



**Massachusetts Bay  
Transportation Authority**

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## **Track 61**

**The Red Line Car Test Track**

**June 2017**



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## Goals of this Presentation

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- To review background related to the new Red Line Car fleet
  - Procurement and Delivery
  - New Car Design
  - Anticipated Benefits to Service
- To provide information on Track 61
  - Testing and accepting the new Red Line Car fleet
  - Locations considered
  - Expectations and Timeline



## Investing in the Red Line to Improve Service Delivery

Initiative	Estimated Cost
Red Line Car Fleet	\$458M
Red Line Signals	\$191M
Red Line Infrastructure *includes \$32M for Red Line Test Track	\$177M





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## The Red Line Cars, Anticipated Benefits to Service

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- More than 47,000 customers take public transportation each weekday from a South Boston Station (FY16).
- The new Red Line cars will support a 50% increase in customers carried per hour.
- Trains are designed to operate for up to 30 years.

**Wait time will be 3 minutes, instead of  
between 4 and 5 minutes.**

# Implementing Better Service on the Red Line





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## Testing and Accepting the new Red Line Cars

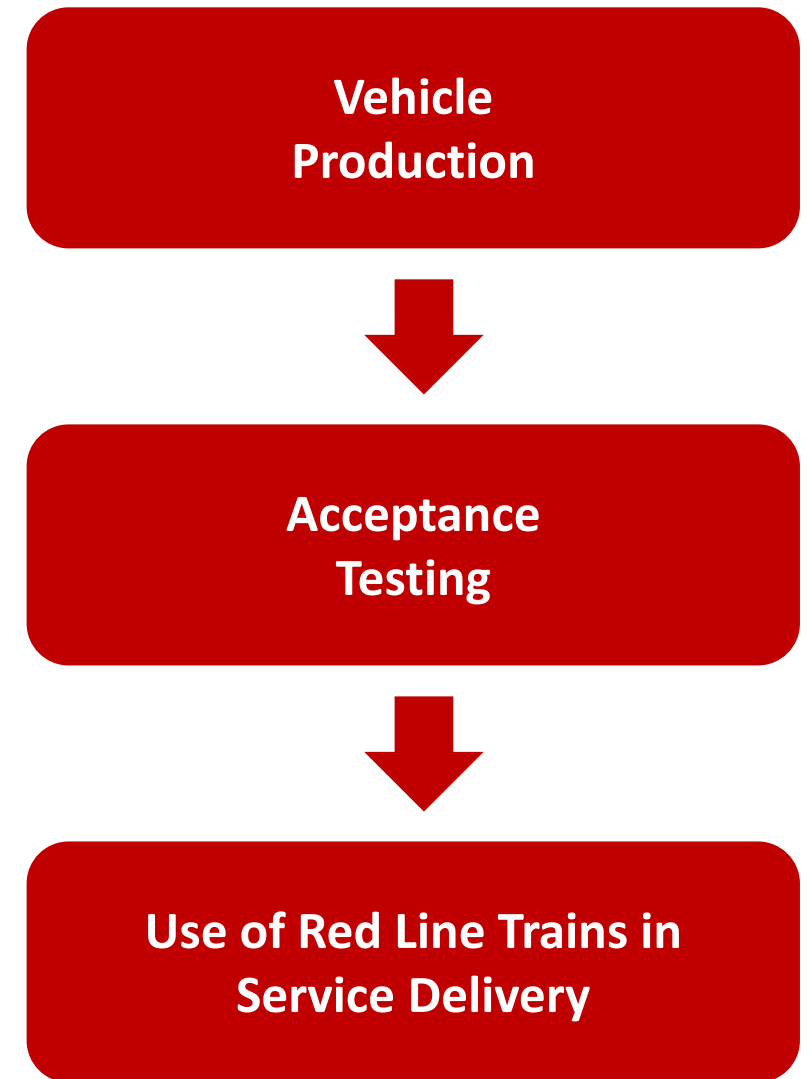
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Testing and acceptance is the process used to test the new Red Line cars after they come from the production facility.

This process ensures the cars can run, stop and function safely on the MBTA third rail system.

Once fully tested, the cars are approved by an MBTA engineering team and they can officially be used for passenger service on the main Red Line.

Choosing a location for testing and accepting is extremely important. Without a location, newly produced cars are not able to carry passengers on revenue lines.





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## Testing Location Criteria for the new Red Line Cars

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- No less than 1,800 feet of straight track for test runs
- Close proximity to the Red Line car house
- Ability to move between the Red Line Car House to the test track with no impact on the main line
- Additional storage for vehicles in close proximity to the test track



## Identifying a Location for Testing and Accepting

11 options - 5 reviewed in detail - 1 meets all requirements

1

### One Mile South of Cabot Yard

- Insufficient length.
- No connection to Cabot Yard.
- May interfere with Revenue Service

2

### Track South of Cabot Maintenance Facility

- Used to service and stage Commuter rail equipment, with single rail, related to maintenance of way.

3

### New Track Wollaston & Quincy Ctr

- Potential impacts by 3rd parties encroaching on ROW.
- No connection to Cabot Yard

4

### Existing Braintree storage track

- No connection to Cabot Yard.
- Storage potential

5

### Alignment adjacent to South Boston Haul Road

- 'Track 61' meets all requirements





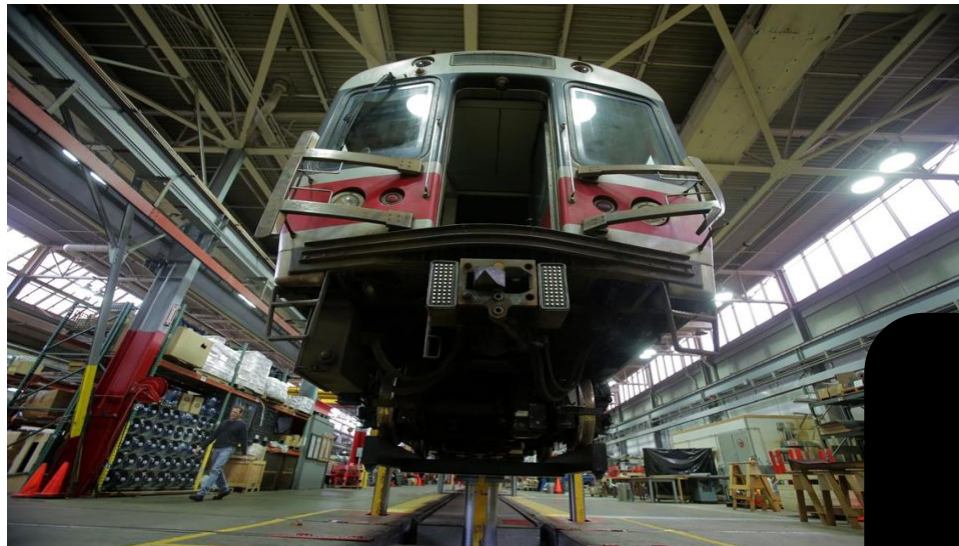


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## Track 61, Testing Location for the new Red Line Cars

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For the Red Line Trains to be in service by 2024, Track 61 has been identified as the only viable location for testing and acceptance.



**Wait time will be 3 minutes, instead of between 4 and 5 minutes.**

# Expectations and Timelines





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## Track 61, Time Line and Expectations

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- Testing will begin in 2019. Testing is expected to end in 2024. The total timeline is estimated at 60 months.
- Testing hours will be established as the Red Line car delivery gets closer.
- Noise will be monitored and mitigation, where necessary, will occur.
- The MBTA will employ up to 16 people to test the Red Line cars.

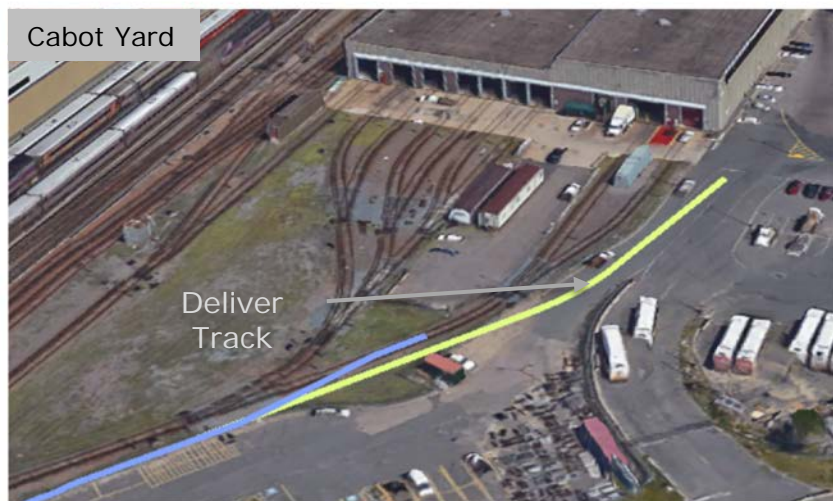


## The Vehicle Shed on Track 61

Yard 61 Layout



Cabot Yard



- A vehicle shed will expedite testing by up to 18 months (3.5 years).
- The shed measures 6,000 sq. ft. and is approximately 20ft high.
- Within the shed, employees will test HVAC, utilities, make minor modifications, test communications and security.
- The building is estimated at \$2.5M and will be used during testing between 2019 and 2024.



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## Overall Timeline

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- Design: **Winter/Spring 2017**
- Advertise: **July 2017**
- Construction: **Fall 2017 to Early 2019**
- Red Line Pilot Car Delivery: **Begins in Early 2019**
- Red Line Production Car Delivery: **Late 2019**
- End of Delivery/Acceptance: **Early 2024**
- Completion of Project: **Summer 2024**