

1200 New Jersey Avenue, SE Washington, DC 20590

Federal Transit Administration

of Transportation

SENT VIA EMAIL

April 18, 2023

Mr. Phillip Eng General Manager Massachusetts Bay Transportation Authority 10 Park Plaza Boston, MA 02116

Subject: Immediate Action Required to Protect Workers on Right-of-Way

Dear Mr. Eng:

Over the last year, the Federal Transit Administration (FTA) has observed the Massachusetts Bay Transportation Authority's (MBTA) progress in many areas assessed during our 2022 Safety Management Inspection (SMI). However, FTA remains deeply concerned regarding MBTA's implementation of its right of way (ROW) access procedures and practices. While MBTA is carrying out corrective action plans ¹ designed to improve ROW safety in response to SMI findings, FTA's on-site inspection teams continue to observe deficiencies in implementation of ROW safety rules; significant gaps in ROW safety oversight and training; and lack of clarity in authorities, accountabilities, and responsibilities for worker safety on the ROW. The Massachusetts Department of Public Utilities (DPU), in its role as State Safety Oversight Agency, has reported similar concerns.

Between March 13 and March 24, 2023, MBTA experienced three near miss events involving trains and workers. Despite action by both DPU and MBTA to reinforce employee and contractor understanding of safety rules protecting them on the ROW, on April 7, MBTA reported its fourth near miss. On Thursday morning, April 13, an employee was seriously injured while working on the ROW in a location where access had not been requested or granted – a major violation of MBTA's ROW safety procedures. On Friday morning, April 14, MBTA experienced its fifth ROW near miss in just over one month.

Given recent events, the results of FTA's on-site inspections, reports from DPU, and the MBTA's backlog of maintenance work which necessitates continued track access for work crews, FTA finds that a combination of unsafe conditions and practices exist such that there is a substantial risk of death or personal injury.

¹ Corrective action plans include FTA-TRA-22-001, FTA-TRA-22-002, FTA-OCC-22-005, FTA-OCC-22-006, FTA-22-12-MBTA-CAT4-1 and FTA-22-12-MBTA-CAT4-2.

Therefore, in accordance with 49 U.S.C. § 5329(h), FTA is prohibiting MBTA from allowing ROW access unless MBTA takes the actions described below.

Enhance Monitoring of Implementation of Track Access Procedures

Beginning on Thursday, April 20, 2023, ROW access is prohibited unless MBTA submits to FTA daily ROW Access Planning and Verification Documents.

ROW Access Planning Documents (in advance of ROW access)

- 1. Submit to FTA and DPU (prior to the 5 a.m. start of revenue service) all Night and Day Orders for all rail transit lines in effect for the 24-hour period beginning with the start of revenue service.²
- 2. Submit to FTA and DPU (prior to the 5 a.m. start of revenue service) a compilation of all ROW Access Forms, showing access granted to work crews, by line, in effect for the 24-hour period beginning with the start of revenue service, that includes name, badge number, access location start point and end point, and associated access start and end times.
- 3. Submit to FTA and DPU (prior to the 5 a.m. start of revenue service) the work site hazard assessments completed before work crews were placed on the Night and Day Orders in effect for the 24-hour period beginning with the start of revenue service.

Completed ROW Access Verification Documentation (after ROW access)

4. Submit to FTA and DPU (**prior to the 5 a.m. start of a revenue service**), **for the previous 24-hour period**, a report, signed by the Chief Operating Officer, the Chief Safety Officer, and the General Manager, showing actual track access granted to work crews, by line, and documenting any identified deficiencies in ROW access protocols.

MBTA must submit this documentation daily until further notice from FTA.

In addition, FTA will conduct no-notice inspections to monitor MBTA's compliance with Night/Day Orders, ROW Access Forms, and work site hazard assessments in the Operations Control Center (OCC) and on the ROW. FTA will report any identified deficiencies to the MBTA's Chief Operating Officer and General Manager and DPU's Director of Rail Transit Safety for immediate resolution.

Assess Capacity to Support Track Access

² The 24-hour period includes the day's revenue service hours (5 a.m. to 1 a.m.) and the non-revenue hours (1 a.m. to 5 a.m.) for the following day. MBTA rules require that ROW access during revenue hours must be scheduled 24 hours prior to the start of work and ROW access during non-revenue hours must be scheduled 48 hours prior to start of work.

Beginning on Monday, April 24, 2023, ROW access is prohibited unless MBTA submits to FTA evidence that it has:

- 1. Completed an analysis, for each rail transit line, for revenue and non-revenue hours, that evaluates and recommends how many work crews safely can be granted ROW access and monitored under each MBTA Level of Protection. This analysis, at a minimum, must address:
 - a. lessons learned from recent ROW access violations and near misses;
 - b. radio limitations;
 - c. staffing and hours of service limitations; and
 - d. potential task saturation for MBTA workers:
 - i. focusing on the impacts of increased ROW access requests made and granted while managing normal operations and other activities, and disruptions such as late trains, in service defects or other events.
 - ii. including OCC dispatchers, Engineering & Maintenance department scheduling coordinators, operations superintendents, night trackmasters, operations construction supervisory personnel, flaggers, crew forepersons, and motorpersons.
- 2. Completed a review and analysis of the current language, references, layout and design of Night Orders/Day Orders, and other worksheets that OCC dispatchers use to track and monitor personnel on the ROW. This analysis must include a discussion on how non-retribution reporting of mistakes can be encouraged so that these situations can be analyzed to identify future strategies/processes or other mitigations to prevent mishaps. After review and analysis, MBTA should recommend changes that ensure there are no single points of failure when granting ROW access and time and location tracking of work crews on the ROW.
- 3. Completed a review and analysis of the communication process that identifies areas where a verbal confirmation/read back and verification can be implemented to ensure that communication errors are limited. This analysis must include a discussion on how non-retribution reporting of mistakes can be encouraged so that these situations can be analyzed to identify future communication strategies or other mitigations to prevent mishaps. After review and analysis, MBTA should recommend changes that require repeat back and positive confirmation between OCC dispatchers and work crews when granting ROW access.
- 4. Submit completed analysis to FTA and DPU. After FTA review and approval, institute identified work crew limits per line, until subsequent analysis, also submitted to FTA for approval, shows sufficient improvements in ROW access safety have been made, through the ROW Rules Compliance and Safety Work Plan and expedited revised initial ROW safety training program required below, to increase work crew limits.

Beginning on Friday, May 5, 2023, ROW access is prohibited unless MBTA submits to FTA evidence that it has:

5. Completed an audit of the MBTA's radio discipline with required ROW call/on and call/off procedures for each rail transit line for the last 30 days (March 14 to April 14, 2023) including compliance with initial call/on, call/off procedures, protection updates, repeat-backs, and radio transmission quality. This audit should identify any deficiencies and concerns. MBTA must submit results to FTA for approval and utilize the results as directed below.

Develop and Implement a ROW Rules Compliance and Safety Work Plan

Beginning on Friday, May 5, 2023, ROW access is prohibited unless MBTA submits to FTA evidence that is has:

1. Completed the development of a ROW rules compliance and safety work plan that sets forth corrective actions MBTA will take to improve compliance with ROW safety procedures and ensure motorperson awareness regarding the presence of workers on the ROW, based on review of near miss events, and the above required activities.

At a minimum, the work plan must address the following actions:

- a) worker ahead flagging or notice provided to motorpersons in stations in advance of workers on the ROW;
- b) re-configuration of available radio channels to provide additional capacity for heavy and light rail lines;
- c) review and revision of required information to be exchanged between flaggers and dispatchers during radio call on/call off process to ensure unambiguous and explicit communication;
- d) review and revision of night and day orders to ensure safety critical information is communicated explicitly;
- e) adoption of line maps or other tools for OCC dispatchers to track the presence of workers on the ROW;
- f) increased use of Level 3 protection for some MBTA work crews;
- g) additional training, qualification, and experience requirements for OCC dispatchers managing ROW access;
- h) additional training and qualification for Operations and Engineering & Maintenance flaggers;
- i) enhanced audits of ROW safety; and
- j) changes to the Safety Rules Compliance Program to include requirements for providing feedback to workers (positive and constructive) at conclusion of each observation and collection of additional information to support understanding of the real world conditions under which workers access the ROW.

If any action (a-j) is not adopted in the work plan, provide a rationale for excluding the action, and, as appropriate, identify alternate action(s) to ensure safety.

FTA will review and approve MBTA's work plan and will monitor the agency's progress in implementing corrective actions as part of FTA-TRA-22-002.

Expedite Revision of Initial ROW Safety Training Materials

Beginning on Friday, May 5, 2023, ROW access is prohibited unless MBTA submits to FTA:

- 1. An expedited timeline for revision of the MBTA's initial ROW safety training materials.
 - a. FTA requires this revision of MBTA's initial ROW safety training materials to include explicit reference to ROW rules and ROW Safety Rulebook, in each section.
 - b. FTA requires this training to include skill evaluation on using the ROW Safety Rulebook. FTA also expects these initial training materials to include set-up of a Level 2 and Level 3 Work Zone and practical exercises to demonstrate Level 4 flagging rules and procedures.
 - c. MBTA must coordinate with FTA an estimated date for delivery of draft initial ROW safety training materials to FTA and DPU for review prior to new course delivery.
 - d. FTA also will schedule a session with MBTA and DPU to review the draft initial ROW safety training materials. FTA and DPU must accept this training prior it its implementation.

Beginning no later than Thursday, June 15, 2023, ROW access is prohibited unless MBTA trains members to the new training materials and practices. Further FTA prohibits MBTA from issuing new ROW access/certification cards unless the new training program is implemented.

Conclusion

Safety is our top priority at the U.S. Department of Transportation and FTA. While we recognize MBTA's clear progress in many areas since the 2022 SMI, ROW near miss events continue to occur. Your commitment to take all necessary steps needed to immediately address these safety concerns is expected. If you have any questions or concerns, please contact the FTA SMI Coordinator Erin Powell or me.

Sincerely,

Joe DeLorenzo

Associate Administrator and

Chief Safety Officer

Office of Transit Safety and Oversight

cc: Jeffrey Gonneville, Deputy General Manager, MBTA

Erik Stoothoff, Acting Chief Operating Officer

Ron Ester, Chief Safety Officer, MBTA

Katie Choe, Chief of Quality, Compliance and Oversight Pat Richmond, Chief Transportation Officer, MBTA

Cecile M. Fraser, Acting Chair, DPU

Robert Hanson, Director, Rail Transportation Safety, DPU