



PROJECT PIPELINE NEEDS AND EXISTING CONDITIONS SUMMARY

Route 419 (Electric Road) from Starkey Road to Springwood Park Drive
VDOT District: Salem / Locality: Roanoke County

SA-25-06
Sheet 1 of 3



Study Purpose, Goals, and Objectives

To analyze the operational and safety issues identified along Route 419 (Electric Road) from Starkey Road to Springwood Park Drive, with a focus on identified needs related to roadway & pedestrian safety, capacity preservation, multi-modal accessibility/connectivity (pedestrian, bicycle & transit), and transportation demand management (TDM) needs.

VTrans Needs

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

Study Facts

Major Study Intersections	4
Length of Study Area	1.27 miles
Classification	Principal Arterial
[2023] AADT (Average Annual Daily Traffic)	27,900
Speed Limit	35 MPH - Starkey Rd to 0.11 miles west of Chaparral Dr 45 MPH - 0.11 miles west of Chaparral Dr to Springwood Park Dr

Operations Summary

- Westbound left-turn queues along Route 419 at Colonial Ave exceed existing turn lane storage in both the AM & PM
- Northbound & Southbound queues along Colonial Ave extend past adjacent intersections in both the AM & PM
- Vehicles exiting West Village/Promenade Park stack in the median to complete their left turns onto Route 419
- Northbound Chaparral Dr right turns experience high delays in the AM; Westbound left-turn queues to Chaparral Dr exceed existing turn lane storage in both the AM & PM

Summary of Needs Identified Through Public Outreach

- Survey date: June 2 – June 16, 2025
- Number of participants: 1,056
- Highest ranked needs: Reducing traffic congestion, intersection/corridor safety, and traffic signal timing
- Mode(s) of travel: Personal vehicle (99%), walking (7%), cycling (7%)
- Sudden stopping/rear-end crashes, speeding/aggressive driving, and not enough green time were identified by participants as the greatest safety issues in the study area

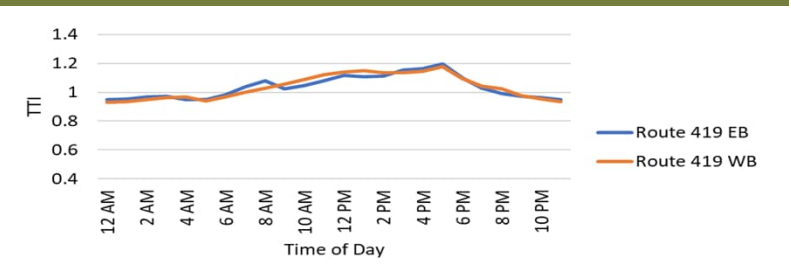
Transit and TDM Needs

- Very high transit access and TDM needs within study area

Bicycle and Pedestrian Access Needs

- Low bicycle access and very high pedestrian access VTrans needs within the study area
- No existing bicycle or pedestrian facilities along Route 419 within the study area
- Streetscape project along Route 419 from Starkey Rd to the north will add sidewalks along both sides of Route 419
- From 0.14 miles east of Colonial Ave to Springwood Park Dr ranks in the top 5% of VDOT Pedestrian and Bicyclist Safety Action Plan (PBSAP) priority corridors

Travel Time Index*



*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.

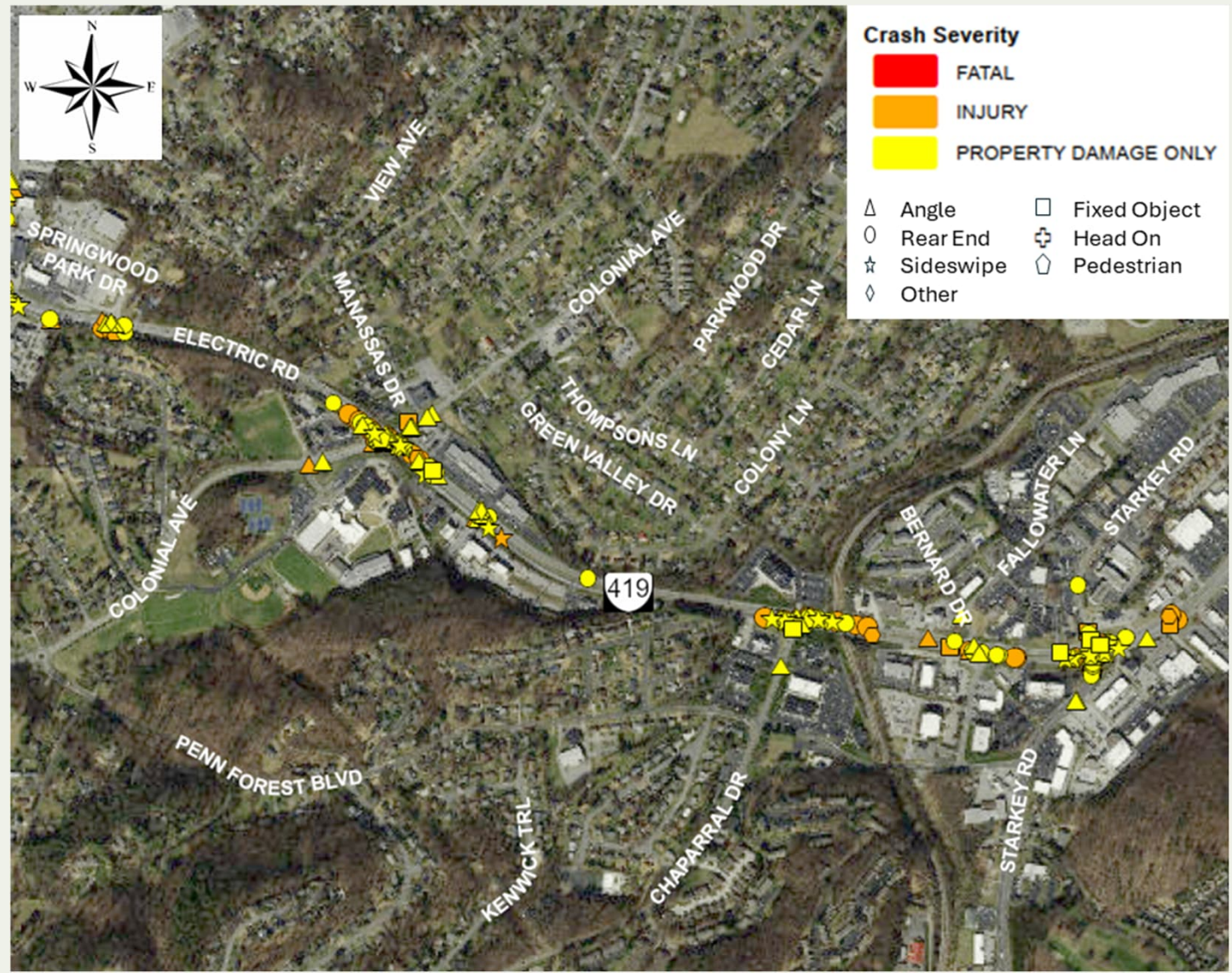


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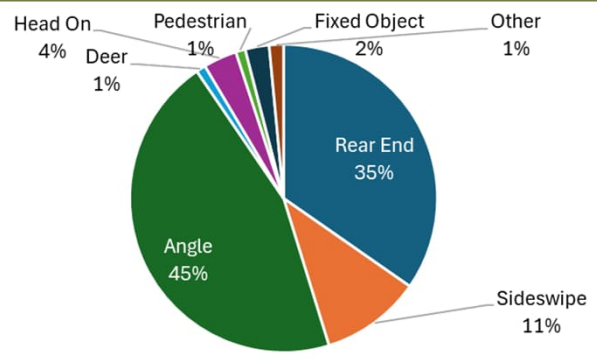
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Safety Needs

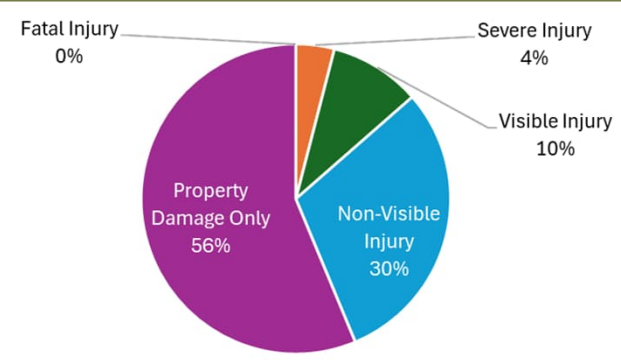
- 63 of the total 199 crashes within the study area occurred at the Colonial Avenue intersection
- The most prominent crash type along the corridor is angle crashes with 45%
- 44% of the crashes resulted in personal injuries
- Two pedestrian crashes occurred within the study area: one east of Chaparral Drive, one just east of Colonial Avenue



Crash Type 199 Total Crashes (2020 – 2024)



Crash Severity 199 Total Crashes (2020 – 2024)



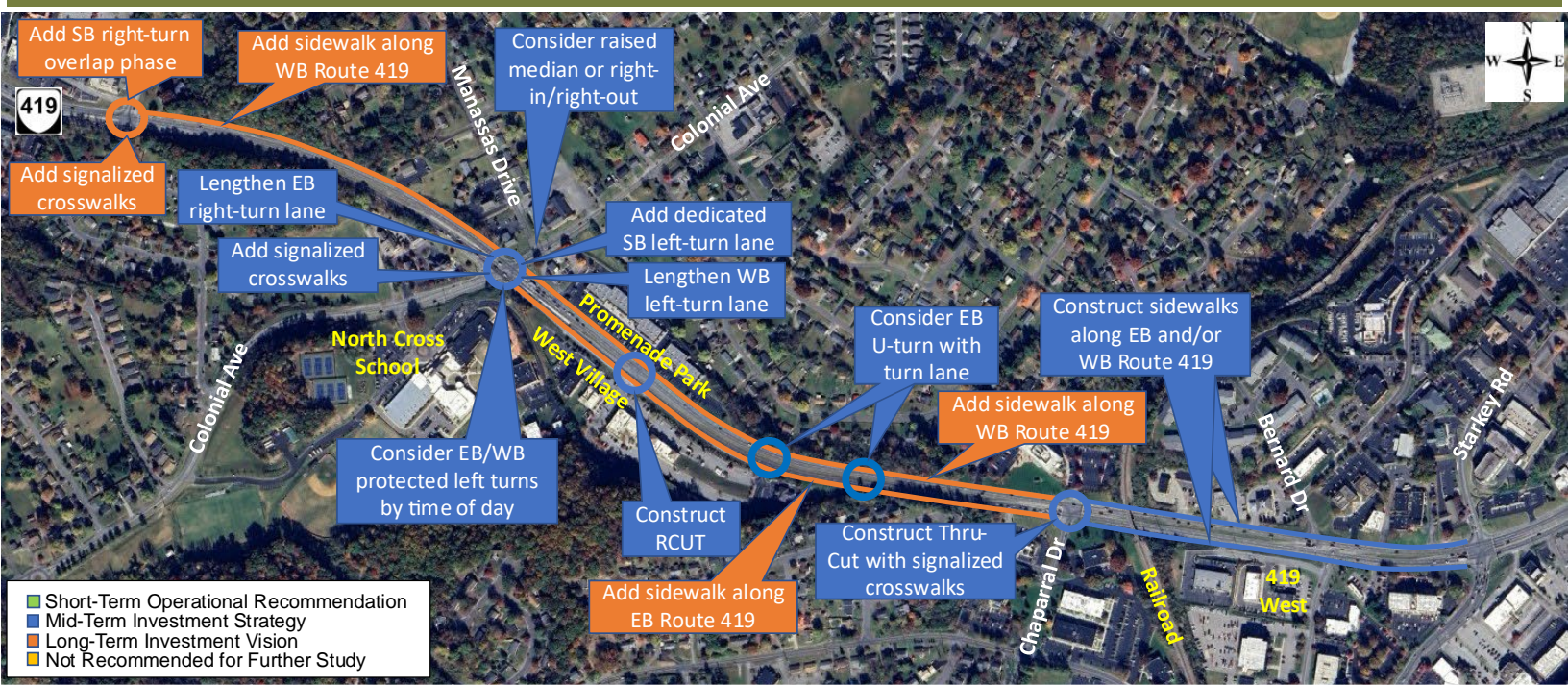


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Sheet 3 of 3

Proposed Solutions to Evaluate in Phase 2



Intersection / Segment	Improvement Type	Recommendation to be Evaluated
Intersection Improvements		
Springwood Park Drive	Long-Term	Add SB right-turn overlap phase
	Long-Term	Add signalized crosswalks
Colonial Avenue	Mid-Term	Consider EB/WB protected left turns by time of day
	Mid-Term	Lengthen WB left-turn lane on Route 419
	Mid-Term	Lengthen EB right-turn lane on Route 419
	Mid-Term	Add signalized crosswalks
	Mid-Term	Add dedicated SB left-turn lane on Colonial Ave
	Mid-Term	Consider raised median or right-in/right-out for Manassas Drive at Colonial Avenue intersection
West Village/ Promenade Park	Mid-Term	Construct RCUT with potential EB turn lane for U-turn at new median crossover
Chaparral Drive	Mid-Term	Construct Thru-Cut with signalized pedestrian crossings
Corridor Improvements		
Springwood Park Drive to Colonial Avenue	Long-Term	Install sidewalk along WB Route 419
Colonial Avenue to Chaparral Drive	Long-Term	Add sidewalks along EB and WB Route 419
Chaparral Drive to Starkey Road	Mid-Term	Construct sidewalk along EB and/or WB Route 419