

## Tobin Bridge / Chelsea Curves Rehabilitation Project

Public Information Meeting
Chelsea City Hall
March 27, 2019

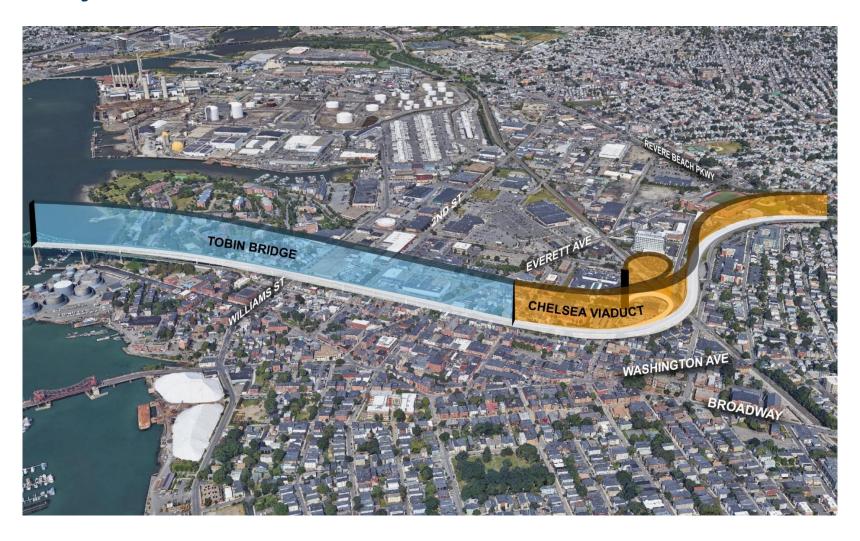


## **Project Need**

- Both the Tobin Bridge and the Chelsea Viaduct currently have Structurally Deficient bridge decks
- Since the conclusion of the Accelerated Bridge Program, MassDOT has worked aggressively to maintain and improve the Commonwealth's Structurally Deficient Bridge inventory
- FHWA now requires that DOTs measure SD bridge by deck square footage and requires that no more than 10% of the entire state inventory of bridge deck is SD.
- This project will remove 15% of the Commonwealth's SD bridge deck inventory which will bring the Commonwealth's inventory within 1% of target.

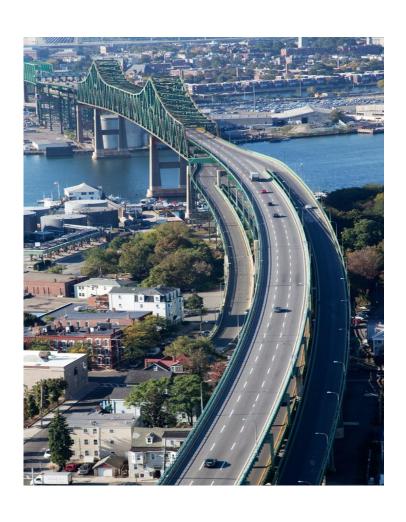


## **Project Area**





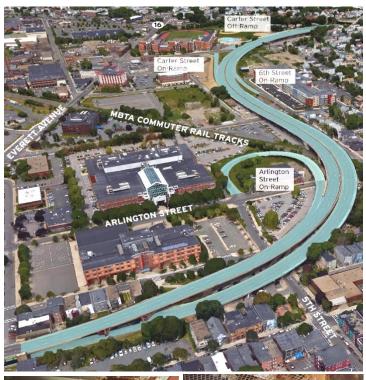
## Project Scope: Tobin Bridge



- \$42M rehabilitation of the Tobin Bridge deck, superstructure, and adjoining ramps
- Replace the 257,423 SF Structurally Deficient (SD) bridge deck
- Project Duration: 2018 2020
- Contractor: J.F. White



## Project Scope: Chelsea Curves





- \$169M rehabilitation of the Chelsea Viaduct elevated ramps, substructure, and superstructure
- Project Duration: 2019 2020
- Replace the 267,400 SF Structurally Deficient (SD) bridge deck
- Utilizes Accelerated Bridge Construction
- Contractor: Skanska-McCourt



## **Pre-Work Completed**

- Everett Street on-ramp and Beacon Street off-ramp reconstructed and repaired
- Steel repair and structural repairs of bridge deck
- Preparatory work for lower deck replacement











## Staging and Accelerated Bridge Construction

- One coordinated work zone on Chelsea Curves and Tobin Bridge for efficient traffic management
  - Coordinates consistent northbound work zone
  - Always allows for 2 lanes in each direction during commuting hours
- Utilizes accelerated bridge construction techniques to expedite construction activities
  - Uses prefabricated bridge units along the Chelsea Curves
  - Same technologies used for the Commonwealth Avenue Bridge reconstruction but larger scale with no full closures



## Benefits of Schedule Shift

#### Resident Benefits:

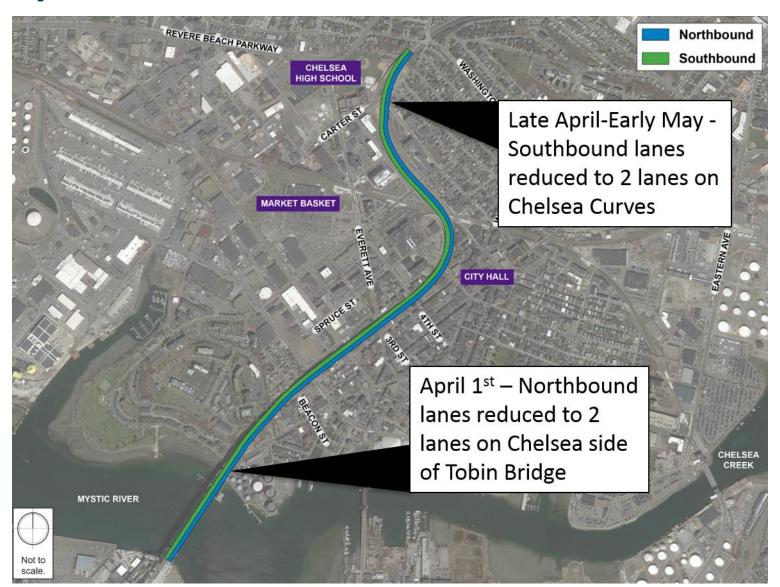
- Significantly reduces nighttime operations
  - Majority of loudest/impactful operations moved to day hours
- Reduces number of material deliveries
- Speeds up viaduct construction

#### Constructability Benefits:

- Reduces risk of delay between demolition and Prefabricated Bridge Unit (PBU) installation
- Reduces need to use deteriorated structure to support traffic and construction equipment
- Eliminates need for zipper barriers



## **Project Limits**





## Work zone stages over 2 year duration



Stage 1



Stage 2



Stage 3

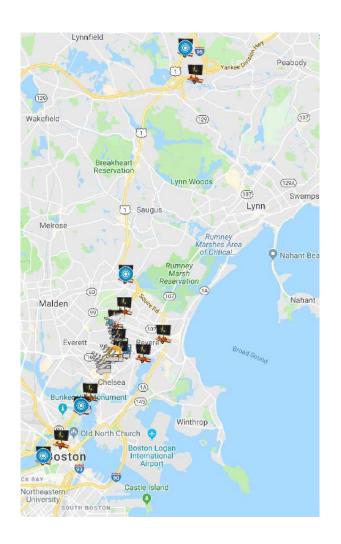


## Roadway Impacts

- Starting April 1st Through Duration of Project:
  - Northbound Impacts entering Tobin side of work zone from Boston
  - Lane reduction will result in 2 travel lanes available for commuters
- Late April/Early May Through Duration of Project:
  - Southbound Impacts start entering Chelsea side of work zone heading towards Boston
  - Lane reduction will result in 2 travel lanes available for commuters
- Additional temporary lane takings may occur during offpeak and overnight hours



## Real Time Traffic Management (RTTM) System



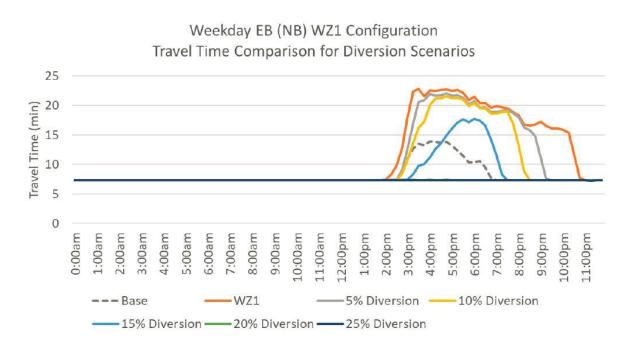
- Temporary signage in place along Route 1
- MassDOT will utilize permanent RTTM signs on Interstate 93







## Northbound Impacts



**Projected delay through work zone without diversions**9 minutes

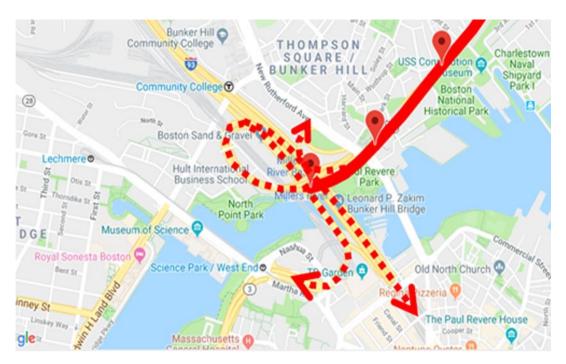
Projected delay through work zone with 15% traffic reduction
400 vehicle/hour goal
4 minutes

Rush hour will begin earlier and last longer

Expect that delays will be more extensive until drivers acclimate



## Potential Northbound Queues

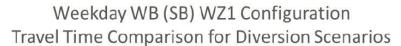


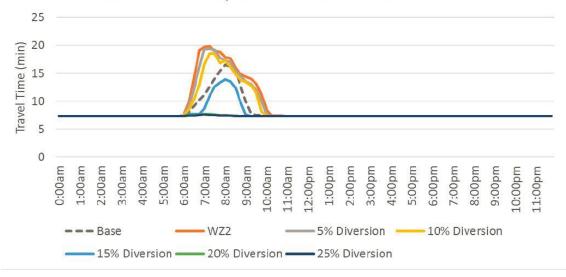
Areas of variable congestion — — — — Work zone congestion

Time Period	All WZ1 Scenarios
12am - 2pm	No Queue
2pm – 3pm	Partial Queue
3pm – 4pm	Queue onto I-93
4pm – 5pm	Queue onto I-93
5pm - 6pm	Queue onto I-93
6pm - 7pm	Queue onto I-93
7pm – 8pm	Partial Queue
8pm – 9pm	Partial Queue
9pm – 10pm	Partial Queue
10pm - 11pm	Partial Queue
11pm - 12am	Queue Clears



## Southbound Impacts





## **Projected delay through work zone without diversions**4 minutes

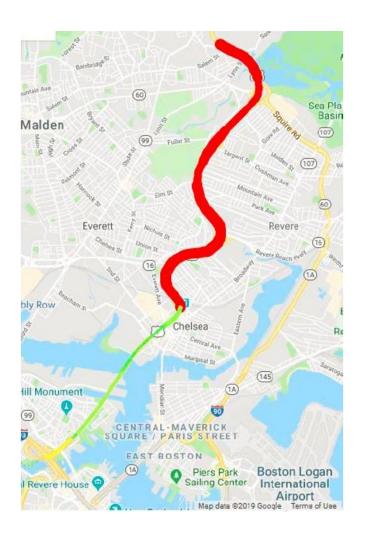
Projected delay through work zone with 15% traffic reduction
400 vehicle/hour goal
0 minutes

Rush hour will begin earlier and last longer

Expect that delays will be more extensive until drivers acclimate



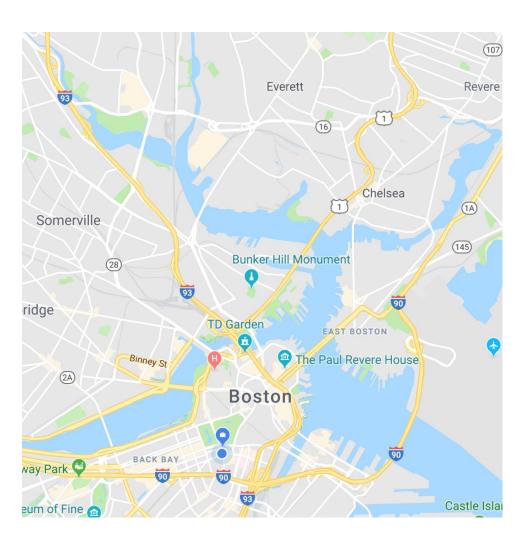
## Potential Southbound Queues



Time Period	WZ1
Midnight – 6am	No Queue
6am - 7am	Partial Queue
7am - 8am	Full Queue to Start of Facility
8am - 9am	Full Queue to Start of Facility
9am - 10am	Partial Queue
10am - 11am	Partial Queue
11am - Midnight	No Queue



### Vehicle Diversions



- ➤ Use of I-93
- Use of Callahan Tunnel to Route 1A to Route 1
- Information Technology Solutions (ITS) to be implemented to direct drivers to most efficient route
- > Transit alternatives

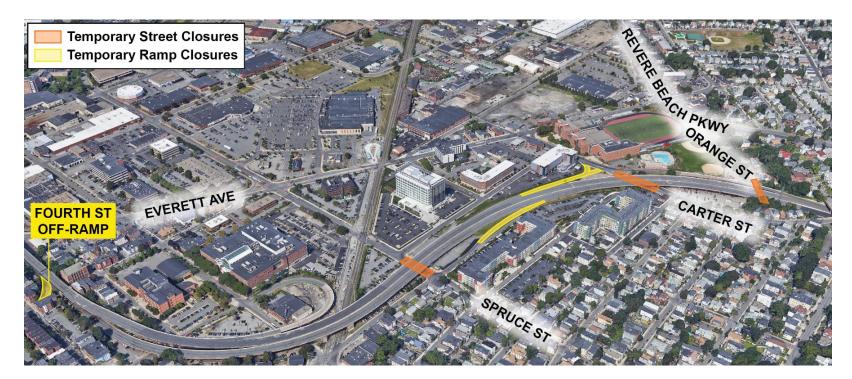
Commuters and employers should consider:

- > Flexible work hours
- Build extra time into commutes
- Smart travel decisions



## 2019 Temporary Ramp and Street Closures

- Fourth Street Off-Ramp beginning in August for 1-2 months
- Local nighttime road closures intermittent throughout for column construction, utility work, concrete column construction, delivery and installation of PBUs
  - Spruce Street, Orange Street, and Carter Street





## MBTA Bus Impacts

#### Once the work zone is fully established:

- Some bus routes will experience travel delays during peak travel times
- Without any vehicle reduction, the delay could be as high as 20 minutes

#### **Route 111:**

- Southbound: bus enters Tobin from Everett Avenue onramp beyond work zone; bridge is at full capacity: three travel lanes
- Northbound: bus exits the Tobin Bridge at the Beacon Street offramp
- Travel delays still expected

#### Routes 426 and 428:

Both routes traverse entire work zone



## Public Transit Options

- Commuter Rail Haverhill and Newburyport/Rockport Lines
  - Customers can consider using the Haverhill or Newburyport/Rockport Lines
    - Haverhill Line historically has parking capacity at Haverhill and Bradford stations
    - Newburyport/Rockport Line historically has parking capacity at Newburyport, Salem, and Lynn stations
    - Customers can monitor @MBTA\_Parking on Twitter for capacity updates
  - Commuters will be able to use a CharlieCard to travel between North Station and Chelsea on the Commuter Rail

#### Blue Line

- The MBTA will be adding additional trains to the Blue Line
- Silver Line 3-Chelsea
  - Free fares (inbound only) will be offered at the Chelsea, Bellingham Square, Box District, and Eastern Avenue SL3 stops for the duration of construction
- Additional cost of Blue Line trains and Silver Line 3 fares will be paid for with MassDOT Highway Division project funds



## Outreach to Date - Design Period

- Design-Phase Public Meetings and Hearings
  - Nov. 8, 2017, Dec. 5, 2017, Jan. 22, 2018 (in Spanish), Jan. 24, 2018, Apr. 5, 2018
- Project Open House at Chelsea Collaborative: Dec. 7, 2017
- Door-to-door flyer drops for abutting homes and businesses
  - Jan. 16, 2018 Jan. 21, 2018
- Notification Letters to businesses, and non-occupant owners
  - Nov. 2017, Dec. 2017, and pre-DPH
- Stakeholder Briefings
  - GreenRoots Chelsea: Dec. 14, 2017 and Jan. 18, 2018
  - Chamber of Commerce: Feb. 14, 2018
  - Major viaduct adjacent businesses: Mar. 19, 2018
  - North Suffolk Mental Health Association Briefing: Apr. 26, 2018
  - New England Produce Center Site Visit: May 10, 2018
  - Kiwanis Club: May 17, 2018
- Appeared before Chelsea City Council: Mar. 1, 2018
- Community Pop-ups between Nov-Dec. 2017



## Outreach to Date – Construction Period

- Newsprint:
  - Boston Globe March 9<sup>th</sup> and 14<sup>th</sup>
  - Chelsea Record March 14<sup>th</sup>
  - East Boston Times March 20<sup>th</sup>
  - El Planeta March 15<sup>th</sup>
  - El Mundo March 21st
- Radio: Power 800 (Spanish) March 18<sup>th</sup>-27<sup>th</sup>
- Flyer distribution week of March 11<sup>th</sup>:
  - Chelsea City Hall
  - Chelsea Public Library
  - Chelsea Senior Center
  - 200 yard zone to either side of the project
  - 111 buses
  - Silver Line and Commuter Rail Stations
- Pop-up meetings (library and Market Basket):
  - Week of March 11<sup>th</sup>
  - Week of March 18<sup>th</sup>
  - Week of March 25<sup>th</sup>
- Email bursts to project database with public meeting calendar:
  - March 15<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, and 22<sup>nd</sup>



## Managing Impacts To Residents

#### Project Coordination

- Ongoing efforts with MBTA to mitigate Bus Route 111 impacts
- Coordinate transit impacts of construction on Tobin Bridge, Chelsea Viaduct, and North Washington Street Bridge

#### Dust

- Dust and pollutant containment system
- During demolition activities, water will be used to minimize dust emissions per MassDOT and OSHA regulations
- Dust monitoring will be conducted during ALL concrete demolition activities
- Contractors Health and Safety Plans will address dust control on-site

#### Lead Paint

- Lead Paint Abatement Plan for Hazardous Materials Mitigation
- All Federal, State, Local and OSHA regulations will be followed
- · Contractors to contain all areas where paint is removed
- Removed steel is recycled off-site



## Managing Impacts To Residents

#### Noise

- Measured baseline noise what is happening today
- Contractors are required to have approved Noise Control Plans
- Certain activities and hours of operations will be limited
- Different noise limits for different times of day
- Noise mitigation required if allowable noise levels are exceeded through noise shielding and limiting machinery types and use

#### Parking and Safety

- Introduction of new Carter Street lot for temporary relocation due to parking impacts during construction
- Tow trucks staged to clear breakdowns



## Ongoing Outreach and Engagement

Extensive outreach to ensure motorists and residents understand and plan for traffic impacts

- New project web site and project specific email address
- Extensive email database
- Multilingual project hotline
- Two-week construction look-ahead emails
- Media outlet outreach
  - Boston Globe, Newburyport Daily News, Newburyport Current, Ipswich Chronicle, Salem News, Saugus Advocate, Wilmington Advocate, North Andover Citizen, 102.9FM Power/800AM
- Social Media
  - MassDOT Twitter and Facebook
- Meeting Flyers
  - Project abutters, city/town halls, public libraries, Route 111 buses, Silver Line stations



## Ongoing Outreach and Engagement

- Delivery of project information material to (including but not limited to):
  - Major Boston and Chelsea employers
  - City of Boston school buses
  - Fenway Park and TD BankNorth Garden
  - TNCs and taxi companies
  - > MASCO
  - Massport
  - Chambers of Commerce
  - Bunker Hill Community College
  - MGH Chelsea, MGH Revere
  - Massachusetts Trucking Association and AAA
  - Mystic Mall



## Ongoing Outreach...Continued

#### North Shore Outreach

- Targeted emails to all North shore E-Z Pass holders
- > VMS boards
- ➤ Delivery of project fact sheets to north shore city/town halls, public libraries, media outlets, and North Station

#### Focus on:

- Commuters (Transit and Vehicular)
- Residents close to the project



# Thank You Q&A

www.mass.gov/tobin-bridgechelsea-curves-rehabilitation-project

**Project Hotline:** (855)-201-2614

#TobinChelseaCurves

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