

MBTA-MassDOT Safety Overview

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Safety Management

A Collaborative Effort



Safety Responsibilities & Accountabilities

MBTA GENERAL MANAGER & CEO - ACCOUNTABLE EXECUTIVE

SAFETY OVERSIGHT

OPERATIONS & COMPLIANCE

PERFORMANCE IMPROVEMENT

MassDOT Chief Safety Officer

Observations

Recommendations

Benchmarking & Industry Comparisons

MBTA
Safety Department

Compliance Audits

Investigation

Safety Engineering

Training

Policy Development

Occupational Health

MBTA
Operating Departments

Safe Operations

Training

Compliance

Rules Development

MBTA
Quality, Compliance & Oversight

Process Improvements

SMI Compliance

Culture Change

Outcome Verification & Monitoring

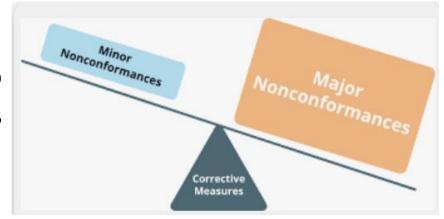


Observations | Findings



Observations | Findings

- ➤ There is a difference between addressing non-conformance issues vs. addressing identified risks
 - Issues of nonconformance Typically result in CAPs to address deficiencies



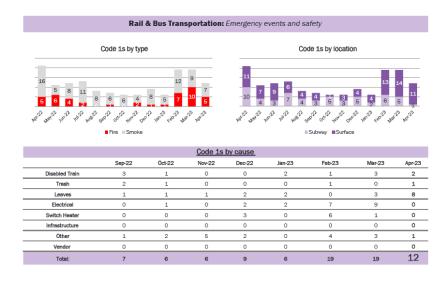


 Identified risks – Typically result in risk mitigation strategies based upon actionable data

Identified Risk - Code 1 Events (Fire/Smoke)

CSO Observations: KPIs need greater actionable data

- Example Code 1 Events (Fire/Smoke Events)
- Existing KPI chart below:
 - oDoes not identify specific locations
 - Oboes not provide totals for each type of event
 - Does not provide 3-year trend data
 - ODoes not establish goals/targets



Code 1 Incidents (Fire/Smoke events) data improvements:

- Totals provided for each type of event
- Running 3 year data comparison
- Flag the most frequent/severe types of Code 1 events
- Develop Heat Maps by location/nature of fire
- Establish goals/targets to measure performance
- Results in more effective deployment of resources
- Results in improved risk mitigation decision making process

Benchmarking note: Other Rail Transit Agencies have shown great performance improvements from adopting this approach.

CSO recommendations resulting from derailment



1. Immediate Inspection of all 10-mph (or less) speed restricted areas.



2. Collaborative Review of Track Inspection Records – MBTA Safety & E&M.



3. Determine conformance to Track Standard frequencies and outcomes.



4. Determine whether 5-mph speed limit tolerance above posted speeds is the appropriate measure/approach.



CSO recommendations resulting from derailment



5. Accelerate Green Line trackwork.



6. Strategize global track repair work acceleration.



7. Produce "lessons learned" bulletins.



8. Create CAP for recommendations and tracking.



Accident Investigation Improvements for MBTA Safety Dept.

- ✓ Assess MBTA's Existing Investigation Protocol
- ✓ Benchmark against industry best practices
- ✓ Report-writing seminar in development
- ✓ Consultant project team lead is retired NTSB Investigator



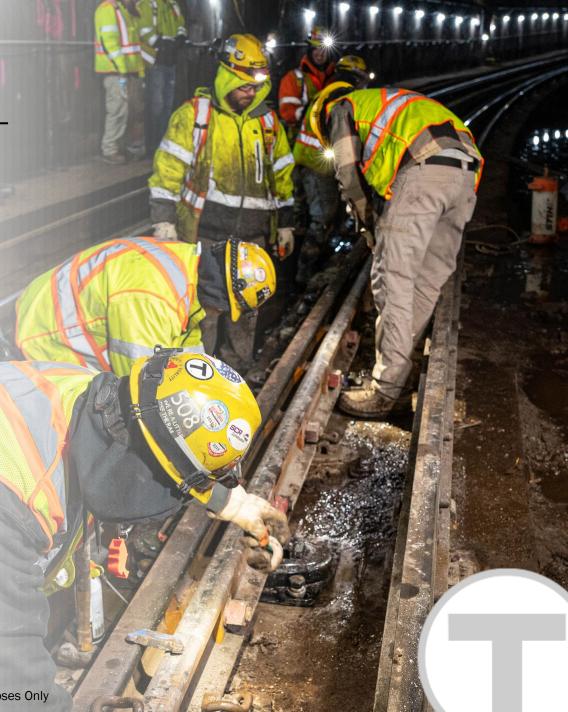
MBTA Office of Quality, Control & Oversight

Created to respond to FTA's SMI and establish a sustainable safety environment.



Quality, Compliance & Oversight Office's Role

- Manage the implementation of the changes brought about by the response to the FTA's SMI and other cross-authority efforts.
- Ensure the outcomes of those changes are effective and sustainable.
- Communicate SMI Response progress/updates to internal and external audiences.
- Conduct non-SMI performance improvement/cross-departmental projects.
- Perform key programmatic activities including employee engagement, change management, public transparency, communication, verification of outcomes & metrics.
- Be facilitators & conveners across the MBTA.



Workforce



Focuses on workforce composition; recruiting, hiring, and retaining staff; career development and training including centralized training governance and content

Workforce assessment, 5-year hiring plan, training assessment & curriculum, Learning Management System

Data, Systems & Communication



Focuses on data and information flows, especially safety data; working to use technology to inform better operations and decision making

Hazard Reporting & Communication, Radio System Performance, Safety Hotline

Quality Management



Focuses on asset and project life cycle to ensure high quality, safe outcomes by incorporating robust processes into each project or delivery phase

Safety Engineering & Certification, Track Maintenance, Contractor Oversight, Asset Management, Quality Management

Policies, Rules & Procedures



Focuses on formalizing policies, rules and procedures; develops processes to update rules or procedures based on operating conditions or employee feedback

Rules Development & Compliance, Tools & Checklists, External Vehicle Inspections

QCO | Four Guiding Principles



Take a Human-Centered Approach



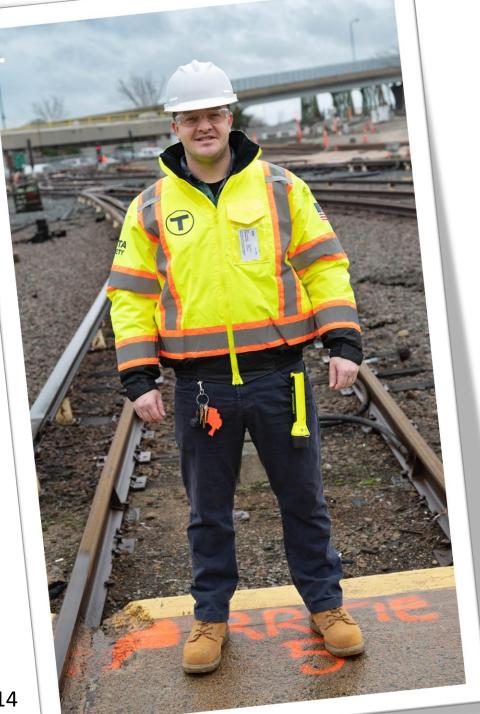
Practice
Transparency &
Strong
Communication



Set Everyone Up for Success Across the Authority



Listen to and Learn from Frontline Workers



Successes So Far

- **PPE Policy**
- **Boot trucks**
- Disabled Vehicle Movement Procedures
- Blue Flag/Blue Light Procedures
- **Green Line Work Train**
- OCC & Motorperson Recertification
- **RAC Training**

Thank you.

