

# GLTPS

## GREEN LINE TRAIN PROTECTION SYSTEM

A CAPITAL TRANSFORMATION PROJECT

### Monthly Review and Lookahead

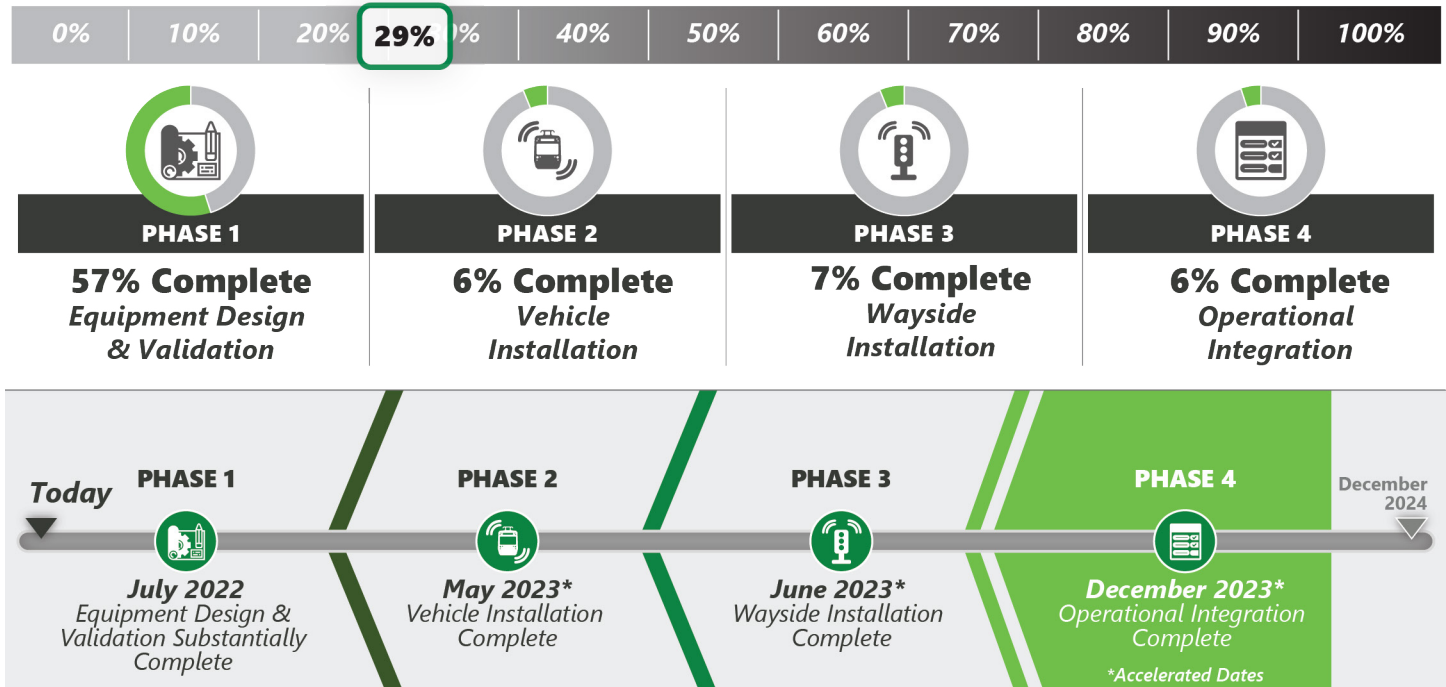
Thursday, January 27, 2022

**MBTA announced additional safety Investments:** including \$45 million in the Green Line Train Protection Project and accelerating the project’s schedule by a year to be completed next year instead of 2024. *Updated timeline below.*

**Overview:** The Green Line Train Protection System (GLTPS) combines vehicle and wayside equipment, that work together to avoid train on train collisions, add red light signal protection, and incorporate speed enforcement. The project has four (4) overlapping phases starting with **Equipment Design** that integrates new components into the legacy system. The **Vehicle** and **Wayside** installation phases are currently in planning. The final **Operational Integration** phase prepares the MBTA to use the new safety system on its Green Line. Currently our primary focus is working toward the baseline design finalization for Wayside and Type 7 vehicle.

**Did you know...**  
*GLTPS integrates different types of safety monitoring equipment into the vehicles that all work together to alert the operator of a risk, and then if no response is observed, apply the brakes automatically to stop the vehicle.*

### GLTPS by the Numbers





## Equipment Design & Validation

- **Design review comments for Wayside & Type 7 drawing package are being addressed** by the System Integrator/Designer. Working sessions between the project team and the System Integrator continue in order to advance project activities and finalize design.
- **Project personnel travelled to the manufacturing site** to review the design changes per on car fitment exercises and readiness moving towards the formal First Article Inspection activities scheduled in March where the major components are tested and compliance with design criteria is validated before beginning serial production.



## Vehicle Installation

- **Type 7 major carborne component demonstration** was performed at the new Green Line Extension (GLX) facility with MBTA Maintenance personnel, Program Management, and BBR Representatives to familiarize all parties with the new equipment to be installed and overall functionality of the train protection system.



## Wayside Installation

- **Wayside Installation Package is being updated to reflect recent optimized approach.** The updated package will be shared with internal stakeholders for review and finalization.
- **Test track equipment delivered to Riverside** for scheduled February installation to allow for real time validation testing once carborne equipment is mounted and static tests completed.

## Lookahead for February



### Equipment Design & Validation

- Close remaining Wayside & Type 7 Design Package actions and discrepancies
- Start 3D working sessions for Type 8 conceptual design to gain feedback
- Complete wayside surveys of available Green Line Extension track locations



### Wayside Installation

- Revise current wayside installation plans to reflect the optimized approach
- Update timeline and labor resourcing for wayside pilot installation



### Vehicle Installation

- Begin preparation of GLX in advance of carborne equipment installation
- Update timeline and labor resourcing for Type 7 pilot installation
- Advance vehicle installation contract actions



### Operational Integration

- Complete Test Track Equipment Installation for Validation Testing
- Receive and review preliminary operational instruction videos