

General Manager and Deputy General Manager Remarks

Fiscal and Management Control Board

June 24, 2019



Red Line Derailment Status Update

- Investigation into root cause of derailment remains underway:
 - Operator error, speed, foul play, and track infrastructure dispelled as probable causes
 - Incident vehicle components sent to lab for metallurgical analysis
 - Completed a rigorous inspection of all related components of all vehicles of the same type involved in the derailment
- Major signal work continues concentrated in four areas:
 - Broadway-JFK, JFK-Ashmont, JFK-North Quincy, JFK-Cabot
 - Signal restoration expected to continue through summer
 - Incremental progress with signal restoration will result in service improvements
- Future state: Red/Orange Line signal upgrades to digital audio frequency track circuits will replace existing analog technology
 - Currently working with contractor to re-sequence project to start in Columbia Junction
- Progress in repairs to track, third rail, and power has brought service up to 10 trains per hour, resulting in six-minute headways between JFK/UMass and Alewife during peak



Red Line Service Restoration



- On a <u>typical weekday</u>, the T operates 13-14 trains per hour during peak service
 - **4:30 minute headways** in the trunk and **9 minute headways** on each branch
 - Average trip time from Braintree to South Station is 30 minutes
- From <u>June 12-14</u>, due to damaged infrastructure, the T operated only 6 trains per hour during peak and required a transfer at JFK for Braintree passengers
 - Headways inconsistent and **service gaps of 15+ minutes**
 - Average trip time from Braintree to South Station was 55+ minutes
- Last week <u>(June 17-21)</u>, after conducting repair work at Columbia Junction, the T was able to improve to **10-11 trains per hour** and provide a **one-seat ride for Braintree passengers**
 - Headways of 5:45 minutes in trunk and 11:30 minutes on branches
 - Average trip time from Braintree to South Station was 40 minutes
- **<u>Going forward</u>**, service will continue to improve as team repairs the infrastructure and makes other operational improvements

Note: Peak refers to 7-9 AM and 4-6:30 PM; When discussing throughput (trains per hour), more trains are in the system during this time, but an individual standing on a South Station platform would see 14 trains pass by during 1 hour



Three Key Signal Bungalows Damaged







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Red Line Train Control Outage Area



Manual Operation in place:

- Braintree Branch: Broadway to North Quincy
- Ashmont Branch: Broadway to Fields Corner
- Requires approximately 50 personnel in the field per day



Columbia Junction-Red Line



- Track Circuits control speed, spacing, and switch movement
- 99 track circuits in affected area (Columbia Junction)



Front and Back of Signal Racks



Back

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Thank You

To our employees and contractors running the Red Line and working on repairs













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