Public Information Meeting

Welcome to the Virginia Department of Transportation’s (VDOT) public information meeting on concepts being studied to assess potential operational and safety improvements for nearly two miles of Route 50 (Lee Jackson Memorial Highway) between Route 28 (Sully Road) and Stringfellow Road (Route 645). The concepts studied include reconfiguring and modifying intersections, continuing the traffic signal timing optimization program, replacing and adding pavement and crosswalk markings, and access management strategies for properties along the corridor.

This meeting is being held to provide an opportunity for residents and organizations to give VDOT comments and suggestions on the study.

VDOT strives to ensure that all members of the community have the opportunity to participate in public decisions on transportation projects and programs affecting them.

VDOT representatives are here to discuss the concepts being studied and answer your questions. Residents and drivers of the corridor in the study area are asked to take a short online survey that is now available for responses at www.virginiadot.org/route50chantillystudy.

All comments received on this study will be reviewed and the final concepts based on public input will be made available on the VDOT study website.

Study at a Glance

**Purpose**: Assess potential safety and operational improvements.

**Lengths and Limits**: About two miles of Route 50 between Route 28 and Stringfellow Road.

**Phase**: Study

**Begin Date**: September 2017

**Completion Date**: Summer 2020

**Cost**: $317,000
This STARS (Strategically Targeted Affordable Roadway Solutions) study is assessing potential safety and operational enhancements for nearly two miles of Route 50 between Route 28 and Stringfellow Road.

Currently, this segment of Route 50 experiences congestion in the morning and evening peak periods and a high number of crashes.

Potential improvement options include:

- Reconfiguring and modifying intersections
- Continuing the traffic signal timing optimization program
- Replacing and adding pavement and crosswalk markings
- Providing additional signage
- Adding pedestrian signals in the median (two-stage crossing)
- Access management strategies for properties along the corridor

### Study Overview

Environmental Review

Potential environmental impacts will not be included as part of this study. When the operational concepts are finalized and carried forward into a future project design development, VDOT will coordinate with the appropriate federal, state and local agencies as part of the environmental review and approval process.

### Right of Way

Preliminary study concepts presented on the displays are conceptual and may change as the study and concepts are refined. Property owners would be informed of the exact location of any easements during the right of way acquisition process and prior to construction if projects should be developed as a result of this study.

Information about right of way purchase is discussed in VDOT’s brochure, “Right of Way and Utilities: Guide for Property Owners and Tenants.” Copies of this brochure are also available online at: [www.virginiadot.org/business/row-default.asp](http://www.virginiadot.org/business/row-default.asp).

### Civil Rights

VDOT ensures nondiscrimination and equal employment in all programs and activities in accordance with Title VI and Title VII of the Civil Rights Act of 1964. If you need more information or special assistance for persons with disabilities or limited English proficiency, contact VDOT Civil Rights at 703-259-1775.

### Get Involved

VDOT will review and evaluate any information received as a result of the public information meeting. The comment sheet and brochure are provided to assist in making your comments. You may leave the sheet or any other written comments in the comment box, or mail/email your comments.

Residents and drivers of the corridor in the study area are asked to take a short online survey that is now available for responses at [www.virginiadot.org/route50chantillystudy](http://www.virginiadot.org/route50chantillystudy).

Comments must be postmarked or delivered to VDOT by Feb. 18, 2020.

All comments received on this study will be reviewed and the final concepts will be made available on the VDOT study website. Study information shared here, including a summary of comments received during the comment period, will be available on the study website.

### Contact Information

<table>
<thead>
<tr>
<th>Primary Contact: Andrew Beacher, P.E.</th>
<th>Preliminary Engineering</th>
<th>4975 Alliance Drive Fairfax, VA 22030</th>
<th>703-259-2239</th>
</tr>
</thead>
</table>

© 2020 Commonwealth of Virginia
All comments are subject to public disclosure.

Name (optional): ____________________________________________________________

Address (optional): _________________________________________________________

Email (optional): ____________________________________________________________

1. What are your major concerns that you would like to see incorporated into this study? Which intersections within the study limits are most important?

2. Which concepts do you support? Which concepts do you not support?

3. How did you hear about this meeting?

   _____ Newspaper  _____ Social Media  _____ Website  _____ Other ____________________________
Postal Service will not deliver without a stamp

Virginia Department of Transportation
Northern Virginia District
Mr. Andrew Beacher, P.E.
4975 Alliance Drive
Fairfax, VA 22030
US ROUTE 50 (LEE JACKSON MEMORIAL HIGHWAY) CORRIDOR STUDY (FAIRFAX COUNTY)

A Study undertaken as part of VDOT’s Strategically Targeted and Affordable Roadway Solutions (STARS) Program

Andrew Beacher, NOVA, VDOT

January 30, 2020
Presentation Outline

1. Introductions
2. Meeting Objectives
3. VDOT Strategically Targeted and Affordable Roadways Solutions (STARS) Program
4. Route 50 Corridor Study
5. Existing Traffic and Safety Conditions
6. Potential Improvements
7. Funding/Next Steps
8. Questions
2. Objectives for this Public Information Meeting

• Inform the public about this STARS study
• Present information on safety and traffic conditions
• Describe alternatives/potential improvements
• Solicit input from the public on potential improvements
• Discuss potential funding
3. BACKGROUND ON VDOT’S STARS PROGRAM
What is the STARS Program?

Program to develop solutions to reduce crashes and congestion bottlenecks using a data-driven approach

- Crash hotspots
- Speed data
- AADT data

Use this information together to identify corridors with safety and congestion challenges

Overall goal of STARS is to develop solutions that can be programmed in the VDOT Six-Year Improvement Program (SYIP) through SMART SCALE or other funding programs
4. US 50 CORRIDOR STUDY
Includes Route 50 intersections with:

- NB Route 28 On and Off Ramps
- Centerview Dr./Sullyfield Circle
- Centreville Rd./Walney Road
- Elmwood St./Metrotech Drive
- Chantilly Road
- Downs Drive
- Chantilly Plaza
- Galesbury Lane
- Lees Corner Road
- Stringfellow Road
Elements of the Study

- Conduct comprehensive traffic operations and safety performance study
- Perform analyses of existing safety and traffic conditions and future (2030) traffic conditions
- Identify short-term and mid-term improvements
- Identify potential funding/implementation opportunities

Targeted completion date: Summer 2020
5. EXISTING TRAFFIC AND SAFETY CONDITIONS
Significant Queueing Throughout the Corridor - AM & PM Peaks
Pedestrian Accommodations at Signalized Intersections

- **Route 50 and Centerview Dr./Sullyfield Cir.**
  - Pedestrian facilities on north, east and south legs

- **Route 50 and Centreville Rd./Walney Rd.**
  - Pedestrian facilities on all four legs

- **Route 50 and Elmwood St./Metrotech Dr.**
  - Pedestrian facilities on north, east and south legs

- **Route 50 and Chantilly Road**
  - Pedestrian facilities on north and west legs

- **Route 50 and Chantilly Plaza**
  - Pedestrian facilities on east leg

- **Route 50 and Lees Corner Road**
  - Pedestrian facilities on north, east and south legs

- **Route 50 and Stringfellow Road**
  - Pedestrian facilities on north, east and south legs
Existing Transit Stop Locations

LEGEND
- Westbound Transit Stop Locations
- Eastbound Transit Stop Locations
Bike Routes and Trails

LEGEND

Bicycling Routes
- Most Comfortable
- Somewhat Comfortable
- Less Comfortable
- Use Caution

 Trails (Shared Use Paths)
- Primary
- Secondary
- Natural Surface
- Bikeable Sidewalk
Crashes Reported on Route 50 within Study Limits

- Total 586 crashes from Aug. 30, 2012 to Aug. 30, 2017
- Crash rate below statewide average
- 1 fatal crash

Legend:
- 0 - 16 crashes
- 17 - 32 crashes
- 33 - 48 crashes
- 49 - 64 crashes
- 65 - 80 crashes

- SR 28 (Sully Road)
- Centerview Drive/Sullyfield Circle
- Centreville Road/Walney Road
- Chantilly Road
- Metrotech Drive/Elmwood Street
- Chantilly Plaza and Galesbury Lane
- Lees Corner Road
- Stringfellow Road
- 1 fatal crash (driver error)
Pedestrian and Bicycle Crashes Reported on Route 50

- Total 6 pedestrian and 4 bicycle crashes from Aug. 30, 2012 to Aug. 30, 2017

- 2 pedestrian crashes at Route 50 and Lees Corner Road
- 1 bicycle crash at Route 50 and Metrotech Drive/Elmwood Street
- 2 pedestrian crashes at Route 50 and Chantilly Road
- 1 pedestrian crash on Route 50 between Downs Drive and Chantilly Plaza
- 1 bicycle crash on Route 50 between Metrotech Drive and Chantilly Plaza
- 1 bicycle crash on Route 50 between Downs Drive and Chantilly Plaza
- 1 pedestrian crash at Route 50 and Stringfellow Road
- 1 bicycle crash on Route 50 between Walney Road/Centreville Road

Virginia Department of Transportation
6. POTENTIAL IMPROVEMENT OPTIONS
Potential Short-term Improvement Options

- Add reflective backplates to signal heads
- Upgrade pedestrian ramps to ADA standards
- Replace faded pavement and crosswalk markings
- Provide additional signage (for example: consider additional advance lane designation signage on SB Centreville Road approach to Route 50)
- Continue signal timing optimization program on an ongoing basis
- Add pedestrian signals in the median (two-stage crossing)
- Consider:
  - Converting Bus Stops to Bus Shelters
  - Transit prioritization
  - Sidewalk connection between Galesbury Lane and Lees Corner Road
Potential Mid-term Improvement Options

- Changes in traffic control at intersections
- Geometric changes and intersection modifications
- Access Management strategies
- Innovative solutions
Route 50 and Centerview Drive

- Extend southbound right-turn lane
- Two-stage pedestrian crossing on east leg
- High-visibility crosswalk on east leg
Route 50 and Centreville Road

Southbound right-turn overlap phase

Provide additional signage for southbound approach

Two-stage pedestrian crossing on west leg

Extend westbound left-turn lanes

Two-stage pedestrian crossing on east leg
Route 50 and Metrotech Drive

Extend southbound right-turn lane
Extend eastbound left-turn lanes
Two-stage pedestrian crossing on east leg
High-visibility crosswalk on east leg
Route 50 and Chantilly Road

Two-stage pedestrian crossing on west leg

High-visibility crosswalk on west leg
Provide right-in access

Remove existing signal and close median opening

Provide eastbound U-turn lane

Install new signal

Relocate bus shelter

Provide westbound left-turn/U-turn lane

High-visibility crosswalk on east leg

Two-stage pedestrian crossing on east leg
Route 50 and Lees Corner Road

- Two-stage pedestrian crossing on east leg
- Provide southbound right-turn lane
- Restrict westbound left-turns and reroute left-turns to Galesbury Lane
- Relocate the signal pole and mast arm in the northeast quadrant
- Provide sidewalk connection to Galesbury Lane
- High-visibility crosswalk on east leg
- Two-stage pedestrian crossing on east leg
Route 50 and Stringfellow Road

Restrict eastbound left-turns and reroute left-turns to Plaza Lane

Extend westbound left-turn lanes

Two-stage pedestrian crossing on east leg
Route 50 2030 Build Operational Analysis

LEGEND
- Intersection Number
- Signalized Intersection
- Slight Delay
- Moderate Delay
- PM Peak Hour Intersection Delay Threshold
- AM Peak Hour Intersection Delay Threshold

<table>
<thead>
<tr>
<th>Signalized Intersection Delay Thresholds (sec/veh)</th>
<th>Designated Intersection Delay Thresholds (sec/veh)</th>
<th>Measure of Congestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;30</td>
<td>&lt;35</td>
<td></td>
</tr>
<tr>
<td>&gt;30-55</td>
<td>&gt;35-55</td>
<td></td>
</tr>
<tr>
<td>&gt;55</td>
<td>&gt;35</td>
<td></td>
</tr>
</tbody>
</table>
# Route 50 Travel Time Comparison

<table>
<thead>
<tr>
<th></th>
<th>Net Time Savings</th>
<th>Throughput Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Round Trip Peak Direction Commute</strong></td>
<td>~4 minutes</td>
<td>Yes (PM only)</td>
</tr>
<tr>
<td><strong>Round Trip Reverse Commute</strong></td>
<td>~3 minutes</td>
<td>Yes (AM/PM)</td>
</tr>
</tbody>
</table>
FUNDING/NEXT STEPS

• Estimated cost range for the entire corridor: $8-11 Million
• Potential funding opportunities: SMART SCALE and/or other State/Local programs
• Public provides comments using the following link on computers and smart phones: www.virginiadot.org/route50chantillystudy
• Comment Period Closes – February 18, 2020
• Study Completion – Summer 2020
QUESTIONS
Thank you!

Your participation and feedback is essential to developing a solution that works for all!

*Project Website: www.virginiadot.org/route50chantillystudy*
Innovative Alternatives Considered But Rejected

- Median U-turn at Route 50 and Stringfellow Road
- Median U-turn at Route 50 and Lees Corner Road
- Quadrant Roadway at Route 50, Centreville Road and Metrotech Drive
- Bowtie at Route 50 and Centerview Drive/Sullyfield Circle
- Continuous Green-T at Route 50 and Chantilly Plaza
- One-way operation on service road
Innovative Intersections

Continuous Green-T (CGT)

Quadrant Roadway (QR)

Bowtie

Median U-Turn (MUT)