



Rochester
VT 73 Bridge 13



Rochester
VT 73 Bridge 16



Rochester
VT 73 Bridge 15



Rochester
VT 73 Bridge 19

Public Information Meeting

April 9, 2014



Rochester / Middlebury / Warren
BRIDGE PROJECTS



Introductions

- Mark Mackintosh, P.E. – VTrans Regional Construction Engineer
- Jennifer Fitch, P.E. – VTrans Project Manager
- Chris Williams, P.E. – VTrans Resident Engineer
- Kevin Ture – W. M. Schultz Construction Project Manager
- Joanne Frascella, AICP – Parsons Brinckerhoff, Public Outreach
- Samantha Hiscock – Parsons Brinckerhoff

Meeting Overview



Rochester VT 73 Bridge 13



Rochester VT 73 Bridge 16



Rochester VT 73 Bridge 15



Rochester VT 73 Bridge 19

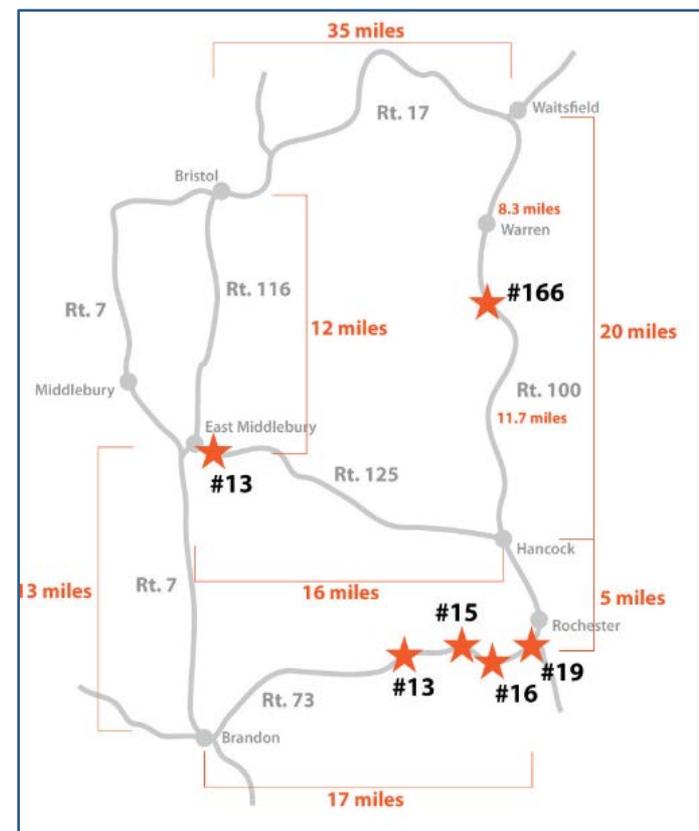
- Project Overview
 - Purpose and Need
 - Bridge Design
- Project Update
- Construction Methods and Schedule
- Construction Period Travel Routes
- Public Information during Construction



Rochester/Middlebury/Warren Projects

Six Bridge Replacement Projects:

- Rochester VT 73 Bridge 13
- Rochester VT 73 Bridge 15
- Rochester VT 73 Bridge 16
- Rochester VT 73 Bridge 19
- Middlebury VT 125 Bridge 13
- Warren VT 100 Bridge 166



Construction Methods



- **Accelerated Bridge Construction (ABC)**
 - Rapid bridge construction techniques
 - Build bridge components off site
 - Reduce bridge construction duration

Benefits of Accelerated Bridge Construction

- Reduced design and construction duration
- Reduced road user cost
- Safer for workers and traveling public
- Eliminates need for temporary bridge construction
- Reduced impacts to:
 - Environmental resources
 - Utilities
 - Right-of-way



VT Route 73 Bridge #13

VT 73 over Brandon Brook



Rochester

VT 73 Bridge 13

Rochester VT 73 Bridge 13 Existing Conditions

- Temporary 10' diameter culvert
- Rail-to-Rail Width 28'
- Emergency repair after Tropical Storm Irene
- No Aquatic Organism Passage
- Hydraulically inadequate



Damage from Tropical Storm Irene

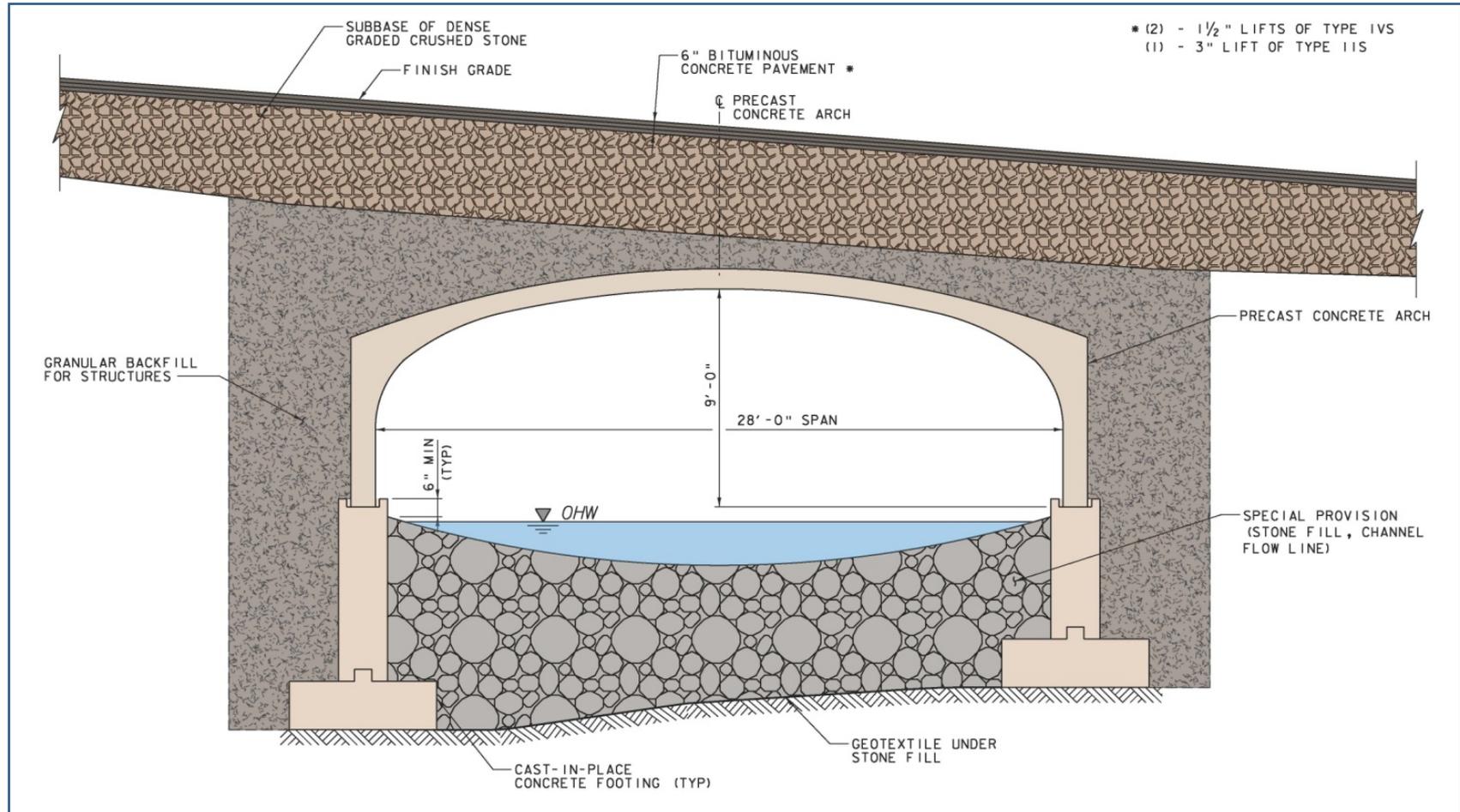


Looking East on VT 73



Rochester VT 73 Bridge 13

Bridge Type: Precast Concrete Arch



 Rochester VT 73 Bridge 13

Bridge Features

- Improved Hydraulics – more resilient to storm events
- Aquatic Organism Passage
- Lowest construction cost
- Simplest method of construction
- Minimizes impacts to ROW and environmental resources



Proposed Bridge Design

VT Route 73 Bridge #15

VT 73 at Brandon Brook



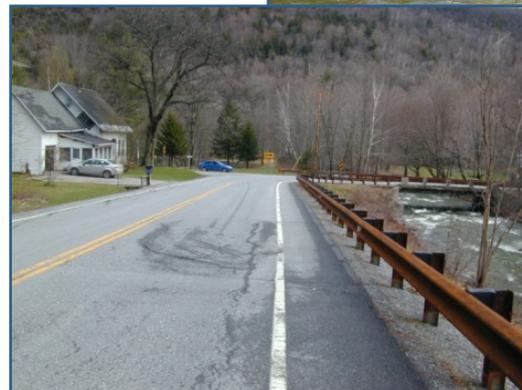
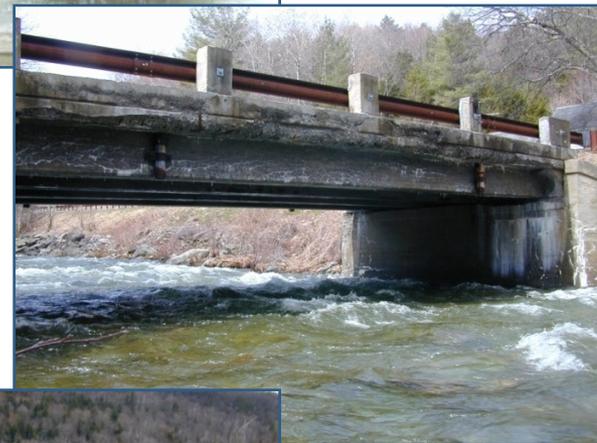
Rochester

VT 73 Bridge 15

Rochester VT 73 Bridge 15

Existing Conditions

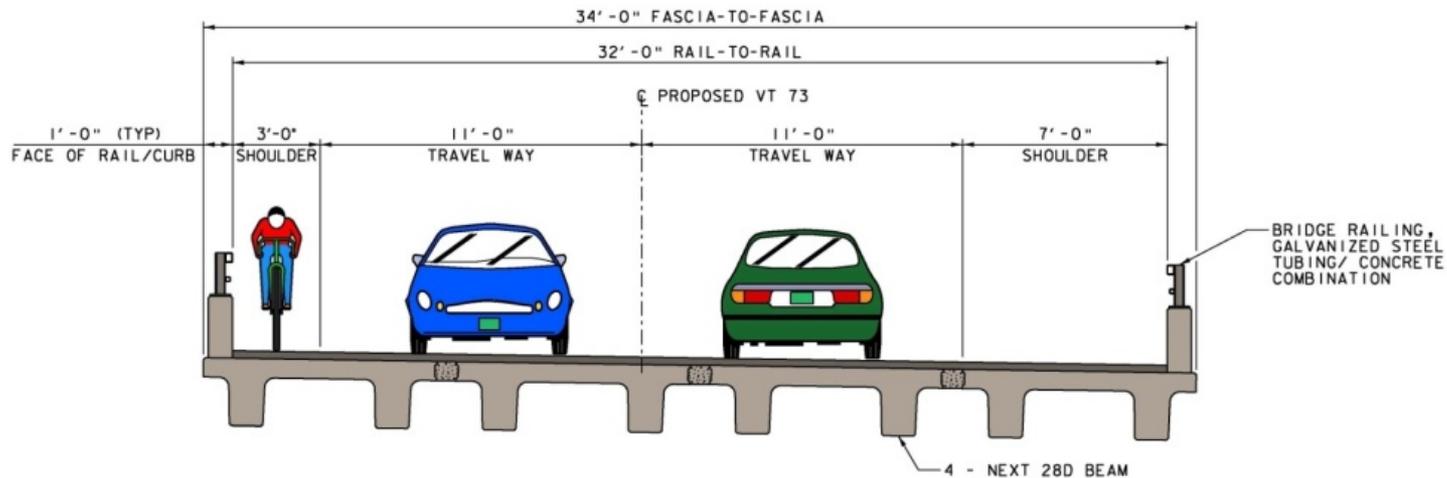
- Existing Bridge constructed in 1929
- Superstructure
 - 43' Long by 23'-4" Wide Concrete T-Beam Bridge (20'-10" Rail-to-Rail)
- Substandard width and poor condition
- Historic bridge



Rochester VT 73 Bridge 15

Bridge Type: Precast Prestressed Concrete NEXT Beam

- 65' Long by 34' Wide bridge (32' Rail-to-Rail)
 - Existing bridge: 43' Long by 23'-4" Wide (20'-10" Rail-to-Rail)



Rochester VT 73 Bridge 15

Bridge Features:

- Extra wide 7' shoulder
- Flared corner on the southeast side of the bridge to facilitate the movement of truck traffic
- Combination concrete and steel bridge Rail (Tenney Rail)
- Safety enhancements to alert drivers to the sharp curve
- Improved hydraulics – more resilient to storm events
- Shortest construction duration
- Cost effective
- Minimizes impacts to ROW and environmental resources



VT Route 73 Bridge #16

VT 73 at Corporation Brook



Rochester



VT 73 Bridge 16



Rochester VT 73 Bridge 16 Existing Conditions

- Constructed in 1929
- Cast-in-place concrete T-beams
- Cast-in-place concrete deck
- Substandard bridge width
- Poor condition



Rochester VT 73 Bridge 16

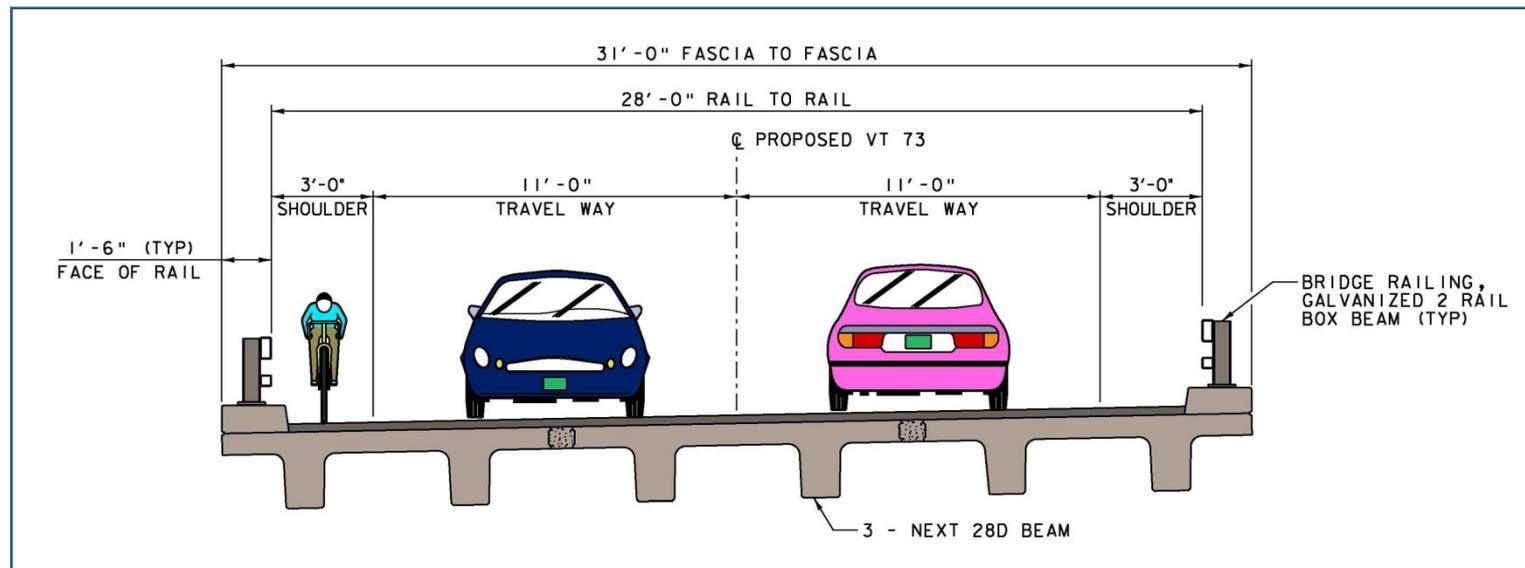
Bridge Type: Precast Prestressed Concrete NEXT Beam

Future

- 62'-6" Long by 31' Wide
- 28' Rail-to-Rail

Existing

- 28' Long by 23'-6" Wide
- 20'-1.5" Rail-to-Rail



Rochester VT 73 Bridge 16

Bridge Features

- Wider curb-to-curb width
- 3' shoulders
- Improved Hydraulics – more resilient to storm events
- Shortest construction duration
- Cost effective
- Minimizes impacts to ROW and environmental resources



VT Route 73 Bridge #19

VT 73 over the White River



Rochester

VT 73 Bridge 19

Rochester VT 73 Bridge 19

Existing Conditions

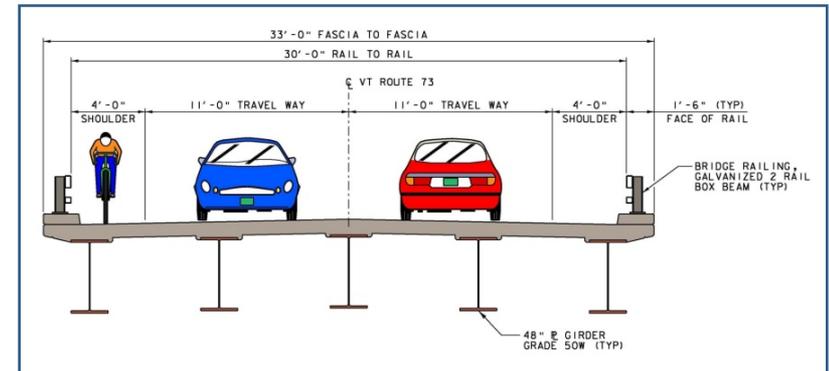
- Constructed in 1930s
- Rehabilitated in 1970s
- Damaged by Tropical Storm Irene in 2011
- Temporary bridge built in fall of 2011 to reopen VT 73
- Temporary bridge does not meet design standards



Rochester VT 73 Bridge 19

Bridge Type: Steel Plate Girders

- 130' Long by 33' Wide Bridge (30' Rail-to-Rail)
 - Temporary Bridge: 132' Long by 24' Wide
 - Previous Bridge: 74' Long by 26' Wide Bridge
- Meets Design Criteria
 - Turning radius for trucks and buses
 - Accommodates wider shoulders





Rochester VT 73 Bridge 19

Bridge Features

- Wider curb to curb width
- 4' shoulders to accommodate bike and pedestrian movement
- Improved Hydraulics – more resilient to storm events
- Improved turning radius for trucks and buses
- Cost Effective



Project Milestones

- Preliminary Plans – Summer/Fall 2012
- Permitting – Summer/Fall 2012
- Final Design – Spring 2013
- Right-of-Way – Spring 2013
- Bid Advertisement – Late Summer 2013
- Contract Award – Fall 2013
- Construction Begins – April 2014
- Project Completion – Fall 2014

Combined Schedule



Rochester VT 73 Bridge 13

- Allowable Bridge Closure Periods: **Aug 25, 2014 - Sep 30, 2014**
- Bridge Closure Period: **14 Days**
- Scheduled Interim Completion: **NA**



Rochester VT 73 Bridge 15

- Allowable Bridge Closure Periods: Jul 10, 2014 - Jul 28, 2014
- Bridge Closure Period: **84 Hours**
- Scheduled Interim Completion: **NA**



Rochester VT 73 Bridge 16

- Allowable Bridge Closure Periods: **Jul 11, 2014 - Jul 28, 2014**
- Bridge Closure Period: **60 Hours**
- Scheduled Interim Completion: **NA**



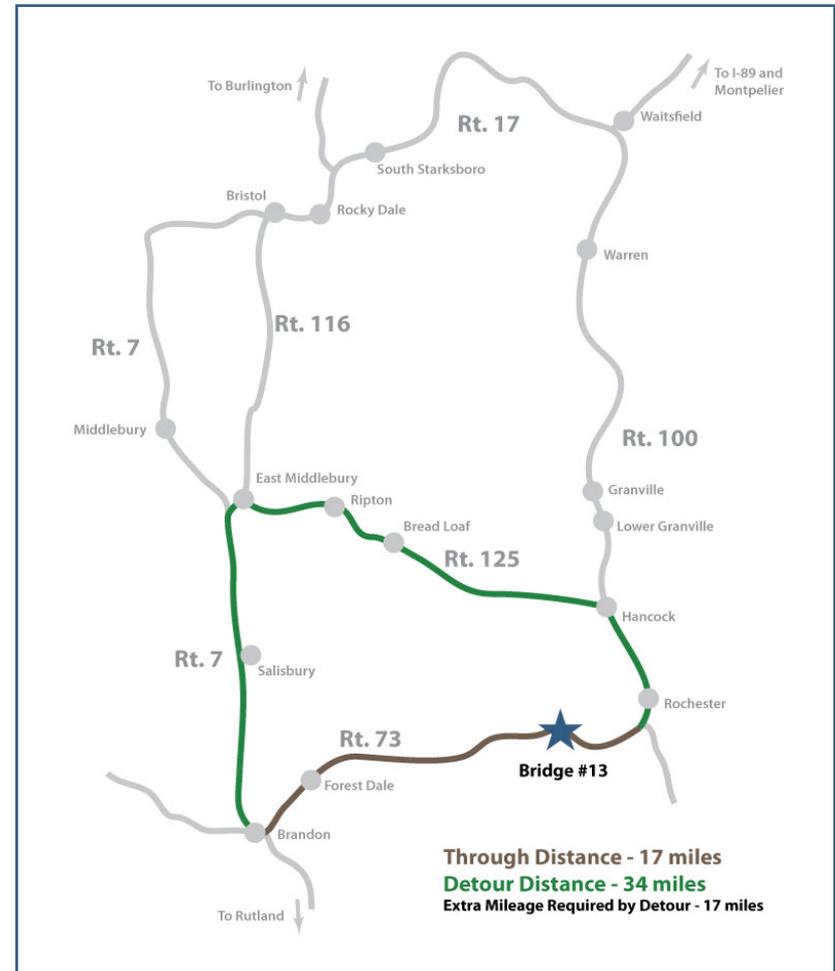
Rochester VT 73 Bridge 19

- Allowable Bridge Closure Periods: **N/A**
- Bridge Closure Period: **N/A**
- Scheduled Interim Completion: **N/A**

Rochester VT 73 Bridge 13

Construction and Traffic Control

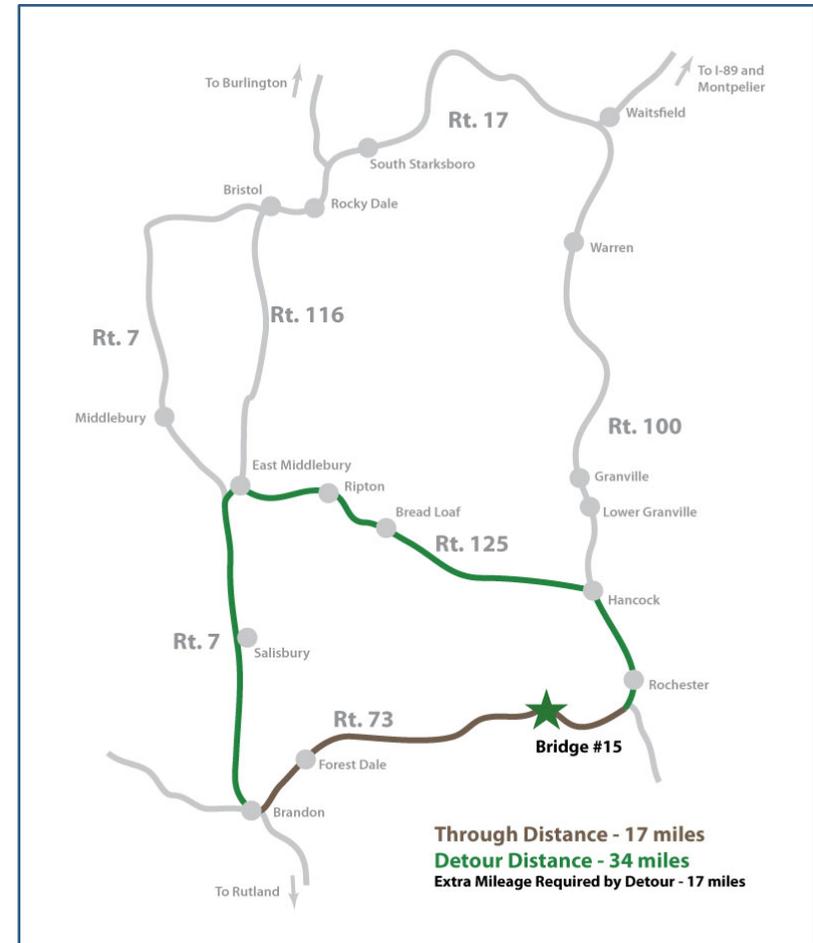
- Road Closure – 2 week maximum
- Closure Period – Late August/September 2014
- Substantial completion – two weeks following bridge closure
- Detour Route – VT 100 / VT 125 / US 7



Rochester VT 73 Bridge 15

Construction and Traffic Control

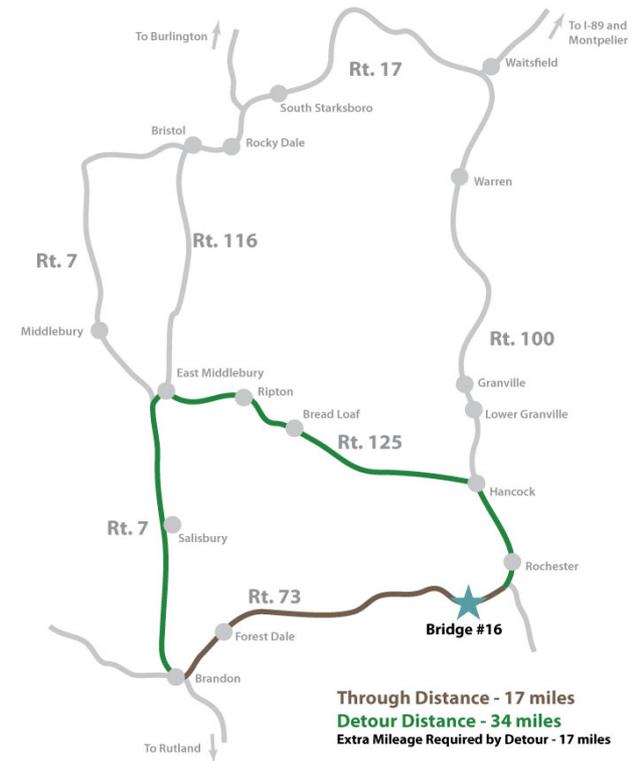
- Bridge closure period July 10 – 28, 2014
- Weekend closure during demolition of existing structure and installation of superstructure (Thursday evening to Monday Morning)
- Allowable closure is 84 hours
- Single lane closure during installation of substructure and paving
- Substantial Completion – Two Weeks following Bridge Closure



Rochester VT 73 Bridge 16

Construction and Traffic Control

- Bridge closure period July 11-28, 2014
- Allowable closure is 60 hours (Friday Evening to Monday Morning)
- Weekend closure during demolition of existing structure and installation of superstructure
- Single lane closure during installation of substructure and paving
- Substantial Completion – Two Weeks following Bridge Closure





Rochester VT 73 Bridge 19

Construction and Traffic Control

- Construct Temporary Bridge next to existing bridge
- Detour Traffic onto Temporary Bridge
- Alternating one way traffic during construction season

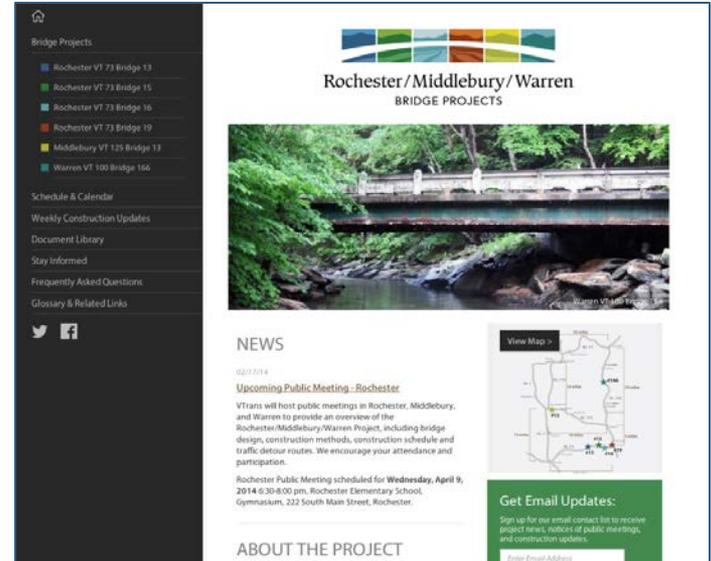
Public Meetings during Project Development

- Public Information Meeting 8/14/2012
- Alternatives Presentation 5/14/2012
- Local Concerns Meeting 2/13/2012

Construction Period Updates

Website: www.rmw.vtransprojects.vermont.gov

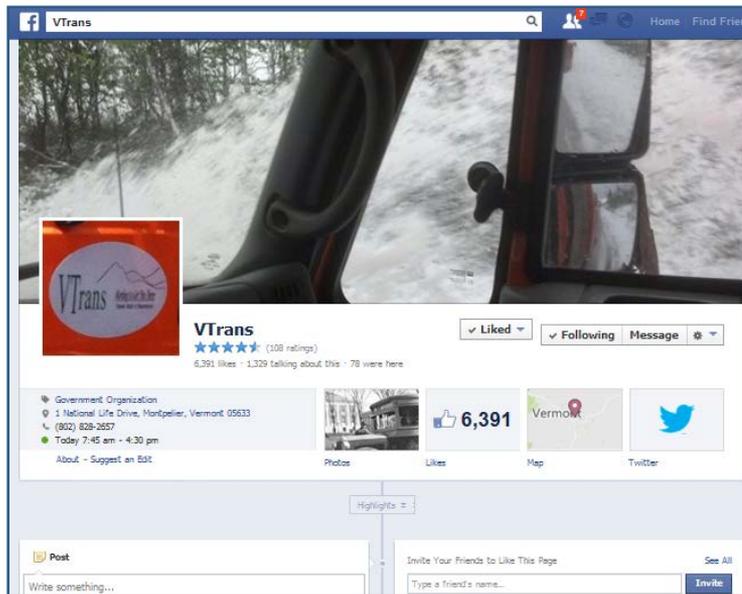
- Construction Period Updates
- Project Overview
- Frequently Asked Questions
- Submit Question/Comment
- Register for Email Project Updates



The screenshot shows the website interface. On the left is a dark sidebar with navigation links: Bridge Projects (with sub-links for Rochester VT 73 Bridge 13, 15, 16, 19, Middlebury VT 125 Bridge 13, and Warren VT 100 Bridge 166), Schedule & Calendar, Weekly Construction Updates, Document Library, Stay Informed, Frequently Asked Questions, and Glossary & Related Links. The main content area features the project logo, a photo of a bridge over a stream, a 'NEWS' section with an article titled 'Upcoming Public Meeting - Rochester' dated 02/17/2014, a 'View Map' button, and a 'Get Email Updates' sign-up form. The article text states: 'VTrans will host public meetings in Rochester, Middlebury, and Warren to provide an overview of the Rochester/Middlebury/Warren Project, including bridge design, construction methods, construction schedule and traffic detour routes. We encourage your attendance and participation. Rochester Public Meeting scheduled for Wednesday, April 9, 2014 6:30-8:00 pm, Rochester Elementary School, Gymnasium, 222 South Main Street, Rochester.'



For Project News and Updates:



Facebook: <https://www.facebook.com/pages/VTrans/143848835653728>

Twitter: <https://twitter.com/511VT>

Telephone Hotline: (802) 496-3376

Questions and Comments