

QICO 2018 INTERNAL REVIEW



Washington Metropolitan Area Transit Authority
WMATA



December 6, 2018

Service Delivery

13. *Train Operator Training & Certification*

14. *Metrorail Stations Americans with Disabilities Act (ADA) Compliance*



ENGINEERING &
MAINTENANCE



SERVICE
DELIVERY



CAPITAL PROGRAM –
MANAGEMENT
& EXECUTION



INTERNAL SAFETY
& SECURITY REVIEW

Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence

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WHAT WE DO



WHAT WE FOUND | SERVICE DELIVERY

December 2018

13. Train Operator Training & Certification Program

Wins:

- ✓ A comprehensive train operator training program adequately prepares operators for delivering safe and reliable train service.
- ✓ A certification process independently managed by Rail Transportation (RTRA) promotes an objective final qualification of new train operators.

Action Areas Identified During Review:

- A well-defined spot check plan, including frequency, number of checks, and type of checks for new train operators is essential for effective monitoring of post-certification performance. The area of improvement identified is addressed in Federal Transit Administration (FTA) Corrective Action Plans (CAPs) R-2-18-a, R-2-18-b, R-2-19-a, R-2-19-b, and R-2-20-a which will be satisfied upon their closure.

14. Metrorail Stations Americans with Disabilities Act (ADA) Compliance (Part 2 of 3)

Wins:

- ✓ Rail station compliance with accessibility requirements promotes safe and reliable service delivery.
- ✓ Effective communication of the unavailability of ADA station equipment and providing alternatives are important for service reliability and customer satisfaction.

Items Resolved During Review:

- ✪ Materials stored improperly were removed from designated Area of Refuge.

Action Areas Identified During Review:

- Consistent daily inspections of designated Areas of Refuge are vital to ensure the safety of customers during an emergency. The area of improvement identified is addressed in Tri-State Oversight Committee (TOC) CAP TOC-OTR-15-010 and Internal Corrective and Preventive Action (iCAPA) QICO-ADA-17-02, which will be satisfied upon their closure.
- Effective maintenance of platform edge lighting is important to maintain reliable indication of platform edges.

Note:

An itemized internal Corrective and Preventive Action (iCAPA) and/or existing external Corrective Action Plans (CAPs) will address each required action to achieve effective and measureable resolution of identified concerns. To check the status of the iCAPA implementation visit: www.wmata.com/initiatives/transparency/.

WHAT WE WILL DO MOVING FORWARD

Key Takeaways



An effective train operator post-certification spot-checks plan is necessary to continuously monitor safety, performance and the delivery of quality service.

The identification and completion of required maintenance pertaining to ADA related assets at rail station facilities is necessary to continuously promote safety and ensure station remains in a state of good repair.

Through the implementation of 5 FTA CAPs, 1 TOC CAP and 2 iCAPAs, we are committed to driving quality improvement initiatives with the objective of safeguarding the mission success of the agency while enhancing customer experience. These strategic plans to address issues of concern, required actions and recommendations are intended to drive real progress that is measureable and verifiable.

13. Train Operator Training & Certification Program

- Review and revise current train operator spot-check program to ensure it aligns with the criteria mandated by FTA’s CAPs to ensure a quality measure of train operator performance. Include frequency, time window for checks to be performed and a required number of checks required for each operator.
- For details on the committed action plans check the following FTA CAPs: R-2-18-a, R-2-18-b, R-2-19-a, R-2-19-b, and R-2-20-a by visiting wmata.com/initiatives/transparency/.

14. Metrorail Stations Americans with Disabilities Act (ADA) Compliance

- Managing a state of good repair pertaining to ADA related assets at rail station facilities and performing necessary checks to reinsure readiness of Areas of Refuge (AORs) in the case of emergency are vital in ensuring Metrorail facilities are safe.
- For details on the committed action plans check CAP TOC-OTR-15-010 and iCAPA QICO-ADA-17-02 by visiting wmata.com/initiatives/transparency/.



Washington Metropolitan Area Transit Authority
INTERNAL REVIEW 2018

Internal Review: Service Delivery
(13) Train Operator Training & Certification

September 28, 2018



Quality Assurance, Internal Compliance & Oversight (QICO)
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INTERNAL SAFETY
& SECURITY REVIEW



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 objective review authorized by the General Manager as outlined in the [Quality Management System Plan \(QMSP\)](#).

Why QICO Performed This Review:

- This internal review is intended to provide Metro senior management with an assessment of the state of Train Operator Training & Certification process and promote the actions needed to address any concerns.

QICO's Methodology:

- Develop relevant review activities by identifying and assessing any risks to policies, procedures & standards, quality & compliance, & traceability.
- Review documentation, observe processes, and interview key personnel.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

INTERNAL REVIEW SUMMARY

September 2018

(13) Train Operator Training & Certification



Key Takeaway:

An effective train operator post-certification spot-checks plan is necessary to continuously monitor safety, performance and the delivery of quality service.

Wins:

- ✓ A comprehensive train operator training program adequately prepares operators for delivering safe and reliable train service.
- ✓ A certification process independently managed by Rail Transportation (RTRA) promotes an objective final qualification of new train operators.

Areas for Improvement:

- A well-defined spot check plan for new train operators is essential for effective monitoring of post-certification performance.

Required Actions:

- The area of improvement identified is addressed in Federal Transit Administration (FTA) Corrective Action Plans (CAPs) R-2-18-a, R-2-18-b, R-2-19-a, R-2-19-b, and R-2-20-a which will be satisfied upon their closure.

Note: An itemized internal Corrective and Preventive Action (iCAPA) and/or existing external Corrective Action Plans (CAPs) will address each required action to achieve effective and measureable resolution of identified concerns. To check the status of the iCAPA implementation visit:

<https://www.wmata.com/initiatives/transparency/upload/Overview-of-Internal-Compliance-Actions.pdf>.

13.1. FUNCTIONAL OVERVIEW AND STRUCTURE

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Train Operator Training & Certification

WMATA's Metrorail service is the core of the region's public transportation system. Opening to the public in 1976, Metrorail operates within a vast network of 91 stations, connected by 118 miles of track. To maintain the necessary number of qualified train operators, the Office of Rail Transportation (RTRA) selects candidates who are then enrolled in a 24 week training program, conducted by the Rail Operations Quality Training (ROQT) group. During this time, candidates are exposed to classroom courses, practical demonstrations, and on-the-job training that ensures proficiency in safe train operation across WMATA's rail network.

Upon completion of the ROQT Train Operator Program, candidates are then turned over to the RTRA Quality Assurance/Quality Control Group (QA/QC) team for a final one (1) day evaluation to complete the certification process.

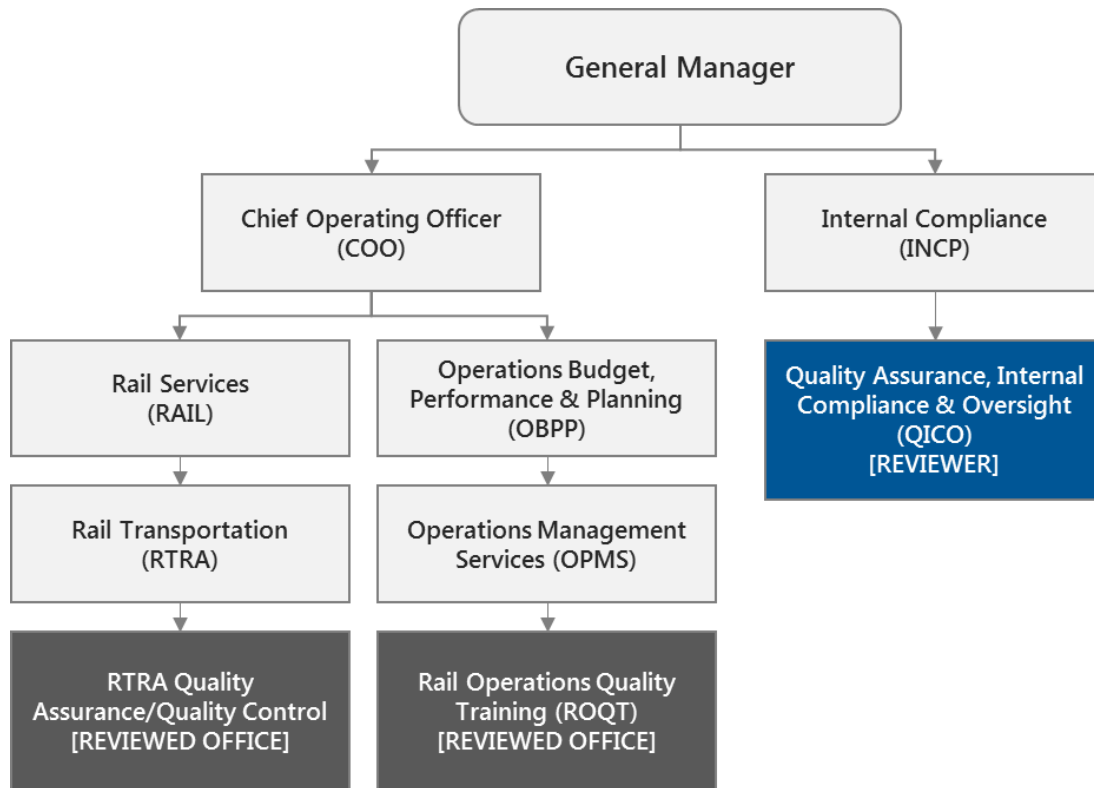
Train operators are responsible for:

- The monitoring and operation of all train movements in passenger and non-passenger service in accordance with the Metrorail Safety Rules & Procedures Handbook (MSRPH), standard operating procedures (SOPs), and Special Orders as required, observing wayside signals and signs while monitoring the boarding and alighting of Metrorail passengers.
- Adherence to all issued schedules and headways, and making pre-trip inspections of trains before entering mainline for passenger service.
- Providing passengers with trip information through public address announcements at all station stops, informing them of the next station stop, transfer points, elevator outages, and other pertinent information throughout passenger service and during emergencies.
- Following all instructions of the Rail Operations Control Center (ROCC), Road and Terminal Supervisors, and Interlocking Operators at all times.
- Exercising judgment under normal and emergency situations, while carrying out duties necessary to ensure the safety of Metrorail passengers, employees, and equipment.
- Reporting and troubleshooting minor rail car related malfunctions on mainline and while in yards, making adjustments to overcome problems and complete scheduled trips.
- Provide verbal reports to ROCC, Division Managers and Supervisors, and submit written reports after emergencies, unusual occurrences, accidents, or when otherwise requested.
- Under the direction of the Interlocking Operator, complete yard and shop movements and properly store trains and cars on yard storage tracks.
- Operation of trains to dispatching tracks for passenger service or non-passenger transports, conducting train and yard inspections and, when instructed, the operation of trains and cars through the car washes.

Organizational Structure and Background

Within WMATA, the department of Rail Services (RAIL) reports to the Chief Operating Officer (COO). As shown in the organizational chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP). The scope of this internal review is to assess the training and certification of new train operators.

Train Operator Training & Certification program is divided amongst two (2) sub-groups. The Rail Operations Quality Training (ROQT) group, which falls under Operations Management Services (OPMS), is responsible for administering a 24 week operator training program and the RTRA QA/QC group is independently responsible for conducting operator certifications.



13.2. REVIEW SCOPE

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Documentation Review

- Training history review of 47 train operators and their associated Rail Supervisor Daily Activity Reports (RSDAR) dated March 5, 2018 through July 11, 2018
- Agreement between Washington Metropolitan Area Transit Authority and Local Union 689 of the Amalgamated Transit Union AFL-CIO Effective from July 1, 2012 through June 30, 2016
- WMATA Railcars Participant Manual
- Train Operator Participant Manual
- Train Operators Radio Communication Participant Manual
- Train Operator Initial Training Program
- Train Operator Incidents and Emergencies Participant Manual
- Train Operator Reports and Forms Participant Manual
- SOP 202-1 Rail Supervisor Daily Activity Report and Compliance Checks Rev 3

Personnel Discussions

- [REDACTED]
- [REDACTED]
- [REDACTED]

Operator Courses Assessed by a QICO Representative

The assessed classes below do not reflect the entire course list

| Date | Course | Lead Instructor | Assisting Instructor |
|----------|-----------------------------|-----------------|----------------------|
| 09/11/17 | ADA | [REDACTED] | N/A |
| 09/12/17 | Rail System | [REDACTED] | [REDACTED] |
| 09/14/17 | Rail System | [REDACTED] | [REDACTED] |
| 09/18/17 | Railcars | [REDACTED] | [REDACTED] |
| 09/19/17 | Railcars | [REDACTED] | [REDACTED] |
| 09/20/17 | Railcars | [REDACTED] | [REDACTED] |
| 09/21/17 | Railcars | [REDACTED] | N/A |
| 09/22/17 | Radio Communications | [REDACTED] | [REDACTED] |
| 09/25/17 | Radio Communications | [REDACTED] | [REDACTED] |
| 09/26/17 | Railcar Troubleshooting | [REDACTED] | [REDACTED] |
| 09/28/17 | Railcar Troubleshooting | [REDACTED] | [REDACTED] |
| 10/02/17 | Incidents & Emergencies | [REDACTED] | [REDACTED] |
| 10/04/17 | Incidents & Emergencies | [REDACTED] | [REDACTED] |
| 10/05/17 | Incidents & Emergencies | [REDACTED] | N/A |
| 10/12/17 | Lifeline Test Review | [REDACTED] | [REDACTED] |
| 10/13/17 | Lifeline Test | [REDACTED] | [REDACTED] |
| 11/13/17 | Mid-Term Test | [REDACTED] | [REDACTED] |
| 11/15/17 | Mid-Term Test (Retake) | [REDACTED] | N/A |
| 11/17/17 | Yard Practical Training | [REDACTED] | [REDACTED] |
| 11/29/17 | Yard Practical Training | [REDACTED] | N/A |
| 11/30/17 | Yard Practical Training | [REDACTED] | N/A |
| 12/07/17 | Yard Practical Training | [REDACTED] | N/A |
| 12/11/17 | Lifeline Test #2 | [REDACTED] | [REDACTED] |
| 12/12/17 | QA Test | [REDACTED] | N/A |
| 12/13/17 | 7000 Series Familiarization | [REDACTED] | [REDACTED] |
| 12/14/17 | 7000 Series Familiarization | [REDACTED] | [REDACTED] |

13.3. WHAT WORKED WELL (WINS)

Wins are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

W-TOTC-18-01 [Skills Management](#)

Reduces [Service Delivery Risk](#) Owner – ROQT

- ✓ A comprehensive train operator training program adequately prepares operators for delivering safe and reliable train service.

Discussion

- Train operator students complete a comprehensive 24 week training program, made up of classroom courses and field activities encompassing all aspects of WMATA's Metrorail train operation.
- Before being certified to operate a WMATA train, candidates must pass a series of both computer based tests and practical demonstrations.
- The training program covers train operation, radio communication, the Americans with Disabilities Act (ADA), troubleshooting, handling emergency situations, and safety.

W-TOTC-18-02 [Skills Management](#)

Reduces [Service Delivery Risk](#) Owner – RTRA

- ✓ A certification process independently managed by Rail Transportation (RTRA) promotes an objective final qualification of new train operators.

Discussion

- Upon completion of the ROQT train operator training program, candidates must go through an independent certification process.
- Candidates are evaluated by RTRA personnel, thereby validating the candidates' readiness to operate a train in revenue service and providing training oversight.

13.4. AREAS FOR IMPROVEMENT

Findings are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

F-TOTC-18-01

[Quality Control](#)

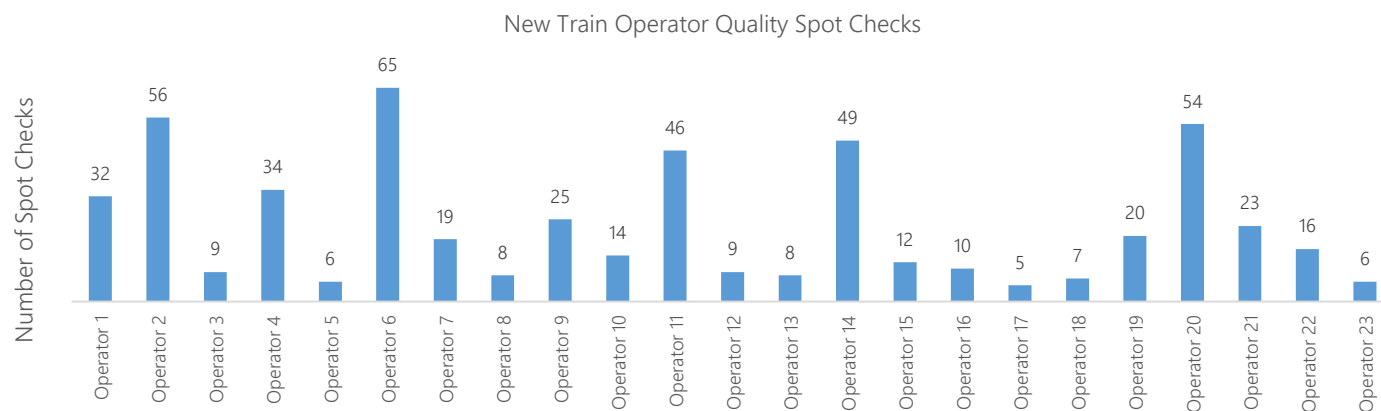
[Service Delivery Risk – Moderate \(3,4\)](#)

Owner – RTRA

- A well-defined spot check plan for new train operators is essential for effective monitoring of post-certification performance.

Discussion

- The train operators assessed, passed the certification process between the dates of January 24, 2018 and March 8, 2018. Hence, the following RSDAR Spot check data generated between March 5, 2018 and July 11, 2018 was assessed as follows:



Operator names have been removed and substituted with "Operator numbers"

- The RSDAR data revealed inconsistent spot checks among the assessed new operators. Some operators received as many as 65 spot checks, while others were subject to as little as five (5) spot checks between the dates of March 5, 2018 and July 11, 2018.
 - Out of the 23 operators assessed, five (5) received over 45 checks while eight (8) received less than 10.
 - The above finding is already addressed by the following Federal Transit Administration (FTA) Corrective Action Plans (CAPs):
 - o R-2-18-a: 2.1 FTA Finding – Rules compliance checks of operational personnel are inconsistent.
 - o R-2-18-b: FTA Finding – Rules compliance checks of operational personnel are inconsistent.
In response to WMATA's closeout request of CAPs R-2-18-a and R-2-18-b, the FTA highlighted that SOP 202-01 does not describe the process to ensure all employees are assessed over a specific period. Furthermore, the spot checks described does not represent "meaningful rule checks" or something more than single observation items, as per the required action for these CAPs.
 - o R-2-19-a: 2.1 FTA Finding – Rail Transportation is not ensuring that field supervisors conduct required rules compliance checks on station managers and train operators.
In response to WMATA's closeout request of CAP R-2-19-a, the FTA highlighted that SOP 202-01 does not include a process for "monthly quality control checks on a sampling of Rail Supervisor observations to include: quantity of observations, criteria used and provide feedback to Office of Rail Transportation management." Further, the spot checks described do not represent "a robust testing and observation program" as per the required action for this CAP.
 - o R-2-19-b: 2.1 FTA Finding – Rail Transportation is not ensuring that field supervisors conduct required rules compliance checks on station managers and train operators.
 - o R-2-20-a: 2.1 FTA Finding – New supervisors are not familiar with rules compliance checks requirements.
- QICO will not require a separate internal corrective action and preventative plan (iCAPA) for this finding. This finding will be satisfied upon closure of the related FTA CAPs R-2-18-a, R-2-18-b, R-2-19-a, R-2-19-b, and R-2-20-a.



Washington Metropolitan Area Transit Authority

INTERNAL REVIEW 2018

Internal Review: **Service Delivery**

(14) Metrorail Stations Americans with Disabilities Act (ADA) Compliance (Part 2 of 3)

December 6, 2018



Quality Assurance, Internal Compliance & Oversight (QICO)

Promoting Transparency, Accountability, & Public Confidence



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INTERNAL SAFETY
& SECURITY REVIEW



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 objective review authorized by the General Manager as outlined in the [Quality Management System Plan \(QMSP\)](#).

Why QICO Performed This Review:

- This internal review is intended to provide Metro senior management with an assessment of ADA requirements compliance within stations and the maintenance of ADA-specific equipment in order to promote the actions needed to address any concerns.

QICO's Methodology:

- Developed relevant review activities by identifying and assessing compliance with statutory and internal design standards.
- Performed field assessments and interviewed key personnel.
- This is the second in a series of Internal Reviews providing comprehensive coverage of all Metrorail stations over a three-year period.
- Review findings and required actions are rated based on severity of risk, which ranges on a scale from "Insignificant" to "High".

Note: An itemized internal Corrective and Preventive Action (iCAPA) and/or existing external Corrective Action Plans (CAPs) will address each required action to achieve effective and measureable resolution of identified concerns. To check the status of the iCAPA implementation visit: <https://www.wmata.com/initiatives/transparency/upload/Overview-of-Internal-Compliance-Actions.pdf>.

INTERNAL REVIEW SUMMARY

December 2018

(14) Metrorail Stations Americans with Disabilities Act (ADA) Compliance (Part 2 of 3)



Key Takeaway:

Identification and completion of required maintenance pertaining to ADA related assets at rail station facilities is necessary to continuously facilitate quality and safe service.

Wins:

- ✓ Rail station compliance with accessibility requirements promotes safe and reliable service delivery.
- ✓ Effective communication of the unavailability of ADA station equipment and providing alternatives are important for service reliability and customer satisfaction.

Items Resolved During Review:

- ★ Materials stored improperly were removed from designated Area of Refuge.

Areas for Improvement:

- Consistent daily inspections of designated Areas of Refuge are vital to ensure the safety of customers during an emergency.
- Effective maintenance of platform edge lighting is important to maintain reliable indication of platform edges.

Required Actions:

- The first area of improvement identified is addressed in Corrective Action Plan (CAP) TOC-OTR-15-010 and Internal Corrective and Preventive Action (iCAPA) QICO-ADA-17-02 which will be satisfied upon their closure.
- QICO-ADA-18-01: Bring platform edge light elements system-wide to a state of good repair. (*Risk Rating: Moderate*)

14.1. FUNCTIONAL OVERVIEW AND STRUCTURE

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Metrorail Stations Americans with Disabilities Act (ADA) Compliance

The Americans with Disabilities Act (ADA) requires transportation entities to make reasonable modifications and/or accommodations to policies, practices, and procedures to avoid discrimination while ensuring their programs are accessible to individuals with disabilities. As a public transit service provider, Metro is required to comply with ADA standards, which contain service-related requirements for transportation facilities, acquisition of accessible vehicles, and paratransit as a complement to fixed route service and more.

Improving accessibility for all riders, including those within the ADA community, is a key part of Metro's Back2Good Plan. In support of this plan, specifically the accessibility improvement component, Metro's Office of Quality Assurance, Internal Compliance & Oversight (QICO) is performing a three-part ADA compliance assessment of Metrorail stations. This is a self-assessment intended to evaluate Metro's compliance with applicable ADA standards for transportation facilities, as set forth in the Federal Department of Transportation's (USDOT) "ADA Standards for Transportation Facilities".

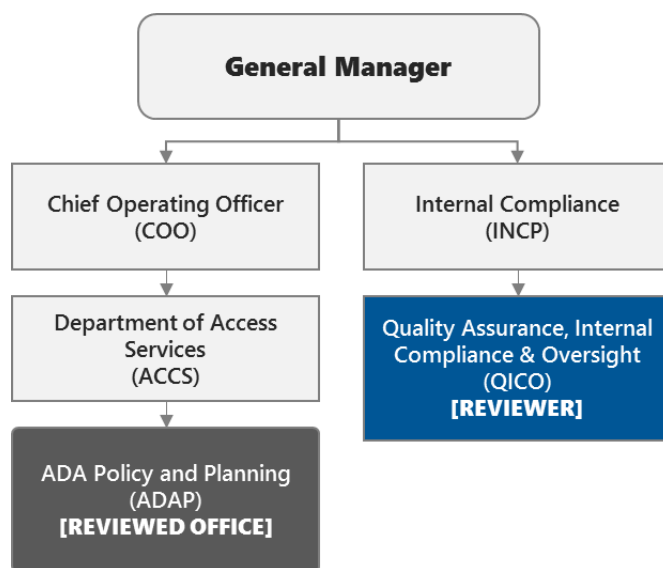
This is the second installment of a multiyear series that began in 2017 and included documentation review of all pertinent departments' policies and procedures related to ADA compliance, reviews of reference documents and specifications from external sources such as USDOT and Federal Transit Administration (FTA), interviews with responsible department personnel, and on-site surveys of rail station facilities. The initial sample size of stations included all 9 transfer stations, and 17 other stations selected by their high usage of ADA passengers, for a total survey of 26 stations for 2017. This 2018 review (part 2) includes the continuation of rail station assessments of additional 32 stations, selected in order of their ADA passenger usage, plus a return assessment of the 4 largest transfer stations, comprising a total of 36 station assessments.

Organizational Structure and Background

Within WMATA, the Department of Access Services (ACCS) reports to the Chief Operating Officer (COO). As shown in the organizational chart, QICO is independent of this function, reporting to the General Manager through Internal Compliance (INCP).

The office of ADA Policy and Planning (ADAP) promotes the accessibility of Metrobus and Metrorail by working to obtain and maintain ADA compliant facilities, equipment, operating procedures, and training. These activities include routinely inspecting assets, coordinating and providing technical support for other departments, interfacing with the FTA, and supporting the ADA Reasonable Accommodation Panel and the Accessibility Advisory Committee.

Additional responsibilities include facilitating outreach, providing travel training, and coordinating Metro activities with the disability community and stakeholders.



14.2. REVIEW SCOPE

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Documentation Review

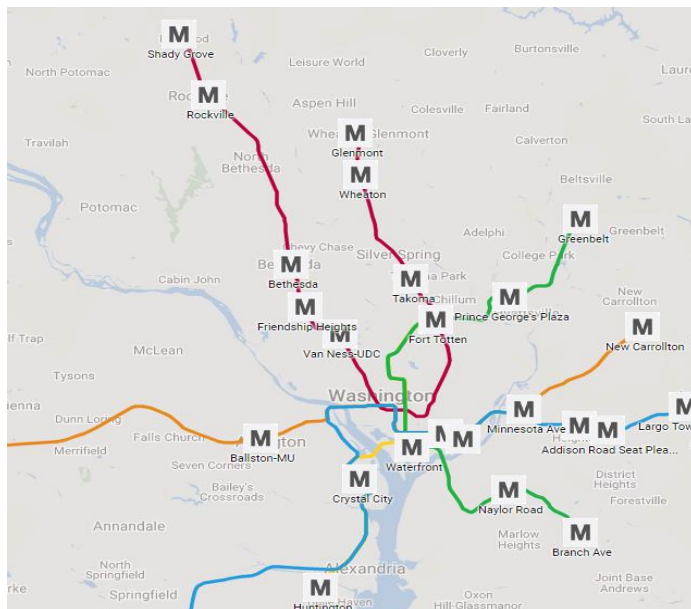
- USDOT ADA Standards for Transportation Facilities.
- FTA ADA Circular C 4710.1.
- US Department of Justice 2010 ADA Standards for Accessible Design.
- WMATA Policy/Instruction 16.1/2: ADA Compliance and Jurisdiction of the Department of Access Services.
- Permanent Order T-17-07: Procedures for the Areas of Refuge (AOR).
- Maximo maintenance management system work orders.
- Station Manager Log Books at Ballston-MU and Largo Town Center.
- Completed Rail Transportation (RTRA) Station Inspection Checklist for Rail Operations Supervisors covering the months of June, July, and August 2018 for Ballston-MU, Glenmont, Largo Town Center, and Wheaton stations.

Personnel Interviews

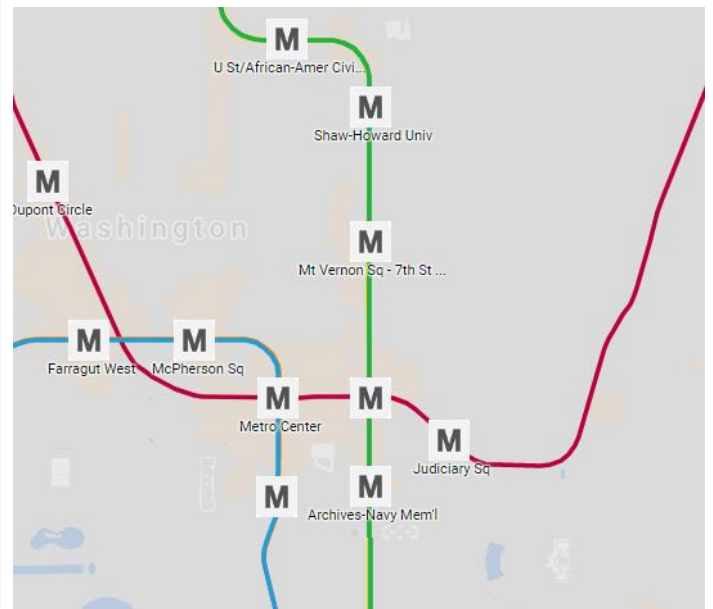
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Field Assessments

- A total of 36 (thirty-six), or approximately one third, of all Metrorail stations were assessed for this portion of the Internal Review. Any stations that have not yet been evaluated will be assessed as part of the final installment next year.
- Stations selections were based upon ADA passengers' ridership, stations previously assessed, traffic volume, and availability of a designated Area of Refuge.



Map of regional Metrorail stations assessed



Detailed map of downtown DC Metrorail stations assessed

Station Assessed Details

| | | | |
|-------------------------------------|----------|---|----------------|
| Addison Road-Seat Pleasant | BL SV | Largo Town Center | BL SV |
| Archives-Navy Memorial-Penn Quarter | GR YL | L'Enfant Plaza | GR YL OR BL SV |
| Ballston-MU | OR SV | McPherson Square | OR BL SV |
| Bethesda | RD | Metro Center | RD OR BL SV |
| Branch Avenue | GR | Minnesota Avenue | OR |
| Capitol Heights | BL SV | Mt Vernon Sq.-7 th St.-Convention Center | GR YL |
| Crystal City | BL YL | Naylor Road | GR |
| Dupont Circle | RD | New Carrollton | OR |
| Eastern Market | OR BL SV | Potomac Avenue | OR BL SV |
| Farragut West | OR BL SV | Prince George's Plaza | GR |
| Federal Triangle | OR BL SV | Rockville | RD |
| Fort Totten | RD GR YL | Shady Grove | RD |
| Friendship Heights | RD | Shaw-Howard University | GR YL |
| Gallery Place-Chinatown | RD GR YL | Takoma | RD |
| Glenmont | RD | U Street-Cardozo | GR YL |
| Greenbelt | GR | Van Ness-UDC | RD |
| Huntington | YL | Waterfront | GR |
| Judiciary Square | RD | Wheaton | RD |

14.3. WHAT WORKED WELL (WINS)

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Wins are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

W-ADA-18-01 [Regulations & Oversight](#)

Reduces [Legal & Compliance Risk](#) **Owner – ADAP**

- ✓ Rail station compliance with accessibility requirements promotes safe and reliable service delivery.

Discussion

- All stations assets subject to ADA requirements met the necessary standards, in accordance with their original construction or installation dates.

W-ADA-18-02 [Application & Fulfillment](#)

Reduces [Service Delivery Risk](#) **Owner – RTRA**

- ✓ Effective communication of the unavailability of ADA station equipment and providing alternatives are important for service reliability and customer satisfaction.

Discussion

- Scheduled or unscheduled equipment outages are consistently reported through the Maintenance Operation Center (MOC).
- Rail Operations Information Center (ROIC) reliably generates system-wide outage notification messages through multiple public channels:
 - o Kiosk Information Display System (KIDS).
 - o Passenger Information Display System (PIDS).
 - o Public Address (PA) announcements.
 - o ELstat.
 - o Media hotline.
- ROIC maintains contact with Bus Services (BUSV) to arrange bus shuttle service as required.

14.4. ITEM RESOLVED DURING REVIEW

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Items are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

The following are issues that were identified by QICO during the Internal Review process, where appropriate actions were taken to eliminate the discrepancy or nonconformance prior to the close of this review.

R-ADA-18-01

[Application & Fulfillment](#)

[Safety – Moderate \(3,4\)](#)

Owner – RTRA

✱ Materials stored improperly were removed from designated Area of Refuge at Largo Town Center.

Actions Taken

- All stored items were removed from each Area of Refuge within this station and the areas were verified free of unauthorized materials by QICO.



Unauthorized storage detected during initial assessment.



Area verified free of storage during follow-up visit.

14.5. AREAS FOR IMPROVEMENT

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Findings are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

F-ADA-18-01

[Application & Fulfillment](#)

[Safety – Moderate \(3,4\)](#)



Owner – RTRA

Finding: Managing a state of good housekeeping within designated Areas of Refuge is vital to ensure the safety of customers during an emergency.

Discussion

- Material storage detected at two (2) of seven (7) assessed stations equipped with a code-compliant Area of Refuge, in violation of Permanent Order (PO) T-17-07:
 - o Affected station locations were Ballston-MU and Largo Town Center.
 - o AOR inspections are required to be conducted daily by Station Managers and monthly by RTRA supervisors in accordance with PO T-17-07.
 - o Reviewed Station Manager Log Books at affected stations did not contain any evidence of the performance of daily inspections or the presence of unauthorized material storage.
 - o Reviewed RTRA Station Inspection Checklist for Rail Operations Supervisors for the affected stations did not contain any evidence of the performance of monthly inspections or the presence of unauthorized material storage.
 - o Neither the Station Condition Checklist nor the RTRA Station Inspection Checklist for Rail Operations Supervisors contain specific checklist items providing for mandatory Area of Refuge inspections.
 - o Corrective Action Plan (CAP) TOC-OTR-15-010 was issued to address deficiencies in the Station Condition Checklist. The CAP is open and past due, originally scheduled for closure December 2015.
- Station Managers interviewed at two (2) of seven (7) assessed stations equipped with a code-compliant Area of Refuge were not familiar with the location or purpose of the Area of Refuge:
 - o Affected station locations were Ballston-MU and Wheaton.
 - o Internal Corrective and Preventive Action (iCAPA) QICO-ADA-17-02 was issued to address this concern. The iCAPA is open and past due, originally scheduled for closure February 28, 2018.
- QICO will not require a separate internal corrective action plan (iCAPA) for this finding. This finding will be satisfied upon closure of the related TOC CAP TOC-OTR-15-010 and iCAPA QICO-ADA-17-02.

F-ADA-18-02

[Work Standards](#)

[Safety – Moderate \(3,3\)](#)



Owners – SMNT, DECO/ENGA

Finding: Effective maintenance of platform edge lighting is important to maintain reliable indication of platform edges.

- Discussion

- All Metrorail station facilities feature embedded edge lighting along the length of each train boarding platform.
- The lights offer an enhanced level of safety for customers by providing a visual indication of the platform boundary.
- Field assessments detected discrepancies with edge lights at twenty (20) of the assessed stations, or 56% of locations.
- Several contributing factors have resulted in a backlog of deferred maintenance of edge lighting systems such as:
 - o Replacement components have become obsolete and are no longer available from original supplier.
 - o Access to system elements requires total shutdown of rail traffic at affected platforms.
 - o Failure mode varies among platforms, necessitating the development of site-specific rehabilitation plans.

14.6. SUMMARY OF REQUIRED ACTION

[Return to Table of Contents](#)Findings are categorized by [Quality Measures](#) and rated according to [Risk Assessment](#)

QICO-ADA-18-01

Action Owners – SMNT, DECO/ENGA[Overall Risk – Moderate \(Average Score\)](#)**Required Action: Bring platform edge light elements system-wide to a state of good repair.**

-Applicable Findings

- F-ADA-18-02: Effective maintenance of platform edge lighting is important to maintain reliable indication of platform edges.
 - o Measure: [Work Standards](#). Risk: [Safety – Moderate \(3.3\)](#)

Internal [Corrective and Preventive Actions \(iCAPAs\)](#) are designated to address each Required Action listed above.

METRORAIL STATIONS AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE iCAPA

Return to [Summary of Required Actions](#)

INTERNAL REVIEW

Service Delivery

In response to the internal review of service delivery, including review of Train Operator Training & Certification and Metrorail Stations Americans with Disabilities Act (ADA) Compliance, the office of Quality Assurance, Internal Compliance & Oversight (QICO) has coordinated the development of one (1) iCAPA. The iCAPA outlines the findings, recommendation and requirements to be addressed, and a detailed action plan outlining responsible parties and specific actionable items.

EXECUTIVE LEADERSHIP OF RESPONSIBLE PARTIES

Internal Corrective and Preventive Action (iCAPA) Commitment


Joseph Leader
Chief Operating Officer (COO)

12-5-2018

Date

WMATA INTERNAL OVERSIGHT

Internal Corrective and Preventive Action (iCAPA) Acknowledgement


Hakim Davis
Acting Managing Director, Quality Assurance, Internal Compliance & Oversight (QICO)

12-05-2018

Date


Eric Christensen
Chief of Internal Compliance (INCP)

12/5/18

Date


Paul J. Wiedefeld
General Manager & Chief Executive Officer (GM/CEO)

12/6/18

Date

Purpose and Scope

On September 26, 2018 the Office of Quality Assurance, Internal Compliance & Oversight (QICO) issued an internal review report regarding Metrorail Stations Americans with Disabilities Act (ADA) Compliance. This internal Corrective and Preventive Action (iCAPA) has been developed to address required action QICO-ADA-18-01 and the associated finding(s).

Required Action

QICO-ADA-18-01 *Infrastructure Renewal Program Group – (IRPG)*

Moderate



Bring platform edge light elements system-wide to a state of good repair.

Applicable Finding(s)

- F-ADA-18-02: Effective maintenance of platform edge lighting is important to maintain reliable indication of platform edges.
 - o Measure: Work Standards Risk: Safety – Moderate (3.3)

Action Plan Overview

IRPG will oversee the replacement of the existing platform edge light system that has reached the end of its useful life with new light fixtures, electrical infrastructure, and flashing dimmer control panels as follows:

24 Above-ground stations through a stand-alone Above Ground Station Edge Light & Dimmer Control System Replacement Contract.

- Phase 1 – Survey: Initial plan will be to conduct a full assessment of the existing conditions as it relates to installing all new surface mounted conduit underneath platform. Relocation of existing utilities will be included in the design as needed. This effort has been scoped out, solicited and awarded. Anticipated notice to proceed (NTP) will be mid-October 2018. Period of performance to complete surveys and submit final assessment report is NTP + 180 calendar days.
- Phase 2 – Design: The results of the survey will dictate the level of effort required for the design phase and period of performance associated with it.
- Phase 3 – Procurement: A 5-month procurement period is assumed at this time. As the project progresses through design, an estimate and scope will be developed which will determine the preferred construction vehicle.
- Phase 4 – Construction: Construction is anticipated to be completed in a 2-year period of performance. 20 above-ground stations through the platform construction project. This project is being implemented through IRPG Facilities in which the platforms at various stations are being brought to a state of good repair. Such work will include the replacement of platform edge lights and dimmer control systems.

(20) Stations Platform Rehabilitation Construction - The 20 above ground station platforms are being renovated in phases. The edge lighting associated with the platforms will be replaced with the platform construction. A schedule is provided in the Plan Structure, Action Items 3 – 6.

Once approved through DECO management, IRPG will provide a plan for repair or replacement of platform edge light systems at underground stations. The plan will be developed at a later date, to incorporate best practices learned during the design and construction efforts executed at above-ground stations.

Business Impact – Budget/Cost Estimate

Process Execution – A current process/procedure exists that meets the QICO Required Action, but needs to be executed. This type of initiative does not need additional resources.

PLAN STRUCTURE

| Actionable Items | | Description | Responsible Party ¹ | Est Start ² | Est End ³ |
|------------------|---|---|--|------------------------|----------------------|
| 1. | List of Stations | IRPG will submit a list of stations to be completed under Future Above Ground Edge Light Contract & STUC-012. | Alexandria Zimar IRPG | 10/17/18 | 10/31/18 |
| 2. | Develop design documents | IRPG will submit evidence of completion of site survey and design for the replacement of platform train edge lights at 24 above-ground stations under task order POWR-008. | Alexandria Zimar IRPG | 10/31/18 | 10/30/19 |
| 3. | FQ18117 Platform Construction Phase-1 | IRPG will complete construction, installation, testing and acceptance of replacement platform train edge lights at Metro Stations C12, C13, C14, C15, J02, & J03. | Steven Powers/ Alexandria Zimar IRPG | 11/05/18 | 01/01/20 |
| 4. | Platform Construction Phase-2 | IRPG will complete construction, installation, testing and acceptance of replacement platform edge lights at Metro Stations E07, E09, E10, & B04. | Steven Powers/ Alexandria Zimar IRPG | 11/01/19 | 12/30/20 |
| 5. | Platform Construction Phase-3 | IRPG will complete construction, installation, testing and acceptance of replacement platform edge lights at Metro Stations K08, K07, K06, & K05. | Steven Powers/ Alexandria Zimar IRPG | 11/01/20 | 12/29/21 |
| 6. | Platform Construction Phase-4 | IRPG will complete construction, installation, testing and acceptance of replacement platform edge lights at Metro Stations D11, D12, D13, G03, C10, & C06. | Steven Powers/ Alexandria Zimar IRPG | 11/01/21 | 12/28/22 |
| 7. | FQxxxx - (24) Above Ground Stations – Edge Light Construction | IRPG will complete construction, installation, testing, and acceptance of replacement platform edge lights at 24 above-ground stations. IRPG – Station Lighting will submit a report on progress. | Alexandria Zimar IRPG | 03/04/20 ² | 03/30/22 |
| 8. | (48) Underground stations Edge Light plan | IRPG will submit an implementation plan including schedule to bring platform edge light systems at underground stations to a state of good repair. | Alexandria Zimar IRPG | 04/03/19 | 07/31/19 |

¹ In the event of personnel or departmental changes, responsibilities for actionable items shall transfer to the new leadership.

² Est Start – Estimated Start Date.

³ Est End – Estimated Completion Date.

| Actionable Items | Description | Responsible Party ¹ | Est Start ² | Est End ³ |
|---------------------------------|--|--------------------------------|------------------------|----------------------|
| 9. QICO CAP Verification Report | QICO will evaluate actionable items submitted to confirm there is reasonable evidence that the findings and this required action have been resolved, taking into account the actionable items descriptions and performance measures. | QICO | 03/31/22 | 04/29/22 |

Completion Documentation & Performance Measures

- 90 percent of all construction completed in relation to actionable items 3-7.

Responsible Party/Parties

IRPG

Alexandria Zimar


(Signature/Date)

11/20/18

IRPG

Steven Powers


(Signature/Date)

11/20/2018

Second-Level Responsibility

DECO

John D. Thomas


(Signature/Date)

11.21.18

SUPPLEMENTAL MATERIALS

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Policies, Procedures & Standards

- Work Standards: The existence and effectiveness of department policies, procedures, manuals, work instructions, quality control measures, and other requirements that define department activities.
- Work Measurement: The existence and effectiveness of operational goals (indicators) and sound management routines to achieve these goals.
- Change Management: The existence and effectiveness of processes, tools and techniques to manage changes to a system to achieve intended outcomes.
- Skills Management: The existence and effectiveness of a training strategy to ensure personnel are adequately qualified to perform work.

Quality & Compliance

- Application & Fulfillment: Adherence to existing/adopted policies, procedures, and standards; including applicable engineering or other technical requirements that specify material and/or workmanship standards.
- Job Safety: Adherence to safety requirements, including enterprise-wide standards (e.g. MSRPH) or those specific to a particular type of work (e.g. PPE).
- Quality Control: The performance of quality control functions to ensure the consistency and reliability of work performed; including the usage of properly calibrated equipment and compliant materials/parts.
- Regulations & Oversight: Adherence to requirements, guidelines, and recommendations from external/regulatory authorities and internal oversight functions, including items issued for corrective and preventive actions.

Traceability

- Data Assurance: Assessment of the validity, accuracy, consistency, relevance, and completeness of data used to schedule, document, and track work activities.
- Assets and Activities: Assessment of the ability to verify the history, location, or application of an item by means of documented recorded identification; including the quality and validity of data capturing this information.
- Document Control: Assessment of version control, ownership and approval, dissemination, storage and accessibility of business-critical documents.

Risk Assessment Methodology

Risk is defined as an uncertain event or condition that, if it occurs, has a positive or negative effect on the organization's objectives and operations (both threats and opportunities). It is assessed on the combination of the probability of occurrence of risk and the severity of the risk. Risk management is an attempt to answer the following questions:

- What can go wrong? – The Risk
- How often does/will it happen? – The Probability of Occurrence
- How bad are the consequences? – The Impact
- Is the risk acceptable? – The Risk Treatment, Remediation

Categories of Risk

- **Service Delivery** – A broad range of risks with direct or indirect impact on daily transit and/or business operations. The risk of direct or indirect losses or other negative effects due to inadequate or failed internal business or transit operations, or from external events that impair internal processes, people, or systems.
- **Financial** – The risk to achievement of the Authority's mission arising from an inability to manage credit, debt and financial leverage, and other financial resources. Financial risk would also include risk arising from adverse movements in market rates or the Authority's inability to meet its obligations.
- **Legal & Compliance** – Risks arising from a failure to comply with applicable laws and regulations and a failure to detect and report activities that are not compliant with statutory, regulatory, or internal policy requirements. Failure to comply with prescribed guidelines and established practices. This would also include a lack of awareness or ignorance of the relevant standards, guidelines or regulations.
- **Safety** – The risk of achievement of the Authority's mission arising from failures to prevent hazards that may cause harm to human, equipment, or the environment. This would also include risk arising from the Authority's inability to comply with safety-related legal or regulatory standards.
- **Strategic** – Risks arising from failure to achieve strategic or tactical objectives, an adverse business decision, or a lack of strategic direction and leadership. This would also include the ineffective implementation of the strategic plans, a lack of business strategies developed to achieve goals, and inadequate resources deployed against the achievement of those goals. Strategic risks can be affected by changes in the political environment such as changes in administration and resulting changes in strategic priorities. Strategic risks can also be triggered by actions of key stakeholders such as the Tri-Jurisdictional law makers or the Federal Transit Administration (FTA).
- **Technology** – The risk of unexpected losses from inadequate systems, breaches in information technology security, and inadequate business continuity planning. This would also include risks to the achievement of the Authority's mission arising from the inability of networks, security, and technologies to meet Metro's evolving needs.
- **Reputation** – The risk to the achievement of the Authority's mission arising from negative internal or external stakeholder opinion. Reputation risk affects the Authority's ability to establish new and/or sustain existing relationships.

Risk Assessment Process

The following risk matrix is used to assess risks within the universe of review areas. The universe (see Table 1) is comprised of the potential range of all review activities and review business units (or departments) that fall within QICO's scope and oversight authority. These business units consist of programs, processes, assets and people which together contribute to the fulfilment of the departments' strategic goals (Goal 1 - Build Safety Culture; Goal 2 - Deliver Quality Service; Goal 3 - Improve Regional Mobility; and Goal 4 - Ensure Fiscal Stability).

Risks are assessed based on the significance of their impact (see horizontal axis in Figure 1) and the probability of occurrence (see vertical axis in Figure 1). The probability ratings are rated on a scale of 1 (minimum) to 5 (maximum) and are driven by the metrics shown on the next page. The impacts ratings are also rated on a scale of 1 (minimum) to 5 (maximum) and are driven by the category of risks, which are then aligned on the metrics shown on the next page.

Each finding is given a severity rating of Insignificant, Low, Moderate, Elevated or High. All areas with Elevated/High ratings are considered to be high risk to the organization's objectives; and need to be mitigated/reduced in severity at the earliest. The risk ratings to the findings are provided as "Type of Risk" followed by "Severity Rating (Impact, Probability)" (e.g. a finding with "Elevated (4,3)" would mean a 'significant (4)' impact along with a 'possible (3)' probability of occurrence).

Risk Assessment Matrix

| Almost Certain (5) | Probability of Occurrence | Low | Moderate | Elevated | High | High |
|--------------------|---------------------------|--------------------------|---------------|-----------------|-----------|----------|
| Likely (4) | | Low | Low | Moderate | Elevated | High |
| Possible (3) | | Low | Low | Moderate | Elevated | Elevated |
| Unlikely (2) | | Insignificant | Low | Low | Moderate | Moderate |
| Rare (1) | | Insignificant | Insignificant | Low | Moderate | Moderate |
| Probability | | Potential Impact of Risk | | | | |
| Impact | Negligible (1) | Minor (2) | Moderate (3) | Significant (4) | Major (5) | |

Risk Scale Definitions

| | |
|---------------|--|
| Insignificant | Reasonable assumption that this risk will not occur and unlikely to cause the activity to fail to meet part of its objective. |
| Low | Reasonable assumption that this risk will likely not occur & may cause a failure of the business process to meet part of its objectives. |
| Moderate | Reasonable assumption that this risk may occur & may cause a failure of the business process to meet a significant part of its objectives. |
| Elevated | Reasonable assumption that this risk will likely occur & likely to cause a failure of the business process to meet a significant part of its objectives. |
| High | Reasonable assumption that this will occur & will cause a failure of the business process to meet its objectives or cause objective failure in other activities. |

Potential Impact

- (1) **Negligible** – Unlikely to cause the activity to fail to meet part of its objectives.
- (2) **Minor** – May cause a failure of the business process to meet part of its objectives, which may expose Metro to minor financial losses, less- effective or efficient operations, some non- compliance with laws and regulations, waste of resources, etc.
- (3) **Moderate** – May cause a failure of the business process to meet a significant part of its objectives, or negatively impact the objectives of other activities, which may expose Metro to moderate financial losses, reductions to or ineffectiveness of operations, non- compliance with laws and regulations, sizable waste of resources, etc.
- (4) **Significant** – Likely to cause a failure of the business process to meet a significant part of its objectives, or negatively impact the objectives of other activities, which may expose Metro to significant financial losses, reductions to or ineffectiveness of operations, non- compliance with laws and regulations, sizable waste of resources, etc.
- (5) **Major** – Will cause a failure of the business process to meet its objectives, or cause objective failure in other activities, which may cause or expose Metro to major financial losses, interruptions in operations, failure to comply with laws and regulations, major waste of resources, failure to achieve stated goals, etc.

Probability of Occurrence

- | | |
|---|---|
| (1) Rare – Reasonable assumption that this risk will not occur | (4) Likely – Reasonable assumption that this risk will likely occur |
| (2) Unlikely – Reasonable assumption that this risk will likely not occur | (5) Almost Certain – Reasonable assumption that this will occur |
| (3) Possible – Reasonable assumption that this risk may occur | |

Description

- **BACK2GOOD:** Back2Good is Metro's plan to improve safety, reduce delays caused by problems with the tracks and railcars, and provide a balanced budget based on what the region can afford. This will happen through programs that, for example, institute aggressive new preventive maintenance efforts with the goal of cutting in half delays to trains caused by track problems, and visibly improve station cleaning and lighting.



- **Kiosk Information Display System (KIDS):** Flat panel dynamic display monitors installed at each Metrorail station kiosk. These displays are used to provide timely service updates and upcoming service change information to riders as well as information about equipment outages affecting station accessibility.



- **Platform Information Display System (PIDS):** Dynamic display devices located at station mezzanines and train boarding platforms within the system. The displays provide next train arrival time and destination as well as cycling through messages providing information about equipment outages affecting station accessibility.



- **Platform edge lights:** Recessed lighting located along the length of the edge of every train boarding platform within the Metrorail system. The lamps provide a visual warning indicating the edge of the platform at all times. The lights shift from an always-on state to a flashing mode when a train is approaching the platform.



Additional Terms

- **Area of Refuge (AOR):** Sometimes referred to as an Area of Rescue Assistance, AOR is a location in a building designated to hold occupants during an emergency, when evacuation may not be safe or possible. Occupants can wait there until rescued or relieved by first responders.
- **ELstat:** The Electronic Elevator Notification System is a subscription service that notifies customers when elevators are in and out of service at user-specified Metrorail stations. Alerts can be sent to both email addresses and cell phones.

Additional Terms

- Interlocking Operator: Operates track switching equipment from the control tower to route train traffic within the rail yard or at switching points, following switching orders, train schedules, and safety regulations.
- Lifeline: Examination Retake Policy is referred to as a Lifeline Test.
 - o A trainee scoring less than 75% will be allowed to retake the test but must score an 80% or higher on the retake.
 - o Failure to score 80% or higher on a retest will disqualify the trainee from Rail Training for at least one (1) year. Only one Lifeline Test will be allowed for the entire length of the training course.
- Mainline: A track that is used for through trains or is the principal artery of the system from which branch lines, yards, sidings and spurs are connected.
- Maintenance Operation Center (MOC): Responsible for monitoring the technical operations of the Authority's communications-electronics system, electrical power distribution systems, automatic train control system, plant fixed facilities, and rail computer systems. MOC also provides technical guidance in diagnosing and troubleshooting service-affecting problems.
- Rail Operations Information Center (ROIC): Primarily responsible for supervising and coordinating station operations functions such as providing emergency and routine information and instructions to customers and employees via system wide PA announcements, maintaining station equipment status reports for fare collection equipment, escalators, and elevators, etc., coordinating unusual incidents that occur in Metrorail stations, the primary liaison between Rail Operations Control Center (ROCC) and Bus Operations Control Center (BOCC), Transit Police, and area fire department communication centers, and provides local media with information regarding operating conditions.
- Rail Yard: An area which is used to organize and store rolling stock such as track maintenance equipment and train cars. Rail yards are commonly found at the end of a line, and they are also positioned in strategic locations along a railway line, such as transfer points.
- RSDAR: Compliance spot checks are performed and documented by rail supervisors using Rail Supervisor Daily Activity Reports (RSDARs). This reporting system was built for use on WMATA-issued smartphones using the Avoka T-Field application.
- Standard Operating Procedure (SOP): Standard Operating Procedures (SOP) delineate responsibilities and procedures for performing certain job or operating functions.
- Station Manager DIRECT: Employee-only intranet site that serves as a one stop shop for all policies and procedures, news, and information relevant to incumbents in the Station Manager position.
- Wayside signal: Fixed signal equipment which is located along the track right-of-way. Wayside equipment are railway safety systems that communicates track status and equipment condition information to the operator cab.