



Safety and Operations Committee

Board Information Item IV-A

November 19, 2020

Corrective Action Plans Update

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

☐ Action ☒ Information

MEAD Number:
202221

Resolution:
☐ Yes ☒ No

TITLE:

Status of Safety Corrective Action Plans

PRESENTATION SUMMARY:

The Department of Safety and Environmental Management (SAFE) will be providing an update on the open National Transportation Safety Board (NTSB) and State Safety Oversight (SSO) Corrective Action Plans (CAPs) and associated actionable items.

PURPOSE:

This update informs the Safety Committee on the current status of the open NTSB and SSO CAPs. This briefing will publicly communicate the status of the actionable items as Metro continues to close these and all other recommendations as part of improving safety

DESCRIPTION:

Developed by WMATA, CAPs describe the actions the Authority will take to minimize, control, correct, or eliminate risks and hazards, as well as specify the schedule for taking the actions. CAPs are developed to address findings, recommendations, or required actions issued from multiple sources including NTSB and the SSO. They are tracked by WMATA's internal Quality Assurance, Internal Compliance and Oversight (QICO) and any WMATA department may be assigned responsibility for CAP completion. CAPs are implemented through WMATA personnel, contractors, and capital investments procured from third-party vendors.

The NTSB and SSO CAPs are managed differently. Upon receipt of an SSO finding or required action, the Authority has 45 days to develop CAPs, including the hazard ratings for the recommendation and mitigation. These CAPs are submitted to the SSO for review and approval, at which point WMATA begins the implementation process.

The NTSB issues Safety Recommendations, which WMATA is responsible for developing responding CAPs. These CAPs are delivered to the NTSB within 90 days of the issuance of the Safety Recommendations. The NTSB does not formally approve the CAPs, but WMATA seeks concurrence prior to implementation.

There are no interested parties in this matter.

Key Highlights:

- There have been 367 Corrective Action Plans (CAPs) assigned to WMATA.
- 305 have been closed in the past five years.
- 45 CAPs remain open.
- 17 CAPs have been fully implemented and have been submitted to the NTSB or SSO for review and closure.
- Each CAP may have multiple actionable items, of which there are 1513. Of that total, 1283 have been approved and closed, 105 have been submitted for approval and closure, and the remaining 125 have been developed and are in the process of being implemented.

Background and History:

The CAPs can be divided into three groups.

The Federal Transit Administration CAPs include those that were originally assigned as part of the FTA's oversight role. Those CAPs have been transferred to Metro's SSO Agency, the Washington Metrorail Safety Commission (WMSC). The WMSC will continue to manage the CAPs. These CAPs are embedded in the FTA's original Safety Directives, of which there have been seven issued:

- 15-1, Safety Management Inspection;
- 16-2, Tri-State Oversight Committee;
- 16-4, Track Integrity Investigation;
- 16-5, Stop Signal Overrun Investigation;
- 16-6, Rail Vehicle Securement Investigation;
- 17-1, Traction Power Electrification Investigation; and
- 18-2, TOC Triennial Safety Findings.

These Directives have resulted in 289 CAPs.

In addition to transferred CAPs, the WMSC has independently issued and approved 47 additional CAPs in 2020, resulting in 147 actionable items. The recent WMSC Rail Operations Control Center audit report resulted in an additional 22 CAPs, which are currently under development and review and are not included in the total tallies. These CAPs are scheduled to be approved by the WMSC sometime in November 2020. Upon approval, the CAPs will be

included in the overall count.

The NTSB CAPs are those that been assigned primarily in response to the L'Enfant Incident. Of the 31 total CAPs, three are unrelated to this incident.

Closures by entity are:

- Of the 289 SSO FWSO CAPs, 278 have been closed.
- Of the 47 WMSC CAPs, nine have been closed.
- Of the 31 NTSB CAPs, 18 have been closed.

Some CAPs may take longer than others to implement due to factors such as significant capital investment, complexity of design, availability of technology, production schedules, and other factors.

The CAP closures have contributed to the progress on improving areas such as preventive and corrective maintenance; policy and procedures, and training and recordkeeping. The status of each CAP is posted online for tracking and review at: <https://www.wmata.com/initiatives/transparency/Corrective-Action-Plans.cfm>

Discussion:

Actionable Items:

Actionable Items are attached to each CAP that demonstrate how WMATA will close out the CAP.

Of the current 1513 Actionable Items:

- 1283 have been approved and closed;
- 105 have been submitted for approval and closure; and
- The remaining 125 have been developed and are being implemented.

A single action may be equivalent to closing a finding in which WMATA developed an overall CAP. However, the majority of the CAPs have numerous Actionable Items that address the specific finding or recommendation.

To address these Actionable Items, WMATA must implement them and submit documentation to either the SSO or the NTSB for approval.

The number of Actionable Items will continuously change over time (i.e., when a CAP is closed by the SSO or NTSB, or if new ones are added). For example, a new WMSC audit will generate additional CAPs and Actionable Items. The last audit was issued in September 2020 for the Department of Rail Transportation Rail Operations Control Center.

FUNDING IMPACT:

There is no impact on funding for this informational presentation.	
Project Manager:	Theresa Impastato
Project Department/Office:	Department of Safety and Environmental Management

TIMELINE:

Previous Actions	<p>April 27, 2017 – NTSB CAP Review</p> <p>November 16, 2017 – Update on FTA and NTSB Actionable Item</p> <p>January 16, 2018 – Memo to Board</p> <p>October 11, 2018 – Update on FTA and NTSB Actionable Item</p> <p>December 12, 2019 – Update on Status of Safety Corrective Action Plans</p>
Anticipated actions after presentation	<ul style="list-style-type: none"> • Continue to fully implement all NTSB and SSO CAPs • Continue to implement programs and activities to strengthen safety culture

Status of Safety Corrective Action Plans

Safety & Operations Committee
November 19, 2020



Purpose

- Provide an update on the status of safety corrective action plans

<https://www.wmata.com/initiatives/transparency/Corrective-Action-Plans.cfm>

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CAP Defined

- What is a Corrective Action Plan (CAP)?
 - Plan developed by Metro, in response to a Washington Metrorail Safety Commission (WMSC)/NTSB recommendation or finding, describing actions to minimize, control, correct, or eliminate risks and hazards, as well as the schedule for taking those actions
 - CAPs are submitted to the WMSC for review and approval, prior to full implementation
 - Metro routinely meets with the WMSC on CAP progress

<https://www.wmata.com/initiatives/transparency/Corrective-Action-Plans.cfm>

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CAP Status Defined

<u>Open</u> <i>Implementing</i>	Mitigation strategy developed; in the process of being implemented
<u>Open</u> <i>Submitted for Closure</i>	Fully implemented, supporting documentation submitted to the WMSC/NTSB for review
<u>Closed</u>	Plan implemented, approved, and closed by WMSC/NTSB

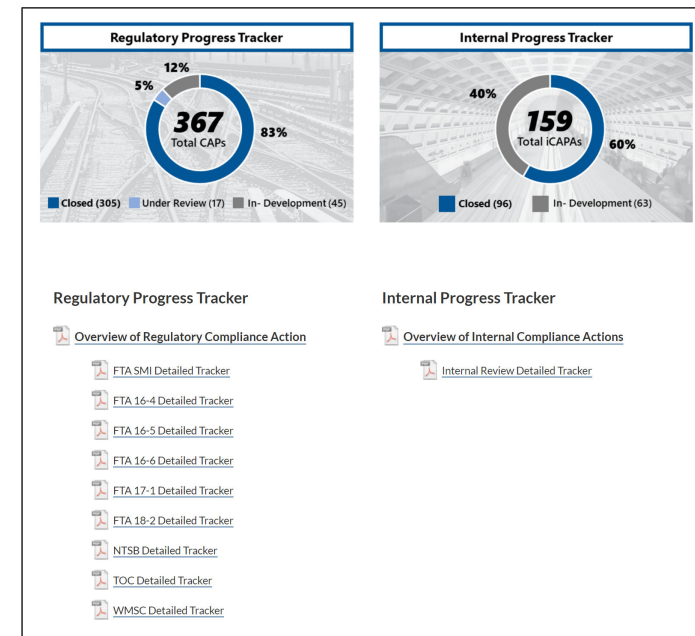
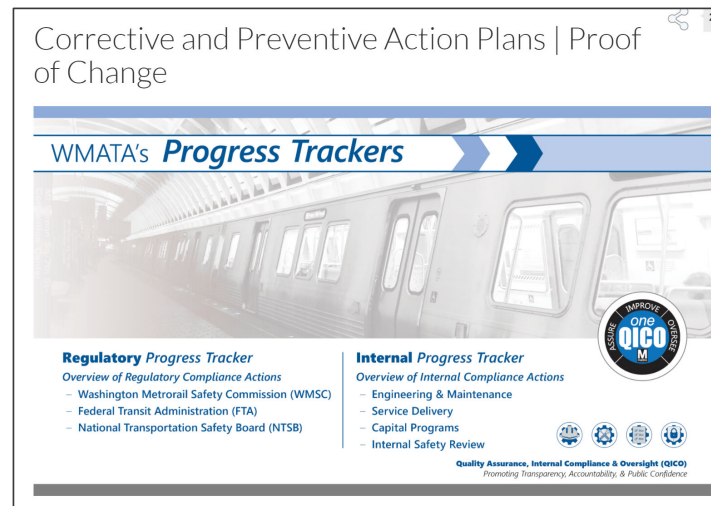
<https://www.wmata.com/initiatives/transparency/Corrective-Action-Plans.cfm>

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WMATA CAP Progress Tracker – Public Site

- Since 2017, all oversight CAPs have been posted on WMATA's website
- Provides detailed breakdown
- Updated weekly



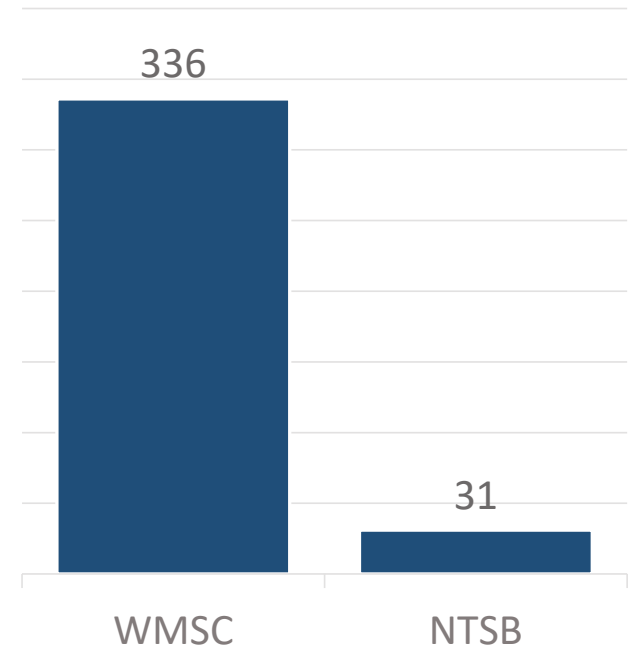
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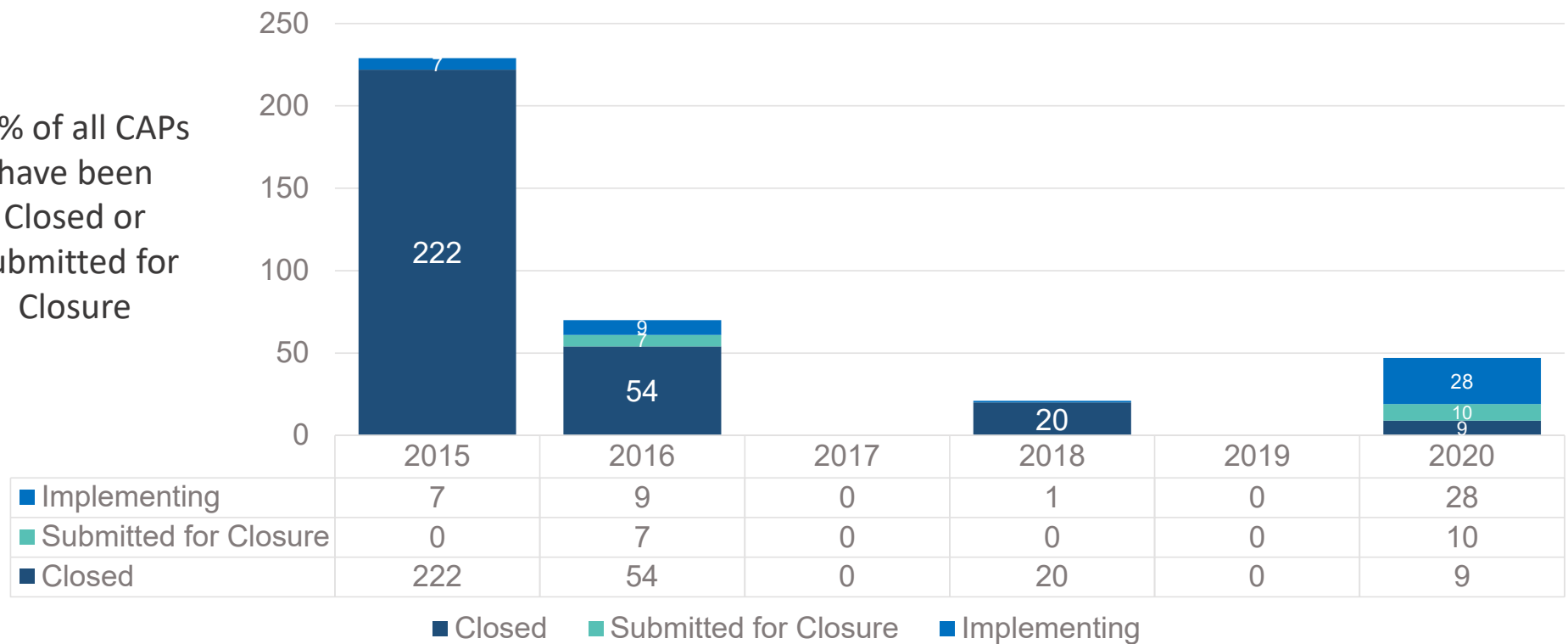
CAPs by Source

- Total of 367 CAPs have been assigned to Metro
 - All WMSC CAP plans have been approved
 - NTSB does not pre-approve CAP actionable items
- 305 of the 367 have been closed in the past five years
 - 71 CAPs have been closed since last Board report in December 2019
- Of the remaining 62 CAPS that are open:
 - 17 CAPs have been completed and submitted for closure
 - 45 CAPs are currently being implemented
- *CAPs addressing the WMSC ROCC Report are in the review cycle and are not included in this report*



Regulatory CAP Progress*

88% of all CAPs
have been
Closed or
Submitted for
Closure



*as of 10/30/20

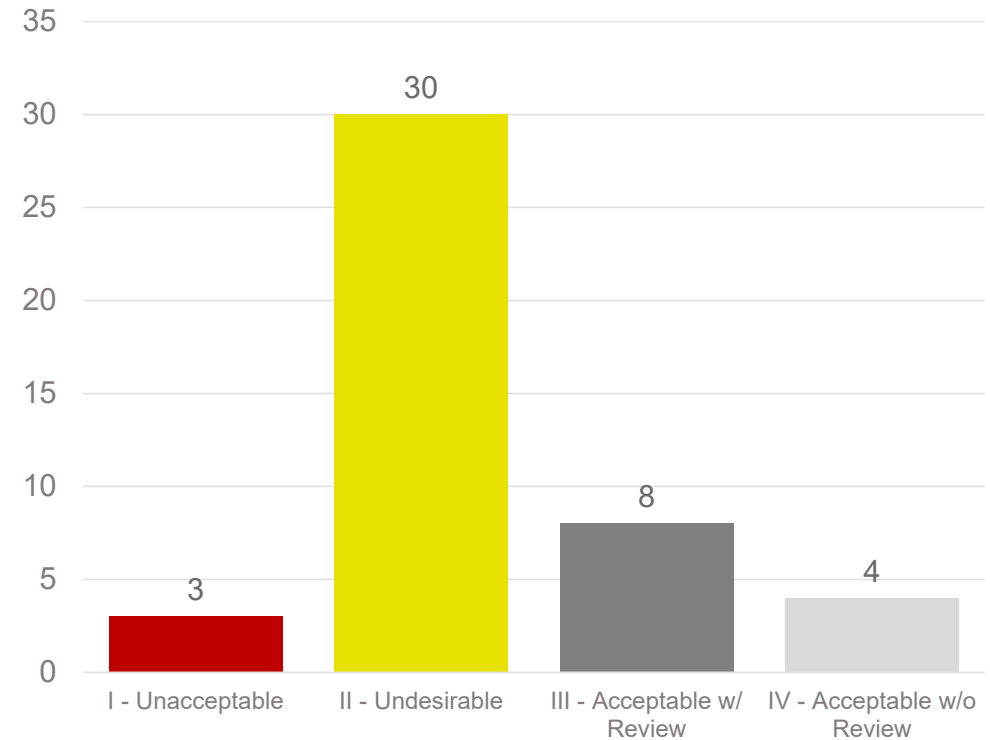
Status of Safety Corrective Action Plans

Hazard Ranking*

Open CAPs currently being implemented

Unacceptable Hazards

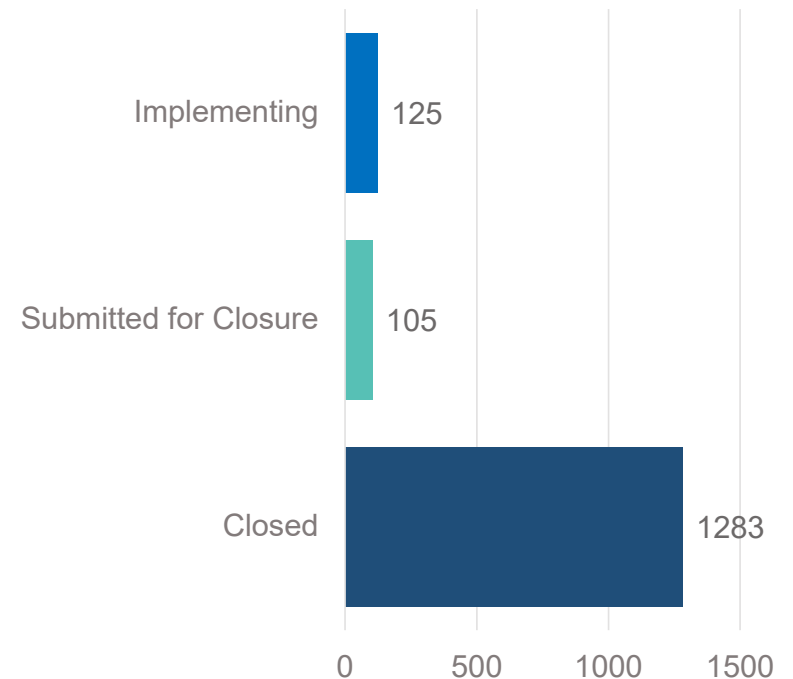
- **WMSC-20-C0035**
 - Emergency ventilation fans operation training and vent fan playbook familiarization for rail controllers
- **NTSB-R-08-004 (2x, adopted by prior SSO)**
 - Bi-directional technology for roadway worker protection



*as of 10/30/20

Actionable Items Progress*

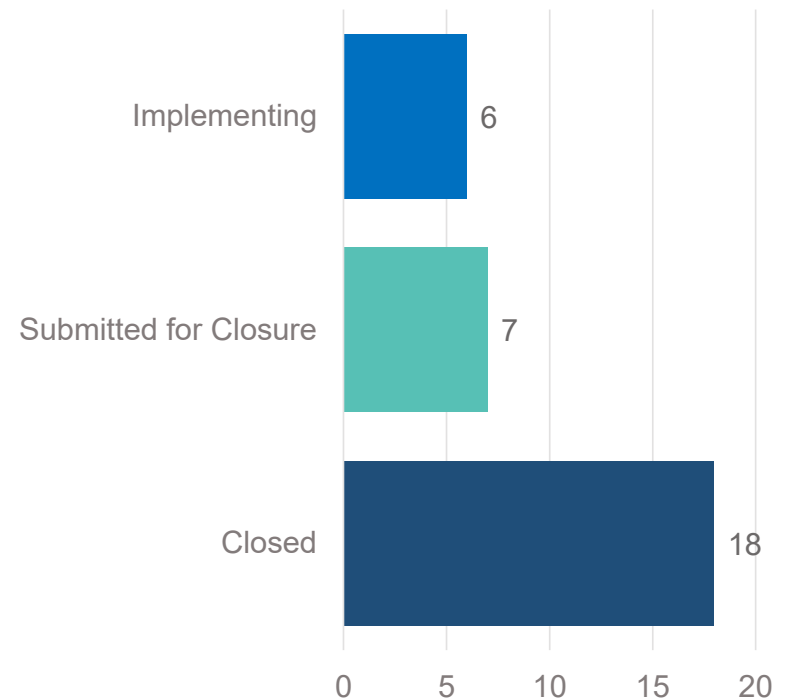
- Under the 367 CAPs, there are 1513 individual actionable items
- 1283 of the 1513 have been closed in the past four years
- Actionable Item Status
 - Open – (15%)
 - Implementing (8%)
 - Completed / under review for closure (7%)
 - Closed – (85%)



*as of 10/30/20

NTSB CAP Status

- CAPs are the result of a variety of incidents
- Oldest CAP is R-08-004
 - Bi-directional technology for roadway worker protection
- Many CAPs require long lead times
 - Significant capital investment
 - Complexity of design
 - Availability of technology
 - Production scheduling



Next Steps

- Awaiting response from WMSC and NTSB on submitted action items
- Continue working with WMSC to close out CAPs
- Continue working to close actionable items by scheduled dates

National Transportation Safety Board (NTSB)
Recommendations Progress Tracker
As of April 01, 2015

NTSB #	NTSB Required Action(s)	WMATA Hazard Risk Category	Date Closed	Action Status	WMATA Comments
NTSB R-07-001	Develop and implement a plan to ensure that all future train equipment will be built to meet the requirements of the NTSB R-07-001.	II	May 2013	Closed	
NTSB R-07-004	Implement QA Procedures to ensure accurate wheel truing.	II	June 2013	Closed	
NTSB R-07-005	Ensure appropriate coordination between all departments responsible for maintenance and design for future issues before new equipment is purchased.	II	October 2013	Closed	
NTSB R-07-006	Establish a single point of responsibility within WMATA to identify and coordinate actions identified through accident investigations or related research.	II	October 2013	Closed	
NTSB R-07-007	Establish written procedures regarding rail lubrication for single track operations over switch, turnout, lubrication of switch face - LSWC.	II	October 2013	Closed	
NTSB R-07-008	Feasible and controlled by 2008, the replacement of all No. 6 turnouts to standard turnouts.	II	June 2013	Closed	
NTSB R-08-001	Review and update WMATA's policies for hours of operation for trackside workers - adding requirements for training, safety, and other related management items.	II	October 2012	Closed	
NTSB R-08-002	Establish a systematic approach to request unannounced checks of employee compliance with Manual operating and safety rules and procedures.	II	November 2012	Closed	
NTSB R-08-003	Perform periodic internal reviews on the deficiencies identified through the Compliance and Operating Rule Check and data base.	II	November 2012	Closed	
NTSB R-08-004	Promptly implement appropriate technology that will automatically alert workers of approaching trains and will automatically warn train operators when approaching areas with workers on or near the track.	II	November 2013	Closed	
NTSB R-09-004	Safety redundancy of the train control system, establish track occupancy data on a real time basis to detect loss of short and automatically generating alerts.	II	July 2012	Closed	WMATA is addressing NTSB's comments received on March 15, 2014.

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Questions

