

# North Washington Street Bridge

## Public Information Meetings

November 27, 28, and 29, 2018 at the Nazzaro Community Center (North End), Shriners Hospital for Children (West End), and Knights of Columbus (Charlestown)

# Agenda



- Project Overview
- Construction & Staging
- Construction Impacts
- Traffic Management
- Public Outreach
- Next Steps
- Questions & Answers

# Project Overview



# Contract Information



## Notice to Proceed (NTP)

- August 8, 2018

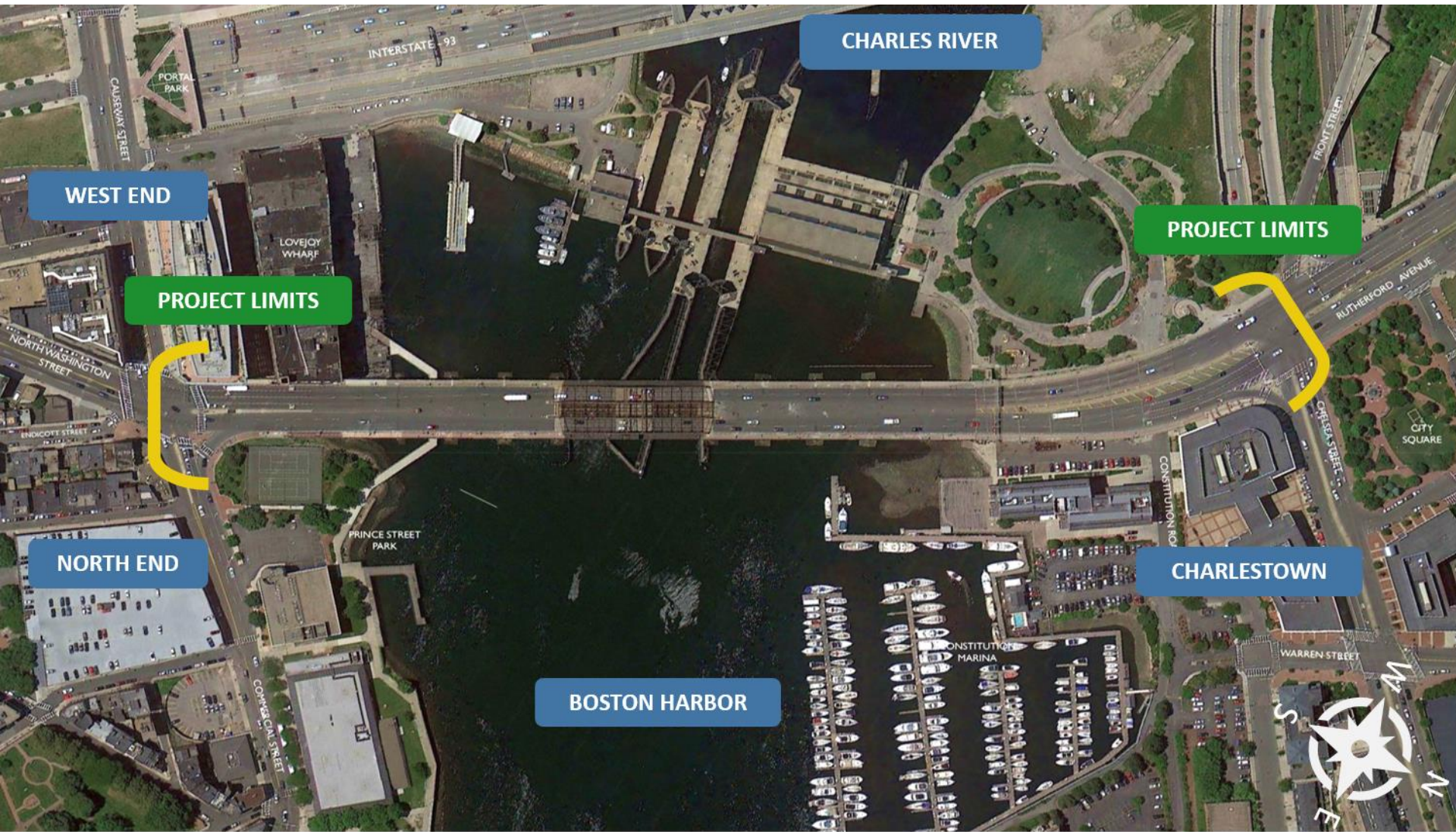
## Construction Duration

- Original Design Phase Contract: 5 years
- New Construction Phase Contract: 4 years and 6 months

## Dollar Amount

- \$176,777,388.50

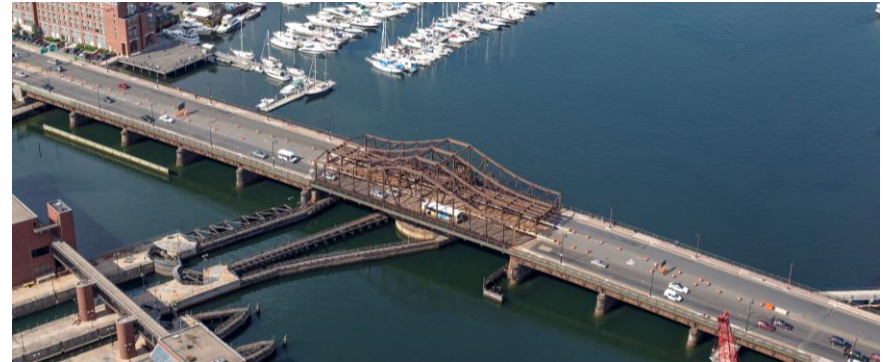
# Location & Context



# The Bridge Now



- Multiple attempts to rehabilitate the structure over the course of 100 years were deemed imprudent and impracticable
- The deteriorating bridge costs \$3-5 million each year to maintain
- It has been determined that the bridge must be replaced to ensure safety, accessibility, and long-term serviceability



# A Bridge for the 21<sup>st</sup> Century

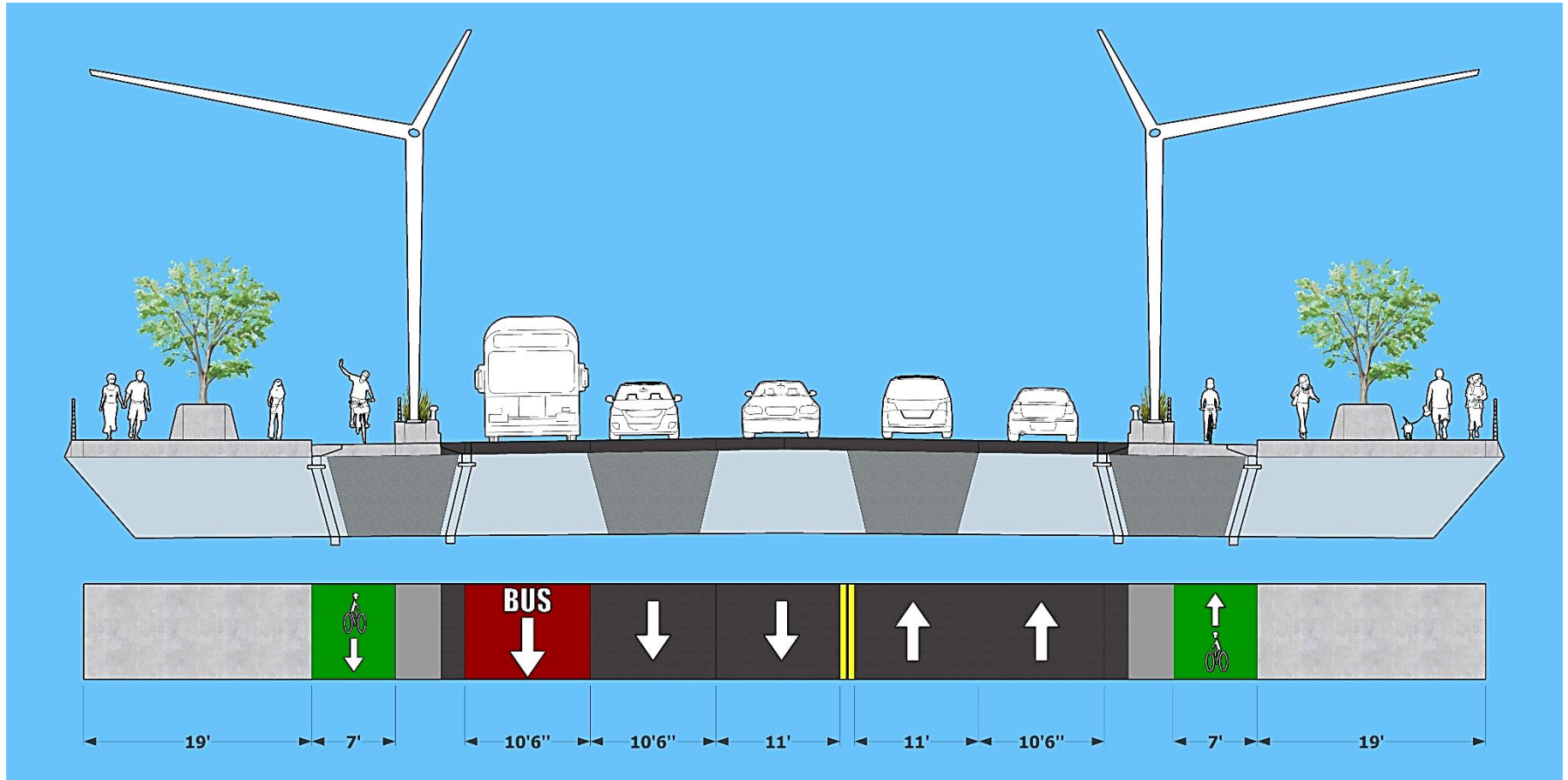


The new bridge will feature:

- Two vehicle lanes in each direction
- One dedicated inbound bus lane
- Separated cycle tracks
- Expanded sidewalks
- A wide scenic overlook and seating area midway across the bridge
- A widened navigation channel for boats and watercraft
- Architectural design elements that visually complement the iconic Zakim Bridge



# New Bridge Cross-section



# General Contractor & Coordinating Agencies



## Construction Contract Administrator:

- MassDOT Highway Division, District 6

## General Contractor:

- J.F. White Contracting Co.



## Coordinating Agencies:

- City of Boston
  - PWD
  - BTB
  - BPS
- Boston Police
- Boston Fire
- Boston EMS
- MBTA
- MWRA
- DCR
- National Park Service
- MA State Police
- US Coast Guard
- Army Corps of Engineers

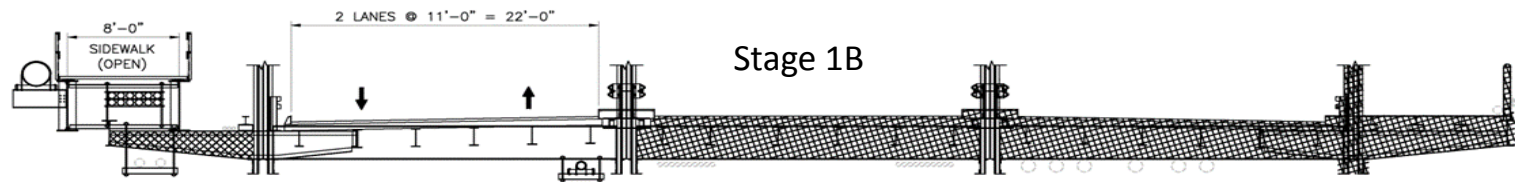
# Construction & Staging



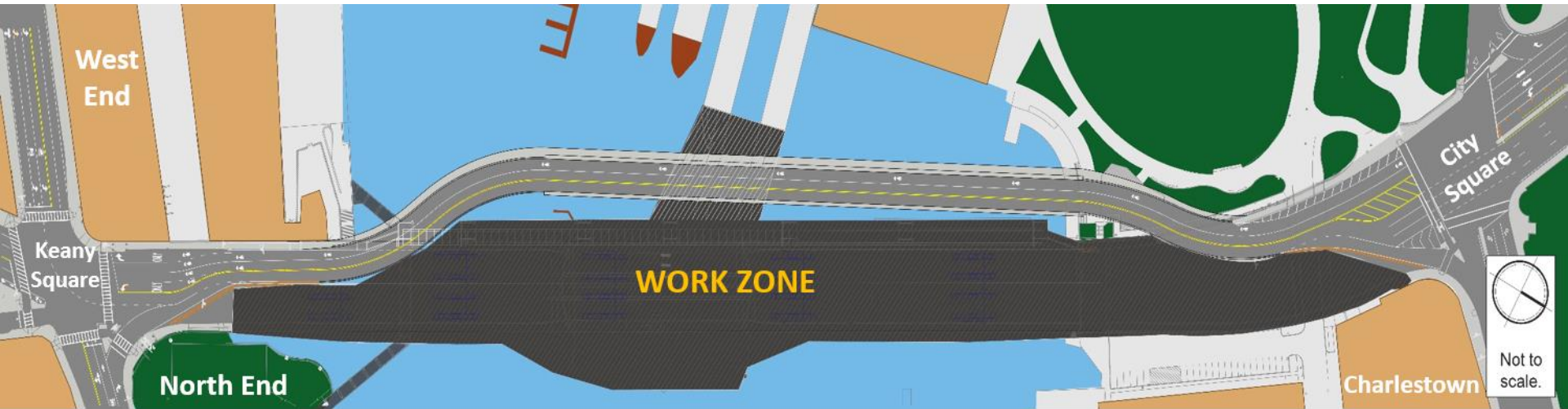
# Original Staging Plans



- 6 construction stages were planned during the design phase:
  - 1A, 1B, 2, 3, 4A, and 4B
- Stage 1B required reducing traffic lanes to one lane in each direction and would have significantly impacted traffic flow for a period of three weeks beginning August 2019
- The project team explored innovations that eliminated the necessity for this stage



# Temporary Bridge



# Temporary Bridge From Lovejoy Warf



# Temporary Bridge Benefits

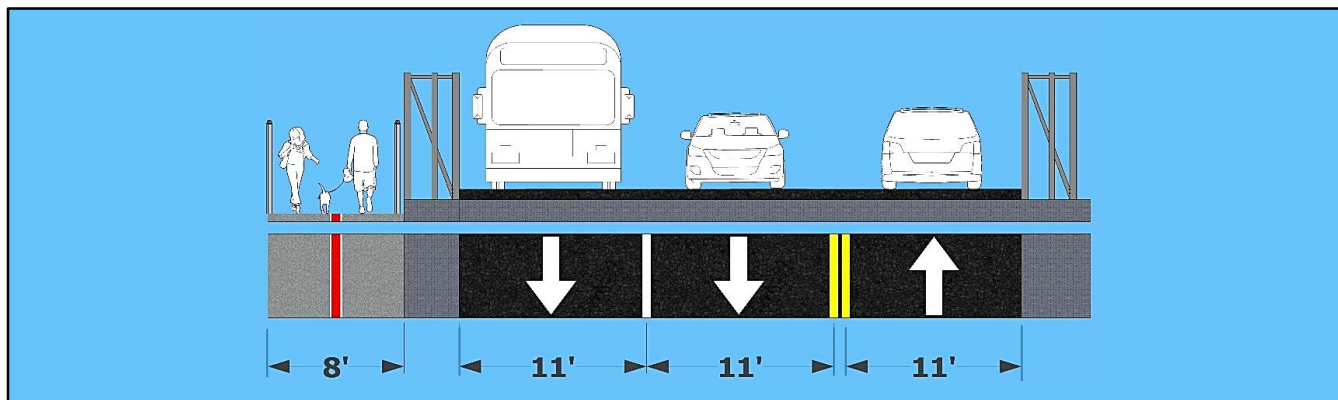


- Eliminates Stage 1 B (one lane in each direction)
- Maintains access for vehicles, pedestrians, bikes, and buses with two inbound lanes, one outbound lane, and one sidewalk
- Expedites construction by approximately 6 months
- Expedites bridge demolition and the installation of 40 drilled shafts
- Does not require trestle adjacent to Charlestown Marina
- Reduces the number of major traffic and pedestrian shifts (5 to 3)
- Reduces nighttime lane closures
- Reduces need to use the structurally deficient bridge for traffic
- Provides a new public playground away from the active construction site

# Temporary Bridge Pedestrian Accommodations



- Accommodations equal to those in original contract
  - Cyclists may operate within the righthand vehicle travel lane on a paved surface similar to a normal street
- Temporary bridge will include one 8' wide sidewalk
  - Simplified routes and fewer shifts from side to side
  - 8' at northern tie-in and 6'6" at southern tie-in
  - Due to 6'6" section at the southern tie-in, cyclists are requested to dismount to use the sidewalk
- Freedom Trail marked and carried across bridge



# Temporary Bridge Fly Through



At this point in the presentation, the project team showed a video rendering of the temporary bridge during Construction Stage 2.

To access the video on MassDOT's YouTube channel, please click here: <https://www.youtube.com/watch?v=ypPlinmThFI>

# Dog Park and DCR Playground Relocation



- JF White will construct a new playground and dog park
- Design, size, and details currently under development in coordination with DCR



# Staging Durations



## Original Durations

Stage 1: *12 months*

Stage 1B: *1 month*

Stage 2: *21 months*

Stage 3: *21 months*

Stage 4A: *2 months*

**+** Stage 4B: *3 months*

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**=** *60 months*

## New Durations

Stage 1: *15 months*

Stage 2: *23 months*

Stage 3: *10 months*

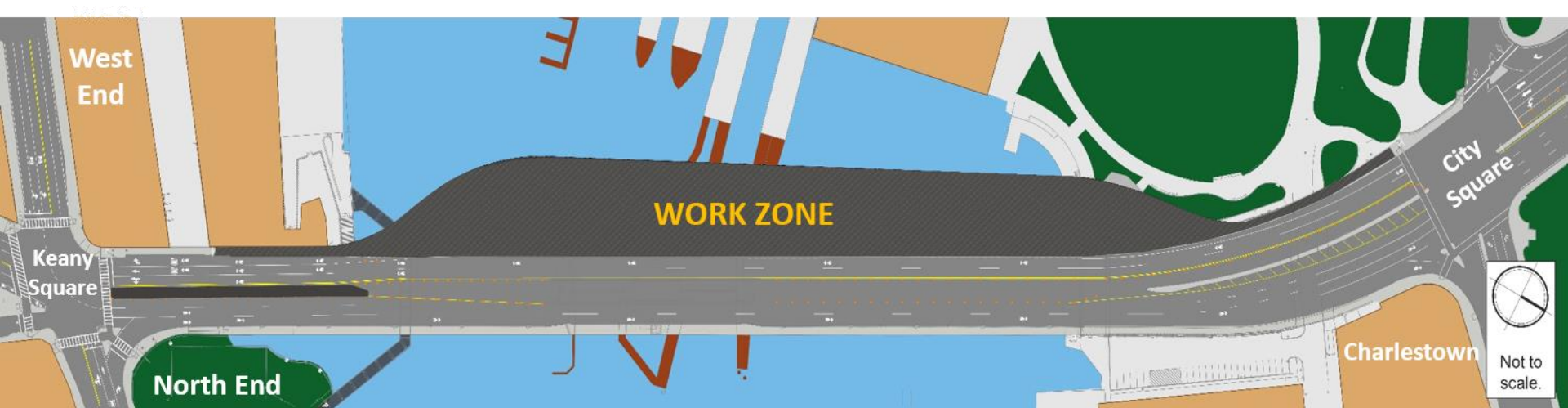
**+** Stage 4: *6 months*

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**=** *54 months*

# Stage 1: Current Configuration

Aug. 2018 – Nov. 2019



- Relocation of utilities
- Removal of the west sidewalk
- Construction of temporary bridge; to be completed in fall 2019

# Stage 2:

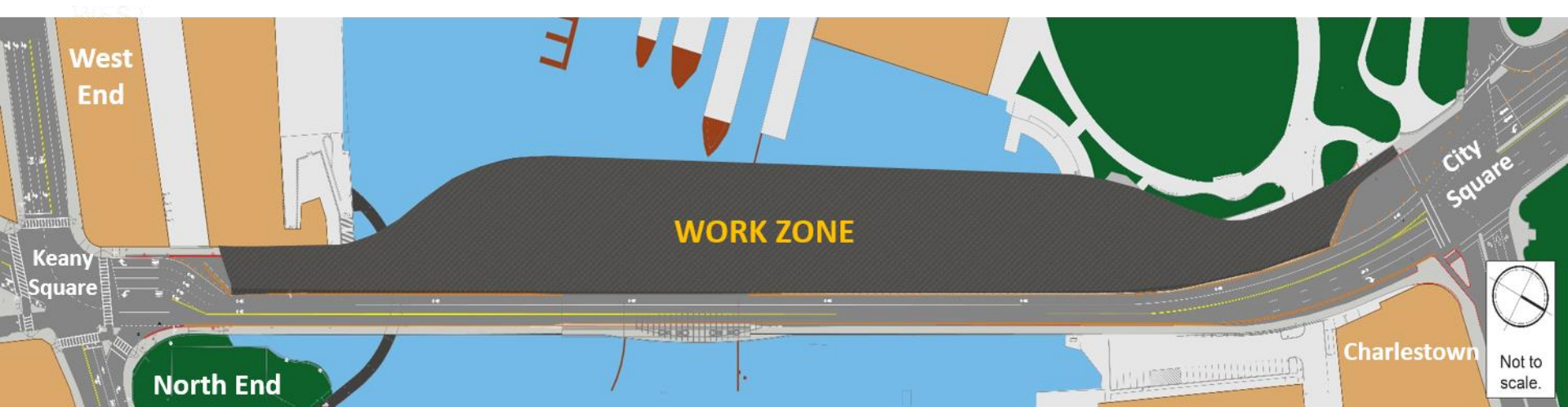
Nov. 2019 – Oct. 2021



- Traffic and pedestrians diverted to temporary bridge beginning December 2019 through December 2021
- Demolition of old bridge and construction of new bridge except for the southwest corner

# Stage 3:

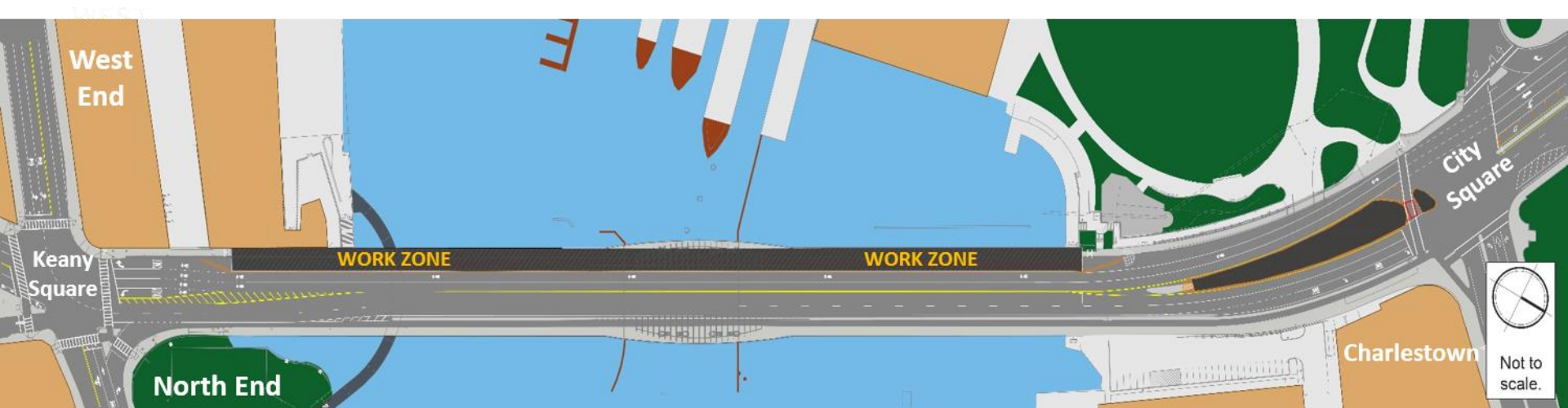
Nov. 2021 – Aug. 2022



- Demolition and construction of the southwest corner of the bridge
- Traffic and pedestrians relocated to east side of new bridge

# Stage 4:

Sept. 2022 – Feb. 2023



- Removal of the temporary bridge
- Completion of the sidewalks, landscaping, trellis, and barriers

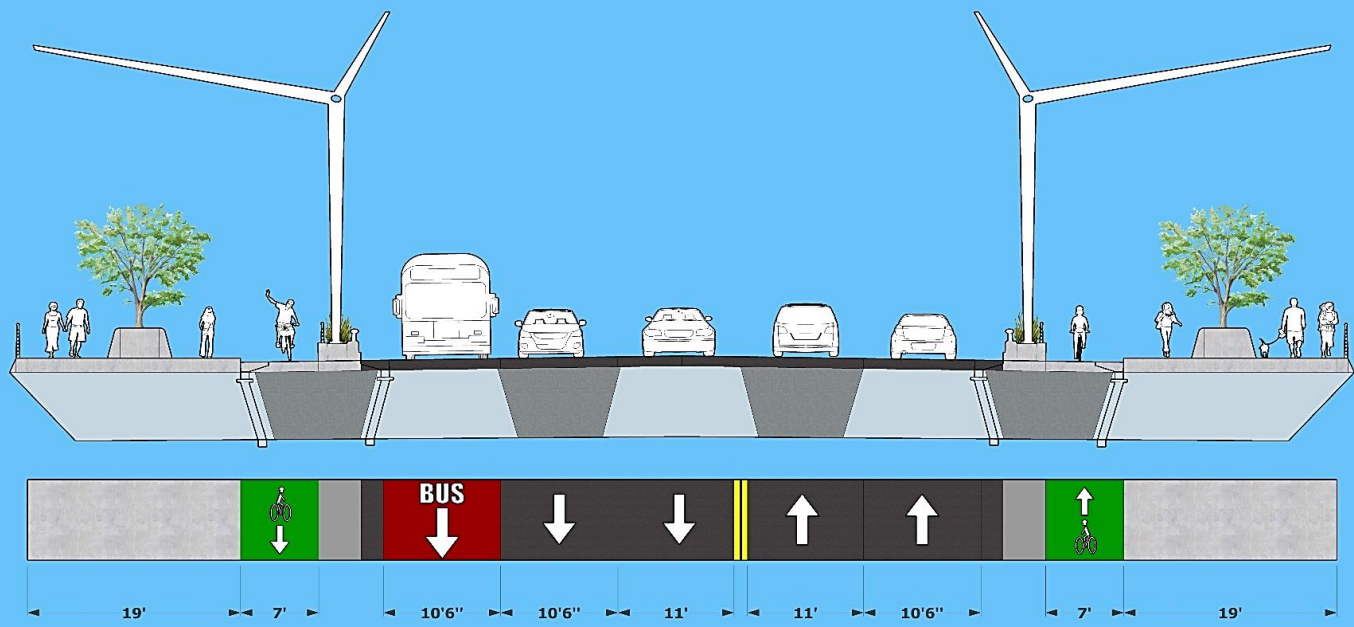
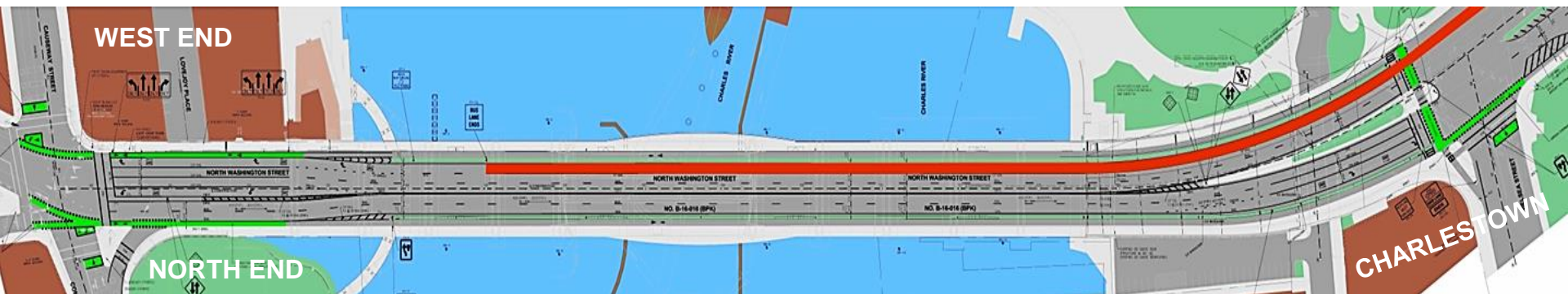
# Traffic Control Plans:

## Original Design Phase Contract vs New Construction Phase Contract



Original Design Phase Contract					New Construction Phase Contract				
Stage	Duration (Month)	Pedestrians (Location)	Vehicle (Lanes)	Vehicle (Location)	Stage	Duration (Month)	Pedestrians (Location)	Vehicle (Lanes)	Vehicle (Location)
1A	12	Existing Bridge East	4	Existing Bridge	1	15	Existing Bridge East	4	Existing Bridge
1B	1	Temp Bridge West	2	Existing Bridge West					
2	21	Existing Bridge East	3	Existing Bridge East	2	23	Temp Bridge West	3	Temp Bridge & SW of Existing
3	21	Temp Bridge West	3	New Bridge West	3	10	New Bridge East	3	New Bridge East
4A	2	New Bridge East	4	New Bridge	4	6	New Bridge East	4	New Bridge
4B	3	New Bridge East	4	New Bridge					
Total	60	Minimum Lanes = 2 Maximum = 4			Total	54	Minimum Lanes = 3 Maximum = 4		

# Final Condition



# Construction Impacts



# Working Hours



- Project working hours will be 7AM to 10PM
- It is expected the Contractor will work overnight between 10PM and 7AM as necessary
  - All stages will require some overnight work, especially Stage 1 for utility relocation and upgrades and Stage 3 for steel erection
- Some periods of 24-hour work are expected to speed construction during steel erection and traffic shifts

# Construction Noise



- Maximum noise levels are specified in the contract
- Baseline measured against existing conditions
- Noise limits vary across day, evening, and night hours
  - Day: 7AM - 6PM
  - Evening: 6PM - 10PM
  - Night: 10PM - 7AM
- It is the Contractor's responsibility to comply to the contract specifications and the City of Boston noise ordinance

# Noise Protections



Proactive noise protections are readied prior to work

- Noise monitoring of project area
- Shielding noisy operations with noise blankets and white noise back up alarms
- Strategic means and methods
  - Machinery types and use
  - Scheduling operations

# Dust Protections



## Proactive dust protections

- Contractor health and safety plan includes dust control on site
- During bridge demolition activities, water will be used to minimize dust emissions
- Dust monitoring will be conducted during dust producing activities

# Additional Protections



- Hazardous Materials (asbestos, lead)
  - Contractor will follow municipal, state, and federal guidelines for the use, transportation, and disposal of hazardous materials
- Water Quality
  - Contractor will use controlled demolition of old bridge
  - Certain activities will be limited for fish runs
- Rodents
  - Contractor will implement trap and bait program throughout construction

# Traffic Management



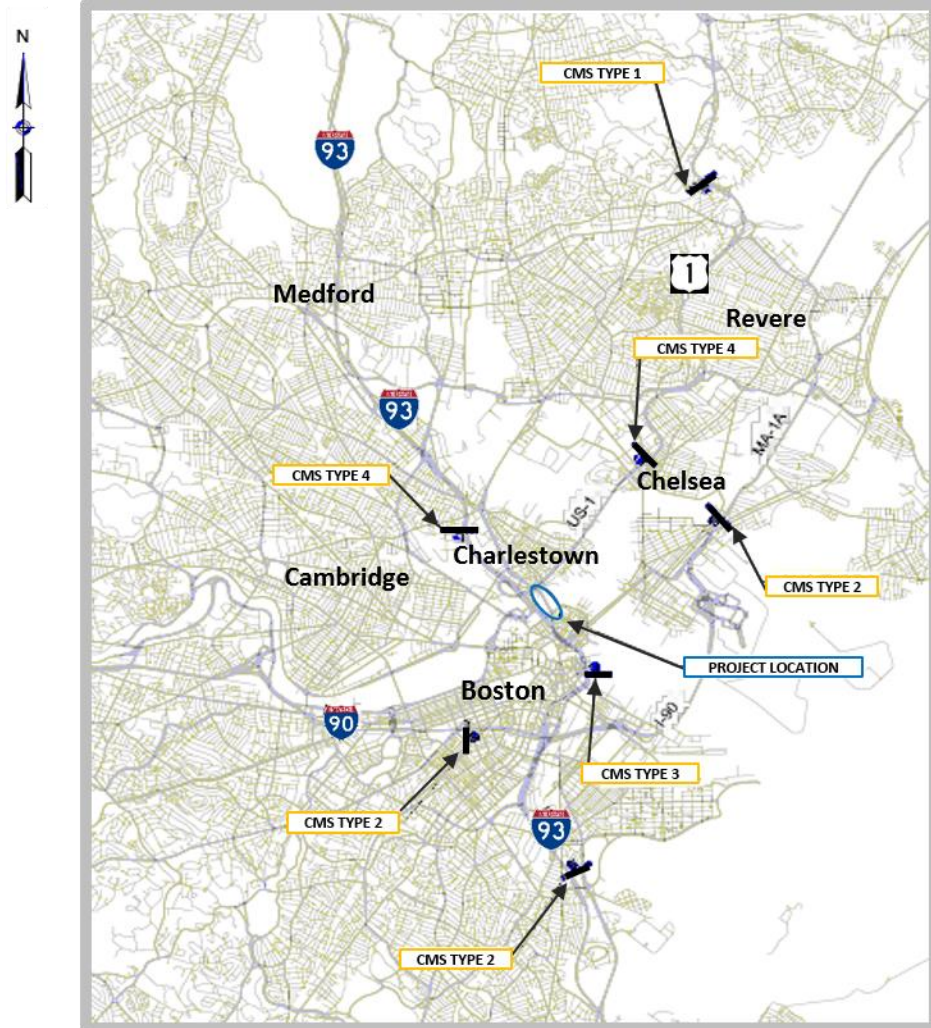
# Traffic Management Goals



1. Provide early and accurate information so drivers make smart decisions
2. Reduce regional traffic to maximize limited bridge capacity
3. Provide traffic details at major intersections as needed:
  - Keany Square
  - City Square
  - Along Chelsea Street



# Regional Signage



## CMS TYPE 1 Legend

TWO WEEKS PRIOR TO CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	CONST
BRIDGE	BEGINS
IN BOSTN	MM DD YY

DURING CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	CONST
BR UNDER	SEE ALT
CONSTR.	ROUTE

## CMS TYPE 2 Legend

TWO WEEKS PRIOR TO CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	BEGINS
BRIDGE	MM DD YY
CONST	

DURING CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	93 NB
BR UNDER	E PECT
CONSTR.	DELAYS

## CMS TYPE 3 Legend

TWO WEEKS PRIOR TO CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	BEGINS
BRIDGE	MM DD YY
CONST	

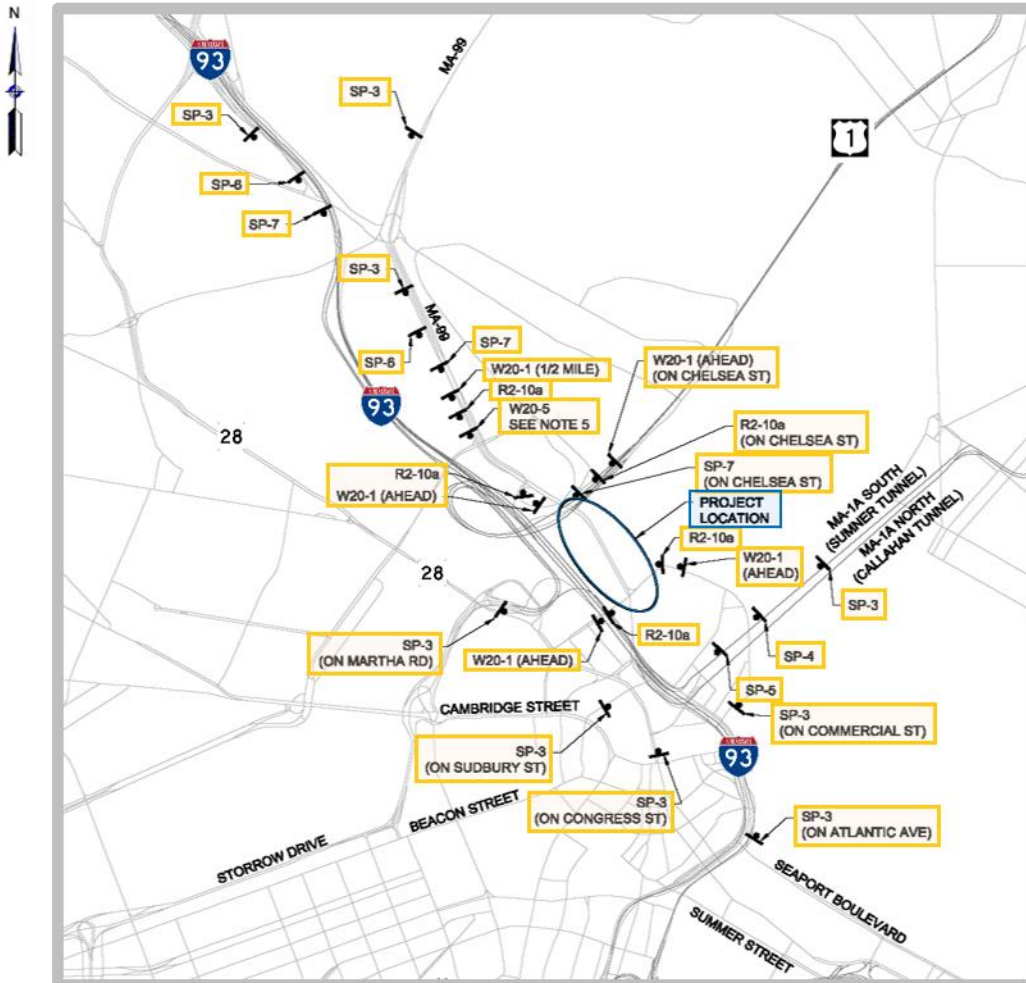
DURING CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	93 NB 99
BR UNDER	NB E PCT
CONSTR.	DELAYS

## CMS TYPE 4 Legend

TWO WEEKS PRIOR TO CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	BEGINS
BRIDGE	MM DD YY
CONST	

DURING CONSTRUCTION	
SCREEN 1	SCREEN 2
CHRLTOWN	99 SB
BR UNDER	E PECT
CONSTR.	DELAYS

# Local Signage



## SP-3 Legend

CHARLESTOWN  
BRIDGE CONST.  
EXPECT DELAYS

## SP-4 Legend

FOR CHARLESTOWN  
USE ALT ROUTE

## SP-5 Legend

ALT ROUTE  
USE I-93 NORTH

## SP-6 Legend

FOR NORTH END  
OR TD GARDEN  
USE ALT ROUTE

## SP-7 Legend

ALT ROUTE  
USE LEVERETT  
CONNECTOR

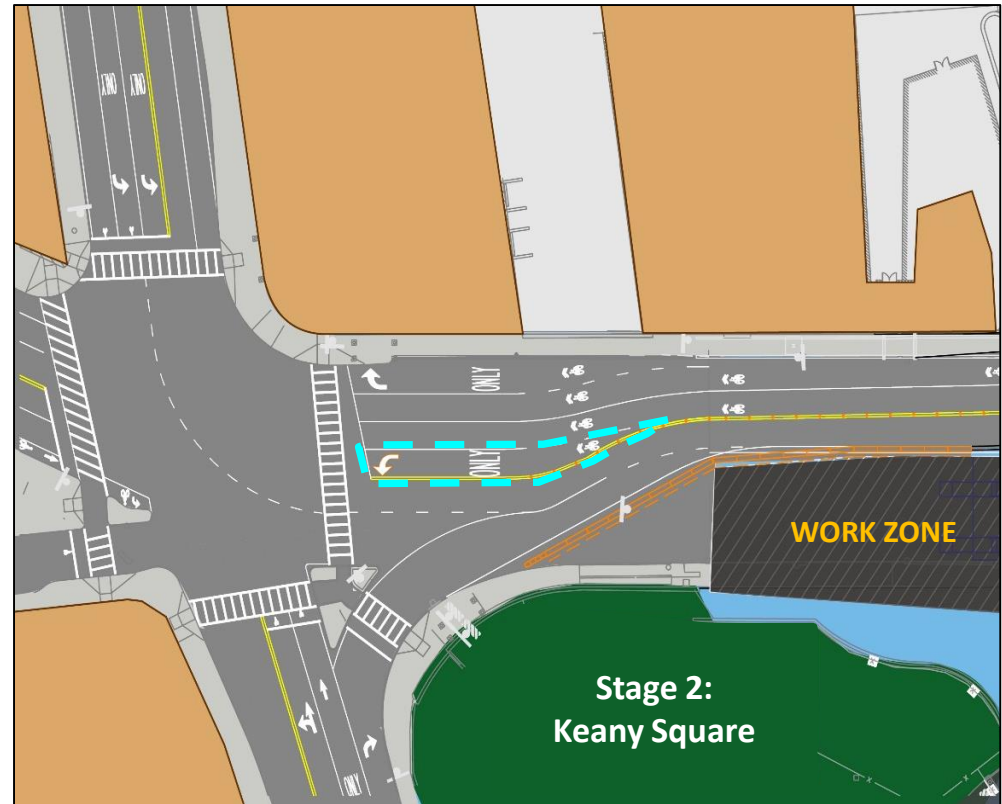
## SP-8 Legend

NARROW BRIDGE  
NO WIDE LOADS  
SEEK ALT ROUTE

# Traffic Control Plans: Keany Square



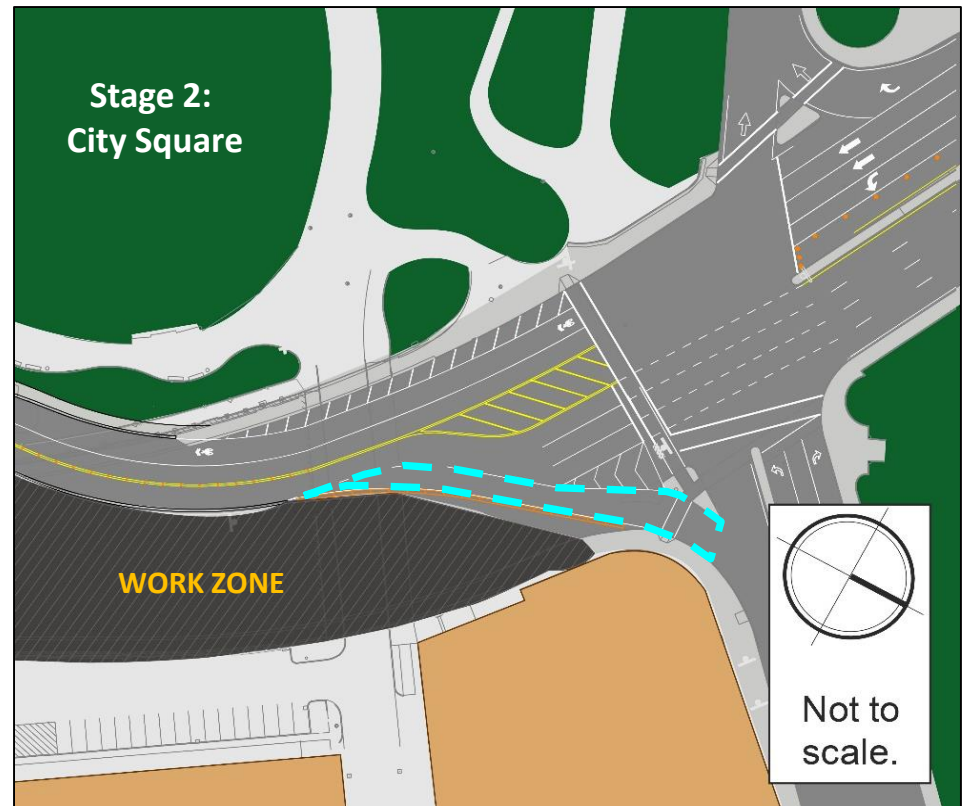
The Keany Square  
Traffic Control will  
include a left turn lane  
from the bridge to  
Commercial Street



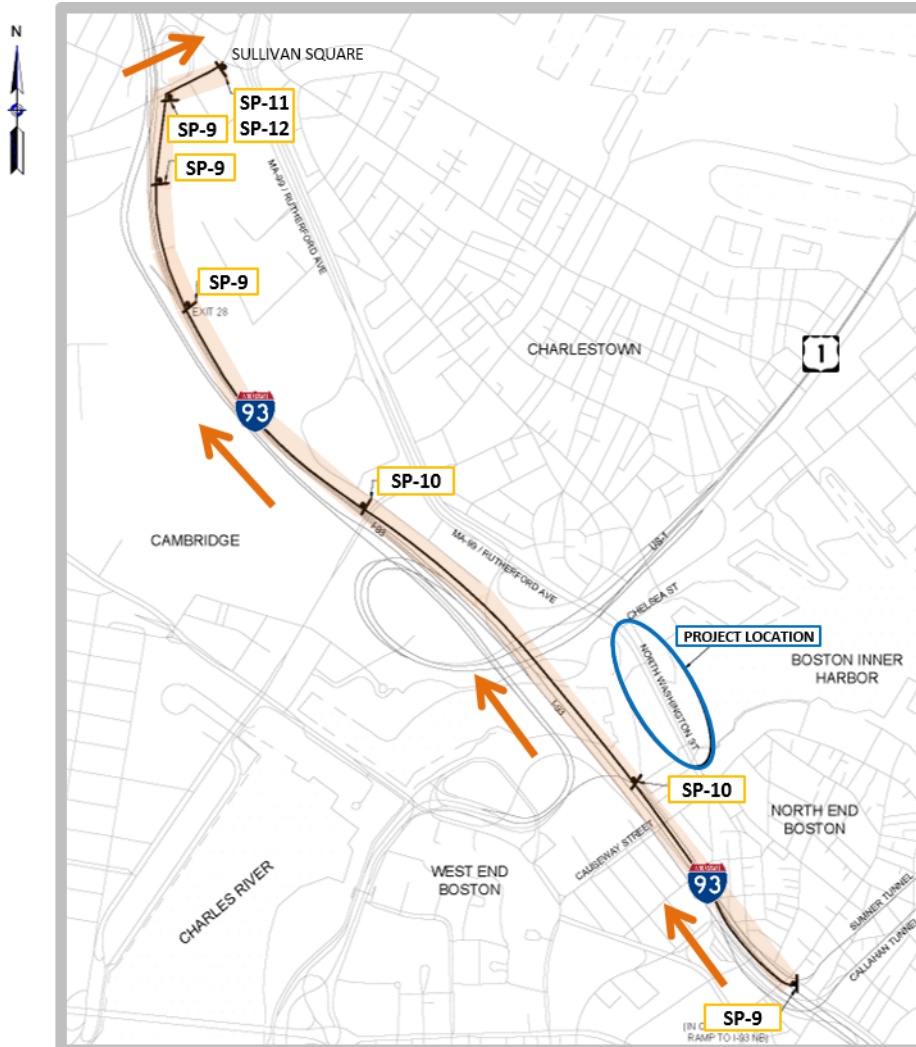
# Traffic Control Plans: City Square



The City Square Traffic Control will include a “slip lane” from the temporary bridge to Chelsea Street as requested by the City of Boston



# Alternate Routes Northbound



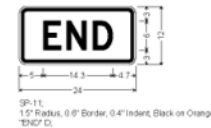
**SP-9 Legend**



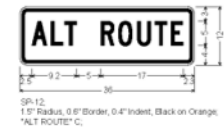
**SP-10 Legend**



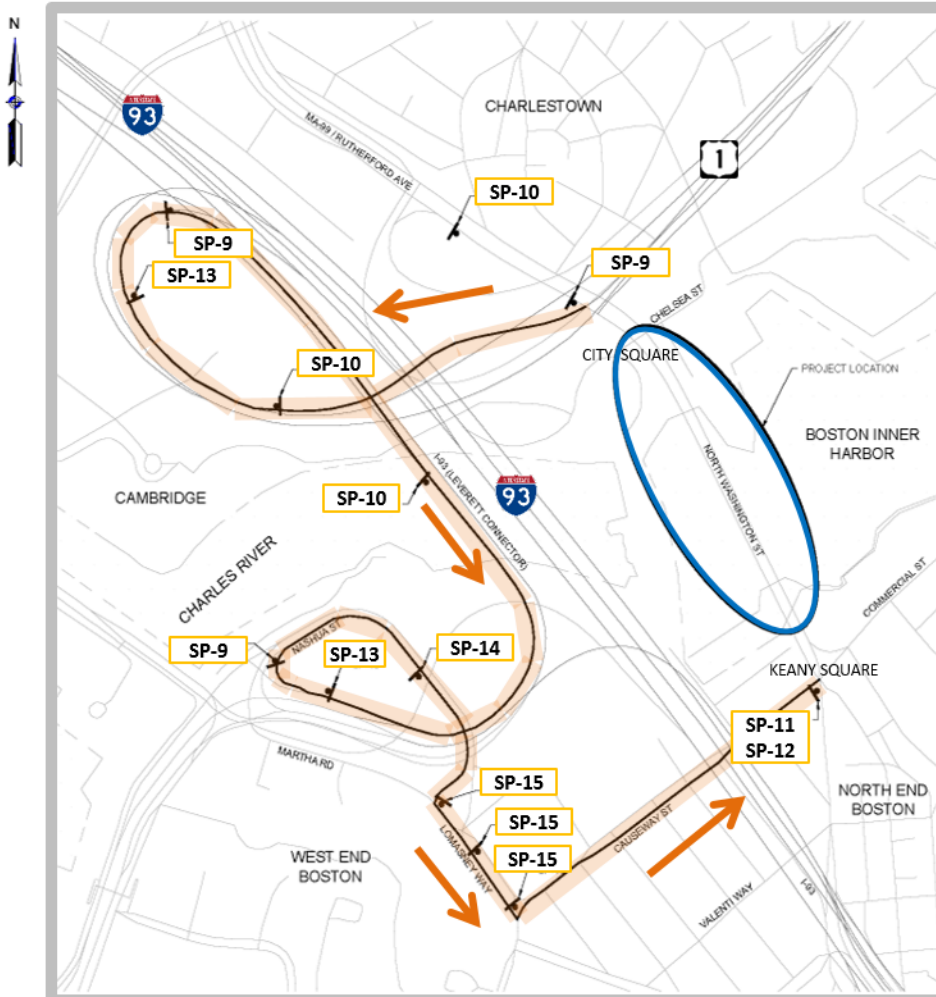
**SP-11 Legend**



**SP-12 Legend**



# Alternate Routes Southbound



**SP-10 Legend**



**SP-14 Legend**



**SP-15 Legend**



**SP-11 Legend**



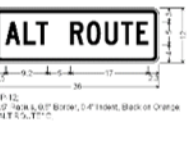
**SP-9 Legend**



**SP-13 Legend**



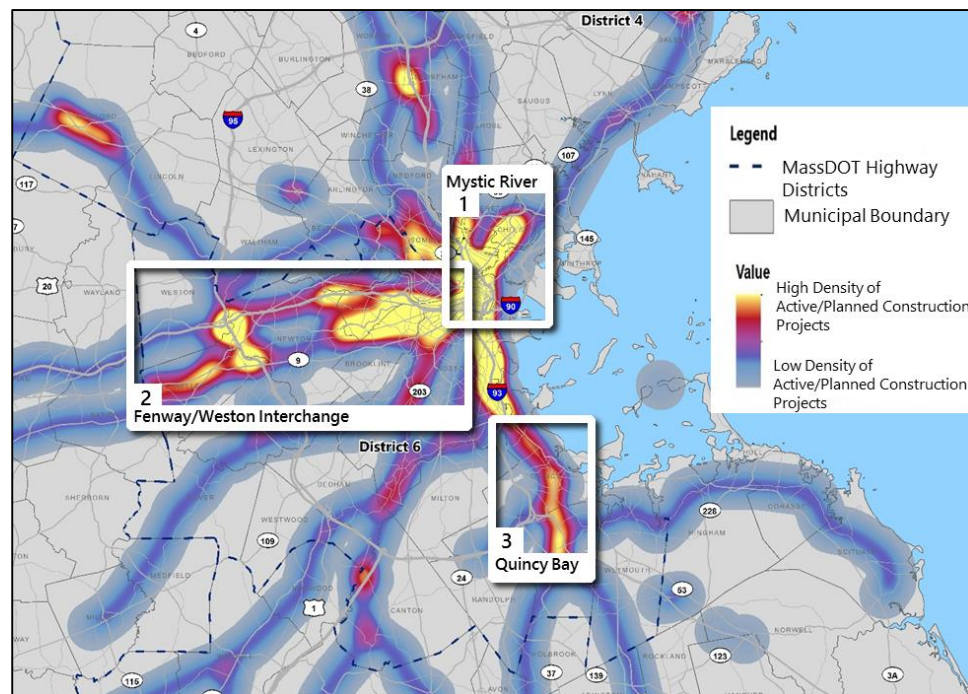
**SP-12 Legend**



# Construction Coordination & Traffic Management



- Joint effort between Highway Division and MBTA to identify potential schedule conflicts and impacts to the public during construction, including MBTA bus routes 92, 93, 111, and 426
- Results will allow the Highway Division to focus on improved safety and public outreach strategies



# Public Outreach



# Project Updates



- Construction Look Aheads for upcoming work
- Notifications for major operations and night work
- Shared on:
  - MassDOT project website
  - Email updates to project subscribers  
*(address will be shown at end of presentation)*



## North Washington Street Bridge Replacement

You are subscribed to North Washington Street Bridge Replacement Updates from Massachusetts Department of Transportation.

### North Washington Street Bridge (Charlestown Bridge) Construction Look-Ahead – October 13, 2018 to October 27, 2018

This document provides a brief overview of construction operations and impacts for the North Washington Street Bridge Replacement Project. It will be supplemented by additional notices as needed for high-impact work and changes to traffic configurations beyond those described below.

#### Site Preparation: October 13 - October 27, 2018

**Description:** Preparatory work including surveys, bearing measurements, installation of signage including variable message boards, installation of air quality monitors, and borings will be taken on the piers in the median on both sides of the bridge.

**Travel Impacts:** None

**Work Hours:** Daytime (7am-6pm)

#### Utility Relocation: October 13 - October 20, 2018

**Description:** Electrical utility relocation and upgrades on the south end of the bridge at Keany Square will continue overnight on weeknights by Eversource and on Saturday morning by Comcast.

**Travel Impacts:** Overnight off-peak lane closures of 2 northbound lanes at the Keany Square Intersection; Saturday off-peak lane closure of 1 northbound lane at the Keany Square Intersection.

**Work Hours:** Overnight on weekdays (7pm-5am); Saturday morning 10/13 (5am-12pm); daytime Saturday 10/20 (7am-3pm)

#### Utility Relocation: October 21 - October 27, 2018

**Description:** Electrical utility relocation and upgrades on the south end of the bridge at Keany Square will continue overnight on weeknights by Eversource and on Saturday morning by Comcast.

**Travel Impacts:** Overnight off-peak lane closures of 3 southbound lanes at the Keany Square Intersection; Saturday off-peak lane closures of 2 northbound lanes at the Keany Square Intersection.

**Work Hours:** Overnight on weekdays (7pm-5am); Saturday daytime (7am-3pm)

#### Travel Tips

Please take care to pay attention to all signage and police details and move carefully through the work zone. Police details, changes in lane markings, temporary controls such as barriers and traffic cones, signage, and other tools will be used throughout the project to control traffic and create safe work zones.

The contractor is coordinating with the TD Garden and local police to provide awareness and manage traffic impacts during events. For your awareness, during this look-ahead period, the following events are scheduled:

**Celtics:** 10/16 at 8pm; 10/22 at 7:30pm  
**Braves:** 10/13 at 3pm; 10/25 at 7pm; 10/27 at 7pm  
**Concerts:** 10/14 at 7:30pm; 10/18 at 7:30pm; 10/20 at 5pm; 10/21 at 7pm; 10/26 at 7pm

# Public Meetings



**Tuesday, 11/27/18, 6:00pm**

Nazzaro Community Center  
30 N. Bennet Street,  
Boston, MA 02113

**Wednesday, 11/28/18, 6:30pm**

Shriners Hospital for Children  
51 Blossom Street,  
Boston, MA 02114

**Thursday, 11/29/18, 6:30pm**

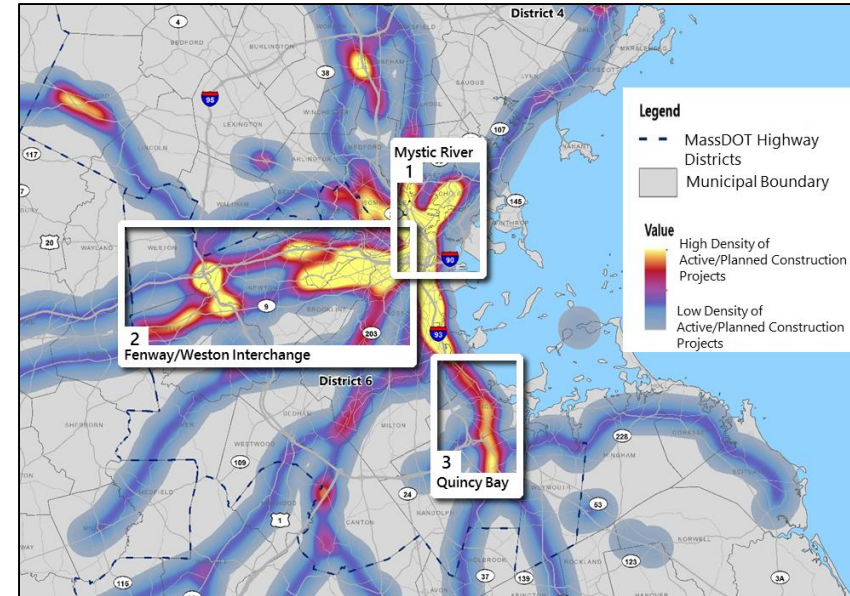
Knights of Columbus  
545 Medford Street,  
Charlestown, MA 02129

- More public meetings as needed and upon major project milestones
- Public meetings in Charlestown, North End, and West End
  - Advertised in The Boston Globe, The Beacon Hill Times, The Charlestown Patriot Bridge, and NorthEndWaterfront.com
  - Flyers posted in Charlestown, North End, and West End Boston Public Library branches
  - Announcements on the project website and MassDOT Twitter account
  - Email notifications sent to project subscribers and included in the City of Boston Office of Neighborhood Services digital newsletter
- Stakeholder meetings

# Regional Outreach and Social Media



- MassDOT social media to broaden outreach
- Regional outreach and specific messaging to specific users
- Outreach to North Shore
- Ongoing coordination with City of Boston



@MassDOT



facebook.com/massdotinfo

# Next Steps



# Target Milestones



December 2018	<ul style="list-style-type: none"> <li>• MassDOT/City of Boston finalize and implement temporary bridge design</li> </ul>
February 2019	<ul style="list-style-type: none"> <li>• Pile installation begins in water</li> </ul>
April 2019	<ul style="list-style-type: none"> <li>• New playground opens and old playground closes</li> <li>• North tie-in construction begins</li> </ul>
June 2019	<ul style="list-style-type: none"> <li>• South tie-in deck construction begins</li> </ul>
August 2019	<ul style="list-style-type: none"> <li>• Eversource cable cut-over to temp bridge begins</li> </ul>
December 2019	<ul style="list-style-type: none"> <li>• Traffic switch to temporary bridge</li> <li>• Start deck demolition</li> </ul>
January 2020	<ul style="list-style-type: none"> <li>• Eversource cable cutover complete</li> <li>• Major demolition of the existing bridge begins</li> </ul>

# Current Look Ahead

Nov. 25 – Dec. 8



## UTILITY RELOCATION

- Utility relocation and upgrades on the outbound side of the bridge (Boston Harbor side) and at the southern end of the bridge at Keany Square will continue weekdays by Eversource and on Saturday by Comcast.

### WORK HOURS:

- Weekdays: Daytime (7am-6pm)
- Saturdays: Daytime (7am-3:30pm)

### TRAVEL IMPACTS:

- Weekdays: During off-peak, daytime working hours (10am-2pm), outbound traffic will be reduced to one lane.
- Saturdays: During off-peak, daytime working hours on 12/1 and 12/8, inbound traffic will be reduced to one lane.

## SITE PREPARATION

- Traffic barrier installation and preparation for sidewalk demolition will take place on the inbound side of the bridge (Charles River side). Drilling of north and south pier borings will continue in the median on both ends of the bridge.

### WORK HOURS:

- Daytime (7am-6pm)

### TRAVEL IMPACTS:

- During off-peak, daytime working hours (10am-2pm), inbound traffic will be reduced to one lane.

## TD GARDEN EVENTS

Bruins: 11/23 at 7:30pm, 11/29 at 7pm, 12/1 at 7pm  
Celtics: 11/21 at 7:30pm, 11/30 at 7pm, 12/6 at 8pm  
Concerts: 11/24 at 8pm, 11/28 at 6pm, 12/2 at 7:30pm, 12/4 at 7pm, 12/7 at 8pm

# Contact



Sign up for progress updates and meeting minutes and learn more about the project at:

[www.mass.gov/north-washington-street-bridge-replacement](http://www.mass.gov/north-washington-street-bridge-replacement)



Email your questions, general inquiries, and comments to  
[NorthWashingtonStreet@dot.state.ma.us](mailto:NorthWashingtonStreet@dot.state.ma.us)

- MassDOT will answer all inquiries in timely fashion
  - Donny Dailey, MassDOT Public Affairs



North Washington Street Bridge

# Construction Staging and Traffic Control Video



At this point in the presentation, the project team showed a video rendering of the traffic control for all four construction stages and on the new bridge.

To access the video on MassDOT's YouTube channel, please click here: <https://www.youtube.com/watch?v=ZYEYbUsq9cY>



# Questions?