FTA Final SMI Report: Directives Updates

Four Special Directives issued, August 31, 2022. MBTA Quality, Compliance, and Oversight Chief Katie Choe

Draft for Discussion & Policy Purposes Only

FTA SMI 08.31.22 – Summary of Findings

#22-9: Managing the impact of operations, maintenance & capital projects requirements on the existing workforce.

4 findings requiring additional assessment and resource prioritization for O&M activities.

CAPs due in 30 days (by Sep 30) Revisions due 11/4

SUBMITTED

#22-10: Prioritization of Safety Management Information.

6 findings requiring enhanced and expedited implementation of the Agency's SMS, including procedures, training, safety risk assessment, and safety assurance activities.

CAPs due in 45 days (by Oct 15) *SUBMITTED*

Revisions due 11/18

#22-11: Effectiveness of Safety Communication.

3 findings requiring improvements in the MBTA's management of its safety committee process, employee safety reporting program, and safety promotion activities.

CAPs due in 20 days (by Sep 20) Revisions due 10/28 *SUBMITTED* #22-12: Operating conditions and policies, procedures, and training.

7 findings requiring additional monitoring of rail transit operations, new Quality Assurance/Quality Control capabilities, and new training and procedures.

CAPs due in 35 days (by Oct 5) Revisions due 11/14 *SUBMITTED*

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Corrective Action Plan Status

SMI Finding	Corrective Action Plan	Status	SMI Finding	Corrective Action Plan	Status
22-9 Finding 1	Workforce Assessment	Under Review	22-11 Finding 1	Safety Committee Meetings	Under Review
22-9 Finding 2	Hiring Plan	Under Review	22-11 Finding 2	Frontline Participation	Under Review
22-9 Finding 3	Safety Certification	Under Review	22-11 Finding 3	ESRP/Safety Hotline	Under Review
22-9 Finding 4	Contractor Oversight	Approved	22-12 Finding 1	Rules Compliance	Under Review
22-10 Finding 1	SMS Implementation	Resubmittal Required	22-12 Finding 2	Operating Conditions	Under Review
22-10 Finding 2	Safety Information	Resubmittal Required	22-12 Finding 3	QA/QC	Under Review
22-10 Finding 3	Data Prioritization	Resubmittal Required	22-12 Finding 4	Training	Approved
22-10 Finding 4	Precursor Factors	Resubmittal Required	22-12 Finding 5	Manuals	Approved
22-10 Finding 5	Risk Assessment	Resubmittal Required	22-12 Finding 6	Mentoring	Approved
22-10 Finding 6	Risk & Performance Monitoring	Resubmittal Required	22-12 Finding 7	Radio System	Approved

Upcoming Deadlines

Special Directive	Finding	Actionable Item	Deadline	
22-12	Finding 4	Advisory Committee	November 1 🛛 🗸	
22-9	Findings 1, 2, 3	CAP Revisions	November 4 🛛 🗸	
22-9	Finding 4	Advisory Committee	November 4 🛛 🗸	
22-12	Finding 7	Advisory Committee	November 4 🛛 🗸	
22-12	Finding 7	Address Radio Weak Spots	November 4 🗸 🗸	•
22-12	Finding 7	Site Survey 18 Radio Weak Spots	November 4 🗸 🗸	
22-12	Finding 7	Repair Radio Weak Spots	November 4 🗸 🗸	
22-9	Findings 1, 2	Workforce Analysis & Hiring Plan RFP	November 10 🗸	
22-12	Findings 1, 2, 3	CAP Revisions	November 14 🗸 🗸	
22-11	Finding 3	ESRP & Safety Hotline RFP/TO	November 15 🗸	
22-10	ALL	CAP Revisions	November 18	
22-11	Findings 1, 2	Safety Committee RFP/TO	November 20	
22-9	Finding 3	Findings Analysis/Strategic Planning Session	November 30	
22-12	Fnds 1, 2, 5, 6	Findings Analysis/Strategic Planning Session	November 30	

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Workforce Assessment

#22-9: Managing the impact of operations, maintenance & capital projects requirements on the existing workforce.

- Finding 1: MBTA's staffing levels are not commensurate with the demand for human resources required to carry out current rail transit operations and maintenance in addition to expanding capital program activities.
- Finding 2: MBTA has not demonstrated the organizational capacity to recruit and hire personnel to meet authorized staffing levels.



Workforce Assessment: Required Actions

MBTA must conduct and submit to FTA 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.

MBTA must **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.

Appendix – Details of Final SMI Findings



FTA SMI 08.31.22 – Summary of Findings

#22-9: Managing the impact of operations, maintenance & capital projects requirements on the existing workforce.

- Finding 1: MBTA's staffing levels are not commensurate with the demand for human resources required to carry out current rail transit operations and maintenance in addition to expanding capital program activities.
- Finding 2: MBTA has not demonstrated the organizational capacity to recruit and hire personnel to meet authorized staffing levels.
- Finding 3: Additional resources are needed to support MBTA's safety engineering and safety certification process for capital projects.
- **Finding 4:** MBTA requires additional oversight of contractor work sites.

#22-10: Prioritization of Safety Management Information.

- Finding 1: MBTA has not ensured that the necessary structures are in place to support effective implementation and operation of its SMS
- **Finding 2:** MBTA executive leadership does not receive prioritized and actionable information related to safety risks or shortcomings in safety risk mitigations.
- Finding 3: MBTA Executive Management does not consistently ensure its decisions related to safety risks are based on safety data analysis or documented facts.
- Finding 4: MBTA's safety investigations and safety assurance activities do not consistently collect and analyze information on precursor factors.
- Finding 5: MBTA's safety risk assessment guidance as part of its Safety Risk Management is ambiguous and has led to confusion among stakeholders regarding their responsibilities and authorities, which has created delays in carrying out safety risk assessments activities.
- **Finding 6:** MBTA safety information management tools (hazard log, safety risk mitigation log, etc.) do not fully support prioritization of resources to address safety risk and safety performance monitoring.

FTA SMI 08.31.22 – Summary of Findings

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22-11: Effectiveness of Safety Communication.

- Finding 1: MBTA has not established explicit and formal provisions to ensure safety information from safety committee results in a consistent outcome of documented, prioritized, and actionable safety information.
- Finding 2: MBTA has not documented explicit and formal provisions to ensure the participation of frontline employees in local safety committees as part of their job responsibilities in relation to the agency's SMS.
- Finding 3: MBTA management has not effectively communicated clear direction to frontline employees on what to report and what not to report through the Safety Hotline.

#22-12: Operating conditions and policies, procedures, and training.

- Finding 1: Documented operating and maintenance rules and procedures are not implemented as required.
- **Finding 2:** MBTA does not monitor operations, including the conditions of the operating environment, to identify the reasons for deviations between formal, established standards, rules and procedures, and actual operations and maintenance practices.
- Finding 3: MBTA's QA/QC program is not sufficiently independent from the activities it oversees.
- Finding 4: Technical training for operations and maintenance departments is underresourced and decentralized, without sufficient resources and direction, and relies significantly on on-the-job-training (OJT) which is informal and lacks oversight. Emergency response training is poorly integrated into overall training program.
- **Finding 5:** MBTA lacks formal resource manuals in key maintenance areas and does not currently provide employees with checklists or other tools to support training and implementation of maintenance rules and procedures.
- **Finding 6:** Due to workforce turnover, MBTA's new motorpersons and officials no longer have access to mentoring from experienced motorpersons and officials (inspectors, chief inspectors, and supervisors).
- Finding 7: Radio quality is deficient in several key locations and does not support adequate communications between OCC and field employees to ensure the safety of MBTA operations and maintenance.



