



**Massachusetts Bay
Transportation Authority**

Safety Updates

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MBTA Board of Directors Meeting

October 24, 2024

Discussion Topics

- Recent Incidents and Corrective Actions
- Safety Performance Indicators and Trend Analysis
- 2024 Women in Safety Conference



Recent Incidents and Corrective Actions



Safety Performance Indicators and Trend Analysis Highlights

August 2024

Heavy and Light Rail

- Continued success reported in system reliability for Heavy Rail Mean Miles Between Mechanical Failures performance, monthly targets have been met each month.
- Continued success for Blue Line in meeting all of its Collision targets. All targets have been met since July 2023.
- All Smoke/Fire Incident targets were met again in August for heavy rail, making this three months in a row.

Commuter Rail

- Commuter Rail's August Accident Frequency Ratio stands at 1.5, indicating better performance compared to the year-to-date ratio of 2.1

2024 Women in Safety Conference

- Conference hosted by OSHA Training Institute Education Center on Friday, October 4, at Keene State College
- 10 Safety Division staff members representing various departments attended the conference
- MBTA participated as a conference sponsor with Human Resource representatives meeting with attendees and discussing advertised Safety employment opportunities
- Session topics included:
 - For Women in Safety: Guarding Against Vocational Stress and Burnout
 - Learning From Complacency And Moving Forward With Intention
 - How Process Safety Elements Help Improve Safety in any Industry
 - Why Being a Leader In Safety Matters!



Questions?

Appendix

Safety Performance Indicators and Trend Analysis - *Bus*

- There were **8** Bus NTD Reportable Major Safety Events in August, exceeding the monthly performance target of **7** but performing better than the YTD average of **11** for the **second month in a row**.
- There was a **significant increase** in Bus NTD Reportable Injuries (this number includes both customer- and employee-transported injuries) in August. Our YTD monthly average is **29** (against a target of **21**), and we had **35** transports in August. *
- For the **fourth consecutive month**, Bus Safety performed at target or better in System Reliability, getting **33,520** mean miles between mechanical failures in August vs. the target rate of **28,500**.





Safety Performance Indicators and Trend Analysis – *Heavy Rail*

- **Significant improvement** in Heavy Rail NTD Major Safety Events over last month, with **6** events in August, compared to our **11** in July. The monthly performance target for this SPI is **1.11**.
- Heavy Rail met its NTD Reportable Injuries (this includes both customer and employee transported injuries) performance target of **14.17** for the first time in 2024, with **10** total transports.
- There were **0** Main Line or Yard derailments on the Heavy Rail in August. However, there were **3** Maintenance Vehicle derailments.
- The Orange Line met its Customer Injury performance target of **2.12** for the **2nd time this year**, with a rate of **1.47** customer injuries per one million passenger trips.
- Heavy Rail met its Reportable Smoke Fire performance targets for **all three lines in August**, with **0** incidents on the Blue Line (vs. target of **.98**), **2** on the Orange Line (vs. target of **3.21**), and **4** on the Red Line (vs. target of **5.88**).
- **Continued success** in System Reliability for Heavy Rail. Heavy Rail Mean Miles Between Mechanical Failures performance in August was **60,912** compared to the target of **49,000**. Heavy Rail has met its system reliability performance target each and every month in 2024.



Safety Performance Indicators and Trend Analysis – *Light Rail*

- *Steady upward trend* of Light Rail NTD Reportable Major Safety Events over the past 3 months, (**3** in June, **5** in July, and now **8** in August.) The performance target for this SPI is **2.25**.
- *Significant increase* in Light Rail NTD Reportable Injuries (this includes both customer and employee transported injuries) in August, with **13** total transports compared to only **10** in July and the monthly performance target of **6.58**.
- There were *no* Light Rail derailments in August.
- Light Rail *more than doubled* its July Customer Injuries Rate of **1.14** with a rate of **3.25** customer transports per million passenger trips in August, against the target rate of **2.86**.
- For the *2nd month in a row*, Light Rail had **0** Reportable Smoke and Fire Incidents.

Safety Performance Indicators and Trend Analysis

Commuter Rail and Ferry

- Commuter Rail's August Accident Frequency Ratio stands at **1.5**, indicating better performance compared to the year-to-date ratio of **2.1**.
- The Commuter Rail reported **4** Reportable and **1** Non-Reportable employee injuries, with **0** passenger injuries recorded.
- There was **1** Commuter Rail derailment reported in August.
- Additionally, there were **0** reportable rule violations on the Commuter Rail.
- In August 2024, Ferry had **0** Reportable and **0** Non-Reportable employee injuries, with **0** passenger injuries reported.

↑ EMERGENCY ENTRY ↑

