similar request was made for records. Metro Transit staff did provide most of these training records for the sample we provided. However, in some cases such as Back Care, Ergonomics, Welding, or Traffic Control, no training records existed for our sample, which is acceptable as the procedure states that these training topics are only given if there is a reason or need to do so.

# Finding Observations

## Documentation referenced in the ASPs was generally maintained, with two exceptions.

Documents referenced in the bus and rail ASPs, including those related to implementing a SMS and results from SMS processes and activities, were generally maintained, with two exceptions. First, Commercial Drivers' License (CDL) daily checks have not been completed since May. According to the bus and rail ASPs, these checks are performed daily. Second, formal documentation of hazards and their evaluations is inconsistent. 49 CFR Part 673.31 requires the Council to maintain documentation on items referenced in the ASP for 3 years.

The causes for each exception were unique. For the CDL checks, the Council relies on a State of Minnesota-owned system. The state made changes to their system, which prevents the Council from accessing it. Since the Council lacked access, it could not run operators' CDLs to ensure they were active. Without the CDL checks, the Council cannot certify that all operators have a valid CDL without a manual review. As such, the Council is currently exposed to liability risks, as operators may be operating with invalid licenses. Currently, the Council is relying on operators to self-report issues with their CDLs. As maintaining a valid CDL is a job requirement, operators may be hesitant to self-report. Bus Operations is responsible for running the daily checks.

As of September, Bus Operations and Asset Management are actively working together with the State of Minnesota to formalize an interagency agreement to address the issues.

For hazard analyses, the ASPs lack a clear definition for when a potential hazard should be formally evaluated, an informal analysis is acceptable, or when a potential hazard is determined to not be one. Additionally, the ASPs do not contain a procedure for documenting hazard analyses, and the process is left to the safety managers' discretion.

By not properly documenting hazards and the decision-making process, the Council is acquiring additional injury, compliance, and liability risk. Without the proper documentation, the hazard identification process appears to be random. If a hazard were to occur and result in injury, but the Council determined it to not be a hazard without the documentation to back it up, the Council would be unable to determine the historical cause and conditions that created the hazard. Additionally, the FTA requires transit agencies to maintain documentation on its processes. By not documenting the hazards, the Council is not meeting the documentation requirements of 49 CFR Part 673.31.

## Recommendations:

1. Once the interagency agreement is completed, return to completing regular CDL checks as stated in the bus and rail agency safety plans. Create a procedure for manual checks. In preparation for a Triennial review, document the issues with the system for the FTA and the actions the Council took to resolve them.

**Management Response:** The Safety Department will work with Bus Operations Administration on completing a manual process to complete CDL checks once a month until the interagency agreement is in place. Once the interagency agreement is completed, automated CDL checks will return.

**Timetable:** December 31, 2021

**Staff Responsible:** Director of Asset Management

**Audit Follow-Up:** Audit will confirm that the interagency agreement has been completed and CDL checks have resumed.

2. Create and implement a procedure for documenting hazard analyses, including when a hazard decision should be documented, the required supporting documentation, and the communication plan.

**Management Response:** The Safety Department will document and implement a process within both the Bus and Rail Agency Safety Plans (ASPs) and include the language in the next revisions of these documents during our required annual review.

**Timetable:** July 31, 2022

**Staff Responsible:** Acting Director, Rail and Bus Safety

**Audit Follow-Up:** Audit will confirm that a process has been completed and implemented.

### **There was a discrepancy between the planned and executed bus audits in 2019.**

Each ASP establishes an Internal Safety Audit Program to assist with ensuring the ASP is properly implemented. The Internal Safety Audit Program Plans for both bus and rail identify the ASP elements that will be audited by the Safety Department for the next three years, according to a specific schedule listed in Appendix A of the Internal Audit Program Plans.

Six audits listed in the 2019 Internal Bus Safety Audit Program Plan did not occur or align with the scheduled elements for 2019. Instead, most completed bus audits in 2019 align with the 2017 Bus System Safety Program Plan. This discrepancy was caused by the transition to Agency Safety Plans. In July 2019, the agency transitioned from the Bus System Safety Program to the Bus Agency Safety Plan. When this transition occurred, the previously completed audits under the 2017 Safety System Program Plan were not accurately recorded in the 2020 Agency Safety Plan and did not match the new program's elements.

By not updating the internal bus safety audit program plan at the same time as the transition to the ASP, Safety created a discrepancy in its recordkeeping. Additionally, some audits were not completed as a result. FTA regulations require the agency to maintain documentation of the items that it lays out in its ASP.

### **Recommendation:**

1. Metro Transit Safety should document the identified discrepancies surrounding the transition from the System Safety Plans to Agency Safety Plans.

**Management Response:** The Safety Department will document discrepancies in both the Bus and Rail Safety Plans (ASPs) in the next required annual review.

**Timetable:** Completion by Next Triennial.

**Staff Responsible:** Acting Director, Rail and Bus Safety

**Audit Follow-Up:** Confirmation that the department has documented the discrepancy.

### **Workspace housekeeping can be improved.**

Metro Transit adheres to most of the HR9-1a procedure, except regarding some issues with workspaces housekeeping. At the Green Line OMF there was an employee's lunch bag, thermos, and other personal and miscellaneous items on a work bench. In the same area there is a work area used for welding that had various PPE, tools, equipment, and parts laying on it. In the machining area, behind one of the computer numeric controlled machines there were unused stands on the floor. At the Heywood garage there were empty boxes, packing material, and other pieces of trash below a sign that stated, "Please Do Not Leave Any Trash On This Table!".

HR9-1a and the "a workplace accident and injury reduction" (AWAIR) surveys/checklists that the Safety Specialists use both state that proper housekeeping includes keeping work areas orderly, in a sanitary condition, and floors should be clean. While the exact cause of the housekeeping issues is unknown, there are factors that are believed to have contributed to the cause. Management stated that due to the COVID-19 pandemic there are restrictions on the number of employees allowed in the breakroom. This has caused some employees to take their breaks outside of the breakroom (e.g. at workstations, work areas, etc.). Another contributing factor may be that no formal method exists to periodically review work areas are kept in an orderly manner.

Unclean workstations and poor housekeeping could result in employees injuring themselves or other coworkers.

### **Recommendation:**

1. The safety specialists should work with the owners of the work areas to clean and organize the areas identified and discuss how work areas will be maintained going forward. Management should determine a method that allows employees to take their breaks in the designated areas and complies with COVID-19 restrictions. Management may also want to consider following a formal workplace organizational/housekeeping method.

**Management Response:** The Safety Department will work with other departments throughout the organization's management to increase awareness of work area cleanliness, complying with COVID-19 restrictions, and its importance.

**Timetable:** March 31, 2022

**Staff Responsible:** Safety Specialists and Managers of the work areas.

**Audit Follow-Up:** Confirmation that Management has addressed the issues and discussed with the employees.

## Conclusions

Metro Transit is generally compliant with 49 CFR Part 673 the Public Transit Agency Safety Rule. While documentation and record keeping can be improved, Metro Transit has worked to ensure that it complies with federal regulations. Metro Transit has also responded to MnOSSO's findings and implemented corrective actions. Finally, Metro Transit is also generally implementing the requirements of internal Council procedures, helping to create a safe workplace for employees. While housekeeping can be improved, staff are being appropriately trained on essential workplace safety programs.



December 7, 2021  
Matthew J. LaTour, Director Program Evaluation & Audit  
Chief Audit Executive

## Appendix A — Classifications

Program Evaluation and Audit recommendations are categorized according to how Audit will follow-up on them. The categories are:

- **Retest** — Audit will retest the area using the same or similar procedures after a recommendation has been implemented and sufficient time has passed for the changes to take effect. The retest will take place on a specified timetable. The recommendation will be closed once the change has occurred. A new audit project will be opened for retesting and any new findings will include new recommendations
- **Confirmation** — Audit will confirm that an adequate risk response has been completed on the agreed upon timeline. The recommendation will be closed once the change has taken place.
- **Assess Risk** — Audit will not plan for specific follow up to these recommendations. Audit will discuss the area as part of its annual risk assessment activities and consider future audit work in the area.

## Appendix B – Glossary

- **Agency Safety Plan** – The documented comprehensive agency safety plan.
- **Commercial Driver’s License (CDL)** – A license required to operate large, heavy, or passenger-carrying vehicles.
- **Federal Railroad Administration (FRA)** – A Department of Transportation agency, the FRA is the federal oversight agency for railroads.
- **Federal Transit Administration (FTA)** – A Department of Transportation agency, the FTA is the federal oversight agency for public transportation agencies.
- **Minnesota Office of State Safety Oversight (MnOSSO)** – A Department of Public Safety agency, the MnOSSO oversees the Light Rail program. It is the SSOA for Minnesota.
- **Public Transit Agency Safety Plan (PTASP)** – The documented comprehensive agency safety plan for a transit agency that is required by 49 United States Code 5329.
- **Safety Management System (SMS)** – The formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency’s safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- **State Safety Oversight Agency (SSOA)** – An agency established by a state that meets the requirements and performs the functions specified by 49 United States Code 5329(e) and the regulations set forth in 49 CFR part 674.



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