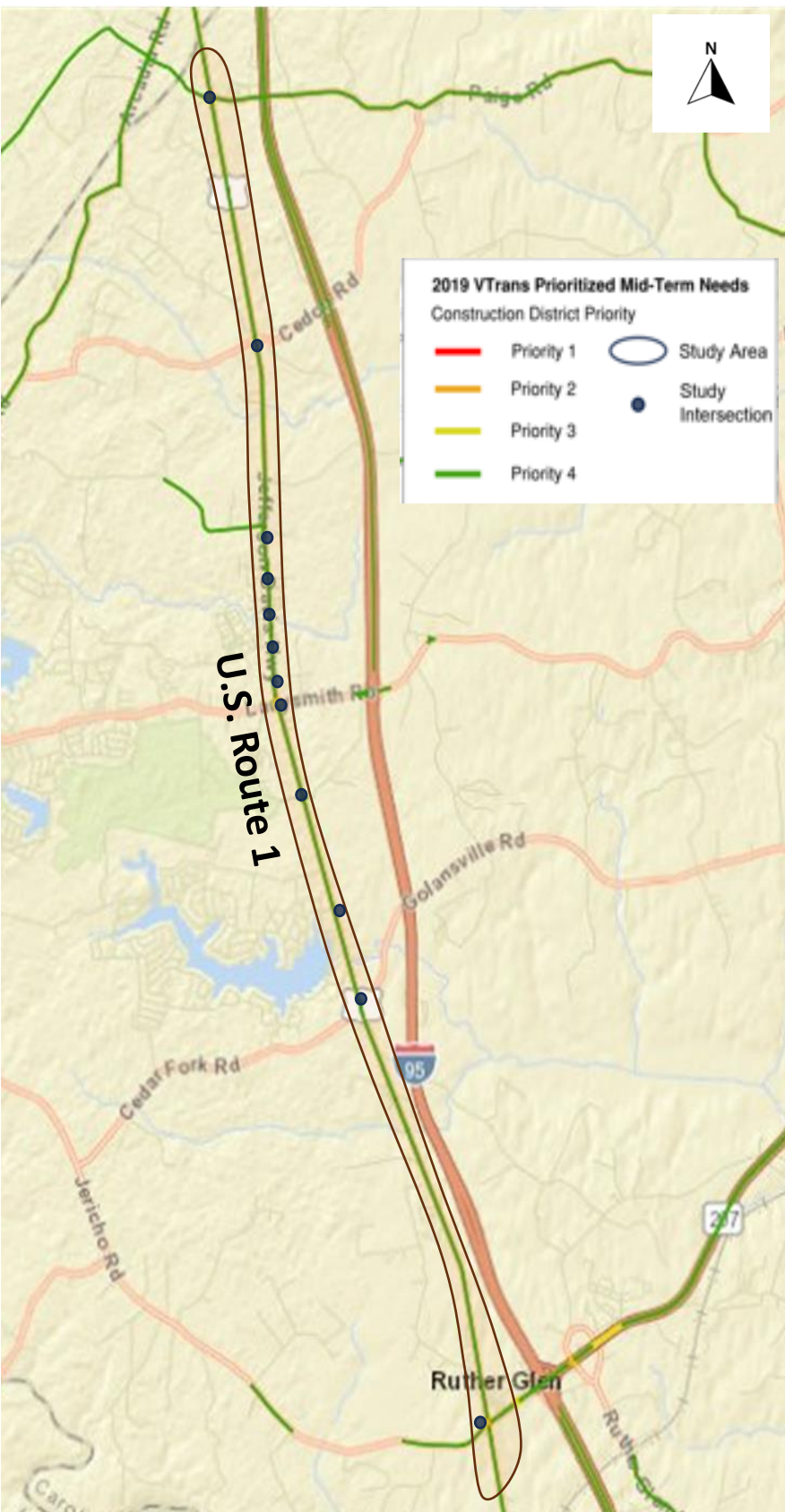




Study Area



Project Overview

Project Fact Sheet	
VDOT District	Fredericksburg
Locality	Caroline County
# of Study Intersections	12 (2 Signalized & 10 Unsignalized)
Transit Routes	None
Nearby Transit Connections	None
Nearby Bikeways	Eastcoast Greenway Bicycle Route
Functional Classifications	Other Principal Arterial
Speed Limit	45 mph to 55 mph

Intersection Level of Service

Existing Condition Overall Level of Service		
Intersection	AM	PM
Paige Road	A	A
Cedon Road	A	A
Pine Tree Drive	A	A
Ladysmith Common Boulevard	A	A
Deerfield Road	A	A
Clara Smith Street	A	A
Durette Road	A	A
Ladysmith Road	C	C
Edmund Drive	A	A
Lake Caroline Drive	A	A
Cedar Fork Road	A	A
Jericho Road	C	D

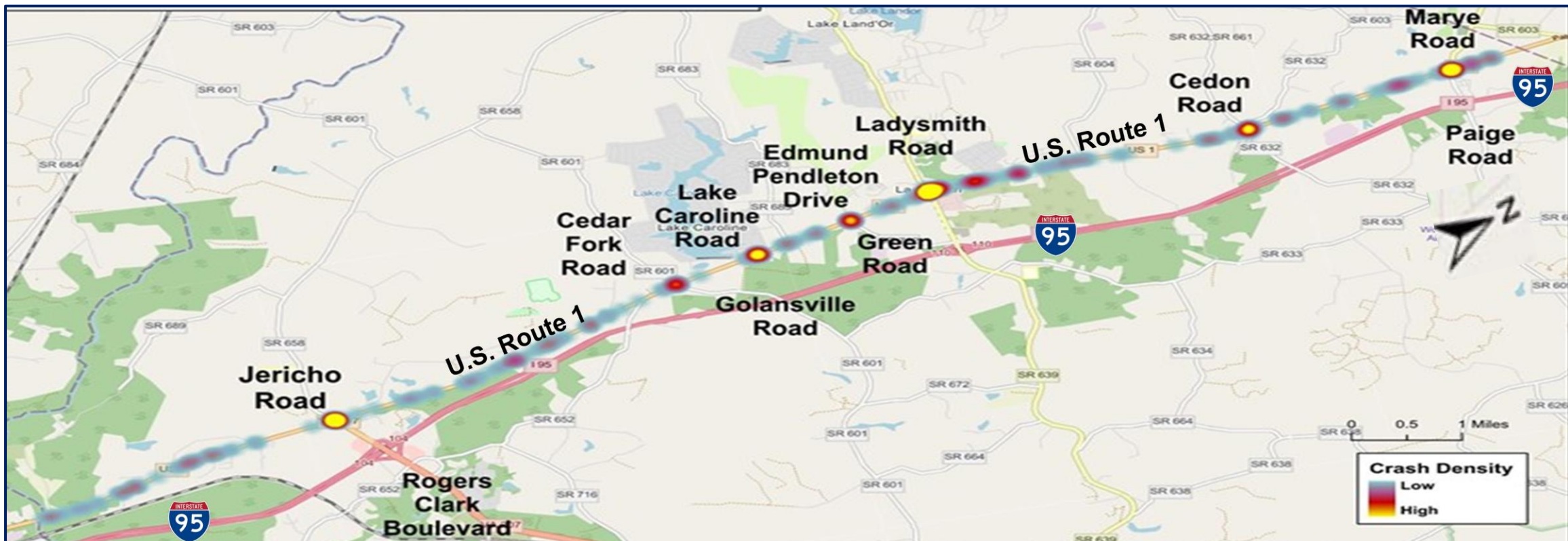
Access Management and Pedestrian Summary

- 251 access points in total along the corridor (most of which are driveways to residential areas)
- Corridor Wide: 16.88 access points per mile
 - 17 angle crashes occurred directly near an access point
 - 22 rear end crashes were located at access points
- Limited pedestrian & bicycle facilities along the corridor
 - NE quadrant of Ladysmith Road has sidewalk for peds
 - Future plans for sidewalk along Route 1 between Caroline/Hanover County
 - 10' shared use path and crosswalks currently being installed on Ladysmith Road

Public Involvement Survey

- Congestion and safety issues due to I-95 detoured traffic
- The presence of wildlife along the corridor
- Sight distance concerns
- Lack of turn lanes into side streets
- Safety issues at the shopping center north of Ladysmith Road
- Lack of pedestrian facilities along the corridor

Corridor Crash Hot spots



U.S. Route 1 in Caroline County Potential Alternatives



FR-23-07
UPC123255



June 26, 2024

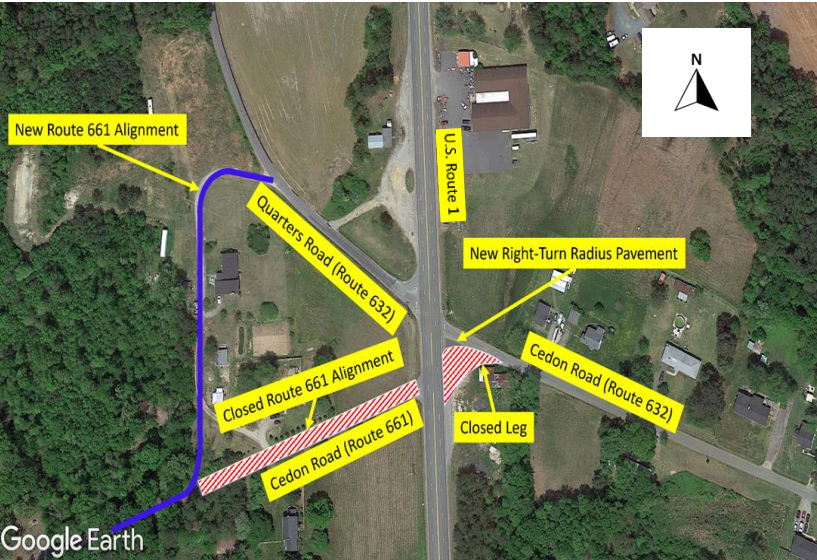
U.S. Route 1 at Marye Road/Paige Road



- Lane Configuration Changes**
- Adding a northbound left-turn lane
 - Adding a southbound left-turn lane
 - Adjust the northbound right-turn radius

- Proposed Alternative Benefits**
- Provide safer turning areas and potential reduction of angle crashes
 - (14 angle crashes during the study period)

U.S. Route 1 at Quarters Road/Cedon Road



- Lane Configuration Changes**
- Realign Quarters and Cedon Road to remove the through movement skew
 - Acquire and upgrade private road between Quarters and Cedon Road
 - Connect new road from Cedon Road to Quarters Road and close the southeast leg of Cedon (traffic from Cedon Road will be diverted to Quarters Road)
 - Close the southeast leg of Cedon Road
 - Increase northbound right lane turn radius

- Proposed Alternative Benefits**
- Reduce Driver Confusion and improve safety

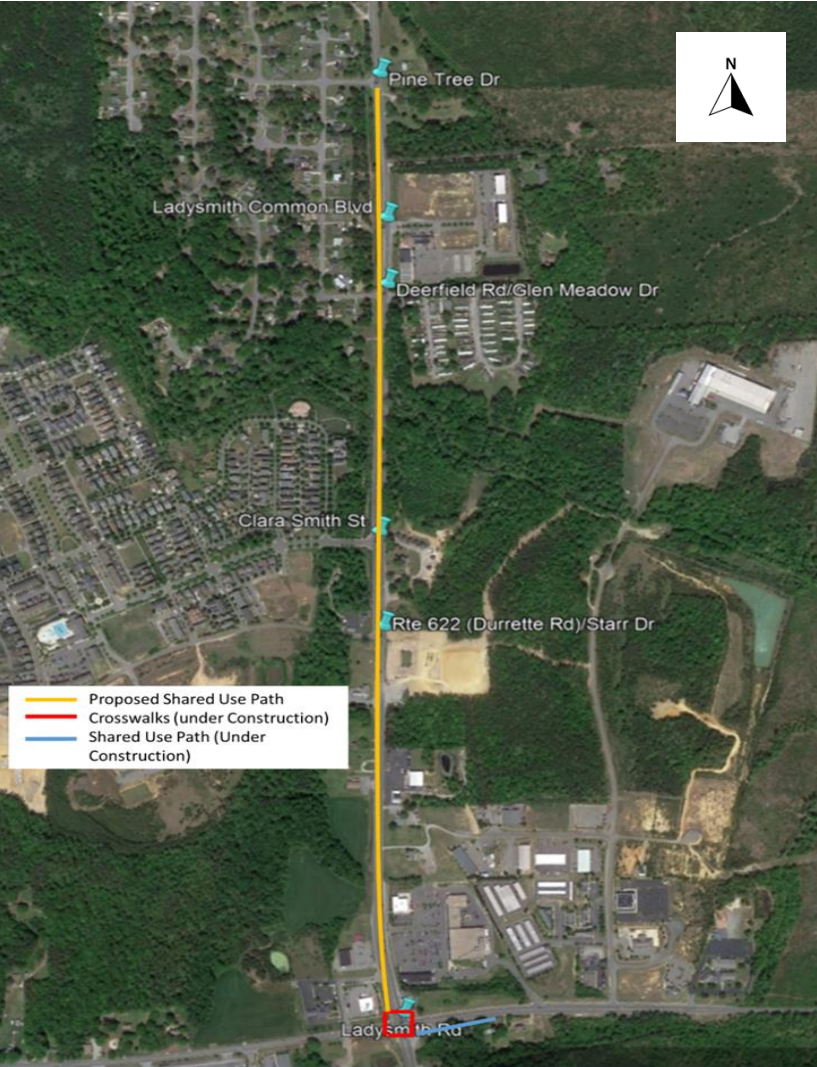
U.S. Route 1 at Lake Caroline Drive



- Lane Configuration Changes**
- Adding a northbound left-turn lane
 - Adding a southbound right-turn lane
 - Restripe the eastbound lane to separate the left- and right-turn movements

- Proposed Alternative Benefits**
- Provide safer turning areas for vehicles entering Lake Caroline Drive
 - Improve traffic operations on Lake Caroline Drive by allowing right turning vehicles to have their own lane instead of waiting for left turning vehicles

U.S. Route 1 General Corridor Improvements



- Pedestrian and Bike Improvements**
- **Shared Use Path from Pine Tree Drive to Ladysmith Road**
 - Path will tie into existing construction at Ladysmith
 - Will provide pedestrians and cyclists with safer path in the most residential and commercial area

- Corridor Wide Improvements**
- **Intersection Warning Signs**
 - Provide additional warning alerting drivers there are intersections present if there are sight distance issues
 - **Installation of Deer Warning Signs**
 - 14% of all corridor crashes were deer related
 - **Relocate the Food Lion/Brick Sign at the shopping plaza north of Ladysmith Road**
 - Nine crashes at this location, six of which were angle crashes
 - **Improved Lighting Along the Corridor**
 - 30% of all crashes along the corridor occurred during dark hours

U.S. Route 1 at Jericho Road



- Lane Configuration Changes**
- Add a storage lane for the channelized right turn lane in the westbound direction
 - Reoptimize the signal timings

- Proposed Alternative Benefits**
- Improve overall intersection traffic operations
 - Reduce congestion when there is a detour from I-95 to Route 1