



I-89 Bridges Project



Project Location: The I-89 Bridges Project is located at Exit 10 on I-89 in Waterbury.

Project Objective: The I-89 Bridges Project will repair aging parts of the I-89 mainline substructure and replace the concrete decks to extend the life of the Northbound and Southbound bridges and completely replace the Exit 10 Northbound Off-Ramp bridge.



I-89 bridges.

Existing Conditions: Mainline Northbound and Southbound bridges (46 N and 46 S) each have two travel lanes. The two mainline bridge decks have deteriorated to the point that concrete is starting to fall from the structure. The existing ramp bridge (46A) is a 6-span structure with five piers and expansion joints at each pier. Severe deterioration of the concrete piers on this Bridge coupled with the need for painting and re-decking the bridge triggered replacement of that structure.

Design: Final design work was completed during the winter of 2013, and work began in October 2014 to prepare for reconstruction of the two interstate mainline (Northbound and Southbound) decks and rehabilitation of the piers and abutments. The actual work on the mainline bridges will begin in 2015.

Work on the replacement bridge for the Northbound off-ramp (Exit 10) is anticipated to begin in 2016. A new ramp bridge will be built with two piers and three spans with continuous steel girders and expansion joints at the ends only. Reducing the number of expansion joints on the ramp bridge will reduce the potential for leaking at expansion joints, which causes deterioration of the bridge. The northbound exit ramp is being widened to two lanes to provide additional capacity on the ramp because traffic backs up onto I-89.

One of the two Southbound on-ramps will be closed for a trial period and, if successful, this will become the permanent condition. For the other Southbound on-ramp, the acceleration lane will be extended onto I-89 to more closely meet design standards for ramp design, which is currently substandard.

A related project, Northbound Off-ramp Signal Project to replace the traffic signal at the end of the ramp was completed in September 2014.

Adaptive signal controls will also be installed as part of the I-89 project. These signal controls include control boxes and cameras to track traffic at each segment of the interstate. This data will enable VTrans to trace the history of traffic patterns and adjust signal phasing to accommodate better traffic flow.



Existing bridge condition

TARGET CONSTRUCTION SCHEDULE

- ▶ Final Design
Winter 2013
- ▶ Advertise
June 2014
- ▶ Phase I
September 2014 - November 2015
- ▶ Construct Bridges
April 2015 - November 2016
- ▶ Reconstruct NB Off-Ramp Bridge
2016
- ▶ Project Completion
Summer 2017

CONTACT

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ESTIMATED COST

- ▶ \$11,000,000



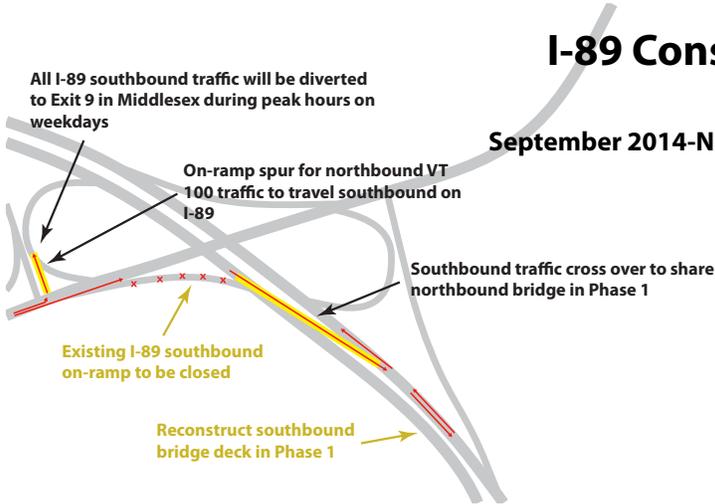
I-89 Bridges Project

Construction Sequencing:

Construction of the I-89 Bridges Project will be sequenced from Fall 2014 to Spring 2017 because of the scope and complexity of the project. Sequencing of construction will also reduce potential impacts to the public.

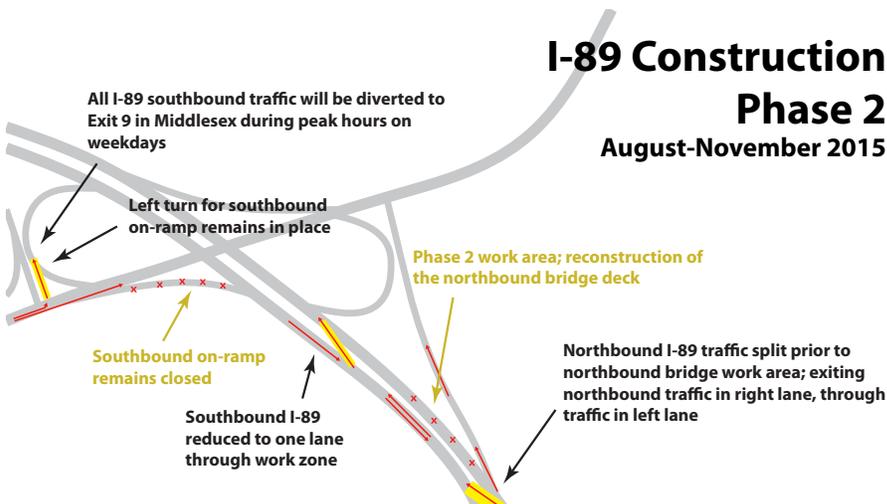
I-89 Construction Phase 1

September 2014-November 2015



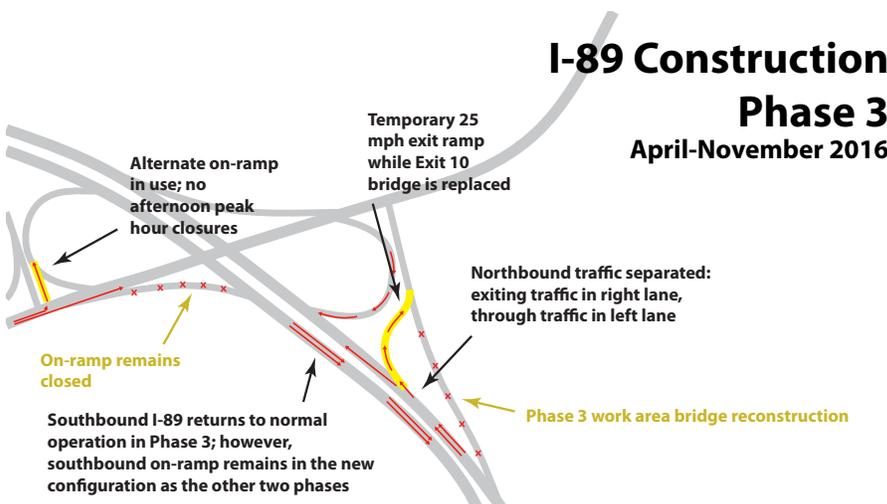
I-89 Construction Phase 2

August-November 2015



I-89 Construction Phase 3

April-November 2016



Phase 1

Fall 2014: Crossovers will be constructed to carry interstate traffic. Work will begin to install underground conduits along Stowe Street. Travel will be reduced to alternating one-way traffic in the vicinity of the interstate bridges. New southbound access ramp will be constructed near the existing southbound exit ramp.

Spring-Summer 2015: Traffic will be diverted onto the crossovers. The Southbound on-ramp from Waterbury-Stowe will be closed during afternoon peak travel times, and the existing southbound on ramp from Waterbury village will be closed, at a minimum, for the duration of the project. Underground utilities will be installed in conduits along Stowe Street to facilitate demolition of the bridges. The utility relocation work will require temporary traffic signals on Stowe Street. For all of 2015 and part of 2016, traffic on Stowe Street will be alternating one-way below the bridges.

Phase 2

Fall 2015: Crossovers will be constructed to switch both NB and SB traffic onto newly resurfaced SB bridge. Reconstruction of NB bridge will progress. NB I-89 traffic exiting at Exit 10 will continue to use existing exit ramp. NB through traffic will cross over to share SB bridge via two-way traffic. Work will continue adjacent to Stowe Street for the construction of new exit ramp bridge pier. Alternating one-way traffic along Stowe Street will remain in effect.

Phase 3

2016 construction season: SB I-89 traffic will be only marginally impacted. NB traffic will be divided prior to Exit 10, through traffic will use the left lane and exiting traffic will exit via a temporary exit ramp while a new NB exit ramp bridge is reconstructed. Stowe Street will have intermittent delays for construction activities associated with new bridge construction and rehabilitation of the piers of the mainline bridges.

LEARN MORE

- ▶ <http://watp.vtransprojects.vermont.gov/>
- ▶ Please refer to the project website for weekly construction updates. Register on the website to receive construction updates by email.

