



PROJECT PIPELINE NEEDS AND EXISTING CONDITIONS SUMMARY

5th Street Corridor

VDOT District: Culpeper / Locality: Albemarle County/ City of Charlottesville

CU-25-03

Sheet 1 of 2



Study Purpose, Goals, and Objectives

To re-evaluate previous studies and SMART SCALE applications along the corridor to refine and value-engineer solutions with improved benefit-to-cost potential. The study will result in updated concepts for consideration in the upcoming Round 7 of SMART SCALE.

VTrans Needs

	Safety Improvement
	Congestion Mitigation
	Transportation Demand Management
	Transit Access
	Bicycle Access
	Pedestrian Access

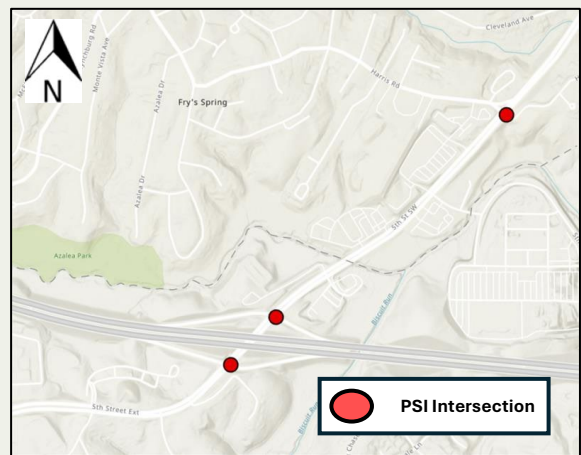
Safety Needs

- 225 crashes have occurred within the study area over the past five years.
- 48% of all crashes were angle crashes, including one fatal crash involving alcohol at 5th Street & Harris Road, followed by rear-end crashes, making up 27% of the total.
- The corridor experienced 8 pedestrian crashes and 1 bicycle crash, with 8 of the 9 resulting in injury.
- A recurring angle crash pattern involves southbound vehicles on 5th Street colliding with vehicles turning left from the I-64 EB off-ramp to go northbound on 5th Street.
- Identified hotspot locations include:
 - 5th Street at I-64 EB Ramps
 - 5th Street at I-64 WB Ramps
 - 5th Street SW at Harris Road
 - Pedestrian and bicycle crashes near the I-64 ramps and Harris Road along 5th Street

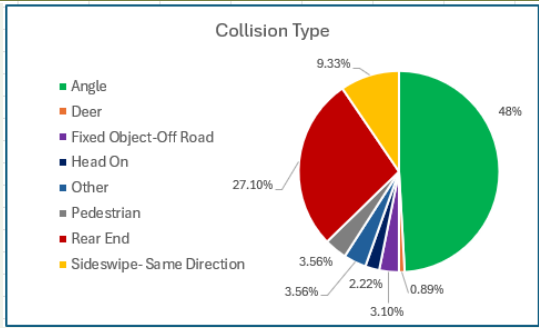
Study Facts

Major Study Intersections	I-64 & 5th St.
Length of Study Area	0.9 miles
Classification	Minor Arterial/ Other Principal Arterial
2022 AADT (Average Daily Traffic)	17,000-28,000
Speed Limit	45 mph

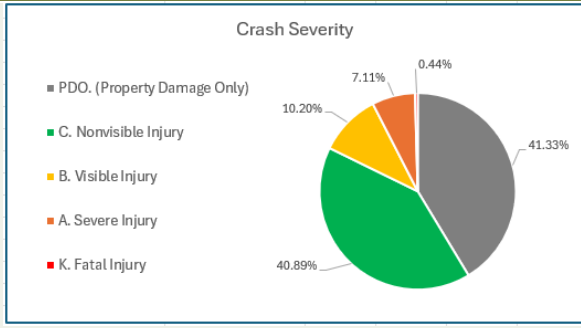
PSI Locations



Crash Type 225 Total Incidents (2020-2024)



Crash Severity 225 Total Incidents (2020-2024)





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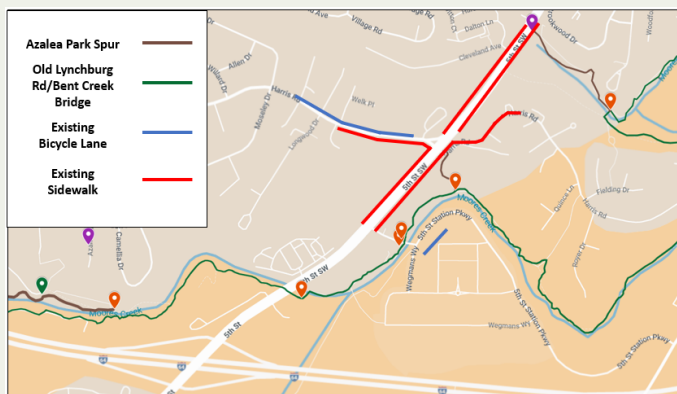
Operations Summary

- All intersections operate at LOS D or better for both AM and PM peak hours, except 5th Street & I-64 EB Ramp: LOS E in AM peak
- Individual movements operating at LOS E or worse:
- 5th Street & Pinehurst Court
 - WB Left – AM Peak (LOS E)
- 5th Street & I-64 EB Ramps
 - EB Left/Thru – AM & PM Peak (LOS E)
 - NB Thru/Right – AM Peak (LOS E)
- 5th Street & 5th Street Station
 - EB Left – AM & PM Peak (LOS E)
 - EB Thru – AM & PM Peak (LOS E)
- 5th Street & Harris Road
 - WB Left/Thru/Right – AM Peak (LOS E)

Level of Service by Intersection	AM	PM
5th Street & Harris Road	C	C
5th Street & 5th St. Station Pkwy	C	D
5th St. Station Pkwy & Wegmans Way	B	B
5th Street & I-64 WB On-/Off-Ramps	C	C
5th Street & I-64 EB On-/Off-Ramps	E	D
5th Street & Pinehurst Court	A	A

Bike and Pedestrian Access Needs

- Sidewalk and bicycle infrastructure is limited at the intersection of 5th Street and 5th Street Landing.
- Between 5th Street Landing and Harris Road, sidewalks are present on both sides of 5th Street but offer minimal buffer from traffic.
- The Rivanna Trail crosses 5th Street, though the crossing point is unpaved aside from the roadway itself.
- 5th Street lacks pedestrian and bicycle connectivity beyond 5th Street Landing, resulting in a multimodal gap near the I-64 interchange and further south.



Transit and TDM Needs

- Azalea Park & Ride Lot and Avon Street Ext are located less than one mile from the study corridor.
- Charlottesville Area Transit stops are located in front of the Sleep Inn on 5th Street and in front of the Wawa at 5th Street & 5th Street Station Parkway.

Summary of Needs Identified Through Public Outreach

- Survey dates: June 2nd – June 16th, 2025
- Participants: 729
- Highlighted areas of concern: congestion (83%), safety (77%), pedestrian access (58%), and bicycle access (53%).
- Safety concerns: speeding/aggressive driving (53%), running red lights (51%), insufficient/ missing crosswalks and pedestrian signal timing (49%), and sudden stopping (39%).
- The newly opened WAWA at 5th Street Station Parkway & 5th Street has significantly worsened congestion.
- Respondents expressed safety concerns and noted poor pedestrian and bike infrastructure at 5th Street & 5th Street Station Parkway, as well as 5th Street and Harris Road.
- Lack of connectivity for multimodal transportation across the 5th Street Bridge.
- Need for a separated and protected bike lane along 5th street to allow for safe multimodal transportation.

Proposed Solutions to Evaluate in Phase 2

- Implement traffic cameras to capture red light running crashes.
- Pavement marking and signage improvements, specifically at the 5th Street Station Parkway and Wegmans Way intersection.
- Evaluate/revise existing signals, particularly for left turns. Consider protected lefts and increased enforcement.
- Evaluate shared-use path options
 - Relocation of shared-use path (ensure connectivity to existing paths)
 - Keep walking path across diverging diamond intersection (create a recycled plank boardwalk)