

# Highway Administrator's Report

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# Mass Ave Bridge Safety Improvements

- Fall 2021 pilot program: review of temporary measures demonstrated safety improvements for multiple modes
- Permanent configuration: one travel lane in both directions across the bridge; buffered bike lanes; bus-only lanes to improve transit

CITY OF BOSTON



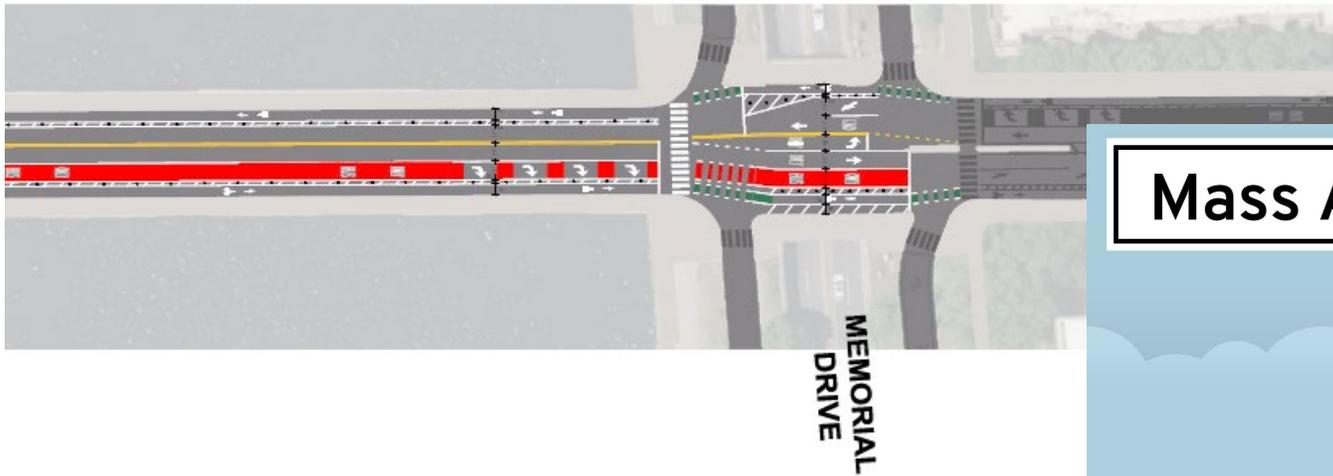
Mass Avenue at Beacon Street (Facing SB)



# Mass Ave Bridge Safety Improvements

- Timeline:
  - October: finalizing designs
  - ~November: begin implementation of pavement markings, flex posts; new signal heads for transit priority; traffic signal phasing modifications

CITY OF CAMBRIDGE



## Mass Ave at Memorial Drive (Facing NB)



# North Washington Street Bridge



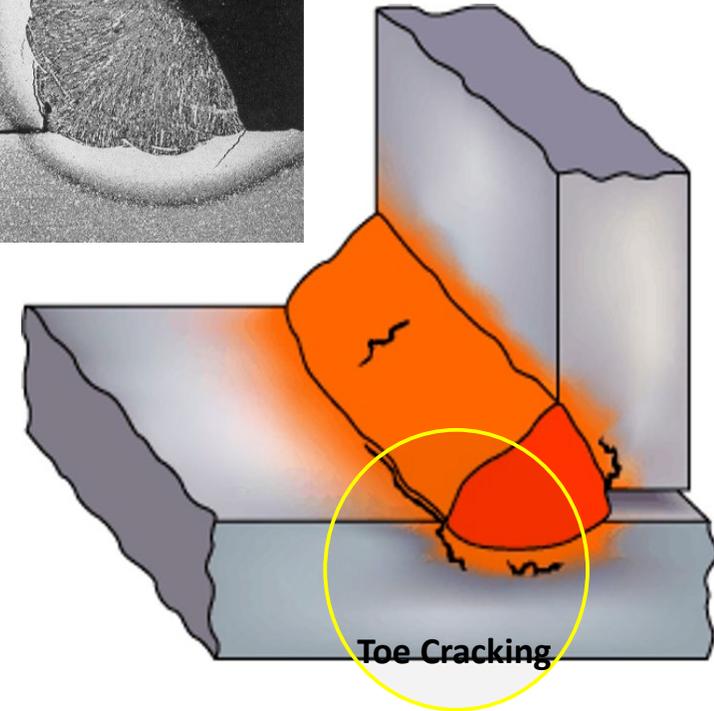
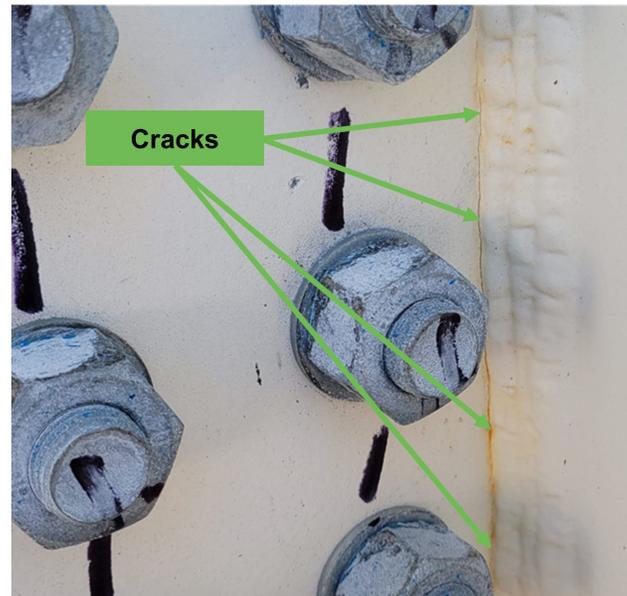
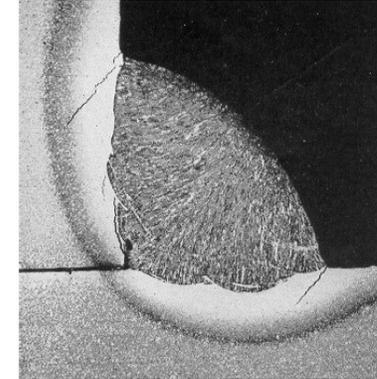
## What We Have Done

- Piers for new bridge complete
- First elements of new bridge being built at City Square
- 60% of steel erected
- Structural work paused after MassDOT inspectors discovered 52 cracked welds at several connection points

# North Washington Street Bridge

## Why Are These Small Cracks So Serious and Caused Such A Long Delay?

- Known as Toe Cracking
- Small hairline cracks that expand over time
- Found in the field and at the fabricator
- Generally, appears a few days after fabrication and grows over time
- If not addressed steel would have greatly reduced strength capacity and structural integrity



# North Washington Street Bridge



## Corrective Action Plan

MassDOT's investigation identified and mapped out 192 locations of welded connection points that are cracked or at risk of cracking

The Plan involves mapping/testing the cracks, removing paint from the cracks, repairing cracks if needed, heat treating, and repainting each of the 192 identified locations

For the 52 identified connection points with cracks, these connection points are being rewelded in addition to above corrective actions

## Current Estimated Project Milestones

Traffic switch to new bridge: Dec. 2023

Fully open to all users: Dec 2024

Contract Complete: March 2025



# Rapid Staffing Increase

- Attrition Rate - 6.64%
- NET FTE - 126
- Total Hires (Head Count) - 446 (includes Interns & Seasonal Workers)
- Total Terminations (FTE) - 157
- Total Promotions (FTE) - 359.5

# Highway Hiring to Support BIL

