



PFC Ralph T. Basiliere Bridge Replacement

Public Meeting 1

Haverhill | March 9 2023 | 6:30 PM

Project File No. 605304



Agenda

1. Welcome & Overview
2. Why was this project initiated?
3. What do we want to accomplish?
4. How has our design progressed?
5. How will bicyclists and pedestrians be impacted?
6. What are the environmental, cultural resource, and community impacts?
7. What is our construction approach?
8. How will we keep you informed?
9. Questions & Discussion



Welcome and Meeting Overview:

- 30-minute presentation
 - Eamon Kernan, Project Manager, Massachusetts Department of Transportation (MassDOT)
- Q&A Period
 - Eamon Kernan, Project Manager, Massachusetts Department of Transportation (MassDOT)
 - Rich Lenox, Project Management/Bridge Engineering, WSP
 - Andy Benkert, Bridge Engineering, WSP
 - Erik Maki, Traffic, WSP
 - Etty Padmodipoetro, Urban Idea Lab, Bridge Architecture
 - Nathaniel Cabral-Curtis, Communications and Public Involvement

Language Translation Speakers

- **Portuguese**
 - KATIA MORRIS
- **Spanish**
 - FRANCES PERNILLO
- **Vietnamese**
 - TONY MAI CUONG

Notice of MassDOT / MBTA Policy Diversity and Civil Rights

All MassDOT / MBTA activities, including public meetings, are free of discrimination. The MassDOT / MBTA complies with all federal and state civil rights requirements, preventing discrimination on the basis of race, color, national origin, limited English proficiency, and additional protected characteristics. We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit: www.mass.gov/nondiscrimination-in-transportation-program / www.mbta.com/titlevi to reach the Office of Diversity and Civil Rights.

All questions and comments are welcome and appreciated.

Please refrain from any disrespectful comments.

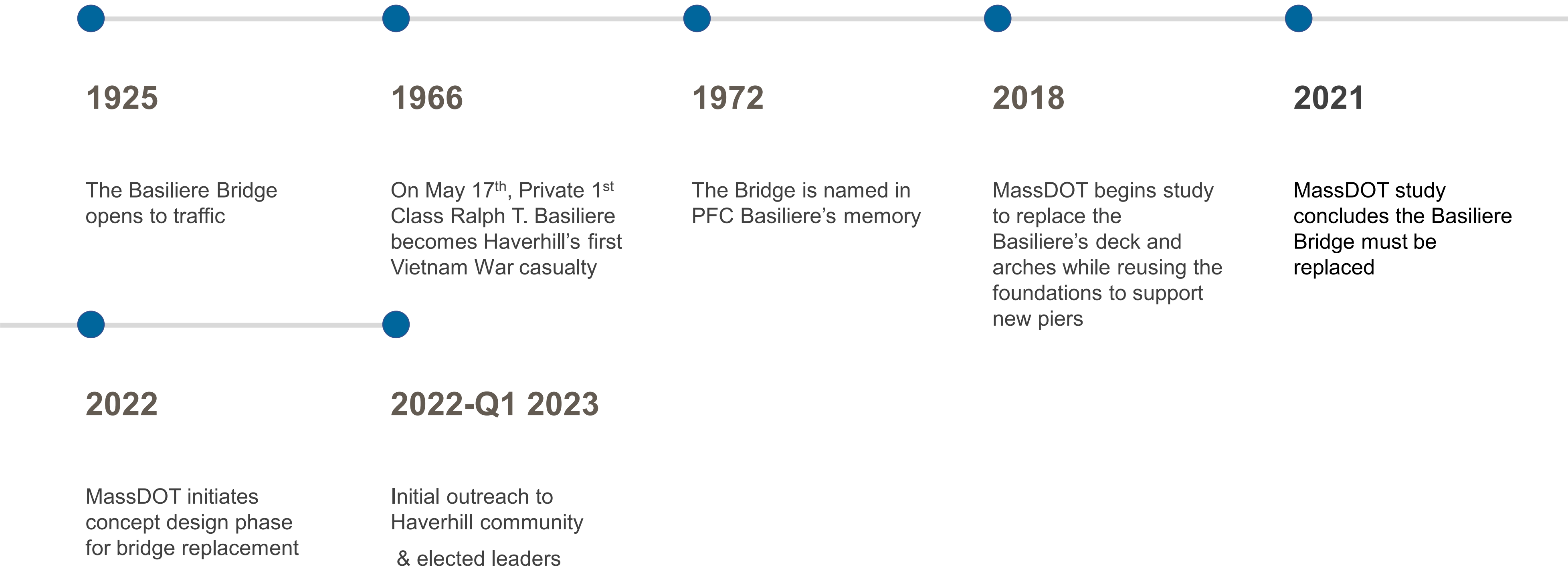
General Public Information Meeting Notes and Procedures

- MassDOT may retain and distribute transcripts / written records of this meeting
- Please respond to our short survey at the end of the meeting

How to Participate

- Listen and view the 30-minute presentation
- Ask questions to project team during question-and-answer period
- Submit comments into the comment box at the sign-in table
- Representatives of the media can direct media inquiries to Jacquelyn.Goddard@dot.state.ma.us

How did we get here?



Public Information Meeting - Advertisement

MassDOT Email Burst

- Mass email to community organizations – 2/28/23 and 3/7/23

Mass Media

- *Haverhill Gazette* – 2/23/23 and 3/2/23
- *Lawrence Eagle Tribune* 2/23/23 and 3/2/23
- *Rumbo (Spanish)* – 3/22/23 and 3/1/23
- HCTV – Weeks of 2/27/23 and 3/6/23
- WHAV – Weeks of 2/27/23 and 3/6/23

Social Media

- Facebook
- Twitter



The
H A V E R H I L L
G A Z E T T E


The Eagle-Tribune



Public Information Meeting – Flyer Drops and Staffed Tables

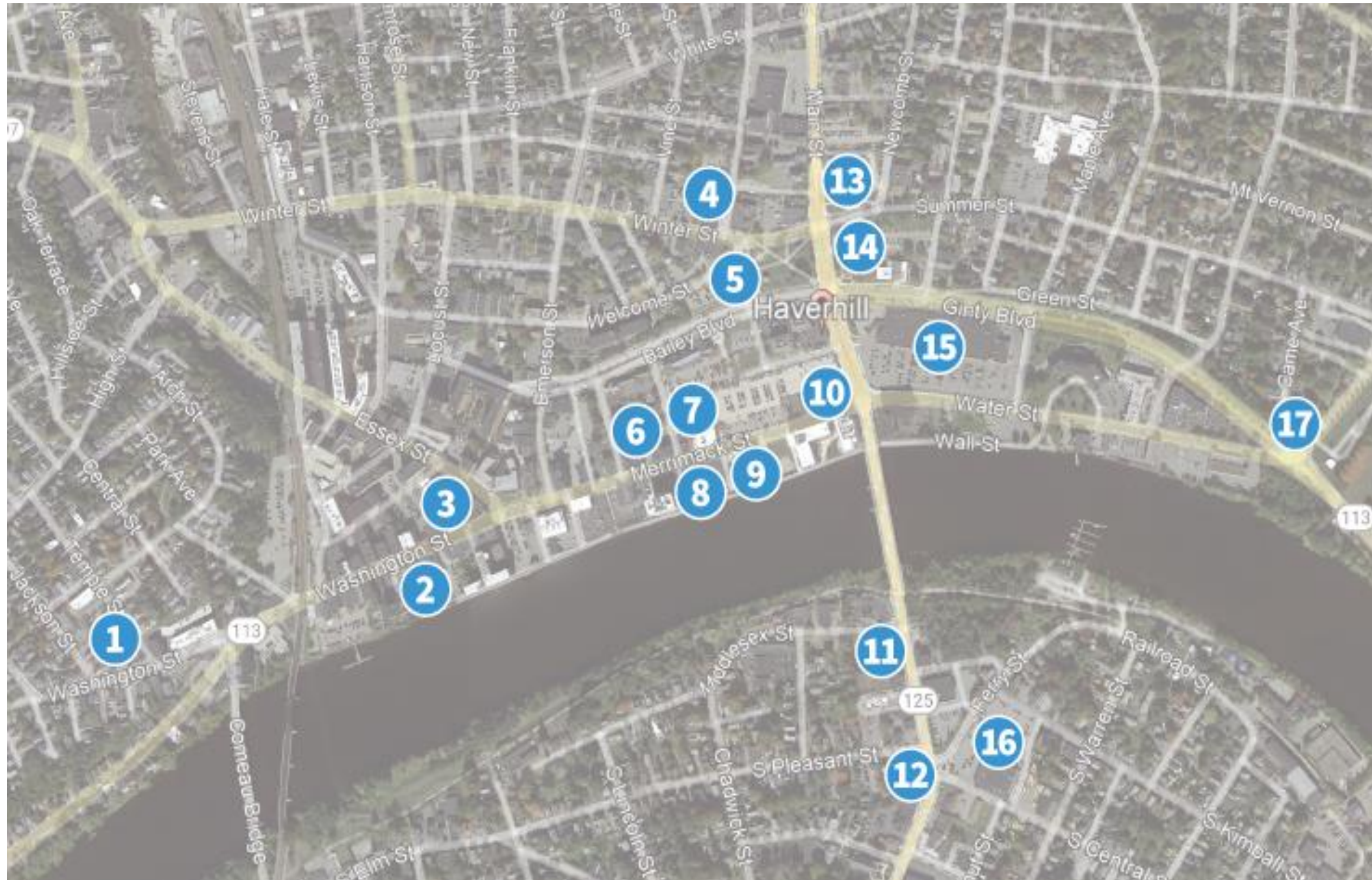
Staffed Tables:

- Haverhill Citizen Center
- Haverhill Public Library
- Water Street Market Basket

Flyer Drops at 17 locations in downtown and Bradford



Flyer Drop Locations



1. Smart Bike
2. MVRTA Washington Square
3. Battle Grounds Coffee Co.
4. Haverhill YMCA
5. Haverhill Citizen Center
6. TD Bank
7. La Pizza di Forno
8. Salvation Army Thrift Store
9. A-1 Deli
10. Pentucket Bank
11. Wendy's
12. A Sweet Affair
13. Haverhill City Hall
14. Haverhill Public Library
15. Market Basket
16. The Fix 2 (barbershop)
17. Riverside Cycle

Thank You To Those Who Shared Our Flyers

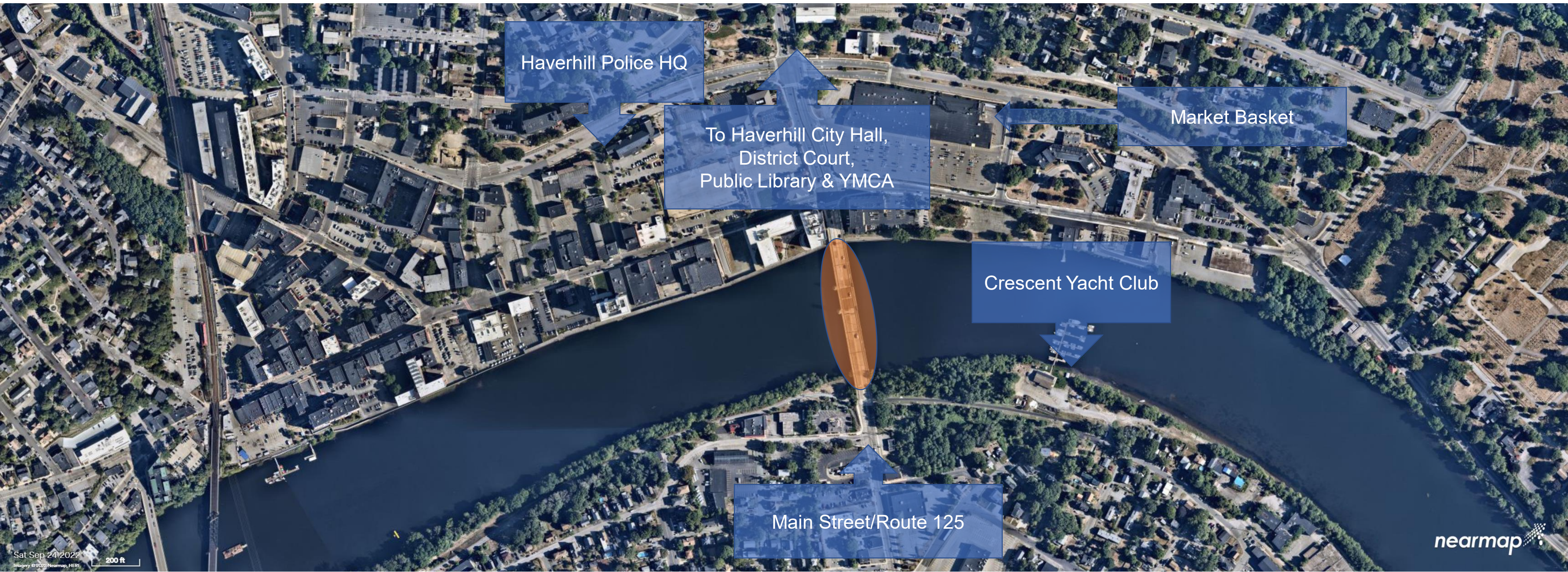
State and Municipal:

- State Delegation for Haverhill
- Office of Mayor James J. Fiorentini
- Haverhill City Council
- Council on Aging
- Disability Commission
- Planning & Economic Development via “News You Can Use” newsletter

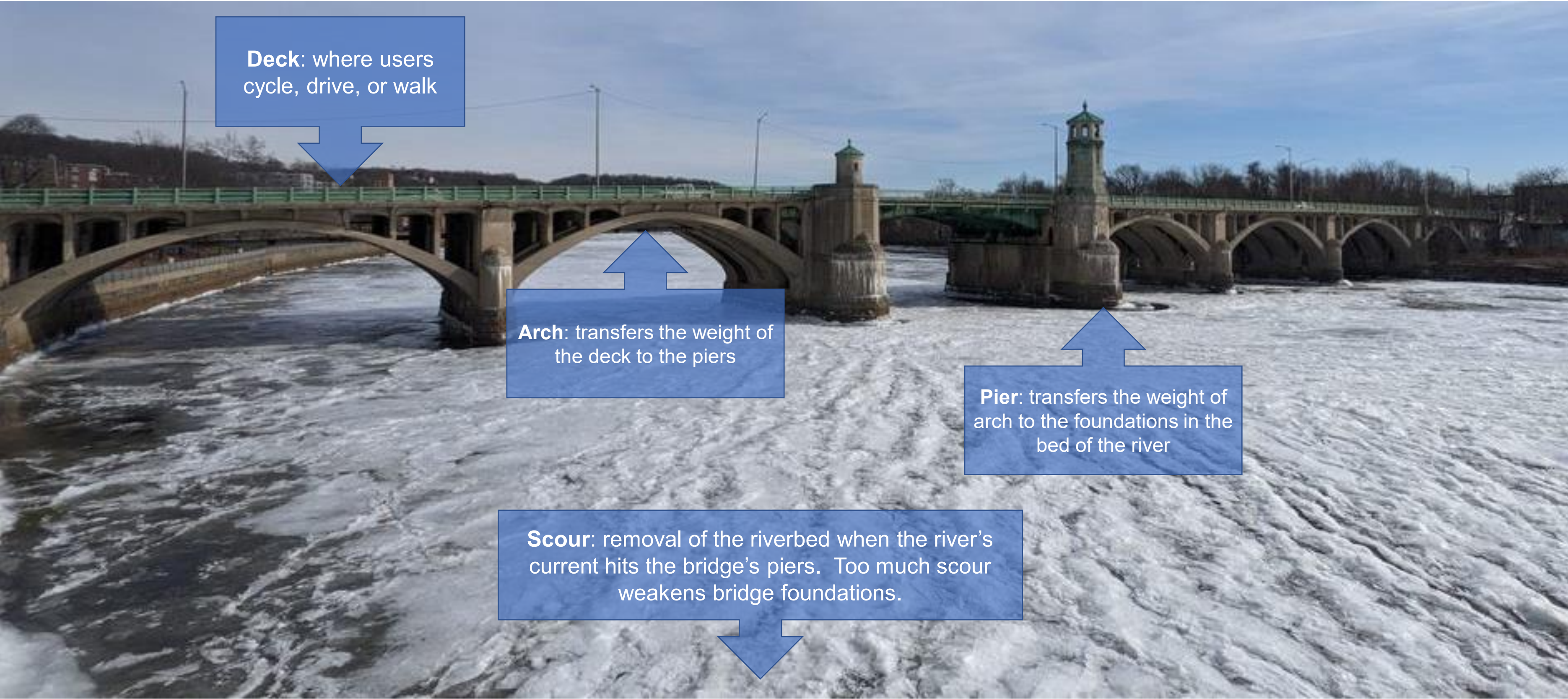
Local community organizations, medical providers, schools, and social service providers

Thank you to Haverhill city staff for double checking contact information

A Haverhill Landmark & Connector Since 1925



Key Terms

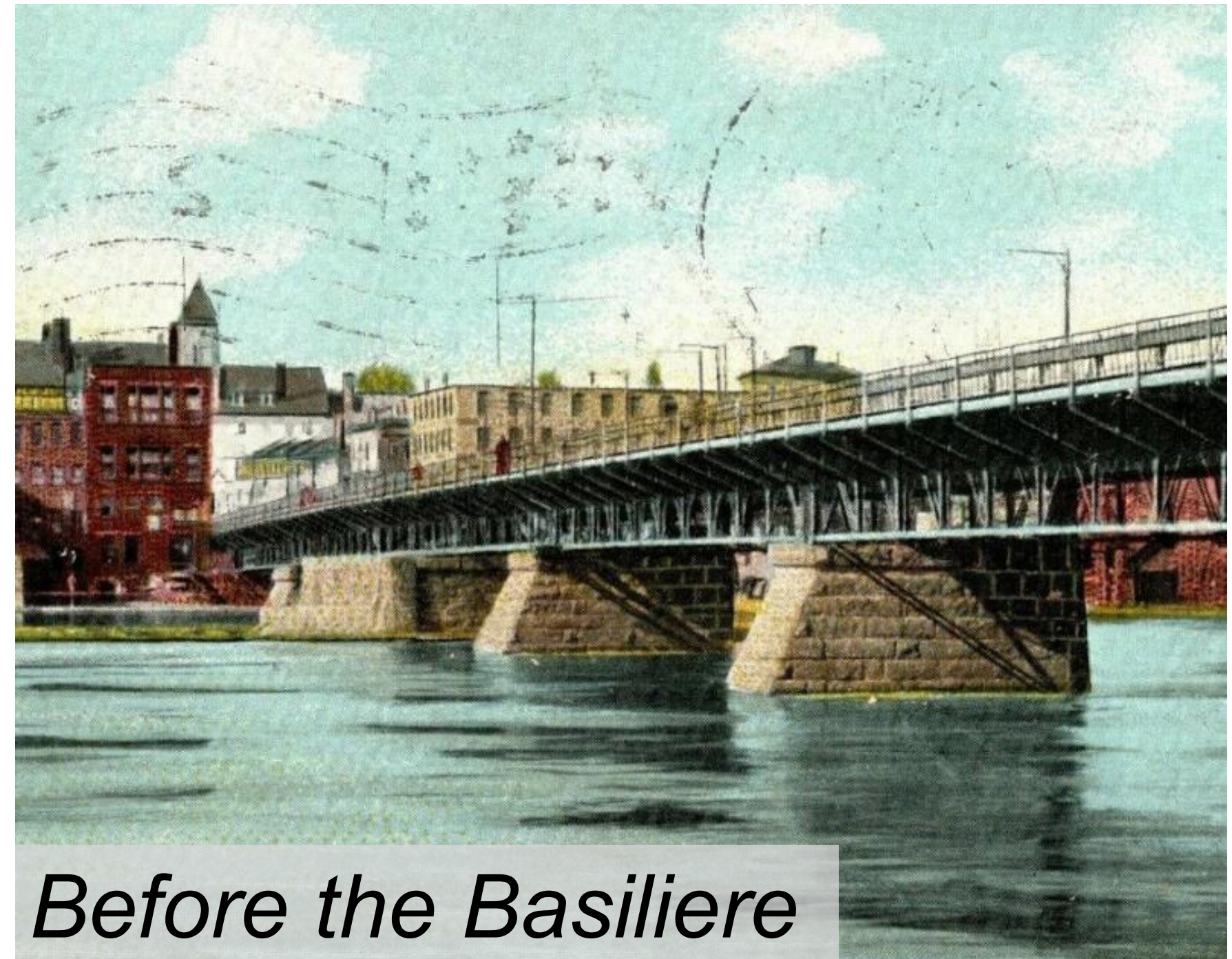




**Why was this
project
initiated?**

PFC Ralph T. Basiliere Bridge: Key Facts

- The existing bridge opened 1925 and replaced an older crossing.
- The Basiliere is technically two bridges with elements of the pre-1925 structure mixed into today's bridge
- Total length – roughly 800 feet
- Bridge width – roughly 68 feet
- Carries 30,000+ vehicles per day
 - 4% heavy vehicles including MVRTA buses
- At the end of its useful lifespan
- ***Remains safe for all users***



Before the Basiliere

Today's Bridge



Generally Deteriorated Conditions



Bridge Towers

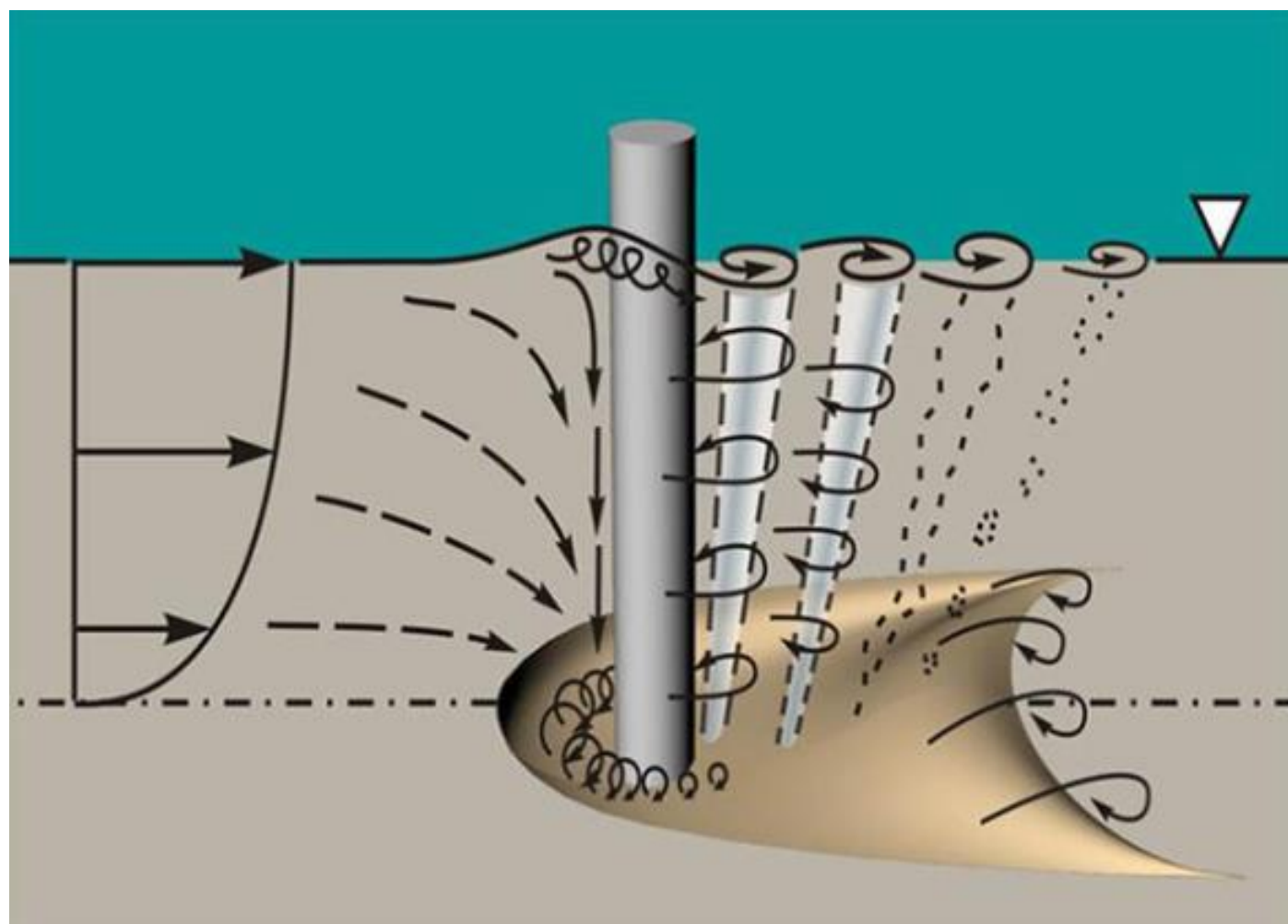


- Part of the bridge's unique appearance
- Foundations are in poor condition
- Portions of the towers are damaged beyond repair



Scour

- Scour is the removal of soil which supports bridge abutments and piers, caused by fast-flowing water.
- The fast-flowing water creates scour holes, which can lead to instability of the bridge's foundation.
- Drives the need for a full replacement of the Basiliere Bridge



Work Completed to Date

- Preliminary Structures Report
- Survey
- Geotechnical Control Borings
- Preliminary Geotechnical Report
- Preliminary Hydraulics Report
- Traffic Data Collection

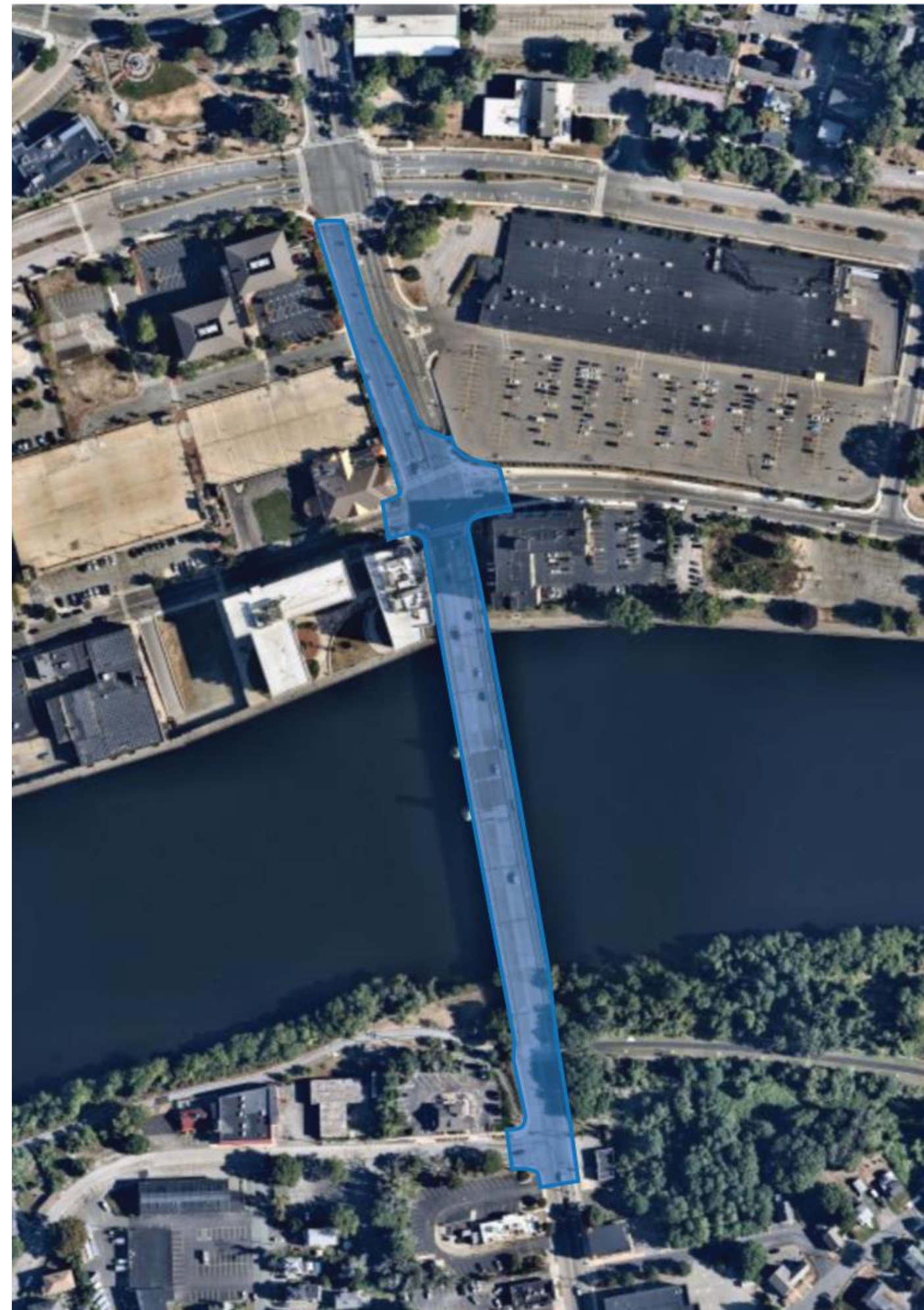




**What do we
want to
accomplish?**

Current Limits of Work

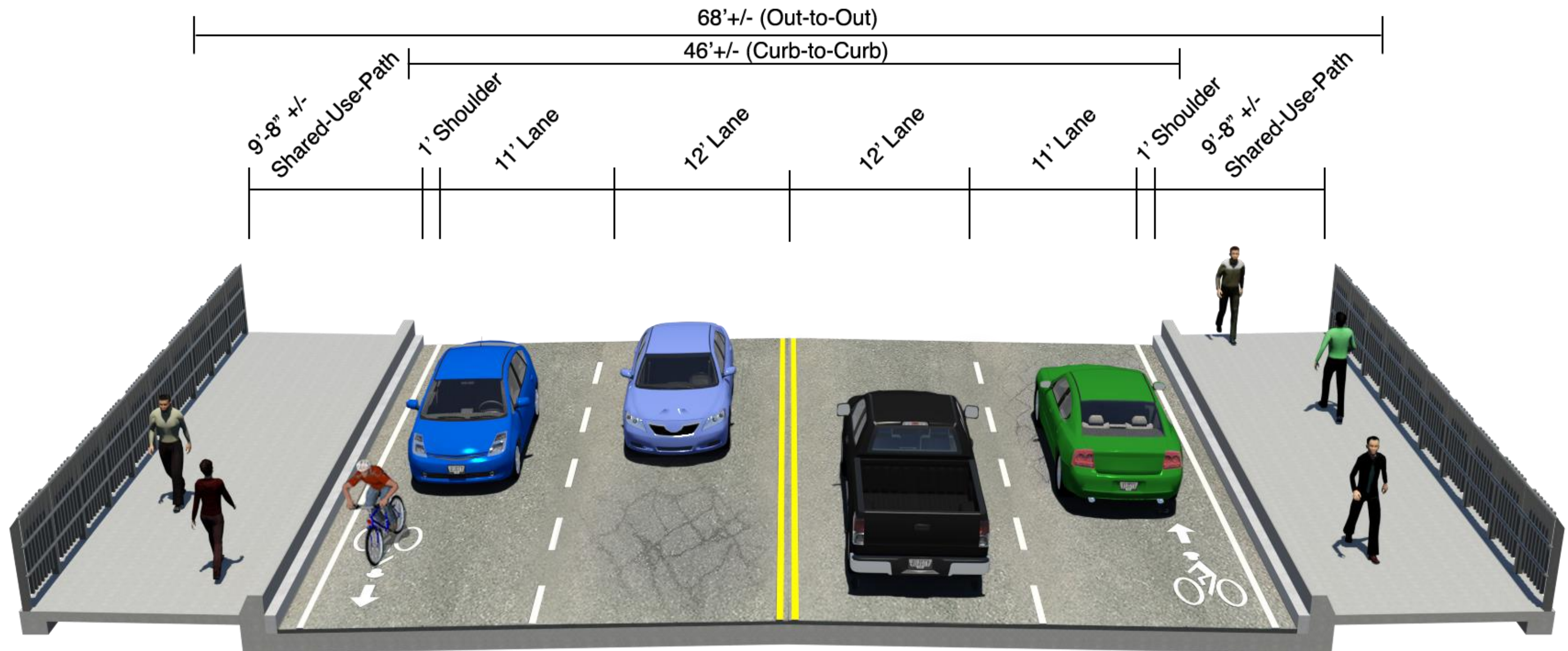
- In the north:
 - The Main Street/Water Street/Merrimack Street intersection
 - A portion of Main Street as far north as Bailey Boulevard
- In the south:
 - Just past the S. Main Street/Middlesex Street intersection
- Includes short stretches of intersection approaches



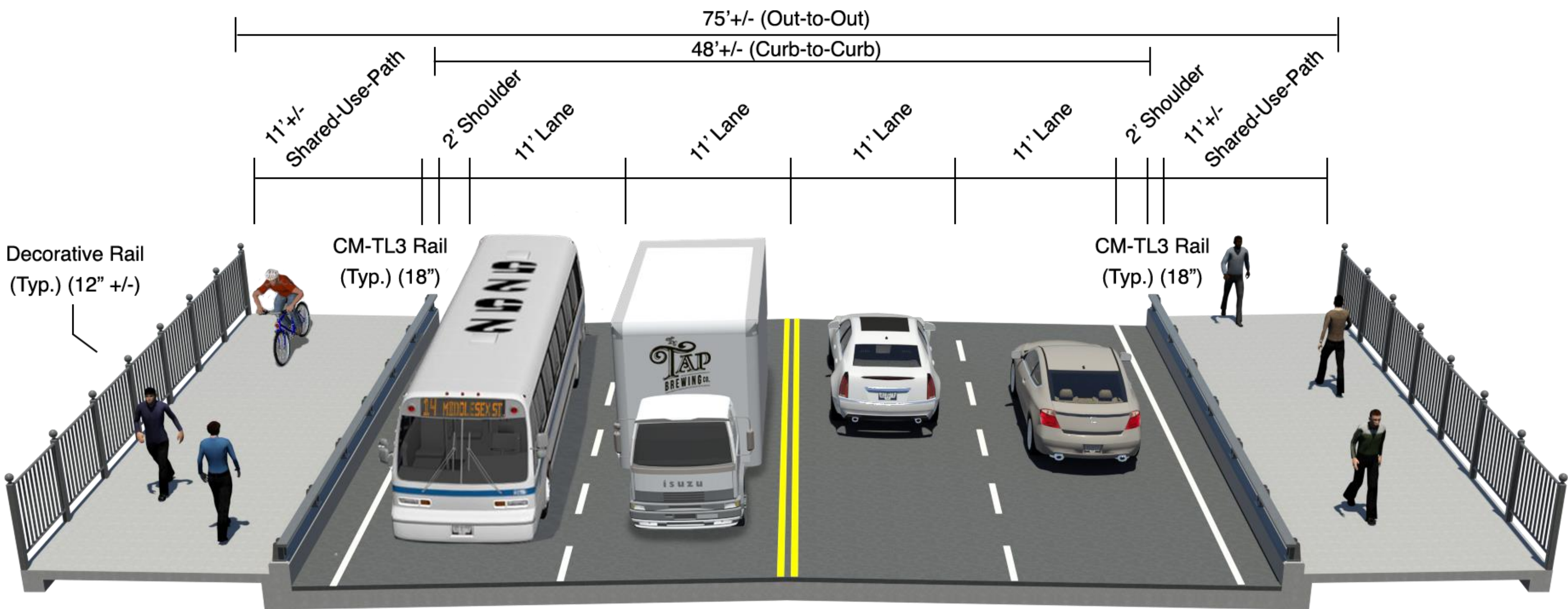
For Bridge Users

- Meet roadway traffic needs
- Provide ADA-compliant sidewalks on both sides of the structure
- Provide cycling accommodations on the structure
- Provide connections to Bradford Rail Trail and Dempsey Boardwalk

Existing Cross Section – Four Lanes

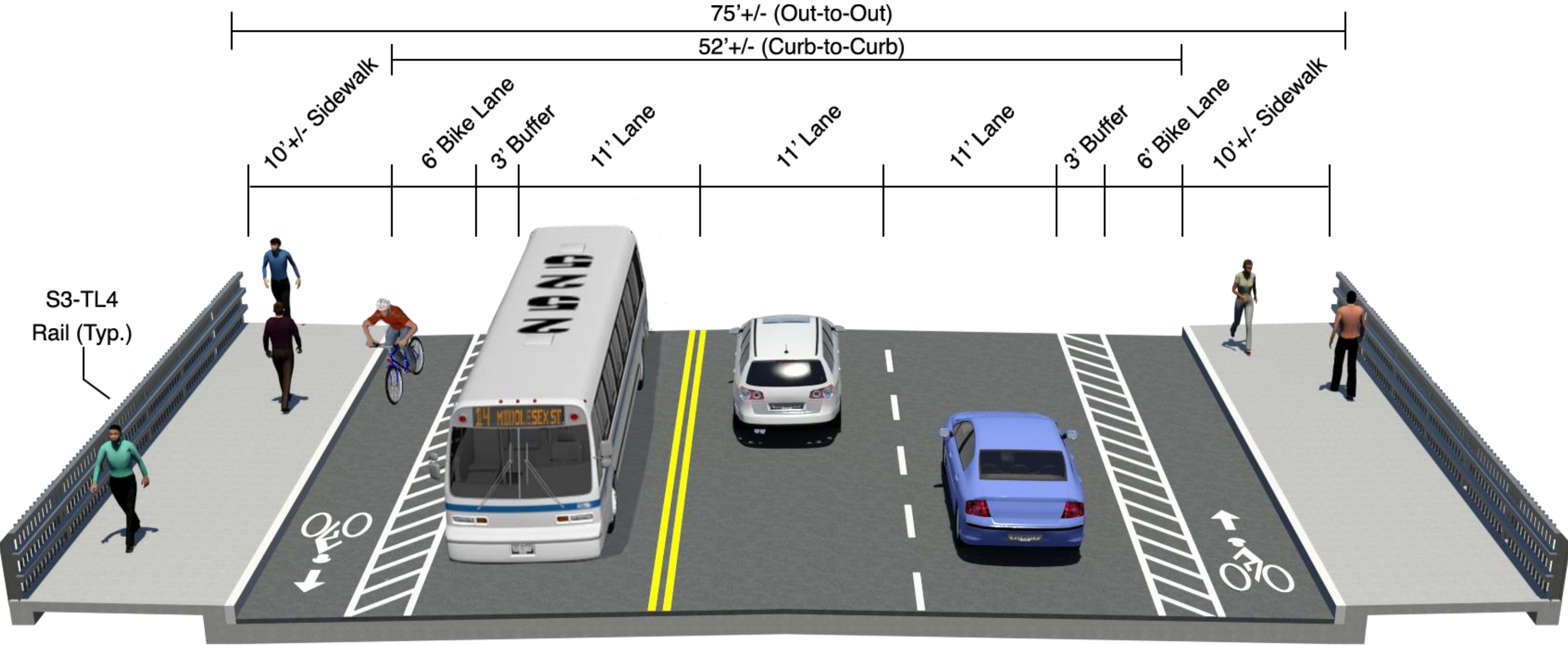


Potential Cross Section – Four Lanes



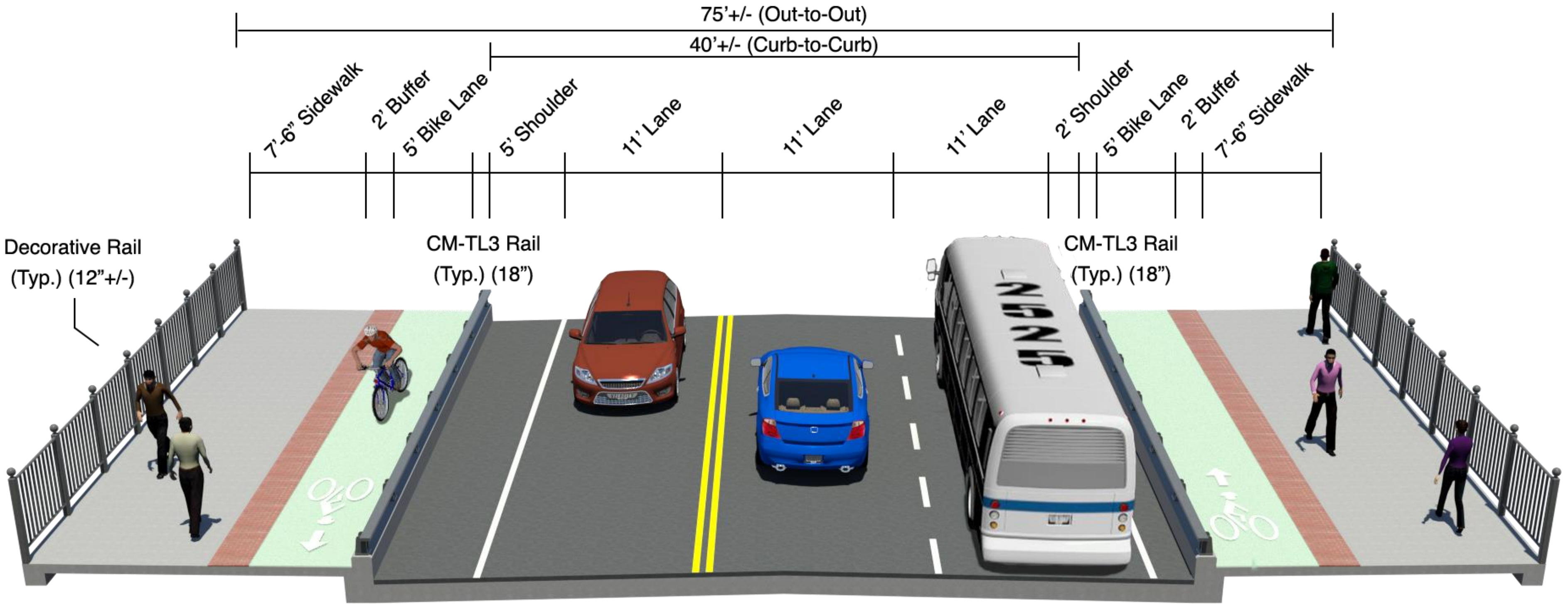
Sidewalks widened to shared use paths

Potential Cross Section – Three Lanes



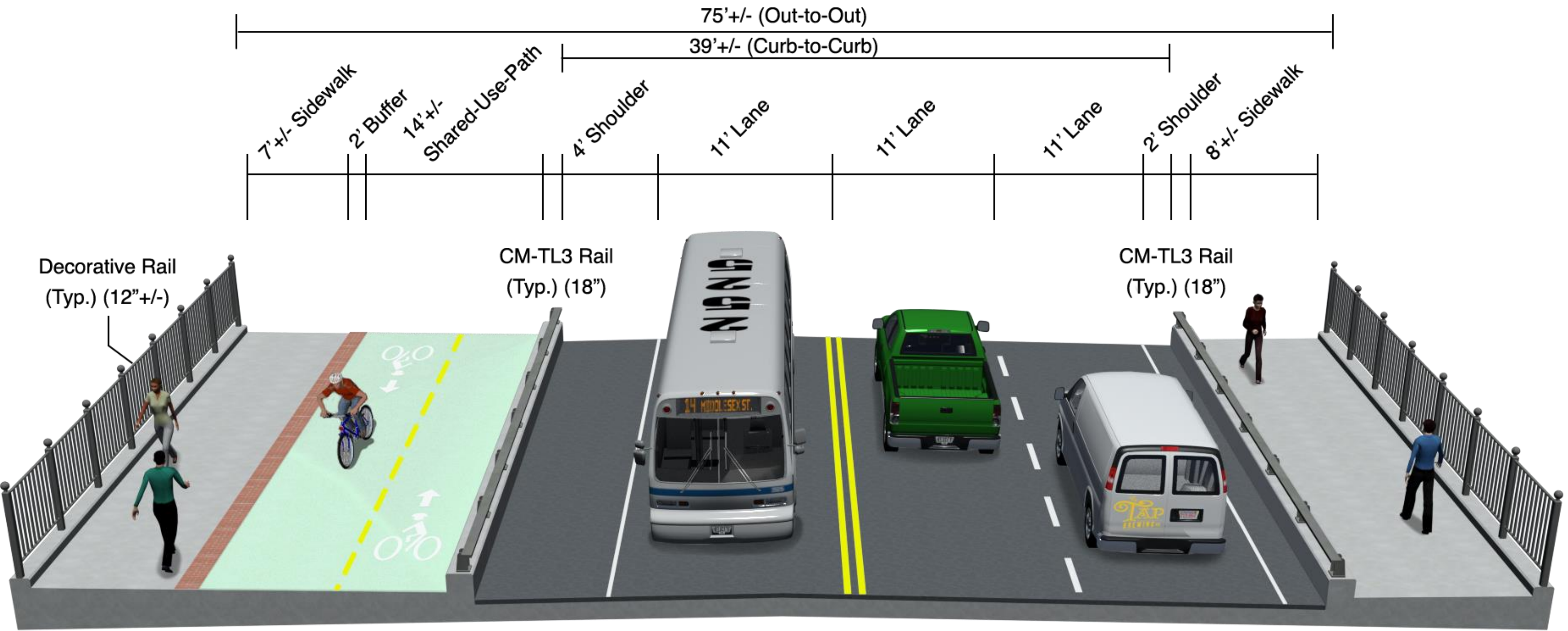
On-street bicycle facilities

Potential Cross Section – Three Lanes – Decorative Rail



Separated bicycle facilities – same direction as traffic – level with sidewalk

Potential Cross Sections – Three Lanes – Decorative Rail



Separated bicycle facilities – both directions on southbound/upstream side – level with sidewalk



For the Merrimack River

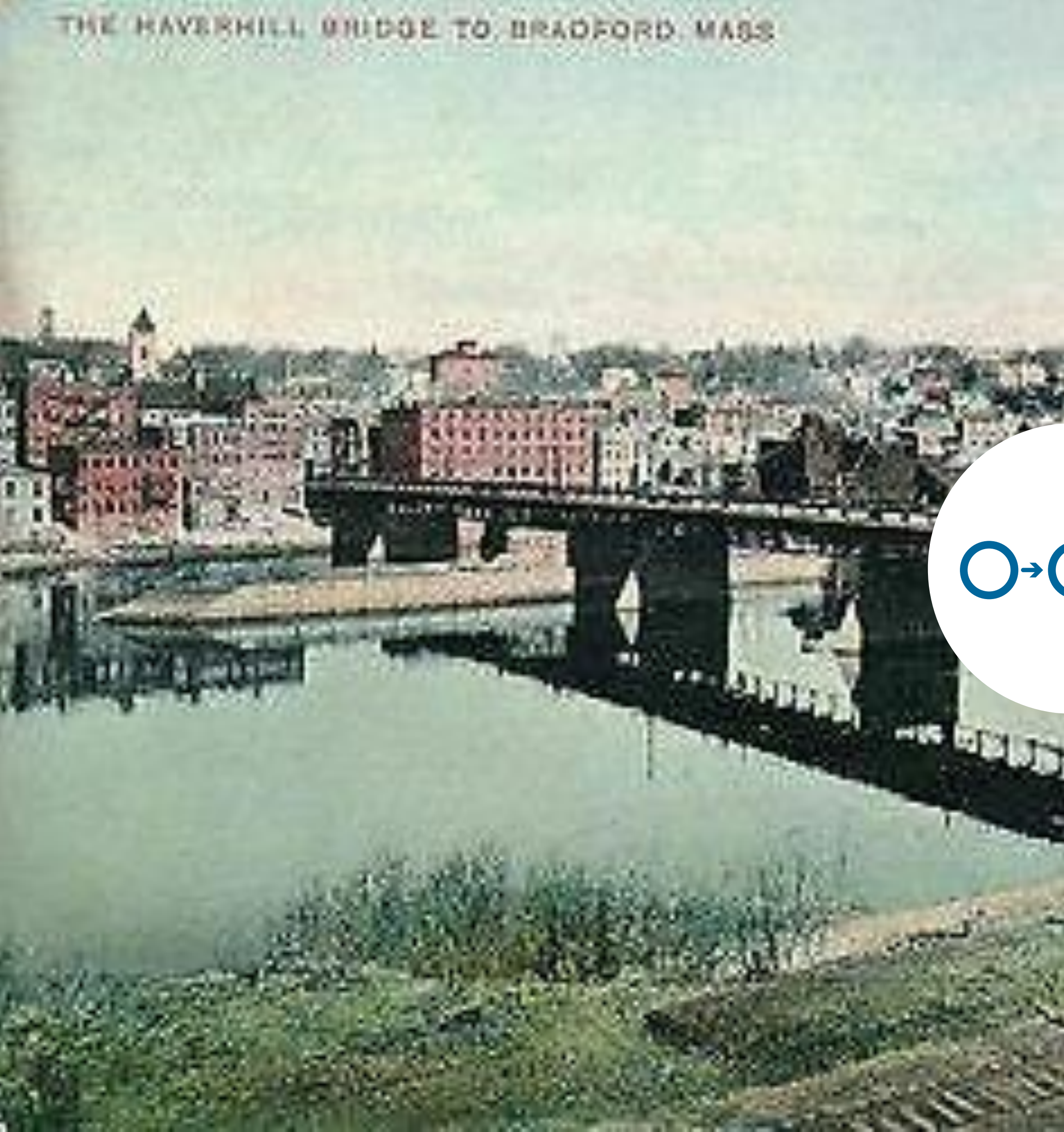
- Reduce the number of piers in the river to the extent possible (five today)
- Avoid or remove existing and prior bridge foundations
- Capture and treat stormwater that falls on the bridge
- Avoid impacts to wetlands along the river's south bank
- Avoid impacts to the Atlantic Sturgeon and other protected species
- Provide adequate horizontal and vertical clearances for:
 - Flooding events
 - Crescent Yacht Club and other boaters

For Abutters

- Design a replacement bridge that:
 - Minimizes right-of-way impacts
 - Can be constructed without undue impacts to nearby homes
 - Allows for one lane in each direction during construction
 - Allows for one sidewalk during construction
 - Maintains uninterrupted utility service



THE HAVERHILL BRIDGE TO BRADFORD MASS



How has our
design
progressed?

Concept Design Phase

- By Summer 2023, we want to be able to answer the following:
 - What type of bridge will replace the current structure?
 - What will the new bridge look like?
 - What will the lane configuration be on the new bridge?
 - How will the new bridge accommodate cyclists and pedestrians?
 - How will the new bridge provide connections to the Bradford Rail Trail and Dempsey Boardwalk?

Considerations on Structure types

- Respect the history of the previous bridge
- Context sensitive design
 - Lighting
 - Aesthetic Treatments – i.e. - railings/viewing bump outs
- Ability to be constructed in stages (2 primary stages likely)
- Facilitate future inspection and maintenance
- Able to carry required utilities

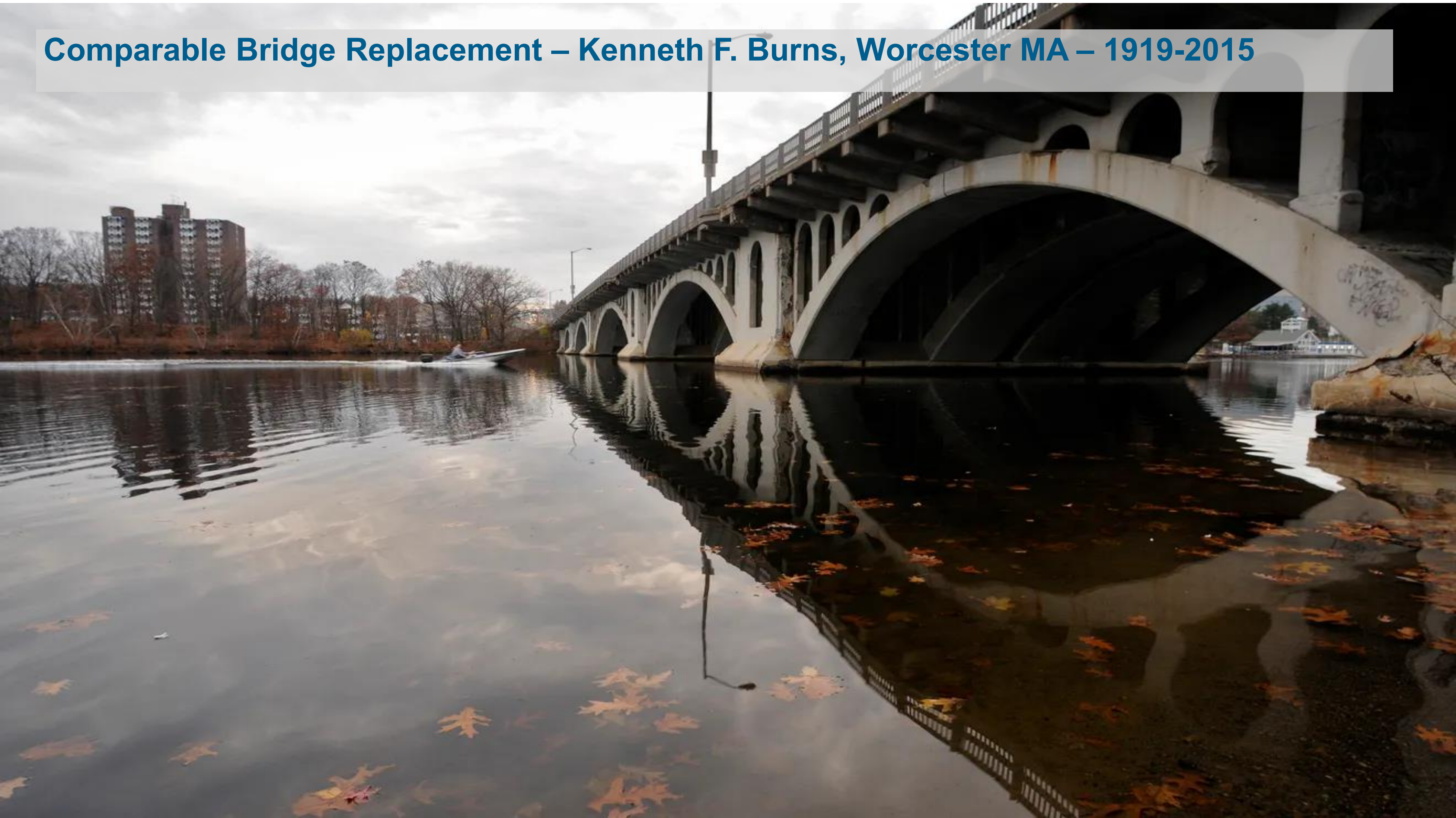
Today's Bridge – Reminder View



Potential Bridge Concept – Parabolic Girder



Comparable Bridge Replacement – Kenneth F. Burns, Worcester MA – 1919-2015



Comparable Bridge Replacement – Kenneth F. Burns, Worcester MA – 2015 to present



Today's Bridge – Reminder View II



Potential Bridge Concept – Berkeley/Dighton, MA



Potential Bridge Aesthetics – Bridge End Treatments





**How will
bicyclists and
pedestrians
be impacted?**

Improving Cycling and Walking Connections



- Today:
 - No dedicated cycling space
 - Pedestrians are provided with sidewalks on both sides
- For the new bridge, we want to hear from you:
 - A wider shared use path on both sides?
 - Street level bicycle lanes?
 - Sidewalk level cycle tracks?



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

Construction Impacts

- During construction:
 - One lane in each direction
 - One sidewalk
 - Signal timing changes to keep traffic flowing
 - Potential full off-peak closure if needed
 - Potential turn restrictions to reduce congestion
- Tell us your construction period concerns:
 - Traffic congestion?
 - Noise?
 - Nighttime operations?
 - Something else?

What About The Towers?

- The smaller tower is in better condition than the larger one
- Their weight requires their placement directly over a pier
- Options will be shared with the community to evoke the existing structures in the new bridge.



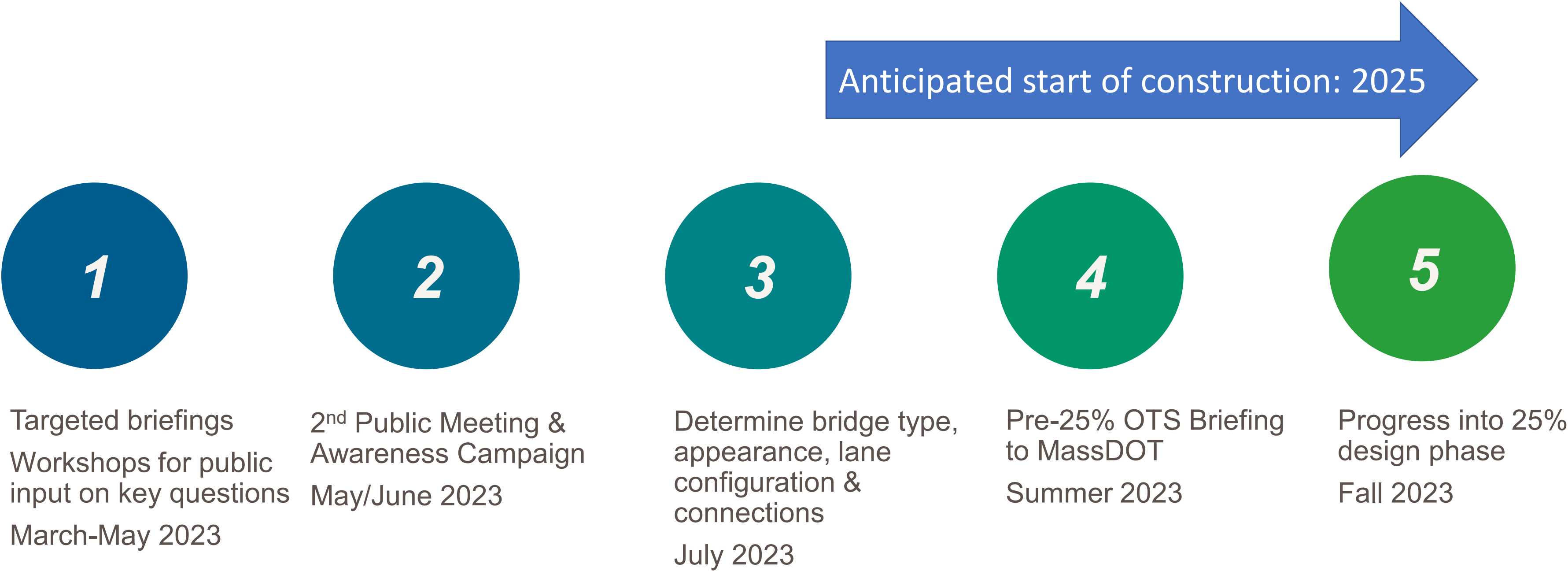


**What is the
construction
approach?**

Proposed construction approach: Design-Build

- Tonight's team will develop a 25% design and base technical concept (BTC) for bid by Design-Build (DB) entities
- DB Best Value procurement
 - Short-List Best Qualified Teams
 - Shorten project duration
 - Promote innovation by teaming the engineer and the general contractor
 - Allow for accelerated bridge construction (ABC) techniques if applicable
- 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 may be used to ensure compliance with contract timelines

Our next steps

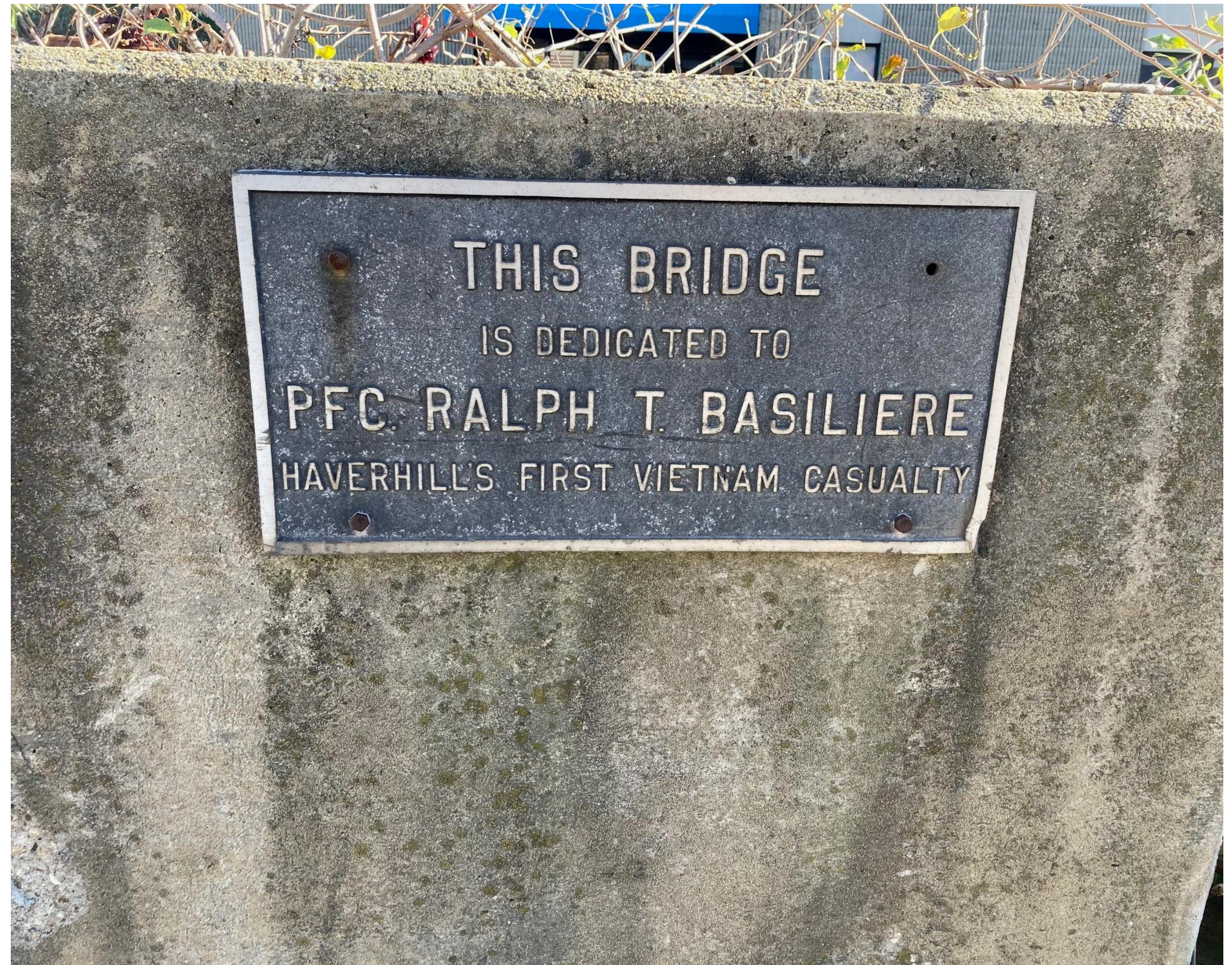




**How will we
keep you
informed?**

Upcoming public outreach

- March, April, May: workshop sessions to discuss:
 - Bridge type
 - Bridge appearance
 - Lane configuration
 - Bicycle/pedestrian accommodations & connections
- March, April, May:
 - Stakeholder discussions
- May: additional staffed tables to boost project awareness
- June: 2nd public information meeting to provide an update on concept design



How to reach us?

- Submit written comments to:
Carrie Lavallee, P.E., Chief Engineer
MassDOT
10 Park Plaza
Boston, MA 02116
Attention: BRIDGE SECTION, PROJECT FILE NO. 605304
- Submit email comments to:
haverhillbasilierebridge@dot.state.ma.us
- Visit the project website at:
www.mass.gov/basiliere-bridge-project-haverhill



**Questions and
discussion**



Thank You

PFC Ralph T. Basiliere

Bridge Replacement

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Eamon Kernan - Eamon.kernan@dot.state.ma.us

