

A black and white photograph of the Allston Interchange project. In the foreground, there are several sets of railroad tracks with a locomotive and freight cars. In the middle ground, there is a large construction site with various materials and equipment. In the background, the Boston skyline is visible with several tall buildings.

I-90 ALLSTON INTERMODAL PROJECT

MassDOT Capital Programs Committee
July 11, 2018

OVERVIEW



On June 27, 2018; MassDOT convened the Allston I-90 Taskforce in order to:

- **Provide taskforce members and the public with an update on the status of the project since the completion of the Draft Environmental Impact Report process**
- **Describe MassDOT's new approach to addressing three key outstanding project issues**
- **Hear ideas and concerns, and discuss next steps**

Today's presentation will walk members of the MassDOT Board through the same information.

Preparation of Final Environmental Impact Report



Because of the new approach we are about to describe, the timetable for filing of the Final Environmental Impact Report has been extended to Spring 2019

MassDOT has NOT YET selected a preferred alternative for the “throat”

MassDOT WILL REVISIT THE PHASING PLAN included in the Draft Environmental Impact Report, including the phasing of both West Station and layover

While the additional reviews described next are underway, the MassDOT Project team will continue to advance design and analysis of project elements that are unaffected by the decision on a Preferred Alternative for the throat, including

- Bicycle and pedestrian accommodations in other areas of the project
- West Station design and location
- Lifecycle project costs (for already determined elements of the Project Preferred Alternative)
- Construction staging and mitigation

Getting a Fresh Perspective on Key Decisions

MassDOT will begin additional reviews and studies to address three key issues raised in the public comments submitted on the DEIR:

- (1) The choice of the preferred alternative for the 'throat' segment**
- (2) The inadequacy of current public transit services in the Allston/Brighton area**
- (3) Project phasing, specifically the timing of West Station and layover**

Issue #1: Selecting a Preferred Alternative for the Throat

Need to be able to compare improved versions of a viaduct alternative and an 'at-grade' alternative with respect to all project objectives and issues such as:

- Constructability
- Permitting Risk
- Traffic, Environmental and Community Impacts
- Relationship to Parkland and Bicycle and Pedestrian Network

At-grade alternatives in the DEIR were not as fully developed/evaluated as the viaduct alternative and new ideas have been raised since the DEIR was prepared

Concerns have been raised about whether MassDOT staff and consultants can be unbiased in evaluating pros and cons of viaduct vs. at-grade alternatives for the throat

Solution #1: 90-Day Independent Review

No decision will be made on the Preferred Alternative for the throat until completion of a 90-day independent review of viaduct and at-grade alternatives conducted by an independent Review Team which includes expertise in design, engineering, permitting, and risk review

The Review Team is accountable directly to the Secretary and managed separately from the Allston I-90 Project Management Group

The Review Team will develop and vet improved version(s) of viaduct and at-grade throat alternatives

The work will conclude within 90 days so a decision can be made on a preferred alternative for inclusion in the FEIR

Independent Review Team - Goals

The primary goal of the independent Review Team will be to meet with stakeholders to gain a complete understanding of each of the alternatives and to produce an independent report on the advantages/disadvantages of the alternatives.

- Conduct a high-level review of important components of each alternative
- The Review Team will prepare critical cross-sections and renderings of both alternatives
- The Review Team will prepare a report summarizing the pros and cons of the alternatives
- The Review Team will present its findings to the Task Force and the Secretary

Independent Review Team - Tasks

The Independent Review Team will work with the Task Force, City of Boston and other stakeholders to refine improved versions of at-grade and viaduct options for the throat

The Independent Review Team will produce renderings and cross-sections to help the public understand and visualize the two options

The Independent Review Team will analyze the benefits and challenges of the viaduct and at-grade options (at a high level) with respect to:

- Safety and Operations
- Horizontal and Vertical Geometry (including Right of Way)
- Constructability
- Environmental Impacts
- Impacts on and Benefits to Parkland
- Permitting
- Structural and Geotechnical Analyses
- Resiliency
- Cost

The Independent Review Team will document its results, including preparation of a risk assessment

Independent Review Team - Members

- **Project Director: Jack Wright**
Weston & Sampson
- **Design and Engineering Support: Howard Stein Hudson, Arup**
- **Environmental Permitting: Noble, Wickersham & Heart**
- **Facilitator: Professor Ilyas Bhatti**
Wentworth Institute of Technology

Weston & Sampson

Weston & Sampson brings project management experience, most recently for the Green Line Extension project, as well as a broad range of subject matter expertise on topics such as utility coordination, resiliency, and site environmental issues

Jack Wright (who managed the Green Line Extension review) will manage the overall Independent Review Team effort

Dean Groves will bring expertise in environmental permitting, as needed to support legal team

Professor Ilyas Bhatti is under contract to Weston & Sampson to facilitate public discussions between the Review Team and project stakeholders, including the Task Force

Howard Stein Hudson

Howard Stein Hudson brings expertise in multimodal roadway design, traffic management, and utility issues, particularly:

- Transportation planning for complex projects
- Traffic and safety analysis
- Roadway design standards
- Complete Streets planning and design
- Familiarity with MEPA and NEPA requirements and processes
- Planning, design, and permitting experience in the Charles River Basin

- **Undertook Green Line Extension review for MassDOT and MBTA**
 - Completed technical due diligence of first principles to assess scope, schedule and budget
 - Reduced the cost of the project while delivering the core transportation solutions
- **Has experience bringing consensus on projects worldwide, including SF's Presidio Parkway (similar to Allston I-90 project)**
- **Will review planning assumptions, engineering criteria, and agency and community needs and aspirations driving both proposed alternatives**
- **Will provide technical expertise in structural engineering, geotechnical engineering, constructability, resiliency, and cost estimating**

Noble, Wickersham & Heart LLP

- Brings deep expertise in environmental regulation and permitting
- Jay Wickersham is the former Assistant Secretary of the Executive Office of Environmental Affairs and MEPA Director
- Bennet Heart is the former General Counsel of the Executive Office of Environmental Affairs and Acting General Counsel of the Department of Environmental Protection
- Will be the team lead on understanding the permitting requirements and challenges presented by both alternatives

Issue #2: The Inadequacy of Existing Transit

Many comments on the DEIR raised valid issues about the adequacy of current transit service for existing Allston residents and businesses

Neighbors and businesses are aware that existing public transit services in the Allston/Brighton area are limited, unreliable, and crowded

Addressing these issues, since they relate to current conditions, should not have to await the completion of the Final Environmental Impact Report or the construction of the Allston Multimodal Project

Solution #2: Near-Term Transit Improvement Studies



The City of Boston and MassDOT/MBTA have committed to collaborating on two studies to address community concerns about existing transportation options

MassDOT has begun a six-month study of immediate public transit deficiencies and needs, primarily on the bus network, which will generate recommendations for MBTA operational and capital improvements and potential new bus transit service alternatives

In the fall, the BPDA kick off the Allston Brighton Mobility Study, which will assess existing and future conditions in the neighborhood and identify ways to improve safety and mobility for all modes (transit, bicycle, pedestrian and vehicular)

MassDOT Allston Transit Improvement Study



The scope for the study was developed in collaboration with the City of Boston

Study Timeline

- Conduct data analysis to examine existing conditions: May 2018 - August 2018
- Evaluate potential service improvements and alternatives: July 2018 - October 2018

Central Transportation Planning Staff is currently analyzing and reviewing data for bus routes 47, 57/57A, 64, 66, 70, 70A, 86, 501, 503, and CT2, as well as Green Line stops on Commonwealth Avenue and the Boston Landing Commuter Rail station

Issue #3: Project Phasing and the Timing of West Station Construction



The phasing plan in the DEIR potentially delayed the opening of West Station to as late as 2040

Many commenters argued that the Commonwealth must build the large, multimodal station immediately so as not to discourage development in Allston and on Harvard University's land holdings in the former Beacon Park Yards

The proposed West Station site is also the staging area for taking down and reconstructing the Mass Pike, so a regional transit hub at West Station cannot physically begin construction before 2025, when the Mass Pike construction is scheduled to be complete

Many commenters envisioned West Station as supporting new regional bus and rail services – but neither the MBTA nor anyone else has yet planned such service additions or committed to fund or provide new transit services at West Station

Solution #3: Re-Phasing the Project and Construction of West Station Construction



MassDOT is committed to working with the Metropolitan Area Planning Council, the Cities of Boston and Cambridge and other stakeholders to better understand future land use and transit demand and potential services in order to ensure that we get both the design and timing of West Station right

This work will include an MAPC-led study that will help better define the future of West Station – its physical design, transit services, integration with the surrounding neighborhoods, and connectivity with the rest of the transportation system – based on a variety of potential development scenarios for Beacon Park Yard and the region

Based on additional analysis and stakeholder outreach, the FEIR will include a revised phasing plan for both West Station and MBTA layover

MassDOT commits to re-phase the project to start construction of West Station as soon as it is both possible and sensible

Land Use and Public Transit Study

The study will evaluate the transit services, bicycle and pedestrian connections, and mobility/land use policies that will best support the use of public transit as a way to access jobs, labor, housing, healthcare, and other major destinations for trips to, from, and through the Beacon Park Yards area, under different potential development futures

This work will help us to understand future public transit demand under different potential development futures for the Beacon Park Yards area and adjacent areas

From there, we can scale and design a future West Station appropriately, determine future services from/at the station, and correct timing

Needs to be immediately relevant to answering questions at hand

Other Ongoing Efforts to Define Future Rail Service

Future service models for the commuter rail system – such as urban rail provided by multiple units and regional rail with all-day frequent service – are under consideration as part of the MBTA's Commuter Rail Vision

The next generation of MBTA investments (beyond those in the current 5 year Capital Investment Plan) are being developed as part of the Focus40 planning process

Allston stakeholders are encouraged to participate in Focus 40 after the Draft Plan is released in a few weeks; that is the appropriate forum in which to advocate for additional transit investment that is beyond the scope of the Allston Multimodal Project (for example, a rebuilt and enlarged Grand Junction bridge)

Focus40 and Commuter Rail Vision

FOCUS40 PROGRAMS			
Service	We're Doing (Commitments through 2023)	We're Planning (Next Priorities through 2040)	We're Imagining (Big Ideas)
Blue Line 2040	<ul style="list-style-type: none"> Resiliency Phase 1: Planning and Early Actions Reliability Centered Vehicle Maintenance Program Infrastructure Improvements between Maverick and Aquarium 	<ul style="list-style-type: none"> Downtown Pedestrian Connection between the Red and Blue Lines Blue Line Capacity and Reliability Improvements Resiliency Phase 2: Further Implementation 	<ul style="list-style-type: none"> Red/Blue/Green/Orange Downtown Superstation Blue Line Connection to Red Line and Beyond Blue Line Extension to Lynn
Green Line 2040	<ul style="list-style-type: none"> Green Line Transformation Phase 1: SGR Projects Green Line Transformation Phase 2 Planning and Early Actions: Fleet Procurement Green Line Extension to Somerville and Medford Surface Green Line Stop Consolidation Surface Green Line Transit Signal Priority Infrastructure Green Line Train Protection Accessibility Upgrades at Hynes and Symphony Stations 	<ul style="list-style-type: none"> Green Line Transformation Phase 2: New Fleet, Upgraded Infrastructure and Maintenance Facilities Green Line Transformation Phase 3: Expand Capacity on D and E Branches (2-Car Trains) Reservation and Right-of-Way Expansion for Surface Green Line 	<ul style="list-style-type: none"> Red/Blue/Green/Orange Downtown Superstation Green Line Transformation Phase 4: Expanded Capacity on B and C Branches (2-Car Trains) Green Line Extension to Mystic Valley Parkway, Somerville/Medford
Red Line 2040	<ul style="list-style-type: none"> Red Line System-Wide Improvement Program: Fleet Replacement and Maintenance Facility Upgrades Red Line System-Wide Improvement Program: Capacity and Reliability Improvements (3-Minute Headways) Red Line South Improvements: Wollaston Station, Transit-Oriented Development, Parking Garages Mattapan High-Speed Line Phase 1: Reimagining and Short-Term Improvements 	<ul style="list-style-type: none"> Downtown Pedestrian Connection between the Red and Blue Lines Strategic Track Reconfiguration to Address Bottlenecks Mattapan High-Speed Line Phase 2: Implementation of Reimagining 	<ul style="list-style-type: none"> Blue Line Connection to Red Line and Beyond Red/Blue/Green/Orange Downtown Superstation
Orange Line 2040	<ul style="list-style-type: none"> Orange Line System-Wide Improvement Program: Fleet Replacement and Maintenance Facility Upgrades Orange Line System-Wide Improvement Program: Capacity and Reliability Improvements (4.5-Minute Headways) 	<ul style="list-style-type: none"> Orange Line Connectivity Improvements (to Bus and/or Commuter Rail) Additional Capacity Improvements (3-Minute Headways) 	<ul style="list-style-type: none"> Red/Blue/Green/Orange Downtown Superstation Sullivan Square Superstation (Commuter Rail/Orange Line/Silver Line) North Station to Back Bay Shuttle Orange Line Extensions (Everett, Roslindale)
Silver Line 2040	<ul style="list-style-type: none"> Silver Line Fleet Planning and Procurement (Vehicle Type, Fleet Size) SL2 and SL4 On-Street Improvements Transit Priority Infrastructure in the Seaport 	<ul style="list-style-type: none"> Silver Line Next Generation Vehicles and Maintenance Facility Silver Line Capacity and Reliability Improvements Silver Line Extension through Everett Infrastructure Upgrades in Silver Line Tunnel 	<ul style="list-style-type: none"> Silver Line Tunnel Extension Under D Street in the Seaport
Bus 2040	<ul style="list-style-type: none"> Better Bus Project Phase 1: Current Route Network Improvements (to Meet Service Standards) Better Bus Project Phase 2: Network Redesign Process, Bus Rapid Transit Planning Municipal Collaboration to Improve High-Priority Bus Facilities and Stops Bus Fleet Replacement and Expansion (Procurement and Maintenance Facility Reconfiguration) Zero-Emission Bus In-Service Testing 	<ul style="list-style-type: none"> 21st-Century Vehicle Maintenance and Storage Facilities Fleet Expansion to Serve Bus and Bus Rapid Transit Network Better Bus Project Phase 3: Implementation of Network Redesign Phased Conversion to Zero-Emissions Fleet Priority Bus Rapid Transit Corridors 	<ul style="list-style-type: none"> Autonomous Bus Shuttles
Commuter Rail 2040	<ul style="list-style-type: none"> Commuter Rail Vision North Station Drawbridge South Coast Rail Phase 1 Bi-Level Coach Procurement Locomotive Upgrades and Replacement Ruggles Station Upgrades Positive Train Control and Automatic Train Control 	<ul style="list-style-type: none"> Station Investments (Infill Stations, Connections to Rapid Transit) Regional Multimodal West Station and Midday Train Layover Double and Triple Tracking to Add Capacity South Coast Rail Phase 2 	<p>As part of the <i>Commuter Rail Vision</i> process now underway, MassDOT/MBTA is examining various possible service models for rail transportation in the Commonwealth. Topics include the benefits and costs of urban rail and regional rail, of service focused on reverse-commute needs and the needs of Gateway Cities, and of system electrification. Different service models will require different near, medium, and long-term capital investments.</p>
Water Transportation 2040	<ul style="list-style-type: none"> Landside Infrastructure Improvements Fleet Expansion to Four Ferries 	<ul style="list-style-type: none"> Phase 1: Expanded and Better Integrated Multi-Operator Water Transportation Network 	<ul style="list-style-type: none"> Phase 2: Full Implementation of an Expanded Comprehensive, Multi-Operator Network

As part of the *Commuter Rail Vision* process now underway, MassDOT/MBTA is examining various possible service models for rail transportation in the Commonwealth. Topics include the benefits and costs of urban rail and regional rail, of service focused on reverse-commute needs and the needs of Gateway Cities, and of system electrification. Different service models will require different near, medium, and long-term capital investments.

COMMUTER RAIL 2040



Program Objective: Serve more riders and non-commuting trips, by providing better connections to more destinations and potentially by implementing one or more new service models (urban rail/regional rail), pending results of *Commuter Rail Vision Study*.

We're Doing: Commitments through 2023

- *Commuter Rail Vision*
- **North Station Drawbridge**
 - Faster and more reliable service out of North Station
- **South Coast Rail Phase 1**
- **Bi-Level Coach Procurement and Locomotive Upgrades**
 - Added capacity and more reliable vehicles
- **Ruggles Station Upgrades**
 - More stops with better connections to Orange Line
- **Positive Train Control and Automatic Train Control**

We're Planning: Next Priorities through 2040

- **Station Investments (Infill, Rapid Transit Connections)**
 - Infill targeted for Priority Places
- **Regional Multimodal West Station and Midday Layover**
- **Double and Triple Tracking to Add Capacity**
 - Worcester Line and other congested areas
- **South Coast Rail Phase 2**

We're Imagining: Electrification of some or all of the rail network with major capital projects supporting a system that is more than “commuter” rail

Next Steps

- Once Independent Review Team is up to speed, will come back to the Task Force and others to discuss improved versions of at-grade and viaduct options
- MassDOT Project Team will continue to meet with Task Force as ongoing FEIR analyses advance
- MassDOT will report on findings of near-term transit study to the Task Force