



GREEN LINE EXTENSION PROJECT



massDOT
Massachusetts Department of Transportation



April 28, 2016
Boston Region Metropolitan
Planning Organization

Regional Benefits of GLX Project

- Anticipated to bring regional economic benefits, including:
 - Employer access to regional talent pool
 - Faster travel times for workers
 - Commercial tax base improvements through new TOD
- GLX corridor is dense and underserved by rail transit; GLX is projected to serve 9.3 million riders per year
- Anticipated to improve local and regional air quality
- Substantial transit-oriented planning already done in GLX corridor



Role of the Interim Project Management Team

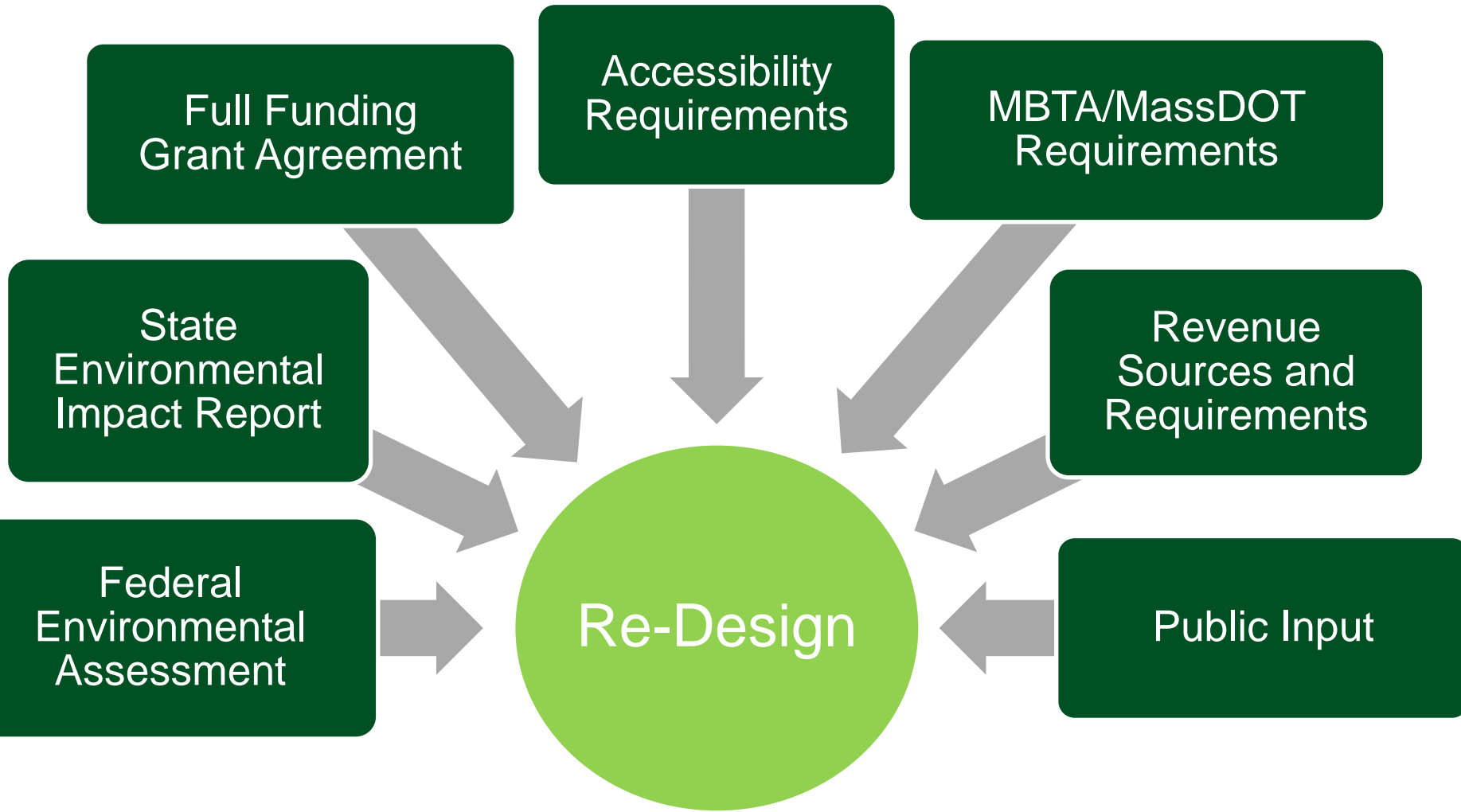
The GLX Interim Program Management Team (IPMT) has been tasked with substantially reducing the cost of the GLX Project while maintaining the core functionality and mitigation commitments of the project.

Program elements include:

- 1.) A new GLX scope based on a major redesign effort
- 2.) A cost estimate and budget for redesigned scope
- 3.) A new procurement / project delivery strategy
- 4.) An MBTA management plan (staffing and professional support)
- 5.) A new program schedule for the new GLX
- 6.) A short-term action plan



Guiding Framework for Review Process



Major Redesign Efforts

- A. Minimize Lowell Line retaining walls and Community Path walls
- B. Preserve Medford St. Bridge
- C. Scale back stations
- D. Streamline Lechmere Viaduct
- E. Preserve Lowell Street Bridge
- F. Move Gilman Traction Power Substation to east side of corridor
- G. Scale back Vehicle Maintenance Facility
- H. Utilize center catenary
- I. Reduce width of Broadway Bridge
- J. Maximize capacity of College Ave Bridge
- K. Analyze power infrastructure
- L. Redesign Washington Street Bridge
- M. Reconfigured Red Bridge Traction Power Substation
- N. Consolidated Ball Square Traction Power Substation
- O. Review of Union Square Branch



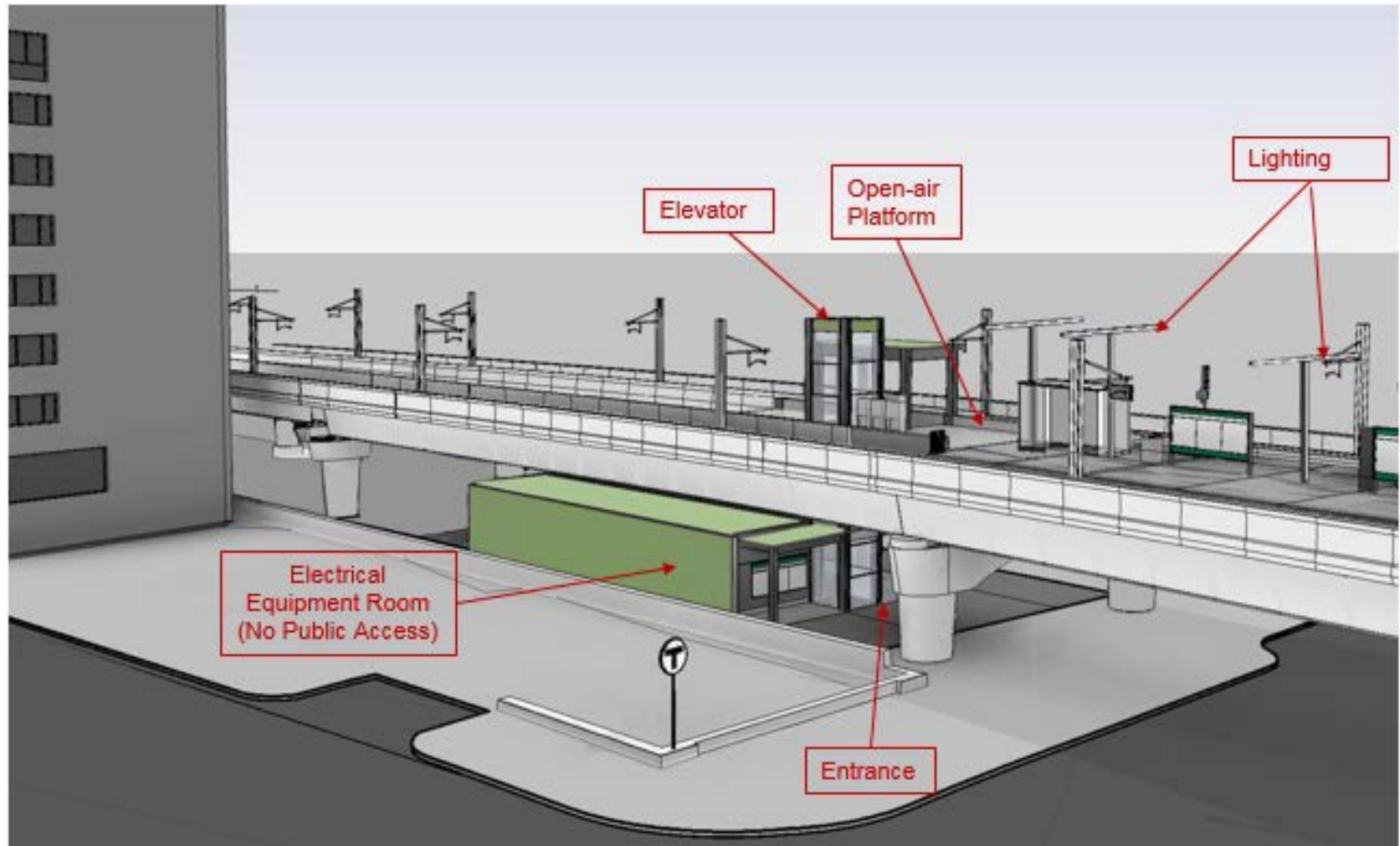
Redesign Example: Lechmere Station

Proposed Redesign Station Elements

- Open-air station
- North headhouse
 - 2 elevators, one stair
 - Stairs are covered but not enclosed
- Maintained 4-car platform
- Maintained bike storage
- Working with MBTA Operations on eliminating bus loop
 - Lechmere is no longer a terminal station so certain buses are more directly routed to new GLX stations



Lechmere Station Redesign



Redesign Example: Vehicle Maintenance Facility

Function	Previous Design	Redesign
Vehicle Maintenance Facility building	94,000 square feet	55,000 square feet
Transportation building	8,200 square feet	1,200 square feet
Employee parking	175 deck plus surface spaces	143 surface spaces
Green Line Vehicle storage capacity	88	44
Wheel truing	In plan	None
Sanding	Automatic System	Sanding by hand
Part storage	Automated storage and retrieval system	Manual rack storage
Facility tracks	4 through tracks, 2 heavy maintenance	4 through tracks
Car wash	In plan	None
Cranes/hoists	Two 7.5 ton and one 5 ton	One 10 ton and one 7.5 ton
Maintenance of Way facility	2 tracks, offices, storage	None
Traction power substation	In plan	None

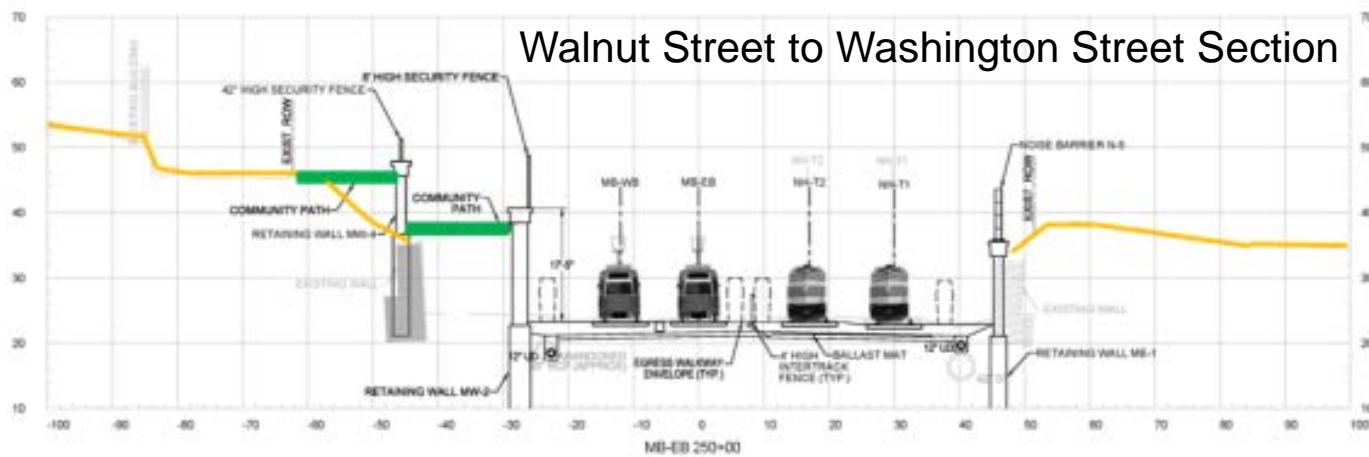
Vehicle Maintenance Facility Redesign



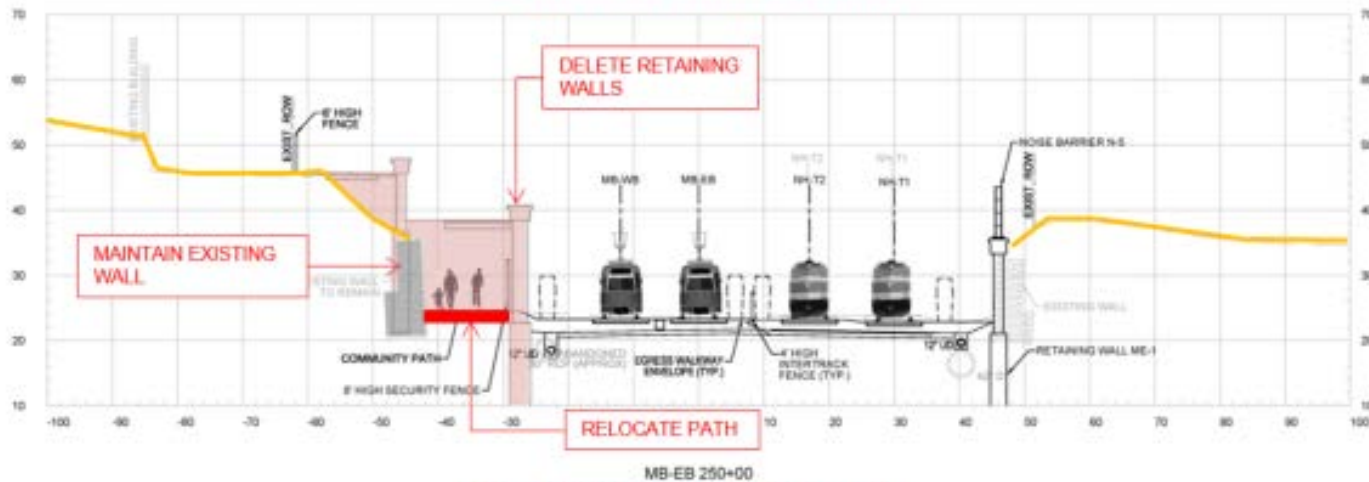
Redesign Example: Alternative Community Path

- **Meets the spirit of the original Community Path by providing:**
 - Nearly 7,000 new linear feet of the urban path network from Lowell Street Station to Washington Street Station
 - Accessible connections to 4 GLX stations
 - Washington Street Station to West Boulevard in Cambridge would rely on existing surface streets with potential improvements by others
 - Corridor section maintains original widths of 11-foot average and 8-foot minimums at pinch points
- **Cost estimate reduced from \$100+/- M to latest redesign cost estimate of \$20 M +/-**

Community Path Redesign



ORIGINAL PATH DESIGN



ALTERNATIVE PATH DESIGN

Meetings

GLX Public Meetings

GLX Design Working Group Sessions (Open to public)

Agency Meetings (Open to public)

March 2, 2016

Public Meeting
Somerville Armory
Somerville

March 23, 2016

Public Meeting
Somerville High
School, Somerville

April 13, 2016

Public Meeting
Somerville High
School, Somerville

April 27, 2016

Public Meeting
St. Anthony's
Parish Hall
Cambridge

February 5, 2016

Design Working Group
Somerville Armory
Somerville

March 30, 2016

Design Working Group
Somerville High School
Somerville

April 28, 2016

Boston Region MPO
10 Park Plaza
Boston

May 5, 2016

Boston Region MPO
10 Park Plaza
Boston

May 9, 2016

MassDOT and MBTA
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For more info: info@glxinfo.com



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