Safety Updates

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MBTA Board of Directors Meeting
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Discussion Topics

• Recent Incidents and Corrective Actions
• Advanced Mobile Flagger Update
• Safety Performance Indicators and Trend Analysis
Recent Incidents and Corrective Actions
Advanced Mobile Flagger Update

- MBTA restarted the Advanced Mobile Flagging (AMF) program on the Orange and Green Lines on Monday, July 8.
- Program was implemented to improve safety for on-track personnel performing maintenance and inspections.
- AMF, over the last few months, has evolved to remove ambiguity, formalize communication protocols, and increase accountability for everyone on and off the track.
- In addition to the existing mandatory work crew PPE, train headlights, and radio communication requirements, MBTA formalized protocols to protect on-track personnel:
  - Require the vehicle to come to a complete stop and await a signal to proceed past the on-track personnel.
  - Temporary reduced vehicle speed to 10mph through areas.
  - Increased use of the horn to alert on-track workers of oncoming car movement.
Safety Performance Indicators and Trend Analysis Highlights May 2024

Bus

- Notable downward trend in Bus vs. Pedestrian Collisions.
- Target for MBTA Bus NTD Safety Events has not been met since February 2023.
- Significant improvement in Bus System Reliability performance.

Heavy and Light Rail

- Continued success reported in system reliability for Heavy Rail Mean Miles Between Mechanical Failures performance.
- Continued success for Blue Line in meeting all of its Collision Targets (has met all targets since July 2023.)
- All Smoke/Fire Incident targets were met again in May for rail, making this two months in a row.

Commuter Rail

- Commuter Rail’s May accident frequency ratio stands at 1.3, indicating better performance compared to the year-to-date ratio of 2.7.
Questions?
Appendix
Safety Performance Indicators and Trend Analysis - Bus

- **Second** month in a row where Bus performed at target or better in Bus vs Pedestrian Collisions Rate (1.13 vs. Target Rate of 1.49 in May).
- There were **16 Bus NTD Reportable Safety Events**, exceeding the monthly performance target of **7.33**.
- There were **41 Bus NTD Reportable Injuries** (this includes both customer and employee transported injuries) in May, exceeding the monthly target of **21**.
- Significant improvement in *Bus System Reliability* with May’s *Mean Miles Between Mechanical Failures* at **39,565**, performing better than target of **28,500**.
Safety Performance Indicators and Trend Analysis – Heavy Rail

- Significant improvement in Heavy Rail NTD Reportable Safety Events in May, with only 4 incidents compared to 11 in April, however still falling short of target (1.92).
- There were 21 NTD Reportable Injuries on Heavy Rail, falling short of the performance target of 14.
- There were 0 Main Line or Yard derailments on heavy rail, however there were 4 Maintenance Vehicle derailments.
- The Orange Line had a Customer Injury rate of 1.88 customer injuries per one million passenger trips, performing below target (2.12) for the first time since November 2023.
- The Red Line has met the Reportable Smoke/Fire incident performance target of 5.88 or fewer three months in a row, with only 2 incidents in May.
- Heavy Rail Mean Miles Between Mechanical Failures performance in May was 130,680 compared to the target of 49,000.
Safety Performance Indicators and Trend Analysis – Light Rail

- There were 2 Light Rail NTD Reportable Safety Events in May, compared to the target 2.25.

- There were 5 Light Rail NTD Reportable Injuries, compared to the monthly performance target of 6.58.

- There were 0 derailments.

- Continued success in system reliability for Light Rail. Light Rail Mean Miles Between Mechanical Failures performance in May was 9,018 compared to the target of 7,900. This is the 2nd month in a row meeting this target.

- After missing the Customer Injuries Rate performance target in April, the Green Line fell within the target rate of 2.41 in May with 1.54 customer injuries per million passenger trips.
Safety Performance Indicators
Trend Analysis

_Commuter Rail and Ferry_

- Commuter Rail’s May accident frequency ratio stands at 1.3, indicating better performance compared to the year-to-date ratio of 2.7.

- Commuter Rail reported 3 Reportable and 0 Non-Reportable employee injuries, with 1 passenger injury recorded.

- There were 0 Commuter Rail derailments.

- There was 1 reportable rule violation.

- Ferry had 0 Reportable and 2 Non-Reportable employee injuries, with 0 passenger injuries reported.