



# Exit 16 DDI

Diverging Diamond Interchange

March 18, 2021  
Senate Transportation  
Committee



# Roosevelt Highway's Problems

- **Safety Issues**
  - 2012-2016: 109 Crashes (3<sup>rd</sup> highest in VT for Injuries, 8<sup>th</sup> highest in VT for #)
- **Traffic Capacity Issues**
  - LOS (Delay) deficiencies at Mt. View and Exit 16 Ramps
  - Heavy Left Turn Movements at Exit 16 Ramps
- **Lack of Multi-Modal Facilities**
- **Lack of Stormwater Treatment**
- **Buried and Aerial Utilities**
  - Starting to become messy with new development

## Bonus!

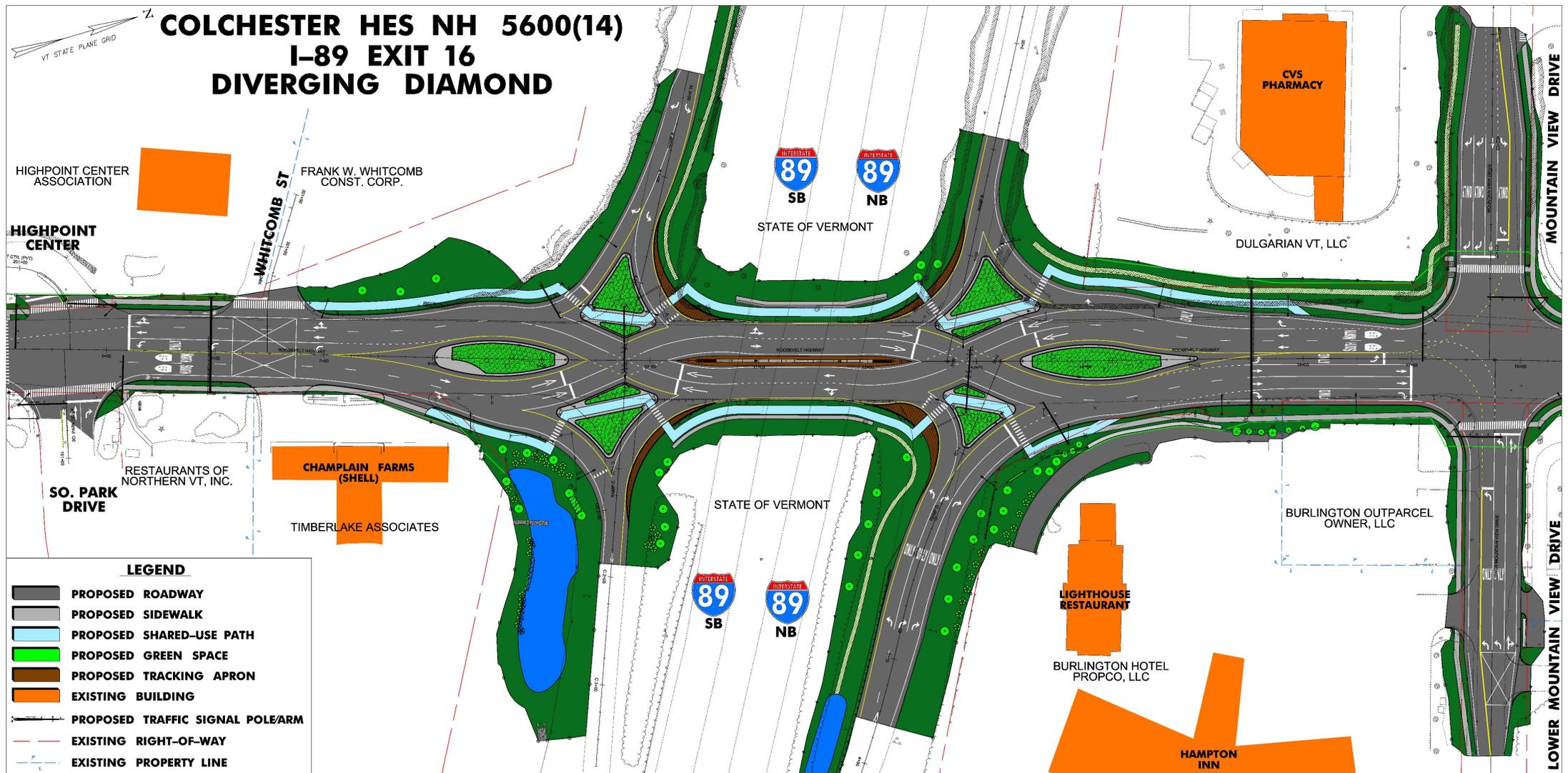
Interchange Bridges' Condition:  
**Good!** Do not need replacing

# Colchester HES NH 5600(14) Scope

- Stormwater Treatment Infrastructure
  - 3 Ponds
  - 8 Grass Channels
- Roadway Banking Corrections
- New:
  - Signs
  - Pavement Markings
  - Traffic Signals
  - Roadway Drainage
- Reconfigured I-89 Exit 16 Interchange → **DDI**



# I-89 Exit 16 Reconfiguration



# I-89 Exit 16 Diverging Diamond Interchange



# DDI Benefits

In 113 Diverging Diamond Interchanges in the U.S., states have experienced:

- Over 60% reduction in crashes
- Over 50 % increase in vehicular throughput
- Sarasota, Florida
  - Built their DDI at I-75 @ University Parkway
  - 5 x 5 DDI
  - In the first year since opening:
    - -50% crashes
    - -40 travel time delay
- Testament: 37 DDIs currently under construction; another 157 planned!  
(Including 3 in Alaska! 2 Open and 1 Planned)

# DDI Traffic Flow (1:05)



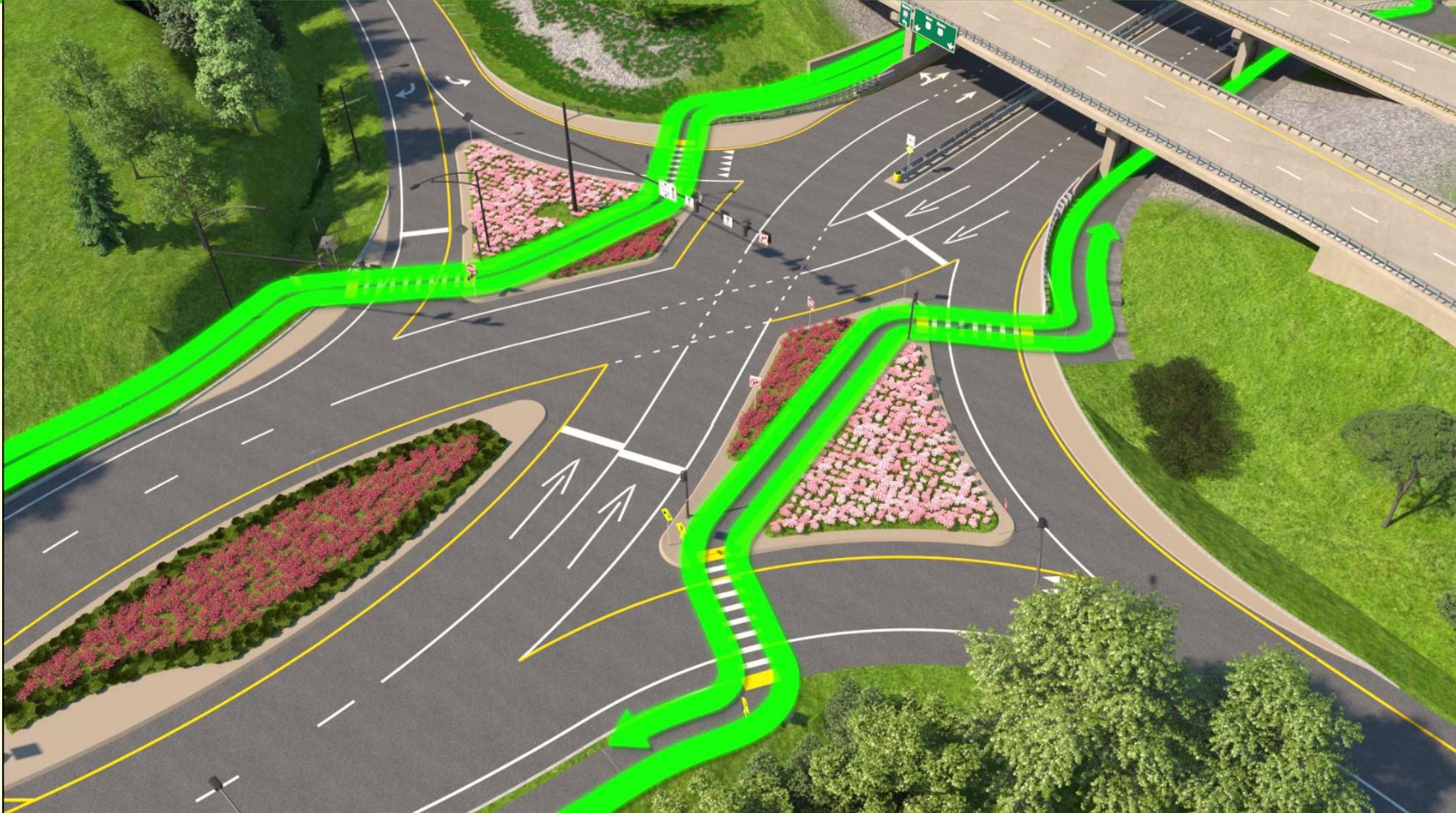
**Exit 16 DDI**  
Diverging Diamond Interchange

# DDI Traffic Flow (0:42)



**Exit 16 DDI**  
Diverging Diamond Interchange

# Bicycles and Pedestrian Flow



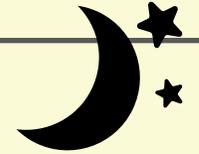
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# Project Construction

- 1<sup>st</sup> Construction Contract (2022)
  - Utility Relocation
    - Buried Waterline
    - Buried Telecommunication Duct
    - Buried Gas Lines
  - Retaining Walls Under Interstate Bridges
  - Potential Ledge Removal\*
  - Potential Stormwater and Drainage Infrastructure
  - ALL within existing State ROW

\*Ledge Removal will be required to be done during the day.

Night Work = 7:00 PM – 6:00 AM



Daytime roadway work will NOT be allowed; all traffic lanes must be open by **6:00 AM**



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# Project Construction

- 2<sup>nd</sup> Construction Contract (2023+)

- Roadway Work
- Drive accesses, ramps, will be open

- If a drive needs to be temporarily closed short-term, an alternate ingress/egress will be provided

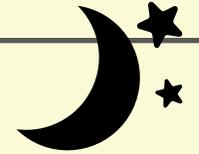
- Night-time noise

- The contractor will be required to under utilize noise reduction mitigation measures. *FHWA Construction Noise Handbook*.

- 3<sup>rd</sup> Construction Season (if needed)

- Landscaping, Clean-up

Night Work = 7:00 PM – 6:00 AM



Daytime roadway work will NOT be allowed; all traffic lanes must be open by **6:00 AM**



# Project Status

## Permitting:

- **Completed!** Act 250, Operational and Construction Stormwater, Wetlands

## Right-of-Way:

- Necessity (Condemnation) Hearing – April 29<sup>th</sup> and 30<sup>th</sup> 2021
  - 8 parcels and 2 lessees.
  - 5 parcels attempting to sign before Hearing

## Construction:

- Contract 1 Bid Advertisement – 15 April 2022
- Contract 1 Awarded – 15 May 2022
- Potential Groundbreaking – 15 June 2022 (not earlier)



# Public Outreach

## WSP, Inc.

- Public Outreach during Preliminary Engineering and throughout Construction.
- Maintains E-Mail Distribution List
- Developed Website, Pamphlets, and staffs a 24-7 Toll-Free Hotline
- Education!
  - Videos, Animations, Interactive Map



# Public Outreach: Website

The screenshot shows a web browser window with the URL `exit16ddi.vtransprojects.vermont.gov`. The website header includes the logo for Exit 16 DDI (Diverging Diamond Interchange) and a navigation menu with links for PROJECT OVERVIEW, INTERACTIVE MAP, WHAT IS A DDI, DOCUMENT LIBRARY, STAY INFORMED, and FAQs. Social media icons for Facebook and Twitter are also present. The main content area features the title "Vermont's First Diverging Diamond Interchange" and a green button labeled "Watch Educational Video". Below this is a paragraph of text describing the project's location and goals, followed by a link to learn more about improvements. A large circular image on the right side of the page shows a 3D rendering of the proposed diverging diamond interchange.

Exit 16 DDI  
Diverging Diamond Interchange

PROJECT OVERVIEW INTERACTIVE MAP WHAT IS A DDI DOCUMENT LIBRARY STAY INFORMED FAQs

## Vermont's First Diverging Diamond Interchange

[Watch Educational Video](#)

The Vermont Agency of Transportation (VTrans) is improving the roadway along the US Routes 2/7 corridor, in the vicinity of I-89 Exit 16, to enhance mobility and safety in Colchester, Vermont. The project area extends from in the Colchester-Winooski town line north for approximately 1 mile to just beyond the intersection of Sunderland Woods Road at US Route 2/7. The core of the project is to reconfigure the existing tight diamond interchange to a Diverging Diamond Interchange at I-89 Exit 16.

[Learn more about this and other improvements](#)



**Exit 16 DDI**  
Diverging Diamond Interchange

# Public Outreach: Booth & Simulator



# Public Outreach: Simulator

**Exit 16 DDI**  
Diverging Diamond Interchange

VERMONT  
AGENCY OF TRANSPORTATION  
219 North Main Street, Barre, VT 05641

Want more information?  
Have a comment?  
Looking for email updates?  
[www.exit16ddi.vtransprojects.vermont.gov](http://www.exit16ddi.vtransprojects.vermont.gov)

Select Vehicle  
Sedan  
Hatchback  
SUV  
Options  
Quit Game

Please choose an option below to get started

Option 1   Option 2   Option 3   Option 4   Free Drive

Stantec

# Public Outreach: Simulator



**Exit 16 DDI**  
Diverging Diamond Interchange

# Public Outreach: Simulator



**Exit 16 DDI**  
Diverging Diamond Interchange

# Public Outreach: Quarterly Newsletter



Vermont Agency of Transportation <info@exit16ddi.vtransprojects.vermont.gov>

To: Makhetha, Delia A.

Reply Reply All Forward

Wed 3/10/2021 10:17 AM



## Exit 16 DDI news & updates

Winter 2021

### Table of Contents

**Interactive Map**  
View the new interactive project map.

**Updated Schedule**  
Learn more about the updated project schedule.

**Frequently Asked Questions**  
See the latest FAQ additions.

**DDIs during the winter**  
Roadway maintenance during snowy weather.

**Project Resources**  
[Project Factsheet](#)  
[Project Brochure](#)  
[Project Video](#)



## Updated Project Schedule Now Available

The Exit 16 DDI Project continues to progress. An updated project schedule is now available.

The bid advertisement and the contract award will take place in Spring 2022. Once awarded, phase one of construction can be begin and will include utility relocation, ledge removal, and the construction of a retaining wall and shared-use path. Phase two is set to begin in 2023 and includes construction of the new DDI.

We encourage you to visit the [project website](#) for more information.

# Questions?



**Exit 16 DDI**  
Diverging Diamond Interchange



**Shelburne St.  
Roundabout**  
BURLINGTON, VT.



<https://d1png.com/png/6388062>

**Exit 16 DDI Project**

**Shelburne Street Roundabout Project**

# Stay Involved



**Exit 16 DDI**  
Diverging Diamond Interchange



**Shelburne St.  
Roundabout**  
BURLINGTON, VT.



## Visit the Project Websites:

<https://vtrans.vermont.gov/projects/burlington-roundabout>

<https://exit16ddi.vtransprojects.vermont.gov>



## Email Us:

[info@shelburnestreetroundabout.com](mailto:info@shelburnestreetroundabout.com)

[info@exit16ddi.vtransprojects.vermont.gov](mailto:info@exit16ddi.vtransprojects.vermont.gov)



## Call the 24-Hour Project Hotlines:

**802-496-8956 (Shelburne Street)**

**802-595-4399 (Exit 16)**