





# GREENVILLE AVENUE (US 11) CORRIDOR IMPROVEMENT STUDY

**Public Information Meeting** 

STARS VDD

## **VDOT STARS PROGRAM OVERVIEW**

Staunton Augusta **Wavnesboro** Metropolitan Planning Organization

- Strategically Targeted Affordable Roadway Solutions
- Safety and Operational Focus
- Multi-modal Considerations (Pedestrian, Transit, Bicycles)
- Collaborative Study Team
- Funding Application Ready Recommendations (Smart Scale)













# Purpose of Today's Public Information Meeting

Share Identified Needs of the Corridor

• Have we Captured All Needs of Corridor Users?

Present Corridor <u>Recommendations</u> for Public Feedback

 Incorporate Public Feedback to Finalize Study for Locality Consideration of Adoption



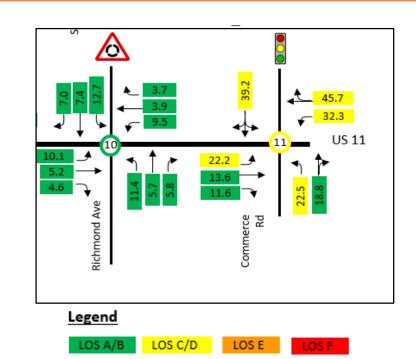
# STUDY CORRIDOR





# NEEDS OF THE CORRIDOR — VEHICLE OPERATIONS

- PM Peak Hour = Highest volumes in both directions
- Unacceptable conditions limited to the Richmond Ave and Commerce Rd intersections and individual movements at unsignalized intersections (Ritchie Blvd)
- Traffic volumes reduce considerably at Statler Blvd (Daily traffic = 16,000 to south, 10,000 to north)

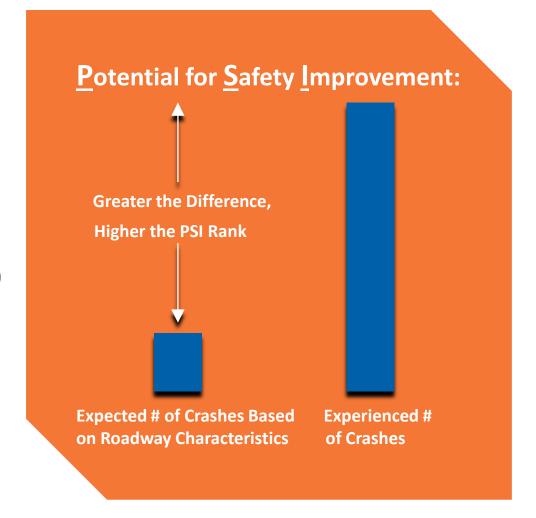






# NEEDS OF THE CORRIDOR — CRASH DATA (2013-2017)

- 215 total crashes
- 3/4<sup>th</sup> of the study segment has PSI
- Intersections within top 100 PSI:
  - US 11 at Commerce Road (Rank: 17)
  - US 11 at Barterbrook Road (Rank: 36)
  - US 11 at Richmond Avenue (Rank: 42)
- Angle collision 47%
- 55% crashes from 12 PM to 6 PM
- One crash related to fatality
- One crash involved pedestrian





- Corridor Wide Entrance Spacing Deficiency
- More Entrances Results in more Conflict Points / Crash Potential
- Reducing Conflict Point Can Result in Enhanced Safety / Better Corridor Progression

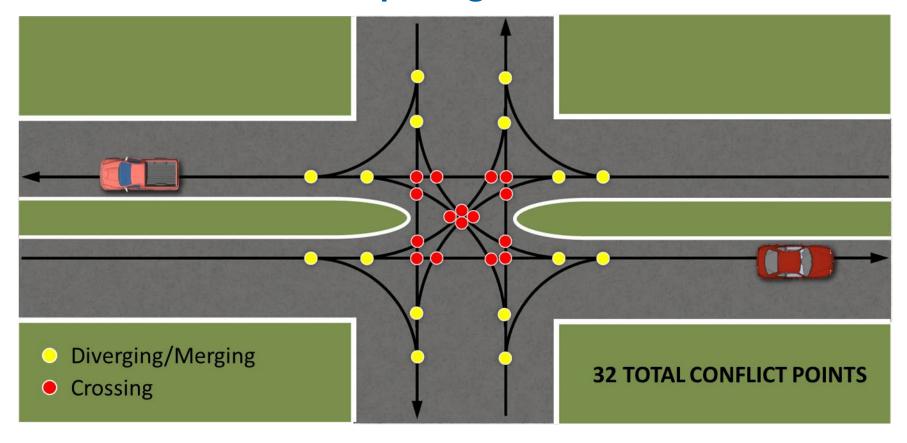


**VDOT Standards / Best Practices:** 

565' min. spacing between full access entrances along a Principal Arterial posted at 35-45 mph

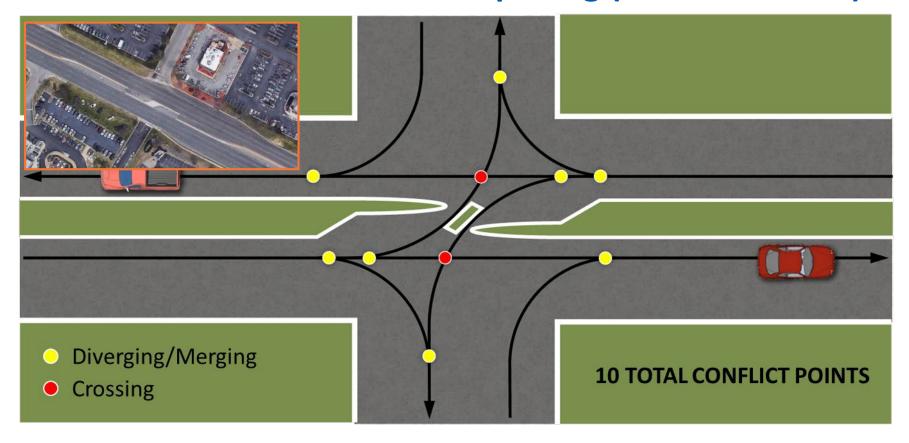


# Conflict Points – Full Median Opening



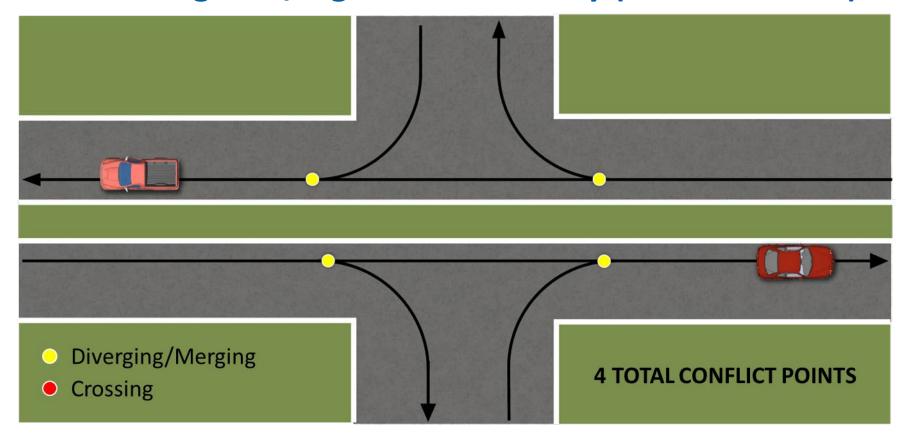


Conflict Points – Directional Median Opening (68% Reduction)





Conflict Points – Right-In/Right-Out Driveway (88% reduction)





## ADDITIONAL NEEDS OF THE CORRIDOR

- Improve existing non-motorized accommodations (ADA sidewalk requirements, improve transit stops)
- Expand the non-motorized network (bicycle facilities, pedestrian crossings)
- Aesthetic improvements (corridor serves as a city gateway)









## RECOMMENDATION DEVELOPMENT CONSIDERATIONS

Reducing Conflict Points (Focusing on Intersections)

Maintaining Access along Corridor

- Accommodating all Users of the Corridor
- Opportunities for Corridor Gateway Treatments







# **CORRIDOR WIDE RECOMMENDATIONS**

- Pedestrian Improvements
- Signal Operation Improvements
- Recommend Access Improvements as the Corridor Redevelops in the Future
- Transit Service Improvements (shelters, benches, adjustments to stop locations based on evaluation)





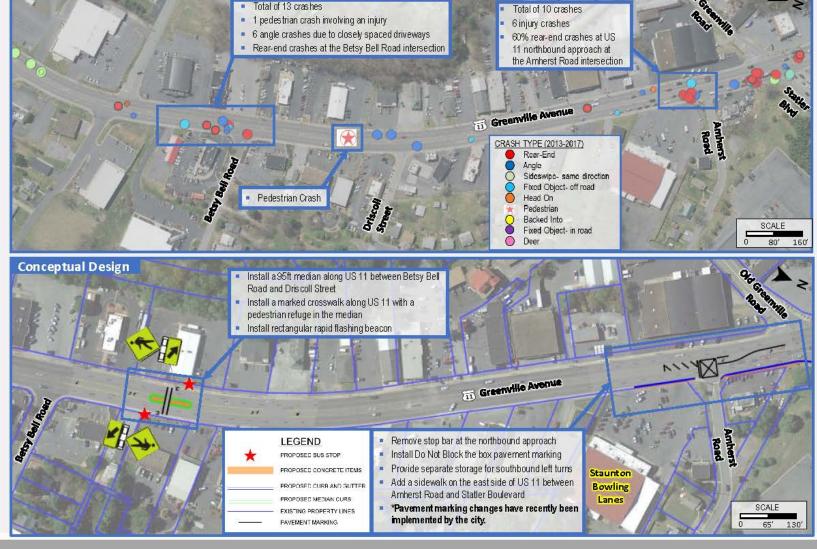




#### US 11 FROM BETSY BELL ROAD TO AMHERST ROAD

#### **Issues and Proposed Improvements**

**Existing Issues** 

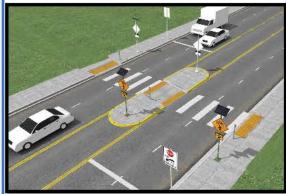


#### **Existing Issue**



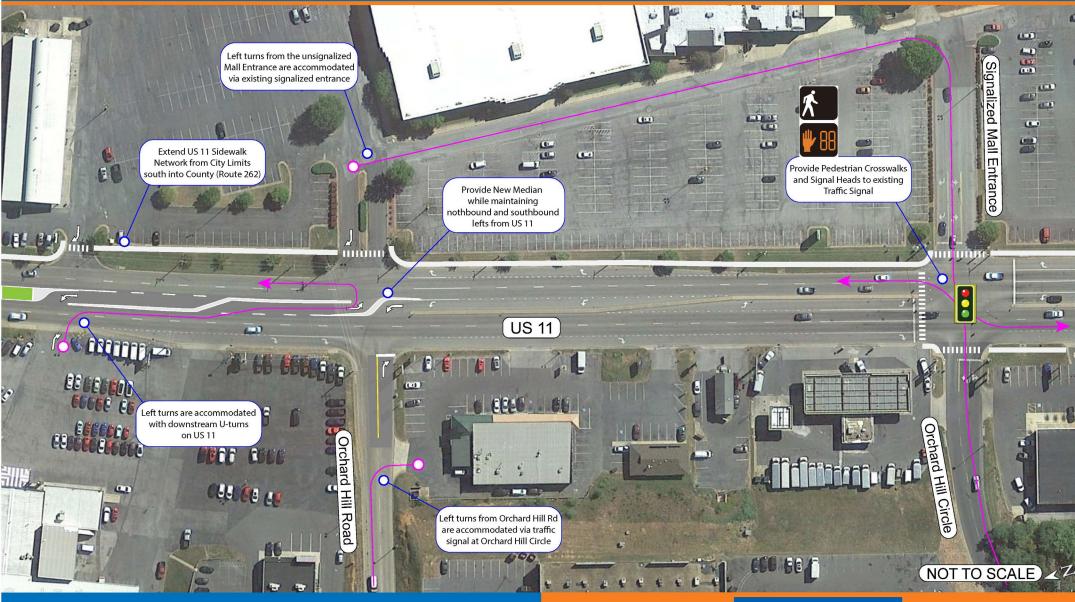
Pedestrian Crossing at Midblock

#### **Proposed Improvement**



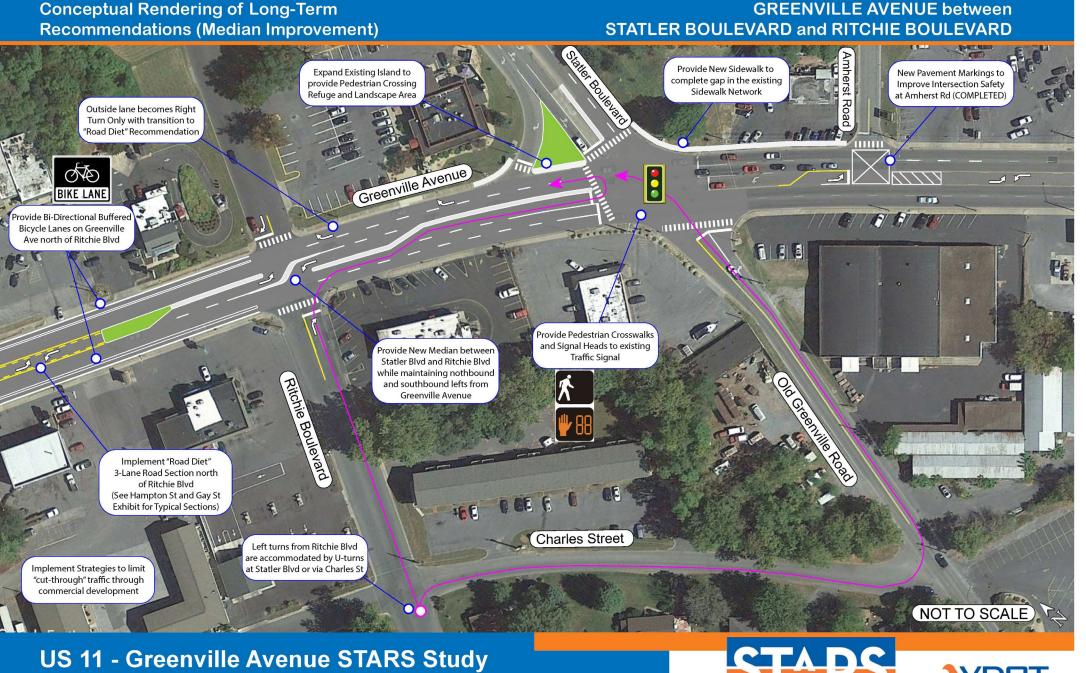
Midblock Crosswalk with a Pedestrian Refuge and Rectangular Rapid Flashing Beacon

Source: (https://nacto.org/publication/urban-bikewaydesign-guide/bicycle-signals/active-warning-beacon-for-bikeroute-at-unsignalized-intersection/)



**US 11 - Greenville Avenue STARS Study City of Staunton and Augusta County** 









#### **Conceptual Rendering of Long-Term GREENVILLE AVENUE** between **Recommendations (Road Diet) GAY STREET and HAMPTON STREET** Existing Typical Roadway Section Proposed Road Diet Typical Roadway Section Provide Pedestrian Crosswalks and Signal Heads to existing 9 Traffic Signal Ramps and Crosswalks with **BIKE LANE** upgrading pedestrian signage (RRFB to be considered at Provide Bi-Directional Buffered Bicycle Lanes on Greenville Ave Provide southbound minni Greenville Avenue Greenville Ave Right Turn Lane 28 3 1 45 61 6 Implement "Road Diet" 3-Lane Road Section Provide New Median within (Ritchie Blvd to Richmond Rd) Functional Areas of existing ntersections to enhance safety 70 6 6666 NOT TO SCALE

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# Conceptual Rendering of Long-Term Recommendations (Mini-Roundabout)

# GREENVILLE AVENUE between RICHMOND ROAD and COMMERCE ROAD



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### **NEXT STEPS**

Review Public Feedback with Study Team

Incorporate Public Comments and Finalize Study

- Present the completed Study to Staunton City Council and Augusta County Board of Supervisors for consideration of adoption
- Localities can utilize Study Recommendations to submit project applications for state funding consideration

# For more information visit VDOT's Study Page:

https://www.virginiadot.org/projects/staunton/greenville\_avenue\_corridor\_improvement\_study.asp

Contact Adam Campbell with additional questions and comments:

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# **US 11 EXISTING VOLUMES**

