

APPENDIX B. SHORT RANGE TRANSPORTATION PLAN



#96 INTERSECTION CLOSURE

CANDLERS MOUNTAIN RD AT MURRAY PL

Score Overview

Rank: 1

Cost:
\$70,000

Benefit Score:
80.6

Project Description

Close the unsignalized intersection on Candler Mountain Road at Murray Place. Traffic would be rerouted to the signalized intersection on Candler Mountain Road at Murray Place/River Ridge Mall 370 feet to the southwest.

Quick Facts

Project Type: Access Management and Safety

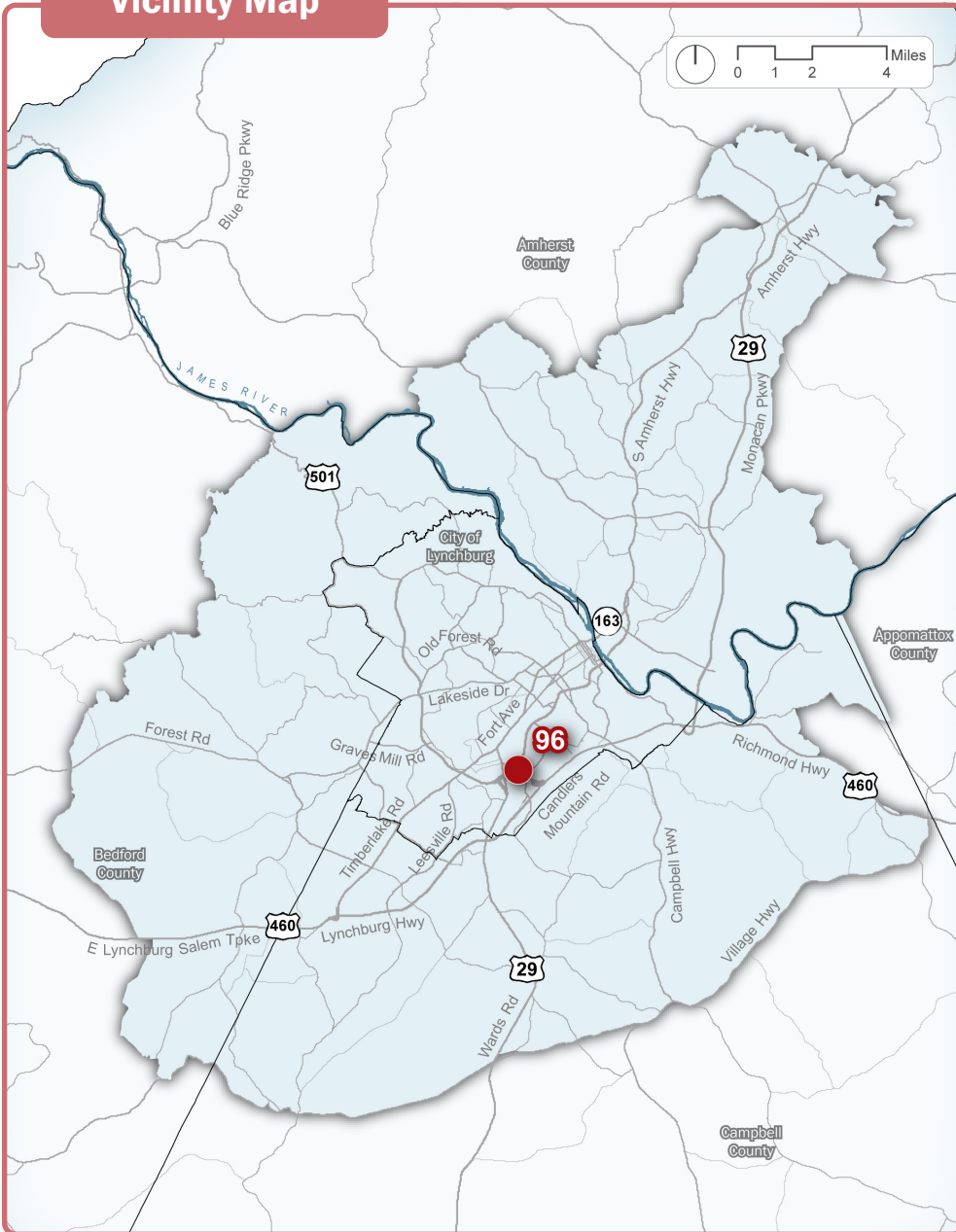
Functional Class: Other Principal Arterial

Source: Lynchburg Expressway Improvement Study (2015)

Defined Need

The current intersection configuration creates a conflict between vehicles turning from Murray Place and vehicles merging right on Candler Mountain Road to get on the northbound Lynchburg Expressway ramp. This intersection does not meet current VDOT access spacing standards. Between 2010 and 2012, there were 14 crashes within the influence area of this intersection.

Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 16/20 points
- Safety: 20.8/25 points
- Economy: 18.8/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 10/15 points

Potential Funding Sources

- » Highway Safety Improvement Program
- » SMART SCALE Round IV
- » Revenue Sharing
- » Capital Improvement Program funds

Next Steps

- » Conduct outreach with adjacent property owners.
- » Prepare detailed construction drawings.
- » Secure funding.



#43 RESTRICTED CROSSING U-TURN

TIMBERLAKE RD AT SUNNY BANK DR

Score Overview

Rank: 2

Cost:
\$2,990,000

Benefit Score:
78.4

Project Description

Convert the median opening at Sunny Bank Drive to a Restricted Crossing U-turn (RCUT) intersection. Install loons at Sunny Bank Drive and Powtan Drive to facilitate U-turns. Construct sidewalk on westbound Timberlake Road between Silver Springs and Tanzalon Drive to accommodate bus stop. Construct sidewalk on eastbound Timberlake Road at the Big Lots parking Lot.

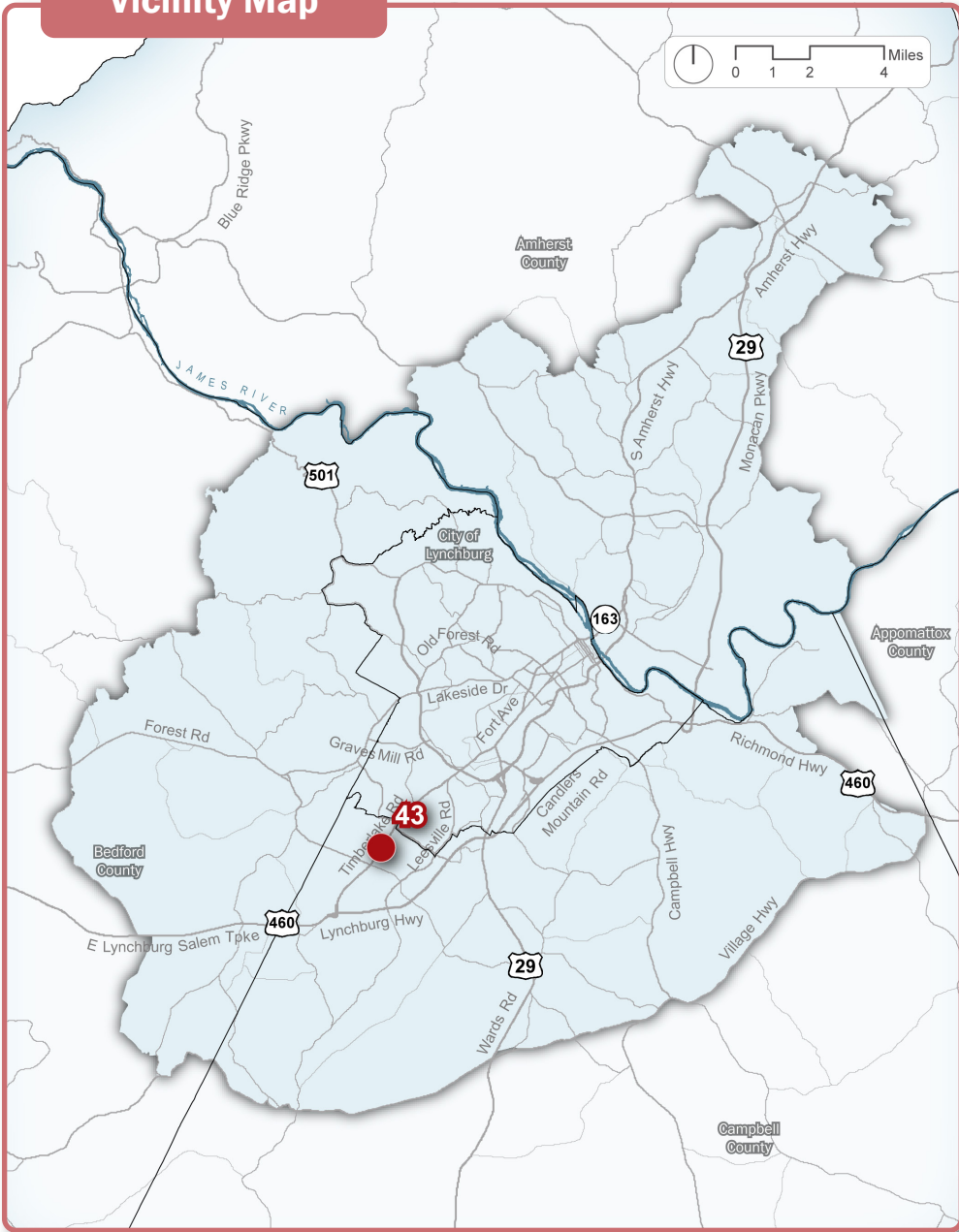
Quick Facts

Project Type: Access Management and Safety
Functional Class: Minor Arterial
Source: Timberlake Road Corridor Improvement Study (2019)

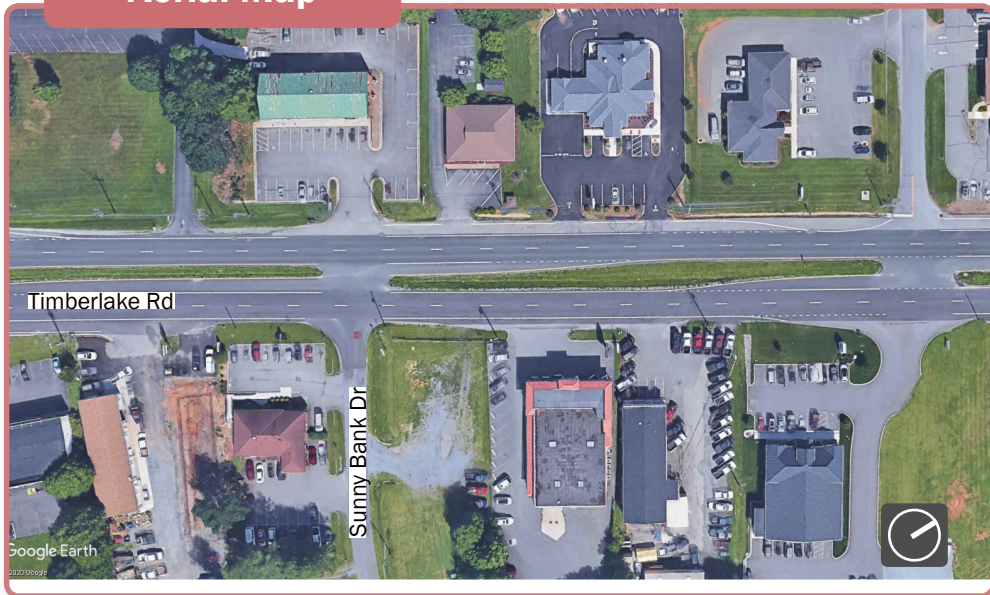
Defined Need

Installation of an RCUT at Sunny Bank Drive is anticipated to improve throughput on Timberlake Road and reduce crashes.

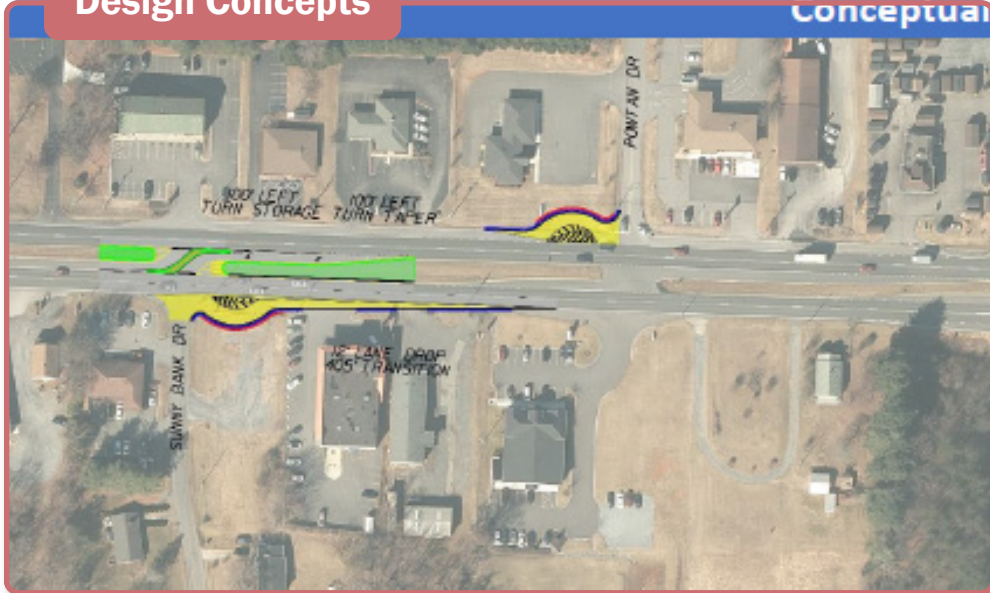
Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 14.7/20 points
- Safety: 20.8/25 points
- Economy: 14.6/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 13.3/15 points

Potential Funding Sources

- » Highway Safety Improvement Program
- » SMART SCALE Round IV
- » Revenue Sharing
- » Transportation Alternatives

Next Steps

- » Prepare detailed engineering design drawings.
- » Conduct outreach with adjacent property owners.
- » Secure funding.



#62 CONTINUOUS GREEN-T INTERSECTION IMPROVEMENTS

CANDLERS MOUNTAIN RD AT MURRAY PL

Score Overview

Rank: 3

Cost:
\$7,300,000

Benefit Score:
80.3

Project Description

Construct a signalized Continuous Green-T at Murray Place (west) intersection with a free-flow eastbound through movement. Construct pedestrian improvements along Clanders Mountain Road and River Ridge Mall driveway. This project will improve operations on Clanders Mountain Road in the vicinity of the Murray Place and River Ridge Mall intersections by eliminating signal phases and providing additional green time for vehicles.

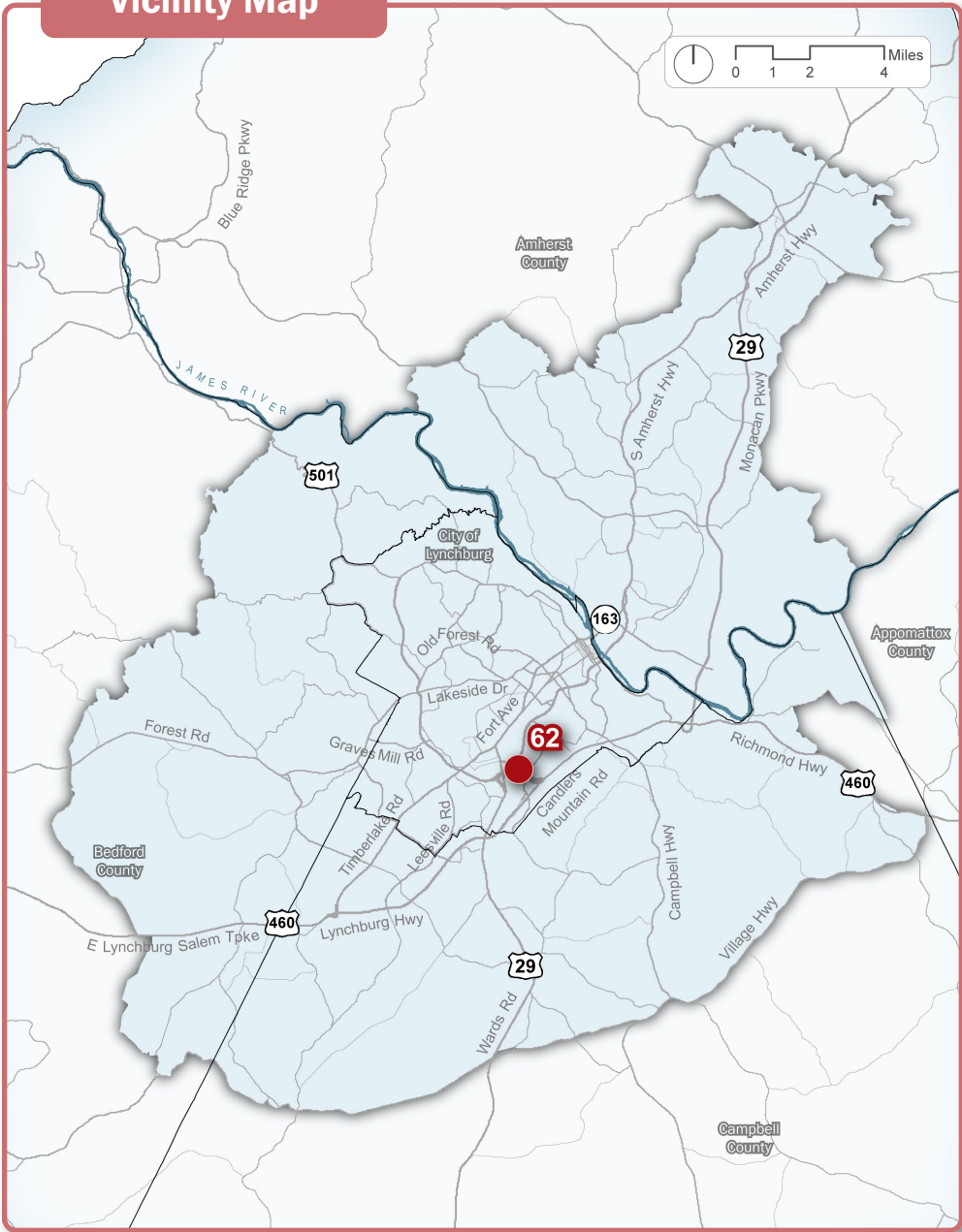
Quick Facts

Project Type: Intersection Reconstruction
Functional Class: Other Principal Arterial
Source: Clanders Mountain Road Corridor Study (2018)

Defined Need

The unsignalized intersection of Clanders Mountain Road and Murray Place experienced 17 crashes between 2010 and 2014. Traffic operations at the signalized intersection are anticipated to worsen to LOS E or F in the PM peak hour by 2025 and to LOS E or F in both AM and PM peak hours by 2045.

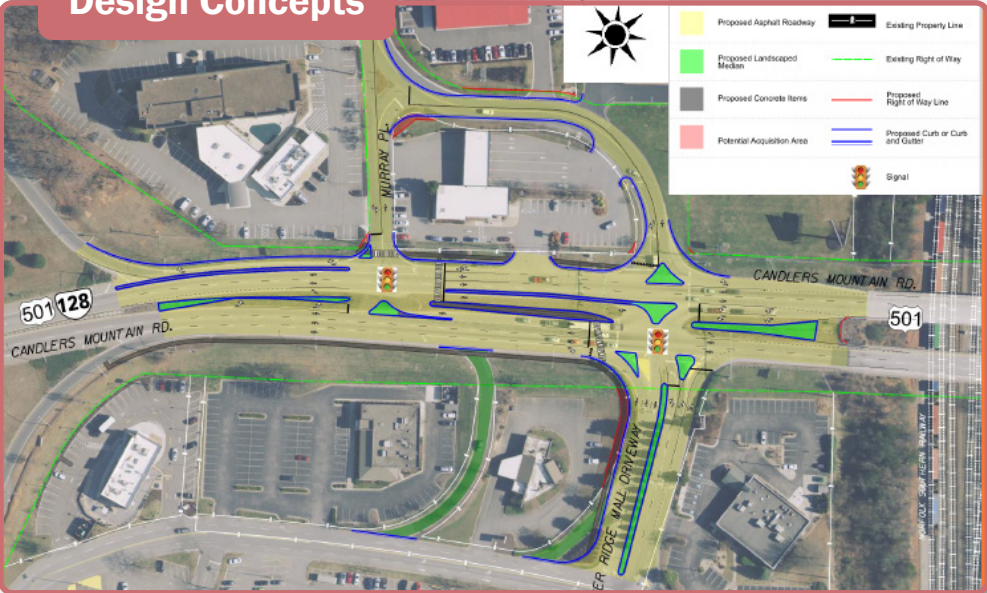
Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 17.3/20 points
- Safety: 20.8/25 points
- Economy: 18.8/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 8.3/15 points

Potential Funding Sources

- » Highway Safety Improvement Program
- » SMART SCALE Round IV
- » Revenue Sharing
- » Transportation Alternatives

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#7 TRAFFIC OPERATIONS/SIGNAL COORDINATION

SOUTH AMHERST HWY FROM ROUTE 163 TO S COOLWELL RD

Score Overview

Rank: 4

Cost:
\$2,500,000

Benefit Score:
71.7

Project Description

Improve the signal timing and identify other operational improvements on US 29 Business (South Amherst Highway) between Amherst Street (Rt 163) and South Coolwell Road (Rt 604).

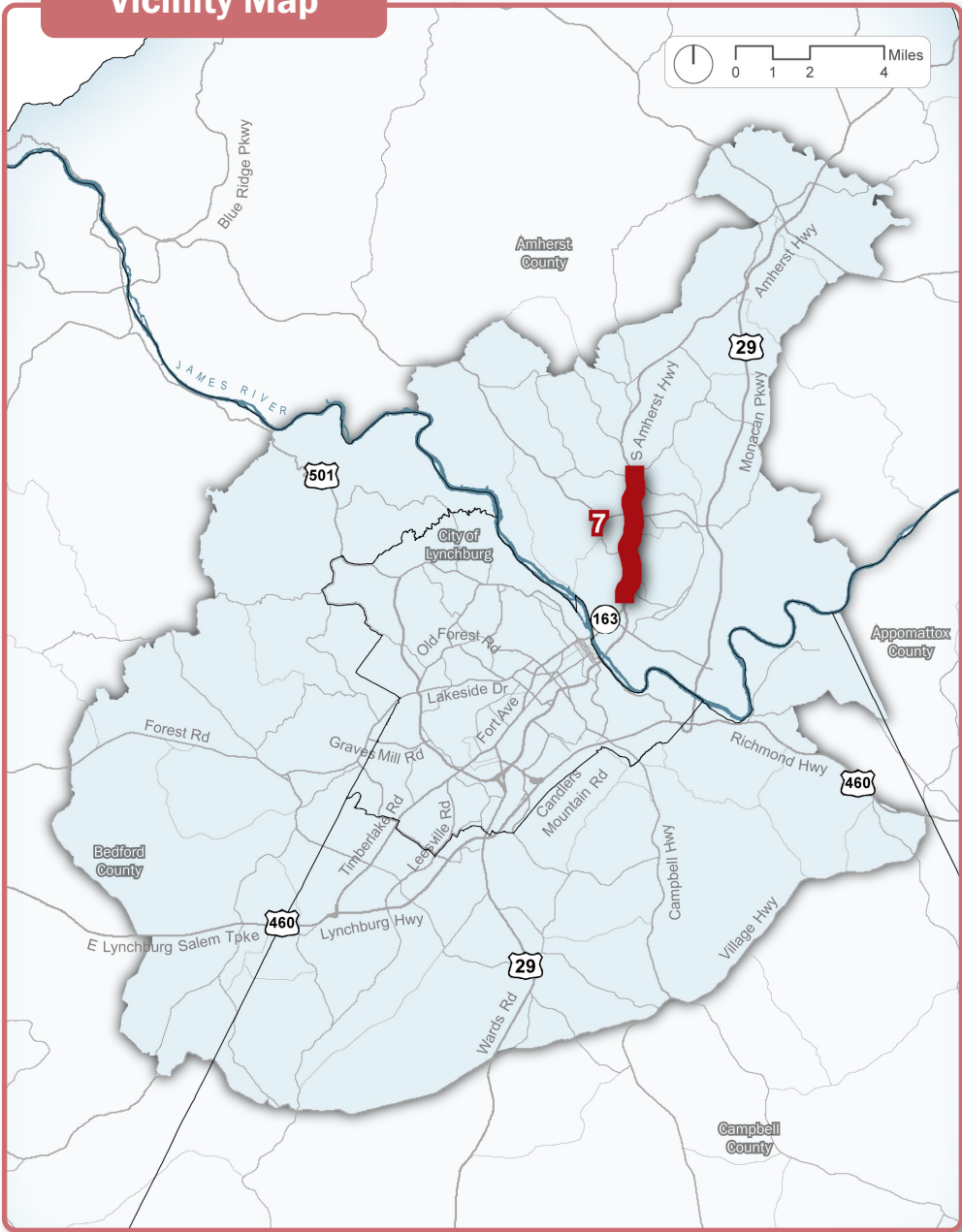
Quick Facts

Project Type: Access Management and Safety
Functional Class: Other Principal Arterial
Source: 2040 CVMPO LRTP

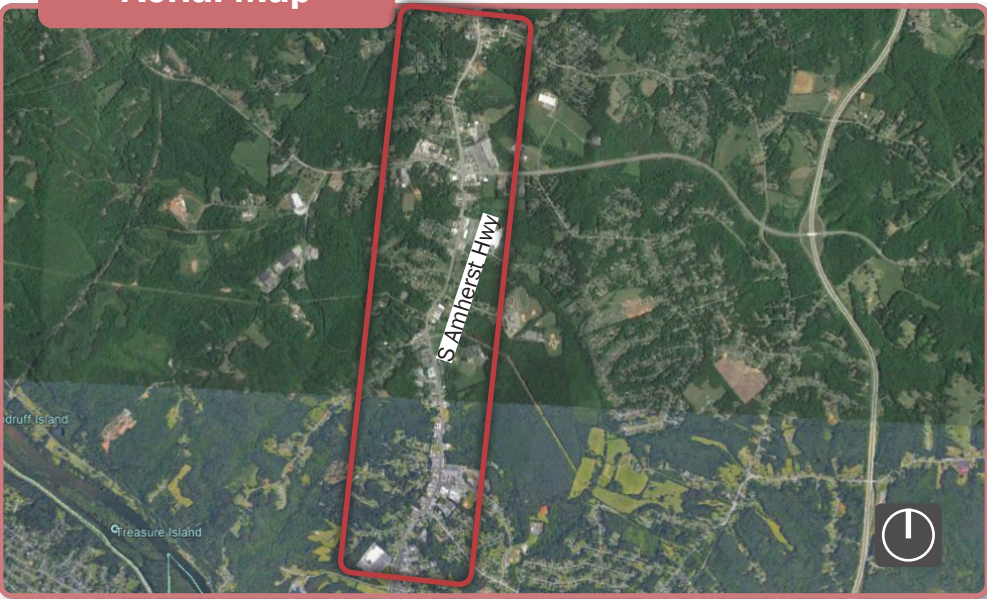
Defined Need

Frequent curb cuts and long waits at signals contribute to intermittent congestion along this portion of the corridor. Improving signal timing and other operational improvements will enhance travel and access to local commercial uses along the corridor. This portion of Rt. 29 is a key connector between local activity centers in Amherst County.

Vicinity Map



Aerial Map



Design Concepts

No design concepts available.

Goals Scores

- Mobility & Accessibility: 13.3/20 points
- Safety: 20.8/25 points
- Economy: 16.7/25 points
- Community & Nature: 7.5/15 points
- Operational Efficiency: 13.3/15 points

Potential Funding Sources

- » SMART SCALE Round IV
- » Revenue Sharing

Next Steps

- » Conduct a study of traffic operations, safety issues, and access spacing to develop more detailed recommendations.



#42 RESTRICTED CROSSING U-TURN

TIMBERLAKE RD FROM BRUSH TAVERN DR TO CROWELL LN

Score Overview

Rank: 5

Cost:
\$3,650,000

Benefit Score:
72.6

Project Description

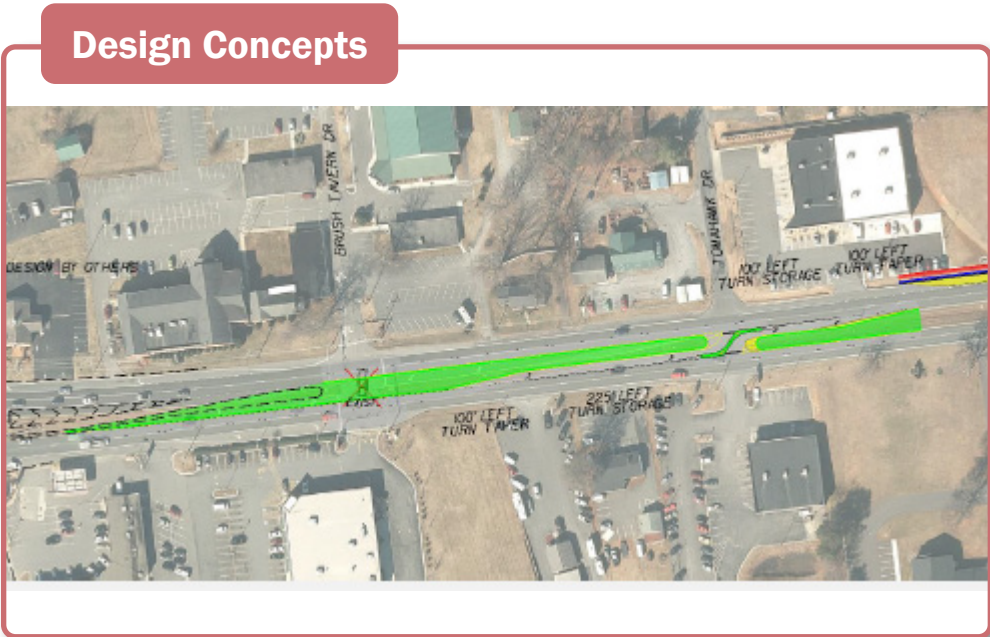
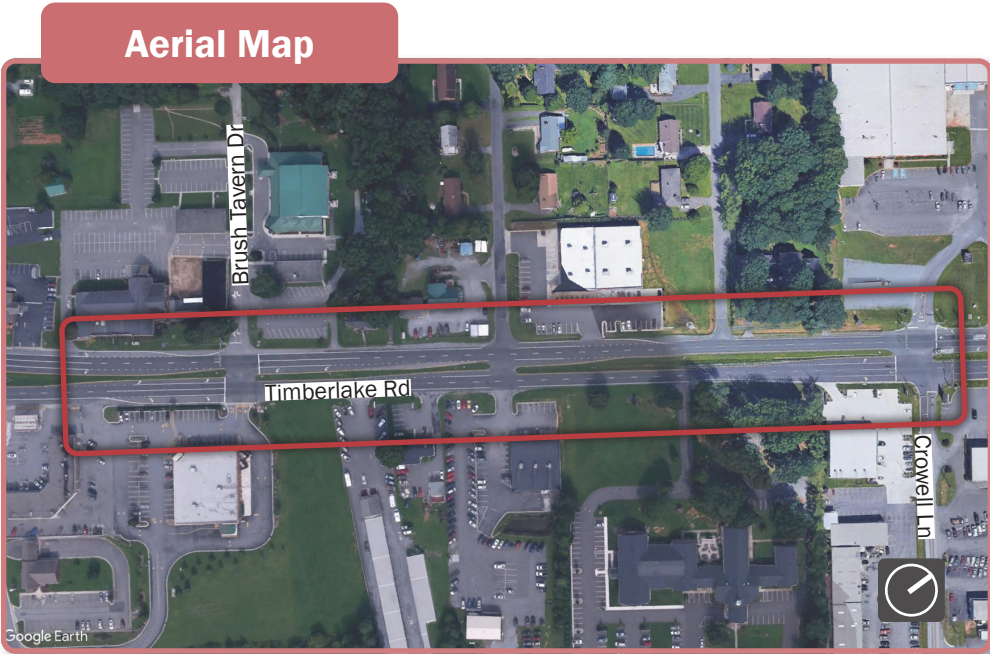
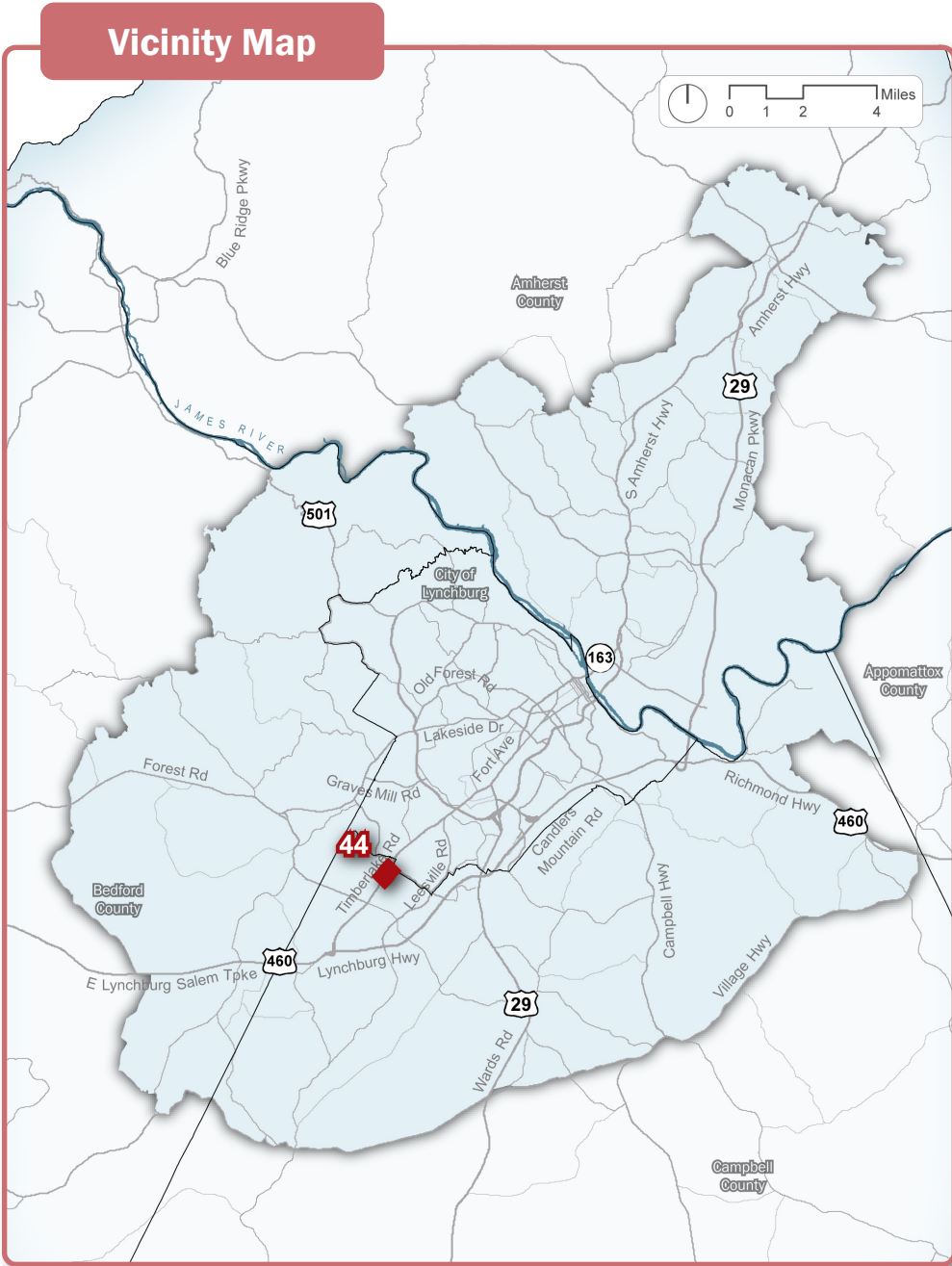
This project entails installing a Restricted Crossing U-turn (RCUT) in the median of Timberlake Rd at the intersection with Brush Tavern Dr. The RCUT will prohibit left turns from Brush Tavern Dr. Drivers who previously would have turned left will now turn right onto Timberlake and then make a u-turn. The project also includes a loon, median modification and sidewalk construction towards Crowell Ln.

Quick Facts

Project Type: Access Management and Safety
Functional Class: Other Principal Arterial
Source: Timberlake Road Corridor Improvement Study

Defined Need

RCUTs are alternative intersection designs that increase safety and reduce congestion by rerouting vehicles making left turns from side streets onto main roads. This RCUT will reduce congestion along Timberlake Rd, while reducing collisions at the intersection of Brush Tavern Dr.



Goals Scores

Mobility & Accessibility: 14.7/20 points

Safety: 16.7/25 points

Economy: 14.6/25 points

Community & Nature: 15/15 points

Operational Efficiency: 11.7/15 points

Potential Funding Sources

- » SMART SCALE Round IV
- » Revenue Sharing

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#63 TURN LANE INSTALLATION

CANDLERS MOUNTAIN RD AT MAYFLOWER DR

Score Overview

Rank: 6

Cost:
\$2,800,000

Benefit Score:
74.4

Project Description

This project provides additional capacity at the Mayflower Drive intersection by installing a southbound left-turn lane (in addition to the existing southbound left-through lane) and extending the eastbound right-turn lane back to the railroad bridge on Mayflower Dr.

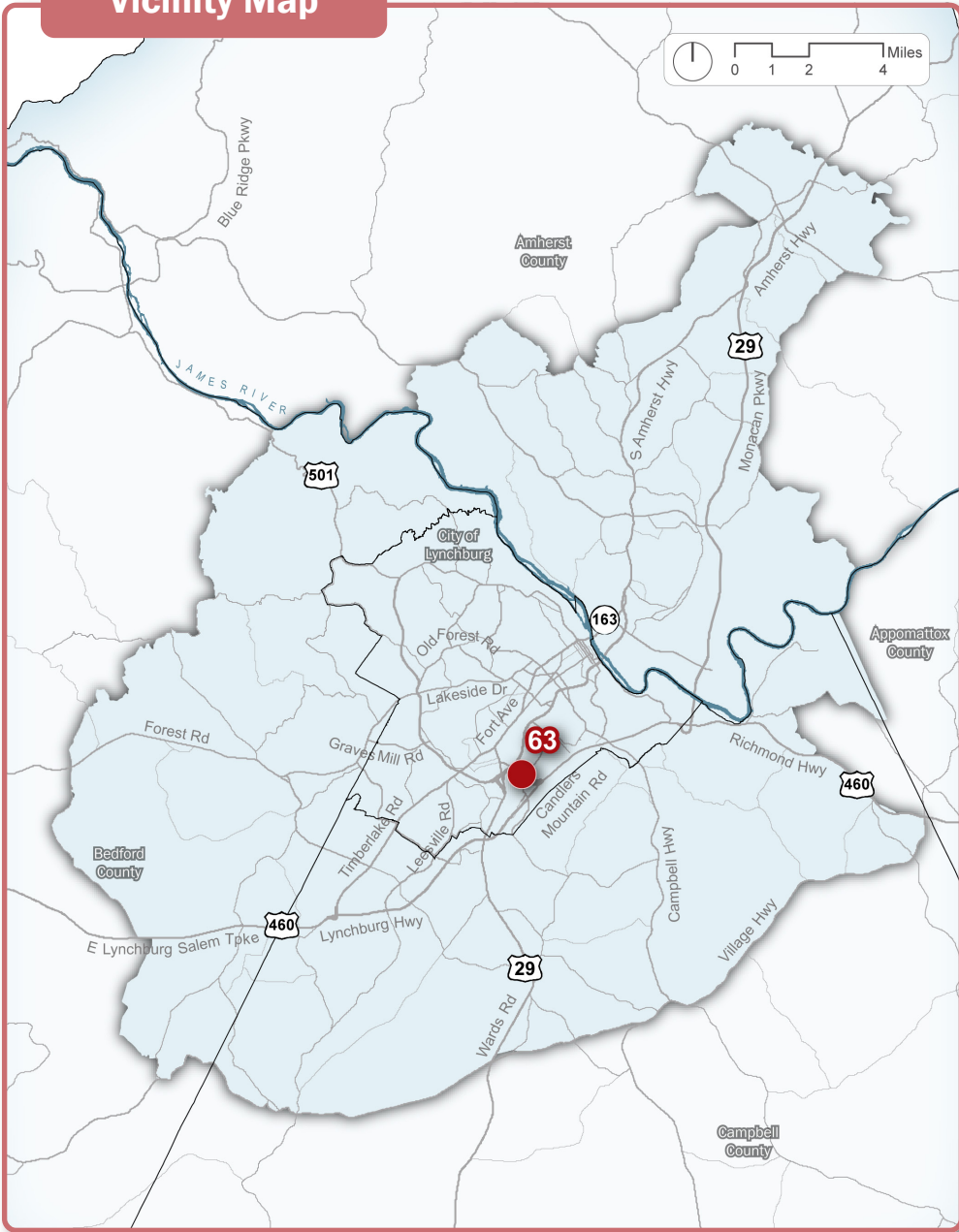
Quick Facts

Project Type: Roadway Capacity Expansion
Functional Class: Other Principal Arterial
Source: Clanders Mountain Rod Corridor Study

Defined Need

The turn lane modifications on Mayflower Dr will reduce crashes and reduce congestion at the intersection with Clanders Mountain Rd. These changes are important as this stretch of Clanders Mountain Rd scored high for its current crash rate and for future congestion.

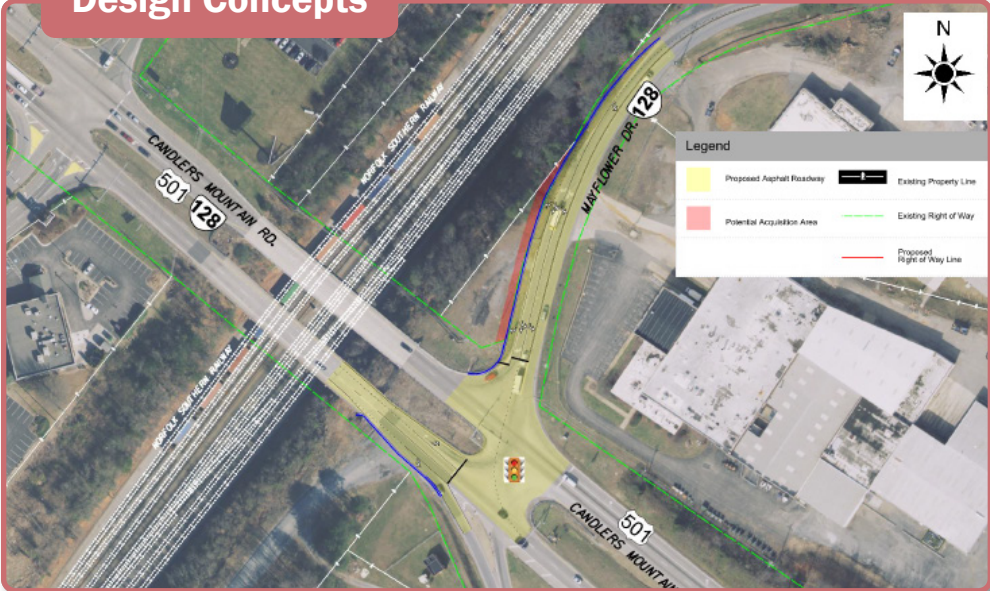
Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- » Mobility & Accessibility: 17.3/20 points
- » Safety: 16.7/25 points
- » Economy: 18.8/25 points
- » Community & Nature: 15/15 points
- » Operational Efficiency: 6.7/15 points

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing
- » Developer Proffers

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#33 INTERSECTION RECONSTRUCTION

FOREST RD AT ENTERPRISE DR

Score Overview

Rank: 7

Cost:
\$5,000,000

Benefit Score:
73.9

Project Description

This intersection reconstruction projects entails installing two westbound right-turn lanes, modifying the existing eastbound right turn lane to allow through and right turn movements, constructing sidewalks and other ped features, as well as modifying the signals.

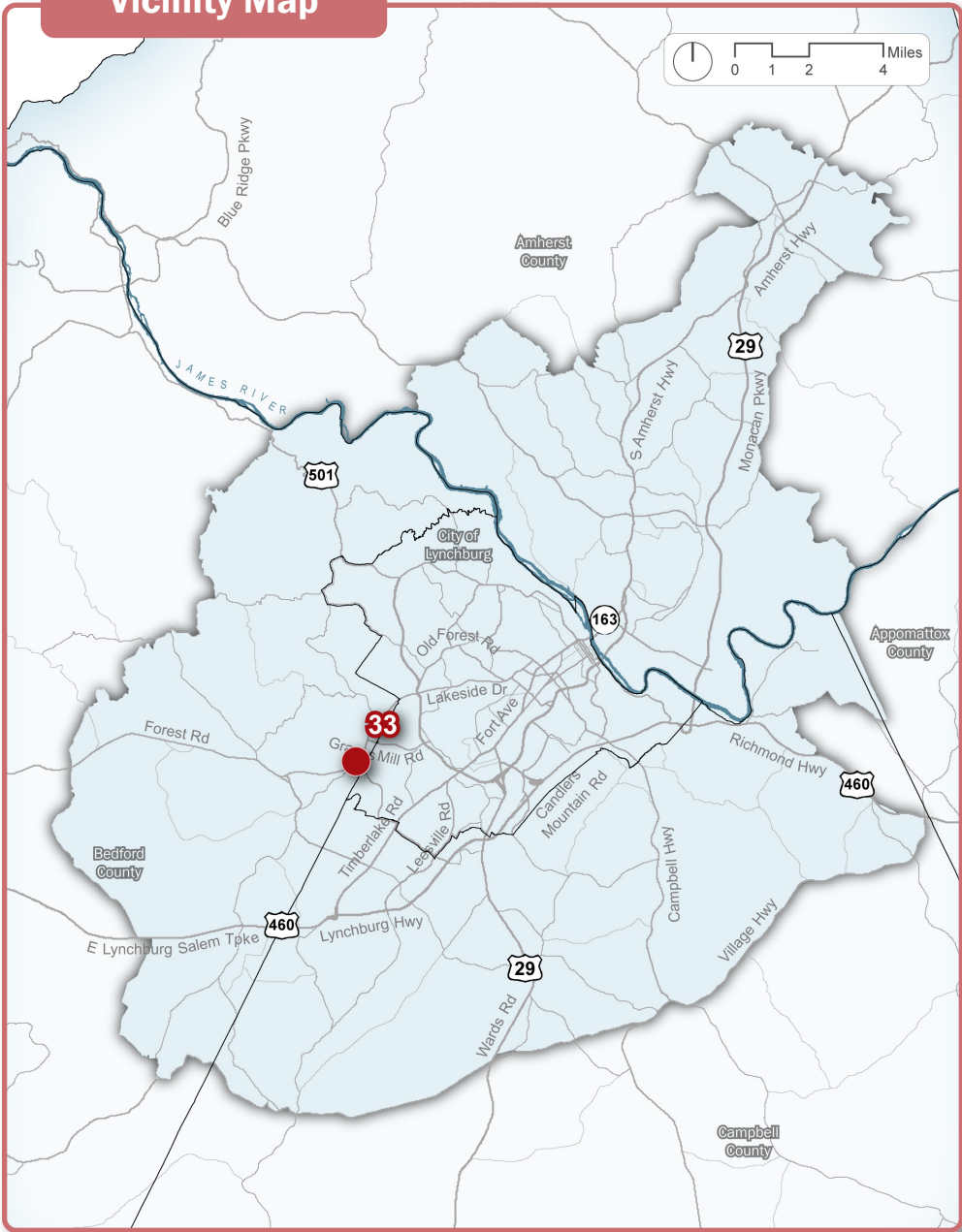
Quick Facts

Project Type: Intersection Reconstruction
Functional Class: Other Principal Arterial
Source: Route 221 Corridor Plan

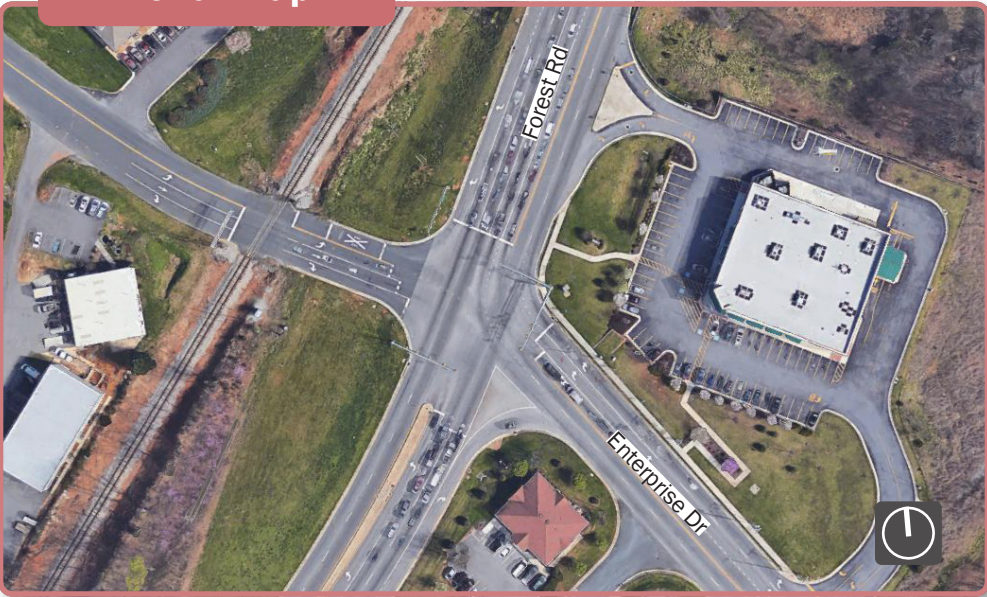
Defined Need

This is a high congestion area along a key commuter corridor for the region. Reconstruction will add capacity and thereby reduce congestion and help improve safety. The improvements will also add pedestrian accommodation.

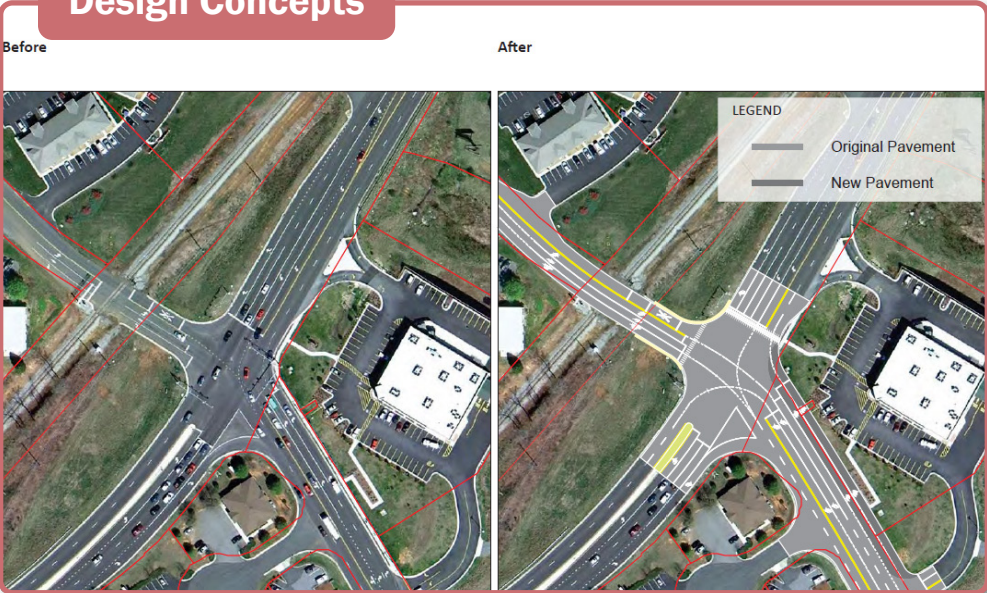
Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 16/20 points
- Safety: 16.7/25 points
- Economy: 14.6/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 11.7/15 points

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing
- » Developer Proffers

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#44 RESTRICTED CROSSING U-TURN

TIMBERLAKE DR FROM SHELOR DR TO ENTERPRISE DR

Score Overview

Rank: 8

Cost:
\$5,710,000

Benefit Score:
71.3

Project Description

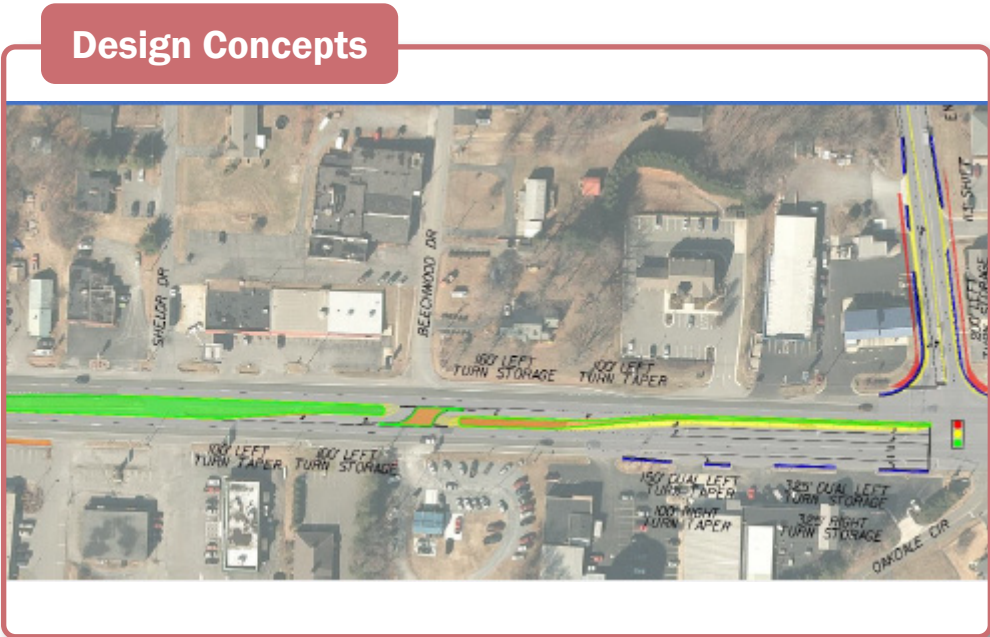
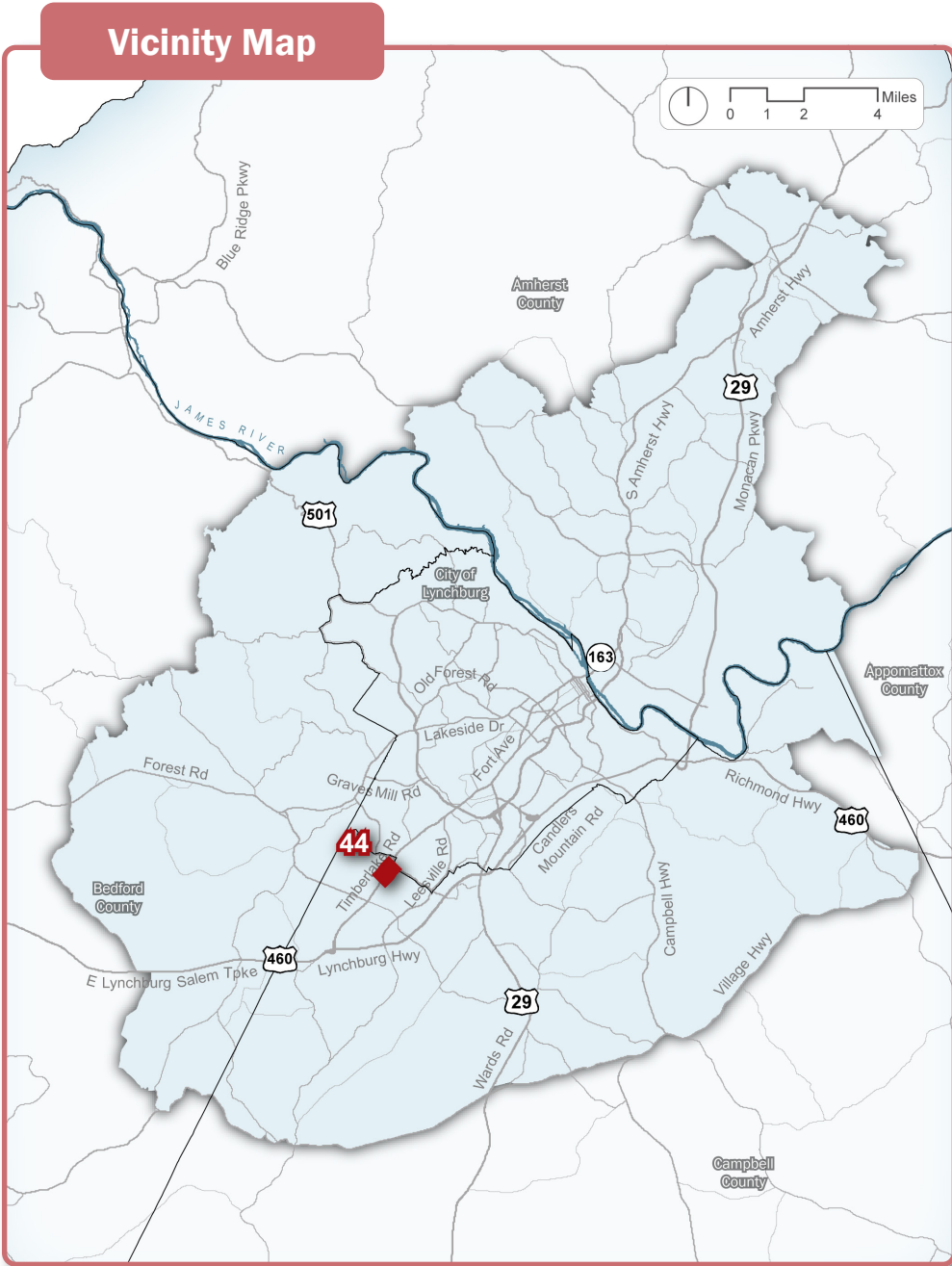
Close median opening at Shelor Drive, convert the median opening at Beechwood Drive to a restricted crossing U-turn (RCUT) intersection, construct a second eastbound left turn lane and optimize signal timing at Enterprise Drive, widen Enterprise Drive and create a second northbound receiving lane, relocate existing Route 7 GLTC bus stop to the east towards Big Lots, and a new bus stop and sidewalk will be installed between Silver Springs Drive and Shelor Drive.

Quick Facts

Project Type: Access Management & Safety
Functional Class: Minor Arterial
Source: Timberlake Road Corridor Improvement Study

Defined Need

Installation of an RCUT at Beechwood Drive is anticipated to improve throughput on Timberlake Road and reduce crashes. A second eastbound left turn lane will be added at Enterprise Drive and is anticipated to improve throughput on Timberlake Road. On Enterprise Drive.



Goals Scores

Mobility & Accessibility: 13.3/20 points

Safety: 16.7/25 points

Economy: 14.6/25 points

Community & Nature: 15/15 points

Operational Efficiency: 11.7/15 points

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing
- » Developer Proffers

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#56 VUL GATEWAY ROUNDABOUT & ROAD DIET

CAMPBELL AVE FROM KEMPER ST TO FLORIDA AVE

Score Overview

Rank: 9

Cost:
\$3,800,000

Benefit Score:
72.2

Project Description

This project includes installing a roundabout at the intersection of Campbell Ave and Edmunds St, as well as a road diet on Campbell Ave from Kemper St to Florida Ave. The road diet entails converting the current streetscape to one with a bike lane and one travel lane in each direction with a center landscape median accommodating left turn lanes.

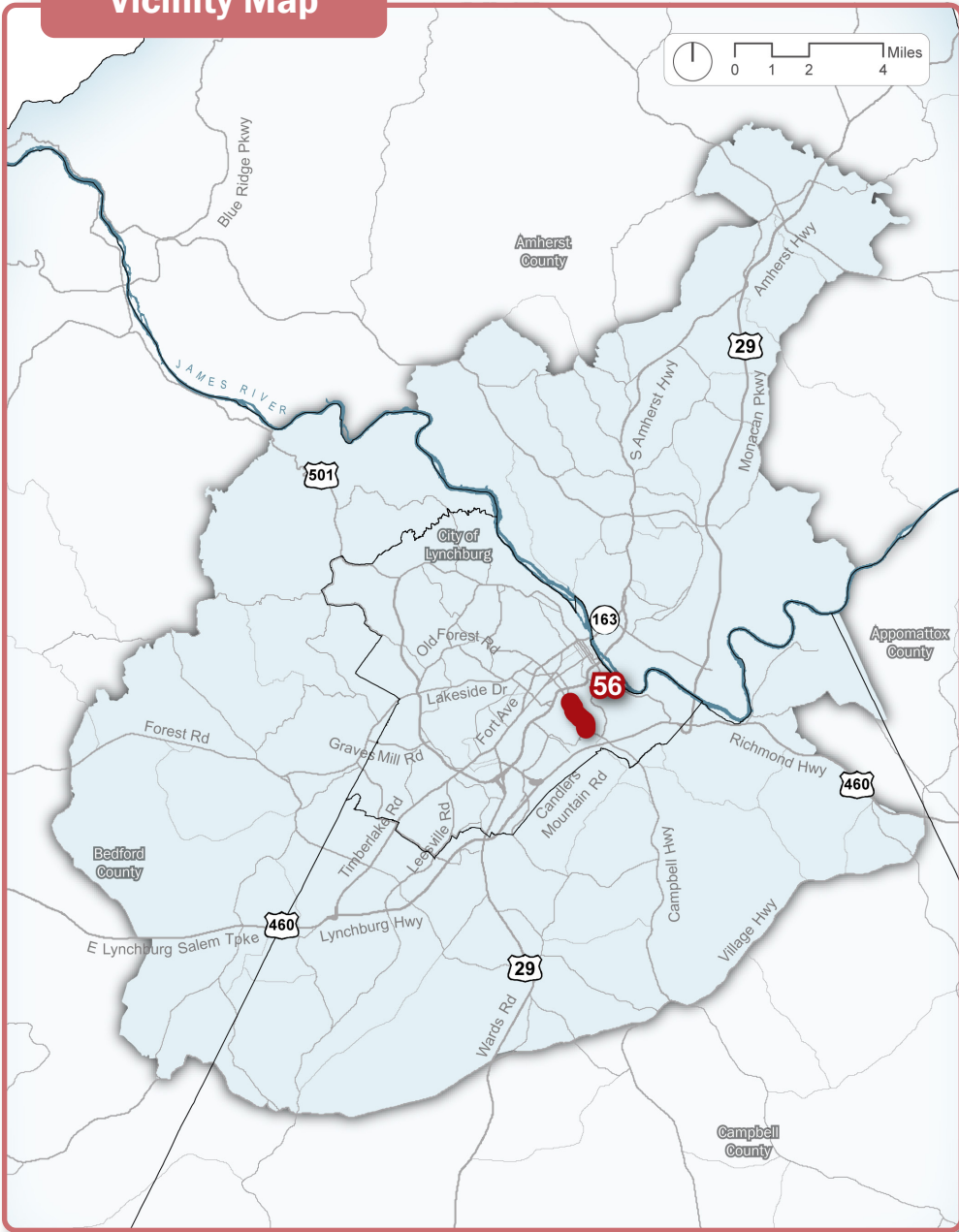
Quick Facts

Project Type: Multimodal Capacity Expansion
Functional Class: Minor Arterial
Source: Campbell Ave - Odd Fellows Rd Land Use and Corridor Master Plan Study

Defined Need

VUL Gateway: A roundabout at Kemper Street / Old Campbell Avenue both reduces traffic conflicts at a highly dangerous intersection, and provides a gateway for Virginia University-Lynchburg (VUL). The greenspace surrounding the roundabout is an opportunity to highlight VUL's presence with an institutional lawn with great mountain views over the city.

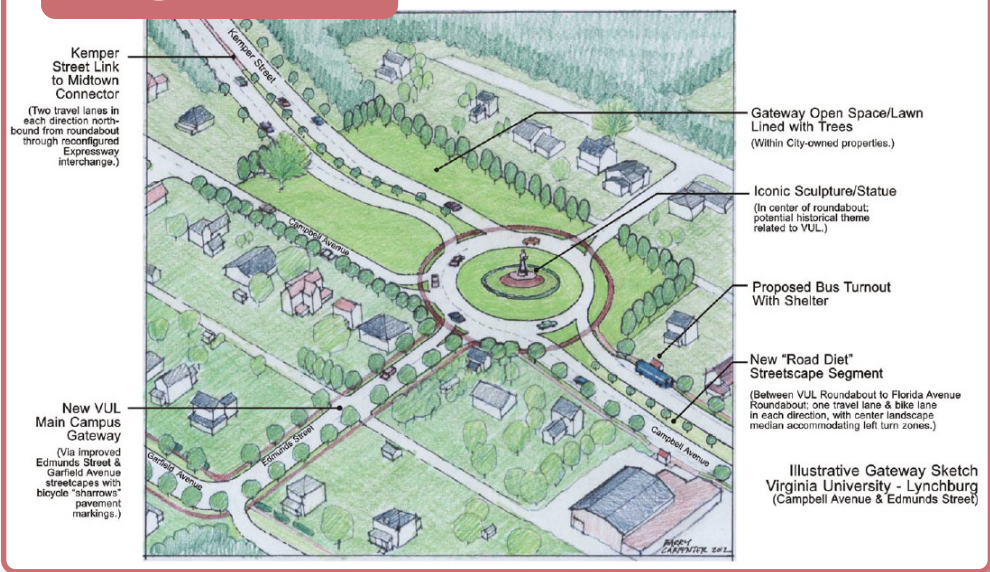
Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 14.7/20 points
- Safety: 12.5/25 points
- Economy: 16.7/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 13.3/15 points

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.



#95 RAMP REALIGNMENT & AUXILIARY LANE INSTALLATION

LYNCHBURG EXPRESSWAY AT CANDLERS MOUNTAIN RD

Score Overview

Rank: 10

Cost:
\$18,000,000

Benefit Score:
81.3

Project Description

The proposed improvement includes constructing a 600-foot northbound Lynchburg Expressway auxiliary lane between the entrance ramp from eastbound Candler Mountain Road and the exit ramp to westbound Candler Mountain Road, constructing a 700-foot southbound Lynchburg Expressway auxiliary lane between the entrance ramp from westbound Candler Mountain Road and the exit ramp to eastbound Candler Mountain Road, and realigning the northbound Lynchburg Expressway entrance ramp from westbound Candler Mountain Road. The improvement includes replacing the Candler Mountain Road bridge.

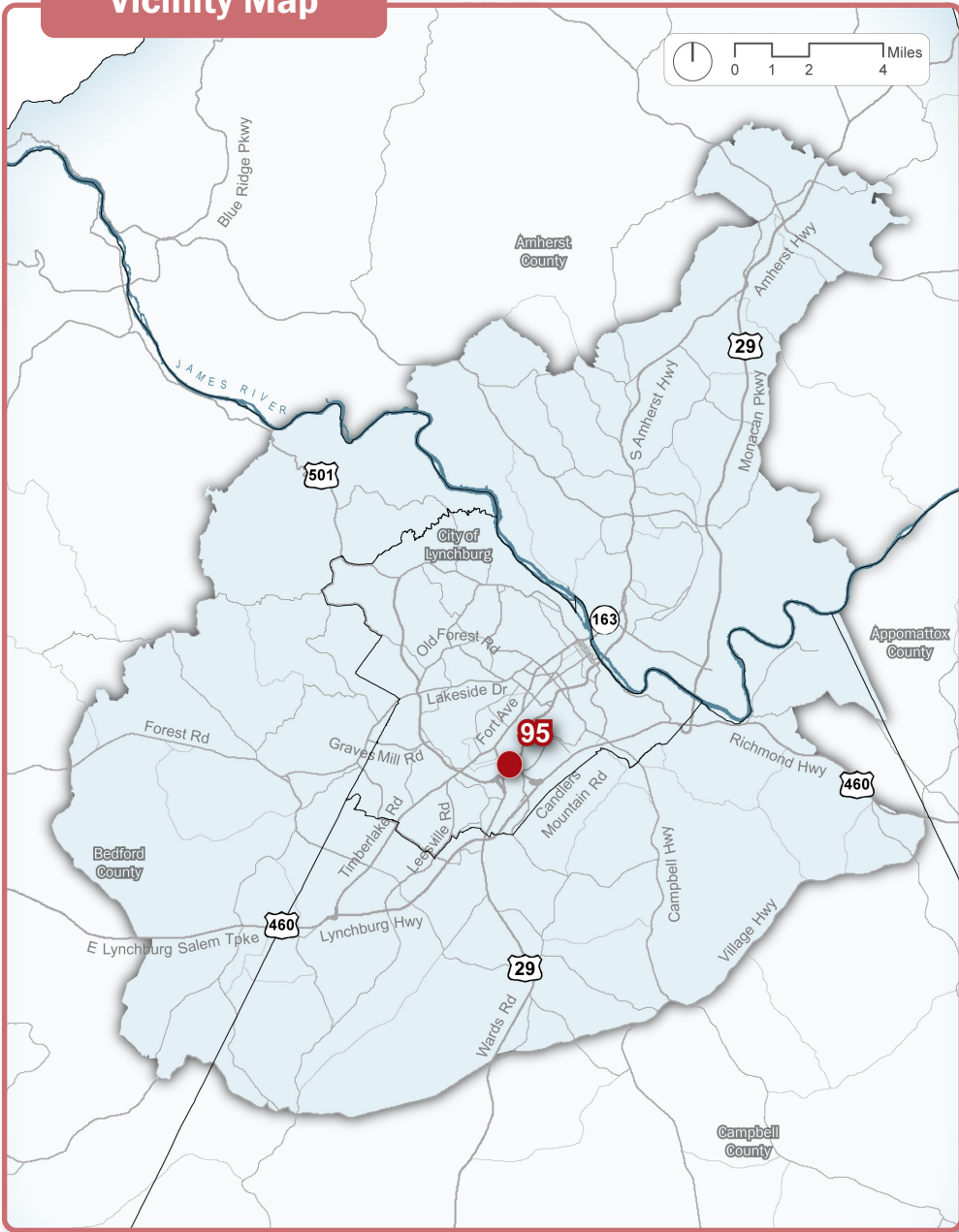
Quick Facts

Project Type: Roadway Reconstruction
Functional Class: Other Freeways and Expressways
Source: Lynchburg Expressway Improvement Study

Defined Need

Constructing the northbound and southbound Lynchburg Expressway auxiliary lanes at the Candler Mountain Road interchange will improve safety by providing longer acceleration and deceleration distances for vehicles merging onto and off of the Lynchburg Expressway. In addition, realigning the northbound Lynchburg Expressway entrance ramp from westbound Candler Mountain Road will allow vehicles to reach a higher speed before merging onto the Lynchburg Expressway.

Vicinity Map



Aerial Map



Design Concepts



Goals Scores

- Mobility & Accessibility: 13.3/20 points
- Safety: 20.8/25 points
- Economy: 18.8/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 13.3/15 points

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing

Next Steps

- » Prepare detailed engineering drawings.
- » Conduct community outreach.
- » Secure funding.

