

PROJECT PIPELINE NEEDS AND EXISTING CONDITIONS SUMMARY

Lightfoot Road and Mooretown Road

VDOT District: Hampton Roads / Locality: York County

HR-25-05

Sheet 1 of 2



VTrans Needs

	Bicycle Access
	Transit Access
	Safety Improvement
	Pedestrian Safety Improvement
	Transportation Demand Management (TDM)
	Pedestrian Access

Study Purpose, Goals, and Objectives

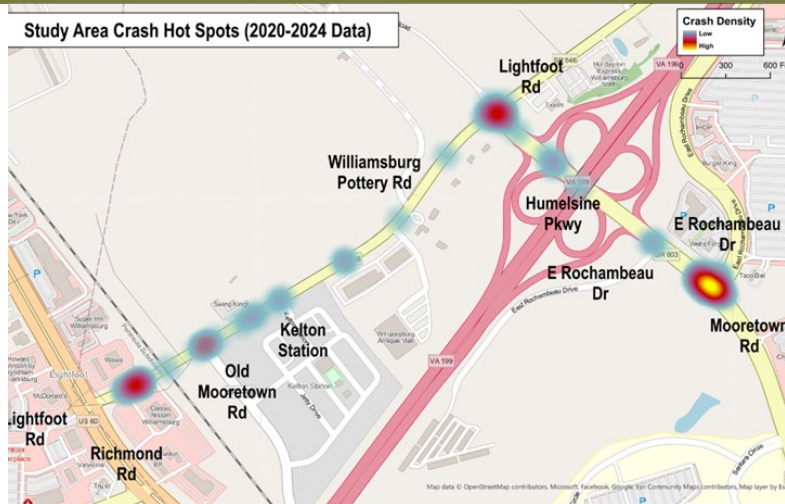
To analyze the operational and safety issues identified at the intersection of Lightfoot Road (Route 646) and Mooretown Road (Route 603), with a focus on providing enhanced bicycle, pedestrian and transit access, transportation demand management, safety improvements, and pedestrian safety improvement.

Study Facts

Major Study Intersections	3
Length of Study Area	0.8 mile(s)
Classification	Major Collector
[2023] AADT (Average Annual-) Lightfoot Road	11,260
-Daily Traffic) Mooretown Road	8,657
Speed Limit	35-45 mph

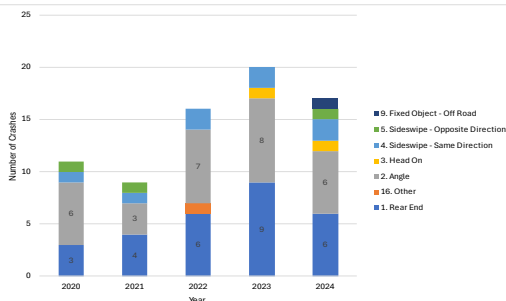
Safety Needs

- 73 total crashes have occurred within the study area of Mooretown Road and Lightfoot Road in the years of 2020-2024.
- The intersection of Mooretown Rd and Rochambeau Drive had the most crashes out of all the intersections within the study area with 26 crashes.
- Most of the crashes were angle crashes and property damage only.
- There has been zero pedestrian crashes within the study area.
- One fatal crash has occurred within the study limits between 2020-2024.



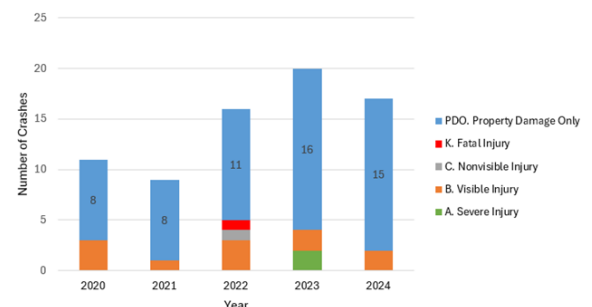
Crash Type

73 Total Crashes (2020 – 2024)



Crash Severity

73 Total Crashes (2020 – 2024)





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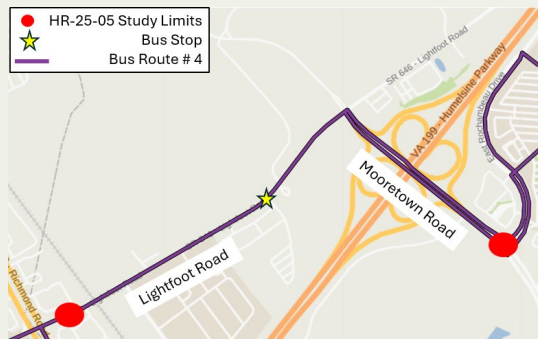
Sheet 2 of 2

Operations Summary

- Congestion at the intersection of Lightfoot Road and Mooretown occurs during the PM peak periods.
- Railroad tracks are located near the intersection of Lightfoot Road at Old Mooretown Road. Long queues were observed in the eastbound and westbound directions.
- Congestion and weaving issues at the intersection of Mooretown Road and Rochambeau Drive. During the field visit it was observed that vehicle turning right onto Mooretown Road were not yielding, creating merging issue for driver attempting to merge onto Route 199.

Transit and TDM Needs

- There was one transit stop within the study area. A Williamsburg Area Transit Authority (WATA) routes 4 bus stop on Lightfoot Road near the Williamsburg Antique Mall.
- Transit access will be accommodated in the proposed changes to the study corridor.



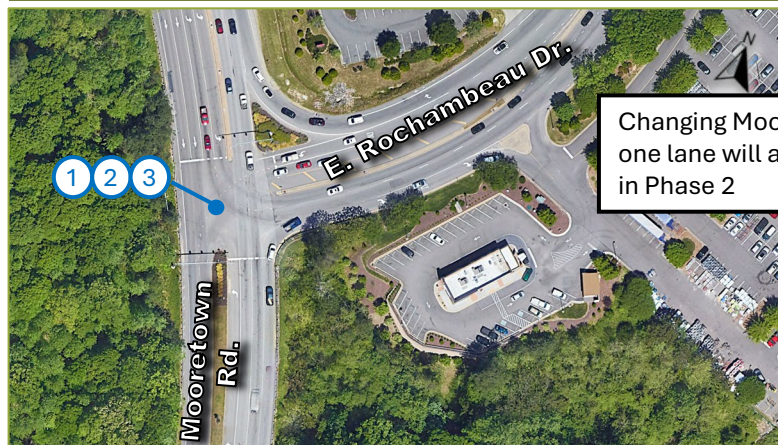
Bike and Pedestrian Access Needs

- Bike and pedestrian access priority along Lightfoot Road and Mooretown Road.
- Sidewalk at the intersection of Lightfoot road and Kelton station exist but it does not connect to any facilities. There is a bike lane that starts at the intersection and travels in the westbound direction, however, there is no guide sign.
- In the southbound direction of the intersection of Mooretown Road and Rochambeau Drive, there is a bike lane that starts just past the intersection. In addition, there is a bike lane that runs in the westbound direction; however, the pavement markings are faded.
- Lightfoot Road and Mooretown Road are in the top 5% of VDOT Pedestrian Safety Action Plan (PSAP) priority corridors

Summary of Needs Identified Through Public Outreach

- Survey date: May 14 – May 30, 2025
- Number of participants: 742
- Highest ranked needs: Reducing traffic congestion, Corridor safety/ intersection safety, proper pavement marking and signage
- Difficulty weaving/ merging and sudden stopping/rear end crashes were identified by participants as the greatest safety issues in the study area.

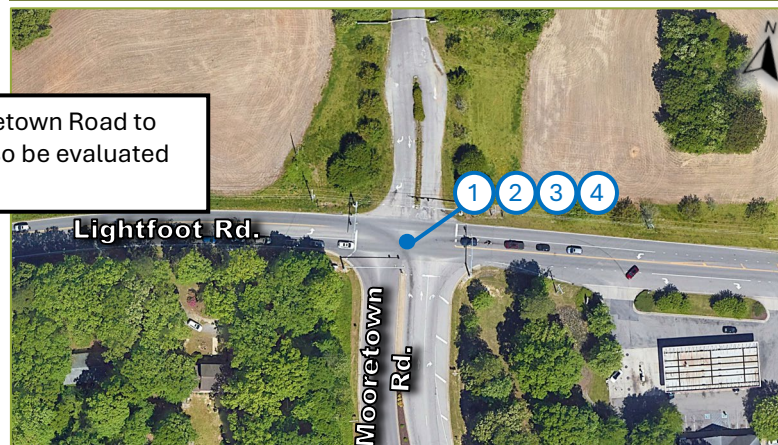
Proposed Solutions to Evaluate in Phase 2



Operations/Safety Improvements

- | | |
|-------------------------|----------------------|
| ① Roundabout | ③ Continuous Green T |
| ② Modified Conventional | |

Proposed Solutions to Evaluate in Phase 2



Operations/Safety Improvements

- | | |
|-------------------------|------------------------------|
| ① Roundabout | ③ Quadrant Left (North-East) |
| ② Modified Conventional | ④ Quadrant Left (North-West) |