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Office of Transportation Planning

ROUTE 1A CORRIDOR STUDY

Welcome! Please settle in.

The meeting will begin shortly…

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Office of Transportation Planning

ROUTE 1A CORRIDOR STUDY

Public Meeting #4

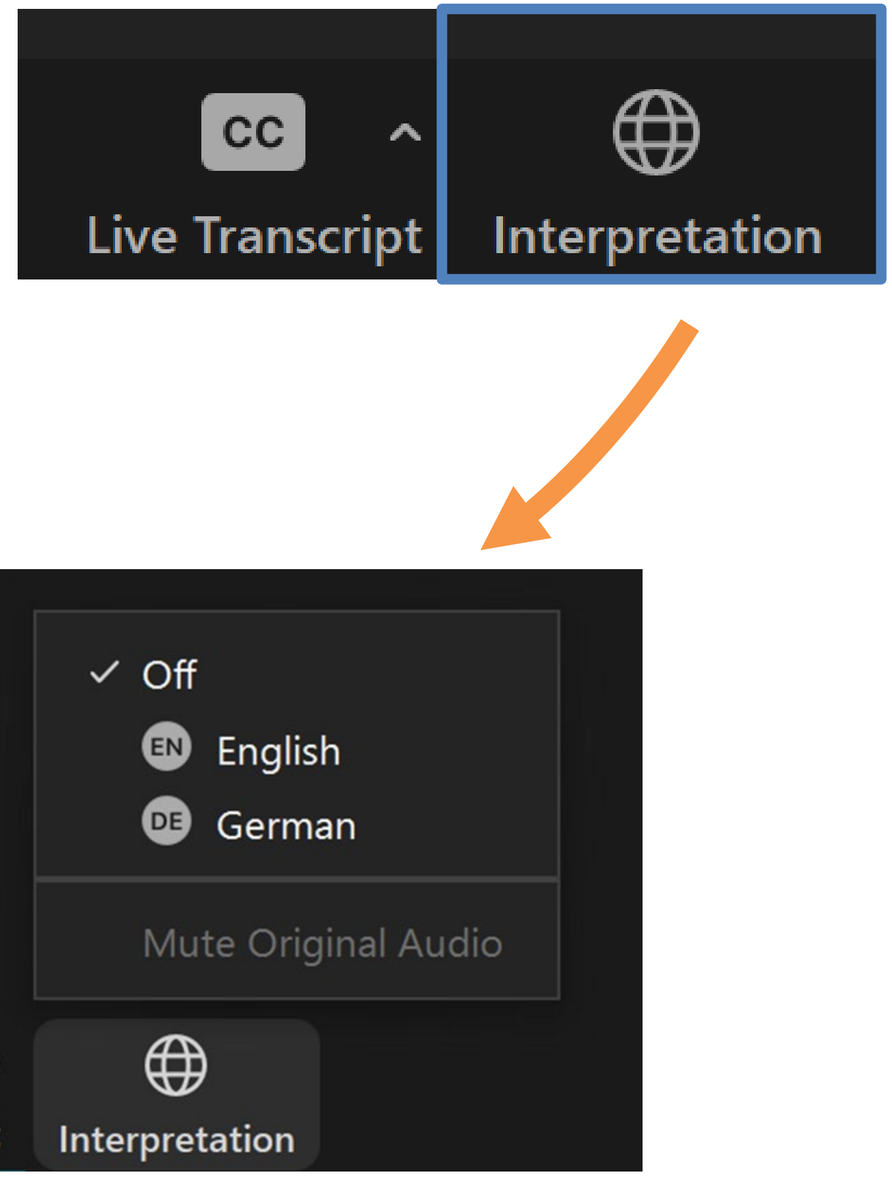
December 20, 2022

East Boston – Revere

How To Use Zoom - Interpretation

Select the **language** you would like to hear by clicking the **Interpretation** feature and selecting a language from the list provided.

To hear the **interpreted language only**, click **Mute Original Audio**.

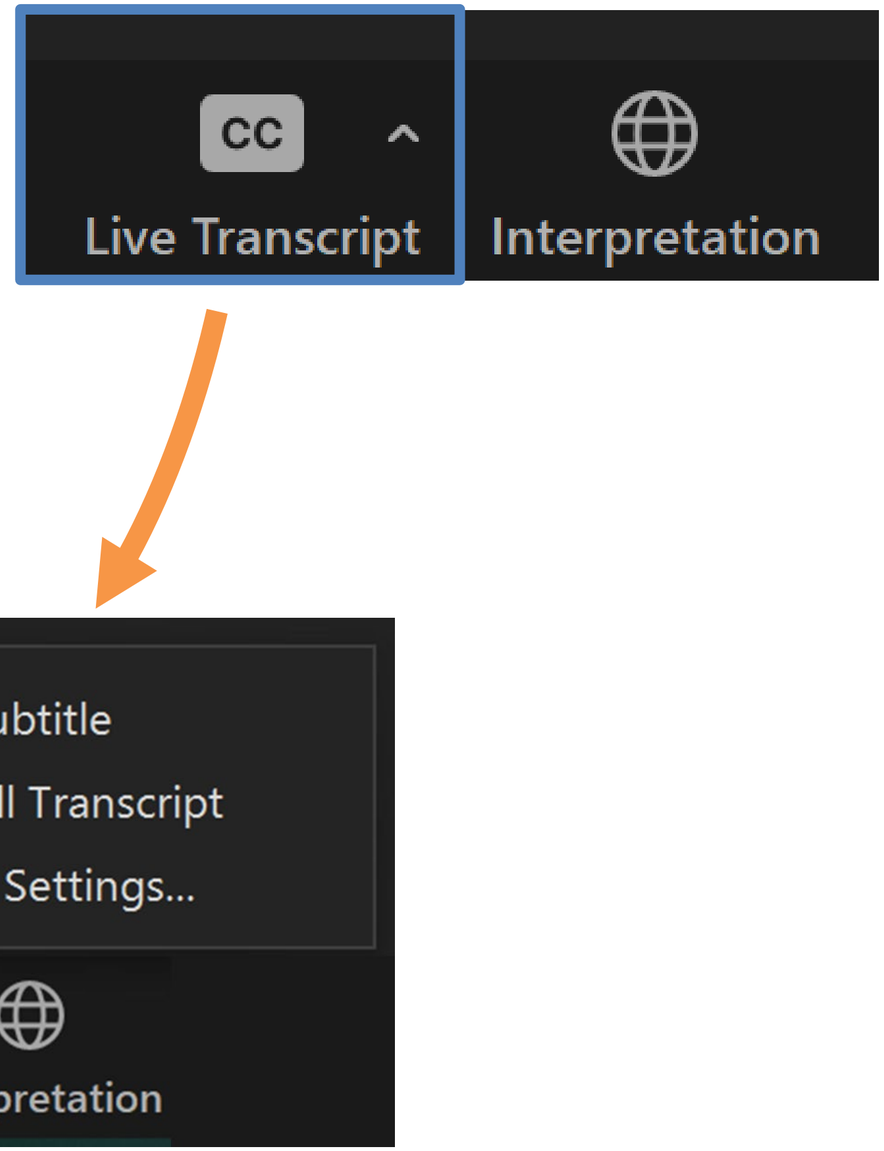


How To Use Zoom - Captioning

You can view **closed captions** by clicking the **Closed Captions** feature and selecting from the options shown.

Show Subtitle will **display a caption** at the bottom of the screen.

View Full Transcript will display the meeting's **audio transcription** in a window to the right.



How To Use Zoom – Submit a Question or Comment

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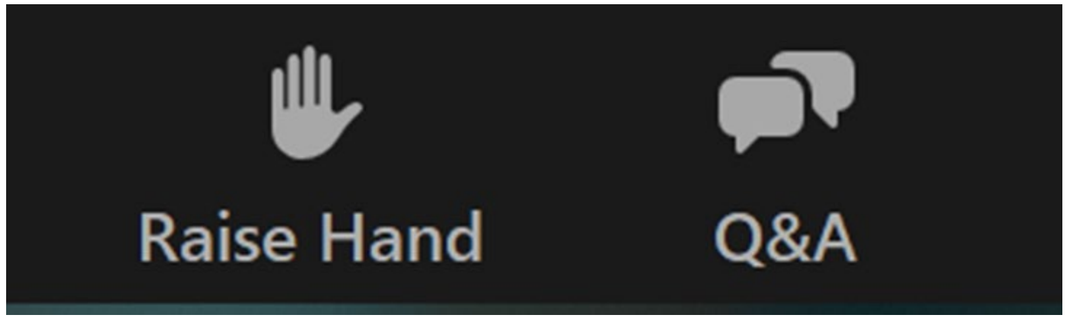

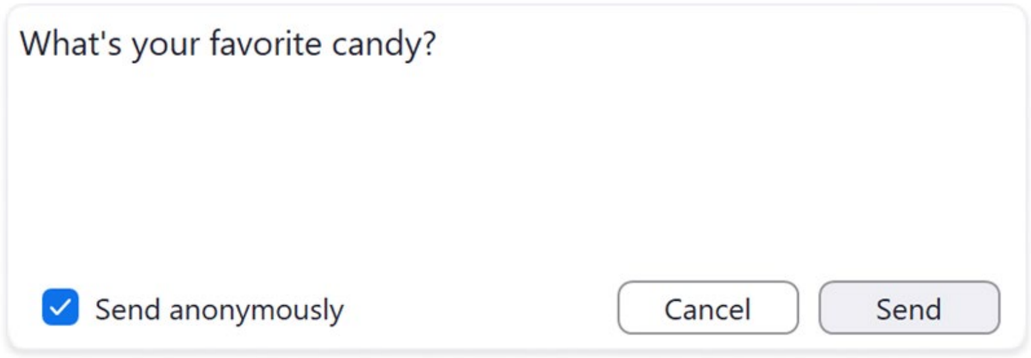

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December 20, 2022

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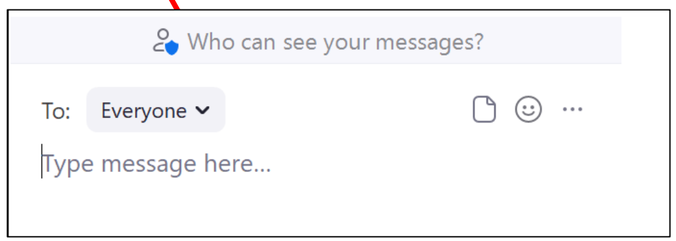
Zoom Controls

- Press the **Raise Hand** button. Please wait for the moderator to recognize you before unmuting yourself and speaking.
- Please share any typed feedback in the **Chat** feature. Be sure to select ***To: Everyone***.



Note: *if you are not using the latest software of Zoom, you may have to click the* ***Participants*** *button to access the Raise Hand feature.*

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Today's Agenda

1 Project Overview

2 Goals & Objectives

3 Rail Corridor Alternatives

(1) Shared Use Path Only

(2) Bypass Road + Shared Use Path

4 Alternatives Analysis and Evaluation

5 Key Findings and Next Steps

Meeting Purposes

- Present Key Findings of the evaluation of alternatives and solicit public input
  - Public Meeting presentation and recording will be posted to the study website
- Begin the public comment period on the study's Key Findings
  - Series of 2 (two) virtual Public Meetings to present Key Findings and solicit feedback:
    - Tonight - Tuesday, December 20, 2022 at 6:00PM
    - Thursday, January 19, 2023 at 6:00PM
- Based on feedback from the public process, release a draft report for 30-day public comment period in late January 2023

Why Was This Study Initiated?

After receiving public feedback in response to a request to lease the inactive rail parcels along the Chelsea Creek, the MBTA's Fiscal and Management Control Board and MassDOT committed to conducting a study of the rail corridor.

Study Purpose and Need

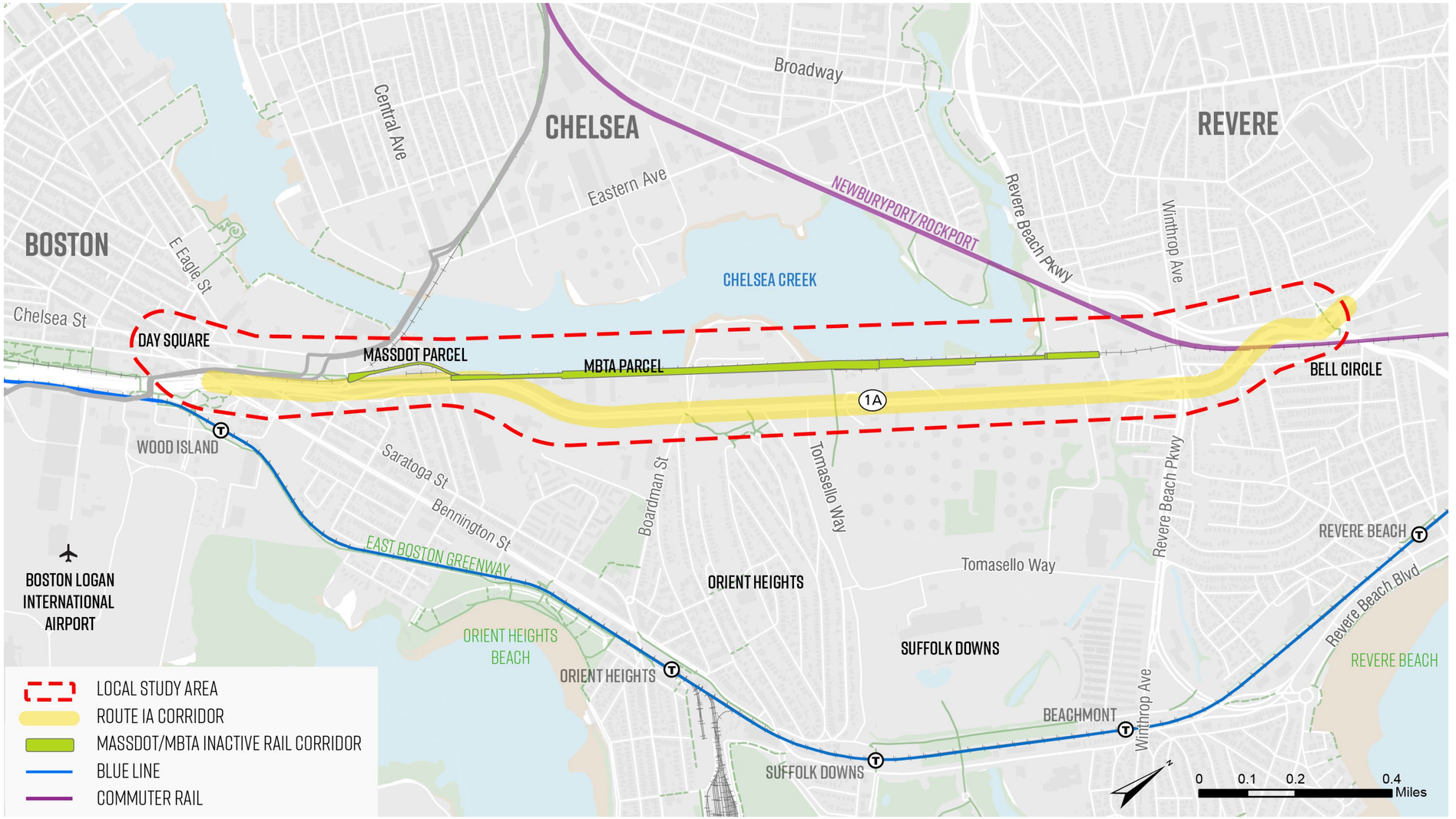
The purpose of this study is to assess the potential uses of the MassDOT and MBTA rail parcels located between Route 1A and the Chelsea Creek in East Boston, and evaluate the Route 1A corridor between Bell Circle and Day Square.

The study will identify opportunities to:

- improve walking, biking, and transit conditions
- address safety deficiencies for all users
- accommodate freight needs and increasing demand on the corridor due to new development
- mitigate potential impacts of climate change

Study Corridor

Our study corridor includes the MassDOT/MBTA owned rail parcels along the Chelsea Creek and Route 1A from Chelsea Street in East Boston to Bell Circle in Revere.



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Study Goals

Safety

- Improve safety for people using all modes of transportation (walking, biking, transit, driving, etc.)

Connectivity

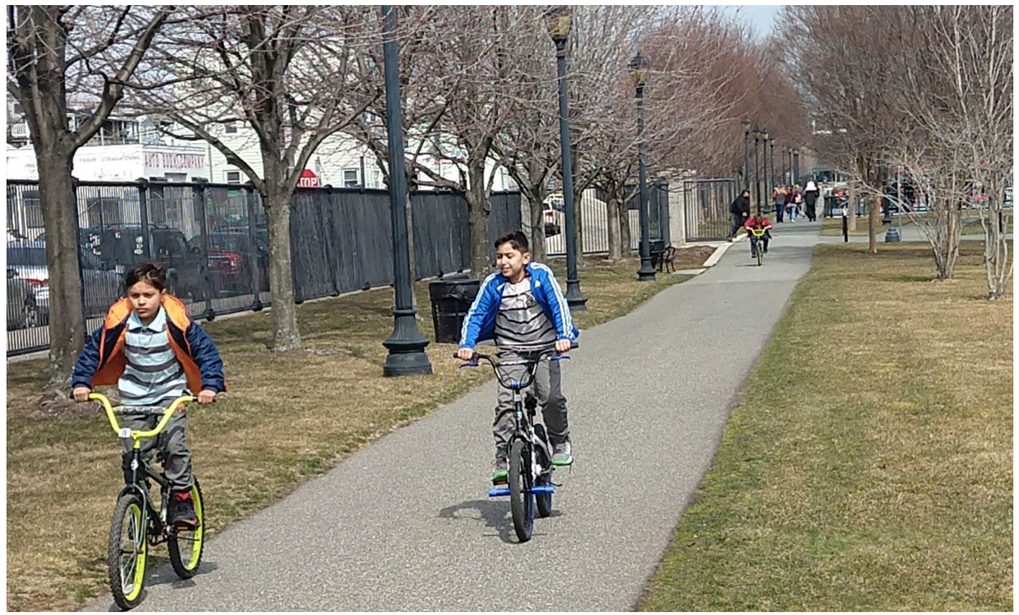
- Expand and enhance connectivity for users of all modes of transportation along and across the Route 1A corridor
- Balance local and regional transportation needs and improve the reliability of freight transportation

Sustainability and Climate Change Resiliency

- Improve air quality and access to public and natural resources
- Enhance resilience of corridor infrastructure and surrounding area

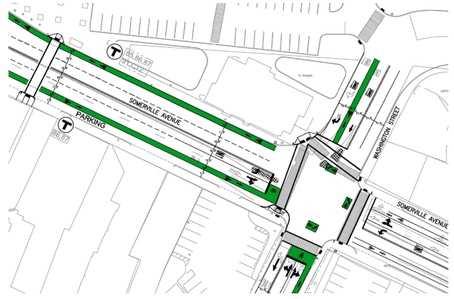
Equity

- Enhance corridor benefits and reduce corridor burdens on Environmental Justice communities



Study Schedule

Public Involvement

Study Context	Existing & Future Conditions	Alternatives Development	Alternatives Analysis	Findings & Recommendations
				
Fall 2021	**Fall 2021/ Winter 2022**	**Spring 2022**	**Spring/Summer 2022**	**Fall 2022**

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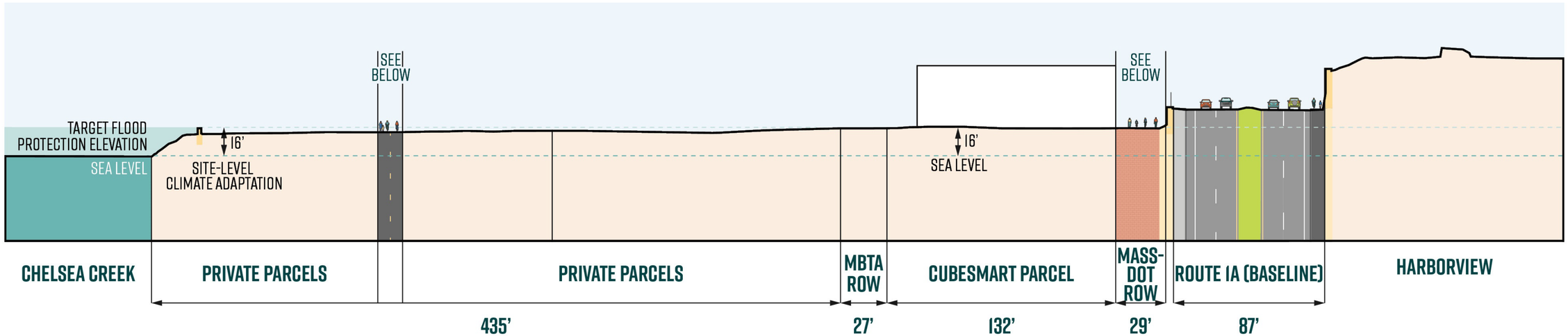
Alternatives

Alternative 1: Shared Use Path Only

Alternative 1: Shared Use Path Only – Curtis Street to Addison Street



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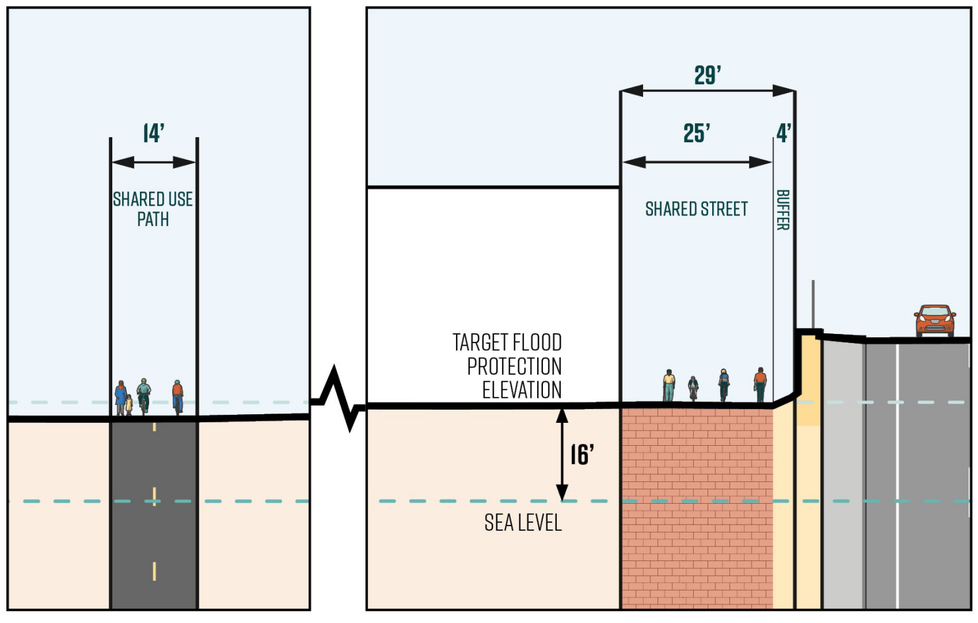

LOCATION ALONG CORRIDOR

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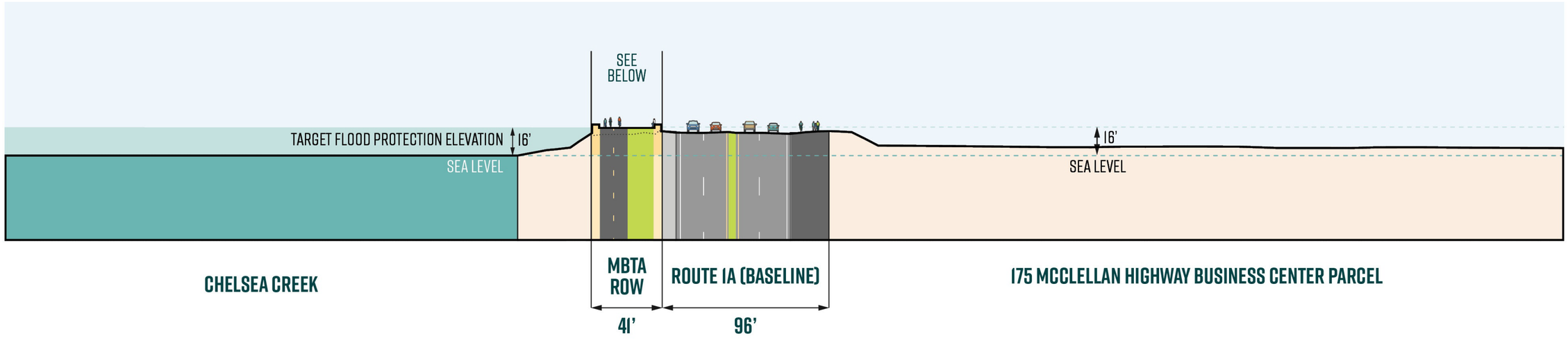
Alternative 1: Path Only – North of Addison Street to Boardman Street

Alternative 1: Shared Use Path Only – North of Addison Street



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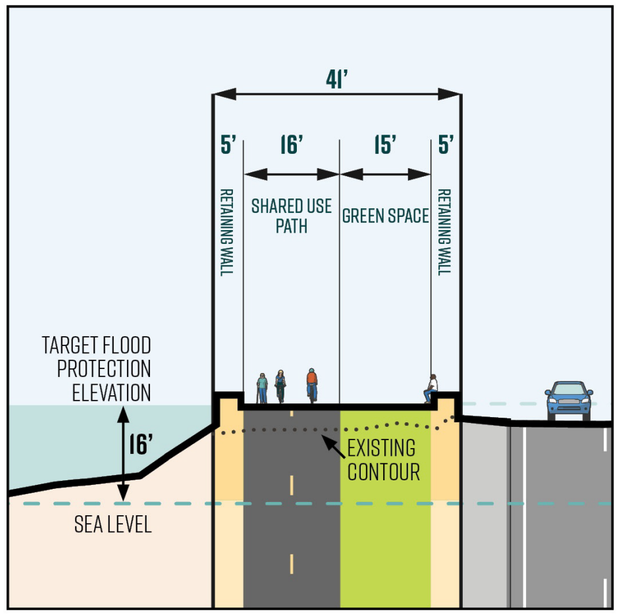
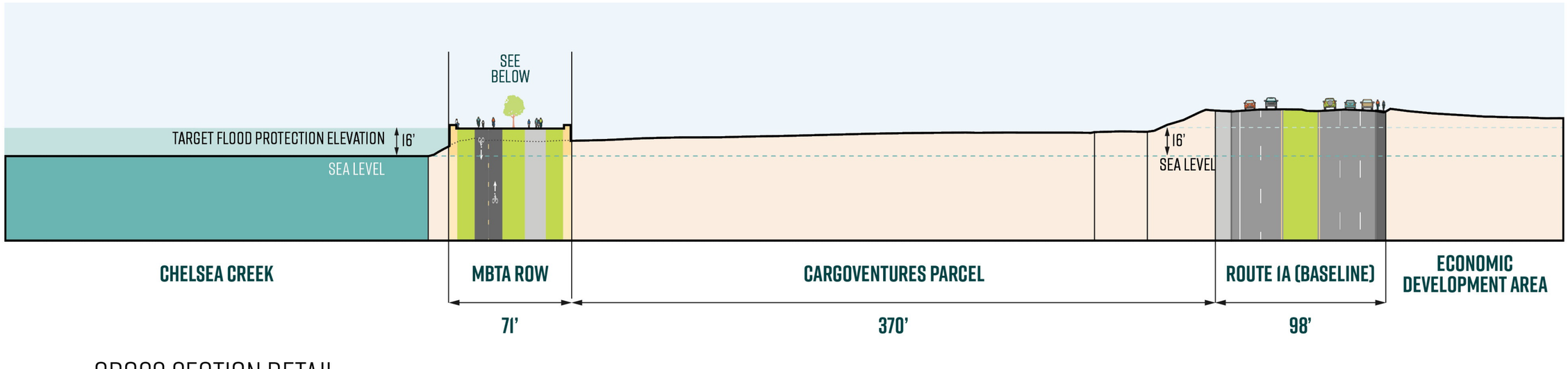


LOCATION ALONG CORRIDOR

Alternative 1: Shared Use Path Only – South of Boardman Street



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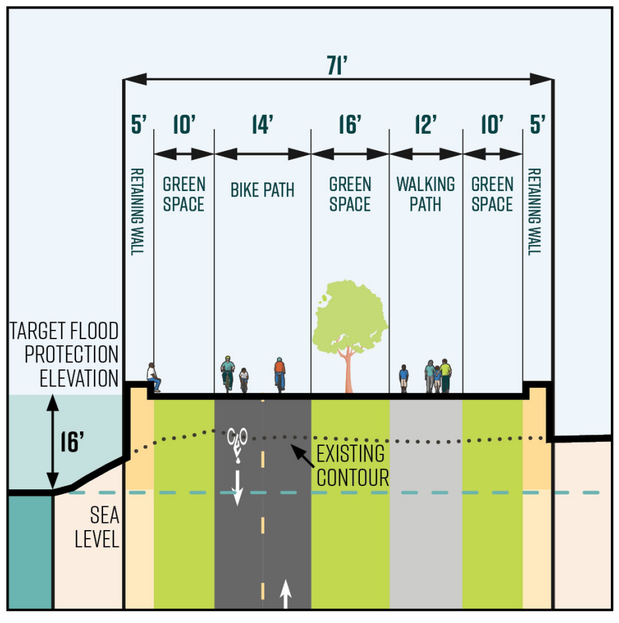

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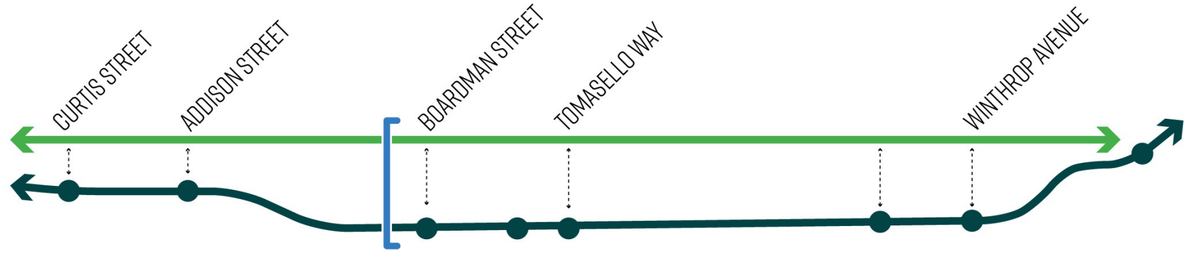

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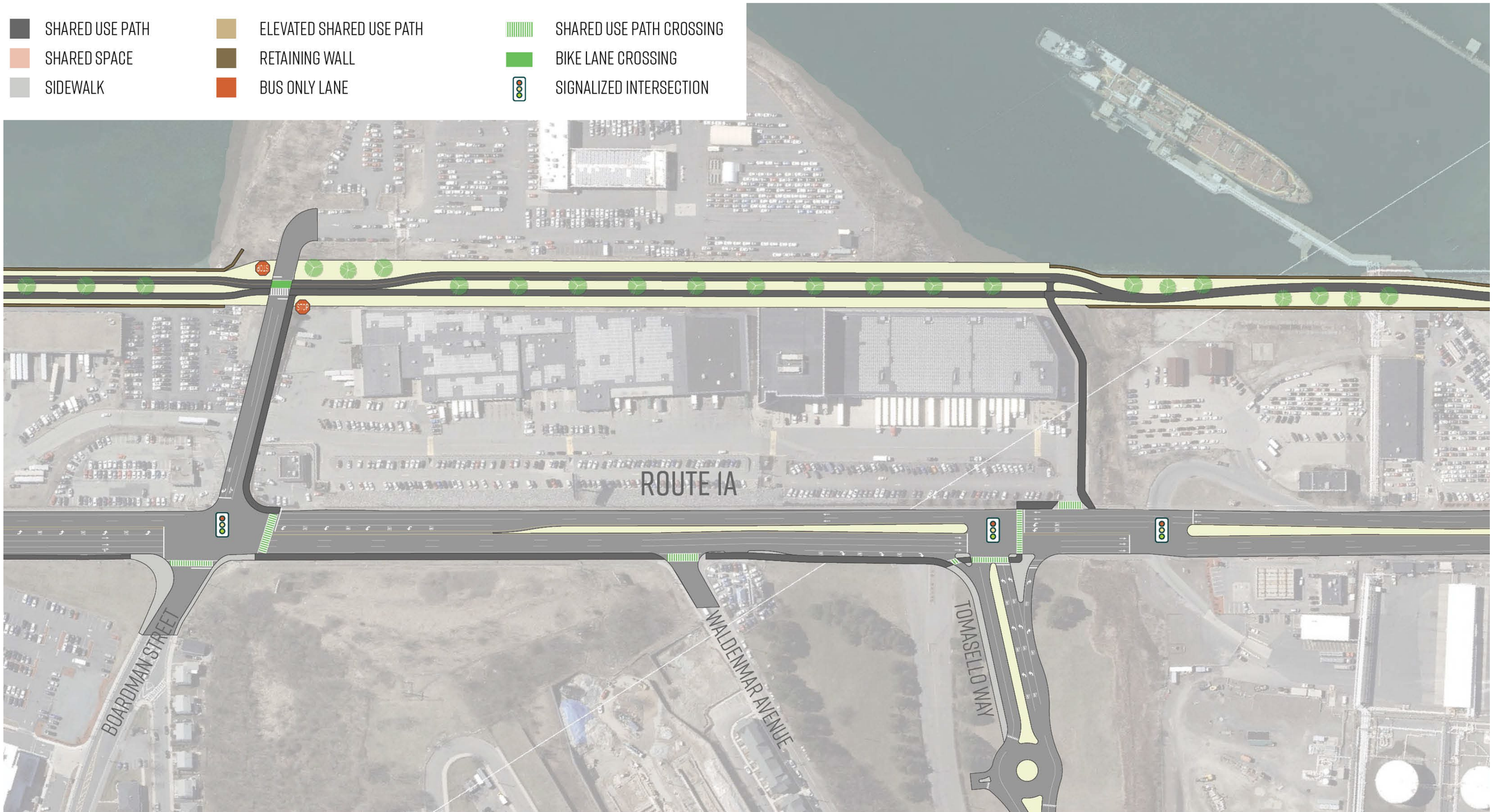
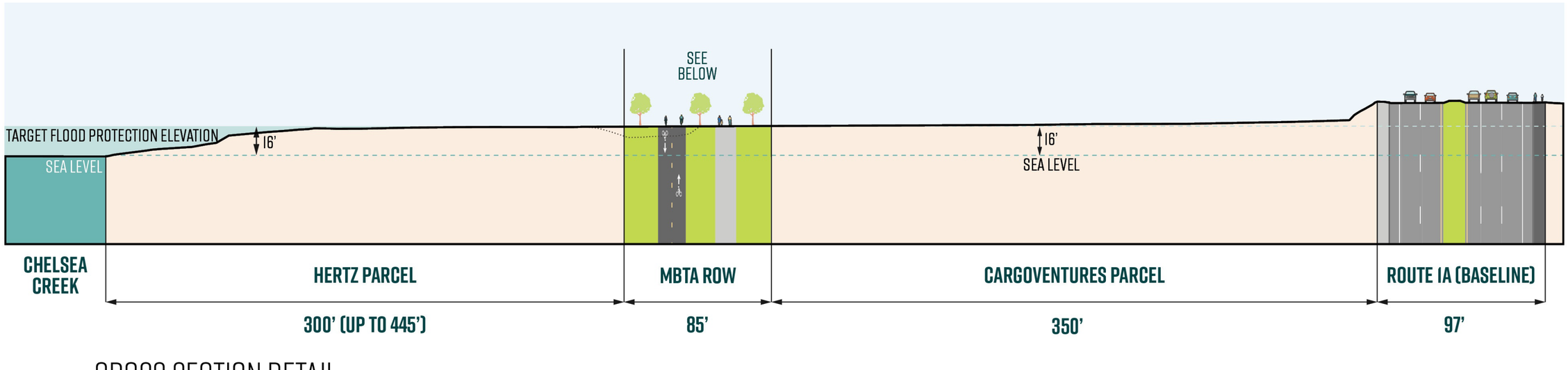
Alternative 1: Path Only – Boardman Street to Tomasello Way



Alternative 1: Shared Use Path Only – South of Tomasello Way



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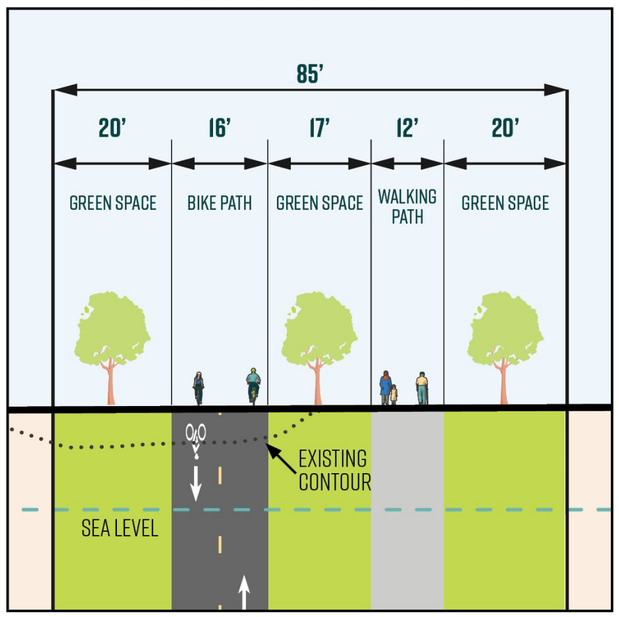

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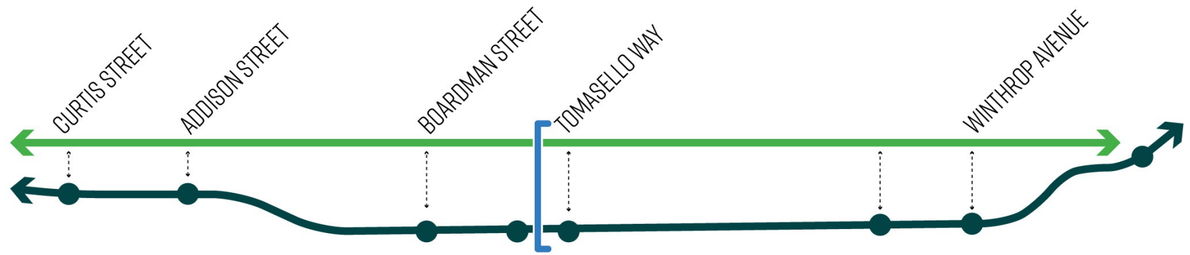

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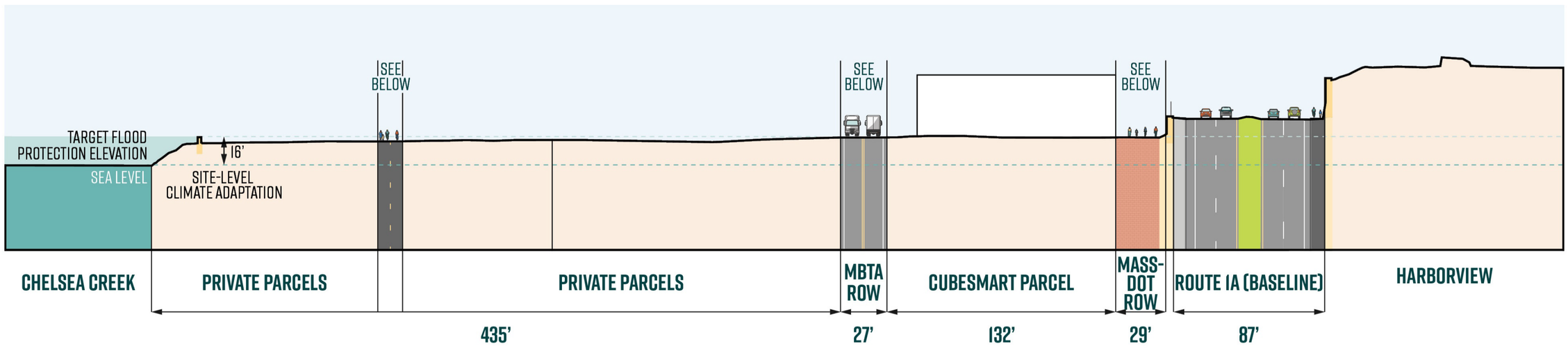
Alternative 2: Bypass Road and Shared Use Path

Alternative 2: Bypass with Shared Use Path – Curtis St. to Addison St.



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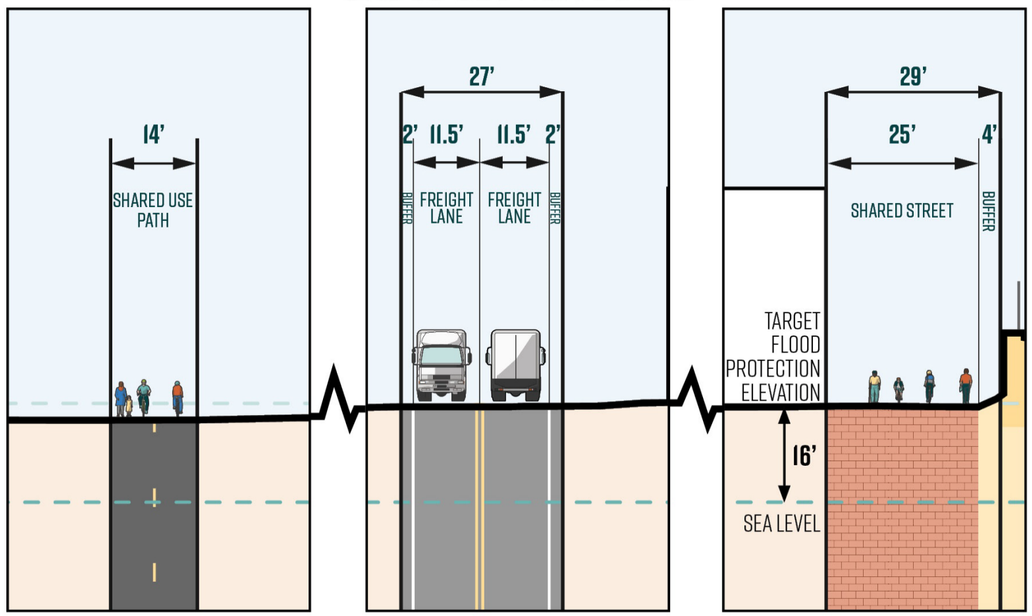

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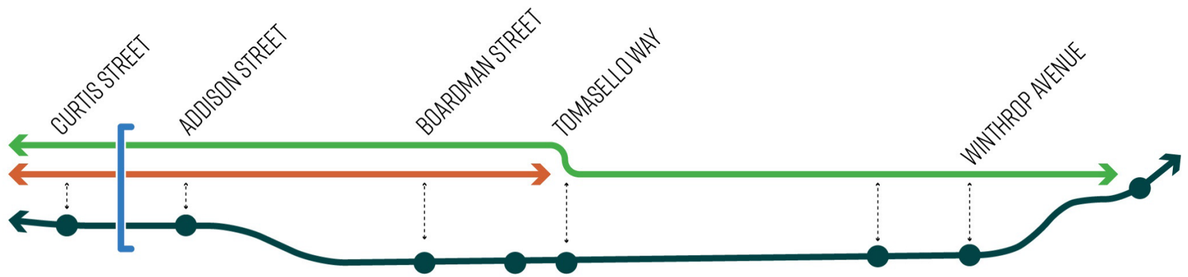

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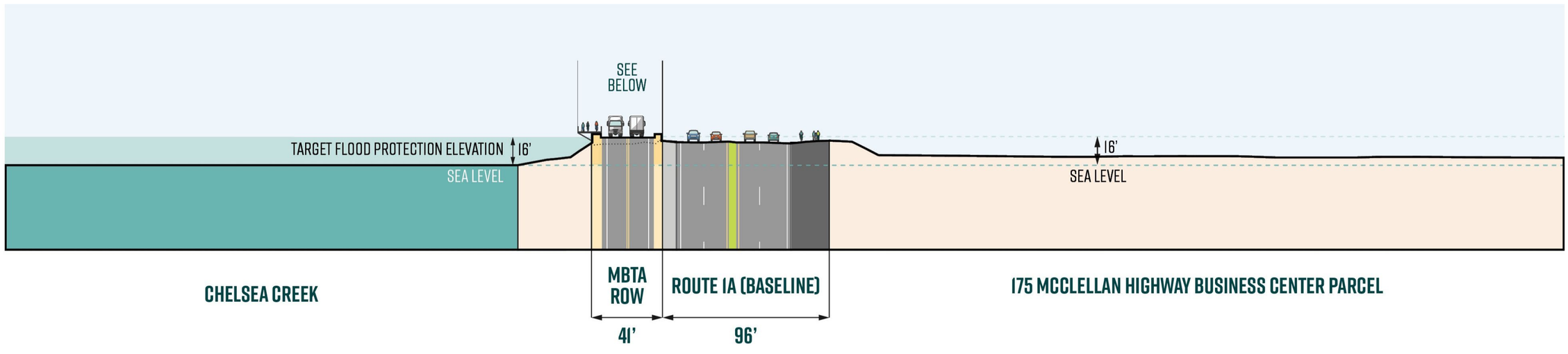
Alternative 2: Bypass with Path – North of Addison St. to Boardman St.

Alternative 2: Bypass with Shared Use Path – North of Addison Street



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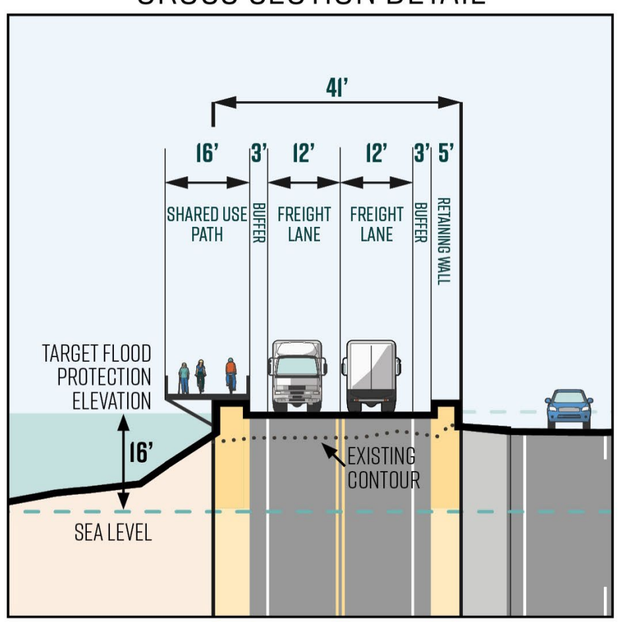

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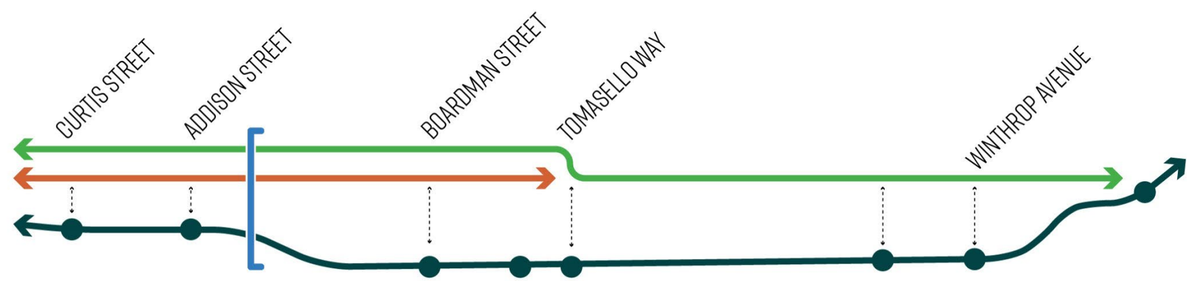

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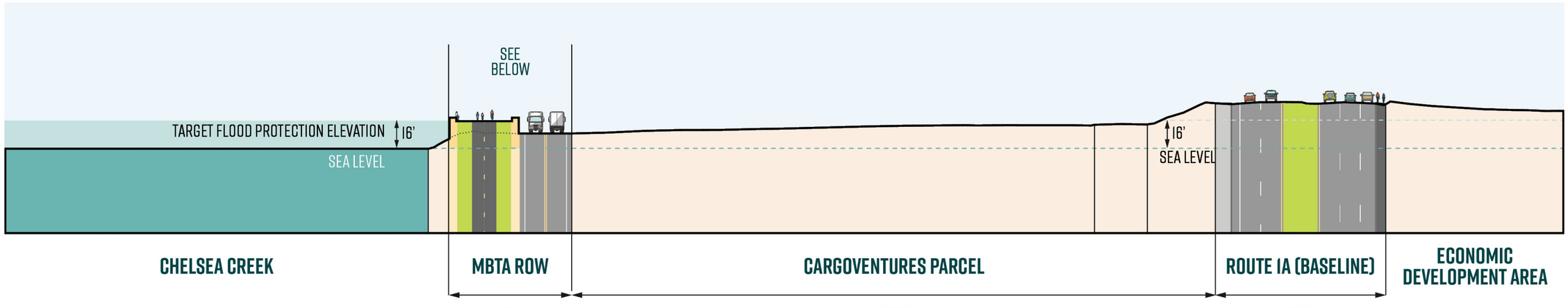
Alternative 2: Bypass with Shared Use Path – South of Boardman St.



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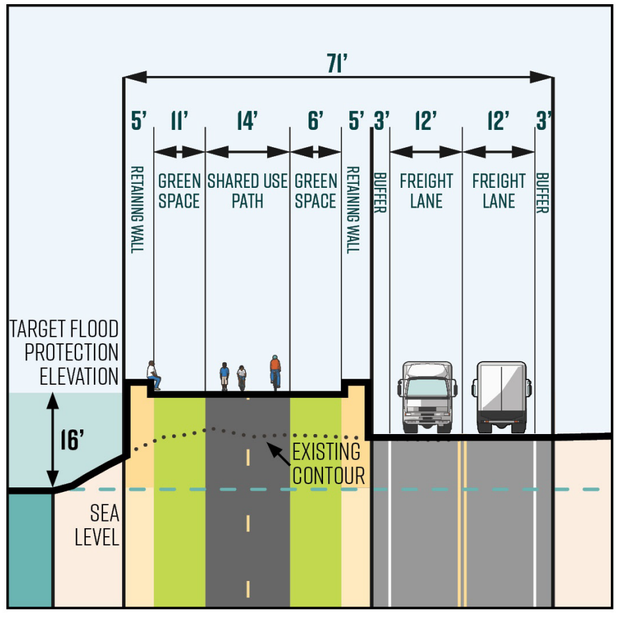

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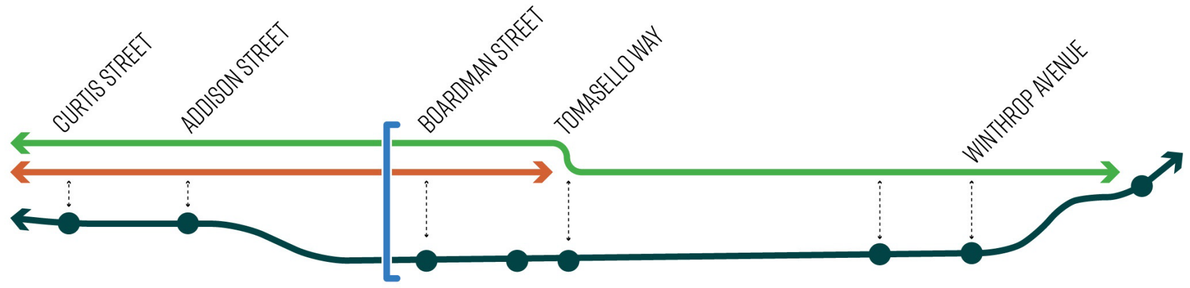

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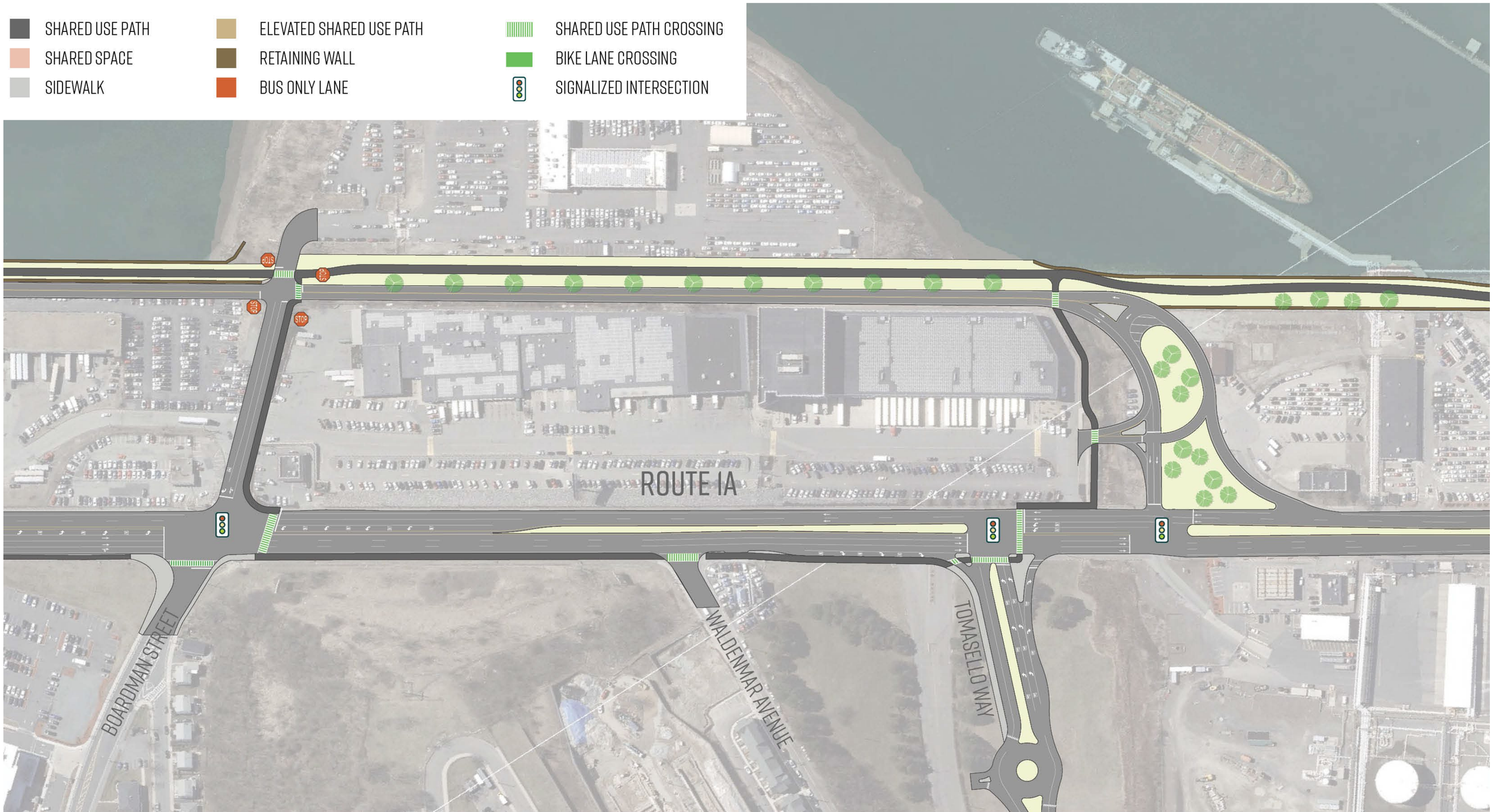
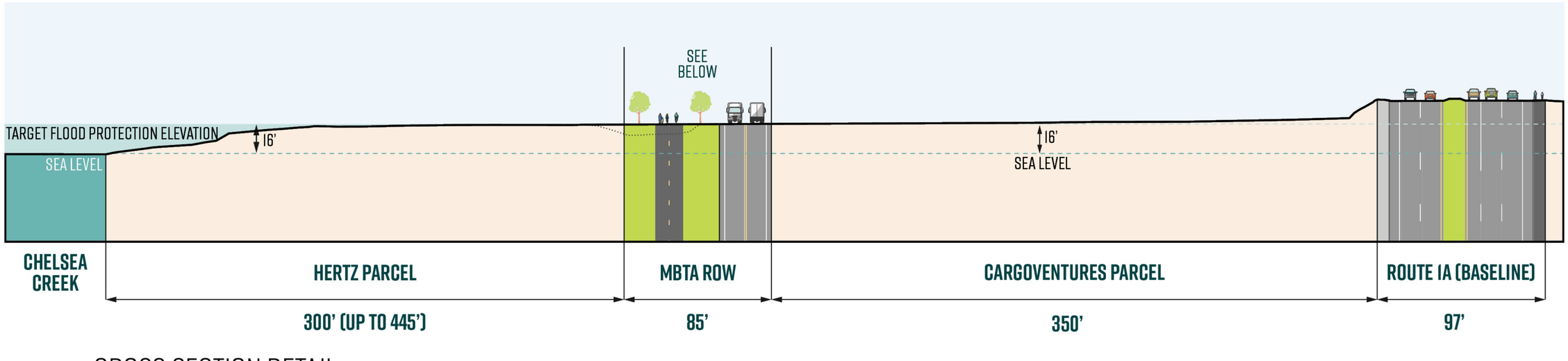
Alternative 2: Bypass with Path – Boardman Street to Tomasello Way



Alternative 2: Bypass with Shared Use Path – South of Tomasello Way



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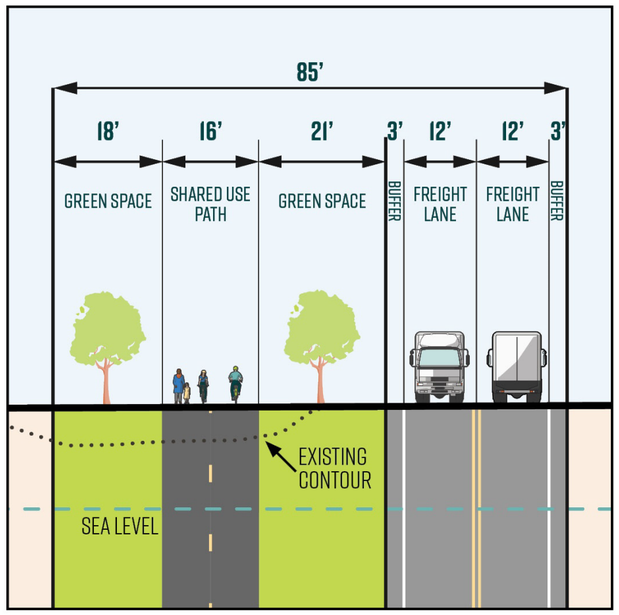

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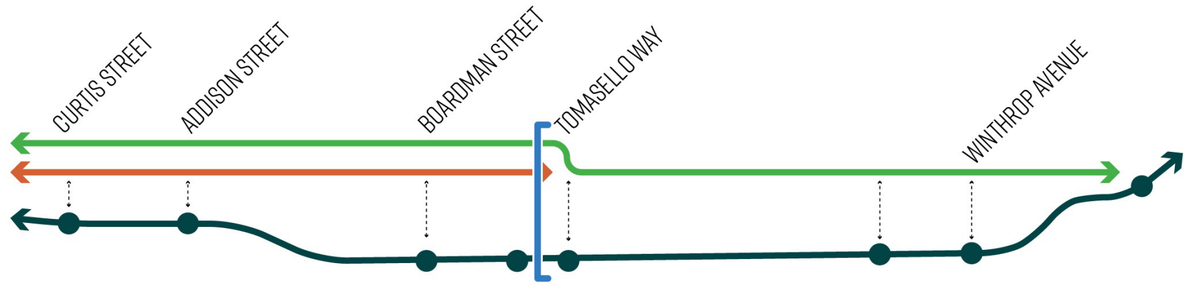

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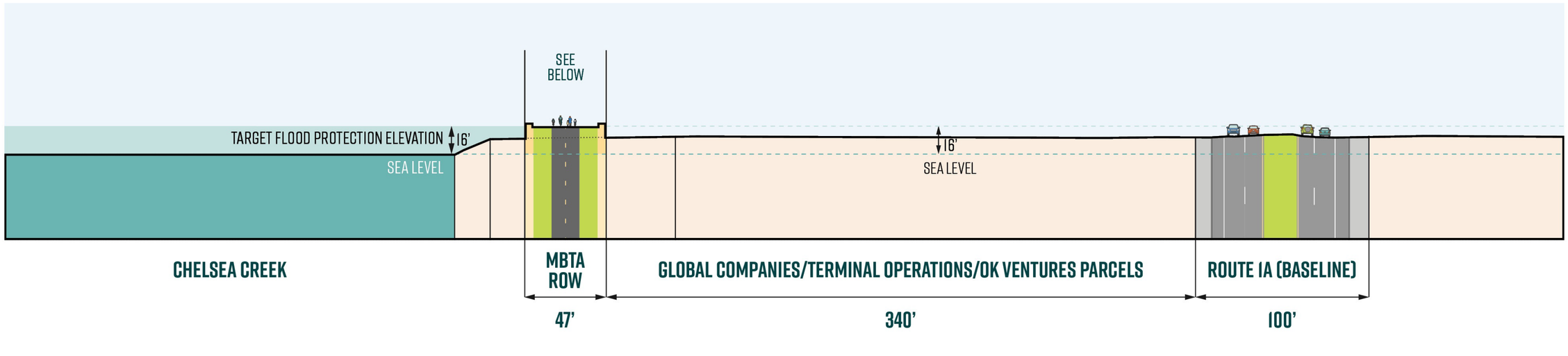
Both Alternatives – North of Tomasello Way to Railroad Street

Both Alternatives – South of Railroad Street



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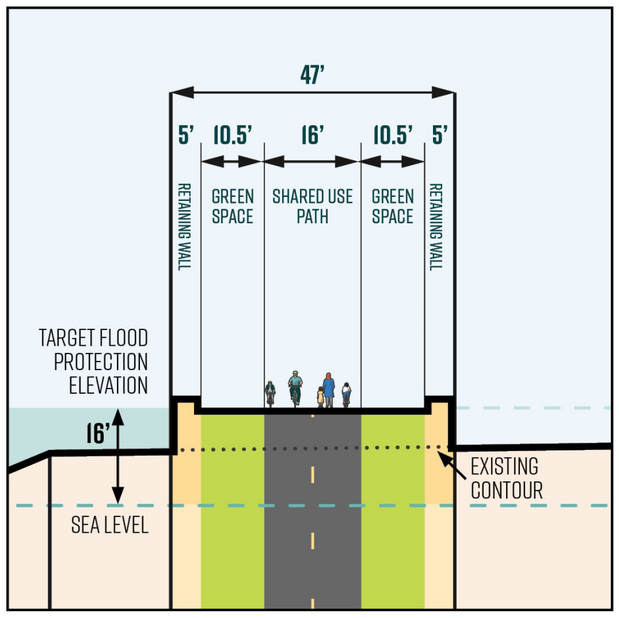

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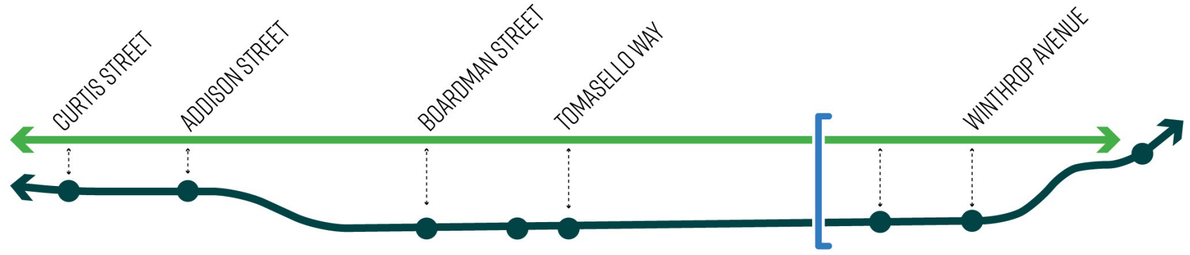

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Both Alternatives – Railroad Street to Winthrop Avenue

Bell Circle Connections – Option A (Harris Street)

Bell Circle Connections – Option B (Revere Beach Parkway)

Evaluation of Alternatives

Evaluation of Goals and Metrics Relative to Baseline

Goal	Metric	Alternative 1 – Path Only	Alternative 2 – Bypass + Path
Safety	Crash Modification Factors	Somewhat Better	Somewhat Better
Safety	Pedestrian Comfort (Level of Crossing Stress)	Better than Base	Somewhat Better
Safety	Bicycle Comfort (Leve of Traffic Stress)	Better than Base	Somewhat Better
Connectivity	Truck Volumes	Comparable to Base	Somewhat Better
Connectivity	Intersection Operations	Comparable to Base	Somewhat Better
Connectivity	Employment Access	Somewhat Better	Somewhat Better
Resilience	Flood Protection	Somewhat Better	Somewhat Better
Resilience	Heat Island	Better than Base	Somewhat Better
Resilience	Restored / Improved Natural Resources	Better than Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Residents	Comparable to Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Path Users	Somewhat Better	Somewhat Worse
Equity	Public Health (Access to Recreation, Natural Resources)	Better than Base	Somewhat Better
Feasibility	Cost	Somewhat Worse	Worse
Feasibility	Permitting	Somewhat Worse	Somewhat Worse

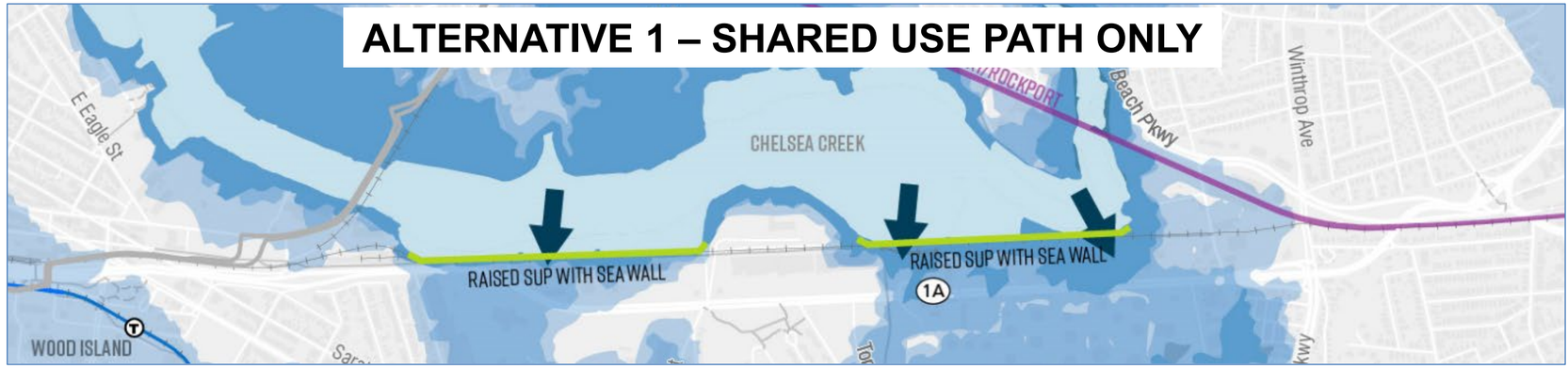
Legend **Better than Baseline** **Somewhat Better** **Comparable to Baseline** **Somewhat Worse** **Worse**

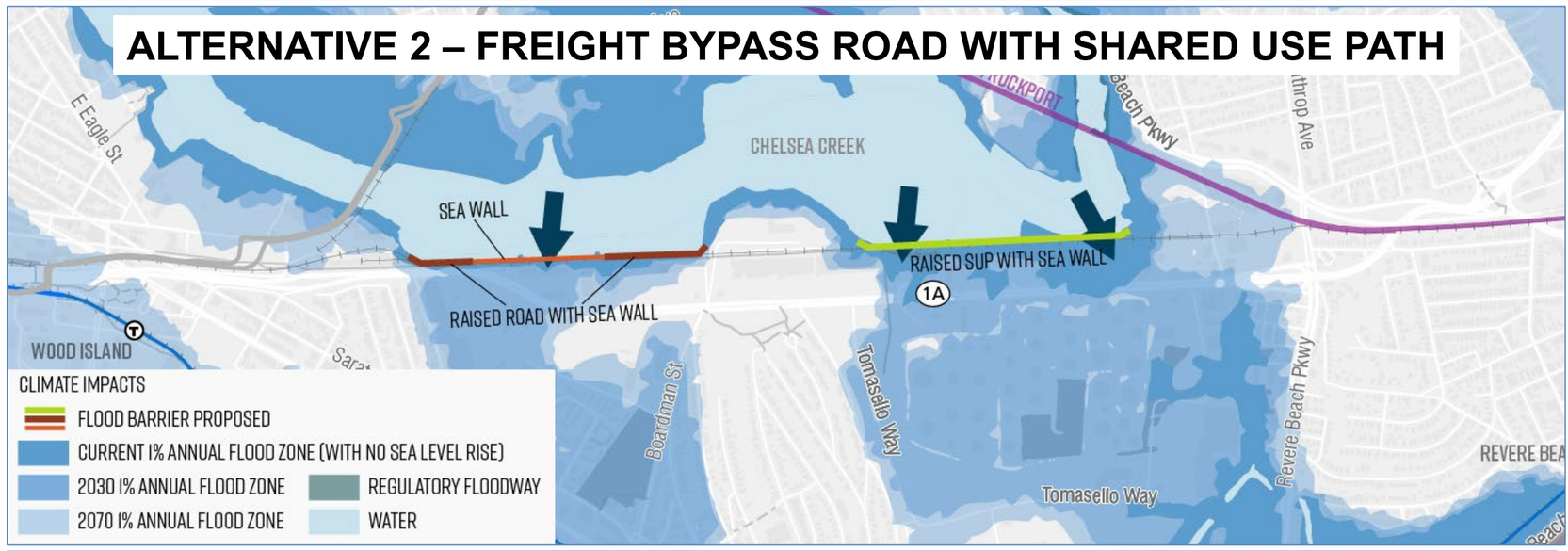
Resilience

Both alternatives provide flood protection for 2070 sea level rise

Alternative 1 provides 3.4 acres of additional green space

- Less pavement, more permeable cover for drainage, flood control
- More green space reduces heat island effect
- Better access to recreation and natural resources





ROUTE 1A CORRIDOR STUDY

Truck Diversions from Route 1A to Bypass Road – Alternative 2

2040 Traffic Projections	AM Peak Hour	PM Peak Hour	Daily
SB Trucks – Bypass Road	67	53	1,047
SB Trucks – Route 1A	42	63	1,721
SB Total Route 1A Traffic	2,427	2,449	44,824
NB Trucks – Bypass Road	42	50	821
NB Trucks – Route 1A	123	86	1,801
NB Total Route 1A Traffic	1,646	2,830	38,722

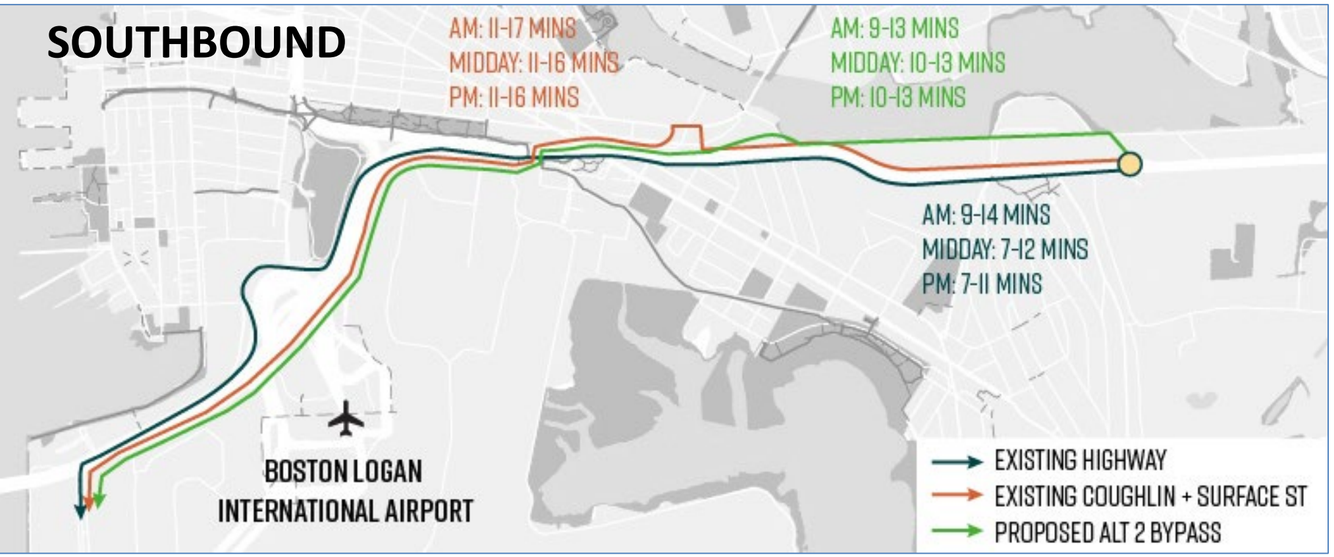
Note: 2040 travel conditions, development, travel times, and truck volumes assumed for this analysis. Current travel patterns of freight vehicles informed by StreetLight data.

- Estimated peak hour truck diversions to Bypass Road in 2040
  - ~42 – 67 trucks would use new bypass road during each peak hour
  - Heavier SB demand for Bypass (AM = 61%, PM = 46%) than NB (AM = 25%, PM = 37%)
- Estimated daily truck diversions to Bypass Road in 2040
  - ~1,870 trucks would use the new Bypass Road on a daily basis
  - ~35% of Route 1A truck traffic, ~2% Route 1A total traffic in 2040

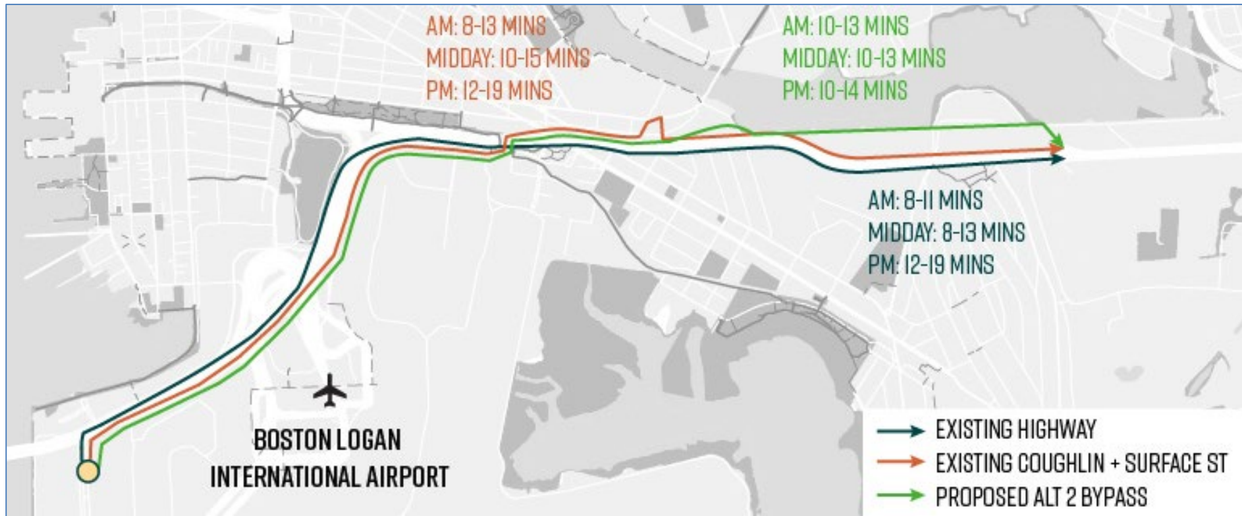
Truck Diversions to Bypass Road – Alternative 2: Travel Time Analysis

- Diversions based on vehicle travel times
- Travel times between jughandle and Airport shorter on Bypass Road during peak directional periods (Southbound AM, Northbound PM), otherwise shorter via Route 1A
- Travel times on Bypass Road generally more reliable due to separation from road network

SOUTHBOUND

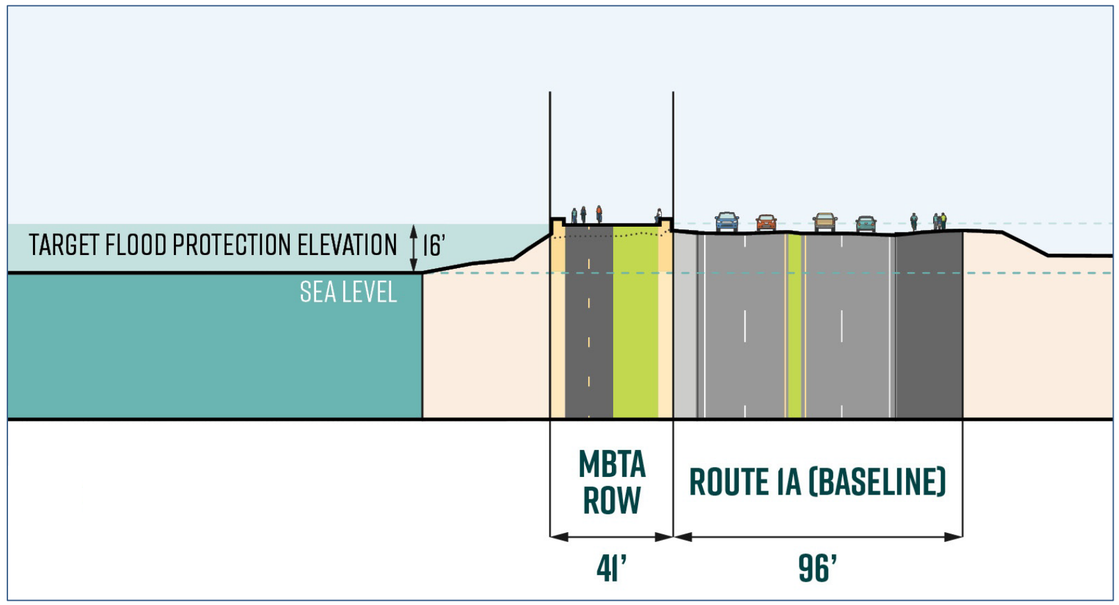


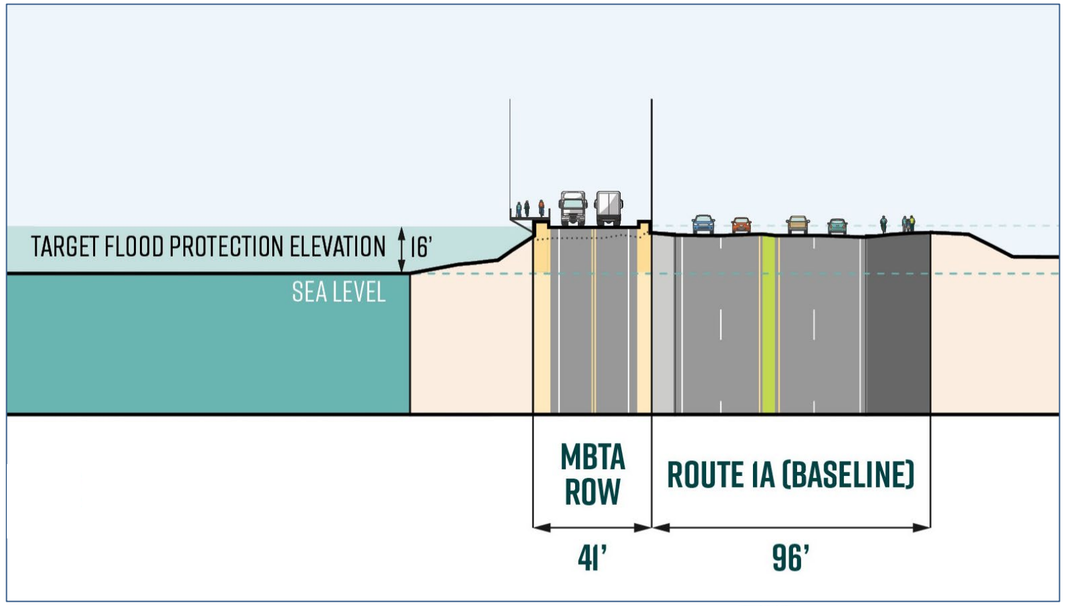
NORTHBOUND



Potential for Transit Access

- Future Baseline
  - Bus Network Redesign eliminates Route 1A bus service
  - Current land use, zoning not conducive to transit demand
- Alternative 1 – Shared Use Path Only
  - No separate roadway for potential transit use
  - Transit priority would require use of Route 1A
- Alternative 2 – Bypass Road with Path
  - Bypass Road could allow transit vehicles
  - Potential for transit priority away from Route 1A congestion





Safety – Crash Modification

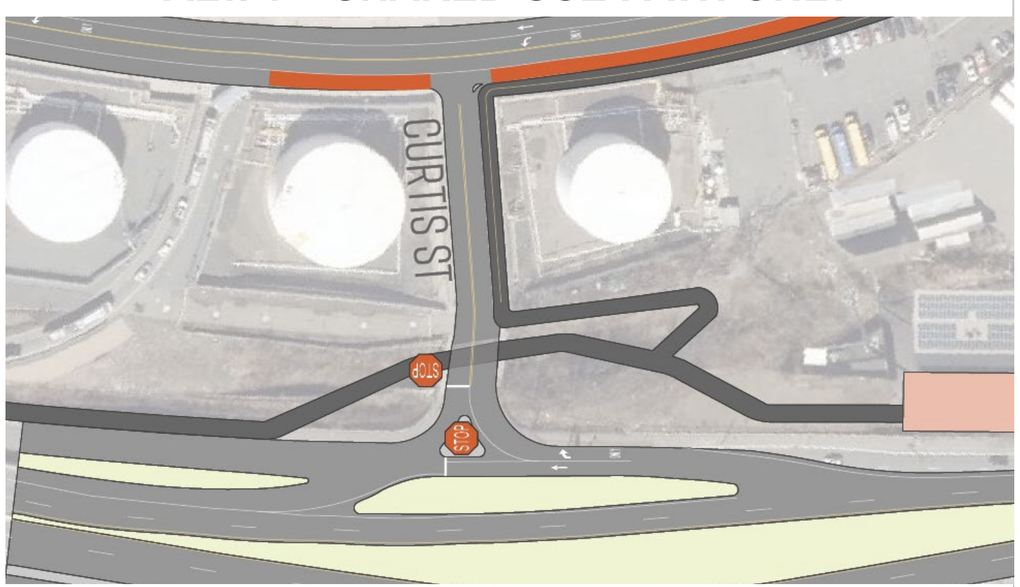
Both alternatives provide safety improvements

- Separation of Route 1A SB from Curtis Street and off-ramp
- Improved signalization of Addison Street

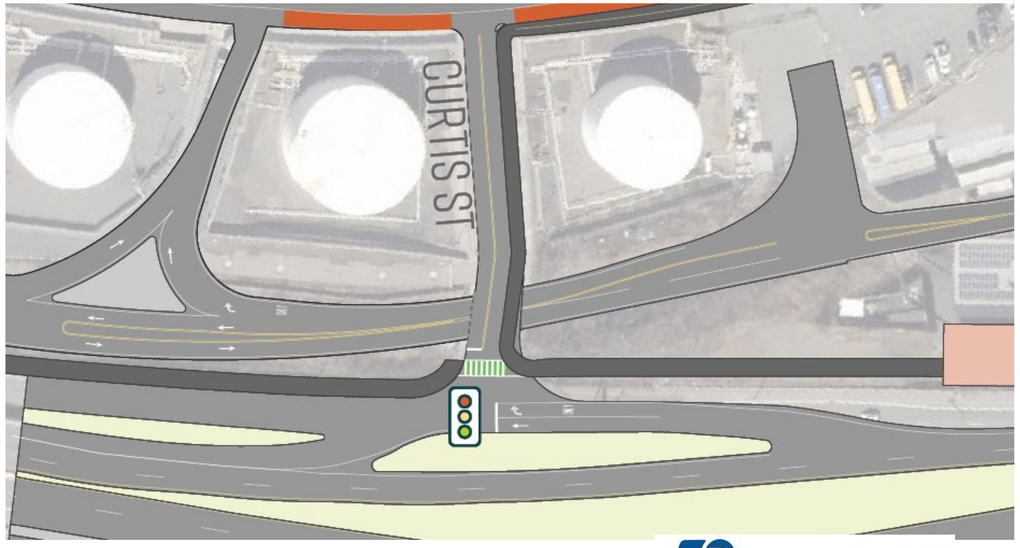
Alt. 1 reduces conflicts compared to Alt. 2

- Alternative 1: Shared use path crosses Curtis Street below grade
- Alternative 2 has greater ped – bike conflicts
  - Shared use path crosses Curtis Street at grade, with heavy truck and general traffic conflicts
  - Bypass Road creates four new ped – bike conflicts with trucks along shared use path

ALT. 1 – SHARED USE PATH ONLY



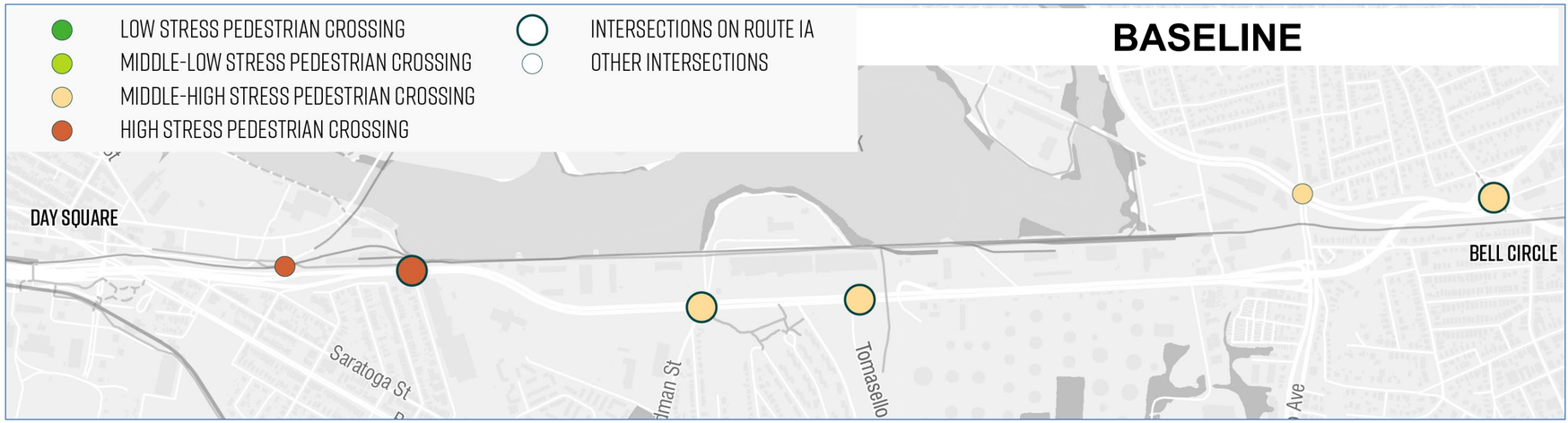
ALT. 2 – FREIGHT BYPASS ROAD WITH SHARED USE PATH

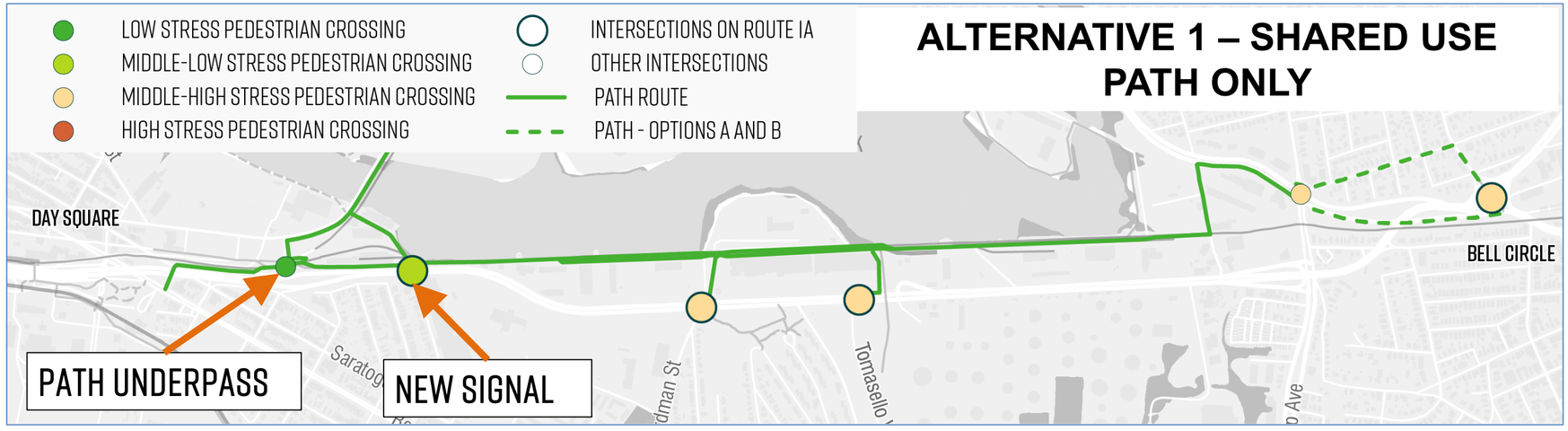


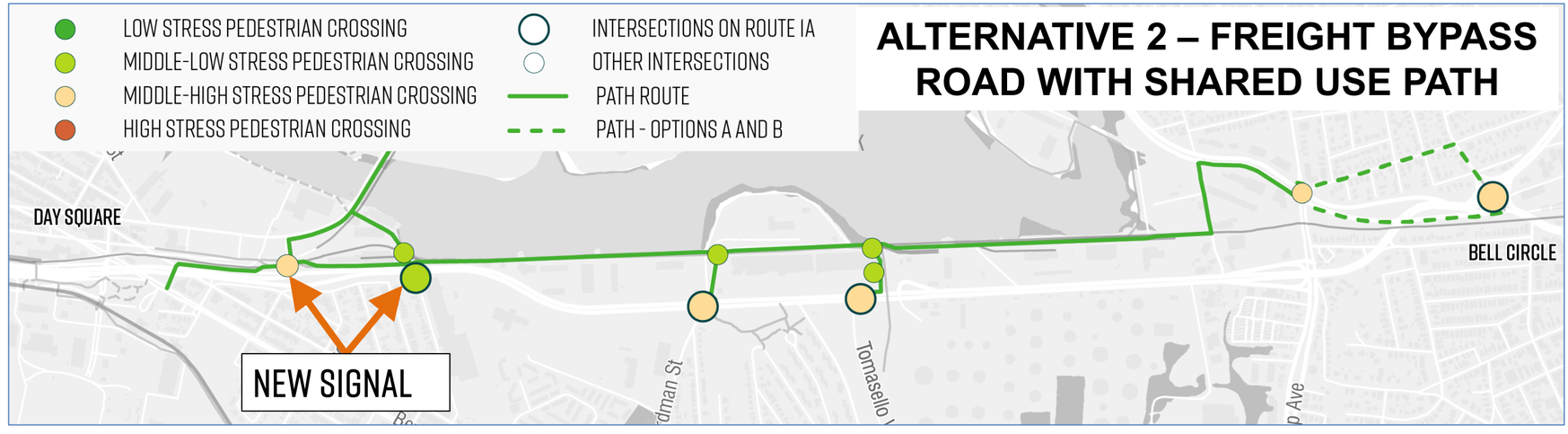
Pedestrian Crossing Comfort

- Number of crossings and pedestrian comfort based on lanes, traffic volume, speed, proximity
- Baseline condition has high stress crossings throughout corridor and on side streets
- Alternative 1 – Crossing conditions improved by signal at Addison Street and Curtis Street underpass
- Alternatives 2 – Signals at Addison Street and Curtis Street, 4 added path crossings of Bypass Road

ROUTE 1A CORRIDOR STUDY

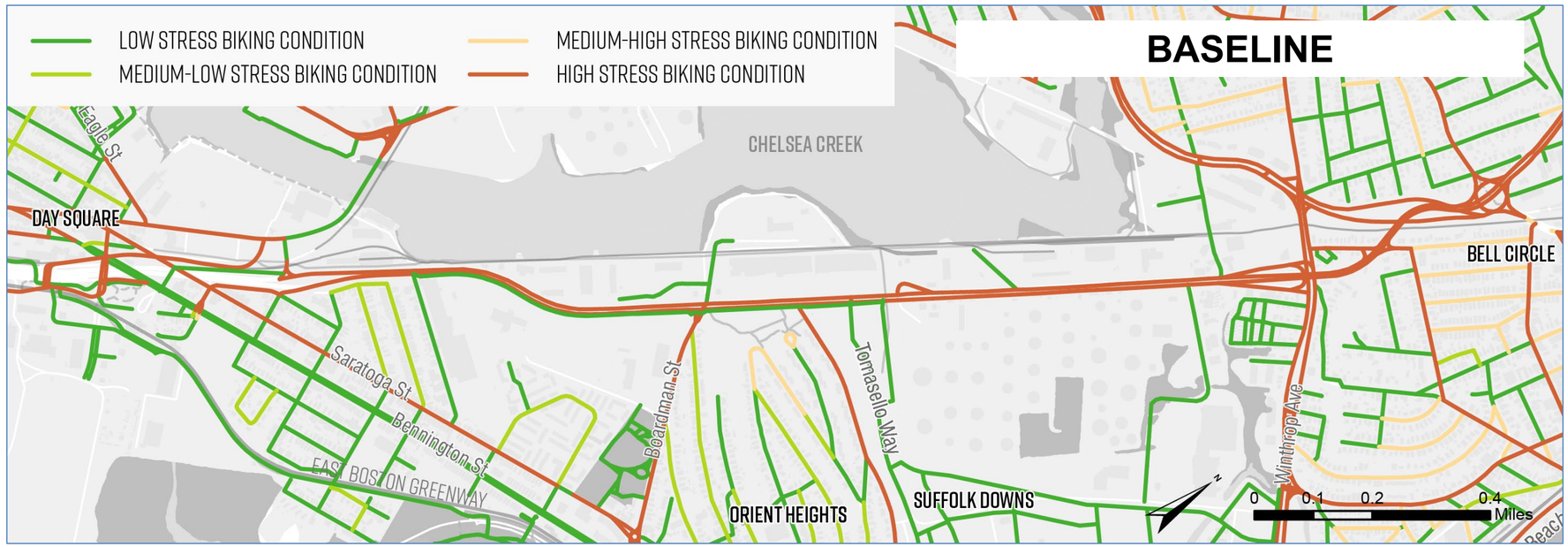


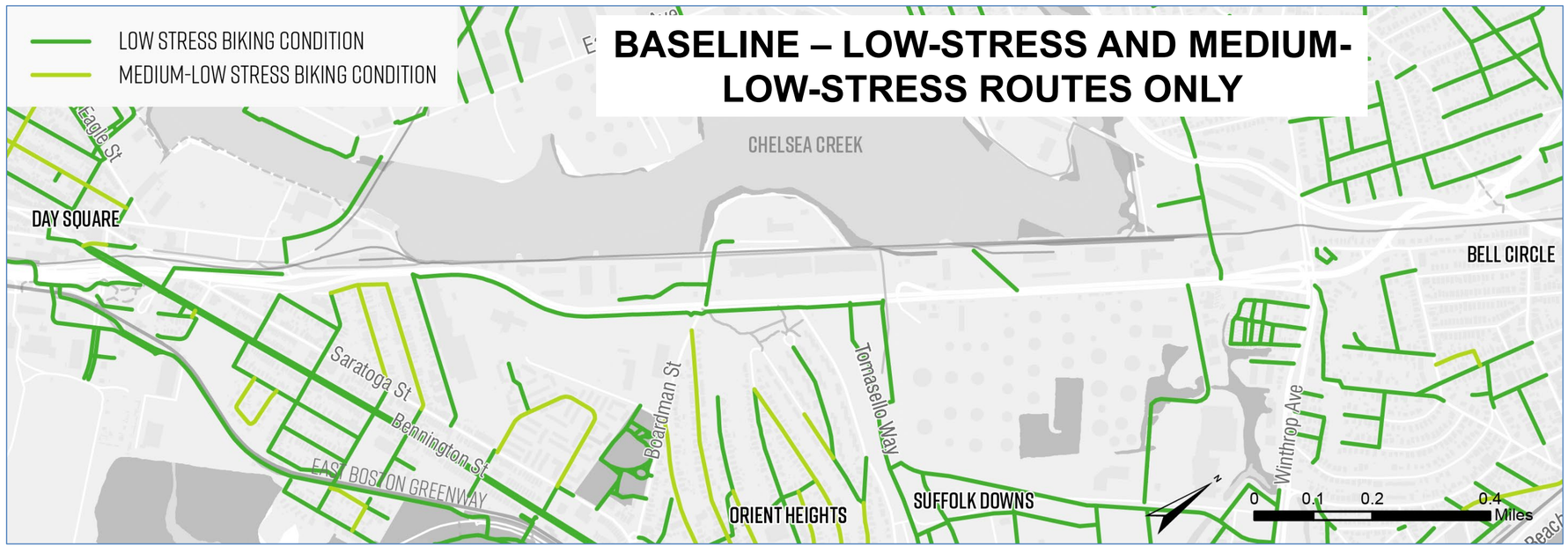




Bicycling Comfort

- Bicycling comfort based on type of bike facility, number of lanes, traffic volume, traffic speed, proximity
- Baseline condition has high bicycling stress
- Only low-stress route in corridor in Baseline condition is shared use path along east side of Route 1A (Addison – Tomasello) proposed as Suffolk Downs mitigation





ROUTE 1A CORRIDOR STUDY

Bicycling Comfort

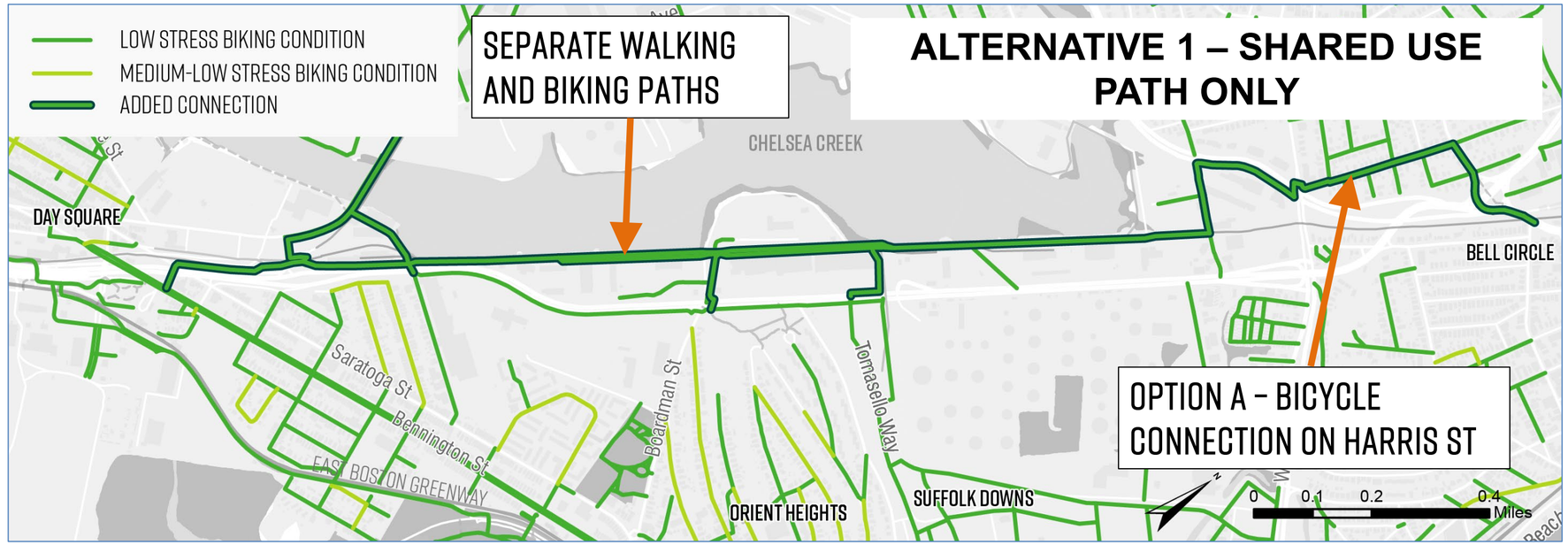
- Both alternatives provide continuous path throughout the study corridor

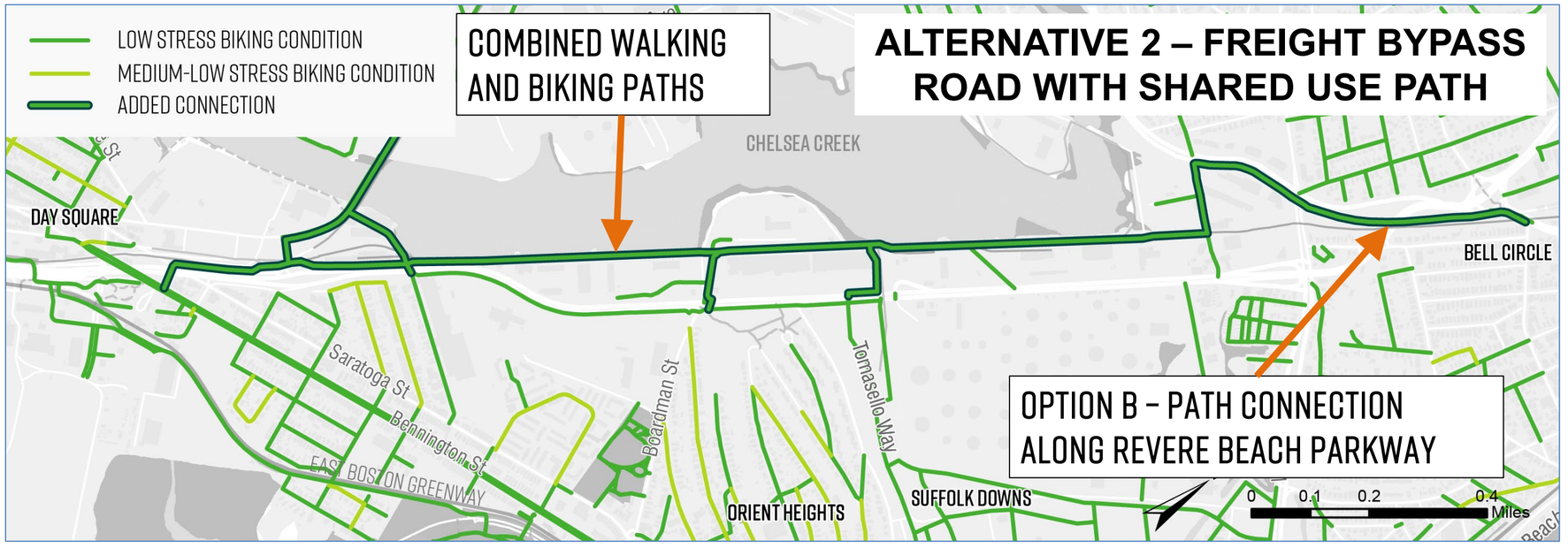
Alternative 1

- Provides separate biking and walking paths, more park space, greater comfort

Alternative 2

- Narrower combined walking and biking path adjacent to Bypass Road, less comfort
- **Bell Circle Option A:** Sharrows on Harris Street, better connection to west side
- **Bell Circle Option B:** Separated shared use path on Revere Beach Parkway ramp





ROUTE 1A CORRIDOR STUDY

Safety – Pedestrian and Bicycle Comfort/Level of Stress on Path

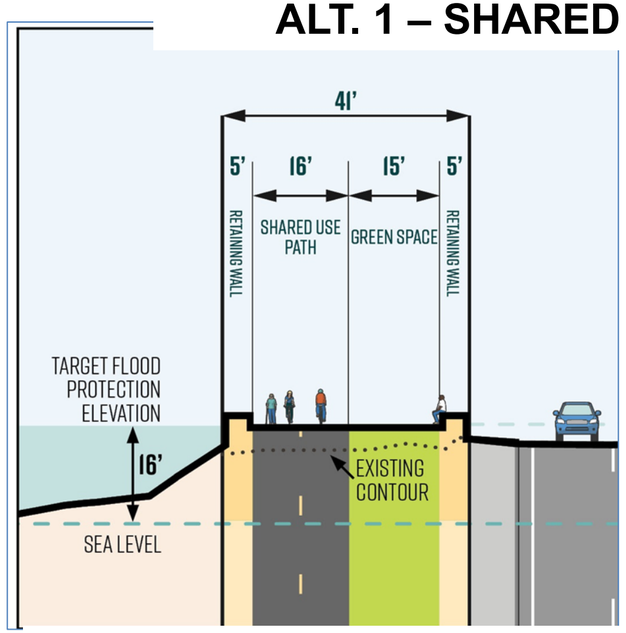
Alternative 1 provides higher level of pedestrian and bicycle comfort

- More open space provided, buffer between shared use path and traffic
- Adequate space for separate walking and biking paths
- Allows for path underpass at Curtis Street

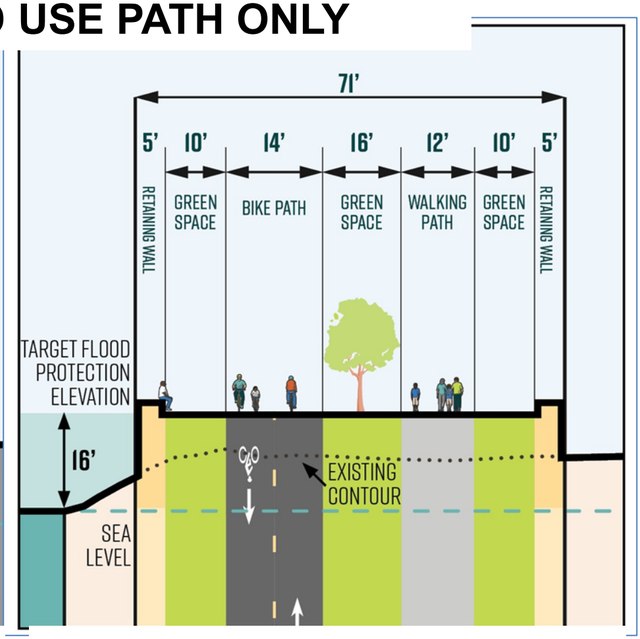
In Alternative 2, Bypass Road constrains path

- Need for cantilevered section + seawall
- Proximity of trucks to path users

ALT. 1 – SHARED USE PATH ONLY

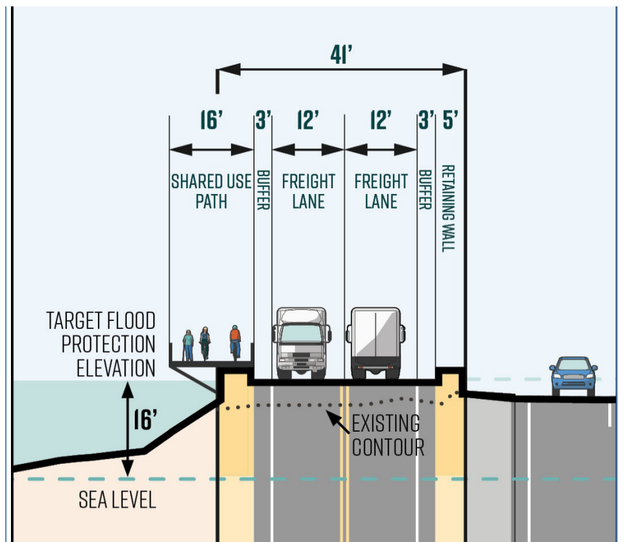


North of Addison Street

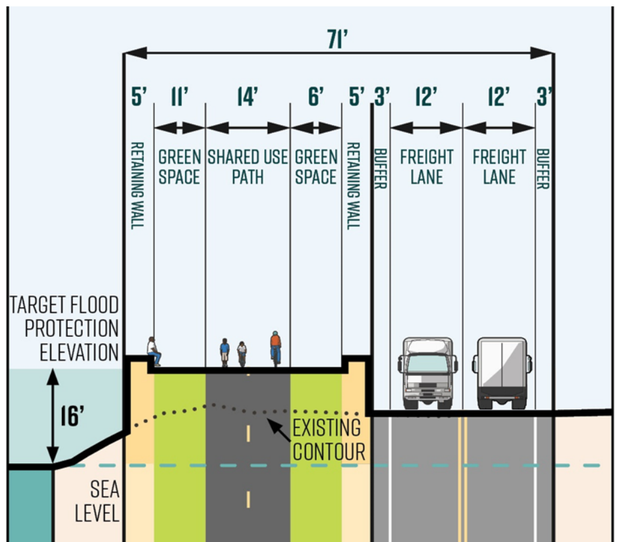


South of Boardman Street

ALT. 2 – FREIGHT BYPASS ROAD WITH SHARED USE PATH



North of Addison Street

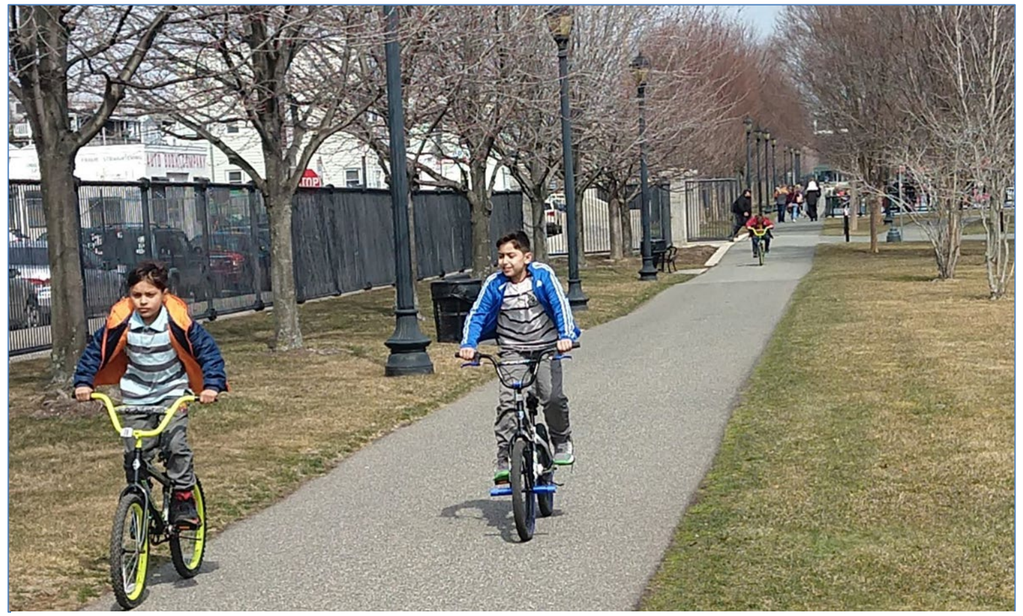


South of Boardman Street

Equity – Truck Impacts on Noise and Air Quality

Alternative 1 better for path users

- Lack of trucks and separation from all traffic (~400’ for most of corridor length)
- Quieter, cleaner user experience



East Boston Greenway

Alternative 2 better for East Boston residents

- Bypass Road lowers truck volumes along Route 1A by ~35% south of Tomasello
- Benefit in noise and air quality for residents at the western end of Orient Heights neighborhood

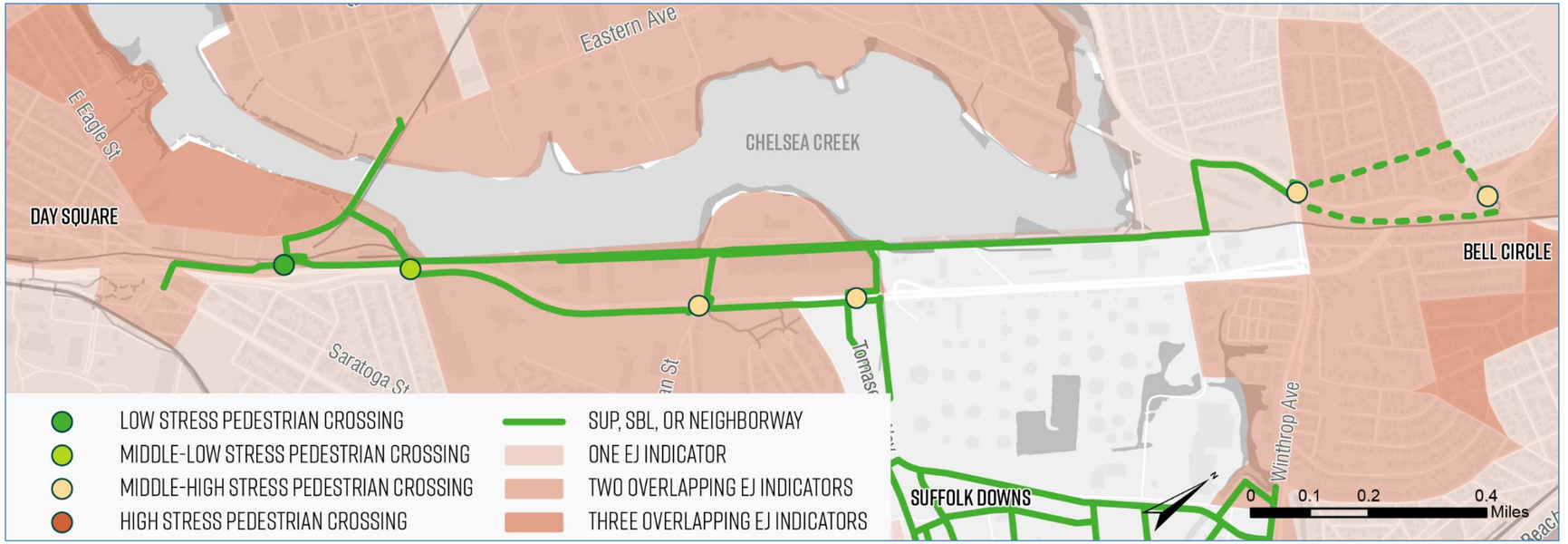
North Greeley Separated Bike Path in Portland, OR (Source: Jonathan Maus)

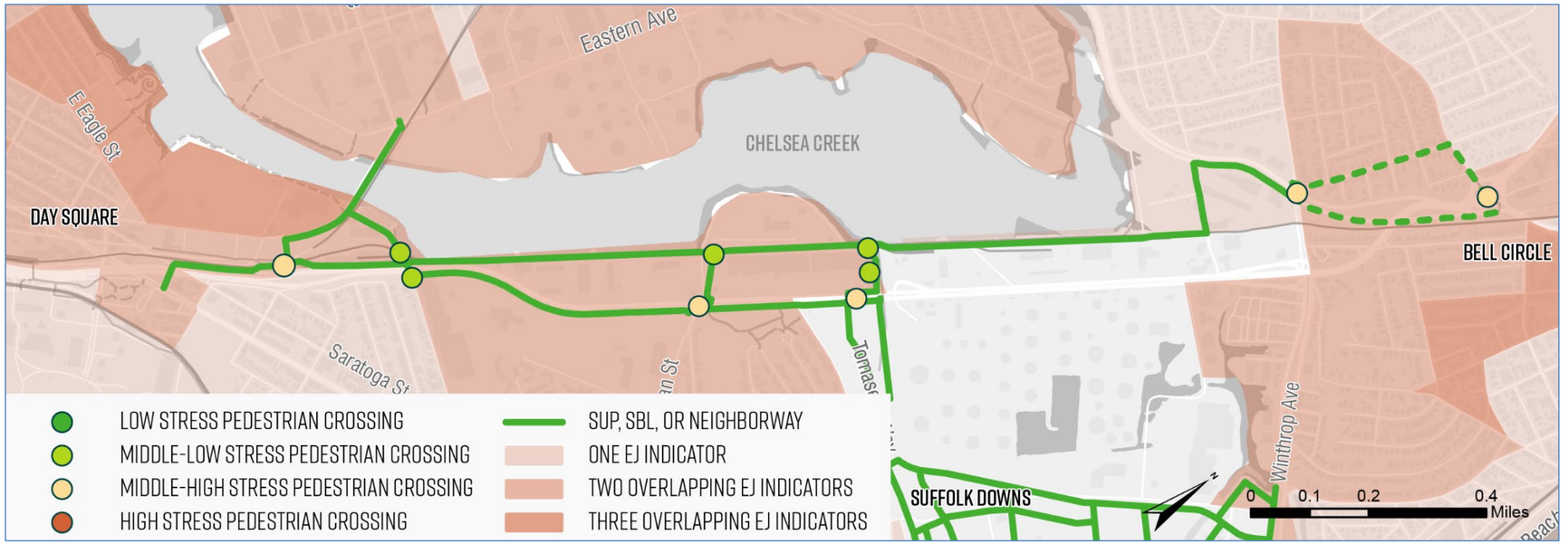
Equity – Environmental Justice (EJ)

Both alternatives provide better neighborhood connections for EJ communities

Alternative 1 would provide better recreation, access to natural resources for EJ communities

- Less crossing conflictions and lower crossing stress
- More green space along path, reduced heat island
- Better Chelsea Creek access





ROUTE 1A CORRIDOR STUDY

Capital Costs – Both Alternatives

Major Components

- Common elements in both alternatives
  - Shared use path and traffic controls
  - Seawall sections
  - Railroad St. Bridge over Commuter Rail
  - Soil disposal allowance
- High contingencies for planning estimate

Alternative 2 cost is $35.5M (50%) higher

- Largest cost increment from cantilevered path (4,200 feet)
- Roadway is also a significant increase

Option A vs. Option B – Northern Path

- Negligible difference in capital cost

Order of Magnitude Estimates ($ 2022 Millions)

MAINLINE ALTERNATIVE	*ALT. 1 Shared Use Path Only*	*ALT. 1 Shared Use Path Only*	*ALT. 2 Bypass Road & Path*	*ALT. 2 Bypass Road & Path*
BELL CIRCLE APPROACH	A (Harris Street)	B (Revere Beach Pkwy)	A (Harris Street)	B (Revere Beach Pkwy)
Common Elements	33.1	33.2	33.3	33.4
Cantilever Path along Creek	--	--	10.1	10.1
Freight Bypass Road	--	--	6.5	6.5
CONSTRUCTION SUBTOTAL	**33.1**	**33.2**	**49.9**	**50.0**
10% Police Detail	3.3	3.3	5.0	5.0
20% Utilities	6.6	6.6	10.0	10.0
40% Design Contingency	13.2	13.2	20.0	20.0
40% Construction Contingency	13.2	13.2	20.0	20.0
Soil Allowance	1.5	1.5	1.5	1.5
TOTAL CAPITAL COST	**70.9**	**71.0**	**106.4**	**106.5**

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Anticipated Permits

Major Issues

- Most issues related to Chelsea Creek
- Berm would introduce new fill into creek
  - Significant permitting challenge

Federal Level

- Construction has potential to affect wetlands, water quality, and stormwater
- Discovery of hazardous materials would trigger EPA involvement

State Level

- Filing required given wetlands and proximity to Low-Income populations
- Anticipate an Environmental Notification Form

AGENCY WITH JURISDICTION	*PERMIT OR DECISION NEEDED TO ADVANCE*
MA Office of Coastal Zone Management	Coastal Zone Consistency Concurrence
MA Office of Coastal Zone Management	DPA Boundary Coordination
MA Department of Environmental Protection	Chapter 91 (Low Tidelands)
MA Department of Environmental Protection	Order of Conditions (State Wetlands) *issued by City Conservation Commission*
U.S. Army Corps of Engineers	Section 404 (Federal Wetlands)
U.S. Army Corps of Engineers	Section 401 (Water Quality)
U.S. Environmental Protection Agency	National Pollutant Dispersion Elimination System (Stormwater General Construction Permit)

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Evaluation of Goals and Metrics Relative to Baseline

Goal	Metric	Alternative 1 – Path Only	Alternative 2 – Bypass + Path
Safety	Crash Modification Factors	Somewhat Better	Somewhat Better
Safety	Pedestrian Comfort (Level of Crossing Stress)	Better than Base	Somewhat Better
Safety	Bicycle Comfort (Leve of Traffic Stress)	Better than Base	Somewhat Better
Connectivity	Truck Volumes	Comparable to Base	Somewhat Better
Connectivity	Intersection Operations	Comparable to Base	Somewhat Better
Connectivity	Employment Access	Somewhat Better	Somewhat Better
Resilience	Flood Protection	Somewhat Better	Somewhat Better
Resilience	Heat Island	Better than Base	Somewhat Better
Resilience	Restored / Improved Natural Resources	Better than Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Residents	Comparable to Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Path Users	Somewhat Better	Somewhat Worse
Equity	Public Health (Access to Recreation, Natural Resources)	Better than Base	Somewhat Better
Feasibility	Cost	Somewhat Worse	Worse
Feasibility	Permitting	Somewhat Worse	Somewhat Worse

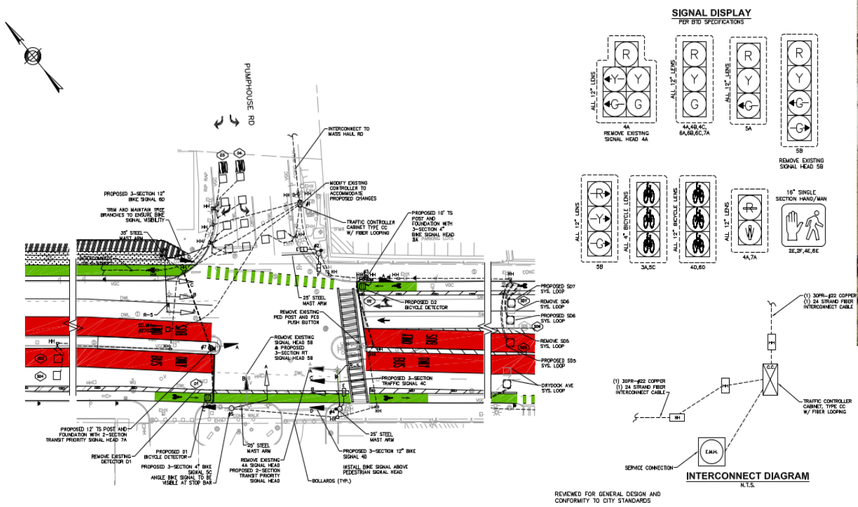
Legend **Better than Baseline** **Somewhat Better** **Comparable to Baseline** **Somewhat Worse** **Worse**

Next Steps

Project Development Process

- Community and Stakeholder Consensus
- Identify Project Proponent
- Project Initiation
- Capital Investment Plan Adoption
  - Identification of federal and state funding sources and amounts
- Metropolitan Planning Organization Process
  - Evaluation by Boston Region MPO
  - Inclusion in Transportation Improvement Program (TIP) for funding
- Permitting
- Project Design
- Construction

December	January	February	March	April	May	June
Review Programs / Sizes	**Refine CIP Programs / Sizes / Scoring**	**Project Prioritization**	**Align CIP / STIP / funding**	**Choose projects/ draft CIP**	**CIP Public Comment Period**	**MassDOT Board Review / Final CIP Approved**
Review and update existing CIP programs / identify new programs Preliminary financial guidance (federal & state) developed	CIP programs/ sizes finalized; score new projects. Develop estimates of capital sources & federal formula targets distributed	Project readiness evaluated; capital sources refined; projects prioritized and draft project selection underway	Fiscal constraint analysis and CIP programs / sizes finalized; project lists developed MPOs release development scenarios / preferred projects selected	Final QA/QC on sources & uses and fiscal constraint analysis conducted MPOs release draft TIPs for 21-day public comment; draft CIP document finalized	Draft CIP finalized and submitted to MassDOT Board for consideration; public comment period commences Draft STIP released for public comment. ANF publishes Commonwealth's capital plan	Equity Analysis of CIP investments completed; final CIP reviewed and approved by MassDOT Board STIP is endorsed after public comment period and submitted to federal and state partners



ROUTE 1A CORRIDOR STUDY

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Potential Funding Opportunities

FEDERAL FUNDING

- FHWA Formula Funds
- CMAQ Funds
- Competitive Grant Funding
  - Carbon Reduction Program ($1.28B nationwide, annually)
  - Safe Streets and Roads for All ($5B nationwide, 5 years)
  - Reconnecting Communities Pilot ($1B nationwide, 5 years)
  - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - ~$1.4B annually nationwide for planning and construction of resilience improvements

STATE FUNDING

- MA Capital Investment Program (CIP)
- Grant Funding Programs (Chapter 90, MassTrails, Complete Streets, Shared Streets and Spaces)

PRIVATE FUNDING

- Potential private developer funding for Bypass Road

Questions and Answers

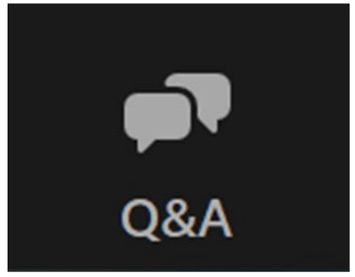
What feedback would you like to share with us?

What additional questions do you have?

Questions and Answers

- Please share only one question or comment at a time
- Use the "**Q&A**" button to submit a typed question or comment
- Press the "**Raise Hand**" button to share your question or comment verbally. Wait for the moderator to recognize and unmute you before speaking.
- If you have joined by phone only, you may "raise your hand" by pressing the star button and then nine (*9)
- *After you speak, we will lower your hand and you will be muted to allow the team to respond and provide opportunities for others to participate*
- Comments may also be sent to Rt1ACorridorStudy@dot.state.ma.us
- Website: https://www.mass.gov/route-1a-corridor-study

To speak,
click **"Participants"**
then **"Raise hand"**



Click **Q&A**
to "Ask A Question"

***9**
Raise Hand

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Thank you!

For question and comments please email:
Rt1ACorridorStudy@dot.state.ma.us

Sign up for project updates:
https://www.mass.gov/route-1a-corridor-study