



**Massachusetts Bay  
Transportation Authority**

# MBTA-MassDOT Safety Overview

---

Phillip Eng, MBTA General Manager and CEO

Pat Lavin, MassDOT Chief Safety Officer

Katie Choe, MBTA Acting Chief of Staff

June 22, 2023





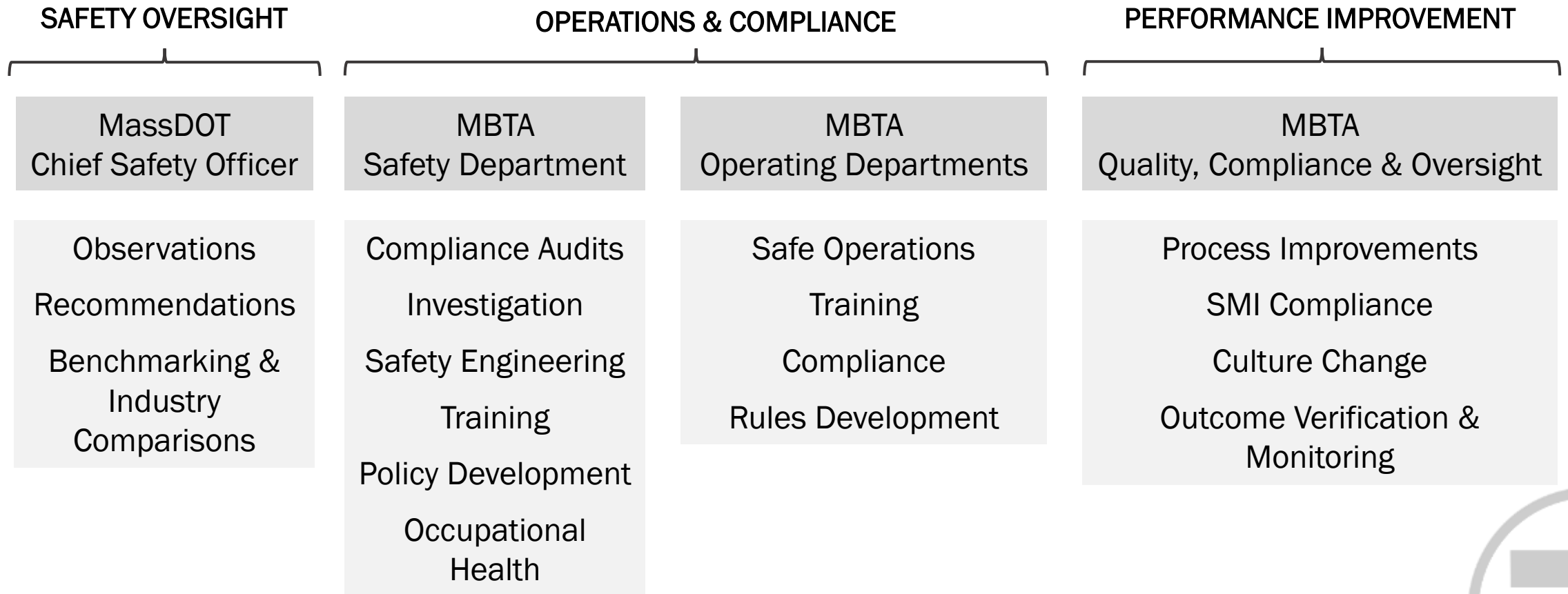
# Safety Management

A Collaborative Effort



# Safety Responsibilities & Accountabilities

## MBTA GENERAL MANAGER & CEO – ACCOUNTABLE EXECUTIVE







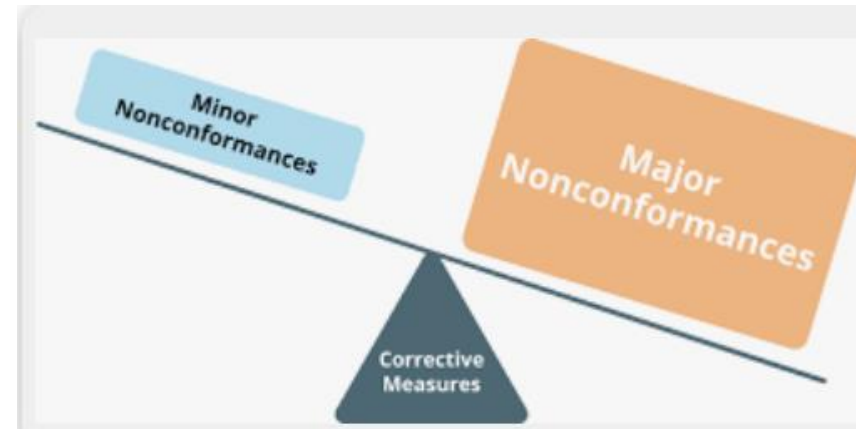
# Observations | Findings

---

# 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

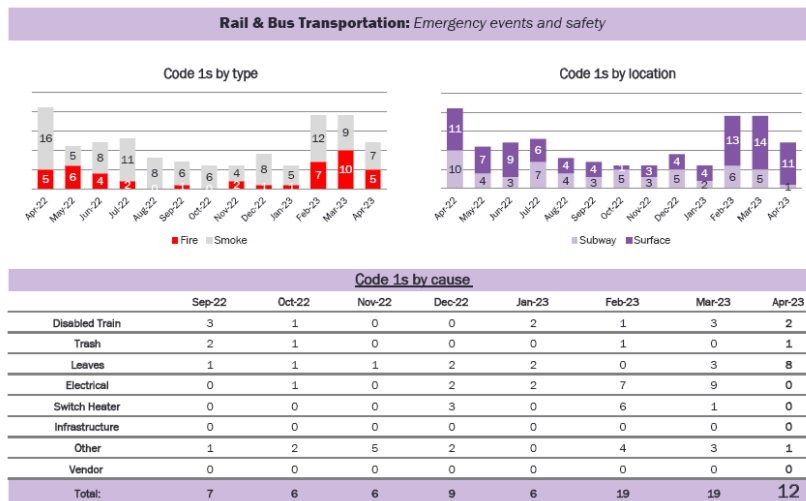


- **Identified risks** – Typically result in risk mitigation strategies based upon actionable data

# 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:
  - Does not identify specific locations
  - Does not provide totals for each type of event
  - Does not provide 3-year trend data
  - Does 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

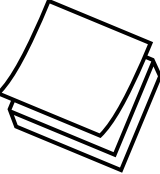
*Benchmarking note: Other Rail Transit Agencies have shown great performance improvements from adopting this approach.*



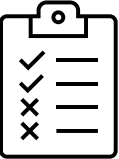
# CSO recommendations resulting from derailment



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.



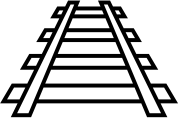
4. Determine whether 5-mph speed limit tolerance above posted speeds is the appropriate measure/approach.



# 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.





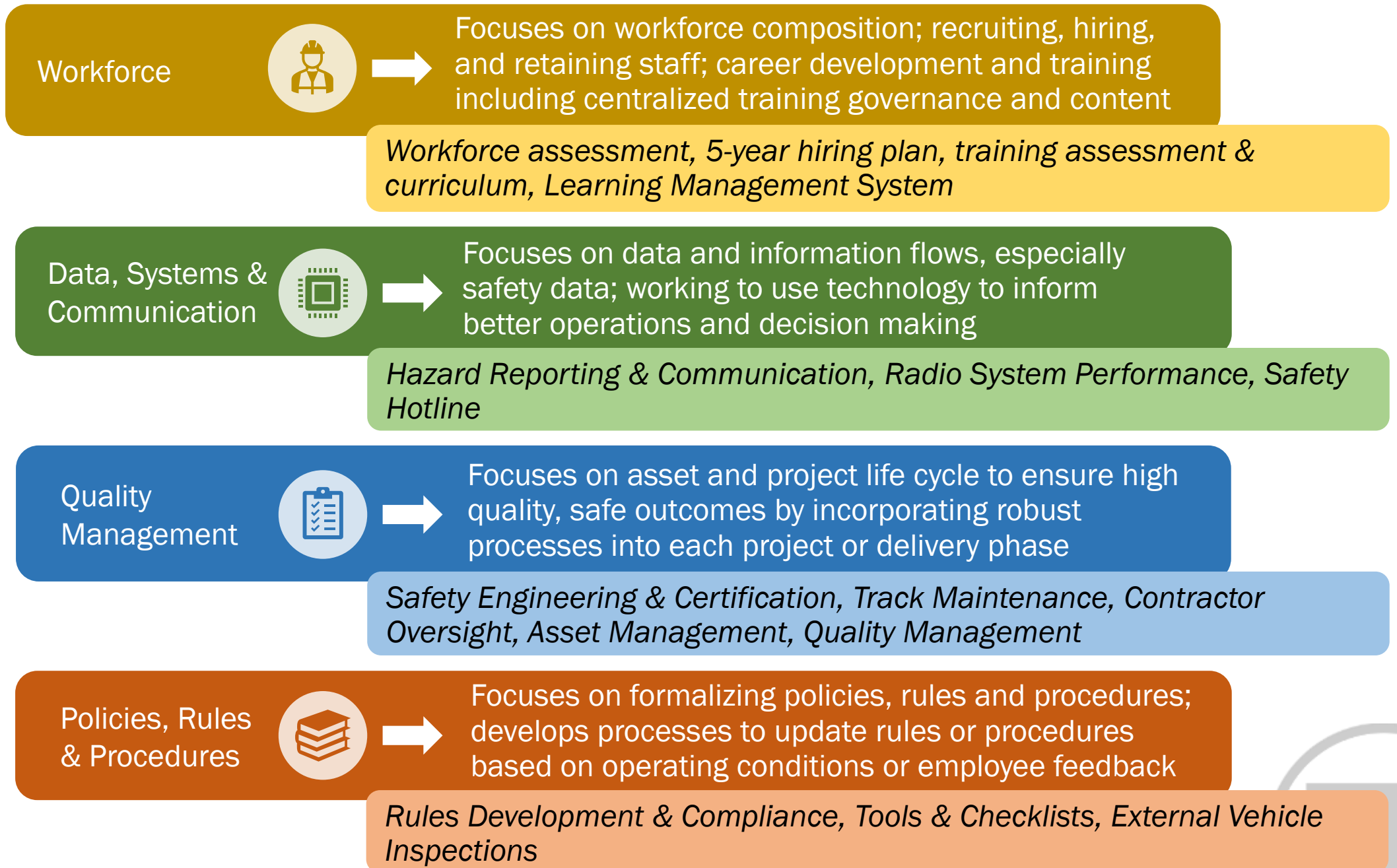
# Quality, Compliance & Oversight Office's Role

---

- 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.



# QCO SMI Initiatives





# 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.**

