REPORT OF THE JOINT COMMITTEE ON TRANSPORTATION RELATIVE TO THE SAFETY MANAGEMENT PRACTICES OF THE MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

JANUARY 3, 2023

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I. INTRODUCTION

The purpose of this report is to provide a record of the committee's oversight actions, together with relevant background. The goal is to inform the Legislature during the upcoming session as it considers possible additional legislative action relative to the MBTA's safety management practices. The report concludes by identifying a number of policy areas that deserve consideration in this regard.

The MBTA, through the work initiated by the previous financial control board, has demonstrated heightened concern for transit safety for more than three years, dating back to the convening of the Safety Review Panel (SRP). The SRP was initiated by the prior MBTA control board members after the June 2019 derailment that crippled Red Line service. Serious and tragic safety failures continued to plague the MBTA's operations, principally subway and bus services, continuing through the tragic death last spring of a Red Line passenger due to an undetected faulty door mechanism.

Throughout this period, the authority's safety practices have been scrutinized by outside agencies and experts in the field, and the public now has numerous reports and reviews available to it that dissect and explain the authority's deficiencies. This Report is intended to be a useful addition to the extensive body of work that is now available to the Legislature and the incoming Healey-Driscoll Administration.

Sadly, however, despite the heightened scrutiny over the last several years, the MBTA's safety program has continued to fall below the level that the public is entitled to expect from its public transit system. Much of this failure is attributable to a maintenance backlog that is decades in the making, and leadership decisions, both financial and operational, that were exacerbated by

the pandemic in acute ways. Yet, it is also clear that structural deficiencies impacting safety management do exist, and bold changes should be openly debated.

Ultimately, the primary concern for the committee is not whether adequate means exist to identify defects after a tragedy, but whether and to what degree change is needed to ensure that such defects are routinely discovered before safety events occur; the committee looks forward to continuing that discussion during the upcoming session with T officials, the new administration and, we hope, our federal partners.

II. TIMELINE OF NOTABLE SAFETY EVENTS: 2015-2022

At the outset, to place the committee's actions in historical context, the following is a non-exhaustive list of notable safety events that have occurred since 2015 at the T:

2015 – 2019: During this time period, the MBTA was particularly susceptible to derailments. The authority experienced no fewer than twenty-four "in-service mainline" derailments between 2015 and 2019.[1]

July 7 – August 17, 2015: Three derailments occur in quick succession on the Green Line involving Ansaldo-Breda "Type 8" low-floor vehicles. The design of the center truck of the Type 8 vehicles combined with excessive speed and degradation to track infrastructure makes the vehicles particularly susceptible to derailments.

July 17, 2015: The MBTA Fiscal and Management Control Board (FMCB), created by the Legislature to provide heightened oversight following the service shutdowns during the preceding winter, is convened.

December 10, 2015: Red Line train carrying approximately 50 passengers rolls out of Braintree station onto the main line under power with no operator at the controls. The train travels approximately five miles down the line, passing through at least three stations until MBTA employees bring the train to a stop in the vicinity of North Quincy by cutting electrical power to the line. No injuries.

June 2016: National Transportation Safety Board requires MBTA to conduct a fatigue risk analysis.

October 17, 2016: Deputy General Manager Jeff Gonneville gives a presentation to the FMCB on remedial measures taken in response to Green Line Type 8 derailments.

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[1] "Joint General Manager and Deputy General Manager Remarks," June 17, 2019 Fiscal and Management Control Board Meeting, available at: https://www.mbta.com/events/2019-06-17/joint-meeting-the-massdot-board-and-the-fiscal-and-management-control-board.

April 2017: FMCB issues a comprehensive strategic plan for the MBTA that lists safety as one of the top priorities for the authority, reiterating the authority's commitment to the Safety Management System principles as contained in federal regulations.

December 29, 2017: Collision between two 1940s era PCC car streetcars on the Mattapan High Speed Line branch of the Red Line in vicinity of Cedar Grove station resulting in seventeen injuries.

February 21, 2018: Red Line train derails in the morning in vicinity of Andrew Square station due to a faulty restraining bolt. The vehicle rerailed itself but not before causing significant damage to the third rail. Service disruptions last until the late afternoon.

August 30, 2018: The core portions of the Blue, Green, and Orange Lines suffer a loss of power due to a defect in a power cable affecting the lighting, propulsion, and signal systems of each of the three lines in downtown Boston.

November 27, 2018: Commuter Rail train derails on the Fitchburg line. Investigations determine a wheel separated from an axle on one of the cars. No injuries reported.

February 5, 2019: Green Line trolley derails on Riverside "D" Branch in vicinity of Brookline Hills station due to track geometry and existing conditions. Of note, the authority saw a significant increase in passenger traffic due to a Patriots parade in Boston on this day.

March 22, 2019: MBTA terminates Chief Safety Officer Ron Nickle.

May 1, 2019: Former Chief Safety Officer Ron Nickle provides a written statement to the FTA outlining his concerns with MBTA safety practices.

June 9, 2019: Green Line trolley derails in vicinity of Kenmore Square station. Ten injuries reported.

June 11, 2019: Southbound Red Line train on the Braintree Branch entering JFK/UMass station derails and collides with a bungalow shed containing signal equipment causing severe and extensive damage. Derailment causes months-long disruption along the Braintree Branch. Investigations determine the derailment resulted from a failed axle caused by long-term electrical arcing from a worn electrical grounding ring.

June 17, 2019: FMCB convenes to discuss the June 11 Red Line JFK derailment, and recent history of derailments. When MBTA staff was questioned by the FMCB as to whether the authority needed more funding to meet its repair needs, both General Manager Steve Poftak and Deputy GM Jeff Gonneville referred to the MBTA's Capital Improvement Plan as sufficient.[2]

June 27, 2019: Safety Review Panel convened at request of FMCB.

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[2] Meeting Minutes - June 17, 2019 Joint Meeting of the Fiscal and Management Control Board and the MassDOT Board of Directors, available at: https://www.mbta.com/events/2019-06-17/joint-meeting-the-massdot-board-and-the-fiscal-and-management-control-board.

September 16, 2019: FMCB approves an $18 million contract for the overhaul of ninety-five center trucks and spares for the Type 8 Green Line vehicles.[3]

October 2019: FTA conducts triennial review of DPU's State Safety Oversight Agency program.

December 9, 2019: Safety Review Panel issues its final report.

February 5, 2020: MBTA removes passengers and "isolates" a single "Type 14" CRRC manufactured Orange Line car at Wellington station when the doors would not close. MBTA reported the train remained in service and would be inspected following the morning rush.

December 8, 2020: FTA issues its final audit report following its triennial review of DPU's oversight program and finds 16 areas of non-compliance.

March 2020-June 2021: Massachusetts declares state of emergency in response to Covid-19 pandemic. Daily average of weekday ridership falls from 1.22 million trips per day in February 2020 to 142,000 trips per day in April of 2020.[4]

January 21, 2021: Fatality resulting from a grade crossing collision between a motor vehicle and a Commuter Rail train in Wilmington.

July 30, 2021: Collision between two Green Line trolleys in vicinity of Boston University resulting in twenty-seven injuries.

September 11, 2021: Fatality at Columbia Road and JFK/UMass station, attributable to a staircase that had been in a state of disrepair for approximately 20 months.

September 26, 2021: Nine persons injured when a crowded escalator at Back Bay station abruptly reverses direction.

September 28, 2021: Red Line derailment at Broadway station, followed by a runaway vehicle during an attempted rerail.

November 3, 2021: DPU issues triennial audit report of MBTA's safety program finding five areas of non-compliance.

March 14, 2022: FTA directs DPU to submit Corrective Action Plans (CAPs) for 7 open compliance issues identified in its 2020 audit report. The open compliance issues center on PPE, track maintenance, investigations, and hazard identification.

April 10, 2022: Fatality at Broadway station when malfunctioning doors close on a passenger and fail to reopen as the train departs.

April 14, 2022: In a letter directed to GM Poftak, FTA informs the MBTA that it is initiating a Safety Management Inspection (SMI) of the transit agency.

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[3] Meeting Minutes – September 16, 2019 Joint Meeting of the Fiscal and Management Control Board and the MassDOT Board of Directors, available at: https://cdn.mbta.com/sites/default/files/2019-10/2019-09-16-FMCB-minutes.pdf

[4] MBTA Performance Dashboard "Ridership – Average Weekday Trips by Month," available at: https://mbtabackontrack.com/performance/#/detail/ridership/2022-10-01////.

May 7, 8, and 9, 2022: Construction equipment derails on three consecutive days during work on the Blue Line during a planned service diversion for maintenance of infrastructure. The series of derailments results in an extension of the service diversion beyond its intended end date.

May 19, 2022: Braking system on a new "Type 14" CRRC Orange Line vehicle becomes disabled at Wellington station. MBTA removes all CRRC manufactured vehicles from service for further inspection.

May 30, 2022: During an attempt to decouple a pairing of Red Line cars in the Braintree yard just beyond Braintree station, a four-car section breaks away and rolls out of the yard, through Braintree station, and onto the main line until coming to a stop on its own.

June 1, 2022: Four MBTA operators are injured when an in-service two-trolley consist of Green Line vehicles collides with another two-trolley consist of vehicles about to enter service at Government Center Station.

June 14, 2022: Service is disrupted on the Green Line between Government Center and Park Street stations when MBTA reports two Green Line vehicles "unintentionally coupled." Passengers were required to evacuate the vehicles through the tunnel.

June 15, 2022: FTA issues five interim directives in connection with ongoing SMI, four pertaining to MBTA operations and one addressing DPU.

June 19, 2022: An escalator at Chinatown station on the Orange Line reverses direction. No injuries.

June 20, 2022: A battery explodes on a stationary Type 14 Orange Line vehicle in Wellington Yard. MBTA again removes all CRRC manufactured vehicles from service for further investigation.

June 20, 2022: MBTA implements a reduced frequency Saturday schedule on weekdays for the Red, Orange, and Blue Lines due to the lack of certified dispatchers at the MBTA's Operational Control Center.

July 21, 2022: During the morning rush commute, the lead car of a southbound Type 12 Hawker-Siddeley Orange Line vehicle catches fire as it attempts to cross the rail bridge spanning the Mystic River. Passengers evacuate onto the right of way, with one electing to jump off the rail bridge into the river below. Investigations determine the fire started from a dislodged metal sill hanging off of the vehicle coming into contact with the third rail.

July 25, 2022: Around 5:30am, a two-car consist rolls out of Braintree yard through Braintree station and on to the main line. MBTA reports that due to "diminished braking capacity" the vehicle was unable to stop before rolling onto the main line. Red Line Braintree branch suffers residual service delays.

August 12, 2022: Service on the Blue Line is disrupted for several hours when the pantograph connecting a Blue Line train to the overhead catenary wire system is damaged at Suffolk Downs station. The damage was caused by the pantograph contacting a piece of fiberglass which fell from a closed pedestrian bridge at the station onto the catenary wires. Shuttle buses are put in place for several hours.

August 12, 2022: A power problem on the Green Line disables trolleys between Kenmore Square station and Hynes station. Passengers are required to evacuate the vehicles through the tunnel to the closest respective station.

August 19 – September 18, 2022: MBTA shuts down the entire Orange Line for one month to allow work crews around the clock unrestricted access for repairs. Concurrently, the portion of the Green Line between Government Center station and Union Square in Somerville are also closed between August 22 through September 18, 2022. The MBTA provides shuttle bus service and enhanced Commuter Rail service for portions of the Commuter Rail which parallel the Orange and Green Lines.

August 31, 2022: FTA issues its SMI Final Report.

September 11, 2022: A catenary wire dislodges from the ceiling of Park Street station falling on top of a Green Line vehicle causing a series of loud sparks and smoke. Service on the Green and Red Lines is temporarily disrupted due to the evacuation of Park Street station.

September 19, 2022: Green Line trolley derails outside of Park Street station before midnight.

September 20, 2022: During the evening commute, passengers are removed from a Type 14 Orange Line train at Downtown Crossing station when the doors will not close. MBTA reports the train was taken out of service.

October 11, 2022: Red Line service is suspended between Ashmont and Fields Corner on the Ashmont branch due to an issue with the tracks. MBTA implements shuttle bus service.

October 20, 2022: MBTA implements shuttle bus service between Alewife and Harvard stations for the morning commute on the Red Line due to overnight maintenance work running over scheduled completion. Delays are experienced throughout the line.

October 20, 2022: A late night power failure on the Blue Line disrupts service leaving passengers in darkness.

December 10, 2022: An Orange Line train loses power near Community College station. Passengers are evacuated along the right of way back to Community College when power cannot be restored to the vehicle.

December 11, 2022: *Boston Herald* reports a train on the Green Line derails disrupting service for several hours which the MBTA attributes to a disabled vehicle.

December 30, 2022: Nine Orange Line cars are taken out of service after inspections reveal electrical arcing caused by faulty power cables may have compromised axles on the vehicles.

III. SUMMARY OF APPLICABLE LAW

A. BEGINNINGS

Safety practices at state transit agencies have been regulated at the federal and state levels dating back to at least 1991, when Congress passed legislation requiring the Federal Transit

Administration to adopt rules and regulations implementing an oversight program that placed primary responsibility for the safety of rail transit with the states.[5] The initial rule implementing the program was put into effect by the FTA in 1996, requiring states served by rail fixed guideway systems to designate a state entity to serve as a State Safety Oversight Agency (SSOA).[6] It further required transit agencies that operated such systems to adopt "system safety program plans" (SSPPs) that complied with the American Public Transit Association's "Manual for the Development of Rail Transit System Safety Program Plans."[7] At that time, only five states had some form of SSOA in place overseeing the safety of rail transit. During the next decade, an additional 21 states would join them.[8]

In 2006, the FTA substantially amended this rule. The 2006 revision struck the incorporation by reference of APTA's Safety Manual and stipulated twenty-one separate elements that SSPPs were required to contain, including, most prominently, the first rules requiring SSOAs and transit agencies to document procedures for "hazard management processes" concerning the identification of and response to hazards.[9]

Thereafter, passage of the 2012 federal surface transportation act, commonly known as MAP-21, represented a pivotal moment in transit safety, as Congress sought to replace the existing scheme with an enhanced oversight program.[10] Five new rules were promulgated to replace the former program, providing separate regulatory schemes governing asset

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[5] See 60 Fed. Reg. 67034 (December 27, 1995). The state safety oversight program excluded – and continues to exclude - certain rail fixed guideway systems such as MBTA commuter rail that are subject to oversight by the Federal Railroad Administration.
[6] See 60 Fed. Reg. 67034 (discussing final adoption of 49 CFR 659 (since repealed)).
[7] See 60 Fed. Reg. 67044.
[8] See 70 Fed. Reg. 22562 (April 29, 2005) (approving amendments to 49 CFR 659, the precursor to SSOA regulations in existence today, which are codified at 49 CFR Part 674).
[9] See 70 Fed. Reg. 22566-67, discussing 49 CFR § 659.19 (since repealed).
[10] Codified at 49 USC § 5329 (public transportation safety program) and 49 USC § 5326 (transit asset management).

management,[11] SSOA program standards,[12] and public transit agency safety plans (PTASPs) that would now apply to all modes.[13] New rules were also adopted that set standards for mandated safety training certifications[14] and the parameters of the FTA's new enforcement functions.[15]

Though the structure and many of the requirements of state rail oversight remained largely the same – with designated SSOAs monitoring and enforcing compliance by rail authorities with safety plans adopted by those authorities[16] – there was a perspective shift with the passage of MAP-21, driven in part by the fact that agency safety plans would now be expanded to cover bus, paratransit and other modes of service. The intent was to put in place a more flexible, data-driven "proactive" approach to identifying and remedying hazards as opposed to the "reactive" approach of responding to causal factors identified after an accident or incident.[17] The FTA referred to the new scheme and its principles as the Safety Management System, or SMS, the requirements of which are well summarized in Appendix B to the Safety Review Panel Report, which is incorporated in this report by reference.

B. FEDERAL REQUIREMENTS

Taken together, the various federal rules regulating state safety oversight require adoption of safety programs that contain the following basic attributes:

> With respect to transit agencies that provide services to the public along "rail fixed guideway" systems, designation by the state of a state agency that is "financially and

[11] See 49 CFR Part 625.
[12] See 49 CFR Part 674.
[13] See 49 CFR Part 673.
[14] See 49 CFR Part 672.
[15] See 49 CFR Part 670.
[16] See 81 Fed. Reg. 48928 (July 26, 2016). The FTA has created a "crosswalk" comparing the required elements of the pre- and post-MAP-21 safety plans, available at Crosswalk Matrix: 49 CFR Part 659.19 System Safety Program Plan Requirements with Proposed Requirements for Public Transportation Agency Safety Plans (dot.gov).
[17] See National Public Transportation Safety Plan, pp. 9-10. It is not entirely clear to the committee which aspects of the new system were intended to achieve this result.

legally independent"[18] from the transit agency, with "appropriate staffing levels" that are determined after consultation with the FTA, to function as SSOA in accord with 49 CFR Part 674 for the purpose of overseeing and enforcing compliance by the transit agency with federal and state safety laws and the authority's PTASP;[19]

Adoption of safety oversight program standards by the SSOA in accord with 49 CFR Part 674 that set forth the duties and obligations of the SSOA and transit agency with respect to oversight of the transit agency's safety program;

Development and adoption by the transit agency, with approval by both the agency board and SSOA and subject to annual review and revision, of a public transportation agency safety plan (PTASP) that meets the requirements of 49 CFR Part 673, including the adoption of performance targets consistent with the National Public Transportation Safety Plan and the implementation of SMS principles;[20]

Development and adoption by the transit agency of a transportation asset management plan, updated at least every 4 years, that meets the requirements of 49 CFR Part 625, including an inventory and condition assessment of capital assets and the establishment of performance targets related to the reduction of state of good repair backlogs, and, importantly, that requires "due consideration" of the prioritization of assets that present "identified unacceptable safety risks;"[21]

Designation of an "Accountable Executive" within the transit agency with primary responsibility for ensuring compliance with the PTASP and asset management plan;[22]

Identification of a chief safety officer within the agency with a direct reporting line to the agency's general manager;

Mandatory reporting of "accidents"[23] to both the FTA and National Transit Database (NTD), and mandatory reporting of "incidents"[24] to the NTD;[25]

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[18] Absent waiver by the FTA, the federal regulations also prohibit the SSOA from retaining the services of any employee or contractor of the transit agency. 49 CFR § 674.41(b).
[19] See 49 CFR § 674.11.
[20] Note that in contrast to the scope of authority of the SSOA, which is limited to rail fixed guideway systems, PTASPs are intended to cover other modes of transit that are not otherwise federally regulated, including bus service.
[21] See 49 CFR § 625.33 as to prioritization of capital investments.
[22] The General Manager of the MBTA is the Accountable Executive for the authority.
[23] "Accident" is defined as "an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause." 49 CFR § 674.7.
[24] "Incident" is defined as "an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency." 49 CFR § 674.7.
[25] See Appendix A to 49 CFR Part 674 regarding federally required notification standards.

Investigation of "safety events,"[26] with active oversight by the SSOA of accident investigations conducted by the transit agency, and issuance of a report within a reasonable time following an accident that describes causal and contributing factors and any corrective action plans;[27]

Documented processes by which the transit agency assesses the safety risks posed by identified hazards, including "an assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk;"[28]

Procedures related to the development, implementation and monitoring of corrective action plans (CAPs) by transit agencies, as approved by SSOAs, where CAPs are defined as "a plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions."[29]

Triennial audit of SSOA activities by the FTA;[30]

Triennial audit by the SSOA of a transit agency's compliance with its PTASP;[31]

Annual safety status report delivered by the SSOA to the governor and the transit agency's board;[32]

Annual report issued by the SSOA to the FTA on or before March 15 noting, among other things, any approved changes to either the program standard or PTASP and a publicly available description of oversight activities, including causal factors identified in accident investigations and status of CAPs;[33]

Compliance by the SSOA and transit agency with the federally mandated Safety Certification Training Program in accord with 49 CFR part 672; and

Adoption of a document retention policy that requires the transit agency to retain PTASP and SMS-related documents for not less than 3 years.[34]

C. KEY ASPECTS OF STATE IMPLEMENTATION

[26] See 49 CFR § 673.27(b)(4). Safety "events" include accidents, incidents and occurrences.
[27] See 49 CFR § 674.35 and 49 CFR § 673.27.
[28] See 49 CFR § 673.25(c).
[29] 49 CFR § 674.37.
[30] See 49 CFR § 674.11.
[31] See 49 CFR § 674.31.
[32] See 49 CFR § 674.13(a)(7).
[33] See 49 CFR § 674.39
[34] See 49 CFR § 673.31.

Notable features of the DPU's and MBTA's implementation of the federal state safety oversight program, as set out in 220 CMR 151 and the MBTA's PTASP, are as follows:

Designation of the General Manager as the MBTA's Accountable Executive;

Mandatory annual review by the MBTA of its PTASP, with any updates provided to DPU by September 1 for approval;[35]

Mandatory internal audits by the MBTA covering all aspects of its safety program conducted over a 3-year cycle, with associated annual reporting to DPU by February 15;[36]

Establishment within the PTASP of performance targets and metrics related to safety, including the number of fatalities, injuries, safety events and mechanical failures by mode, which are reviewed monthly as part of the Safety Data Analysis Report (SDAR);[37]

Retention for 3 years of the safety-related documents listed in Table 1 of the PTASP;[38]

To ensure proper communication and deliberation concerning safety matters, the establishment of safety committees at various levels of the authority, including:

Executive Safety Council (CSO and MBTA leadership; quarterly meetings; reviews matters for possible elevation to the GM);

Safety Management Review Committee (CSO and high-level executive management; monthly meetings; senior technical review committee that reviews all safety findings, data, and regulatory changes; meeting summaries provided to Executive Safety Council);

Safety Management Working Groups (executive management; review cross-departmental safety issues and matters that are elevated by department- and mode-specific working groups);

Data Analysis Groups (organized by mode or department; review performance metrics and aggregated safety data); and

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[35] See 220 CMR § 151.03(4).

[36] See 220 CMR § 151.05. See also MBTA PTASP, § 6.5.1. Note that the committee has examined the FY22 PTASP signed by the GM on June 3, 2021, available at https://www.bostonmpo.org/data/calendar/pdfs/2022/MPO_0331_MBTA_Safety_Plan_FFY_2021.pdf. A revision to the T's PTASP was recently approved by the MBTA Board at a meeting on December 15, 2022.

[37] See MBTA PTASP, § 3.1 and Table 2.

[38] See MBTA PTASP, § 2.7.

Local Safety Committees (management-labor committees formed to address safety issues affecting a particular line or facility);[39]

With respect to safety assurance, in addition to regular inspections of capital assets, daily review and monitoring by MBTA safety personnel of the Incident Reporting Information System, which catalogues "issues and defects" reported by operators and engineering and maintenance staff;[40]

In connection with SMS principles related to safety risk management, the identification of hazards through both investigations and the review of data collected by the MBTA's Hazard Tracking System;[41]

Assessment by the MBTA of the risk posed by any identified hazards using the "Risk Assessment Matrix" depicted in Table 9 of the PTASP, which assigns a "risk factor" to hazards based upon the likelihood of the "worst credible" outcome of the hazard, provided that any residual risk associated with either an "unacceptable" hazard or "undesirable" hazard (the two most severe categories) is presented to and accepted by the General Manager or "Agency Leadership," respectively;[42]

Notice to the DPU of all accidents and all hazards that receive risk factor assessment scores of "unacceptable" or "undesirable" (see above);[43]

Investigation by the MBTA of all safety events and all identified hazards with risk factors of "unacceptable" or "undesirable" conducted under the oversight of the DPU and in accordance with the authority's Safety Event Investigation Manual;[44]

Implementation of a "voluntary, confidential, non-punitive" employee safety reporting program (extends to contractors, as well) that enables workers to report safety issues by

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[39] See MBTA PTASP, § 4.2.
[40] See MBTA PTASP, § 6.1.
[41] See MBTA PTASP, § 5.2.
[42] See MBTA PTASP, §§ 5.2.3 through 5.2.5. Per § 4.1.4, "Leadership" includes the Deputy General Manager and other senior officers.
[43] See 220 CMR §§ 151.06 and 151.09. Note that DPU's definition of "accident" tracks but is not identical to the federal definition discussed in footnote 23 above. DPU defines "accident" for notification purposes as follows: "(a) Fatality at the scene or occurring within 30 days following the accident; (b) One or more persons suffering Serious Injury; (c) Property damage resulting from a collision involving a rail transit vehicle or the derailment of a rail transit vehicle; (d) Evacuation due to life safety reasons; (e) Derailment; (f) Collision with a person resulting in Serious Injury or fatality; (g) Collision between a rail transit vehicle and second rail transit vehicle or a rail transit non-revenue vehicle; (h) Collision at grade crossing resulting in Serious Injury or fatality; (i) Collision with an object resulting in Serious Injury or fatality; or (j) Fires resulting in Serious Injury or fatality."

[44] See MBTA PTASP, §§ 6.2.4 and 6.2.5. The committee notes that it has not had an opportunity to review a number of the manuals and standard operating procedures referred to in the PTASP, including the Safety Event Investigation Manual.

calling a hotline, by email, through a direct report to a safety official, or by filing a form with a safety officer;[45] and

Inclusion of appendices to the PTASP that contain more detailed department-specific guidelines with respect to the authority's implementation of SMS principles.

IV. RECORD OF COMMITTEE'S OVERSIGHT PROCEEDINGS

In early July 2022, the committee began its oversight review of safety lapses at the MBTA. The committee scheduled an initial hearing at the State House in Gardner Auditorium for July 18, 2022 for the purpose of receiving testimony from MBTA General Manager Steven Poftak and Secretary of Transportation Jamey Tesler. The committee also disclosed publicly at that time that it had submitted a formal request for pertinent documents to Secretary Tesler and General Manager Poftak.

Two additional hearings were held on September 14, 2022 and October 25, 2022.

Archived recordings of the committee's public hearings may be accessed online at https://malegislature.gov/Events/Hearings/Joint .

A detailed summary of the committee's actions follows. Statements and conclusions of the witnesses described below are their own and are not necessarily reflective of the view of the committee members.

A. JULY 18, 2022 OVERSIGHT HEARING

The Committee held its first oversight hearing on July 18, 2022 for the purpose of examining issues related to deficiencies in safety management practices at the MBTA. The committee heard testimony from Massachusetts Secretary of Transportation Jamey Tesler and MBTA General Manager Steve Poftak. As the FTA's investigation was still ongoing at the time

[45] See MBTA PTASP, § 6.2.7.

of this hearing, the Committee used this opportunity in part to examine the progress of implementation of the recommendations in the 2019 Safety Review Panel Report.[46]

The testimony and response to questions by the Secretary and General Manager reflected their understanding of the serious safety problems and the needed corrective actions at the time of the hearing. The subsequent FTA report in August, 2022, and the fact that a new Secretary and GM will assume their positions during 2023 provide a fresh opportunity for the MBTA to address the safety and performance needs at the agency.

In their prepared statements before the committee, both the Secretary and the General Manager highlighted the efforts the MBTA had taken to ensure safety was the top priority at the T. The newly formed MBTA Board of Directors, established by the Legislature in 2021 to replace the FMCB (created in 2015 after the crippling snow events of that winter brought the T to a virtual shutdown), is required to include members with operational safety experience, as recommended by the Safety Review Panel. The MBTA has asserted that it completed, or is in the process of completing, all of the Report's 34 recommendations and 61 corrective actions.

Secretary Tesler stated that prior periods of under- or dis-investment in the system were the driving force behind the MBTA's current safety performance, but believed that significant gains had been made in recent years to upgrade and repair assets at the authority.

The Committee asked the General Manager for insight on the FTA's focus, and the General Manager indicated that staffing problems at the MBTA are a core cause of many of the

[46] Available at https://archives.lib.state.ma.us/handle/2452/808853. Following a Red Line train derailment in June 2019, the Fiscal and Management Control Board (FMCB) commissioned a panel of three nationally recognized transportation experts to conduct a review of safety policies and procedures within the organization. The panel was informed through numerous site visits, ride-alongs, and interviews with more than one hundred MBTA employees. Their findings were released in December 2019.

safety concerns. The MBTA hoped to address this shortage in 2023 by hiring up to 2,000 additional employees.[47]

General Manager Poftak said the MBTA has "embraced" both the Safety Review Panel and the FTA's safety management inspection process. He acknowledged the role that staffing shortages have played in recent safety incidents, noting that it is not a problem unique to the T; both peer agencies across the country and other public agencies in different sectors have faced similar challenges post-pandemic. The authority's budget is sufficient to support a larger workforce, but it has struggled to hire new employees. The GM asserted that the MBTA has engaged in an aggressive hiring campaign, including the use of substantial signing bonuses, to address these shortages and some of the FTA's directives.

General Manager Poftak estimated the cost of meeting the FTA's directives to be $300 million.

The 2019 Safety Review Panel Report indicated that a focus on capital delivery at the T may be coming at the expense of safe operations. The MBTA has responded to that report by hiring more operations staff who can support capital projects but also be available to perform necessary operations work, according to both the Secretary and the General Manager. The General Manager was candid that the hiring process has been a challenge and will continue to be a focus moving forward. He also pointed to increased use of longer-term shutdowns –referred to as "piggyback projects" – which reduces the number of operations support staff that is needed. In his view, the longer-term shutdowns (as later occurred with the Orange Line work in the fall of 2022) enable operations staff to go in and do additional work. Many of the existing capital

[47] Per materials presented on December 1, 2022 to the Planning, Workforce, Development and Compensation Subcommittee of the MBTA Board, the MBTA has seen a net increase in headcount of 158 positions for FY22 and FY23 combined (as of 11/21/22).

projects at the MBTA are maintenance projects, which are intended to improve performance of the authority's assets.

The hearing also included a discussion of the possibility of shifting the MBTA away from responsibility for capital projects, and instead focusing primarily on being an operations entity.

The MBTA does have a history of using outside entities to manage certain projects and Secretary Tesler stated an openness to creative scenarios where that approach might work. According to GM Poftak, however, for work being done on the existing system, integration with operations is a key component of success, and the participation of MBTA personnel is "safety critical." The Secretary also referenced the Green Line Extension Project, where the agency built a separate, purpose-built organization for the life of that project. That project team had its own structure, resources, and leadership team. MassDOT has also undertaken major capital construction projects within the department, with the MBTA acting as a "client" as opposed to managing the project in-house.

For large capital projects, there are several options for structuring the project that can be successful depending on the type of project and whether it involves an existing or new rail line. Regardless of the proposed project delivery plan, avoiding interference with the day-to-day operations of the T is crucial. With the ability to compete for federal funding made available through the Bipartisan Infrastructure Law over the next several years, the MBTA (or MassDOT) should be able to take a varied approach to compete for these investments.

Committee members asked both the Secretary and the General Manager about their communications policies. These questions sought answers on the question of who decides how the public is informed about safety incidents and what information will be included in public releases, as public trust is a critical component of a safe and reliable system. The General

Manager affirmed that the public can expect timely and accurate communications from the T, but such announcements would continue to be made in coordination with the Administration.

The 2019 Safety Review Panel Report also outlined pervasive problems with the safety culture within the MBTA, detailing employees' concerns that issues raised were not being adequately addressed by leadership. Some employees even expressed fear of retaliation for speaking up. Committee members asked the General Manager to outline what had been done since 2019 to improve the safety culture at the MBTA. The GM acknowledged that shifting a culture is a process that takes time, but asserted that they have taken proactive steps since the report was released in December 2019.

First, according to the GM, the MBTA created venues to listen to employees, including town halls where employees could share feedback and questions anonymously. The MBTA also holds "no meeting days" once a month where operations managers are out in the field visiting facilities, riding the system and speaking with employees.

The MBTA also has an existing safety hotline, which they have been "promoting in earnest" since the Safety Review Panel Report to solicit and encourage more employee feedback. These calls are reviewed by senior management on a daily basis. The General Manager viewed the increased number of calls to the hotline as a positive development, as employees have started to trust that those calls will be acted upon.

The MBTA also offers a quarterly newsletter where they highlight an employee who brought an important safety issue to light in order to celebrate that employee.

Committee members asked about whether or not the MBTA handles issues proactively or reactively, and the General Manager pointed to the new Orange and Red Line vehicles as an example; eventually these lines will see 404 new cars between them, and the decision to take

new cars off the line should, in his view, ensure the entire system is safe in the long run. He believed that this will mean that the remaining cars will not have problems, despite the immediate inconvenience of pulling these new cars out of service. The GM noted that these new vehicles have such a high degree of complexity that there will be challenges when it comes to accepting them, but stated that he does not view them as a poor investment.

B. SEPTEMBER 14, 2022 OVERSIGHT HEARING

The committee held a second oversight hearing on September 14, 2022. Invited to testify at this hearing were Department of Public Utilities Commission Chair Matthew Nelson, Chair of the MBTA Board of Directors Betsy Taylor, MBTA bus operator Toni Hobbs, and President of the Machinist Union 264 Boston Jeb Mastandrea. The September hearing occurred after the release of the FTA report and as a result provided an additional resource for the comments by witnesses and committee members; however, the FTA continued in its refusal to assist the committee in its work.

Testimony from DPU Commission Chair Matthew Nelson

Chair Nelson furnished the committee with further information about the role the DPU plays as the state safety oversight agency of the MBTA, and what the agency is seeking to do moving forward to improve their oversight capabilities. In order for the DPU to be the designated state safety oversight agency of the Commonwealth for the T's rail operations, the FTA itself had to accept this designation originally under federal requirements.

The DPU agreed with the FTA's recommendations as a vital component of ensuring rider safety and, according to Mr. Nelson, worked closely with both the FTA and the MBTA to begin implementation of those recommendations.

As a result of the FTA inspections in 2022, the DPU had begun to expand its fieldwork and auditing of the MBTA. They are looking to hire additional transportation safety experts, but acknowledged that finding candidates with the requisite skills on rail operations has been a challenge and remained incomplete at the time of the September 2022 hearing.

According to Mr. Nelson's testimony, the DPU began shifting its focus in 2018 from root-cause analysis (identifying issues after incidents occur) to a more proactive, preventive program (looking at hazards and potential risks before they become accidents). The FTA concluded that the DPU needs additional resources to implement this new strategy successfully. Mr. Nelson agreed in his testimony that the DPU needs a larger staff to continue to improve safety on the MBTA lines. This additional staff capacity includes the creation of a new Director of Rail Transit Safety position.

Though the DPU has oversight authority, "the MBTA is still the primary and first line of defense on all safety activities," according to Chair Nelson. The DPU's fundamental goal is to ensure that members of the MBTA are doing their jobs and complying with their safety plans, and taking the steps needed in identified areas of improvement. According to Chair Nelson, the

DPU has been meeting its requirements, but "given the circumstances, more needs to be done."[48] The Chair believes that a larger staff will enable the agency to take on this enhanced role.[49]

Testimony from MBTA Board Chair Betsy Taylor

In 2021, the newly established MBTA Board of Directors replaced the Fiscal and Management Control Board as the internal oversight body at the MBTA. Betsy Taylor serves as the chair of the successor seven-member board created by the Legislature.

Chair Taylor stated that safety is the top priority of the Board, but acknowledged the MBTA has much work to do in order to make the system safer. She referenced years of deferred maintenance projects, which means that progress will be gradual as the backlog is addressed: "It will take years of dedicated resources and hard work to bring the T's assets to the desired state of good repair."

Chair Taylor also mentioned the hiring "challenges" that continue to plague the MBTA. As also claimed by the GM in his July testimony, she noted that many peer transportation agencies across the nation are facing similar hiring difficulties. She referenced a March 2022 study from the American Public Transportation Association that shows that more than nine in ten public transit agencies have reported difficulties in hiring new employees, which has resulted in

[48] A fair number of public comments have been made in recent weeks about whether the DPU is the appropriate agency or department to be the safety oversight agency approved by the FTA for the subway transit work of the MBTA. While the DPU has other areas of statutory responsibility, simply moving the oversight responsibilities to another part of the state government is something that requires extensive consideration and, legally, involves the FTA given its role in certifying what would be a successor to the DPU. Unfortunately, as discussed in depth below, the FTA chose to avoid the committee's invitations for input in the Legislature's safety oversight role; had the FTA agreed to express views on this matter and share its views to the committee on even this particular issue of the proper function and resources for safety oversight, the Legislature would be in a better position today to consider improvements or alternatives to the critical safety oversight role now being performed by the DPU. It is hoped that the USDOT will re-think its role with the Massachusetts Legislature and adopt a more cooperative posture in the new year with respect to enhancing the safety performance of the MBTA.

[49] Unstated by Mr. Nelson, but likely, is that in addition to staffing needs in numbers, a review should occur as to the relative compensation of those hired for the importance of the work to be performed.

71% of said agencies needing to cut or delay services due to worker shortages.[50] The MBTA, like many other transportation agencies, has implemented (1) increased starting pay, (2) sign-on bonuses, (3) referral bonuses, and (4) retention bonuses to help address these issues.

Chair Taylor also discussed the Board's unprecedented decision to transfer $500 million from the T's operating budget to its capital budget in January 2022. The decision was rooted, in her assessment, in the concept that one-time funds should be spent on one-time uses with lasting, long-term benefits. She says these funds were allocated towards key capital investments in safety, employee recruitment and retention initiatives, key shovel-ready and shovel-worthy projects, improvements to bus facilities, and to prepare for additional federal formula funding:

> $145 million went to ensuring Massachusetts hit the required local match for federal funding opportunities, and the T has assembled a team that is aggressively applying for those funds;
>
> $170 million went to the Green Line Protection System, to accelerate design and installation;
>
> $20 million went to employee initiatives, such as frontline employee pandemic pay, and increasing HR staff capacity; and
>
> $48 million went to the commuter rail automatic train control safety program, which is federally mandated.

These capital investments, according to Chair Taylor, advanced critical safety projects, which are necessary to safe and reliable service.

Testimony of Toni Hobbs

Ms. Hobbs offered testimony before the committee as a 23-year employee of the MBTA. She has worked in several roles within the MBTA, but most of her experience has been as a bus driver.

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[50] https://www.apta.com/wp-content/uploads/APTA-SURVEY-BRIEF-Workforce-Shortages-March-2022.pdf

Ms. Hobbs described her earliest days as an MBTA employee positively, saying she "absolutely loved" her job as bus driver. As the years progressed, her job became more difficult from a safety perspective. Ms. Hobbs is still required to complete a ten-minute circle check of her bus when she starts her shift, despite many add-ons that have been added to her checklist over the years. Ms. Hobbs only has those ten minutes to determine that everything on the bus is in order and working safely before putting the bus in service.

Ms. Hobbs also described a lack of communication between leadership at the MBTA and frontline employees. She feels as though operators such as herself do not have a seat at the table, which means decisions are being made without their first-hand experiences and expertise as a frontline worker. Frontline workers are in the best position to know what policies can make a difference in safety operations, but there is currently no way for them to submit that input. She provided the example of the recent addition of new fare boxes on buses, which she says present safety concerns that could have been prevented if bus operators were consulted before their installation.

Ms. Hobbs also expressed her concern with implementation of new schedules, which continually reduce trip times. While riders want to be able to get to their destination efficiently, these schedules can place burdens on drivers and create the potential for safety incidents and accidents to occur.

Finally, Ms. Hobbs addressed how employee shortages have impacted her work as a bus driver. Not having enough drivers has resulted in crowded buses and delays in service, putting an onus on drivers to handle frustrated passengers on full buses who had been waiting for buses that did not show because a driver called out or buses that could no longer pick up passengers due to overcrowding. Ms. Hobbs stated that she and her colleagues are not just on the frontlines of

potential safety hazards, but of customer interaction day in and day out. This has led to less employee satisfaction, which also contributes to difficulties attracting and retaining new employees.

Testimony of Jeb Mastandrea

Mr. Mastandrea provided comments pertaining to his experience as an outside machinist at the MBTA, working primarily on MBTA facilities. Mr. Mastandrea works on compressors, train lifts, bus lifts, garages, back-up power engines, and additional facilities and equipment spanning the entire network.

Mr. Mastandrea identified staffing levels as his primary safety concern. Mr. Mastandrea and his colleagues cover nine bus garages and seven train facilities with eleven employees. They do not have time to do preventive maintenance; instead, they are required to be "putting out fires." He recalled that 20 years ago, there were approximately 35 employees who were doing the same tasks now performed by those 11 individuals. When these employees are unable to complete tasks, the solution has been to call in a contractor to complete the work. Many times, this adds additional work for employees as they have to check, and sometimes even correct, the work that was done by contractors.

In his personal experience, Mr. Mastandrea recalls instances where he has reported issues to the safety hotline and years later, the problem persists.

C. OCTOBER 25, 2022 OVERSIGHT HEARING

The committee held a third oversight hearing on October 25, 2022. The sole witness at this hearing was former United States Secretary of Transportation Ray LaHood. Secretary LaHood was also one of the three members of the 2019 Safety Review Panel.

Secretary LaHood emphasized that commuters and travelers should not be thinking of safety when they board a train, plane, or bus. The public must be assured that they will get where they need to go safely, which means there should be zero tolerance for any safety incidents within the organization.

It is the job of transportation organizations to create a robust safety culture. Safety should not just be the primary concern for operators; it needs to be "embedded in every person who works for the organization," and that culture must come directly from those in the top leadership positions.

Secretary LaHood categorized the implementation and enforcement of safety culture as the top priority for transportation organizations. Problems will persist, even with deep financial investments, if that culture is not embedded in every aspect of the organization. As an example, he recommended that organization members be rewarded for reporting safety defects, whether financially or through other incentives.

Secretary LaHood's testimony included four recommendations for the MBTA:

1. The MBTA should publish a comparison between the FTA report and the 2019 Safety Review Panel recommendations. They should identify specific, measurable safety performance goals, interim milestones, and annual tracking progress against them. While the FTA recommendations focused on rail, this comparison should include commuter rail, RIDE paratransit services, and bus networks as well.
2. The MBTA's Chief Safety Officer should certify that the staff department-submitted budgets for annual operating and capital spending reflect plans and resources that enable improvements in safety consistent with the goals from the recommendations of both reports.

3. The DPU should no longer have state safety oversight authority over the MBTA. The certified SSOA needs to be proactive, not reactive, and their work needs to be transparent to the public.
4. Massachusetts needs to create an independent agency that will regularly issue reports to the MBTA and have the ability to oversee all elements of safety. This board may only be temporary until the safety plan is in place, but should be responsible for deciding what needs to get done, how it gets done, and who will bear the financial costs.

The Secretary also acknowledged the role that the pandemic has played in delaying implementation of the recommendations of the 2019 report. Progress was stymied by the necessary pandemic-related precautions, and he believes that the MBTA would be further along if not for these unforeseen circumstances. Ultimately, however, he noted that it is clear from both the 2019 report and the FTA recommendations that the current system is not working and change needs to be implemented quickly.

D. DOCUMENT REQUESTS

In addition to the public testimony before the committee during the summer and fall of 2022, the committee issued a formal request for documents from MassDOT and the MBTA in several areas affecting safety reliability.

The document request delivered to MassDOT and the MBTA on July 8, 2022 is provided as Exhibit A. The document request contains seven separate categories of documents and further required that any responses be provided in an electronic, searchable format, unless the document existed in hard copy format only.

The seven categories of documents requested by the committee were as follows:

1. For the period from January 1, 2018 to present, an itemized list of all incidents at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater,

unscheduled service diversions, removal of vehicles from service, or requiring the issuance of a corrective action plan.

2. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications from, to, or otherwise received by an employee of MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration concerning an incident at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater, unscheduled service diversions, removal of vehicles from service, or requiring the issuance of a corrective action plan.

3. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications from, to, or otherwise received by an employee of MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration concerning the Safety Review Panel (SRP) convened on June 27, 2019, its review methods, its findings, or the report issued by the SRP on December 9, 2019 otherwise known as the "LaHood Report."

4. Any and all emails, letters, memoranda, reports, and other communications provided by, received by, or otherwise exchanged between members of the Safety Review Panel, members of the Fiscal and Management Control Board (FMCB), and any designated contacts including but not limited to Jamey Tesler and Bill Hanson concerning the contracting, scope of work, investigations, and findings of the Safety Review Panel.

5. Any and all reports, findings, emails, letters, memoranda, and other communications provided by HNTB as contracted to perform an independent evaluation to assist the Safety Review Panel.

6. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications provided by MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration to a media outlet as part of a public records request including the complete public records requests previously provided to the *Boston Globe*, *Commonwealth Magazine*, and others concerning incidents at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater, unscheduled service diversions, removals of vehicles from service, or requiring the issuance of a corrective action plan.

7. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications provided by, received by, or directed to the attention of the following individuals: Jamey Tesler; Steve Poftak; Jeffrey Gonneville; Joe Pesaturo; Lisa Battiston; Ronald Ester, Jr.; Erik Stoothoff; Tim Buckley; Sarah Finlaw; Anisha Chakrabarti; Danielle Burney; Jacquelyn Goddard concerning incidents, findings, or other matters referenced or described in requests 1 through 6.

In its response, the MBTA provided a total of approximately 3,300 documents in four separate productions received by the committee on the following dates: July 14, 2022; July 19,

2022; July 28, 2022; and August 25, 2022. Each of the productions was accompanied by an Excel file inventorying the documents produced. The committee notes that a significant portion of the documents consist of email chains with attachments; as such, an undetermined number of the documents provided are in fact duplicates.

July 14, 2022 Production

The July 14 production contained 374 documents with the MBTA identifying three documents responsive to category 1, ninety-nine documents responsive to category 2, four documents responsive to category 3, twelve documents responsive to category 4, one document responsive to category 5, and 255 documents responsive to category 6.

The three documents in category 1 included a spreadsheet listing 491 incidents reportable to DPU and/or the FTA involving trains, buses, infrastructure, or maintenance equipment at the MBTA occurring between January 2, 2018 and July 10, 2022, and an additional spreadsheet listing "near miss" incidents for the years 2021 and 2022, and the June 10, 2022 version of DPU's Safety Operating Guidelines. The production also included numerous redacted interim and/or final incident reports prepared by the MBTA for the DPU, monthly safety presentations delivered by MBTA staff, and copies of consulting services agreements between the MBTA and members of the Safety Review Panel.

Additionally, this production contained media and public records requests for documents and visual media concerning a variety of issues, including: the condition of the Columbia Road staircase adjacent to JFK/UMass station; the Back Bay station escalator reversal; the Red Line JFK/UMass June 2019 derailment; the May 30, 2022 Braintree rollaway Red Line car incident; the condition of Alewife and South Shore community parking garages; and nighttime right of way access. The MBTA also provided its responses to these various requests, which included

video footage of the Braintree rollaway and the JFK/UMass derailment from various angles. Lastly, a copy of the Safety Review Panel report was included in the initial production.

July 19, 2022 Production

The second production contained 379 documents. Of these, the MBTA identified six documents responsive to category 1; 109 documents responsive to category 2; fifty-one documents responsive to category 4; 198 responsive to category 5; and fifteen documents responsive to category 6.

The overwhelming majority of documents contained in the second production consisted of MBTA safety event reports filed with DPU, as well as independent evaluations and site condition reports conducted by the firm HNTB during the latter half of 2019 and early 2020 to assist the efforts of the Safety Review Panel.

The HNTB evaluations consist of photo logs of potentially hazardous site conditions, individual reports concerning specific sites along the system with the potential to cause derailments or other service disruptions, and weekly and monthly spreadsheets identifying asset conditions across the system that require attention, with a priority level assigned to each asset. It is worth noting that the asset condition spreadsheets contain identified individual assets needing various levels of attention numbering in the low thousands.

The second production also included an "Internal Rail Flaw Inspection Analysis" conducted on behalf of the MBTA by HNTB dated December 19, 2019.

Other documents contained in the second production include internal communications between MBTA staff, FMCB members, and Safety Review Panel members concerning scheduling, meeting agendas, and media readiness in anticipation of the SRP report release.

Finally, the second production included a public records request and the MBTA's response for communications involving the condition of the Columbia Ave staircase at JFK/UMass station.

July 28, 2022 Production

The third production contained 113 documents, consisting of thirty-two documents identified as responsive to category 2; twelve documents responsive to category 3; and sixty-nine documents responsive to category 4.

This production contains another collection of MBTA incident reports that were filed with DPU, as well as a sampling of undated Safety Review Panel Update progress reports presented by MBTA staff, along with other various staff updates and reports. Much of this production, however, consists of internal communications between MBTA staff, FMCB members, and the Safety Review Panel with regard to meetings, scheduling, and the preparation of draft remarks and expected media questions for the December 2019 SRP Report release and press conference.

Of particular note, the documents include an internal memo from Scott Darling, chair of the Safety, Health, and Environment subcommittee of the MBTA Board of Directors, addressed to Betsy Taylor, chair of the MBTA Board of Directors, summarizing the subcommittee's activities from October 2021 through March 2022.

August 25, 2022 Production

The fourth and final production contained 2,463 documents. Of these, the MBTA identified 354 documents as responsive to category 2 and 2,109 documents responsive to category 7, making this the only production that included documents responsive to this category.

The documents grouped into category 7 contain a wide variety of communications among MBTA staff, spokespersons, and leadership, primarily involving internal reviews of draft language for responses to media inquiries concerning various safety events. Internal communications concerning materials, presentations, and remarks prepared in anticipation of a public forum, such as the SRP report release, also comprise a substantial portion of documents provided.

This production also includes memos and presentations prepared by MBTA staff for the authority's oversight boards.

Safety Event Reporting

It should be noted that 519 files contain either an interim or final report of an incident the MBTA prepared for DPU. These files do not correspond to 519 separate reportable events, however, as multiple files (e.g., interim reports, revised interim reports, final reports, revised final reports) do cover the same event. Of these files, approximately 200 cover bus-related events, such as collisions with other vehicles or vulnerable road users.

Few Corrective Action Plans were included in the documents which it received from the MBTA. The committee received several versions of a Corrective Action Plan Form regarding Type 14 Orange Line vehicle low speed derailments from 2021, as well as an incomplete Corrective Action Plan Form regarding a collision on the Mattapan High Speed Line in 2017. These few Corrective Action Plans provided are far fewer than the number of Corrective Action Plans that the MBTA identified as active. According to an Excel file last updated on April 29, 2022 and shared between MBTA Chief Safety Officer Ron Ester and Deputy General Manager Jeff Gonneville, as of that date the MBTA had twenty-eight active Corrective Action Plans.[51]

[51] According to the April 29, 2022 listing, the following Corrective Action Plans were in an active state: 1) Plan A15-320: Green Line Train Protection; 2) Plan 15-3647: Electrical Safety; 3) Plan 6620:

With respect to any documents that may have been withheld from the committee, the committee was not provided with any log or other notice of documents that were treated as privileged or otherwise confidential.[52] It is important for the committee, and ultimately the public, to also know what is being withheld and why.

Any withheld documents should be reviewed by the incoming new administration and supplements to documentary production would assist the Legislature in the next session to meet its responsibilities in reviewing the various legislative ideas that are to be presented.

Standpipe Defects; 4) Plan 6320: Orange Line Type 14 Door Issue; 5) Plan 6720: Dorchester Avenue Bridge; 6) Plan 6700: Green Line Catenary Wire Car; 7) Plan 6860 Green Line Central Subway Catenary Wooden Trough; 8) Plan 7080: Cabot Rail Sled Derailment; 9) Plan 7260: Failing 600 VDC feeder cable splices; 10) Plan 7340: Green Line ROW Trespassing at Chicken Farm Truck Pad [note that this CAP was pending DPU closure as of the date of this file]; 11) Plan 7365: 2020 Internal Safety Review – Operations Control Center [note that this CAP was pending DPU closure as of the date of this file]; 12) Plan 7460: Type 14 Low Speed Derailments; 13) Plan 7640: Green Line Train on Train Vehicle Spacing; 14) Plan 7840: Type 8 Derailment Inspection Frequency; 15) Plan 7860: Hi-Rail Inspection re: June 30, 2021 Blue Line Hi-Rail Derailment; 16) Plan 7880: September 28, 2021 Broadway Station Derailment – Restraining Bolt Failure; 17) Plan 7940: July 25, 2021 Red Line Train Collision with gate at West Pocket – Ineffective Communication during a pin hitch train move [note that this CAP was pending DPU closure as of the date of this file]; 18) Plan 8000: Red Line Type 4 Vehicle Return to Service; 19) Plan 8041: Department of Public Utilities Triennial Audit Findings; 20) Plan 8141: Safety Rules Compliance Program Inconsistencies; 21) Plan 8021: August 7, 2021 Green Line Riverside Yard Derailment – Yard Route Setting [note that this CAP was pending DPU closure as of the date of this file]; 22) Plan 8201: August 18, 2021 Orient Heights Station – Scene Preservation and Reporting Failures; 23) Plan 8221: August 18, 2021 Orient Heights Station – Vehicle Securement Procedures; 24) Plan 8241: September 28, 2021 Rerail Checklist and Training - Train movement during rerail process; 25) Plan 8261: October 20, 2021 Hi-rail excavator derailment – lack of refresher training; 26) Plan 8281: December 17, 2021 Runaway Train Cabot Yard – Pin Hitch and Uncoupling Procedures; 27) Plan 8301: December 29, 2021 Improper Trolley Storage in Boston College Yard – Issue of Memo [note that this CAP was pending DPU closure as of the date of this file]; 28) Plan 8321: Occupational Health Services Internal Safety Audit.

[52] There are limited circumstances under federal regulations in which the MBTA can claim privilege outside of attorney-client and work product privilege, and those circumstances do not appear to apply to the committee's requests. Federal regulations provide that material related to investigations of litigated accidents, as well as documents pertaining to security plans, may be treated as confidential by transit agencies in certain instances. See 49 CFR § 674.23. Further, federal regulations also permit transit agencies to request confidential treatment by the FTA of any materials provided to the FTA in connection with a SMI. See 49 CFR § 670.13.

V. FTA'S REFUSAL TO PARTICIPATE

On two separate occasions – one prior to the issuance of the SMI Final Report and one following – the chairs of the committee extended written invitations to the FTA to provide testimony concerning safety and regulatory lapses of the MBTA and DPU.

On July 6, 2022, the committee delivered by email a written invitation from the chairs to FTA Associate Administrator Joseph DeLorenzo requesting his appearance – either virtually or in person – before the committee at the July 18, 2022 oversight hearing. On July 7, 2022, Mr. DeLorenzo replied by email stating that "because [the FTA's] work with the MBTA and MDPU is ongoing," he would not be able to appear.

On September 8, 2022, following issuance of the FTA's final report on August 31, 2022, the committee again delivered by email a written invitation from the chairs requesting Mr. DeLorenzo's appearance – either virtually or in person – before the committee at the September 14, 2022 oversight hearing. Again, Mr. DeLorenzo stated that he would be unable to do so.

In an email dated September 12, 2022, he stated:

> I am in receipt of the September 8, 2022 request to appear before the Commonwealth of Massachusetts' Joint Committee on Transportation on September 14, 2022. I understand the purpose of the hearing is to examine the MBTA's safety practices, and you are seeking my testimony in my official capacity as the Associate Administrator for Transit Safety and Oversight for the Federal Transit Administration. After conferring with counsel, I must decline your request.
>
> 49 CFR Part 9 prohibits such testimony. This hearing would constitute a "legal proceeding," as defined in 49 CFR § 9.3. Per 49 CFR § 9.1, the U.S. Department of Transportation restricts employees' participation in such proceedings based on, among other things, the need to protect confidential, sensitive information and the deliberative processes of the Department, and on important federalism interests. While FTA understands the committee's interest in FTA's work on this issue, we would refer you to the SMI and Special Directives for the agency's position, which constitute FTA's most recent public position on these issues.

The committee takes issue with the position of the Associate Administrator and the FTA in failing to provide public explanations for its conclusions; the federal regulations cited by the

FTA do not in fact "prohibit such testimony." Our federal partners fell short of their need to work with other public entities on this important question of public safety. The FTA was able to make its staff available for press briefings and public testimony in Boston before a Congressional panel. Ironically, however, it will be the state government, acting through the legislature and the new Governor who will have the key responsibility and obligation to restore the public's confidence in the safety performance of the MBTA.

Moreover, even if it were true that the committee's oversight hearings constitute "legal proceedings," federal regulations authorize agency counsel to permit such testimony when it is "in the best interest of the Department or the United States."[53] That remains the case here, as the committee feels that the FTA assisting the Legislature's Joint Committee on Transportation – which has jurisdiction over legislative matters affecting the MBTA – would be of substantial benefit to the department and users of transit within the United States, especially given the complexity of the regulatory and technical issues examined in the SMI. The committee would certainly have ceded to any claim of privilege during the oversight hearing with respect to the agency's deliberative processes.

The FTA has a shared role with the Commonwealth moving forward on safety issues at the T. As noted earlier in this report, since the FTA has a legal role in certifying the state's safety oversight agency for subway operations, any discussion of the future role of the DPU or another state entity will benefit from and need the input, thoughts and experience of the FTA's staff.

Further, having reviewed the MBTA PTASP, MBTA Transit Asset Management Plan, and DPU safety oversight program standard, as well as the corresponding federal regulations, there remain questions concerning what may be the most important regulatory area – the federal

[53] 49 CFR 9.1 (c)

rules governing detection and mitigation of hazards before they result in accidents. Indeed, as previously noted, improvement in this area was one of the primary aims of the revisions to the state safety oversight program enacted as part of MAP-21. However, the recent safety-related failures within the T across a number of performance and operations areas demonstrates sadly how far the agency still needs to go in identifying and mitigating safety risks!

It appears that a strong case can be made that the federal regulations may have delegated too broadly to the states in this area. The federal regulations (and, in turn, the MBTA PTASP) are surprisingly open-ended and inexact on the issue of proactive hazard identification.[54] In fact, this was by design. In amending the state safety program regulations following MAP-21, the FTA made clear that it was "not mandating that transit agencies adopt any particular method of process for hazard identification and risk analysis."[55] To the contrary, the FTA "intentionally drafted broad, non-prescriptive requirements for SMS in an effort to develop a safety framework that could fit within the thousands of unique transit operating environments across the nation."[56] Since the FTA now finds itself with regular and continuing oversight of the MBTA, perhaps the basic approach described above needs to be reconsidered.

The possible need for greater clarity at the federal level is also apparent in the area of capital planning. Concerning safety risk, the federal transit asset management regulations state in relevant part: "When developing an investment prioritization, a provider must give due

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[54] Both the federal regulations and MBTA PTASP define "hazard" as "[a]ny real or potential condition that can cause injury, illness, or death[,] damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system[,] or damage to the environment." See 49 CFR § 673.5 and MBTA PTASP PRF 2. Section 5.2.2.2 of the FY22 MBTA PTASP, titled "Proactive hazard Identification," simply states that "[p]roactive methods attempt to identify and analyze hazards before they have resulted in an incident or accident," followed by a list of some of the proactive methods used by the authority.

[55] See 83 Fed. Reg. 34442 (July 19, 2018).

[56] See 83 FR 34430.

consideration to those state of good repair projects to improve that pose an identified unacceptable safety risk when developing its investment prioritization."[57] Unfortunately, the FTA has provided little guidance as to the meaning of "due consideration," and "identified unacceptable safety risk" is not a defined term.[58]

Again, this was by design. In the discussion accompanying publication of the final asset management rule, the FTA noted:

> The final rule neither defines nor prescribes standards for 'unacceptable safety risk.' FTA believes that each provider is in the best position, based on knowledge of both its unique operating environment and availability of resources, to make determinations regarding categorization and mitigation of risks. The final rule merely requires that a transit provider give due consideration in its investment prioritization to those assets that pose an identified unacceptable safety risk.[59]

Despite the importance of capital planning to system safety, it appears that the FTA has opted for a "lowest common denominator" approach, so it is unsurprising that both the MBTA's Transit Asset Management Plan (TAM Plan) and most recent 5-year capital plan fail to include any meaningful discussion of the methods used to identify and prioritize unacceptable safety risks. The current CIP, for example, excludes any mention of this federal obligation, and fails to offer any direct link between any of the $7.5 billion of "safety-related" projects and identified unacceptable risks.[60]

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[57] See 49 CFR 625.33(d) (emphasis added).

[58] In the appendices to the regulation, the FTA does include a capital planning example that involves an asset that presents unacceptable risk, but the example does not provide any insight as to the contours of the analysis involved in prioritizing the asset in the capital plan, or what might be considered unacceptable risk. See Appendix B to 49 CFR Part 625.

[59] See 81 Fed. Reg. 48894 (July 26, 2016).

[60] Page 28 of the current 5-year capital plan notes $7.5 billion in "safety-related" investments, but includes no discussion of which projects, if any, address "unacceptable" safety risk. The plan is available at https://www.mbta.com/financials/fy-2023-2027-capital-investment-plan-cip. It appears, however, that the MBTA is in the midst of scrutinizing its capital planning process through the use of a new "safety matrix" that is intended to bring greater focus and clarity to the authority's consideration of safety risks in planning.

As to the T's TAM Plan, per recommendations contained in the 2015 report of the Project Selection Advisory Council, safety was in fact included among the eight criteria used to evaluate projects for inclusion in the 5-year capital plan,[61] and the TAM Plan does acknowledge its federal obligation to duly consider identified unacceptable safety risks. However, with regard to meeting this obligation, the plan simply states that "[f]or the most recent CIP, the Safety criterion was scored by the Safety Department using their expertise and resources,"[62] and the section on "Investment Prioritization and Decision Support" lacks any discussion of the manner in which unacceptable safety risks are addressed in the capital planning process.[63]

Contrast this with discussions contained in the 2009 D'Alessandro Report, which was commissioned by Governor Patrick in August 2009 to provide a "frank assessment of the MBTA's condition."[64] Though the report predated the current asset management rule, the authors in very clear terms noted that operating deficits had exacerbated state of good repair backlogs to such a degree that "many projects that would address critical safety or system reliability issues [were] not funded each year."[65] The report identified fifty-one "critical" safety projects that had been rated as "a danger to life or limb of passengers and/or employees" that went unfunded in the T's capital plan at that time.

Though the committee is unaware of any category under the T's asset management plan that applies to assets that present "danger to life or limb," it does appear that safety was scored

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[61] See Massachusetts Bay Transportation Authority FY23-27 Capital Investment Plan, p. 23. See also Transit Asset Management Plan dated September 2018, p. 67. The current 5-year capital plan cites the 2018 Transit Asset Management Plan as a source document.
[62] See 2018 Transit Asset Management Plan, p. 67. Note also that section 5.2.2 of the Plan does discuss risk management as a general matter.
[63] See 2018 Transit Asset Management Plan, § 7.2.1.
[64] Available at https://cdn.mbta.com/sites/default/files/2017-10/2009-dalessandro-report.pdf.
[65] D'Alessandro Report, p. 24, available at https://cdn.mbta.com/sites/default/files/2017-10/2009-dalessandro-report.pdf.

on a 10-point scale.[66] At a minimum, therefore, the committee feels there is a strong need to see analysis by the MBTA and MassDOT within both the TAM Plan and CIP concerning the priority given to identified projects that score highly in safety risk.[67]

As has been noted, the committee's understanding of these regulatory requirements would have benefited greatly from active and ongoing consultations with the FTA; however, it is fair to conclude that these key safety program documents do not adequately address treatment of "identified unacceptable safety risks," even if they may technically comply with federal requirements. In the future, more constructive guidance from the FTA might help remedy this problem.

Ultimately, to ignore the committee in the oversight task it has pursued is counter to serving the shared public interest, which should be expected of our federal partners. If, as more recent news from the FTA suggests, it is exercising a direct review role in how the T complies with the various directives it issued last summer, the FTA will need to exercise some level of cooperation with the Massachusetts Legislature. Accordingly, as the committee and Massachusetts Legislature continue to deliberate additional actions in response to the MBTA's pressing concerns, the chairs hope that the FTA will reconsider and bring its considerable expertise to bear on future legislative efforts by the Commonwealth.

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[66] See Recommendations for MassDOT Project Selection Criteria dated July 1, 2015, p. 16.
[67] As noted, it does appear that per recent presentations to the MBTA Board, there will be a greater emphasis on safety during planning and development of the FY24-28 CIP.

VI. LEGISLATIVE RESPONSE TO DATE

Though the intent of forward funding – implemented in 2000 by the Legislature – was to provide the MBTA with a degree of independence as to fiscal, capital and operational matters,[68] in recognition of the important role that the transit agency plays with regard to equity, quality of life and economic activity in the commonwealth, the legislature has consistently responded during the past 20 years to the challenges impacting the MBTA.

On the fiscal side, since 2009, the Legislature has provided the T with additional annual state operating assistance of up to $347 million over and above what was initially requested and provided when forward funding was enacted. For the current fiscal year, this includes a line item in the budget for additional state assistance of $187 million,[69] augmented by 2014 legislation that included a $160 million increase in the amount of sales tax that is dedicated to the T.[70]

Further, the state now covers a significant portion of the MBTA's capital budget, which was not factored into the forward funding calculus when originally implemented. The Legislature has included line items for MBTA state of good repair and special projects in the last 3 major transportation bond bills.[71] These authorizations will enable the commonwealth to pay for MBTA capital projects, including Red and Orange Line improvements, totaling approximately $1.5 billion from FY23 through FY27, per the most recent MBTA 5-year capital plan.

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[68] Background and details on forward funding have been included in a number of reports over the years that examined the MBTA's finances. See, e.g., Blue Ribbon Committee Report on Forward Funding and the final report of the Massachusetts Transportation Finance Commission dated March 28, 2007.
[69] Since 2014, line item 1595-6369 has fluctuated between $127 million and $187,050,00.
[70] See section 4 of chapter 359 of the acts of 2014 (amending MGL c. 10, § 35T).
[71] See chapter 176 of the acts of 2022; chapter 383 of the acts of 2020; and chapter 79 of the acts of 2014.

The authorizations also made it possible in November for the state to direct $145 million to the MBTA in order to provide the T with the matching funds required to tap into the additional federal transit funding contained in the Infrastructure Investment and Jobs Act of 2021.[72]

The Legislature also took bold action following the record snowfalls that paralyzed the MBTA's rail system in 2015. Following a series of oversight hearings conducted by the committee that identified serious capital planning and operating issues as contributing factors, the Legislature passed enabling legislation creating the Fiscal and Management Control Board, a body of transportation experts with enhanced powers, mandates and meeting requirements that did commendable work in scrutinizing T operations during its 6-year term.[73]

The current legislative session has brought safety oversight practices into focus. In addition to the committee's oversight proceedings, the Legislature took decisive action to assist the authority this past summer as the FTA was in the midst of its safety management inspection. Most notably, in the FY23 budget, the legislature funded a $266 million reserve in order to pay for actions needed to comply with directives issued by the FTA, with a related reporting requirement, as follows:

> *1599-1971 For projects to address ongoing safety concerns at the Massachusetts Bay Transportation Authority related to the interim and final findings uncovered during the Federal Transit Administration's Safety Management Inspection initiated in April 2022; provided, that the Massachusetts Bay Transportation Authority shall work in consultation with the Massachusetts Department of Transportation and the department of public utilities in the planning and implementation of said projects funded through this item; provided further, that funds may be expended for hiring and retention; provided further, that the Massachusetts Department of Transportation shall issue monthly reports to the joint commitee on transportation and the house and senate committees on ways and means detailing the status of the department's progress toward responding to each finding and required action as issued by the Federal Transit Administration; and provided further, that these reports shall be delineated by special directive and include, but not be limited to: (i) the funds expended from this item and the related purpose for said spending; (ii) the completion date of each executed required action; (iii) the*

[72] The funding was approved by the MassDOT Board at a meeting held on November 16, 2022.
[73] See sections 199-218 of chapter 46 of the acts of 2015.

estimated completion date of each pending required action..... $266,290,000

This amount was supplemented in the economic development bill passed by the Legislature in November, which included additional state funding for safety compliance in the amount of $111,957,684.[74]

According to reports filed with the committee, through November 2022, $37 million of this funding has been expended for costs associated with Orange Line track work. The report for November 2022, attached hereto as Exhibit B, also provides estimated completion dates for each of the required actions set forth in the FTA's directives. With respect to required actions that have been partially completed, the committee has requested additional details from the MBTA concerning the related actions that remain open.

Additional remedial legislation was contained in the transportation bond bill passed in July.[75] The act contained a number of provisions intended to improve transparency related to the MBTA's safety management practices and to assist the authority in responding to safety-related challenges.

Buttressing the funds included in the FY23 GAA, the bond bill included the following line item authorizing the Commonwealth to borrow up to $400 million for related safety projects:

6720-2259.. For projects to address ongoing safety concerns related to the interim and final findings uncovered during the Federal Transit Administration's safety management inspection of the Massachusetts Bay Transportation Authority initiated in April 2022; provided, that the Massachusetts Bay Transportation Authority shall work in consultation with the Massachusetts Department of Transportation and the department of public utilities in the planning and implementation of the projects funded through this item..... $400,000,000

Additionally, the bond bill included three outside sections implementing safety reforms.

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[74] See sections 2 and 218 of chapter 268 of the acts of 2022.
[75] See chapter 176 of the acts of 2022.

Section 24, which was returned to the Legislature by Governor Baker,[76] increased transparency by requiring the MBTA to issue monthly reports detailing safety events that would be made accessible to the public on the authority's web site, as follows:

> *SECTION 24. Section 5 of chapter 161A of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by adding the following subsection:-*
> *(t) Monthly, prior to the fourteenth day of the month, the authority shall submit a report to the office of the inspector general that contains a list of all of the incidents, accidents, casualties and hazards affecting any mode of transit operated by the authority or by a third party on behalf of the authority that: (i) occurred during the immediately preceding month; and (ii) are required to be reported to any state or federal entity pursuant to state or federal law or regulations or any policy or plan of the authority, without regard to whether the incident, accident, casualty or hazard was so reported. The authority shall make the report publicly available on the authority's website not later than 3 days following delivery of the report to the office of the inspector general.*

Section 32, also returned by Governor Baker to the Legislature,[77] would have provided greater clarity on one of the major issues impacting operations – the number of unfilled positions at the T – as follows:

> *SECTION 32. Not more than 1 week after the effective date of this act and monthly thereafter, the Massachusetts Bay Transportation Authority shall file a report with the joint committee on transportation and shall make the report publicly accessible on the Massachusetts Bay Transportation Authority website. The report shall include: (i) all unfilled job positions, including the position title and the length of time the position has been open; (ii) all positions filled in the prior month; and (iii) the length of time needed for the completion of any required training after an individual has been hired and prior to the date on which the individual may start to perform the role in the capacity for which the individual was hired.*

[76] In his signing statement, Governor Baker stated that the contents of such reporting should be aligned with the monthly "SDAR" report that is currently provided to the Board and regulators. See House Docket No. 5336. However, the SDAR covers a narrower range of safety matters and presents aggregated safety data that lacks the level of detail sought by the Legislature.

[77] In his signing statement, Governor Baker took issue with the limited time to comply and the requirement to report on the estimated time needed to comply with training requirements for new hires.

Finally, section 62 requires the authority to adopt a comprehensive 3-year safety improvement plan, subject to annual review by outside auditors, that accounts for all modes of transit and discloses pertinent communications with state and federal regulators, as follows:

> *SECTION 62. (a) The Massachusetts Bay Transportation Authority, hereinafter referred to as the authority, shall establish a 3-year safety improvement plan that shall: (i) identify measurable safety objectives for each of the next 3 calendar years and an update on the progress for the prior calendar year when applicable; (ii) include an analysis of all modes of transit operated or overseen by the authority, including, but not limited to, light, heavy and regional rail, bus, paratransit and ferry; (iii) include, as attachments, all memoranda, reports and substantive email communication between the authority and the department of public utilities, the federal transit administration, the federal railroad administration, the United States Coast Guard, the United States Occupational Safety and Health Administration and any other safety partners and regulators; and (iv) include data on all passengers, employees and contractors that have been injured or died as a result of injuries sustained on land, equipment or modes of transit owned or operated by the authority, provided, however, that the data shall include, but not be limited to, all derailments, construction accidents, elevator accidents and all other accidents; provided further, that the data shall include vehicle, signal, power, track, communications asset conditions and plans to significantly reduce safety hazards.*
>
> *(b) For the duration of the 3-year safety improvement plan, the board of the authority shall contract with an independent third-party entity with experience and expertise in the operation of, and safety requirements for, mass transit systems in the United States, to conduct an annual independent safety audit of the operations of the authority, including, but not limited to, issues affecting employees, passengers and equipment.*
>
> *The audit shall include: (i) an assessment of the progress of the 3-year safety improvement plan under this section; (ii) an analysis of any reported safety incidents, conditions or concerns of which the authority is aware, including any such information obtained by the independent auditor through research, investigation, public input or information available as a result of federal oversight and regulation; and (iii) information on the financial and human resources needed to execute the plan and information on the authority's plan to secure these resources via the annual budgeting process and shall present the data in a consistent manner to allow for annual comparisons. The authority shall not alter the format of the data unless at the express request of the joint committee on transportation. The plan shall be submitted to the joint committee on transportation.*
>
> *The audit results, together with any recommendations to address any identified safety issues, shall be reported to the secretary of transportation, the joint committee on transportation, the senate and house committees on ways and means and the clerks of the senate and house not later than March 1. The clerks of the senate and house shall post the audit results electronically for public inspection.*

(c) The department of public utilities shall create and submit a report with the information required in subsections (a) and (b) independent from the authority. The report shall include, in addition to the requirements of subsections (a) and (b): (i) an analysis and review of the authority's progress against the 3-year safety improvement plan; and (ii) an assessment of the department's capability to exercise all safety oversight duties and coordination activities across all components of the authority's operation, maintenance, capital investment, procurement and other systems.

(d) Annually, not later than March 1 the chief safety officer of the authority shall submit a letter to the joint committee on transportation on the strengths and weaknesses of the 3-year safety improvement plan. The chief financial officer of the authority shall submit a report outlining how the funds requested from the chief safety officer are being provided for in the existing operating and capital budgets. The letter and the report shall be submitted to the joint committee on transportation.

At the time of this report, the MBTA had yet to release a draft or final version of the 3-year safety improvement plan.

VII. REFORM PROPOSALS FOR CONSIDERATION

The Joint Committee on Transportation's series of oversight hearings was an informative process that helped identify how the MBTA can improve its safety operations. The testimony received by the committee will help formulate future plans for safety culture improvements, including our main objective: consistent safe and reliable service at the T. The hearings demonstrated a consensus that the T needs to do better, particularly when it comes to prioritizing safety, recruiting and retaining a well-trained workforce, and addressing deferred maintenance and bringing the system into a state of good repair.

This report provides a thorough summary of the key takeaways from these hearings and will be a valuable resource as the Legislature determines how to best implement these necessary changes at the MBTA. The diligent work of the committee members and our valuable committee staff has been instrumental in producing this document. We appreciate the thoughtful participation of the committee members; members asked pertinent questions throughout the hearing process and their input has helped to form the basis of this report. We also appreciate the

participation of all our witnesses during the hearing process. We look forward to working with the incoming Healey-Driscoll Administration and their transportation team to continue this vital collaboration process and exchange of ideas. While there is still much to discuss going forward into the next legislative session, below are some ideas on behalf of each of the Co-Chairs for future areas of focus that came up throughout the course of the hearing process and production of this report.

A. CO-CHAIR CRIGHTON

1. Future Possibilities for SSO

Throughout the oversight hearing process and in response to the findings of the FTA, questions have been raised about retaining DPU as the state safety oversight authority of the MBTA. The DPU itself acknowledged in their testimony before the committee that they have taken a more reactive approach to their oversight role, but recent safety incidents at the T suggest an agency with the capacity to take a more proactive approach may be a better long-term solution. In addition to the SSO becoming pro-active, a repositioned SSO needs to be politically independent, committed to transparency, and capable of recruiting and retaining the needed expertise.

There are at least three options for the future of the SSOA: (1) maintaining this authority within the DPU but ensuring it can act as a proactive and independent entity, (2) moving the statutory oversight authority to another existing agency, or (3) creating a new, standalone agency for the sole purpose of completing this oversight function.

As discussed at length during the second oversight hearing, the DPU has been plagued by staff shortages that have led the agency to take a more reactive than proactive approach to their oversight of the MBTA. In addition to having investigative and enforcement authority, a state

safety organization must be financially and legally independent from the transit authority it oversees. If the DPU is to retain its oversight authority over the MBTA, they must address the ongoing staffing issues and show a willingness to take a more proactive approach in their oversight.

Massachusetts could also decide to move the role to another existing agency. The Office of the Inspector General and the MBTA Advisory Board are two possible solutions. The Inspector General's Office is an existing independent agency created to promote transparency and efficiency within state government, a purpose that aligns well with an oversight function. The MBTA Advisory Board is a regional, government entity created by the Legislature to represent the interests of the 176 cities and towns in the MBTA service district. This entity is already statutorily responsible for reviewing the T's annual operating and capital budgets, proposed major service changes, and fare policies. The Board is made up of local mayors and municipal officials.

Finally, Massachusetts may decide to create a new, standalone entity to take over the role of the SSOA. Both New York and Washington D.C. have created such commissions. The Legislature would need to further contemplate the membership and the mandate of such a new entity.

We expect a much longer conversation about the future of the state safety oversight agency, with strong input from the FTA before a final decision is made.

2. Ongoing Safety Plans

In his testimony before the committee at the third oversight hearing, Secretary LaHood outlined several potential safety actions that are worth future consideration by the Legislature and the incoming Administration.

As discussed in length in this report, the MBTA has been equipped with two extensive safety review documents: the 2019 Safety Review Panel Report and the Final Report from the FTA. The public deserves to see the progress being made on implementing the safety recommendations from both documents. The MBTA could publish a comparison between the two documents and include specific safety performance goals and annual tracking progress. This will enable the public to see progress on important safety initiatives in real time.

In addition to this document, Massachusetts may decide to create an independent agency for the purpose of regularly issuing reports to the MBTA. This agency should have the ability to oversee all safety elements at the T and help the authority make decisions on what improvements need to be made and how. This agency may only need to be a temporary entity until there is a long-term safety plan in place.

One of the main components to creating a safer authority is proper budget allocations. The Chief Safety Officer could take a larger role in these discussions by certifying annual operating and capital spending budgets. Such certification would indicate that spending plans will enable critical safety improvements.

3. Staffing Levels at the MBTA

Throughout this oversight process, a great deal of emphasis has been placed on MBTA staffing levels. It is readily apparent that the MBTA needs more employees to deploy safe and reliable service. Despite the incentives employed by the authority, hiring continues to be a major challenge. Some of these challenges have a national profile such as the struggle to employ bus drivers. It may be that T management and the unions need to rethink their approach to attracting today's workforce.

As outlined in section VI of this report, the Legislature required the MBTA to submit a monthly report on the progress made on hiring new employees, in addition to the number of positions that remain unfilled. While the Governor returned this Section to the Legislature with amendments, this remains a vital component of ensuring safe service. Progress on hiring initiatives must be a consistently monitored to determine if additional resources or strategies need to be implemented.

B. CO-CHAIR STRAUS

Based on information gathered during the committee's oversight proceedings, the following policy areas deserve to be considered during the upcoming session as part of any additional legislative response to the authority's safety deficiencies. These observations are not intended to address and resolve all attendant issues (it is acknowledged, for example, that many of these actions would raise questions concerning the need to amend the flow of existing dedicated transit funding); conceptually, however, certain structural changes could offer the potential for improved focus on and compliance with Safety Management System principles.

Strong management dedicated to infusing safety concerns into every task and job title of the MBTA is not only needed but required going forward. In recent years, transit systems around the country have experienced similar financial and pandemic-related challenges, but not the same safety-related difficulties as summarized here and elsewhere at the T. Over the period that the MBTA's safety performance suffered with, in some cases, horribly tragic results, the T endured several management changes at the top; it should be obvious that experienced management with a successful focus on operations (and not just at the GM's position) is going to be required at the MBTA. In a real sense, the T is expected to deliver transit services in multiple modes – subway, bus, commuter rail and ferries – in a way that that is perhaps unique in this country. An MBTA

which has as its focus the core subway and bus systems now under its authority would free up the agency to meet its basic mission of providing safe, predictable and reliable transportation for members of the public.

1. Transform the T into a Leaner Bus and Rapid Transit Operating Agency

The below items reflect a view for debate that the MBTA has been tasked with offering services and performing operations that extend beyond its charge of providing a public transportation option that makes it possible for residents of the Boston area and eastern Massachusetts to get from place to place safely, conveniently, reliably and on time. One idea for consideration is that the MBTA be allowed to focus on its core mission of serving as the metropolitan region's bus and rapid transit service agency, thus allowing the authority to become a more responsive and efficient agency with an improved safety record. Accordingly, the following ideas are offered for consideration:

(a) Responsibility for operation of commuter rail and oversight of the contract with Keolis could be transferred from the MBTA to MassDOT's Rail and Transit Division (or another office) under direct supervision by the Secretary of Transportation. For decades, commuter rail has been operated by third parties pursuant to a series of publicly procured contracts which, candidly, have been executed and overseen under the direction of the Governor and cabinet secretary. The notion that the MBTA is truly in charge of the selection and supervision of the commuter rail system historically is something of a fiction. Further, from a safety perspective, as noted by both the Safety Review Panel Report and SMI Final Report, commuter rail operates outside of the FTA's jurisdiction and is not a service covered by the MBTA's PTASP. Therefore, by clearly placing responsibility for commuter rail (and any future contract review with the Secretary of

Transportation), we ensure that the governing statutes and future capital project needs for the commuter rail, and perhaps passenger rail considerations related to Western Massachusetts, reflect the reality that the general manager of the MBTA has had little or no real management role regarding commuter rail;

(b) Notwithstanding the foregoing, the public discussion can include whether the MBTA should retain responsibility for operation of the Fairmont line to become functionally a part of the subway system. Consideration of this option for the Fairmont line is not a new idea but would now align that train corridor with the community it could better serve. In essence, this would cause the Fairmont to provide service that more closely resembles rapid transit in terms of operating schedule and fare structure. Fairmont presents a real opportunity to the public to operate as a part of the existing bus and subway network. Just because the Fairmount Line uses different equipment and track from the rest of the subway system would not be an obstacle to better management and service to the community.

(c) Similar to commuter rail, water transportation is typically not subject to FTA-mandated agency safety plans, as ferry service is overseen by the United States Coast Guard, and such service generally resides outside of the expertise and experience of MBTA staff.[78] With this in mind, especially given recent and past efforts of legislators and local officials to direct greater resources and attention to water transportation, a strong argument can be made for removing ferry operations from the MBTA under one of two possible models. Either approach, offers a focused discussion for the idea of waterborne transportation which clearly has not been a major focus of the MBTA historically. Two (and there

[78] MBTA commuter boat service is run by a third-party operator.

could be more) ways to provide greater focus on ferries are either the transfer of such service to a new water transportation division within MassDOT,[79] or the creation of a new ferry-based regional transit authority similar to the Massachusetts regional transit authorities formed under MGL chapter 161B. An RTA model exists and is available under existing law, but would require some likely legislative changes to provide the funding now going to the T to provide the existing service. Simply put, this would be an RTA operating or contracting for ferries on the water instead of buses.. The latter approach would provide sufficient flexibility to enable Massport, which is currently served by water transportation, to join as a constituent member on the same voluntary basis that municipalities currently join RTAs. Further, chapter 161B does not require communities to be contiguous, which fits the concept of waterborne transportation with connections from Boston to areas north and south of the city; and

(d) With respect to large, complex capital projects, consideration and discussion should occur over the use of the newly created High Performance Project Office within MassDOT. This newly created unit has already been tasked with overlapping MBTA and MassHighway functions, such as implementation of the EV Charging networks recently authorized by the Legislature, as well as the need for rail electrification, bridge work and ADA access compliance.[80] Discussion of this idea is grounded on the idea that the MBTA should no longer be viewed as a "construction company". The success of the MBTA in removing itself from direct involvement in major capital projects such as the

[79] See, for example, the state of Washington, which is served by a number of ferry lines, including extensive service in Puget Sound in the vicinity of Seattle. These lines are controlled by a division within the Washington Department of Transportation as opposed to any of the existing regional transit agencies.
[80] As discussed by Secretary Tesler during his November 16, 2022 presentation to the MassDOT Board of Directors. See page 6, attached to this report as Exhibit C.

Green Line Extension and South Coast Rail demonstrates the benefit of leveraging in-house expertise and resources within MassDOT.

2. Transfer of Safety Oversight from the DPU

The Committee and others received clear testimony that the DPU often viewed its rail oversight duties from a "reactive" perspective that as an agency, it was insufficiently geared towards identifying safety risks proactively. Staffing levels and limitations, even prior to the Covid-19 state of emergency, were not merely a contributing factor to safety lapses but evidence of the limited scope in which the DPU viewed its duty as the SSOA.

Moreover, the DPU has suffered from a lack of independent leadership that would allow for truly functional safety oversight. SMI Finding 22, which cited shared reporting relationships as a sufficient basis to require DPU to "examine and ensure its organizational and legal independence from the MBTA," has merit.[81] Indeed, there is evidence that leadership at all relevant entities – MassDOT, MBTA and DPU – has sought guidance and taken their cues from the Governor's Office. The correspondence between the Governor's Office and MBTA officials concerning the Blue Line maintenance vehicle derailments – as reported by the *Boston Globe* and discussed at the initial oversight hearing – is a prime example.

One option for consideration going forward is for the SSOA to be moved to an office that is sufficiently "walled off" from any administration. One choice for discussion (and there could be others) would be the Office of the Inspector General. The existing IG appointment process

[81] The committee notes, however, that the FTA's rationale appears to misstate or misinterpret recent iterations of the MBTA board. The FTA pointed to the newly created MBTA Board – which includes a cabinet member (secretary of transportation, ex officio) and at least three appointees of a sitting governor – as presenting a change in circumstances that may compromise the MBTA's independence, given that DPU's commissioners are appointed by a cabinet member with approval by the governor. However, both the FMCB and MassDOT Board, which functioned as the MBTA board prior to 2021, were made up of governor appointees, as well.

permits the agency to operate free from political considerations that may be imposed by the governor or other gubernatorial appointees.[82]

If independence of the safety oversight agency is deemed to have merit, the forensic role played by the Inspector General is more in line with safety oversight, and an SSOA unit within that office is less likely to be viewed as a secondary mandate (by contrast, in its 2021 annual report, DPU devoted a total of four paragraphs in a 55-page report to its SSOA function).

There is an important caution flag for consideration of any ideas regarding shifting of the oversight role from the DPU. As noted above, this option, or any other proposal to move safety oversight from the DPU, can only be considered with input from the FTA as it must certify and effectively approve any change in assigned safety function. In the near term, as a result, a fundamental resource question confronts the Commonwealth and the DPU. Policy makers will have to decide in 2023 – not just where safety oversight is located "geographically" within the organization of state government, but what its financial and staff resources are going to be. The new administration will have the first opportunity to address this question in its work on the budget plan for the new fiscal year to begin July 1, 2023. All who provided input and comment to the committee agreed that the current level of resources provided for the safety function performed by the DPU are not adequate to the task.

3. Remove Ferry Services from DPU Enabling Legislation

In conjunction with the proposal above regarding water transportation, DPU's enabling legislation should also be revised to exclude jurisdiction over ferry service. As noted, FTA safety regulations exclude ferry service. When this question about DPU oversight of ferries was raised

[82] The Inspector General is appointed to a 5-year term by a majority vote of the governor, attorney general and state auditor. Appointees are limited to a total of two terms and may be removed for cause upon a majority vote of the appointing officials. See MGL c. 12A, § 2.

as an issue to Commissioner Nelson during his appearance before the committee, the Commissioner was clear in his response that doing so would have little effect on DPU operations.

Accordingly, section 12 of chapter 159 of the General Laws, which sets forth those services to be supervised and regulated by DPU, should be amended to strike all references to "ships or vessels."

4. Audit Function

The committee's oversight investigation included an examination of past employee complaints, and in particular the protests of former chief safety officer Ron Nickle, who filed an extensive sworn statement with the FTA in connection with the filing of a whistleblower complaint against the MBTA after he was terminated in March 2019.[83] It is clear from the events described in Mr. Nickle's statement that greater procedural and structural protections are needed to ensure that chief safety officers and safety staff may freely examine and opine on safety lapses without fear of repercussions. The CSO should also have a means of reporting safety concerns "up and out" of the authority when disagreements with MBTA leadership exist. These were among the same lessons learned from the committee's work last session examining failures at the Registry of Motor Vehicles.

Currently, neither the MBTA ASP nor DPU's state safety oversight standard provide any such protections. This is unsurprising, as the federal regulations governing state safety oversight programs do not appear to address the independence of the CSO.[84] However, the Legislature should consider language requiring the general manager to overcome high procedural barriers

[83] Mr. Nickle's statement was posted to the committee's web site prior to the first oversight hearing.
[84] In accord with federal regulations, the PTASP does state that CSOs may not serve in any other capacity within the authority, which arguably protects against potential conflicts, but this is insufficient. See 2018 MBTA PTASP § 4.1.3 and 49 CFR § 673.5.

before terminating any CSO, including the possibility of Board ratification after the filing of written findings demonstrating gross misconduct.

Similar to protections provided to the RMV's internal auditor in legislation filed this session,[85] (and reported favorably by the Committee) the CSO could be required to refer "critical disagreements" with MBTA senior management regarding safety matters to the Inspector General, in which case the CSO would be protected from retaliatory action.

VIII. CONCLUSION

This report is in no way intended to serve as a final comment on the issue of transit safety oversight. In large part due to the nature of the tragedy that precipitated these proceedings and the focus of the resulting safety management inspection, the committee's sights have been disproportionately fixed on subway, but as has been noted by the committee chairs, all modes are at risk and subject to further inquiry.

Moreover, the committee does hope and expect to be able to consult in depth with experts at the FTA on the T's deficiencies and on regulation of transit safety more generally. As the history of federal regulation of safety oversight demonstrates, this is an area in flux, and the rapid pace of regulatory change should continue as agencies across the country struggle to deal with aging systems and look to assess and incorporate new safety technologies.

Despite being the subject of extensive federal and state regulation, there is a clear need for the Legislature to actively engage with the issue of safety oversight in ways that extend beyond appropriations. Accordingly, much as state transit safety programs are expected to adopt processes that foster "continuous improvement," the committee looks forward to continuing its

[85] See H4096, An Act regarding audit performance and functions at the Department of Transportation.

examination into the next and succeeding sessions, benefited by improved transparency regarding the T's safety record and a deeper understanding of the regulatory structure.

EXHIBITS

A – Committee Document Requests dated July 8, 2022

B – November 2022 Report to the Committee Concerning Progress on FTA Directives

C – Page 6 from November 16, 2022 MassDOT Board Presentation Discussing Capital Project Initiatives

EXHIBIT A

The Commonwealth of Massachusetts
General Court
State House, Boston 02133

JOINT COMMITTEE ON TRANSPORTATION

Rep. William M. Straus
House Chair

Sen. Brendan P. Crighton
Senate Chair

July 8, 2022

Secretary Jamey Tesler
Department of Transportation
10 Park Plaza, Suite 4160
Boston, MA 02116

General Manager Steve Poftak
Massachusetts Bay Transportation Authority
10 Park Plaza, Suite 3190
Boston, MA 02116

Re: Joint Transportation Committee Oversight Hearing

Dear Secretary Tesler and General Manager Poftak:

In advance of the July 18, 2022 and continuing oversight hearings, below are requests for documents that the committee believes can provide information bearing on the processes, systems, and management decisions responsible for critical safety matters at the MBTA.

The committee requests that the following documents available from within the MBTA or MassDOT, whether in paper or electronic form, be provided for the committee's review. We are mindful of the relatively short period involved in gathering these materials but assume the requests are largely within the realm of the kinds of information that would likely have been sought already by the review team from the FTA, or public records requests provided to media outlets.

For the purposes of these requests, the term "incident(s)" is to be construed broadly to include, without limitation, derailments, equipment malfunctions, collisions, design flaws, infrastructure failures, infrastructure deteriorations, unscheduled service diversions, removal of vehicles from service, etc.

1. For the period from January 1, 2018 to present, an itemized list of all incidents at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater, unscheduled service diversions, removal of vehicles from service, or requiring the issuance of a corrective action plan.

2. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications from, to, or otherwise received by an employee of MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration concerning an incident at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater, unscheduled service diversions, removal of vehicles from service, or requiring the issuance of a corrective action plan.

3. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications from, to, or otherwise received by an employee of MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration concerning the Safety Review Panel (SRP) convened on June 27, 2019, its review methods, its findings, or the report issued by the SRP on December 9, 2019 otherwise known as the "LaHood Report."

4. Any and all emails, letters, memoranda, reports, and other communications provided by, received by, or otherwise exchanged between members of the Safety Review Panel, members of the Fiscal and Management Control Board (FMCB), and any designated contacts including but not limited to Jamey Tesler and Bill Hanson concerning the contracting, scope of work, investigations, and findings of the Safety Review Panel.

5. Any and all reports, findings, emails, letters, memoranda, and other communications provided by HNTB as contracted to perform an independent evaluation to assist the Safety Review Panel.

6. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications provided by MassDOT, MBTA, DPU, or an individual employed with or appointed by the Governor's office or administration to a media outlet as part of a public records request including the complete public records requests previously provided to the *Boston Globe*, *Commonwealth Magazine*, and others concerning incidents at the MBTA resulting in serious bodily injury, death, damage of $10,000 or greater, unscheduled service diversions, removals of vehicles from service, or requiring the issuance of a corrective action plan.

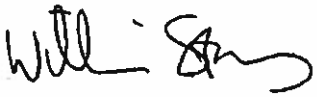
7. For the period from January 1, 2018 to present, any and all emails, letters, memoranda, reports, and other communications concerning incidents, findings, or other matters referenced or described in requests 1 through 6 provided by, received by, or directed to the attention of the following individuals: Jamey Tesler; Steve Poftak; Jeffrey Gonneville; Joe Pesaturo; Lisa

Battiston; Ronald Ester, Jr.; Erik Stoothoff; Tim Buckley; Sarah Finlaw; Anisha Chakrabarti; Danielle Burney; Jacquelyn Goddard.

The committee requests that all responsive documents be delivered in an electronic and keyword searchable format, provided that any responsive documents existing in hard copy only may be delivered in its existing format.

We thank you for your prompt attention to this request.

Sincerely,



Chair William M. Straus

Chair Brendan P. Crighton

EXHIBIT B

Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager

massDOT
Massachusetts Department of Transportation

December 1, 2022

The Honorable Senator Brendan Crighton
Chair, Joint Committee on Transportation
Room 109-C, Massachusetts State House
24 Beacon Street, Boston, MA 02133

The Honorable State Representative William Strauss
Chair, Joint Committee on Transportation
Room 134, Massachusetts State House
24 Beacon Street, Boston, MA 02133

The Honorable Senator Michael Rodrigues
Chair, Senate Committee on Ways and Means
Room 243, Massachusetts State House
24 Beacon Street, Boston, MA 02133

The Honorable State Representative Aaron Michlewitz
Chair, House Committee on Ways and Means
Room 212, Massachusetts State House
24 Beacon Street, Boston, MA 02133

Re: FY23 budget report on supplemental state funds to the MBTA

Dear Chairpersons,

Consistent with the FY23 General Appropriations Act (GAA) under Chapter 126 of the Acts of 2022 and *An Act Relating to Economic Growth and Relief for the Commonwealth* under Chapter 268 of the Acts of 2022, the Massachusetts Department of Transportation and the MBTA jointly provide this report detailing the status of the department's progress toward responding to each finding and required action as issued by the Federal Transit Administration.

Funds received from this item to date are included below. Updates on the status of each required action are enclosed. As required, we will continue to provide updates on actual spending in subsequent reports.

To date, the MBTA has received $37,000,000 from line item 1599-1971 (MBTA Safety/Workforce Reserve) to ensure transportation for riders during the Orange Line closure for critical track maintenance work from August 19, 2022 through September 18, 2022. This cost stems from the track maintenance work related to Special Directive 22-4.

Please let us know of any questions or if we may provide any further information.

Sincerely,

David W Pottier
Chief Financial Officer, MassDOT

Mary Ann O'Hara

Mary Ann O'Hara
Chief Financial Officer, MBTA

Cc: Jamey Tesler, Secretary and Chief Executive Officer, MassDOT
Steve Poftak, General Manager, MBTA
Gary Blank, Chief Administrative Officer, MassDOT
David Panagore, Chief Administrative Officer, MassDOT
James Kersten, Director of Legislative Affairs, MassDOT
Catharine Hornby, Undersecretary, Executive Office of Administration and Finance
Bran Shim, Budget Director, Executive Office of Administration and Finance

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FTA SMI Corrective Action Plan Status

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-4	FTA-TRA-22-001	Establish consistent PPE requirements for ROW personnel access	30-Jun-23	Ongoing - 5 of 10 actions complete
22-4	FTA-TRA-22-002	Implement and document consistent MOW compliance with ROW safety procedures, including PPE requirements for all personnel.	31-Dec-22	Ongoing - 1 of 5 actions complete
22-4	FTA-TRA-22-003	Correct the track defects between Tufts Medical Center and Back Bay Stations on both north- and south-bound tracks	31-Oct-22	Complete - 5 of 5 actions complete*
22-4	FTA-TRA-22-004	Document MOW maintenance needs and develop and implement a schedule to ensure adequate track access to meet maintenance requirements.	30-Jun-24	Ongoing - 4 of 13 actions complete
22-4	FTA-TRA-22-005	Develop and implement work plans to address MOW maintenance needs and manage ongoing MOW workload	1-Feb-23	Ongoing - 3 of 7 actions complete
22-4	FTA-TRA-22-006	Expedite and sufficiently resource the transition to new Enterprise Asset Management (EAM) system.	1-Jul-23	Ongoing - 2 of 10 actions complete
22-4	FTA-TRA-22-007	Implement a process and reporting procedure that accurately communicates the number, severity, and significance of MOW defects to Executive Leadership.	30-Aug-23	Ongoing - 1 of 7 actions complete
22-4	FTA-TRA-22-008	Develop and implement a special maintenance repair plan to reduce the percentage of system track that is under a speed restriction	30-Jun-23	Ongoing - 2 of 8 actions complete
22-4	FTA-TRA-22-009	Restore Green Line work train capabilities	1-Dec-22	Ongoing - 2 of 4 actions complete
22-5	FTA-VSC-22-001	Implement specific written procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment.	30-Dec-23	Ongoing - 21 of 30 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-5	FTA-VSC-22-002	Develop training and train personnel on the policies and procedures to safely move rail vehicles with known or suspected defective brakes or propulsion equipment.	27-Jan-23	Ongoing - 15 of 19 actions complete
22-5	FTA-VSC-22-003	Implement a compliance program to ensure personnel consistently and accurately use policies and procedures for yard movements of rail vehicles with known or suspected defective brakes or propulsion equipment.	14-Oct-22	Complete - 11 of 11 actions complete
22-6	FTA-OCC-22-001	Submittal #1: Submit to FTA and DPU each week prior to the next week's service a detailed OCC revenue service schedule for each line to verify that each OCC employee assigned to work a shift is certified to MBTA's certification and retraining standards. Submittal #2: Submit to FTA and DPU within 24 hours of each day's operations the "as performed" schedule to demonstrate that substitutions are made with certified personnel.	5-Feb-23	Ongoing - Reporting reduced from weekly to monthly starting October 2022
22-6	FTA-OCC-22-002	Submittal #1: Submit to FTA and DPU each week prior to the next week's service a detailed staffing plan that validates appropriate duty periods and rest periods for OCC staff to verify that each employee assigned to work a shift within the OCC works a shift consistent with MBTA's hours of service policy for rail transit motorpersons. Submittal #2: Submit to FTA and DPU within 24 hours of each day's operations the "as performed" schedule to validate that any changes to the schedule due to employee substitutions were filled with employees that had sufficient opportunity for recovery between shifts.	5-Feb-23	Ongoing - Reporting reduced from weekly to monthly starting October 2022

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-6	FTA-OFF-22-003	Submit to FTA and DPU each week prior to the next week's service that, for each shift, OCC supervisors and managers are not dual scheduled for both supervisory duties and dispatcher duties at any time.	5-Feb-23	Ongoing - Reporting reduced from weekly to monthly starting October 2022
22-6	FTA-OCC-22-004	Develop and enforce policies that require OCC personnel to work in a rested state. Modify hours-of-service policy to require sufficient hours of rest, consistent with MBTA's hours of service policy for rail transit motorpersons.	1-Apr-23	Ongoing - 3 of 5 actions complete
22-6	FTA-OCC-22-005	Adequately staff the OCC for current operational needs. Provide a plan to meet the operational needs of the system, consistent with MBTA's hours of service policy for rail transit motorpersons and meeting scheduled leave requirements.	15-Oct-22	Complete - 5 of 5 actions complete
22-6	FTA-OCC-22-006	Address major challenges in recruiting and training new rail transit dispatchers, the quality and performance of their training, and the certification of new candidates.	1-Jul-24	Ongoing - 4 of 12 actions complete
22-6	FTA-OCC-22-007	Verify that all dispatchers working within the OCC are current in their certifications prior to starting their shift.	1-Jan-24	Ongoing - 2 of 5 actions complete
22-6	FTA-LC-22-001	Submittal #1: Submit to FTA and DPU a detailed revenue service schedule for each line to verify that each employee assigned to work a shift is certified to MBTA's certification and retraining standards. Submittal #2: Submit to FTA and DPU within 24 hours of each week's operation the "as performed" schedule to validate that any changes or substitutions were filled with certified personnel.	30-Jan-23	Ongoing - Reporting reduced from weekly to monthly starting September 2022

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-7	FTA-LC-22-002	Implement procedures to ensure that only trained and certified personnel are scheduled to operate or supervise the movement of railcars.	1-Nov-23	Ongoing - 3 of 9 actions complete
22-7	FTA-LC-22-003	• Create, review, and/or update its training materials to include 1) Training and certification manuals for each line, to include manuals for operators and supervisors, 2) Updated rulebooks for all train lines, enforce version control, 3) A compilation of temporary and permanent orders • Make training materials available electronically • Ensure that employees who have enrolled for training have completed the training.	1-Oct-24	Ongoing - 1 of 6 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-9	FTA-22-9-MBTA-CAT1-1	Conduct and submit a workforce analysis and associated workforce planning to include: 1. Required activities that must be performed for rail transit operations, maintenance, and capital projects delivery: A description of present and projected day-to-day requirements for rail transit operations, preventive and corrective maintenance, and capital project delivery through the next five fiscal years. 2. Required resources to perform mission-critical activities: A description of the assignment of the necessary human resources to support present and projected day-to-day requirements for rail transit operations, preventive and corrective maintenance, and capital project delivery through the next five fiscal years per the description above. 3. Current staffing capabilities for mission-critical activities: The results of an assessment of MBTA's ability to safely operate, maintain, and complete capital project delivery for its rail transit system at current service levels of workforce. 4. Safety case for mission-critical activities that can be performed within current and projected resources over the next five fiscal years: The identification of safety risk associated with current staffing shortages and how they are or will be mitigated and any needed changes or reductions in activities.	28-Sep-23	Ongoing - 1 of 10 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-9	FTA-22-9-MBTA-CAT1-2	Develop and implement a recruitment and hiring plan to address findings from its workforce analysis and associated workforce planning for at least a five-year period, including how it will expand its capabilities for recruiting and hiring personnel to fill operations, maintenance, and capital project delivery positions.	15-Jan-24	Ongoing - 1 of 9 actions complete
22-9	FTA-22-9-MBTA-CAT1-3	Modify safety engineering and certification requirements for capital projects and vehicle procurements and ensure they are addressed through additional E&M and Safety Department staffing, contractor resources, or a combination of approaches.	30-Jun-24	Ongoing - 1 of 11 actions complete
22-9	FTA-22-9-MBTA-CAT1-4	Review inspection and resident engineering resources needed to ensure compliance with MBTA Right of Way safety rules; additional staffing, contractor resources, or a combination.	15-Mar-24	Ongoing - 1 of 10 actions complete
22-10	FTA-22-10-MBTA-CAT2-1	•Conduct review of SMS planning, implementation, and operational processes and activities to address the gaps discussed in this finding. •Update SMS Implementation Plan to reflect the results of this review.	22-Mar-24	Ongoing - 1 of 19 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-10	FTA-22-10-MBTA-CAT2-2	•Define explicit criteria for prioritizing safety risks. •Include explicit safety risk acceptance criteria into Agency Safety Plan and/or reference documents. •Define how safety information must be presented to MBTA leadership in a prioritized and actionable manner. •Require, and provide means for, operating department leads (including maintenance and engineering departments) to elevate proposed safety risk mitigations, including their status, that require MBTA leadership approval for resourcing.	18-Jul-24	Ongoing - 1 of 20 actions complete
22-10	FTA-22-10-MBTA-CAT2-3	•Map safety data flows and supporting processes. •Establish explicit accountabilities and responsibilities for safety data flows as a component of safety information management (collection, analysis, communication, storage, and retrieval of safety data). •Provide formal training in safety information management to relevant personnel. •Demonstrate that executive management uses and promotes the usage of safety data analysis and/or documented facts in decision-making related to safety risk.	24-Nov-23	Ongoing - 1 of 16 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-10	FTA-22-10-MBTA-CAT2-4	•Update Safety Assurance process to include monitoring of safety risk mitigations with a) compliance-based activities to provide the baseline for monitoring implementation status and b) performance-based activities to monitor the actual effectiveness of safety risk mitigations. •Prepare a monthly look-ahead schedule for prioritized safety risk monitoring activities that include safety risk mitigations and corrective actions in place to address MBTA's highest safety priorities. •Develop guidance, and deliver training for safety investigators that ensure the consideration of precursor factors in the analysis of the chain of events leading to a safety event (accident, incident, or occurrence), including but not limited to, for example: •Suitability of resources available to frontline personnel for operational and maintenance activities •Deficiencies in policies, procedures, rulebooks •Outdated policies, procedures, and rulebooks •Deficiencies/inadequacies in training Shortcomings in supervision •Deviations from procedures and rules Reasons for lack of adherence to procedure and rules •The limited success of discipline to address safety issues	2-Feb-24	Ongoing - 1 of 18 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-10	FTA-22-10-MBTA-CAT2-5	•Develop criteria for conducting safety risk assessments consistent with the basic principles of safety management and the tenets of SMS as conveyed in FTA's SMS guidance materials. •Develop explicit direction for the ownership of safety risk assessments among the Safety Department and the operating departments. Documentation must include providing explicit roles, responsibilities, and thresholds of authority of each department involved. •Include in the above criteria directives to ensure that operating departments including subject matter expertise, own safety risk assessments, while safety officials provide support for safety risk assessments and reports on results to Executive Leadership for safety resource allocation priorities. •Expand policy of establishing a predefined schedule of safety risk assessment workshops and develop criteria attuned with the nature of hazard identification (i.e., as they are identified), to expedite safety risk assessments to support prioritization for resource allocation.	31-Dec-23	Ongoing - 1 of 13 actions complete
22-10	FTA-22-10-MBTA-CAT2-6	•Evaluate (and correct) the data contained in its hazard log and safety risk mitigation log for accuracy and relevancy to SMS. •Expedite the build out of safety risk and safety risk mitigation monitoring information tools. •Demonstrate use of its safety information management tools to effectively prioritize its resources to address the results of: -Safety Risk Monitoring -Safety Performance Monitoring	5-Apr-24	Ongoing - 1 of 12 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-11	FTA-22-11-MBTA-CAT3-1	•Develop, in SMS documentation, instructions regarding the conduct, recording, communication and follow-up of the outcome consensus decisions specific for each of the following meetings: Operations and Safety biweekly call, Operations and Safety weekly meeting, Executive Safety Committee, Safety Management Review Committee, Safety Management Working Groups, Data Analysis Group, Local Safety Committee Meetings, Joint Labor/Management Safety Committee •Develop, in SMS documentation, a formal mechanism and associated guidelines to ensure that meetings are consistent in the identification and analyses of safety concerns and hazards, prioritization of safety risks; implementation of corrective actions; and safety risk mitigation effectiveness monitoring	20-Dec-23	Ongoing - 0 of 17 actions complete
22-11	FTA-22-11-MBTA-CAT3-2	•Develop guidelines for the expected role and contribution of frontline employees to the local safety committee meetings •Develop instructions for the conduct of meetings, including explicit departmental accountabilities for meeting outcome information capture, communication and follow-up.	20-Oct-23	Ongoing - 0 of 10 actions complete

FTA_SMI_CAP_Status_2022.11.07

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-11	FTA-22-11-MBTA-CAT3-3	•Expedite the development of an effective ESRP as a fundamental source of safety information for hazard identification and safety performance monitoring •Provide explicit direction to frontline employees on what to report and what not to report through ESRP (including the safety hotline) •Provide refresher training to stakeholder personnel on the role of employee safety reporting within SMS and the crucial contribution managers and supervisors play	15-Dec-23	Ongoing - 0 of 12 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-12	FTA-22-12-MBTA-CAT4-1	•Each operating and maintenance department must establish a group to review department-wide information on levels of non-compliance with key rules and procedures critical to the safety of activities performed by the department. •Each department must establish and act on a prioritized list of most frequently violated rules and procedures with the most significant potential safety consequences. •Each department must develop and implement approaches, which could include audits, use of checklists and guides, campaigns, and training, to improve compliance. •Each department must report to the Safety Department monthly on its compliance with identified key rules and procedures critical to the safety of activities performed by the department. •Safety must review and audit these reports and compile a monthly compliance report for MBTA's executive leadership team. •Each department must continue to review safety data to assess effectiveness of actions and improve compliance with safety rules and procedures.	31-Dec-25	Ongoing - 1 of 17 actions complete
22-12	FTA-22-12-MBTA-CAT4-2	Mechanism to monitor operations and train stakeholder safety and operating personnel to identify situations of non-compliance	1-Mar-26	Ongoing - 1 of 13 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-12	FTA-22-12-MBTA-CAT4-3	•Develop a QA/QC program to independently oversee ongoing QA/QC activities. •Ensure that the QA/QC functions are independent of the Safety department and establish a monthly report to the GM. •Develop a formal QA/QC procedure that details the oversight of and accountability and roles and responsibilities for QA/QC programs provided by railcar manufacturers and MBTA consultants related to quality control of its railcars and subcomponents. •Ensure that the MBTA QA/QC independent group is staffed with a sufficient SMEs in necessary disciplines to ensure a complete and thorough understanding of the responsibilities under the purview of railcar maintenance and engineering.	1-Mar-25	Ongoing - 0 of 14 actions complete
22-12	FTA-22-12-MBTA-CAT4-4	•Conduct a training needs assessment for rail transit operations and maintenance departments, to include emergency response training. This assessment should identify training that needs to be updated, developed, and supported with additional resources. •Implement the results of the training needs assessment. •Consider opportunities and adopt technology and other resources to support training development and training management and record-keeping.	1-Nov-24	Ongoing - 1 of 17 actions complete

Directive	Finding / CAP #	Description	Est. Completion Date	MBTA Reported Progress Update
22-12	FTA-22-12-MBTA-CAT4-5	•Review existing maintenance rules and procedures; identify opportunities for tools and checklists to support employees in carrying out maintenance rules and procedures; and develop, distribute, maintain, and update these materials. •Include frontline maintenance personnel in the development evaluation of these tools and checklists.	1-Oct-24	Ongoing - 0 of 15 actions complete
22-12	FTA-22-12-MBTA-CAT4-6	Evaluate expanding its existing mentoring program from Bus Transit Operations to include new part-time and full-time rail transit operators or consider establishing a mentoring program specific to rail transit operations. In its evaluation, MBTA should consider opportunities and resources to support the professional development of rail transit operations personnel.	31-Dec-23	Ongoing - 0 of 9 actions complete
22-12	FTA-22-12-MBTA-CAT4-7	•Confirm radio dead spots with frontline motorpersons and maintenance workers. •Improve the performance of its radio system in these dead spots.	30-Oct-24	Ongoing - 4 of 9 actions complete

Opportunities for MassDOT/MBTA Capital Collaboration

Potential Opportunities/Programs for MassDOT to assist the MBTA

- EV/Charging Stations
- Commuter Rail Electrification
- Bridge Repair and Rehabilitation
- ADA Improvements

Next steps:

- Establish a new unit in MassDOT to advance initial demonstration projects (EV Charging Stations).
- Look at other DOT models including High Performance Enterprise in Colorado.

massDOT

EXHIBIT C