



Blake Lane Safety & Operational Improvements

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- Vegetation Trimming at Blake/Hibbard and Blake/Sutton
- Sign and Paving Marking Improvements
- Pedestrian Safety at the Blake Lane/Sutton Road Signalized Intersection
- Potential Speed Study for Blake Lane
- Signal Warrant Process
- Signal Warrant Studies
- Proposed Restricted Crossing U-Turn (RCUT)

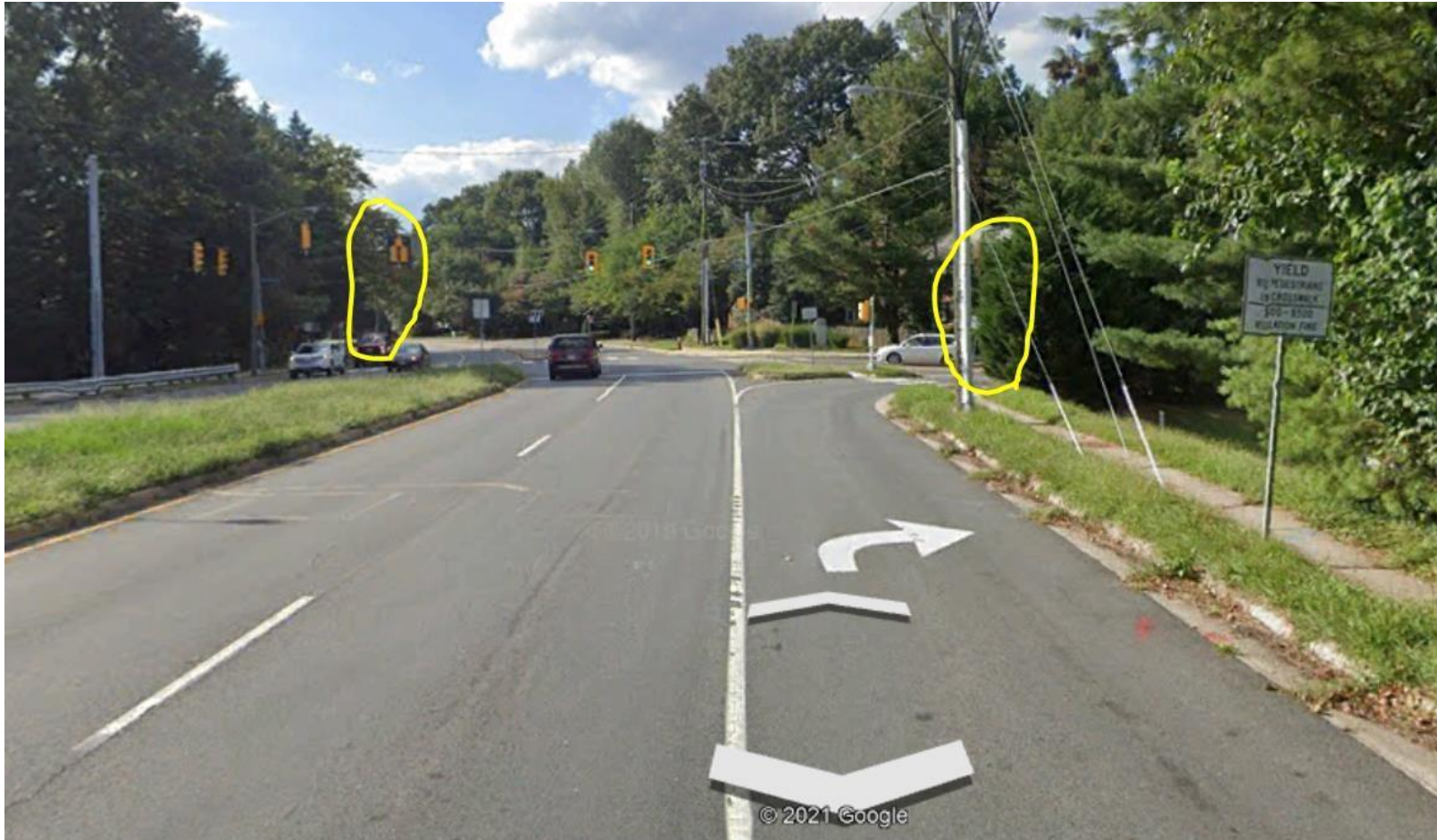
Tree Trimming

- Blake Lane and Hibbard Street

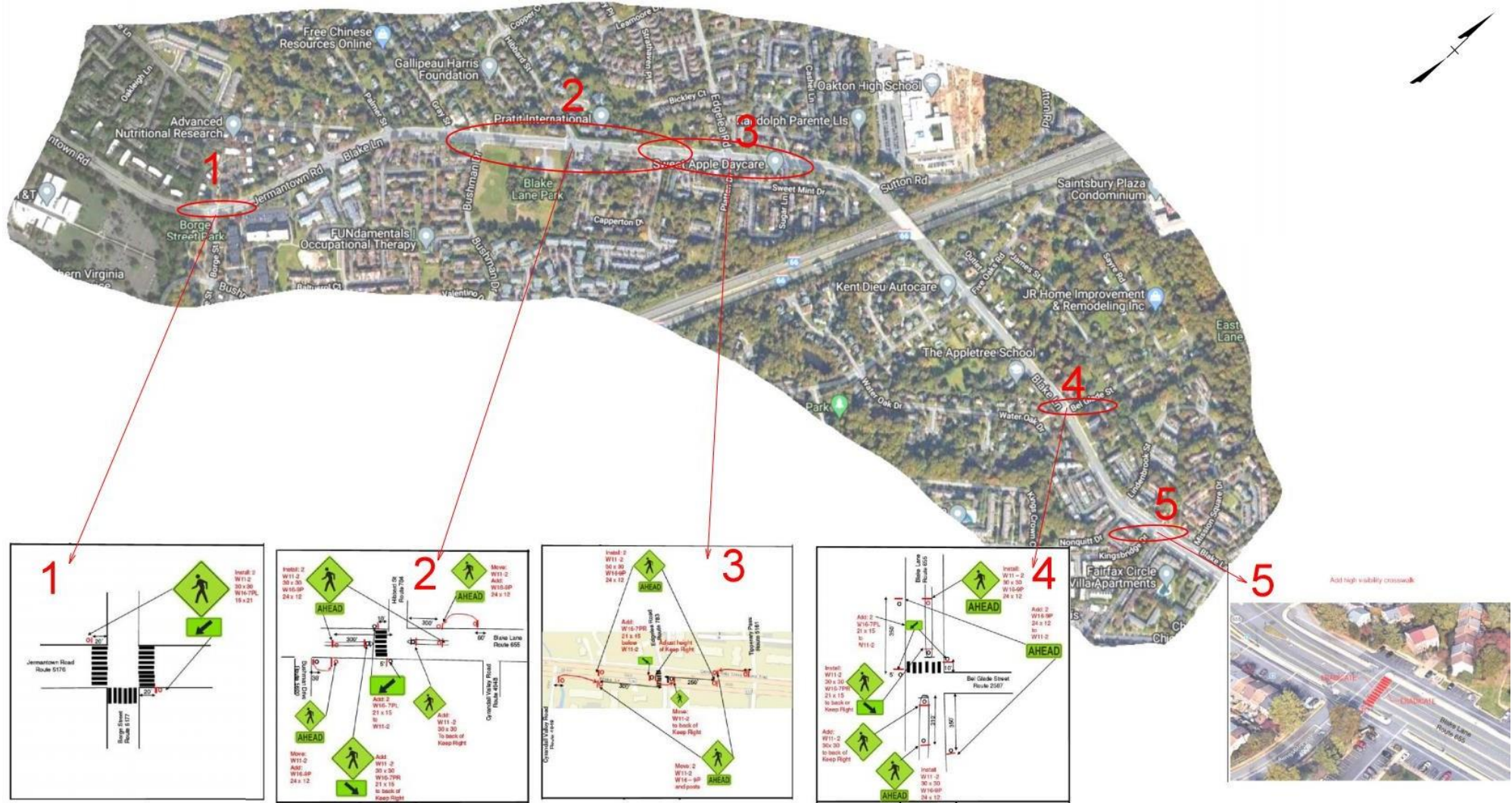


Tree Trimming

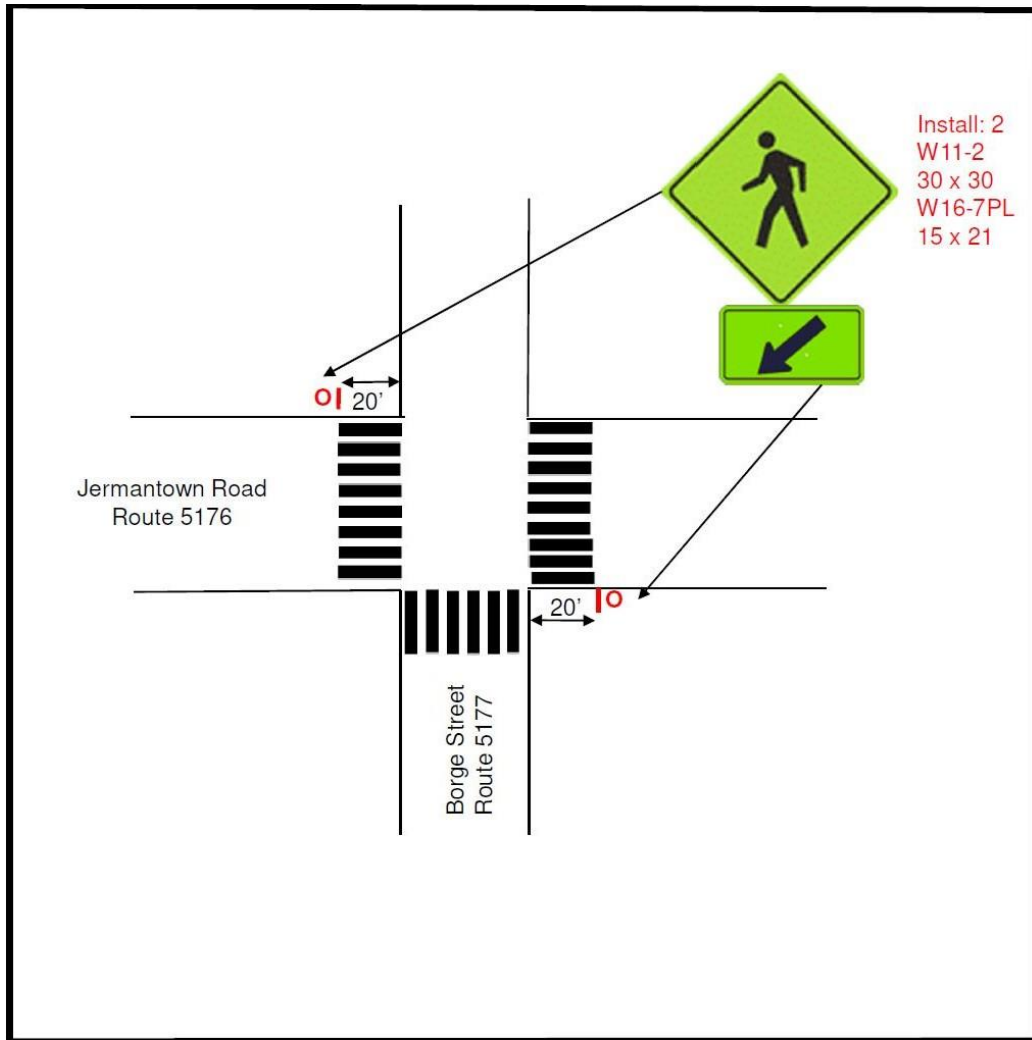
- Blake Lane and Sutton Road



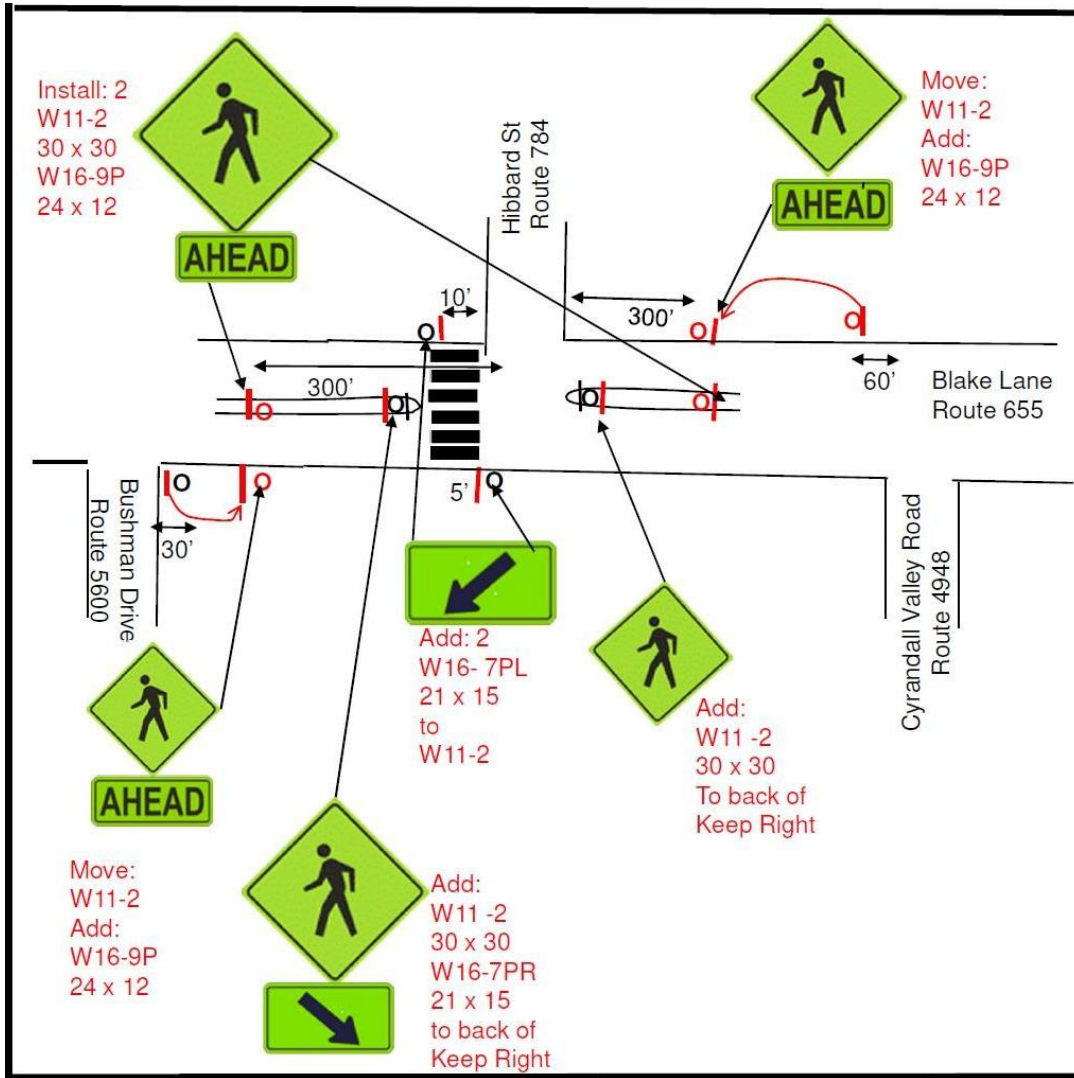
Sign and Paving Marking Improvements



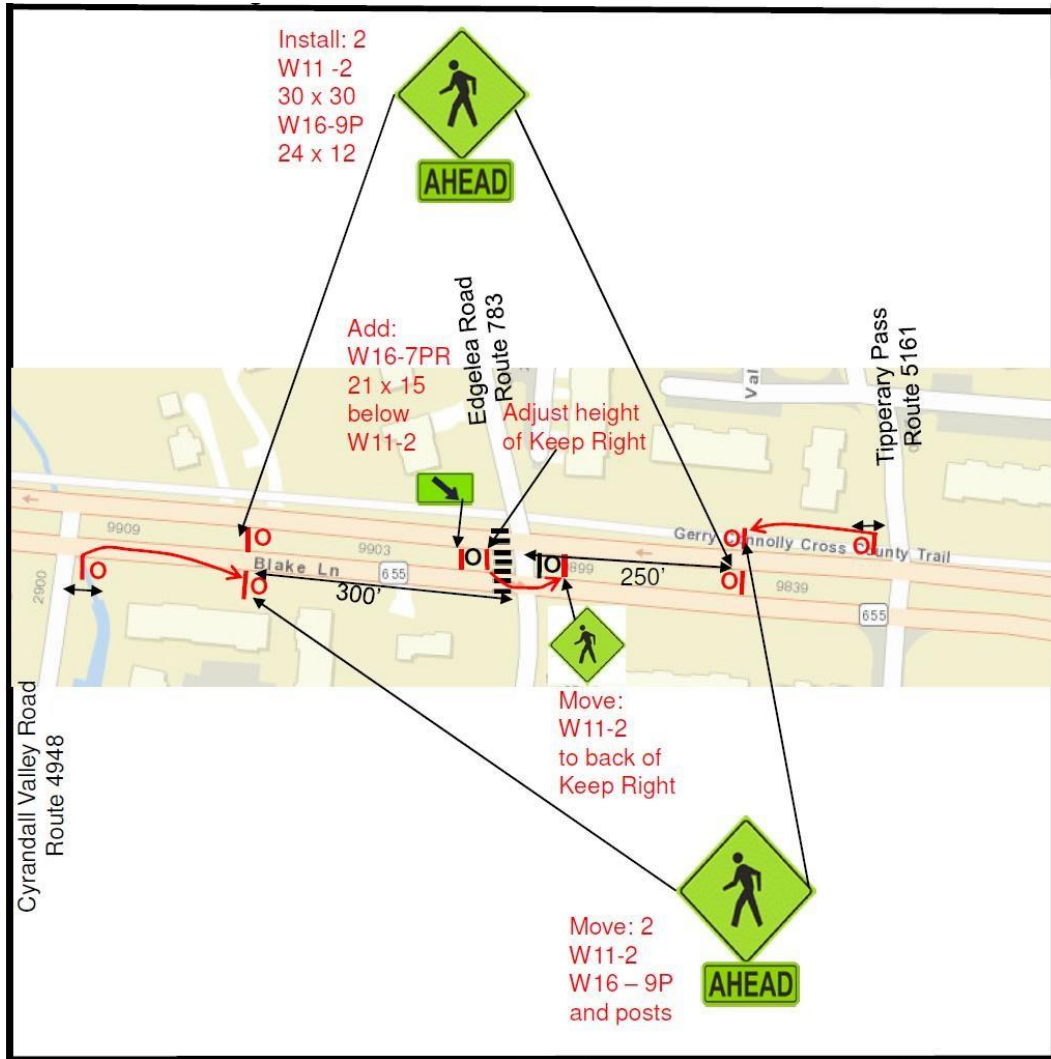
1. Jermantown Road & Borge Street



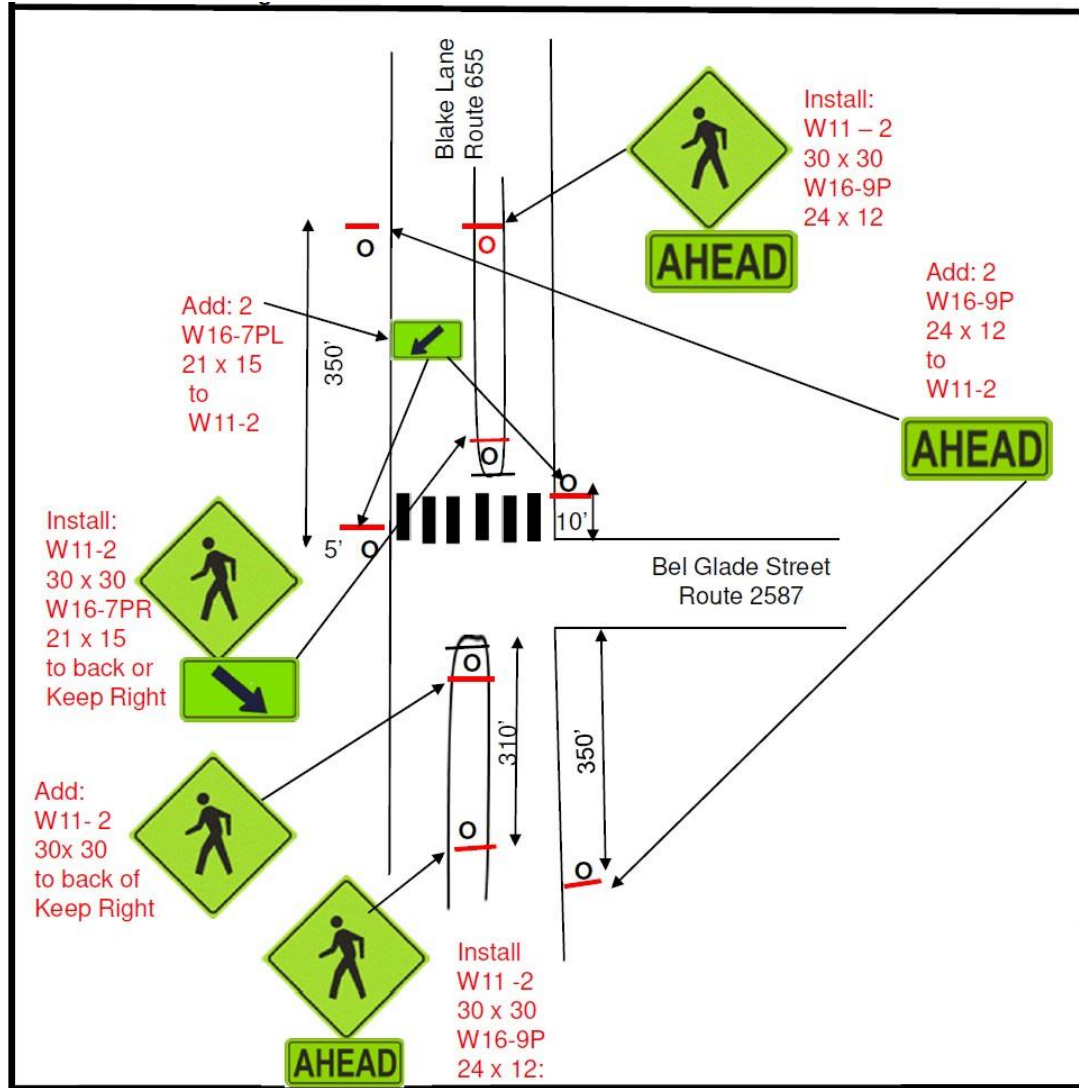
2. Blake Lane & Hibbard Street



3. Blake Lane & Edgelea Road



4. Blake Lane & Bel Glade Street



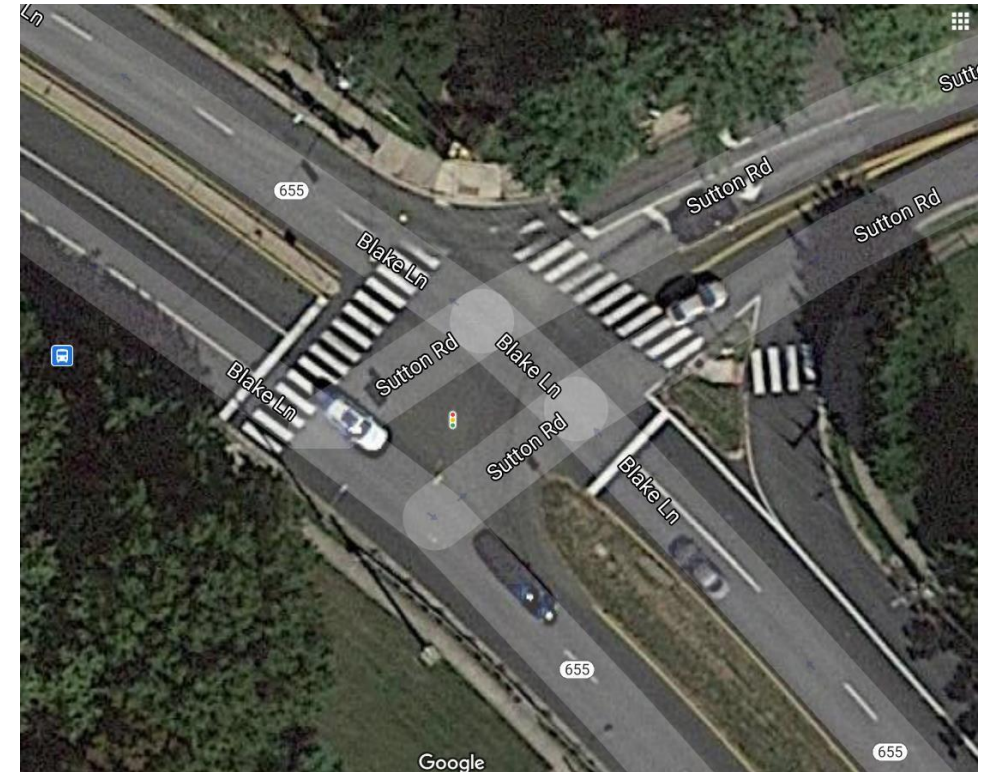
5. Blake Lane & Kingsbridge Drive



- Implemented high visibility crosswalk at the signalized intersection for the northbound approach during the week of March 12, 2021.

Pedestrian Safety at the Blake Lane/Sutton Intersection

- A “Leading Pedestrian Interval” (LPI) is an adjustment to the signal phasing that allows a pedestrian to establish a presence in a crosswalk from the side streets before vehicles are given the green indication.
- Due to student pedestrian activities, VDOT implemented an LPI with 4 seconds of early walk for the WB approach on Sutton Road on March 25, 2021.



Speed Study on Blake Lane

- Currently, the posted speed limit is 35 MPH from Rte. 123 to Rte. 29
- VA Code required VDOT to conduct an engineer study to change speed limits.
- The national standard Manual of Uniform Traffic Control Devices (MUTCD) recommended the posted speed limit should be within 5 MPH of the 85th-percentile speed of free-flowing traffic.
- Recent speed data collected on Blake Lane showed that the 85th-percentile speed is about 43.5 MPH.
- VDOT can collect the speed data again when the pandemic is over and traffic is back to normal as well as schools are fully opened to determine if a full speed limit study should be conducted.

Traffic Signal Warrant Process

- VDOT follows national standard Manual of Uniform Traffic Control Devices (MUTCD) Chapter 4C to determine whether installation of a signal is warranted at a particular location. The warrants can be found online from the MUTCD website: (<https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm>).
- The signal warrant study considers traffic and pedestrian volumes, crash history, roadway physical characteristics, traffic operation conditions, and other factors.
- If a traffic signal is warranted for an intersection, it is required to be screened for innovative intersections by performing the Signal Justification Report (SJR).

Traffic Signal Warrant Studies

- **Blake Lane and Hibbard Street**
 - The Average Annual Daily Traffic (AADT) traffic volume is low on Hibbard Street and it is most likely that a traffic signal will not be warranted.
- **Rte. 123 and Hibbard Street**
 - Data was collected in April 2018, but will require updated data collection.
 - The signal warrant and signal justification report (SJR) will be reevaluated with newer data once traffic volumes are considered normalized post-pandemic and after schools are fully open.

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Thank You!



Fairfax County Department of Transportation
Residential Traffic Administration Program
and
Blake Lane Pedestrian and Bicycle Project Updates

Steve Knudsen / Chris Wells
Fairfax County Department of Transportation

Residential Traffic Administration Program

Traffic Calming	Cut-Through Mitigation	\$200 Fine for Speeding Signs	Watch for Children Signs	Through-Truck Restriction
Physical devices installed in roadway to slow vehicles to the speed limit. Examples include speed humps, speed tables and pavement markings.	Access restrictions or route modifications to decrease traffic volume.	"\$200 Additional Fine for Speeding" signs added underneath speed limit signs.	"Watch for Children" signs installed where appropriate in the community.	Prohibits use of a road by trucks that are not making stops in a neighborhood.



QUALIFICATION CRITERIA:

- The road must be a local road, a collector road, or a minor arterial.
- The road must have a speed limit of 35 mph or less.
- The road must have at least 600 vehicles per day.
- The 85th percentile speed of vehicles is at least 10 mph over the speed limit in at least one direction.

Blake Lane meets all qualification criteria for the \$200 Additional Fine for Speeding Program

Classification: Minor Arterial Road
Posted Speed Limit: 35 MPH

48-Hour Volume and Speed Analysis

Direction	48-Hour Volume	85 th Percentile Speed
Eastbound	15,066	51 MPH
Westbound	14,817	49 MPH
Requirement Met:	Yes	Yes

Date of traffic count: 3/17/2021-3/18/2021

Blake Lane \$200 Additional Fine for Speeding Study

PROCEDURE:

1. The community sends its request to the District Supervisor, who forwards it to FCDOT.
2. FCDOT conducts a traffic count and speed survey of the road.
3. FCDOT determines whether the road meets the qualification criteria.
4. If the road meets the qualification criteria, the District Supervisor confirms community support for \$200 Additional Fine for Speeding signs.
5. The Board of Supervisors endorses the installation of \$200 Additional Fine for Speeding signs.
6. FCDOT sends request to VDOT for the installation of the signs.

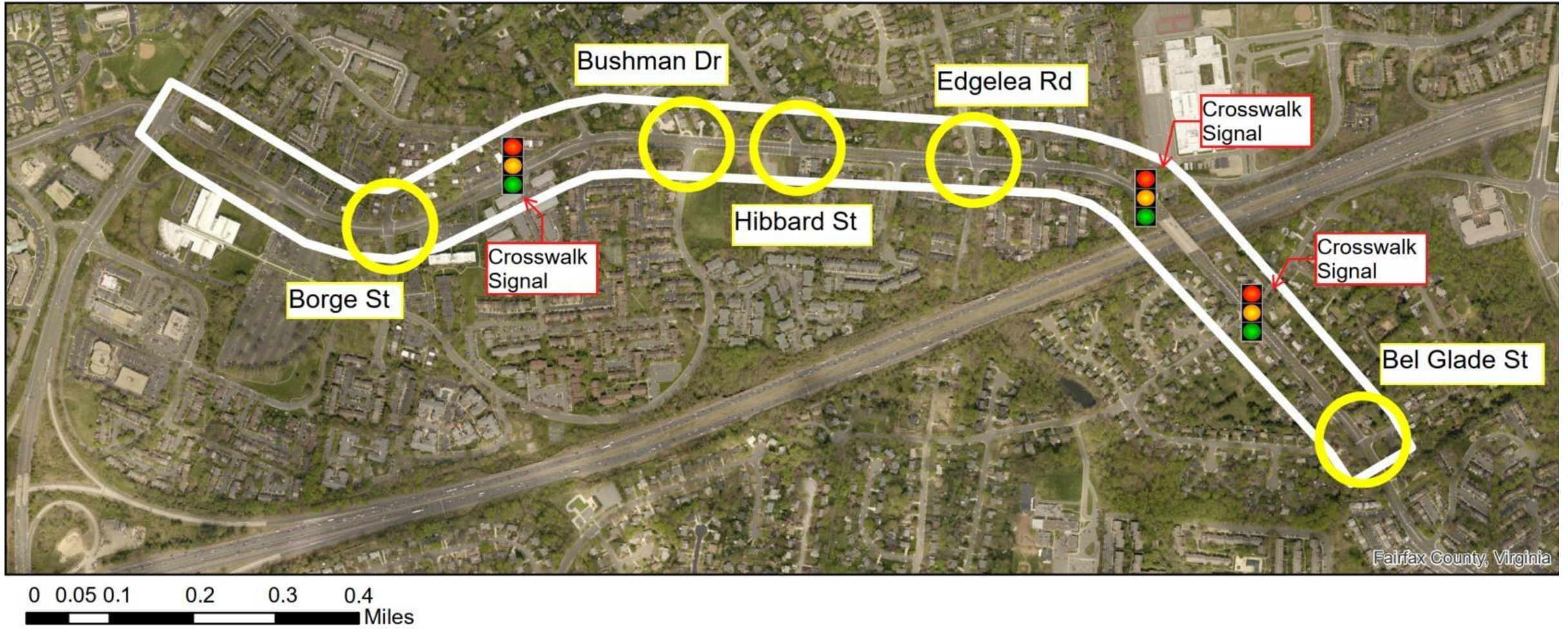
Next Steps:

- Confirm community support
- Board of Supervisors Resolution
- Memo to VDOT requesting installation of signage



Blake Lane Pedestrian and Bicycle Projects Update

Location Map



Blake Lane from Rt 123 (Chain Bridge Rd) to Bel Glade St

Blake Lane Pedestrian and Bicycle Project Updates

FCDOT has applied for MWCOCG grant funding for design of a new RRFB Crosswalk on the west leg of Blake Lane and Bushman Road.

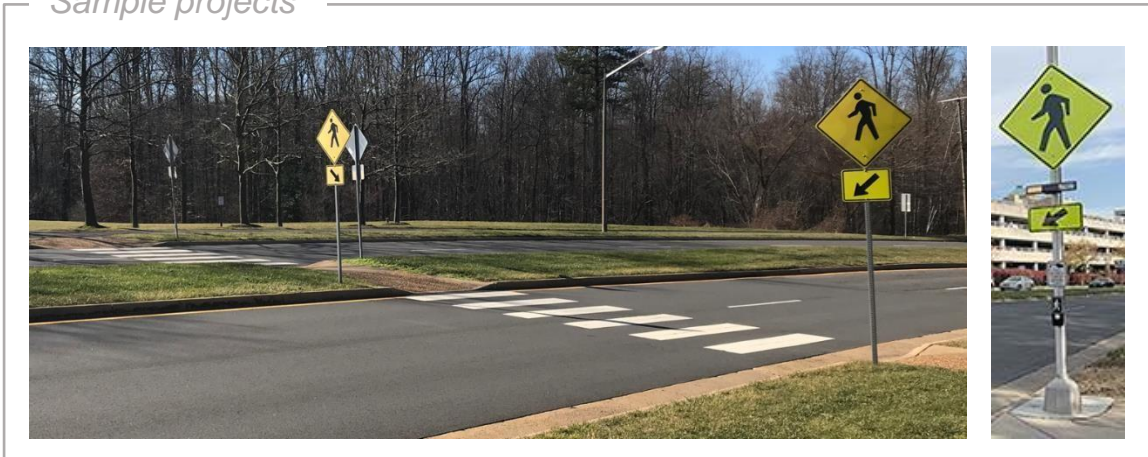
FCDOT is recommending Federal Annual Appropriations funding for addition of RRFB's at additional Blake Lane intersection crosswalks.

FCDOT has proposed bike lanes and bike markings for Bushman Drive and Borge Road as part of the VDOT Summer 2021 Repaving process. These bike facilities will serve as a route to the Bushman Road access point to the I-66 Parallel Trail.

Bushman Drive (highest priority)

- Add crosswalk
- Extend median refuge
- Add RRFBs
- Cost estimate: \$125,000 to \$300,000
- Others may be considered in future

Sample projects



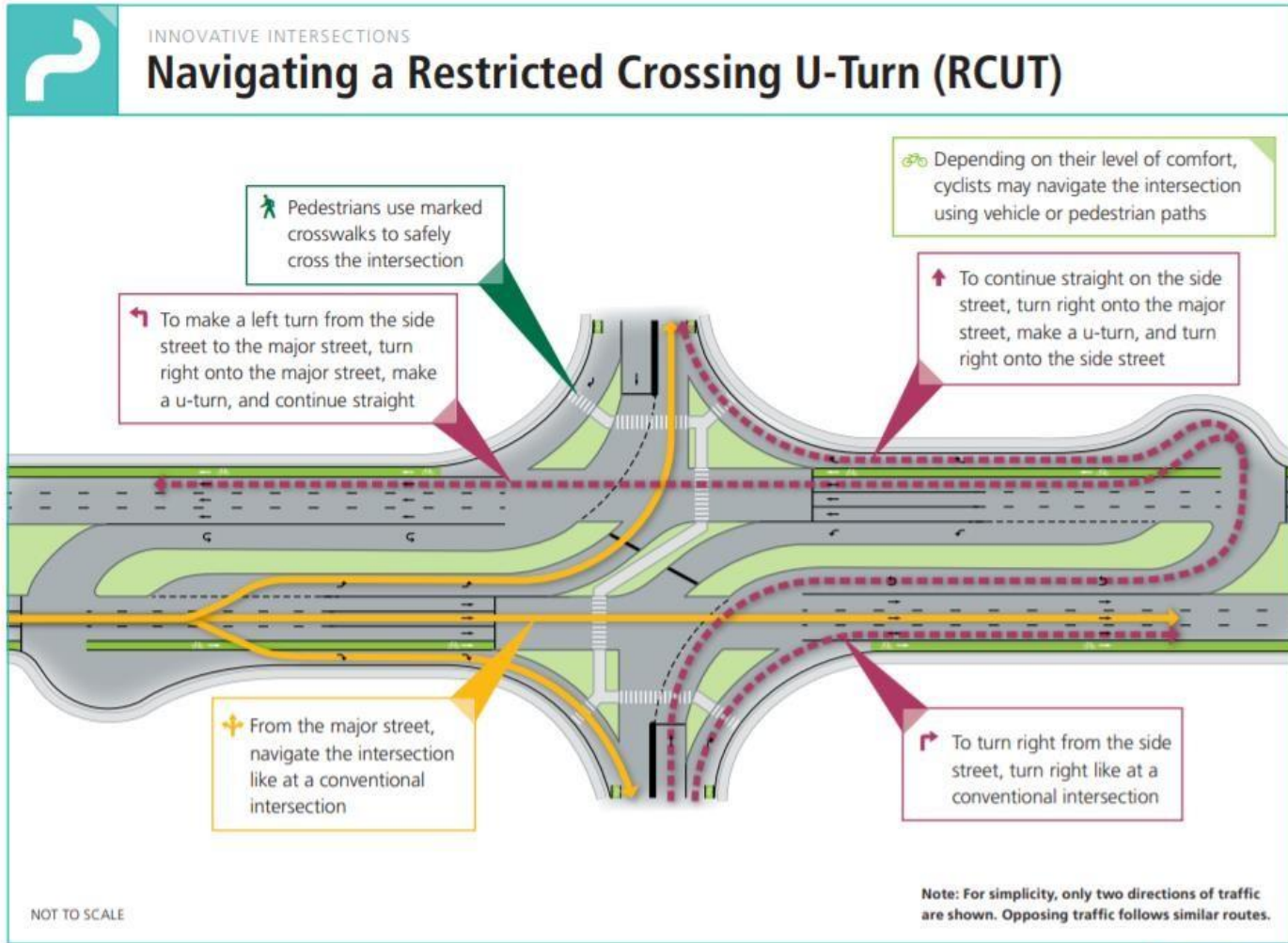
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Proposed Restricted Crossing U-Turn (RCUT)

- The RCUT is one of VDOT's Innovative Statewide Design Solutions*
- Intersection design where all side street movements begin with a right turn and make a U-turn at a downstream median opening to complete the desired movement
- Allows left-turns into the side streets
- Reduces the number of conflict points from 32 to 18
- A potential solution for the Blake Lane and Hibbard Street

[*http://www.virginiadot.org/info/innovative_intersections_and_interchanges/rcut.asp](http://www.virginiadot.org/info/innovative_intersections_and_interchanges/rcut.asp)

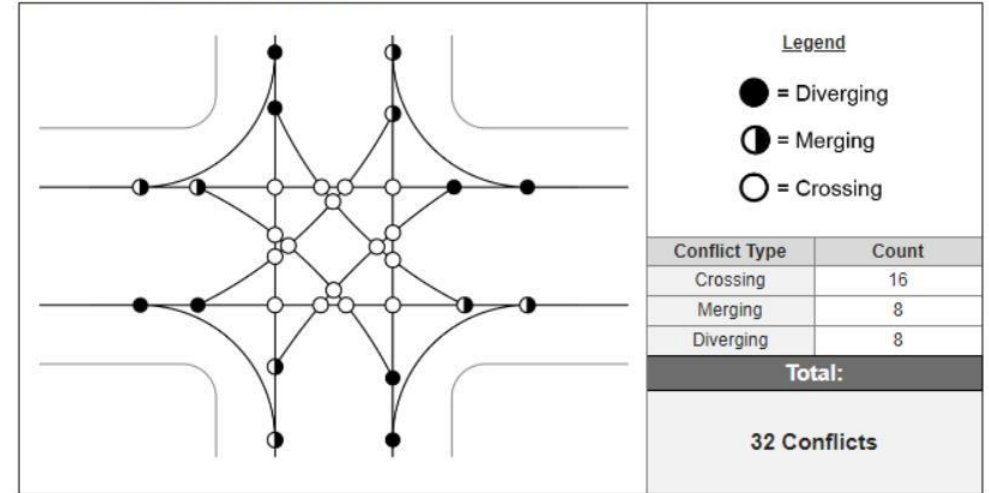
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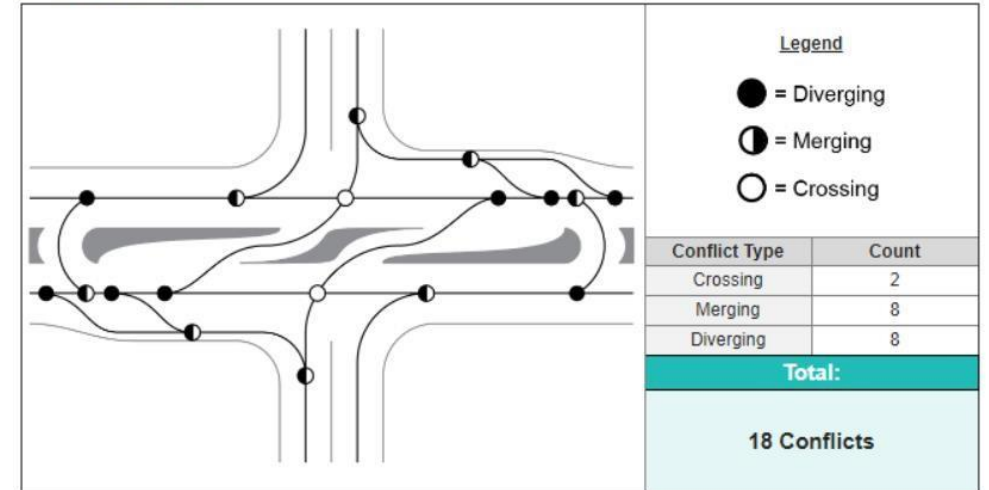
Visit www.virginiadot.org/innovativeintersections to learn more.

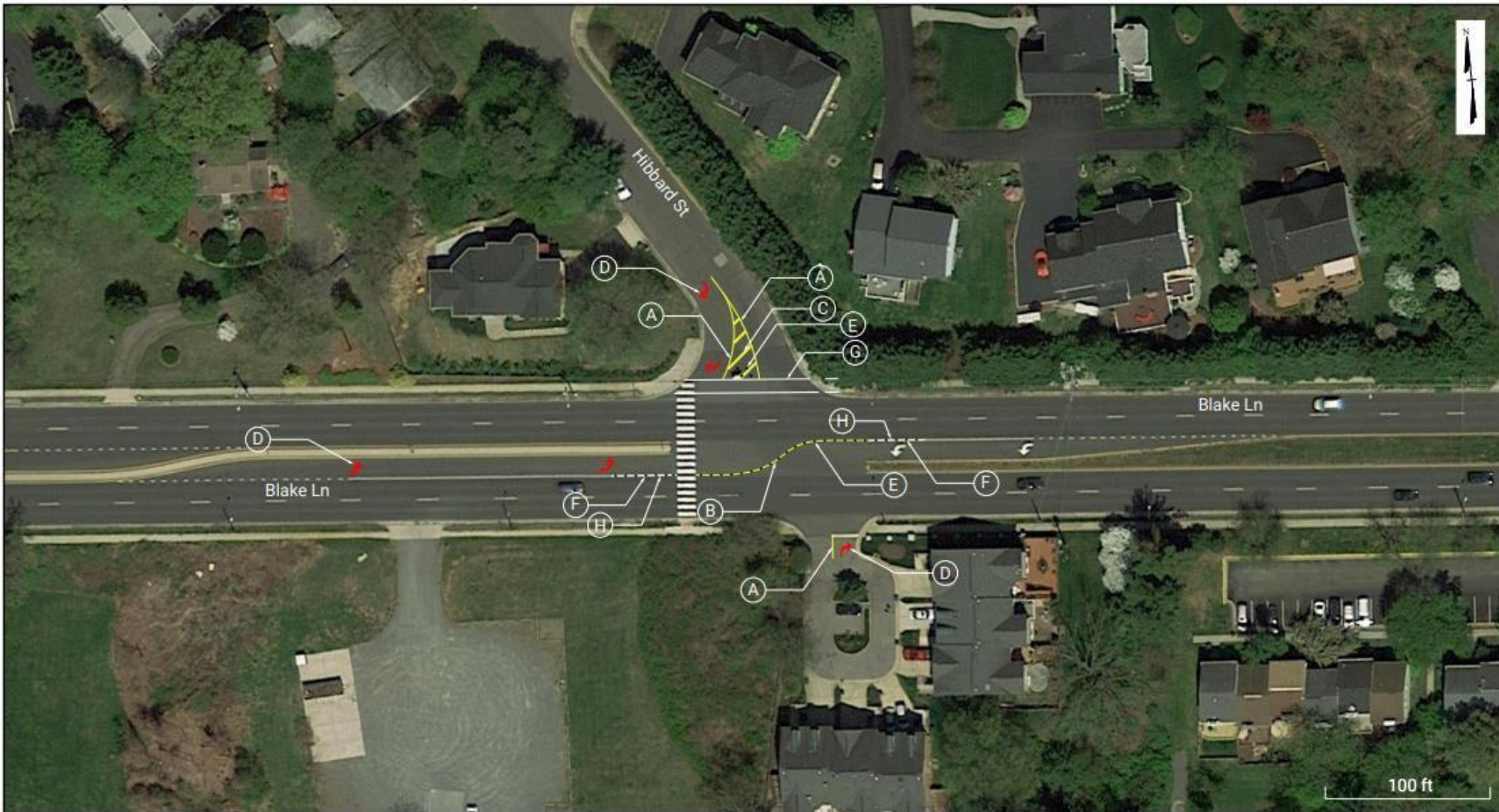


Conventional Intersection: Conflict Points



RCUT: Conflict Points



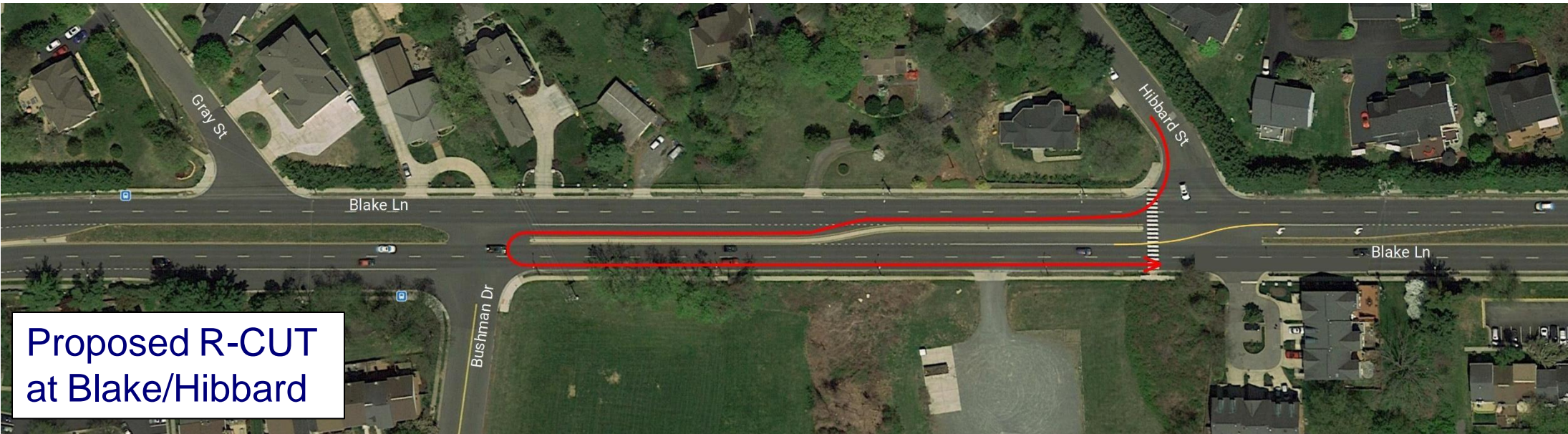
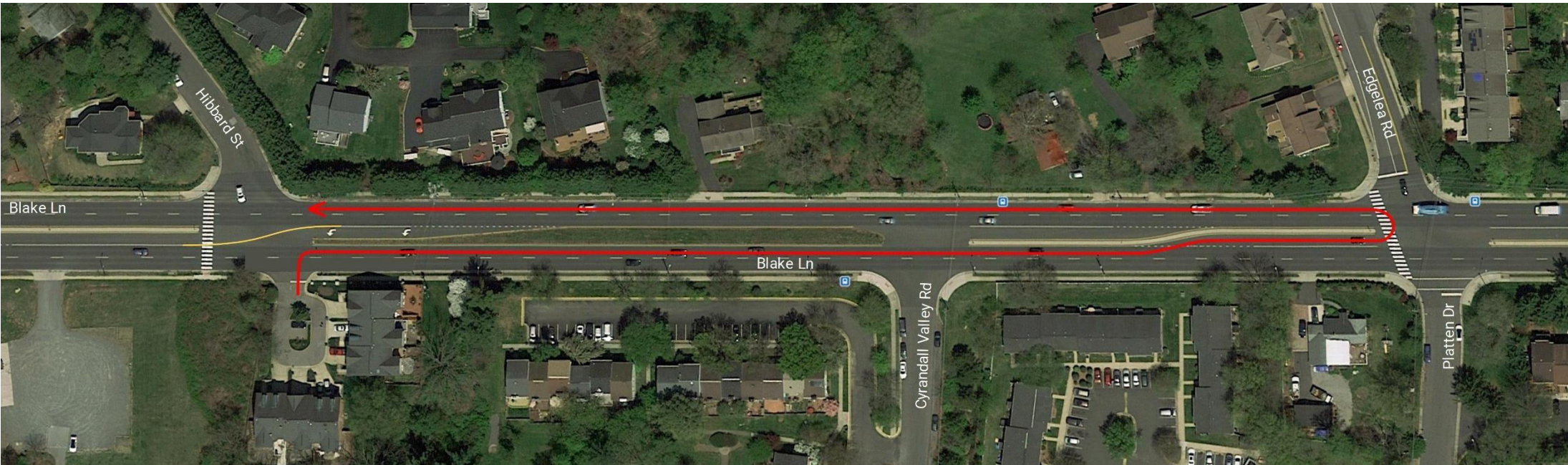


- | | |
|-----------------------------------|----------------------------------|
| (A) YELLOW DOUBLE LINE 4" WIDTH | (E) YELLOW FLEX POSTS @ 4' SPACE |
| (B) YELLOW 4" WIDTH | (F) WHITE FLEX POSTS @ 4' SPACE |
| (C) YELLOW 24" WIDTH @ 45 DEGREES | (G) WHITE 6" WIDTH |
| (D) WHITE ARROW | (H) WHITE 4" WIDTH |

Proposed R-CUT at Blake/Hibbard

Blake Lane (Route 655) and Hibbard St (Route 784) Intersection
Restricted Crossing U-Turn (RCUT) Design
Fairfax County, VA

VDOT Traffic Engineering
DATE: 3/10/2021



Proposed R-CUT
at Blake/Hibbard

Example RCUT: Tall Cedars Parkway and Elk Lick Road





Questions/Discussion

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