

RI-05 ROUTE 147 (HUGUENOT RD) Phase II – Preferred Alternative

FROM ROBIOUS RD TO BIG OAK LN / CRANBECK RD



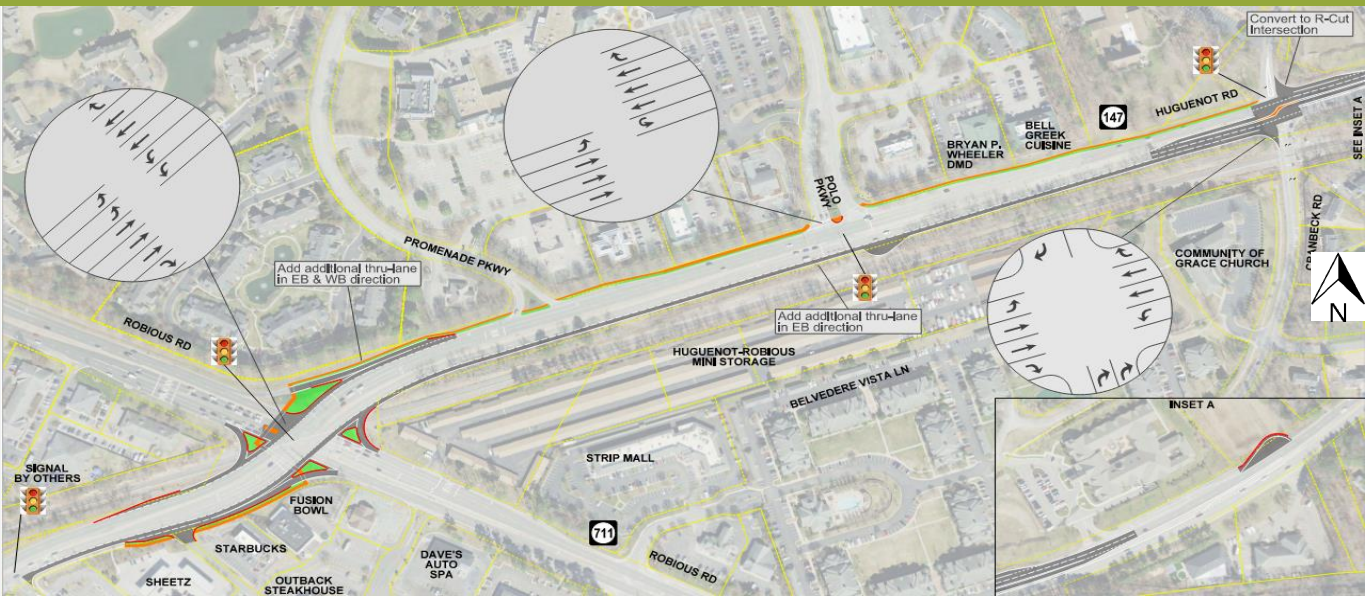
Project Description

- The Huguenot Rd. corridor improvement project focuses on safety issues identified along the corridor.
- Concept 1 – Optimize the signal at Huguenot Rd. at Robious Rd. Convert the phasing for left turns off Huguenot Rd. to Cranbeck Rd. / Big Oak Ln. from protected-permitted to protected-only.
 - Concept 2 – Add a through lane in each direction of Huguenot Rd. Remove one of the two westbound left-turn lanes at the Huguenot Rd. and Robious Rd. intersection. Convert the left turn phasing off Huguenot Rd. to Cranbeck Rd. / Big Oak Ln. from protected-permitted to protected-only.
 - Concept 3 – Add a through lane to each direction of Huguenot Rd. Convert the intersection of Huguenot Rd at Cranbeck Rd. / Big Oak Ln. to a signalized Restricted Crossing U-Turn (RCUT) intersection.

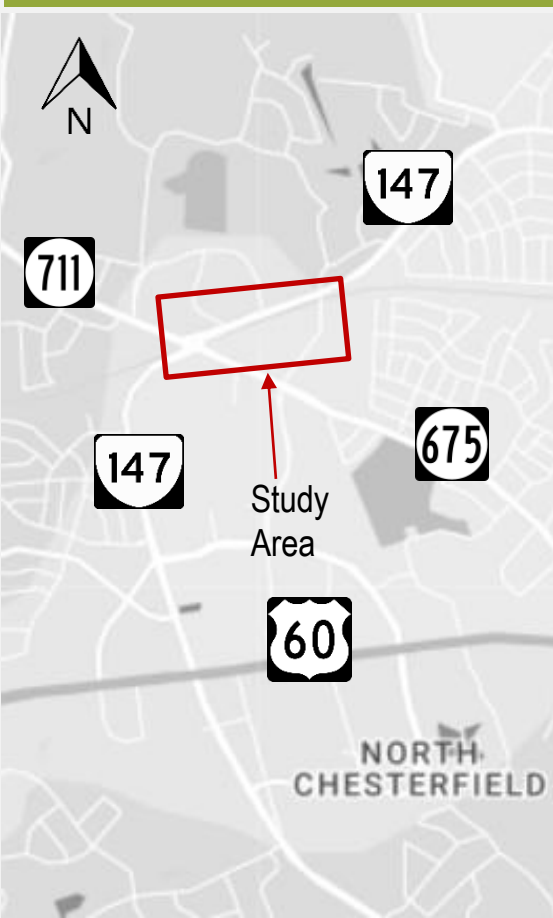
Concept 2 (Add Through Lanes and Protected-Only Left Turn)



Concept 3 (Add Through Lanes and RCUT)



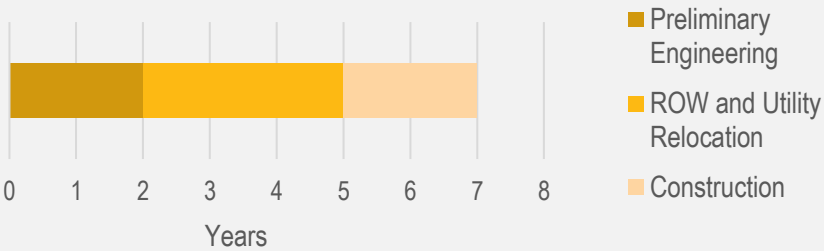
Project Location



Planning Level Cost Estimate FY 2022

Phase	Concept		
	1	2	3
Preliminary Engineering	\$20 k	\$ 1.4 m	\$ 1.9 m
ROW and Utility Relocation	\$0	\$ 586 k	\$ 947k
Construction	\$20 k	\$ 6.6 m	\$ 12.2 m
Total Cost	\$40 k	\$ 8.6 m	\$ 15.0 m

Sample Project Schedule



Note 1: Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.

Note 2: Concept 1 comprises signal retiming and phasing improvements; therefore, no cost estimation is conducted for it.

Traffic Operations Benefits

- Concept 1 – Optimizing signal intervals at Huguenot Rd. and Robious Rd. reduces congestion and improves traffic flow.
- Concept 2 and 3 – Adding through lanes along Huguenot Rd improves roadway capacity which improves traffic flow and reduces congestion and queueing.
- Concept 3 – Upgrading the intersection of Huguenot Rd at Cranbeck Rd / Big Oak Ln to an RCUT intersection reduces the signal phases at the intersection, which improves signal efficiency and reduces congestion and queueing.

Safety Benefits

- Concept 1 and 2 – Converting the left-turn phasing from Huguenot Rd to Cranbeck Rd / Big Oak Ln to protected-only results in fewer angle crashes.
- Concept 3 – Converting the intersection of Huguenot Rd at Cranbeck Rd / Big Oak Ln to an RCUT intersection reduces the conflict points at the intersection which will reduce the angle and rear end crashes.

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FROM ROBIOUS RD TO BIG OAK LN / CRANBECK RD



PHASE 2 – PREFERRED ALTERNATIVE

PROJECT DESCRIPTION

The Huguenot Rd. corridor improvement project focuses on safety issues identified along the corridor.

- Concept 1 – Optimize the signal at Huguenot Rd. at Robious Rd. Convert the phasing for left turns off Huguenot Rd. to Cranbeck Rd. / Big Oak Ln. from protected-permitted to protected-only.
- Concept 2 – Add a through lane in each direction of Huguenot Rd. Remove one of the two westbound left-turn lanes at the Huguenot Rd. and Robious Rd. intersection. Convert the left turn phasing off Huguenot Rd. to Cranbeck Rd. / Big Oak Ln. from protected-permitted to protected-only.
- Concept 3 – Add a through lane to each direction of Huguenot Rd. Convert the intersection of Huguenot Rd at Cranbeck Rd. / Big Oak Ln. to a signalized Restricted Crossing U-Turn (RCUT) intersection.

PROJECT BENEFITS



Access Management



Safety Improvement



Pedestrian Access

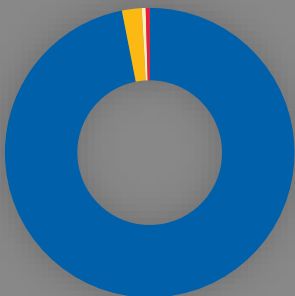


Congestion

- Access Management within the functional area of the intersection along Huguenot Rd. give estimated reduction of between **28-38%** crashes along the corridor.
- Signal optimization at Huguenot Rd. and Robious Rd. and addition of through lanes along Huguenot Rd. reduces congestion and queueing, which results in fewer rear-end crashes.
- Converting the left-turn phasing from Huguenot Rd to Cranbeck Rd. / Big Oak Ln. to protected-only reduces angle crashes.
- Conversion of the Cranbeck Rd. / Big Oak Ln. intersection to a Restricted Crossing U-turn intersection reduces the signal phases at each intersection, which improves signal efficiency and reduces congestion and queueing. Reduced conflict points at the intersection also reduces angle and rear-end crashes.

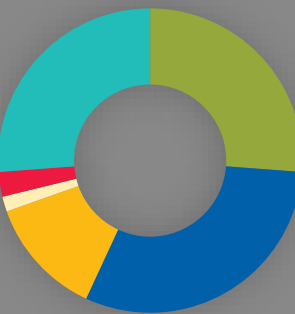
PUBLIC SURVEY

Travel Method



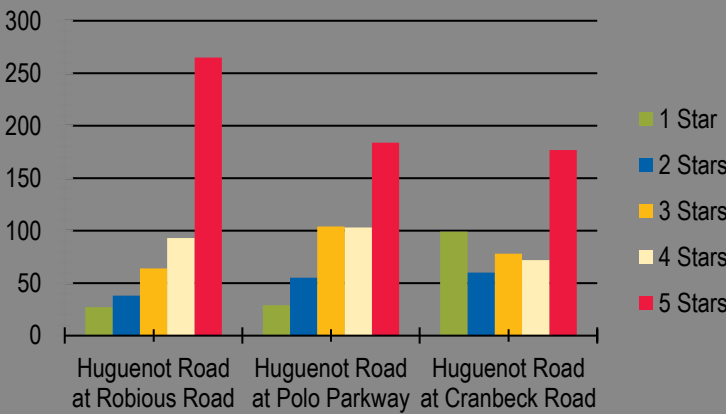
Public Transit
Driving Personal Vehicle
Biking
Walking
Carpool/Shared Ride

Other Preferred Method



Walking
Biking
Transit
Carpool/Vanpool
Taxi/Ride Service
Prefer to Drive

Concept 1

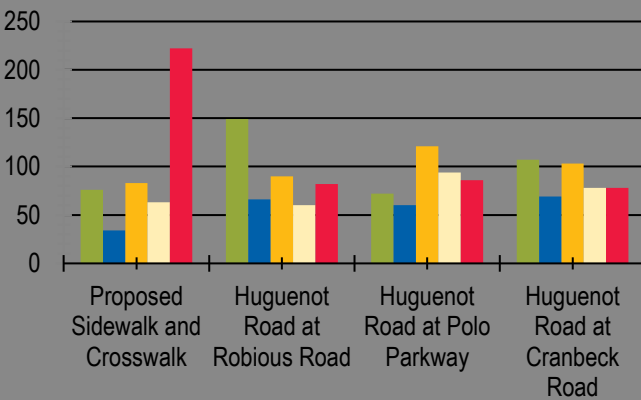


Survey Respondents rated this concept an average of 3.73 out of 5

Please rate this scenario



Concept 2

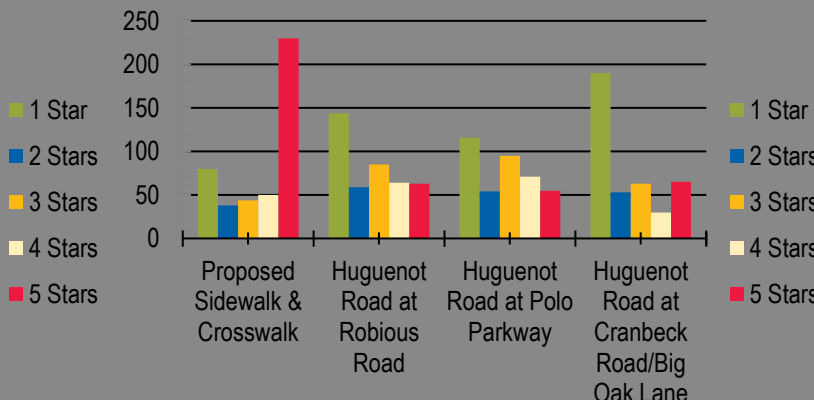


Survey Respondents rated this concept an average of 3.09 out of 5

Please rate this scenario



Concept 3



Survey Respondents rated this concept an average of 2.89 out of 5

Please rate this scenario

