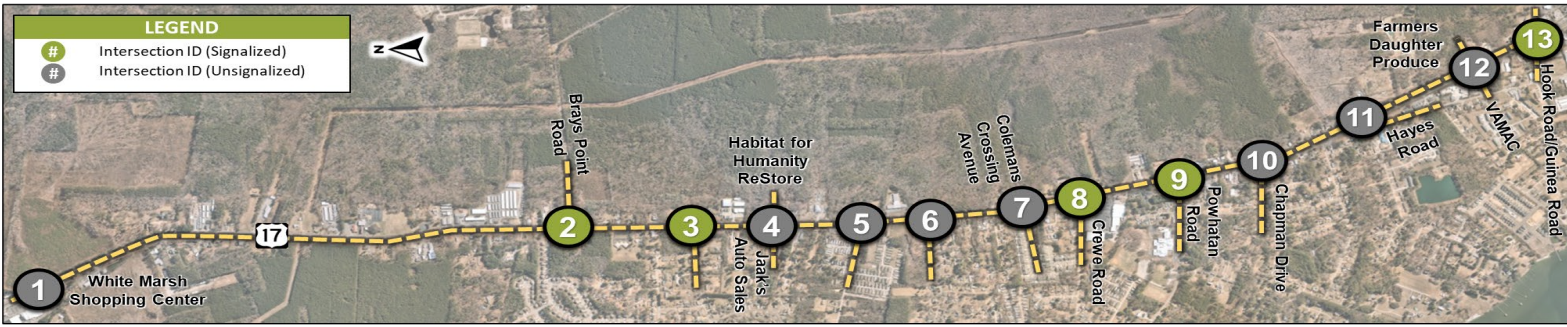




PROJECT PIPELINE NEEDS AND EXISTING CONDITIONS SUMMARY

US Route 17 from White Marsh Shopping Center to Hook Road/Guinea Road
VDOT District: Fredericksburg / Locality: Gloucester County

FR-25-03
Sheet 1 of 2



VTrans Needs

	Capacity Preservation (Keep traffic flowing smoothly)
	Bicycle Access
	Safety Improvement
	Transit Access
	Transportation Demand Management (TDM)
	Pedestrian Safety Improvement

Transit and TDM Needs

- The planned HRT MAX commuter extension will serve the Guinea Road Park and Ride lot
- Commuters use MidPenRideShare to coordinate carpools and vanpools on the peninsula
- Bay Transit Express provides on-demand transit service
- Transit Access need extends along US 17 to FR-25-02

Bike and Pedestrian Access Needs

- No bike facilities within study area
- Sidewalks present on both sides of Crewe Road at US 17
- Crosswalk crossing the south leg of US 17 at Guinea Road

Future Developments

- No finalized plans within study area for future development
- Tolls over Coleman Bridge to be removed January 1st, 2026

Operations Summary

- US Route 17 operates below the speed limit throughout the day except between 4:00 AM and 6:00 AM.
- Travel Time Index* is below 1.1 demonstrating that US 17 is a reliable facility

*Travel Time Index (TTI) is the ratio of the travel time during the referenced time period to the travel time during typical conditions. For example, a TTI of 1.5 means a trip takes 50% longer than it would in free-flow conditions

Study Purpose, Goals, and Objectives

To analyze the issues identified along US Route 17 (US 17) from White Marsh Shopping Center to Guinea Road. US 17 is a Corridor of Statewide Significance serving residents, commuters, vacationers, and is an emergency evacuation route. The objective of the study is to identify cost-effective preferred alternatives that address the documented needs.

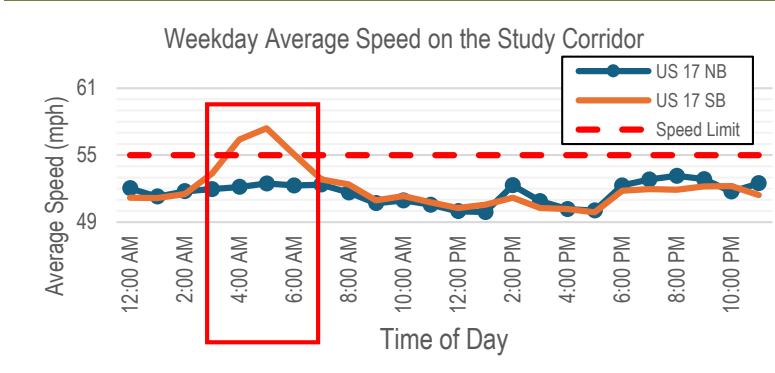
Study Facts

Major Study Intersections	8
Length of Study Area	4.6 miles
Classification	Other Principal Arterial
2023 Annual Average Daily Traffic	32,200–33,500
Speed Limit	45–55 mph

Summary of Needs Identified Through Public Outreach

- Survey date: May 7, 2025 – May 21, 2025
- Number of participants: 686
- Highest ranked needs: Capacity preservation, safety improvement, transportation demand management
- Mode(s) of travel: Personal vehicle (100%), truck or commercial vehicle (6%), cycling (5%), carpool (3%)
- Speeding/aggressive driving and sudden stops/rear end crashes sidewalks were identified by participants as the greatest safety issues in the study area

Average Speed on the Corridor





PROJECT PIPELINE NEEDS AND EXISTING CONDITIONS SUMMARY

US Route 17 from White Marsh Shopping Center to Hook Road/Guinea Road

VDOT District: Fredericksburg / Locality: Gloucester County

FR-25-03

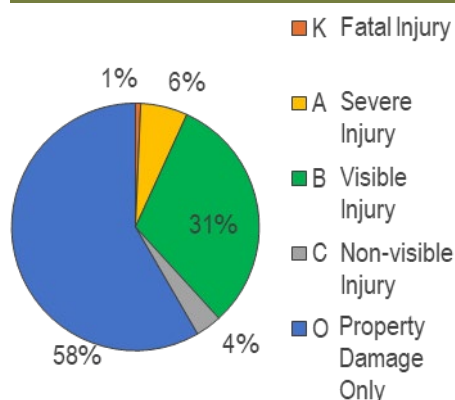
Sheet 2 of 2

Safety Needs

- The only fatalities in the study area occurred at Crewe Road in 2024
- Angle collisions account for 50% of fatal and injury (KABC) crashes, and rear end collisions for 28% of injury crashes
- The highest density of crashes occurred at the five signalized intersections and at Hayes Road, Fields Landing Road, and Woodville Road

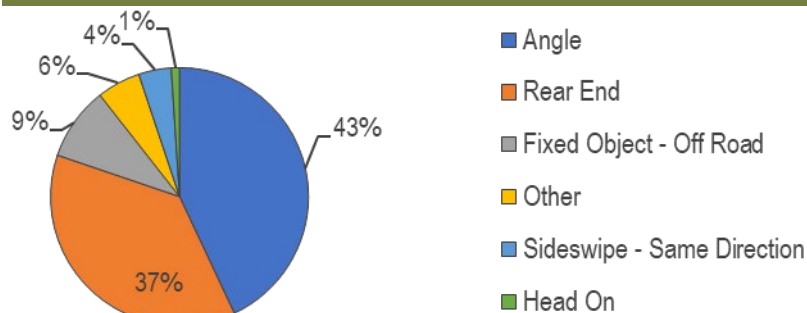
Crash Severity

293 Total Crashes (2020 – 2024)



Crash Type

293 Total Crashes (2020 – 2024)



Proposed Solutions to Evaluate in Phase 2

Operations Improvements

- 1 White Marsh shopping center right-in/right-out and southbound left-turn lane
- 2 Modify flashing yellow arrow (FYA)
- 3 Lane reconfiguration
- 4 Modify subpeak timings; preemption

Safety Improvements

- 1 Directional median
- 2 Signal ahead warning sign
- 3 Continuous Green-T (CGT)
- 4 Access management
- 5 Turn lane removal or median closure

Pedestrian, Bicycle, Transit, TDM Improvements

- 1 Pedestrian signals and crosswalks
- Shared-use path
 - Extend HRT MAX service to Gloucester Courthouse

