



The Massachusetts Bay Transportation Authority

Corrective Action Plan (CAP)

FTA-TRA-25-004

BACKGROUND

Overview: The FTA issued Special Directive 22-4 that required the Massachusetts Bay Transportation Authority (MBTA) to address ongoing safety concerns at MBTA and interim findings uncovered during FTA's Safety Management Inspection (SMI) that was initiated in April 2022.

This Special Directive mandated that MBTA take nine required actions in three distinct categories related to maintenance of way (MOW). These required actions are to address deficiencies in personal protective equipment (PPE) and right of way (ROW) safety; to correct defective track conditions; and to address management practices that negatively impact track repair.

PURPOSE

This Corrective Action Plan has been developed to address **Special Directive 22-4 Category 3: Management Practices** and its Required Action **FTA-TRA-22-004**.

FTA Finding

Management Practices

- MBTA does not provide adequate time to complete necessary MOW maintenance activities.

FTA Required Action

- **FTA-TRA-22-004:** MBTA must document its MOW maintenance needs and develop and implement a schedule to ensure adequate track access to meet maintenance requirements.

ANALYSIS AND RECOMMENDATIONS

Analysis

- The MBTA does not have adequate time to complete necessary MOW maintenance activities.
- The MBTA successfully executed the track improvement program aimed at reducing the % track under restriction in CY24.
- Under other Corrective Action Plans as a part of Special Directive FTA-TRA-22, the MBTA has developed plans for enhancing the maintenance and capital renewal programs which will require additional track access time.

Recommendations

MOW Maintenance Needs


- Develop definitions of the four identified types of maintenance to create a common understanding across the MBTA. Where the four maintenance types are Preventive Maintenance and Inspection, Corrective Maintenance, Emergency Maintenance, and Renewals.
- Use available data and resources to identify maintenance activities for each maintenance type.
- Define the type of access needed for each maintenance activity and when the activity needs to be performed.

Track Access

- Develop Key Performance Indicators (KPIs) to measure compliance, manage backlogs, and identify trends.
- Identify data sources and the process to gather the data to measure track access hours and productivity.
- Refine data sources and forms for more detailed track access monitoring.
- Create standardized reporting mechanisms to monitor track access activities in alignment with baseline requirements.

Schedule and Implementation Plan

- Develop Master Plans by asset class articulating the State of Good Repair of assets within the asset class and necessary funding and access to deliver its renewal strategy.
- For MOW, develop an interim solution ahead of master plan completion to facilitate CY25 access planning

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ACTION PLAN

- The MBTA develop definitions and break down its maintenance into preventive maintenance and inspection, corrective maintenance, emergency maintenance, and renewals. The MBTA will articulate a plan to quantify the access needed for each type of work and measure success against KPIs for each type of work.
 - Preventive Maintenance: The MBTA will define preventive maintenance and inspection schedules and approximate access time needed to perform. The MBTA will measure compliance with PM&I schedules as applicable.
 - Corrective Maintenance: The MBTA will analyze current EAMS defect data to understand volume of corrective maintenance and access time needed to perform. The MBTA will develop a methodology for tracking corrective maintenance backlog.
 - Emergency Maintenance: The MBTA will improve its access planning processes including definitions, timelines, and approvals for emergency access requests. The MBTA will track the volume of emergency maintenance requests and work to reduce.
 - Renewals: The MBTA will develop master plans by asset class which will articulate the state of good repair of assets within the asset class and necessary funding and access to deliver its renewal strategy. For MOW, the MBTA will also develop and interim solution ahead of master plan completion to facilitate CY25 access planning.
- The MBTA will leverage the work of other CAPs addressing the comments of Special Directive FTA-TRA-22.

PLAN STRUCTURE

#	Actionable Items	Description	Responsible Party ¹	Est Start ²	Est End ³
Preventive Maintenance and Inspection					
1	Define current safety and system critical PM&Is requiring ROW access	Provide list of all track, power, and signal safety and system critical PM&I schedules currently performed requiring ROW access.	MOW: Ed Baird PSM: Bill Charrette SCM: Joe Buonopane	12/02/2024	03/03/2025
2	Calculate approximate ROW access time needed for PM&I	Define types of access and timeframes needed to perform PM&I activities.	MOW: Ed Baird PSM: Bill Charrette SCM: Joe Buonopane	02/03/2025	05/01/2025
3	Develop PMI digitization schedule	Incorporate schedule for digitization of safety and system critical PM&Is and training for recording digital PM&I tasks into the Framework and Training developed under SD 22-12 Finding #5 corrective action plan.	ECD: Hugh Quinn E&M: Megan Chann	12/02/2024	05/01/2025
4	Develop Reporting	Develop PM&I compliance reporting for digital safety and system critical PM&I schedules.	E&M: Elana McDermott	02/03/2025	07/01/2025
5	Identify additional preventive maintenance and inspection programs	Provide a summary of all track, power, and signal additional PM&I programs in development, access required, and timelines for implementation including documentation and training requirements.	MOW: Ed Baird PSM: Bill Charrette SCM: Joe Buonopane	03/03/2025	09/01/2025
Corrective Maintenance					
6	Quantify volume of corrective maintenance	Quantify corrective maintenance needs based on defect data in the asset management system.	MOW: Ed Baird PSM: Bill Charrette SCM: Joe Buonopane E&M: Elana McDermott	01/02/2025	10/01/2025

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

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7	Quantify access needed for corrective maintenance	Develop an estimate of the access hours needed to complete corrective maintenance work. Review and revise estimates with input from maintenance staff.	MOW: Ed Baird PSM: Bill Charrette SCM: Joe Buonopane E&M: Elana McDermott	01/02/2025	02/02/2026
8	Develop KPI corrective maintenance backlog	Develop KPIs to manage corrective maintenance backlog for assets requiring ROW access.	E&M: Elana McDermott	07/01/2025	07/01/2026

Emergency Maintenance


9	Revise policy for scheduling ROW work to include new emergency escalation process	Complete revision of policy and SOP for scheduling work on the ROW and develop escalation process for approval of emergency access requests. Update training curriculum to reflect changes.	E&M: Rinat Aksianov	12/02/2024	06/02/2025
10	Quantify emergency maintenance	Develop a method to quantify instances of emergency maintenance access.	E&M: Elana McDermott Ops: Phil Groth (Ops Analytics)	03/03/2025	06/02/2025
11	Develop KPI for emergency maintenance	Develop KPI to track trends in emergency maintenance.	E&M: Elana McDermott Ops: Phil Groth (Ops Analytics)	06/02/2025	12/22/2025

Renewals

12	Develop Power SGR Strategy	Complete planning for power asset classes to summarize current investment, additional investment need, and timeline to achieve SGR	ECD: Scott Hamwey	12/02/2024	03/31/2025
13	Develop Signals SGR Strategy	Complete planning for signals asset classes to summarize current investment, additional investment need, and timeline to achieve SGR	ECD: Scott Hamwey	02/03/2025	12/22/2025
14	Develop Track SGR Strategy	Complete planning for track asset classes to summarize current investment, additional investment need, and timeline to achieve SGR	ECD: Scott Hamwey	12/02/2024	12/22/2025
15	Published CIP	Provide published CIP showing alignments of funded projects with SGR strategies	CPP: Mike Malia	12/02/2024	06/30/2025
16	Deliver a diversion access planning strategy	Develop a document that articulates the timelines, inputs, and prioritization process for ROW Diversion Planning at the MBTA.	Ops: Nikita Chuyko (RDPI)	12/02/2024	05/30/2025
17	Develop a track access planning tool	Formalize long-term process for establishing ROW access windows for track, power, signal renewal work.	ECD: Joe Guyder ECD: Scott Hamwey	12/02/2024	12/21/2026

Renewals (MOW – Interim Plan)

18	Quantify annual programmed maintenance	Use asset attribute information and expected useful life data to develop an annual renewal need.	ECD: Joe Guyder MOW: Jody Ray	08/01/2024	02/03/2025
19	Assign production rates	Develop assumed production rates for each task and each access type.	MOW: Jody Ray	09/02/2024	02/03/2025

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20	Develop the track maintenance access needs for CY25	Develop a proposal for a CY25 track access that will provide access needed to complete required maintenance work.	E&M: Megan Chann MOW: Jody Ray ECD: Gideon Guilman	08/01/2024	03/28/2025
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Track Access Reporting

21	Define track access data sources	Establish process to gather source data and measure track access hours and productivity.	E&M: Elana McDermott E&M Rinat Aksianov OCC: Michael Joyce	08/01/2024	04/01/2025
22	Develop additional fields for reporting	Update required data sources and forms to allow access to be better categorized and monitored for KPIs. Update documentation and training as required for form changes.	E&M: Elana McDermott E&M Rinat Aksianov OCC: Michael Joyce	01/02/2025	09/02/2025
23	Develop track access reporting	Develop standardized reporting to monitor track access executed against baseline requirements.	E&M: Elana McDermott E&M Rinat Aksianov OCC: Michael Joyce	01/31/2025	12/22/2025

COMPLETION DOCUMENTATION

Performance Metrics

This CAP will require the development of data pipelines and reporting to measure track access and production. Track access executed and production will be measured against a baseline need developed in this CAP.

Verification

Overview: MBTA will track progress against required diversions for maintenance work and against regular ROW access required to conduct maintenance activities.

BUDGET/COST ESTIMATE

- Overview:**
- Retain consultant to assist in development of track master plan and development of full cycle long range access needs.
 - Funding for execution of diversions to address track maintenance needs including bussing support, materials, contract resources, etc.
 - Existing funding sources will be utilized to support this work.



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CORRECTIVE ACTION PLAN COMMITMENT

<i>Responsible Parties</i>			
Department⁴	Name	email	Signature
E&M	Megan Chann	[REDACTED]	DocuSigned by: <i>Megan Chann</i>
E&M	Doug Connett	[REDACTED]	DocuSigned by: <i>Doug Connett</i>
Maintenance of Way	Jody Ray	[REDACTED]	Signed by: <i>Jody Ray</i>
Power Systems Maintenance	Bill Charrette	[REDACTED]	DocuSigned by: <i>Bill Charrette</i>
Signal and Communications Maintenance	Joe Buonopane	[REDACTED]	DocuSigned by: <i>JOE BUONOPANE</i>
Engineering & Capital Division	Gideon Guilman	[REDACTED]	DocuSigned by: <i>Guilman, Gideon</i>
Engineering & Capital Division	Scott Hamwey	[REDACTED]	Signed by: <i>Scott Hamwey</i>
Engineering & Capital Division	Joe Guyder	[REDACTED]	DocuSigned by: <i>Joe Guyder</i>
Capital Programs	Mike Malia	[REDACTED]	DocuSigned by: <i>Michael Malia</i>
Operations	Deirdre Habershaw	[REDACTED]	DocuSigned by: <i>Deirdre Habershaw</i>
Operations Control Center	Mike Joyce	[REDACTED]	DocuSigned by: <i>Mike Joyce</i>
Ops/RDPI	Nikita Chuyko	[REDACTED]	DocuSigned by: <i>Nikita Chuyko</i>

⁴ Offices designated as supporting roles provide subject matter expertise to responsible parties during action development and are not directly responsible for delivery of actionable items listed above.

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Executive Leadership of Responsible Parties

DocuSigned by:

Doug Connett
MBTA Chief of Infrastructure

2/3/2025

Date

DocuSigned by:

Ryan D. Coholan
MBTA Chief Operating Officer

1/30/2025

Date

Signed by:

Sam (Xin) Zhou
MBTA Chief of Engineering and Capital

2/3/2025

Date

DocuSigned by:

Meredith Sandberg
MBTA Chief of Quality, Compliance, and Oversight

1/30/2025

Date

DocuSigned by:

Timothy P. Lesniak
MBTA Chief Safety Officer

2/3/2025

Date

DocuSigned by:

Phil Eng
MBTA General Manager

2/4/2025

Date