

20 March 2024

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To: Distribution

Subj: Key Takeaways from UVM Transportation Modeling iso Eclipse Planning

### **Intent**

This synopsis is intended to give a broad overview of methodology and to highlight specific locations for congestion consideration during the eclipse event.

### **Background**

TICC planners worked with UVM Transportation Research Center to use the State Travel Demand model to assess possible roadway corridors and site-specific locations of congestion concern, based upon a set of assumptions provided by AOT.

### **Models are Just That**

Readers and users of this information should understand that models generally try to bring an approximation of order to an uncertain environment. They are based upon assumptions which may or may not be accurate, and they offer no solid conclusion, just predictions based upon, data, mathematics, past model validation, new information, and assumptions. It should augment your intuition and local knowledge, not be considered authoritative.

### **Assumptions**

- Albany, Portland, and Montreal will not provide a significant number of new visitors
- Primary driveshed for Vermont will be to the south to include Boston, Worcester Hartford/Springfield, and New Haven/Bridgeport
- Inbound traffic will generally be staggered over the 2-3 days preceding the eclipse,
- Outbound traffic will depart directly after the eclipse
- A high of 160K additional people will be entering the state. At 2.8 people/vehicle this equates to an additional 60K vehicles
- Given 26K total hotel and short term stay rooms available, and some travelers staying with friends and relatives, 14K+ vehicles may be overnights
- Monday is a workday, and so may reduce the number of visitors
- Since bedstock in VT is limited and eclipse is late in the day, motorists may elect to take a Monday day trip to see the eclipse and return home, same day
- There are a finite number of optimal viewing areas, so if motorists are in a delay, they will pull off onto the shoulder to view the eclipse
- A cloudy/overcast and rainy forecast will reduce the number of visitors

- Certain construction projects on the roadways may be limited to one lane
- Most visitors will use on-line navigation such as Waze, 511, and Google/Apple Maps, and will self-detour off of the main roadways, resulting in potential congestion and delays on local and feeder roads
- Lincoln Gap Rd and The Notch Rd (VT-108) will remain closed

## **Two Scenarios**

The Model works with two scenarios, each of which contains its own assumptions.

**Scenario A** assumes new visitors will travel to locations within the eclipse area and as aligned with normal points of interest in the area, such as schools, hospitals, tourist attractions, arts venues, etc. This model tends to send more travelers to the NW of the State. With Scenario A, the following rural highways could see significant congestion:

- US-4 in Mendon, Bridgewater and Woodstock
- VT-103 in Ludlow and Clarendon
- VT-100 in Waterbury
- VT-9 in Brattleboro
- I89 from Exit 10 to Rt2 and the Islands

And more localized congestion could be seen:

- Burlington
  - Colchester Ave.
  - Main St.
- Richmond
  - US-2
  - VT-117
- VT-15 in Essex
- Arch St (TH-5) in Pittsford (bypass for US-7)
- VT-2A in Williston and Essex Junction
- N. Grove St (TH-4) in Rutland (bypass for US-7)
- US-5 in Brattleboro
- Spear St. in S. Burlington

**Scenario B** changes the assumption so visitors are routed more uniformly to locations with a focus on the cities and towns which are considered optimal for viewing , and adds an influx of visitors from the southern part of Vermont outside of the viewing area. This model seems to relax the pressure that was put on the rural highways in Scenario A and could result in more significant congestion in urban areas, villages, and town centers:

- US-7 in Shelburne
- Williston
  - Exit 12 ramps in Williston

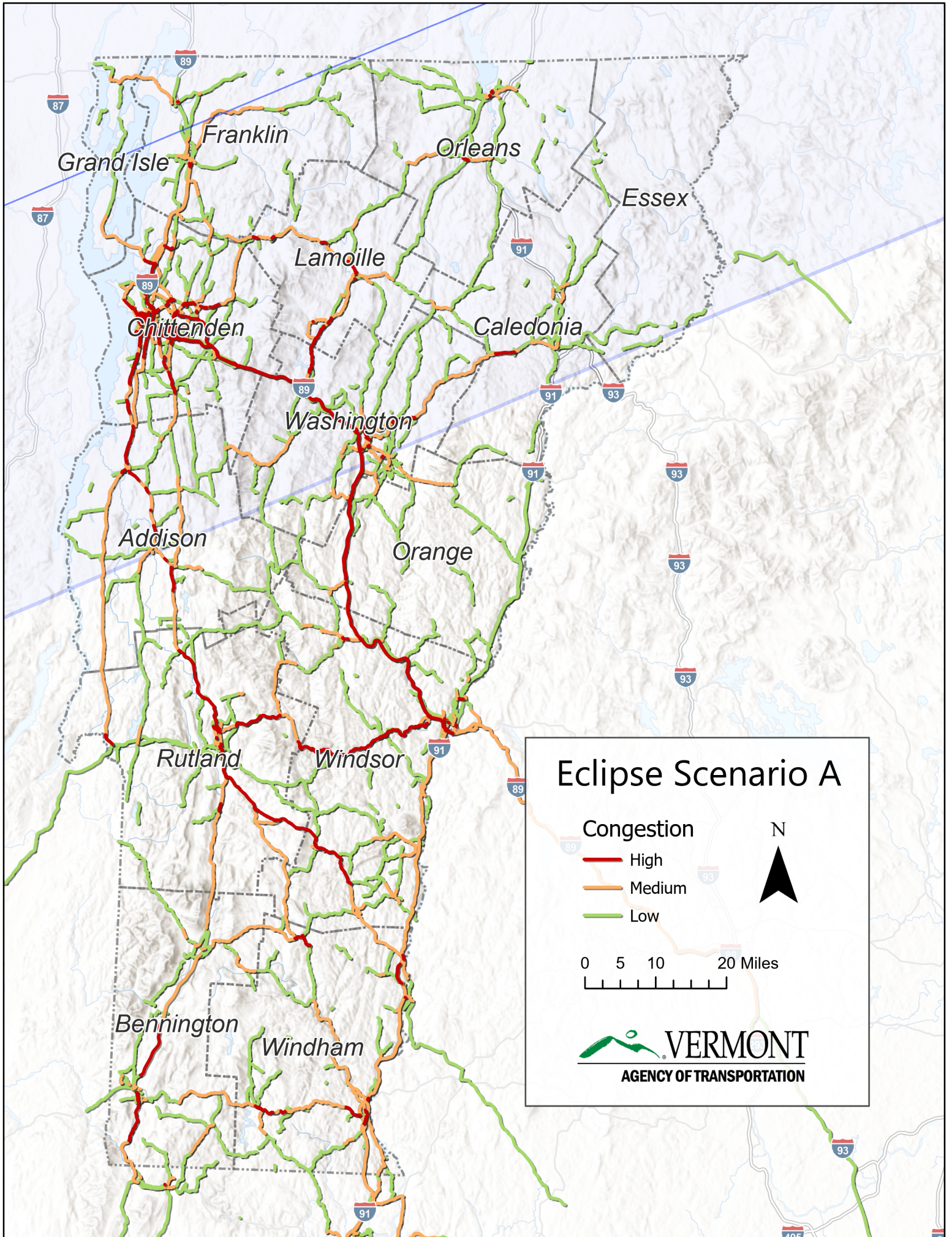
- Industrial Ave. in Williston
- VT-2A in Williston and Essex Junction
- US-2 (Williston Rd.) in S. Burlington and Williston
- I89 from Exit 10 to Rt2 and the Islands
- I91 from Clay Hill Rd to Exit 10
- Burlington
  - Colchester Ave. in Burlington
  - Pine St. in Burlington
  - Main St. in Burlington
- VT-15 in Essex
- US-2 and VT-117 in Richmond, VT
- Arch St (TH-5) in Pittsford (bypass for US-7)
- US-5 in Brattleboro

With the following rural highways continuing to be somewhat problematic:

- VT-100 in Waterbury
- I-91 in Rockingham
- VT-103 in Ludlow, Clarendon and Cavendish
- US-7 in Ferrisburgh
- US-7 in Pittsford
- VT-9 in Brattleboro and Wilmington
- I-89 in Waterbury, Middlesex, Montpelier and Hartford

#### GIS Planning Tool

AOT GIS analysts applied the technical data from the two scenarios run by UVM to create a GIS product which will allow visualization of potential trouble areas in both scenarios. This product will be disseminated upon further refinement.



# Eclipse Scenario A

## Congestion

- High
- Medium
- Low

