# VTR, GMRC & Irene

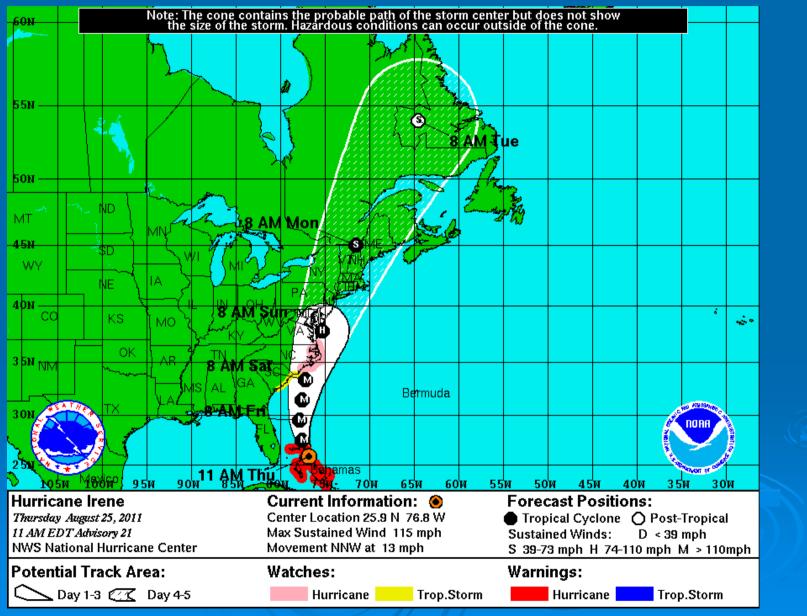
Vermont Rail System Hurricane Irene Damage and Recovery

> Briefing Prepared for Vermont State House and Senate Transportation Committee Montpelier, VT October 12, 2011

# Agenda

> Overview – Irene's Impact on Vermont
> Impact on Vermont Rail System
> The Damage
> The Recovery
> Impact on customers

## The Path of Irene



### August 28 Irene Slams into New England



News Headlines After the Storm Hurricane Irene Hits Vermont: State Begins Sorting Through Flooding After Storm Tropical Storm Irene wreaks havoc in southern Vermont

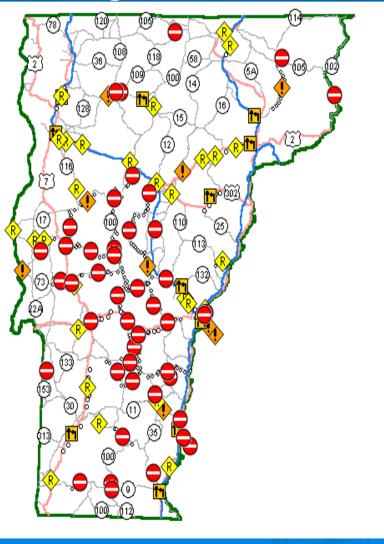
heavy rains, flash flooding

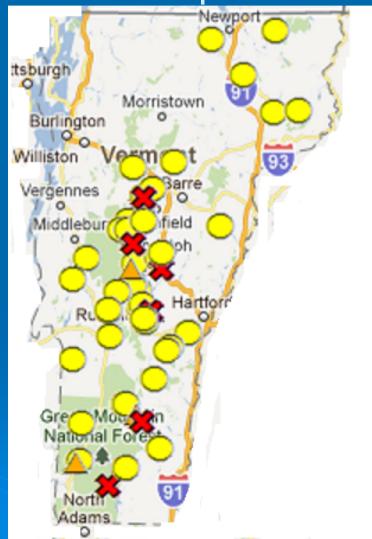
Airlifts planned to supply cut-off Vt. towns

## Vermont Road Closures

#### August 29

#### Sept 30







#### Highway Washouts Near Rutland



Route 4 between Killington, VT and Mendon, VT.



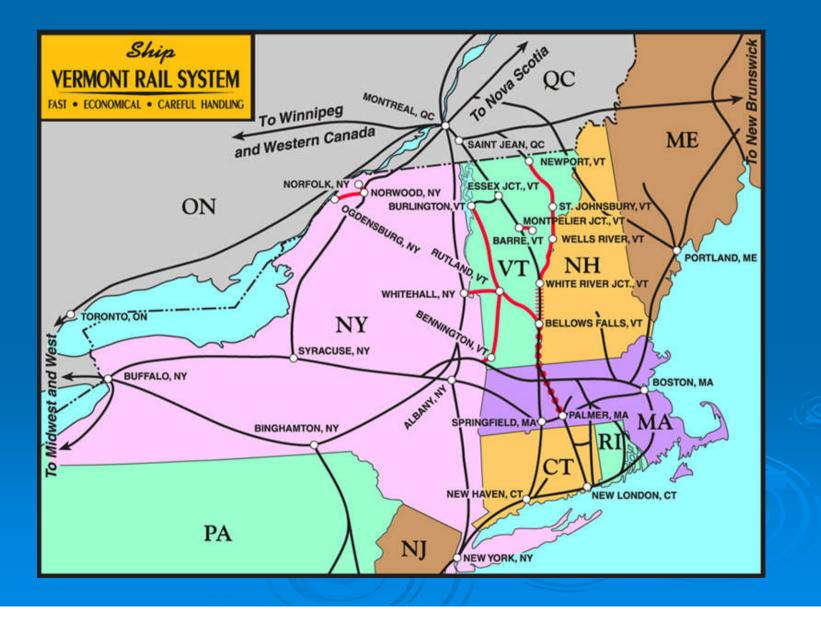
### Southern, VT

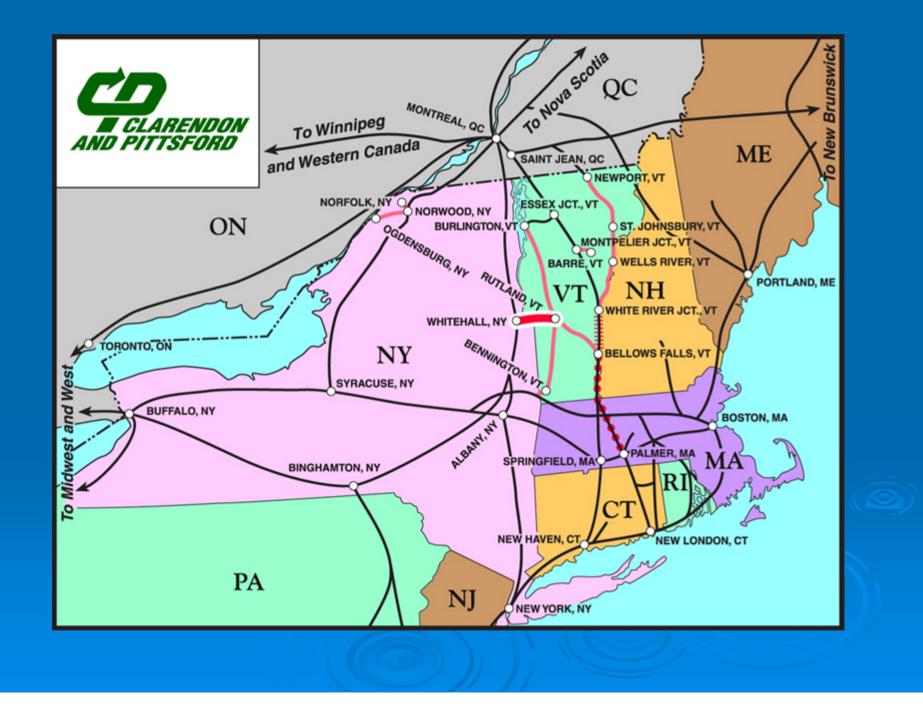


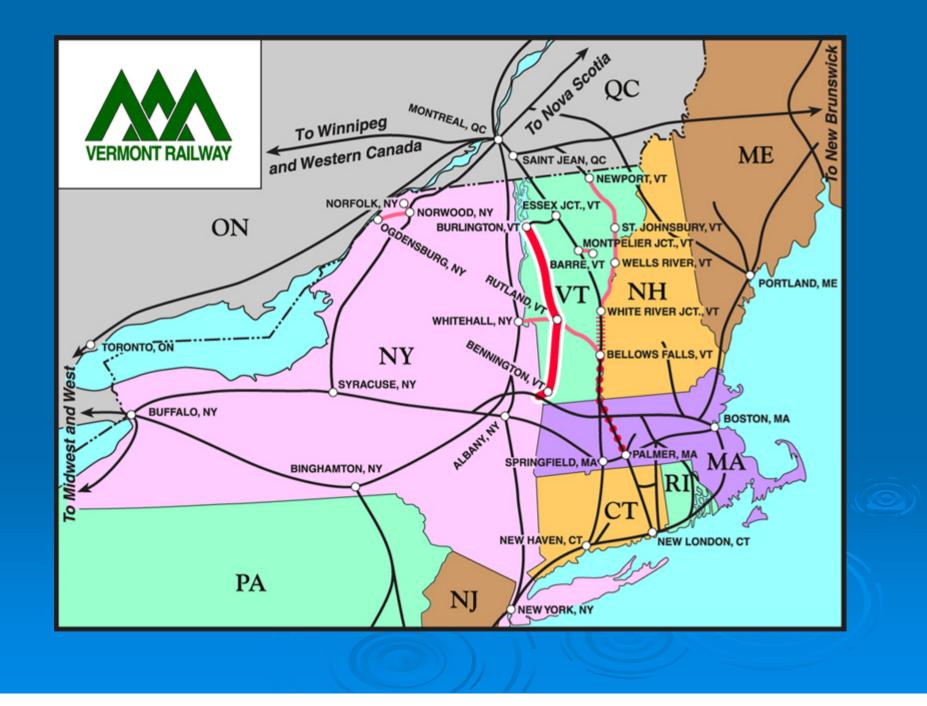
#### More than Road Damage - 700 Homes Destroyed

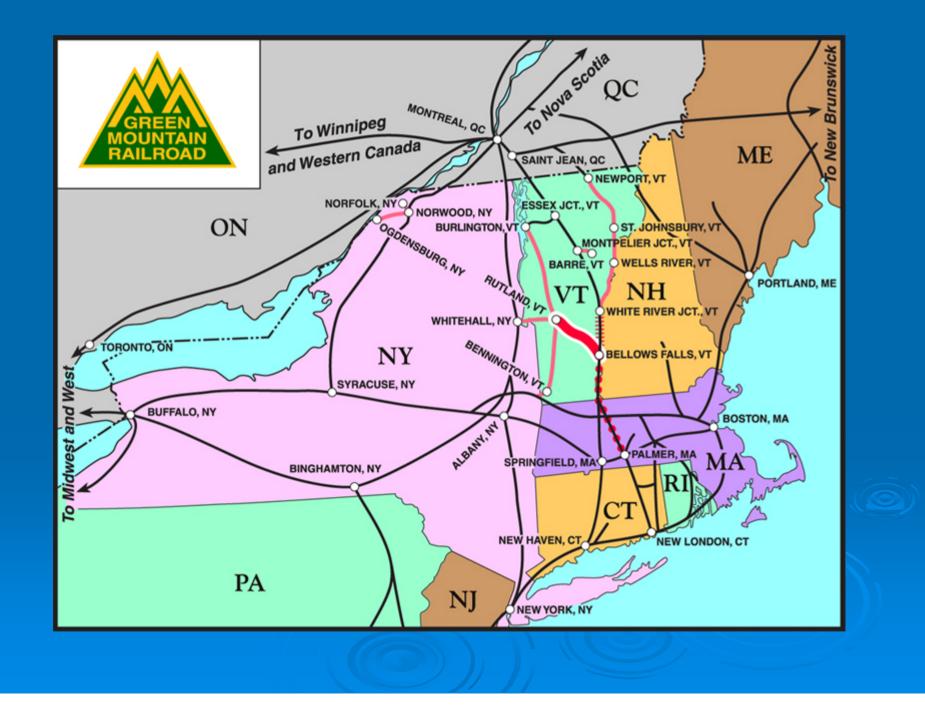
# Impact on VRS

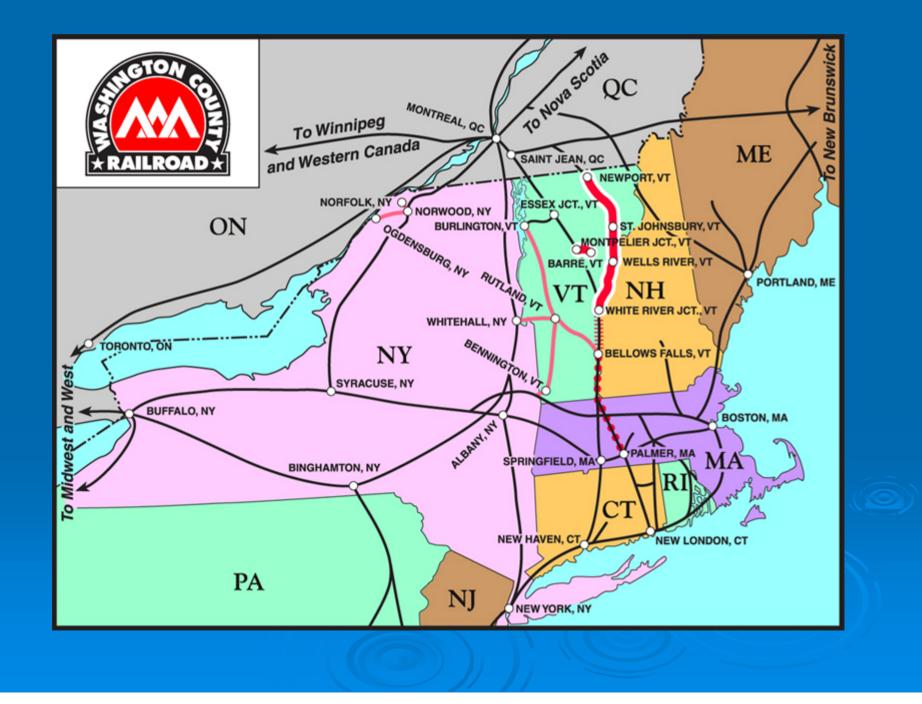
#### Over half of our system was shut down for three weeks











# The Damage

#### > 107 Washouts – over 50 very large

- 32 on GMRC
- 47 on B&R
- 4 on VTR Northern
- 9 on CLP
- 9 on WACR Conn River
- 6 on WACR M&B
- 6 Bridges severely compromised
  - All suffered major structural damage



North of Rutland near Florence VT – MP 63 - VTR is in middle of picture:



#### Florence, VT – Omya in background top left



Aerial View of Bridge 114 Chester, VT



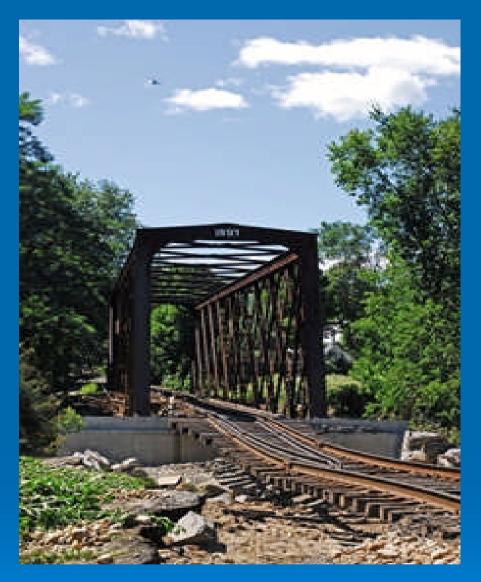
Bridge #114, Milepost 11 on the Green Mountain Subdivision



Bridge #114, Milepost 11 on the GMRC from the other side of the bridge

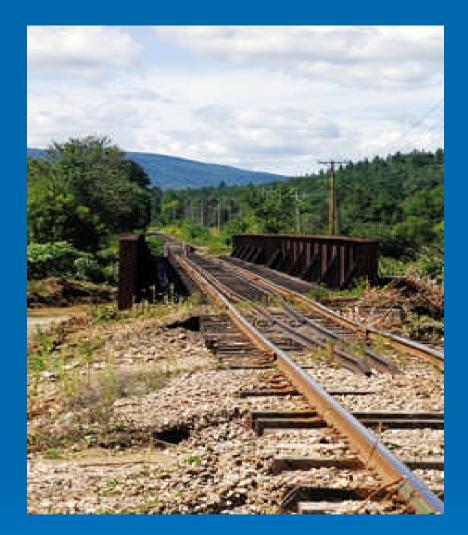


Bartonsville, VT – Green Mountain Railroad Before Repairs



The Proctorsville, Vt., thru-truss bridge on the Green Mountain Railroad is compromised on both sides.

The railroad's chartered helicopter with officials aboard is surveying the Green Mountain Railroad Co.



Adjacent to the Route 103 grade crossing in Proctorsville, VT., the Black River overflowed its banks well over the height of the railroad bridge, washing away the approaches on both ends. More than 200 feet of rail is suspended in the air to the north end of the bridge.



GMRC North of Mt Holly, VT





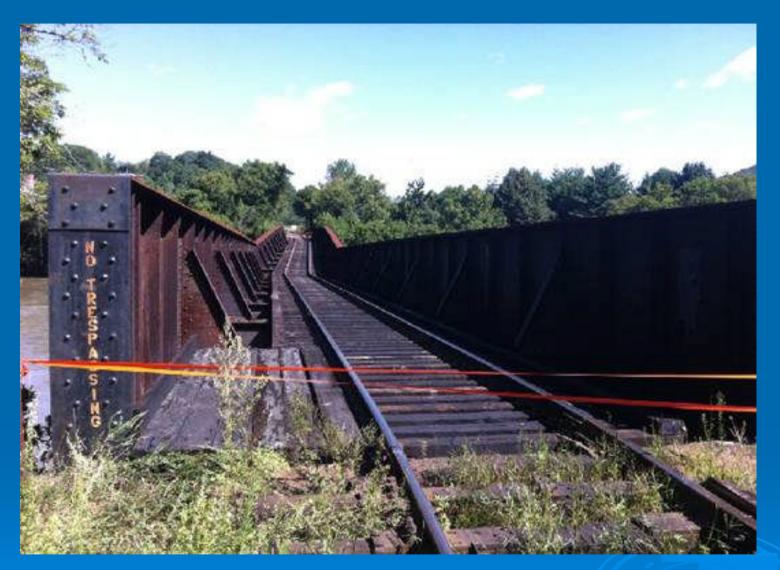
Total of 11 Miles of Track Washed out



North of Alfrecha Crossing, Rutland on B&R

Steet Wheels Photography steetwheelsphotography.com

The Washington County Railroad bridge (formerly B&M bridge) has held up to the elements since its installation in 1936, but met its match with Irene. Seen off its pier and from the deck surface, this bridge has severed service to the VTR Conn River line.



The Washington County Railroad bridge (formerly B&M bridge) looking north from White River this bridge has severed service to the upper Connecticut River valley.

#### The Recovery Effort MOW team started work the day after the storm



Repair work underway on bridge 114 near Chester, VT:

## The Recovery Effort

- Mobilization of contractors, material, equipment, men
- 6 different contractors and engineering firms for the bridges
- Worked 24/7 for three weeks straight
- Several vendors supplied ballast, rip rap and other material. Also worked around the clock.
- Thanks to Vermont AOT, facilitated the recovery effort
- State of VT waived environmental regulations and weight restrictions temporarily

## The Recovery Effort

Surfacing crews working simultaneously

- 2 VRS, 1 RJ Corman
- Over 250 men working on the recovery
- Side dumps and ballast cars from CPRS, P&W, NECR, Amtrak others. MMA supplied engine for WACR
- Thank you to ASLRRA (dragnet) and many of our short line friends who offered help, advice and equipment.
- NECR and VRS worked together to repair track, secure ballast and share equipment

## Rip Rap, Ballast and Ties Replaced

GMRC – 47,000 tons
B&R -40,000 tons
WACR – 2,000
50 dump trucks mobilized
1,000 ties replaced



Bridge 114 Under Repair



Building emergency temporary roads to reach remote locations:

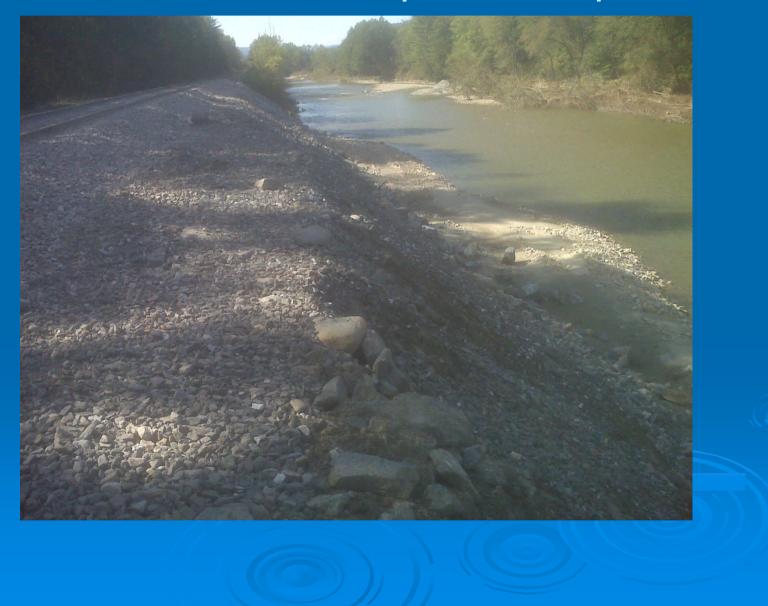


Rotary dump truck delivering material to job site:

### Bartonsville Under Repair



### Bartonsville After - Repairs Completed







Bridge at White River Junction Under Repair

### White River Junction Bridge Under Repair



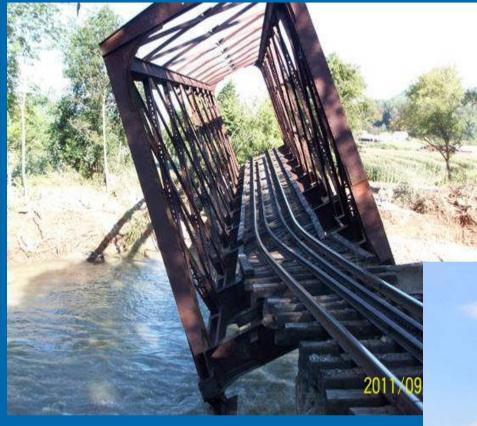
#### Could not have done it without....



.....and many others.



ECI & VHB on Bridge 114



#### Before August 29

#### After September 18



### White River Junction October 11, 2011



### White River Junction October 11, 2011



# Service Restoration

Railroad shut down August 29 > Service restored on: • CLP Aug 31 VTR Northern Aug 31 WACR Conn River from north only Sept 9 • GMRC Sept 16 VTR B&R Sept 18 White River Junction Bridge Oct 11

(NYOG & WACR M&B not closed)

# Impact on Customers

### > VRS did not issue any embargos

- Arranged transloading and detours (CPR & PAS)
- Did have delays but kept traffic flowing

#### > Accurate Customer Service Bulletins

- Positive feedback
- They like being kept informed
- It helped ease pain of delays
- Reduced/eliminated customer complaints
- Willing to work with us

# Impact On Customers

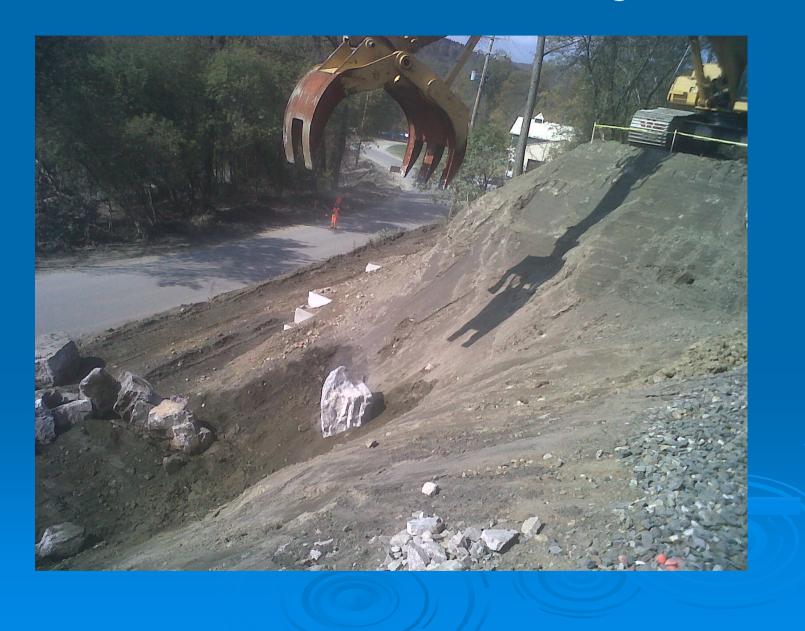
Wheels Underwater – private cars

Loss of fall foliage season for passenger excursions

#### Work on Bethel, VT 107 Bridge 115



### Work on Bethel, VT 107 Bridge 115



### Work on Bethel, VT 107 Bridge 115



# PS: Send Side Dumps!!

# Success!



#### Thank you! Questions?