Agenda

Welcome & Introduction
➢ Terry McCarthy, MBTA / GLX Stakeholder Engagement

Project Overview
➢ John Dalton, MBTA / GLX Program Manager

Construction Plans for 2020
➢ T.J. Steinhilber, Structures Manager, GLX-C

MBTA Bus Operations
➢ Melissa Dullea, MBTA

Comments / Questions
GLX Overview
Genesis of GLX Project

Boston’s Central Artery/Tunnel Project
GLX Project Area
GLX Summary Fact Sheet

- Seven light-rail GLX stations
  - Relocated Lechmere Station
  - 5 on Medford Branch
  - 1 on Union Square Branch
- Conforms with all environmental commitments and committed scope elements as established in the Full Funding Grant Agreement (FFGA)
- Includes a multiuse community path
- Procurement of 24 Green Line light rail vehicles
- Vehicle Maintenance Facility (VMF)
- Program Budget - $2.3Bn
Construction Update

Lechmere Area - Old and New
Construction Update

Red Bridge / Boston Engine Terminal Area
Construction Update

Red Bridge / Fitchburg Viaducts
Lechmere Station & Viaduct

Demolition & Replacement
Lechmere Station & Viaduct Alternate Service

Lechmere Station will be closed to Green Line service for approximately one year beginning Spring of 2020 to remove, rebuild, and relocate a viaduct section and station

- Existing commuter bus routes (69, 80, 87, & 88) will continue to provide service to the existing bus garage at Lechmere Station during Green Line service outage
- Green Line service between Lechmere Station and North Station will be diverted to a replacement bus service
- Weekday average Green Line trips to/from Lechmere Station and Science Park is approximately ~14,000
- Initial estimates indicate 12 to 14 buses will be required during peak periods
Lechmere Station Demolition & New Viaduct Section

- Site of New Lechmere Station
- Demolition of Existing Green Line Viaduct – Spring 2020
- Concurrent viaduct renovation by MBTA
- Existing Lechmere Station & Bus Terminal
- Demolition of Existing Green Line Viaduct Overpass Spring 2020

GLX Project Public Meeting
March 10, 2020
Multicultural Arts Center, Cambridge
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.
## Planned Lechmere Viaduct Outreach

<table>
<thead>
<tr>
<th><strong>Target Audience</strong></th>
<th><strong>Tactics/Approach</strong></th>
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<tbody>
<tr>
<td>• Commuting public</td>
<td>• Variable Message Signs (VMS)</td>
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<tr>
<td>• Neighboring cities/towns (&gt;1M People)</td>
<td>• Reboot Your Route campaign</td>
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<tr>
<td>• 84 media outlets</td>
<td>• Email blasts (More than 7,300 registered recipients)</td>
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<td>• 29 Hospitals and medical facilities</td>
<td>• MassDOT social media</td>
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<tr>
<td>• 26 Colleges/Universities</td>
<td>• Public Service Announcements</td>
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<tr>
<td>• Chamber of Commerce &amp; large employer database</td>
<td>• Municipal websites</td>
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<tr>
<td>• Regional bus companies</td>
<td>• News media engagement</td>
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<td>• MBTA ridership (Alerts)</td>
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**GLX Project Public Meeting**

March 10, 2020

Multicultural Arts Center, Cambridge
Next steps

Alternative service:

- Continue coordination with MassDOT, Boston, and Cambridge on stop location, replacement bus routing, and bus priority feasibility
- Finalize operating party for alternate bus service (MBTA or 3rd party provider) - RFP process underway
Construction Plans for 2020

• TJ Steinhilber – GLXC Structures Discipline Lead

• Presentation Overview
  • Scope of Work – Overview
  • Where are we now, where will we be?
  • Lechmere Viaduct – Gilmore Bridge to East Street
    • Demolition
    • Pier Cap/Structural Steel Installation
    • Superstructure Installation
    • Track Build/Systems Installation/Testing
Construction Plans for 2020
Where are we now?

• Three Different Areas
  o Lechmere Viaduct – Gilmore Bridge to East St.
  o Lechmere Viaduct – East St. to North First St.
  o Lechmere Viaduct – North First St. to Water St.
Construction Plans for 2020
Work to be completed prior to demolition

Lechmere Viaduct – Gilmore Bridge to East Street
• Foundation Prep/Excavation Complete
• Foundations (Micropile) Installation Complete
• Column Installation Largely Complete
Construction Plans for 2020
Existing Lechmere Viaduct – Gilmore Bridge to Lechmere Station

• Work Period # 1 Demolition
  o Work will start from Lechmere station towards Gilmore Bridge
  o Work Hours
    • Monday through Friday
    • Friday (after rush hour ~ 9PM) through Monday Morning (prior to rush hour ~3 AM)
      ➢ Outbound lane closures expected, Hwy 28
      ➢ Demolition and haul off
Construction Plans for 2020
Lechmere Viaduct Demolition / Replacement

• Work Period # 1 Demolition
  o Work will start from Lechmere Station and work toward Gilmore Bridge
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East Street

• Work Period # 2 Pier Cap and Structural Steel Installation
  o Work will start from Charlestown Ave and work towards East Street
  o Work Hours
    • Monday through Friday
      ❑ Performing work to increase weekend work efficiency
      ❑ Performing grouting and curing activities
      ❑ Bolting up structural steel, installing decking
    • Friday (after rush hour ~ 9PM) through Monday Morning (prior to rush hour ~3 AM)
      ❑ Outbound lane closures expected - Hwy 28
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East Street

• **Work Period # 2 Pier Cap and Structural Steel Installation**
  - Once demo is complete, Precast Pier Cap 1-6 Installation begins and cast-in-place Pier Cap 7 begins
  - Will start from Charlestown Ave and work towards East Street
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

• Work Period # 3 Superstructure Construction
  o Once Structural steel erection, decking and deck formwork is out in front, superstructure construction will begin.
  o Will start from Charlestown Ave and work towards East Street
  o General sequence
    ❑ Rebar installation
    ❑ Deck Pour/Cure
    ❑ Parapet Form/Pour/Cure
    ❑ Overhead Catenary System (OCS) Pole Foundation Form/Pour/Cure
    ❑ Joint/Waterproof Installation

  o Work Hours
    ❑ Monday through Friday
    ❑ Weekends
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

• Work Period # 3 Superstructure Construction
  o Once Structural steel erection, decking and deck formwork is out in front, superstructure construction will begin.
  o Will start from Charlestown Ave and work towards East Street
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

• **Work Period # 4 Track Build/Systems Install/Testing**
  o Will start from Charlestown Ave and work towards East Street
  o General sequence
    - Ballast/Track Install
    - Systems Infrastructure/Poles
    - Testing
    - Service Start
  o Work Hours
    - Monday through Friday
    - Weekends
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East Street

• Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
• Single Lane Closure (Right Lane Outbound Hwy 28)
  o Vehicular Detour
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

• Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
• Single Lane Closure (Right Lane Outbound Hwy 28)
  o Pedestrian Detour
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East Street

• Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
• Demolition of Existing Viaduct over Hwy 28, Closure
  o Vehicular Detour
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

- Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
- Demolition of Existing Viaduct over Hwy 28 / Closure
  - Pedestrian Detour
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

• Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
• Complete Closure of Outbound Hwy 28 (Weekends)
  o Vehicular Detour
  o Pedestrian Detour will follow same route as previous slide.
Construction Plans for 2020
Lechmere Viaduct – Gilmore Bridge to East St.

- Vehicular and Pedestrian Traffic Detour Plan During All Work Periods
- Complete Closure of Outbound Hwy 28 (Weekends)
  - Vehicular Detour
Lechmere to North Station

Bus Replacement Planning
Lechmere Bus Replacement Service
Lechmere Bus Replacement Service

Lechmere Station Operations

• Bus Routes 69, 80, 87, and 88 continue to follow current routes

• Existing Bus Garage and Operator Facilities to remain until new bus loop and new Lechmere Station are fully functional
Lechmere Bus Replacement Service
Lechmere Bus Replacement Service

Charles River Dam Road
Lechmere Bus Replacement Service

Leverett Circle
Lechmere Bus Replacement Service

Science Park – Proposed Bus Stop
Lechmere Bus Replacement Service

North Station – Proposed Bus Stop
Q & A