



Massachusetts Bay Transportation Authority

Green Line Transformation Program: Program Overview

2018-2022 (FY19 – 23)



Transformation Program

- Establish a multi-phased Green Line Transformation Program that integrates safety and reliability needs of today and modernization planning for tomorrow into a single, coordinated capital investment program
- Consistent with Focus40 and Service Delivery Policy, develop a strategic vision and KPIs for Green Line service and infrastructure, tied to multi-phased modernization around a new vehicle fleet
- Coordinate all non-GLX activities impacting Green Line vehicles, infrastructure, and service anticipated to be a significant capital program phased over the next 5, 10, 15+ years
- Hire a GLT Program Manager within a year. In the meantime, establish an internal MBTA Steering Committee to provide direction
- Engage a PM/CM Consultant to coordinate existing and proposed projects for 2018, develop a plan for 2019 and beyond, and support program management, coordination, and communication/outreach efforts.



Transition Program: Phased Implementation

Multi-phased program proposed that will transition the Authority to a modern 100% accessible high capacity car and necessary system improvements

Phase I: Near term projects currently identified in FY19-23 Draft CIP addressing urgent SGR needs and necessary system and reliability improvements

Phase II: Procurement of a new modern fleet of Green Line vehicles and completion of necessary infrastructure changes to operate them as single units

Phase III: Completion of necessary infrastructure changes to operate new vehicles as 2 car units on the D & E Lines.

Phase IV: Long term possibility, completion of infrastructure changes to operate new vehicles as 2 car units on B & C Lines.



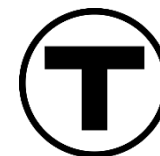
Immediate Program Need

- All Green Line Branches have immediate infrastructure needs. Work is underway in 2018 that begins to address the immediate needs:
 - Train protection signal overlay
 - D-Branch signal upgrade
 - Track infrastructure SGR upgrades
- Infrastructure and Vehicle needs exist beyond the immediate 2018 – 2019 timeframe
- A transformative operational/service vision, investment program, and coordinated communication strategy is needed:
 - Service improvements and future vehicle options to guide infrastructure and accessibility investments
 - Clearly describe the investments
 - Guide current and future work
 - Minimize disruption
 - Integrate internal and external project/planning efforts critical to success
 - Preserve Rights of Way and future TSP options



Immediate Program Need





Green Line Transformation Phase 1: DRAFT FY19-23 CIP

Investment Category	Total Budget	FY19-23 CIP	Sample Projects
Infrastructure (Track, Signals, Power, Bridges, Tunnels)	\$389.2M	\$367.1M	<ul style="list-style-type: none"> - Green Line D Branch Track and Signal Replacement - Green Line (Non-GLX) Grade Crossings
Stations and Customer-Facing Improvements	\$168.7M	\$133.4M	<ul style="list-style-type: none"> - Green Line Real Time Tracking - Symphony Station
Revenue Vehicles	\$233.9M	\$123.2M	<ul style="list-style-type: none"> - Type 7 Midlife Overhaul - Type 8 Reliability Improvements - Type 10 Planning
Risk Management and Mitigation	\$171.9M	\$117.3M	<ul style="list-style-type: none"> - Green Line Train Protection
Systemwide programs and on-call projects	Various	Various	<ul style="list-style-type: none"> - Facility Roof Replacements On-Call - Systemwide tunnel inspection and repairs - On-call Power
Total, Phase 1 Investments	\$963.7M	\$739.9M	

*Projects that extend beyond 2023 will be funded through follow-up annual CIP programs



Organize the Green Line Transformation Program

Organize the separate, uncoordinated Green Line (Non-GLX) projects and plans into a unified, integrated multi-phased Green Line Transformation (GLT) Program

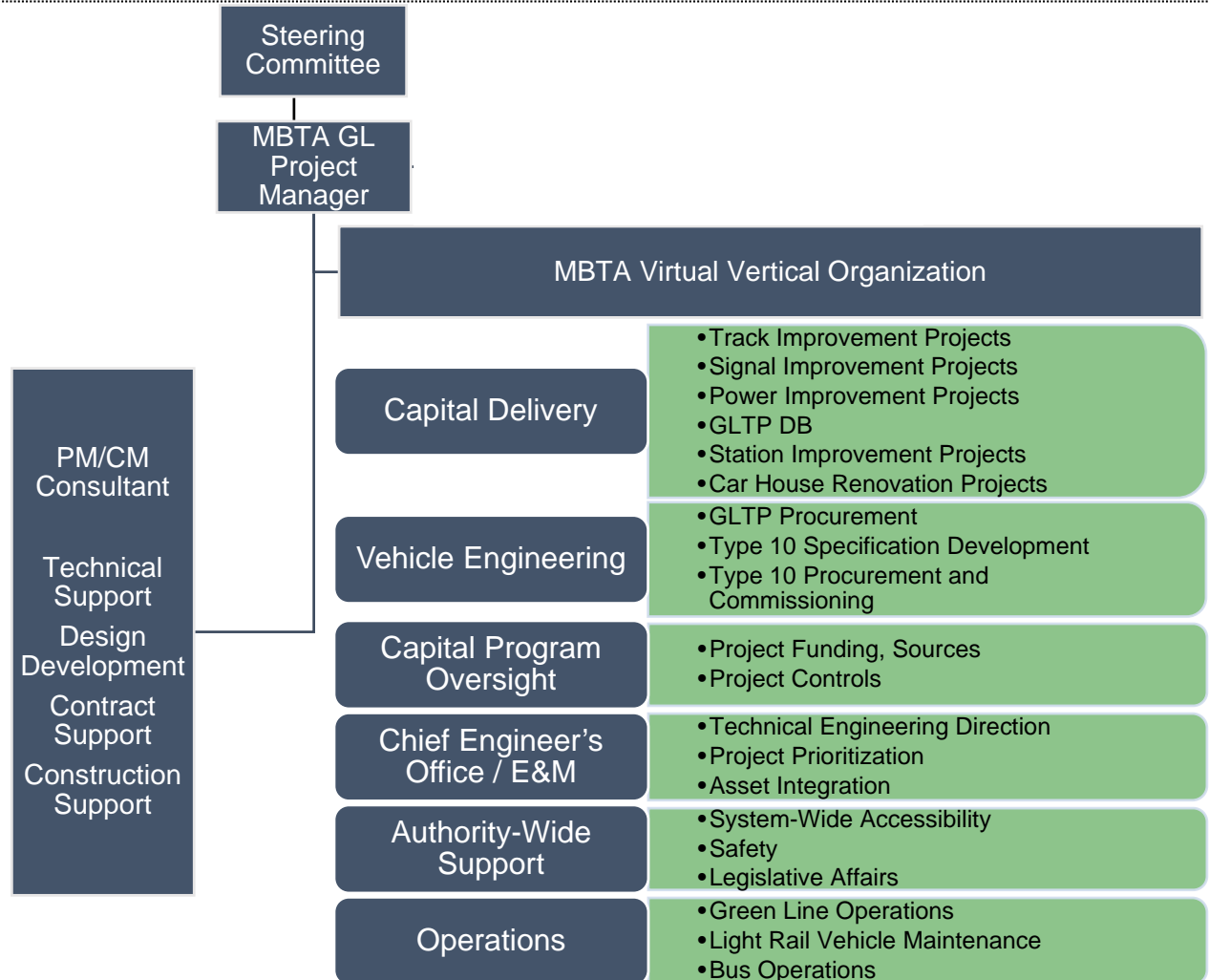
- Establish an integrated Steering Committee:
 - Define roles and responsibilities of members to guide the deliverables in the first year of strategic implementation planning.
 - Set short, medium, and long-term goals and KPIs to drive the implementation of the GLT program
- Develop the framework for guiding the MBTA PM and PM/CM to deliver critical tasks for year one and Transformation Program life-cycle
 - Build from Green Line Capacity Study
 - Engage PM/CM
 - Coordinate and communicate with stakeholders in advance of construction activity.
 - Align Immediate work commencing this spring
 - Integrate and align Focus 40 Green Line corridor study and GLX into the GLT Program



Program Team (Virtual Vertical Organization)

Steering Committee:

- Chief Engineer
- Engineering and Maintenance
- Operations
- Capital Delivery
- Other





Next Steps

Under the direction of an MBTA PM and Chief Engineer, establish a GLT Program Team from MBTA departments (and others as appropriate) as the central group to review, analyze and plan Green Line improvements.

- ***PM/CM selected – Obtain Board Approval for PM/CM***
 - Develop Task Order #1: Clearly defines scope to coordinate and develop a GLT Team and Program
 - Coordinate findings from current studies and guide schedules for construction activity in 2018
 - Develop Communications Plan that integrates all current activity within the broader plan for the Green Line across MassDOT Highway and MBTA speaking with one voice connecting with municipalities and stakeholders.
 - Integrate and align Focus 40, Capacity Study and GLX into the GLT Program
 - Continue Program development of Phase II & Phase III of GLT Program
- Coalesce the separate Green Line Projects into a FY19 – 23 (and beyond) Capital Program
 - Continue to procure design and construction contracts organized around the common transformation vision.