



**VTRANS**

VIRGINIA'S  
TRANSPORTATION PLAN

Mid Term Needs  
Assessment Regional  
Workshop Summary  
Winchester-Frederick  
August 8, 2019



Office of Intermodal Planning and Investment

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Richmond, Virginia 23219

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Transportation Plan

Contract Number 47082, Task Two: Agency Involvement

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# 1 INTRODUCTION

This report summarizes the input from a workshop conducted by the Virginia Office of Intermodal Planning and Investment (OIP) with representatives of local, regional, and state agencies that support transportation planning for the Winchester-Frederick area. The purpose of the meeting was to elicit input on the analysis methods (specifically, key performance measures) and the regional results of initial analyses conducted to identify statewide transportation needs for the coming seven to ten years.

## 2 MEETING LOCATION AND PARTICIPANTS

The workshop was conducted at the George Washington Hotel in Winchester, Virginia, from 10:00 a.m. to 2:00 p.m. Table 1 provides a list of participants and invitees.

**Table 1: Workshop Participants and Invited Representatives**

Name	Agency	Title
<b>Regional and Local Representatives</b>		
Dennis Utterback	Boyce Planning Commission	Chairman
Tim Youmans	City of Winchester	Planning Director
John Bishop	Frederick County	Assistant Director - Transportation
Mike Ruddy	Frederick County	Director of Planning & Development
John Madera	Northern Shenandoah Valley Regional Commission	Principal Planner
Becky Sandretzky	RideSmart	Project Coordinator
Jenna French	Shenandoah County	Director of Tourism & Economic Development
Barbara Nelson	The Port of Virginia	Vice President of Government Affairs/Transportation Policy
Dan Harshman	Town of Edinburg	Mayor

Name	Agency	Title
Jeremy Camp	Town of Front Royal	Director of Planning & Zoning
Matt Farace	Town of Front Royal	Planning Technician
Bryan Chrisman	Town of Luray	Assistant Town Manager
Lemuel Hancock	Town of Woodstock	Urban Designer & Neighborhood Planner
Bob Childress	Warren County	Deputy County Administrator
Taryn Logan	Warren County	Planning Director
Nick Sabo	Winchester Regional Airport Authority	Executive Director
<b>Additional Regional, Local, and State Representatives Invited but Unable to Attend</b>		
Renee Wells	Winchester Transit	
Mike Majher	Town of Stephens City	
Rebecca Layman	Town of Middletown	
Brandon Stidham	Clarke County	
Amity Moler	Page County	
Christy Dunkle	Town of Berryville	
Lisa Currie	Town of Toms Brook	
Wyatt Pearson	Town of Strasburg	
Terry Pettit	Town of Stanley	
Juanita Roudabush	Town of Shenandoah	
<b>State Agency Staff</b>		
Scott Alexander	VDOT - Edinburg Residency	Assistant Resident Engineer
Erik Johnson	VDOT - TPMD	Freight Planning Specialist
Adam Campbell	VDOT - District Planning	Transportation Planner
Terry R Short Jr	VDOT - District Planning	District Planning Manager
Ronique Day	OIPI	Deputy Director

Name	Agency	Title
Jitender Ramchandani	OIPI	Transportation Planning Program Manager
Chris Wichman	OIPI	Transportation Planner
Katie Schwing	OIPI	Transportation Planner
<b>Consultant Facilitators and Scribes</b>		
Vlad Gavrilovic	VTrans Consultant team	Facilitator
Marissa Sperry	VTrans Consultant team	Scribe
Phil White	VTrans Consultant team	Scribe
Rebecca Jablon	VTrans Consultant team	Scribe
Kristina Heggedal	VTrans Consultant team	Scribe
Taylor Gestwick	VTrans Consultant team	Scribe

### 3 AGENDA AND MATERIALS

Following a plenary presentation and discussion of the VTrans Needs Assessment method and performance measures, the participants broke into small groups to review the information developed for the region. They regrouped at the end of the meeting to share their findings and to hear about the process and schedule for developing, reviewing, and finalizing the VTrans Mid-term Needs Assessment.

At sign-in, each participant received a packet with the following materials, all of which are available for download from VTrans website.<sup>1</sup>

- Agenda
- Plenary presentation slides
- VTrans Summer 2019 Newsletter
- VTrans Mid-Term Needs Frequently Asked Questions (FAQ)
- Comment Form
- Regional maps, charts, and/or tables of the data. Detailed descriptions of each measure and analysis method are included in the plenary presentation slides.
- Summaries of transportation needs in each of the region's designated Urban Development Areas as identified by local governments through an online survey conducted by OIPI in June-July 2019. Participants were invited to comment upon the identified needs, and to identify any potential new Urban Development Areas that the localities in the region might consider adopting

<sup>1</sup> VTrans website: [www.vtrans.org](http://www.vtrans.org) Location of workshop summaries: <http://vtrans.org/get-involved/online-meetings/VTrans-Mid-Term-Needs-Regional-Workshops>

prior to April 1, 2020 (the deadline for establishing UDAs as candidates for the 2020 round of SMART SCALE grants).

- A list of Business Ready Sites in the region drawn from the Virginia Economic Development Partnership (VEDP) database. These sites are locally identified subareas of 100 or more contiguous acres that have the potential to be developed into industrial parks, office campuses, research facilities, or other economic hubs that could generate transportation needs. Participants were asked to identify sites that were in an advanced stage of development planning and investment, and to describe associated transportation impacts might be generated within the coming ten years. They were also asked to comment upon the most appropriate threshold for identifying potential sites across the state, based upon the five levels of business readiness assigned by VEDP.

## 4 SYNTHESIS OF COMMENTS

The following section provides a summary of comments about each performance measure, compiled from the plenary session, breakout groups, and comment sheets. The appendix includes transcripts of the sessions and sheets, including photos of the marked-up maps developed by each breakout group. After the participants have reviewed and vetted the draft report, OIPI will synthesize the comments that were associated with the maps and upload them to the online InteractVTrans map (<http://www.vtrans.org/mid-term-planning/InteractVTrans>). In addition to serving as a repository for regional workshop comments, InteractVTrans provides a publicly available resource for ongoing input from local stakeholders and the public.

Each comment listed in this table includes a notation indicating OIPI's intention to respond directly to the participants (e.g., answering a question about the data) and/ or to consider the idea or concern during the process of analyzing and developing mid-term needs. As noted in the plenary presentation, OIPI will present the initial list of needs to the Commonwealth Transportation Board in October 2019, and the final needs assessment with a request for Board action in December 2019.



**Table 2 Synthesis of Comments**

	<b>Comment</b>
	<b>Congestion: Percent Person Miles Traveled in Excessively Congested Conditions (PECC)</b>
1.	Most of the congestion issues in this region are around interchanges and/ or related to truck travel patterns (e.g., slow-downs climbing hills), which this measure does not seem to pick up.
2.	Trucks parking on ramps is a concern.
3.	Areas meriting examination - -- US 11 at US 211 -- Access to Luray Caverns -- Access to Seven Bends State Park -- Development of new hospital in Warren County -- I-66/ Route 79 interchange -- I-66 at Warren/ Fauquier Line -- I-81/ I-66 interchange -- Exits 313, 314 and 317 on I-81 -- Route 522 along Inland Port (both directions) -- US 11 from Old Charles Town Road to Winchester City Limit -- Route 522 near Costco -- Route 522 approaching US 50 (near exit 313 of I-81) -- Route 7 from I-81 interchange to Greenwood Road
4.	A recent study completed on I-81 may have helpful data for this region.
5.	Route 37 should be marked as a limited-access facility.
6.	Corridor/ network redundancy is an issue during the peak hour/ incident management events. The supporting network cannot handle incident events on the interstates. Bottlenecks include ramps that are substandard/ transition to the local network.
	<b>Congestion: Travel Time Index (TTI)</b>
7.	In Woodstock, there are acute problems, though they impact a small number of people.
8.	Route 55 towards Strasburg has seen an increase in truck traffic even though it was not designed for heavy traffic.
9.	The Inland Port expansion project could lead to further congestion in the area.
10.	Park and ride lots in Warren County should be considered for expansion, as they are at capacity.
	<b>Reliability: Unreliable Delay (UD)</b>

- 11. The UD measure may not be the most appropriate for the area.
- 12. The map should explain which direction it is (i.e. northbound or southbound) if only one direction is highlighted.

**Reliability: Buffer Time Index (BTI)**

- 13. Areas meriting examination -
  - The I-66 and I-81 interchange
  - Route 7
  - US 211 between New Market and Luray
  - Route 522 south of I-66 and Route 55 from Lynden to Front Royal

14. The BTI does not measure the key issue of regular congestion at hot spots.

15. The metric should reflect regional needs and not be watered down by the more populous areas of Hampton Roads and Northern Virginia.

**Passenger Rail: Amtrak Station On-Time Performance**

- 16. There are several train and commuter bus options for residents to commute to D.C.
- 17. Consideration for the last mile connections from Winchester to the train stations in Martinsburg and Harper’s Ferry, WV should be included.

**Passenger Rail: VRE On-Time Performance**

18. The Northern Shenandoah Valley Regional Commission is looking to extend VRE service to Front Royal.

**Accessibility: Transit Access Deficit to Activity Centers**

- 19. Due to safety concerns, bicycling is often not considered a viable mode option.
- 20. Activity center typology should be shown on Map 6.

- 21. Areas meriting examination -
  - Amazon distribution center
  - Lord Fairfax Community College
  - Delco Shopping Center on US 50
  - Walmart on US 50 and Route 37

22. VTrans should strongly consider the addition of non-regional network activity centers, such as Woodstock, Luray and Front Royal.

**Travel Options: Disadvantaged Population Beyond ¼ Mile Access to Fixed Route Transit**

23. The performance metric for travel options for disadvantaged populations may be better represented as percentages.

24. Census tracts or blocks can dilute the true picture - perhaps percent per capita of disadvantaged populations within municipal boundaries would be a better reflection of the area.
25. If census block groups are used, consider including the census block boundaries on the maps.
26. The maps should demonstrate where transit riders would need to travel to.
- Safety: Vehicle Crashes**
27. Glad to see all types of incidents included, not just those resulting in fatalities.
28. There is a trade-off for vehicular versus pedestrian safety.
29. When there are major accidents on I-81 and I-66, trucks detour to other roadways causing safety risks and secondary accidents. It leads to major congestion (particularly heavy truck congestion) up to 50 miles away from the interstate. These roadways were not designed for that degree of traffic. The data may not reflect this issue, since the heavy traffic is not constant, but it should be considered.
30. On I-81 and I-66, sight distance and shoulder width are major concerns during peak traffic periods.
31. VTrans should capture detour and emergency routes, particularly those designated by localities for emergency planning.
32. VTrans could consider a different threshold for potential for safety improvement (PSI), so that they identify safety risks of areas that are important but may not be included at higher thresholds.
33. Some roadways should have standards similar to I-81, for instance, US 211's speed limit is 55 mph (which is was not designed for), and the deceleration and acceleration lanes are too short for this speed. In addition, the guardrails are too close to the striped lines.
34. The probability of having a severe or fatal crash is higher in this area due to the high speed limits on the roadways. Urban and rural context for PSI based on the typology thresholds would be recommended.
35. All crash types should be included, but severe crashes should be weighted more highly.
36. Colleges and secondary schools should be added as a safety issue, especially with regard to bicycle and pedestrian concerns.
37. Density of traffic violations could be a criterion for safety.
38. The region is becoming more attractive for bike tourism, but rural roads are very dangerous for bikes. Separate safety needs for bicycle crashes should be considered.

- 39. Since many localities have bicycle/ pedestrian plans, the top ranking projects in these plans could be used to establish needs.
- 40. There is a truck staging gap at the Inland Port.
- 41. Distribution sites and transfer centers are growing in Frederick County.
- 42. VTrans should consider roadway/ design deficiencies, in addition to crash history/ PSI for improvement eligibility.
- 43. Areas meriting examination -
  - US 340
  - Exits 313 and 317 on I-81
  - Back Mountain Road and US 50
  - Zachary Ann Lane
- Economic Development: Urban Development Areas (UDAs) and Virginia Economic Development Partnership (VEDP) Business Ready Sites**
- 44. It is difficult to obtain state funds for development - municipalities need to provide infrastructure to support progress, but current requirements demand a program in order to justify infrastructure.
- 45. VEDP Business Ready Site Program sites are important to include, as infrastructure needs are important, and it provides a way to assist and prioritize more rural areas.
- 46. Non-urban activity centers should be considered.
- 47. Tier 3 is recommended as the threshold for inclusion in VTrans.
- 48. VEDP is useful for industrial development but it could promote sprawl by incentivizing office development in rural areas without services.
- 49. A participant suggested including Enterprise Zones, Opportunity Zones, and Technology Zones which promote infill and are therefore more urban than rural.
- 50. Consideration should be given to mesh the UDAs with VEDP sites to incentivize Smart Growth.
- 51. Proximity to Surface Transportation Assistance Act (STAA) and National Highway System (NHS) highways systems should be incorporated.
- 52. Consideration should be given to using the SMART SCALE Weighting Typology to establish variable thresholds.
- 53. Winchester plans to adopt its UDAs soon.
- 54. The Port of Virginia is working on identifying statewide freight rail bottlenecks and safety hot spots.

55. The incorporation of VEDP sites into VTrans needs is an interesting concept, with Tier 3 seeming to be an acceptable threshold. Consider adding non-regional network activity centers as well.

## 5 APPENDIX: COMMENTS FROM PLENARY PRESENTATION, BREAKOUTS, AND WORKSHOP HANDOUTS

### i. COMMENTS DURING PLENARY PRESENTATION

The following section summarizes questions and comments about the topics covered during the plenary presentation by Jitender Ramchandani. Questions from participants are shown in italics, followed by brief responses from the plenary speaker.

#### INTRODUCTION/OVERVIEW

- Jitender re-introduced the purpose of VTrans, the planning context and the federal and state requirements
- He emphasized that the data and analysis presented is meant to spur discussion, and is not the final Needs. He requested that participants also review the data with an eye for completeness/accuracy.

#### VTRANS NEEDS ASSESSMENT PROCESS

Jitender Rachmandani asked the participants to answer with a show of hands to several questions to gauge the group's level of experience with VTrans process.

- When asked if their districts had UDAs, approximately half of participants raised their hand affirmatively.
- When asked if they had submitted projects to SMART SCALE, several raised their hand affirmatively.

In addition, a participant asked that since VTrans serves as a gatekeeper for SMART SCALE, would VTrans remain sensitive to the fact that some local projects do not rise to "statewide need." Jitender Rachmandani responded that a balance needs to be struck between regional needs and statewide needs, and as of now OIPI is creating separate thresholds for each. In this way, local projects address a regional need, and are not competing with the with the broader statewide needs of more urbanized areas such as Northern Virginia.

## CONGESTION MEASURES

### *Percent Person Miles Traveled in Excessively Congested Conditions (PECC)*

Jitender Rachmandani illustrated differences in how people implicitly identify congestion by asking participants to answer with a show of hands if they consider traveling at several speeds on a hypothetical 70 mile per hour (mph) road to indicate congestion.

- Traveling 42 mph on a 70-mph road (60% of the speed limit): most attendees raised their hand indicating that they consider this congestion.
- Traveling 52 mph on a 70-mph road (75% of the speed limit): a handful of attendees raised their hand indicating that they consider this congestion.
- Traveling 63 mph on a 70-mph road (90% of the speed limit): Two attendees raised their hand indicating that they consider this congestion.

## RELIABILITY

- A participant asked whether the reliability performance measure takes the number of passengers into account or the type of vehicle. Jitender Rachmandani responded that the measure does indeed take the number of passengers into account, but not the type of vehicle.
- A participant noted that the unreliable delay measure (minimum 80th/50th percentile travel time equal to 1.5 or higher) might not be most appropriate for the Winchester-Frederick area. Jitender Rachmandani responded that the 1.5 is a Federal threshold, but perhaps another level would be more appropriate.
- A participant asked whether there is a method to look at the economic impact of different types trucks experience unreliability (i.e. heavy versus light). Jitender Rachmandani responded that there is no method as of now, but economic impacts will be analyzed following the development of mid-term needs.
- A participant commented that not only the actual reliability, but the perceived reliability of a roadway (what a traveler expects) should be considered.
- A participant asked if incidents and weather delays were taken out of the equation for unreliable delay. Jitender Rachmandani explained that incidents and weather delays were averaged over the course of a year and included into the equation (though they are minimized by the non-delay periods).
- Jitender Rachmandani asked if there is a preference for the focus to be on acute traffic problems affecting few people or moderate traffic problems affecting many people. A participant responded that another way to look at the issue is whether one would prefer a few people be significantly upset and quite loud in their anger or a larger number of people only moderately upset.

## ACCESSIBILITY TO ACTIVITY CENTERS

- A participant noted that due to safety concerns, people do not consider bicycling as a viable mode option, even if the activity center is within a 7-mile threshold. Jitender

Rachmandani responded that denser areas have a larger latent demand within the distance thresholds than more rural, less dense areas.

- The 45-minute threshold for accessibility to activity centers is too high for the more rural areas of the state. Jitender Rachmandani responded that the threshold was selected because it matches the SMART Scale application threshold.

### TRAVEL OPTIONS: DISADVANTAGED POPULATIONS

- A participant suggested that the performance metric for travel options for disadvantaged populations be represented as percentages.

### SAFETY

- A participant explained that safety should be measured by all types of incidents and stated that he was glad to see this metric includes all safety incidents, not just those resulting in fatalities.

### URBAN DEVELOPMENT AREAS

- A participant stated that there is a catch-22 with regards to industrial and economic development areas - municipalities need to figure out how to provide infrastructure to support progress, however current requirements demand progress in order to justify infrastructure.
- Several participants agreed, explaining they cannot get SMART SCALE verification unless a site plan is developed, but a site plan cannot be developed without providing expectations for traffic that would utilize the roadway.
- Another participant noted that SMART SCALE requires local investment in order to get points, but if the SMART SCALE funds are not awarded, then localities have already expended funds with no resources to complete the projects.
- The difference between Tier 2 and Tier 3 projects is due diligence, which is related to environmental (rather than transportation) concerns.

### SUMMARY/WRAP-UP

- The facilitators briefly summarized the discussion and comments received at each table
- Jitender asked the group if there was anything that wasn't covered that the participants expected to cover. There was no response.

## ii. BREAKOUT SESSION COMMENTS

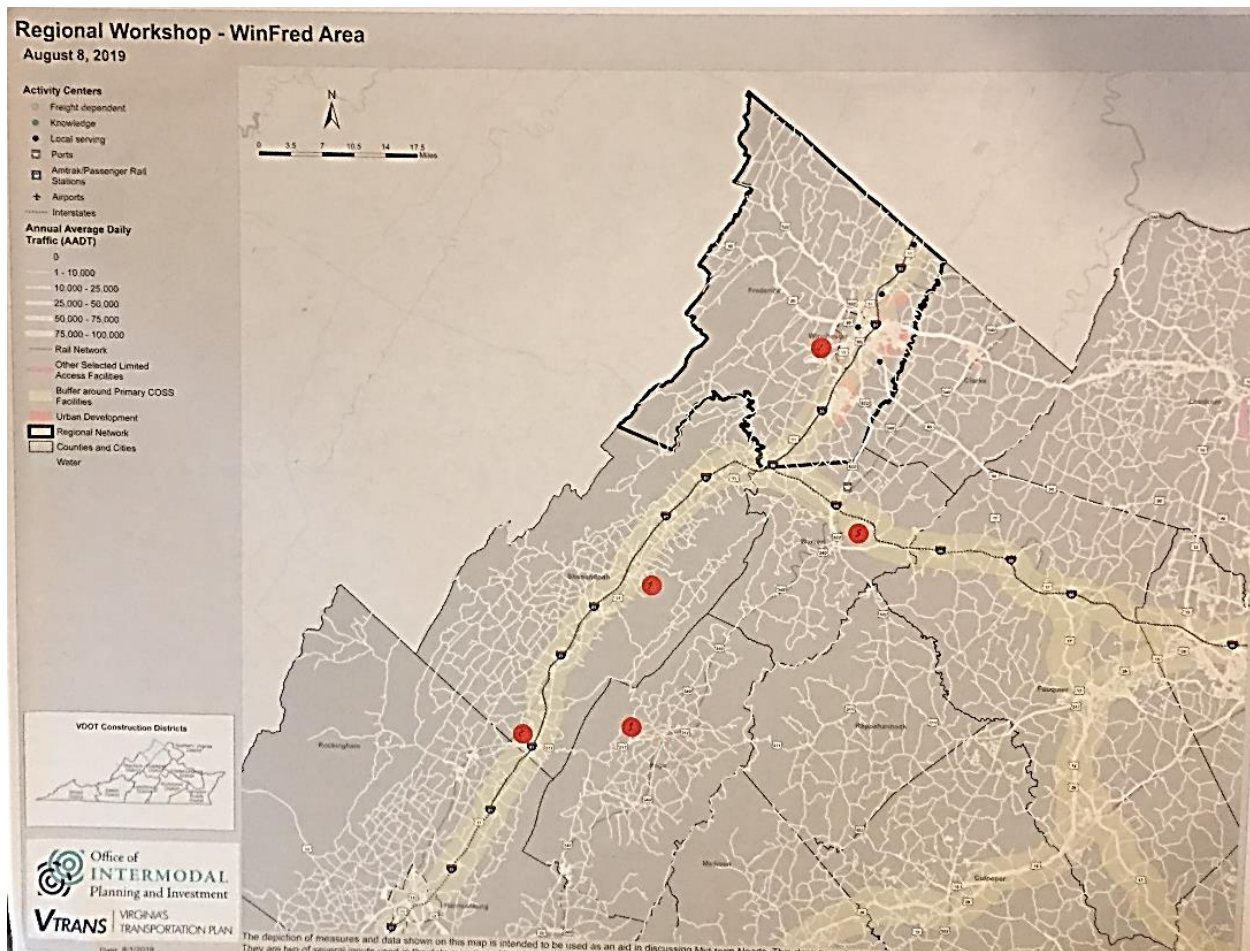
The following synthesis reflects input from all the breakout groups. Participants were asked to reflect broadly upon the issues addressed by the performance measures (i.e., congestion, reliability, passenger rail on-time performance, accessibility to activity centers, travel options for disadvantaged populations, safety, and economic development. They were also asked for input on the regional applicability of each measure.

Facilitators and scribes assigned to each group recorded the input by writing notes on a flip chart and on a laptop. For comments with geographic specificity, facilitator and/ or group members placed numbered stick-on dots onto a poster-sized base map and noted the meaning of the numbered dot on the flip chart.

Participants were invited to jot down additional notes on the Comment Form and return it to a facilitator at the end of the meeting, or to fill it out later and email their responses to OIPI staff. A summary of input from the written Comment Forms is included at the end of this section

### GROUP 1 COMMENTS

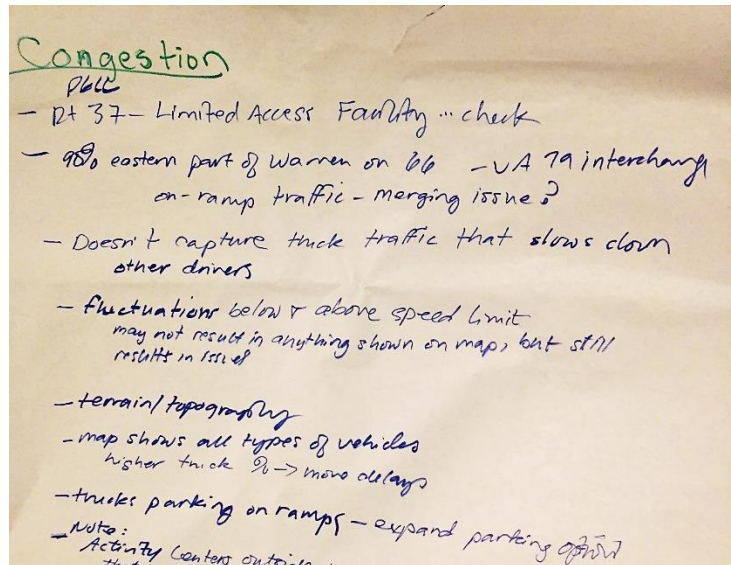
#### Breakout Group 1 Marked-Up Map





## Congestion

1. Route 37 should be marked as a limited-access facility.
2. US 11 cannot handle the volume to get on US 211 and backs up onto I-81.
3. Luray Caverns see 500,000 visitors a year and the backup occurs on the secondary road. A change to signal timing on the primary road is warranted.
4. Seven Bends State Park is set to open this Fall, but its current access point is a one-lane gravel road. Road improvements are needed.
5. A hospital is set to open in approximately a year, which could create more congestion in the area.



## Percent Person-Miles Traveled in Excessively Congested Conditions (PECC)

- There is significant on-ramp traffic (a merging issue) at the I-66/ Route 79 interchange.
- This threshold does not capture truck traffic that leads to congestion.
- Most issues are peak period, but there are some areas of all-day congestion.
- Fluctuation in speed leads to frustration that can lead to safety issues.
- The map shows all types of vehicles, but an increase of truck traffic leads to more delays.
- Trucks parking on ramps is a concern.

## Travel Time Index (TTI)

- In Woodstock, there are acute problems impacting a small number of people.
- Route 55 towards Strasburg has seen an increase in truck traffic, though the roadway was not designed for heavy traffic.
- The Inland Port expansion project could lead to further congestion in the area.
- There are two large park and ride lots in Warren County that are at capacity and should be expanded.

## Reliability

### Unreliable Delay (UD)

- When only one direction is highlighted, is it northbound or southbound?

### Buffer Time Index (BTI)

- The I-66 and I-81 interchange can add delays up to an hour.
- Route 7 is a nightmare during rush hour.
- The geometry of US 211 between New Market and Luray cause accidents.
- Route 522 south of I-66 and Route 55 from Lynden to Front Royal should be considered.

## Travel Options for Disadvantaged Populations

- Consider a percent per capita of disadvantaged populations showing corporate boundaries. Census tracts/ blocks can dilute the true picture of what residents face.
- On the 80% map, perhaps the census block boundaries.
- The maps should show representation of where people need to travel to on transit.

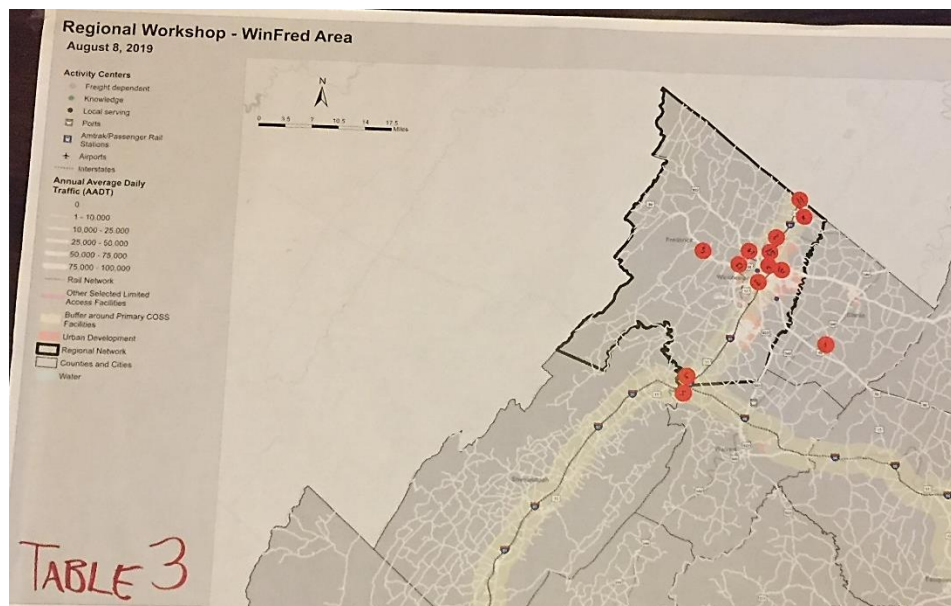
## Economic Development

- VEDP Business Ready Site Program sites are important to include, as infrastructure needs are important.
- The VEDP program is a way to assist and prioritize more rural areas.
- The VEDP program requires local investment, each locality has to determine what is feasible.
- About half of the sites have been categorized into a tier by VEDP thus far.
- How are multi-phased projects tiered? There is no mechanism with VTrans for phased projects - however, the tiering categorization is a VEDP decision.
- VEDP sites should be included because GoVirginia, another economic development program, cannot be used for transportation projects.
- Tier 2 projects may not be marketable within the 7-10 year timeframe. Thus, Tiers 3 and 4 should be included as part of VTrans.
- Non-urban activity centers (outside of UDAs) should be considered.

## Safety

- Why have crashes increased - is it due to vehicle miles travelled (VMT), distracted driving, other factors?
- There is a trade-off for vehicular versus pedestrian safety.

- When there are major accidents on I-81 and I-66, trucks detour to other roadways causing safety risks and secondary accidents. It leads to major congestion (particularly heavy truck congestion) up to 50 miles away from the interstate. These roadways were not designed for that degree of traffic. The data may not reflect this issue, since the heavy traffic is not constant, but it should be considered.
- VTrans should capture detour and emergency routes, particularly those designated by localities for emergency planning.
- There is a cascade effect of severe congestion on the network.
- US 211 serves as a detour for the northeast portion of the state.
- The safety threshold looks to the VDOT PSI list.
- The Town of Woodstock just adopted a bicycle/ pedestrian plan. There were no issues because no one currently bikes in town. However, more conflict will occur as new infrastructure is introduced.
- Activity centers and UDAs are a great way to include bicycle/ pedestrian needs.
- There are an increasing number of incidents across all modes, though increasing the funding has not led to improvements. When the economy is doing well, there is more freight traffic and people tend to drive more, leading to higher VMT. Also, distracted driving seems to have increased over the years.
- Front Royal has seen an increase in crashes as alternative transportation use has increased.
- On I-81 and I-66, sight distance and shoulder width are major concerns during peak traffic periods.
- The current 5-mile buffer may not be adequate to include the emergency routes. Designated emergency routes should be considered as part of the regional network.
- VTrans could consider a different threshold for PSIs, so that they identify safety risks of areas that are important but may not be included at higher thresholds.
- Some roadways should have standards similar to I-81, for instance, US 211's speed limit is 55 mph (which is was not designed for), and the deceleration and acceleration lanes are too short for this speed. In addition, the guardrails are too close to the striped lines.

GROUP 2 COMMENTS (ORIGINALLY TABLE 3)**Breakout Group 2 Marked-Up Map****Safety**

1. It is very hard to cross US 340.
  2. Exits 317 and 313 are major standouts with regards to safety issues on I-81. Exist 317 has been through two rounds of SMART Scale applications - would love to see feedback on why projects are not selected to better refine the applications for future submissions.
  3. Back Mountain Road and US 50 is a high crash location.
  4. There is Flying J that is used informally for truck parking. The truck parking overflows to Zachary Ann Lane, which causes issues.
- The safety threshold is based on PSI identified locations. That data is updated annually.
  - The probability of having a severe or fatal crash is higher in this area due to the high speed limits on the roadways. Urban and rural context for PSI based on the typology thresholds would be recommended.
  - All crash types should be included, but severe crashes should be weighted more highly.
  - The context of the community is important. For instance, in Boyce, very few children walk to school because of safety concerns.
  - The data includes all reasons for crashes.
  - VDOT Staunton District is working on a list of the top 50 PSI locations in the District.
  - Many improvements made for vehicular safety work against pedestrian safety.

- Colleges and secondary schools should be added as a safety issue, especially with regards to bicycle and pedestrian concerns.
- County police have set up speed monitoring on Route 723 in Boyce. Once schools start up, the school zone speed limits reduce and the police target times when students are coming or going to school. Density of traffic violations could be a criterion for safety.
- The region is becoming more attractive for bike tourism, but rural roads are very dangerous for bikes. Separate safety needs for bicycle crashes should be considered.
- Since many localities have bicycle/ pedestrian plans, the top ranking projects in these plans could be used to establish needs.
- There is a truck staging gap at the Inland Port.
- Several years ago, Winchester did a total ban on freight trucks in the city (except for deliveries); however, it has been difficult to enforce.
- Distribution sites and transfer centers are growing in Frederick County.

### Congestion

5. I-66 at Warren/ Fauquier Line is an issue, though may be due to topography.
6. I-81/ I-66 interchange is a consistent congestion issue.
7. Most issues are interchange-based (exits 313, 314, and 317), so corridor-based measures do not reflect that.
8. Exit 317 on I-81.
9. Route 522 along Inland Port.
10. US 11 from Old Charles Town Road to Winchester City Limit.
11. The Amazon distribution center at US 11 is congested [see also #17 under Accessibility to Activity Centers]
12. This number was skipped.
13. Route 522 near the Costco.
14. Route 522 coming into US 50, next to existing 313 (but not a part of I-81).
15. Route 522 along Inland Port (other direction).
16. Route 7 from I-81 interchange to Greenwood Road.
  - These thresholds do not reflect the congestion issues in the region. Most issues are interchange-based [so are not reflected in corridor-level assessments]
  - The I-81 study had in-depth data for this region that may be helpful.
  - Most issues are peak period, but there are some areas of all-day congestion.

## Reliability

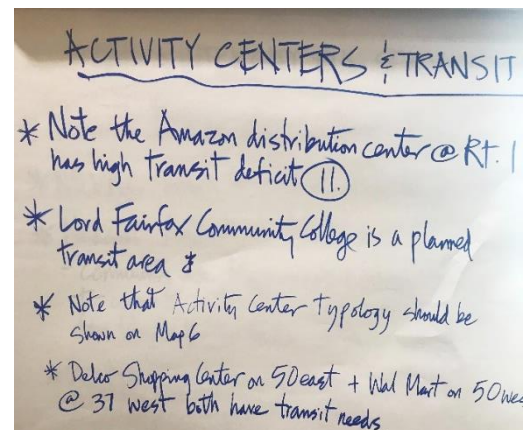
### Buffer Time Index (BTI)

- The BTI does not measure the key issues of regular congestion at hot spots.
- People make locational decisions based on the perception of low congestion and reliable travel, thus, doubling the travel time in an area like this is a much bigger deal.
- The scale for these measures is driven by Hampton Roads and Northern Virginia, which waters down the effects that you can see in this area. The metrics should reflect regional needs.

## Accessibility to Activity Centers

17. The Amazon distribution center at US 11 has a high transit deficit.

- Lord Fairfax Community College is a planned transit area.
- Activity center typology should be shown on Map 6.
- The Delco Shopping Center on US 50E and the Walmart on US 50W at Route 37W both have transit needs.



## Travel Options for Disadvantaged Populations

- Note that transit viability is based on density.

## Passenger Rail On-Time Performance

- Virginia Breeze stops in Front Royal.
- The Northern Shenandoah Valley Regional Commission wants to extend VRE to Front Royal.
- The nearest Amtrak station is in Martinsburg, WV. Commuters go into D.C. via Martinsburg or Harper's Ferry. The last mile connections from Winchester to these stations are important.
- DC Motor Coach runs a commuter bus from Front Royal to D.C. They had 300 riders last month.
- Commuters from Frederick County drive to Purcellville to take the Loudoun commuter bus to D.C.

## Economic Development/ Urban Development Areas/ VEDP sites

- Will VTrans made recommendations on how to move the VEDP sites up to meet the threshold? Participants recommended Tier 3 as the threshold, as Tier 3 is more viable for small towns and Tier 2 projects may not be marketable.

- VEDP has assistance grants for project planning.
- VEDP is useful for industrial development but it could promote sprawl by incentivizing office development in rural areas without services.
- A participant suggested including Enterprise Zones, Opportunity Zones, and Technology Zones which promote infill and are therefore more urban than rural.
- Consideration should be given to mesh the UDAs with VEDP sites to incentivize Smart Growth.
- Proximity to STAA and NHS highways systems should be incorporated. There is some proximity information in the analysis, but will confirm as to whether the distance is “as the crow flies” or distance via established roadways.
- Also, consideration should be given to using the SMART SCALE Weighting Typology to establish variable thresholds.
- GoVirginia, another economic development program, will not fund transportation projects.
- The program is great for encouraging industrial development, but there is a general disconnect for why VDOT wants to promote the development of office parks outside of urban areas where there is not already multimodal infrastructure. Research and office parks should be near established areas.
- Enterprise zones and technology zones are heavily discussed in public meetings, but it is a big ask to prove that these areas are prime for development and investment, especially since 85% of economic activity comes from existing businesses.
- Winchester plans to adopt its UDAs soon.
- The Port of Virginia is working on identifying statewide freight rail bottlenecks and safety hot spots.

### iii. WRITTEN COMMENTS

The following section lists the written input from participants who chose to fill out the printed comment sheet in their meeting packets. Key points and concepts from this input are reflected in Table 2 (Synthesis of Comments). Some participants planned to send comments to OIPI staff after the meeting; input from these post-meeting messages may not be captured in this meeting summary, but OIPI is considering all continued input during the development of the needs assessment.

#### CONGESTION

Does Congestion affect this region’s economic competitiveness? If so - where, how, and why?

- Yes. Corridor/ network redundancy is an issue during the peak hour/ incident management events. The supporting network (options and capacity) cannot handle

incident events on interstates. Bottlenecks also include ramps that are substandard/ transition to the local network.

### RELIABILITY

Does travel time reliability affect this region's economic competitiveness? If so - where, how, and why?

- Yes. See congestion response.

### PASSENGER RAIL ON-TIME PERFORMANCE

Does passenger rail on-time performance affect this region's economic competitiveness? If so - where, how, and why?

- N/A for this region.

### ACCESSIBILITY TO ACTIVITY CENTERS

Is accessibility to activity centers a concern for this region? If so - where, how, and why?

- VTrans should strongly consider the addition of non-regional network activity centers. Woodstock/ Luray/ Front Royal for example. All serve regional commercial, industrial, healthcare needs.

### TRAVEL OPTIONS FOR DISADVANTAGED POPULATIONS

Is the availability of travel options for disadvantaged populations a concern for this region? If so - where, how, and why?

- Data may not be displaying inaccurately given geography of census boundaries. May be more appropriate to display the data based on municipal boundaries.

### SAFETY

Is traveler safety a concern for this region? If so - where, how, and why?

- VTrans should consider roadway/ design deficiencies, in addition to crash history/ PSI for improvement eligibility.

### ECONOMIC DEVELOPMENT NEEDS

Please provide your thoughts about mid-term transportation needs related to economic development in this region's activity centers, urban development areas, and/ or industrial development areas.

- The incorporation of VEDP sites into VTrans needs is an interesting concept, with Tier 3 seeming to be an acceptable threshold. Consider adding non-regional network activity centers as well.