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## Introduction

In 2012, the Thomas Jefferson Planning District Commission (TJPDC), also known as Region 10, started an initiative to study, promote and improve its portion of U.S. Bicycling Route 76 (BR 76). This report is the first step in this initiative, creating an inventory of existing conditions and highlighting recommendations for improving the safety and recreational value of the Route.



Figure 1: TJPDC's Bike Route 76 Initiative

## Purpose and Audience

This report is a technical document, intended to highlight roadway deficiencies that diminish cycling safety along BR 76, in Region 10. As a technical document, the intended audience includes regional and state transportation planners, along with cycling advocates. This report is intended to document cycling compatibility, with a secondary goal of recording cycling amenities and tourist destinations.

This report may also serve as a guide to local officials, to aid in decision-making for transportation-related investments. Since BR 76 is also a recreational and tourist amenity, this report may also be helpful for identifying strategies for supporting tourism efforts.

## Goals and Objectives

This report is intended to fulfill four main goals:

### Goal A: Inventory Road Conditions

Inventory all roadway conditions along the Region 10 portion of BR 76.

### Goal B: Safety Recommendations

Develop recommendations for improving overall cycling compatibility along the corridor.

### Goal C: Recreational Value

Identify strategies for improving the recreational experience along BR 76.

### Goal D: Data Collection

Collect data and develop maps that will assist with subsequent efforts to promote BR 76.

## U.S. Bicycling Route 76

U.S. Bicycling Route 76 is an on-road Bike Route that spans the eastern half of the Country, from Missouri to eastern Virginia, in Yorktown. The concept for BR 76 originated with a large cycling event in 1976, which celebrated the Country's bicentennial. As part of the event, the Adventure



TransAmerica Trail - Courtesy Adventure Cycling Association

Cycling Association (at that time known as Bikecentennial) first mapped a cross-country bike route named the TransAmerican Bicycle Trail. That trail still exists today and stretches from Oregon to Virginia, spanning approximately 4,242 miles from coast to coast. While the Adventure Cycling Association acts as overseer to this trail, there were no official bike route designations until 1982.

In 1978, the American Association of State Highway and Transportation Officials (AASHTO) established the U.S. Bicycling Route System (USBRS), the cycling equivalent to the numbering system for highways and interstates. The purpose of these route numberings and markings is to facilitate recreational riding between states, by way of roadways that are reasonably suitable for bicycling. While U.S. Bike Routes include off-road paths, the vast majority of route mileage consists of on-road facilities (public highways).

In 1982, AASHTO designated the first two U.S. Bicycling Routes (Routes 1 and 76), both of which pass through Virginia. This made the Commonwealth one of the first states with a USBR and the first with two routes. In recent years, AASHTO approved additional Bike Routes and there are more under review. At this time, there are over 6,200 miles of approved Bike Routes, spanning 12 states.



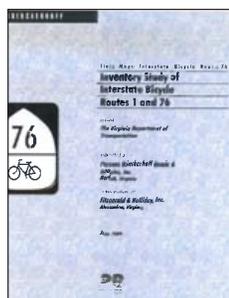
Route 76 and Route 1 Bike Routes in Virginia

There is common confusion between BR 76 and the Trans-American Trail. While the TransAmerican Trail spans the entire country, AASHTO officially designated only the eastern portion of that trail (Missouri to Virginia) as BR 76. While the USBR and TransAmerican Trail are related and overlap in most cases, there are areas where these routes diverge.

## Bicycling Route 76 in Virginia

In Virginia, BR 76 accounts for 559 miles of roadways, from the Cumberland Plateau and Appalachian Mountains to the lowlands of Hampton Roads. Along its path, BR 76 traverses 23 counties, including: Dickenson, Buchanan, Russell, Washington, Smyth, Grayson, Wythe, Pulaski, Montgomery, Roanoke, Botetourt, Rockbridge, Augusta, Nelson, Albemarle, Fluvanna, Goochland, Louisa, Hanover (overlaps with U.S. Bicycling Route 1), Henrico, Charles City, James City, and York. The Bike Route also passes through four of Virginia's cities: Radford, Lexington, Charlottesville, and Williamsburg – before the eastern terminus at Yorktown.

Across the Commonwealth, there have been several studies and initiatives to improve BR 76. In 1999, VDOT completed the Inventory Study of Interstate Bicycle Routes 1 and 76. This study provided a general snapshot of existing conditions along the entire length of both bike routes in Virginia. In 2012, the Department of Conservation and Recreation (DCR) and Virginia Department of Transportation (VDOT) released the Official State Bicycle Map: Bicycling in Virginia, which featured BR 76. The map included information on public destinations along the Route, along with road profiles that illustrated changes in topography.



## Project Study Area

The study area of this report includes all sections of BR 76 in Region 10, including small portions in Augusta and Goochland Counties. Within the TJPDC boundaries, BR 76 accounts for over 135 miles of roadway that include:

### Nelson County

Route 48: Blue Ridge Parkway  
Route 250: Rockfish Gap Turnpike  
Route 6: Afton Mountain Road  
Route 750: Old Turnpike Road  
(See Map 2)

### Western Albemarle County

Route 750: Old Turnpike Road  
Route 250: Rockfish Gap Turnpike  
Route 796: Brooksville Road  
Route 690: Newtown Road  
Route 691: Greenwood Road  
Route 691: Jarmans Gap Road  
Route 684: Lanetown Road  
Route 788: Railroad Avenue  
Route 789: Buck Road  
Route 810: White Hall Road  
Route 614: Garth Road  
Route 676: Garth Road  
Route 601: Garth Road  
Route 601: Old Garth Road  
Route 601: Old Ivy Road  
(See Map 3)

### Charlottesville

Route 250: Ivy Road  
Route 250: University Avenue  
Route 250: West Main Street  
Route 652: Water Street  
Route 3413: Second Street SE  
Route 620: Garrett Street

Route 20: Avon Street  
Route 20: Monticello Avenue

### Eastern Albemarle County

Route 20: Scottsville Road  
Route 53: Thomas Jefferson Parkway  
Route 795: James Monroe Parkway  
Route 620: Rolling Road  
Route 619: Ruritan Lake Road  
(See Map 4)

### Fluvanna

Route 619: Ruritan Lake Road  
Route 660: Ruritan Lake Road  
Route 53: Thomas Jefferson Parkway  
Route 15: James Madison Highway  
Route 601: Courthouse House  
Route 608: Wilmington Road  
Route 601: Venable Road  
Route 603: Tabscott Road  
Enter Goochland County  
(See Map 5)

### Louisa

Enter Goochland County  
Route 605: Shannon Hill Road  
Route 605: Willis Proffitt Road  
Route 522: Pendleton Road  
Route 522: Mineral Avenue  
Route 522: East 1st Street  
Route 618: East 1st Street  
Route 618: Fredericks Hall Road  
Route 700: Johnson Road  
Route 652: Kentucky Springs Road  
Route 650: Pottiesville Road  
Route 618: Fredericks Hall Road  
Route 618: Belsches Road  
(See Map 6)

Since AASHTO established BR 76 in 1982, traffic conditions along these roadways have changed significant. In the past 33 years, traffic counts have continued to increase, while roadway dimensions remained unchanged in many areas. Consequently, there are several dangerous corridors in this Region as seen throughout this report.

## Process

In 2012, the TJPDC proposed an initiative to study, promote and improve its portion of BR 76. This work fell under the TJPDC's Transportation Programs, which are funded annually by VDOT. Since most of the study area is within the region's rural boundaries, TJPDC staff designated its Rural Technical Advisory Committee (RTAC) as the Project Steering Committee for this report. The Committee's first meeting on the corridor study took place in November of 2013, with follow-up meetings every other month. The Committee reviewed draft documents and provided guidance on subsequent phases of the overall BR 76 initiative.

At the beginning of 2014, the TJPDC established an online presence for the project. Staff developed a project website that included drafts of deliverables, agendas and minutes from the Steering Committee. The site also provided op-

portunities for public comment. In March, staff created a Facebook® page for the study, as another tool for collecting feedback and distributing information. By the end of March, the TJPDC began an outreach effort to engage local bicycle shops, clubs and advocates from across the region. Staff conducted several one-on-one interviews with those in the local cycling community. In April, staff developed an online survey that helped gather detailed input from riders, which included questions on how to improve cycling safety. TJPDC staff worked with bike clubs to distribute the online survey to the cycling community.

TJPDC staff attended additional cycling meetings to discuss the Corridor Study and collect feedback. In May of 2014, staff made a presentation to the Charlottesville/Albemarle Bicycle Advisory Committee and held a lengthy discussion on the project. Starting that month, staff began to participate in meetings held by the Charlottesville/Albemarle Visitor's Bureau, to discuss promotion of BR 76.

In the summer of 2014, the TJPDC assembled a Bicycle Technical Committee, consisting of cycling experts from around the region, along with a representative from the Virginia Bicycling Federation and VDOT. The group also included stakeholders from tourism groups.

## Methodology

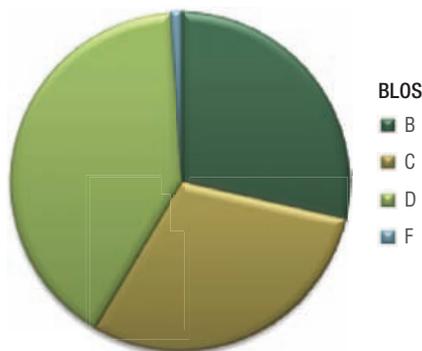
TJPDC staff worked closely with VDOT on data collection and conducted multiple site visits of the study area. VDOT representatives provided their expertise on roadway conditions and cycling deficiencies along the corridor. The Statewide Planning System (SPS) data was critical for this analysis, providing roadway dimensions, traffic counts and Level of Service information. If any roadway data seemed inaccurate, staff would verify dimensions with site visits and measurements from aerial photography. The Bicycle Technical Committee was another valuable resource for data collection.

### Bike Level of Service

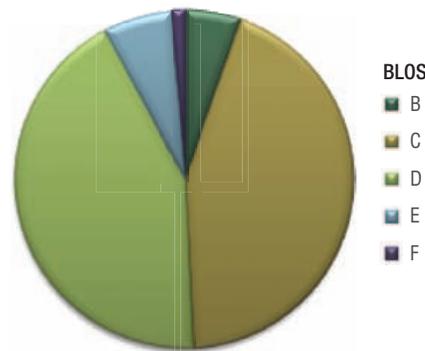
Staff used a Bike Level of Service (BLOS) calculator from the League of Illinois Bicyclists (LIB), as recommended by VDOT, to calculate bike compatibility. The equation provided a general score of bike compatibility for a given roadway. The calculator requires inputs on 8 critical indicators, which included:

1. Number of through-lanes per direction: (Default = 1 feet)
2. Width of outside lane, to outside stripe, in feet: (Default = 12 feet)
3. Paved shoulder, bike lane, OR marked parking area - outside lane stripe to pavement edge, in feet: (Default=0 feet)
4. Bi-directional Traffic Volume in ADT: (Default = 4000 ADT)
5. Posted speed limit in mph: (Default = 30 mph)
6. Percentage of heavy vehicles: (Default = 2%)
7. FHWA's pavement condition rating: (5 = Best, 1 = Worst; Default = 4)
8. Percentage of road segment with occupied on-street parking: (Default = 0%)

Current BLOS by Mileage

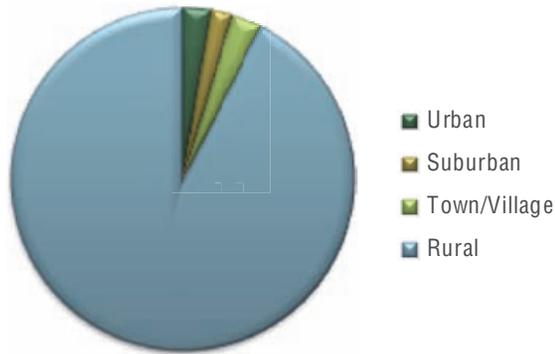


2035 BLOS by Mileage



<http://www.bikelib.org/>

## Road Mileage by Environment



The BLOS equation provided a score between 'A' and 'F'. According to LIB, a score of 'A' through 'C' indicated roadways that were compatible or "comfortable enough" for experienced cyclists. The worst score is an 'F', representing a roadway that is not compatible for cycling.

BLOS scores and definitions:

BLOS A: High Level of Bike Compatibility

BLOS B: Compatible

BLOS C: Moderate Compatibility

BLOS D: Moderately Low Compatibility

BLOS E: Low Bike Compatibility

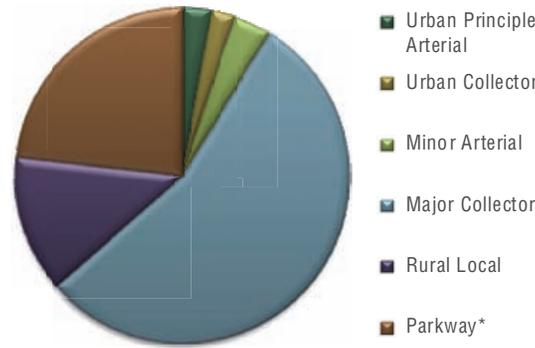
BLOS F: Extremely Low Compatibility

## Overview

### Environments

Across the study area, a rural landscape frames BR 76. Over 93 percent of the Route is within this rural environment. The remaining 7 percent of road mileage passes through small villages, the Town of Mineral, suburban areas and the City of Charlottesville. Consequently, cycling safety is linked with the challenges of rural transportation: high travel speeds, poor sight-distances and curvy roadways. Conversely, rural environments typically translate

## Mileage by Road Classification



into lower traffic counts, which is why AASHTO targets rural roadways from the USBRS.

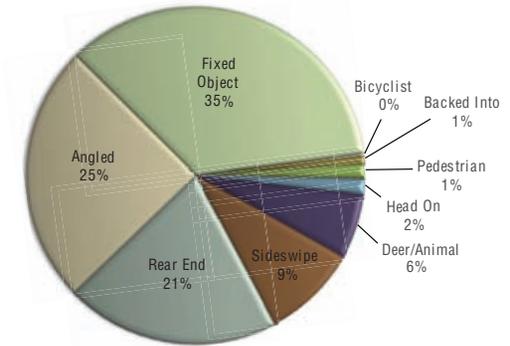
### Functional Classifications

Due to the rural nature of the study area, BR 76 consists mostly of rural road-types, including rural collectors and local roads. Those roadways typically have fewer traffic counts and serve more local traffic, rather than higher speed through traffic. Since relatively small portions of the route are in urbanized areas, there are few urban roadway classifications in the study area.

### Crash Data

The environments and roadway functions influence the types of safety issues along the corridor. Traffic accident data for the study area reveals that many accidents involve off-road collisions with fixed objects. This may be the result of narrow travel lanes on rural highways, a condition that can be particular hazardous to cyclists, since riders travel along the road's edge. The roadways of BR 76 also experience several angled collisions and sideswipes at intersections, which are where most cycling-related crashes occur. A positive from the crash data is the lack of collisions between motorists and bicyclists. The only bike-related crashes are in the City of Charlottesville, where vehicular and bike traffic is high. There may be bike-related crashes

## Traffic Accidents by Type (2005-2011)



in the rural areas, but recording is generally less accurate.

### Bike Level of Service (BLOS)

Using the LIB equations, TJPDC staff calculated the BLOS for all roadways along the Region 10 portion of BR 76. This report provides a detailed description of the scores for all roadways in the study area. Overall, approximately 42% of road mileage in the study area is incompatible for cycling (BLOS D-F).

VDOT's traffic forecasts show significant increases in Annual Average Daily Trips (AADT) along the corridor, for 2035. Without highway improvements to address cycling and road safety, the bike compatibility of BR 76 will noticeably decline. By 2035, 51% of the Bike Route will be incompatible for cycling. Additionally, there would also be a 24% decrease in road miles scoring a BLOS B.

### Traffic Counts

The BLOS results are tied to the roadway geometries and traffic counts. While traffic heavily influences bike compatibility, Chart 1 implies that there are other factors involved as well.

## Countywide Overview

### Nelson County

In Nelson County, BR 76 accounts for over 32 miles of roadway, primarily along the Blue Ridge Parkway (Map 1). In terms of cycling safety, there are several locations with limited sight-lines, particularly the areas referenced in Map 2. The Nelson County map also illustrates the various overlooks along the Parkway and proximity to destinations, such as Wintergreen Resort and wineries. There is a short section of BR 76 on US 250, in the Afton area. This roadway is one of the most dangerous in the corridor and scored an 'F' on the BLOS calculations.

### Western Albemarle County

The western side of Albemarle County is home to some of the most valued scenic vistas on BR 76, along with several tourist destinations. In terms of safety, the over 26 miles of BR 76 also presents frequent cycling hazards. Map 3 illustrates the various safety deficiencies, involving sight-distances, uneven road surfaces, dangerous intersections and guardrails.

### City of Charlottesville

While the study area consists mostly of rural roadways, the streets in Charlottesville present a unique experience for cyclists. On the City's 3.5 mile section, riders have access to numerous services and resources, as well as historic landmarks. Consequently, this corridor can serve as a destination for most cyclists.

Additionally, the League of American Bicyclists identified Charlottesville as a Silver Level, Bicycle Friendly City. This is the highest rated locality on the Virginia portion of BR 76, whereas Williamsburg, Richmond, and Roanoke received Bronze ratings.

### Eastern Albemarle County

In the eastern half of Albemarle County, BR 76 meanders 13 miles, between the City of Charlottesville and Fluvanna

County. The curvy roadway creates several deficiencies with sight-distances, as seen in Map 4. In terms of recreation and tourism, this area has some of the most desirable destinations, with the homes of two presidents and proximity to local wineries.

### Fluvanna County

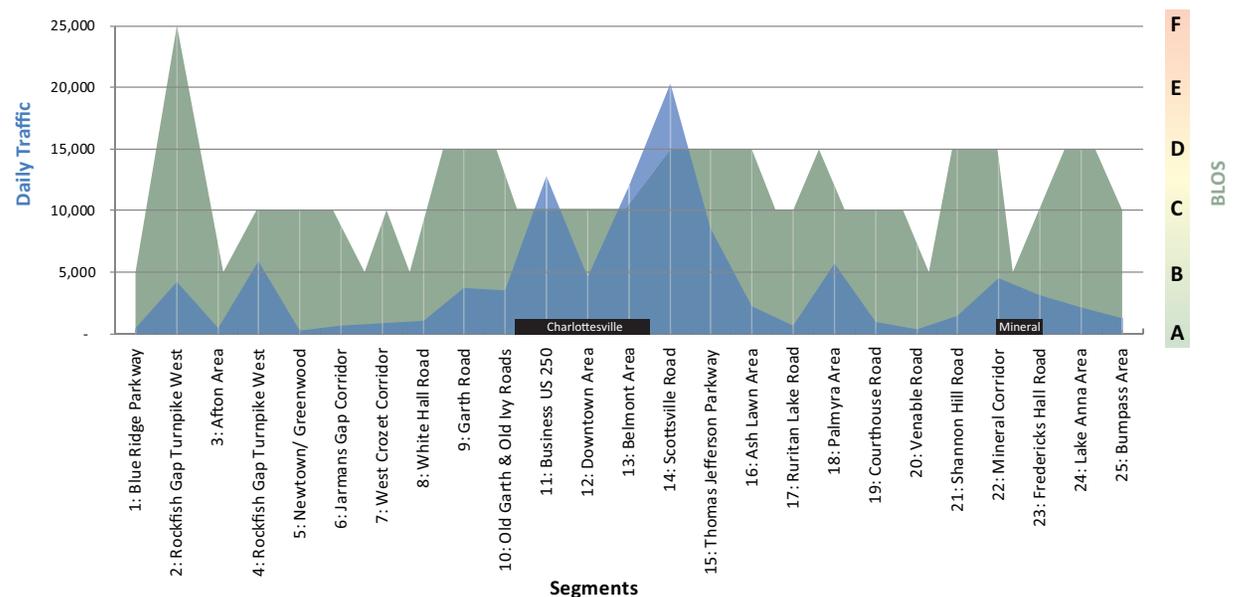
In Fluvanna County, BR 76 passes through the Village of Palmyra and several small crossroads. The route accounts for over 23 miles of roadway. Most cycling hazards involve sight-distances and guardrails. Refer to Map 5.

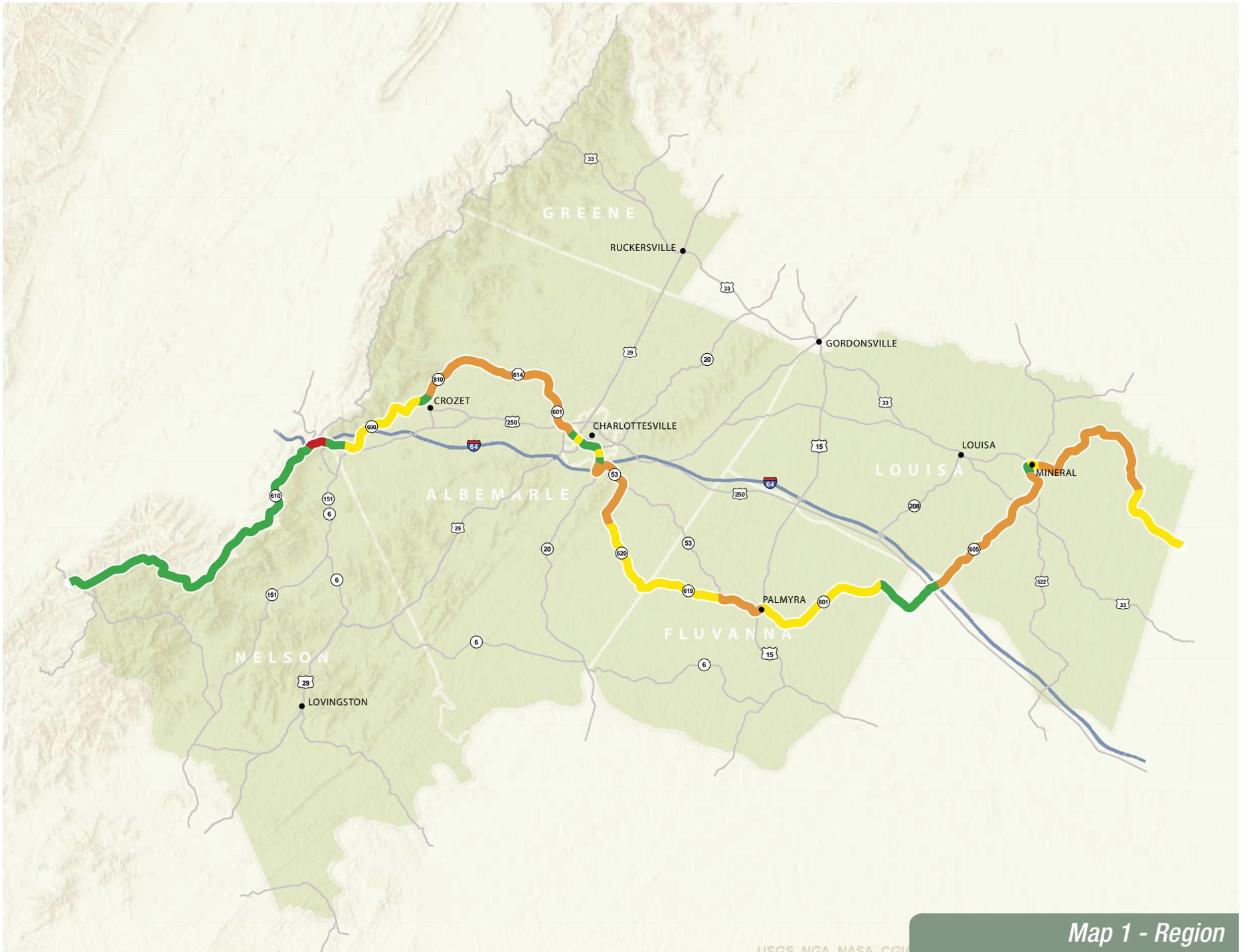
### Louisa County

There are nearly 35 miles of BR 76 in Louisa County, passing through the only incorporated town along the study area. In Louisa County, the most common road hazards are narrow roadways with guardrails. Refer to Map 6.



Annual Average Daily Traffic (AADT) and Bike Level of Service (BLOS) by Roadway Segments



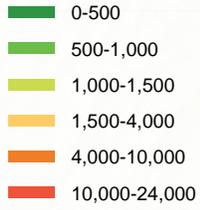


USGS NGA NASA CGI

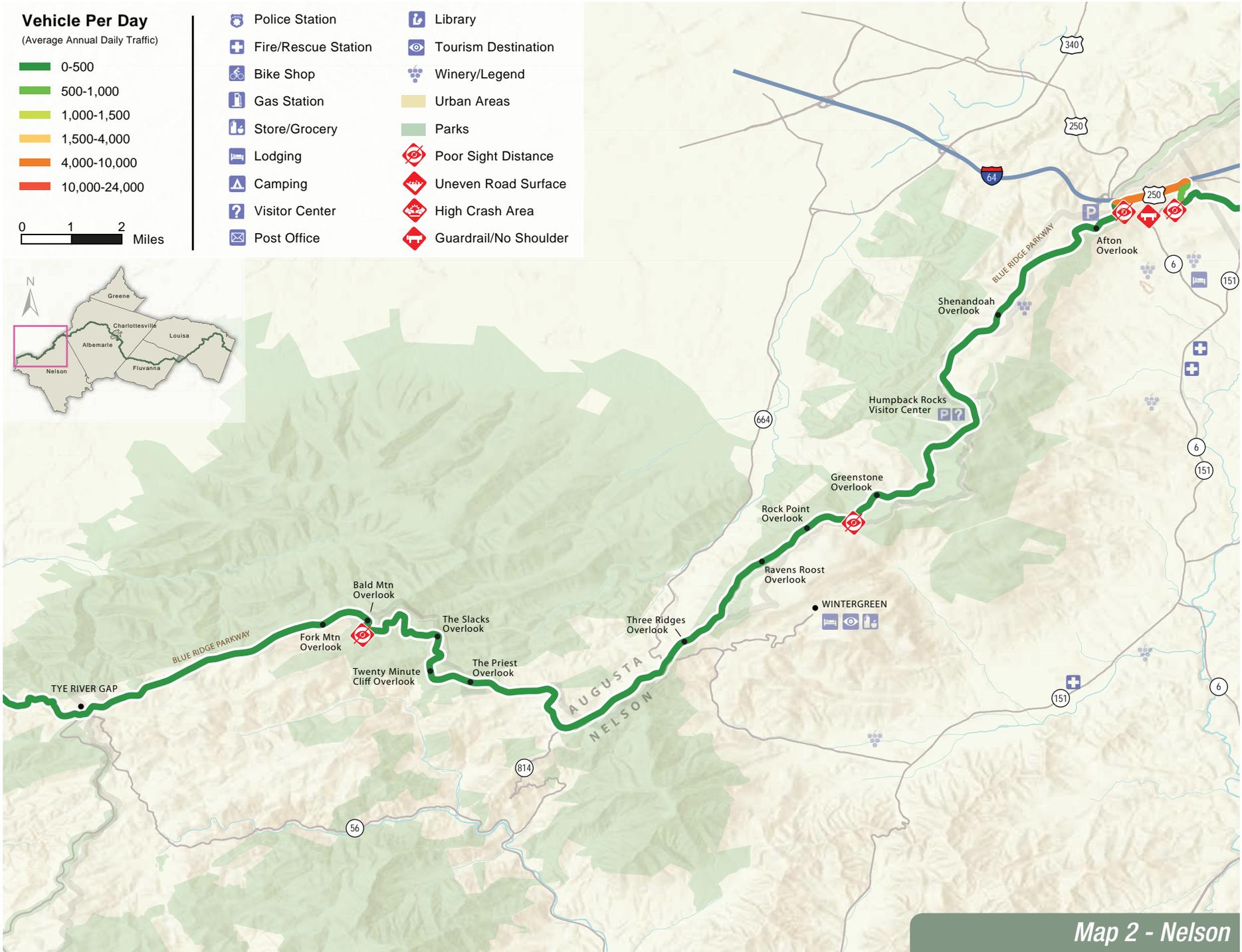
Map 1 - Region

### Vehicle Per Day

(Average Annual Daily Traffic)



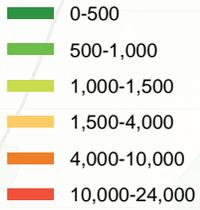
- |                     |                       |
|---------------------|-----------------------|
| Police Station      | Library               |
| Fire/Rescue Station | Tourism Destination   |
| Bike Shop           | Winery/Legend         |
| Gas Station         | Urban Areas           |
| Store/Grocery       | Parks                 |
| Lodging             | Poor Sight Distance   |
| Camping             | Uneven Road Surface   |
| Visitor Center      | High Crash Area       |
| Post Office         | Guardrail/No Shoulder |



Map 2 - Nelson

### Vehicle Per Day

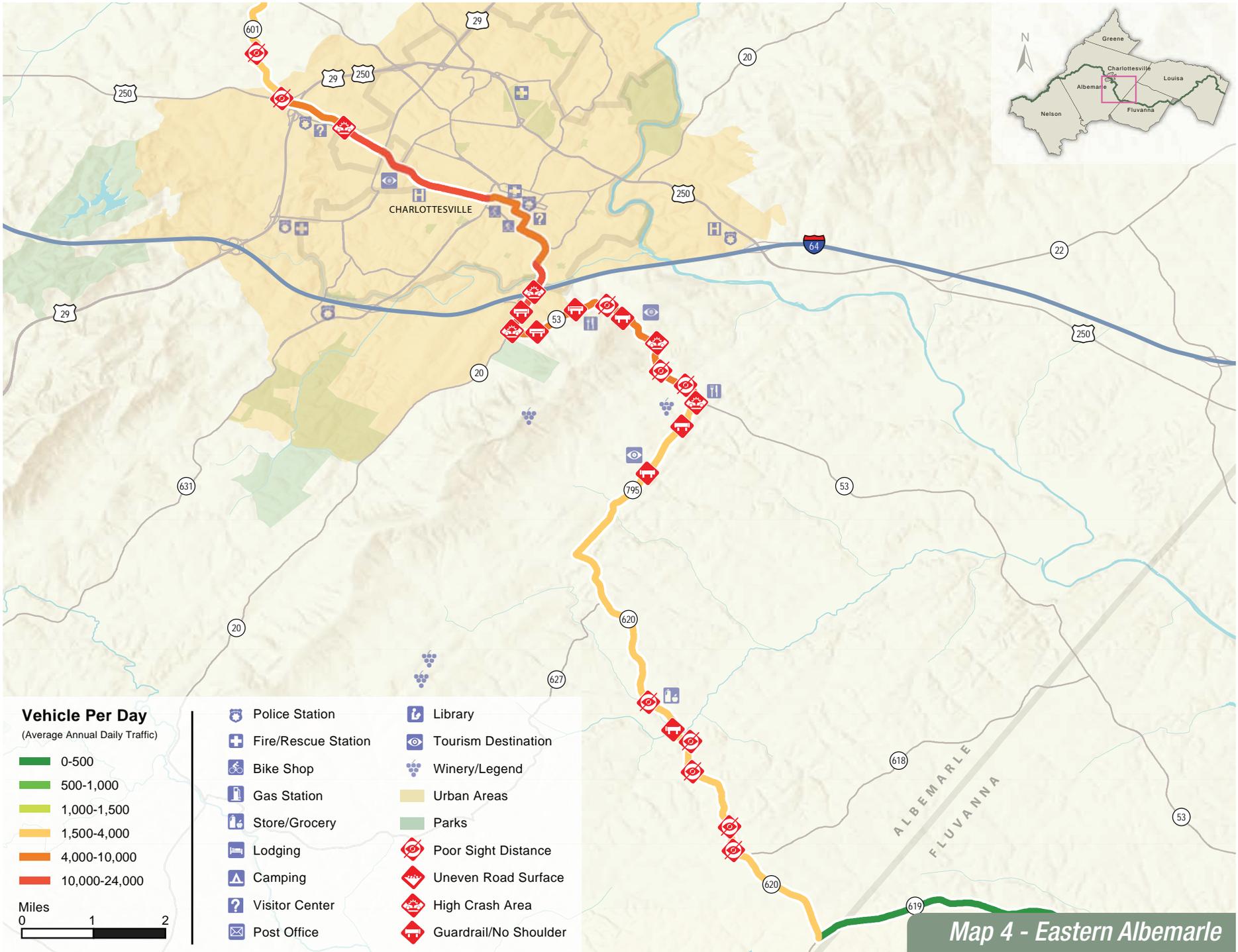
(Average Annual Daily Traffic)

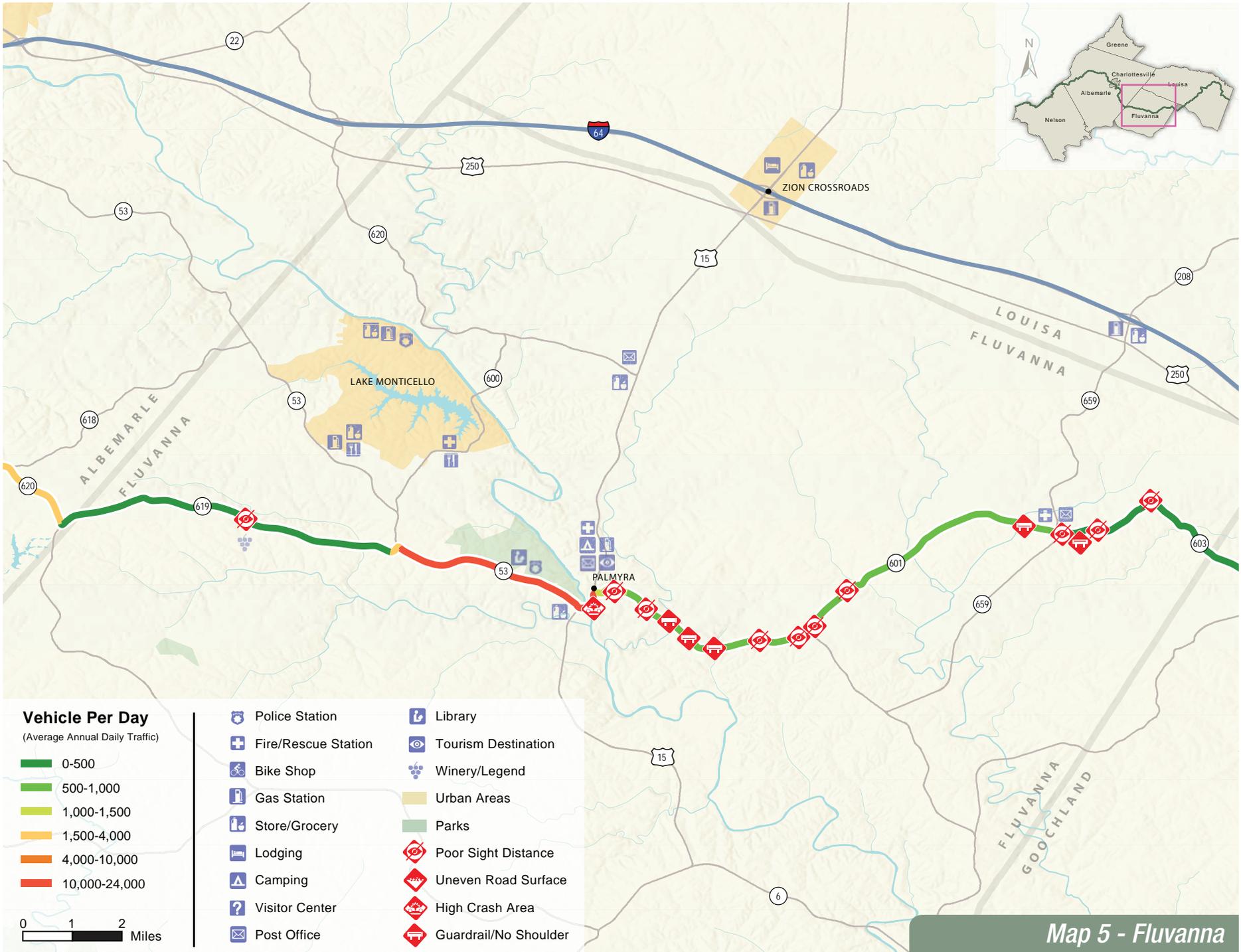


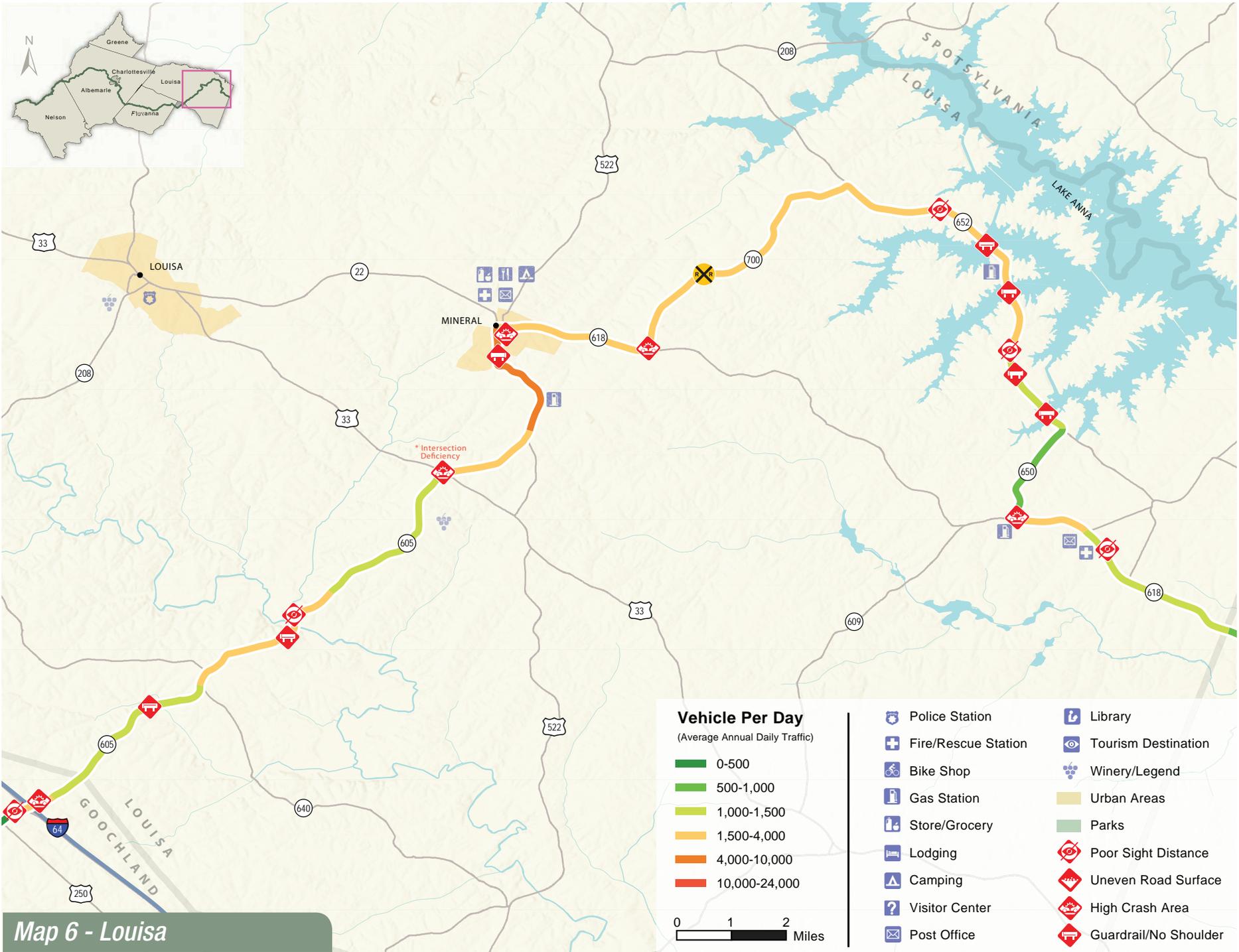
- |                     |                       |
|---------------------|-----------------------|
| Police Station      | Library               |
| Fire/Rescue Station | Tourism Destination   |
| Bike Shop           | Winery/Legend         |
| Gas Station         | Urban Areas           |
| Store/Grocery       | Parks                 |
| Lodging             | Poor Sight Distance   |
| Camping             | Uneven Road Surface   |
| Visitor Center      | High Crash Area       |
| Post Office         | Guardrail/No Shoulder |



Map 3 - Western Albemarle







## Segment Corridors

The following segments are the main deliverables of this report, providing a detailed inventory of all road, traffic and recreational conditions along this portion of BR 76. This existing conditions inventory is divided into 25 segments, or sub-corridor studies.\* Each segment includes roadways that are grouped together based on functional classifications, road dimensions and general corridor characteristics. The goal is to have concise but comprehensive assessments for every segment of BR 76 in the region. Each segment functions as its own mini-plan, with a detailed inventory, assessments and recommendations. Stakeholders can refer to a given segment to find information and recommendations on these targeted areas.

In every segment, there are six (6) sections, to provide an overview of the cycling conditions and recreational value of each corridor. These sub-headings cover:

- Segment characteristics,
- Road features,
- Traffic conditions,
- Recreational,
- Cycling Assessment, and
- Recommendations.

*\* Customized versions of this report were created for each of the five localities in the study area. This version may not include all 25 segments.*

### Segment Characteristics

Each segment begins with a general description of the corridor. This includes an overview of the roadway designations and adjacent land uses, along with feedback from local cyclists.

#### Environment

Roadways are classified as either rural or urban, based on VDOT and AASHTO definitions. These classifications deter-

mine whether AASHTO's rural or urban cycling standards should be applied to the corridor (Refer to Appendix).

#### Functional Classification System

The functional classification system identifies the function and design of roadways. For the purposes of this report, these classifications help to highlight how motorists use the roadways and whether the corridor is intended to serve high-speed, through-traffic or low-speed, local trips. The categories include:

- Urban principal arterial
- Urban minor arterial
- Urban collector
- Urban local
- Rural principal arterial
- Rural minor arterial
- Rural major collector
- Rural minor collector
- Rural local

(Refer to Glossary)

#### Roadways

A list of roadways helps to define the boundaries of each segment. This list includes mileage to communicate the length of each corridor. Please note that the distances are measured in road-miles, not lane-miles.

#### Land Uses

Land use is a critical component to transportation and can heavily influence recreational cycling. Consequently, the segments include a description of the land uses along each corridor. (For a more detailed look at existing land uses, refer to the appendix).

#### Public Comments

While local cyclists are aware of BR 76, many do not intentionally target their rides for those roadways. Instead, local riders pick unofficial routes that provide the safest and most satisfying rides. At the same time, local riders will know the existing roadway and traffic conditions better than out-of-town riders. Consequently, feedback from locals was critical to the review of existing conditions.

## Road Features

The assessment of road features is the first of two sections that identify bike compatibility of each road section. Roadway widths and geometrics are critical considerations for cycling.

#### Road Sections

Road widths are the simplest and fundamental aspect of roadway geometries. Under each segment, there are detailed measurements of the travel lanes and shoulders. Each segment also includes assessments of existing bike facilities. While shared use lanes are the most common facility along BR 76, there are also bike lanes, wide shoulders, and wide outside lanes. (Refer to Glossary.)

#### Bike Signage

Signage can direct cyclists along the Bike Route; provide information or warnings to riders; and, inform motorists of areas with heavy bike traffic. In each segment, there is a count of all bike-related signs that are currently in the corridor.

#### Featured Intersections

Intersections are the most dangerous places for cyclists and are where most bike-related accidents occur. Due to this importance, each segment includes a list of intersections in the corridor. The text includes a brief description of the intersections and identifies any apparent deficiencies.

#### Sight Distance

Particularly on rural roads, sight-lines can be fundamental to cycling safety. Under each segment, there is an overview of sight distances throughout the featured roadways.

#### Additional Road Hazards

In certain segments, there are additional road hazards that do not fall under a specific section heading. The report identifies any of these additional hazards, road surfaces, guardrails, or dangerous curves.

## Planned Road Improvements

The segments include lists of any existing recommendations, projects, assessments or studies that may influence road conditions on BR 76. In many cases, existing recommendations will benefit cycling safety. These findings help to feed into the action items of this study, guiding VDOT and other stakeholders to give priority to projects along BR 76.

### *Traffic Conditions*

The traffic conditions assessment is the second part to the equation for bike compatibility. Traffic flow is one of the most important characteristics that affect cycling safety.

#### Traffic Counts

The ADT data in this report originates from VDOT's 2012 traffic counts. The segments also include 20-year forecasts from VDOT, to anticipate future traffic volumes. These future counts help to prioritize roadway improvements and determine whether portions of BR 76 should be rerouted to lower volume roads.

#### Truck Traffic

The amount of truck traffic can greatly influence bike compatibility. Truck blast occurs when heavy vehicles generate high winds that can blow cyclists off-balance. Other than safety, heavy vehicles can also diminish overall comfort for riders. The truck traffic assessment is expressed as a percentage of total ADT, as seen in the sub-headings.

#### Travel Speeds

The segments include inventories on the posted speed limits. Due to traffic congestion and road conditions, the actual travel speeds may be lower or higher than what is posted. Consequently, the segments include estimates of those actual speeds.

#### Level of Service

The Level of Service (LOS) serves as a congestion stan-

dard for roadways (refer to glossary). The existing LOS data originates from VDOT's 2012 records. The segments also include VDOT forecasts for the year 2035.

#### Traffic Accidents

Crash data is a key indicator of general roadway safety, especially if the accidents involve cyclists. VDOT provided crash data, for the years 2005 to 2011. In each segment, there is an analysis that shows a breakdown of crash types and locations.

#### Additional Traffic Hazards

This final section addresses any miscellaneous traffic hazards, such as distracted drivers, high levels of pedestrian and bus traffic or other traffic conditions that could endanger cyclists.

### *Recreational*

Since BR 76 serves mostly recreational purposes, the location and quality of attractions is an important consideration. In each segment, there is an assessment of historic and scenic resources, tourist destinations, cycling services and resources, access points and terrain.

#### Historic Resources

Whether open to the public or visible from the roadway, historic resources can be an important part of recreational cycling. These resources give the Bike Route a unique character and allow cyclists to connect with the history of our region, state and nation. The Virginia Department of Historic Resources (VDHR) provided mapping data on the sites along the corridors.

#### Highway Markers

At the roadside, highway markers can be valuable resources, allowing visitors to pause and learn more about historic places and famous residents who lived in the area. The 25 segments include a list of any highway markers or historic plaques on or near the Route.

## Scenic Resources

Scenic resources are difficult to measure but provide great value to recreational riding. While a corridor can be attractive to visitors, there may not be any identified vistas or views from the roadway. The segments indicate any official designation or scenic byways. There is also a short description of notable views.

#### Other Destinations

Other than historic sites, there may be other destinations that interest cyclists. These destinations could include wineries, orchards, parks, trails, small towns and other interesting places.

#### Cycling Services & Resources

For long distance riders, there is great interest in cycling services and resources. These amenities may include items such as: restrooms, food and water, air pumps, medical services, post offices and internet access, along with bike shops, information centers and lodging.

#### Access Points

Access is an important consideration for recreational cycling. While some cyclists attempt to complete BR 76 at once, others may break this ride into multiple trips. There are still others who may want to access BR 76 for a shorter rider, with no intention of completing other portions of the Route. In addition to short route cycling, long distance riders frequently have support and gear (SAG) vehicles that need short term parking, as cyclists often "leap frog" the SAG vehicle, taking turns driving. Each segment includes an inventory of these public parking areas.

#### Topography

In this region, cyclists experience frequent changes in topography, as the Route passes through the foothills and into the Blue Ridge Mountains. The segments include a cross-section of the terrain in each corridor, along with a brief description.

## *Cycling Assessment*

The cycling assessment provides an overview of the inventory found in each segment corridor. This includes a score of bike compatibility and recreational value. The recreational assessment is less scientific, resulting in a general range of values from low to high. The recreational range is based on the presence and quality of destinations and amenities in the segment.

## *Recommendations*

The recommendations section includes a preliminary list of actions that can improve cycling safety and experience in the segment corridors. A more thorough, in-depth list of recommendations is included in a consolidated project list, found at the back of the report.

## **Overview of Segments**

To provide a quick reference of the conditions throughout the study area, the following matrix highlights the key indicators. This data feeds into the BLOS equations, to identify an overall bike compatibility rating. Since road and traffic conditions can vary within a segment, some BLOS scores may be displayed in a range. The 25 segments are listed in order, from west to east.



BLOS Key Indicators

	Segment	BLOS	Road Conditions		Traffic Conditions		
			Lane Widths (Feet)	Width of Shoulder/Bike Lane (Feet)	Annual Average Daily Trips (AADT)	Truck Traffic (% of AADT)	Posted Speed (MPH)
Rural	1: Blue Ridge Parkway	B*	10	None	440	0%	45
	2: Rockfish Gap Turnpike West	F	10	0 – 2	8,450	7%	35 – 55
	3: Afton Area	B – C*	8 – 11	0 – 2	435	1%	55 (NP)
	4: Rockfish Gap Turnpike East	C	10 – 12	1 – 2	5,890	4%	55
	5: Newtown/Greenwood	C	9	None	290	0%	55 (NP)
	6: Jarmans Gap Corridor	C	8	None	635	1%	40
	7: West Crozet Corridor	B – C	9	None	875	.5%	40
	8: White Hall Road	D	9	.5	2,020	2%	45
	9: Garth Road	D	9 – 10	0 – .5	3,700	1.5%	35 – 50, 45 (TR)
SU	10: Old Garth & Old Ivy Roads	D	9 – 11	0 – .5	3,495	1%	30
Urban	11: Business US 250	B – C	10 – 14	5 + 8 (Parking)	12,850	2%	25 – 35
	12: Downtown Area	B – C	9 – 12	8 (Parking)	4,625	3%	25
	13: Belmont Area	B – C	10 – 12	8 (Parking)	12,000	2%	25 – 35
SU	14: Scottsville Road	D	12	0 – 12	20,345	2%	45
Rural	15: Thomas Jefferson Parkway	D	10	1 – 2	8,525	3%	45
	16: Ash Lawn Area	C – D	10	None	2,200	1%	45 - 55
	17: Ruritan Lake Road	C	9	None	600	0%	45
	18: Palmyra Area	C – D	11	.5 – 10	5,650	8%	35 – 55
	19: Courthouse Road	C	9	None	980	0%	40
	20: Venable Road	B – C	9	None	385	0%	55
	21: Shannon Hill Road	D	9 – 10	None	1,470	4%	45 – 50
	22: Mineral Corridor	B – D	12	1 – 3	4,535	3.5%	25 – 55
	23: Fredericks Hall Road	C – D	10	None	3,100	2%	25 – 45
	24: Lake Anna Area	D	10	0 – 1	2,160	3%	55
	25: Bumpass Area	C	9 – 10	None	1,255	1%	35 – (55) NP

\*Other conditions may diminish BLOS; SU = Suburban; NP = Not Posted; TR = Trucks



# Segment N1: Blue Ridge Parkway

## Nelson & Augusta Counties

Segment N1 explores the cycling environment along the Blue Ridge Parkway, which zigzags along the border of Nelson and Augusta Counties. This corridor includes the areas between US 56 (Tye River Turnpike), to the southwest, and US 250 (Rockfish Gap Turnpike), to the northeast. All told, this segment includes over 30 miles of BR 76 and is a critical section of the Bike Route, since the Parkway is a destination for many cyclists.

The Blue Ridge Parkway was designed and built in the 1930s and early 1940s to provide access to the scenic resources of the Blue Ridge Mountains. The National Parks Service (NPS) maintains the roadway and adjacent parkland. The Parkway is designated as a National Parkway, National Scenic Byway, All-American road and a Virginia Scenic Parkway.

## Segment Characteristics

### Rural Environment

- Minor Arterial
- Primary Route

### Roadways

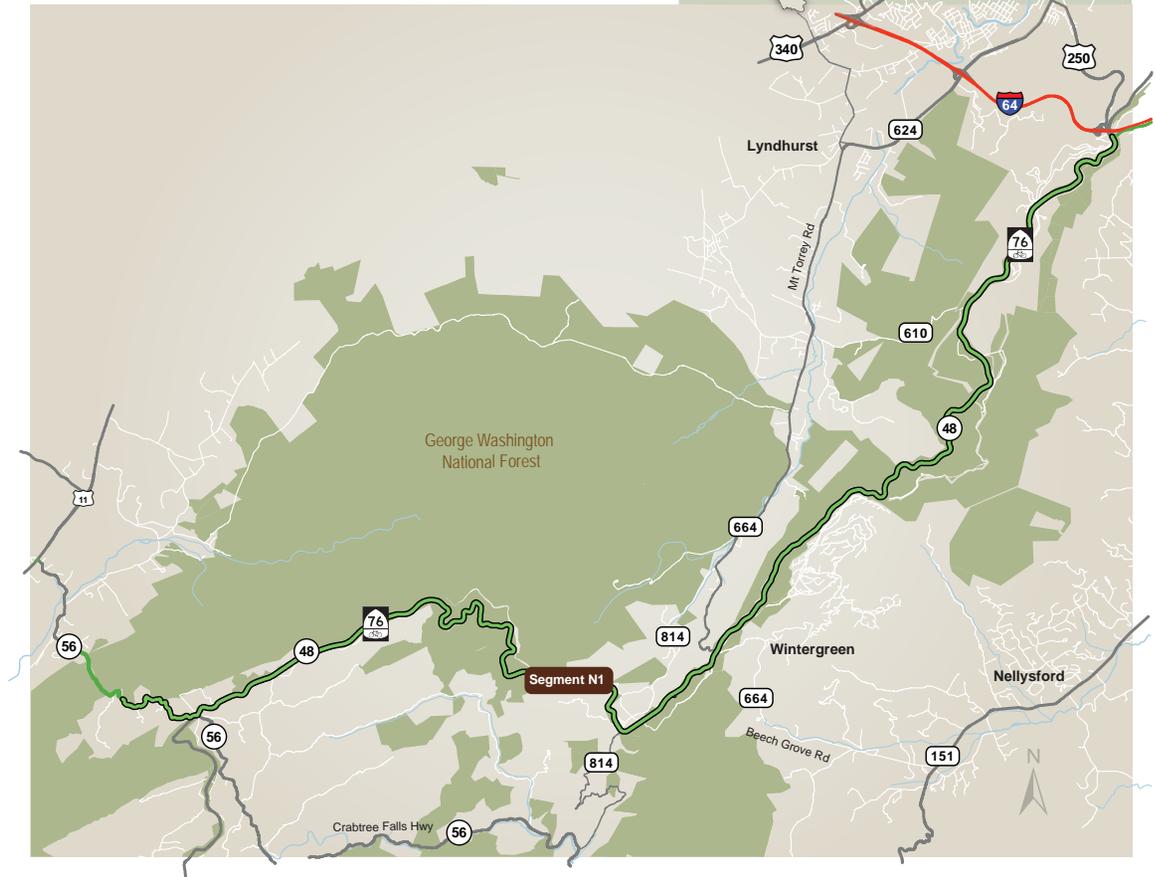
- » *Total Road Mileage: 31.33 Miles*
- US 48 (Blue Ridge Parkway) – 31.33 Miles

### Land Uses

#### » Rural

As a parkway, the land directly adjacent to US 48 is parkland managed by the NPS. Setback from the parkway, the area includes forests, farms and large lot residential properties. There are neighborhoods that connect with the parkway indirectly, through low-volume rural roads, such as the Wintergreen Resort and community. While Wintergreen includes a higher density of residential and resort uses, there is no direct access point to US 48.

<b>B</b> Bike Level of Service	<b>440</b> Annual Average Daily Trips	<b>45</b> Posted Speed (MPH)
<b>10'</b> Average Lane Widths (feet)	<b>0'</b> Shoulder/Bike Lane Width (feet)	<b>0%</b> Truck Traffic (percent)
Positive Contributing Factor		Negative Contributing Factor



## Public Comments

### » Positive Feedback

In an online survey, local cyclists mentioned that the Blue Ridge Parkway is a favorite place to ride.

## Road Features

### Road Sections

#### » Rural Two Lane

US 48 consists of a 20-foot, asphalt road surface, with ten (10)-foot travel lanes. Adjacent to the road edges, there are grass shoulders that are typically at least four (4) feet. In several areas, the side ditches are lined with asphalt (3-foot width), which is approximately two (2) feet from the road edge.

#### » Shared Lane Bike Facility

Throughout this segment, cyclists share the same travel lanes as motorists. (Figure 1-1)

### Bike Signage

#### » No Signage for Cyclists

Currently, there are no signs indicating BR 76 on the Blue Ridge Parkway. While there are signs that direct cyclists onto the parkway, from Tye River and Rockfish Gap Turnpikes, there is no signage on US 48. Additionally, there are no other bike-related signs in this segment. The main reason for the lack of BR 76 signage is the NPS policy to minimize signage on the parkway, in order to preserve the natural character of the corridor.

### Featured Intersections

#### » US 56 (Crabtree Falls Highway)

This is a grade-separated rural interchange, marking the southwestern end of this corridor. With low traffic volumes and sufficient sight distances, there are no immediate deficiencies apparent in this area. (Figure 1-2)

#### » VA 664 (Beech Grove/Reed Gap Road)

There do not appear to be any deficiencies at this four-way

intersection. It provides an indirect connection between the Wintergreen area and Parkway. Overall, there are good sight distances and limited conflict points.

#### » US 250 (Rockfish Gap Turnpike)

This is a grade-separated interchange, with two (2) ramps. The northern ramp is part of BR 76 and serves as one of the most dangerous intersections in the study area.

There are obstructed views looking east, due to an embankment adjacent to the west-bound lane. This visual obstacle allows for less than 250 feet of sight distance. If traffic on US 250 is moving at 45 MPH, then a cyclist would have less than 4 seconds to complete a left turn onto US 250 before an approaching vehicle reached the intersection. There are also obstructed views to the west, due to vegetation on the northwest corner of the intersection ramp. This obstruction allows for less than 200 feet of sight distance, looking west from the ramp. That sight-line gives cyclists 3 seconds to complete a left turn from the ramp. (Figure 1-3)

Despite these deficiencies, there were relatively few traffic accidents, considering the travel volumes, at this intersection. Between 2005 and 2011, there were two (2) recorded crashes associated with this ramp.

### Sight Distance

#### » Minor Issues at Curves

There are select curves with poor horizontal sight distance. These hazards are more problematic to cyclists when motorists have blocked sight-lines of the uphill lane. As cyclists climb, they travel at lower speeds and typically require additional room to maneuver. (Figure 1-4)

### Planned Road Improvements

#### » Surface Treatments

The is repaving the Parkway road surface to address wear and tear of the existing pavement. (Figure 1-5)

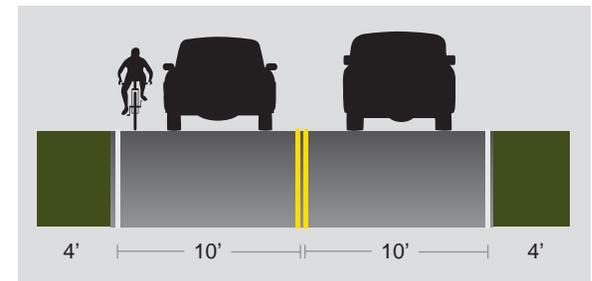


Figure 1-1: Typical Road Section



Figure 1-2: Crabtree Falls Intersection



Figure 1-3: Sight-Lines at US 250



Figure 1-4: Problematic Sight-Lines

## Traffic Conditions

### Traffic Counts

#### » 400 to 480 ADT

The Blue Ridge Parkway carries one of the lowest traffic volumes in the study area. VDOT's twenty year forecast shows that these volumes could increase, particularly on the northern end of the parkway, where counts are estimated to reach 1,300 ADT.

### Travel Speeds

#### » Speed Limit: 45 MPH

The NPS set the speed limit to 45 MPH, though there are areas where this drops to 35 MPH. With the mountainous terrain, motorists tend to travel slower than the posted limit on uphill lanes and faster on downhill lanes.

### Level of Service

#### » A – Free Flow

On the Blue Ridge Parkway, traffic flows freely and vehicles are able to travel at or above the posted speed limit. While VDOT forecasts show that the LOS will degrade slightly by 2035 (to LOS B), traffic will continue to be free-flowing with no congestion.

### Traffic Accidents

#### » No Data Available

### Additional Traffic Hazards

#### » Distracted Drivers

Because there are scenic vistas along the Parkway, there is a greater chance of distracted drivers on US 48. The greatest dangers are at curves, where motorists have restricted sight-lines.

## Recreational

### Historic Resources

#### » Public Sites

There are two significant historic resources along US 48.

This includes the Parkway itself, which is on the Virginia Landmarks and National Registers. Near the Intersection with US 250, there is an historic home called Swannanoa, which dates to 1913. Currently, the owners provide limited access for public tours.

### Scenic Resources

#### » Virginia & National Scenic Parkway

Nearly the entire Parkway provides access to scenic vistas of the Shenandoah Valley or Rockfish Valley. There are also hiking areas like Humpback Rock that provide scenic visits. (Figure 1-6)

### Other Destinations

#### » Parkway & Trail

The Blue Ridge Parkway is a destination, though there is also easy access to the Appalachian Trail.

### Cycling Services & Resources

#### » Restrooms & Pull-Off Areas

The overlooks can serve as pull-offs for cyclists. There is at least one rest area that provides restrooms (located at coordinates: 37° 58' 23.28"N, 78° 53' 54.95"W), the Humpback Rock Visitor Center and picnic area.

### Lodging

There are lodging and camping options in close proximity to the parkway, with more options in the Tye River Valley and Rockfish Valley.

### Access Points

#### » Parking at Overlooks

There are 16 public parking areas along the Parkway where people can access BR 76. Overall, this is the most accessible segment in the study area, depending on the season. There are challenges to maintaining the Parkway, due to the mountainous terrain and weather. Sections which pass over especially high elevations and through tunnels are often impassable and closed from late fall through early spring.



Figure 1-5: Poor Surface Conditions



Figure 1-6: Scenic Resources

### Topography

#### » Mountainous

The topography on the parkway is continuously changing. There are climbs throughout the corridor that can be challenging to cyclists, but the downhill lanes provide opportunities to recover.

## Road Assessment

### Bike Compatibility: BLOS B\*

The BLOS equations suggest that the parkway is one of the most bike compatible corridors in the study area, but there are several factors that are not included in these calculations. Overall, this roadway is moderately compatible for cycling. Challenges to cycling include narrow travel lanes, inconsistent road surfaces and blind curves. These hazards

are exacerbated by distracted drivers who are sight-seeing along the Parkway. With these considerations, the BLOS is better expressed with a C rating.

### **Recreational: Very High Value**

In terms of recreation, the parkway is the highest valued corridor in the study area. The Parkway provides the best scenic vistas in the region. There is abundant public access. There are several pull-offs and benches, where cyclists can rest. Finally, there is access to the famous Appalachian Trail, along with a restroom area and camping sites.

## *Recommendations*

### **Additional Signage**

The TJPDC should work with the NPS and Virginia Cycling Federation to encourage installation of bike signage along the Parkway, to inform cyclists and warn motorists of frequent bike traffic.



# Segment N2: Rockfish Gap Turnpike West

## Nelson

Segment N2 explores the cycling environment on the Rockfish Gap Turnpike, located at the northern tip of Nelson County, in the Afton area. This segment includes the roadway between US 48 (the Blue Ridge Parkway), to the west, and US 6 (Afton Mountain Road), to the east. The Rockfish Turnpike is a three-lane road and one of the most dangerous areas for cyclists in the study area. Consequently, this corridor primarily serves as a connector between the Blue Ridge Parkway and rural roads to the east.

### Segment Characteristics

#### Rural Environment

- Minor Arterial
- Primary Route

#### Roadways

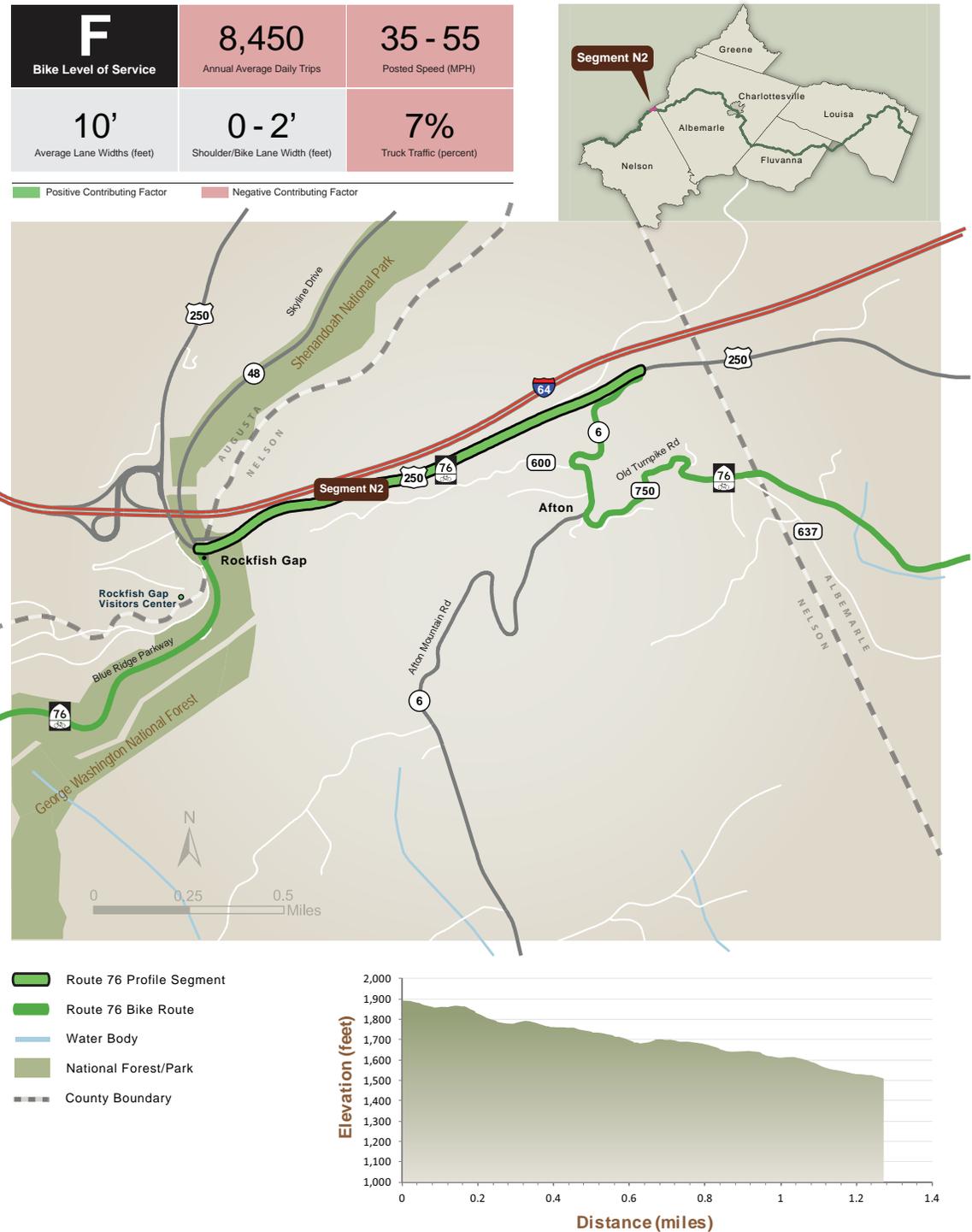
- » *Total Road Mileage: 1.27 Miles*
- US 250 (Rockfish Gap Turnpike) – 1.27 Mile

#### Land Uses

» *Rural*  
The area around Rockfish Gap Turnpike is rural in nature, flanked by mountainous terrain and wooded properties. There are also several single-family resident properties, with access on the eastbound lane.

#### Public Comments

» *Safety Concerns*  
In an online questionnaire, several local cyclists communicated their concern with this road section. Cyclists indicated that the traffic speeds and volumes were too high for safe cycling. Respondents felt that motorists in this corridor were generally oblivious to bicycles. Many cyclists try to avoid this area, but it is the only local access point to the Blue Ridge Parkway.



## Road Features

### Road Sections

#### » Rural Three Lane

While the road widths and configuration vary slightly, this portion of US 250 is a three lane highway. The uphill side includes two (2) westbound lanes, allowing motorists to pass slower moving vehicles, such as tractor-trailers. Each travel lane averages ten (10) feet in width. On the eastbound lane, there is a four (4)-foot, gravel shoulder with a guardrail on the outer edge. On the west-bound lane, there is a paved shoulder of approximately two (2) feet. Adjacent to the shoulder is a vegetated ditch and embankment. (Figure 2-1)

#### » Shared Lane Bike Facility

Cyclists share the same travel lanes as motorists, though cyclists on the westbound lane have additional room with the paved shoulder.

### Bike Signage

#### » Sufficient Signage

In this corridor, there are two (2) “Share the Road” signs and five (5) road signs indicating BR 76.

### Featured Intersection

#### » US 6 (Afton Mountain Road)

Sight-lines are the main issues at this T-intersection. From US 6, there are several road signs on the southwest corner of the intersection that may obstruct views of oncoming vehicles that are eastbound on US 250. In terms of crash history, there were four (4) vehicular crashes that occurred at the intersection, between 2005 and 2011.

### Sight Distance

#### » Deficiencies at Intersections

The main sight distance deficiencies are located at the intersections with US 48 and US 6. Aside from those areas, this corridor allows for adequate sight-lines. (Figure 2-2)

## Planned Road Improvements

### » Road Widening

The Rural Long Range Transportation Plan (RLRP) identifies operational and geometric deficiencies along Rockfish Gap Turnpike. The plan recommends widening of the roadway (including full-width lanes and shoulders). The plan lists this recommendation as a long-term project, but there are no specific timelines or funds assigned to the work. With the terrain, road widening would be very difficult in this area.

## Traffic Conditions

### Traffic Counts

#### » 8,450 ADT

For a rural segment, this corridor has one of the highest traffic counts in the study area. Through-trips account for most of this traffic, as motorists travel between the Piedmont and Shenandoah Valley. VDOT forecasts show an increase in traffic, with 9,900 ADT by the year 2035.

### Truck Traffic

#### » 7 Percent

US 250 serves as a major corridor for freight, as trucks traffic accounts for 7 percent of total ADT. This is one of the highest percentages in the study area. (Figure 2-3)

### Travel Speeds

#### » Speed Limit: 55 MPH/35 MPH

Though the speed limit is posted at 55 MPH, traffic generally travels at a higher speed, particularly on the downhill lane, where vehicles build momentum. The average travel speed is assumed to be closer to 65 MPH, though congestion may slow speeds at peak hours. The speed limit drops to 35 MPH near the intersection with US 48.

### Level of Service

#### » D - Approaching Unstable Flow

With a LOS D, travel speeds may decrease slightly due to

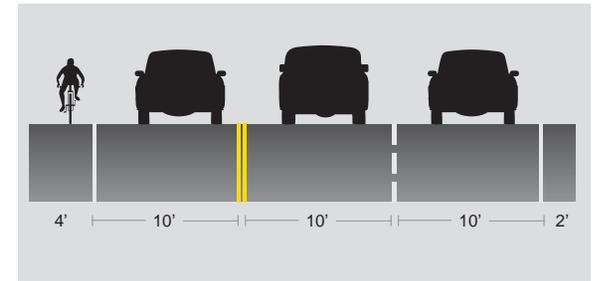


Figure 2-1: Typical Road Section



Figure 2-2: Sight Distance



Figure 2-3: Truck Traffic

increased traffic congestion, during high volume hours. VDOT forecasts show that LOS will remain at D over the next twenty years.

### Traffic Accidents

#### » 24 crashes, 2 fatal

Between 2005 and 2011, there were 24 vehicular crashes on this 1.27-mile corridor. Over 30 percent were off-road collisions. The remaining crashes occurred between ve-

hicles, including rear-end, sideswipe, head-on, and angled collisions. *Note: there are no records of crashes between motorists and cyclists.*

## Recreational

### Historic Resources

#### » *Public & Private Sites*

This portion of US 250 is a major access point for the Blue Ridge Parkway and the Appalachian Trail, but also marks the western edge of the Greenwood-Afton Rural Historic District, which encompasses approximately 16,300 acres in Virginia's Piedmont region. There is one (1) historic structure on this section of Rockfish Gap Turnpike, the Blue Ridge Tavern Inn.

### Highway Markers

#### » *Nelson County*

Near the US 48 intersection, there is a marker that tells the history of Nelson County.

### Scenic Resources

#### » *Virginia Byway*

US 250 is designated as a Virginia Byway, because of its views and rural character. On the eastbound lane, there is an overlook that provides views of the Rockfish Valley. (Figure 2-4)

### Other Destinations

#### » *Parkway and Trail*

There are no specific destinations for cyclists within this corridor, though US 250 connects to the Blue Ridge Parkway and Appalachian Trail, to the west.

### Cycling Services & Resources

#### » *Food & Pull-Off Area*

On the eastbound lane, there is a stand that once served cyclists with baked goods. This stand may still be in opera-

tion. The overlook area provides views and an opportunity for cyclists to rest.

### Access Points

#### » *Parking at Overlook*

While the overlook provides an opportunity to access the BR 76, most would rather park at the Parkway, to the west.

### Topography

#### » *Mountainous*

There is a relatively consist 5 percent grade throughout this segment. From US 48 to US 6, the topography drops by over 300 feet, from an elevation of 1860 to 1540 feet.

## Cycling Assessment

### Bike Compatibility: BLOS F

On this portion of US 250, the cycling compatibility is extremely low and has the worst BLOS score in the study area. The roadway presents several dangers to cyclists. With the existing traffic counts and speeds, the existing shoulders are inadequate. (The shoulders should be at least a 6 feet wide, according to AASTHO standards). There is significant truck traffic. There are hazards from poor sight distance. There are also areas with guardrails, exposing cyclists to high speed traffic. Overall, this section of Rockfish Gap Turnpike is dangerous for cycling. Consequently, the cyclists that use this roadway generally ride early in the morning, to avoid high traffic volumes.

### Recreational: Low Value

While there are recreational amenities in this corridor, the overall value is low. There are scenic vistas of the Rockfish Valley, but access to the overlook can be dangerous for cyclists. There are no cycling destinations and limited historic resources. The main purpose of this segment of BR 76 is to connect cyclists to the Blue Ridge Parkway.



Figure 2-4: US 250 Overlook



Figure 2-5: Blue Ridge Tunnel

## Recommendations

As one of the most dangerous roads in the study area, this corridor requires significant safety improvements. There are also options to reroute cyclists, in order to bypass this segment altogether.

### Additional Signage

The TJPDC should work with VDOT and Nelson Counties to install additional bike signage, to inform cyclists and warn motorists of frequent bike traffic.

### Road Widening

The TJPDC should work with VDOT to review and determine the feasibility of the RLRP recommendation that calls for widening of US 250.

### Additional Study: Rerouting

With the reopening of the Blue Ridge Tunnel as a bike and

pedestrian resource, there may be opportunities to reroute BR 76 away from this road segment, using trails to access the Parkway and the Shenandoah Valley. (Figure 2-5)

### **Coordinate with USBR 11**

There is initial planning underway to add a new USBR that would extend from the Great Smoky Mountain National Park, in the south, along the Blue Ridge Parkway and Skyline Drive through the Shenandoah National Park, to Harpers Ferry and the C&O Canal National Park in the north. Rockfish Gap would be a key intersection of USBR11. This would offer looping opportunities for Nelson, Albemarle and Greene counties with the Amtrak access in Charlottesville (refer to Segment 11). The looping could complement the effort by the Central Shenandoah PDC and Northern Shenandoah Valley Regional Commission to develop a Valley Road Bike Route, west of the Blue Ridge Mountains. The TJPDC should work with the Shenandoah Valley PDCs and cycling groups to make this connection between BR 76 and 11.



# Segment N3: Afton Area Corridor

## Nelson and Albemarle County

Segment N3 evaluates the cycling environment on US 6 (Afton Mountain Road) and VA 750 (Old Turnpike Road). This includes over 2 miles of rural roadways in the Afton Area, between the western and eastern segments of US 250 (Rockfish Gap Road). This area spans Nelson and Albemarle Counties, serving as an important link between these communities and creating a bypass from several miles of US 250, to help cyclists avoid the high volume/speed conditions on that highway.

### Segment Characteristics

#### Rural Environment

- Minor Arterial
- Rural Local
- Primary Route
- Secondary Route

#### Roadways

- » **Total Road Mileage: 2.47 Miles**
- US 6 (Afton Mountain Road) – .56 Mile
- VA 750 (Old Turnpike Road) – 1.91 Miles

#### Land Uses

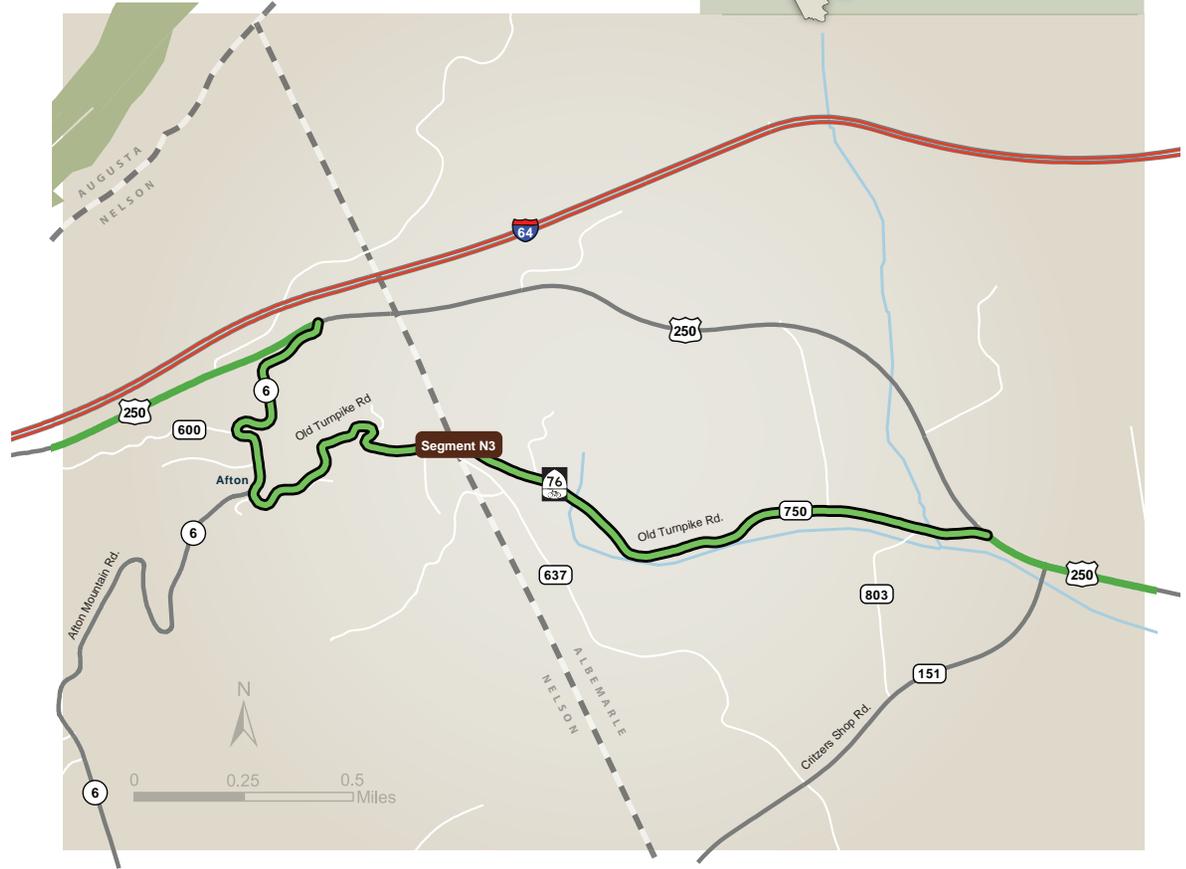
- » **Rural**
- The Afton area is a rural landscape, consisting mostly of large residential properties and pastures. Within the village of Afton, there is a slightly higher density of homes.

#### Public Comment

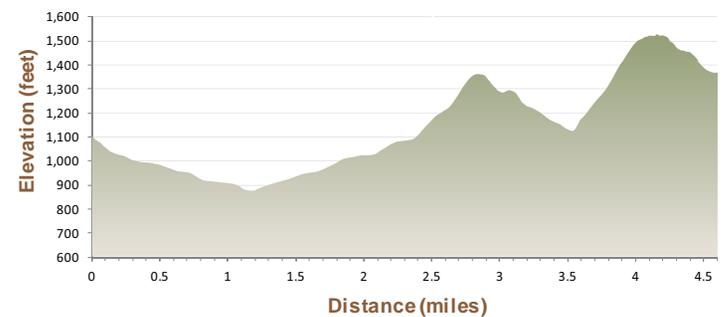
- » **Mixed Comments**
- In an online questionnaire, several local cyclists mentioned that they ride in the Afton area. One respondent recalled that the pavement on VA 750 was in poor condition and needed resurfacing.

<b>B-C</b> Bike Level of Service	<b>435</b> Annual Average Daily Trips	<b>55</b> Posted Speed (MPH)
<b>10.5'</b> Average Lane Widths (feet)	<b>0 - 2'</b> Shoulder/Bike Lane Width (feet)	<b>1%</b> Truck Traffic (percent)

Positive Contributing Factor      Negative Contributing Factor



- Route 76 Profile Segment
- Route 76 Bike Route
- Water Body
- National Forest



## Road Features

### Road Sections

#### » Rural Two-Lane

The road section varies in this corridor. Afton Mountain Road has a 22-foot paved surface, consisting of 11-foot travel lanes. The shoulders vary in width. On curves and within the village of Afton, the shoulders are at least 2 feet wide. Along other road sections, the shoulders narrow to less than a foot. (Figure 3-1)

Old Turnpike Road is narrower, with a 16-foot paved surface, allowing for 8-foot travel lanes. There are no shoulders, with vegetated ditches directly adjacent to the pavement. (Figure 3-2)

#### » Wide Outside Lane/Shared Lane Bike Facility

Cyclists share the same travel lanes as motorists, though cyclists on US 6 have additional room with the paved shoulders.

### Bike Signage

#### » Sufficient Signage

There are five (5) road signs indicating BR 76, directing cyclists through this segment of the study area. There are no other bike-related signs in this corridor.

### Featured Intersections

#### » US 6 (Afton Mountain Road)/

#### VA 750 (Old Turnpike Road)

US 6 and VA 750 form a T-Intersection, located along a curve in the road, within the village of Afton. Since there are low traffic counts in this area, there is a lower potential for conflicts between motorists and cyclists. Currently, there are no identified deficiencies or crashes at this intersection.

#### » US 250 (Rockfish Gap Turnpike) East

Old Turnpike Road forms a Y-Intersection with US 250, with channelized lanes. The traffic counts on VA 750 are considered low, resulting in fewer turning movements. There

are no deficiencies with sight-distance and only one (1) recorded accident, a rear-end collision on VA 750.

### Sight Distance

#### » Minor Issues at Curves

There are select curves with poor horizontal sight distance. The issues are more problematic to cyclists when obstructed sight-lines occur on uphill lanes. With a speed limit of 55 MPH, there is less time for motorists to react to those slower-moving cyclists. (Figure 3-3)

### Additional Cycling Hazards

#### » Poor Surface Conditions & Shoulder Drop-Offs

On VA 750, the pavement surface is in fair condition, but there are locations where the asphalt is cracked or broken. Additional, there are several areas where ditches or embankments are directly adjacent to the roadway. This gives no room for cyclists to maneuver or bail from the roadway. (Figure 3-4)

### Planned Road Improvements

#### » None Planned

## Traffic Conditions

### Traffic Counts

#### » 150 to 720 ADT

These winding country roads carry low traffic volumes, with 720 ADT on US 6 and 152 to 211 ADT on US 750. In the forecast year 2035, VDOT estimates that these roads will continue to experience relatively low traffic volumes. VDOT anticipates that counts on US 6 may increase to 1,100 ADT. For VA 750, there are no anticipated increases in traffic.

### Truck Traffic

#### » 0 to 2 Percent

There are no significant levels of traffic from heavy vehicles in this segment. On US 6, trucks account for approximately 2 percent of existing trips. On VA 750, there are no records of truck traffic.

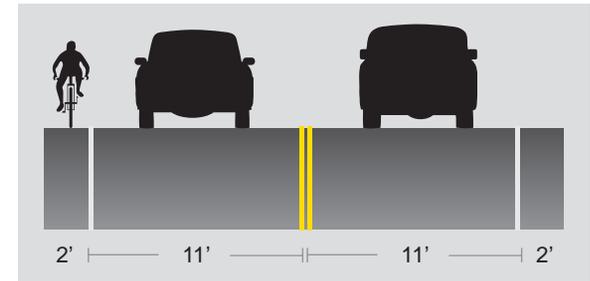


Figure 3-1: (US 6) Typical Road Section

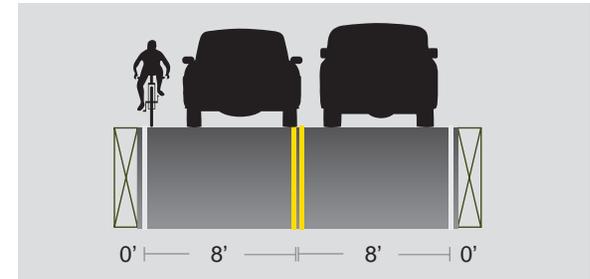


Figure 3-2: (VA 750) Typical Road Section



Figure 3-3: Sight Distances on US 750



Figure 3-4: Example of Poor Surface Conditions

## Travel Speeds

### » *Not Posted – Default 55 MPH*

Though the speed limit in this area is not posted, the default speed is 55 MPH, per state regulations and local code.

## Level of Service

### » *A – Free Flow*

On US 6 and VA 750, traffic flows freely. VDOT forecasts show that LOS will remain at this level over the next twenty years.

## Traffic Accidents

### » *14 crashes, 0 fatal*

Between 2005 and 2011, there were 11 crashes on Afton Mountain Road. Nearly 50 percent of those accidents were off-road collisions. The remaining crashes were angled collisions between vehicles or other miscellaneous accidents. On Old Turnpike Road, there were three (3) crashes. *Note: there were no recorded crashes between motorists and cyclists, from 2005 to 2011.*

## Recreational

## Historic Resources

### » *Historic District*

This area is within the Greenwood-Afton Rural Historic District.

## Scenic Resources

### » *Virginia Byway*

While this corridor is an attractive rural area with a Virginia Byway designation, there are no identified scenic vistas.

## Other Destinations

### » *No Cycling Destinations*

## Cycling Services & Resources

### » *No Resources*

## Access Points

### » *No Access*

There are no public parking areas that allow cyclists to access BR 76, though there is a Post Office near the intersection of US 6 & VA 750. There may be opportunities to allow for public parking at this site.

## Topography

### » *Mountainous*

The topography creates several challenging climbs for cyclists in this area. On US 6, the elevation drops over 160 feet in a half mile, from US 250 to VA 750. While the average slope is 6 percent, there are areas with steeper grades, specifically on the switchbacks located near the higher elevations. VA 750 has an average 5 percent grade, though there are also shorter climbs with steeper grades.

## Cycling Assessment

### **Bike Compatibility: BLOS B – C\***

Generally, the roadways in this corridor are compatible for cycling. While the BLOS equations show that US 6 is reasonably suited for cycling, the calculations do not account for the winding travel lanes on the northern end of the corridor.\* Overall, the main safety concern is travel speed, plus the lack of shoulders on VA 750. Also, the surface conditions can be a serious danger for cyclists. The main benefits to cycling in this corridor are the low traffic counts and lack of heavy vehicles.

### **Recreational: Low Value**

As a connector route, this corridor will have a low recreational value. There are few historic or scenic resources and no major destinations for riders.

## Recommendations

### **Additional Signage**

The TJPDC should work with VDOT, Nelson and Albemarle Counties to install additional bike signage. Those signs can inform cyclists and warn motorists of frequent bike traffic.

### **Speed Limit Reductions**

The existing speeds are relatively high, considering the sight-distances and road widths. The TJPDC should work with VDOT to study the feasibility and effects of reducing speed limits in these areas.

### **Surface Improvements**

The TJPDC should conduct a more in-depth inventory of surface conditions on VA 750 and work with VDOT to repair damaged pavement.

### **Additional Study: Retouring**

With the reopening of the Blue Ridge Tunnel as a bike and pedestrian resource, there may be opportunities to reroute Bike Route 76, to avoid US 250 and the curving switchbacks on the northern end of US 6. The TJPDC should partner with Nelson County and the Central Shenandoah PDC to study the feasibility of rerouting this portion of BR 76.



Figure 3-5: Blue Ridge Tunnel

