SHREVE ROAD CORRIDOR STUDY
Virtual Public Information Meeting

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October 7, 2020
Agenda

• Instructions
• Planning Study Overview
• Previous Studies and Ongoing Improvements
• Proposed Recommendations
• Next Steps
• Questions
GoToWebinar Tips

• If you want to ask an oral question, you need to raise your hand and unmute yourself. Oral question period will be in the last 30 minutes of the meeting.
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Study Limits (Shreve Road and Surrounding Community)
Study Schedule

Existing Conditions/Goals and Objectives

3/25 – 6/26
Development of Recommendations
6/15 – 8/7
Recommendations Input
8/7 – 10/7
Prioritization
10/7-10/30
Final Report
11/1-11/30

Planning Study budget: $100,000
Planning Study timeline: 8 months

April  May  June  July  August  September  October  November

2020
Study Goals and Objectives

• Identify design measures to reduce vehicle travel speeds and enhance safety for pedestrians & bicyclists along the corridor.

• Reduce conflicts between modes where activity points interface with Shreve Road at:
  • Shrewwood Elementary School
  • Washington & Old Dominion (W&OD) Trail.

• Reduce impediments to sight lines, especially where pedestrians and bicycles are obstructed.

• Develop recommendations that are feasible, implementable, and/or appropriate for funding opportunities (such as grant applications).
Previous Studies and Ongoing Improvements
• Speed data collected in October 2019

• Focus of the study was Shreve Rd

• Identified 85th Percentile Speeds

• Based on the speed data, AADT, crash data, surrounding development and roadway characteristics / geometry
VDOT Resurfacing and Restriping

- **Opportunities at Shrevewood Elementary School**
  - Convert on-street parking to a right-turn lane

- **Corridor Study Team – Check Bike Lane Feasibility**
  - Not enough width to restripe bike lanes
• There would be some gaps to fit a bike lane in the corridor.

• Right-of-Way would need to be acquired for portions of the corridor.
• W&OD Trail runs parallel to Shreve north of the Shrevelwood Elementary School
FCDOT Safe Routes to School (SRTS) Grant

- Project administered by FCDOT
- Install crosswalks, sidewalks, and improve curb ramps
- Project would be funded through a federal source

From SRTS grant application, provided by FCDOT
NOVA Parks W&OD Trail Improvements

- Align W&OD crossing to be perpendicular
- Add yield markings and signage
- Add flexible barrier at Pinecastle Road

Example of flexible barrier
City of Falls Church – West Falls Church Project

- Project administered by City of Falls Church
- 10’ Shared Use Path on east side of Shreve
- Includes 6’ landscaping buffer
- Add some stormwater drainage improvements
- Install high-visibility crosswalk on Gordons Road

From West Falls Church grant application
Proposed Recommendations
Identify Areas of Improvements
Recommendations

- VDOT Restriping and FCDOT SRTS Grant
- NOVA Parks W&OD Trail Improvements
- Urban Cross Section
- Vegetation Management and Optical Speed Bars
- Mini Roundabouts
- Roundabouts or Median Removal
- Chicane
- Optical Speed Bars
- Neighborhood Gateway

Legend:
- Study Corridor
- W&OD Trail
Route 29 Transition to Oldewood Curve

Optical Speed Bars

Neighborhood Gateway
Pioneer Lane

Planning Study Only – Not for Construction

Chicane

SHREVE ROAD

CURB RAMP IMPROVEMENTS

CURB RAMP IMPROVEMENTS

CURB RAMP IMPROVEMENTS

CURB RAMP IMPROVEMENTS

PIONEER LANE
Fairwood Lane

Planning Study Only – Not for Construction

Pedestrian Median
Shreewood Elementary School (ongoing projects)

- Add marked crosswalk, curb ramps and sidewalk connections.
- Add marked crosswalk with southside curb extension, northside sidewalk connection and curb ramps.
- Add crosswalks and sidewalk connections with southside curb extension.

VDOT Restriping

FCDOT Safe Route to School Grant
Shrevenwood Elementary School (Alternative 1)

- Significant engineering considerations include utilities and topography, especially coming down Virginia Lane
- School Bus turn radius checked
- For more information on roundabouts near schools see: http://guide.saferoutesinfo.org/engineering/roundabouts.cfm
Shreewood Elementary School (Alternative 2)

Planning Study Only – Not for Construction

- Significant engineering considerations include utilities and topography, especially coming down Virginia Lane.
- Signal Justification Report would need to be completed and approved.
Pinecastle Road

- Reconstruct the corner of the intersection with curb & gutter

- VDOT has concerns with using flexible barrier, including:
  - Maintenance
  - Snow plowing
  - Potential vehicle obstruction
Pinecastle Road and Buckelew Drive Intersections

Planning Study Only – Not for Construction

- **Mini Roundabouts** have a smaller diameter than typical Roundabouts

- Significant engineering considerations include utilities, property impacts, and topography

- School Bus turn radius checked

- Single roundabout has more significant property impacts
Hickory Curve; Guardrail Consideration

• VDOT was asked to review Shreve Road to provide additional guardrail as a means to shield pedestrians from motorists.

• Guardrail is a safety barrier that provides the following safety benefits:
  ➢ Guardrail is a device intended to shield a motorist who has left the roadway from striking fixed object hazards within the clear zone that cannot be mitigated through other means. These may include trees, bridge piers, retaining walls, and utility poles among other obstacles.
  ➢ Preference is always given to maintain an area free of obstructions (a "clear zone") adjacent to the roadway, in lieu of installing guardrail. If it is not feasible to remove those obstacles, guardrails are considered and installed as the consequences of striking a guardrail would be less severe than striking fixed object hazards.

• VDOT Traffic Engineering used Federal Highway Administration guidelines and found that additional guardrail installation is not warranted. More information about guardrails can be obtained at: https://www.fhwa.dot.gov/guardrailsafety/guardrail101.pdf
Hickory Curve

- Slow operating speeds and enhance signage & pavement markings to slow traffic in advance of curve.
- Move the pedestrian pathway as far out of the clear area as possible.
- Clear vegetation to improve sight lines.
- Consider adding barrier curb & gutter along the curve.
Shreve Road near Gordons

- Cross section would run from Gordons Road to Route 7.
- Different from City of Falls Church current project.
- Would build on City project by adding buffered bike lanes.
Next Steps

- Provide feedback by October 19
- Late October – Recommendation Priorities and Next Steps
- Late November – Study Report available on website
- This is a study phase and does not set construction dates for any of the alternatives. The purpose of this study is to develop proposed improvements that localities can apply for to develop all or some of the recommendations.
How to Submit Your Comments

Give feedback on the virtual public information meeting in the following ways by October 19:

- **Email Us**
  
  MeetingComments@vdot.Virginia.gov
  
  Please reference “Shreve Road Corridor Improvements” in the subject line

- **Mail Us**
  
  Mr. Amir Shahpar, P.E.
  
  VDOT’s Northern Virginia District
  
  4975 Alliance Drive
  
  Fairfax, Virginia 22030

- **Comment**
  
  In the Questions window during the virtual meeting. The Study website is available at www.virginiadot.org/ShreveRd
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## Mini Roundabout vs Roundabout

**TABLE 1-1: TYPES OF ROUNDABOUTS**

<table>
<thead>
<tr>
<th>DESIGN ELEMENT</th>
<th>MINI-ROUNDABOUT</th>
<th>SINGLE-LANE ROUNDABOUT</th>
<th>MIXED LANE ROUNDABOUT</th>
<th>MULTILANE ROUNDABOUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of circulating lanes</td>
<td>1</td>
<td>1</td>
<td>2*</td>
<td>2*</td>
</tr>
<tr>
<td>Typical inscribed circle diameter</td>
<td>45 to 90 feet</td>
<td>90 to 150 feet</td>
<td>120 to 180 feet</td>
<td>135 to 300 feet</td>
</tr>
<tr>
<td>Central island treatment</td>
<td>Traversable</td>
<td>Raised with traversable truck apron</td>
<td>Raised with traversable truck apron</td>
<td>Raised with traversable truck apron</td>
</tr>
<tr>
<td>Typical daily service volumes on four-leg roundabout</td>
<td>Up to approximately 15,000</td>
<td>Up to approximately 25,000</td>
<td>Up to approximately 35,000 for a two-lane road intersecting a four-lane road</td>
<td>Up to approximately 45,000 for a four-lane road intersecting a four-lane road</td>
</tr>
<tr>
<td>Desirable entry speed range</td>
<td>15 to 20 MPH</td>
<td>20 to 25 MPH</td>
<td>20 to 30 MPH</td>
<td>25 to 30 MPH</td>
</tr>
</tbody>
</table>

*Source: MassDOT Guidelines for the Planning and Design of Roundabouts*