

State Safety Oversight Audit of Washington Metrorail Safety Commission (WMSC) Washington, DC

Conducted by
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION

Office of Transit Safety and Oversight

Virtual Interview Dates: April 26-May 24, 2021

Final Report Date: January 11, 2022



January 11, 2022

SENT VIA EMAIL

Dr. David Mayer Chief Executive Officer Washington Metrorail Safety Commission 750 First Street, NE – Suite 900 Washington, DC 20002 dmayer@wmsc.gov

Subject: FINAL State Safety Oversight Program Audit Report of the WMSC – April 26 – May 24, 2021

Dear Dr. Mayer,

Enclosed is the Federal Transit Administration's (FTA) Final State Safety Oversight (SSO) Program audit report of the Washington Metrorail Safety Commission (WMSC). This audit assessed WMSC's implementation of FTA's SSO program regulation 49 CFR Part 674 (Part 674) and conformance to its own Program Standard and governing directives. The audit was conducted virtually.

This is the FTA's first audit of WMSC since FTA certified WMSC's SSO program on March 18, 2019.

Audit Process

Prior to virtual interviews, the FTA's Audit Team requested, and reviewed documentation used by WMSC and Washington Metropolitan Area Transit Authority (WMATA) to direct, manage, implement, and monitor the SSO program as specified in Part 674.

At the conclusion of the virtual audit on May 24, 2021, the FTA held an exit briefing and delivered key observations to WMSC representatives.

Comment on Draft Report

FTA provided WMSC an opportunity to review the draft SSO audit report for errors of fact and to submit factual corrections to FTA. The comments WMSC submitted to FTA on December 20, 2021, are in Appendix A. FTA has provided responses to WMSC's draft audit report comments in Appendix B. FTA incorporated necessary comments and updated this final audit report to address any concerns.



Audit Findings

As a result of the audit, FTA identified 11 findings where elements of the oversight program are "Noncompliant" with specific Part 674 requirements. An explanation of this criteria is presented in Section 1 of this audit report.

Resolution of Findings

WMSC will have 45 business days from the issuance of this report to respond to any open findings with corrective action plans.

We appreciate your cooperation and assistance in working with FTA to support this audit. Your actions to address findings will contribute to the goal of improved safety for your rail transit passengers and employees.

If you have any questions about the audit, please contact Ruth Lyons, FTA SSO Program Manager at 202-366-2233 or Ruth.Lyons@dot.gov.

Sincerely,

Melonie Barrington, EdD. Director, Office of Safety Review

Enclosure: Final WMSC SSO 2021 Audit Report

cc: Ms. Sharmila Samarasinghe, Chief Operating Officer, WMSC

Ms. Theresa Garcia-Crews, Regional Administrator, FTA Region 3

Mr. Anthony Tarone, Deputy Regional Administrator, FTA Region 3

Mr. Tony Cho, Director of Program Management and Oversight, FTA Region 3

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Executive Summary

Background

The Washington Metrorail Safety Commission (WMSC) is the designated agency for the State of Maryland, Commonwealth of Virginia, and the District of Columbia to carry out the State Safety Oversight (SSO) program responsibilities for the Washington Metropolitan Area Transit Authority (WMATA) rail transit system.

The WMATA is responsible for operations of the Metrorail system, which opened its first heavy rail operations in 1976. Created by an interstate compact in 1967, WMATA operates over 117 revenue miles of passenger rail services over six routes with a total of 91 stations. In 2019, the six lines provided 228,974,810 unlinked passenger trips.

The WMSC SSO Program is an independent oversight body established through an interstate compact between the State of Maryland, the Commonwealth of Virginia, and the District of Columbia. The SSO program has direct responsibility as the State Safety Oversight Agency (SSOA) to carry out Federal safety requirements in its oversight of WMATA. There are six commissioners and three alternates appointed to the commission's board, two commissioners and one alternate from each jurisdiction. The SSO Program Manager designee manages the staff and daily operations for the WMSC. This is the Federal Transit Administration's (FTA) first audit of WMSC since FTA certified WMSC's SSO program on March 18, 2019.

Scope of the Audit

Federal regulation, 49 CFR Part 674.11, requires FTA to audit each State's compliance of their SSO program at least triennially. The FTA Audit Team conducted the virtual portion of this audit from April 26 to May 24, 2021.

Summary of Findings

The FTA Audit Team identified 11 findings of noncompliance in the WMSC SSO program. A finding of noncompliance is determined when FTA finds that a required element of an SSOA's program does not meet the SSO Rule (49 CFR Part 674) requirements.

Findings related to WMSC's direct oversight of WMATA include deficiencies in WMSC's oversight and enforcement of WMATA's execution of its Public Transportation Agency Safety Plan (PTASP).

- WMSC did not have a documented process for review and approval of WMATA's PTASP.
- WMSC did not ensure that all elements of the PTASP were internally reviewed.
- WMSC did not ensure that WMATA notified WMSC and FTA of all accidents within two hours.
- WMSC did not investigate or require an investigation of all accidents.



- WMSC did not issue a written report on its investigation of an accident or review of a WMATA's accident investigation within a reasonable time.
- WMSC did not explain the process and the criteria for conducting a complete audit of the WMATA's compliance with its PTASP, particularly for drug and alcohol.
- WMSC did not conduct a complete triennial audit of WMATA's PTASP.
- WMSC did not ensure that WMATA developed Corrective Action Plans (CAPs) as required in the WMSC Program Standard for hazardous conditions, investigation reports, and internal reviews.
- WMSC did not ensure that WMATA's CAPs included an accurate schedule and responsible individual.
- WMSC submitted an annual report that did not accurately contain all required information.

One finding relates to SSO program management and WMSC's capacity and resources to provide adequate oversight of WMATA.

• WMSC did not document the staffing levels needed for the SSO program.

Between Federal Fiscal Years (FY) 2013 and 2021, FTA apportioned \$8,746,922 to WMSC to operate its SSO Program. At the time of the audit, WMSC had dispersed \$2,912,096 leaving \$6,287,066 million in apportioned funds available.

Required Actions

WMSC will have 45 business days from the issuance of this final report to respond to any open findings with a corrective action plan.

Conclusion

WMSC has been certified under 49 CFR Part 674 and has an approved Program Standard to exercise safety oversight of WMATA. The findings of noncompliance are detailed in this report. WMSC must address the FTA findings and required actions.



1. Introduction

This report documents the FTA SSO Audit required under Part 674 of WMSC. Title 49 CFR Part 674.11 requires FTA to monitor and evaluate SSOA compliance with FTA's SSO Rule on a triennial basis.

The FTA's SSO audit program is designed to:

- Review the implementation of Part 674 requirements by the SSOA;
- Assess the adequacy of resources and authority provided to the SSOA to carry out Part 674 requirements;
- Assess the technical capacity of the SSOA to implement Part 674 requirements; and
- Assess the agency's compliance with all other regulatory requirements.

1.1 Audit Scope

On April 26 – May 24, 2021, the FTA conducted the virtual interview audit portion of WMSC SSO program. The audit assessed WMSC's process and implementation of FTA's SSO Rule, Part 674 for the rail transit agency (RTA) in its jurisdiction: Washington Metropolitan Area Transit Authority (WMATA). This is the first audit of WMSC under FTA's SSO Final Rule, 49 CFR Part 674. FTA's SSO audit focused on the following areas:

- The adequacy of WMSC resources and authority to carry out Part 674 requirements;
- WMSC's use of available financial assistance to develop and carry out SSO programs;
- The level of communication and coordination between WMSC and WMATA regarding safety issues;
- The effectiveness of the processes in place for WSMC and WMATA to identify, assess, communicate, and resolve hazards and vulnerabilities in both operations and in safety certification for current projects;
- The effectiveness of the processes used by WMSC to manage, review, approve, track, and close out corrective action plans (CAPs);
- The adequacy of WMATA's internal reviews and WMSC's triennial audits in assessing either the System Safety Program Plan (SSPP) or PTASP; and
- WMSC's technical capacity to implement Part 674 requirements.

1.2 Audit Methodology

The SSO audit process follows four major steps:

1. Prior to Virtual Review

- FTA requested that WMSC submit specific documents and materials related to its SSO program and the RTA under its jurisdiction's safety plans as applicable to SSO program rules.
- FTA reviewed the documents prior to virtual interviews on April 26, 2021.

2. During the Virtual Review

- FTA conducted interviews with WMSC staff and the transit agency safety and operations personnel responsible for key safety programs and functions.
- FTA also conducted virtual field reviews and/or verification activities.

3. Drafting and Reviewing Audit Report

- On December 7, 2021, FTA provided WMSC with the draft audit report for comment.
- On December 20, 2021, WMSC provided comments to the draft audit report. FTA incorporated comments, as appropriate, and updated this final audit report.
 - Appendix A includes WMSC's letter with comments to FTA dated December 20, 2021.
 - o Appendix B includes FTA's responses to WMSC's comments to the draft report.

4. Findings Management

- If there are any findings, this report will include a tracking matrix that identifies each audit finding of noncompliance and the required actions.
- Open findings require a corrective action plan, including target action dates based on necessary implementation. Corrective action plans must be submitted to the FTA within 30 business days of the issuance of the final report.

1.3 Findings of Noncompliance

If FTA determines that a required element of an SSOA's program does not meet the SSO rule requirements, FTA will issue a finding of noncompliance to be addressed through a corrective action plan.

1.4 FTA Audit Team

The FTA Audit Team is led by an FTA Program Manager with a team of technical consultants. The work of the Program Manager In-Charge is managed by the FTA Office of Safety Review, Program Management Division.

FTA Audit Team

Ruth Lyons

Program Manager In-Charge Program Management Division

Dain Pankratz	Consultant	Boyd Caton Group
Michael Vitale	Consultant	Boyd Caton Group
Diba Saadut	Consultant	Boyd Caton Group

Audit Management

Dr. Melonie Barrington Director Office of Safety Review

Patrick D. Nemons Chief Program Management Division
Ruth Lyons Sr. Program Manager Program Management Division

2. Program Management

For this portion of the audit, the FTA evaluated WMSC's program management process as specified in Part 674:

Part 674.3 – Applicability

Part 674.5 – Policy

Part 674.11 – State Safety Oversight Program

Part 674.13 – Designation of Oversight Agency

Part 674.15 – Designation of Oversight Agency for Multi-State System

Part 674.25 – Role of the State Safety Oversight Agency

Part 674.27 – State Safety Oversight Program Standards

Part 674.41 – Conflicts of Interest

2.1 Legal Entity

Basic Requirement: 49 CFR Part 674.11(c) State Safety Oversight Program

Establish a State Safety Oversight agency, by State law, in accordance with the requirements of 49 United States Code (U.S.C.) 5329(c) and this part.

Audit Evidence

The legal authority for the WMSC is derived from an Interstate Compact, which was authorized by identical legislation enacted by each of the jurisdictions served by Metrorail: D.C. Act 21-666, which became law on February 10, 2017; Maryland House Bill (H.B.) 119, which became law on March 30, 2017; and Virginia H.B. 2136, which became law on March 24, 2017. The U.S. Congress granted its consent and approval of the WMSC Compact via House Joint Resolution (H.J.Res.) 76, which became Public Law (P.L.) 115-54 on August 22, 2017. In this document, this legislation is collectively referred to as the "WMSC Compact."

There are no findings of noncompliance for this portion of the audit.

2.2 Legal Independence from RTA



Basic Requirement: 49 CFR Part 674.41(a) Conflicts of Interest

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 Part 674.13(b).

Audit Evidence

WMSC Program Standard Section 1 specifies, "Title 49 USC Section 5329 requires a legally and financially independent State authority for safety oversight of all fixed rail transit facilities. For the purposes of meeting the SSO requirements of Title 49 USC §5329(e), the WMSC is the SSOA with jurisdiction over Metrorail."

During interviews, the FTA Audit Team was informed by WMSC that the SSOA remains legally independent from WMATA.

There are no findings of noncompliance for this portion of the audit.

2.3 Financial Independence from RTA

Basic Requirement: 49 CFR Part 674.11(f) State Safety Oversight Program

Demonstrate that by law, the State prohibits any public transportation agency in the State from providing funds to the SSOA.

Audit Evidence

WMSC Program Standard Section 1 specifies, "Title 49 USC Section 5329 requires a legally and financially independent State authority for safety oversight of all fixed rail transit facilities. For the purposes of meeting the SSO requirements of Title 49 USC §5329(e), the WMSC is the SSOA with jurisdiction over Metrorail."

During interviews, the FTA Audit Team was informed by WMSC that the SSOA remains financially independent from WMATA.

There are no findings of noncompliance for this portion of the audit.

2.4 Overlap of Transportation Services

Basic Requirement: 49 CFR Part 674.13(a) Designation of Oversight Agency

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.

Audit Evidence

WMSC Program Standard Section 1 specifies, "The WMSC does not provide any public transportation services."

During interviews, it was verified that WMSC does not directly provide public transportation services.



There are no findings of noncompliance for this portion of the audit.

2.5 Employment Conflict of Interest

Basic Requirement: 49 CFR Part 674.41(b) Conflicts of Interest

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 Part 674.13(b).

Audit Evidence

WMSC Program Standard Attachments A, B, C, and D provide conflict of interest forms for WMSC personnel and contractors for Disclosure of Conflicts, Self-Certification, Documentation of Annual Review, and Form of Statement.

The FTA Audit Team was informed that the WMSC staff who oversee the SSO program include personnel who previously worked for WMATA. During interviews, WMSC explained that this did not present a conflict of interest as the WMSC staff did not simultaneously perform duties for both WMSC and WMATA. WMSC also provided details on their process for ensuring new hires do not create a conflict of interest.

There are no findings of noncompliance for this portion of the audit.

2.6 Contractor Conflict of Interest

Basic Requirement: 49 CFR Part 674.41(c) Conflicts of Interest

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.

Audit Evidence

WMSC Program Standard Attachments A, B, C, and D provide conflict of interest forms for WMSC personnel and contractors for Disclosure of Conflicts, Self-Certification, Documentation of Annual Review, and Form of Statement.

WMSC's contractor personnel were reviewed by the FTA Audit Team, and the team confirmed with WMSC and WMATA that the current contractors did not pose a conflict of interest.

There are no findings of noncompliance for this portion of the audit.

2.7 Acknowledgement of Responsibility

Basic Requirement: 49 CFR Part 674.11(a) State Safety Oversight Program



At minimum, an SSO program must: (a) Explicitly acknowledge the State's responsibility for overseeing the safety of the rail fixed guideway within the State.

Audit Evidence

The WMSC Program Standard Foreword Section specifies, "The WMSC has rail safety oversight authority of WMATA under Title 49 U.S.C.5329. The ultimate responsibility for all State Safety Oversight Agency (SSOA) activities rests with the WMSC Commissioners."

During interviews, WMSC acknowledged its responsibilities implementing the SSO program for WMATA.

There are no findings of noncompliance for this portion of the audit.

2.8 Establishment of Minimum Standards for Safety

Basic Requirement: 49 CFR Part 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 and the Public Transportation Safety Certification
Training Program, the rules for Public Transportation Agency Safety Plans and all applicable
Federal and State law.

Audit Evidence

The WMSC Program Standard establishes the minimum safety standards set for WMATA by WMSC. WMSC Program Standard Section 2 states, "The WMSC has identified WMATA program areas for which minimum safety standards are appropriate and necessary according to Title 49 CFR Part 674. As such, WMATA must prepare and maintain a [PTASP] in accordance with the WMSC requirements to address the safety of passengers and employees."

There are no findings of noncompliance for this portion of the audit.

2.9 Multi-State System Oversight Agency Designation

Basic Requirement: 49 CFR Part 674.15(a) 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.

Audit Evidence

WMSC Program Standard Section 1 specifies, "The Metrorail service area covers the District of Columbia, the State of Maryland, and the Commonwealth of Virginia. The authority of the WMSC extends to the WMATA [Rail Fixed Guideway Public Transportation System (RFGPTS)] and all other rail and property owned, leased, operated, and otherwise used by WMATA rail services."

There are no findings of noncompliance for this portion of the audit.

2.10 Enforcement Authority

Basic Requirement: 49 CFR Part 674.13(a)(5) Designation of Oversight Agency

The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State.

Audit Evidence

WMSC Program Standard Section 1 specifies, "in accordance with the WMSC Compact, the WMSC has the authority to conduct enforcement activities for non-compliance." WMSC's Standard Operating Procedure (SOP) WMSC-SOP-007 outlines the execution of WMSC enforcement authorities, including:

- Cause for initiating enforcement action;
- Suspension of service on all or part of the WMATA rail system;
- Removal of a specific vehicle, infrastructure element, or unsafe rule/procedure from the WMATA rail system, or prioritization of spending on safety-critical items due to failure to address a safety violation;
- Suspending or disqualifying an individual from performing in any safety sensitive position;
- Citation Program.

There are no findings of noncompliance for this portion of the audit.

2.11 Investigative Authority

Basic Requirements:

49 CFR Part 674.13(a)(5) Designation of Oversight Agency

The SSOA has investigative and enforcement authority with respect to the safety of all rail fixed guideway public transportation systems within the State.



49 CFR Part 674.25(c) Role of the State Safety Oversight Agency

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.

Audit Evidence

WMSC Program Standard Section 8 specifies, "Each investigation will be under the direction of the WMSC Chief Executive Officer. WMSC representatives, to include permanent WMSC staff and contracted staff, have the authority, training, and expertise to conduct investigation activities under the direction of the WMSC Chief Executive Officer including rights to access all WMATA property, equipment, systems, records, personnel, and contractor personnel."

During interviews, WMSC verified their investigative authority. WMSC's investigation authority is further examined in Section 8 of this report.

There are no findings of noncompliance for this portion of the audit.

2.12 Adoption of Federal and State Laws

Basic Requirement: 49 CFR Part 674.11(b) State Safety Oversight Program

At minimum, an SSO program must: (b) Demonstrate the State's ability to adopt and enforce Federal and relevant State law for safety in rail fixed guideway public transportation systems.

Audit Evidence

WMSC Program Standard Section 1 specifies, "This Program Standard establishes the WMSC's minimum standards for ensuring the safety of WMATA. These standards are consistent with the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training 49 CFR 672 Provisions, the System Safety Program Plan (SSPP), the Public Transportation Agency Safety Plan 49 CFR 673 when effective, and all applicable federal and state laws."

There are no findings of noncompliance for this portion of the audit.

2.13 Allegations of Noncompliance

Basic Requirement: 49 CFR Part 674.25(c) Role of the State Safety Oversight Agency 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.

Audit Evidence

WMSC Program Standard Section 1 specifies, "Investigating accidents and requiring WMATA to investigate accidents, including allegations of non-compliance per 49 CFR Part 674.25(c)."



The WMSC public website allows users to report WMATA safety concerns. WMSC also participates in WMATA safety committees to verify that allegations are resolved.

There are no findings of noncompliance for this portion of the audit.

2.14 Ongoing Communication

Basic Requirement: 49 CFR Part 674.27(a)(1) State Safety Oversight Program Standards 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.

Audit Evidence

WMSC Program Standard Section 1 specifies, "Communications between the WMSC and WMATA will occur at all levels of the Washington Metrorail Safety Commission. Frequent and candid communication between the WMSC and WMATA is valuable as it serves to maintain transparency and rapport between the two organizations."

During interviews, the FTA Audit Team was informed that, in addition to regular meetings between WMSC and WMATA personnel to discuss CAPs and investigations, WMSC leadership also meets regularly with the WMATA chief safety officer.

There are no findings of noncompliance for this portion of the audit.

3. Grant Program

For this portion of the audit, the FTA evaluated WMSC grant program processes and activities as specified in: Part 674.17 – Eligibility of Federal financial assistance.

3.1 20-percent Non-Federal Match

Basic Requirement: 49 CFR Part 674.17(e) Non-Federal shares of the eligible expenses 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.

Audit Evidence

WMSC's 20-percent match of Federal funds, comes from equal shares from the three jurisdictions: the District of Columbia, the State of Maryland, and the Commonwealth of Virginia.

There are no findings of noncompliance for this portion of the audit.



3.2 Obligation and Disbursing of Federal Funds

Basic Requirements:

49 CFR Part 674.17(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 an SSOA in compliance with 49 U.S.C. 5329(e)(4).

2 CFR Part 200.303 (a)

Establish and maintain effective internal control over the Federal award that provides reasonable assurance that the non-Federal entity is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the Federal award. The internal controls should follow guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework", issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

2 CFR Part 200.303 (d)

Take prompt action when instances of noncompliance are identified including noncompliance identified in audit findings.

FTA Circular 5010.1E Chapter VI (2)(f)(3)(a)(2)

Permit the tracing of federal assistance to a level of expenditures adequate to establish that such federal assistance has been used according to the federal statutes, regulations, and the terms and conditions of the Award.

Audit Evidence

WMSC's spending plan, included in the 2020 Annual Report, showed that SSO program expenses remained consistent with the grant funding and budget. WMSC's grant funds were dedicated to the administrative payroll, office space and equipment, training, and other direct expenses.

Between Federal Fiscal Years (FY) 2013 and 2021, FTA apportioned \$8,746,922 to WMSC to operate its SSO Program. At the time of the audit, WMSC had dispersed \$2,912,096 leaving \$6,287,066 million in apportioned funds available.

During interviews, the FTA Audit Team was informed by WMSC that training activities were minimal during Calendar Year 2020 due to COVID-19 travel restrictions, but that WMSC anticipates continued training efforts as pandemic restrictions are lifted.



There are no findings of noncompliance for this portion of the audit.

4. Program Standard

For this portion of the audit, the FTA evaluated WMSC Program Standard as specified in: Part 674.27 – State Safety Oversight Program Standards.

4.1 SSOA Program Standard Adoption and Distribution

Basic Requirement: 49 CFR Part 674.27(a)(2) State Safety Oversight Program Standards 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.

Audit Evidence

WMSC Program Standard Section 2 explains the "WMSC's process for developing, reviewing, adopting, and revising its minimum standards for safety, and distributing these standards to WMATA." WMSC Program Standard Section 2 further specifies, "The WMSC Chief Executive Officer will transmit its Draft WMSC Program Standard, officially, with a cover letter to WMATA's Chief Safety Officer for further internal distribution for purposes of review. WMATA will have thirty (30) days to provide its response from receipt of official transmission of such a Draft WMSC Program Standard. The WMSC will have the sole discretion regarding incorporating WMATA-proposed revisions. Within thirty (30) days of receipt of WMATA response, or after the thirty (30) day deadline for WMATA's response has passed, the WMSC will finalize the final revised version of the WMSC Program Standard and submit for WMSC Board approval prior to implementation."

The FTA Audit Team verified the Program Standard review process, and WMSC explained that the Program Standard is reviewed annually by staff and then distributed to WMATA for comments. WMATA's comments to the draft Program Standard are considered by WMSC, revisions are made as necessary, and then the report is finalized. Once the Program Standard has been finalized and approved by the WMSC board, the Program Standard is distributed to WMATA leadership.

During the recent Program Standard revision process, formal comments were provided by WMATA. However, WMSC did not provide a written response to WMATA's comments. The revisions to the Program Standard were adopted by WMSC commissioners on April 13, 2021, effective June 1, 2021.WMSC should formally respond to WMATA's comments to the Program Standard prior to Program Standard adoption and implementation.

There are no findings of noncompliance for this portion of the audit.

4.2 SSOA Program Standard Minimum Requirements

Basic Requirement: 49 CFR Part 674.27(a) State Safety Oversight Program Standards At minimum, the Program Standard must meet the following requirements:

- (1) Program management
- (2) Program standard development
- (3) Program policy and objectives
- (4) Oversight of Rail Public Transportation Agency Safety Plans and Transit Agencies' internal safety reviews
- (5) Triennial SSO audits of Rail Public Transportation Agency Safety Plans
- (6) Accident notification
- (7) Investigations
- (8) Corrective actions

Audit Evidence

WMSC Program Standard Section 2 specifies, "Throughout this section and others in this Program Standard, references to the System Safety Program Plan, Public Transportation Agency Safety Plan or Agency Safety Plan are fundamentally interchangeable." Program Standard Section 4 also states, "In determining whether a SSPP is compliant with Title 49 CFR Part 674, the WMSC must specifically evaluate at least the following aspects of the SSPP." The Program Standard then lists all the requirements specified in 49 CFR Part 674.29(b).

The July 1, 2020, Program Standard Section 4's references to the SSPP were discussed during interviews. WMSC explained that WMATA's PTASP was not yet developed during the Program Standard revision process. The revised Program Standard, effective June 1, 2021, no longer references the SSPP and includes references to the PTASP as required by Part 674.

There are no findings of noncompliance for this portion of the audit.

5. Staffing and Qualifications of SSO Personnel and Contractors

For this portion of the audit, the FTA evaluated WMSC staffing, and qualifications of personnel as specified in:

Part 674.11 – (d) and (e) State Safety Oversight Program

Part 674.25 – (f) Role of the State Safety Oversight Agency

Part 674.35 - (c) Investigations

5.1 SSO Program Workload Assessment

Basic Requirement: 49 CFR Part 674.11(d) State Safety Oversight Program

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.

Audit Evidence

It was noted by the FTA Audit Team that WMSC's current organizational charts and Technical Training Plans (TTPs) included staffing levels that were not reflected in their latest workload assessment. FTA then requested that WMSC develop, submit, and implement a revised workload assessment that reflects an appropriate staffing level for overseeing the WMATA.

The WMSC Program Standard Section specifies, "The day-to-day work of the Washington Metrorail Safety Commission is undertaken by a team of SSO staff, including subject matter experts in the areas of train operations, rail vehicles, traction power, track and structures, automatic train control, program implementation, as well as rail safety, and project staff who will assist the subject matter experts."

The Program Standard organization chart, TTP, and workload assessment provided to FTA during 2018 shows 11 Full Time Equivalents (FTEs) and 7 contractor support staff positions supporting WMSC's SSO program. However, the WMSC staffing levels and organizational chart provided in the 2020 Annual Report submission to FTA included over 15 FTEs. The FTA Audit Team was concerned that WMSC had not assessed staffing levels since certification and that current resources might not be appropriate.

The FTA Audit Team was informed that a partial FTE is assigned to WMATA's major projects. Evidence of oversight of the Dulles Corridor Metrorail Phase 2 Silverline Project, scheduled for revenue service 2021–2022, was provided to the FTA Audit Team by WMSC. WMSC has started the Pre-Revenue Service Review and plans to distribute the final report prior to Silverline Phase 2 Project revenue service. However, WMSC did not provide documentation supporting plans for Pre-Revenue Service Review of WMATA's other major projects, such as the Potomac Yard Metrorail Station Project. The FTA Audit Team acknowledges that WMSC provides oversight for the Silverline Phase 2 Project, and WMSC staff participated in WMATA's safety certification committee meetings. However, documentation was not provided for oversight activities of the other major projects.

Finding 1 – WMSC did not document the staffing levels needed for the SSO program.

Required Action – WMSC must develop, submit, and implement a revised workload assessment that reflects an appropriate staffing level for overseeing the WMATA.

5.2 Staffing Qualifications

Basic Requirement: 49 CFR Part 674.25(f) Role of the State Safety Oversight Program All personnel and contractors employed by an SSOA must comply with the requirements of the Public Transportation Safety Certification Training Program [49 CFR Part 672] as applicable.

49 CFR Part 672.21 Records

- (a) *General Requirement*. Each recipient shall ensure that its designated personnel are enrolled in the PTSCTP [Public Transportation Safety Certification Training Program]. Each recipient shall ensure that designated personnel update their individual training record as he or she completes the applicable training requirements of this part.
- (b) SSOA Requirement. Each SSOA shall retain a record of the technical training completed by its designated personnel in accordance with the technical training requirements of Appendix A to this part. Such records shall be retained by the SSOA for at least five (5) years from the date the record is created.

Audit Evidence

During document reviews, it was found that WMSC had submitted their TTP but not the Individual Training Plans (ITPs) for their staff. WMSC's ITPs were requested by FTA for review to ensure that the Public Transportation Safety Certification Training Plan (PTSCTP) requirements were met. Concerns were expressed by FTA Audit Team regarding the data in the submitted TTP and the required corrections were reviewed by the FTA Audit Team during the audit interviews.

The original TTP submitted by WMSC was not complete with recordkeeping requirements. It was confirmed by the FTA Audit Team that 12 employees at WMSC were enrolled in the PTSCTP, but the organization chart provided listed 15 FTEs. During the audit, WMSC submitted additional ITP information for SSO program resources, to satisfy this section.

There are no findings of noncompliance for this portion of the audit.

6. Public Transportation Agency Safety Plan (PTASP)

For this portion of the audit, the FTA evaluated WMSC's review and approval documentation, and minimum requirements of their RTAs PTASP as specified in:

Part 674.13 - (a)(4) Designation of Oversight Agency

Part 674.25 – (b) Role of the State Safety Oversight Agency

Part 674.29 – (b)(c) Public Transportation Agency Safety Plans: General Requirements

Part 674.37 - (a) Corrective Action Plans

Part 673.13 - (a) Certification of Compliance

Part 672 – Appendix A Public Transportation Safety Certification Training Program

Part 673.11 - (a)(c) Safety Plans General Requirements

Part 673.21 - Safety Management Systems General Requirements

Part 673.31 – Safety Plan Documentation

6.1 PTASP Review and Approval



Basic Requirement: 49 CFR 673.13(a) Certification of Compliance

Each transit agency, or State as authorized in § 673.11(d), must certify that it has established a Public Transportation Agency Safety Plan meeting the requirements of this part one year after July 19, 2019. A State Safety Oversight Agency must review and approve a Public Transportation Agency Safety Plan developed by rail fixed guideway system, as authorized in 49 U.S.C. 5329(e) and its implementing regulations at 49 CFR Part 674.

49 CFR Part 674.13(a)(4) Designation of Oversight Agency

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).

49 CFR Part 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 Part 674.29(c) Public Transportation Agency Safety Plans: General Requirements 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.

49 CFR Part 674.37(a) Corrective Action Plans

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.

Audit Evidence

WMSC's Program Standard Section 4 states, "In determining whether a SSPP is compliant with Title 49 CFR Part 674, the WMSC must specifically evaluate at least the following aspects of the SSPP. As outlined in FTA's Certification Tool Kit.

- 1. Whether the SSPP is approved by WMATA's Board of Directors and signed by the Accountable Executive at WMATA;
- 2. Whether the SSPP sets forth a sufficiently explicit process for safety risk management, with adequate means of risk mitigation for Metrorail;



- 3. Includes a process and timeline for annually reviewing and updating the safety plan;
- 4. Includes a comprehensive staff training program for the operations personnel directly responsible for the safety of Metrorail;
- 5. Identifies an adequately trained safety officer who reports directly to the general manager;
- 6. Includes adequate methods to support the execution of the SSPP by all employees, agents, and contractors for Metrorail; and
- 7. Sufficiently addresses other requirements under Title 49 CFR Part 674."

Section 4 further states, "The WMSC will make provisions either through a guidance tool or instructions to enable WMATA to prepare a compliant SSPP or revisions to the SSPP." It was verified by the FTA Audit Team that WMSC had reviewed and approved WMATA's PTASP using FTA's checklist template. During interviews, WMSC stated that it had performed the annual review of WMATA's PTASP and referred to the FTA checklist template. However, the checklist or review process was not documented in the WMSC Program Standard effective July 1, 2020.

WMSC provided a Program Standard Implementation Guide effective June 1, 2021, which complements the revised Program Standard, effective on the same date. This guide provides additional detail on WMSC oversight activities, including the WMSC PTASP review process stating, "Upon receipt of the revised PTASP, organize and disseminate for internal review, guided primarily by FTA's PTASP checklist." However, the implementation guide did not completely describe the process that will be used by WMSC to review WMATA's PTASP, and it did not ensure that all the requirements of Part 673 were met, such as references to the review checklist.

Finding 2 – WMSC did not have a documented process for review and approval of WMATA's PTASP.

Required Action – WMSC must develop, submit, and implement a documented process for reviewing and approving WMATA's PTASP.

6.2 PTASP Minimum Requirements

Basic Requirement:

49 CFR Appendix A to Part 672 Public Transportation Safety Certification Training Program

- (1) FTA/SSOA personnel and contractor support, and public transportation agency personnel with direct responsibility for safety oversight of rail fixed guideway public transportation systems:
 - (a) One (1) hour course on SMS Awareness e-learning delivery (all required participants)
 - (b) Two (2) hour courses on Safety Assurance e-learning delivery (all required participants)



- (c) Twenty (20) hours on SMS Principles for Transit (all required participants)
- (d) Sixteen (16) hours on SMS Principles for SSO Programs (FTA/SSOA/contractor support personnel only)
- (e) TSSP curriculum (minus Transit System Security (TSS) course) (all required participants credit will be provided if participant has a Course Completion Certificate of previously taken TSSP courses)
 - (i) Rail System Safety (36 hours)
 - (ii) Effectively Managing Transit Emergencies (32 hours)
 - (iii)Rail Incident Investigation (36 hours)

49 CFR Part 673.11 Safety Plans General Requirements

- (a)(1) The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority.
- (a)(2) The Public Transportation Agency Safety Plan must document the processes and activities related to Safety Management System (SMS) implementation, as required under subpart C of this part.
- (a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.
- (a)(4) The Public Transportation Agency Safety Plan must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan. Compliance with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C) is not required until standards have been established through the public notice and comment process.
- (a)(5) Each transit agency must establish a process and timeline for conducting an annual review and update of the Public Transportation Agency Safety Plan.
- (a)(6) A rail transit agency must include or incorporate by reference in its Public Transportation Agency Safety Plan an emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.
- (c) A transit agency must maintain its Public Transportation Agency Safety Plan in accordance with the recordkeeping requirements in subpart D of this part.

49 CFR Part 673.21 Safety Management Systems General Requirements

Each transit agency must establish and implement a Safety Management System under this part. A transit agency Safety Management System must be appropriately scaled to the size, scope and

complexity of the transit agency and include the following elements: (a) Safety Management Policy as described in 673.23; (b) Safety Risk Management as described in 673.25; (c) Safety Assurance as described in 673.27; and (d) Safety Promotion as described in 673.29.

49 CFR Part 673.31 Safety Plan Documentation

At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its Safety Management System (SMS), and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the agency uses to carry out its Public Transportation Agency Safety Plan. These documents must be made available upon request by the Federal Transit Administration or other Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.

49 CFR Part 674.25 Role of the State Safety Oversight Agency

(b) 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.

49 CFR Part 674.29 Public Transportation Agency Safety Plan General Requirements

(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.

Audit Evidence

WMATA's PTASP was reviewed by the FTA Audit Team, and it was verified that the plan incorporates the PTASP rule requirements. The PTASP was approved by the WMATA Board of Directors through resolution 2020-36 and signed by WMATA staff personnel, including the General Manager. In addition, the WMATA PTASP review checklists and formal letters communicating final WMSC approval for the PTASP were provided by WMSC. WMATA finalized their PTASP in October 2020.

There are no findings of noncompliance for this portion of the audit.

7. RTA Safety Reviews

For this portion of the audit, the FTA evaluated WMSC oversight activities for its transit



agencies' internal safety reviews as specified in: Part 674.27(a)(4) State Safety Oversight Program Standards.

7.1 RTA Safety Review Requirements

Basic Requirement: 49 CFR Part 674.27(a)(4) State Safety Oversight Program Standards 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.

Audit Evidence

WMSC Program Standard Section 4B specifies, "WMATA must conduct internal reviews of its PTASP. Over a three-year period, WMATA must review the implementation of all elements of the PTASP. In upholding its responsibility to oversee the WMATA internal safety review program the WMSC will participate, on occasion, in WMATA internal safety reviews, to observe the various components of the internal review program being executed." The Program Standard also requires WMATA to deliver a "three-year schedule setting forth when each PTASP element will be reviewed and specific scheduling details."

WMATA's Quality Assurance, Internal Compliance & Oversight (QICO) internal reviews, conducted during 2019 and early 2020, were reviewed by the FTA Audit Team. The internal reviews included a review of the previous SSPP elements. The FTA Audit Team was informed that an internal review schedule had not been developed that reviews all PTASP elements, as required by the Program Standard. WMSC must ensure that the internal safety reviews address the PTASP elements.

An advanced review of the WMSC Program Standard Section 4, effective June 1, 2021, was conducted by the FTA Audit Team. It was noted that the WMSC requirement for approval of internal safety review CAPs will be removed.

- The Program Standard effective June 2021 specifies, "If as a result of a review, WMATA determines that it is not in compliance with the PTASP, its Accountable Executive must identify the activities WMATA must take to achieve compliance, including corrective action addressing the findings in accordance with this WMSC Program Standard."
- The current WMSC Program Standard Section 4 (dated July 2020) requires that, "WMSC shall review, approve, or decline to approve WMATA Corrective Action Plans (CAP) developed as a result of the findings identified in each WMATA internal review."

WMSC should ensure that future Program Standard updates require the approval of CAPs resulting from internal safety reviews, as required by the current Program Standard.

The 2020 WMATA QICO internal review report identified 57 Internal Corrective and Preventive Actions (iCAPAs) that were closed without WMSC approval. The FTA Audit Team was concerned that WMSC did not regularly approve or respond to WMATA's internal safety reviews and did not approve internal review CAPs.

Finding 3 – WMSC did not ensure that all elements of the PTASP were internally reviewed and that CAPs resulting from internal safety review findings were approved.

Required Action – WMSC must ensure that WMATA conducts internal reviews for all PTASP elements and that resulting CAPs are submitted, reviewed, approved, and tracked.

8. Investigations and Reviews

For this portion of the audit, the FTA evaluated WMSC investigation and reviews activities, and documentation as specified in:

Part 674.27 – (a)(7) State Safety Oversight Program Standards

Part 674.33 – Notification of Accidents

Part 674.35 – Investigations

8.1 Notifications

Basic Requirement: 49 CFR Part 674.33(a) Notification of Accidents

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 Part 674.39(b), and Appendix A.

Audit Evidence

WMSC Program Standard Section 7 specifies, "For urgent notifications regarding high profile events, telephone notifications are required. The "Accident" types contained in Title 49 CFR Part 674 Appendix for Notification of Accident, Incidents and Occurrences are considered high profile events by the WMSC. WMATA must contact the WMSC-designated representative in the specified timeframe. A voicemail may be left with the designee if necessary. The WMSC also requires that WMATA provide an email notification to the WMSC's email distribution list." Further, the WMSC Program Standard Section 7 states, "WMATA must also comply with the FTA Two-Hour Accident Notification requirements."

WMSC's 2020 two-hour notification tracking log, 2020 annual report accident data collected through the State Safety Oversight Reporting (SSOR) tool, and FTA notification records were reviewed by the FTA Audit Team. Table 8.1 identifies discrepancies and concerns with WMSC's oversight of WMATA accident notifications.

Table 8.1 – WMSC Accident Notification Discrepancies			
Event Date and WMSC Code	Status	Count	
1/4/20 (A-3) 1/23/20 (A-3) 5/1/20 (A-2) 9/9/20 (A-2)	Accidents included in WMSC two-hour notification log as reported to FTA but not included in FTA notification log.	4	
2/14/20 (A-5) 4/5/20 (A-1) 8/5/20 (A-2)	Accidents included in WMSC two-hour notification log as not reported within two hours and not included in FTA notification log.	3	
7/7/20 (A-5)	Accidents included in WMSC two-hour notification log as not reported within two hours and included in FTA notification log.	1	
2/11/20 (A-3) 9/11/20 (A-2)	Accidents not included in WMSC two-hour notification log and included in FTA notification log.	2	
2/9/20 (A-3) 4/6/2020 (I-3) 4/27/20 (I-3) 8/11/20 (O-7) 10/9/20 (O-12(h)) 10/16/20 (O-19)	Accidents not included in WMSC two-hour notification log or FTA notification log.	6	

Event Number W0031 E20125 was reviewed by the FTA Audit Team. This event involved a serious injury. The event occurred at 4:32 a.m., but notification was not made to WMSC until 6:58 p.m. The actions taken by WMATA in response to this event, and WMATA's processes for ensuring that notifications are made as required, were discussed by WMSC and WMATA. WMSC required WMATA to develop CAP WMSC-20-C0070 to address these concerns. This CAP is projected for completion on October 27, 2023.

Finding 4 – WMSC did not ensure that WMATA notified WMSC and FTA of all reportable accidents within the FTA two-hour notification requirement.

Required Action – WMSC must update, submit, and implement a process that ensures WMATA notifies FTA and WMSC of all reportable accidents within two hours.

8.2 Accident Investigation Requirements



Basic Requirement: 49 CFR Part 674.35(a) Investigations

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.

Audit Evidence

WMSC Program Standard Section 7 specifies, "The WMSC is required to investigate, or cause WMATA to investigate, all accidents. Additionally, the WMSC requires that certain other safety events are investigated, as detailed in the Safety Event Notification Matrix in Appendix A."

Accidents reported in the annual reports since WMSC certification on March 18, 2019, were reviewed. The FTA Audit Team identified three events, on February 11, 2020; April 6, 2020; and April 27, 2020, that involved collisions between two rail transit vehicles and were not reported and investigated as required by Part 674. The FTA Audit Team was informed that these three events were not properly classified and that WMATA did not submit final investigation reports.

Accidents reported in FTA's annual report, from the WMSC certification date through the end of 2020 (downloaded March 30, 2021) were reviewed. As shown in Table 8.2 below, 26 of 39 accidents submitted in the annual report did not indicate the investigation was adopted by WMSC, including accidents dating back to April 2019. Further, WMSC's submitted event tracking log did not include the status of the event investigation reports. However, a number of these events were identified by the FTA Audit Team, using WMSC's public website.

Table 8.2 – WMATA Accidents Not Adopted by WMSC			
Report Numbers or Date	Status	Count	
E19354, E19431, E19450, E19454, E19509, E19539, E19563, E19661, E19675, W-0081, W-0069, W-0078	Reports classified as accidents in the WMSC log that have been adopted and record should be updated in annual report	12	
W-0079, W-0071	Reports classified as occurrences in the WMSC log that should be classified as accidents that have been adopted and record should be updated in annual report.	2	
7/17/19 (A-1) 7/23/19 (A-1) 12/16/20 (A-3)	Reports classified as accidents in the WMSC log that have not been adopted.	3	

Table 8.2 – WMATA Accidents Not Adopted by WMSC		
Report Numbers or Date	Status	Count
4/2/19 (I-3) 4/23/19 (I-2) 7/7/19 (I-3) 8/10/19 (I-3) 12/26/19 (O-25) 2/11/20 (I-3) 4/6/20 (I-3), 4/27/20 (I-3)	Reports classified as incidents or occurrences in the WMSC log that should be classified as accidents	8
5/29/19	Report not included in the WMSC log that should be classified as accident	1

As shown in Table 8.3 below, five events classified as accidents in the WMSC 2020 tracking log were not included in the 2020 annual report.

Table 8.3 – WMATA Accidents Not Included in the 2020 Annual Report to FTA			
Event Date	WMSC Event Code	Description	
2/14/2020	A-3	Collision with Person at Minnesota Ave. Station	
4/5/2020	A-1	Fatality at Pentagon Station	
5/1/2020	A-2	Serious Injury at Vienna Station	
8/5/2020	A-2	Serious Injury at West Falls Church Station	
11/8/2020	A-3	Collision with Person at Bethesda Station	

Finding 5 – WMSC did not ensure investigations were conducted for all accidents.

Required Action – WMSC must submit and implement a process that ensures all accidents are investigated as required.

8.3 Accident Investigation Reports

Basic Requirement: Part 674.35(b) Investigations

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.

Audit Evidence

WMSC Program Standard Section 8 specifies, "When safety event occurs, WMATA will initiate and conduct the investigation, unless notified that the WMSC intends to conduct the investigation... Regardless of which entity conducts the investigation, a report will be prepared for all accident[s] and certain other safety events as specified in the matrix in Appendix A. These reports will be submitted to the WMSC for its Commissioners to consider and adopt."

A sampling of the following four investigation reports was reviewed by the FTA Audit Team:

- W-0031 National Airport Worker Injury
- E19431 Largo Tail Track Collision
- E19509 WFC Hi-Rail Derailment
- E19675 Farragut West Suicide

The FTA Audit Team verified that these accident reports included elements required by the Program Standard and that WMSC followed the approval process. However, as shown in Table 8.2 in the previous section, 26 of 39 accidents submitted in the annual report did not indicate the investigation was adopted by WMSC, including accidents dating back to April 2019.

Finding 6 – WMSC did not formally adopt all investigation reports.

Required Action – WMSC must submit and implement a process that ensures accident reports are formally adopted.

8.4 RTA Investigations

Basic Requirement: 49 CFR Part 674.27(a)(7) State Safety Oversight Program Standards, 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.

Audit Evidence

WMSC Program Standard Section 8 specifies that "A draft investigation report will be completed by the investigation team and reviewed by the Lead Investigator and Technical Staff within 45 calendar days of the WMSC's determination to investigate. The report may be issued sooner depending on the circumstances or as directed by the Chief Executive Officer. In the event additional time is needed for investigative activities (such as reconstruction or testing), the

WMSC Chief Executive Officer will notify WMATA Chief Safety Officer in writing in advance of the 45-day deadline. The WMSC Chief Executive Officer will submit the draft report to WMATA for review and comment. WMATA must transmit any comments or additional documentation to the WMSC Technical Staff within 10 business days of receiving the draft investigation report."

During interviews, WMATA explained their accident investigation process, and WMSC discussed its involvement in investigations. The WMSC explained that it is an active participant in most accident investigations performed by WMATA and that WMSC participates in interviews with relevant subject matter experts, as needed, as well as in other phases of WMATA's investigations. WMSC's participation in these accidents and review and approval of the resulting reports serves to ensure that a thorough investigation is completed for all accidents.

The WMSC Program Standard Section 8 specifies, "Depending on the circumstances of a safety event, another agency such as the NTSB might conduct an investigation utilizing its own procedures and personnel. In the event of an NTSB investigation, the WMSC shall request party status to the investigation. The WMSC will support the NTSB investigation."

Both WMSC and WMATA have procedures in place for supporting the National Transportation Safety Board (NTSB).

There are no findings of noncompliance for this portion of the audit.

9. SSOA Triennial Audits Verification of PTASP Implementation

For this portion of the audit, WMSC three-year period covered oversight of SSPP/PTASP. The FTA evaluated WMSC triennial review documentation of the SSPP/PTASP as specified in:

Part 674.31 – Triennial Audits, General Requirements

Part 674.13 – (a) Designation of Oversight Agency

Part 674.27 – (a)(5) Triennial SSOA Audits of PTASPs

Part 672 – Appendix A Public Transportation Safety Certification Training Program

Part 673.11 – (a)(c) Safety Plans General Requirements

Part 673.21 - Safety Management Systems General Requirements

Part 673.31 – Safety Plan Documentation

Part 674.9 – (c) Transition from Previous Requirements for State Safety Oversight

Part 674.25 – (b) Role of the State Safety Oversight Agency

Part 674.29 – (b) Public Transportation Agency Safety Plan General Requirements

9.1 SSPP/PTASP Audit Requirements

Basic Requirement: 49 CFR Part 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 System Safety Program Plan/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.

Basic Requirement: 49 CFR 673.13(a) Certification of Compliance

Each transit agency, or State as authorized in § 673.11(d), must certify that it has established a Public Transportation Agency Safety Plan meeting the requirements of this part one year after July 19, 2019. A State Safety Oversight Agency must review and approve a Public Transportation Agency Safety Plan developed by rail fixed guideway system, as authorized in 49 U.S.C. 5329(e) and its implementing regulations at 49 CFR Part 674.

49 CFR Part 674.13(a)(4) Designation of Oversight Agency

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).

49 CFR Part 674.13(a)(6) Designation of Oversight Agency

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).

49 CFR Part 674.27(a)(5) Triennial SSOA Audits of PTASPs

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.

Audit Evidence

The WMSC Program Standard Section 5 specifies, "Under the direction of the WMSC CEO the WMSC will work with WMATA personnel to schedule on-site audit activities during a period that is suitable for both parties. This process will include scheduling of specific audit periods, including interviews, records reviews, and field visits, for each topic being audited."

The WMSC triennial audit of WMATA is conducted in an ongoing manner, with a final report at the end of the three-year cycle. The FTA Audit Team was provided WMSC partial triennial audit reports for 2020. WMSC Program Standard Section 5 further specifies, "Prior to the on-site visit, the WMSC will develop and submit a request for procedures, plans, and other records that

pertain to the specific area being audited. The WMSC will develop checklists or guides for the on-site audit activities as needed."

The FTA Audit Team was provided documentation for WMSC's 2020–2021 audit of fitness for duty, including the drug and alcohol program. The WMSC Program Standard Section 8 and WMATA PTASP includes requirements to "analyze employee records and the results of postevent drug and alcohol tests", but did not include requirements for auditing of random drug and alcohol testing.

During interviews, the FTA Audit Team was informed, by WMATA, that WMSC requested several documents and records for WMATA employees subject to random drug and alcohol testing in compliance with 49 CFR Part 655 and for testing for security personnel. However, neither the Program Standard nor PTASP specifies the audit requirement for random drug and alcohol testing. FTA is also concerned with potential WMSC audit duplication and findings that may conflict with FTA's Part 655 requirements. To ensure there was not duplication or finding conflicts, the FTA Audit Team asked WMSC to provide its criteria for auditing of random drug and alcohol testing and testing for security personnel. The WMSC did not have provide a process or criteria for its drug and alcohol review.

Finding 7 – WMSC did not have a process and criteria for conducting a complete audit of WMATA's compliance with its PTASP, particularly for auditing random drug and alcohol testing.

Required Action – WMSC must develop and implement a process and criteria for conducting a complete audit of WMATA's compliance with its PTASP at least once every three years.

9.2 SSOA Triennial Audit Verification of SSPP/PTASP Implementation

49 CFR Part 673.11 Safety Plans General Requirements

- (a)(1) The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority.
- (a)(2) The Public Transportation Agency Safety Plan must document the processes and activities related to Safety Management System (SMS) implementation, as required under subpart C of this part.
- (a)(3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.
- (a)(4) The Public Transportation Agency Safety Plan must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan. Compliance with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C) is not required until standards have been established through the public notice and comment process.



- (a)(5) Each transit agency must establish a process and timeline for conducting an annual review and update of the Public Transportation Agency Safety Plan.
- (a)(6) A rail transit agency must include or incorporate by reference in its Public Transportation Agency Safety Plan an emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area.
- (c) A transit agency must maintain its Public Transportation Agency Safety Plan in accordance with the recordkeeping requirements in subpart D of this part.

49 CFR Part 673.21 Safety Management Systems General Requirements

Each transit agency must establish and implement a Safety Management System under this part. A transit agency Safety Management System must be appropriately scaled to the size, scope and complexity of the transit agency and include the following elements: (a) Safety Management Policy as described in 673.23; (b) Safety Risk Management as described in 673.25; (c) Safety Assurance as described in 673.27; and (d) Safety Promotion as described in 673.29.

49 CFR Part 673.31 Safety Plan Documentation

At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its Safety Management System (SMS), and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the agency uses to carry out its Public Transportation Agency Safety Plan. These documents must be made available upon request by the Federal Transit Administration or other Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after they are created.

49 CFR Part 674.9 Transition from Previous Requirements for State Safety Oversight 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.

49 CFR Part 674.25 Role of the State Safety Oversight Agency

(b) 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.

49 CFR Part 674.29 Public Transportation Agency Safety Plan General Requirements (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.

Audit Evidence

WMSC Program Standard Section 5 specifies, "Every three years the WMSC completes a full audit of Metrorail and determines whether Metrorail is complaint with its PTASP and other rules, policies, procedures and requirements. Due to the size and complexity of Metrorail, this is an ongoing effort over a three-year timeframe with separate audits corresponding to specific areas within Metrorail."

The FTA Audit Team was provided with the WMSC triennial audit list, including the following 15 elements:

- 1. Track and Associated Training (Audit of Track Maintenance and Training)
- 2. Roadway Worker Protection Training and Compliance
- 3. Rail Operations, Supervision, Control, and Associated Training
- 4. Tunnels, Structures, and Associated Training
- 5. Hi-Rail/Maintenance, Vehicle Management, Maintenance, and Training
- 6. Automatic Train Control/Signals/Signals Machines and Associated Training
- 7. Drug and Alcohol Program, Employee Fitness for Duty/Hours of Service
- 8. Vehicle Maintenance and Associated Training
- 9. Traction Power Maintenance and Associated Training
- 10. Subway Fire-Life Safety Equipment
- 11. Safety Risk Management Component, Hazard Management, Accident Investigation, Data Collection/Analysis, and Internal Safety Reviews
- 12. Station Maintenance, Elevator, Escalator, and Associated Training
- 13. Safety Certification, System Modification, Procurement, and Configuration Management
- 14. Communications Systems and Maintenance Training
- 15. Rail Operations, Supervision, Control, and Associated Training

However, WMSC did not provide audit documentation that reviewed all PTASP elements as required by Part 673, including:

- Safety Management System
- Safety Assurance
- Safety Promotion



- Environmental Management
- Life Cycle Planning
- Safety Committees
- Accident Notification
- Corrective Actions Plans

Finding 8 – WMSC did not conduct a complete triennial audit of WMATA's PTASP.

Required Action – WMSC must ensure that the triennial audit reviews all PTASP elements.

10. Corrective Actions

For this portion of the audit, the FTA evaluated WMSC CAP documents as specified in:

Part 674.27 – (a)(8) State Safety Oversight Program Standards

Part 674.37 - (a) Corrective Action Plans

10.1 Procedure to Review, Approve, and Verify Corrective Action Plans

Basic Requirements:

49 CFR Part 674.27(a)(8) State Safety Oversight Program Standards – CAPS

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 Part 674.37(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, onsite inspections, or any other means the SSOA deems necessary or appropriate.

Audit Evidence

WMSC Program Standard Section 9 requires that "WMATA develop a CAP for the following items:

1. Results from investigations in which identified causal factors are determined by

WMATA, the WMSC, FTA, GAO, Commonwealth of Virginia, State of Maryland, District of Columbia, US Congress or NTSB as requiring corrective actions;

- 2. Hazards or deficiencies identified from safety reviews performed by WMATA, the WMSC, or other agencies such as the FTA or NTSB [emphasis added];
- 3. Results from FTA or NTSB special advisories, or the WMSC special audits;
- 4. Results from three-year safety audits conducted by the WMSC identified as requiring corrective actions;
- 5. Hazards identified through the WMATA Safety Measurement System; and
- 6. Pre-Revenue Service Audits."

During virtual interviews, it was clarified by WMSC that hazards are tracked in a log and reviewed by WMATA. The hazard log that was provided included 52 hazards, reported during 2019 and 2020. Of these 52 hazards, 16 included documented CAPs. However, almost all the hazards included "tasks" that resembled CAPs. Similarly, WMSC stated that corrective actions included in accident investigation reports were not tracked as CAPs unless WMSC determined that a directive was warranted to require WMATA to develop a CAP.

As an example, a hazard dated May 23, 2019, was described as "Due to rail breaks, trains and equipment have the potential to derail and cause damage to rolling stock, track, and/or facilities." The hazard mitigation included "SAFE will oversee deep dive into broken rail to include types of breaks, trend analysis, process review, existing practices and training gaps."

However, a CAP was not developed and approved by WMSC. This condition and other hazards reported in the log are serious enough that CAPs would need to be developed to ensure mitigation and tracking to completion. WMSC did not require WMATA to submit a CAP for review and approval.

The FTA Audit Team reviewed Recommended Corrective Actions (RCAs) internally developed by WMATA as part of accident investigation reports. Many of these items were not included as CAPs as required by the WMSC Program Standard.

As an example, in response to an event on August 19, 2019, WMATA developed an RCA that stated, "TRST will develop an SOP for Thermite Welding that ensures that relevant hazards such as housekeeping concerns and the hazards associated with the [Job Hazard Analysis] JHA are identified through the SOP."

The WMSC annual reports to FTA and CAP log were reviewed by the FTA Audit Team. It was determined that only two CAPs were attributed to accident investigations, and none were attributed to hazards. In addition, as discussed in the oversight of internal reviews section of this report, WMSC has not approved or tracked the WMATA iCAPAs as part of the SSO program CAPs.

WMSC provided a revised Program Standard effective June 1, 2021, which states, "Findings or conclusions that may require corrective actions (or recommended corrective actions) may arise

from the non-exhaustive list below. The WMSC informs WMATA when the WMSC requires a corrective action plan due to one of these events." The Program Standard then lists a variety of sources including safety event investigations, hazard investigations, and WMATA internal safety reviews.

WMSC also provided an implementation guide effective June 1, 2021, which complements the revised Program Standard effective on the same date. This guide provides additional detail on the tracking and management of RCAs, iCAPAs, and hazards.

Finding 9 – WMSC did not ensure that WMATA developed CAPs, as required in the WMSC Program Standard, for hazardous conditions, investigation reports, and internal reviews.

Required Action – WMSC must ensure that WMATA identifies and implements CAPs resulting from hazards, and that all required CAPs are submitted, reviewed, approved, and tracked.

10.2 Establish Content Requirements for Corrective Action Plans

Basic Requirement: 49 CFR Part 674.37(a) Corrective Action Plans

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.

Audit Evidence

WMSC Program Standard Section 9 requires, "At a minimum, each CAP shall include:

- 1. Date the CAP was generated;
- 2. Unique CAP identifier;
- 3. Source;
- 4. Description;
- 5. Hazard rating;
- 6. Estimated cost and funding strategy, if known;
- 7. Interim mitigations in place (if applicable);
- 8. Anticipated completion date; and
- 9. Responsible party/department. "

The FTA Audit Team reviewed a sampling of CAPs provided in the annual report and approved by the WMSC, including:



FTA-TSR-18-001	WMSC-19-C0020	WMSC-20-C0037
FTA-TSR-18-007	WMSC-19-C0023	WMSC-20-C0057
WMSC-19-C0018	WMSC-19-C0028	WMSC-20-C0068

It was noted by the FTA Audit Team that WMSC's tracking log did not include all requirements, including responsible party, date of next update, and interim milestones, though these items are included in the CAPs developed by WMATA. During interviews, WMSC provided evidence of a new tracking system that included responsible party.

Additionally, several CAPs included in the tracking log did not include an accurate completion date or implementation schedule, including:

- FTA-TSR-18-004 (marked as closed but does not have a closure date listed).
- FTA-TSR-18-014 (marked as closed but does not have a closure date listed).
- FTA-TSR-18-020 (marked as closed but does not have a closure date listed).
- WMSC-19-C0008-A (has a CAP completion date of September 2020 but remains open).
- WMSC-19-C0015-A (has a CAP completion date of September 2020 but remains open)

Finding 10 – WMSC did not ensure that WMATA's CAPs included an accurate schedule and responsible individual.

Required Action – WMSC must ensure that their CAP tracking logs are updated and contain all required information, including current schedules and responsible individuals.

10.3 Process for Evaluating NTSB Findings

Basic Requirement: 49 CFR Part 674.37(b) Corrective Action Plans

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.

Audit Evidence

WMSC Program Standard Section 9 requires WMATA to develop CAPs for both "hazards or deficiencies identified from safety reviews performed by... NTSB" and "results from...NTSB special advisories." Further, Section 8 states, "Should the NTSB recommendations be adopted by the WMSC, WMATA shall implement corrective measures to address causal factors and recommendations. WMATA will propose corrective actions to address each of these recommendations."

It was verified by the FTA Audit Team that there have been no NTSB recommendations issued to WMATA since WMSC's oversight began in March 2019. It was also verified that the CAPs

that were required in response to previous NTSB recommendations were included in WMSC's tracking log.

There are no findings of noncompliance for this portion of the audit.

11. Annual Reports

For this portion of the audit, the FTA evaluated WMSC annual reports submissions as specified in:

Part 674.13 - (a)(7) Designation of Oversight Agency

Part 674.27 – (b) State Safety Oversight Program Standards

Part 674.39 – State Safety Oversight Agency Annual Reporting to FTA

11.1 Annual Safety Status Report Requirements

Basic Requirement: 49 CFR Part 674.13(a)(7) Designation of Oversight Agency

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.

Audit Evidence

WMSC Program Standard Section 10 specifies, "The WMSC Chief Executive Officer shall make and publish, annually, a status report on the safety of the WMATA Rail System, which shall include, among other requirements, established by the Commission and federal law, status updates of outstanding Corrective Action Plans, Commission directives, and on-going investigations."

It was verified by the FTA Audit Team that WMSC submitted its 2019 and 2020 annual reports to FTA within the required time frames. WMSC's annual safety report was also reviewed by the FTA Audit Team. This report was provided to the Governors of the two States, the Mayor, and the WMATA Board of Directors.

There are no findings of noncompliance for this portion of the audit.

11.2 FTA Annual Report Requirements

Basic Requirement: 49 CFR Part 674.39(a) State Safety Oversight Agency Annual Reporting to FTA

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 Part 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 three-year audits completed during the preceding twelve months, and the RTAs' progress in carrying out CAPs arising from three-year audits conducted in accordance with Part 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.

Audit Evidence

WMSC Program Standard Section 10 states, "On or before March 15 of each year, the WMSC shall submit to FTA...the materials for the FTA SSO Annual Report shall be submitted electronically through a reporting system specified by FTA." FTA confirmed that WMSC had submitted their 2019 and 2020 annual reports to the SSOR by the yearly deadline.

The WMSC Program Standard Section 10 states, "WMSC shall submit to FTA...A publicly available report that summarizes the WMSC's oversight activities for the preceding 12 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 WMSC in carrying out its oversight activities."

WMSC's 2020 annual report reviewed by the FTA Audit Team did not include all information, such as responsible parties for CAPs, reportable accidents, and probable causes for accidents.

Finding 11 – WMSC submitted an annual report that did not accurately contain all required information.

Required Action – WMSC must review the 2020 annual report and ensure that the annual report contains all required elements.



12. Follow Up Actions

WMSC will have 45 business days from the issuance of this report to respond to any open findings with corrective action plans.

13. Summary of Findings

Table 13.1 – Summary of WMSC Audit Findings			
Finding	Required Actions		
1) Section 5.1 Part 674.11(d) – WMSC did not document the staffing levels needed for the SSO program.	WMSC must develop, submit, and implement a revised workload assessment that reflects an appropriate staffing level for overseeing the WMATA.		
2) Section 6.1. Part 674.25(b) – WMSC did not have a documented process for review and approval of WMATA's PTASP.	WMSC must develop, submit, and implement a documented process for reviewing and approving WMATA's PTASP.		
3) Section 7.1 Part 674.27(a)(4) – WMSC did not ensure that all elements of the PTASP were internally reviewed and that CAPs resulting from internal safety review findings were approved.	WMSC must ensure that WMATA conducts internal reviews for all PTASP elements and that resulting CAPs are submitted, reviewed, approved, and tracked.		
4) Section 8.1 Part 674.33(a) – WMSC did not ensure that WMATA notified WMSC and FTA of all reportable accidents within the FTA two-hour notification requirement.	WMSC must update, submit, and implement a process that ensures WMATA notifies FTA and WMSC of all reportable accidents within two hours.		
5) Section 8.2 Part 674.35(a) – WMSC did not ensure investigations were conducted for all accidents.	WMSC must submit and implement a process that ensures all accidents are investigated as required.		
6) Section 8.3 674.35(b) – WMSC did not formally adopt all investigation reports.	WMSC must submit and implement a process that ensures accident reports are formally adopted.		
7) Section 9.1 Part 674.27(a)(5) – WMSC did not have a process and criteria for conducting a complete audit of WMATA's compliance with its PTASP, particularly for auditing random drug and alcohol testing.	WMSC must develop and implement a process and criteria for conducting a complete audit of WMATA's compliance with its PTASP at least once every three years.		
8) Section 9.2 Part 674.31 – WMSC did not conduct a complete triennial audit of WMATA's PTASP.	WMSC must ensure that the triennial audit reviews all PTASP elements.		
9) Section 10.1 Part 674.27(a)(8) – WMSC did not ensure that WMATA developed CAPs, as required in the WMSC Program Standard, for hazardous conditions, investigation reports, and internal reviews.	WMSC must ensure that WMATA identifies and implements CAPs resulting from hazards, and that all required CAPs are submitted, reviewed, approved, and tracked.		



Table 13.1 – Summary of WMSC Audit Findings		
Finding	Required Actions	
10) Section 10.2 Part 674.37(a) – WMSC did not ensure that WMATA's CAPs included an accurate schedule and responsible individual.	WMSC must ensure that their CAP tracking logs are updated and contain all required information, including current schedules and responsible individuals.	
11) Section 11.2 Part 674.39(a) – WMSC submitted an annual report that did not accurately contain all required information.	WMSC must review the 2020 annual report and ensure that the report contains all required elements.	



14. Appendix A – WMSC Comments to the Draft Audit Report

WMSC provided the following comments on December 20, 2021, to the FTA Draft SSO Audit Report dated December 7, 2021.

750 First St, WE + Ste. 900 + Washington, O.C. 20002

Office: 202-384-1520 · Website: www.wmsc.gov

December 20, 2021

Melonie Collette Barrington, Ed.D. Director, Office of Safety Review Federal Transit Administration U.S. Department of Transportation

Dear Dr. Barrington,

Thank you for the time your that team has spent thus far on the draft State Safety Oversight Program audit report that was transmitted to the WMSC on December 7, 2021 ("draft report"). We view the FTA's audit as an opportunity to enhance our program activities and to enhance our continuous improvement process for the robust safety oversight work that we have been carrying out since our certification in March 2019.

As requested in your December 7, 2021 letter, this letter and the attachments note (1) areas in which the WMSC has already taken action to address issues that were noted in the draft report as potential findings, and (2) specify errors of fact that the WMSC has identified in the draft report.

Most significantly, the draft report incorrectly states that the WMSC did not have a process and criteria for conducting a complete audit of WMATA's compliance with its Public Transportation Agency Safety Plan ("PTASP"). As explained more fully in the attached supplemental comments and support ("Attachment A"), the WMSC has both a process and criteria for auditing WMATA's compliance with its PTASP.

Specifically, the draft report takes issue with the WMSC's recent Audit of Fitness for Duty Programs. The WMSC conducted this audit in accordance with our Program Standard, which – like all prior version of our Program Standard – includes criteria as defined in ISO 19011, Guidelines for Auditing Management Systems (Third Edition 2018-07). The draft report incorrectly states that the Program Standard and PTASP do not include information that would require an audit of drug and alcohol testing, and incorrectly references Section 8 of the Program Standard as the basis for our Audit of Fitness for Duty Programs, when that section relates specifically to safety event investigations, not to audits. Further, the WMSC is fully complying with statutory, regulatory, and Compact requirements regarding fitness for duty, which is described in Attachment A in greater detail.

Areas the WMSC has addressed

As part of our continuous improvement process, the WMSC has taken a number of actions that address findings noted in the draft report; accordingly, the WMSC requests that these items be closed:

Findings 2, 4, 5, 6, 11: As documented in interviews for this audit and in our Program Standard
Implementation Guide now revised (latest version included as "Attachment B"), and as discussed
more fully in Attachment A, the WMSC has added an additional full-time employee to our
investigations team. This Investigations Analyst works with the Investigations Program Manager,
including to continue to identify safety events that are not reported to the WMSC or not properly

Page 2 of 2 WMSC Response to the Draft SSO Audit Report of the WMSC December 20, 2021

reported to the WMSC to provide oversight of Metrorail's notifications to both the WMSC and the FTA (see Attachment B). This process also includes ensuring that investigations are conducted for all accidents, and that each accident investigation report, once sufficiently complete, is presented to the WMSC Commissioners for adoption. As documented in the Program Standard Implementation Guide, the investigations team also now holds regular, recurring meetings with their counterparts at Metrorail to crosscheck SSOR entry status to provide these checks on an ongoing basis throughout the year.

 Finding 9: As documented in the draft report, the WMSC at the time of this audit had already developed and adopted changes to our Program Standard and the Program Standard Implementation Guide that became effective on June 1, 2021 that address the previous issues identified in Finding 9. These changes include providing specific details on the tracking and management of RCAs, iCAPAs, and hazards.

For a fuller explanation of the WMSC's response to matters raised in the draft report, please refer to Attachment A.

The WMSC thanks the FTA for the opportunity to provide comments on the draft report. Please feel free to contact me with any questions.

Sincerely,

Control of the Contro

David L. Mayer, Ph.D. Chief Executive Officer

Enclosures:

Attachment A: WMSC Supplemental Comments and Support

Attachment B: Revised Implementation Guide for Program Standard Rev. 4.2



15. Appendix B – FTA Response to WMSC Comments to the Draft Audit Report

Table 15.1 - WMSC Draft Audit Report Comment/Response Table			
Comment No.	Finding	WMSC Comment	FTA Response
1	General Comment	Regarding the statement that findings are "noncompliant[] with specific Part 674 requirements[]", please refer to the comments and support below. To the extent, a finding is based exclusively on a prior version of the Program Standard that is no longer in effect, the WMSC requests that FTA acknowledge that the Program Standard has been revised and as a result such findings be closed.	No Response.
2	General Comment	Executive Summary: Any comment(s) and support stated below that are relevant to a summary finding stated in this section is also incorporated here.	No Response.
3	2) Section 6.1. Part 674.25(b) – WMSC did not have a documented process for review and approval of WMATA's PTASP.	WMSC has a documented approval process for the PTASP. Section 4.A.2 of the current Program Standard (language in effect since June 1, 2021) provides that "WMATA must initiate [the PTASP review] process within a practicable time not later than 9 months from the effective date of the last revision; must be completed within 12 months from the effective date of the last revision." This is further affirmed in the Implementation Guide (for a revised version, see Attachment B) and in the PTASP (Section 1.2 in both the currently in-effect version 1 and version 2 effective December 31, 2021). Version 2 of the PTASP (Public Transportation Agency Safety Plan), which takes effect December 31, 2021, followed that documented process.	The response does not address the finding. Therefore, the finding and required action will stand.
4	3) Section 7.1 Part 674.27(a)(4) – WMSC did not ensure that all elements of the PTASP were internally reviewed and that CAPs resulting from internal safety review findings were approved.	Regarding the first clause of Finding 3, "WMSC did not ensure that all elements of the PTASP were internally reviewed" This was not possible. Metrorail's first PTASP came into effect less than two months before the WMSC received FTA's audit notification letter. Internal safety reviews require that WMATA audit the past three-year period of compliance with the safety plan. Because the PTASP was not yet in effect, it could not have been audited during this time. Per FTA regulations and guidance, and as stated during this audit process and in the WMSC's Program Standard Implementation Guide, Metrorail's internal reviews and the WMSC's audits began to assess PTASP elements after PTASP implementation began after December 31, 2020.	The response does not address the finding. Therefore, the finding and required action will stand.

Table 15.1 - WMSC Draft Audit Report Comment/Response Table			
Comment No.	Finding	WMSC Comment	FTA Response
5	(Finding 3 – Continued) 3) Section 7.1 Part 674.27(a)(4) – WMSC did not ensure that all elements of the PTASP were internally reviewed and that CAPs resulting from internal safety review findings were approved.	"WMSC should ensure that future Program Standard updates require the approval of CAPs resulting from internal safety reviews, as required by the current Program Standard[]", the WMSC does not agree that 49 CFR Part 674.27(a)(4) requires the WMSC to approve such CAPs. The FTA audit team stated during the audit that the sole criteria related to approval and tracking of corrective actions related to internal reviews was the WMSC Program Standard that was then in-effect, as this approval and tracking is not a requirement of the regulation. As this is no longer part of the WMSC's Program Standard (as already noted in the draft report), the WMSC requests that this finding be closed.	The response only addressed a portion of the finding. Therefore, address the required action to ensure that WMATA conducts internal reviews for all PTASP elements.
6	4) Section 8.1 Part 674.33(a) – WMSC did not ensure that WMATA notified WMSC and FTA of all reportable accidents within the FTA two-hour notification requirement.	The WMSC now has additional processes in place under our Program Standard Implementation Guide (see Attachment B). The WMSC Investigations Program Manager—with the assistance of an Investigations Analyst as of July 2021—has worked with the Rail Operations Control Center director and Metrorail's Safety Department to ensure ROCC and Safety Department management oversee the proper fulfillment of reporting requirements. Reporting integrity has also been corrected through our regular interactions with the WMATA Chief Safety Officer and Deputy Chief of Investigations. Further, Section 7 (Safety Event Notification) of the Program Standard, in effect since June 1, 2021, provides the updated process by which the WMSC ensures WMATA notifies FTA and WMSC of all reportable accidents within two hours. Therefore, the WMSC requests these findings be closed.	The response does not address the finding. Therefore, the finding and required action will stand.
7	5) Section 8.2 Part 674.35(a) – WMSC did not ensure investigations were conducted for all accidents.	The WMSC now has additional processes in place under our Program Standard Implementation Guide (see Attachment B). In addition, three reports listed in Table 8.2 as not adopted by the WMSC have been adopted by the WMSC. These reports were adopted on March 12, 2020, and December 16, 2020.	The response does not address the finding. Therefore, the finding and required action will stand.
8	6) Section 8.3 674.35(b) – WMSC did not formally adopt all investigation reports.	The WMSC now has additional processes in place under our Program Standard Implementation Guide (see Attachment B). Additionally, regarding Finding 6, investigation reports may not be finished by the time an annual report must be submitted to FTA; however, that a report has not yet	The finding will stand until evidence of adopted reports are provided.

Table 15.1 - WMSC Draft Audit Report Comment/Response Table			
Comment No.	Finding	WMSC Comment	FTA Response
		been adopted by the time of an annual report means only that adoption will occur at some time later than the date of the annual report. All adopted reports are available on our website.	
		The Draft Report incorrectly states that the Program Standard and PTASP do not include information that would require an audit of drug and alcohol testing.	
9	7) Section 9.1 Part 674.27(a)(5) – WMSC did not have a process and criteria for conducting a complete audit of WMATA's compliance with its PTASP, particularly for auditing random drug and alcohol testing.	Section 5 of the Program Standard states that the WMSC completes a full audit of Metrorail's compliance with its PTASP and other rules, policies, procedures, and requirements every three years. Section 4.13 of WMATA's Agency Safety Plan covers drug and alcohol compliance and associated policies such as the testing program, so the WMSC is therefore required to audit this area. Drug and alcohol compliance is also an element audited under both the SSPP and the PTASP. The WMSC conducted the fitness for duty audit in accordance with our Program Standard, which – like all prior versions of our Program Standard – includes criteria as defined in ISO 19011, Guidelines for Auditing Management Systems (Third Edition 2018-07). These best practices are consistent with, and provide specificity to, the requirements set forth at 49 USC 5329(e) and (f) and at 49 CFR Part 674.31.	The response does not address the finding. Therefore, the finding and required action will stand.
10	8) Section 9.2 Part 674.31 – WMSC did not conduct a complete triennial audit of WMATA's PTASP.	WMSC audits do not stand for any one SSPP or PTASP element, each audit covers several elements and elements may be covered by several audits multiple times but in different contexts. The WMSC conducts its audits organized by topic area so that the WMSC can comprehensively audit all relevant portions of the effective safety plan(s) when meeting with that topic area's relevant departments. For example, an audit of equipment maintenance includes discussion on the department's methods for addressing hazards, trending of failures, and completing training—all of which span multiple elements of the SSPP as well as multiple components of the PTASP. The list of audits on page 33 was based on our audit schedule at the time but those audits do not constitute "elements" as the term is understood for SSPP or PTASP elements. SSPP and PTASP "elements" are tracked in accordance with the Program Standard Implementation Guide (Attachment B) to ensure that the triennial audit is complete. In any event, it is not possible for the WMSC to have yet	The response does not address the finding. Therefore, the finding and required action will stand.

Table 15.1 - WMSC Draft Audit Report Comment/Response Table			
Comment No.	Finding	WMSC Comment	FTA Response
		time of the notification letter for this audit, and the PTASP had been in effect for less than two months.	
11	required in the WMSC Program Standard, for hazardous conditions,	The WMSC acknowledges the finding and has since taken action to address this issue. As documented in the draft report, the WMSC developed and adopted changes to our Program Standard and our associated Implementation Guide that would be effective June 1, 2021 that address the previous issues identified in Finding 9. These changes include providing specific details on the tracking and management of RCAs, iCAPAs, and hazards. Therefore, the WMSC requests that this finding be closed.	The response does not address the finding. Therefore, the finding and required action will stand.
12	10) Section 10.2 Part 674.37(a) – WMSC did not ensure that WMATA's CAPs included an accurate schedule and responsible individual.	The draft report notes that each CAP already includes the responsible party, date of next update and interim milestones as required by 49 CFR Part 674.37(a). The draft report however states that the WMSC is noncompliant with section 674.37(a) due to a separate tracking log that is not required by the regulation. In addition, the draft report notes that the WMSC demonstrated a new tracking system during the audit that the WMSC transitioned to on May 1, 2021. CAPs may be developed and approved years before an expected closure period and as such, the schedule is inherently subject to change or delay, it is unreasonable to expect CAPs to be static from the date of approval through completion. 49 CFR Part 674.37(a) requires a schedule—a feature every one of the highlighted CAPs has. Therefore, the WMSC requests that this finding be removed or closed.	The response does not address the finding. Therefore, the finding and required action will stand.
13	11) Section 11.2 Part 674.39(a) – WMSC submitted an annual report that did not accurately contain all required information.	The cited regulation (49 CFR Part 674.39(a)) does not require the inclusion of CAP responsible parties in an annual report. The WMSC is in full compliance with the Program Standard section quoted on page 39. The required action that the "WMSC must review the 2021 annual report and ensure that the annual report contains all required elements" will be fulfilled by the deadline for the 2021 report, which is March 2022.	The response does not address the finding. Therefore, the finding and required action will stand.