



IMPLEMENTING NCDOT PROJECT PRIORITIZATION WITHIN THE PLANNING PROCESS: A CASE STUDY IN HOPE MILLS

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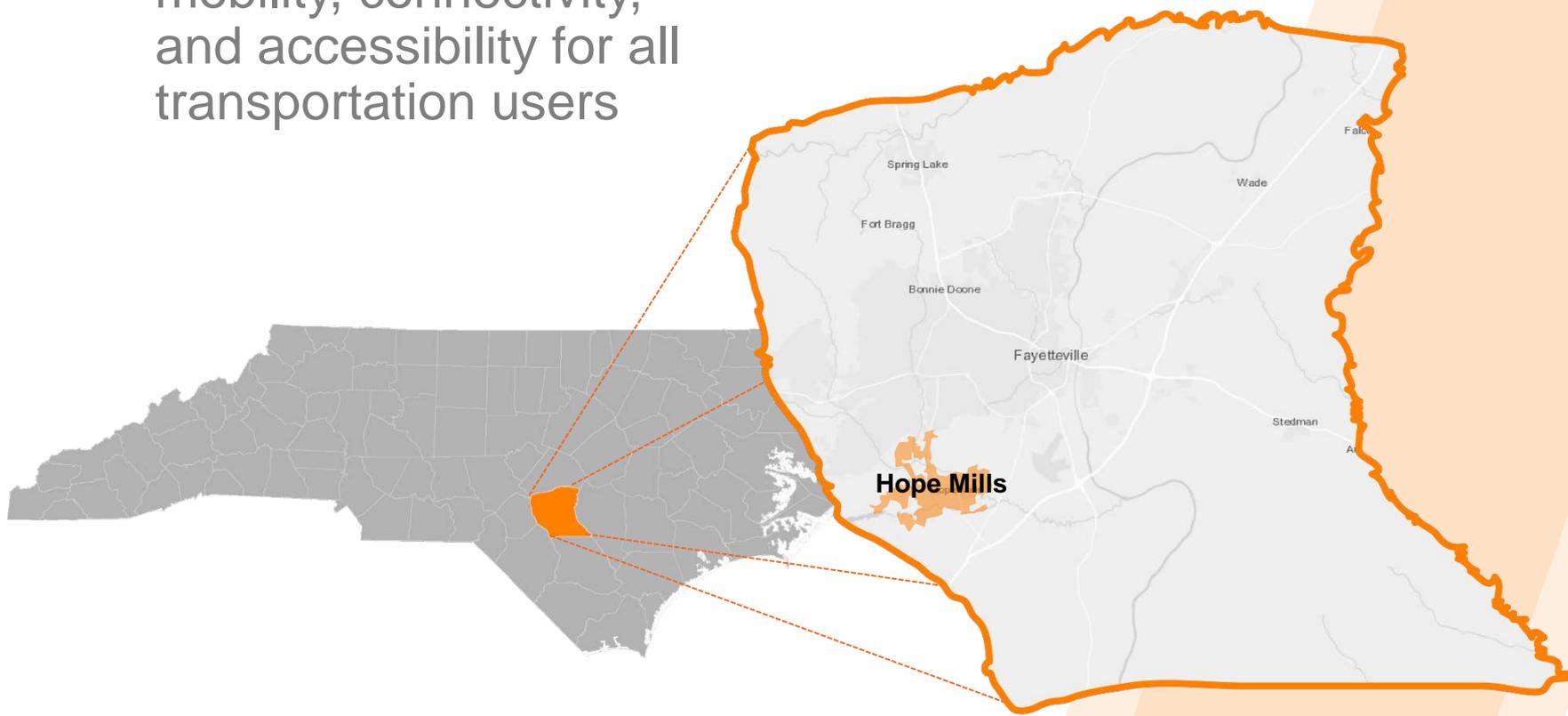


K KITTELSON
& ASSOCIATES



Project Background and Significance

- **Location:** Hope Mills
- **Focus:** Safety, mobility, connectivity, and accessibility for all transportation users

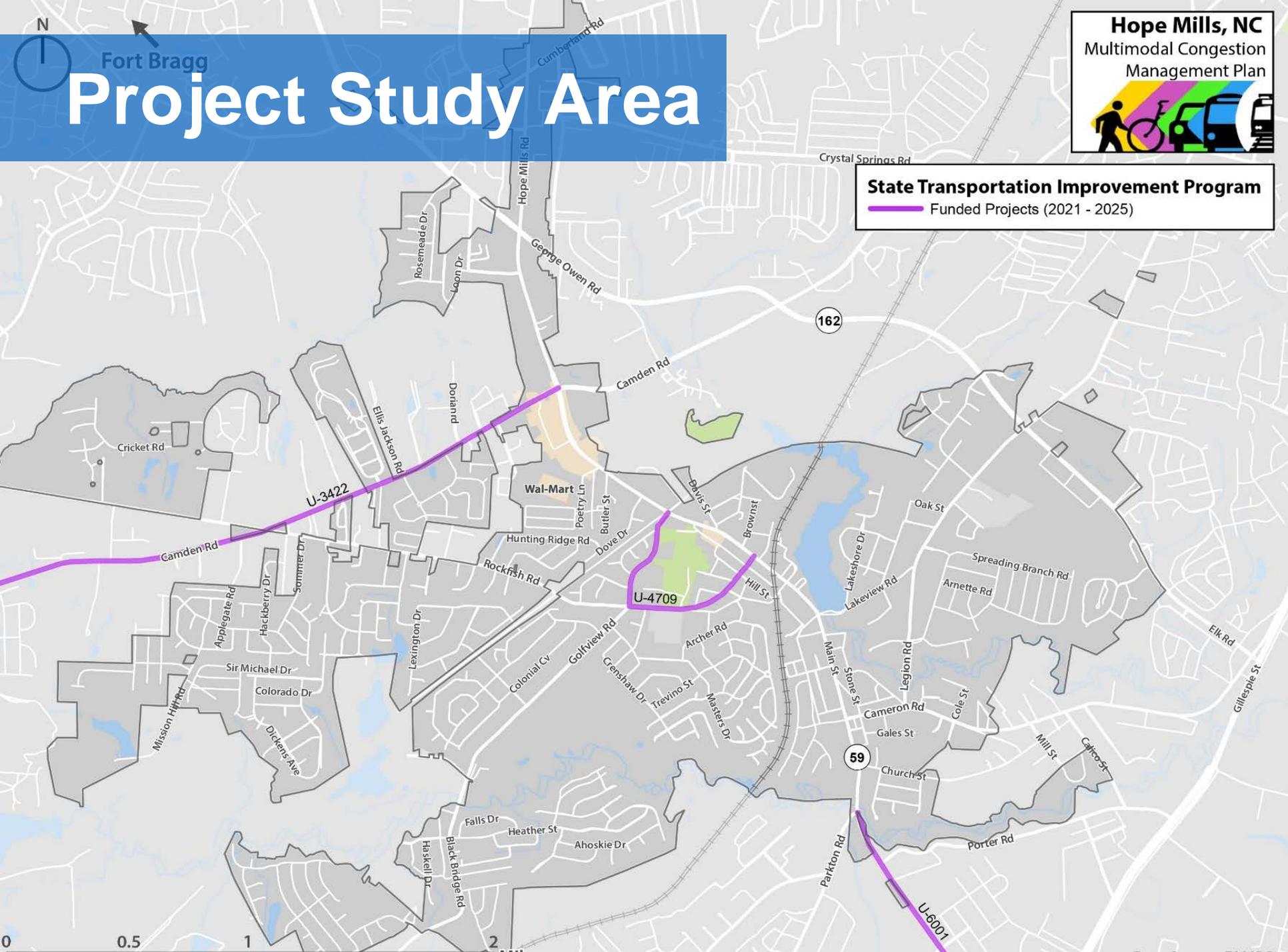


Fort Bragg

Project Study Area



State Transportation Improvement Program
Funded Projects (2021 - 2025)



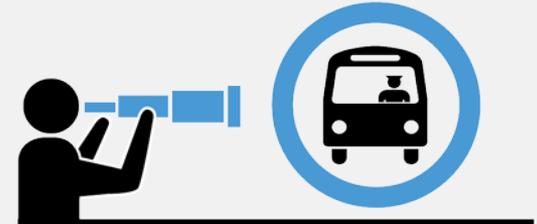
Project Goals and Objectives



MEET PEDESTRIAN MOBILITY
& ACCESSIBILITY NEEDS



MEET BICYCLE MOBILITY
NEEDS



ESTABLISH A PUBLIC
TRANSPORTATION VISION



MAINTAIN ACCEPTABLE AUTO
& FREIGHT MOBILITY



PRESERVE HISTORIC/
COMMUNITY RESOURCES AND
ENHANCE CONNECTIONS

**Make recommendations implementable
within the NCDOT process**



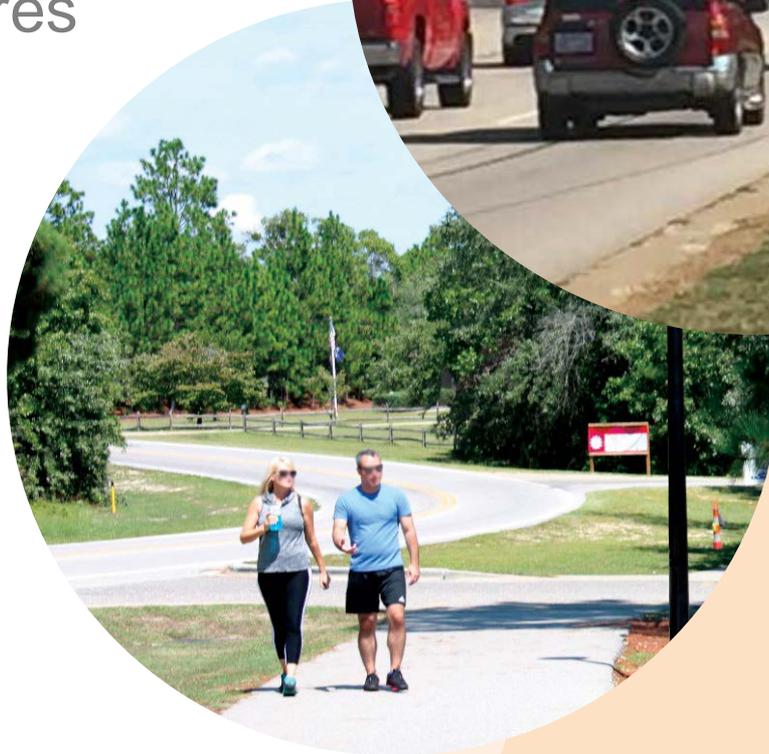
Public Engagement

- 3 public meetings to share project alternatives
- 30 and 50 attendees each
- Community feedback
 - Small group discussions
 - In-person/ online surveys

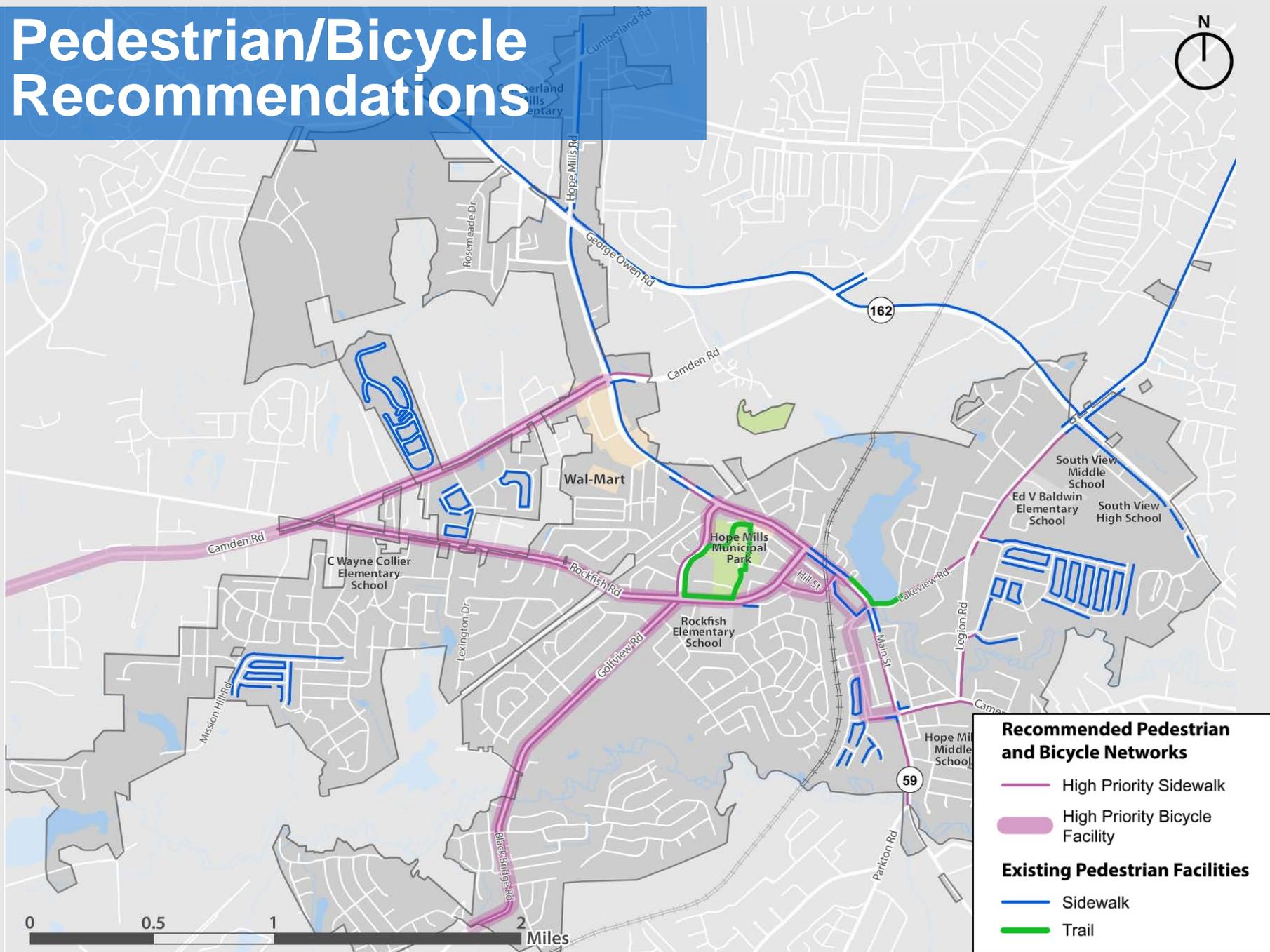


Assessment Methodology

- Three alternative types:
 - Roadways
 - Cross-sections
 - Intersection treatments
- Goals and objectives informed performance measures



Pedestrian/Bicycle Recommendations



Recommended Pedestrian and Bicycle Networks

- High Priority Sidewalk
- High Priority Bicycle Facility

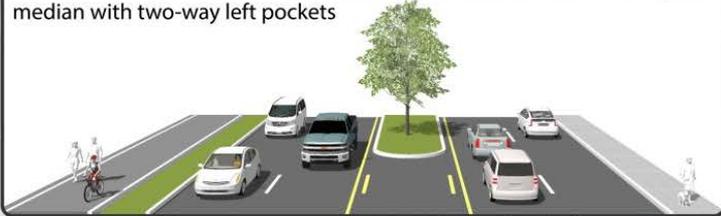
Existing Pedestrian Facilities

- Sidewalk
- Trail

Cross Section Recommendations



C. Shared use path on one side; sidewalk on other side; wide landscaped median with two-way left pockets



D. Shared use path on one side; sidewalk on the other side; narrow median



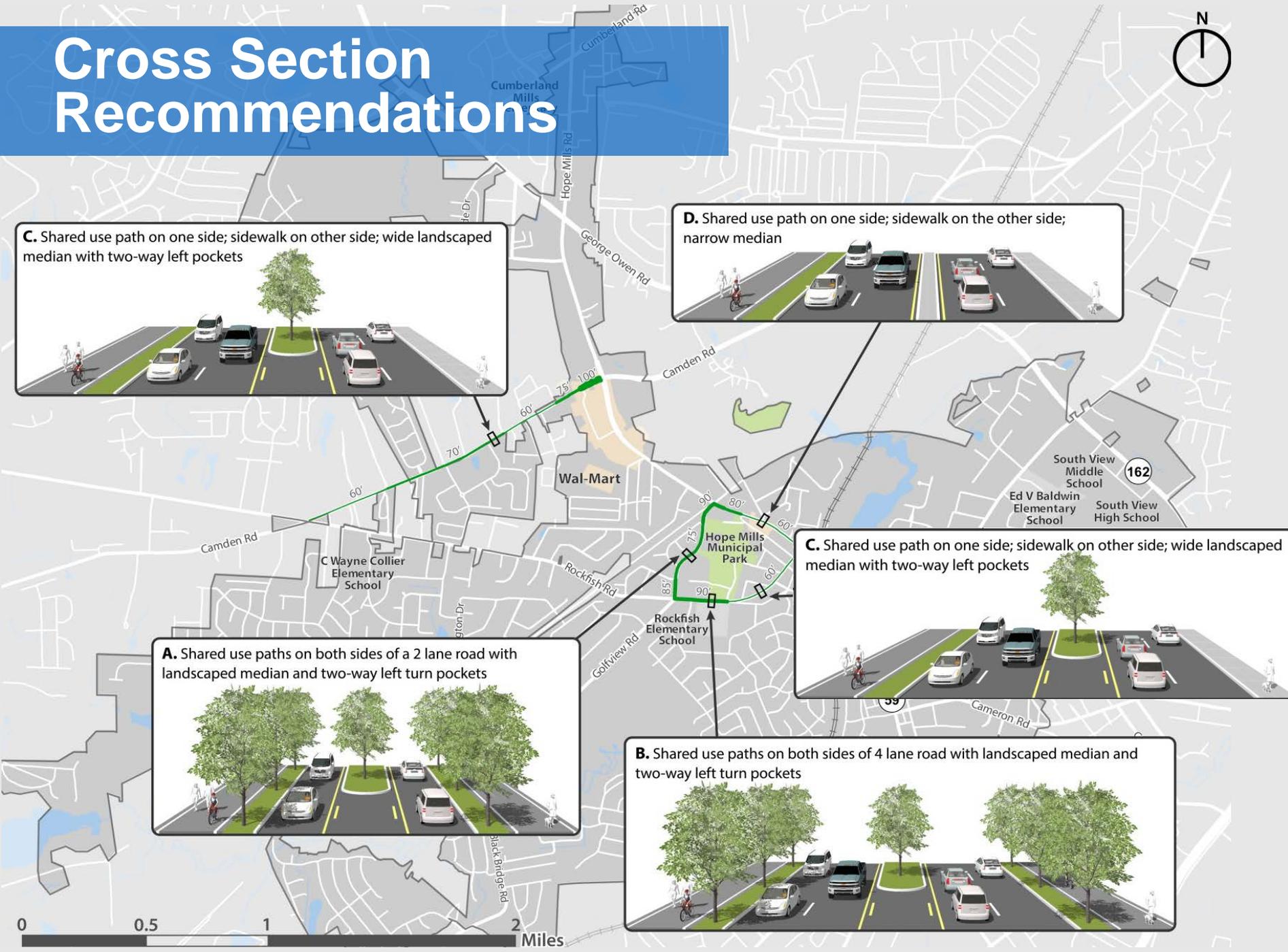
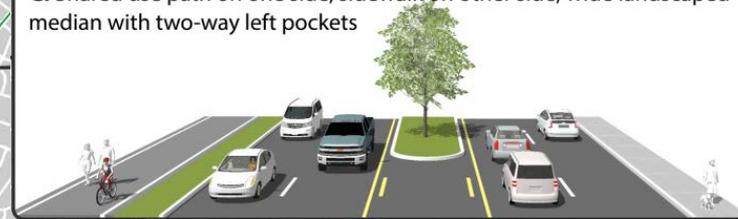
A. Shared use paths on both sides of a 2 lane road with landscaped median and two-way left turn pockets



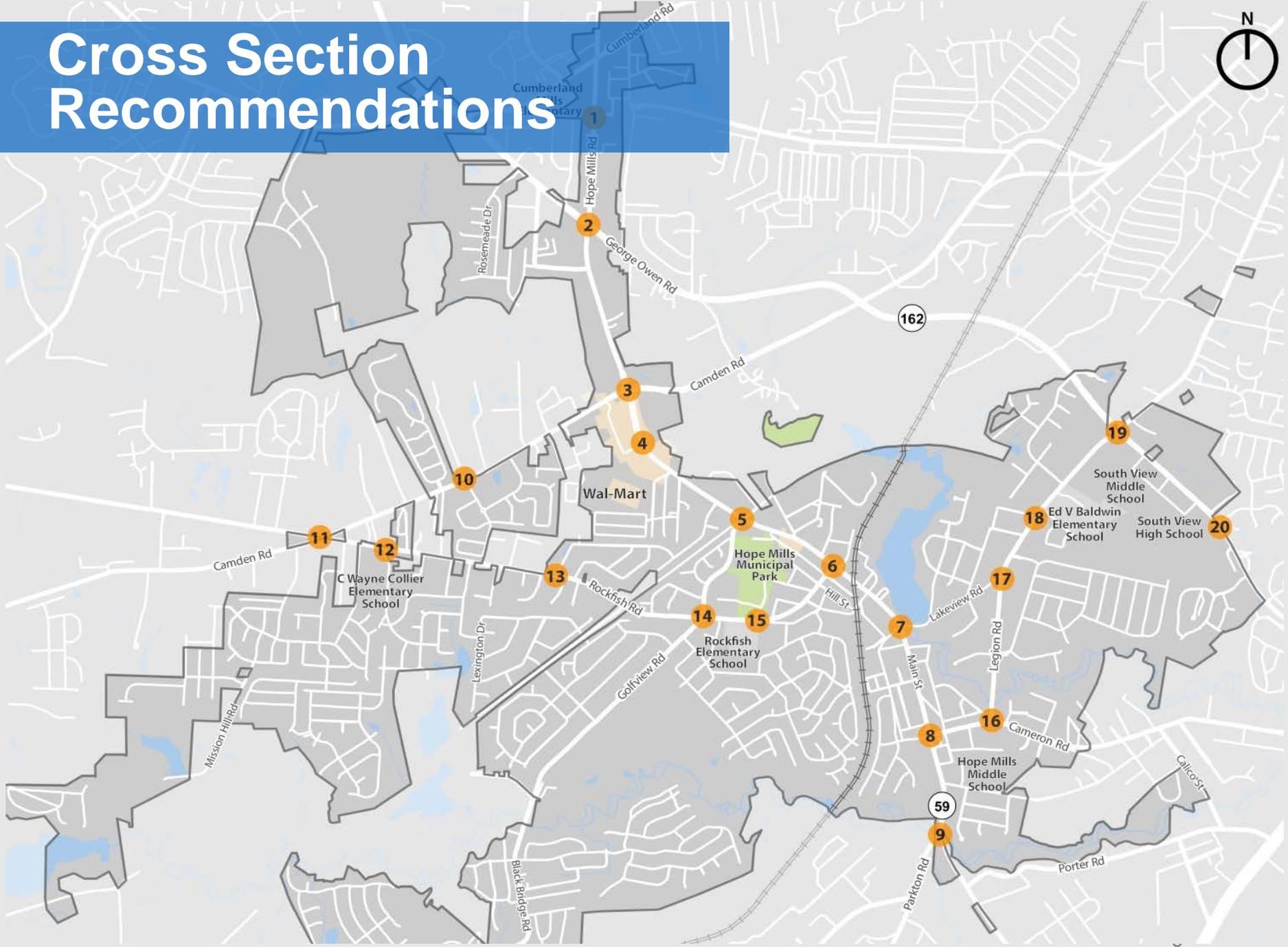
B. Shared use paths on both sides of 4 lane road with landscaped median and two-way left turn pockets



C. Shared use path on one side; sidewalk on other side; wide landscaped median with two-way left pockets



Cross Section Recommendations



Crossing Recommendations



Median Refuge Island



Curb Extension



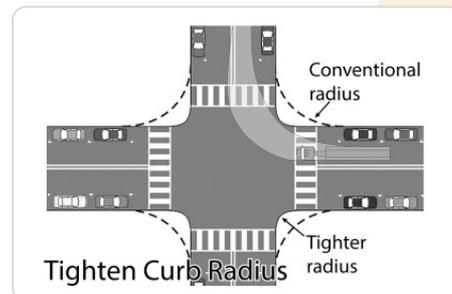
Roundabout



Refuge Island at Channelized Right Turn



Raised Crosswalk



Tighten Curb Radius

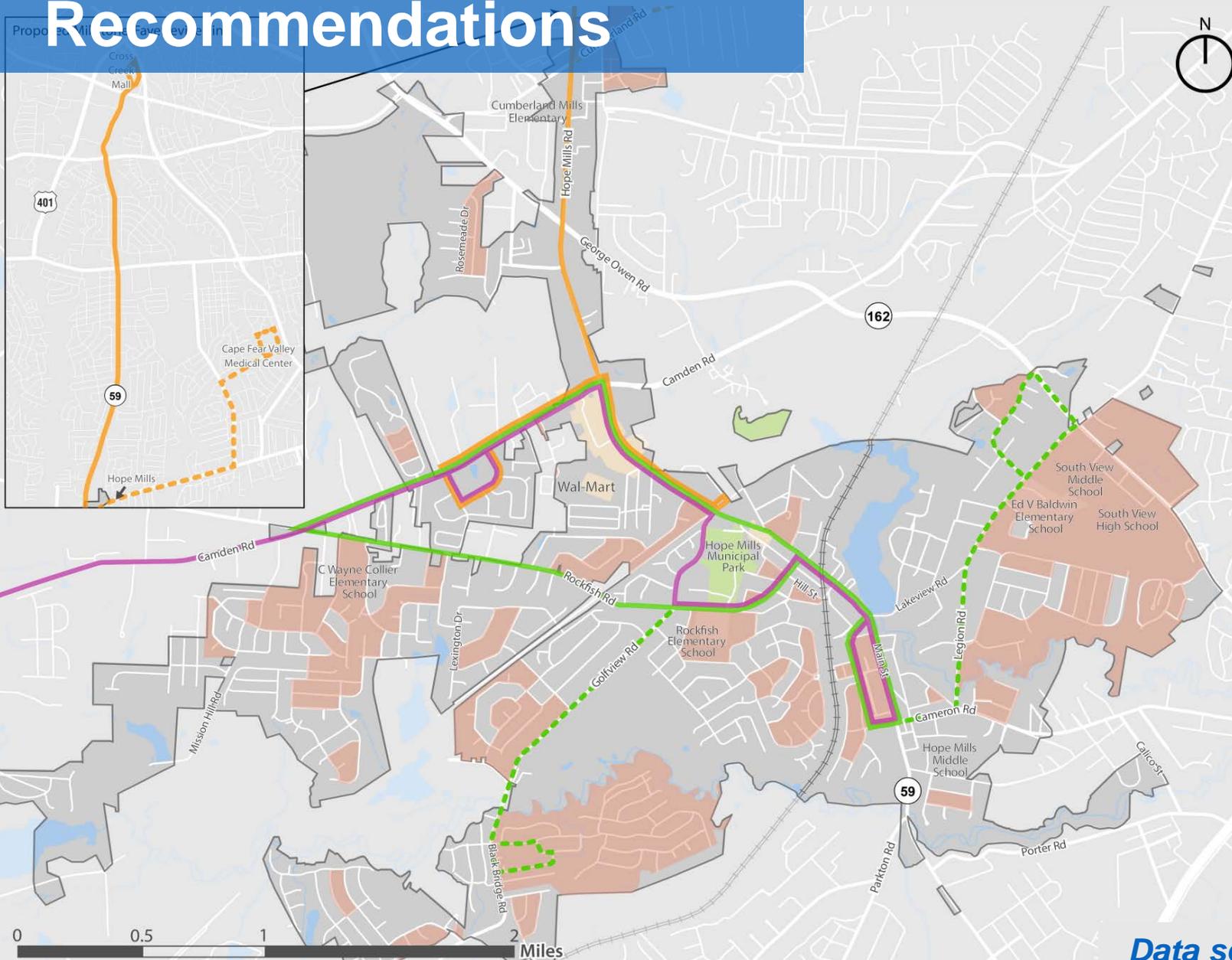


Curb Extension

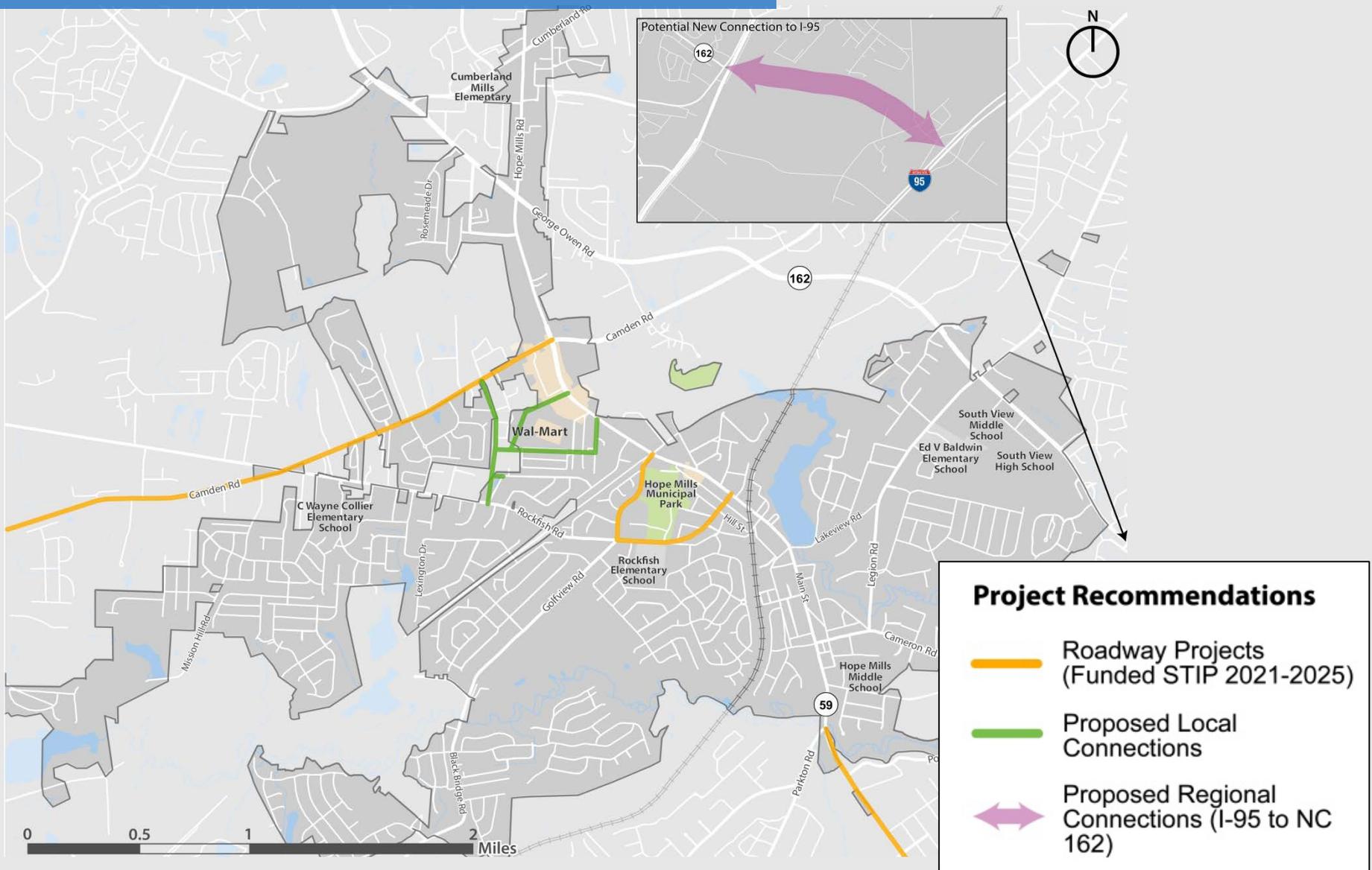


HAWK Beacon

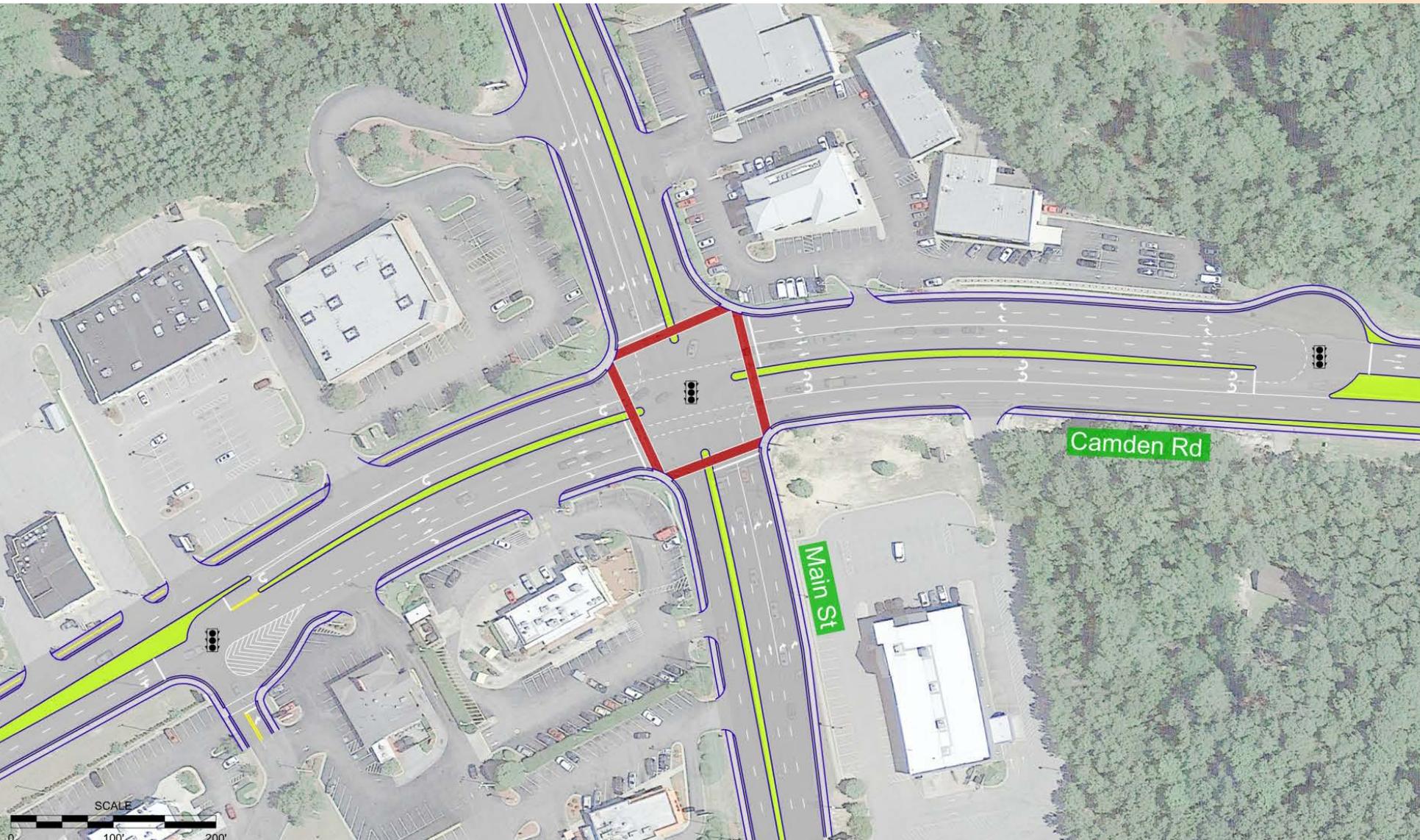
Transit Recommendations



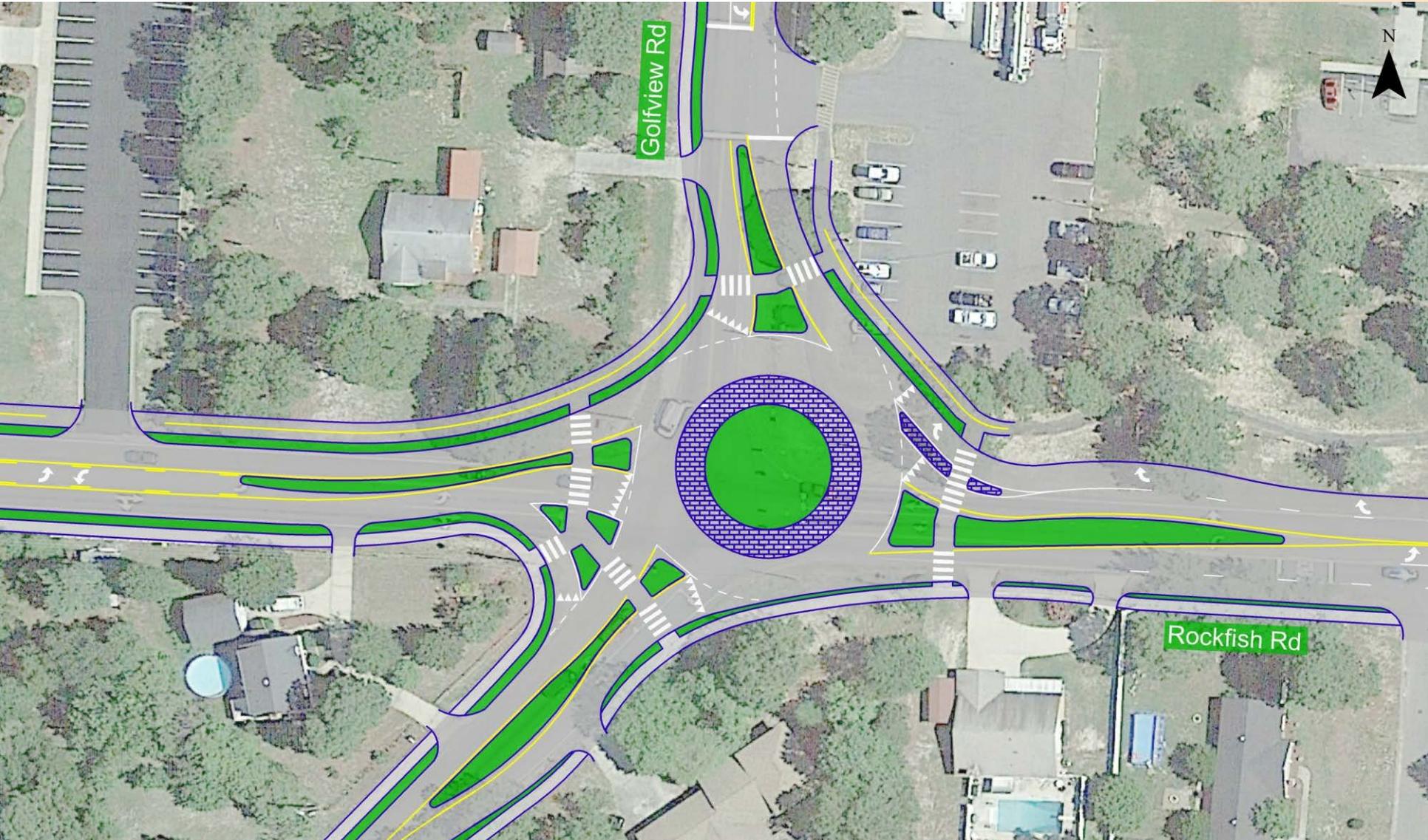
Roadway Recommendations



NC 59/Camden Road Concept



Golfview Road/Rockfish Road Concept





Project Prioritization Process and Implementation Plan

Project Prioritization and Implementation Plan

RFP

NCDOT
SPOT
process

Local input
to guide
project
prioritization



NCDOT Prioritization Process

~ \$23B 

funds for SFY18-27

SPOT P6.0 input due
approximately September 2019

40%

Statewide Mobility

Focus → Address Significant Congestion and Bottlenecks

- Selection based on 100% Data
- Projects Programmed prior to Local Input Ranking

30%

Regional Impact

Focus → Improve Connectivity within Regions

- Selection based on 70% Data & 30% Local Input
- Funding based on population within Region (7)

30%

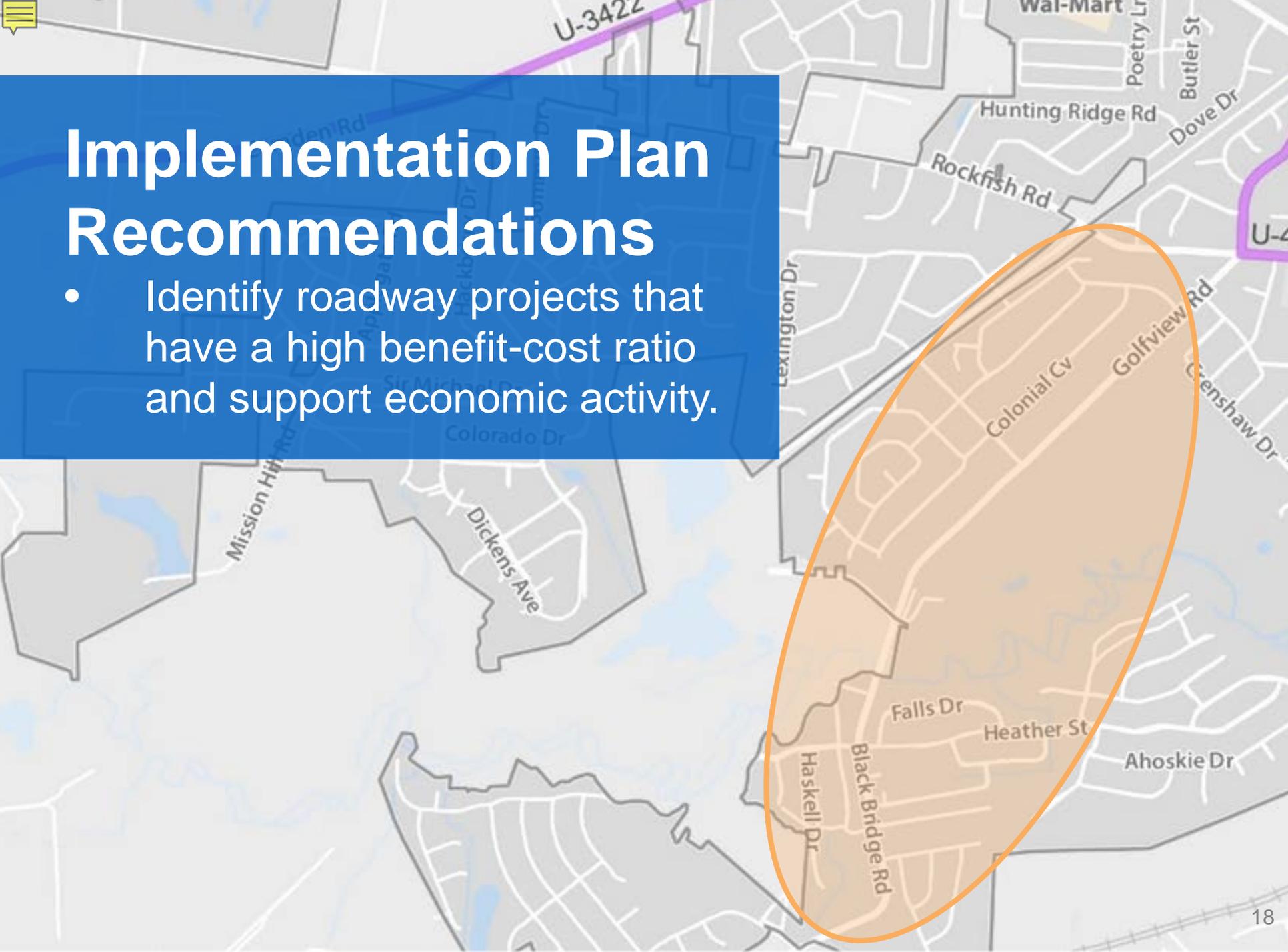
Division Needs

Focus → Address Local Needs

- Selection based on 50% Data & 50% Local Input
- Funding based on equal share for each Division (14) = ~\$42M/yr

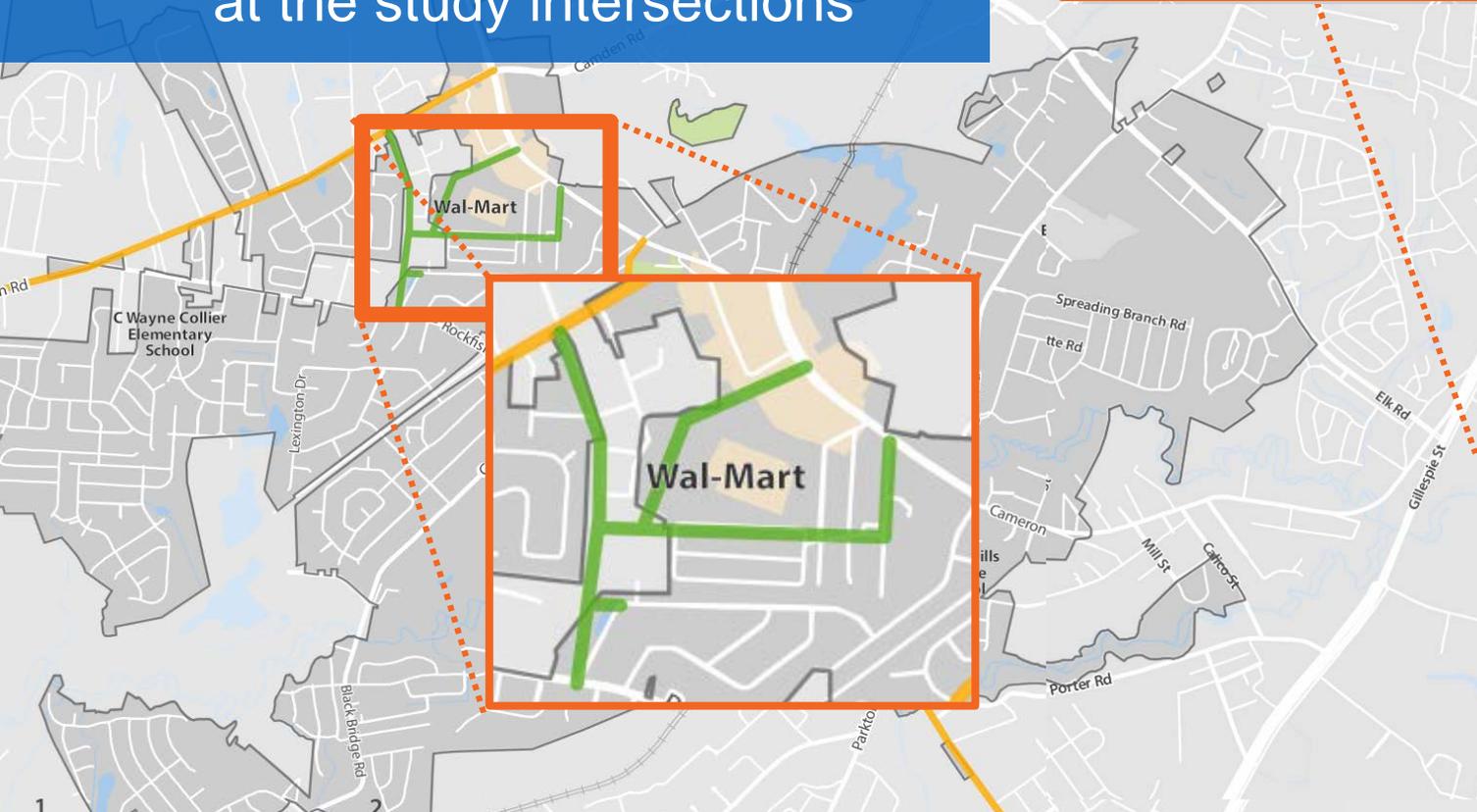
Implementation Plan Recommendations

- Identify roadway projects that have a high benefit-cost ratio and support economic activity.



Implementation Plan Recommendations

- Alternatives 2 and 3 both improve safety and mobility at the study intersections

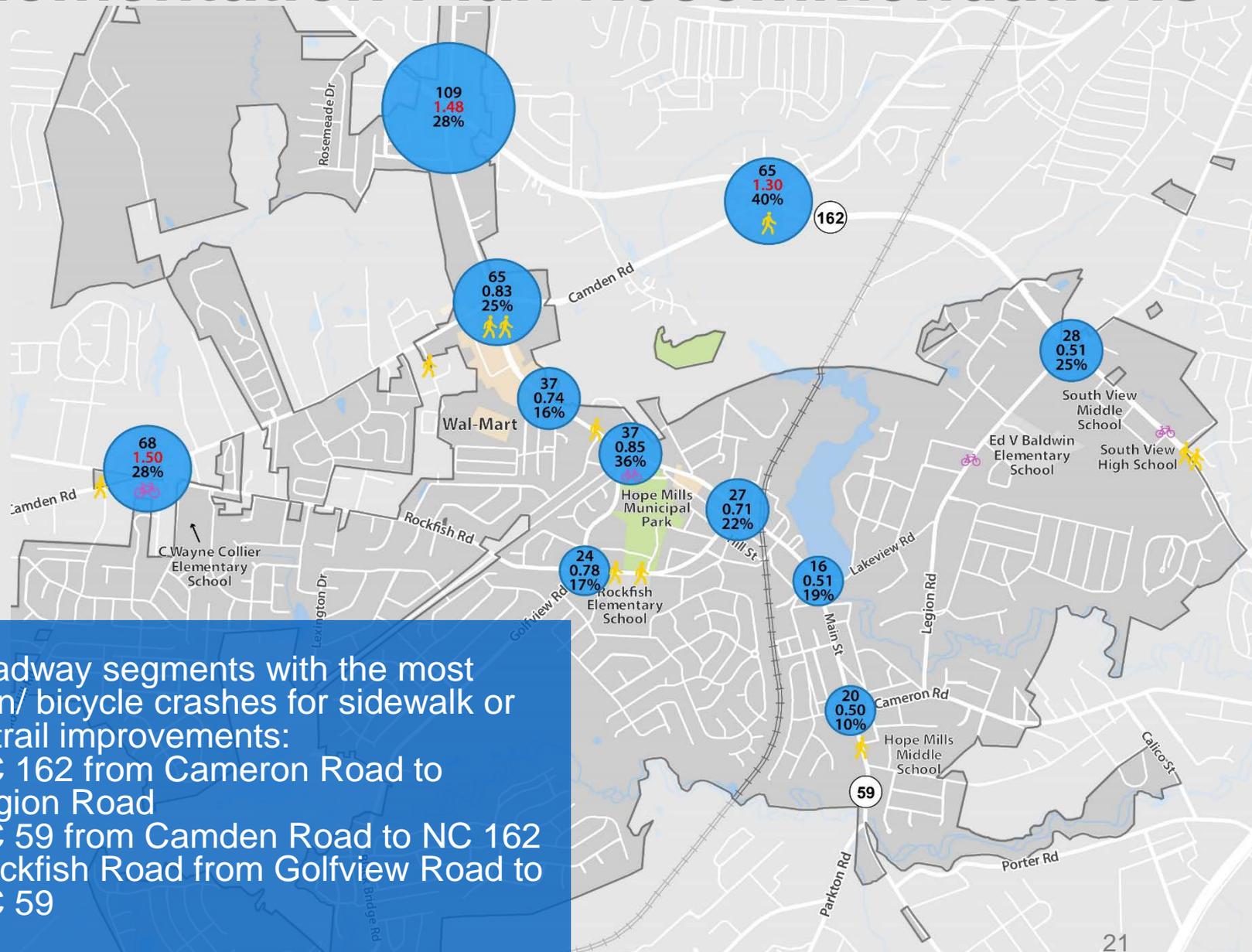


Implementation Plan Recommendations

**BREAK PROJECTS
INTO SMALLER
AREAS TO MAXIMIZE
BENEFIT-COST
RATIO.**



Implementation Plan Recommendations



Target roadway segments with the most pedestrian/ bicycle crashes for sidewalk or multiuse trail improvements:

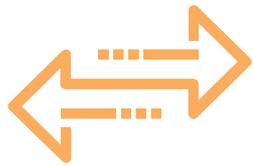
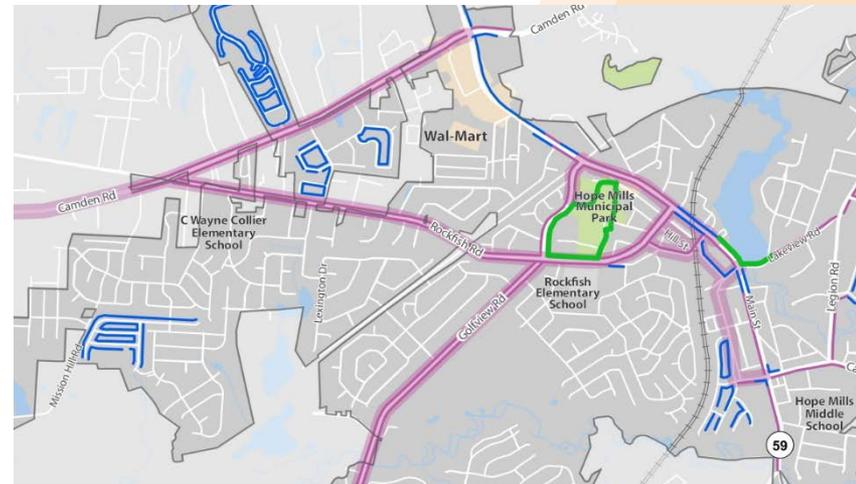
- NC 162 from Camden Road to Legion Road
- NC 59 from Camden Road to NC 162
- Rockfish Road from Golfview Road to NC 59

Implementation Plan Recommendations

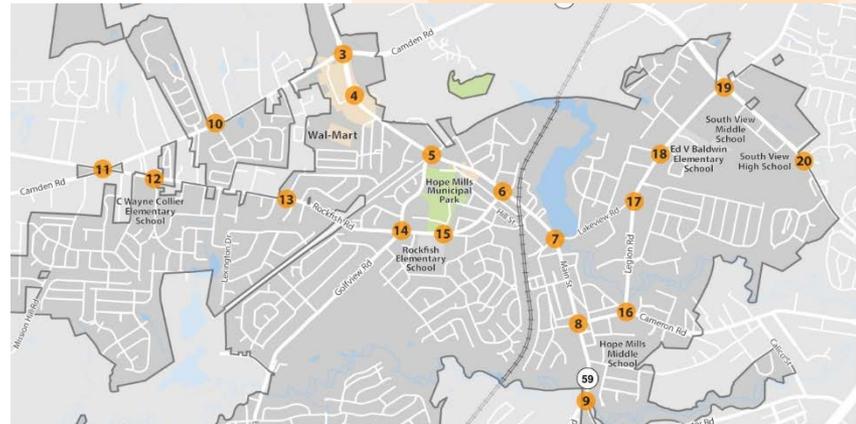
Identify bike/ped projects that support connectivity and serve major destinations:



Near schools



Connecting to Hope Mills Lake and Hope Mills Municipal Park



Connecting to existing sidewalks and multiuse paths



Thank you!

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