



## The Massachusetts Bay Transportation Authority

### Corrective Action Plan (CAP)

FTA-TRA-22-008

## 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-22-008**.

### *FTA Finding*

#### **Management Practices**

- MBTA reports 9.6% of heavy rail track is under a speed restriction due to track defects and over two miles of Green Line track also are speed restricted. MBTA's management accepts an unsustainable level of speed restrictions due to deferred maintenance.

### *FTA Required Action*

- **FTA-TRA-22-008:** MBTA must develop and implement a special maintenance repair plan to reduce the percentage of system track that is under a speed restriction.

## ANALYSIS AND RECOMMENDATIONS

### *Analysis*

- The MBTA MOW and Capital Programs departments have a list of capital renewal assignments that were agreed to be carried out by managing Contractor resources.
- The MBTA does not have a further developed special maintenance repair plan to reduce the percentage of system track that is under a speed restriction.
- The MBTA Maintenance Department does not have adequate time on track to reduce the percentage of system track that is under a speed restriction.

### *Recommendations*

- MBTA will develop and implement a special maintenance repair plan to reduce the percentage of system track that is under a speed restriction. This work is in conjunction with Corrective Actions FTA-TRA-22-003, 004, and 005.
- The MBTA will develop a staffing model along with operating and capital budgets that are sufficient to manage defects that result in service reductions such as speed restrictions. This work is in conjunction with Corrective Actions FTA-TRA-22-007.



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### ACTION PLAN

- MBTA will develop and implement a special maintenance repair plan to reduce the percentage of system track that is under a speed restriction. The MBTA has multiple diversions planned that will allow for maintenance and repairs to address a number of these speed restrictions.
- The MBTA will develop and fully resource additional headcount, materials, equipment, operating budget, and capital budget to reduce the percentage of service-affecting defects managed by MOW departments.
- The MBTA MOW and Capital Programs departments will jointly develop a strategy for resourcing the work to reduce speed restrictions using both internal maintenance capabilities and contractor resources.
- Working in conjunction with the ROW access committee, the MBTA will schedule additional time to adequately support activities required to reduce defects that result in speed restrictions.

### PLAN STRUCTURE

#	Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
1	Create a special maintenance repair plan working group	Discipline experts will be assigned to develop a special maintenance repair plan that addresses the percentage of system track that is under a speed restriction.	OCE: Hadley	7/15/22	7/31/22
2	Develop special maintenance repair plan	The Special Maintenance Repair Plan working group will develop a maintenance repair plan that addresses the system track speed restrictions.	OCE: Hadley	7/15/22	9/1/22
3	Formalize special maintenance repair plan	This plan will be formalized resourced with appropriate staff, materials, equipment, contracts, and funding.	OCE: Hadley	9/2/22	12/31/22
4	Implement special maintenance repair plan - Internal	MOW shall procure the materials, equipment, labor, and schedule ROW access to execute the special maintenance repair plan for work that is coordinated and performed internally by MBTA resources.	E&M: Martin	9/1/22	ongoing
5	Implement special maintenance repair plan - External	Capital Programs shall procure the contracts and schedule ROW access to execute the special maintenance repair plan for work that is agree upon to be performed by contracted resources.	CP: Thorn	9/1/22	ongoing
5	Monitor, maintain and control the plan	As speed restrictions due to maintenance issues have the potential to impact operations into the future and the MBTA will continue to monitor, maintain and control the plan.	OCE: Hadley	1/1/23	Continuous
6	Develop a budget plan to sustain the track conditions	The MBTA will develop a staffing plan, operating budget and capital budget necessary to maintain the tracks in a condition that reduces the total percentage of tracks with speed restrictions.	E&M: Chann	9/1/22	6/30/23

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

<sup>2</sup> Est Start – Estimated Start Date

<sup>3</sup> Est End Estimated Completion Date



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### PLAN STRUCTURE

#	Actionable Items	Description	Responsible Party <sup>1</sup>	Est Start <sup>2</sup>	Est End <sup>3</sup>
7	CAP Verification	MBTA departments will evaluate actionable items/deliverables before submission to FTA to confirm there is evidence that the findings and this required action have been resolved, taking into account the scope and performance measures.	OCE: P. Hadley	Ongoing	

### COMPLETION DOCUMENTATION

#### Performance Metrics

- The MBTA will prepare a long-term special maintenance plan by the end of 2022 to address speed restricted track conditions based on current speed restrictions.
- The MBTA will develop a staffing model and planning schedule for sustaining a program for preventative maintenance and corrective maintenance activities that will result in a reduced quantity of speed restricted track conditions by the end of the fiscal year.
- The MBTA will develop a capital investment budget to address the speed restricted track conditions by the end of 2022

#### Verification

**Overview:** As speed restrictions are reduced, the effectiveness of special maintenance can be evaluated and measured.

### BUDGET/COST ESTIMATE

**Overview:** E&M, OCE, and Capital Programs will require additional resources in the form of Operating Budget, Capital Budget, headcount, and work schedules in association with Capital Programs to facilitate this CAP. The budget values below are rough orders of magnitude estimates that will require further refinement as the work associated with this CAP is carried out. Estimates include 30% contingency.

Segment Code	Cost Estimate
E&M will require a minimum of two project managers/maintenance planners per department.	\$1,560,000
OCE will require a minimum of 4 project managers to support work planning and outage scheduling along each of the operating lines of the rapid transit network	\$1,040,000
Implementation of a special maintenance repair plan will require additional funding.	\$32,500,000
E&M, OCE, and Capital will require budget for alternative service to provide additional work windows to complete the maintenance activities to address the service-affecting infrastructure defects.	\$13,000,000
<b>Total</b>	<b>\$48,100,000</b>



**The Massachusetts Bay Transportation Authority**

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**Corrective Action Plan (CAP)**

**CORRECTIVE ACTION PLAN COMMITMENT**

**Responsible Parties**

Department <sup>4</sup>	Name	email	Signature
E&M	Joseph Cheever	[Redacted]	Joseph Cheever DocuSigned by: 48782C0440904F7...
Vehicle Maintenance	Stephens Hicks	[Redacted]	Stephens Hicks DocuSigned by: 3F67E3E7226843C...
Capital Programs	James Neider	[Redacted]	James Neider DocuSigned by: 3F5173951C94773...
Rail Transportation	Andrea Gordon	[Redacted]	Andrea Gordon DocuSigned by: 7E964CA05487467...
Bus Transportation	Karen Burns	[Redacted]	Karen Burns DocuSigned by: 460D2B48E6A7490...
OCC & Training	Aisheea Isidor	[Redacted]	Aisheea Isidor DocuSigned by: 434C07EE20A40A...
Office of Chief Engineer	Erik Stoothoff	[Redacted]	Erik Stoothoff DocuSigned by: 71D642BD36D47E...
Reliability Engineering	William Boyce	[Redacted]	William Boyce DocuSigned by: ED70D9A650840B...
System Wide Accessibility	Laura Brelsford	[Redacted]	Laura Brelsford DocuSigned by: FEE2688CF99543A...
Customer Experience	Danny Levy	[Redacted]	Danny Levy DocuSigned by: 73AB14BE2F00419...
Human Resources	Thomas Waye	[Redacted]	Thomas Waye DocuSigned by: 66923AE9EBBE462...
Budget	Mary Anne O'Hara	[Redacted]	Mary Anne O'Hara DocuSigned by: 3F02AEC466884D1...
Labor Relations	Ahmad Barnes	[Redacted]	Ahmad Barnes DocuSigned by: C905170689224D6...
Procurement	Jeffrey Cook	[Redacted]	Ray Wise on behalf of Jeffrey Cook DocuSigned by: BE7007594DED4D2...
Safety	Ronald Ester	[Redacted]	

**Executive Leadership of Responsible Parties**

DocuSigned by:  
*Jeffrey D. Gonneville*  
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7/15/2022

**Jeffrey D. Gonneville**  
MBTA Deputy General Manager

Date

<sup>4</sup> 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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*Corrective Action Plan (CAP)*

**Executive Leadership of Responsible Parties**

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7/15/2022

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*MBTA Chief Administrative Officer*

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**Steve Poftak**  
*MBTA General Manager*

Date