



I-89 Colchester BRIDGES PROJECT



COLCHESTER I-89 BRIDGES

(Colchester IM 089-3(69) project)

Project Location: Town of Colchester in Chittenden County on I-89 between exit 16 and exit 17. Bridges 76 North & South are located over Bay Road (TH-1) at mile marker 95.3. Bridges 77 North & South are located over Mallett's Creek at mile marker 96.6 (see map on back).

Project Purpose: The Colchester Interstate 89 Bridges 76 (N&S) and Bridges 77 (N&S) project will replace the existing bridge decks, which are in fair to poor condition, with new precast deck panels. The current bridge and approach railings are substandard and will be replaced to meet today's crash standards.

Background: The existing bridges are 3-span continuous rolled beam bridges constructed in 1964. Bridges 76 N&S are 157-feet in length and Bridges 77 N&S are 185-feet in length. All four bridges have beams and substructures that are in satisfactory condition and decks that are in fair to poor condition.

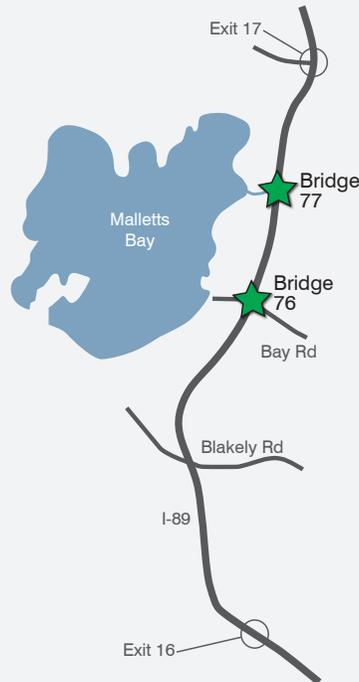
VTrans evaluated alternatives for rehabilitation or replacement of the bridges in an engineering study completed in December 2014. It assessed the proposed design criteria for the bridges, impacts on rare/threatened/endangered species, archaeological resources, and wetland resources. Several alternatives were considered including no action, minor patching, deck replacements, superstructure replacements, and full replacements.

The engineering study recommended deck replacements with minor substructure repairs.

The decks will be replaced using Accelerated Bridge Construction methods. The new decks will be comprised of full width precast deck panels and placed in 8-foot length segments. Each bridge will have two 12-foot lanes with a 4-foot shoulder on each side. The existing beams will be cleaned and prepared for painting as a part of this project and will be painted as part of a separate project.

I-89 will remain open throughout construction. Crossovers will be used on weekends during the period when each of the six decks is replaced and new bridge side barriers are built.

On two weekends when the decks of Bridge 76 northbound and southbound are demolished, Bay Road and the bike path will be closed. The local detour has not yet been determined.



PROJECT MILESTONES

Planning and Design

2016-17

Project advertised

March 2019

Crossovers constructed

Fall 2019

Bridges constructed

Summer 2020



**Accelerated
Bridge
Program**
VTRANS

What's the problem?

BRIDGES #76 N&S

- The approach rail connections and bridge railing are substandard.
- Both bridges have insufficiently protected piers.
- Both bridges have Leaky Bridge Joints.
- Deck geometry is substandard.
- Archaeologically sensitive area within limits.
- Wetlands within project area limits.

BRIDGES #77 N&S

- Bridge 77S is structurally deficient with some heavy deterioration of the deck.
- The approach rail connections and bridge railing are substandard.
- Deck geometry is substandard.
- There are extensive wetland limits around the bridges.



BENEFITS OF ACCELERATED BRIDGE CONSTRUCTION

- Less disruption for travelers
- Reduced road user cost
- Shorter timeline for design and construction
- Safer for workers and traveling public
- Increased strength and quality of bridge components
- Eliminates need for temporary bridge construction
- Reduced impacts to:
 - » Environmental Resources
 - » Utilities
 - » Right-of-Way

PROJECT DETAILS

Project ID: Colchester IM 089-3(69)

VTrans Project Manager: Kristin Higgins, PE

Project Outreach Coordinator: Jill Barrett

Project Cost: \$8 million (estimate)

Project hot line: (802) 272-1248

