



**Massachusetts Bay
Transportation Authority**

Safety Updates

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MBTA Board of Directors Meeting

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Discussion Topics

- 
- Managing Safety Risk
 - Recent Incidents and Corrective Actions

Safety Risk Management (SRM) at the MBTA

SRM:

- One of the four main components of SMS
- A process for identifying hazards and analyzing, assessing, and mitigating safety risk

Risk:

- The composite of predicted severity (Catastrophic to Low) and likelihood (Frequent to Eliminated, or Not Effective to Effective when assessing past events and related mitigations) of the potential effect of a hazard

Safety Risk Assessment (SRA):

- A sub-element of the overall SRM process
- The actual assessment of risk where MBTA's risk assessment matrix is applied to hazards and their consequences to quantify risk



Safety Risk Assessment Process and Procedure

Safety Risk Assessments:

- Conducted using collaborative discussions, referred to as SRM workshops, to assess risks and document risk mitigations facilitated by Safety with input from other business units
- Initiated in response to major changes (equipment, procedures, operations, organization), hazard reports, and emerging issues
- Memorialized in SRM Worksheets which are formally reviewed, signed, and retained to document risk acceptance

Assessment	Catastrophic (1)	Critical (2)	Moderate (3)	Minor (4)	Low (5)	Events
Frequent (A)	High	High	Serious	Serious	Medium	Not Effective (A)
Probable (B)	High	Serious	Medium	Medium	Medium	Minimal (B)
Occasional (C)	High	Serious	Medium	Medium	Low	Limited (C)
Remote (D)	Serious	Medium	Medium	Low	Low	Adequate (D)
Improbable (E)	Medium	Medium	Low	Low	Low	Effective (E)
Eliminated (F)	Eliminated					



SRM Process Enhancements Under FTA Special Directive 23-10 CAP Requirements



Structured SRM approach to accommodate both emerging issues and planned future topics for in-depth assessment



Clarified roles, responsibilities, action steps, and criteria for risk acceptance



Clarified protocols for evaluating and escalating risk information to senior leadership



Application of reports, dashboards, and technology tools to better facilitate SRM process

MBTA SRM Program Continues to Grow

- Scheduling consistent SRM workshops established with stakeholder departments on topics selected in coordination with Safety
- Tracking of SRM-identified risks and mitigations through use of hazard module of Safety's new database software
- Continuing to build out SRM process using internal feedback and external input from FTA and DPU
- Continuing to build out SRM team under the direction of the Safety Risk Management Deputy Director



Safety Risk Management Workshops 2024

Forty-nine (49) SRM workshops completed and certified

Focus areas:

- Emerging Topics and Initiatives
- Radio protocols and communications
- Right-of-Way access and work practices
- Health and safety

Organizational Changes

- Leadership structure updates
- Movement of functions between departments
- New teams and functions

Staffing, Hiring, and Training

- Ops, Maintenance, Capital, and Safety Workforce Assessments

Changes to Systems and Infrastructure

- 15+ pre-Surge assessments of planned work activities
- Fleet technology modifications

Transit Worker Assault

Other FTA- and DPU-mandated Topics

SRM Outcome Contributions 2024

- **Proactive action**
 - Detailed and comprehensive mitigations for hazards identified in MBTA's operations
- **Strengthened accountability**
 - Formal management review and acceptance of emerging areas of risk
- **Streamlined oversight**
 - SRM outputs used to obtain FTA and DPU approval for new and proposed initiatives
- **Continuous risk monitoring**
 - Safety Division continues to track, verify, and document closure of over 400 recorded mitigations in CY2024



Employee Engagement and Training 2024



Recent Incidents and Corrective Actions



Questions?
