



**Massachusetts Bay  
Transportation Authority**

# Safety Updates

Tim Lesniak

Chief Safety Officer

Safety, Health and Environment Subcommittee

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# Discussion Topics

- Green Line Surge
- Safety Risk Management (SRM)  
Update



# Green Line Surge

January 16 - January 28

North Station to  
Kenmore, Kenmore to  
Heath Street

## Replaced:

- 900+ ties
- 880+ feet of full depth track
- 80+ switch rods
- Catenary wiring across the entire surge limits

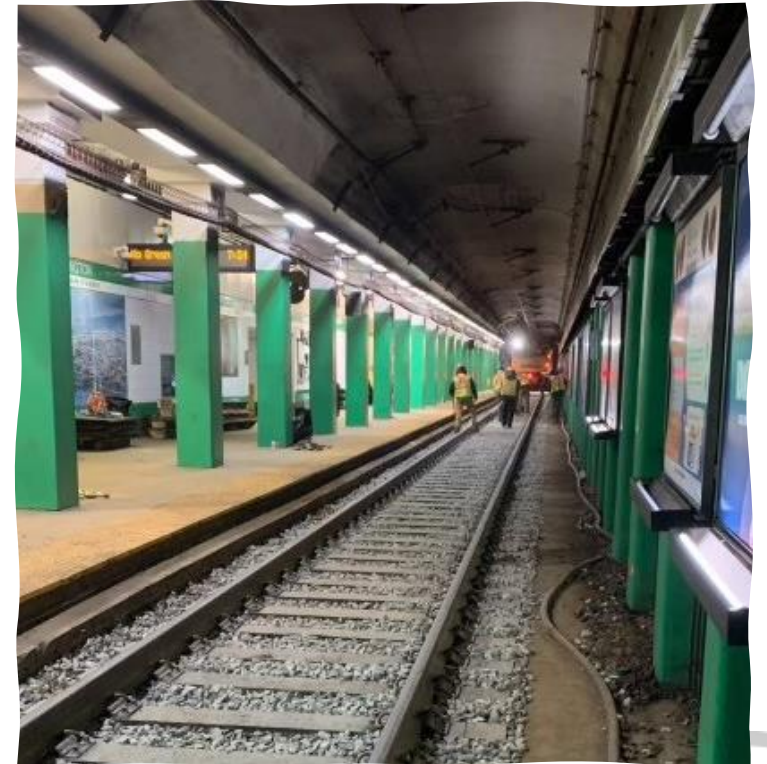
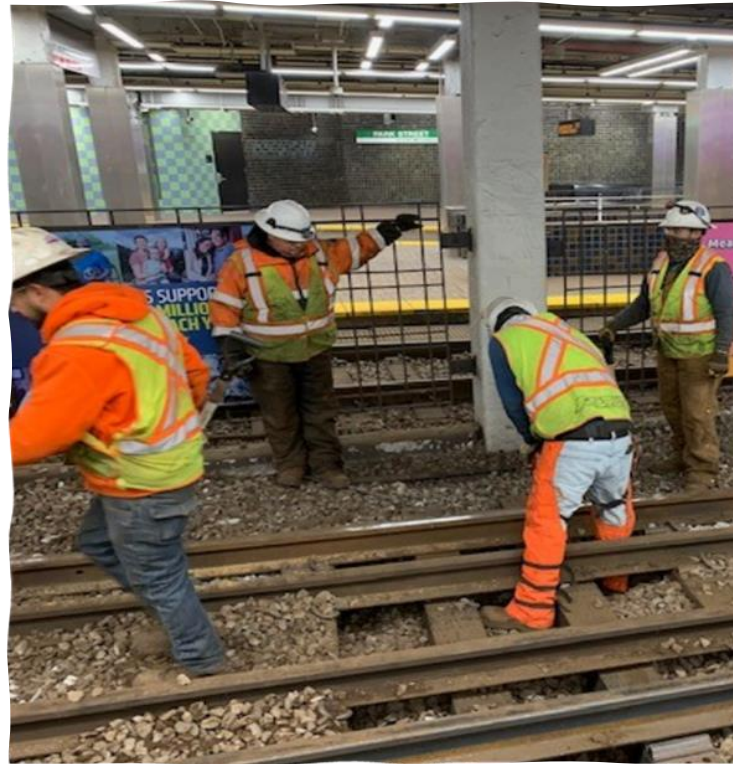
## Repaired:

- 7700+ feet of track
  - 10+ switches
  - Station columns
  - Leaks throughout surge limits
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- Completed work at various stations such as painting, repairing floors, stairs and benches, replacing tactiles and standpipe systems and making bathroom accessibility improvements
  - Conducted structural inspections across all stations and at various tunnel locations



# Green Line Surge Photos

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# Green Line Surge Photos

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# Safety Risk Management (SRM) at the MBTA

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## **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 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

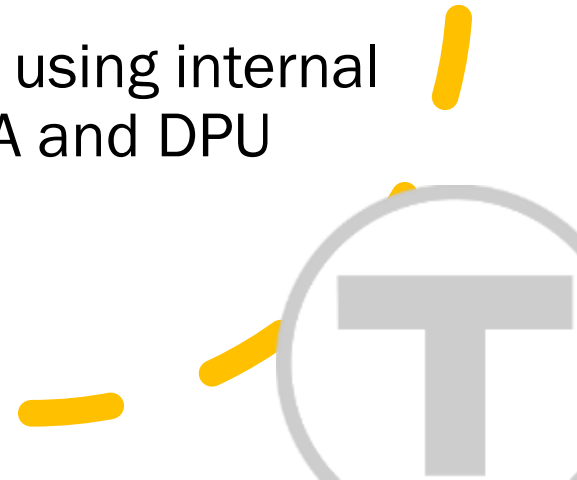


Application of reports, dashboards, and technology tools to better facilitate SRM process



# Growing MBTA's SRM Program in 2024

- Building out dedicated SRM team under newly-created Deputy Director of Safety Risk Management role
- 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



# SRM Workshop Topics: Recent and Future

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## Recent workshop topics:

- Surge Planning, Execution, and Return to Service
- Track and Rail Conditions
- Power Dispatch Protocols
- Fatigue and Attention to Duty
- Transit Worker Assaults
- Fare Transformation
- Workforce Assessments

## Future workshop topics:

- Insulator Smoke and Fire Events
- Signal Rules Compliance
- Escalator and Station Slip/Trip/Fall Safety
- Emergency Response
- Communications
- Operation of Maintenance Equipment



Questions?

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