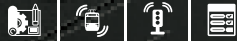


# GLTPS



# GREEN LINE TRAIN PROTECTION SYSTEM

A CAPITAL TRANSFORMATION PROJECT

## Monthly Review and Lookahead

Wednesday, March 23, 2022

The Green Line Train Protection System (GLTPS) combines vehicle and wayside equipment to avoid train-on-train collisions, add red light signal protection, and enforce speed limits. The project has four overlapping phases starting with **Equipment Design** – integrating new components into the legacy system. **Vehicle** and **Wayside** installation phases are currently in procurement. The **Operational Integration** phase prepares the MBTA to use the new safety system. Currently our focus is completing the baseline design for wayside and Type 7 vehicles.

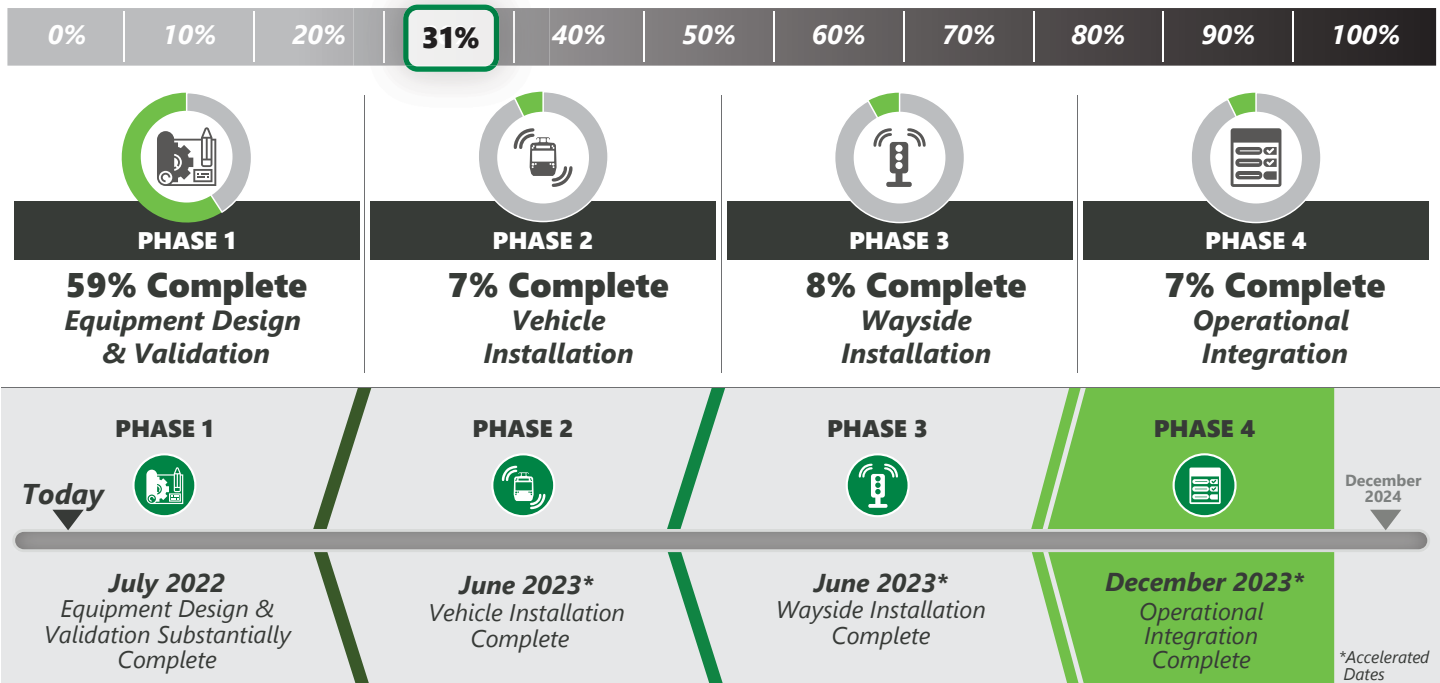


[Click here to see more!](#)

### Did you know...

... the Collision Avoidance System (CAS) being installed as part of the Green Line Train Protection System (GLTPS) does not utilize any wayside equipment therefore it works outside of track sections (ex: yard tracks) that are not equipped with GLTPS Wayside Equipment. The CAS also provides an additional layer of safety by means of a video sensor in conjunction with the radar sensor

### GLTPS by the Numbers





## Equipment Design & Validation

- **Project personnel completed an interactive First Article Inspection (FAIs)** on the wayside balise with the System Integrator. Open points are in process of being addressed and manufacturing has started to build new equipment for upcoming installations.
- **Pre-production equipment was installed on car #3664 at Riverside** for pre-pilot testing and software validation. This car will be used with the GLTPS test track equipment, which was completed on Tuesday, March 22, to validate both vehicle and wayside functionality.



## Vehicle Installation

- **Type 7 preliminary First Article Inspections are ongoing** at the manufacturing facility in western New York and formal FAIs are scheduled for the week of March 28. As First Article Inspection assemblies are completing the inspection process, pilot equipment is being manufactured and scheduled to be installed at the Green Line Extension (GLX) Maintenance Facility beginning mid-April.



## Wayside Installation

- **Pre-production equipment was mounted on the Riverside test track** the week of March 7. This equipment will be used in parallel with the pre-production equipment installed on car #3664 for pre-pilot and software testing. This equipment will remain installed on the test track for post-installation validation testing of the vehicles after modifications are completed.
- **The Wayside Installation Package was formally released for Public Bid** on Wednesday, March 16. There will be a site tour at Riverside on Monday, April 4 to review the newly installed test track equipment, and a Pre-Bid Conference will be held that afternoon for prospective bidders.



## Lookahead for April



### Equipment Design & Validation

- Continue component First Article Inspections (FAIs) for Type 7 vehicle & wayside assemblies
- Complete wayside & component functional interface pilot testing at Riverside and collision avoidance software optimization testing on the D Branch



### Vehicle Installation

- Finalize terms and conditions with Installation Contractor
- Mobilize Installation Contractor and begin the Pilot installation
- Begin Type 8 vehicle conceptual design review and prototyping of enclosures



### Wayside Installation

- Complete a pre-bid tour at the Riverside test track facility and a virtual follow-up meeting on April 4
- Award Installation Contract per the Construction Package which began advertisement on March 16



### Operational Integration

- Provide stakeholder comments back to system integrator on newly revised operational storyboard video
- Begin bi-weekly Operational Readiness meetings to train the various stakeholder groups on GLTPS integration