

## Deck Replacement of I-89 Bridges with Weekend Closures

### PROJECT TITLE

Deck Replacement of I-89 Bridges with Weekend Closures

### STUDY TIMELINE

July 2019 – Oct 2019

### INVESTIGATORS

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### VTRANS CONTACTS

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More information about the VTrans Research Program, including additional Fact Sheets, can be found at:  
<http://vtrans.vermont.gov/planning/research>

### Problem Statement

The deck replacement of I-89 bridges calls for a very aggressive construction schedule, replacing bridge decks of 4 bridges using 6 weekend closures (59 hours for each closure). VTRANS, upon the contractor's recommendation, used the innovative AccelBridge precast deck system for the project.



### Methodology

The construction team, including VAOT, VHB (designer), Kubricky (contractor), Fort Miller (precaster) and AccelBridge (deck system developer), worked closely together to execute the project seamlessly, on budget and within schedule.

### Next Steps

AccelBridge is relatively simple and fast to construct. It simplifies deck construction by eliminating the typical cast-in-place joint between precast deck panels. The technology has been tested and fine-tuned along the construction of these four bridges. Standard operation processes have been established and new improvements were developed.

### Potential Impacts and VTrans Benefits

The project developed useful guidelines for the application of precast deck system, including design procedures, construction specifications, standard details, construction and inspection protocols. The experience gained in the project provides VTrans a new tool for accelerated bridge construction and can help VTrans deliver similar projects more effectively in the future.