

## **Appendix F – MBTA Comments on Final Draft 2023 Triennial Safety Audit Report**



Maura Healey, Governor  
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April 1, 2024

Mr. Robert Hanson  
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 Massachusetts Department of Public Utilities (DPU)  
 One South Station  
 Boston, MA 02110

**Re: MBTA Comments on DPU Draft 2023 Triennial Safety Audit of the MBTA Report**

Mr. Hanson,

The Massachusetts Bay Transportation Authority (MBTA) Safety Division has received and reviewed the DPU's Draft 2023 Triennial Safety Audit of the MBTA Report, summarizing audit findings and recommendations from the activities required under 49 C.F.R. Part 674.31 and 220 CMR 151.10(2).

The Division thanks you for the opportunity to review the draft report, and offers the following comments, questions, and clarifications on the document.

Page	Section	Text in Draft	Comment
5	Audit Schedules & Activities		RTSD utilized 5 times without being defined
6	Special Directive 22-4	The MBTA replaced tracking and followed internal safety processes and procedures.	Under the section regarding Tufts Curve, it references "The MBTA replaced tracking..." Should 'tracking' be 'track'?
6-7	Notable Areas of Improvement	Additionally, the MBTA has closed the following SD 22-4 findings	MBTA has also closed Finding 7 under 22-4 and Finding 4 under 22-6
11	Triennial Audit Design	The Triennial Audit is not intended to be a comprehensive review in each of the Groupings; however, some aspects of each Grouping are reviewed to assure compliance with the Safety Program, ASP, and SMS implementation.	What is the difference between the Safety Program and the ASP?

18	Grouping 1 Recommendations	The MBTA should provide DPU with a draft of ASP updates, for DPU to complete an informal review of the document and provide conditional approval before the MBTA presents the document to its Board of Directors for approval.	The MBTA has submitted drafts to the DPU for comment prior to leadership signature
18	Grouping 1 Recommendations	The MBTA should perform a formal SMS Implementation Audit to establish where it has made progress with the ASP.	This is covered in FTA 23-10 CAP 1
18	Grouping 1 Recommendations	The Safety Certification Plan and Configuration Management Plan have not been updated since 2015. These plans are being updated pursuant to SD 22-9 and should continue to be updated to also reflect the relevant Recommendations and Findings in Grouping 9 of this audit.	This is covered in FTA 22-09 CAP 3
18	Grouping 1 Findings	The DPU reviewed several documents considered Minimum Standards for Safety (“MSS”) that have been updated but not shared previously with the DPU.	Please note what MSS documents were updated but not shared with DPU
18	Grouping 1 Findings	The MBTA completed drills and exercises without formal sharing of After-Action reports and the Corrective Actions developed in response to those drills and exercises.	There have been no Corrective Actions developed following drills and exercises. All Corrective Actions developed are submitted formally to DPU.

19	Grouping 2 Opportunities	The Safety Department has several vacant positions and is leaning heavily on a few key individuals to do most of the work. MBTA should fill vacancies and develop a clear onboarding plan that identifies the roles and responsibilities associated with new positions.	This is in process since September 2023 and is tied to FTA CAP 22-09 and 23-10.
19	Grouping 2 Recommendations	The Safety Department should develop a strategic plan and forecast the top priorities for safety oversight, as this will help to ensure alignment of resource needs	Prioritization and resource needs are in the process of being developed as part of the Workforce Assessment required by FTA CAP 22-9-1.
20	Grouping 3 Opportunities	To fully implement the SRM process with the staff, more in-depth and in-person training (not just the LMS) should be considered	Is the staff noted in bullet 1 referring to MBTA Safety Division Staff or Agency Staff? This is covered in FTA CAP under 23-10
20	Grouping 3 Opportunities	Although improving, the MBTA should continue to develop the tools and capabilities to fully implement SMS.	This overlaps with FTA CAPs under 23-10
20	Grouping 3 Opportunities	Develop a policy for triage and assessment of hazards reported through the ESRS.	This overlaps significantly with FTA CAPs under 23-10
20	Grouping 3 Recommendations	The MBTA should formally evaluate the current risk level and ensure alignment with executive leadership on risk acceptance.	Risk acceptance criteria has been reviewed and is part of FTA CAP 23-10-2
20	Grouping 3 Recommendations	Develop guidance and employee outreach material for the MBTA staff and management on what is a	This overlaps with FTA CAPs under 23-10 & 22-11

		critical reported hazard via ESRS and what is not	
20	Grouping 3 Recommendations	The MBTA should ensure its use of the Origami database assists the DPU's risk-based inspection program.	This overlaps with FTA CAPs under 23-10
21	Grouping 4 Opportunities	The MBTA should track Corrective Actions and ensure uniform status updates across MBTA responsible departments.	This overlaps with FTA CAP 23-10-04
21	Grouping 4 Opportunities	The MBTA should assist and engage in CAP development from the responsible MBTA departments to determine if proposed CAPs adequately address the root causes of the precipitating event.	This overlaps with FTA CAP 23-10-04
21	Grouping 4 Recommendations	The MBTA should formally identify its peer organizations and compare its performance measures and targets with the peer group.	As a part of multiple FTA CAPs, MBTA has performed industry benchmarking efforts to identify best practices
21	Grouping 4 Recommendations	The MBTA Safety Office should study whether the Safety Rules Compliance Program ("SRCP") is consistent with APTA Standard RT-OP-S-011-10 and other peer organizations. This evaluation should be used to determine whether the program should be further developed to be more effective.	This overlaps with FTA CAP 23-12-01R
22	Grouping 5 Opportunities	The MBTA should track investigation reports and investigational process through	FTA CAP 23-10-04 scope is focused on the MBTA's investigation process

		closure and subsequent mitigation.	
22	Grouping 5 Opportunities	The MBTA should decrease the amount of time it takes to produce final reports.	FTA CAP 23-10-04 scope is focused on the MBTA's investigation process
22	Grouping 5 Opportunities	The MBTA should assure collaboration by all responsible MBTA departments with the results of the investigation reports and corrective actions.	FTA CAP 23-10-04 scope is focused on the MBTA's investigation process
22	Grouping 5 Recommendations	The MBTA should consider a uniform tracking mechanism for safety rules violations and other key investigative milestones	Is this referring to SRCPs, or rule violations requiring incident investigation?
22	Grouping 5 Recommendations	The MBTA should develop an internal policy/procedure and training for MBTA departments on their responsibilities when responding to a safety event.	This is defined in the Safety Event Investigation Manual and an LMS training module was developed for Safety Event Response Team personnel.
22	Grouping 5 Recommendation	The MBTA should determine the appropriate staffing level required to ensure long-term compliance with regulatory investigation reporting requirements.	This overlaps with the FTA Workforce Assessment CAP 22-09-01 and CAP 23-10-04 scope is focused on the MBTA's investigation process
22	Grouping 5 Recommendation	The MBTA should ensure the Accident Investigation report delivery to DPU is up to date and maintain on-time delivery. Written documentation should be provided for reports that MBTA proposes to submit late.	FTA CAP 23-10-04 scope is focused on the MBTA's investigation process
23	Grouping 5 Findings	On several occasions, MBTA operators have returned to operate revenue vehicles prior	Are there examples to validate this statement?

		to both receipt of Post-Accident Testing (“PAT”) results and the operator being cleared based on those results.	
23	Grouping 5 Findings	The MBTA must ensure that operators who are sent for PAT are not permitted to operate an MBTA revenue vehicle until cleared with results of the PAT by the Human Resources department.	Human Resources does not clear employees to return to work. This is done by the Medical Clinic.
24	Grouping 6 Positive Observations	The results of this should regularly be shared within MBTA and with DPU.	This information is shared via the invites to the monthly SRCP meetings which DPU is invited to
24	Grouping 6 Opportunities	MBTA should do more to promote throughout the entire organization the importance of compliance in a rules-based operating environment.	This is covered by FTA CAP 23-12-01R
24	Grouping 6 Opportunities	The Rail Operating Rulebook has too many pages for an operator to carry while operating a train, making it increasingly more difficult for the operator to consult the rulebook in making the correct decisions. MBTA should evaluate other RTA processes for ensuring accessible rules documentation.	This is covered by FTA CAP 23-12-01R
24	Grouping 6 Recommendations	The MBTA should retrain all frontline and management level staff on the importance of rule adherence and efficiency testing (SRCP).	This is covered by FTA CAPs under 23-12

		The MBTA should consider if the method of accounting for SRCP activities is diluting their overall compliance rates.	
24	Grouping 6 Recommendations	The MBTA should consider if the method of accounting for SRCP activities is diluting their overall compliance rates.	This is covered by FTA CAPs under 23-12
24	Grouping 6 Recommendations	The MBTA should assess rules violations based upon years of service. If there is a correlation that employees with shorter durations of years of service have a higher violation rate, a training gap analysis should be conducted.	This is covered by FTA CAPs under 23-12
25	Grouping 6 Findings	On several occasions, MBTA has updated documents designated as MSS without notifying DPU and providing opportunity to review these changed/updated documents.  o MBTA shall develop a process for all rulebook revisions to be presented to DPU for comment before finalizing it as a MSS.	This is covered by FTA CAPs under 23-12
25	Grouping 6 Findings	On several occasions, the DPU has expressed significant concerns with MBTA's Rules Compliance program.  The MBTA must evaluate the Rules Compliance program and determine if it both meets the expectations of its executive management for rules compliance and is consistent	This is covered by FTA CAPs under 23-12.

		with successful peer organizations.	
26	Grouping 7 Opportunities	The current track condition is not completely known by MBTA. MBTA should continue to implement SD 22-4 programs and sustain them over time, so that the condition of track is more transparent, especially for those responsible for inspection, maintenance, and operations.	This is covered by FTA CAPs under 22-04.
26	Grouping 7 Recommendations	The MBTA should determine the scope of the Everett Shop and determine if it is sufficiently staffed or requires additional equipment/machinery to meet the needs of the organization.	This overlaps with the FTA Workforce Assessment CAP 22-09-01
26	Grouping 7 Recommendations	The MBTA should identify gaps within the MOW staffing and develop a plan to address the shortfalls.	This overlaps with the FTA Workforce Assessment CAP 22-09-01
26	Grouping 7 Recommendations	The MBTA should continue to implement the MaxTrax phone system.	This is covered by FTA CAPs under 22-04 and CAP 22-12-05
26	Grouping 7 Recommendations	The MBTA should assess the effectiveness of the RFID tag system used by the Blue Line at Orient Heights Carhouse and determine opportunities for further deployment.	This is covered by FTA CAPs 22-04-06 and 22-12-05
26	Grouping 7 Findings	Based on observations over the last few years, there have been maintenance issues out on the rail system that were not being tracked in the maintenance	Collecting, scoring and planning for track maintenance work is being addressed by FTA CAP 22-4-8, Special Maintenance Repair Plan.

		management system or scheduled for corrective maintenance	Other efforts for assets' inspection, maintenance and planning is covered in other FTA CAPs under SD 22-4.
28	Grouping 9 Recommendations	The MBTA should regularly account for the status of each new capital project in the system and determine if the Safety Certification Tier evaluation originally assigned is still appropriate.	This is covered by FTA CAP 22-09-03.
28	Grouping 9 Recommendations	As part of its implementation of FTA's SD-9, the MBTA should evaluate whether Safety staff plus the current level of contractor support is a sufficient resource level to satisfactorily address Management of Change	This is already part of the workforce assessment CAP 22-09-01 in conjunction with CAP 22-09-04
28	Grouping 9 Findings	<p>The MBTA should reconsider the explanations (in the plans/programs referenced below) of Safety Certification Tiers and requirements for Risk Assessment and Hazard Analysis.</p> <p>o MBTA must improve how Safety Certification Tier selection and appropriate communications of changes on capital projects are addressed in the Configuration Management Plan and Safety Certification Program, which MBTA is currently updating. These updated documents must be sent to DPU for comment and concurrence before finalizing. This Finding is intended to</p>	This is covered by FTA CAP 22-09-03.

		compliment, not alter, FTA's SD 22-9.	
28	Grouping 9 Findings	<p>The GLX project prematurely commenced revenue service while several design specifications were not properly constructed (e.g., narrow gauge), which should have been revealed as part of the Safety Certification Program.</p> <p>o The MBTA must formalize and ensure transparency and effective communication of changes and safety hazards across its divisions/groups prior to introducing new capital projects into revenue service.</p>	This is covered by FTA CAP 22-09-03.
28	Grouping 9 Findings	The MBTA must formalize and consistently use the Change Management Committee structure in the MBTA's Safety Certification Program (the Safety and Security Executive Review Committee, the Safety Certification Working Group, and the project-specific committees) for transparency and effective communication of changes across divisions/groups, including advance notification to DPU of the meeting schedules.	This is covered by FTA CAP 22-09-03.
30	Grouping 10 Recommendations	The MBTA should consider shifting to a final report for each internal audit topic when the audit is complete, rather than compiling at the end of the yearly cycle. The process	MBTA does complete a report for each internal audit, but per 220 CMR 151.05 (3), MBTA is required to submit an annual report to DPU by February 15th.

		change may help the MBTA be more transparent throughout the year in its audit activities and Corrective Actions that result from the audits.	
30	Grouping 10 Findings	The MBTA must update the Internal Safety Review/Audit schedule at a predetermined point each calendar year and communicate that revised schedule with the DPU.	The three year look ahead of the Internal Safety Audit is found in the annual report.
31	Grouping 10 Findings	In those cases, to achieve the most neutral process and meaningful results, it would be helpful to have a separate MBTA office or contractor (e.g., Quality, Compliance, and Oversight (“QCO”)) participate and provide those audits/reviews of MBTA Safety functions and activities.	MBTA Safety was not audited this year. In years where MBTA Safety is audited, a neutral third party performs the audit to avoid a conflict of interest. In 2022, MBTA Safety was audited. This audit was performed by TRA.
31	Grouping 11 Opportunities	The Training department relies on the LMS system to send notifications within MBTA that changes to operational processes need to be made, rather than the Training department preparing training on the changes. The MBTA should provide clearer communication of configuration management changes and evaluate developing training to all departments, rather than relying on the LMS software to make notifications.	This overlaps with the FTA CAP 22-12-04
31	Grouping 11 Recommendations	The MBTA Configuration Management Committee should	This overlaps with the FTA CAP 22-12-04

		include a representative from Training department to ensure the changes are implemented	
31	Grouping 11 Recommendations	The MBTA should audit the LMS/Learning Hub curriculum to see how effective it is for frontline employees.	This overlaps with the FTA CAP 22-12-04
31	Grouping 11 Recommendations	The MBTA should develop a curriculum for Power Dispatchers in addition to one-on-one training.	This overlaps with the FTA CAP 22-12-04
31	Grouping 11 Recommendations	The MBTA should develop checklists of minimum required training for all employee classifications and job performance measures.	This overlaps with the FTA CAP 22-12-04
31	Grouping 11 Recommendations	MBTA Training department should track the topic of each Safety Flash that is issued so it can better target refresher training in those areas.	This overlaps with the FTA CAPs 22-12-04 and 23-10
31	Grouping 11 Recommendations	In accordance with the FTA requirements from the SMI, the MBTA should complete reevaluation and redesign of the ROW/RWP Training and reissue it to all required staff.	This overlaps with the FTA CAP 22-12-04
31	Grouping 11 Recommendations	The Power Training department should determine whether the training curriculum they have is sufficient based on newer and older component equipment manufacturer specifications.	This overlaps with the FTA CAP 22-12-04

32	Grouping 11 Findings	The MBTA must develop a training curriculum for each division that accurately reflects its role and responsibility for completing the safety event investigation checklists that are completed during safety event investigations	This is included in the Safety Event Investigation Training Modules.
32	Grouping 11 Findings	MBTA shall develop a technical training plan for the investigations team that includes key competencies, training schedules, and opportunities for continued education	The Safety Event Investigation Training Modules provide the investigation training for those completing investigations. Those working in Transit Rail Safety are hired as SMEs in the various subjects.
34	Grouping 12 Recommendations	As new staff have been used to analyze the aspects of training pertinent to job classification, the MBTA should perform an assessment of the status of that activity.	This overlaps with the FTA CAP 22-12-04
34	Grouping 12 Recommendations	The MBTA should continue to educate all staff, including its frontline staff, on its adoption of the SMS and how and why the organization has adopted its principles.	This overlaps with the FTA CAPs in 22-10
34	Grouping 12 Findings	The MBTA must communicate all business documents created in the SMI and SMS with the DPU. (Minimum Standards for Safety review)	As part of the SMI, all documents submitted to the FTA Fileshare are also submitted to the DPU Fileshare.
43	Overall System Description	The Rail Transit System (subway system) includes:  5 light rail lines	The MBTA Rail Transit System has 2 light rail lines – the green line with multiple branches, and the Mattapan line.

43	MBTA Rail Transit System	The Green Line is the only line that has direct connections to the rest of the lines.	The Orange line also directly connects with the rest of the lines as well. The Red and Blue lines are the only lines that do not connect with each other.
45	Light Rail Lines	<b>Green Line</b> – The Green Line consists of four active branches:  D Branch runs from the C branch southwest of Kenmore station to Riverside station  E Branch runs northwest from Heath Street station to Copley station	The Union Square Branch is considered the opposite end of the D branch, and the Medford/Tufts Branch is considered the opposite end of the E branch.
45	Light Rail Lines	The GLX extension from Lechmere opened in December 2022 and added another 7 miles of track	GLX added 4.3 miles of track.
45	Light Rail Lines	These vehicles are maintained at vehicle maintenance facilities, Riverside and Reservoir Yard	Vehicles are also maintained at Innerbelt Carhouse
46	MBTA Transit Police Department	The department patrols and protects the 5 subway lines to include the Silver Line, 13 commuter rail lines, 4 passenger ferry routes, 181 bus routes and The Ride paratransit system in Massachusetts communities.	There are 6 passenger ferry routes – Charlestown, Hingham, Hull, East Boston, Winthrop, Lynn.
46	Power Distribution	For the rapid transit and trackless trolley services, the MBTA distributes electricity to power various systems	MBTA no longer has trackless trolleys.
47	Major Administrative Facilities		Missing:

			185 Kneeland St, Boston Training Facilities: Missing the UTC at Charlestown
48	Map of MBTA System		Map is outdated and does not include GLX

We thank you for your consideration of these comments and clarifications, and for the opportunity to continue our collaboration toward a safer MBTA. Should you wish to discuss, please do not hesitate to contact me.

Sincerely,

DocuSigned by:  
  
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Timothy P. Lesniak, Chief Safety Officer