APPENDIX B. SHORT RANGE TRANSPORTATION PLAN



#96 INTERSECTION CLOSURE

CANDLERS MOUNTAIN RD AT MURRAY PL



Project Description

Close the unsignalized intersection on Candlers Mountain Road at Murray Place. Traffic would be rerouted to the signalized intersection on Candlers 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)

 \nearrow



Murray

Aerial Map



Potential Funding Sources

- » Highway Safety
- » Revenue Sharing
- » Capital Improvement Program funds



Defined Need

The current intersection configuration creates a conflict between vehicles turning from Murray Place and vehicles merging right on Candlers 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.

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**

- Improvement Program
- » SMART SCALE Round IV

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

#43 RESTRICTED CROSSING U-TURN

TIMBERLAKE RD AT SUNNY BANK DR



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)



Aerial Map



Design Concepts



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



Defined Need

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

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

- » Revenue Sharing

- » 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



Project Description

Construct a signalized Continuous Green-T at Murray Place (west) intersection with a free-flow eastbound through movement. Construct pedestrian improvements along Candlers Mountain Road and River Ridge Mall driveway. This project will improve operations on Candlers 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: Candlers Mountain Road Corridor Study (2018)



Aerial Map 1003221200001





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



Defined Need

The unsignalized intersection of Candlers 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.

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

- » Revenue Sharing

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

#7 TRAFFIC OPERATIONS/SIGNAL COORDINATION

SOUTH AMHERST HWY FROM ROUTE 163 TO S COOLWELL RD



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



Aerial Map



Design Concepts

No design concepts available.



- » Revenue Sharing





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.



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

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



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



Aerial Map nherlake Ro

Design Concepts





Potential Next Steps Funding Sources » SMART SCALE Round IV » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community outreach. » Secure funding.



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**

#63 TURN LANE INSTALLATION

CANDLERS MOUNTAIN RD AT MAYFLOWER DR



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:** Candlers Mountain Rod Corridor Study









Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Developer Proffers outreach. » Secure funding.



Defined Need

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

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

#33 INTERSECTION RECONSTRUCTION

FOREST RD AT ENTERPRISE DR



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



Aerial Map





Pot Funding

- » Smart Sca
- » Revenue
- » Developer



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.

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

ential g Sources	Next Steps
ale	 » Prepare detailed
Sharing	engineering drawings. » Conduct community
r Proffers	outreach. » Secure funding.

#44 RESTRICTED CROSSING U-TURN

TIMBERLAKE DR FROM SHELOR DR TO ENTERPRISE DR



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 & SafetyFunctional Class: Minor ArterialSource: Timberlake Road Corridor ImprovementStudy



Aerial Map



Design Concepts



Pot Fundin

- » Smart Sca
- » Revenue
- » Developer



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**

ential g Sources	Next Steps
ale	 » Prepare detailed
Sharing	engineering drawings. » Conduct community
r Proffers	outreach. » Secure funding.

#56 VUL GATEWAY ROUNDABOUT & ROAD DIET

CAMPBELL AVE FROM KEMPER ST TO FLORIDA AVE



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 ExpansionFunctional Class: Minor ArterialSource: Campbell Ave - Odd Fellows Rd Land Use and Corridor Master Plan Study



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<image>



Pot Funding

» Smart Sc

» Revenue S

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.

Goals Scores



ential g Sources	Next Steps
ale Sharing	 » Prepare detailed engineering drawings. » Conduct community outreach. » Secure funding.

#95 RAMP REALIGNMENT & AUXILIARY LANE INSTALLATION

LYNCHBURG EXPRESSWAY AT CANDLERS MOUNTAIN RD



Project Description

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

Quick Facts

Project Type: Roadway ReconstructionFunctional Class: Other Freeways and ExpresswaysSource: Lynchburg Expressway ImprovementStudy



<image><image>





Pot Funding

- » Smart Sc
- » Revenue

Defined Need

Constructing the northbound and southbound Lynchburg Expressway auxiliary lanes at the Candlers 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 Candlers Mountain Road will allow vehicles to reach a higher speed before merging onto the Lynchburg Expressway.

Goals Scores

ential g Sources	Next Steps
ale Sharing	 » Prepare detailed engineering drawings. » Conduct community outreach. » Secure funding.

#46 RESTRICTED CROSSING U-TURN

TIMBERLAKE RD FROM WOOD RD TO HOOPER/CHARLIE'S ENTRANCE



Project Description

Extend left lane storage northbound and southbound at Wood Road. Convert the median opening at the Knollwood Townhomes to a restricted crossing U-turn (RCUT) intersection. Install loon to facilitate U-turns at the Knollwood Townhomes and Hooper/Charlie's. Construct sidewalk on westbound Timberlake Road between Hooper/Charlie's and Wood Road. Existing Route 7 GLTC Bus Stops will be consolidated and relocated to a single stop to the east of Wood Road.

Quick Facts

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



Aerial Map

Design Concepts

Potential Funding Sources

- » Highway Safety
- » Revenue Sharing
- » Transportation Alternatives

Defined Need

The installation of and RCUT at the Knollwood Townhomes entrance is anticipated to improve throughput on Timberlake Road and reduce crashes. A bus stop will also be relocated to improve transit operations and sidewalk will be added between Candlewood Court and Wood Road.

Goals Scores

Mobility & Accessibility: 14.7/20 points

- Safety: 20.8/25 points
- Economy: 12.5/25 points
- Community & Nature: 12.5/15 points
- **Operational Efficiency: 10/15 points**

- Improvement Program
- » SMART SCALE Round IV

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

#104 ROUNDABOUT

WARDS FERRY RD AT CVCC CAMPUS DR

Project Description

Construct roundabout. This project was carried forward from the vision list of the 2040 Long Range Plan. A roundabout would improve the safety of the intersection.

Quick Facts

Project Type: Intersection Reconstruction **Functional Class:** Major Collector **Source:** 2040 CVMPO LRTP

Aerial Map

Design Concepts

No design concepts available.

Pot Funding

- » Smart Sca
- » Revenue

The intersection was identified as needing improvement during the 2040 long-range planning process.

Goals Scores

Mobility & Accessibility: 14.7/20 points

Safety: 16.7/25 points

Economy: 16.7/25 points

Community & Nature: 15/15 points

Operational Efficiency: 10/15 points

ential g Sources	Next Steps
ale Sharing	 » Prepare detailed engineering drawings. » Conduct community outreach. » Secure funding.

#142 ROAD DIET

CAMPBELL AVE FROM FAIRVIEW AVE TO FLORIDA AVE

Project Description

This project proposes to reduce Campbell Avenue from two vehicular travel lanes in each direction down to one in each direction with a center turn lane and potential right-turn lanes where further study shows they are warranted. The reclaimed space can be rededicated for wider sidewalks, transit facilities, street trees, bike lanes, and a center median.

Quick Facts

Project Type: Multimodal Capacity Expansion Functional Class: Minor Arterial Source: Campbell Ave - Odd Fellows Rd Land Use and Corridor Master Plan Study (2013)

Aerial Map

Design Concepts

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Development Proffers outreach. » Capital Improvement » Secure funding. Program

Defined Need

The transportation studies in Chapter 1.5 of the source study found that the proposed Odd Fellows Road interchange will reduce traffic on Campbell Avenue. Maintaining unnecessary travel lanes is impractical, especially when vacating lanes presents a unique opportunity to transform Campbell Avenue to suit the needs of residents as proposed in the source study.

#144 ACCESS MANAGEMENT

CANDLERS MOUNTAIN RD FROM WARDS RD (US 29) TO SEMINOLE AVE

Project Description

This project improves access management on Candlers Mountain Road. Construct sidewalks along both ides of Wards Road and Candlers Mountain Road.

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Other Principal Arterial **Source:** Candlers Mountain Road Corridor Study (2018)

Aerial Map

Potential Funding Sources

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing
- » Transportation Alternatives

Defined Need

The intersection of Candlers Mountain Road and Wards Road experienced 39 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.

Goals Scores

Mobility & Accessibility: 13.3/20 points

- Safety: 12.5/25 points
- Economy: 20.8/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 11.7/15 points

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

#147 MEDIAN RECONSTRUCTION

LYNCHBURG HWY AT TURKEY FOOT RD

Project Description

Reconfigure the intersection at US 460 and Turkey Foot Road to a Median U-turn (MUT). Construct median openings with loons to the east and west of the intersection to accommodate U-turns. Restrict left-turns from the mainline. Allow side street lefts, and restrict side street throughs.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial Source: US Route 460 Arterial Preservation Plan (2020)

- » Highway Safety
- » Revenue Sharing

Defined Need

A crash reduction of 30% would be expected by implementing a MUT improvement.

Goals Scores

Mobility & Accessibility: 13.3/20 points

Safety: 12.5/25 points

Economy: 18.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 11.7/15 points

Potential Funding Sources

Improvement Program » SMART SCALE Round IV

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

#117 ROAD WIDENING

GRAVES MILL RD AT CREEKSIDE DR

Project Description

Widen the connector at Creekside Drive to accommodate dual northbound right-turn lanes. Install pedestrian crossings and countdowns.

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Minor Arterial **Source:** Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

Design Concepts

Potential Funding Sources

- » Smart Scale
- » Transportation Alternatives
- » Highway Safety
- » Developer Proffers

Defined Need

Under future conditions, northbound right operates at LOS E (LOS F for shared thru/left movement). Under future conditions, queuing for the northbound right exceeds 600'.

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: 6.7/15 points

» Revenue Sharing

Improvement Program

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

#120 ROAD WIDENING GRAVES MILL RD FROM MILLRACE DR TO MILLSIDE DR

Project Description

Provide a landscaped median with left-turn lanes between Millrace Drive and Millside Drive. The landscaped median would connect with the westbound left at Millrace Drive and support the potential Millside Drive improvements as dedicated left-turn lanes. The improvement would require widening Graves Mill Road to accommodate the additional lane. The project would be enhanced by a multiuse path or sidewalk along the south side of Graves Mill Road (previous multimodal recommendation).

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

- » Smart Scale
- » Transportation Alternatives
- » Highway Safety Improvement Program
- » Developer Proffers

Defined Need

Numerous accidents clustered near the Lillian Lane intersection. Difficulty making an eastbound left and southbound left. High speeds and steeper grade along this portion of Graves Mill Road. Under future conditions, the eastbound and westbound left movements at Millside Drive meet turn lane warrants, per VDOT standards.

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: 11.7/15 points

Potential Funding Sources

- » Revenue Sharing

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

#118 ROUNDABOUT

GRAVES MILL RD AT MCCONVILLE RD

Project Description

Install a full-size roundabout with a raised island. Maintain the eastbound right slip lane.

Quick Facts

Project Type: Intersection Reconstruction Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

Design Concepts

- » Revenue Sharing
- » Transportation Alternatives
- » Highway Safety Improvement Program
- » Developer Proffers

Defined Need

Under future conditions, extensive queuing occurs, primarily with movements associated with Nationwide Drive. Under future conditions, several movements will operate at LOS F, including the overall intersection during the PM peak.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 16.7/25 points

Economy: 20.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 6.7/15 points

Potential Funding Sources

» Smart Scale

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

#148 RESTRICTED CROSSING U-TURN

LYNCHBURG HWY AT NEW LONDON DR

Project Description

Reconfigure the intersection at US 460 and Hicks Road to a Restricted Crossing U-turn (RCUT). Side street throughs and left-turns would U-turn at adjacent existing intersections.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial **Source:** US Route 460 Arterial Preservation Plan (2020)

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Aerial Map

Potential Funding Sources

- » Highway Safety
- » Revenue Sharing

Defined Need

A crash reduction of 20% would be expected by implementing an RCUT improvement.

Goals Scores

Mobility & Accessibility: 13.3/20 points

Safety: 8.3/25 points

Economy: 18.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 13.3/15 points

Improvement Program » SMART SCALE Round IV

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

#116 INTERSECTION RECONSTRUCTION

GRAVES MILL RD AT GRISTMILL DR (RT 1426)

Project Description

Widen Graves Mill Road to accommodate a single westbound left-turn lane (protected permissive phasing). Widen Gristmill Drive to accommodate dual northbound right-turn lanes (overlap phasing). Provide a pedestrian crossing and countdown timer across Gristmill Drive. If sidewalks are eventually implemented along the north side of Graves Mill Road, then pedestrian crossings could be installed at that time.

Quick Facts

Project Type: Roadway Capacity Expansion Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

Design Concepts

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Transportation outreach. Alternatives » Secure funding. » Highway Safety Improvement Program » Developer Proffers

Defined Need

Gristmill Drive functions as a cut-through to avoid US 221 at Graves Mill Road. At times, unable to clear westbound movement in a single cycle length. Lack of a dedicated westbound left-turn lane (shared thru-left) creates heavy queuing during the PM peak. Northbound right is consistent and heavy due to cut-through traffic, generating lengthy queues during the AM peak.

#119 INTERSECTION RECONSTRUCTION

GRAVES MILL RD AT MILLRACE DR

Project Description

Provide an eastbound right-turn lane. Maintain existing access, but consider bringing north side driveway into signalization.

Quick Facts

Project Type: Intersection Reconstruction Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

- » Smart Scale
- » Revenue Sharing
- » Transportation Alternatives
- » Highway Safety
- » Developer Proffers

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 12.5/25 points

Economy: 16.7/25 points

Community & Nature: 15/15 points

Operational Efficiency: 8.3/15 points

Potential Funding Sources

Improvement Program

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

#97 LANE EXTENSION

LYNCHBURG EXPRESSWAY AT CARROLL AVENUE

Project Description

The proposed improvement includes constructing a 1,600foot northbound Lynchburg Expressway auxiliary lane between the entrance ramp from Odd Fellows Road and the exit ramp to Carroll Avenue. The improvement also extends the existing 0-foot long deceleration lane for the exit ramp to Carroll Avenue to exceed the minimum AASHTO recommended design length of 405 feet.

Quick Facts

Project Type: Intersection Reconstruction Functional Class: Other Freeways and Expressways Source: Lynchburg Expressway Improvement Study (2015)

Aerial Map

Potential Funding Sources

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

6 crashes occurred in the influence area of the proposed improvements between 2010 and 2012. Constructing the northbound Lynchburg Expressway auxiliary lane between the entrance ramp from Odd Fellows Road and the exit ramp to Carroll Avenue will improve safety by providing longer acceleration and deceleration distances for vehicles merging onto and off of the Lynchburg Expressway.

Mobility & Accessibility: 12/20 points

- Safety: 16.7/25 points
- Economy: 14.6/25 points
- Community & Nature: 15/15 points
- **Operational Efficiency: 8.3/15 points**

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

#5 LANE MODIFICATIONS LYNCHBURG EXPRESSWAY AT ODD FELLOWS ROAD

Project Description

The proposed improvement includes extending the acceleration lane length for the southbound Lynchburg Expressway entrance ramp from Odd Fellows Road from 270 feet to 600 feet and extending the deceleration lane length for the northbound Lynchburg Expressway exit ramp to Odd Fellows Road from 200 feet to 400 feet to meet the minimum AASHTOrecommended design lengths. The improvement also provides a 300-foot taper at the end of the acceleration lane and at the beginning of the deceleration lane.

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Other Freeways and Expressways Source: Lynchburg Expressway Improvement Study (2015)

Aerial Map

Potential Funding Sources

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

11 crashes occurred in the influence area of the proposed improvements between 2010 and 2012. Extending the acceleration and deceleration lanes will provide safer access to the Lynchburg Expressway by providing longer acceleration and deceleration distances. Vehicles merging onto the southbound Lynchburg Expressway from Odd Fellows Road will have an additional 330 feet to accelerate and vehicles exiting the northbound Lynchburg Expressway to Odd Fellows Road will have an additional 200 feet to decelerate

Goals Scores

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

#60 INTERSECTION AND ACCESS MANAGEMENT IMPROVEMENTS

CANDLERS MOUNTAIN RD AT WARDS RD (US 29)

Sc	ore Overview
	Rank: 24
\$1	Cost: L5,000,000
Be	nefit Score: 70.8

Project Description

This project provides additional operational capacity at the Wards Road intersection.

Quick Facts

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

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Aerial Map lers Mountain Rd

Potential Funding Sources

- » Smart Scale
- » Revenue Sharing
- » Transportation Alternatives

Defined Need

The intersection of Candlers Mountain Road and Wards Road experienced 39 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.

Goals Scores

Mobility & Accessibility: 13.3/20 points

Safety: 16.7/25 points

Economy: 20.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 5/15 points

- » Highway Safety Improvement Program

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

#155 ACCESS MANAGEMENT AND INTERSECTION IMPROVEMENTS

WARDS RD FROM CITY OF LYNCHBURG CORP LIMITS TO LOFTY VIEW LN

Score Overview
Rank: 25
Cost: \$12,547,301
Benefit Score: 76.8

Project Description

Access Management and Intersection Improvements Segments 1-3.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial Source: VDOT SHRP2 PlanWorks- US 29

Aerial Map

Design Concepts

No design concepts available.

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

The identified improvements will collectively improve local vehicular access (e.g., the addition of turn lanes), local nonmotorized access (e.g., construction of a shared-use path), and through mobility (e.g., the closure of medians).

Goals Scores

Mobility & Accessibility: 14.7/20 points

- Safety: 12.5/25 points
- Economy: 22.9/25 points
- Community & Nature: 15/15 points
- **Operational Efficiency: 11.7/15 points**

Potential Funding Sources

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

#49 ACCESS MANAGEMENT

TIMBERLAKE RD FROM WHITTEN TIMBERLAKE CHAPEL ENTRANCE TO HERITAGE BUSINESS CENTER ENTRANCE

Project Description

Convert median opening at the Heritage Business Center entrance to a right-in/right-out entrance. Add a loon at Whitten Timberlake Chapel to facilitate U-turns. Construct sidewalk on eastbound Timberlake Road between Whitten Timberlake Chapel and Misty Mountain Road. Construct sidewalk on westbound Timberlake Road at Liberty Market. Remove existing Route 6 GLTC bus stop at Whitten Timberlake Chapel.

Quick Facts

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

Aerial Map

Design Concepts

Potential Funding Sources

- » Highway Safety
- » Revenue Sharing
- » Transportation Alternatives

Defined Need

Converting the Heritage Business center entrance to a right-in/right-out entrance is anticipated to improve throughput on Timberlake Road and reduce crashes. Sidewalk will also be installed along the segment.

Goals Scores

Mobility & Accessibility: 13.3/20 points

Safety: 12.5/25 points

Economy: 10.4/25 points

Community & Nature: 15/15 points

Operational Efficiency: 13.3/15 points

Improvement Program

» SMART SCALE Round IV

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

#48 RESTRICTED CROSSING U-TURN

TIMBERLAKE RD AT TIMBER RIDGE II APARTMENTS ENTRANCE

Project Description

Install restricted crossing U-turn (RCUT) intersections at both entrances to Timber Ridge apartments. Remove existing Route 6 GLTC bus stop at the western Timber Ridge Apartments entrance. Construct sidewalk at Timber Ridge Apartments to accommodate existing bus stop.

Quick Facts

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

Aerial Map

Design Concepts

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

Defined Need

Installation on an RCUT at the Timber Ridge I and Il entrances is anticipated to improve throughput on Timberlake Road and reduce crashes. Sidewalk will also be installed along Timberlake Road.

Goals Scores

Mobility & Accessibility: 13.3/20 points

- Safety: 12.5/25 points
- Economy: 10.4/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 11.7/15 points

Potential Funding Sources

- Improvement Program

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

#143 POTENTIAL PHASED APPROACH

SOUTH AMHERST HIGHWAY FROM ROUTE 163 TO S COOLWELL ROAD (RT 694)

Score Overview	
Rank: 28	
Cost: \$20,000,000	
Benefit Score: 71.7	

Project Description

This project was carried forward from the vision list of the 2040 Long Range Plan.

Quick Facts

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

Aerial Map

Design Concepts

No design concepts available.

Potential Next Steps Funding Sources » Smart Scale » Conduct a study of traffic operations, » Revenue Sharing safety issues, and access spacing to develop more detailed recommendations.

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.

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

#146 RESTRICTED CROSSING U-TURN

EAST LYNCHBURG SALEM TURNPIKE AT THOMAS JEFFERSON RD (RT 811)

Score Overview
Rank: 29
Cost: \$6,550,000
Benefit Score: 69.5

Project Description

Reconfigure the intersection at US 460 and New London Road to a Restricted Crossing U-turn (RCUT). Construct loons to the east and west of the intersection to accommodate U-turns.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial Source: US Route 460 Arterial Preservation Plan (2020)

Design Concepts

- » Highway Safety
- » Revenue Sharing

Defined Need

A crash reduction of 20% would be expected by implementing an RCUT improvement.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 16.7/25 points

Economy: 16.7/25 points

Community & Nature: 12.5/15 points

Operational Efficiency: 11.7/15 points

Potential Funding Sources

Improvement Program » SMART SCALE Round IV

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

#4 LANE AND RAMP MODIFICATIONS

LYNCHBURG EXPRESSWAY AT JAMES STREET/STADIUM ROAD

Project Description

The proposed improvement includes extending the deceleration lane length for the southbound Lynchburg Expressway exit ramp to Stadium Road/Gordon Street from 240 feet to 650 feet to meet the minimum AASHTO recommended design length, closing the southbound Lynchburg Expressway entrance ramps from Stadium Road/Gordon Street, closing the southbound Lynchburg Expressway exit ramp to James Street, and reconfiguring the southbound Lynchburg Expressway entrance ramp from James Street to extend the acceleration lane length from 0 feet to 500 feet.

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Other Freeways and Expressways Source: Lynchburg Expressway Improvement Study (2015)

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

26 crashes occurred in the influence area of the proposed improvements between 2010 and 2012. Extending the deceleration lane length on the exit ramp to Stadium Road/Gordon Street will provide an additional 410 feet for vehicles to decelerate. Closing the southbound entrance ramp from Stadium Road/ Gordon Street and exit ramp to James Street will increase the spacing between successive ramp termini.

Goals Scores

- Safety: 8.3/25 points
- Economy: 16.7/25 points
- Community & Nature: 15/15 points
- **Operational Efficiency: 13.3/15 points**

Potential **Funding Sources**

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

#8 RAMP CONSTRUCTION

SOUTH AMHERST HIGHWAY AT ROUTE 163

Project Description

Add ramp to complete interchange. This project was carried forward from the vision list of the 2040 Long Range Plan. The proposed improvement would increase the capacity to move more vehicles through this congested interchange.

Quick Facts

Project Type: New Roadway Functional Class: Other Freeways and Expressways Source: 2040 CVMPO LRTP

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Aerial Map

Design Concepts

No design concepts available.

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Developer Proffers outreach. » Secure funding.

Defined Need

The interchange was identified as needing improvement during the 2040 long-range planning process.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 12.5/25 points

Economy: 16.7/25 points

Community & Nature: 15/15 points

Operational Efficiency: 13.3/15 points

#156 ACCESS MANAGEMENT AND INTERSECTION IMPROVEMENTS

WARDS RD FROM LOFTY VIEW LN TO PATTERSON RD

Design Concepts

No design concepts available.

Potential Funding Sources

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

The identified improvements will collectively improve local vehicular access (e.g., the addition of turn lanes), local nonmotorized access (e.g., construction of a shared-use path), and through mobility (e.g., the closure of medians).

Goals Scores

Mobility & Accessibility: 14.7/20 points

- Safety: 8.3/25 points
- Economy: 20.8/25 points
- Community & Nature: 15/15 points
- **Operational Efficiency: 11.7/15 points**

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

#157 ACCESS MANAGEMENT AND INTERSECTION IMPROVEMENTS

WARDS RD FROM LOFTY VIEW LN TO PATTERSON RD

Design Concepts

No design concepts available.

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Highway Safety Improvement Program » Conduct community outreach. » Revenue Sharing » Secure funding.

Defined Need

The identified improvements will collectively improve local vehicular access (e.g., the addition of turn lanes), local nonmotorized access (e.g., construction of a shared-use path), and through mobility (e.g., the closure of medians).

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 8.3/25 points

Economy: 20.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 11.7/15 points

#122 DIVERGING DIAMOND

GRAVES MILL RD AT US 501 INTERCHANGE

Project Description

A Diverging Diamond Interchange is a grade-separated interchange design where arterial (a major route that carries traffic between highways and smaller routes) traffic crosses to the other side of the roadway between the freeway ramps. Would likely be implemented when the Graves Mill Road / US 501 interchange bridge needs replacing. Because the bridge would be replaced, ensure the new one is also wide enough to accommodate a multiuse path or sidewalk.

Quick Facts

Project Type: Roadway Reconstruction Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

Design Concepts

- » Smart Scale
- » Revenue Sharing

Defined Need

Preliminary results suggest the DDI offers the greatest reduction in delay and queuing, when compared to more conventional designs.

Goals Scores

Mobility & Accessibility: 14.7/20 points

Safety: 16.7/25 points

Economy: 16.7/25 points

Community & Nature: 15/15 points

Operational Efficiency: 6.7/15 points

Potential Funding Sources

Next Steps

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

#105 CONSTRUCT TURN LANES

WARDS FERRY RD AT ATLANTA AVE

Project Description

Add turn lanes. This project was carried forward from the vision list of the 2040 Long Range Plan. The proposed improvement would increase the safety of the intersection.

Quick Facts

Project Type: Intersection Reconstruction Functional Class: Major Collector Source: 2040 CVMPO LRTP

Aerial Map

Design Concepts

No design concepts available.

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Developer Proffers outreach. » Secure funding.

Defined Need

The intersection was identified as needing improvement during the 2040 long-range planning process.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 12.5/25 points

Economy: 12.5/25 points

Community & Nature: 15/15 points

Operational Efficiency: 8.3/15 points

#24 CONSTRUCT TURN LANES

ELON RD AT BERG DR

Score Overview
Rank: 36
Cost: \$1,143,000
Benefit Score: 61.6

Project Description

Construct two left-turn lanes.

Quick Facts

Project Type: Intersection Reconstruction**Functional Class:** Minor Arterial**Source:** Amherst County Comprehensive Plan (2017)

Aerial Map

Design Concepts

No design concepts available.

Pot Funding

- » Smart Sc
- » Revenue
- » Developer

Mobility & Accessibility: 12/20 points

Safety: 12.5/25 points

Economy: 14.6/25 points

Community & Nature: 12.5/15 points

Operational Efficiency: 10/15 points

ential g Sources	Next Steps
ale	 » Prepare detailed
Sharing	engineering drawings. » Conduct community
r Proffers	outreach. » Secure funding.

#19 ACCESS MANAGEMENT AND INTERSECTION IMPROVEMENTS

WARDS RD FROM COLONIAL HIGHWAY (RT 24) TO CITY OF LYNCHBURG CORP LIMITS

Score Overview Rank: 37 Cost: \$17,886,422 Benefit Score: 69.7	nent and Intersection Improvements.	Quick Facts Project Type: Access Management ar Functional Class: Other Principal Arte Source: VDOT SHRP2 PlanWorks- US	nd Safety erial 29
	Image: Constraint of the second of the se	the	Goals Goals File Smart Sc Smart Sc Highway S Improvem Revenue

Defined Need

The identified improvements will collectively improve local vehicular access (e.g., the addition of turn lanes), local nonmotorized access (e.g., construction of a shared-use path), and through mobility (e.g., the closure of medians).

Scores

Mobility & Accessibility: 14.7/20 points

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

ential g Sources

- ale
- Safety nent Program
- entriogram
- Sharing

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

#115 TURN LANE CONSTRUCTION AND RAMP WIDENING

GRAVES MILL RD AT US 501 SOUTHBOUND RAMP

Project Description

Reconfigure eastbound approach to a single through lane and dual, controlled rights. Convert the existing right-turn lane to a travel lane by extending back to Creekside Drive. Widen the southbound on-ramp to accommodate two lanes that will merge to a single lane, before merging on to US 501. Provide a channelized southbound right, free-flow lane. The lane will end as a dedicated right-turn lane at Creekside Drive.

Quick Facts

Project Type: Intersection Reconstruction Functional Class: Minor Arterial Source: Graves Mill Road Corridor Improvement Study (2018)

Aerial Map

- » Smart Scale
- » Transportation Alternatives
- » Highway Safety
- » Developer Proffers

Defined Need

Queuing for the eastbound right extends back through Creekside Drive, primarily during the PM peak. Lane bias becomes an issue west of Creekside Drive. The eastbound queue in the right lane consistently does not clear the intersection at Creekside Drive. Moderate southbound right queuing for the off-ramp occurs during both peaks.

Goals Scores

Mobility & Accessibility: 12/20 points

- Safety: 12.5/25 points
- Economy: 14.6/25 points
- Community & Nature: 15/15 points
- **Operational Efficiency: 10/15 points**

Potential Funding Sources

- » Revenue Sharing
- Improvement Program

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

#149 RESTRICTED CROSSING U-TURN

RICHMOND HIGHWAY AT VILLAGE HWY

Project Description

Reconfigure the intersection at US 460 and Village Highway/ Stonewall Road to a Restricted Crossing U-turn (RCUT). Construct loons to the east and west of the intersection to accommodate U-turns.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial **Source:** US Route 460 Arterial Preservation Plan (2020)

Aerial Map

Design Concepts

- » Highway Safety
- » Revenue Sharing

Defined Need

A crash reduction of 20% would be expected from implementing an RCUT improvement.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 8.3/25 points

Economy: 18.8/25 points

Community & Nature: 15/15 points

Operational Efficiency: 13.3/15 points

Potential Funding Sources

Improvement Program » SMART SCALE Round IV

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

#98 INSTALL SOUTHBOUND AUXILIARY LANE

LYNCHBURG EXPRESSWAY FROM MILLER ST TO KEMPER ST

Project Description

§ The proposed improvement includes constructing a 1,700foot southbound Lynchburg Expressway auxiliary lane between the entrance ramp from Miller Street and the exit ramp to westbound Kemper Street. The improvement also extends the existing 250-foot long deceleration lane for the exit ramp to westbound Kemper Street to exceed the minimum AASHTO recommended design length of 414 feet.

Quick Facts

Project Type: Roadway Capacity Expansion Functional Class: Other Freeways and Expressways Source: Lynchburg Expressway Improvement Study (2015)

Aerial Map

Potential Funding Sources

- » Smart Scale
- » Highway Safety Improvement Program
- » Revenue Sharing

Defined Need

9 crashes occurred in the influence area of the proposed improvements between 2010 and 2012. Constructing the southbound Lynchburg Expressway auxiliary lane between the entrance ramp from Miller Street and the exit ramp to Carroll Avenue will improve safety by providing longer acceleration and deceleration distances for vehicles merging onto and off of the Lynchburg Expressway.

Goals Scores

Mobility & Accessibility: 12/20 points

- Safety: 12.5/25 points
- Economy: 14.6/25 points
- Community & Nature: 15/15 points
- Operational Efficiency: 8.3/15 points

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

#145 RESTRICTED CROSSING U-TURN

EAST LYNCHBURG SALEM TURNPIKE AT MEADE RD

Project Description

Reconfigure the intersection at US 460 and Meade Road to a Restricted Crossing U-turn (RCUT). Construct a loon to the west of the intersection to accommodate U-turns.

Quick Facts

Project Type: Access Management and Safety Functional Class: Other Principal Arterial Source: US Route 460 Arterial Preservation Plan (2020)

Aerial Map

- » Highway Safety
- » Revenue Sharing

Defined Need

A crash reduction of 35% would be expected by implementing an unsignalized RCUT improvement.

Goals Scores

Mobility & Accessibility: 12/20 points

Safety: 8.3/25 points

Economy: 14.6/25 points

Community & Nature: 15/15 points

Operational Efficiency: 11.7/15 points

Potential Funding Sources

Improvement Program » SMART SCALE Round IV

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

#150 COMPLETE STREETS

DOWNTOWN STREETS - A

Project Description

Implement complete streets in downtown Lynchburg -Phase A, four blocks. This project was carried forward from the vision list of the 2040 Long Range Plan. Facilitating active transportation in the downtown area will increase mobility and stimulate economic activity in the area.

Quick Facts

Project Type: Multimodal Capacity Expansion Functional Class: Minor Arterial Source: 2040 CVMPO LRTP

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Aerial Map

Design Concepts

No design concepts available.

Potential Next Steps Funding Sources » Smart Scale » Prepare detailed engineering drawings. » Revenue Sharing » Conduct community » Transportation outreach. Alternatives » Secure funding.

Defined Need

The streets of downtown Lynchburg lack complete bike and pedestrian networks.

Goals Scores

Mobility & Accessibility: 9.3/20 points

Safety: 12.5/25 points

Economy: 20.8/25 points

Community & Nature: 7.5/15 points

Operational Efficiency: 11.7/15 points