



Vietnam Veterans' Memorial Bridge Replacement

Chicopee Chamber of Commerce Stakeholder Briefing

Chicopee | June 9 | 1:00 PM

Project File Number: 612187

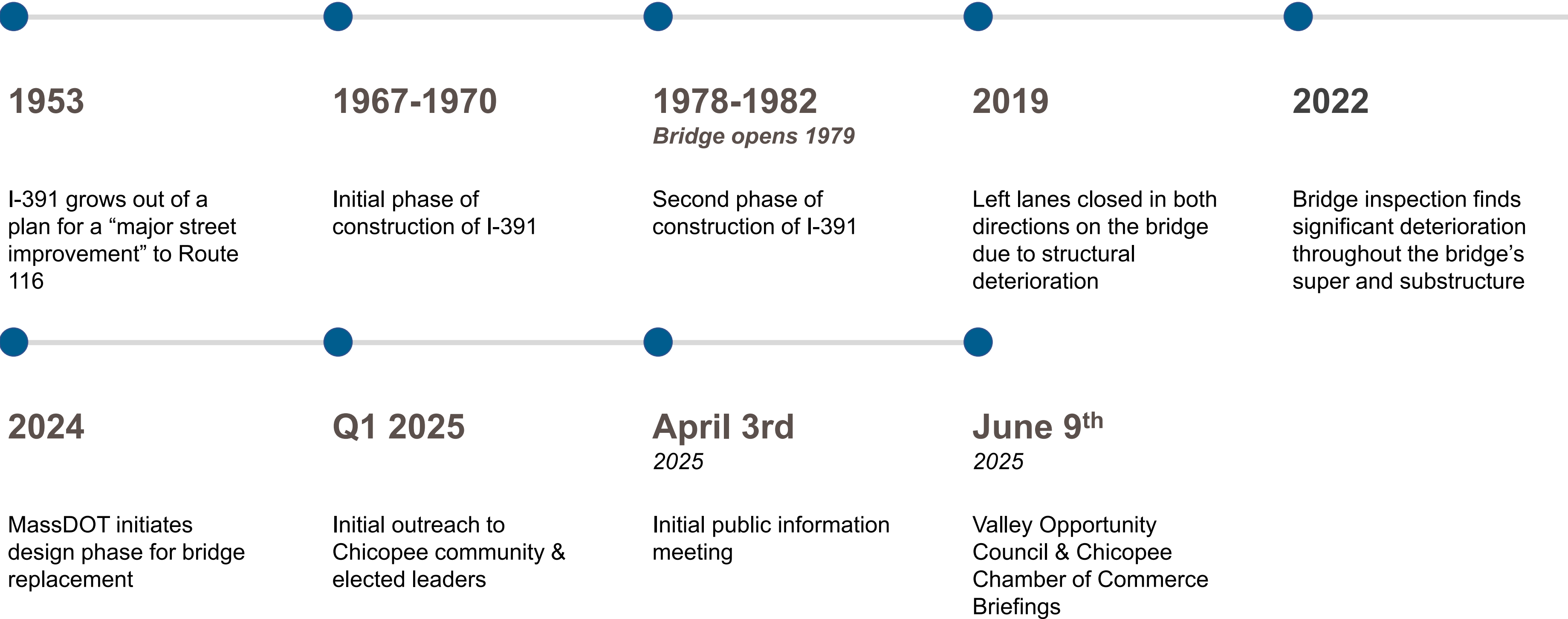


Agenda

1. Welcome & Overview
2. Why Was This Project Initiated
3. Project Status
4. Keeping Chicopee Open for Business
5. What is our Construction Approach
6. How will we keep you informed?
7. Questions and discussion



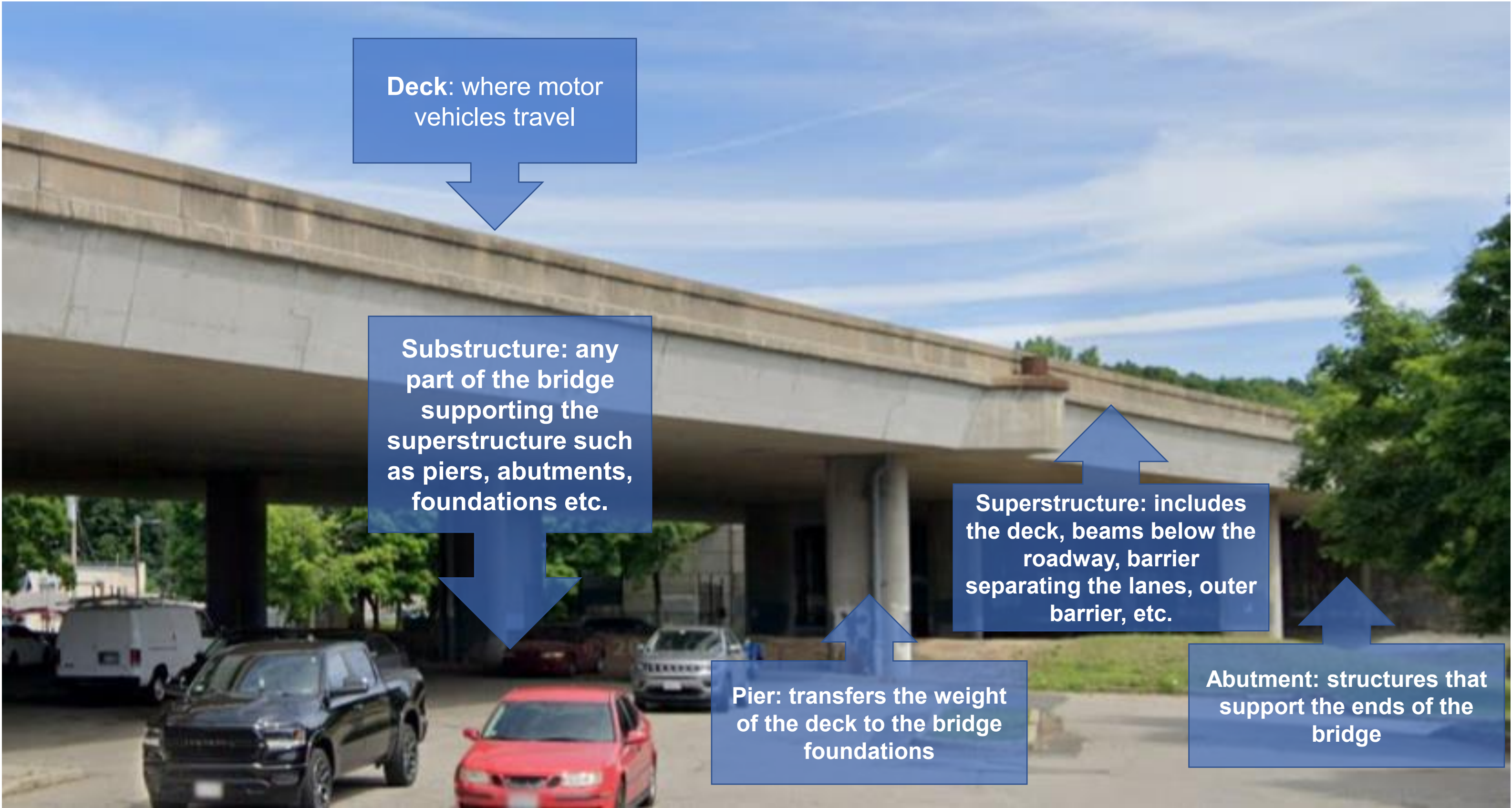
How did we get here?



Project Limits and Context



Key Terms



Deck: where motor vehicles travel

Substructure: any part of the bridge supporting the superstructure such as piers, abutments, foundations etc.

Superstructure: includes the deck, beams below the roadway, barrier separating the lanes, outer barrier, etc.

Pier: transfers the weight of the deck to the bridge foundations

Abutment: structures that support the ends of the bridge



**Why was this
project
initiated?**

10/16/20

Vietnam Veterans' Memorial Bridge: Key Facts

- Opened to traffic in 1979
- Configuration
 - 840' long
 - 111' wide (edge-to edge)
 - Concrete box girder superstructure
 - Six piers
 - Two abutments
- Approximate daily traffic:
 - 14,600 northbound
 - 13,000 southbound
 - 3% heavy vehicles (buses, trucks)
- Three lanes in each direction
 - Left lanes closed in both directions due to structural deterioration



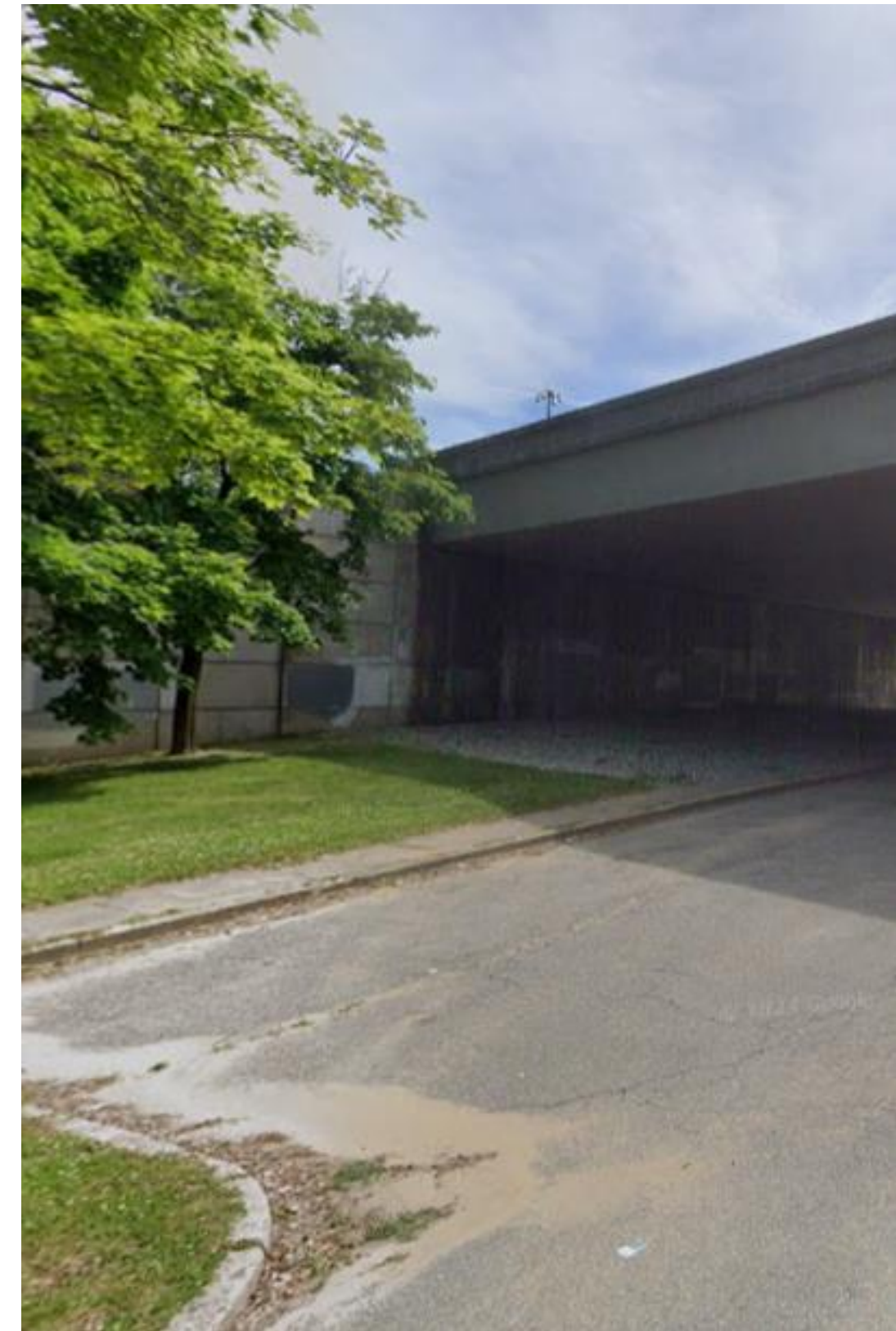
A Deteriorated Structure

- Super- and Substructure are in poor condition:
 - Spalled/delaminated concrete
 - Exposed reinforcing steel
 - Damaged expansion joints
- *Remains safe for all users*
- Has reached the end of its useful lifespan and must be replaced



Goals for the New Bridge

- A new bridge should:
 - Restore I-391 to a full six lane cross section (3 lanes NB and 3 lanes SB)
 - Provide for current and future traffic volumes including heavy vehicles
 - Be constructible in halves to maintain highway traffic during construction
 - Provide a 75-year design lifespan to reduce long-term impacts to local and regional motorists and transit users





Project Status

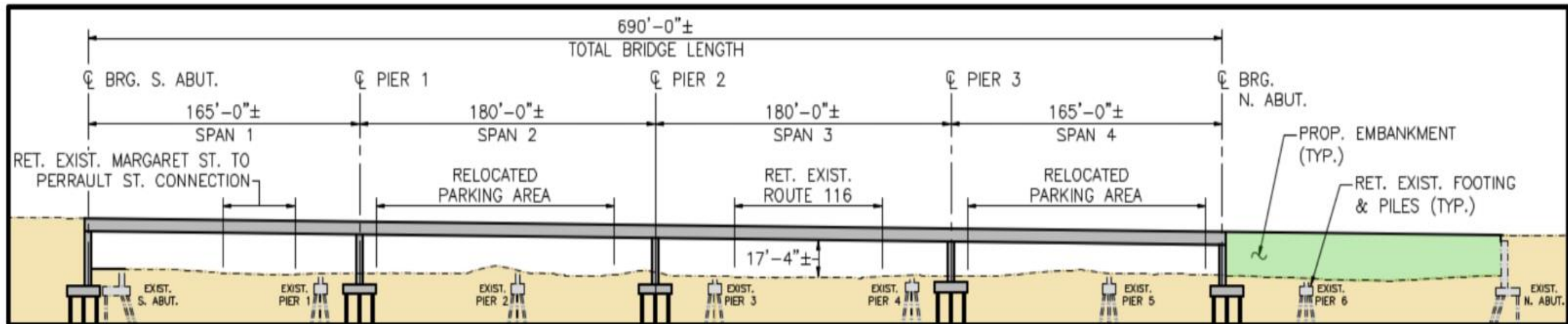
Status of Design Work

- Completed:
 - Bridge Type Selection Worksheet
 - Initial Traffic Data Collection
 - Preliminary Structures Report
 - Survey
- In progress:
 - Supplemental traffic data collection
 - Test borings
 - 25% design elements



Anticipated Span Arrangement

- Reduces unused space below the bridge
- Avoids existing pier locations
- Limits ROW impacts
- Maintains Margaret St. to Perrault St. connection



4 Span Arrangement

Anticipated Structure Type - I

- Several structure types evaluated:
 - Steel Plate Girder
 - Steel Box Girder
 - Spliced Concrete Bulb Tee Girder
- The spliced concrete bulb tee girder offers the best performance:
 - Similar appearance to existing structure
 - Reduced maintenance means fewer community and traveler impacts
 - Less susceptible to damage from roadway deicing salt
 - Lowest anticipated construction and lifecycle costs

Anticipated Structure Type - II

- Replacement bridge will mirror other recent MassDOT bridges and viaducts
 - MassDOT aesthetic column treatment to be used, given visible neighborhood location



Winter St. over I-95 in Waltham

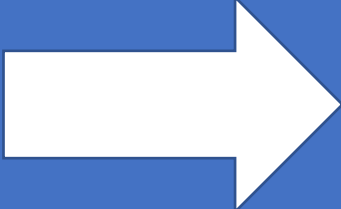


Belmont St. over I-290 in Worcester



**Keeping
Chicopee
Open for
Business**

Business Concerns & Our Approach

Concern		Approach
Employee commute/receipt of deliveries/dispatch of products		<ul style="list-style-type: none">• Two lanes open in both directions on I-391 during commuting times• Chicopee Street open as normal during commuting times• Closures/detours off-peak only• Public outreach provides accurate, timely travel information
Loss of parking under I-391		<ul style="list-style-type: none">• Construction staged to maintain some parking during construction• Space count based on local business input• Unused space below I-391 reduced, but parking maintained in the final condition
Loss of foot traffic at local businesses		<ul style="list-style-type: none">• Chicopee Street and sidewalks only closed during demolition/construction directly above the road• Signage will help direct pedestrians through/around work zone
Construction period communication		<ul style="list-style-type: none">• Public outreach does not end with design• MassDOT will adhere to outreach standards for major construction

Keeping You Moving During Construction - I

- Presented on April 3rd:
 - One northbound lane and two southbound lanes
- Investigating design refinement:
 - Two northbound lanes and two southbound lanes
- Existing structure demolished/new structure built one half at a time to provide a consistent two lanes in both directions during peak periods



Keeping You Moving During Construction - II

- Public safety impacts:
 - Chicopee Street, Margaret/Perrault connector would close for demolition or construction above them, but not at the same time unless absolutely necessary
 - Sections of parking would need to periodically close for the same reason
 - Rolling roadblocks on I-391



Maintenance of Parking


- Parking Goals:
 - Maintain parking supply during and after construction
 - Provide approximately 60 spaces during construction using existing lots
 - Reduce space for nuisance activities, “ware-trucks,” “shade-tree oil changes,” permanently parked cars, etc.

	Existing Spaces	Proposed Spaces	Notes
Connector Road	10	0	A portion of parking will be maintained here during construction
North Lot	56	0	A portion of parking will be maintained here during construction
South Lot	39	60	A portion of parking will be maintained here during construction
Total	105	60	Parking consolidated on the south side of Chicopee Street between Margaret and Perrault streets

Note: existing lots are not striped; a layout was created assuming standard size spaces to obtain the existing count

Construction Period Outreach

- Outreach specifications are written into the construction contract
- I-495 Andover-Lawrence Bridge Replacements – a case study:
 - Public meeting ahead of construction
 - Community group briefings
 - Flyer drops ahead of high-impact operations
 - Dedicated email address for questions
 - Construction period hotline
 - Weekly progress reports/lookaheads
 - Project website
 - Project list serve



I-495 Andover-Lawrence Bridge Replacements

ROUTE 28 NORTHBOUND TEMPORARY OVERNIGHT CLOSURES

What is happening?

Between the hours of 10:00 PM on Tuesday, January 7th and 4:00 AM on Wednesday, January 8th, 2025, Route 28 northbound (towards Lawrence) will be closed where it passes below I-495. Extreme weather may delay this operation, but it is anticipated that the closure will be repeated nightly as needed for approximately the next three weeks excluding the nights of Fridays and Saturdays. When Route 28 northbound is shut down, Route 28 southbound (towards Andover) will not be impacted. Community members are encouraged to sign up for email alerts and to check the project website mass.gov/I-495-Andover-Lawrence-Bridge-Replacements during these three weeks for more detailed information.

While Route 28 northbound is shut down, members of the project team for the I-495 Andover-Lawrence Bridge Replacements will demolish portions of bridges which carry the interstate over Route 28. This is a first step towards building the new bridges associated with this job while maintaining traffic on I-495. MassDOT recognizes that nighttime demolition work is disruptive, but a full shut down of Route 28 is required to ensure public safety. As was discussed during our spring 2024 public meetings, this can only be accomplished during the overnight hours when traffic volumes drop substantially.

How will this affect you?

During the closure of Route 28 under I-495, traffic that would normally travel along Route 28 southbound and then reverse direction to access destinations on Binney or Shepley Streets will not be able to do so. To maintain access to these residential areas, the section of Route 28 locally known as South Union Street will operate in a two-way condition under control of police details between 10:00 PM and 4:00 AM each night of the closure. One police detail will be stationed approximately just to the south of Binney Street, the other approximately where Route 28 splits into South Union Street and South Street.


Other Ramp Closures

During these overnight closures, Ramp D (Route 28 northbound to I-495 southbound – towards Lowell) and Ramp E (I-495 northbound – towards Haverhill to Route 28 northbound) will also be closed to ensure public safety. More information about these detours can be found on our project website: www.mass.gov/I-495-Andover-Lawrence-Bridge-Replacements.

How can I find out more?

Please visit the project website below for more details, to sign up for updates and email alerts, and to view the latest resources on the Andover-Lawrence Bridge replacement project:

Project website www.mass.gov/I-495-Andover-Lawrence-Bridge-Replacements
 Project email I495AndoverLawrence@dot.state.ma.us
 Project phone (English, Spanish, Vietnamese): 978-981-8770



MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
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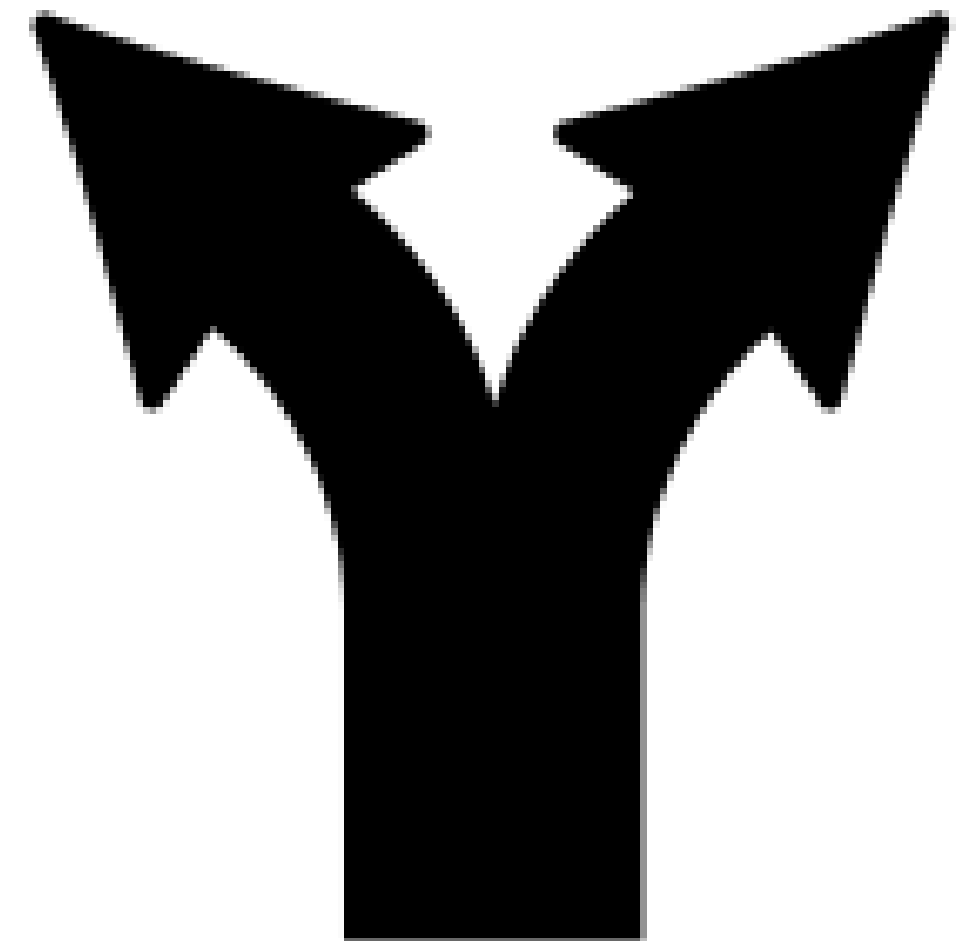
**What is the
construction
approach?**

Proposed construction approach: Design-Build

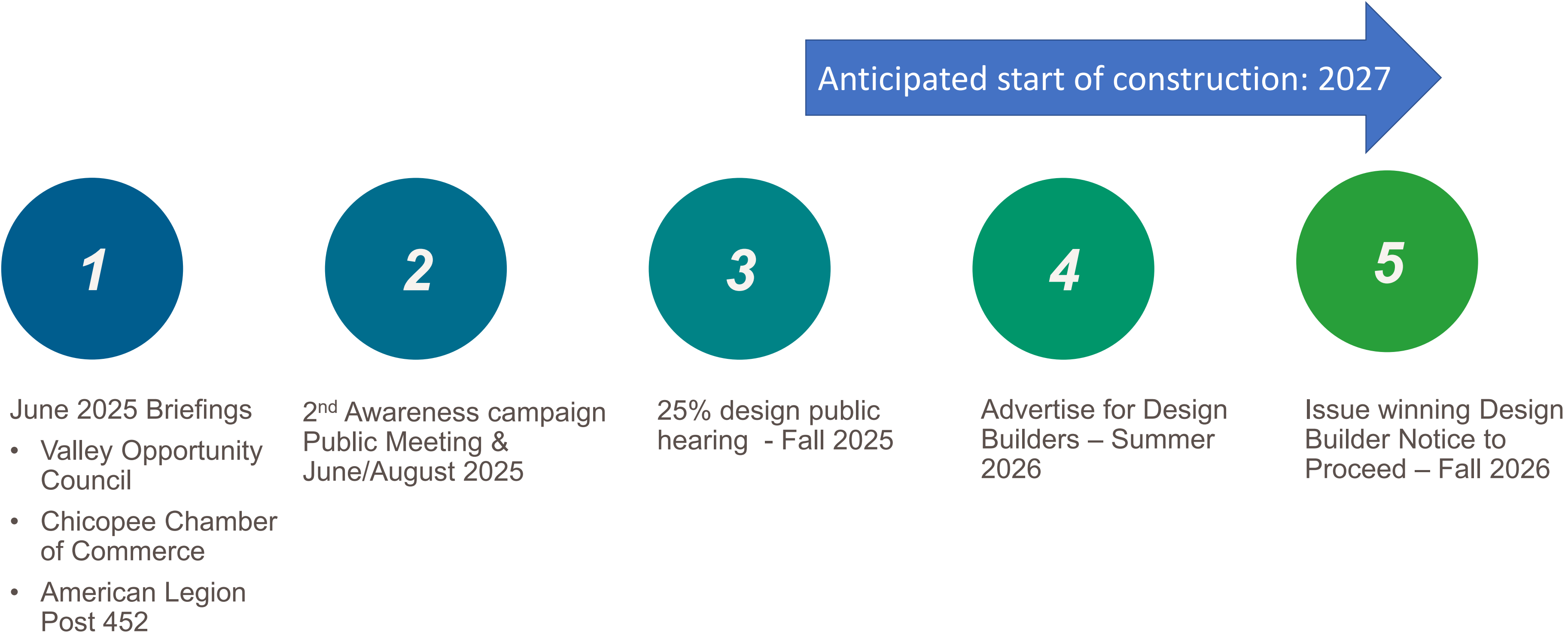
- The current team will develop a 25% design and base technical concept (BTC) for bid by Design-Build (DB) entities
- DB Best Value procurement
 - Short-List Best Qualified Teams
 - Shorten project duration
 - Promote innovation by teaming the engineer and the general contractor
 - Allow for accelerated 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

Alternative Technical Concepts (ATC's)

- Design Builders may propose ATC's as part of their bid
- ATC's may address:
 - Construction staging
 - Construction techniques
 - Materials used for construction
 - Structure type
 - Traffic management
- The advantages of any ATC must be proven to MassDOT's satisfaction



Our next steps





How will we
keep you
informed?

Upcoming public outreach

- June 2025:
 - Stakeholder briefings
- Summer: 2nd public information meeting to:
 - Provide an update on concept design
 - Check that we understood community input correctly
- Please reach out:
 - Existing issues the new bridge can address
 - Thoughts about construction



How to reach us?

- Submit written comments to:
Carrie Lavalley, P.E., Chief Engineer
MassDOT
10 Park Plaza
Boston, MA 02116
Attention: MAJOR PROJECTS, PROJECT FILE NO. 612187
- Submit email comments to:
i-391bridgechicopee@dot.state.ma.us
- Visit the project website and sign up for project emails at:
www.mass.gov/i-391-bridge-replacement-chicopee



Questions & Discussion



Thank You

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Project File Number: 612187

Aleksey Belov- i-391bridgechicopee@dot.state.ma.us

