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Public Information Meeting

Braddock Road and Old Lee Road Safety and Operational Improvements Study

Fairfax County

Thursday, February 13, 2020

6:30 p.m. to 8:30 p.m.

Presentation starts at 7 p.m.

Westfield High School
4700 Stonecroft Boulevard
Chantilly, VA 20151

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 at the intersection of Braddock Road (Route 620) and Old Lee Road, and the S-curve on Braddock Road between Pleasant Valley Road (Route 609) and Old Lee Road. The concepts being studied include enhancements at the Braddock Road and Old Lee Road intersection including turn lanes and innovative intersection improvements, and realignment of the S-curve.

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. We've included a comment sheet in this brochure and encourage your input. 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: Braddock Road and Old Lee Road intersection, and Braddock Road S-curve (about a tenth of a mile) between Pleasant Valley Road and Old Lee Road.

Phase: Study

Begin Date: October 2018

Completion Date: Summer 2020

Study Cost: \$170,000

Study Overview

This study is assessing potential safety and operational improvements at the intersection of Braddock Road (Route 620) and Old Lee Road, and the S-curve on Braddock Road between Pleasant Valley Road (Route 609) and Old Lee Road.

The intersection and S-curve experience morning and evening peak period congestion and crashes. The S-curve can sometimes cause issues for vehicles navigating sharp turns along this stretch of road. Within the study limits, Braddock Road averages 9,200 vehicles a day and Old Lee Road averages 8,200.

The concepts being studied include:

- Enhancements at the Braddock Road and Old Lee Road intersection including turn lanes and innovative intersection improvements
- Realignment of the S-curve

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.

Comments must be postmarked, emailed or delivered to VDOT by **March 6, 2020**. Mail comments to Andrew Beacher, P.E. at the address below or email meetingcomments@vdot.virginia.gov.

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 for 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.

Contact Information

Primary Contact:
Andrew Beacher, P.E.

Preliminary Engineering

4975 Alliance Drive
Fairfax, VA 22030

703-259-2239



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Safety and Operational
Improvements Study**
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COMMENT SHEET

All comments are subject to public disclosure.

Name (optional): _____

Address (optional): _____

Email (optional): _____

1. Do you have any concerns that you would like to see incorporated into this study?

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 _____

Fold Line

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

Fold Line



BRADDOCK ROAD/OLD LEE ROAD INTERSECTION STUDY AND 'S' CURVE

Public Information Meeting

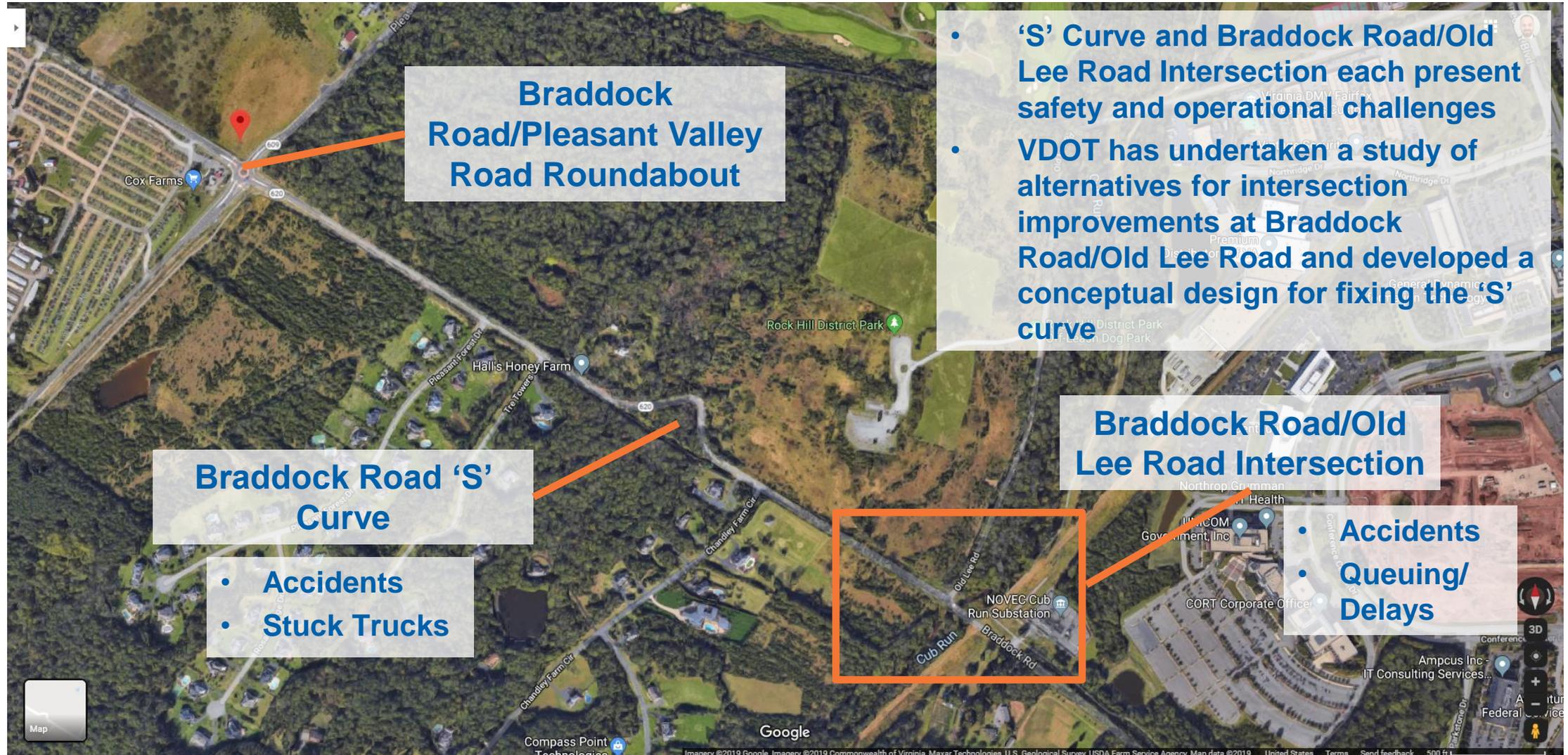
 Andrew G. Beacher, P.E.

February 13, 2020

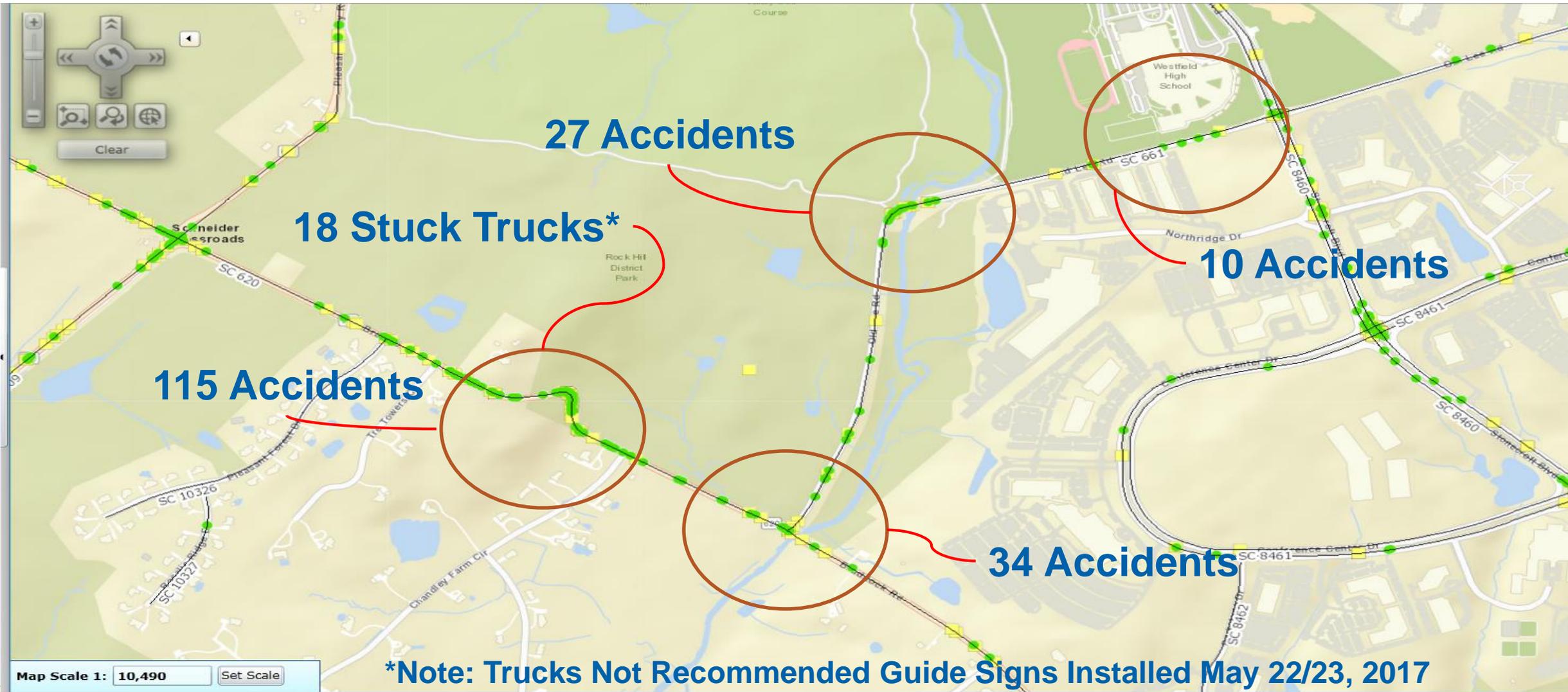
Agenda

- **Introductions**
- **Background**
- **Braddock Road/Old Lee Road Intersection**
 - **Existing Conditions**
 - **Analysis Alternatives**
- **'S' Curve**
- **Results Matrix**
- **Staff Recommendation/Next Steps**

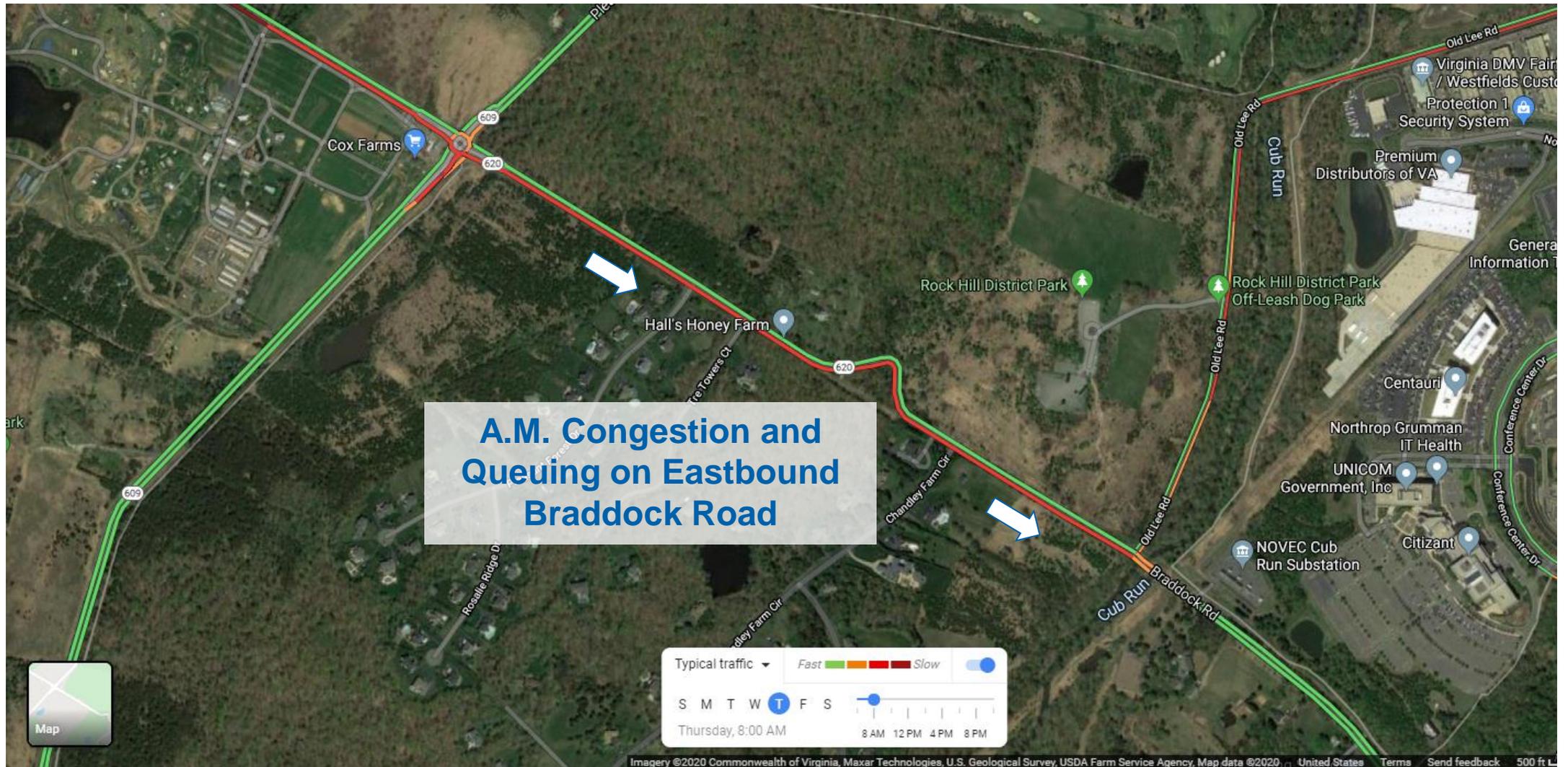
Background: Overview



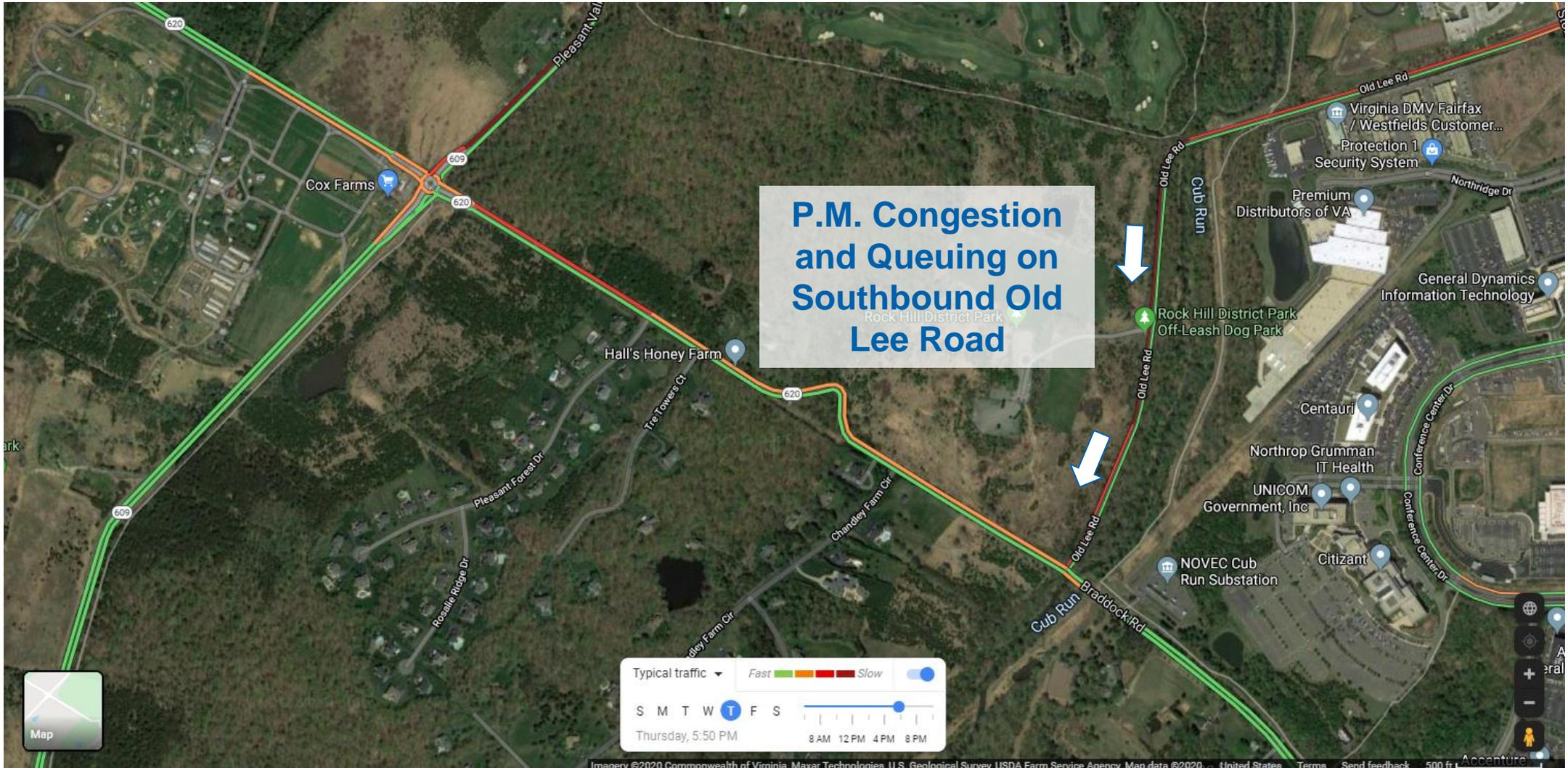
Background: Accident History 2006-Present / Stuck Trucks 2010-2017



Background: Congestion – A.M.

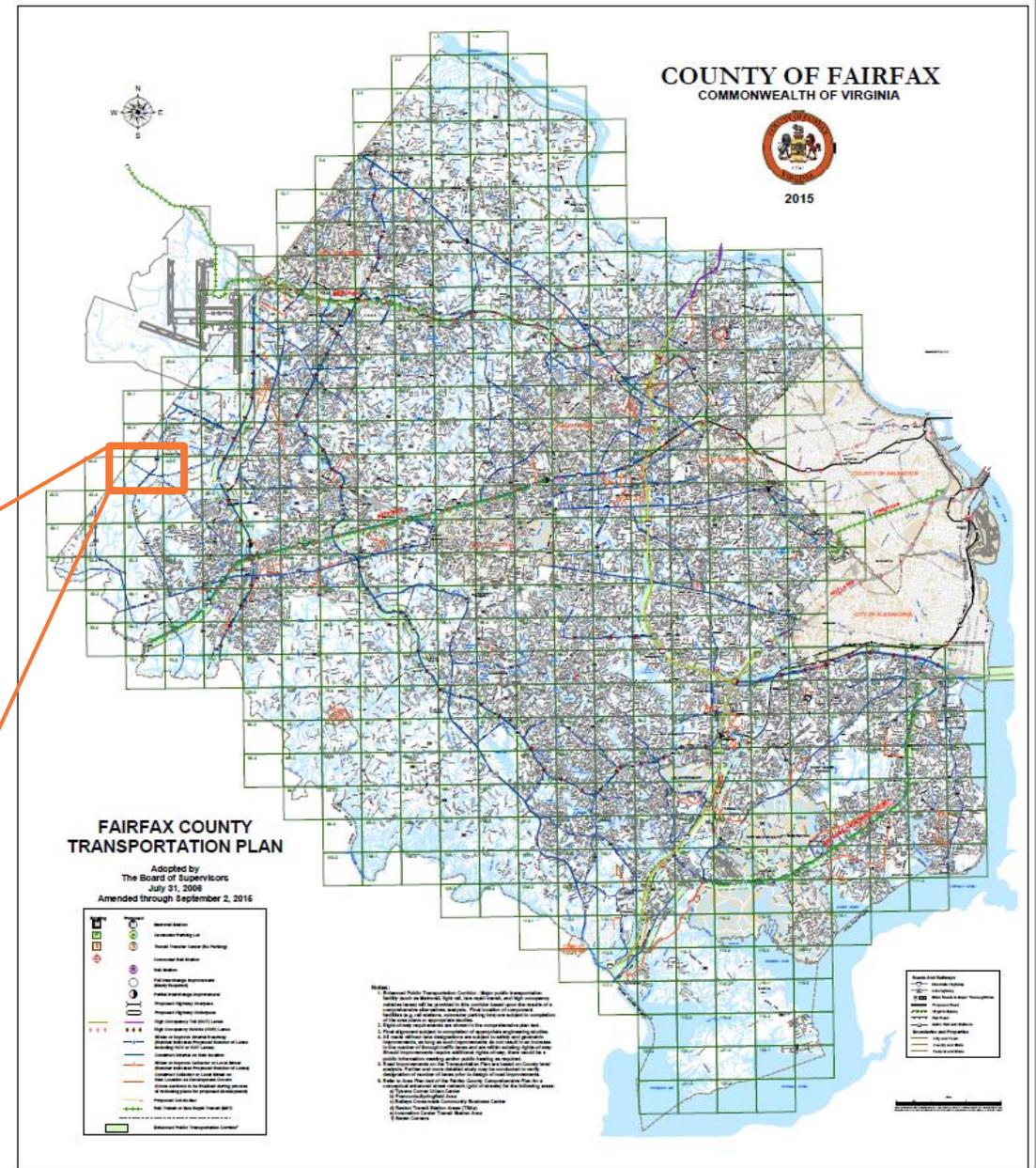
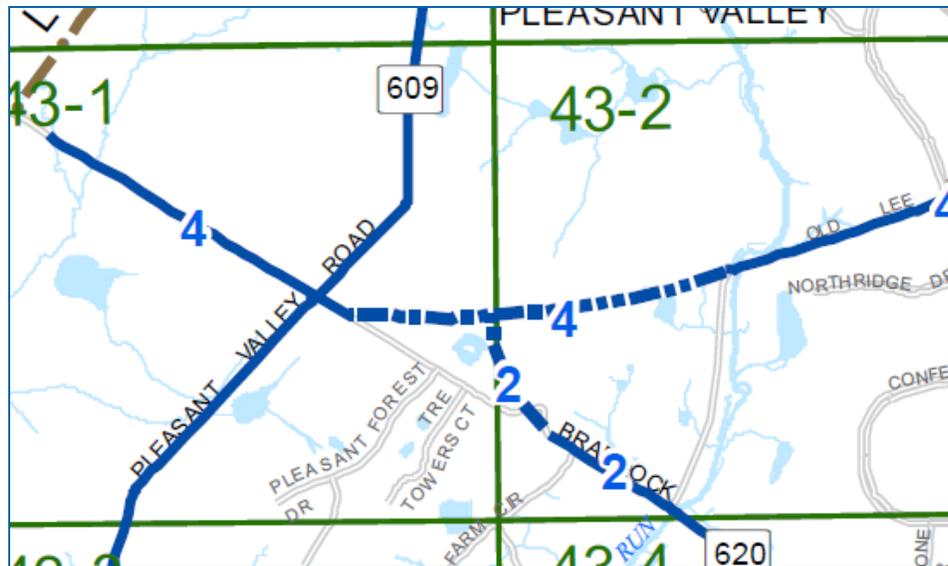


Background: Congestion – P.M.

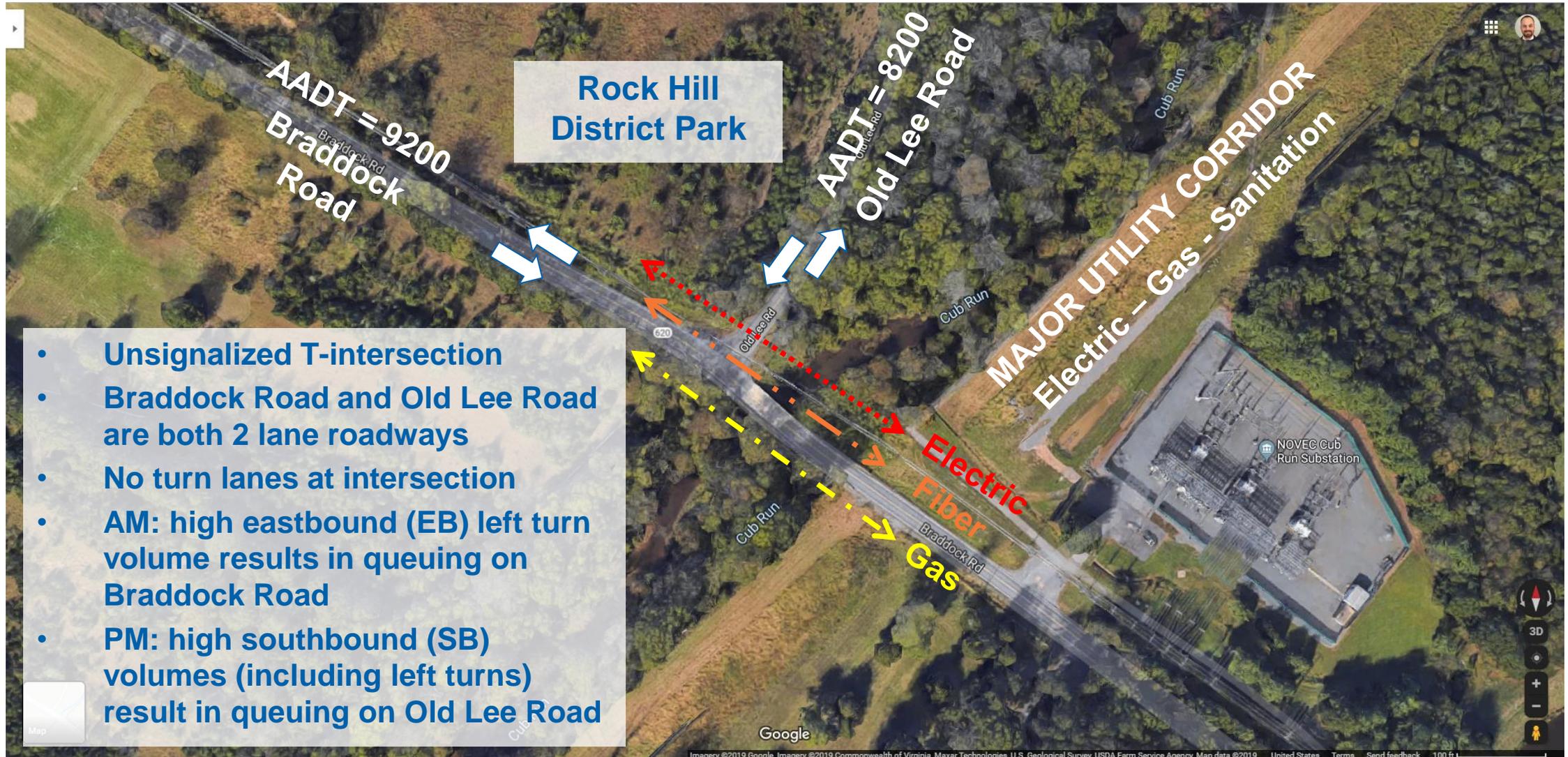


Background: Long-Term Plan

- **Fairfax County Transportation Plan realigns and expands Old Lee Road and realigns Braddock Road to 'T' into Old Lee Road**
- **Costly (~70-80M), long-term improvement**
- **Interim/less costly solution may be warranted**



Braddock Road/Old Lee Road – Existing Conditions



- **Unsignalized T-intersection**
- **Braddock Road and Old Lee Road are both 2 lane roadways**
- **No turn lanes at intersection**
- **AM: high eastbound (EB) left turn volume results in queuing on Braddock Road**
- **PM: high southbound (SB) volumes (including left turns) result in queuing on Old Lee Road**

Alternative 1 – Braddock Road/Old Lee Road

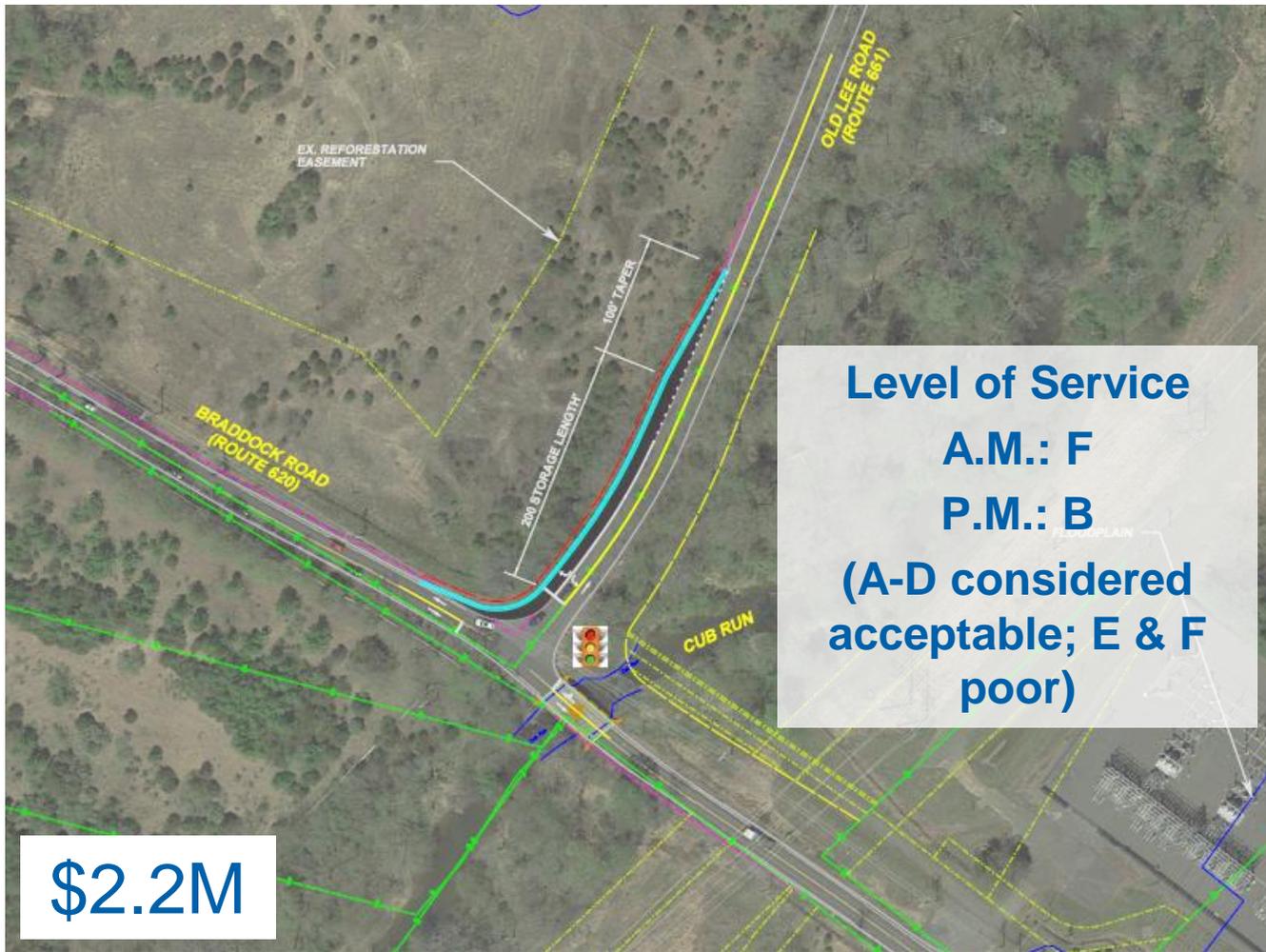
Signalized Intersection



- Adds signal control to intersection without turn lanes
- Poor operational performance
- **Impacts**
 - Right of Way – minimal
 - Utilities – none anticipated
 - Bridge – none
 - Hydraulic – none
 - Environmental – minimal

Alternative 2 – Braddock Road/Old Lee Road

Signalized Intersection with Turn Lane

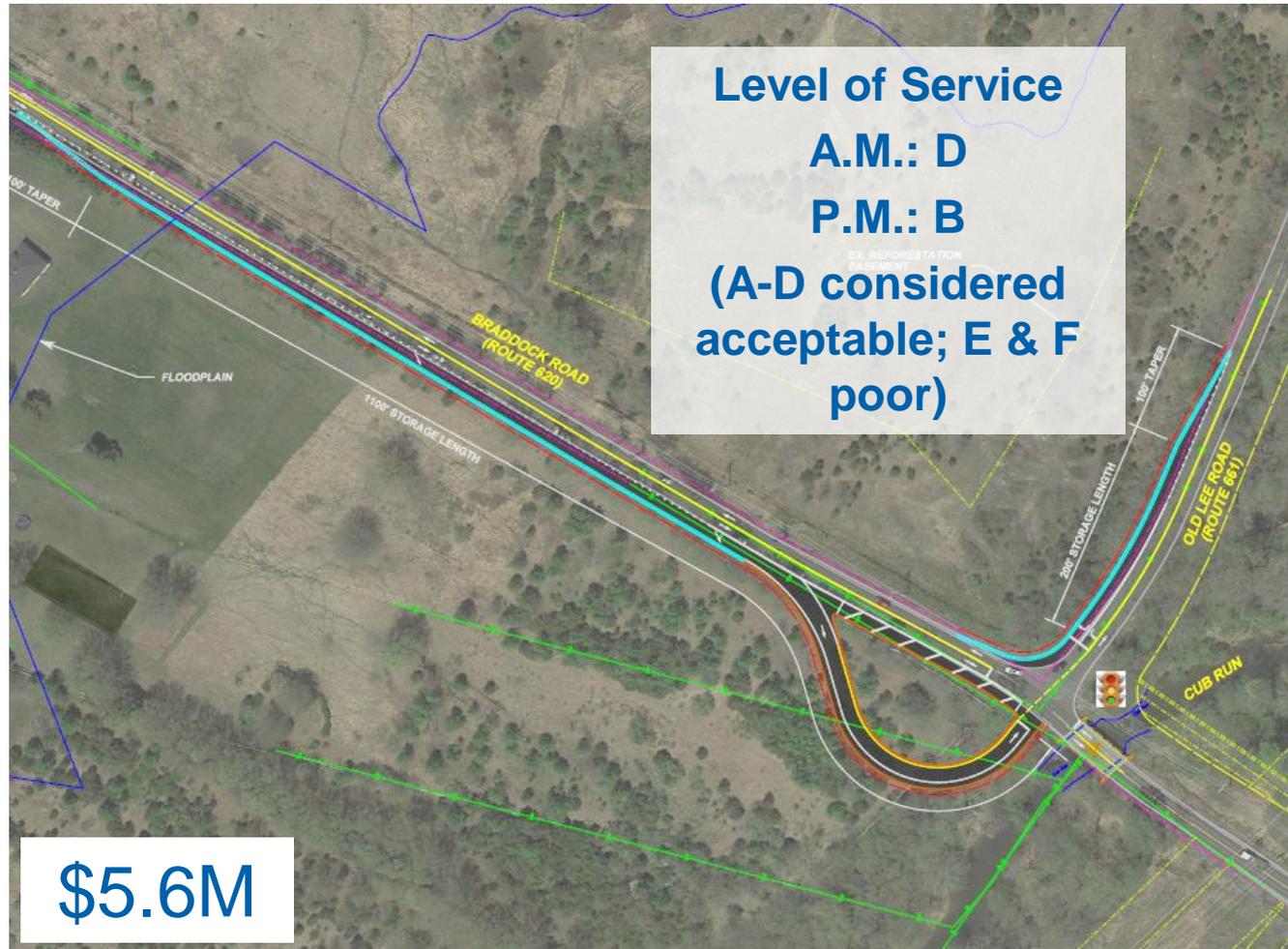


Level of Service
A.M.: F
P.M.: B
(A-D considered acceptable; E & F poor)

- Adds signal control plus 200' SB right turn lane
- Fair operational performance (EB AM queues still anticipated)
- Impacts
 - Right of Way – minimal to moderate (Rock Hill District Park)
 - Utilities – minimal (electric & fiber)
 - Bridge – none
 - Hydraulic – minimal for stormwater management
 - Environmental – minimal (possible higher level environmental documentation if more than minimal right of way is required)

Alternative 3 – Braddock Road/Old Lee Road

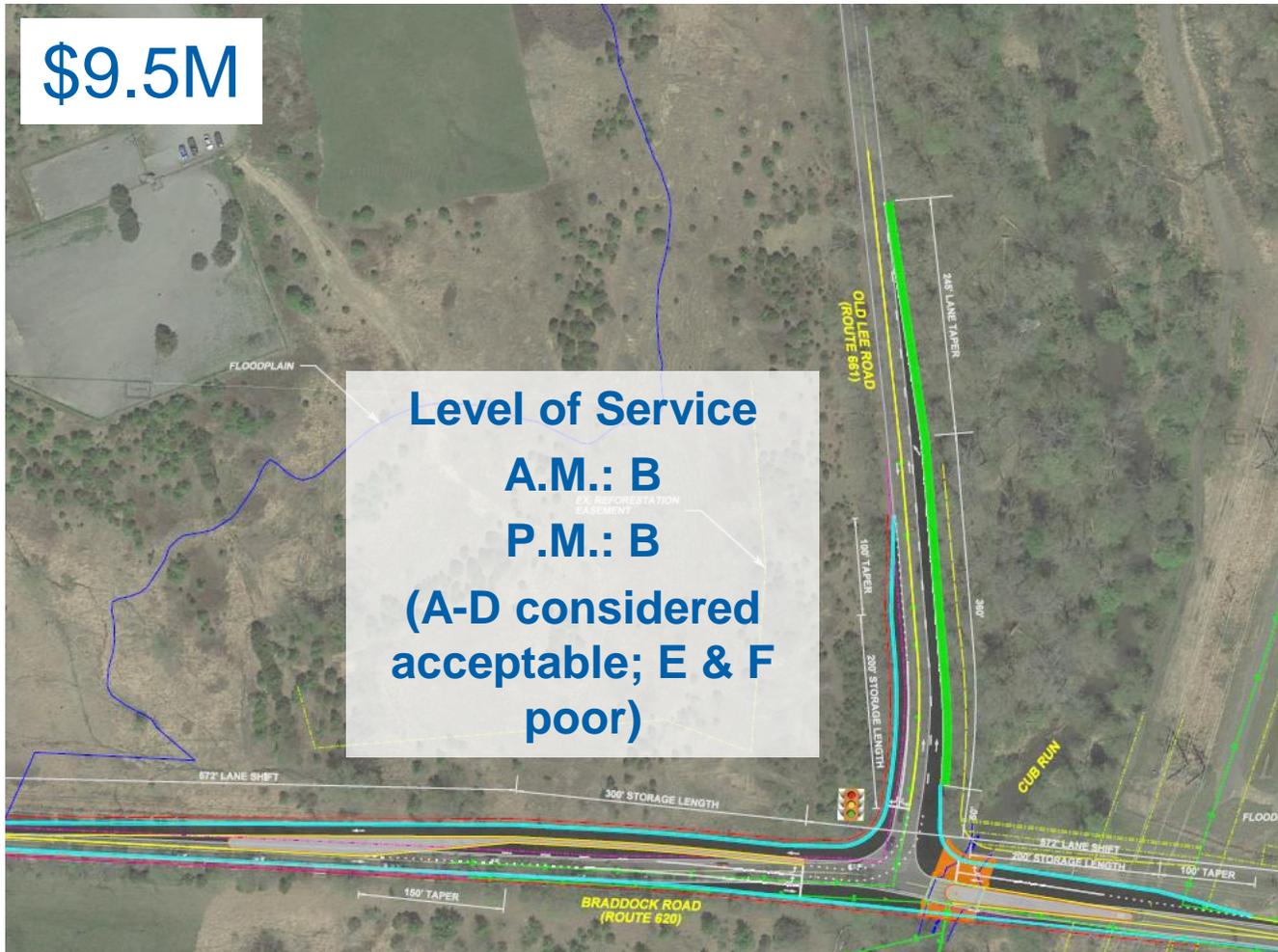
Jughandle with Turn Lane



- Adds signal control plus 1,100' “jughandle” lane to serve existing EB left turns and 200' SB right turn lane
- Fair to good operational performance (small risk for queue storage issues)
- **Impacts**
 - Right of Way – moderate (Rock Hill District Park and residential parcels)
 - Utilities – moderate (electric, fiber & gas)
 - Bridge – none
 - Hydraulic – moderate (possible hydraulic analysis and stormwater management facility)
 - Environmental – moderate (possible archeology survey and higher level environmental documentation required)

Alternative 4 – Braddock Road/Old Lee Road

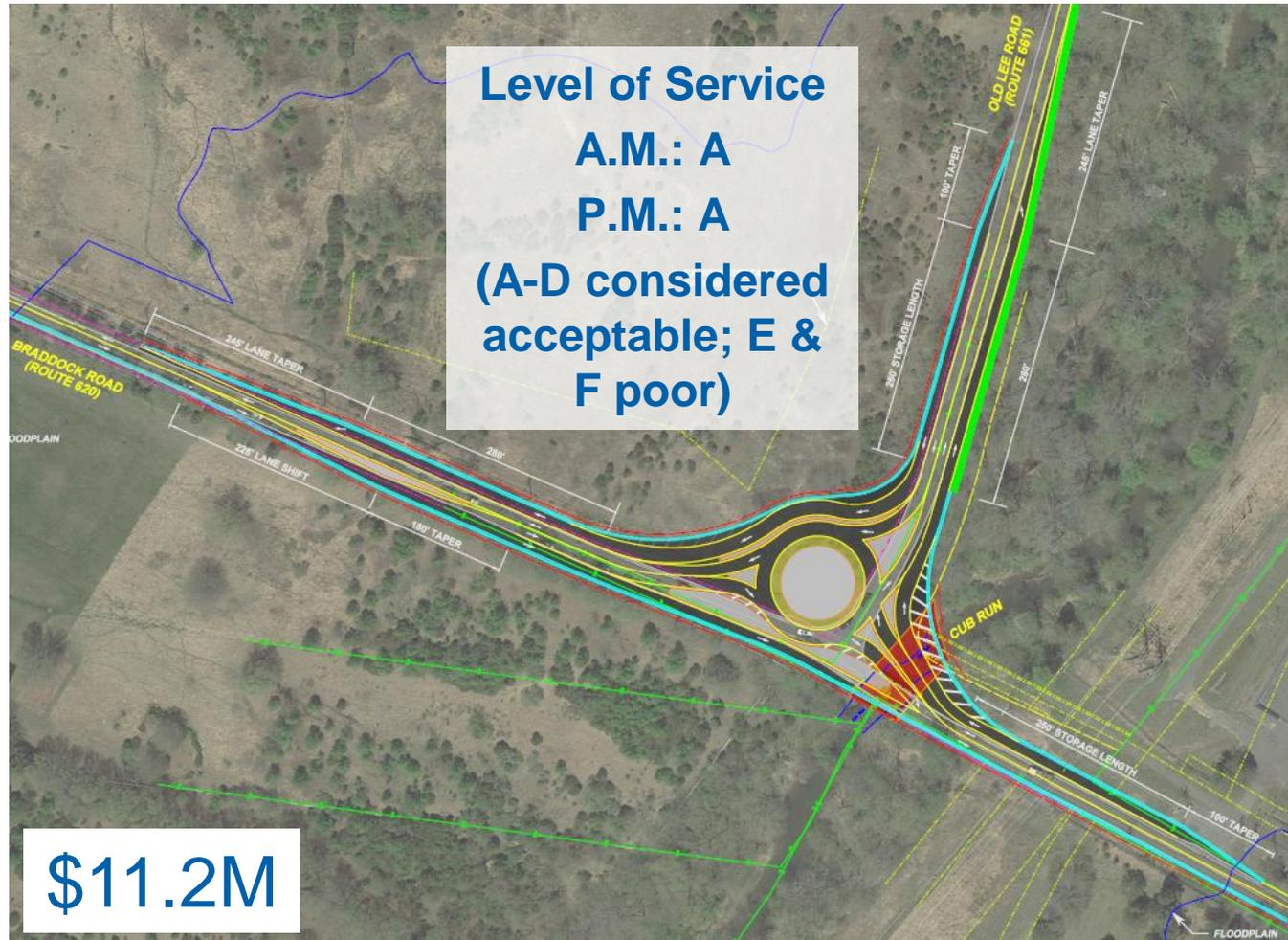
Signalized Intersection with Multiple Turn Lanes



- Adds signal control plus two 300' EB left turn lanes, a 200' WB right turn lane and a 200' SB right turn lane
- Good operational performance (low delay for 2040 projections)
- **Impacts**
 - Right of Way – high (Rock Hill District and Cub Run Stream Valley Parks, residential parcel)
 - Utilities – high (electric, fiber & gas)
 - Bridge – high (widening or replacement)
 - Hydraulic – high (hydraulic study and roadway embankment protection, stormwater management facility)
 - Environmental – high (federal/state water quality permits, permits for culvert extension on west side of intersection, archeology study, higher level environmental documentation required)

Alternative 5 – Braddock Road/Old Lee Road

Roundabout with Bypass Lanes



- Replaces current configuration with a single lane roundabout plus 1 bypass lane in all directions
- Good operational performance (low delay for 2040 projections)
- Impacts
 - Right of Way – high (Rock Hill District and Cub Run Stream Valley Parks, residential parcel)
 - Utilities – high (electric, fiber & gas)
 - Bridge – high (widening or replacement)
 - Hydraulic – high (hydraulic study and roadway embankment protection, stormwater facility)
 - Environmental – high (federal/state water quality permits, archeology study, higher level environmental documentation required)

'S' Curve

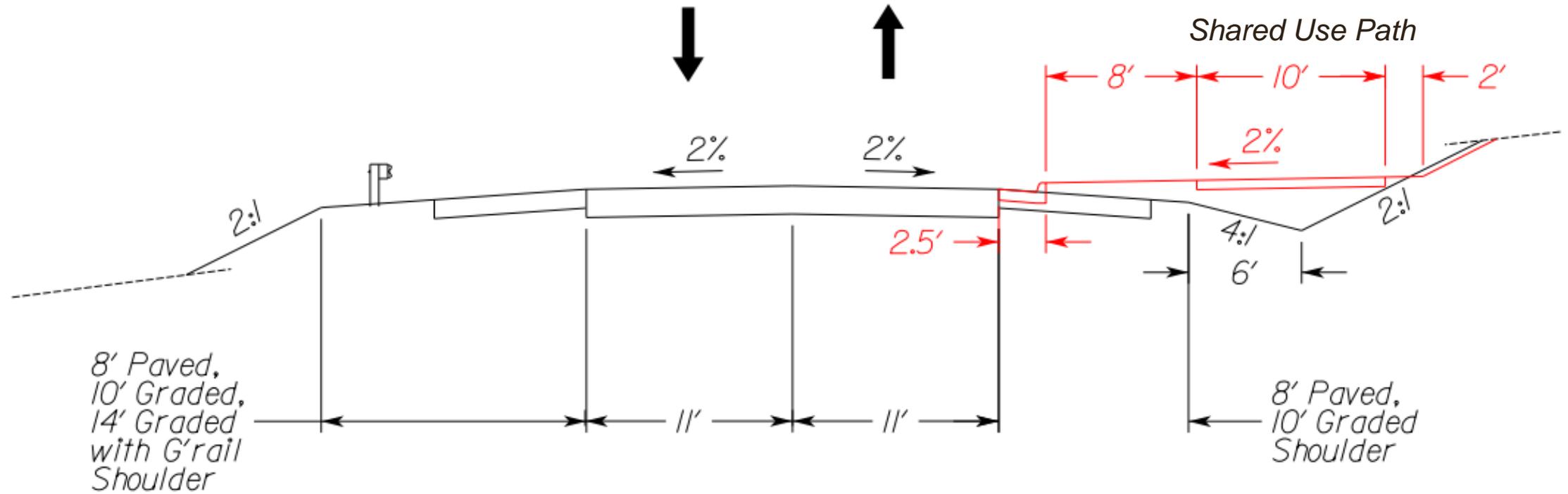
- History of accidents and trucks getting “hung up” on curve
- VDOT has, in parallel to Braddock Road/Old Lee Road intersection study, developed conceptual plans to realign Braddock Road through the ‘S’ curve
- Current estimated cost: \$9M



'S' Curve East Side Looking West



'S' Curve Typical Section



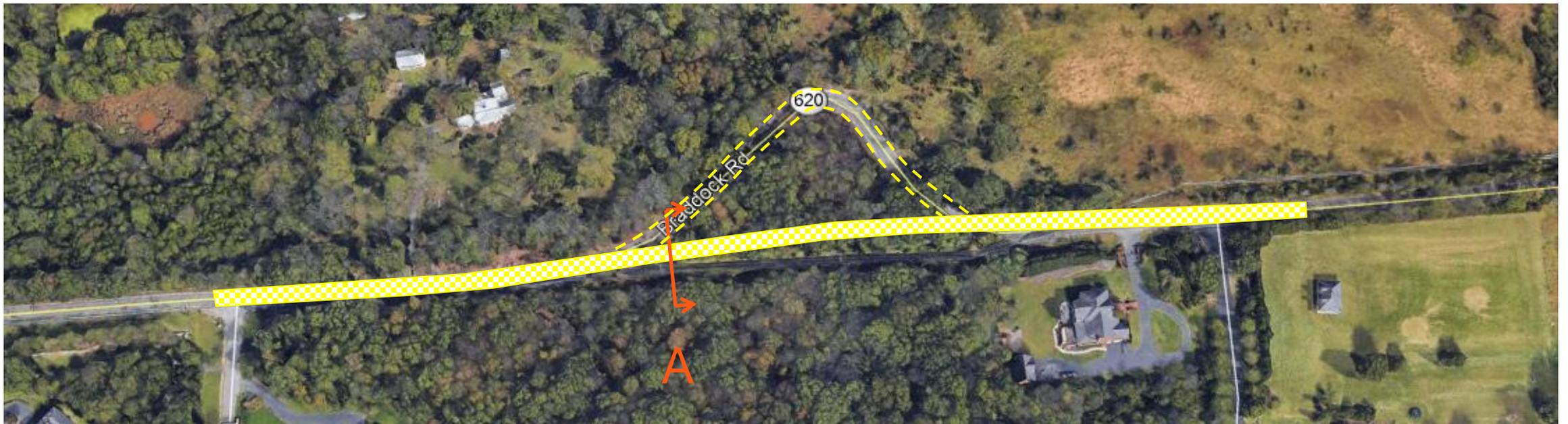
*Route 620 (Braddock Road)
Design Speed = 40 MPH*

'S' Curve Realignment Cross Section



Project will require:

- Deep excavation/rock removal
- Under-cutting of utilities



Analysis Results Matrix

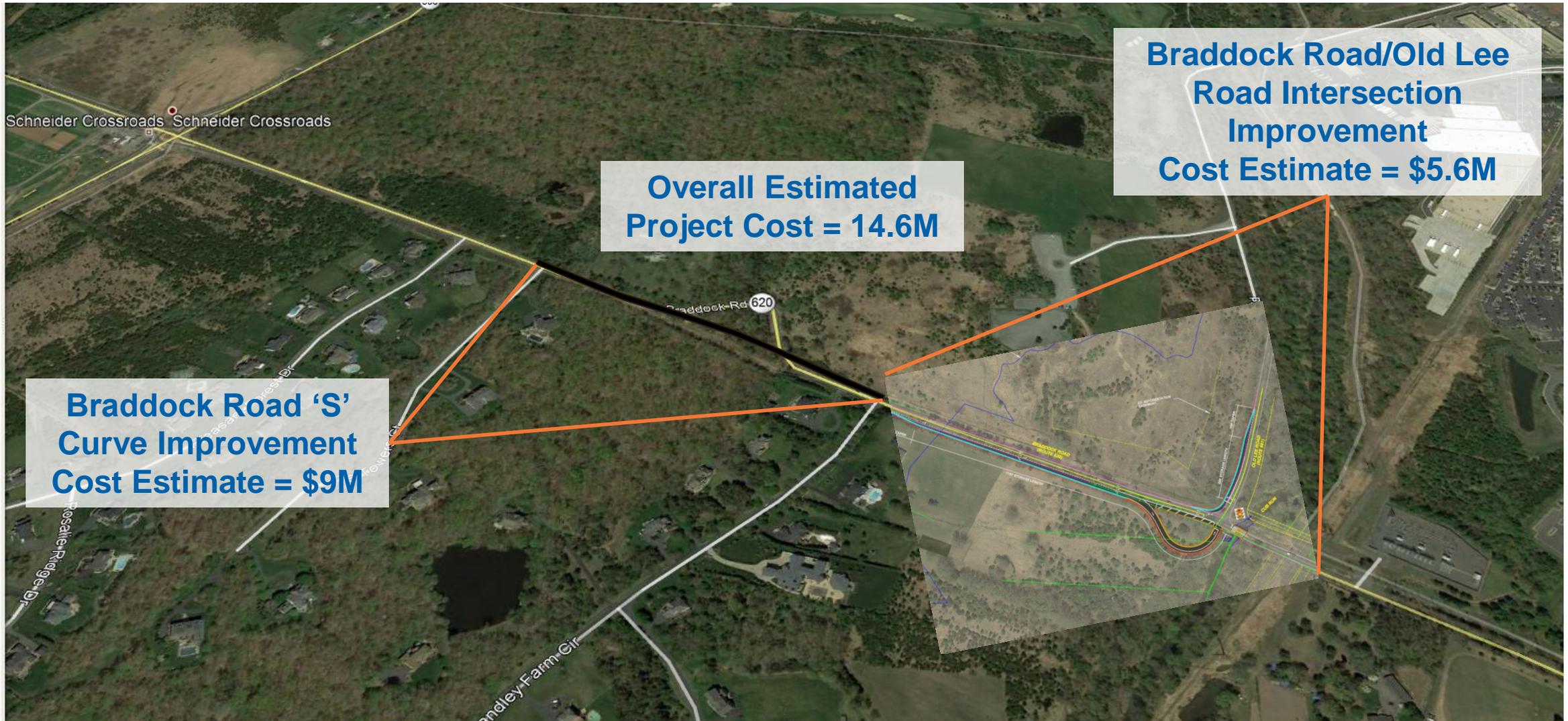
 = Good
  = Fair
  = Poor
  = Good to Fair

Category	Alternative 1 (Signalized Intersection)	Alternative 2 (Signal w/Turn Lane)	Alternative 3 (Jughandle w/Turn Lane)	Alternative 4 (Signal w/Multiple Turn Lanes)	Alternative 5 (Roundabout)
Operations & Safety					
Right of Way Impacts					
Utility Impacts					
Bridge & Hydraulic Impacts					
Environmental Impacts					
Project Implementation Schedule	6-12 months	2-3 years	3-4 years	4-6 years	4-6 years
Cost Estimate	\$400K	\$2.2M	\$5.6M	\$9.5M	\$11.2M

Staff Recommendation/Next Steps

- **Staff recommends pursuing Alternative 3 (Jughandle with Turn Lane) in conjunction with 'S' curve fix as an interim solution**
 - Provides a balance between the key considerations of operational/safety benefits and cost, with less impacts versus Alternatives 4 and 5
 - Would serve as a better interim solution until the long-term (transportation plan) improvements can be constructed
 - Overall estimated cost: \$5.6M for Alternative 3 plus \$9M for 'S' curve fix; total = \$14.6M
- **Next Steps**
 - Receive input from public through March 6 – *we want to hear from you!*
 - Determine preferred alternative and hold additional discussions with localities (Fairfax and Loudoun Counties) to identify potential funding sources (local, state and/or Federal) including SMART SCALE

Summary/Questions



Thank you!

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

Project Website: http://www.virginiadot.org/projects/northernvirginia/braddock_and_old_lee.asp