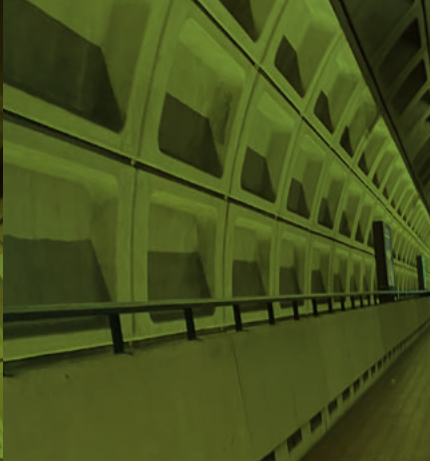


The Washington Metrorail Safety Commission



Safety Audit

of the Washington Metropolitan
Area Transit Authority

Audit of Internal Safety Review Program



Final Report:
January 4, 2023

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Prepared under the authority of the Washington Metrorail Safety Commission

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Executive Summary

The scope of this safety audit is the Washington Metropolitan Area Transit Authority (WMATA) Metrorail Internal Safety Review Program and related corrective action plans. Metrorail refers to these 'internal' Corrective and Preventive Actions developed to address findings of internal safety reviews and similar activities as iCAPAs. The audit objectives included the assessment of audit practices and procedures, and associated training, for purposes of compliance with applicable Metrorail plans and policies, regulations, and industry best practices. At the time of this audit, the current WMATA Public Transportation Agency Safety Plan (PTASP) was Rev. 2.0, effective December 31, 2021.

Internal safety reviews are required by federal regulation and the WMSC Program Standard. They are designed to further continuous safety improvement from within a transit agency by providing an internal audit of all elements of the PTASP over the course of a three-year period. These reviews complement WMSC Triennial Audits of all elements of the PTASP to contribute to ongoing Metrorail safety improvement.

To maximize the safety benefits of each audit and internal safety review, the WMSC Program Standard states that WMATA's internal safety reviews should occur between the WMSC's audits of a similar area, with at least 12 months between the WMSC audit exit conference and an internal safety review.

This audit identified positive practices in Metrorail's effective internal safety review program that contribute to safety improvement. Metrorail's internal safety reviews effectively identify safety issues in Metrorail processes, procedures, implementation, and training. The WMSC appreciates the work of Metrorail's teams conducting internal safety reviews and managing the iCAPA process, and the cooperation of those teams during this audit process. The WMSC also appreciates Metrorail's actions following the

exit conference for this audit to address an element of one of the preliminary findings presented by the WMSC. Metrorail updated Quality Assurance, Internal Compliance and Oversight (QICO) Department management training matrices to address training requirements of 49 CFR Part 672.

This audit identified positive practices that contribute to safety improvement.

This audit also identified three findings that Metrorail is required to develop corrective action plans to address to align its practices and training requirements with its PTASP, federal regulation and the WMSC Program Standard to ensure that Metrorail gets the intended safety benefits of the multiple successful aspects of the internal safety

review and iCAPA program.

First, findings from the internal safety review program are not yet systematically incorporated into Metrorail's Safety Management System (SMS) as specified in Metrorail's PTASP. This prevents Metrorail from ensuring an integrated, consistent and long-term approach to effectively address identified hazards.

Second, Metrorail has not yet implemented training requirements in system safety, hazard management and SMS training for personnel responsible for internal safety reviews as required by the WMSC Program Standard.

Third, Metrorail does not have a process for, and has not conducted or scheduled, a triennial internal safety review of its internal safety review program as required by the WMSC Program Standard. This review is required to ensure that all elements of the PTASP are assessed as part

of the continuous improvement process. Metrorail personnel acknowledged this deficiency.

WMATA is required to propose CAPs for each finding no later than 30 days after the issuance of this report.





Background and Scope

Background and Scope

The scope of this safety audit is Metrorail's Internal Safety Review Program and the related corrective action plans. Metrorail refers to these 'internal' Corrective and Preventive Actions developed to address findings of internal safety reviews and similar activities as iCAPAs. The audit objectives included the assessment of audit practices and procedures, and associated training, for purposes of compliance with applicable Metrorail plans and policies, regulations, and industry best practices. At the time of this audit, the current WMATA Public Transportation Agency Safety Plan (PTASP) was Rev. 2.0, effective December 31, 2021.

What are now called internal safety reviews were recommended as internal safety audits under American Public Transportation Association (APTA) guidelines and were then required beginning in the 1990s under federal regulations (49 CFR Part 659) as part of a rail transit agency's System Safety Program Plan (SSPP). Those audits were required to cover each of the 21 elements of the SSPP. With the evolution to a safety management system and the Public Transportation Agency Safety Plan (PTASP) structure, internal safety reviews are currently required under the WMSC Program Standard and federal regulation (49 CFR Part 674). The reviews must cover each element of the PTASP.

These reviews are designed to further continuous safety improvement from within a transit agency by providing an internal audit of all elements of the PTASP over the course of a three-year period. These reviews complement WMSC Triennial Audits of all elements of the PTASP to contribute to ongoing Metrorail safety improvement. To maximize the safety benefits of each audit and internal safety review, the WMSC Program Standard states that WMATA's internal

safety reviews should occur between the WMSC's audits of a similar area, with at least 12 months between the WMSC audit exit conference and an internal safety review. With the transition from SSPP to PTASP elements and updated triennial schedules for both the WMSC and WMATA, this coordination is improving over time.

Metrorail notifies the WMSC of internal safety review activities in advance, and provides an annual report signed by the General Manager to the WMSC that provides the results of the internal reviews, findings, and iCAPAs. The WMSC reviews the internal safety review documents in accordance with the WMSC Program Standard. The WMSC has also typically reviewed recent internal safety reviews relevant to each functional area as part of the WMSC's audit process.

These reviews are designed to further continuous safety improvement from within a transit agency.

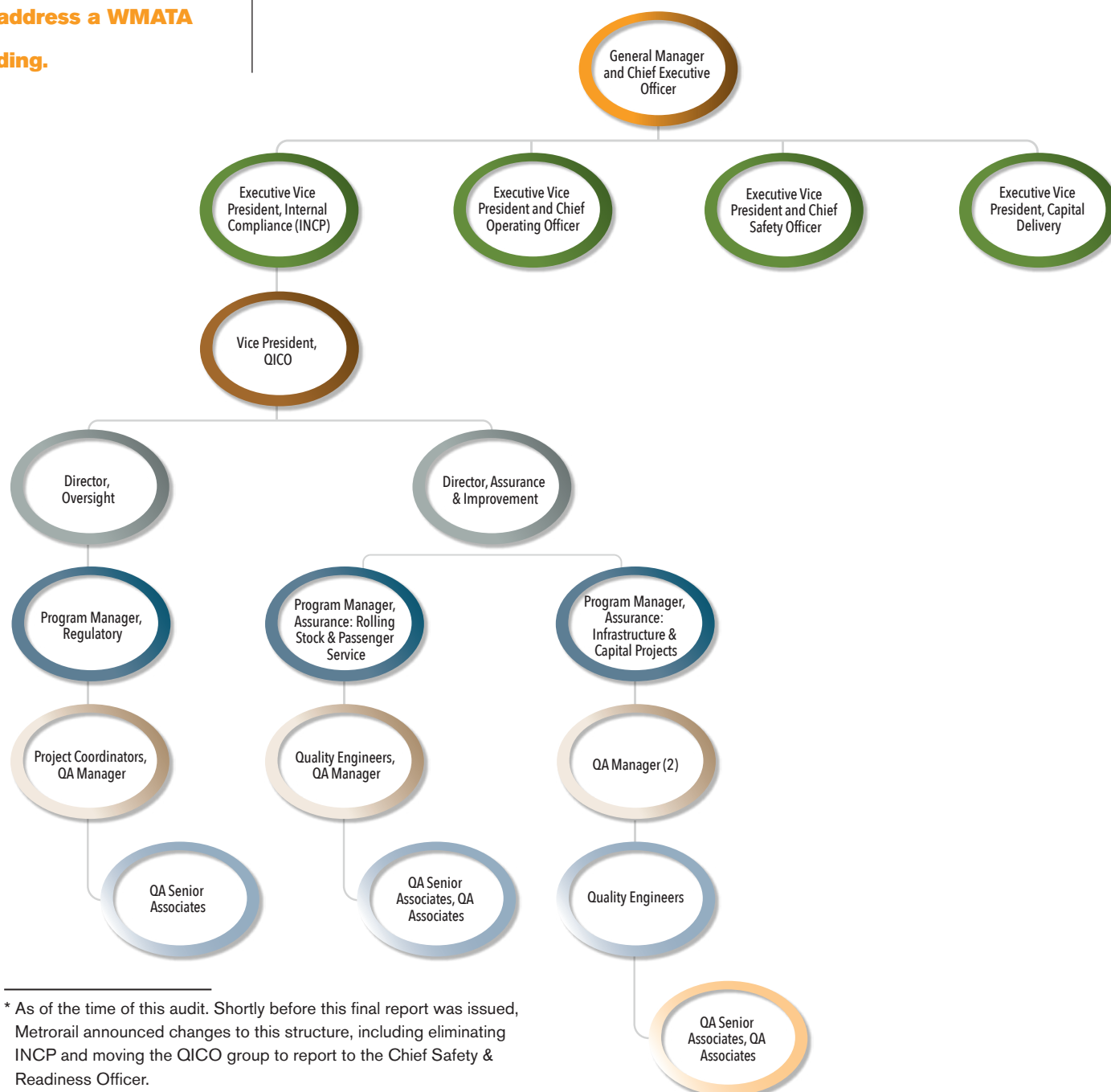


Each corrective action to address a finding from an internal safety review typically has multiple steps that, combined, are designed to address a WMATA finding.

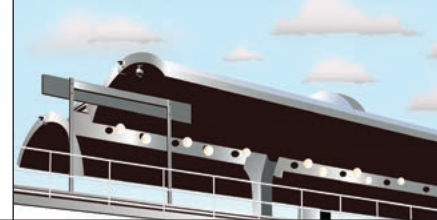
Each corrective action to address a finding from an internal safety review typically has multiple steps that, combined, are designed to address a WMATA finding. Each of those steps must be completed before the iCAPA is closed.

Metrorail's iCAPA tracking document provided in response to initial document requests for this audit noted 166 total closed iCAPAs dating back to a 2018 Internal Review of Transit Operations. Metrorail had 19 open iCAPAs that were past their original due date, and 43 open iCAPAs not yet due for closure.

Organizational Structure*



* As of the time of this audit. Shortly before this final report was issued, Metrorail announced changes to this structure, including eliminating INCP and moving the QICO group to report to the Chief Safety & Readiness Officer.



In the past, WMATA had tasked its Safety Department and the Metro Transit Police Department (MTPD) with conducting these internal safety audits or reviews. In its 2018 SSPP revision, Metrorail transferred responsibility for conducting the internal reviews to the Quality Assurance, Internal Compliance and Oversight (QICO) Department within the Department of Internal Compliance (INCP). This included designating QICO as responsible for the management of corrective action plans to address findings from internal safety reviews. QICO determines when requirements have been met to close iCAPAs.

QICO has two teams with responsibilities related to internal safety reviews and iCAPAs: “regulatory” and “assurance.” The assurance team conducts the reviews and, under recent adjustments, uses its technical expertise to determine when corrective actions have been implemented in accordance with an iCAPA. The regulatory team monitors, communicates and tracks implementation schedules, develops or assesses specific wording of iCAPAs, and has other related responsibilities.

Each team has a director and other staff such as program managers and associates. The directors report to the Vice President of QICO, who reports to the Senior Vice President of Internal Compliance. The Senior Vice President of Internal Compliance reports directly to the General Manager.

Metrorail established QICO in 2015. In addition to internal safety reviews, other internal reviews, and quality assurance assessments, QICO is responsible for coordinating and internally overseeing Metrorail Corrective Action Plans (CAPs) and iCAPAs, setting quality management system standards via the Quality Management System Plan (QMSP), managing WMATA’s Policy Instruction Manual. QICO’s responsibilities beyond the internal safety review and iCAPA process were not part of this audit’s scope.

Metrorail’s Office of Management Audits, Risk & Compliance (MARC), which also reports to the Senior Vice President of Internal Compliance, conducts separate safety-related reviews that are also not part of the scope of this audit. In addition, the Safety Department (SAFE), which is led by the Senior Vice President and Chief Safety Officer, conducts certain activities and sets the framework for WMATA’s Safety Management System (SMS) as specified in the PTASP. After completion of this audit, and just prior to issuance of this final report, Metrorail announced changes to its organizational structure. This included eliminating the Department of Internal Compliance. QICO now reports to the Chief Safety & Readiness Officer and what was MARC now reports to the Chief Legal Officer & General Counsel.

Audit Work

The WMSC received initial documents related to this audit from WMATA in July 2022, and conducted interviews and received follow up documents and conducted document reviews into August 2022.

An exit conference was held on September 15, 2022 with Metrorail staff to summarize the status of the audit to that point.

The WMSC later provided a draft of this report to WMATA for technical review and incorporated any technical corrections as appropriate.





What the **WMSC** Found



What the **WMSC** Found

Metrorail's internal safety reviews effectively identify safety issues.

Positive Practices

- Metrorail's internal safety reviews effectively identify safety issues that must be addressed.
- Internal safety reviews are conducted by a department outside of the reporting structure for operational departments.
- QICO utilizes subject matter experts as part of internal safety review teams and to review iCAPA deliverables and closure requests.
- QICO typically holds individual briefings regarding the findings of each internal safety review with the relevant senior vice president(s) responsible for that area.
- iCAPA deliverables and other items are tracked on schedules for each responsible department. These have continued to be distributed, even if on a reduced frequency, during reduced staffing within QICO.
- QICO tracks completion dates for iCAPAs that were initially committed to in addition to the current expected completion dates for any iCAPAs that are past due.
- QICO has an assigned safety risk coordinator.
- Required documentation on completed annual internal safety reviews is submitted to the WMSC.
- QICO has detailed training matrices listing and tracking training requirements for personnel (see Finding 2 for additional items missing from these matrixes).

Item resolved prior to issuance of audit report

Metrorail had not added specific training requirements required by 49 CFR Part 672 to its training matrices.

Federal regulation, and WMATA's PTASP, require Metrorail personnel directly responsible for safety oversight to be designated for and complete the Public Transportation Safety Certification Training Program (PTSCPT) provided by the U.S. Department of Transportation's Transportation Safety Institute (TSI). This extensive program requires multiple multi-day classes that are offered on a limited basis both online and in person.

Individuals interviewed for this audit stated that many QICO personnel with responsibilities for internal safety reviews have this training or are in the process of taking classes as those courses are available, which is very positive; however, the lack of documentation of requirements or prioritized classes in departmental documents create the risk that this training level may not be maintained in the future. Metrorail had not formally designated the positions that are "responsible for safety oversight" that require certification under 49 CFR 672.13.



In an interview, the Vice President of QICO stated that they were the only officially designated individual under the PTSCTP program to meet the regulatory requirement. Metrorail also provided the Vice President's PTSCTP certificate of completion. However, this training requirement for that position was not listed on training matrices provided for this audit. The Vice President also stated that they try to have personnel take these TSI classes as the classes are available, which, while positive, was not documented in policies or procedures.

After the conclusion of the exit conference for this audit, which included a preliminary finding in this area, Metrorail updated and submitted a revised QICO Management Training Matrix that included the requirement that the Vice President complete the PTSCTP, resolving this item.



Findings

1

This prevents Metrorail from ensuring an integrated, consistent and long-term approach to effectively address identified hazards.

Findings from the internal safety review program are not yet systematically incorporated into Metrorail's Safety Management System (SMS) as specified in Metrorail's PTASP.

Metrorail's internal safety reviews effectively identify safety issues in Metrorail processes, procedures, implementation and training, however, these identified gaps are not systematically incorporated into Metrorail's safety management system (SMS), which is still being established. This prevents Metrorail from ensuring an integrated, consistent and long-term approach to effectively address identified hazards.

Internal safety reviews are among the items designated in Metrorail's PTASP as steps taken for the ongoing management of safety risk by driving safety risk coordinators to re-visit risks identified, prioritization, and mitigations on a regular basis (Section 3.2, Ongoing Management of Safety Risk). The PTASP states this is done by capturing the risk, documenting risk assessments and tracking mitigations in WMATA's Safety Measurement System, a database managed by the Safety Department (SAFE). Interviews and document reviews conducted as part of this audit demonstrate that Metrorail does not have and is not carrying out a process to ensure this occurs.

The PTASP states that a safety risk coordinator (SRC) in each department is supposed to use the Safety Measurement System to determine whether an existing risk has already been identified or a new safety risk needs to be drafted. Similarly, PTASP Section 4.1.4, Information Monitoring, requires departments to work with SAFE regarding data required to measure the effectiveness of the actions taken to reduce their safety risks, and "to ensure, through wide distribution and sharing of safety data and analyses, that all departments and functional areas are aware of trends, hazards, and safety performance in all other departments." Metrorail is still developing and identifying SRCs and SRC training. This process is not yet implemented across all elements of Metrorail, and elements of work processes and data remain siloed.





The disparate information systems lead to a safety gap related to safety risk management, safety assurance, interdepartmental coordination and effective data analysis to ensure the most effective use of resources to provide for operations that are as safe as reasonably practicable.



QICO invites individuals to internal safety review exit conferences and briefs the executive responsible for that area on the outcomes, which are both positive activities. The PTASP also states that the reviews are available to other departments. However, there is no process to ensure that this information is incorporated into and coordinated with Metrorail's hazard management system in Metrorail's Safety Measurement System program, which the Safety Department has established for safety risk coordinators to use as part of the safety management system's processes. Internal safety reviews are distributed by email, but this does not ensure each finding or hazard is entered into Metrorail's Safety Measurement System that the Safety Department has designated as the source of information for the safety management system.

Following an internal safety review report, QICO tracks iCAPAs in its own systems, and provides regular emails to individual departments regarding upcoming deadlines. SAFE is responsible for the separate hazard management system within the Safety Measurement System. Additional related data is kept by individual departments in their own databases or systems and may be identified separately by other WMATA organizational units such as MARC when they conduct reviews or otherwise identify safety issues. QICO and SAFE have taken some steps toward a potential launch of a separate system, Archer, which could be used to track at least CAPs and iCAPAs, and possibly other items. At the time of this audit, this system had not been implemented.

The disparate information systems lead to a safety gap related to safety risk management, safety assurance, interdepartmental coordination, and effective data analysis to ensure the most effective use of resources to provide for operations that are as safe as reasonably practicable.

In addition, due in part to Metrorail not yet having a mature and implemented quality management system or safety management system, QICO personnel work closely with groups that are the subject of internal safety reviews to develop specific corrective action plans and the specific wording of any actions that are committed to address each finding. Metrorail's implementations of these systems in a unified and fully coordinated fashion will provide the greatest opportunity to ensure effective and continuous safety improvement by ensuring that corrective actions are systemic and address issues not just in one department but across any related systems, and that the responsible parties with subject-matter expertise are fully invested in continuous safety improvement.

Metrorail also has the opportunity to improve safety by better connecting and integrating the internal safety review and internal corrective action program into Metrorail's broader safety management system, including by implementing technological improvements that would, if properly implemented and integrated, reduce the risk of human error that could lead, for example, to an identified hazard not being considered as part of Metrorail's safety management system

Advancing technological integration across departments, increasing automated connections among systems (and possibly utilizing fewer disparate systems), and ensuring the systems fit within Metrorail's overall information technology architecture would reduce manual entry, ensure



The WMSC Program Standard requires training for those conducting Metrorail internal audits on auditing, safety risk management, hazard management and safety management systems.

2

coordination is systematic rather than occurring only on a transactional basis, and improve safety.

Having all of this information in a consolidated fashion would also provide an opportunity for further improvements to the internal safety review program by more fully incorporating it into the safety assurance and safety risk management aspects of Metrorail's safety management system through increased coordination.

In a positive step after the initiation of this audit, QICO, at the invitation of Metrorail's Safety Department, presented information in July 2022 to the Executive Safety Committee (made up of Metrorail's Senior Executive Team) regarding internal safety reviews and iCAPAs including recent reviews, upcoming reviews, and trends. QICO and SAFE personnel stated that they intend this presentation to be conducted on a quarterly basis moving forward. Metrorail would benefit from formalizing this process.

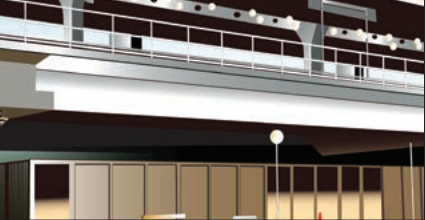
QICO also stated it is beginning formal follow ups for the first time on iCAPAs that have been closed to make sure the issue has not returned and that the controls in place are effective. If implemented and maintained, this will be a positive practice in alignment with safety management systems principles. Metrorail would benefit from coordinating activities in this area between QICO and SAFE to avoid unnecessary siloing so that field visits and other internal oversight activities can be maximized to cover the broadest span of Metrorail needs.

Minimum Corrective Action: Metrorail must implement a process to ensure that internal safety review findings are systematically incorporated into Metrorail's safety management system. This must include implementing technological and quality management and safety management process improvements to further this integration and ensure that identified safety issues are considered, prioritized and addressed in accordance with the requirements of the safety management system specified in Metrorail's PTASP to ensure an integrated, consistent and long-term approach to effectively address identified hazards.

Metrorail has not yet implemented training requirements in system safety, hazard management and SMS training for personnel responsible for internal safety reviews as required by the WMSC Program Standard.

Metrorail has not yet introduced training requirements in system safety, hazard management and SMS training for personnel conducting internal safety reviews. The WMSC Program Standard requires training for those conducting Metrorail internal audits on auditing, safety risk management, hazard management and safety management systems.

Metrorail requires and implements International Organization for Standardization (ISO) lead auditor training, meeting the audit training requirement; however, given the current stage of Metrorail's PTASP implementation, this safety management system (SMS) training has not yet been developed and implemented. The TSI training under the PTSCTP includes SMS training, and could address aspects of these requirements, or Metrorail could develop its own training curricula. Metrorail has not yet documented or finalized a plan for the training requirements that lead auditors will need to meet for this training requirement.



Metrorail has not yet determined how to carry out this action or included it on its schedule.

Following the exit conference for this audit, Metrorail submitted a revised Management Training Matrix that included a Safety Risk Coordinator Training requirement for the Director of Assurance. This training has not yet been completed.

QICO assurance personnel stated that they had begun discussing with SAFE whether any individuals on the QICO assurance team needed to be designated under the PTSCTP program, but that no decisions had been reached.

Other personnel on the assurance team stated they had completed some or all of these TSI classes, which is positive, however the records provided for this audit of Metrorail's individual training records did not include tracking of these classes, which are voluntary for personnel not required by regulation to take them. Metrorail should consider adding formalized tracking of TSI class completion, which could be added when individuals forward their completion certificates to a designated contact.

Minimum Corrective Action: Metrorail must document and implement required training on safety risk management, hazard management and safety management systems for personnel conducting internal reviews. These changes must be reflected in updated training matrices and any associated documentation regarding training requirements for each applicable position.

Metrorail does not have a process for, and has not conducted or scheduled, a triennial internal safety review of its internal safety review program as required by the WMSC Program Standard.

Metrorail personnel are aware of the need to conduct an internal safety review of Metrorail's internal safety review program to meet the WMSC Program Standard (Section 4.B) and federal regulatory (49 CFR 674.27(a)(4)) requirement to conduct internal safety reviews over a three-year period that evaluate the implementation of all elements of the WMATA PTASP. This is also included, as required, in Metrorail's PTASP (Section 4.1.2.1) as a requirement that each department and functional area is reviewed for compliance with the PTASP once every three years and any non-compliances with deficiencies and failures of SMS requiring corrective action to be developed and implemented by the department or functional area.

Metrorail personnel stated that they expect a review of the internal safety review program to occur, but Metrorail has not yet determined how to carry out this action or included it on its schedule for the current three-year cycle. Therefore, this is currently a deficiency.

As personnel interviewed for this audit stated, options to ensure an independent internal review of the internal safety review program include having another department with appropriate expertise conduct this review or having another department with appropriate expertise oversee a contractor who may conduct this review. QICO personnel interviewed for this audit said one option beginning to be discussed at the time of this audit was to have the Safety Department lead this task. As Metrorail noted in its response to the draft of this report, Metrorail's new organizational structure announced shortly before issuance of this final report makes that no longer an option.



The internal safety review schedule reviewed as part of this audit was primarily prospective rather than retrospective due to the timing of the transition from the former System Safety Program Plan (SSPP) to the PTASP. However, Metrorail also had not conducted an internal safety review of its internal safety review program since QICO took over the program in 2018, four years prior to this audit.

The Tri-State Oversight Committee (TOC) issued a similar finding in an audit issued in 2015 of Metrorail's System Safety Program that identified that neither of the organizational units then responsible for the program, the Safety Department and MTPD, had been subject to an internal audit "in recent history."

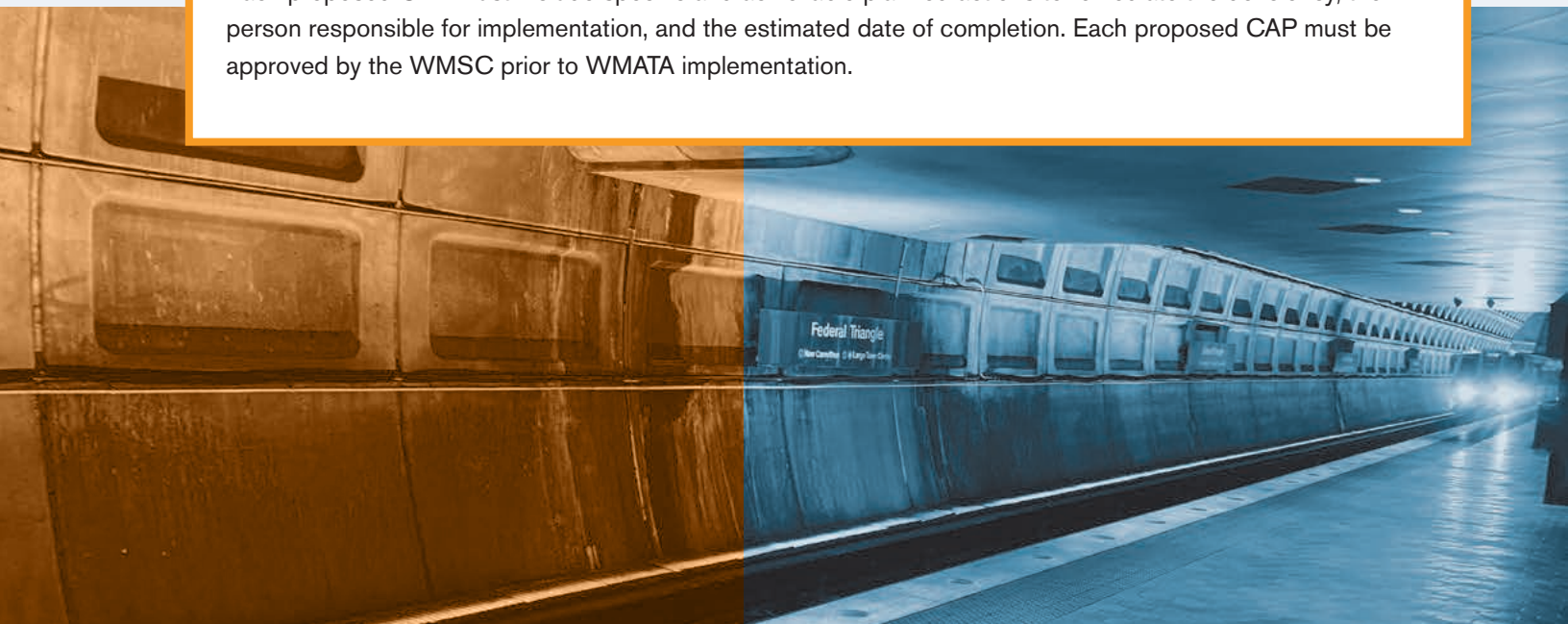
Minimum Corrective Action: Metrorail must establish an adequate process for conducting internal safety reviews of the internal safety review program, assign the responsibility for this action, update its schedule to include this review, and take any other action necessary to demonstrate that the next review will occur within the current three-year cycle.

Other observations

At the time of this audit, QICO's regulatory team had several vacancies. Those interviewed for this audit stated this had led to the need to prioritize or reduce the frequency of some activities, even with a staff member temporarily reassigned from another team to support those employees.

Next Steps

WMATA is required to propose CAPs for each finding no later than 30 days after the issuance of this report. Each proposed CAP must include specific and achievable planned actions to remediate the deficiency, the person responsible for implementation, and the estimated date of completion. Each proposed CAP must be approved by the WMSC prior to WMATA implementation.





Appendices

Appendices A, B and C

Appendix A: Personnel Interviewed

► QICO

- ♦ Vice President
- ♦ Director (2)
- ♦ Lean Continuous Quality Improvement Engineer (2)
- ♦ Quality Assurance Senior Associate
- ♦ Quality Assurance Manager

- ♦ Program Manager
- ♦ Senior Safety Specialist

► SAFE

- ♦ Vice President & Assistant Chief Safety Officer
- ♦ Safety Management System Project Manager

Appendix B: Documents Reviewed

► Department Information

- ♦ QICO Regulatory Organizational Chart, 2022
- ♦ QICO Assurance Organizational Chart: Rolling Stock & Passenger Service, 2022
- ♦ QICO Assurance Organizational Chart: Rolling Stock & Passenger Service + Infrastructure & Capital Projects, 2022
- ♦ Job Descriptions:
 - Quality Assurance Senior Associate (8/13/2018)
 - Lean Continuous Quality Improvement Engineer (1/17/2017)

► Training records

- ♦ QICO Department Training Transcript, spreadsheet (no date)
- ♦ PTSCTP Certificate of Completion, QICO VP (6/30/22)
- ♦ QICO Assurance Team Training Matrix (as of 7/5/2022)
- ♦ QICO Management Team Training Matrix (as of 7/5/2022)
- ♦ QICO Management Team Training Matrix (as of 9/22/2022)
- ♦ QICO Regulatory Team Training Matrix (as of 7/5/2022)

► Procedures, Forms/templates

- ♦ QICO-PRO-P01-01, QICO Internal Safety Review Notification and Reporting Procedure (8/16/2019)
- ♦ Quality Management System Plan (9/2021)
- ♦ QICO-PRO-P01-02, Internal Safety Review Procedure (Rev. 2, 6/17/2022)
- ♦ QICO-PRO-P12-00, Hazard Reporting Procedure (Rev. 0, 5/17/2022)
- ♦ QICO-PRO-TMO06-03, Field Assessment, template (Rev. 3, 9/1/2021)
- ♦ QICO-PRO-TMP02-04, Assessment Checklist, template (Rev. 4, 9/1/2021)
- ♦ QICO-PRO-TMP03-01, Meeting Agenda, template (Rev. 1, 3/1/2022)
- ♦ QICO-PRO-TMP05-02, Meeting Minutes, template (Rev. 2, 3/24/2021)
- ♦ QICO-PRO-TMP09-01, Interview Checklist, template (Rev. 1, 5/11/2022)
- ♦ QICO-PRO-TMP10-02, Document Request, template (Rev. 2, 3/10/2021)
- ♦ QICO-PRO-TMP12-02, iCAPA Executive Signature Page, template (Rev. 2, 5/24/2021)

- ♦ QICO-PRO-TMP13-03, Internal Safety Review Scope of Work, template (Rev. 3, 6/1/2022)
 - ♦ QICO-PRO-TMP14-01, Safety Related Discrepancies, template (Rev. 1, 5/23/2022)
 - ♦ QICO-PRO-TMP16-03, Internal Safety Review Form, template (Rev. 3, 6/17/2022)
 - ♦ QICO-PRO-TMP22-00, WMSC Quarterly Letterhead, template (Rev. 0, 5/26/2021)
 - ♦ QICO-PRO-TMP23-00, WMSC Letterhead, template (Rev. 0, 5/26/2021)
 - ♦ QICO-REG-TMP01-06, iCAPA form, template (Rev. 6, 2/17/2022)
 - ♦ 700-ROCC-ADM-21-00, ROCC Safety Management System Manual (7/23/2021)
 - ♦ 700-ROCC-ADM-26-00, ROCC Internal Assessment Process (7/23/2021)
 - ♦ 400-SAFE-ADM-01-02, WMATA PTASP, Section 3.0: Safety Risk Management (Rev. 2, 10/8/2021)
- **Other documents**
- ♦ Internal Review iCAPA Status Report (as of 6/3/2022)
 - ♦ ISR Schedule, FY23–FY25 (6/13/2022)
 - ♦ Structures Maintenance and Inspection ISR interview list and questions
 - ♦ Car Track Equipment Maintenance ISR interview and field assessment list
 - ♦ QICO – SAFE Communication Hazard Log, spreadsheet (no date)
 - ♦ QICO Safety Related Discrepancies Weekly Report (5/25/2022)
 - ♦ QICO Safety Related Discrepancies Weekly Report (6/8/2022)
 - ♦ INCP, Quality Management Plan (Rev. 1, 4/8/2022)
 - ♦ IBOP, Quality Management Plan (Rev. 0, 6/30/2021)
 - ♦ WMSC CAPs and QICO iCAPAs: 90-Day Look Ahead – CAP/CAPA Details (7/8/2022)
 - ♦ Distribution List for the 30-60-90 day report
 - ♦ iCAPA: QICO-ATC-17-01 subject matter expert (SME) verification materials
 - ♦ QICO-SIM-17-02 Meeting Notes (4/28/2022, 5/20/2022)

WHAT WE DO	WHAT WE FOUND CY22Q1 INTERNAL SAFETY & QUALITY REVIEWS	WHAT WMATA WILL DO MOVING FORWARD
<p>What is QICO? The Office of Quality Assurance, Internal Compliance & Oversight (QICO) is an internal management function that partners with other departments to provide an independent review (QICO) and the external review process are authorized by the General Manager as outlined in the Quality Management System Plan (QMS).</p> <p>Why QICO Performed These Reviews? These internal reviews are intended to provide Metro senior management with an assessment of the following areas:</p> <ul style="list-style-type: none"> Automatic Fare Collection Section Office of Vehicle Program Services Office of Environmental Management and Compliance Office of Track and Structure Remaining Rail Installation and Maintenance <p>QICO's Methodology QICO selects and reviews activities by identifying and assessing any risks to align with the QMSIP, Core Standards, and/or Public Transit Agency Safety Plan (PTASP).</p> <p>Review documentation, interview processes, and interview key personnel. Findings and required actions are based on risk rating which ranges on a scale from "insignificant to high".</p> <p>Note: An internal Internal Compliance and Oversight Action (ICAPA) is developed for each required activity to ensure that and internal review of activities. To check the status of ICAPA, please contact the QICO team.</p>	<p>(1) Automatic Fare Collection Section (AFCS)</p> <p>What:</p> <ul style="list-style-type: none"> Automatic Fare Collection Section (AFCS) routinely begins and completes 100% preventive maintenance in alignment with scheduled target start and finish dates within Metro. <p>Action Areas Identified During Review:</p> <ul style="list-style-type: none"> Obtaining proper safety equipment in accordance with approved Preventive Maintenance Inspections (PMI) promotes safety culture and enhances risk mitigation. Reviewing and updating governing documents within the required frequency optimizes applicability and incorporates changes in a timely manner. Adherence to the Office of Systems Maintenance (OSM)'s Maintenance Control Policy (MCP), AFCS governing documents and Quality Management System Plan (QMSIP) promotes consistent maintenance practices and quality records. Maintaining and complying with an accurate training matrix for AFCS assures compliance with governing documents, the Safety Management Plan (SMP), and promotes safety. Maintaining current Roadway Worker Protection (RWP) training safeguards WMATA personnel from the hazardous and around the roadway and promotes a safe working environment. Maintaining current and ensuring electronic records to include backups of personnel records safeguards from accidents and accidental loss of documents due to flooding or fire and protects the privacy of AFCS personnel. Periodically reviewing and updating AFCS job descriptions to comply with the Human Resources (HR) procedure fulfills qualifications' accuracy and job performance. <p>(2) Office of Vehicle Program Services (OVPS)</p> <p>What:</p> <ul style="list-style-type: none"> Documentation, a centralized electronic repository is well maintained and updated. Approved OVM engineering documentation spreadsheet is sent out weekly. <p>Items Reviewed During the Review:</p> <ul style="list-style-type: none"> OVPS primarily addressed the workplace safety concerns identified at Greenbelt Building H such as tripping hazards and missing labels on chemicals. <p>Action Areas Identified During Review:</p> <ul style="list-style-type: none"> Performing regular workplace inspections helps reduce incidents, injuries, and illnesses through identification, recording, analysis and mitigation of hazards. Maintenance of Tools, Measurements, and Diagnostic Equipment (TMDE) calibration is important to promote accurate and reliable data collection. Maintaining current policies and procedures results in consistent process control. Use of standardized templates is critical in the creation of controlled work. Availability of formal training courses for routine employee skills and update of training logs improves operations, compliance, safety, and engagement. A continuously updated hazard log/risk register contributes to the identification, recording, assessment, and mitigation of potential hazards. Participating in all mandatory safety committee meetings helps reinforce safety standards, disseminate safety requirements, and promote safety culture. A vehicle vehicle Monitoring System (VMS) Event Recorder (ER) is essential for a complete data download and thorough analysis of a vehicle system's operation. <p>(3) Office of Environmental Management and Compliance (EMAC) & Occupational Safety and Health (OSHA)</p> <p>What:</p> <ul style="list-style-type: none"> EMAC and OSHA actively support the COVID-19 Clear program. EMAC proactively engages external services for environmental permit regulatory inspections. EMAC conducts preparatory internal reviews prior to state and federal audits. <p>Action Areas Identified During Review:</p> <ul style="list-style-type: none"> Development of documented departmental procedures is necessary for consistent safety oversight within all processes. Conducting further investigations after identifying chemical hazards can lead to identification of root cause and lead to mitigation or elimination of the hazards. Implementing all aspects of the Fatigue Risk Management Policy can lead to a reduction of fatigue-related incidents across all job functions. A documented training matrix which includes required departmental safety training is essential to ensure personnel are incorporating safe practices within their assigned work. 	<p>(1) Key Takeaways: Updating and implementing established departmental processes to comply with the Public Transportation Agency Safety Plan (PTASP) is essential to establishing a safety-first culture.</p> <p>Required Actions:</p> <ul style="list-style-type: none"> QICO-APCS-21-08: Enhance implementation of quality control and compliance checks to include PPE, tools and equipment, and PM checklist completion. QICO-APCS-21-08: Develop and implement a review and revision process for AFCS governing documents. QICO-APCS-21-08: Update AFCS training matrix to reflect the current business practice. QICO-APCS-21-04: Create and utilize an electronic repository for AFCS event handling and personnel documentation. QICO-APCS-21-05: Update AFCS job descriptions to fully qualify qualifications, accuracy and job performance. <p>(2) Key Takeaways: Adherence to systematic safety policies and procedures fosters proper planning and implementation of engineering responsibilities and support activities that drive WMATA's safety culture.</p> <p>Required Actions:</p> <ul style="list-style-type: none"> QICO-OVPS-21-09: Meet or exceed standards for workplace safety inspections, safety committee participation, and hazard management processes defined in the Public Transit Agency Safety Plan (PTASP). QICO-OVPS-21-02: Align training, inspection, process control, measuring & testing equipment, and document control management with organization-wide quality management system plan standards. QICO-OVPS-21-09: Develop a solution to improve reliability of VMS event recorder systems to comply with requirements of National Transportation Safety Board recommendation NTSB R-10-21. <p>(3) Key Takeaways: Documenting and implementing departmental processes that define existing core functions in alignment with the Public Transportation Agency Safety Plan (PTASP), will provide consistent understanding and consistent execution of essential departmental activities.</p> <p>Required Actions:</p> <ul style="list-style-type: none"> QICO-EMAC-22-01: Develop and implement documented processes for all EMAC core functions. QICO-SAFE-22-02: Identify and define all OSHA core functions, develop and implement documented processes for each. QICO-SAFE-22-03: Develop and implement a root cause analysis investigation requirement and process. QICO-SAFE-22-04: Develop an OSHA specific training matrix.

Appendix C: Public Transportation Agency Safety Plan (PTASP) Elements Reviewed

1. Safety Management Policy

- c. Organizational SMS Accountabilities and Responsibilities
- d. SMS documentation

2. Safety Risk Management

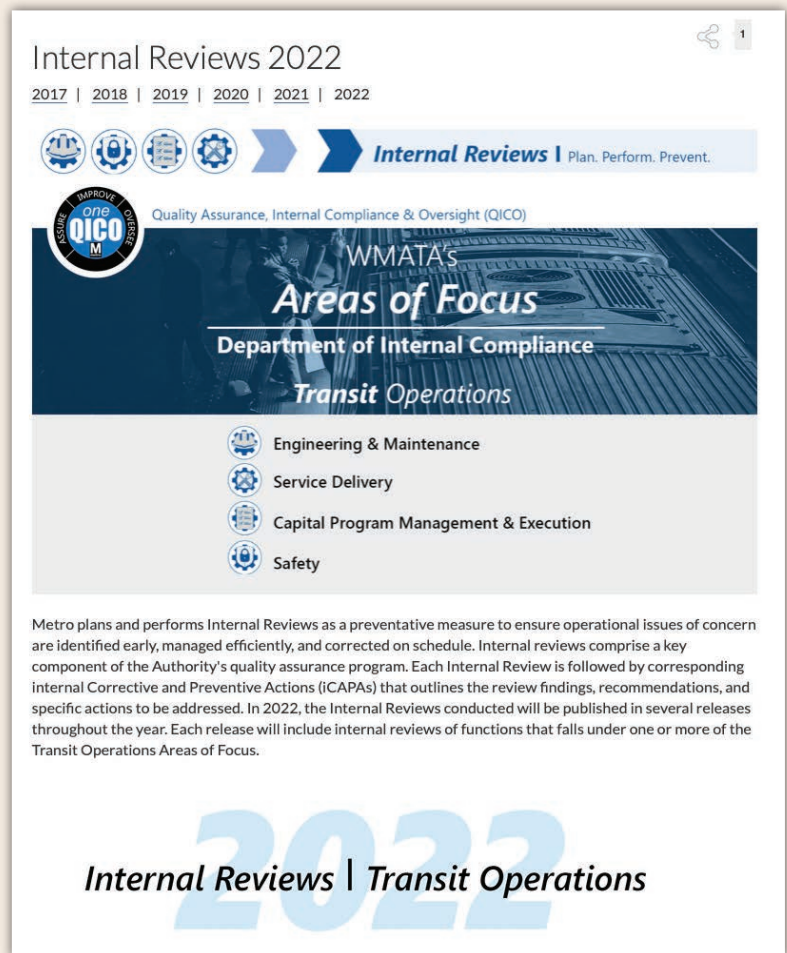
- a. Safety Risk Management (SRM) process
- b. Risk Assessment Process
- c. Risk assessment methodology
- d. Hazard identification
- e. Hazard investigation
- f. Hazard analysis and evaluation of safety risk
- g. Hazard resolution (mitigation, elimination)
- h. Hazard tracking

3. Safety Assurance

- a. Systematic, integrated data monitoring and recording of safety performance
- b. Real-time assessment with timely information
- c. Internal Safety Reviews
- d. Departmental controls
- e. Compliance and sufficiency monitoring (i.e., quality management system plan (QMSP))
- f. Document assurance activities
- g. Change management
- h. Corrective action plans

4. Safety Promotion

- a. Training
- d. Hazard and safety risk information





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