



BRADDOCK ROAD AND OLD LEE ROAD SAFETY AND OPERATIONAL IMPROVEMENTS STUDY

Public Information Meeting #2 (Virtual)

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September 30, 2020

Study/Potential Project Quick Facts

- The effort undertaken to date is a study only; project funding has yet to be secured - in order to begin a project, funding must be obtained
- Fairfax County Board of Supervisors approved submission of a SMART SCALE grant application for a potential project; the application was priority 6 of 9
- An alternative was selected in order to move the application forward
- SMART SCALE is extremely competitive and oversubscribed (\$7.4 billion in SMART SCALE requests in Round 3 for an available \$856.1 million); the next application cycle will not occur for another two years (2022)
- Notification of awarded funds will occur in June 2021
- If successful, funds would not be available until FY26 (7/2025); at that time, preliminary engineering would begin, along with environmental studies and the public involvement process (including public meetings and a hearing)

Agenda

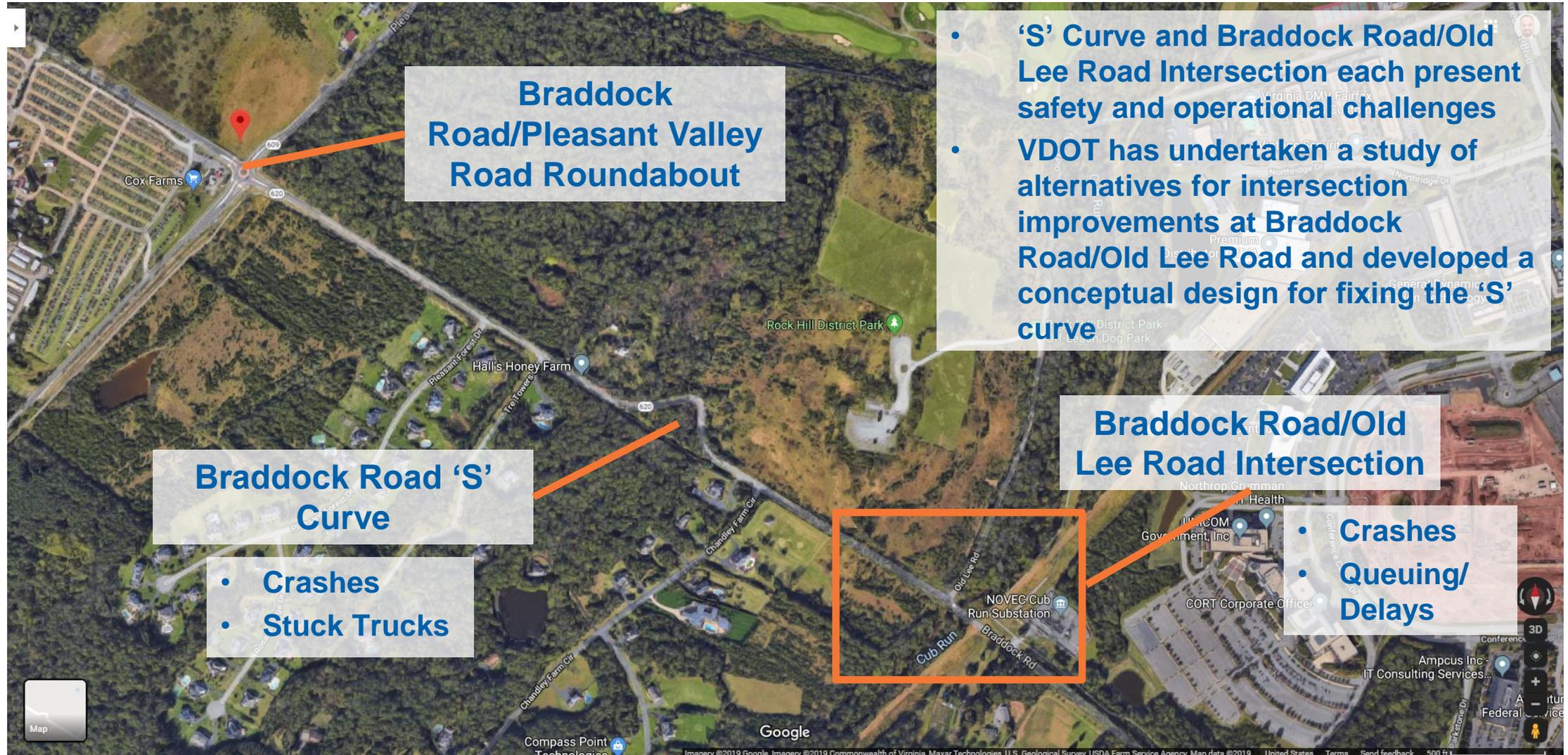
- **Introductions/Instructions**
- **Background from February 13, 2020 PIM**
- **Preferred Alternative Features**
- **Selected Alternative**
- **Next Steps**
- **Questions**

GoToWebinar Tips

- **Expand the Questions Box**
- **To ask a question** [*enter the question in the box*]; **staff will orally ask during the meeting as time allows.**
- **All participants are muted.**
- **If you get disconnected, please attempt to rejoin the meeting.**

The screenshot shows the GoToWebinar interface. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below it is a 'Audio' panel with a 'Sound Check' indicator. The audio settings include three radio buttons: 'Computer audio' (selected), 'Phone call', and 'No audio'. A red 'MUTED' indicator is visible. Below the radio buttons are dropdown menus for 'Microphone Array (Realtek(R) Audio)' and 'Speakers/Headphones (Realtek(R) Au...'. A 'Talking:' section is also present. At the bottom of the audio panel is a 'Questions' section. Below the audio panel is a text input field containing the placeholder text '[Enter a question for staff]' and a 'Send' button.

Background: Overview

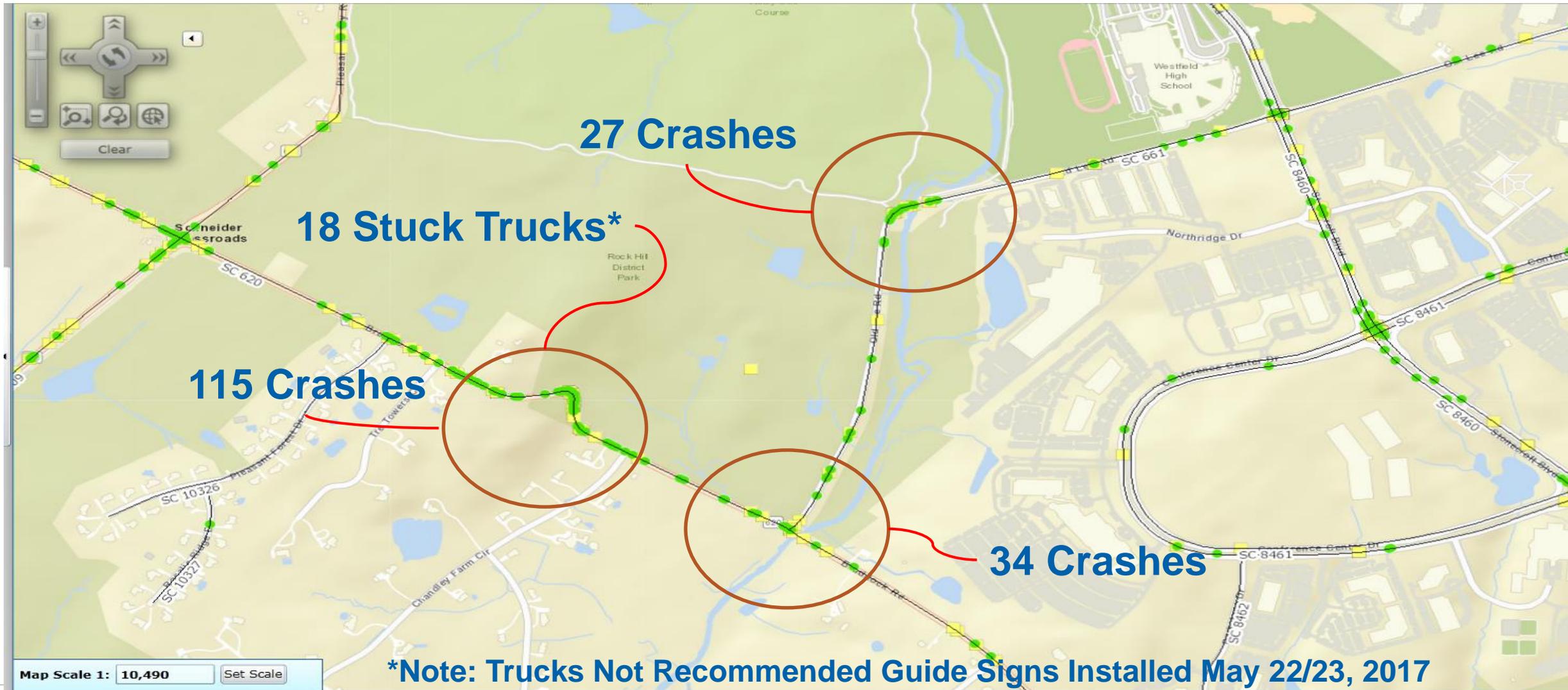


- 'S' Curve and Braddock Road/Old Lee Road Intersection each present safety and operational challenges
- VDOT has undertaken a study of alternatives for intersection improvements at Braddock Road/Old Lee Road and developed a conceptual design for fixing the 'S' curve

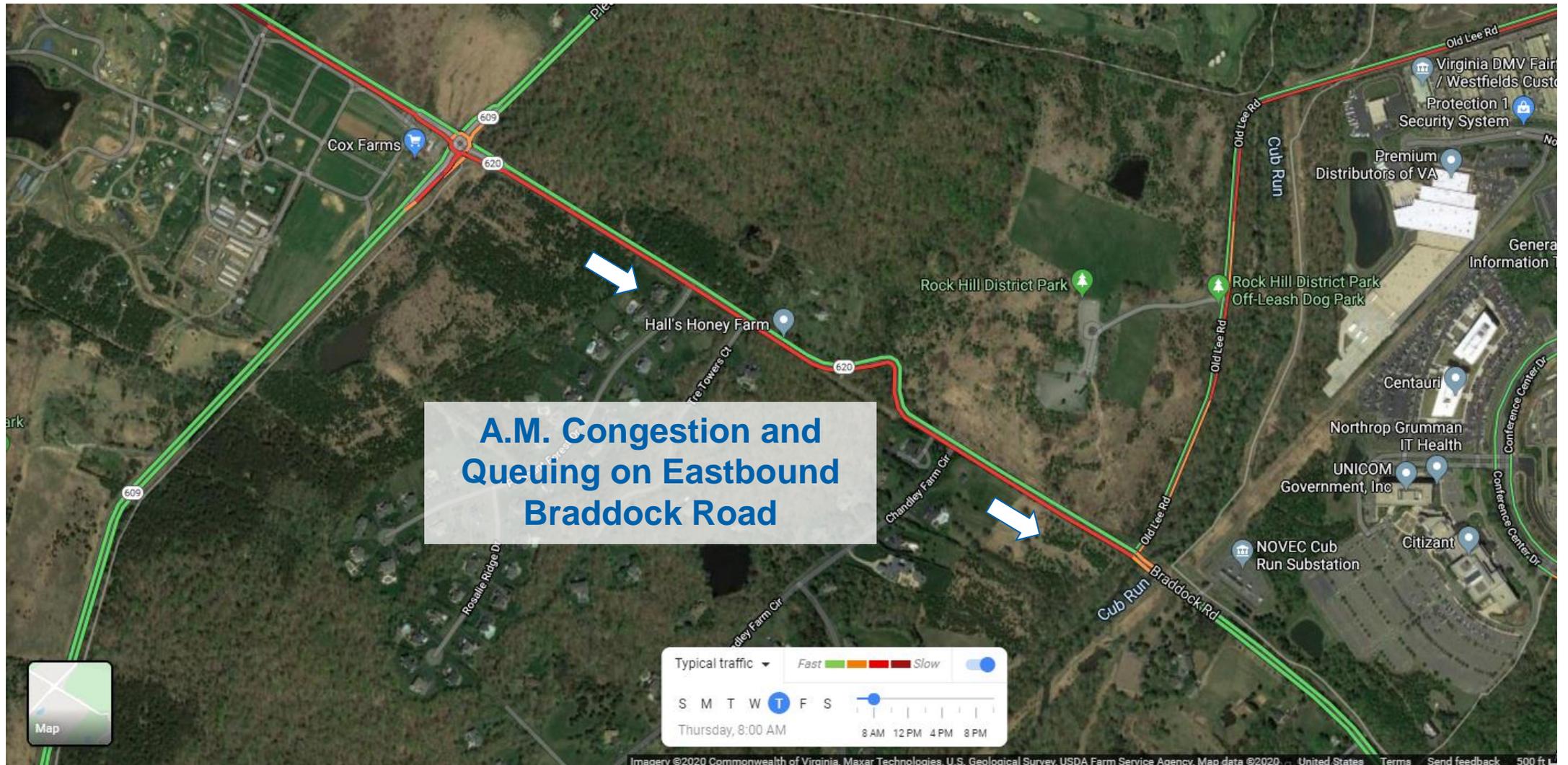
- Crashes
- Stuck Trucks

- Crashes
- Queuing/Delays

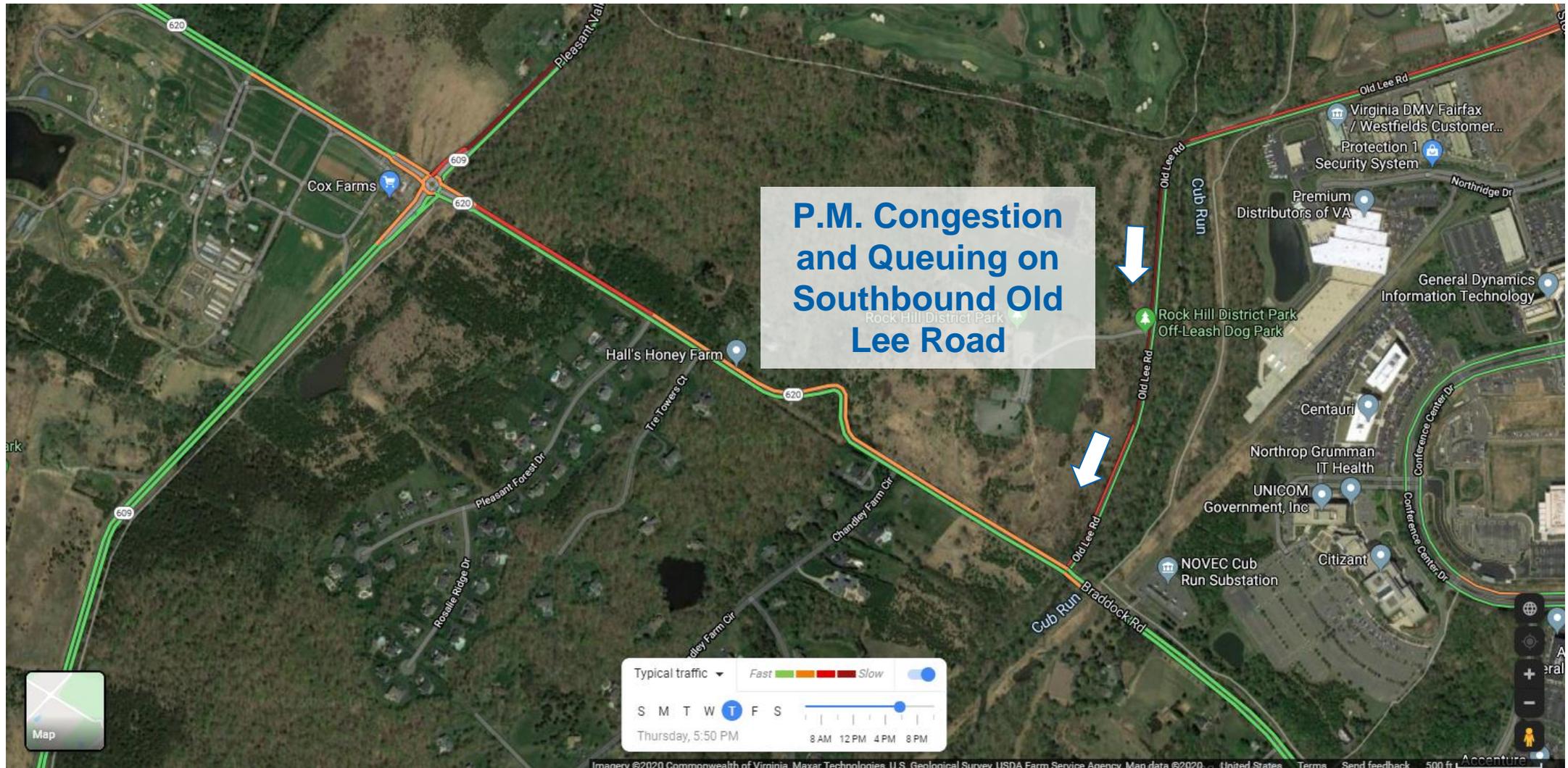
Background: Crash History 2006-Present / Stuck Trucks 2010-2017



Background: Congestion – A.M.

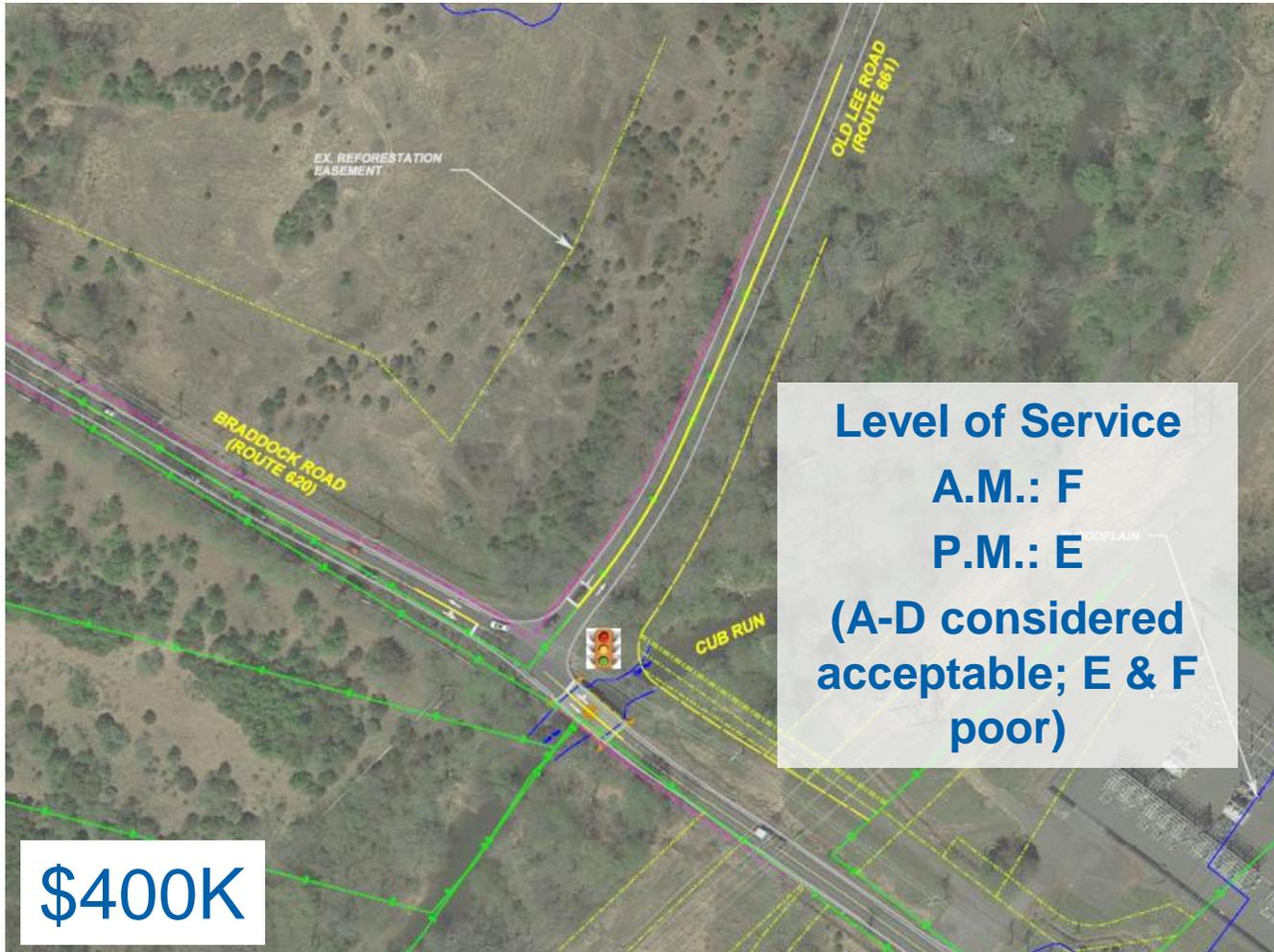


Background: Congestion – P.M.



Alternative 1 – Braddock Road/Old Lee Road

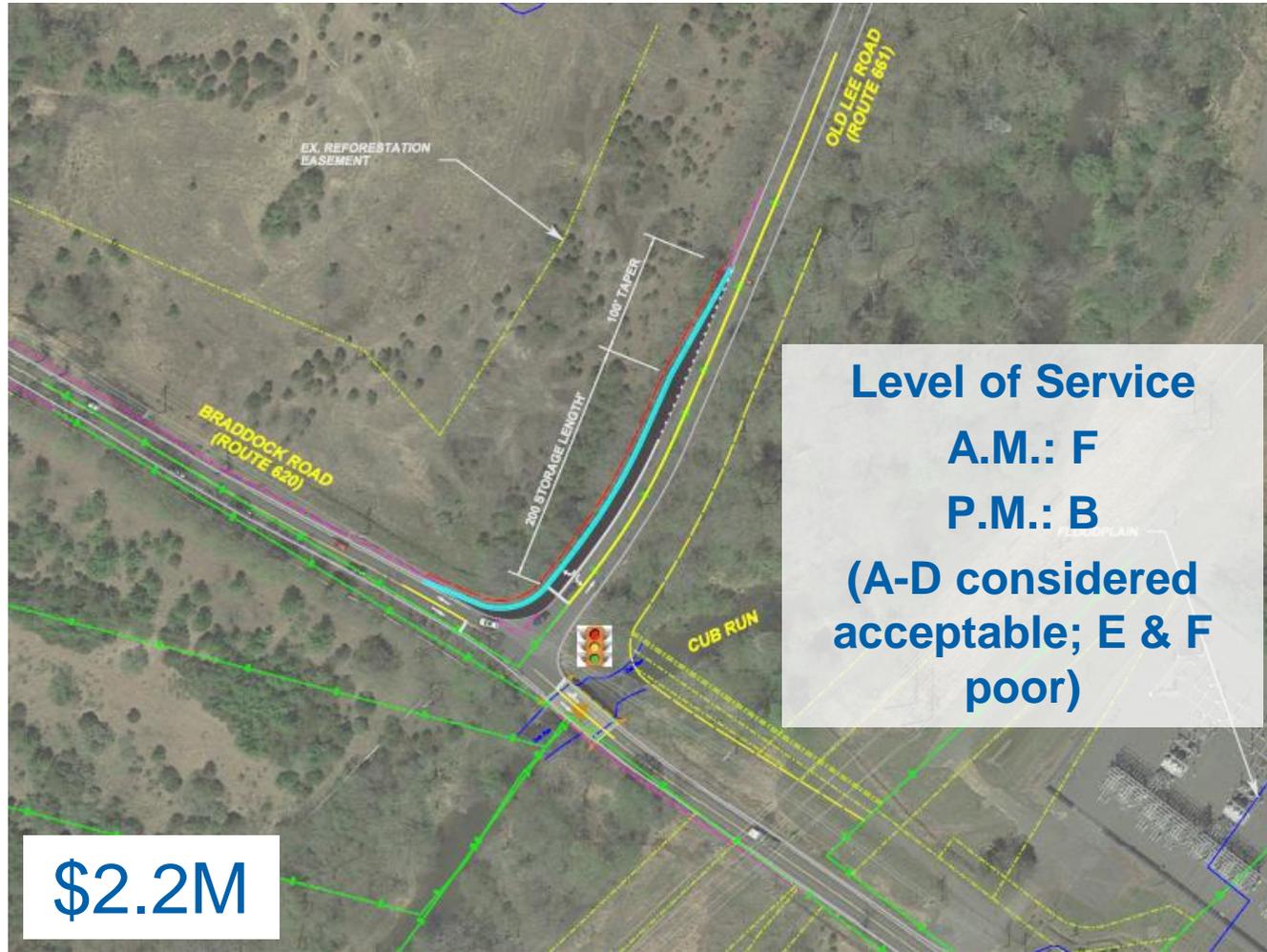
Signalized Intersection



- 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

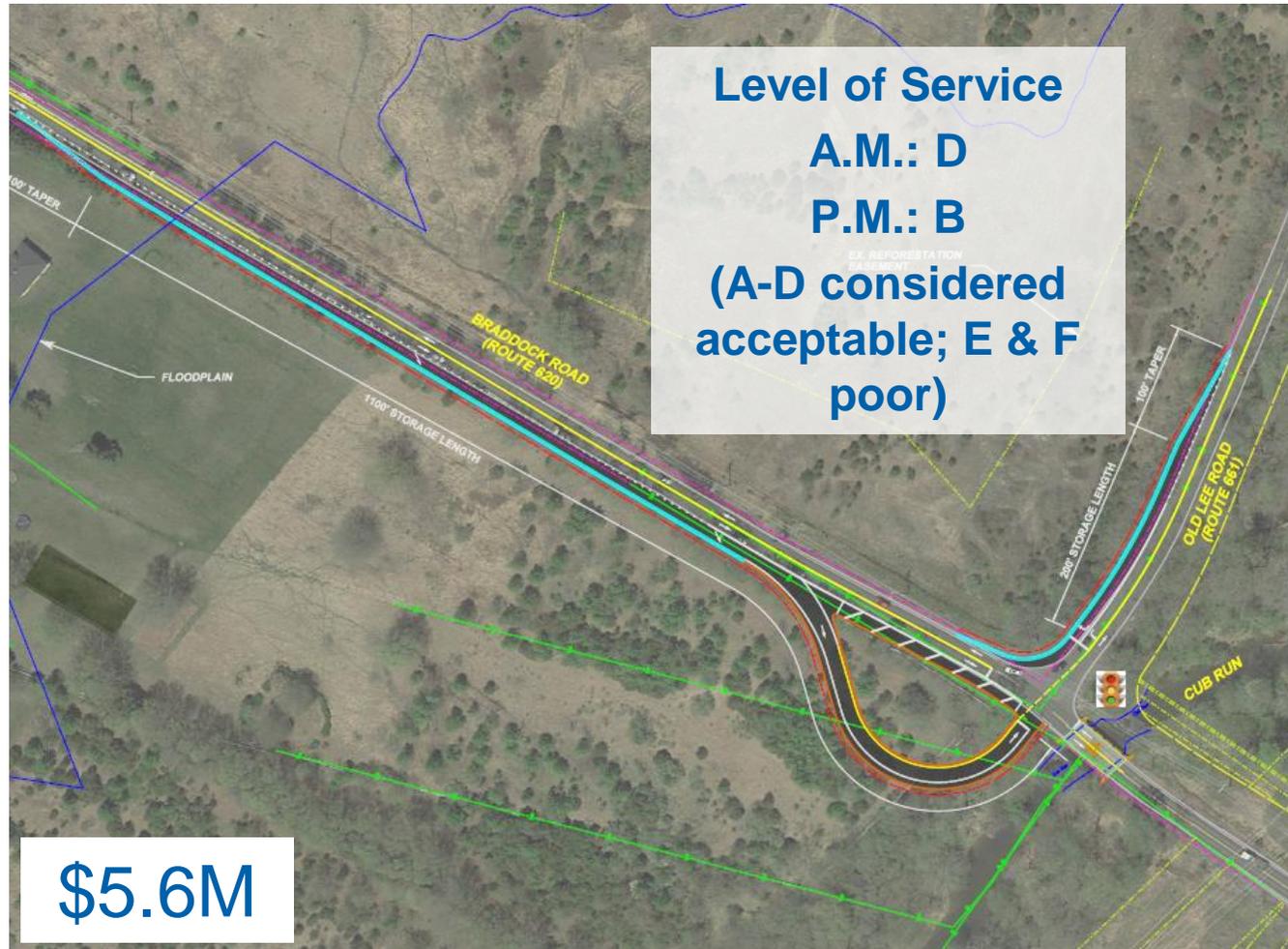
Signalized Intersection with Turn Lane



- 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

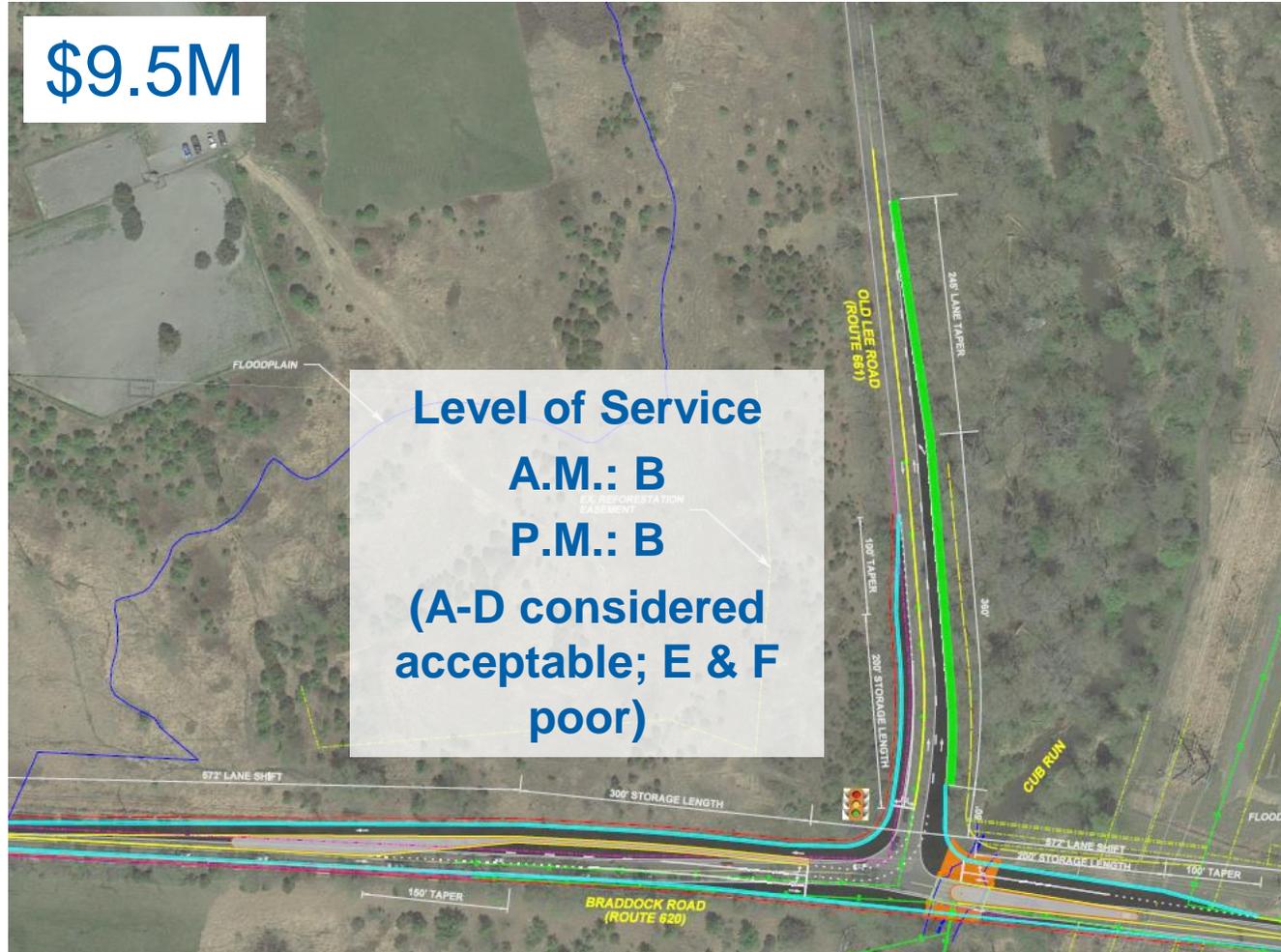
Jughandle with Turn Lane (Staff Preferred Alternative)



- Adds signal control plus 1,100' “jughandle” lane to serve existing EB left turns and 200' SB right turn lane; a jughandle is an at-grade ramp used for making indirect left turns and/or u-turns
- 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

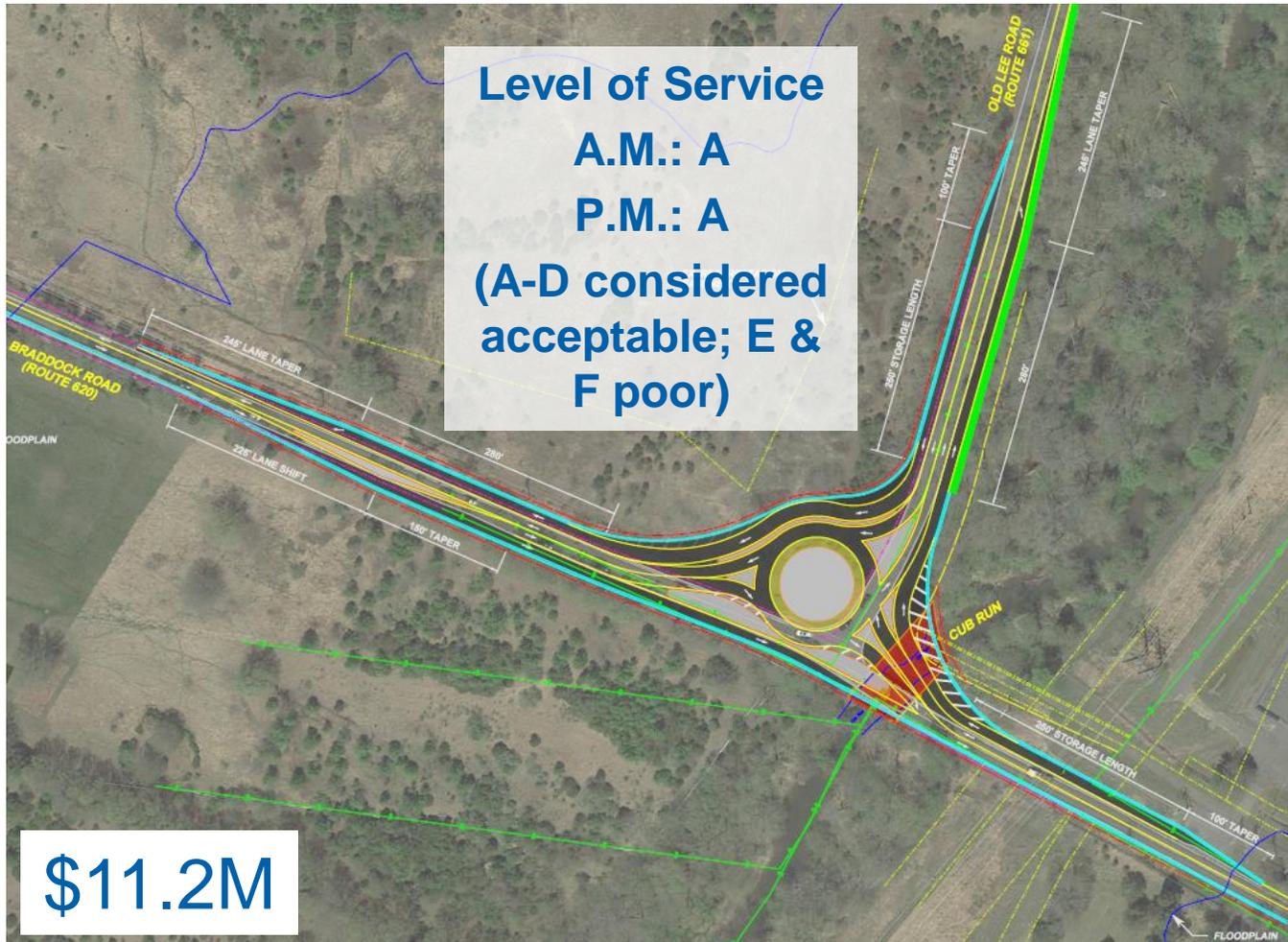
Signalized Intersection with Multiple Turn Lanes



- 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)

Background: Analysis Results Matrix

Staff Preferred Alternative

Category	Alternative 1 (Signalized Intersection)	Alternative 2 (Signal w/Turn Lane)	Alternative 3 (Signalized 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	\$400K	\$2.2M	\$5.6M	\$9.5M	\$11.2M

= Good

= Good to Fair

= Fair

= Poor

Staff Preferred Alternative - Features



- 'S' curve: realigns existing roadway to address crashes and stuck trucks
- Adds shared use path connection along north side of Braddock Road

- Braddock/Old Lee intersection: adds signal control plus 1,100-foot "jughandle" lane to serve existing EB left turns and 200' SB right turn lane
- Shared use path continues along Braddock Road to Old Lee Road



Feedback from February Public Information Meeting

- **Implementation of long-term Fairfax County Transportation Plan (Comp Plan) alignment**
 - Long-term improvement requires significant investment (not funded)
 - Comp Plan alignment will have its own environmental impacts requiring evaluation (4 lanes)
 - Must balance with other transportation priorities; remains on plan for future implementation
- **Consideration of single southbound right turn lane on Old Lee Road at Braddock Road**
 - Does not address all current operational and safety issues at intersection
 - Continued queuing due to inefficient intersection operations would likely block access to turn lane
- **Potential impacts to public and private property**
 - Should project be funded, project team will minimize potential impacts as design is developed and refined through engineering and public input process
- **Increased traffic from Loudoun County**
 - Potential project would address congestion/safety concerns already present; does not add through lanes to Braddock Road
 - Braddock Road is a public road with no restrictions on access for regional traffic

Feedback Continued

- **Need for environmental studies**
 - Consistent with all VDOT projects, environmental studies will begin once funding for the potential project has been identified and preliminary design has been initiated
 - Environmental studies will include but are not limited to evaluation of water resources, as well as threatened and endangered species
 - VDOT will coordinate with all appropriate federal, state and local agencies as part of the environmental study process
 - VDOT will avoid and minimize impacts to resources to the greatest extent practicable
 - Future environmental studies will be posted on the project website and the public will be afforded the opportunity to comment

Selected Alternative

- **Based on review of alternatives and consideration of public input, through a combined staff decision (VDOT and FCDOT), Alternative 3 (Jughandle with Turn Lane) has been selected in conjunction with the ‘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**

**Cost estimate is subject to change as project is further developed*

Next Steps

- **Project is currently unfunded (VDOT does not have discretionary funding for construction projects)**
- **Fairfax County is seeking SMART SCALE funds from the Commonwealth Transportation Board (CTB) for project implementation**
- **About SMART SCALE:**
 - **Primary means for localities to apply for state/federal funds from Commonwealth**
 - **Projects are scored based on an objective, outcome-based process that is transparent and ensures accountability**
 - **After scoring and prioritizing occurs, the CTB holds a public hearing in the Spring (April/May 2021) to allow for public comment on potential SMART SCALE projects**
 - **Projects are then selected by the CTB for funding (June 2021)**
 - **SMART SCALE is extremely competitive and oversubscribed (\$7.4 billion in SMART SCALE requests in Round 3 for an available \$856.1)**
- **SMART SCALE funds for the current cycle are anticipated to be programmed starting in FY26 (July 2025); the next application cycle will not occur for another two years (2022)**
- **If funded, preliminary engineering would be initiated upon receipt of programmed funds, with multiple opportunities for additional public engagement**

How to submit your comments

Give feedback on the virtual public information meeting in the following ways by Oct. 13:



Email Us

meetingcomments@vdot.virginia.gov
Please reference “Braddock Road
and Old Lee Road Study”
in the subject line.

Mail Us

Mr. Andrew Beacher, P.E.
VDOT’s Northern Virginia District
4975 Alliance Drive
Fairfax, Virginia 22030

Comment

In the questions window during the
virtual meeting or online at
virginiadot.org/braddockandoldlee.

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