

GLTPS

GREEN LINE TRAIN PROTECTION SYSTEM A CAPITAL TRANSFORMATION PROJECT

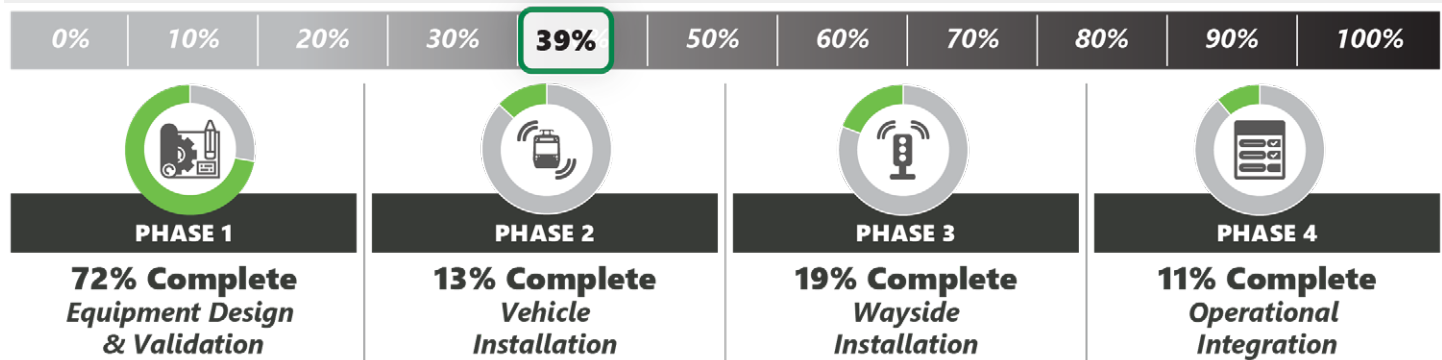
April 2023 Review and Lookahead

The **Green Line Train Protection System (GLTPS)** combines vehicle and wayside equipment that work together to avoid train-on-train collisions, enforce speed limits, and add red light signal protection. The project has four overlapping phases which are all currently underway

- **Phase 1 Equipment Design** integrates new technology into MBTA legacy systems.
- **Phase 2 Vehicle Installation** of camera, radar, and radio equipment into light rail vehicles with some activity already underway at the Innerbelt Vehicle Maintenance Facility.
- **Phase 3 Wayside Installation** is currently on hold and will resume later this year to align with the MBTA construction schedule.
- **Phase 4 Operational Integration** where MBTA personnel will receive information and training on the new GLTPS system and plans are developed for system cutover.

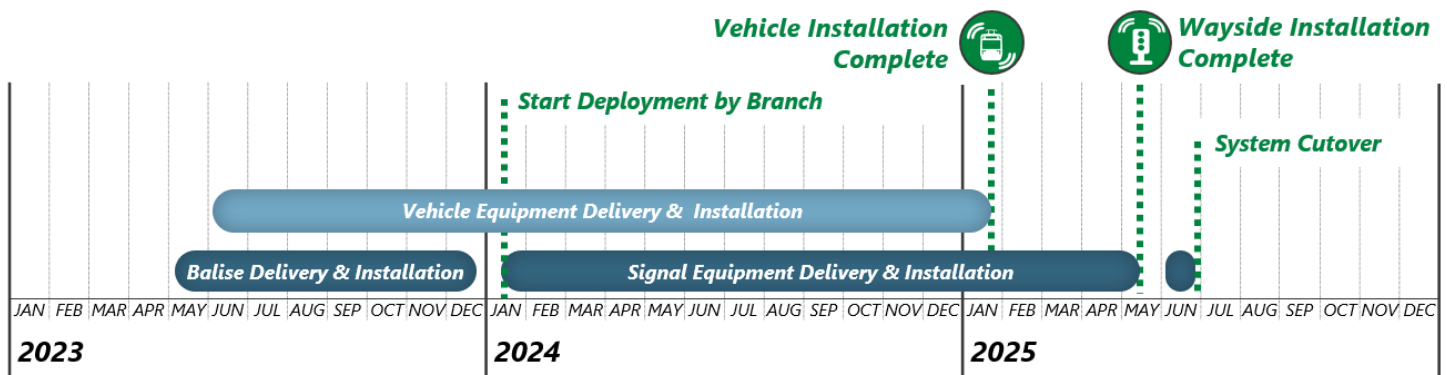


GLTPS by the Numbers



Did you know...

The 24 Type 9 vehicles delivered from 2018 through 2021 were designed and manufactured with advanced provisions for GLTPS. A spare control electronics locker, various conduits, speed sensor and circuit breaker mounting locations, and other design elements are present on the Type 9 fleet to allow for easier GLTPS integration.

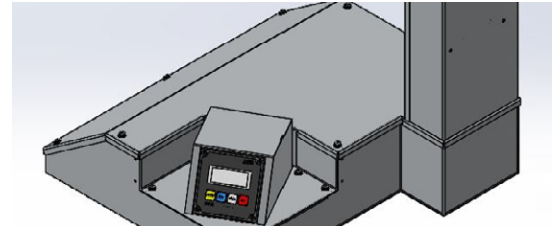


This Past Month



Equipment Design & Validation

- **Type 8 conceptual equipment enclosures were presented to the Project Team** and prototypes have been shipped to Riverside to be fitted in early May by the System Integrator. The components for all legacy vehicles are identical except for packaging and installation.



Conceptual Type 8 cab equipment enclosure



Vehicle Installation

- **Abatement of the 3600 series vehicles has continued as 70 of 86** vehicles are complete to date, which is 81% of the fleet. Abatement will conclude in June.



3661 quarantined for abatement



Wayside Installation

- **200 additional balises have been manufactured in Braunschweig** and are awaiting programming. These balises will be strategically installed in locations where operational speed limits change.



Operational Integration

- **The System Integrator has begun the creation of operational and maintenance training materials.** The System Integrator will train MBTA instructors, who will in turn train all Motorpersons.

Lookahead For Next Month

Continue working closely with the Systems Integrator on mitigation strategies to ensure the safe and rapid implementation of safety features and operationalize them as soon as possible



Equipment Design & Validation

- Perform component first article inspections (FAIs) after CDR conditional approval
- Perform "form & fit" activities of Type 8 prototype enclosures



Wayside Installation

- Begin receiving additional balises to support speed enforcement directive
- Complete dynamic envelope testing at specified tunnel locations



Vehicle Installation

- Continue abatement of installation areas on the 3600 series vehicles
- Continue speed sensor housing installation during the abatement cycle



Operational Integration

- System Integrator to receive production company quote for training videos
- Receive and review draft Operations & Maintenance Manuals