



# Sumner Tunnel Centennial Project

*Design Public Hearing*

May 19, 2021 | 6:00 PM

Project File No. 606476



# Zoom Controls



- Listen in Spanish (Español) or Arabic (عربي), Closed captioning automatically generated by Zoom



- Drop down menu to check microphone and speakers



- Turn camera on/off



- Ask a question and share comments



- Raise your hand



- If you cannot access the internet or have technical problems, please call into the meeting at 888-788-0099, Meeting ID: 88921135782



If you have trouble with the meeting technology during the presentation, please call:  
**617-680-6502**



Unmute



Start Video



Participants



Chat



Share Screen



Raise Hand



Interpretation

Leave

# Public Hearing Notes and Procedures

**Sign Up Link** – [www.mass.gov/service-details/sumner-tunnel-centennial-project-signup](http://www.mass.gov/service-details/sumner-tunnel-centennial-project-signup)

## Notification of Recording

- This virtual public meeting will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or chat transcript. By continuing attendance with this virtual public meeting, you are consenting to participate in a recorded event.
- If you are not comfortable being recorded, please turn off your camera, keep your microphone muted, and refrain from chatting in the transcript box. Else you may choose to excuse yourself from the meeting. – If you prefer to excuse yourself, you can find the materials [mass.gov/sumner100](http://mass.gov/sumner100)

## Other Important Notes

- Please note that you are automatically muted upon entering the meeting. The meeting will be open to questions and answers at the end of the formal presentation.

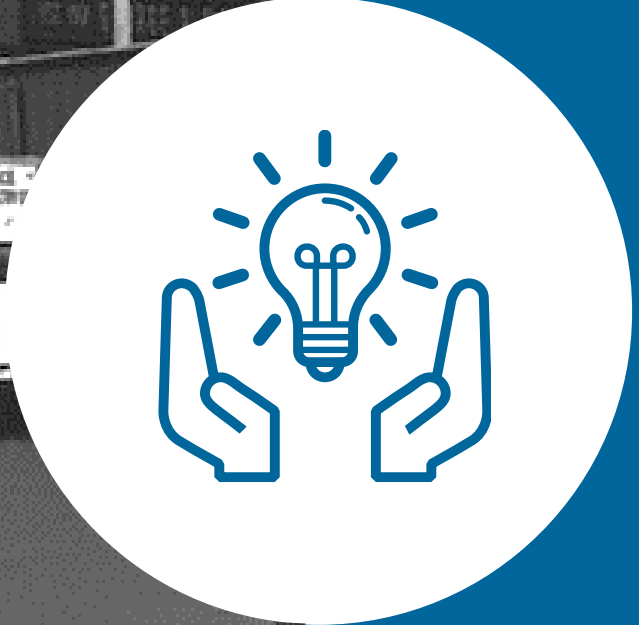
# Public Hearing Notification Process

- MassDOT is committed to providing multiple options for members of the public to learn about public hearings to increase participation.
- This hearing was noticed by the following means:
  - Inclusion on the MassDOT calendar website: 4/28/21
  - Notice provided to local cable access TV and Spanish language radio: 4/30/21
  - Notice run in the following newspapers:
    - *Lynn Journal* – 4/29/21
    - *Boston Globe* – 5/3/21
    - *East Boston Free Press* - 5/5/21
    - *Winthrop Transcript* – 5/6/21
    - *Revere Advocate* – 5/7/21
    - *North End Regional Review* – 5/7/21
    - *Post Gazette* – 5/7/21
    - *El Mundo* – 5/14/21
  - Flyer campaign in East Boston, the North End, and additional North Shore communities: 5/17 and 5/18
  - MassDOT Twitter: 5/18 and 5/19
  - Gov Delivery to 600 subscribers 5/1 and 5/18
  - EZ Pass Blast to 160,000 emails: 5/17

# Public Hearing Agenda

1. Welcome & Overview
2. Project Background
3. Project Overview
4. Alternatives Considered
5. Temporary Construction Impacts
6. Public Involvement and Opportunities for Input
7. Q & A

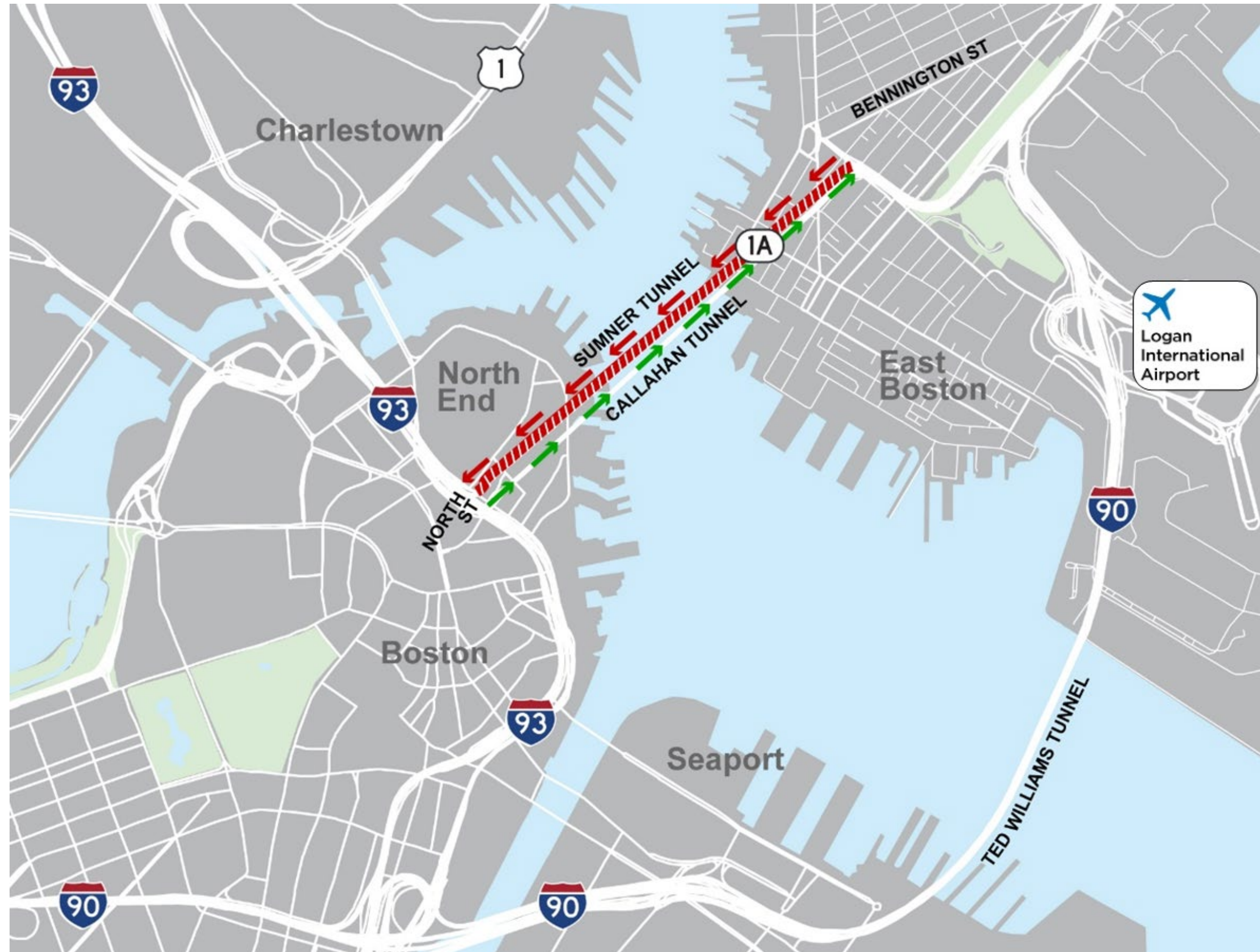




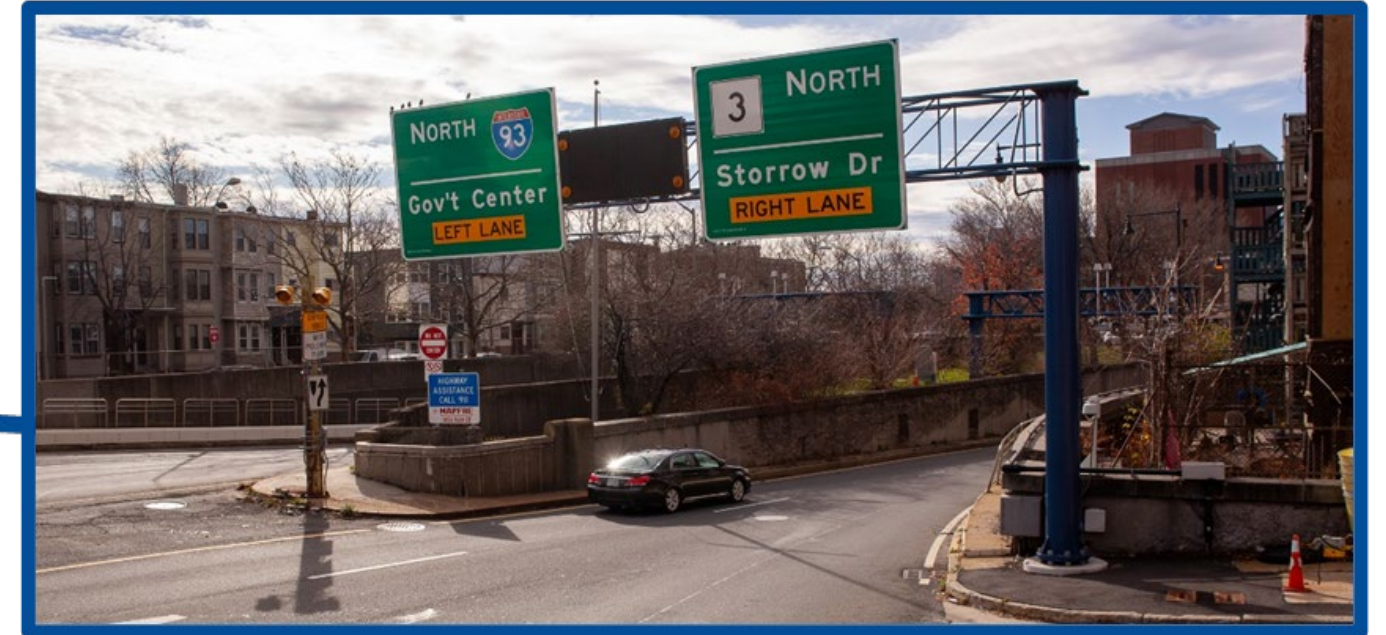
**Why was  
this project  
initiated?**

## Project Area

- Connects East Boston and Logan Airport to Downtown
- Links Route 1A to I-93 and Storrow Drive
- Major transportation route for local and regional drivers
- Carried over 39,000 vehicles a day in 2019
- Approximate project limits are 5,952 linear feet (a little longer than a mile)



# Tunnel Entrance and Exit





## 1934

The Sumner opens as a two-way tunnel



## 1991 - 2005

Tunnel exits changed during the Big Dig

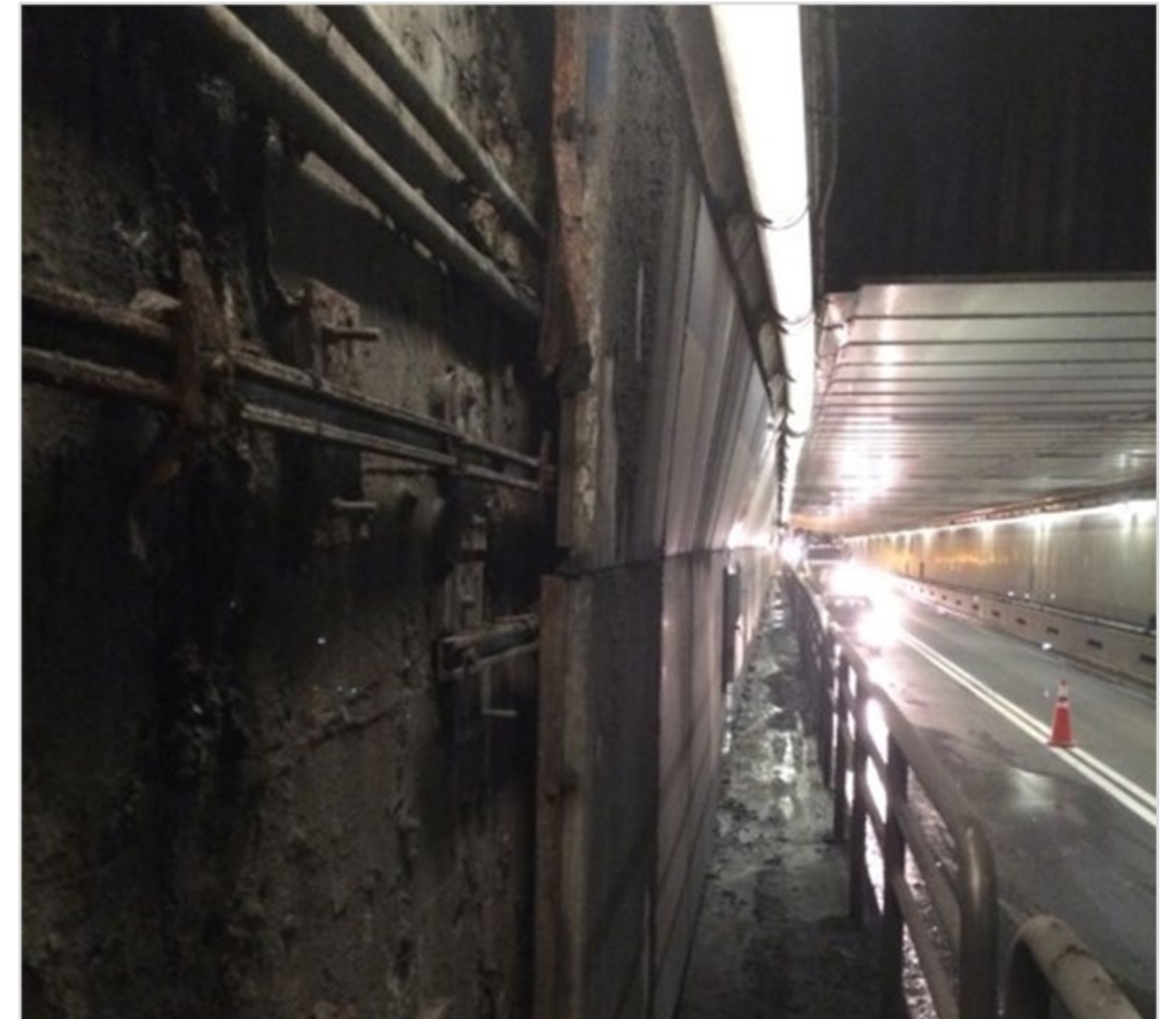


## 2017 - 2019

Entrance toll plaza removed



## Deteriorating Arch and Walls



Spalled concrete, rusted reinforcement, and damaged wall supports

## Deteriorating Ceiling



Spalled concrete, corroded rebar, and rusted support beams



**What do we  
want to  
accomplish?**

## Project Purpose

- The purpose of the proposed project is to address the structural and functional system deficiencies of the Sumner Tunnel using accelerated construction strategies to minimize the overall duration of impacts to the travelling public and surrounding communities.





What alternatives were considered?

# Alternatives Evaluated to Address Project Purpose

## 1. No Build Alternative

- Base condition with continued maintenance to address ongoing deterioration
- *Dismissed due to the tunnel's age and advanced state of structural deterioration*

## 2. Rehabilitation Alternative (preferred)

- Upgrade existing tunnel infrastructure to meet current design and safety standards
- *Extends the service life of the tunnel for another 75 years*
- *Improves safety and operational reliability for all roadway users*
- **The Rehabilitation Alternative** fulfills the project purpose of addressing the existing structural and functional system deficiencies of the Sumner Tunnel

# Temporary Traffic Management Strategies

High priorities placed on work zone safety, mobility and constructability

## A. Closure of one traffic lane in the Sumner Tunnel

- *Not a technically feasible approach due to physical constraints within the tunnel*

## B. Full closure of the Sumner Tunnel with temporary two-way traffic in Callahan Tunnel

- *Poses significant public safety risks to Callahan Tunnel users*
- *Complexed implementation due to ramp configurations at both portals*

## C. Weekend and Full closures of the Sumner Tunnel with off site detour routes via Ted Williams Tunnel (I-90 westbound), Route 1A northbound and Route 16 westbound







- *Preferred option based on work zone safety, limitation of local impacts, mobility, and constructability*



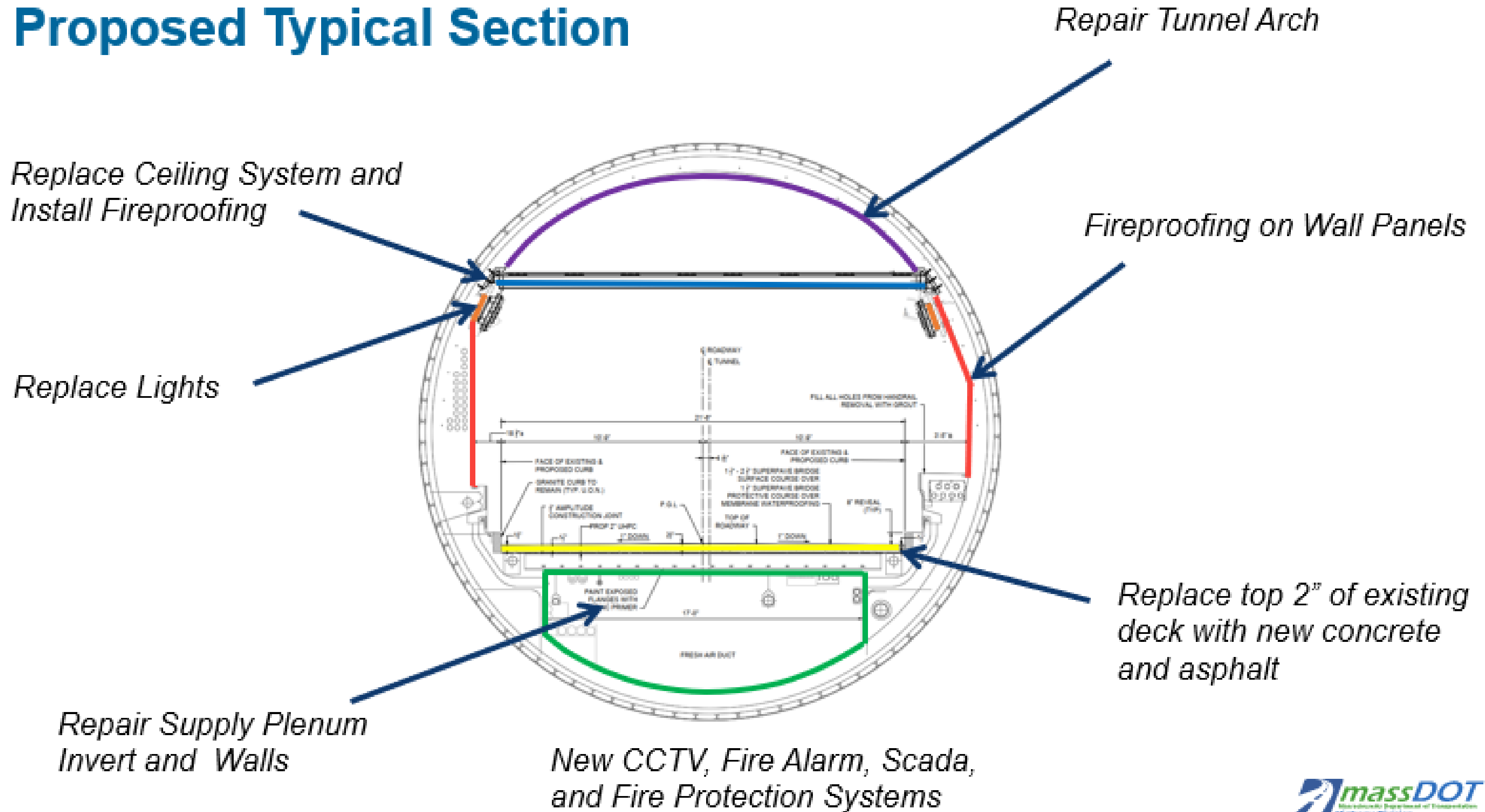


**What are the  
proposed  
project  
benefits?**

## Key Project Activities

-  • Remove and replace the tunnel ceiling and repair overhead arch
-  • Reconstruct tunnel deck and replace roadway surface
-  • Repair tunnel walls and install painted fireproof panels
-  • Install new LED lights inside tunnel
-  • Upgrade CCTV and fire alarm systems
-  • Install new utility conduits and cables

# Proposed Typical Section



## Key Project Benefits

- Improve tunnel safety
- Reduce emergency and scheduled tunnel closures for maintenance
- Smoother and more durable roadway surface
- Updated technology - Improve cell phone, GPS, and radio service inside tunnel
- Add new lighting and security systems



**What is the  
construction  
approach?**

## Design Build Project Delivery

- Design-Build Best Value procurement
  - Short-List Best Qualified Teams
  - Shorten project duration
  - Promote innovation by teaming the engineer and the general contractor
- MassDOT's contract with the Design Builder will stipulate requirements for traffic management while also providing the DB flexibility to develop their own approach to staging.
- Incentives / Disincentives
  - Ensures compliance with contract timelines

## Advantages of Weekend and Full Tunnel Closures

- Minimizes safety risks to tunnel workers and motorists
- Accelerates project completion
- Minimizes duration of disruption to local communities, businesses and road users
- Provides consistent detours and diversions for the traveling public
- Minimizes temperature and weather delays
- Allows for high quality of work



Winter Ice



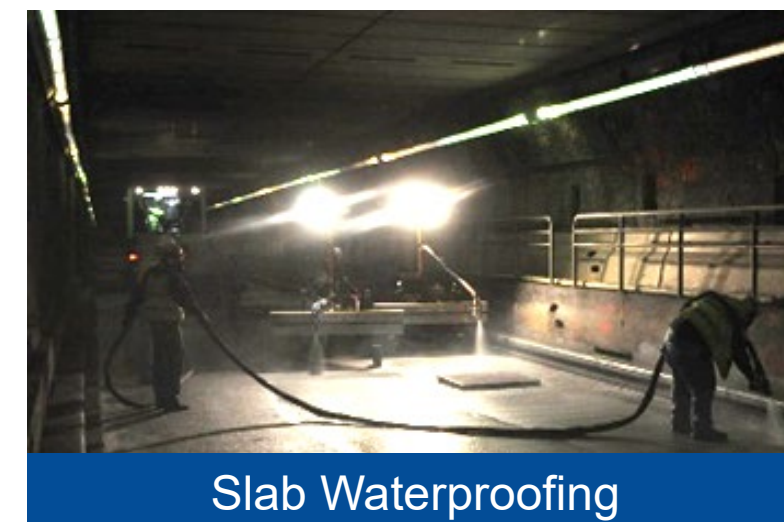
Robot Hydro Demo Wall



Slab Hydro Demolition



Shotcrete Repairs



Slab Waterproofing



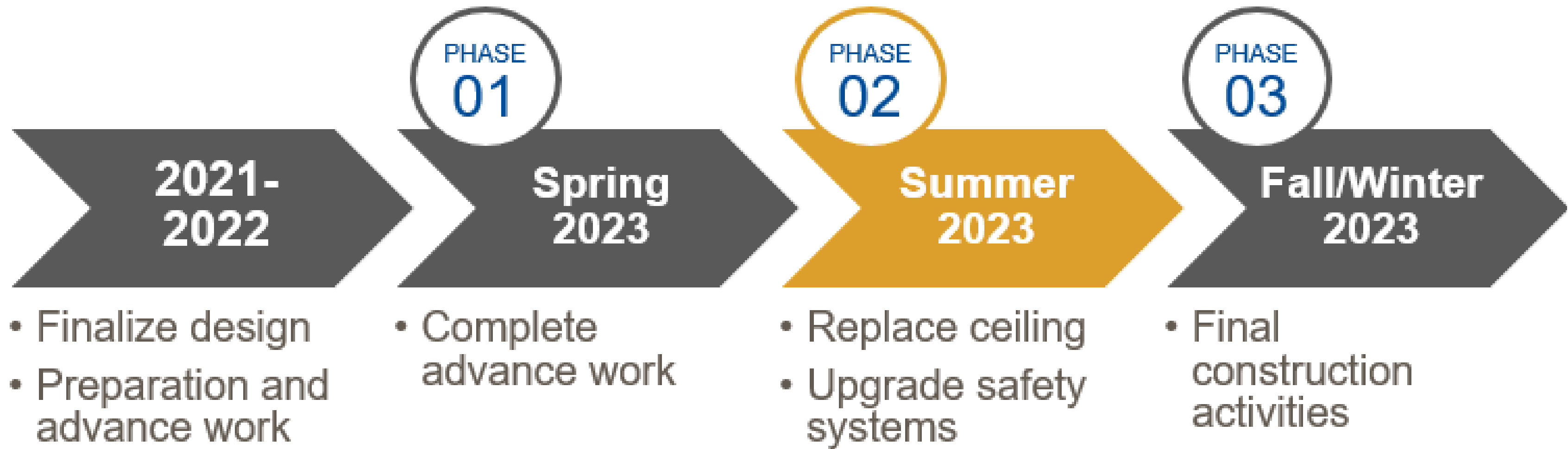
Final Product



How will road users be affected?



# Construction Phases



## Anticipated Traffic Impacts

- Local and regional vehicle detours during tunnel closures
- Coordinate with MBTA to ensure public transit options



## Coordinating Regional Projects

Sumner Tunnel project planning was put on hold in 2016 to minimize impacts on the traveling public during:

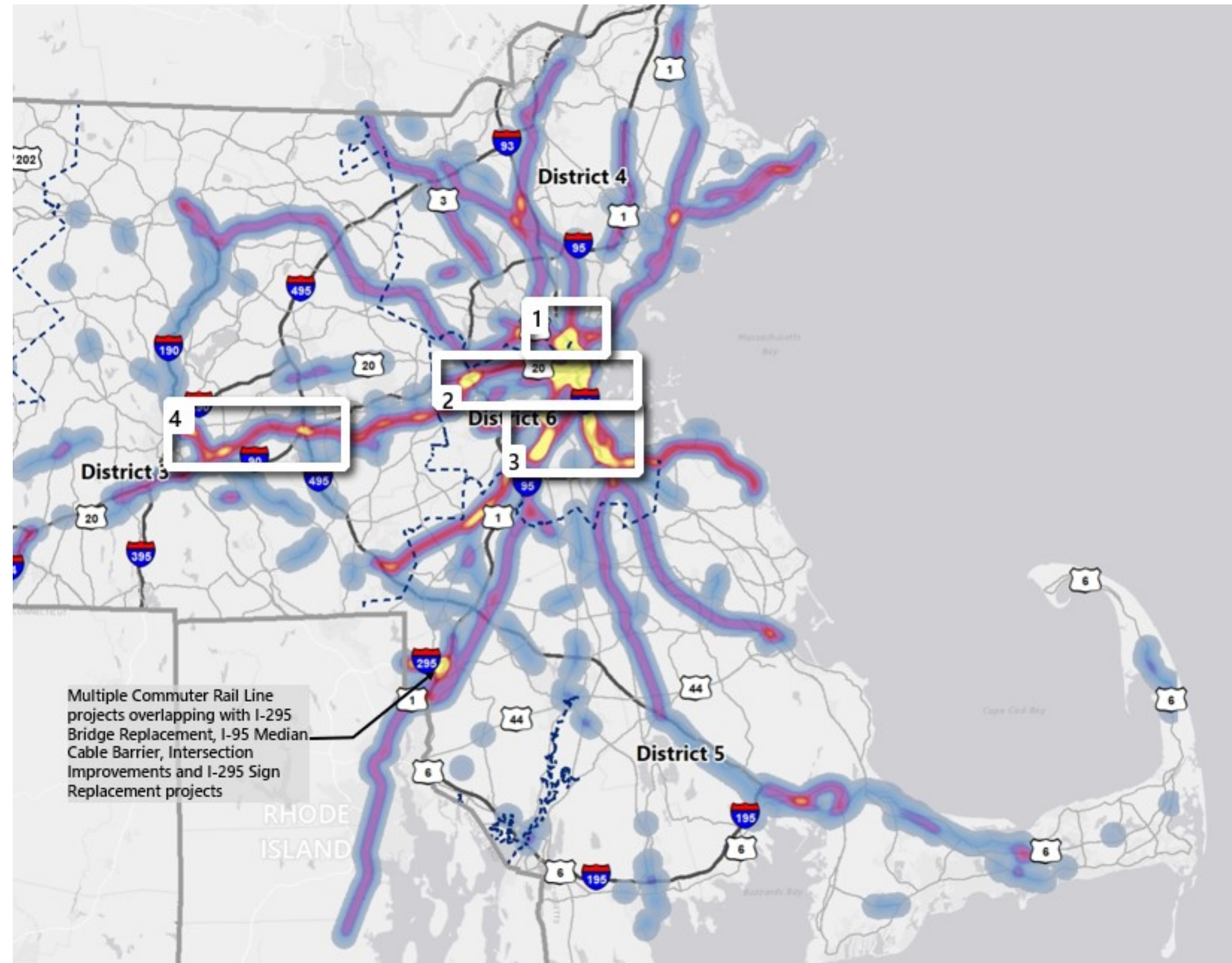
- MBTA Blue Line upgrades between Airport and Aquarium stations
- Tobin Bridge/Chelsea Curves rehabilitation
- North Washington Street Bridge
- Tobin Bus Lane
- Silver Line Improvements



## 2023 Project Density Heat Map and Hot Spots

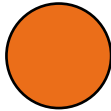
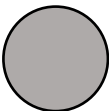
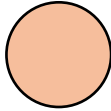

1. Northern Corridor
2. Western Corridor
3. Southern Corridors
4. Greater Worcester

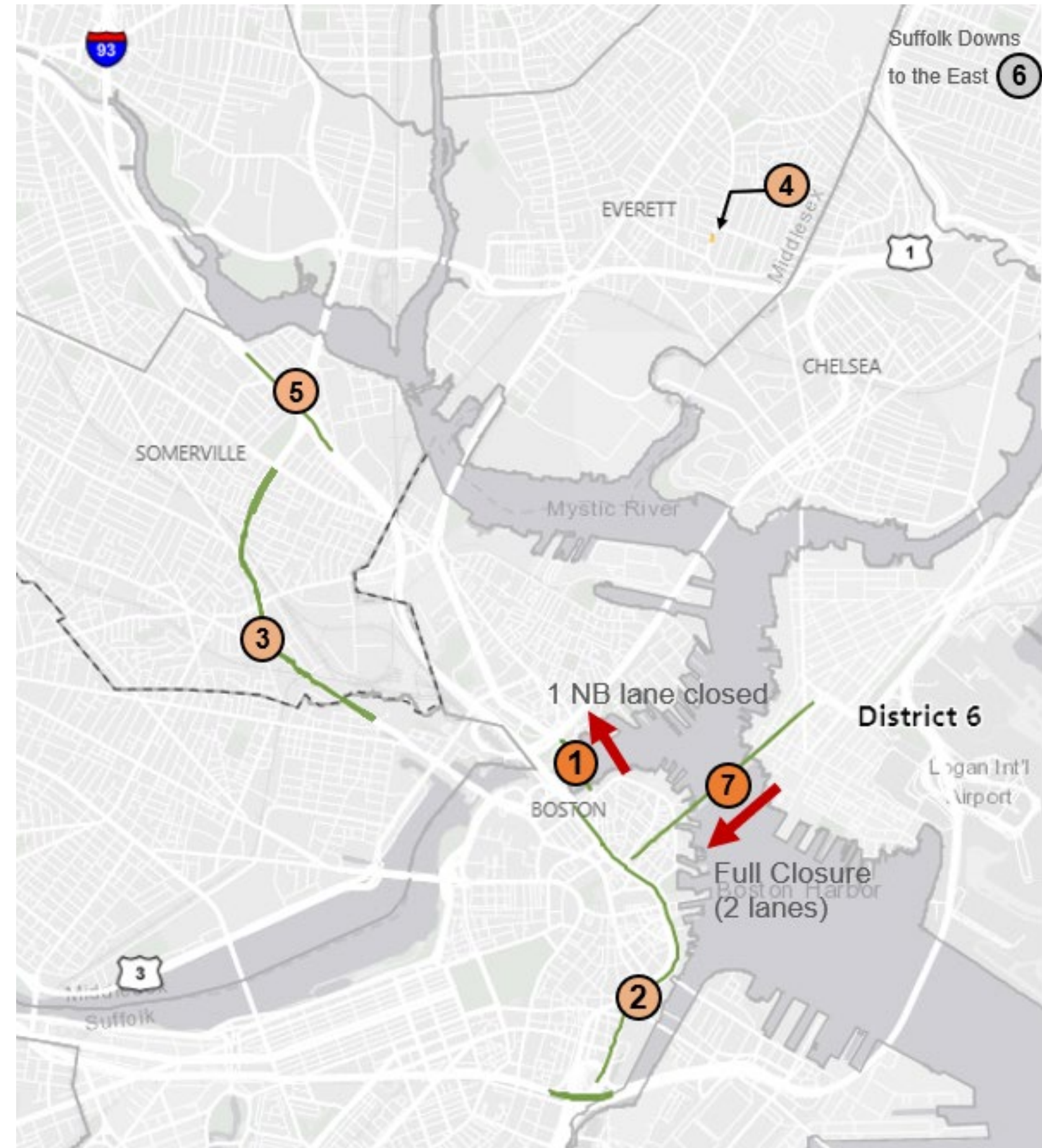
244 projects with roadway and transit impacts expected in 2023  
 (as of March 5, 2021)



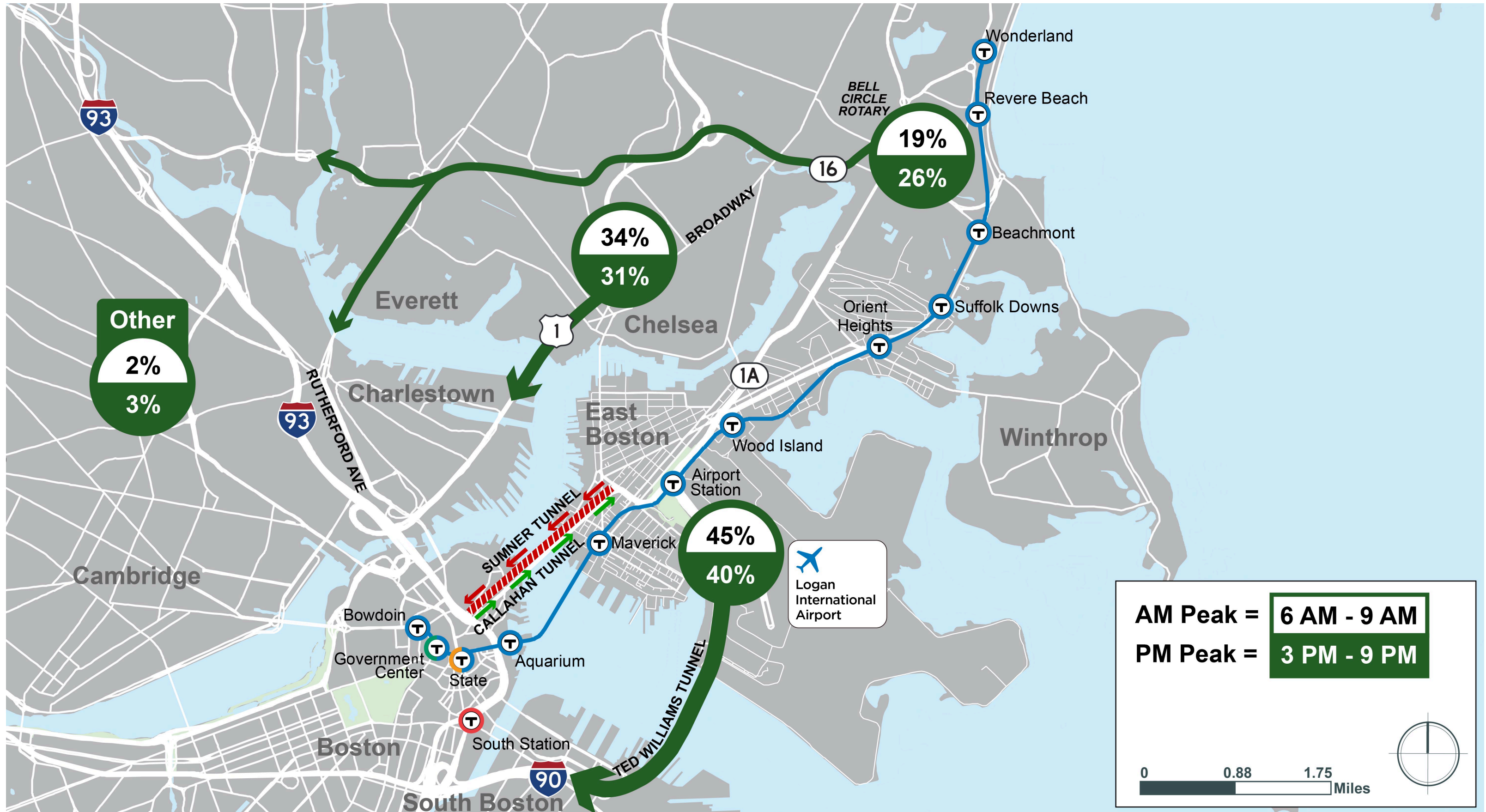
# 2023 Northern Corridor Hot Spot

- ① North Washington Street Bridge (MassDOT)
- ② Miscellaneous Ramps Microsilica Overlay Replacement (MassDOT)
- ③ Route 28 Resurfacing (MassDOT)
- ④ Ferry Street Reconstruction
- ⑤ Somerville Viaduct (MassDOT)
- ⑥ Suffolk Downs Mitigation (HYM Private Development)
- ⑦ Sumner Tunnel Roadway, Ceiling & Wall Construction (MassDOT)

	<b>Weekday Peak Period Impacts</b> (Includes 24/7 Impacts)		<b>Potential Capacity Constraints</b> TBD
	<b>Weekday Off-Peak Period Impacts</b> (Includes 24/7 Impacts)		<b>Lane Reductions</b>



# Estimated Distribution of Trip Diversions During AM and PM Peaks in Summer 2023



# Traffic Control to Support Proposed Detours

**Design package will include requirements for:**

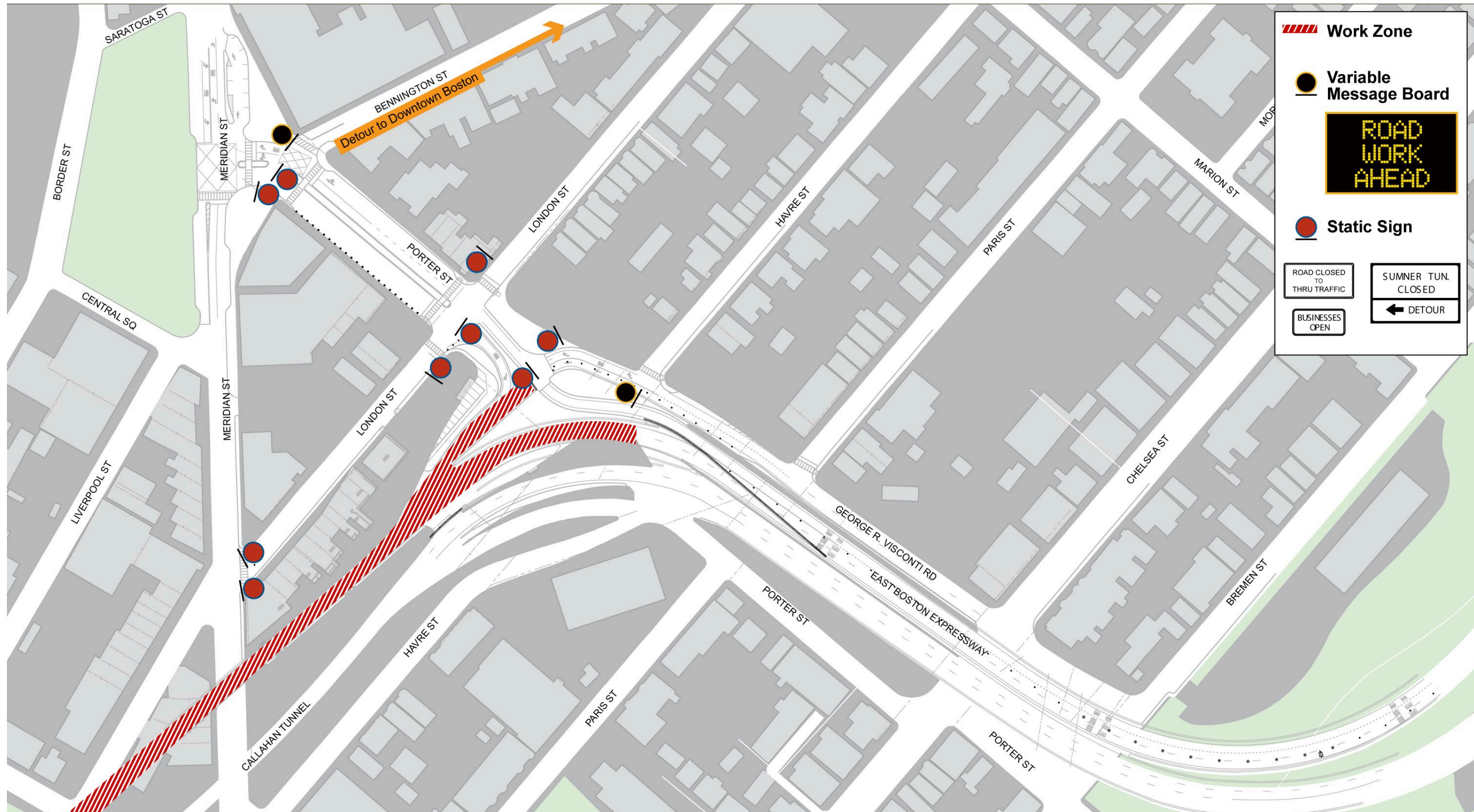
- Real-Time Traffic Management
- Time-to-destination data and messaging
- Real-time video monitoring
- Staff evaluation and monitoring in the field
- Traffic signal technologies for remote intersection adjustments
- Portable Changeable Message Signs (PCMS)
- Static signage locally and regionally

# East Boston to Downtown - Proposed Detour

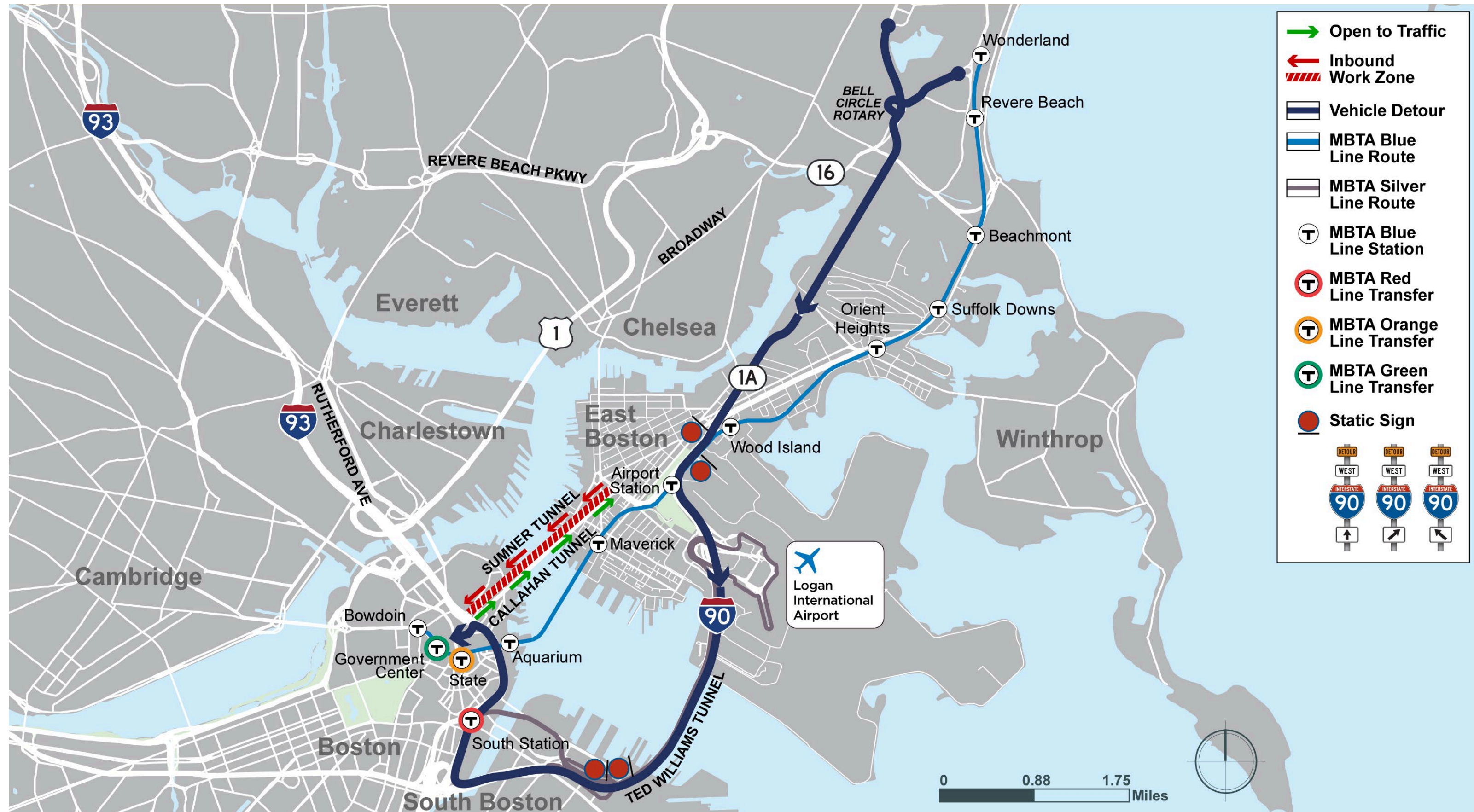




# East Boston to Downtown - Proposed Detour (Local Streets Detail)



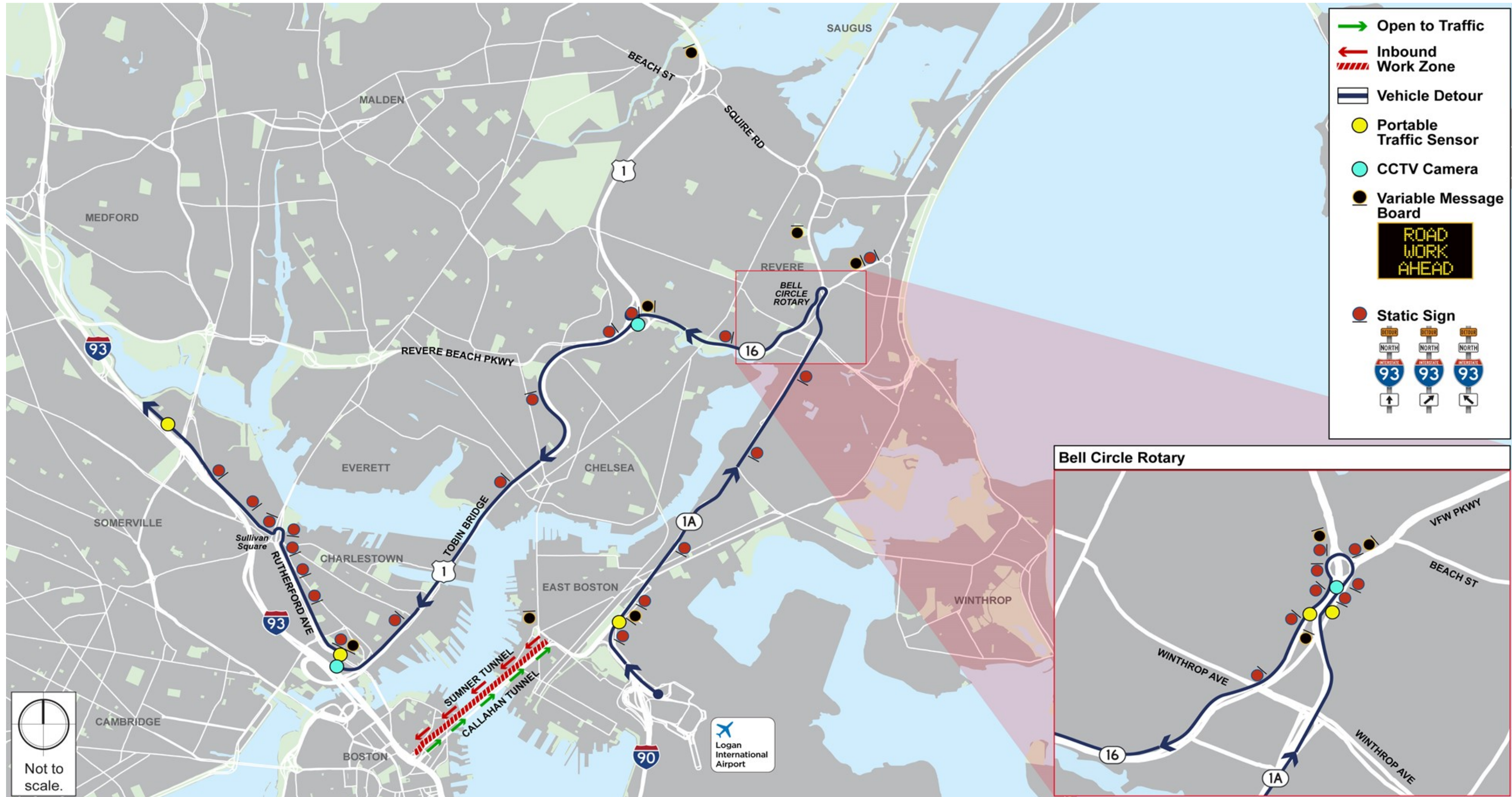
# Revere to Downtown - Proposed Detour



# Logan Airport to Downtown - Proposed Detour



# Logan Airport to I-93 North - Proposed Detour and RTTM





What are the environmental, cultural resource, and community impacts?

# Regulatory Approval Requirements

- **National Environmental Policy Act (NEPA)**
  - NEPA is triggered by funding assistance from FHWA (FY '21-25 TIP)
  - Project requires NEPA review and approval by FHWA
  - NEPA requires us to:
    - Evaluate environmental, social, and economic impacts
    - Identify and evaluate reasonable alternatives to the project
    - Develop feasible impact mitigation measures
  - Community engagement is integral to the NEPA Process – MassDOT is listening to you. Your input will be documented and incorporated where feasible
- **Section 106 of the National Historic Preservation Act**
  - Assess effects of the project on historic properties listed in or determined eligible for the National Register of Historic Places
  - Assessment to be led by MassDOT in consultation with Massachusetts Historical Commission

## Known Community Concerns

**Prior to starting work, the design-build team MUST submit:**

- Dust Control Plan- measures used to control airborne dust emissions within the work zone and along the public roadways outside the work zone.
- Noise Control Plan- assess noise impacts from equipment and activities at sensitive areas in the North End & East Boston based on baseline conditions established prior to construction.
- Vibration Plan- develop specifications and monitor throughout construction
- Implement a Rodent Control Program throughout the project work zone area

\*\*\*An email address has been created to allow the public to submit questions, comment and concerns. Please reach out to us at [Sumner100@dot.state.ma.us](mailto:Sumner100@dot.state.ma.us)

# Known Community Concerns

## Public Safety-

- Briefings with Boston Fire, Police and EMS
- Briefings with Emergency Responders of Surrounding Communities

## Traffic Diversions and Delays-

- Work to keep regional traffic off local streets
  - Coordinate with Boston Transportation Department
  - Coordinate with GPS Mapping Services
  - Interface with affected Agency Roadways: MassPort & DCR
  - Implement Real Time Traffic Management System

\*\*\*We will work across agencies and with communities to provide a balanced approach to managing traffic, with continued opportunities for public input at ongoing public meetings





**How will  
we keep you  
informed?**

# Sumner Tunnel Public Involvement

As the schedule dictates the construction approach and closures,

## WE WANT YOUR INPUT ON:

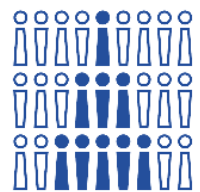
- Construction activities during overnight hours
- Detour routes
- Options for directional signage
- Public outreach ahead of construction



# Key Stakeholders



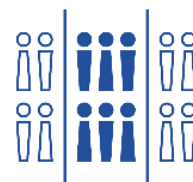
Abutting Residents and Property Owners



Area Residents



Business and Economic Development Groups



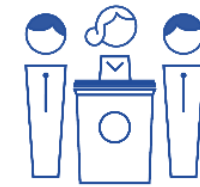
Community Groups and Organizations



Commuters



Boston Logan Airport Travelers



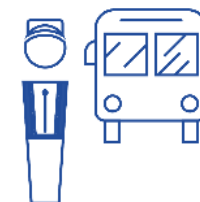
Elected Officials



Massport and other Municipal and Government Agencies



Public Safety and Emergency Response Services



Transportation Groups and Operators



Trip Directions and Mapping Providers



Are we missing anyone?

# Spring 2021 Public Outreach

Host Meetings	Direct Outreach	Provide Information
<ul style="list-style-type: none"> <li>• Virtual legislative briefings</li> <li>• Virtual stakeholder and community group briefings</li> <li>• Virtual public meetings/hearings</li> <li>• Virtual Open Houses</li> </ul>	<ul style="list-style-type: none"> <li>• Mailings to abutters</li> <li>• Informational posters</li> <li>• Emails to EZ-Pass holders</li> <li>• Outreach to Logan Express, Regional Bus Companies, and Rental Car Agencies</li> <li>• Outreach to community groups</li> <li>• Outreach to large businesses</li> <li>• Neighborhood pop-ups</li> </ul>	<ul style="list-style-type: none"> <li>• Updates and project information to partners and stakeholders</li> <li>• Dedicated project website</li> <li>• Emails will provide regular project and traffic updates</li> <li>• MassDOT social media posts</li> <li>• Press briefings</li> <li>• Press releases</li> <li>• Radio</li> </ul>

## Next Steps

### May 2021

- Design Public Hearing
- Community pop ups
- Provide more details and gather input on construction plan and detours

### June 2021

- Community pop ups
- Design public information meetings
- Virtual open house
- Briefings to community groups available upon request

**Raise awareness and gather public input**

# Anticipated Construction Period Outreach

Host Meetings	Direct Outreach	Provide Information
<ul style="list-style-type: none"> <li>• Legislative briefings</li> <li>• Town official briefings</li> <li>• Stakeholder and community group briefings</li> <li>• Public meetings</li> <li>• Open houses</li> <li>• <i>Provide physical and virtual options</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mailings to abutters</li> <li>• Informational posters</li> <li>• Emails to EZ-Pass holders</li> <li>• Outreach to Logan Express, Regional Bus Companies, and Rental Car Agencies</li> <li>• Outreach to community groups</li> <li>• Outreach to large businesses</li> <li>• Outreach to sports and cultural venues</li> <li>• Neighborhood pop-ups</li> </ul>	<ul style="list-style-type: none"> <li>• Updates and project information to partners and stakeholders</li> <li>• Revise project website to delivery construction information</li> <li>• Emails will provide regular project and traffic updates</li> <li>• MassDOT social media posts</li> <li>• Press briefings</li> <li>• Press releases</li> <li>• Radio</li> <li>• Public access cable</li> <li>• VMS and static signage</li> </ul>

## Stay Involved



Visit the project website to stay informed and sign up for the project updates:

- [mass.gov/sumner-tunnel-restoration-project](https://mass.gov/sumner-tunnel-restoration-project)



Email the project team with feedback and questions:

- [\*\*Sumner100@dot.state.ma.us\*\*](mailto:Sumner100@dot.state.ma.us)



# Questions and discussion



# Share Your Questions and Comments



- “Raise your hand” to be unmuted for verbal questions



- Submit your questions and comments using the chat panel



- Please state your name before your question



- Please share only **1** question or comment at a time, limited to **2** minutes, to allow others to participate.



- To ask a question via phone, dial \*9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn.



# *Thank You*

## *Sumner Tunnel Centennial Project*

Sign UP list - <https://www.mass.gov/service-details/sumner-tunnel-restoration-stay-informed>

Visit the project website:

- <https://www.mass.gov/sumner100>

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- [Sumner100@dot.state.ma.us](mailto:Sumner100@dot.state.ma.us)