Appendix D – Audit Checklists

Massachusetts Department of Public Utilities ("DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 1

Updated: 9/6/2023

Grouping 1. Agency Safety Plan ("ASP") Updates and Safety Management System ("SMS") Implementation

- Review records and recordkeeping for the SMS and its implementation.
- Also use the results of the remaining audit groups to assess the SMS implementation.
- Annual Safety Plan Review and Update
  Certification of Compliance
- Documentation and Tracking of Minimum Standards for Safety
- Integration with Public Safety and Emergency Management
  - Security Emergency Preparedness Plan ("SEPP") All Elements/Topics
  - Emergency Operations/Management Plan(s) and Related Training for rail transit agency ("RTA") staff and Emergency Responders
  - Drills and Exercises Program
  - Most Recent Transportation Security Administration ("TSA") Baseline Assessment for Security Enhancement ("BASE") Review
- Assuring Integration of the Safety Department in Policy and Procedure Development and Changes
- [Safety Performance Criteria, Thresholds, and Targets for Improvement are covered in Safety Assurance]

Related Documents to Review:

1A. Safety Program Documents Update Process

- Certification letter submitted to DPU Certifying compliance with the regulation, approval by DPU.
- Submission letter for ASP and DPU Approval
- ASP Review Checklist

1B. Minimum Standards for Safety, Updates, MBTA Safety

- Various documents collected. Need to consider asking questions regarding.
  - document control,
  - update process,
  - and is Safety a required reviewer and at least concurrence for new and updated safety program related documents?
- How is the inclusion of Safety assured? See document describing the general list of minimum standards for safety.

1C. SMS Implementation

- MBTA Transit Safety Plan ("ASP") 2022, PRF [Preface] 4 MBTA SMS Implementation, 2.7 Records Management

- Review the guidance from the Federal Transit Administration ("FTA") in the ASP review checklist Sections B, C, E, K, and L.

1D. Integration with Public Safety
Focus on interactions with first responders, training of first responders, and training for all MBTA employees.

- MBTA Transit Safety Plan 2023, Section 2.3 Emergency Preparedness and Response
- SEPP, sensitive security information ("SSI")
- TSA BASE Review
- Emergency Action Plan
- Continuity of Operations Plan ("COOP")
- Building and Station Evacuation Plan
- After Action Report from Drills and Exercises
- Transit Security Awareness training for all employees
- Local first responder training program materials
    - Standard Operating Procedures ("SOPs") Boston Fire Department ("BFD"), Boston Police Department ("BPD")

Questions and Requests for Grouping 1. ASP Updates and SMS Implementation

1A. ASP update Process and Approvals

1. When does MBTA update their ASP? Describe the timeline and regulatory requirements.

2. Please walk through the annual review and update process.
    a. Who is involved, how communicated, and coordinated for update, who participates?
3. How is the final ASP distributed across the organization?
4. Who has final responsibility for the document?

1B. Minimum Standards for Safety ("MSS"), Updates, MBTA Safety

5. Has MBTA identified safety program related control documents?
    a. Have documents identified as MSS been updated and approved by the DPU SSO Program? How often are the MSS documents updated?
    b. Who updates the Minimum Standards tracking list?
6. What is the process for updates and coordination with SSO program for all aspects of the safety program and SSO program requirements?
    a. How is feedback from DPU SSO incorporated into final document preparation?
    b. Have there been any disagreements?
    c. How would disagreements with the DPU be handled?

1C. SMS Implementation

7. Please provide a high-level overview of the status of SMS Implementation at MBTA, and short-term next steps.
8. What is the anticipated timeframe to make substantial progress toward a fully functioning SMS at MBTA and what are the most difficult tasks to be completed?
9. Does MBTA monitor and report performance indicators for safety and operations?
    a. How are the performance indicators communicated to leadership and front-line?
    b. Is there a record of this communication?
10. Are there significant safety programs or campaigns being rolled out by the MBTA management?

11. What activities are under way to develop an SMS and comply with a recently approved ASP?
12. Please provide an explanation of how documentation and records management will be accomplished, based on ASP Section 2.7.
13. Discuss how the DPU SSO program annual report is delivered to the Board (or equivalent), governor, and FTA.
14. For safety program related control documents (such as Transit Asset Management ("TAM"), Rulebook, RWP, etc.), how are updates made and is Safety a part of the update process? Do updates to these documents require Safety's review and concurrence?
15. What are the requirements for inclusion of MBTA management and staff for updates of procedures or documents (such as those on the list of minimum standards for safety)?

1D. Emergency Response, Management, Preparedness, Security/Public Safety

16. What department(s) are responsible for the security and emergency management documents, and their updates?
    a. MBTA SEPP
    b. MBTA Emergency Management Plan
    c. MBTA Continuity of Operations Plan ("COOP")
    d. Overview of TSA BASE Review
17. Is Safety included in updates of these documents?
18. How are activities coordinated to complete the SEPP annual review and update process?
    a. Who is involved, how communicated, and coordinated for update?
19. Who is responsible for developing the content and conducting first responder training? How is that coordination accomplished?
20. What training is required for first responders? How often is training required to be refreshed?
21. How are drills and exercises planned, scheduled, and conducted? How is coordination accomplished?
    a. When was the most recent drill and/or exercise?
    b. Did any corrective action plans ("CAPs") come from these drills and/or exercises?
22. Does MBTA have an after-action meeting? Are CAPs developed from the meeting? Who is responsible for writing the final report? How is the report presented to the board members and chief executive officer ("CEO")?
23. What emergency response/preparedness training is required for MBTA employees both Administrative and front-line? How often are they refreshed?
24. Explain the process for coordination of public safety and emergency management planning with outside entities, such as updates of the SEPP and emergency management plan ("EMP").
25. When was the last TSA BASE assessment and what was the result?
    a. Were any corrective actions created from this assessment?
26. Provide examples of interactions and coordination with Buffalo City departments supporting MBTA operations/maintenance activities.
    a. City Management, Emergency Management and Homeland Security, police, fire
    b. Others?
27. How did MBTA plan and implement COVID 19 procedure?

Date:
Time:
Location: TBD

Mass DPU - SSO

Vital Assurance

Requested Attendees

Massachusetts Department of Public Utilities ("DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 2

Updated: 09/06/2023

Grouping 2. Safety Management Policy

- Safety Management Policy documentation, signed/endorsed by the Accountable Executive
- Agency's safety objectives
- Organizational Accountabilities and Responsibilities
    - Safety Related Committees
- Employee Safety Reporting System
- Policy Communication Throughout Transit Agency
- Safety Program Definition and Administration

Related Documents to Review:

- Review the guidance from the Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section F.

Agency's Safety Objectives

- MBTA Transit Safety Plan ASP, Preface 4 - Safety Management System ("SMS") Policies
- MBTA Transit Safety Plan ASP, Preface 3 - Safety Management Policy
- MBTA Transit Safety Plan ASP, Section 2.1 Safety Culture

Organizational Accountabilities and Responsibilities

- MBTA Transit Safety Plan ASP, Section 4 Organizational Structure & Responsibilities,
- MBTA Safety Organizational Chart;
- MBTA General Managers Team Organizational Chart

Employee Safety Reporting System

- MBTA Transit Safety Plan ASP, Section 2.1 Safety Culture
- MBTA Transit Safety Plan ASP, Section 7.0 Safety Promotion
- MBTA Transit Safety Plan ASP, Section 5 Safety Risk Management

Policy Communication Throughout Transit Agency

- MBTA Transit Safety Plan ASP, Section 7.2 Safety Communication
- MBTA Transit Safety Plan, Safety Management Policy, PRF 3

Safety Program Definition and Requirements

- Massachusetts DPU Rail Transit SSO Program Standard, Appendices, and Procedures, Section 151.03 Public Transportation Agency Safety Plan, and Transit Agencies' Internal Safety Audits

Questions and Requests for Grouping 2. Safety Management Policy

1. Discuss the Agency's Safety Objectives, Safety Management Policy, and Safety Culture. What is the status of each being rolled out/ implemented?
2. Please explain the Safety Management Policy roll-out and communication throughout the Transit Agency.
3. Discuss the role of Accountable Executive ("AE") and Chief Safety Officer ("CSO") at MBTA. Please explain the role of MBTA Safety across the Executive-Level departments.
    - Is the CSO included in all safety program-related decisions made (or documents created/updated)?
    - How are operational documents updated within the organization?
4. Discuss review and approval responsibilities for the Accountable Executive and Board of Directors.
    - How they are involved in ASP, Transit Asset Management ("TAM") Plan, and Security Emergency Preparedness Plan ("SEPP") updates, and assuring the safety program is implemented and operating properly?
5. Is the organization chart provided current with all positions and contractor staffing?
6. What is the status of implementing Section 4 Organizational Structure & Responsibilities?
    - How are new hires aware of their roles and responsibilities as it relates to SMS? Is this language in their job description?
7. Walk-through the org charts for executive management, rail operations, rail engineering and maintenance, capital projects, and safety. How many vacancies are in the different departments and where do new employees fit in the org chart? Does MBTA plan on adding any new positions?
8. Provide examples of interactions and coordination with Boston City departments supporting MBTA operations/maintenance activities.
    - City Management, Emergency Management and Homeland Security, police, fire
    - Others?
9. Review how the local safety committees at MBTA are set up and issues roll-up. What authority does each committee have to resolve hazards and safety issues? Are all hazards and safety issues listed in the hazard log?
10. Discuss how the Employee Safety Reporting System is established and used. Are all the hazards reported from the Employee Safety reporting System listed in the hazard log? Where can the employees access the hazard reporting form and turn in the form? Are there ways to report hazards anonymously?

Date:
Time:
Location: TBD

DPU/VA Audit Team
DPU

Vital Assurance

Requested Attendees
MBTA

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 3

Update: 09/06/2023

Grouping 3. Safety Risk Management ("SRM")

- Hazard Identification
- Risk Assessment
- Selection and Implementation of Mitigations
- Other sources of formal risk assessment, safety and public safety related information.

Related Documents to Review:

- Review the guidance from the Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section G.
- MBTA Transit Safety Plan 2023
    - Section 5: Safety Risk Management
        - System Modifications
        - Configuration Management
        - Safety Certifications
- Hazard Management Program 2019-2022
- Configuration Management – Configuration Management and Control Safety Program, 2015
- System Modification – MBTA System Modification Safety Program, 2015
- Safety Certification – MBTA Safety Certification Program, 2015
- Transit Asset Management ("TAM") Plan
- Rail and Construction Safety Committee Meeting Minutes
- Corrective Action Plans Log, Hazard Log and Notification Tracker
- MBTA Threat and Vulnerability Assessment ("TVA") (May review on-site)

Questions and Requests for Grouping 3. Safety Risk Management

1. What is the status of MBTA's ASP Implementation for SRM?
2. When and how often is the Hazard Management Program reviewed?
3. Explain and discuss the Hazard Identification process at MBTA. What changes with Safety Management System ("SMS")/SRM?
4. What additional training is MBTA planning to enhance Hazard Identification for front-line workers and others?
5. Discuss the employee safety reporting system and its use since implementation. How is the employee safety reporting system going to be used to enhance Hazard Identification?
6. Explain and discuss the Hazard Identification, Hazard Log, and Resolution of Hazards? How are the safety committees involved?
7. Discuss the SRM process and definitions of the Risk Matrix for MBTA.
8. Who at MBTA does SRM/hazard analyses? How are they qualified? Does MBTA use a group of subject matter experts ("SMEs") or contractors?

9. Is Training planned for SRM and hazard analysis? How does MBTA determine who will receive the training? Which department tracks the refresher? Training?
10. When does the Office of Safety close out the hazards in the hazard log?
11. How is SRM used in System Modifications and Capital Projects? How does the MBTA document describe the System Modification process, hazard analysis, interactions with Safety, and Configuration Management?
12. Are there standard procurement requirements that address SRM for capital and technical service projects?
13. How is SRM used in the TAM process? Used in prioritization?
14. When is Safety Certification used in a Capital Project? What is the current version of the Safety Certification Program? Who performs project oversight on behalf of the MBTA?
15. For capital or technical service projects, how are hazard analysis products reviewed and approved? What happens to the hazard analysis after approval?
16. Who (department or title) develops job hazard analyses ("JHAs")? Who completes JHAs and implements?
17. How are safety risk ratings approved at MBTA? Engineering, Management, Executive Management, Accountable Executive? High Risk (Red), Serious Risk (Orange), Medium Risk (Yellow), Low Risk (Green). Who are the Key Staff? Does it require all of them to approve or can anyone do it?
18. Risk Mitigation Tracking, Risk Mitigation Monitoring Plans – please describe these activities. Are there documents or plans developed for these activities?

Date:
Time:
Location: TBD
DPU - SSO Team
DPU
Vital Assurance

Requested Attendees

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 4

Update: 09/06/2023

Grouping 4. Safety Assurance – Safety Performance Measurements and Targets for Improvement

- Safety Performance Criteria, Targets, and Measures
- National Safety Plan
- FTA Guidance on Safety Performance Measures and Targets
- Coordination with the State and Metropolitan Planning Organization ("MPO") for Safety Performance Measures and Targets
- SSO Program Standard Requirements/Procedures for Hazard/Risk Identification, Data Collection, and Analyses/Assessments
- Hazard Log, Risk Register, and Corrective Actions/Mitigations Tracking and Status
- CAPs definition, tracking, closure process

Related Documents to Review:

- Review the guidance from the Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section H, H-1 through H-3; Section J Corrective Action Plans
- Transit Safety Plan 2023, Section 3 Safety Performance, Section 6 (all, focus on safety performance measurement and targets for improvement), specifically Section 6.4 Safety Performance Assessments.
- Orders and Bulletins, 2020-2023
- Pass/Fail Metrics for Training
- Example Safety Data Analysis Reports, 2023
- Executive Safety Committee Meeting Minutes
- Open/Closed Corrective Action Plans ("CAPs") and supporting documentation, 2018-2023
- DPU Investigation Reports, 2020-2023
- MBTA Hazard Log
- Efficiency Test Records
- Summary table of signal violations, 2020-2022
- Records associated with FTA 2020 COVID-19 Safety Advisory

Questions and Requests for Grouping 4. Safety Assurance – Safety Performance Measurements and Targets for Improvement

1. The System Safety Program Plan ("SSPP") Element 9 section was extensive and described all of the safety data acquisition processes. The 2023 Transit Safety Plan seems to focus on the safety performance measures and results. Is there a separate safety data acquisition plan or documentation?
2. How were the safety performance targets for improvement calculated/selected?
3. Are the safety performance measures and targets for improvement presented to the Board of Directors (or equivalent)?

4. Does MBTA monitor and report performance indicators for safety and operations?
    a. If so, how are they communicated?
    b. Is there a record of development and communication?
5. Review safety performance goals and objectives for the last year.
    a. Did MBTA meet their performance goal? If not, what new measures are they taking to ensure they meet their goals this year?
    b. How is the Accountable Executive and Chief Safety Officer ("CSO") briefed and engaged for safety performance measures that do not meet or exceed the targets?
    c. How are these results communicated to employees across MBTA?
6. Who is responsible for data collection and analysis that builds up to the safety performance measures? What quality control is applied to that data and analysis results?
7. What are executive management and safety responsible for in this process?
8. Is MBTA considering additional safety performance measures to get a headstart on the changes to the regulatory environment? Lagging and Leading?
9. What are the first tracking and monitoring activities planned?
10. Who receives the safety data analysis/measures, how are the results used by executives and other management and supervision? Safety Committees?
11. Are Safety Committees monitored through meeting minutes and outcomes? The DPU SSO program requests inclusion on distribution of the minutes. Minutes from Configuration Management/Transit Asset Management committee meetings? Other meetings such as for capital projects?
12. Discuss the corrective actions determination, development, approval, and tracking process.
13. What analyses are completed for investigations (FTA, DPU, Significant Hazardous Conditions), internal audits, hazard identification and resolution, and corrective actions?
14. Provide a summary of the processes for the following, including interactions with the DPU SSO program:
    a. CAPs development, tracking, and closure
    b. Notification, Investigation, and Tracking
    c. Hazard Log identification, tracking, and closure
    d. Efficiency Testing/Rules Compliance data collection and analysis
    e. Signal Violations tracking and analysis
    f. Evaluation of training, competency, and effectiveness of training
15. Is there training that exists or in development for safety performance measures and improvements?
16. How did MBTA engage with the MPO for safety performance measures and the results of the TAM prioritization?
17. Review the activities reported back for the FTA Safety Advisory on COVID-19? How were these procedures followed and assured by supervision?
18. How are efficiency testing results and rules violations (such as signals violations) reported back to executive management?

Date:
Time:
Location: TBD
DPU - SSO Team
DPU, Vital Assurance
Requested Attendees

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 5

Update: 09/07/2023

Grouping 5. Safety Assurance – Notifications and Investigations of Safety Events

- Rail Property Investigation Procedure(s)
- SSO Program Standard Requirements/Procedures for Safety Event notifications and investigations
- Emergency Response/Operations Procedures
- Rail Operating Rule Book and Required Training
- Right-of-Way or Roadway Worker Protection ("RWP") Plan and Required Training
- Command and Control/Train Control Standard Operating Procedures ("SOPs") and Required Training
- Field Supervision SOPs and Required Training

Related Documents to Review:

- Review the guidance from Federal Transit Administration in the Agency Safety Plan ("ASP") review checklist Section H, H-4.
- Transit Safety Plan ASP 2022, Section 5.3.1 Hazard Tracking System,
- Safety Event Investigation Manual
- Hazard Management Program
- Employee Onboarding, Contractors, and Rail System Rule Book
- MBTA Emergency Management Plan (Business Continuity and Facilities Evacuations)
- Rail Ops and Operation Control Center ("OCC") Standard Operating Procedures
- MBTA Employee Handbook
- Employee Medical and Hours of Service policy/procedure
- MBTA Drug and Alcohol Policy August 1, 2019, update
- Boston and local municipality First Responder Training
- Operations Orders
- DPU Investigation Reports, 2020-2023
- Analysis for this audit includes DPU Investigation Reports
- MBTA Corrective Action Plans ("CAP") and Hazard Log

Questions and Requests for Grouping 5. Safety Assurance – Notifications and Investigations of Safety Events

1. Explain and discuss how a safety event is communicated and responded to:
    a. Notifications
    b. Response
    c. Determination of need for Drug &Alcohol testing
    d. Investigation on-scene
    e. Return to service.

    f. Investigation analysis
    g. Investigation reporting
    h. Development of recommendations and corrective actions.
2. How often is the Safety Event Investigation Manual reviewed and/or updated. How are updates completed, and what approvals are required?
3. Who are the responders – rail operator, supervisors, management, emergency responders, safety? Are there specific levels/tiers that require Safety to respond on scene?
4. Are responders required to have specific training? Please describe the process that ensures all relevant personnel are trained in the role during emergency response. Is there refresher training?
    a. How many Safety and TAPD investigators currently meet the qualifications for 49 CFR Part 672 for PTSCTP?
5. What are the OCC's responsibilities? How are procedures and training kept up to date?
6. Are any changes being made to investigations based on SMS and the organizational accident? Describe an instance where your organization used information collected from an event to describe an organizational accident.
7. Explain MBTA's fitness for duty policy, including hours of service.
8. Explain interactions with DPU for notifications, DPU participation in investigation, submission of investigation reports to DPU.
9. How are requests for information ("RFI") from DPU managed by MBTA? Are there ever disagreements with the DPU? If so, how are disagreements with DPU managed?
10. How often does MBTA miss the 2-hour window for notifications? What is the typical reason for missing the 2-hour notification? Is this recorded anywhere?
11. How are hazardous conditions or hazards notified and investigated? What is the process and what are the typical hazard-related issues?
12. For the Business Continuity Plan ("BCP") Continuity of Operations ("COOP"), please describe the process used to review the document to ensure it is up to date.
13. How are employees trained in emergency preparedness? Is the current executive team familiar with their roles in the BCP/COOP at MBTA? Explain if so.

Date:
Time:
Location: TBD

DPU - SSO Team

Vital Assurance

Requested Attendees
MBTA

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 6

Update: 09/07/2023

Grouping 6. Safety Assurance – Compliance with Operations Rules/Procedures

- Rail Operating Rule Book and Required Training
- Command and Control/Train Control Standard Operating Procedures ("SOPs") and Required Training
- Field Supervision SOPs and Required Training
- Inclement Weather Procedures and Refresher Training
- Operator Certification/Refresher Training and Record-Keeping
- Inspection and Maintenance Manuals, SOPs, and Standards, Supervision, Training, and Competency

Related Documents to Review:

- Review the guidance from Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section H, H-2, H-3, and H-5.
- Transit Safety Plan ASP 2022, Section 6 Safety Assurance
- MBTA Emergency Management
- MBTA Operations Rulebook
- Rail Ops and Operations Control Center ("OCC") Standard Operating Procedures
- Right of Way (ROW) Safety Rulebook, 2014
- MBTA Employee Handbook
- Rail Training curriculum
- Selected recent drill/exercise plans and After-Action Reviews ("AARs")
- Training for employees – rail training courses, switching, flagging, equipment checklists, on board announcements, etc.
- Table of training metric information
- Pre-Trip Inspections
- Rules Compliance
- Summary table of signal violations, 2020-2023
- Railcar Maintenance Records
- SRCP Manual 2016

Questions and Requests for Grouping 6. Safety Assurance – Compliance with Operations Rules/Procedures

1. Please describe the rules compliance processes/functions by MBTA departments.
    a. Operators
    b. Maintenance of Way ("MOW") Maintenance
    c. Railcar Maintenance
    d. OCC
    e. Field Supervision
    f. Engineering
    g. Safety
    h. Contractors
2. Are there plans to enhance the rules compliance function based on the Safety Management System ("SMS") implementation.
3. How are Rulebooks (Operations and ROW Safety) rolled out and what training is completed, testing. Describe the process used to update the Rulebook.
4. The rulebook is currently undergoing a revision. How often is the rulebook updated? Describe how the operator has access to the Rulebook while operating a revenue vehicle.
5. Please explain the process for preventability for rail operator involved safety events.
6. What is the refresher rate for training on rules and procedures, operations, and maintenance?
7. Explain how signals violations are identified, verified, and adjudicated. What is the typical outcome? Refresher training?
8. What is the coverage of the Job Hazard Analysis ("JHA") program? How many does MBTA currently have? What is the process for development of a JHA and how are they used? By whom? How often are they updated?

Date:
Time:
Location: TBD

DPU - SSO Team
DPU

Vital Assurance

Requested Attendees

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 7

Update: 09/07/2023

Grouping 7. Safety Assurance – Compliance with Inspection and Maintenance ("I&M") Requirements

- Transit Asset Management ("TAM") Plan
- Inspection and Maintenance ("I&M") Manuals, Standard Operating Procedures ("SOPs"), Standards, Supervision, Training, and Competency
- Right-of-Way or Roadway Worker Protection ("RWP") Plan and Required Training
- Maintenance (equipment and rail infrastructure/systems) Job-based Certification/Refresher Training

Related Documents to Review:

- Review the guidance from Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section H, H-2, H-3, and H-5.
- Transit Safety Plan ASP 2022, Section 3.2 Safety and State of Good Repair, Section 6.1 System Operation/Monitoring, Section 6.2 Data Collection
- MBTA TAM Plan
- De-energization/Energization procedures, Emergency Power removal procedures
- Vehicle Lock Out Tag Out Process
- Special Orders for moves in and out of facilities and yards
- Inspection and Maintenance ("I&M") Manuals, Sample Vehicle Maintenance Manuals, and Inspection Docs
- Tunnel I&M manuals or SOPs
- Rail Training
- Operations Orders
- Track and Switch Inspections
- Signal Inspection
- Station Inspections
- Overhead Catenary System ("OCS"), Third Rail, and Substation Inspections
- Sample of rail vehicle Pre-Trip Inspections
- Rail Facilities Maintenance – Equipment Plan
- Rail Vehicle-Operations Maintenance Plan
- Rail car Maintenance Records

Questions and Requests for Grouping 7. Safety Assurance – Compliance with Inspection and Maintenance ("I&M") Requirements

1. Please describe the departments that make up the rail system operations and maintenance.
2. For the rail operations and maintenance groups, how many budgeted staff positions are vacant?
    a. How is the organization recruiting new hires?
3. How are staff competencies assured for rail systems inspections and maintenance?

4. Document Request: Can we get the rates for on-time PM completion for Track, OCS, structures? 2021, 2022 and 2023 so far.
5. Is there a backlog of corrective maintenance? If so, how is this backlog prioritized?
6. Please explain the Transit Asset Management ("TAM") process at MBTA. What is the state of good repair for the rail line, infrastructure, and rail vehicles?
7. Please provide a status of corrective maintenance in the rail yards and sidings. What is the schedule of repairs/capital projects and what are the shorter-term mitigations, especially for rail securement in curves and switches?
8. Describe the inspection and maintenance in the rail systems that are provided by contractors, such as for the tunnel.
9. What is the state of good repair of the OCS/Third Rail system in the tunnels? Above ground?
10. What is the state of good repair for the signals systems? Please provide an explanation of the command and control and the status of maintenance – PMs and backlog of corrective maintenance.
11. Please explain the role of the radio system in command and control of the rail systems and operations and maintenance. Is the Radio system reliable in all corners of the system? Where are the vulnerabilities?
12. How do major system modifications and safety certifications get turned over to the operations and maintenance departments from a capital program?
13. Please explain the configuration management process for changes in the existing rail systems.
14. Please explain the planning and completion of the work zone/single tracking process.
15. Please describe and provide the de-energization and energization processes for all departments involved from OCC to OCS/Third Rail, Track, Signals and back.
16. Please describe and provide documentation for lockout tagout processes at MBTA. What departments are included in the lockout tagout processes.

Date:
Time:
Location: TBD

DPU - SSO Team
DPU

Vital Assurance

Requested Attendees
MBTA

Massachusetts Department of Public Utilities ("Mass DPU")
Rail Transit State Safety Oversight ("SSO") Program
Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 8

Update: 09/07/2023

Grouping 8. Safety Assurance – Compliance with Local, State, and Federal Safety Requirements

- Fatigue Management Policy – Hours of Service
- Drug and Alcohol Policy
- Adherence to Occupational Safety and Health Administration ("OSHA")/Massachusetts Workplace Safety and Health Program ("WSHP") Standards

Related Documents to Review:

1. Review the guidance from Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section H, H-2, H-3, and H-5.
2. ASP 2023, Section 6 Safety Assurance, Section 6.1 System Operation/Monitoring, Section 6.2 Data Collection, Section 6.3 Data Analysis
3. Operations and Maintenance Rulebook
4. Right of Way ("ROW") Safety Rulebook 2014
5. Employee Handbook and Contractor Safety
6. Employee Medical Requirements
7. Employee Hours of Service policy/procedure
8. Drug and Alcohol Policy
9. De-energization/Energization procedures, additional materials pending, Emergency Power removal procedures.

Questions and Requests for Grouping 8. Safety Assurance – Compliance with Local, State, and Federal Safety Requirements

18. Compliance with Local, State and Federal Regulations

1. Discuss responsibilities for these safety related regulations (Local, State and Federal), and how the responsibilities are distributed ("operations" vs. "safety" responsibilities)?
2. Does MBTA have a comprehensive and continuous training process for employees and contractors who are exposed to the right of way and maintenance areas?
    - How often is the training scheduled?
    - Is it demand-driven or regularly scheduled?
    - Is it available online, or does it have to be taken on-site?
    - Are employees/contractors aware when their training expires? Is there a tracker that tracks an individual's training date and its expiration dates?
3. Contractors bidding on MBTA work should adhere to safety rules regarding contractors and subcontractors and must have safety supervisors monitoring their employees.
    - Is there a plan or procedure to monitor contractor teams while they are on-site to ensure compliance with MBTA safety policy?
    - Is a badge or card issued to identify qualified persons in the ROW?

- Is there standard procurement/contract language for contractors and sub-contractors requiring them to adhere to safety rules when working on the MBTA ROW?

4. How do MBTA managers stay current with governmental (state and federal) actions that change and added. new laws and regulations?
    - Who is responsible for employee training of changes?
    - Is it toolbox training, or more formal?
5. Please explain MBTA's current Hours of Service policy.
    - How does MBTA ensure compliance? What occurs if there is a violation?
6. What are the required Personal Protective Equipment ("PPE") requirements and are there notices/signs of the requirements posted in facility locations?
    - Does the project manager verify the RWP are up to date prior to working in the work zone?

19. Hazardous and Regulated Materials

7. Who in the Safety department is responsible for maintaining MBTA Safety Data Sheets ("SDS")?
8. Where are the SDS sheets stored? Is an online portal readily accessible for all employees?
9. What is the process/procedure for adding new chemicals and ensuring they are added to the SDS?
10. Who is responsible for annual spill and chemical training?
    - Is this tracked with training?
    - Who is required to take it? Contractors?
11. Who is responsible for spill response and reporting?
12. Has a recent hazardous material review of the property been performed by a qualified firm?
13. Discuss that a qualified person regularly inspects the properties to verify proper and operable fire suppression systems, proper fire lane markings, and storage of flammable materials.

20. Drug and Alcohol Abuse

14. Is the MBTA drug and alcohol policy current and up to date with respect to all FTA regulations? When was it last updated?
    - Does it include the new final rule that went into effect June 1, 2023, which includes industry drug testing program to allow oral fluid testing if the property desires?
15. Who within the MBTA Organization are considered safety-sensitive employees?
16. Is Substance Abuse Program ("SAP") training being provided for supervisors, as required by FTA regulations (49 CFR Part 655)?
17. Is Reasonable Suspicion Training being provided as required by regulation?
18. Who is authorized to make a reasonable suspicion determination?
    - Is a manager or supervisor required to test an employee if someone reports one of their employees?
19. Does MBTA have other related procedures to determine fitness for duty?
20. Have collection sites been reviewed and audited (independent or by MBTA) for compliance? What is the name of the testing site?
21. Are light rail operators being transported for testing within two (2) hours after they have been involved in incidents/accidents?
    - If not, are the reasons fully documented?

22. Are random drug and alcohol tests being conducted for operators and maintenance personnel according to guidelines?
    - How are random participants selected? Is it third party or are they selected in-house?
23. Is the testing spread out over a 24-hour period evenly? Please provide evidence.
24. Has FTA recently performed a drug and alcohol program audit?
    - Is that audit available for review by the audit team/DPU?
25. Tests not conducted within the required time limits should be documented to determine sufficiency of documentation.

Date:
Time:
Location: TBD

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Requested Attendees
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Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 9

Update: 09/07/2023

Grouping 9. Safety Assurance – Management of Change

- Configuration Management Plan ("CMP")
- Safety and Security Certification Plan ("SSCP")
- Tracking of Significant Capital Projects
- Safety-Related Procurement Specifications/Requirements

Related Documents to Review:

- Review the guidance from Federal Transit Administration ("FTA") in the ASP review checklist Section H, Management of Change H-6 and H-7.
- Transit Safety Plan 2023, Section 6 Safety Assurance, Section 6.3.2 Management of Change
- Configuration Management and Control Program
- MBTA Transit Asset Management ("TAM") Plan
- Safety Committee Meeting Minutes
- MBTA Procurement Policy
- MBTA System Modification Safety process
- MBTA Safety Certification process for Capital Projects (Example: GLX)
- Capital Projects Procurement Specification for Construction Safety and General Conditions

Questions and Requests for Grouping 9. Safety Assurance – Management of Change

1. What are the current Capital Projects and how are they tracked by the MBTA? Are there executive meetings or briefings about the state of each project? Are there committee meetings by project?
2. Please explain/describe the safety-related requirements included in contracts for capital projects and services. This includes hi-rail equipment, flagging, RWP, etc.
3. What are MBTA's plans for enhancing Management of Change activities based on implementation of SMS through the ASP?
4. Is there a cross-reference to the Capital Projects planned and underway with the TAM Plan and priorities? Can that be shared with DPU?
5. Please explain the typical interactions for Capital Projects and the DPU SSO program.
6. For a given significant Capital Project, please explain the required hazard analyses that are expected from contractors or MBTA. Who within MBTA is required to review and accept these hazard analyses?
7. Does the MBTA have standard Design Criteria and Safety-Related Design Criteria for these Capital Projects? Who is responsible for updating these Design Criteria? How are changes to Design Criteria managed and approved within MBTA?
8. Describe the Configuration Management process from beginning to end. What types of changes trigger a Configuration Management meeting?

9. Is there a regular Configuration Management committee meeting? Who is present at these meetings?
10. Does MBTA plan on updating the Configuration Management plan? Is there a Standard Operation Procedure ("SOP")? Describe the involvement by department. How are new members of the organization exposed to the committee?
11. Please use an example of the Configuration Management (or similar) Committee from the last 3 years and describe the process from beginning to end.
12. How is the Configuration Management process different from the System Modification process?
13. Using an example from the past 3 years, describe a project that went through the System Modification or Safety Certification process (GLX), then describe how a future project (GLTPS) will differ, if at all.
14. Please describe the interactions for the projects with the City that include stations and right of way.
15. Please explain the process of developing, disseminating, and completing a Work Plan and work zone.
16. For a capital project (System Modification, Safety Certification, and/or Procurement controls), what are the roles for each of the Departments, such as engineering, operations, maintenance, and safety?

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Triennial Audit Checklist Grouping 10

Update: 09/07/2023

Grouping 10. Safety Assurance – Continuous Improvement

- Tracking the Three-Year Cycle of ISAs
- Assessment of Safety Performance Measures Compared to the Targets for Improvement
- Assuring Integration of the Safety Department in Policy and Procedure Development and Changes

Related Documents to Review:

- Review the guidance from FTA in the Agency Safety Plan (ASP) review checklist Section H, Continuous Improvement H-8 and H-9.
- Transit Safety Plan ASP 2022, Section 6 Safety Assurance, Section 6.5 Continuous Improvement
- Open/Closed Corrective Action Plans ("CAPs") and supporting documentation, 2020-2023
- MBTA internal safety audit plan (2020-2022)
- Internal safety audit report 2022
    - Recommendations, findings, CAPs (2020-2022)

Questions and Requests for Grouping 10. Safety Assurance – Continuous Improvement

1. Who within MBTA is responsible for planning, developing, and conducting the internal safety audits?
2. Discuss the responsibilities of the Office of Safety related to the internal audit process.
3. What is the MBTA approach to Internal Audits under the ASP and SMS?
    - What is the process for developing checklists and providing them to DPU for review? Have the checklists for the audits been shared in advance with the DPU? Have the results been shared?

4. How many Internal Safety Audits have been completed to date for the next cycle? What were the results of these audits?

5. Does MBTA incorporate outside entities (other city department, contractor, or office) to complete internal safety audits? If not, does MBTA plan to in the future?
    - What is the scope and requirements and qualifications for the third party?
    - Who receives the contractor's audit report?
    - How are the results of the contractor's audit report used to develop CAPs?
    - How many CAPs have been developed in this cycle from the ISA's?
6. Are there other audits conducted (of the project and related activities)? By whom?
7. What other internal audits related to the safety program are completed within MBTA?
    - How are those audits and results coordinated?
8. How are issues and accusations of fraud, waste, or abuse handled, audited/investigated?

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Vital Assurance

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Triennial Audit Checklist Grouping 11

Update: 09/07/2023

Grouping 11. Safety Promotion – Training and Competency

- Rail Operating Rule Book and Required Training
- Right-of-Way ("ROW") or Roadway Worker Protection ("RWP") Plan and Required Training
- Command and Control/Train Control Standard Operating Procedures ("SOPs") and Required Training
- Field Supervision SOPs and Required Training
- Inclement Weather Procedures and Refresher Training
- Operator Certification/Refresher Training and Record-Keeping
- Maintenance (equipment and rail infrastructure/systems) Job-based Certification/Refresher Training
- Inspection and Maintenance Manuals, SOPs, and Standards, Supervision, Training, and Competency

Related Documents to Review:

- Review the guidance from Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section I Safety Promotion, I-1.
- Transit Safety Plan 2022, Section 8 Safety Training
- Operations Rulebook
- Rail Ops and Operation Control Center ("OCC") Standard Operating Procedures
- ROW Safety Rulebook
- Employee Handbook
- New hire employee packet
- New hire packet, ROW, and ROW recertification training materials
- Operator and Maintenance training examples
- Table of training metric information.
- Example emergency awareness training course materials
- First responder training program materials

Questions and Requests for Grouping 11. Safety Promotion – Training and Competency

Training by Employee Type or Others

1. Is there a Training Plan by employee type?
2. How is Safety Management System ("SMS") training being incorporated with other training?
3. How are modules being developed, what is the process?
    a. All Employees, new and refresher
    b. Administrative staff, new and refresher
    c. Senior Leadership and Management, new and refresher

d. OCC, new, rulebook, track access, RWP, and refresher, how is competency assured?
e. Power/Load Control, new, rulebook, track access, RWP, and refresher, how is competency assured?
f. Field Supervision, new, rulebook, track access, RWP, and refresher, how is competency assured?
g. Rail Operators, rulebook, track access, RWP, and refresher, how is competency assured?
h. Facilities and Rail Equipment Maintenance, by position, new, rulebook, track access, RWP, and refresher, how is competency assured?
i. Shops and Yards staff, by position, new, rulebook, track access, RWP, and refresher, how is competency assured?
j. Maintenance of Way, by position, new, rulebook, track access, RWP, and refresher, how is competency assured?
    i. Track and Switches
    ii. Overhead catenary/contact system
    iii. Power and Substations
    iv. Signals and Communications
    v. Elevators and Escalators
    vi. Stations
k. Engineering, Capital Projects, by position, new, track access, RWP, and refresher, how is competency assured?
l. Supervision, Safety Rules Compliance, new, rulebook, track access, RWP, and refresher, how is competency assured?
m. RWP and Flagging
n. Winter Operations
o. When does the training department start winter operations training?
p.
q. Contractors
    i. On the ROW – track access, RWP
    ii. Work Zones and Contracted Services, operations on the ROW, Hi-Rail
r. Emergency Responders and Awareness Training, track access, RWP
s. Participation in Drills and Exercises

Questions and Status from Investigations

1. Please explain the process for review of rail operator responsibility following a safety event. Please include yard-persons and field supervision, as appropriate.
2. What are the factors considered for re-training and discipline for these performance reviews? Is there is a criteria/ threshold for re-training?
3. Is there a procedure or guidelines for these activities of determining preventability?
4. Who (titles) have the responsibility of determining preventability and training to be completed?
5. How is input from After Action meetings used and integrated back into training?
6. Please describe Training's involvement with developing immediate mitigations and corrective actions following a safety event.
7. Who are "designated staff" for purposes of FTA compliance with 49 CFR Part 672 and what is the status of completing the Public Transportation Safety Certification Training Program ("PTSCTP") for those staff?

Specific Questions about Operators

1. Is there complete training for new operators – who has it and who maintains it?
    a. How is this training considered for update based on results of audits and investigations?
2. Is the current Rulebook the basis for the training of new operators?
3. Winterization Training – Does it exist in the initial training, or does it get trained early in the Fall?
4. Are trouble-shooting activities taught as part of the initial training?
5. Does training review the pass/fail rate for new operators - how that determination is made (when in the training protocol is the determination made to discontinue a new operator from the training and dismiss them)?
6. Who maintains and manages the operator's training records? Where are they stored (paper, database, or both)? Who has access to them?
7. How long is the initial training (classroom, hands-on practice, supervised route training, initial revenue service (with or without a supervisor)?
8. How often do the new operators get effectiveness evaluations/SRCP audits? - what remedial training is often needed?
9. For the initial rides on the system – is each operator taught the various anomalies for the rail line and do they get to experience day and night operations as part of the training?
10. Where in the training do they teach signals and switches?
11. Where in the training are emergency procedures (especially if there are evacuations for life/safety in the tunnel) covered?
12. What is the RWP Training for new operators – especially for work zones?
13. Is there mandatory biennial training?

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Time:
Location:

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Massachusetts Bay Transportation Authority ("MBTA")
Triennial Audit Checklist Grouping 12

Update: 09/07/2023

Grouping 12. Safety Promotion – Communication

- Policy Communication Throughout Transit Agency
- Safety Performance Criteria, Targets, and Measures
- Employee Safety Reporting System
- Hazards Identification and Resolution

Related Documents to Review:

- Review the guidance from Federal Transit Administration ("FTA") in the Agency Safety Plan ("ASP") review checklist Section I Safety Promotion, I-2, I-3, and I-4.
- Transit Safety Plan ASP 2022, Section 7.2 Safety Communication; PRF 5 Safety Management Policy Statement, Section 4.0 Organizational Structure and Responsibilities, Section 6.3 Data Analysis
- Hazard Management Program
- Security Awareness
- Operations Orders
- Safety Data Analysis
- Injury analysis and information

Questions and Requests for Grouping 12. Safety Promotion – Communication

1. How did MBTA intend to communicate the Safety Management Policy throughout the agency? How are you continuing to remind the employees of the Safety Management Policy?

Does the MBTA record/document the following safety communication policies and activities:

2. Documentation of how safety and safety performance information is communicated throughout the organization.
3. Documented criteria to trigger the communication of safety and safety performance information throughout the organization.
4. Documented policies and/or procedures to communicate information related to SMS activities to appropriate personnel throughout the agency.
5. Employees are made aware of safety management priorities and safety concerns at the organizational level and as they relate to their own duties and responsibilities.
6. Communication of safety concerns and hazards to appropriate groups and individuals as it relates to their responsibilities.
7. Communication of actions taken by the MBTA to address safety concerns and hazards reported by employees through the employee safety reporting program.
8. Communication of safety concerns, safety risks and safety performance to executive management.

9. Documented policies and/or procedures for communicating safety performance and SMS information to FTA and the DPU.
10. How to ensure communication, and the means, are effective.
11. Explain the communication of Operations Orders. Any other formal communications of safety data?
12. Who receives the Safety Data Analysis Report results?
13. How is the SMS Implementation going to be communicated to employees?
14. Explain how safety performance data and analysis results are communicated to executives, managers, and all staff.

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Time:
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