



**Massachusetts Bay  
Transportation Authority**

# Green Line Transformation (GLT) Update

Fiscal and Management Control Board

June 21, 2021

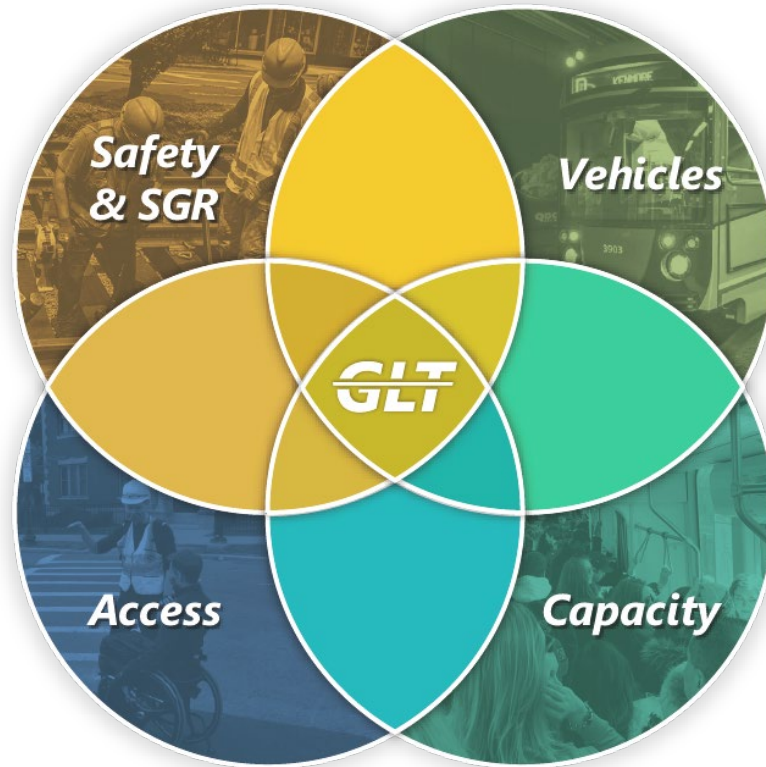
Angel Peña

# Green Line Transformation | Program Goals

**Program Goal:** Improve the Green Line quality of service for all riders through strategic investments in Safety & State of Good Repair, Accessible Stations, Legacy Car Replacement and Increased Capacity

<b>Level 0</b>	<b>Safety &amp; State of Good Repair (SGR)</b>
<ul style="list-style-type: none"><li>• Minimize risk of service disruptions</li><li>• Reduce speed restrictions</li><li>• Bring assets to state of good repair</li></ul>	

<b>Level 1</b>	<b>Accessible Stations</b>
<ul style="list-style-type: none"><li>• New or upgraded platforms</li><li>• Compliant height, width &amp; slope</li><li>• Barrier-free pathways &amp; wayfinding</li><li>• Detectable warning panels</li></ul>	



<b>Level 2</b>	<b>Legacy Car Replacement</b>
<ul style="list-style-type: none"><li>• Operate and maintain single Type 10s</li><li>• More efficient O&amp;M</li><li>• 100% of Green Line trains accessible</li><li>• More equitable across the Green Line</li></ul>	

<b>Level 3</b>	<b>Increased Capacity</b>
<ul style="list-style-type: none"><li>• Additional vehicles and infrastructure for two-car Type 10 operation</li><li>• Increase core capacity of subway</li><li>• Reduce headways and journey time</li><li>• Expand yards and facilities</li></ul>	

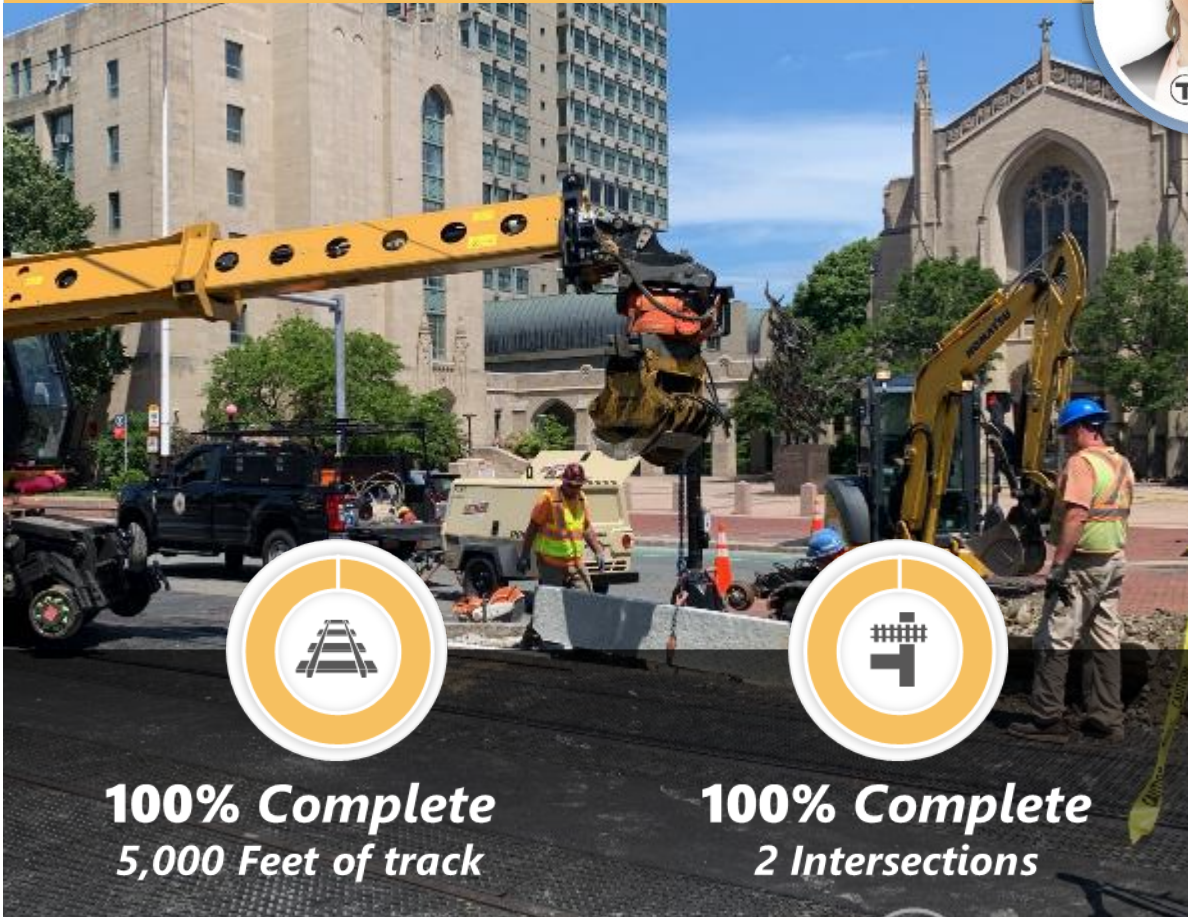


# Level 0 | Safety & State of Good Repair (SGR)

## B Branch Track & Intersection Upgrades



## D Branch Track & Signal Replacement



**100% Complete**  
5,000 Feet of track



**100% Complete**  
2 Intersections



**95% Complete**  
Trackwork



**71% Complete**  
Special Trackwork



**89% Complete**  
Signal

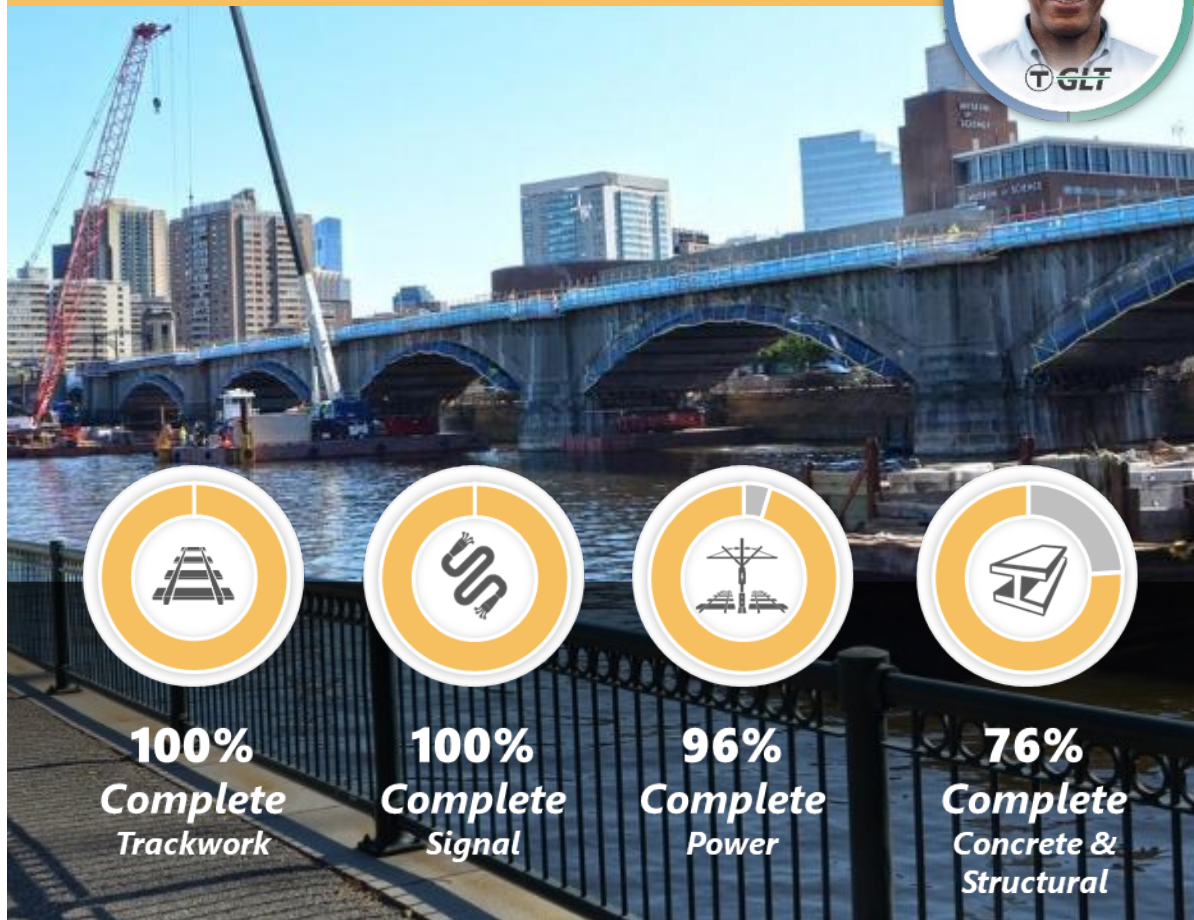


**93% Complete**  
OCS Power  
& Catenary

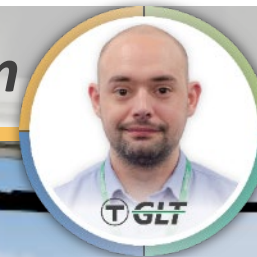


# Level 0 | Safety & State of Good Repair (SGR)

## Lechmere Viaduct Rehabilitation



## Green Line Train Protection System



**Design Underway**



# Accessible Stations | Short-term (0-5 years)

## B Branch Station Consolidation



**63%  
Completed**



**10% Complete  
Canopy  
Installations**



**100% Complete  
Platform & Walkway  
Concrete Slabs**



**90% Complete  
St Paul & Babcock  
Demolition**



# Accessible Stations | Short-term (0-5 years)

## Design Underway

## Planning



**Symphony Station  
Accessibility  
Improvements**



**Hynes Station  
Accessibility  
Improvements**



**D Branch Station  
Accessibility  
Improvements**



**Newton Highlands  
Station Accessibility  
Improvements**



**B & C Branch Short-term  
Station Accessibility  
Improvements**



# Advancing Station Design | Long-term

Requires close coordination with the City of Boston and other stakeholders



Modernize stations from **Blandford portal to Boston College** to accommodate accessible paths of travel and boarding

Add **accessible platforms between Brigham Circle and Heath St** in place of streetcar operation and improve pedestrian accommodations

# Fleet Overview | Existing Trains

## Type 7: Vehicle Entrance

- No low floor entrances
- Requires mobile lift for accessibility (if available)
- Paired with Type 8



## Type 8: Vehicle Entrance

- Only middle door is low floor
- Bridge plate accessible with operator assistance



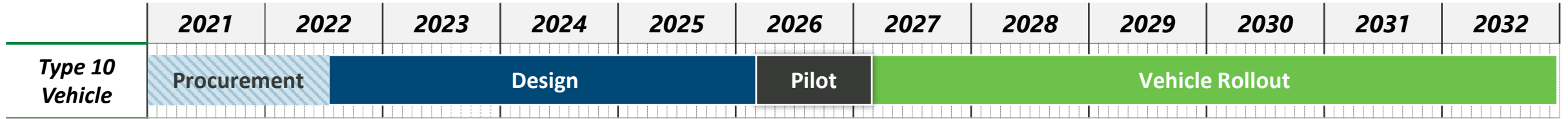
## Type 9: Vehicle Entrance

- Only middle door is low floor
- Bridge plate accessible with operator assistance

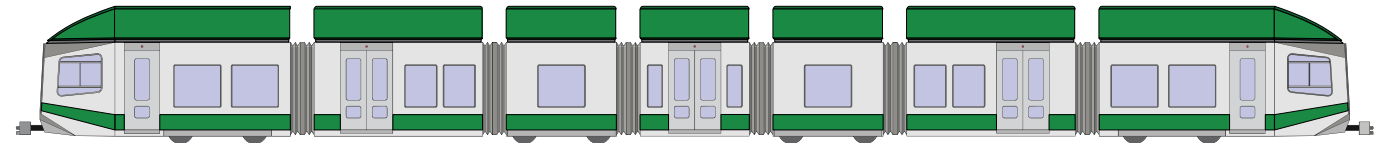
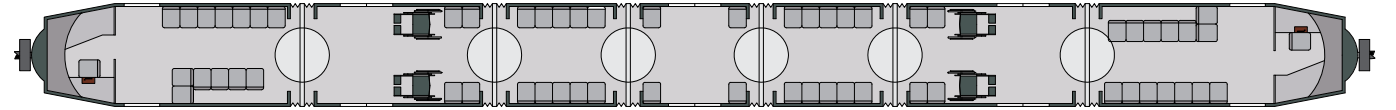




# Type 10 Supercar | *Forging Ahead* Outcomes



- ✓ **Vendor bid proposals to be submitted on July 14, 2021**
- ✓ An addenda was sent out changing the **base contract to 102 cars** from the original 165 car base order
- ✓ **Options have increased** to reflect the new base order quantity
- ✓ We anticipate to have good competition from multiple car builders



*Type 10 Supercar: conceptual rendering*

- + **Low floors to allow for an accessible vehicle**
- + **Replace legacy fleet**
- + **Reduced dwell times**
- + **Allows for improved operations and maintenance**

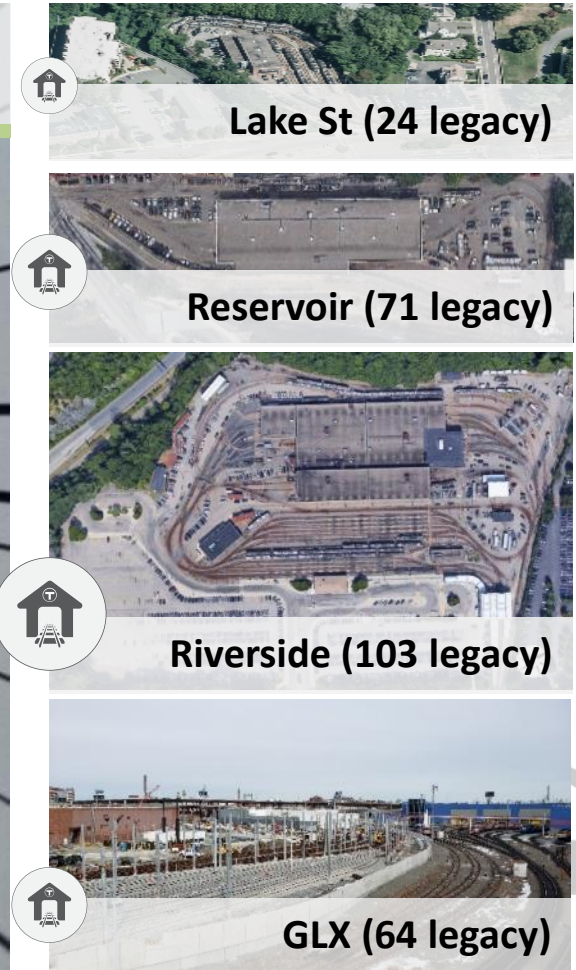
# Level 2 | Legacy Car Replacement

Before the Type 10 pilot arrives in 2026, new maintenance capabilities and yard accommodations are required

## *Vehicle Maintenance Facility Upgrades*



## *Systemwide Preliminary Design Underway*





# Level 3 | Increase Capacity

## Double Type 10 Fleet

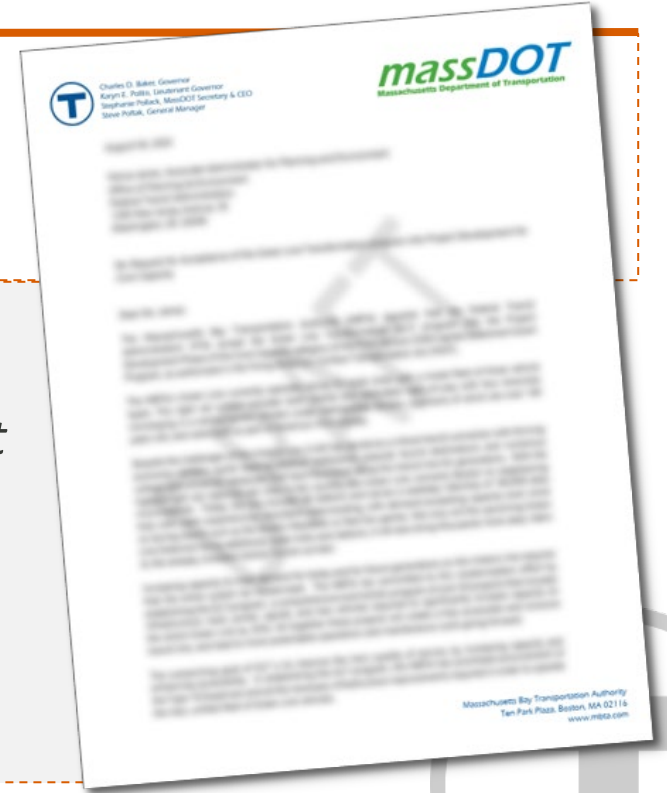
- ✓ Analyzing number of option cars and funding required to meet future ridership demand
- ✓ Planning projects for operating double Type 10's including yard expansions and power upgrades

### FTA Core Capacity Grant Program Eligibility



Next Steps Submit:  
**Letter of Intent**

*Entering into the Core Capacity Grant program would **leverage FTA guidance and maximize potential funding eligibility***





# Green Line Transformation | *Diverse Team Behind GLT*

