



**Massachusetts Bay
Transportation Authority**

Green Line Extension Update

Fiscal and Management Control Board

John Dalton, Program Manager

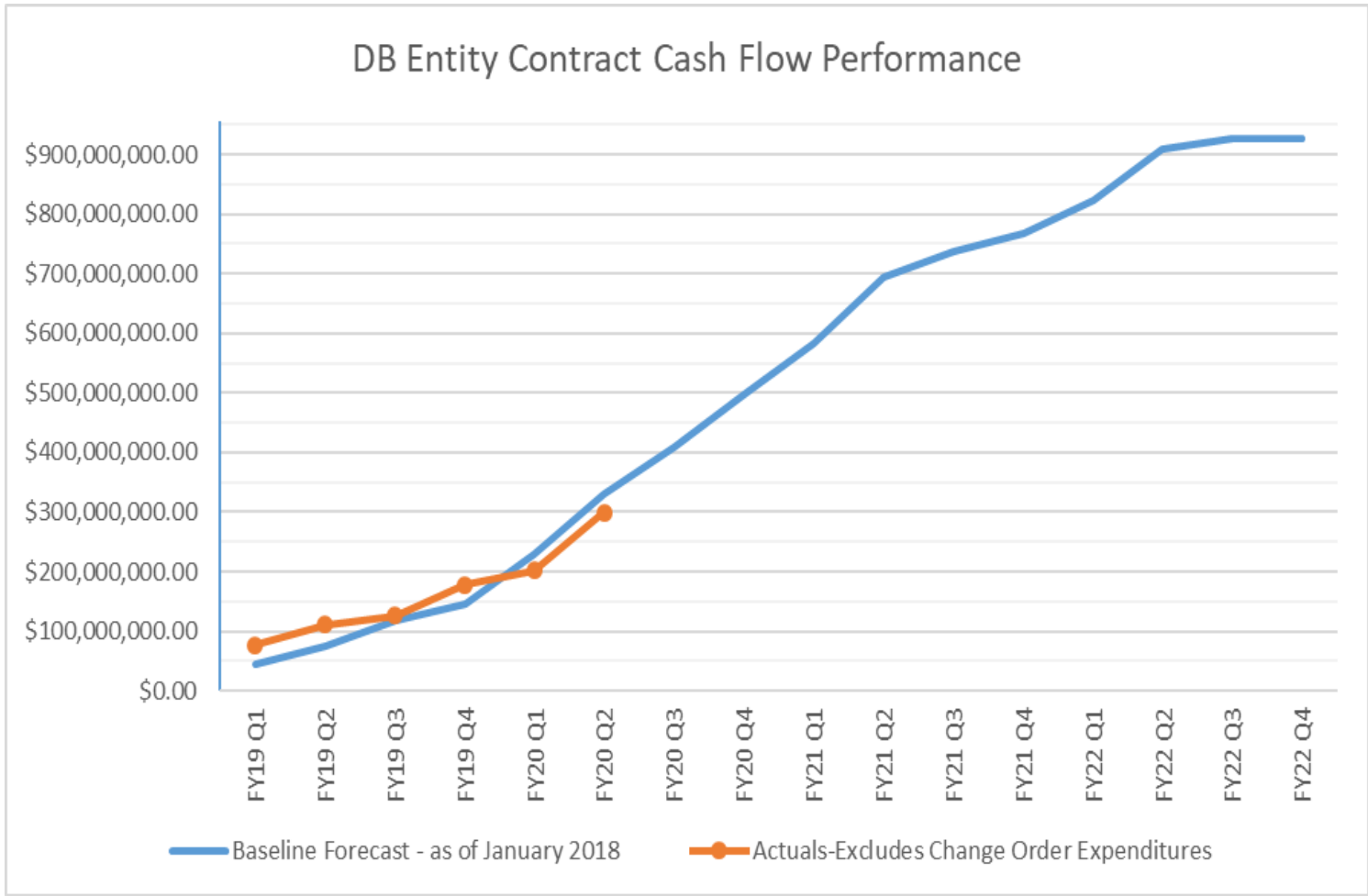
April 13, 2020

Agenda

- GLX Project Update
- GLT Lechmere Viaduct Rehabilitation (B22CN02) & Coordination with GLX
- Lechmere Station Closure and Bus Diversion



Design Build Entity Contract Cash Flow & Spending



Updated Quarterly. Revised as of December 31, 2019.

Actuals = Paid only (does not include retainage or change orders)



Lechmere
Viaduct and
Station Area
(existing and
future)



Red Bridge
Viaduct Area
(looking north)



Future East
Somerville
Station



Broadway Bridge Steel Erection



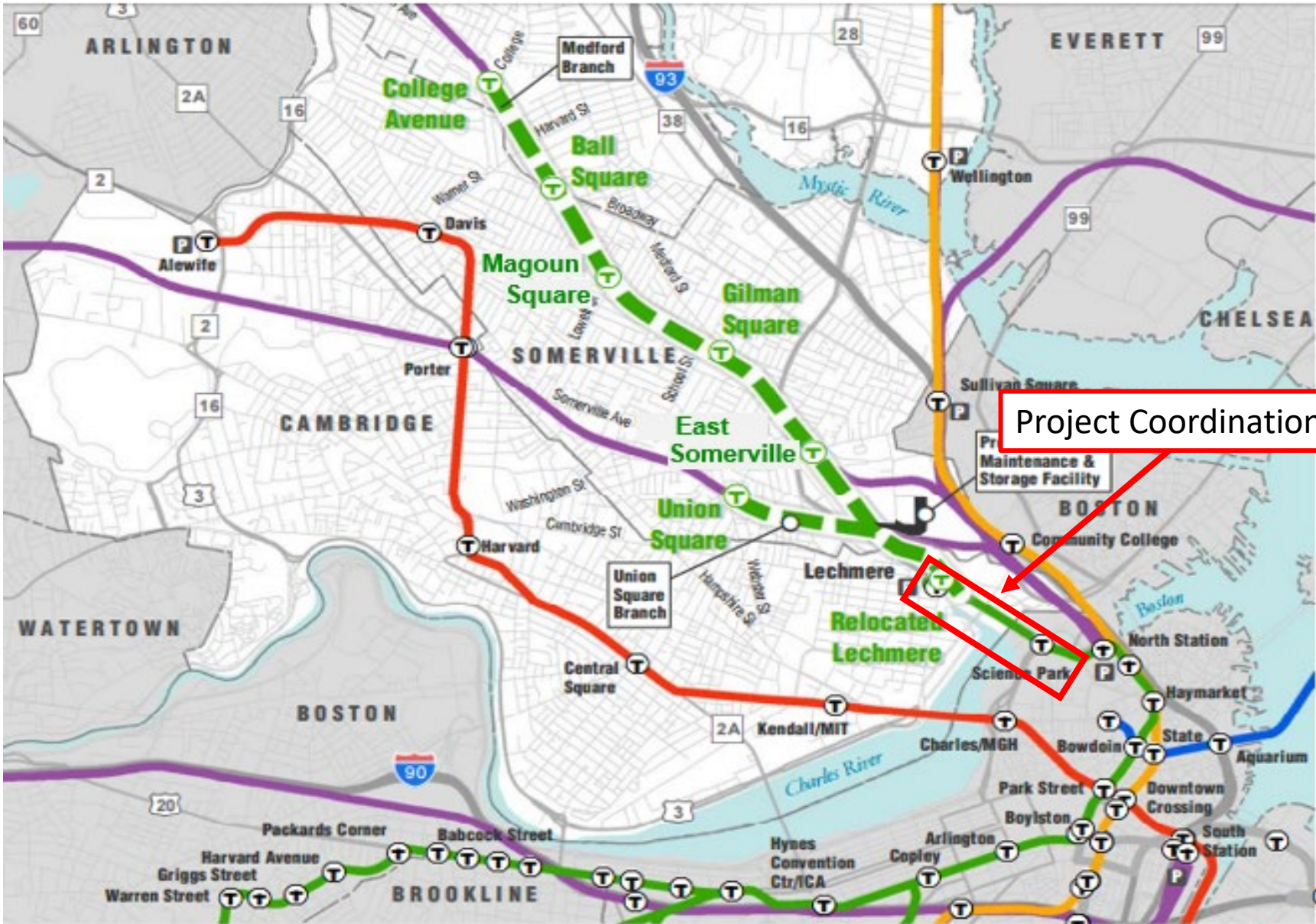
Broadway
Bridge Steel
Erection



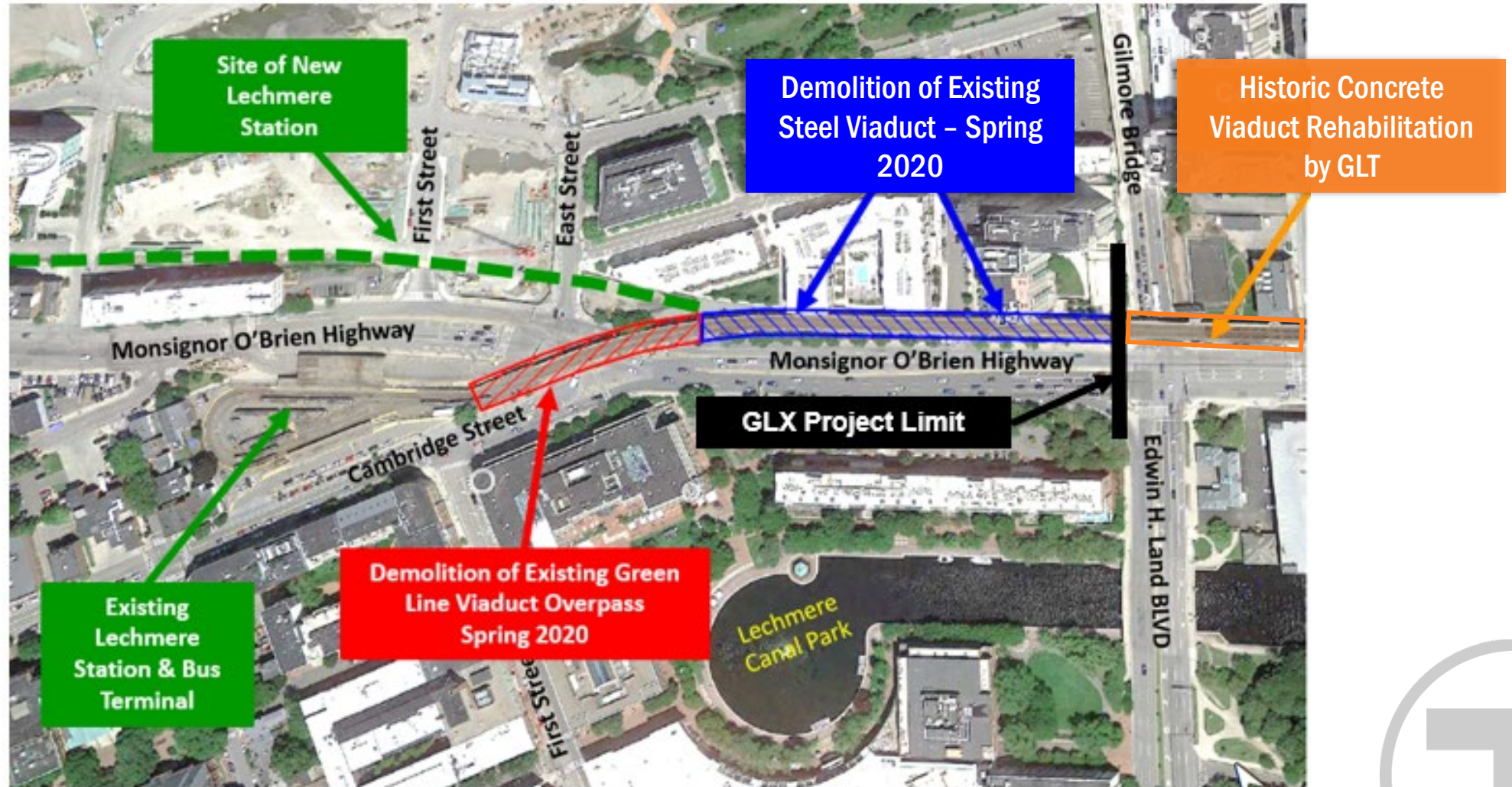
Future Union Square Station



GLX Site Overview



Lechmere Station Demolition & New Viaduct Section



Lechmere Project Limits



GLT Lechmere Viaduct Rehabilitation Project



Physical Conditions

- The existing railing, deck, and stringer conditions warrant replacement due to extensive chloride intrusion and map cracking of the concrete
- Additional concrete and steel repairs necessary to extend the life of the structure



Strength Requirements

- The structure's current load rating indicates the concrete arches are **below statutory requirements**, restricting the number of simultaneous revenue vehicles and work cars on the viaduct

Lechmere Bus Replacement Service

Lechmere Station Operations

- **Existing Service Maintained:** Bus Routes 69, 80, 87, and 88 continue to connect Somerville, Cambridge, Arlington, and Medford to Lechmere
- **Green Line Shuttle:** A separate fleet of accessible shuttle buses will connect Lechmere to North Station to meet or exceed existing Green Line headways
- **Station Bus Infrastructure:** Existing Bus Garage and Operator Facilities to remain until new bus loop and new Lechmere Station are fully functional

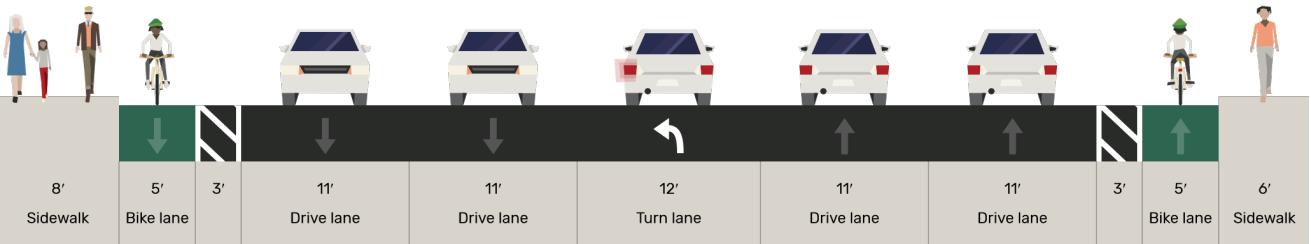
Bus Replacement Service expected to start on or around May 25th

Lechmere Bus Replacement Service

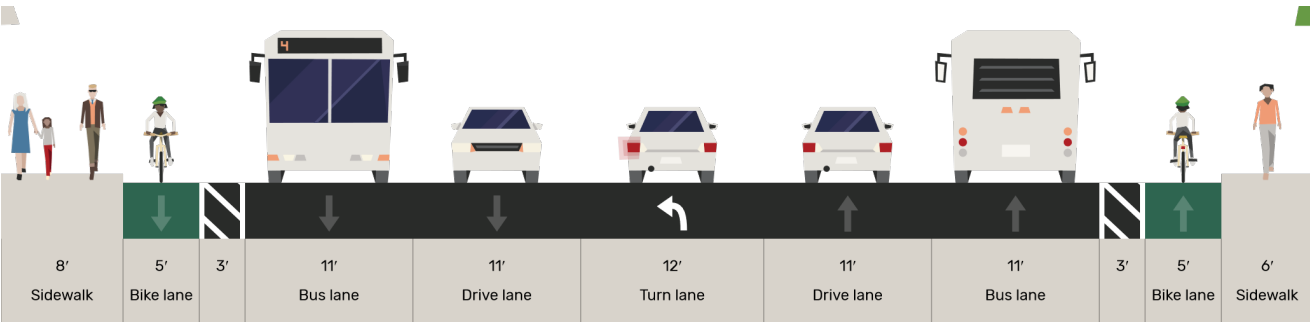
Charles River Dam Road (Craigie Dam)

- Conversion to all-day two-way bus lanes, and accompanying bus lanes conversion in Cambridge and Boston

Existing



*Conversion with
bus lanes*



Lechmere Bus Replacement Service



Bus lanes are needed to maintain people capacity

- In the absence of buses, many of the 14,000+ Green Line riders may choose to drive and overload the roadway system
- Congestion may increase with or without bus lane, but bus lane guarantees a reliable transit alternative
- Bus Lanes also projected to save up to 15 minutes round-trip per passenger during weekday peak travel times