

# MassDOT Highway Division Programs/Projects Briefing

## 495/MetroWest Partnership Transportation Committee Meeting

March 4, 2021

# Introductions

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- **Barry Lorion**
  - District Three Highway Director
- **Thomas Emerick**
  - District Three Operations Engineer

# Agenda

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- What's New at MassDOT
- MassDOT Programs
- Highlighted Projects
- Projects in Planning/Design
- Construction Projects
- Questions and Answers

# Office of the Secretary

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- Stephanie Pollack was named Acting Administrator for the Federal Highway Administration (FHWA).
- January 26, 2021 was her last day as MassDOT Secretary and CEO after serving in the position for the past 6 years.

# Office of the Secretary

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- Jamey Tesler was named acting MassDOT Secretary and CEO January 27, 2021.
- Mr. Tesler had been installed permanently as Registrar of the Massachusetts Registry of Motor Vehicles (RMV) in June of 2020, after serving in the role on an interim basis since June of 2019.
- He has worked for more than 16 years in senior management roles in the public sector, including as General Counsel to the Massachusetts State Treasurer, Deputy Legal Counsel in the Office of the Governor, Deputy General Counsel for the Massachusetts Bay Transportation Authority (MBTA), MassDOT Assistant Secretary for Procurement and Contract Management, Acting Chief of Staff for the Secretary of Transportation, and Chief Operating Officer at MassDOT.

# Transportation Bond Bill

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- Governor Charlie Baker, Lieutenant Governor Karyn Polito, and Acting MassDOT Secretary of Transportation Jamey Tesler joined legislators, municipal leaders, and other stakeholders in a virtual ceremonial signing of the \$16 billion Transportation Bond Bill legislation.
- This legislation was signed into law on January 15, 2021 and authorizes funding across all modes of transportation to support and facilitate the ongoing continual efforts of MassDOT and the MBTA to invest in and modernize the Commonwealth's transportation system.

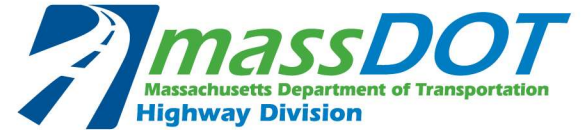
# Transportation Bond Bill Highway Highlights

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- \$1.25 billion for the new Next Generation Bridge program
- \$70 million for the popular Municipal Small Bridge Program
- \$50 million for the popular Complete Streets program
- \$20 million for ‘public realm’ COVID-related Shared Streets and Spaces program
- \$100 million for a new Municipal Pavement program for pavement projects on locally owned but state numbered roads.

# Next Generation Bridge Program



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- \$1.25 billion to dramatically accelerate the Commonwealth's bridge investments
  - Reduce the amount of 'poor' bridge deck area
  - Reduce the current SD percentage
  - Use the design-build project procurement process
  - Pursue corridor/multi structure bundled projects
  - Advertisements as early as FFY2022



# Municipal Small Bridge Program

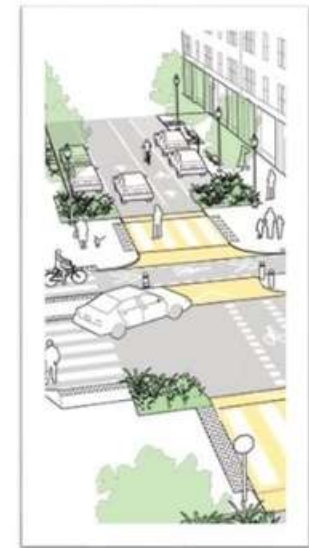
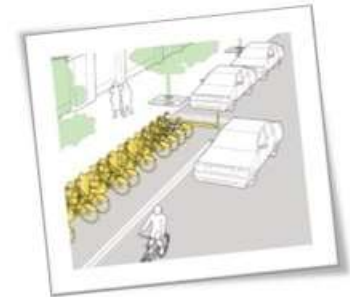


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- Program provides financial support to cities and towns for small bridge replacement preservation and rehabilitation projects.
  - This program was established to assist cities and towns to replace or preserve bridges with spans between 10' and 20'. Each municipality may qualify for up to \$500,000 per year.
  - These small bridges are not eligible for federal aid under existing programs.
  - To date, This program has helped facilitate the development of 121 small bridge projects across the Commonwealth that due to their size would be deemed ineligible for federal funding.

# Complete Streets Program



- The MassDOT Complete Streets Funding Program provides technical assistance and construction funding to eligible municipalities. Eligible municipalities must pass a Complete Streets Policy and develop a Prioritization Plan. All Program news, guidance, and registration information are available through an online Portal.
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- A Complete Street is one that provides safe and accessible options for all travel modes - walking, biking, transit and vehicles for people of all ages and abilities.
- The [Complete Streets Funding Program Portal](https://masscompletestreets.com/) has more information for communities  
<https://masscompletestreets.com/>



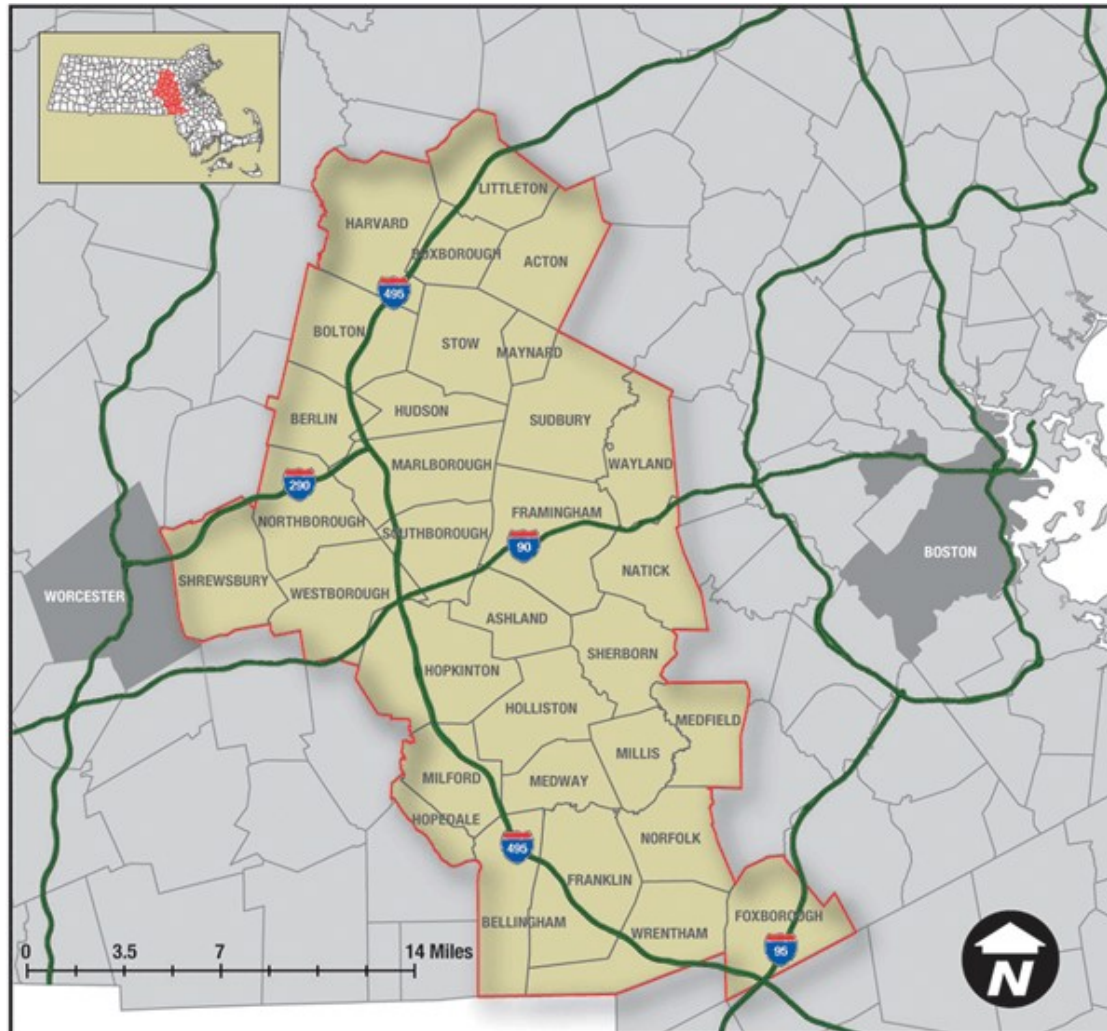
# Shared Streets and Spaces Program

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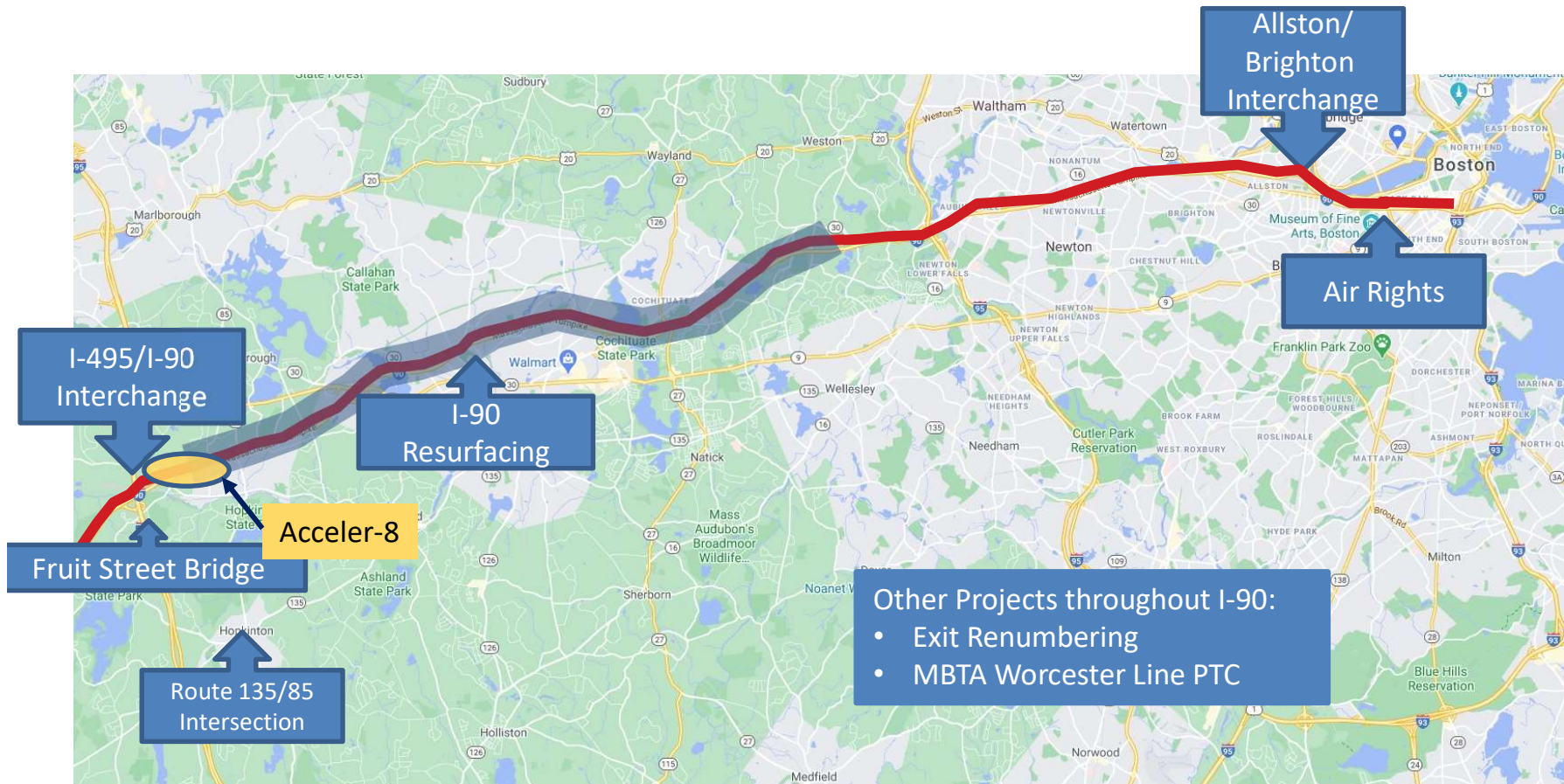
- The Shared Streets and Spaces initiative first launched during the summer of 2020, and the program was extended to help municipalities address the challenges of winter amid the ongoing public health crisis.
- The Shared Winter Streets and Spaces provides cities and towns with grants as small as \$5,000 and as large as \$500,000 to improve plazas, sidewalks, curbs, streets, parking areas, and other public spaces in support of public health, safe mobility, and renewed commerce.
- Since the start of the program in June of 2020, the Commonwealth has invested \$21.1 million in municipal Shared Streets projects.

# I-495/Metrowest Region





# MassDOT I-90 Corridor Projects





## Updated March 1, 2021



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# Exit Renumbering Project | In Progress



- Construction and sign replacement operations to convert former sequential exit numbers to new milepost-based numbers is continuing across the Commonwealth.
- The renumbering operations, which are required per a Federal Highway Administration mandate, began in the fall 2020 and are anticipated to be completed by summer 2021.
- The Federal Highway Administration's 2009 Manual on Uniform Traffic Control Devices mandated that all states establish a mile-based exit numbering system.



# Statewide Exit Renumbering Project Update

- Exit renumbering conversion operations have been completed on Interstate 90, and some northeast and southeast corridors.
- Construction start dates and locations on the following remaining corridors will be announced as they are finalized: State Route 146, Interstate 190, State Route 2, Interstate 495, Interstate 395 and Interstate 290.
- During a transition period for motorists, “Old Exit” signs are being installed at each converted exit for a minimum of two years.
- Work typically is completed during the overnight off-peak hours, with minimal impacts to traffic .







Acceler-8 I-90 Bridge  
Replacements Project



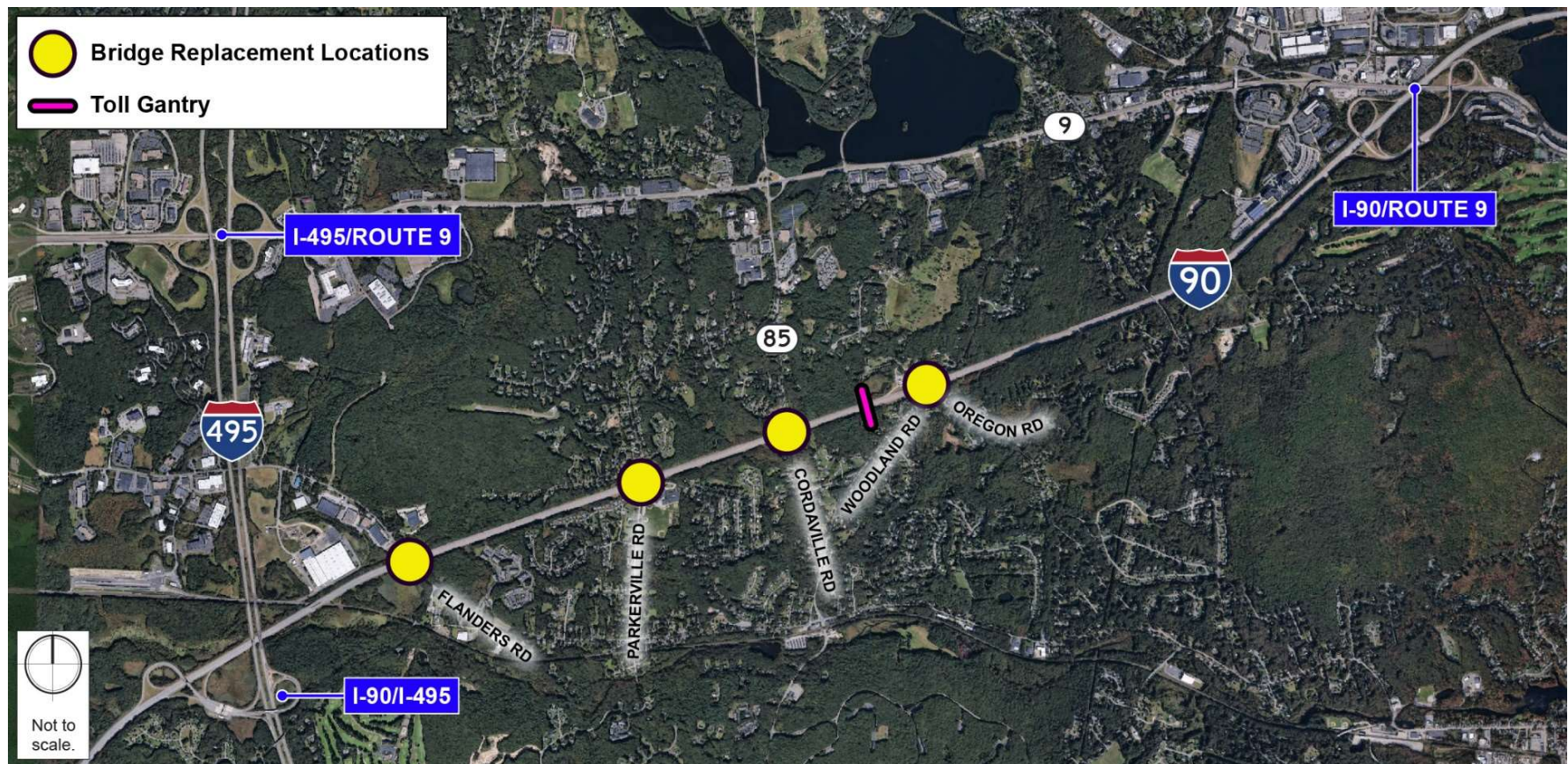
- This project will upgrade and replace eight I-90 bridges (east and westbound) over Flanders Road in Westborough and Parkerville Road, Woodland Road, and Cordaville Road in Southborough.

# Project Limits

**acceler-8**  
I-90 BRIDGE REPLACEMENTS  
8 Bridges 8 Weekends



Acceler-8 I-90 Bridge  
Replacements Project





# Project Goals

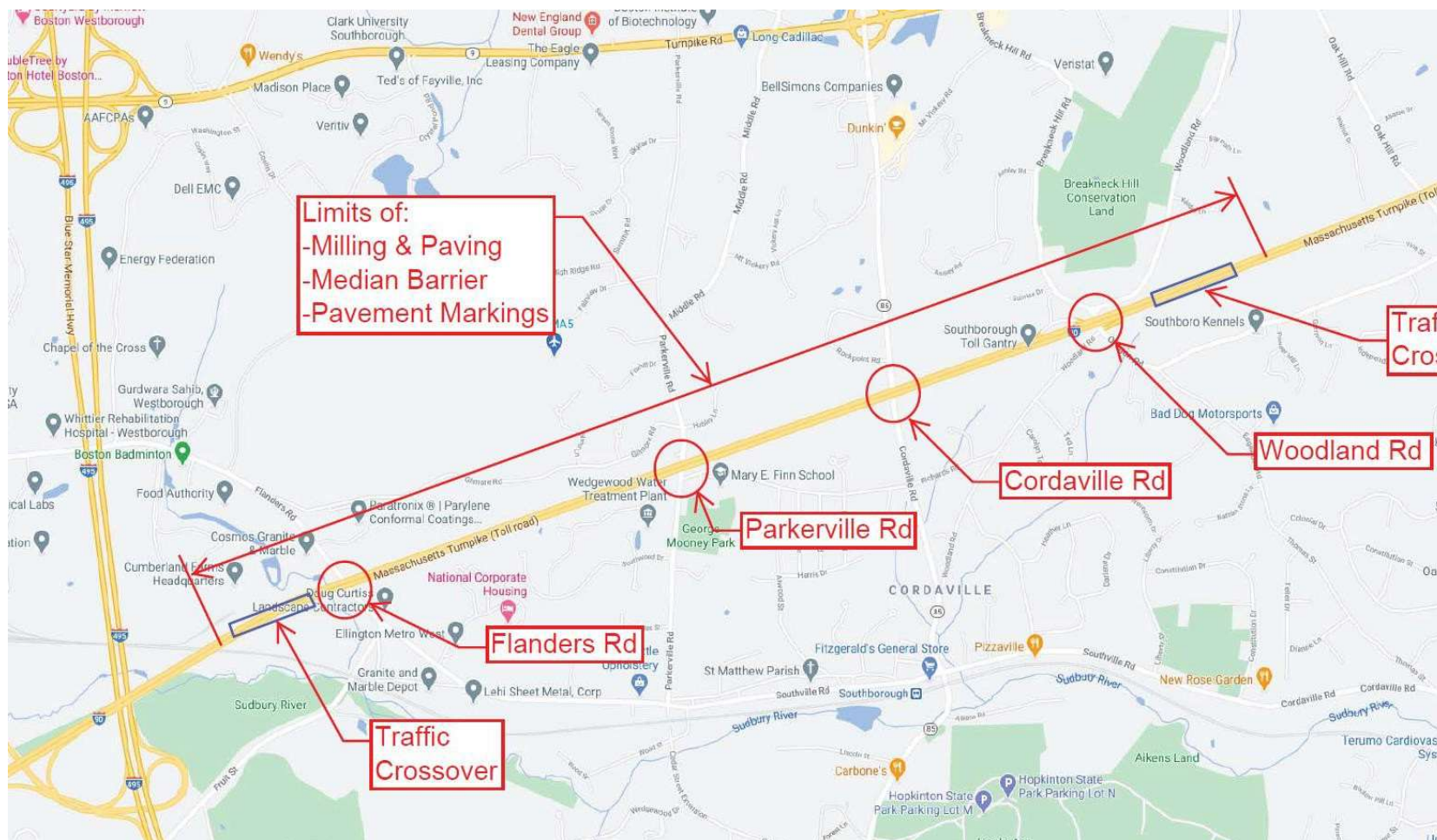
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- Replace Failing Bridge Decks and Superstructures
  - Increase life of each bridge (75 Years)
- Improve Clearance to Local Roadways below
- Increase available width between Abutments of Cordaville Road
- Upgrade Median along I-90 to Current Standards
- Upgrade I-90 Driving Surface and pavement markings
- Upgrade Shoulder Protection
  - New Shoulder Barrier
  - New Guardrail

Southborough-Westborough I-90 Superstructure Replacements  
(EB & WB) over Woodland, Cordaville, Parkerville and Flanders Roads

# Work Activities and Locations



# Significant Construction Work

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- Estimated Start Dates and Durations:
  - February 2021 – March 2021 Flanders Rd. Utility Relocation
  - February 2021 – May 2021 – I-90 Median Barrier Replacement
  - February 2021 – July 2021 Bridge Abutments
  - March 2021 – May 2021 – Median Crossover Construction
  - May 2021 – Movable Barrier Trial Run
  - **June 2021 – August 2021 – Rapid Bridge Replacements**
  - August 2021 – October 2021 – I-90 Median Barrier Replacement
  - September 2021 – November 2021 – Final Paving

# Acceler-8: TMPs & Crossovers

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- Temporary Pavement Markings
- Drum lines
- Movable barrier with reflectors
- Traffic Control Devices

Southborough-Westborough I-90 Superstructure Replacements  
(EB & WB) over Woodland, Cordaville, Parkerville and Flanders Roads



# Acceler-8: Southboro/Westboro I-90 Bridge Replacements

- Replace 8 bridges in 8 weekends during Summer 2021
- 56-hour weekend construction
- Accelerated Bridge Construction using precast components
- Minimize delays to roadway users
- Design /Build – JF White
- \$49 million total construction cost
- Real Time Traffic Management Systems
- Robust Public Outreach



Southborough-Westborough I-90 Superstructure Replacements  
(EB & WB) over Woodland, Cordaville, Parkerville and Flanders Roads

# 56 Hour Weekend Schedule



Southborough-Westborough I-90 Superstructure Replacements  
(EB & WB) over Woodland, Cordaville, Parkerville and Flanders Roads



# Construction Staging by Weekend

				56 Hour Work Window			
MassDOT I-90 Southborough - Westborough Acceler-8 Construction Sequence							
Wknd	Primary Work	Primary	Hwy.	Start	24 hrs per day over Weekend		End
No.	Location	Operation	Direction	FRI @ 9pm	SAT	SUN	MON @ 5am
1	Woodland Road	Bridge Replacement	WB	6/18/2021	6/19/2021	6/20/2021	6/21/2021
2	Cordaville Road	Full Bridge Replacement	WB	6/25/2021	6/26/2021	6/27/2021	6/28/2021
3	Parkerville Rd & Flanders Rd	Bridge Replacement	WB	7/9/2021	7/10/2021	7/11/2021	7/12/2021
4	Woodland Parkerville & Flanders	Waterproof & Pave	WB	7/16/2021	7/17/2021	7/18/2021	7/19/2021
5	Woodland Road	Bridge Replacement	EB	7/23/2021	7/24/2021	7/25/2021	7/26/2021
6	Cordaville Road	Full Bridge Replacement	EB	7/30/2021	7/31/2021	8/1/2021	8/2/2021
7	Parkerville Rd & Flanders Rd	Bridge Replacement	EB	8/6/2021	8/7/2021	8/8/2021	8/9/2021
8	Woodland Parkerville & Flanders	Waterproof & Pave	EB	8/13/2021	8/14/2021	8/15/2021	8/16/2021

Southborough-Westborough I-90 Superstructure Replacements  
(EB & WB) over Woodland, Cordaville, Parkerville and Flanders Roads

# Project Purpose

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*To improve safety and operational efficiency at the system interchange of these two nationally and regionally significant interstate highways.”*



# Project Locus Map





# Project Goals

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Improving the geometric deficiencies and eliminating weaving movements will achieve the goals of:

- Reducing crashes in the project area for all movements
- Reducing recurring congestion within the Interchange
- Reducing recurring queuing that currently extends from the Interchange onto the mainlines of I-90 and I-495
- Reducing travel time through the Interchange, especially on high- volume movements



## Proposed Conditions (I-90 looking east)





## Proposed Conditions (I-90 looking west)





## Proposed Conditions - I-495 South of I-90 (Looking North)





## Proposed Conditions I-495 North of I-90 (Looking South)

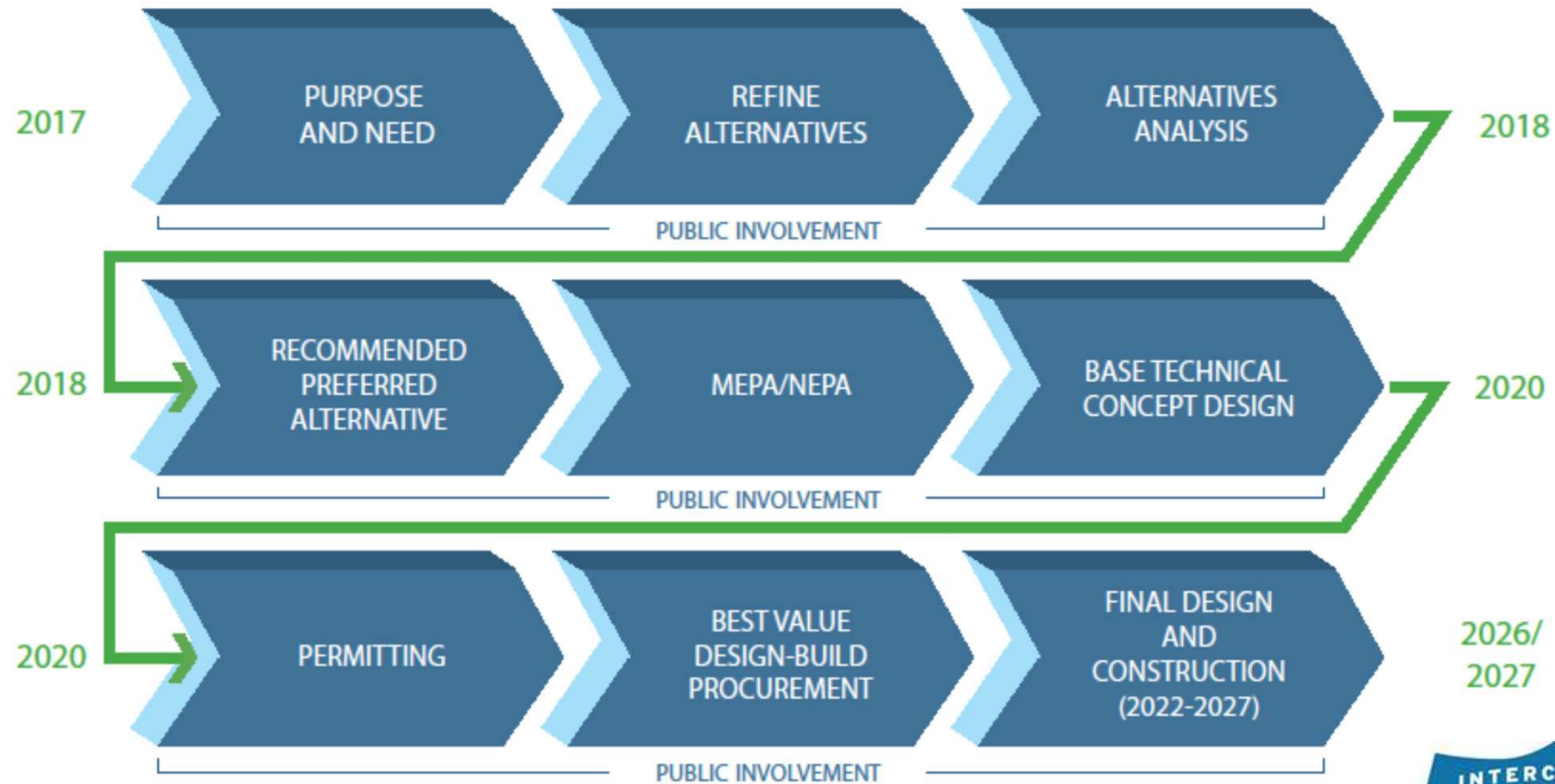




## Proposed Conditions (looking northeast)



# Project Schedule



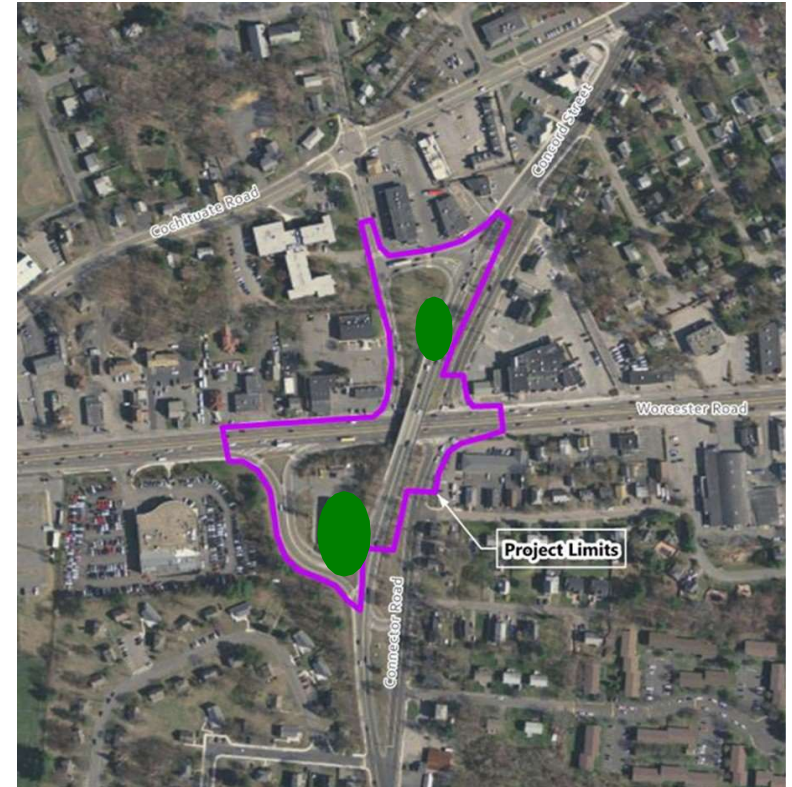


# Framingham- Drainage Improvements

## Route 9 & Route 126

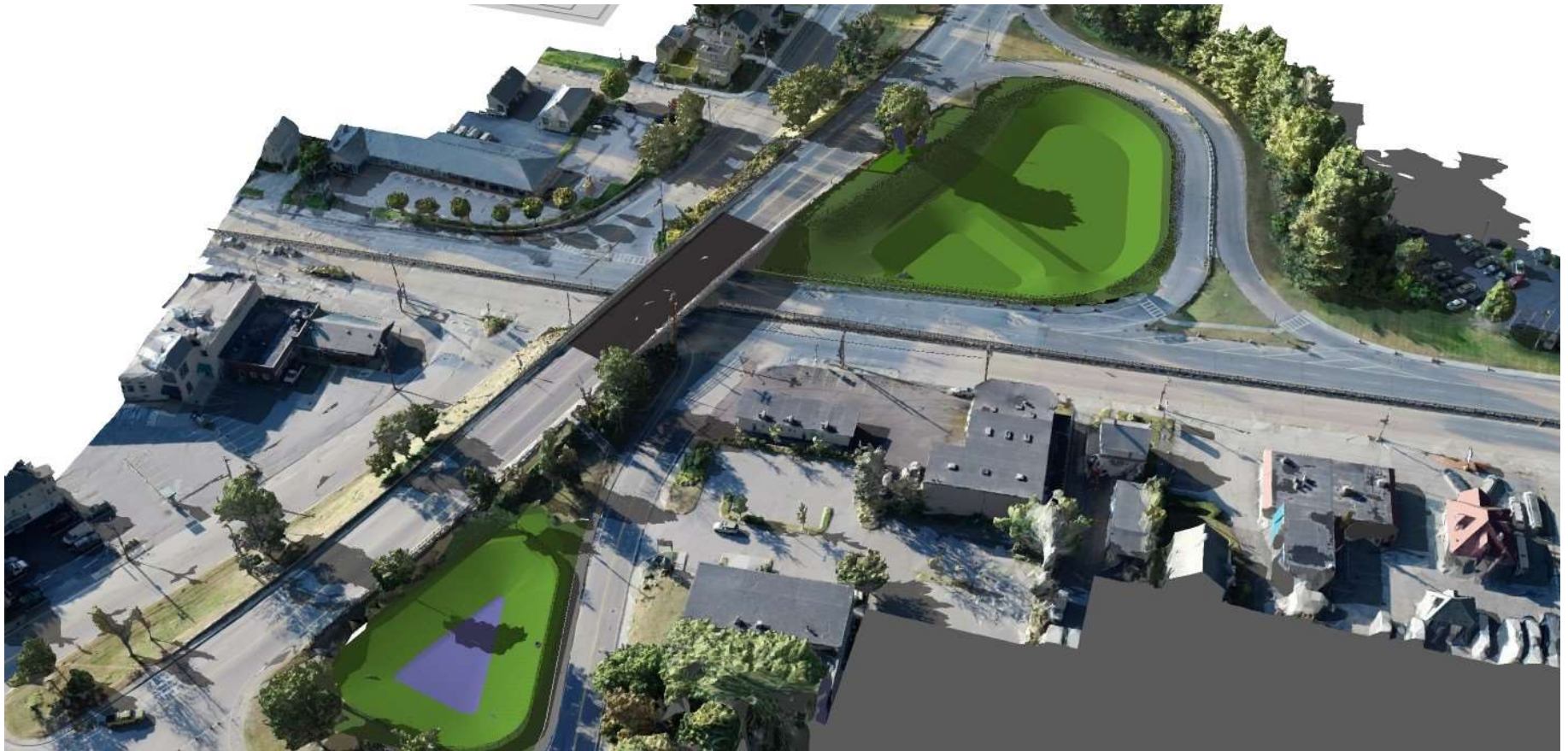


- The project will reduce the frequency and duration of flooding on Rte. 9 by providing stormwater infiltration basins at the intersection of Fairbanks Street and Beacon Street.
- The project will also repair the existing sidewalks and improve accessibility.
- Salt Shed relocation will occur in the Spring of 2022.
- The \$ 4.4 million project is at the 25% phase and is scheduled to be advertised on 11/13/21.



# Framingham- Drainage Improvements Route 9 & Route 126

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## Marlborough-Hudson- Ramp Improvements at I-495 (SB) TO I-290 (WB)

- The proposed interchange Improvements will add onto the Phase 1 interim work by widening the I-495 SB Exit 25B ramp, which carries traffic from I-495 SB to I-290 WB.



## **Marlborough- Hudson- Ramp Improvements at I-495 (SB) TO I-290 (WB)**

- The ramp is proposed to be widened from 1 lane to 2 lanes to increase capacity, reduce delay, shorten queue lengths, and improve safety.
- The approach to the ramp on I-495 SB and the merge with I-290 WB will be reconfigured to allow for the 2-lane ramp. The design will include new roadway geometry, roadway resurfacing, pavement markings, signage, guardrail, retaining walls, and storm drainage.
- This \$6 million project is at the final design phase and has a proposed 10/4/2021 advertisement date.

# Project Development Highlights

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- **Acton- Boxborough- Littleton-** Pavement Preservation for Route 2 (\$7 million)
- **Bolton- Boxborough- Harvard- Littleton-** Pavement Preservation on I-495 (\$14 million)
- **Bellingham** - Rehabilitation and Related Work on Route 126, from Douglas Drive to Route 140 (\$6.5 million)
- **Hopkinton- Upton- Westborough-** Resurfacing and Related Work on I-90 (\$9.9 million)
- **Framingham-** Traffic Signal Installation at Edgell Road at Central Street (\$2.7 million)
- **Littleton- Ayer-** Intersection Improvements on Route 2A at Willow Road and Bruce Street (\$2.8 million)

# Project Development Highlights

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- **Marlboro- Hudson- Berlin-** Interstate Maintenance & Related Work on I-495 (\$ 13 million)
- **Medway-** Holliston Street and Cassidy Lane Improvements
- **Milford- Hopkinton- Westborough- Southborough-** Resurfacing and Related Work on I-495 (\$16 million)
- **Natick-** Bridge Reconstruction, N-03-007, Spring Street over the MBTA (\$1.2 million)
- **Shrewsbury-** Intersection and Signal Improvement at US 20 (Hartford Turnpike) at Grafton Street.
- **Sudbury-** Bike Path Construction - Bruce Freeman Rail Trail (\$13 million)



# Construction Highlights

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- **Ashland-** Reconstruction on Route 126 (Pond Street), from the Framingham T.L. Holliston T.L. (\$19.6 million)
- **Framingham, Natick, Wayland, Weston** - Resurfacing and Related Work on a Section of I-90 (\$14 million)
- **Hopkinton** - Route 135 signal and intersection improvement (\$12.3 million)
- **Hopkinton- Westborough-** Bridge Replacement, H-23-006=W-24-016, Fruit Street Over CSX & Sudbury River (\$13 million)
- **Hopedale- Milford** - Resurfacing & Intersection Improvements on Route 16 (Main Street), from Water Street West (\$3.3 million)
- **Littleton-Westford-**Interstate Maintenance and Related Work on I-495 (\$15 million)
- **Lancaster- Harvard- Littleton-** Resurfacing and Related Work on Route 2 (\$18 million)
- **Natick-** Reconstruction of Route 27 (North Main Street), From North Avenue to the Wayland Town Line (\$12.7 million)
- **Southborough- Ashland- Framingham-** Resurfacing and Related Work on I-90 (\$10 million)



# Shrewsbury

- Superstructure Replacement and Related Work (Including Painting)  
Br. No. S-14-018 (Steel)  
Boylston Street (Route 140) over Interstate 290
- The \$13.4 million contract has a project completion date of Dec 2021.
- See photo of phase one completion.

# Framingham, Natick-Cochituate Rail Trail

This \$12.4 million contract involves the construction of 2.4 miles of rail trail and includes a grade separated crossing at Route 30, as well as replacement of the CSX Bridge over Route 9.

Project completion Summer 2021.

*This photo is from Rte. 9 Bridge erection completed on Oct. 11/12/20.*

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# Questions and Answers

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# Contact Information

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Barry J. Lorion

District 3 Highway Director

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# THANK YOU!!!!

- [www.mass.gov/orgs/highway-division](http://www.mass.gov/orgs/highway-division)
- [www.mass.gov/Acceler8Bridges](http://www.mass.gov/Acceler8Bridges)