## Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization 2012 Update



Approved March 22, 2012



# www.rvarc.org/bike









The 22<sup>nd</sup> day of March, 2012

## RESOLUTION

## Approval of the Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization (MPO) - 2012 Update

**WHEREAS**, federal regulations implemented as a result of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) encourage urbanized area Metropolitan Planning Organizations to include bikeway planning as part of their intermodal planning activities, and

**WHEREAS**, the Roanoke Valley Area Metropolitan Planning Organization approved the previous *Bikeway Plan* on August 25, 2005, and

**WHEREAS**, the *Bikeway Plan* is meant to serve as a non-binding guide to the development of bicycle facilities in the MPO Study Area, and

**WHEREAS**, the update to the *Bikeway Plan* has been thoroughly reviewed by the Regional Bicycle Advisory Committee and the Transportation Technical Committee,

**NOW, THEREFORE BE IT RESOLVED**, that the Roanoke Valley Area Metropolitan Planning Organization Policy Board does hereby approve the *Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization - 2012 Update.* 

elly WMartin Sr

Billy W. Martin, Sr. Vice Chairman

Members: Bedford, Botetourt and Roanoke counties, cities of Roanoke and Salem, Town of Vinton, Greater Roanoke Transit Company, Roanoke Regional Airport Commission, Roanoke Valley-Alleghany Regional Commission, Virginia Department of Transportation of Newva

#### ACKWOWLEDGEMENTS

This report was prepared by the Roanoke Valley-Alleghany Regional Commission (RVARC), which is the lead staff agency for the Roanoke Valley Area Metropolitan Planning Organization (MPO) in cooperation with the U.S. Department of Transportation (USDOT), the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Virginia Department of Rail and Public Transportation (VDRPT), and the Virginia Department of Transportation (VDOT). The contents of this report reflect the views of the staff of the Roanoke Valley Metropolitan Planning Organization (MPO). The MPO staff is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, FTA, VDRPT, VDOT, or RVARC. This report does not constitute a standard, specification, or regulation. FHWA, FTA, VDRPT, or VDOT acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

The Roanoke Valley Area Metropolitan Planning Organization (MPO) would also like to thank the Regional Bicycle Advisory Committee (RBAC) for its guidance and assistance in preparation of this document.









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#### ACRONYMS

- AASHTO American Association of State Highway and Transportation Officials
- ACS American Community Survey
- APBP Association of Pedestrian and Bicycle Professionals
- UZA Urbanized Area
- UC Urban Cluster
- BAC Bicycle Advisory Committee
- BCI Bicycle Compatibility Index
- BFB Bicycle Friendly Business
- BFC Bicycle Friendly Community
- BLOS Bicycle Level of Service
- CTB- Commonwealth Transportation Board
- CTPP Census Transportation Planning Package
- FHWA Federal Highway Administration
- IMBA International Mountain Biking Association (IMBA)
- ISTEA Intermodal Surface Transportation Efficiency Act of 1991
- LAB League of American Bicyclists
- LRTP Long Range Transportation Plan
- MAP-21 Moving Ahead for Progress in the 21<sup>st</sup> Century
- MUTCD Manual on Uniform Traffic Control Devices
- NACTO National Association of City Transportation Officials
- NADO National Association of Development Organizations
- NPS National Park Service
- RVAMPO Roanoke Valley Area Metropolitan Planning Organization
- SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
- TIP Transportation Improvement Program
- SRTS- Safe Routes to School Program
- SYIP Six-Year Improvement Program (VDOT)

TEA-21 -Transportation Equity Act for the 21<sup>st</sup> Century







## **ACRONYMS (continued)**

- TMA Transportation Management Area
- VDH Virginia Department of Health
- VDOT Virginia Department of Transportation
- VDRPT Virginia Department of Rail and Public Transportation
- WVWA Western Virginia Water Authority







#### SECTION 1.0 BIKEWAY PLAN INTRODUCTION

The Bikeway Plan for the Roanoke Valley Area Metropolitan Planning Organization – 2012 Update (herein referred to as the Bikeway Plan), is an update of the 2005 <u>Bikeway Plan for the</u> <u>RVAMPO</u>. The 2012 Update represents a coordinated effort by the Roanoke Valley Area MPO and local jurisdictions to facilitate development of a regional transportation network that accommodates and encourages bicycling as an alternative mode of travel and popular form of recreation in the RVAMPO study area and greater region.

The purpose of the *Bikeway Plan* is to provide a coordinated and strategic approach to the development of a regional bicycling network that provides greater connectivity between activity centers and cultural resources such as greenways, public areas, downtown areas, commercial centers, employment concentrations, educational institutions, transit facilities, scenic corridors, and other points of interest in the MPO study area.

#### 1.1 Overview of Bikeway Plan - 2012 Update

The *Bikeway Plan 2012 Update* is intended to be a dynamic document that accurately reflects the bicycling-related transportation needs and challenges within the RVAMPO study area. As such, while promoting bicycling as a viable form of transportation and recreation, the *Bikeway Plan* Update also recognizes and promotes the numerous benefits of an interconnected, regional alternative transportation network consisting of on-street bicycle accommodations, greenways and shared use trails, recreational trails, and public transportation. Benefits of a bicycle-

friendly community include, but are not limited to:

- Transportation
- Recreation
- Public health
- Environment
- Economic development
- Quality of Life

The *Bikeway Plan* seeks to facilitate the realization of these benefits through the following tasks and activities:

- Serve as a resource guide for bicycle accommodations planning and general promotion of cycling in the region;
- Bicycle User Survey to better understand and document bicyclists and motorists perceptions and opinions regarding cycling in the region;
- Encourage and document application of VDOT policies and practices as related to the planning and provision of bicycle accommodations in the RVAMPO Study Area and RVARC Rural Transportation Planning Area;
- Encourage local governments to incorporate bicycle accommodations in local plans, policies, ordinances, and related guidance;
- Identify and map all existing bicycle accommodations (and related resources) to use in evaluating general progress toward development and implementation of bicycle accommodations RVAMPO study area;
- Identify and map roadways corridors for consideration of future bicycle accommodations or alternatives;







- Provide examples of various bicycle accommodations in place in the region and the various approaches utilized in the planning, installation, maintenance, and promotion of these accommodations; and
- Develop user-friendly cycling information and resources (laws and safety tips, bicycle accommodations, guidance documents, etc.)

#### 1.2 Bikeway Plan Study Area

The *Bikeway Plan* covers the Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) 2035 Study Area which includes the Roanoke Census Defined Urbanized Area (UA) and the contiguous geographic area(s) likely to become urbanized within the twenty year forecast period covered by the Long-Range Transportation Plan (LRTP) (Figure 1.1). Note: an Urbanized Area is a statistical geographic entity, designated by the Census Bureau, consisting of a central core and adjacent densely settled territory that together contain at least 50,000 people, generally with an overall population density of at least 1,000 people per square mile.

Localities within the RVAMPO Study Area include the cities of Roanoke and Salem, the Town of Vinton, the portions of Botetourt and Roanoke counties, and the western portion of Bedford County. Figure 1.1 shows the MPO study area boundary, Roanoke Urbanized Area, and the jurisdictional boundaries. The RVAMPO is within the VDOT Salem Construction District (Figure 1.2). While the primary geographic focus of the Bikeway Plan is the MPO study area, the Plan also seeks to facilitate connections to population centers (e.g., Census-defined places, urban clusters), employment centers, recreational



destinations and resources, and other activity centers adjacent or in close proximity to the Roanoke Valley Area MPO study area boundary. Regional transportation planning in areas outside of the RVAMPO study area are conducted as part of Rural Transportation Program and includes Alleghany, Craig, and Franklin counties, and portions of Botetourt and Roanoke counties (i.e., areas outside of the RVAMPO study area). The <u>Rural Bikeway Plan</u> (2006), developed by the Roanoke Valley Alleghany Regional Commission in with local governments partnership and stakeholders, provides an overview of bicycling conditions, destinations, resources, and related information for areas covered in the RVARC Rural

Transportation Program.

As shown in Table 1.1, the City of Roanoke remains the most populous locality in the RVAMPO study area. Several localities. particularly the Town of Vinton and the cities of Roanoke and Salem, have relatively high population and development densities, which are generally conducive to cycling for mobility purposes. Additionally, portions of Botetourt and Roanoke counties within the RVAMPO study area have relatively high population and development densities and generally correspond to Censusdefined places. Examples include the Cave Spring and Hollins areas of Roanoke County and the Cloverdale, Daleville, and Troutville areas in Botetourt County (Figure 1.1).

Given the limited availability (and accuracy) of bicycle-specific data, bicycle usage (for all purposes) in the RVAMPO study area is difficult to quantify. Common data sources include U.S. Census "journey-to-work" and <u>Census</u> <u>Transportation Planning Package</u> (CTPP) data,





#### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

which provide various commuting information for workers 16 years and over, including primary means of transportation to work, and American Community Survey (ACS) data. Table 1.3 provides ACS 2005-2009 for localities in the RVAMPO study area. Review of these data indicate that a relatively low percentage of workers use a bicycle as their primary means of transportation to work in the study area. However, the numbers for the localities comprising the more densely developed areas of the RVAMPO (i.e., cities of Roanoke and Salem), while low, are comparable to state and national averages at around 0.4 percent of workers commuting to work by bicycle.

While Census data provide a level of insight into bicycle commuting, due to considerable margins of error associated with ACS data in general (on which CTPP data are now based); journey to work data being limited to the primary means of commuting to work; and not capturing data on travel beyond work commuting (e.g., recreation, errands, exercise) these data do not provide a completely accurate measure of bicycle use in the study area. Beyond Census data, the 2009 Bicycle User Survey, conducted as a component of the Bikeway Plan - 2012 Update, provides a range of bicycle-related information for the RVAMPO study area. A complete analysis of survey responses is presented in Section 5. Additional data sources include RVARC Regional Greenway and Trail Users Count Program RVARC (Section 3.3.3) and the **RIDE** Solutions commuter database.

#### 1.3 Roles and Responsibilities

While the *Bikeway Plan* is intended to facilitate, promote, and provide general guidance on improving cycling conditions in the region, within





the MPO study area, the primary entity (local government or VDOT) responsible for construction and maintenance of roads (and onstreet bicycle accommodations) within the RVAMPO study area is based on jurisdictional boundaries, geographic designations, and roadway functional classifications. VDOT 2005 Virginia Highway Functional Classification maps for the RVAMPO study area and local jurisdictions are provided in Appendix A.

#### 1.3.1 Locally Maintained Roads

The following localities are responsible for road construction and maintenance of local roads within their respective jurisdictional boundaries:

- City of Roanoke
- City of Salem
- Town of Vinton

These localities generally have more flexibility in providing bicycle accommodations via contextsensitive design, spot improvements, restriping, signage, pavement markings, bicycle route development, street cleaning, and other approaches to accommodating bicyclists on locality maintained roads. These activities are often conducted as part of the annual street paving programs, general maintenance, or reconstruction projects. Guidance and recommendations on bicycle accommodations design are generally based on AASHTO and MUTCD design standards. The 2011 NACTO Urban Bikeway Design Guide also provides guidance and standards for on-street bicycle accommodations. ASSHTO, MUTCD, and NACTO standards, as well as local guidance documents and standards, are discussed in Section 2. Note: VDOT is responsible



for maintenance and construction on federal and state highways in these jurisdictions (e.g., 81, 581, US 220, US 460, etc.).

#### **1.3.2 VDOT Maintained Roads**

VDOT is responsible for road construction and maintenance in the following localities within the RVAMPO study area:

- Botetourt County
- Roanoke County

While VDOT is the responsible for maintenance and construction in these jurisdictions, the respective local governments, RVAMPO, and other stakeholders participate in the planning processes (long-range and local) and can request VDOT consider specific bicycle accommodations based on local and regional needs. The VDOT Policy for Integrating Bicycle and Pedestrian Accommodations, State Bicycle Policy Plan, and other VDOT bicycle-related guidance are discussed in Section 2.

## **1.3.2** Roanoke Valley Area Metropolitan Planning Organization

Federal law requires the formation of an "MPO" for any urbanized area (UZA) with a population of more than 50,000. The <u>Roanoke Valley Area</u> <u>Metropolitan Planning Organization</u> was created in 1979 to plan and budget the use of federal transportation dollars in the Roanoke region. The RVAMPO develops three key documents that are the backbone of transportation planning and programming in the region and include the Long-Range Transportation Plan, the Transportation Improvement Program, and the Unified Planning Work Program.

RVAMPO activities are directed by a 15-member Policy Board. The voting members of the Policy Board include representatives from the six member localities, as well as the Greater Roanoke Transit Company, the Roanoke Regional Airport Commission, the Roanoke Valley-Alleghany Regional Commission, and the Virginia Department of Transportation. In addition, exofficio (non-voting) members include the Virginia Department of Rail and Public Transportation, the Federal Highway Administration, and the Federal Transit Administration. Additionally, two standing committees assist the RVAMPO Policy Board - the Transportation Technical Committee (TTC), which is responsible for making recommendations to the MPO Policy Board on all transportation plans and programs in the region; and the Community Advisory Committee (CAC), which provides a citizen's perspective on the impact of transportation plans in the region and advises the MPO Policy Board on the public participation plan.







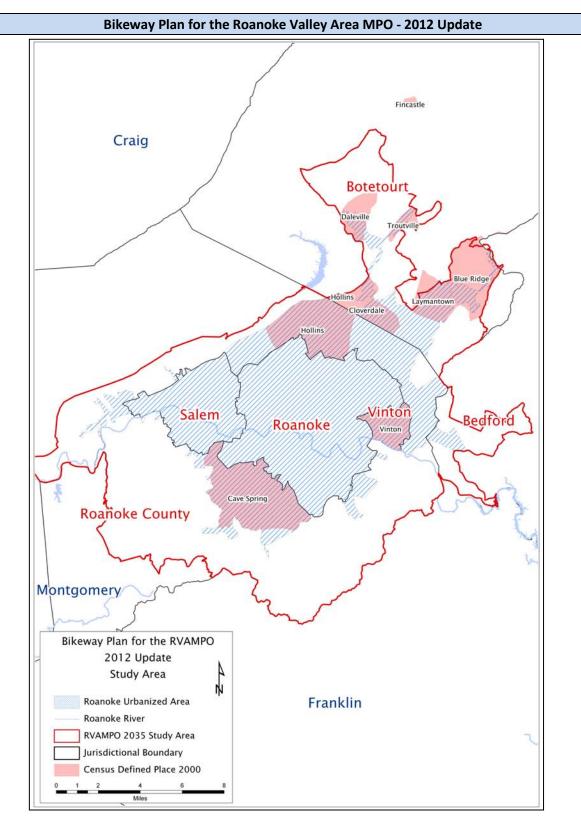


Figure 1.1: Bikeway Plan Study Area



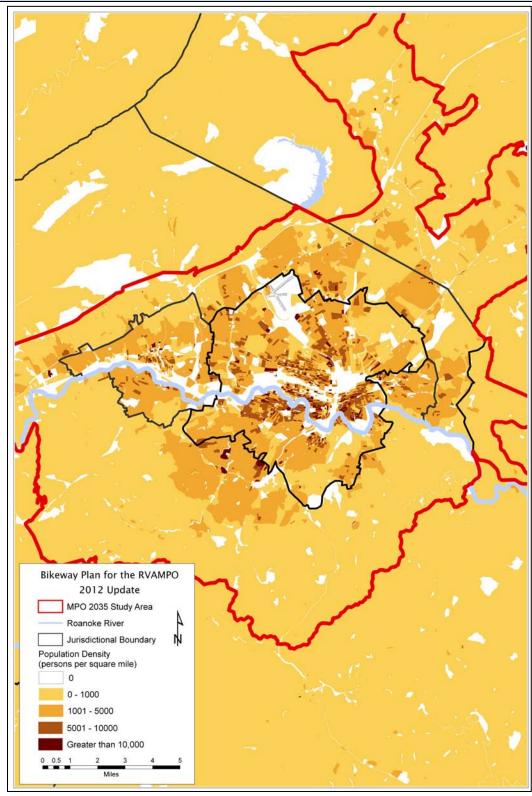


Figure 1.2: RVAMPO Study Area Population Density; Source: US Census 2010







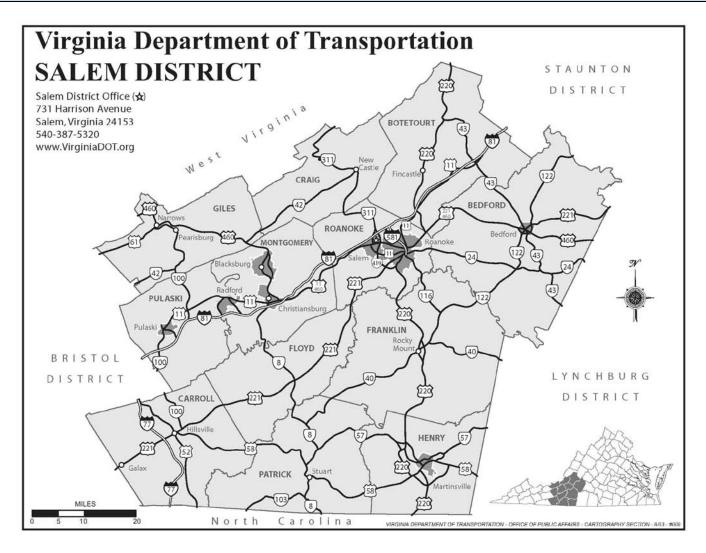


Figure 1.3 VDOT Salem District



#### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

## Table 1.1 Population and Population Density by Locality 2010

Locality	Population 2010	Area (Square Miles)	Population Density 2010	Urbanized Area Population 2010
City of Roanoke	97,032	42.9	2,262	97,032
City of Salem	24,802	14.6	1,699	24,802
Town of Vinton	8,089	3.2	2,528	8,089
Botetourt County	33,148	543	61	N/A
Roanoke County*	84,287	548	154	N/A

Source: US Census Bureau 2012; \* excludes the Town of Vinton; N/A = 2010 US Census defined Urbanized Areas have not yet been delineated

## Table 1.2 RVAMPO Study Area Population 2000

Locality	Locality Population 2000	RVAMPO Study Area Population 2000	Percent of Locality Population in RVAMPO Study Area 2000
City of Roanoke	94,911	94,911	100.0
City of Salem	24,747	24,747	100.0
Town of Vinton	7,782	7,782	100.0
Botetourt County	30,496	15,771	51.7
Roanoke County*	77,996	65,307	76.1

\* excludes the Town of Vinton. Source: US Census 2000; 2010 MPO Population estimate has not yet been determined (contingent upon delineation of 2010 US Census defined Urbanized Areas)







						Jourr	ney to W	ork Data							
	Virgi	inia	Bote	tourt	City of I	Roanoke	Roanok	e County	City of	f Salem	Vi	nton	Roanol	ce MSA	Roanoke Urbanized Area 2000*
Means of Transportation to Work	Total (%)	Margin of Error	Total (%)	Margin of Error	Total (%)										
Workers 16 years and over	3,795,832	+/-8,053	16,037	+/-457	41,351	+/-918	44,843	+/-761	12,021	+/-434	3,614	+/-351	139,675	+/-1,401	95,310
Car, truck, or van	88.0	+/-0.1	93.3	+/-1.5	91.9	+/-1.1	94.2	+/-0.9	88.7	+/-2.6	96.1	+/-2.6	92.8	+/-0.5	93.6
Drove alone	77.1	+/-0.2	85.2	+/-2.1	81.2	+/-1.5	86.3	+/-1.3	81.1	+/-2.8	81.2	+/-5.0	83.3	+/-0.8	83.7
Carpooled	11.0	+/-0.1	8.1	+/-1.6	10.7	+/-1.3	7.9	+/-1.0	7.7	+/-2.0	14.9	+/-4.7	9.4	+/-0.6	9.8
In 2-person carpool	8.1	+/-0.1	6.8	+/-1.5	8.5	+/-1.2	6.6	+/-1.0	5.7	+/-1.6	10.0	+/-4.1	7.8	+/-0.6	n/a
In 3-person carpool	1.7	+/-0.1	1.0	+/-0.5	1.3	+/-0.5	1.0	+/-0.4	1.7	+/-1.1	4.3	+/-2.7	1.1	+/-0.2	n/a
In 4-or-more person carpool	1.1	+/-0.1	0.3	+/-0.2	1	+/-0.4	0.3	+/-0.2	0.3	+/-0.3	0.6	+/-0.9	0.5	+/-0.1	n/a
Public transportation (excluding	4.2	+/-0.1	0.1		2.7		0.5	+/-0.3	0.7	+/-0.6	1.8	./ 1 7	1.1	+/-0.2	1.4
taxicab) Walked	4.2 2.3	+/-0.1	1.0	+/-0.2 +/-0.6	1.6	+/-0.6 +/-0.5	1.5	+/-0.3	4.2	+/-0.6	1.8	+/-1.7 +/-1.1	1.1	+/-0.2	1.4
Bicycle	0.3	+/-0.1	0.0	+/-0.2	0.4	+/-0.3	0.1	+/-0.4	0.4	+/-0.4	0.0	+/-1.1	0.2	+/-0.3	0.1
Taxicab, motorcycle, or other means	1.0	+/-0.1	0.8	+/-0.2	1	+/-0.3	0.1	+/-0.1	0.4	+/-0.4	0.0	+/-1.0	0.2	+/-0.1	0.7
Worked at home	4.2	+/-0.1	4.8	+/-1.2	2.3	+/-0.5	3.4	+/-0.6	5.3	+/-1.8	1.1	+/-1.1	3.5	+/-0.4	2.2

## Table 1.3 American Community Survey 2005-2009

## lournov to Work Date

Source: ACS 2005-2009 5 year estimates; \* US Census 2000 SF3







#### SECTION 2.0 BICYCLE ACCOMMODATIONS – GUIDANCE AND RESOURCES

The *Bikeway Plan* provides general guidance, recommendations, and resources to facilitate development of a regional bicycling network and should be used in concert with local, regional, state, and federal efforts (plans, policies, programs, funding, etc.). This section provides an overview of federal, state, regional, local, and other resources and guidance available to facilitate development of the regional cycling network.

#### 2.1 Federal Guidance and Resources

2.1.1 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

SAFETEA-LU is a funding and authorization bill signed into law in August 2005 that governs federal surface transportation spending. SAFETEA-LU is the most recent transportation bill and carries forward the intent of previous transportation bills the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). SAFETEA-LU expired on September 30, 2009 and has since continued via a series of continuing resolutions.

## 2.1.2 Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations (USDOT)

The United States Department of Transportation (DOT) signed the Policy Statement on Bicycle and Pedestrian Accommodation Regulations and





Recommendations in March 2010. The purpose of the policy statement is to reflect the Department's support for the development of fully integrated active transportation networks.

"The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, transportation, environmental, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and (USDOT)."

A full description of Federal policies related to bicycling is available at www.fhwa.dot.gov/environment/bikeped/policy accom.htm

#### 2.2 State and VDOT Guidance and Resources

## **2.2.1** Vtrans Statewide Multi-modal Long-Range Transportation Plan

<u>VTrans</u>, the Commonwealth of Virginia's statewide long-range multi-modal transportation plan, was developed by the Secretary of Transportation through the four state transportation modal agencies - Department of Aviation (DOAV), Department of Rail and Public Transportation (VDRPT), Port Authority (VPA), and



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the Department of Transportation (VDOT). The Federal Highway Administration (FHWA) and regional planning bodies across the state are also participating in its development (VDOT). The initial document, VTrans2025, was first developed in 2004 with VTrans2035 being adopted in 2008. The <u>Trans2035 Update</u> is the current version of the plan.



## **2.2.2 VDOT Policy for Integrating Bicycle and Pedestrian Accommodations**

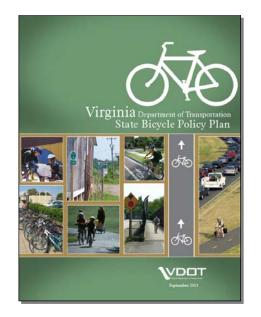
VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations provides the framework through which the Virginia Department of Transportation will accommodate bicyclists and pedestrians, including pedestrians with disabilities, along with motorized transportation modes in the planning, funding, design, construction, operation, and maintenance of Virginia's transportation network to achieve a balanced effective, and multimodal safe, transportation system (VDOT). The Policy is provided in Appendix B.

#### 2.2.3 VDOT State Bicycle Policy Plan

The VDOT <u>State Bicycle Policy Plan</u> (2011) establishes a vision for the future of bicycling in

the Commonwealth and to advance the bicycle element of the Policy consistently, appropriately, and cost-effectively. The VDOT State Bicycle Policy Plan was created to achieve two goals:

- Increase the use of bicycling in Virginia to include a full and diverse range of the population for all trip purposes; and
- Improve safety and comfort of bicyclists throughout Virginia, reduce bicycle crashes



Recommendations from the State Policy Plan will advance the VDOT *Policy for Integrating Bicycle and Pedestrian Accommodations* more effectively and will involve a wide variety of partners within various divisions of VDOT, as well as stakeholders throughout the Commonwealth. The State Policy Plan focuses on policies, procedures, and programs within VDOT's authority. Chapter 5 of the State Plan provides program and policy recommendations organized under 4 core elements:







- Clarify policies with regard to bicycle accommodations;
- Provide staff with resources to integrate the accommodations of bicyclists in projects and programs;
- Improve bicycle outreach and coordination; and
- Measure and evaluate progress

The State Bicycle Plan Recommendations Summary Table is provided in Appendix C.

# 2.2.4 VDOT State Bicycle and Pedestrian Program

Virginia Department of Transportation's <u>State</u> <u>Bicycle and Pedestrian Program</u> promotes bicycling and walking within the state through planning assistance to state and local transportation planners; activity coordination for various bicycle committees; and bicycle and pedestrian education and safety promotions. State Bicycle and Pedestrian Program also involves other VDOT staff, initiatives and resources including:

- State Bicycle and Pedestrian Coordinator
- District Bicycle and Pedestrian Coordinators
- Internal Bicycle and Pedestrian Task Force
- Bicycle Accommodations Review Team
- Bicycle Advisory Committee

The State Bicycle and Pedestrian Program webpage also provide a range of bicycle and pedestrian information, maps, VDOT policies and plans, and related resources.

### 2.2.5 Virginia Bicycle Facility Resource Guide

The <u>Virginia Bicycle Facility Resource Guide</u> provides planning, design, education, encouragement and funding ideas for bicycle facilities. Bicycle accommodations design guidance provided in the Virginia Bicycle Facility Resource Guide generally follows AASHTO guidance.

#### 2.2.6 Safe Routes to School Program

The Virginia Department of Transportation's (VDOT) Safe Routes to School Program (SRTS) assists interested localities and schools in the development of plans, activities. and infrastructure improvements to make bicycling and walking to school a safe and appealing transportation option for students in kindergarten through eighth grade. The Safe Routes to School Program is a federally-funded program created under Section 1404 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). As written in SAFETEA-LU, the purpose of the SRTS program is to:

- Enable and encourage children, including those with disabilities, to walk and bicycle to school
- Make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age
- Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools (VDOT)







An overview of Safe Routes to School funding and programs in the region is provided in Section 3. Additionally information on Virginia's SRTS program is available at http://virginiadot.org/programs/bk-proginfo.asp.

## 2.2.7 VDOT Six-Year Improvement Program (SYIP)

The VDOT <u>Six-Year Improvement Program (SYIP)</u> is the Commonwealth Transportation Board's (CTB) program for allocating funding for rail, public transportation, commuter assistance, bicycle, pedestrian, interstate and primary highway transportation projects in future years. In developing the SYIP, local governments work with citizens, transportation agencies, and other stakeholders to form a vision by developing a transportation plan that anticipates land use changes and travel patterns more than two decades into the future. VDOT cites the following considerations in selecting projects for inclusion in the SYIP:

- Statewide and regional plans that identify transportation needs and projects required to serve future travel demands over a 20- to 25year period
- An analysis of projected traffic volumes and population, business and residential growth
- An evaluation of the priorities for implementation of the transportation plan
- Citizen and community participation meetings to receive input on the transportation priorities (VDOT)

#### 2.2.8 Other VDOT Policies and Guidance

In addition to the guidance and standards provided in the Green Book and MUTCD, VDOT has developed a range of policies, practices, procedures, and resources to direct construction and maintenance of VDOT maintained roads and the planning and provision of bicycle accommodations. VDOT guidance includes:

- VDOT Road Design Manual (Updated 2009)
- Bicycle and Pedestrian Accommodation Decision
- Process for Construction Projects (2008)
- Traffic Calming Guide for Local Residential Streets (Revised 2008)
- Implementation of Bicycle and Pedestrian
- Accommodations Policy Exception Standard Report (2008)
- Maintenance Best Practices Manual, VDOT, 2007
- Maintenance Project Scoping Form AM-430
- VDOT Department Policy Memoranda (DPM) Manual, DPM Number 2-12: Implementation of the CTB Policy for Integrating Bicycle and Pedestrian Accommodations (2007)

### 2.2.9 Bike Smart! Virginia

<u>Bike Smart! Virginia</u> is a collaborative project with the Virginia Departments of Education, Health and Motor Vehicles and the non-profit organization, Bike Walk Virginia. Additionally, Bike Smart, Virginia Schools! teaches children safe biking behavior in an effort to reduce the numbers for injuries and fatalities including: helmet safety, crash avoidance, bike handling



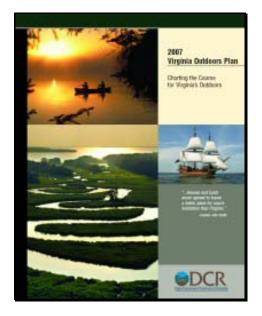




skills, rules of the road etc., as part of the school's Health and P.E. curriculum.

#### 2.2.10 Virginia Outdoors Plan (VOP)

The Virginia Outdoors Plan (Virginia Department of Conservation and Recreation 2007) is the state's official document regarding land conservation, outdoor recreation and open space planning. It helps all levels of the public and private sectors meet needs pertaining to those issues. The VOP includes items relevant to the planning and provision of bicycle accommodations including greenways, trails, scenic highways, and Virginia byways. The Virginia Department of Conservation and Recreation is currently (until April 6, 2012) accepting public input for the 2013 Virginia Outdoors Plan.



#### 2.3 Regional Guidance and Resources

## **2.3.1** Bikeway Plan for the Roanoke Valley Area MPO

See Section 1.1

#### 2.3.2 Regional Bicycle Advisory Committee

The Regional Bicycle Advisory Committee (BAC) was established in 2008 by the Roanoke Valley-Alleghany Regional Commission to serve as a forum for local, regional, state, and federal agencies and staff and citizens to discuss various issues impacting cycling in the region. The Regional BAC also guides development of the *Bikeway Plan* for the RVAMPO, coordinates the annual Bike Awards (Extraordinary Bicycle Professional and Bike Hero), participates in group rides and related fieldwork, and other bicycle-related events. A list of current RBAC representatives is provided in Appendix D.

### 2.3.2 RIDE Solutions

<u>RIDE Solutions</u> is a regional ridesharing program operated by the Roanoke Valley-Alleghany Regional Commission in cooperation with the New River Valley Planning District Commission that provides carpool matching services and alternative transportation and air quality information (Note: RIDE Solutions will be expanding into the Region 2000 area in 2012). RIDE Solutions is also the lead organizer of annual Bike Month events in the region. RIDE Solutions also maintains the <u>BikeRoanoke.com</u> website.



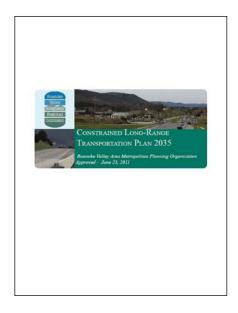






## **2.3.4** Roanoke Valley Area MPO Long Range Transportation Plan (LRTP)

The Roanoke Valley Area Metropolitan Planning Organization (MPO) is recognized as the official transportation planning agency for Roanoke, Virginia urban region as required by federal law (US Code Title 23, Chapter 1, Sec. 134). In order for the region to receive federal funds for use on highway, transit, non-motorized, and multi modal systems, the MPO is required to develop a long range transportation plan with a 20-year planning horizon. The 2035 Financially Constrained Long Range Transportation Plan (CLRTP) is a long-range strategy and capital improvement program developed to guide the effective investment of public funds in multi modal transportation facilities. The plan is updated every 5 years, and may be amended as a result of changes in projected Federal, State and local funding, or other significant studies/plans. The Long Range Plan provides the context from which the region's Transportation Improvement Program (TIP), a short-range capital improvement program for implementing highway, transit, and bikeway projects, is drawn.



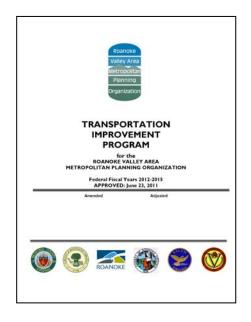
## **2.3.5** Roanoke Valley Area MPO Transportation Improvement Program (TIP)

In addition to the CLRTP, the MPO is required to develop a Transportation Improvement Program (TIP). The Roanoke Valley Are MPO TIP is a 4-year financial program that describes the schedule for obligating federal funds to state and local projects. The TIP contains federal funding information for all modes of transportation including highways, transit and pedestrian facilities. Additionally, the TIP also reflects projects and priorities identified in the Long Range Transportation Plan. The MPO works closely with the Virginia Departments of Transportation and Rail & Public Transportation, as well as local transit operators, to update and amend the TIP each year as funding conditions change. Projects from the current RVAMPO TIP (2012-2015) are discussed in Section 4.





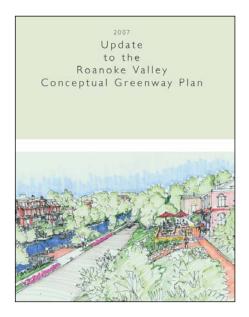




## **2.3.6 2007 Update to the Conceptual Greenway** Plan for the Roanoke Valley

The 2007 Update to the Conceptual Greenway Plan document is an update of the 1995 conceptual Greenway Plan and serves as the guiding document for the planning and development of the regional greenway network in the four Greenway Commission localities (cities of Roanoke and Salem, Roanoke County, and the Town of Vinton). The update has two components: an update and prioritization of routes included in the 1995 Plan; and an organizational assessment of the roles and responsibilities of the various greenway partners.

In addition to providing recreational opportunities, area greenways and trails are considered integral components of the regional network of bicycle accommodations. Additionally, connection of existing and planned greenways will require the use of on-street accommodations and/or shared roadways. The Conceptual Greenway Plan references the *Bikeway Plan* as the document to assist in the development and implementation of on-street greenway connections.



### 2.3.7 Regional Bicycle Suitability Study

The purpose of the study was development of planning level data and tools to assess the current level of service (LOS) offered by the existing roadway network in regards to bicycle travel in the region. The Regional Bicycle Suitability Study was intended to serve as a resource to facilitate development of a regionally significant bikeway network in the RVARC service area. Work products and information developed are available to identify, evaluate, and recommend improvements regional surface to the transportation infrastructure to better accommodate bicyclists.

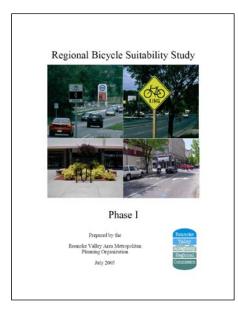






#### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

Phase I of the study, conducted in 2003, includes an overview of the level of service (LOS) concept and models, bicycle facilities, existing conditions, workshop material, and preliminary LOS Phase II, conducted in 2004, is a modeling. continuation of the Phase I methodology applied to corridors comprising the regional study area bicycling network. Additionally, the Regional Bicycle Suitability Study provides a "snapshot" and overview of bicycle accommodations and resources in the MPO study in 2003-2004 and is useful in evaluating progress toward better accommodation of cyclists in the region.



#### 2.4 Local Guidance and Resources

#### 2.4.1 City of Roanoke Complete Streets Policy

The Complete Streets policy states that City streets should provide a safe and attractive environment for all users, including cyclists. The policy is based upon the Street Design Guidelines the City of Roanoke Planning Commission

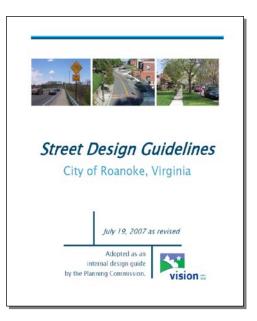




endorsed in 2007. The City of Roanoke Complete Streets Policy is provided in Appendix E.

#### 2.4.2 City of Roanoke Street Design Guidelines

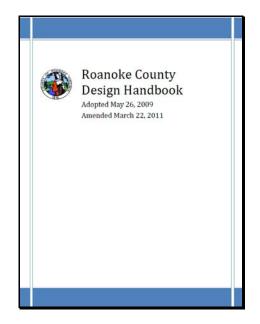
The Street Design Guidelines states that all arterial and collector streets should have some form of bicycle accommodation, and provides design guidance on how to achieve such. The Street Design Guidelines should be used in support of the City of Roanoke's Complete Streets Policy



#### 2.4.3 Roanoke County Design Handbook

The <u>Roanoke County Design Handbook</u> (2009) is an illustrative guide to the Roanoke County's Zoning Ordinance. The Design Handbook was amended in 2011 to include Chapter 3 – Transportation - which provides design guidance and standards for private roads, sidewalks, shared use paths, trails, and bicycle accommodations.



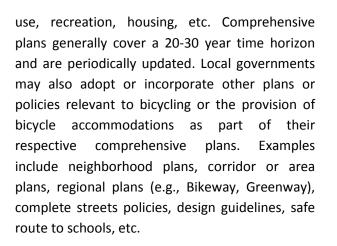


## 2.4.3 City of Roanoke Bicycle Advisory Committee

The City of Roanoke established a Bicycle Advisory Committee in 2009 to guide and support the City of Roanoke's application for Bicycle Friendly Community (BFC) designation by the League of American Bicyclists. The BAC is composed of local government staff from various departments, area businesses, citizens, Regional BAC representatives, Valley Metro, and other stakeholders. The City of Roanoke was designated as a BFC at the Bronze level in 2010 and the BAC continues to work to improve cycling in the City of Roanoke.

## 2.4.4 Comprehensive Plans and Other Local Guidance

All Virginia localities are required to develop and maintain a comprehensive plan that provides guidance on the planning and development of a community including transportation, utilities, land



### 2.5 Professional and Other Guidance

# **2.5.1** A Policy On Geometric Design of Highways and Streets (AASHTO)

The American Association of State Transportation Officials (AAASHTO) *publication, A Policy on Geometric Design of Highways and Streets* (1999) or "Green Book," contains design practices in universal use as the standard for highway geometric design. The Green Book serves as the primary guidance document for federal, state, and local governments throughout the United States including VDOT. An updated version of the publication will be release in 2012.

## 2.5.2 Guide for the Development of Bicycle Facilities (ASSHTO)

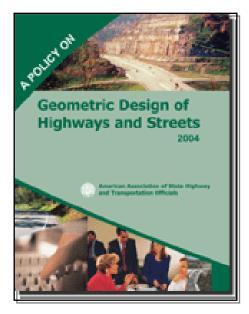
The <u>Guide for the Development of Bicycle</u> <u>Facilities</u> (1999) provides information to help accommodate bicycle traffic in most riding environments. As with the Green Book, this guide serves as the primary reference document guiding bicycle facilities design for federal, state, and local governments and agencies throughout the United States. AASHTO guidance is used in conjunction

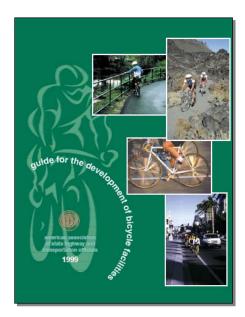






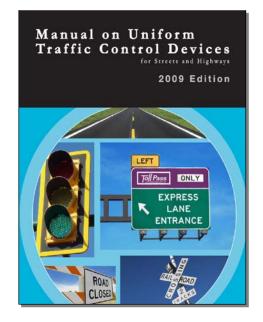
with the Manual on Uniform Traffic Control Devices (MUTCD).





## 2.5.3 Manual on Uniform Traffic Control Devices (2009)

The Manual on Uniform Traffic Control Devices (MUTCD) defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F (MUTCD). Chapter 9 of the MUTCD -Traffic Control for Bicycle Facilities –covers signs, pavement markings, and highway traffic signals specifically related to bicycle operation on both roadways and shared-use paths. The MUTCD is available at <u>http://mutcd.fhwa.dot.gov</u>.



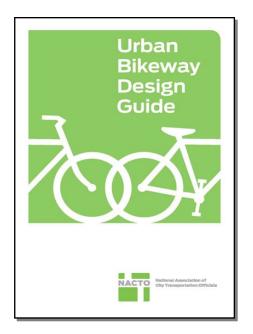






#### 2.5.4 Urban Bikeway Design Guide (NACTO)

The National Association of City Transportation Officials (NACTO) <u>Urban Design Guide</u> (2010) provides state-of the-practice solutions to better accommodate cyclists on urban streets. The Urban Design Guide includes information on bike lanes, cycle tracks, intersections, and signaling and marking. The Urban Design Guide also includes bicycle facility design and principals not described in other referenced national guidance documents such as the Green Book and MUTCD.



#### 2.5.5 Other Resources

Links to all documents referenced in this section as well as a range of range of additional bicycle related plans, policies, and other guidance are provided on the <u>RVARC Bicycle, Pedestrian, and</u> <u>Greenway Planning</u> webpage.







# SECTION 3 - OVERVIEW OF EXISTING BICYCLE ACCOMMODATIONS

Section 3 provides a general accounting and overview of recent efforts and ongoing efforts to better accommodate bicyclists within the regional transportation and recreational network, and an evaluation of progress in doing so, primarily since completion of the 2005 <u>Bikeway Plan for the RVAMPO</u>. This accounting involves engineering approaches, as well as efforts to encourage, promote, and facilitate bicycling as a viable mode of transportation in the MPO study area and the greater region and is generally organized around the League of American Bicyclists' "5 Es" of bicycle/pedestrian planning and coordination which includes:

- Engineering
- Education
- Encouragement
- Enforcement
- Evaluation and planning

#### 3.1 Engineering

Engineering involves accommodation of cyclists on public roads, existence of both well-designed bike lanes and multi-use paths, and existence and content of bicycle master plan or other guidance documents. All identified existing bicycle accommodations (on-street, trails, greenways, signage, pavement markings, etc.) in the RVAMPO study area are included in the Regional Bicycle Accommodations Geodatabase and are viewable on the <u>RVARC Online Map</u>. Additionally, links to bicycle related plans, policies, and other guidance are provided on the <u>RVARC Bicycle, Pedestrian,</u> and Greenway Planning website.

#### 3.1.1 Bicycle Plans, Policies, and Programs

As noted in Section 2, a range of local and regional guidance is available in the MPO Study area including:

- Bikeway Plan for the RVAMPO
- City of Roanoke Completes Policy
- City of Roanoke Street Design Guidelines
- Local Paving and Resurfacing Programs
- Roanoke County Design Handbook
- Roanoke Valley Greenway Conceptual
   Plan
- VDOT Policy for Integrating Bicycle and Pedestrian Accommodations

Consistent with the VDOT Policy for Integrating Bicycle and Pedestrian Accommodations, an "accommodation" is defined as any facility, design feature, operational change, or maintenance activity that improves the environment in which bicyclists and pedestrians travel. Bicycle accommodations may include on-street accommodations, off-street accommodations, and ancillary accommodations.

### 3.1.2 On-Street Bicycle Accommodations

As the name implies, on-street bicycling accommodations generally involve engineering or design approaches to better accommodate cyclists within the roadway or corridor footprint. Examples of on-street accommodations present in the MPO study area include:

- bike lanes (with signage and pavement markings)
- wide travel lane
- paved shoulders







- signed bike routes
- bike routes
- paved shoulders
- shared roadways
- neighborhood streets

Other on-street accommodations available, but not currently in place in the region, include, but are not limited to:

- bicycle boulevards
- bicycle contra lanes
- cycle tracks
- advisory lanes

The previously referenced bicycle accommodation guidance documents (AASHTO, MUTDC, NACTO Urban Design Guide, etc.) provide design guidance and standards for various on-street accommodations.

As outlined in Section 1, the primary entity responsible for installation of an on-street bicycle accommodation varies throughout the MPO study area with VDOT being responsible for roadway construction and maintenance in Botetourt and Roanoke Counties; while the cities of Roanoke and Salem, and the Town of Vinton are responsible for the construction and maintenance of streets within their respective jurisdictional boundaries. While progress has been region-wide, the City of Roanoke in particular has made significant progress in the provision of on-street bicycle accommodations through a variety of approaches including adoption of the 2005 *Bikeway Plan*, adoption and implementation of a "complete streets" policy, annual paving and resurfacing program, stimulus funding (ARRA), road diets, and long range transportation planning processes (TIP, SYIP, etc).

The Regional Bicycle Accommodations Geodatabase (see Section 3.

### 3.1.2.1 Bicycle Lanes

A bike lane is a portion of a roadway, which has been designated by striping, signing and pavement markings, for the preferential or exclusive use of bicyclists. As of November of 2011 there were 6 (six) corridors within the RVAMPO study area boundary with conventional bicycle lanes, totaling 14.2 lane miles, representing differing approaches and opportunities for provision of a bicycle lane (Figure 3.1). Corridors with bicycle lanes in the RVAMPO study area include (Table 3.1):

- Memorial Avenue (City of Roanoke, 2000)
- Hardy Road (Town of Vinton, 2004)
- Colonial Avenue (City of Roanoke, 2008)
- Mountain View Road (Roanoke County, 2009)
- Shenandoah Avenue (City of Roanoke, 2010)
- Gus Nicks Boulevard (City of Roanoke, 2010)
- Peters Creek Extension (City of Roanoke, 2011)

The City of Roanoke has installed conventional bicycle lanes and other accommodations on numerous streets by reconfiguring the existing roadway pavement width as part of its annual paving and resurfacing program.







Memorial Avenue bicycle lanes (13<sup>th</sup> to Cambridge) were installed as part of a "road diet" which removed one travel lane to provide space for installation of a conventional bicycle lane in 2000. This project and was conducted as part of a roadway reconstruction project. This corridor provides connection to the Roanoke River Greenway, Vic Thomas Park, Ghent Park, and the Grandin Village, several signed bicycle routes, public transportation and several neighborhoods (Mountain View, Norwich, and Grandin).

Colonial Avenue bicycle lanes (26<sup>th</sup> to Winding Way) were installed as part of the City of Roanoke's 2008 annual paving program. Existing travel lanes were narrowed allowing for installation of a conventional bicycle lane along a portion of the corridor and preservation of onstreet parking. The Colonial bicycle lane provides connection to Virginia Western Community College, Fishburn Park Elementary School, and Murray Run Greenway.

Shenandoah Avenue bicycle lanes (24<sup>th</sup> to 5<sup>th</sup>) was installed as part of the City of Roanoke's annual paving program (2010) and consists of a conventional bicycle (westbound) and a wide travel lane (eastbound). These accommodations were installed by reconfiguring (i.e., narrowing) the geometric design of the existing travel lanes

Gus Nicks Boulevard bicycle lanes (Orange Avenue to Town of Vinton CL) were installed as part of the City of Roanoke's annual paving program (2010) in which the existing travel lanes were narrowed allowing for installation of a bicycle lane. This bicycle lane design uses the outside travel lane as well as the curb and gutter to meet the AASHTO standards The Peters Creek Extension bicycle lanes (Melrose to Brandon) were installed as part of the City of Roanoke's 2011 annual paving program. Prior to installation of bicycle lanes, bicycle accommodations along the corridor consisted of wider outside travel lanes and Share the Road signage. Existing travel lanes were narrowed allowing for installation of a conventional bicycle lane. This portion of Peters Creek Extension is also a signed bicycle route.

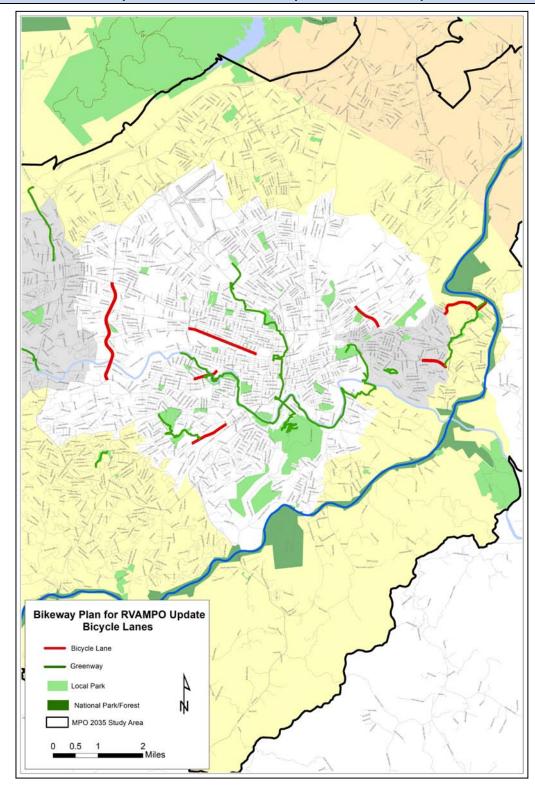
Other bicycle lanes in the RVAMPO study area include Hardy Road (Town of Vinton) and Mountain View Road (Roanoke County), both of which were installed as a part of VDOT reconstruction projects. The Hardy Road bicycle lane (Bypass Road to Wolf Creek) was the first bicycle lane in the region and connects to Wolf Creek Greenway, Horn Elementary School, and several neighborhoods along Hardy Road. The Mountain View bicycle lane (Town of Vinton CL) to near the Blue Ridge Parkway overpass provides connection to the Wolf Creek Greenway, Blue Ridge Parkway, and several neighborhoods.

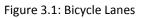
Bicycle lanes are planned for other corridors in the MPO study area including 10th Street and 13<sup>th</sup> Street/Hollins Road in the City of Roanoke and Walnut Avenue in the Town of Vinton as part of planned reconstruction projects. Projects form the <u>2012-2015 RVAMPO Transportation</u> <u>Improvement Program</u> (TIP) are provided in Section 4.













Street	From	То	Year Installed	Locality	Length (miles)
COLONIAL	26TH	WINDING WAY	2008	City of Roanoke	1.8
GUS NICKS	CORPORATE LIMIT	ORANGE	2010	City of Roanoke	1.4
MEMORIAL	13TH SW	CAMBRIDGE	2000	City of Roanoke	1.1
PETERS CREEK EXTENSION	MELROSE	BRANDON	2011	City of Roanoke	4.7
SHENANDOAH	24 TH	5 TH	2010	City of Roanoke	1.6
MOUNTAIN VIEW	CORPORATE LIMIT	0.12 MILES WEST OF FALLING CREEK DRIVE (ROUTE 1075)	2008	Roanoke County	2.5
HARDY	BYPASS ROAD	WOLF CREEK	2004	Town of Vinton	1.1
City of Roanoke - Total Bike Lane Miles					10.6
Roanoke County - Total Bike Lane Miles					2.5
Town of Vinton - Total Bike Lane Miles					1.1
RVAMPO Total Bike Lane Miles					14.2

Table 3.1 Bicycle Lane Locations and Mileage

Bicycle lanes and mileage as of 12/31/11. Source: RVARC









Wide travel lane on Colonial Avenue) prior to bicycle lane installation (City of Roanoke)



Wide travel lanes on Shenandoah Avenue prior to installation of bicycle lane



Bicycle lane on Colonial Avenue (City of Roanoke) installed as part of the 2008 annual paving program



Bicycle lane on Shenandoah Avenue installed as part of the 2011 annual paving program









Bicycle lane on Memorial Avenue (City of Roanoke) installed as part of a "road diet" in 2000



Bicycle lane on Mountain View Road in Roanoke County installed as part of a VDOT reconstruction project in 2008



Bicycle lane on Gus Nicks Boulevard (City of Roanoke) installed as part of the 2011 annual paving program



Bicycle lane on Colonial Avenue (City of Roanoke) installed as part of the 2008 annual paving program







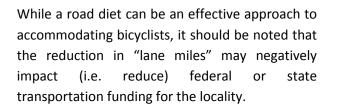
## 3.1.2.2 Wide Travel Lanes

Wide travel lanes are roadways that provide adequate width for both motor vehicle and bicycle travel and are a viable option to accommodate cyclists where there is not sufficient roadway width for conventional bicycle lanes. Wide travel lanes are often used in tandem with signage (e.g., Share the Road, Bike Route, wayfinding, etc.) and pavement markings (e.g., sharrows). Additionally, a right edge stripe ("urban shoulder") or on-street parking stripe can be installed on wide travel lane to further delineate the accommodation and serve as traffic calming devices.

Wide travel lanes are present throughout the RVAMPO study area, representing one of the most common on-street bicycle accommodations (Figure 3.2). Examples of wide travel lanes in the RVAMPO study area include, but are not limited to:

- Brandon Avenue (City of Roanoke)
- College Avenue (City Salem)
- Hollins Road (Roanoke County)
- Idaho Street (City of Salem)
- Melrose Avenue (City of Roanoke)
- Walnut Avenue (City of Roanoke)
- Walnut Avenue (Town of Vinton)

As part of the 2011 paving program, the City of Roanoke installed a wide travel lane in the uphill direction of a portion of Walnut Avenue (and Mill Mountain Greenway) by reconfiguring the existing lane dimensions (i.e., downhill lane narrowed, uphill lane widened). Sharrows and wayfinding signage were also installed along the wide travel lane to further delineate accommodation.





Center line shifted and downhill travel lane narrowed to install wide travel lane in uphill direction on Walnut Avenue/Mill Mountain Greenway (City of Roanoke)



Wide travel lane (uphill), shared lane marking, and wayfinding/directional signage on Walnut Avenue/Mill Mountain Greenway









Wide travel lane (road diet) on 5<sup>th</sup> Street in the City of Roanoke installed as part of the 2011 annual paving program



Wide travel lane on Walnut Avenue/Mill Mountain Greenway in the City of Roanoke



Wider outside travel lane on Brandon Avenue in the City of Roanoke



Wide travel lane with an "urban shoulder" on Walnut Avenue/Mill Mountain Greenway







## 3.1.2.3 Paved Shoulders

Shoulder improvements are often effective in accommodating bicycle travel on a shared roadway. Although a 4-foot paved shoulder is recommended for bicycle travel, there is no design standard. In general, any additional shoulder width will provide greater benefit than no shoulder at all. In addition to accommodating bicyclists, paved shoulders also provide additional roadway maintenance and safety benefits such as pull over areas, recovery areas, and increased pavement structure durability.

Although not specifically installed as bicycle accommodations, there are several roadways in the RVAMPO study area with paved shoulders varying widths and suitability for bicycle travel (Figure 3.2). Additionally, in recent years, VDOT has included (or plans to include) paved shoulders width on several roadway reconstruction projects (e.g., US 221, US 460). Additionally, VDOT can use road maintenance funding to improve existing paved shoulders to better accommodate bicyclists including increasing the shoulder width were practicable. Examples of corridors in the RVAMPO study with paved shoulders include, but are not limited to:

- Route 419/Electric Road
- US 220 (Botetourt County)
- US 460 (western Roanoke County)
- Sanderson (Roanoke County)
- Route 311/Catawba Valley (Roanoke County)



Paved shoulder on US 220 North in the Daleville area of Botetourt County



Wide travel lane and paved shoulder on Shenandoah Avenue installed as part of the 2010 annual paving program









Paved shoulder on Route 419/Electric Road in Roanoke County

While paved shoulders can often sufficiently accommodate cyclists, impediments to doing so can include inconsistent and/or insufficient paved shoulder width, pavement conditions, and right turn conflicts (i.e., paved shoulder also serves as right turn lane). Additionally, as with conventional bicycle lanes and wider travel lanes, debris often tends to accumulate within the paved shoulder presenting a potential hazard for cyclists. Entities responsible for street cleaning with the RVAMPO study area are the same as with construction and maintenance responsibilities (see Section 1). Street cleaning schedule and frequency vary based on the responsible entity. For instance the City of Roanoke cleans each residential street once every four months; arterial streets each month; and Central Business District (downtown) streets are swept each Wednesday, Friday, and Saturday nights. The VDOT Salem District currently conducts very limited cleaning or debris removal on roadways under its jurisdiction.



Inconsistent paved shoulder along Electric Road/419 in Roanoke County

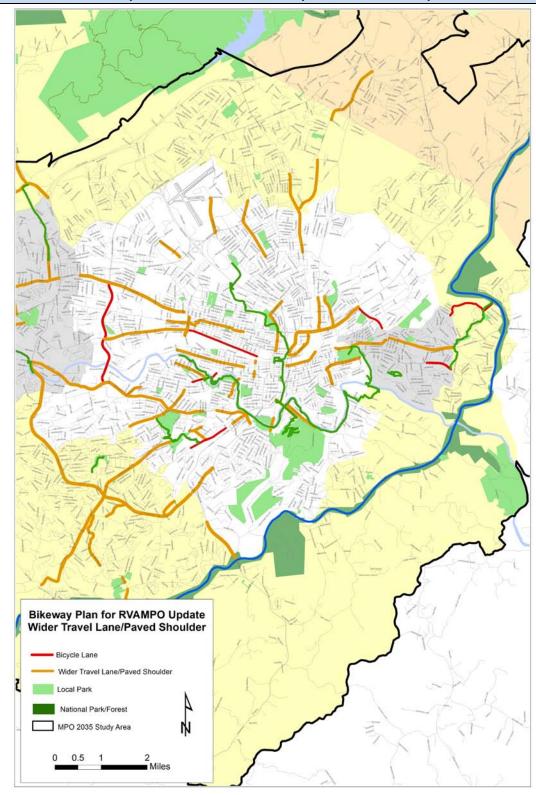


Street cleaning in the City of Roanoke













## 3.1.2.4 Signed Bicycle Routes

A signed bicycle route is an established route that connects activity centers, greenways, and other destinations with directional signage and/or pavement markings to delineate the route. Signed bicycle routes often utilize lower traffic volume corridors, neighborhood streets and other suitable shared roads, as well as existing on-street accommodations were available. The routes as often provide alternatives to higher traffic volume roadways.

The City of Salem has long had an 11.2 mile signed bike route designed for riders of all ages and skill levels. This bike route connects various activity centers and destinations within the city. The Salem bicycle route follows neighborhood and other low traffic volume streets and has bicycle-specific accommodations along portions of the route (Figure 3.3).

The City of Roanoke also has several established signed bicycle routes in place with other routes being developed by the City of Roanoke Bicycle Advisory Committee. The current signed bicycle routes in the City of Roanoke serve as on-street greenway connectors and generally utilize lower traffic corridors, neighborhood streets, as well as other bicycle and existing bicycle accommodations.

Throughout the RVAMPO study area numerous potential bicycle routes have been identified by area cyclists and stakeholders and are included in the Regional Bicycle Accommodations Geodatabase maintained by the Regional Commission. Additional routes are being developed through the various local and/or





regional plans, policies, processes (neighborhood, corridor, or area plans, complete streets policy, etc), as well as VDOT planning efforts. However, additional work is needed to identify additional bicycle routes and provide appropriate accommodation(s) along these corridors.



Bike Route signage and Valley Metro bus stop at the terminus of the Memorial Avenue bicycle lane



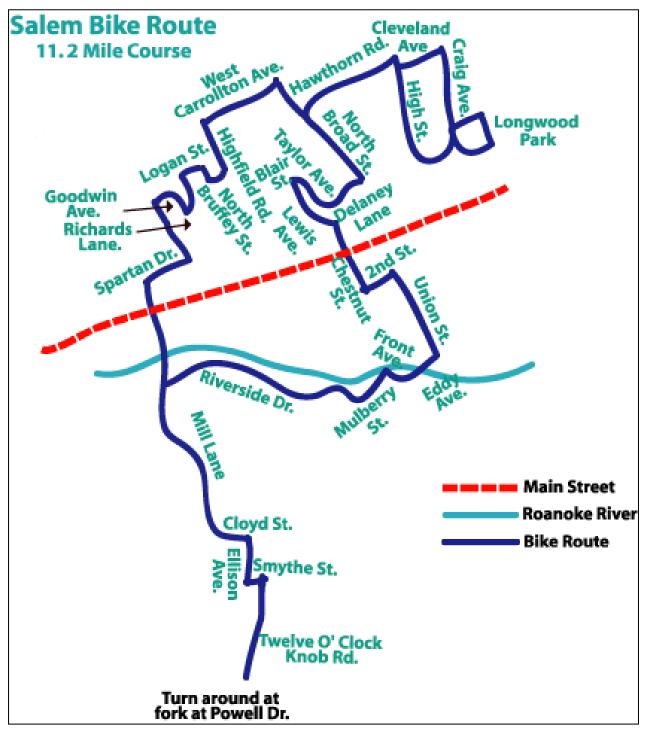


Figure 3.3: City of Salem Bike Route: Source: City of Salem



## 3.1.2.5 Other Local/Regional Routes

Beyond local signed bicycle routes, other informal bicycle "routes" have been identified in the region by local cyclists and stakeholders. These routes include commuter, recreational, touring, and social routes, and utilize existing on-street accommodations, neighborhood streets, lower traffic corridors, greenways, etc.

## 3.1.2.5.1 Regional Bike Commuter Routes

RIDE Solutions "Bike Commuter Routes" provide connection to downtown Roanoke (and points in between) from various quadrants of the RVAMPO study area (Figure 3.4). While these routes are currently not signed/marked or otherwise delineated on ground, printable and Interactive maps of all Regional Bike Commuter Routes are available at the <u>Bike Roanoke</u> website.

## 3.1.2.5.2 Art by Bike Route

The Art by Bike touring route connects various pieces of public art in the City of Roanoke (Figure 3.5). The Art by Bike touring developed in partnership with the Roanoke Arts Commission to celebrate the unveiling of *In a Tangle*, the sculptural bike rack installed in the Grandin Village on July 1, 2011. This easy, eight mile loop runs from the Grandin Village to downtown and back, and utilizes several existing bicycle accommodations including bicycle lanes, signed bicycle routes, greenway/shared use paths, and neighborhood streets. Printable and Interactive maps of the Art by Bike Route are available on the Bike Roanoke website.

#### **3.1.2.5.3** Alternative Routes

While not specifically a bicycle accommodation, alternative routes provide options to higher traffic volume/speed roadways. Alternative routes are generally neighborhood or other lower traffic streets that parallel major commute corridors. The Regional Commission and RIDE Solutions have worked with area cyclists and other stakeholders to identify and map a number of alternative routes throughout the RVAMPO study area. These routes are identified on the <u>RVARC Online Map</u> and Bike Roanoke Interactive Bike Map.







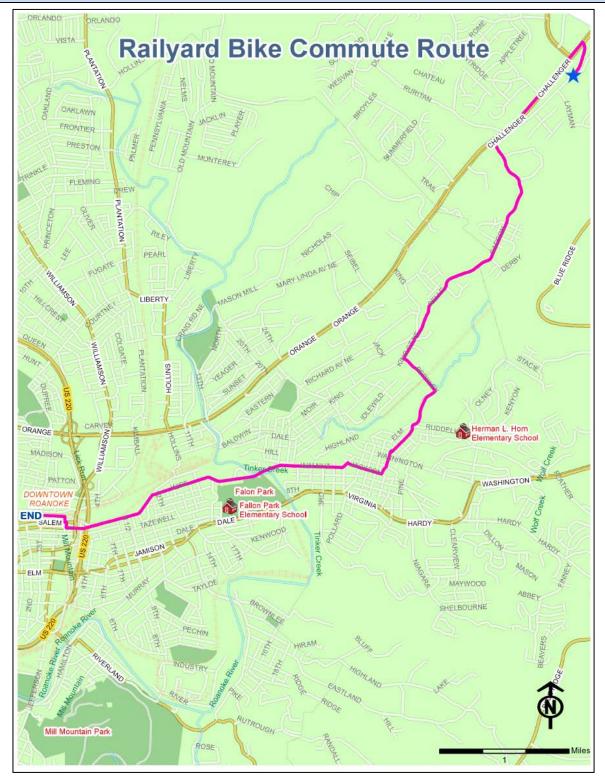


Figure 3.4: RIDE Solutions Bike to Work Route Map



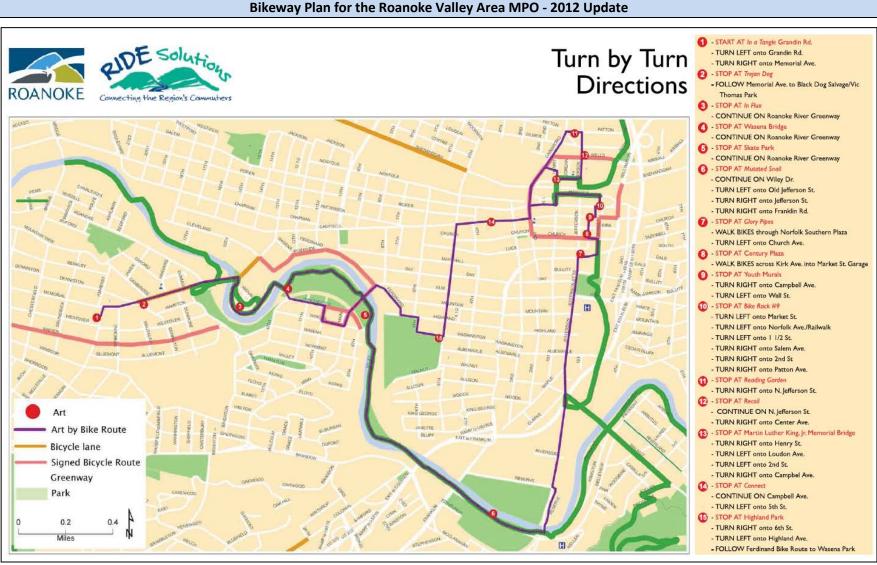


Figure 3.5: Art by Bike Route







## 3.1.2.6 Virginia Interstate Bicycle Route 76

The Virginia Interstate Bicycle Route 76 is one of three recognized national bicycle routes that run through Virginia and is a popular recreational cycling destination (for locals and visitors). Bicycle Virginia Bicycle Route 76 is part of the <u>Trans-</u> <u>America Bike Trail</u> (a.k.a. BikeCentennial Route

76) which runs for 4,250 miles from Williamsburg, Virginia to Astoria, Oregon. The 500-mile Virginia section of the Trans-America Bicycle Route runs from Yorktown to the Kentucky state line near



Breaks Interstate Park and generally follows the Trans-America Bike Trail.

The Virginia Interstate Bicycle Route 76 runs through portions of Botetourt and Roanoke counties and includes roadways within the RVAMPO 2035 study area in Botetourt as well as roadways covered under the Rural Transportation Planning in Botetourt and Roanoke counties (Figures 3.6 and 3.7). Few regions are as uniquely suited to capitalize on this geographic proximity to Bicycle Route 76) and providing improved connection between these routes and the population/activity centers in the RVAMPO study area has been noted as a priority by area cyclists and stakeholders. The *Bikeway Plan* recognizes and promotes greater connection and integration of the route to the RVAMPO study area.

VDOT is primarily responsible for maintenance and signage along the Bicycle Route 76. Currently, Bicycle Route 76 is demarcated with white and black, "Route 76" signs with a bicycle





image. Beyond route and occasional "Share the Road" signage, bicycle accommodations along the route are largely absent. Additionally, wayfinding and directional information, including maps, are very limited. Additionally, speed limits, geometric design (lack of shoulder, narrow travel lanes) on portions of the route present impediments to cyclist using the route.



Bike Route 76 signage at Route 779 and US 220 in Botetourt County

Directions for the Bike Route 76 through Botetourt and Roanoke counties are provided below.

# Botetourt County (traveling east to west) Total Distance: 40.6 miles

- Enters Botetourt County from the north on Frontage Road 55 (old US 11) coming out of Rockbridge County
- Continues through the Town of Buchanan on US 11
- Turns left onto Route 640 (Lithia Road) just south of the Town of Buchanan
- Continues on Route 640 (Lithia Road) south to Nace Road (also Route 640)



- Follows Nace Road (Route 640) until intersection of US 11
- Turns left onto US 11 for a short distance before turning left onto Route 651 (Stoney Battery Road) Continue on Route 651 until it crosses US 11 in Troutville
- Turns right onto Route 779 (Valley Road) to US 220 in Daleville
- Crosses US 220 and follows Route 779 to the Catawba Valley and Roanoke County as it continues south

Roanoke County (traveling east to west) Total Distance: 13.7 miles

- Enters Roanoke County on Route 779 (Catawba Creek Road) from Botetourt County
- Continues on Route 779 until the intersection with Route 311 (Catawba Valley Road)
- Turns right (west) onto Route 311 for a short distance
- Turns left onto Route 785 (Blacksburg Road) and continues on Route 785 into Montgomery County

# Bicycle Route 76 – RVAMPO Study Area Connections

As previously noted, the Virginia Bicycle Route 76 run through, or close to, the RVAMPO study area in Botetourt and Roanoke counties with the following corridors providing possible connection to activity centers and other destinations in the study area:

- US 220 (Botetourt County)
- US 220 Alternate (Botetourt)
- US 11/Lee Highway (Botetourt County)



AD

SR 311/Catawba Valley Road (Roanoke County)

US 220 provides a direct connection from Route 779 to activity centers in the Daleville area of Botetourt County. This portion of US 220 is 4 lanes divided highway and is classified as a "Rural Other Principal Arterial" by VDOT. The outside travel lanes are 12-feet wide with a 4-feet wide paved shoulder (northbound) which is and deteriorated in places, and a speed limit of 45 MPH. Currently, there is no bicycle-related signage (i.e., Share the Road) along the corridor. This segment of US 220 (1-81 to 779) has a high development density with numerous commercial establishments and high AADT. The BCI and BLOS models indicated a LOS of D along this segment of the corridor.

Bicycle Route 76 cross US 11 (Lee Highway) in the Troutville area of Botetourt County. This section of US 11 is classified as an "Urban Collector" by VDOT and connects the Bicycle Route 76 to activity centers in Daleville (Exit 150) and Roanoke County. US 11 continues into Roanoke County Roanoke County (Williamson Road) and connects to other lower-traffic corridors that provide access to Roanoke including Cloverdale Road (Alternate US 220), Read Mountain Road, Sanderson, and Hollins Road.

Route 311 is a two lane rural road with a posted speed limit of 55 and is classified as a Rural Major Collector by VDOT (Appendix A). Route 311 is also a commuter route between parts of Roanoke and Craig counties resulting in high traffic volume and speeds. Virginia Bicycle Route 76 utilizes a section of Route 311 (785 to 779) in Roanoke County. Route 311, a Virginia scenic Byway, provides a direct connection to the City of Salem and the



Roanoke urbanized area approximately 9 miles from the Route 785. Additionally, Route 311 provides connection to numerous activity centers and point of interests within and/or proximate to the RVAMPO study area (via 419/Electric Road, Kessler Mill Road, Thompson Memorial, and Hanging Rock Greenway), including downtown Salem, Roanoke College, a park and ride lot (I-81 at Exit 140), Carvins Cove Natural Reserve, McAfees Knob, Havens Wildlife Refuge, Catawba Recreation Center (Roanoke County Parks and Recreation), the Virginia Tech Experimental Farm, Jefferson National Forest, and the Appalachian Trail. However, although in recent years VDOT has made improvements to the paved shoulder (widening, pavement improvement) through maintenance funds, Route 311 currently does not sufficiently and safely accommodate cyclists. For instance, the LOS along sections of Route 311 was a D (moderately low) and E (very low) (Regional Bicycle Suitability Study, 2004). However, both level of service models (BCI and BLOS) indicated that several design and/or operational changes could increase the LOS including increasing the travel lane and/or paved shoulder and reduction of 85<sup>th</sup> percentile speed along the corridor. To better accommodated cyclists VDOT has recently installed additional "Share the Road" signs and increased shoulders width along portions of Route 311.

Additional planning will be required on behalf of the RVAMPO, local governments, VDOT, and other stakeholders to better connect Virginia Bicycle Route 76 to activity centers and destinations in the RVAMPO study area and incorporate the route into the regional transportation and recreation network. Roads composing the Virginia Bicycle Route and

AD



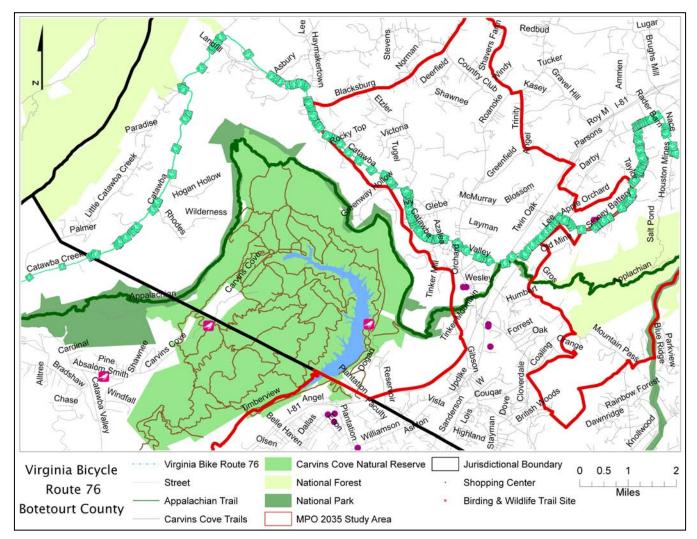
potential connecting corridors are included in the list of corridors for consideration of bicycle accommodations for each locality (Section 4).

Beyond the *Bikeway Plan for the RVAMPO* and related transportation planning documents (e.g., *Rural Bikeway Plan*, TIP, etc.) connectivity between Bicycle Route 76 and regional activity centers and destinations can also be addressed through other planning processes or documents at the local, state, and regional levels (e.g., trail, greenway, tourism, economic development, health/active living, livability).



Improved paved shoulder on Route 311 in Roanoke County installed by VDOT in 2011 as part of its maintenance program









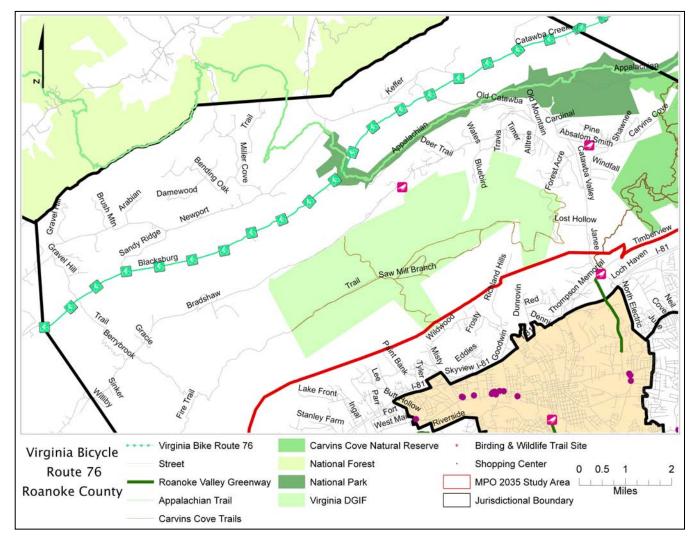


Figure 3.7: Virginia Bicycle Route 76 - Roanoke County



## 3.1.2.7 Blue Ridge Parkway

The <u>Blue Ridge Parkway</u> is a 469-mile scenic route that runs through 39 counties in North Carolina and Virginia. The Blue Ridge Parkway, which is administered by the National Park Service (NPS), is the most visited unit of America's National Park System. The Blue Ridge Parkway runs through portions of the MPO study area in Botetourt, Franklin, and Roanoke counties. The Blue Ridge Parkway is under the jurisdiction of the National Park Service (NPS), as such state, regional, and local agencies have limited input regarding bicycle accommodations along its length.

The portion of the Blue Ridge Parkway in the region is primarily a two-lane, undivided, roadway with 11-foot travel lanes and generally no shoulders along most of its length. Despite the roadway geometrics, the Blue Ridge Parkway is a popular cycling destination for local cyclists as well as cyclists from outside of the area due, in part, to its scenic beauty, challenging and varied topography, and relatively low AADT. However, it should be noted that although the Parkway has low AADT, portions of the Blue Ridge Parkway near the Roanoke area, especially between Route 24 and US 221, are used daily by area commuters, resulting in higher traffic volumes at certain times during the day. Traffic volumes also increase significantly during certain times of year (i.e., fall leaf season) as tourists travel the Parkway.

The Blue Ridge Parkway can be accessed at several locations within, or in close proximity to, the MPO study area including:

- US Route 220 (Roanoke County/City of Roanoke) Parkway Spur/J.P. Fishburn Parkway (City of Roanoke)
- State Route 24 (Roanoke County)
- US Route 460 (Roanoke County)
- Route 43 (Botetourt County outside of MPO)

Although Parkway access is limited, there are numerous activity centers and destinations along or in close proximity to the Blue Ridge Parkway in Roanoke area (the largest population center along the Blue Ridge Parkway) including Explore Park, Mill Mountain Zoo, Discovery Center, the Roanoke Star, Mill Mountain Greenway, Roanoke Mountain campground, and numerous commercial centers. While the limited access points provide connection between the Blue Ridge Parkway and the Roanoke area, currently, bicycle accommodations, wayfinding and/or directional information along these corridors are limited. Likewise, wayfinding and/or directional information to activity centers, destinations, and attractions in communities along the Blue Ridge are also lacking.

In general, the Roanoke Parkway Spur provides the safest access to the Roanoke Valley (City of Roanoke) from the Blue Ridge Parkway via J.P. Fishburn Parkway and the Mill Mountain Greenway). Additionally, a section of US 220 leading to the Blue Ridge Parkway has a paved shoulder (southbound direction) with Share the Road signage. Share the Road signage is in place on US 220 (northbound direction) leading from the Blue Ridge Parkway to Roanoke County and City of Roanoke, however, currently there are no

US Route 221 (Roanoke County)







on-street accommodations (i.e., paved shoulder) along the southbound segment of the corridor.

The primary Blue Ridge Parkway planning and guidance documents include:

- <u>Roanoke Valley/Blue Ridge Parkway Trail Plan</u> (2011)
- <u>Blue Ridge Parkway General Management</u> <u>Plan</u> (GMP) (2011)

In October 2007, the NPS initiated a public comment period to identify issues and additional study that will be needed to develop an Environmental Assessment for a trail plan for the Roanoke Valley section of the Parkway (from Stewarts Knob, Milepost 110.6 to Masons Knob, Milepost 126.2). The intent of the Roanoke Valley/Blue Ridge Parkway Trail Plan is to develop a safe and integrated trail system that would provide critical linkages between the Roanoke Valley Greenway trail network, Parkway trails, and the community. This trail system would provide the public with a greatly enhanced range of trail opportunities, as well as provide the NPS trail planning, mapping, and rehabilitation assistance from the Roanoke Valley Greenway Commission. Additionally, the NPS is developing a Blue Ridge Parkway General Management Plan (GMP) which will provide comprehensive guidance for perpetuating natural systems, preserving cultural resources, and providing opportunities for quality visitor experiences along the parkway for the next 20+ years.

While it is understood that the Blue Ridge Parkway is under the jurisdiction of the National Park Service, the *Bikeway Plan for the RVAMPO* recognizes the importance of the Blue Ridge





Parkway as a major recreational destination in the region and promotes greater connection/access between the Blue Ridge Parkway and trails and the Roanoke. As such the Blue Ridge Parkway and roadways providing potential connection/access are included in the Bikeway Plan as corridors for consideration of bicycle accommodation(s) (Section 4). Table 3.2 and Figure 3.8 provide an overview of current auto and bicycle access to the Blue Ridge Parkway motor road, as well as proposed bicycle access from the Blue Ridge Parkway planning documents. Additionally, the Bikeway Plan encourages greater and ongoing dialog and collaboration between the NPS and Roanoke area governments, citizens, cyclists, and other stakeholders regarding issues impacting the Blue Ridge Parkway and surrounding communities.

Note: Discussion of the Blue Ridge Parkway and inclusion of the corridor in the *Bikeway Plan for the RVAMPO* is done so with the knowledge and understanding that decisions about management of cultural and historic resources, including the parkway motor road itself, and all other parkway resources, are dictated by the National Park Service Organic Act, the Redwoods Act, other Department of Interior (DOI) laws and policies, the U.S. Code of Federal Regulations, and other federal law and policy. Any changes to the parkway require compliance with the National Environmental Policy Act and National Historic Preservation Act to assess the level of impact on park resources.



Table 3.2
Blue Ridge Parkway
Existing and Proposed Bicycle Access

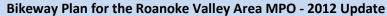
Location	Mile Post	Locality	Access Type	Comments
US 220/Franklin	122	City of Roanoke, Roanoke County	Auto	Existing access; connects to retail/commercial; open to bicycles
Route 24/ Washington	112.5	Roanoke County, Town of Vinton	Auto	Existing access; connects to Wolf Creek Greenway; open to bicycles
Mill Mountain Parkway Spur	121	City of Roanoke	Auto	Existing access; preferred on-road connection to City of Roanoke via Mill Mountain Parkway Spur; open to
US 460/Blue Ridge	105	Botetourt County	Auto	Existing access; high traffic corridors; open to bicycles
Buck Mountain Road	122.5	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; Access from Buck Mountain Rd. (along gas line ROW)
Starlight	124.3	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan, Access from Starkey Park and Greenway
Raintree	126.1	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; Access from Raintree Rd.
Falcon Ridge	121.9	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; Access from Falcon Ridge Rd.
Vinton Ranger Station	112	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; new parking area and paved path to Mountain View Rd.
Hardy Road Vicinity	113.7	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; new parking area and paved path to Mountain View Rd.
Roanoke River Overlook	115	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; Greenway and bicycle connection at Roanoke River Overlook
Pitzer Road	117.1	Roanoke County	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; bicycle connection at Pitzer Rd.
Yellow Mountain Road	Mill Mt.	City of Roanoke	Bicycle	Proposed Authorized Roanoke Parkway Trail Plan; Greenway connections

Source: Roanoke Valley/Blue Ridge Parkway Trail Plan (2011) and National Park Service









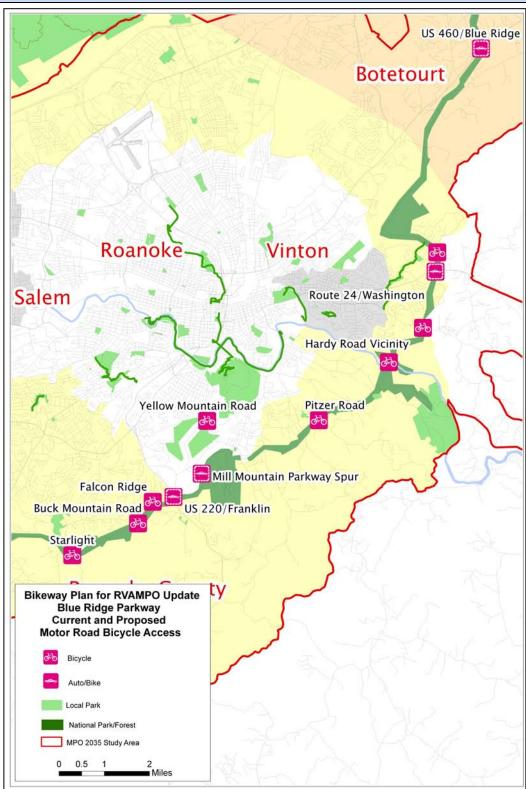


Figure 3.8: Blue Ridge Parkway Current and Proposed Bicycle Access



#### 3.1.2 Signage and Pavement Markings

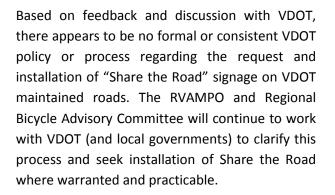
The MUTCD and the NACTO Urban Design Guide provide examples of the various bicycle-related signage and pavements available to better accommodate cyclists with the transportation network. Examples of bicycle signage and pavement markings currently in place in the RVAMPO study area include:

- bike lane signs and pavement markings
- "Share the Road" signs
- bike route signs
- sharrows (shared lane markings)
- wayfinding and directional signage

## 3.1.2.1 Share the Road Signs

Share the Road signs are the most common bicycle-related signage in the RVAMPO study area. Currently there is a total of twenty-four (24) Share the Road signs in the study are with the vast majority (21) being located and installed by the City of Roanoke. VDOT has also installed the remaining Share the Road signs along two corridors in the RVAMPO study area including US 220 (City of Roanoke) leading to and from the Blue Ridge Parkway, SR 311, and Wildwood Road in Roanoke County (Table 3.3 and Figure 3.9).

While the effectiveness (real and/or perceived) of "Share the Road" signs in improving cycling conditions is debatable, this treatment does provide a low-cost, minimum accommodation where other options (i.e., increase pavement width) are not practicable. Additionally, placement of Share the Road signs on roadways with wider outside travel lanes may provide an increased awareness of the potential presence of cyclists, shared nature (motorists and cyclists)of a



roadway, and cyclists "right" to use the roadway.



Share the Road sign, wide travel lane, and "urban shoulder on Brandon Avenue

## 3.1.2.2 Shared Lane Markings

Shared lane markings, or "sharrows," are pavement markings used to indicate a shared lane environment for bicycles and automobiles. Sharrows are included in the 2010 MUTCD, thereby increasing the likelihood of local and state transportation departments. The benefits of sharrows include (NACTO 2011):

 alerts motor vehicle drivers to the potential presence of bicyclists







- alerts road users of the lateral position bicyclists are likely to occupy within the street
- indicates a proper path for bicyclists through difficult or potentially hazardous situations such as railroad tracks
- advertises the presence of bikeway routes to all users
- provides a wayfinding element along bike routes
- increases the distance between bicyclists and parked cars, keeping bicyclists out of the "door zone"

Shared lane markings, however, should not be considered as a substitute or in lieu of bike lanes, cycle tracks, or other separation treatments where these types of facilities are otherwise warranted or space permits. Sharrows are most suitable to indicate a shared lane situation where the speed differential between cyclists and motorists travel speeds is very low such as low traffic volume streets, neighborhood streets, and downtown environments with speed limits not exceeding 25 mph. Shared lane markings generally are not appropriate on streets that have a speed limit above 35 mph. Shared lane markings can also be used to guide cyclists to destinations along preferred bicycle routes as a component of a comprehensive wayfinding system utilizing signing and/or pavement markings.

Since inclusion of shared lane markings in the 2009 MUTCD, the City of Roanoke has begun installing sharrows along corridors throughout the city. For instance sharrows along Church Avenue and 2<sup>nd</sup> Street not only indicate a shared lane environment for bicycles and automobiles but also serve as wayfinding markings for the preferred bicycle route to connect the Lick Run





Greenway and Mill Mountain Greenway through downtown Roanoke. The City of Roanoke has also placed sharrows at the termini of all standard bicycle lanes in the city to indicate the transition to a shared lane environment. Table 3.4 and Figure 3.10 provide an overview of current shared lane markings location in the RVAMPO study area.



Sharrow (shared lane marking) on Church Street in downtown Roanoke. Markings also serve as wayfinding for on-street bicycle connection between Mill Mountain Greenway and Lick Run Greenway





Shared lane marking at terminus of Memorial Avenue bicycle lane

# **3.1.2.3** Directional and Wayfinding Signage and Pavement Markings

Beyond standard bicycle route signage, guidance on a range of directional/wayfinding signage and pavement markings are available to assist in directing cyclists to destinations, preferred routes or other bicycle accommodations. Other directional or wayfinding information may include distances or times to specified destinations or activity centers along a route, connections to other bicycle routes or accommodations, and points of interest. As previously noted, the City of Roanoke BAC is developing bicycle routes throughout the city and reviewing options for design and funding of directional and wayfinding signage along various bicycle routes. Additionally, the RIDE Solutions and the Regional Commission are working with local governments and stakeholders in developing regional commuter, recreational, and "cultural" (Art by Bike, Rail by Bike) routes, as well as greenway connections throughout the study area. The MUTCD and







the NACTO Urban Bikeway Design Guide (Section2) provide guidance on wayfinding signage, pavements markings, and other treatments.

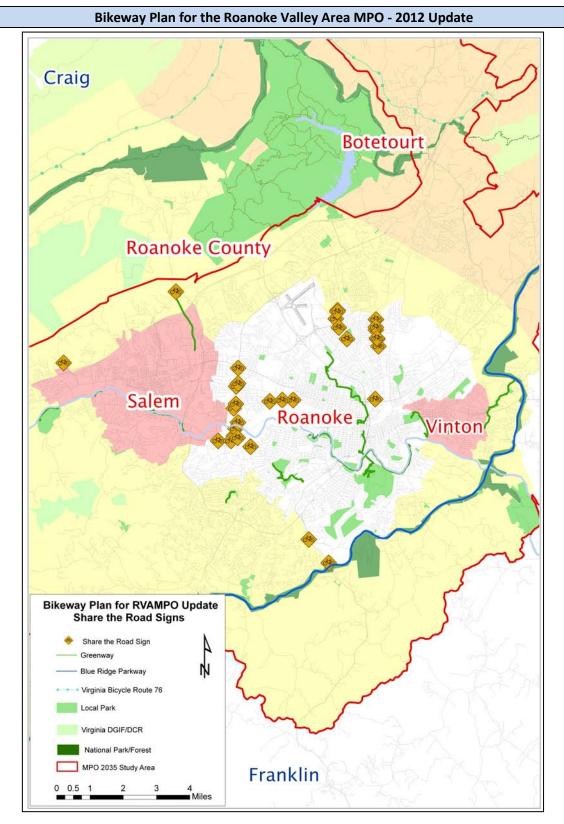


Figure 3.9: Share the Road Signs within RVAMPO



Table 3.3
Share the Road Sign Locations

Street	Direction	Location	Year Installed	Locality
Brandon	West	Edgewood	2008	City of Roanoke
Brandon	West	Peters Creek Extension	2008	City of Roanoke
Brandon	East	Belle Aire	2008	City of Roanoke
Brandon	East	Peters Creek Extension	2008	City of Roanoke
Catawba Valley/311	North	Electric	2009	Roanoke County/VDOT
Peters Creek Extension	South	Shenandoah	2008	City of Roanoke
Peters Creek Extension	South	Salem	2008	City of Roanoke
Peters Creek Extension	South	Melrose	2008	City of Roanoke
Peters Creek Extension	North	Brandon	2008	City of Roanoke
Peters Creek Extension	South	Blue Ridge	2008	City of Roanoke
Peters Creek Extension	North	Shenandoah	2008	City of Roanoke
Peters Creek Extension	North	Salem Turnpike	2008	City of Roanoke
Peters Creek Extension	North	Material Yard	2008	City of Roanoke
Plantation	North	Whiteside	2008	City of Roanoke
Plantation	North	Wentworth	2008	City of Roanoke
Plantation	North	Preston	2008	City of Roanoke
Plantation	South	Monterey Elem School	2008	City of Roanoke
Plantation	South	Preston	2008	City of Roanoke
Plantation	South	Wentworth	2008	City of Roanoke
Shenandoah	West	24th	2010	City of Roanoke
Shenandoah	East	31st	2010	City of Roanoke
Shenandoah	East	30th	2010	City of Roanoke
US 220/Franklin Road	South	Cross Bow	2008	City of Roanoke/VDOT
US 220/Franklin Road	North	Blue Ridge Parkway	2009	City of Roanoke/VDOT
Wildwood	North	Brogan	2005	Roanoke County/VDOT
Williamson	North	Curtis	2008	City of Roanoke
Williamson	North	Trinkle	2008	City of Roanoke
Williamson	North	Pocahontas	2008	City of Roanoke
Williamson	North	Hershberger	2008	City of Roanoke
Williamson	South	Hildebrand	2008	City of Roanoke
Williamson	South	Oaklawn	2008	City of Roanoke

Source: RVARC







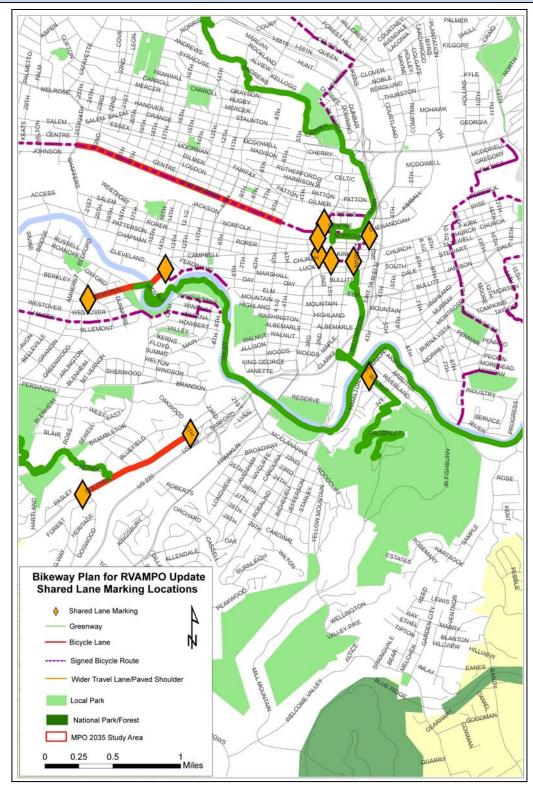


Figure 3.10: Shared Lane Marking (Sharrow) Locations



Street	Direction	Year Installed	Location	Locality
2nd	North	2011	Church - Signed bike route	City of Roanoke
Church	West	2011	Market – Signed bike route	City of Roanoke
Church	West	2011	1st- Signed bike route	City of Roanoke
Colonial	East	2011	26th - terminus of Colonial bike lane	City of Roanoke
			Winding Way - terminus of Colonial	
Colonial	West	2011	Bike Lane	City of Roanoke
			Cleveland - terminus of Memorial bike	
Memorial/13th	West	2011	lane	City of Roanoke
		2011	Cambridge - terminus of Memorial bike	
Memorial	West		lane	City of Roanoke
		2011	Winding Way - terminus of Colonial	
Colonial	West		bike lane	City of Roanoke
	East	2011		
Walnut	(uphill)		Mill Mountain Greenway/Belleview	City of Roanoke
		2011	Shenandoah and Salem – Signed Bike	
Williamson	South		Route, on-street greenway connection	City of Roanoke

Table 3.4Shared Lane Marking (Sharrow) Locations

Source: RVARC







## 3.1.3 Off-Street Bicycle Accommodations

## 3.1.3.1 Greenways and Shared Use Paths

Greenways are consistently cited as one of the top cultural and recreational amenities in the Roanoke area. In addition to providing recreational and health benefits, area greenways are considered an important component of the regional bicycle (and alternative transportation) network. Moreover, in the Bicycle User Survey conducted as part of the *Bikeway Plan -2012 Update*, greenways/shared use paths were cited as the preferred bicycle accommodation. Note: The Bicycle User Survey includes additional greenway-related questions (Section 5).

Since completion of the 2005 Bikeway Plan, several local and regional greenway guidance documents have been developed. The 2007 Update to the Roanoke Valley Conceptual Greenway Plan, completed in June 2007, provides an overview of the existing and proposed regional greenway network. Other relevant plans include the City of Roanoke Parks and Recreation Master Plan and the Roanoke County Parks Recreation and Tourism Comprehensive Master Plan for Parks and Facilities (2008). In public surveys conducted as part of these master plans, respondents ranked expanding and connecting the regional greenway network as top priority. Note: Botetourt County is not a member of the Roanoke Valley Greenway Commission.

Currently, the <u>Roanoke Valley Greenway</u> system consists of approximately 25 miles of shared use paths and trails. Of this total, approximately 19 miles consists of 10-ft wide, paved shared use trails, with the remainder consisting of crushed aggregate, wood chip or natural surface trails (Table 3.5).

The <u>Roanoke Valley Greenways Interactive Map</u> (Figure 3.11) provides greenway location, access, and amenities information and printable maps for all greenways in the network. The Interactive Map also provides directions, by various modes – driving, walking, and bicycling – to area greenways. Note: In 2011 the Roanoke Valley Greenways Interactive Map received the <u>National</u> <u>Association of Development Organizations</u> (NADO) Excellence in Regional Transportation Award and Trailblazer Award.



Informational signage along Roanoke River Greenway in Wasena Park







Graamuru	Date	Length	Surface	Lecolity
Greenway	Completed	(miles)	Surface	Locality
Lick Dun Croonway	2006	4.1	Paved with asphalt or	City of Roanoke
Lick Run Greenway	2006	4.1	concrete Paved with asphalt or	City of
Mill Mountain Greenway	2003	2.8	concrete	Roanoke
	2003	2.0	Crushed aggregate stone	NUATIONE
			or wood chips and	City of
Murray Run Greenway	2002	1.9	natural surface	Roanoke
Multay Kull Greenway	2002	1.5	Paved with asphalt or	City of
Roanoke River Greenway *	1999-2011	5.7	concrete	Roanoke
Roanoke River Greenway	1555-2011	5.7	Paved with asphalt or	City of
Tinker Creek Greenway	2002	1.3	concrete	Roanoke
	2002	1.5	Concrete	Noanoke
			Crushed aggregate stone	City of
Hanging Rock Battlefield Trail	1999	1.3	or wood chips	Salem
			Crushed aggregate stone	City of
Roanoke River Greenway - David Smith	2002	0.5	or wood chips	Salem
			Paved with asphalt or	City of
Roanoke River Greenway - Riverside	2010	1.6	concrete	Salem
			Paved with asphalt or	City of
Roanoke River Greenway - Woodridge	2011	0.3	concrete	Salem
· • •				Description
Liensing Deals Dettinfield Turil	1000	0.0	Crushed aggregate stone	Roanoke
Hanging Rock Battlefield Trail	1999	0.6	or wood chips	County
Mud Liek Creenway, Caret Mill	1007	0.5	Paved with asphalt or	Roanoke
Mud Lick Greenway - Garst Mill	1997	0.5	concrete	County
Roanoke River Greenway - Green Hill Park	2008		Paved with asphalt or	Roanoke
	2008	0.8	concrete	County Roanoke
			Crushed aggregate stone	
			Crushed aggregate stone or wood chips and	County and Town
Wolf Creek Greenway	2006	2.1	natural surface	of Vinton
	2000	2.1		
			Crushed aggregate stone	Town of
Gladetown Trail	2012	0.7	or wood chips	Vinton
Total Greenway Mileage		24.0		
iotal Siechway Mileage	6 10 10 11	24.0		

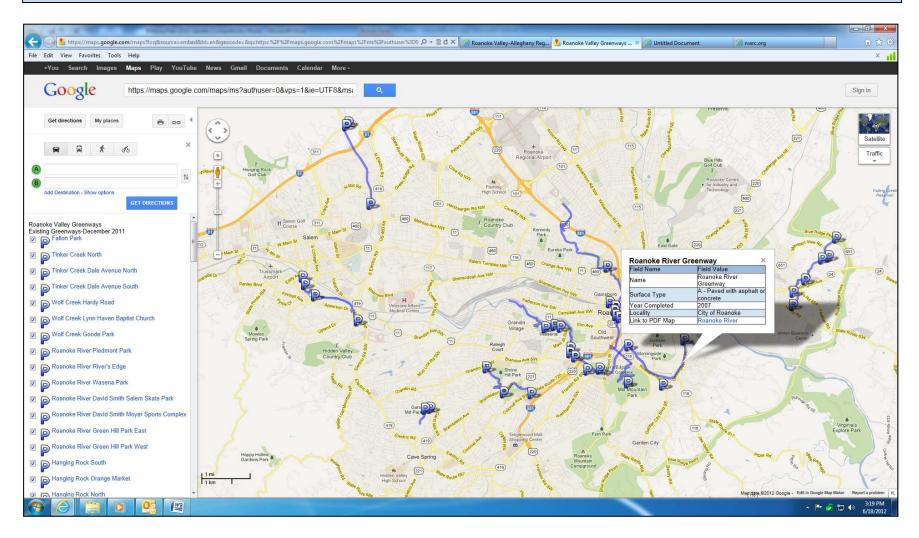
Table 3.5 Roanoke Valley Greenways

Greenways completed or under construction as of 12/31/11; \* Water Pollution Control Center to Bridge St.









3.11: Roanoke Valley Greenways Interactive Map



## 3.1.3.2 Greenway Connections

The need to promote greater connectivity among greenways and other activity centers/destinations was identified as a key issue at the Greenway Plan public input meetings. Additionally, a lack of connectivity between existing greenways was cited as the most common impediment to cycling on area greenways in the Bicycle User Survey (Section 5).

Increasing connectivity between the greenway, trail networks, and the transportation infrastructure can be accomplished through the development and/or utilization of a variety of accommodations. Potential accommodations could include, but are not limited to:

-sidewalks

- paved shoulders
- bike lanes
- wide travel lanes
- shared streets and roadways
- roadways with "Share the Road" signs
- path adjacent to roadway
- trails or other routes
- neighborhood streets
- alleys
- easements
- signage and pavement markings
- spot improvements

It is recognized that identifying and designating specific roadways as on-street greenway connector will require additional planning efforts beyond the *Bikeway Plan for the RVAMPO* (e.g., neighborhood plans, area plans, corridor plans, etc.) as well as greater coordination between VDOT, local governments, and the RVAMPO. The

2007 Conceptual Greenway Plan identified several corridors in the RVAMPO study area, not listed in the 2005 *Bikeway Plan*, as potential on-road greenway connections for consideration in the *Bikeway Plan – 2012 Update* (Table 3.6). Additionally, on-street Greenway routes or connections outside of the RVAMPO study area were in the *Rural Bikeway Plan* (Table 3.7). Both the *2007 Update to the Roanoke Valley Conceptual Greenway Plan* and the *Bikeway Plan* endorse development of on-road greenway connections as part of local and regional planning processes and as opportunities arise.

## 3.1.3.2.1 Existing Greenway Connections

As noted in Section 3.1.2.4, the City of Roanoke has already begun establishing signed bicycle routes to serve as on-street greenway connectors. The City of Roanoke Transportation Division is responsible for installing signage along signed bicycle routes, with the Parks and Recreation Department providing greenway signage on routes that also serve as greenway connectors. Current signed bicycle routes/on-street greenway connections include:

 Roanoke River Greenway – Tinker Creek Greenway Connector (signed bicycle route)

This signed bicycle route provides on-street connection from the Roanoke River Greenway parking lot at the Regional Water Pollution Control Plant to the southern terminus of Tinker Creek Greenway. The route primarily follows lower traffic neighborhood streets with periodic directional signage (e.g., Bike Route signs and directional arrows).







# Table 3.6 On-Road Greenway Connections for Consideration in the Bikeway Plan for the RVAMPO - 2012 Update

Street	From	То	Locality
Cove Road	Electric Road /419	Greenridge Road	Roanoke County
Electric Road / 419	Route 220	Route 311	Roanoke Co., Salem
Green Ridge	Cove Road	Wood Haven Road	Roanoke County
Harborwood Road	<b>Riverside Drive</b>	Poor Mountain Road	Roanoke County
Main Street	Electric Road /419	Peters Creek Road	City of Salem
Mill Lane	Electric Road /419	Roanoke River	City of Salem
Mill Mountain Park Spur Road	Blue Ridge Parkway	Mill Mountain Park	City of Roanoke
Spartan Lane	Electric Road /419	Mill Lane	City of Salem
Timberview Road	Route 311	Terminus	Roanoke County
US 220 South	Franklin Road	Blue Ridge Parkway	City of Roanoke
Washington Avenue /Route 24	Vinton CL	Bedford County CL	Vinton, Roanoke Co.
Wood Haven	Green Ridge	Peters Creek Road	Roanoke County

Table 3.7

On-Road Greenway Routes or Connections Included in the 2006 Rural Bikeway Plan

Street	From	То	Locality
Bradshaw Road (Route 622)	Route 311	Montgomery County CL	Roanoke County
Blacksburg Road (Route 785)	Route 311	Montgomery County CL	Roanoke County
Carvins Cove Road (Route 740)	Route 311	Botetourt County CL	Roanoke County
Carvins Cove Road (Route 740)	Botetourt County CL	Terminus	Botetourt County







Route Description (from Roanoke River Greenway to Tinker Creek Greenway):

Bennington Avenue to Tayloe Avenue to 15<sup>th</sup> Street to Kenwood Avenue to Tinker Creek Greenway.



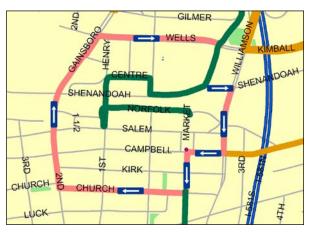
Roanoke River Greenway – Tinker Creek Greenway Connector

• Mill Mountain Greenway – Lick Run Greenway Connector

Established in 2010, this route provides on-street connections from the terminus of the Mill Mountain Greenway at Church Avenue to the Lick Run Greenway at Wells Avenue. Route slower-traffic accommodations include downtown streets, greenway directional signage, and shared lane markings or "sharrows" (first sharrows) installed in the RVAMPO study area). Additionally, this route is intended primarily for use by bicyclists (pedestrians passing through the downtown market) to connect the two greenways.

Route Description: Mill Mountain Greenway – Lick Run Greenway Connector (signed bicycle route)

- Mill Mountain Greenway to Lick Run Greenway - Church Avenue to 2<sup>nd</sup> Street to Wells Avenue to Lick Run Greenway.
- Lick Run Greenway to Mill Mountain Greenway - Lick Run Greenway to Wells Avenue to Hotel Roanoke parking lot to Shenandoah Avenue to Salem Avenue to Market Street to Church Avenue to Mill Mountain Greenway.



Mill Mountain Greenway – Lick Run Greenway Connector (signed bicycle route)

 Roanoke River Greenway (Wasena) – Memorial Avenue Bicycle Lane

This route connects the Roanoke River Greenway (near Wasena Park) to the bicycle lane on Memorial Avenue which provides additional connection to the Grandin Village. Accommodations include Bike Route signage, directional arrows, and wide travel lanes (with right edge striping) on the Main Street bridge.

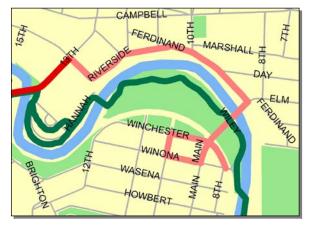
Route Description:







 Memorial/13<sup>th</sup> to Cleveland to Riverside to Ferdinand to Main to Winona to 8<sup>th</sup> Street to Winchester to Roanoke River Greenway.



Signed bicycle route and greenway connector -Roanoke River Greenway to Memorial Avenue bicycle lane



Signed bicycle route and on-street greenway connection directional signage

## 3.1.3.3 Trails

Beyond the on-road bicycling network and the greenway system, there are numerous off-road (i.e., natural surface trails) amenities in the RVAMPO study area. These amenities provide a range of recreation, health, and commuting benefits and include natural surface (other other non-paved greenways – Murray Run, Wolf Creek, Kessler Mill), as well as multi-use mountain bike, hiking, and equestrian trails. The following websites provide information, maps, and other resources on recreational resources (including off-road bicycling amenities) in the greater Roanoke region:

- RoanokeOutside.com
- <u>Roanoke Valley-Alleghany Regional</u> <u>Commission Maps</u>

## 3.1.3.3.1 Mill Mountain Park Trails

The City of Roanoke's Mill Mountain Park has more than 10 miles of multi-use and hiking trails ranging from technical single track to less difficult trails suitable for all users (Figure 3.12). Mill Mountain Greenway also runs through Mill Mountain Park providing connection from downtown Roanoke to destinations on top of Mill Mountain (Roanoke Star, Discovery Center, Mill Mountain Zoo), Blue Ridge Parkway, and Chestnut Ridge Loop Trail (Figure 3.13). See Section 3.1.2.7 for additional discussion of Blue Ridge Parkway, Chestnut Ridge, and cycling on National Park Service lands.







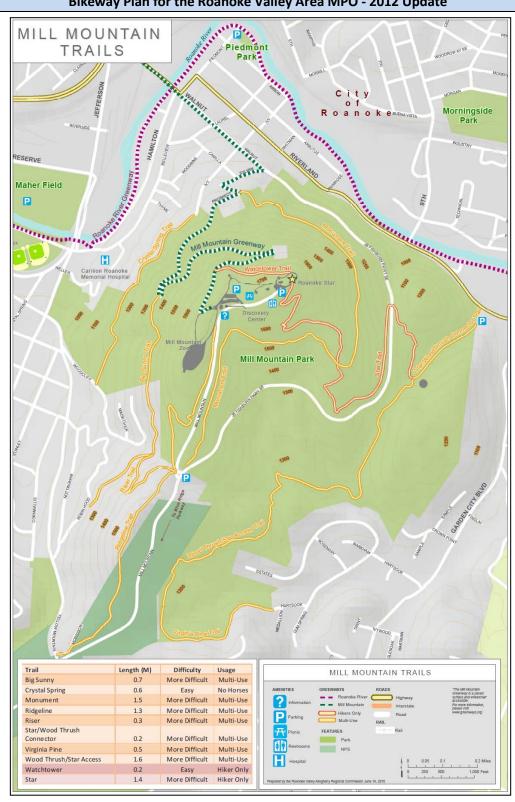


Figure 3.12: Mill Mountain Park Trails







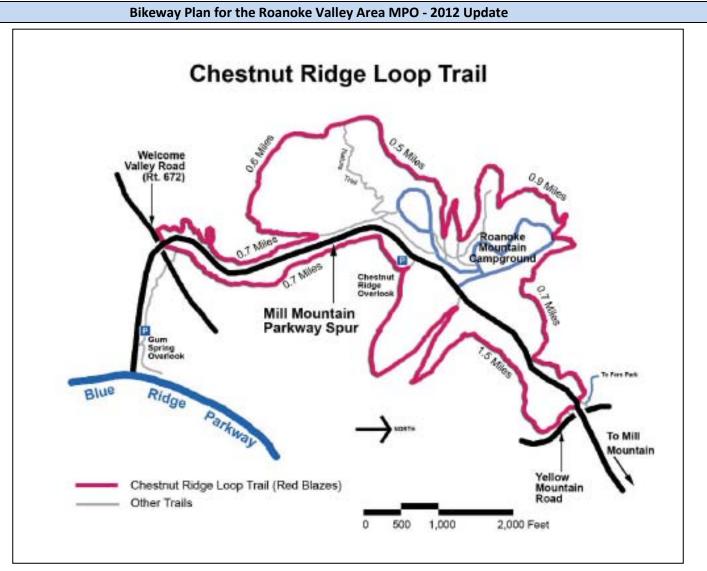


Figure 3.13: Chestnut Ridge Loop Trail Map



### 3.1.3.3.2 Carvins Cove Natural Reserve

The Carvins Cove Natural Reserve has approximately 43 miles of multi-use mountain biking, hiking, and equestrian trails, as well as Carvins Cove Reservoir within its 12,700 acres of open space. Although physically located in Roanoke and Botetourt counties, Carvins Cove Natural Reserve is managed by the City of Roanoke (Parks and Recreation Department), which manages lands above the 1,200-foot contour, and the Western Virginia Water Authority (WVWA), which owns the reservoir and the land below 1,200-foot contour (Figure 3.14).

The Carvins Cove Natural Reserve Trail Management Plan, completed in 2009 and adopted by Roanoke City Council in July 2010, is the primary guidance and reference document management of Carvins Cove Natural Reserve and associated resources. The stated primary goal of the plan is to provide a sustainable network of quality and trails which provides safe nonmotorized trail opportunities year round, allows users to enjoy the natural environment in ways which fulfill their physical, emotional, and spiritual needs, and protects the natural resources and watershed resources while providing these opportunities.

Carvins Cove Natural Reserve can be accessed from the following locations (Figure 3.15):

- Bennett Springs Access (Roanoke County)
- Boat Dock/Reservoir Road (Roanoke County, Botetourt County)
- Timberview Access (Roanoke County)



Information kiosk and land use pass payment dropbox at Carvins Cove Bennett Spring parking area

Directional and wayfinding signage to Carvins Cove, especially for the Bennett Springs and Timberview parking areas, is very limited. Currently, there is no Carvins Cove related directional or wayfinding signage along any corridors leading to the Bennett Springs, Timberview nor Carvins Cove boat dock (Route 11 (Williamson) and Reservoir Road. Although the City of Roanoke and WVWA managed the Carvins Cove Natural Reserve, all access/parking areas and most potential wayfinding signage locations are located in Roanoke and Botetourt counties along VDOT maintained roads and include:

- Carvins Cove (640) Botetourt and Roanoke counties
- Catawba Valley (Route 311)
- Dutch Oven (683) Roanoke County
- Interstate 81
- Electric/419 (Roanoke County)
- Reservoir Road (648) Botetourt and Roanoke counties
- Thompson Memorial/Route 311 Roanoke County, City of Salem
- Timberview (1404) Roanoke County





- Williamson/Route 11 – Roanoke County



Road sign to the Bennett Springs area along Route 311/Catawba Valley Road

Programs are available to assist in the installation of directional/wayfinding signage to outdoor recreation and tourism destinations and travel amenities in the region (e.g., Carvins Cove, Blue Ridge Parkway, Bike Route 76, Explore Park, etc). The Virginia Logos Integrated Directional Signing Program (IDSP) was developed to provide Virginia motorist service businesses, attractions, tourist destinations and other specific points of interest with a single contact if they desire to have their location identified on a road sign along the state controlled and maintained roadway system to provide motorist with directional guidance and information about their location. Relevant IDSP signs and signing programs include the Supplemental Guides Signs Program and Tourist-Oriented Directional Signs.

Additionally, the VDOT Traffic Engineering Division Memorandum T&S-150 (Signing for Facilities on Highway Right of Way) provides guideance on permitting trailblazer signs on highway right of way at those locations where they will be of service in directing traffic to a special facility and are within a reasonable distance of the facility (Appendix H).



Existing directional signage along Route 311/Catawba Valley Road



VDGIF Birding and Wildlife Trail directional signage on Carvins Cove Road (640)







Table 3.8
Carvins Cove Natural Reserve
Access and Amenities

Access Name	Location	Amenities	Locality
Bennett Springs	Carvins Cove Road	parking area, information	City of
Parking Area	(Botetourt County)	kiosk, maps, portable toilet,	Roanoke;
		land use pass payment box	WVWA, VDOT
			maintained
			road
Timberview Parking	Terminus of Timberview	parking area, information	City of
Area	Rd. (Roanoke County)	kiosk, maps, land use pass	Roanoke,
		payment box	WVWA; VDOT
			maintained
			road
Boat Dock	Terminus of Reservoir	parking area, information	City of
	Rd. (Botetourt County)	kiosk, maps, toilets, picnic	Roanoke,
		shelters, dock dock/ramp	WVWA; VDOT
			maintained
			road

Source: RVARC







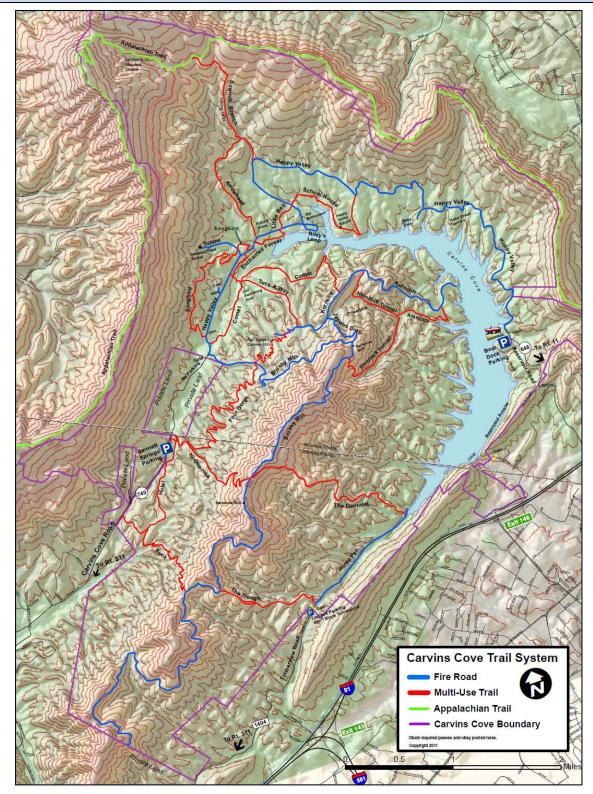


Figure 3.14: Carvins Cove Natural Reserve Trail System



Table 3.9	
Carvins Cove Natural Reserve	e
Trail System	

Trail	Туре	Trail Length
Araminta	Trail	0.7
Arrowhead	Trail	1.5
Brushy Mountain Fire Road	Fire Road	9.2
Buck	Trail	1.6
Comet (lower)	Trail	0.7
Comet (upper)	Trail	1.5
Enchanted Forest	Trail	0.7
Four Gorge	Trail	2.2
Gauntlet	Trail	2.0
Happy Valley Fire Road	Fire Road	7.1
Hemlock Tunnel	Trail	1.8
Hi-Dee-Hoe	Trail	1.5
Horse Pen	Fire Road	1.3
Hotel	Trail	1.0
Jacobs Drop	Fire Road	1.1
Kerncliff	Fire Road	1.9
Little Bell	Trail	0.3
Riley's Loop	Fire Road	0.3
Sawmill Branch	Trail	1.1
School House	Trail	1.3
Songbird	Trail	1.9
Trough	Trail	1.1
Trough (Expert)	Trail	0.1
Tuck-A-Way	Trail	0.9
Tunnel	Fire Road	0.4
Total Trail Miles		43.3

Source: RVARC







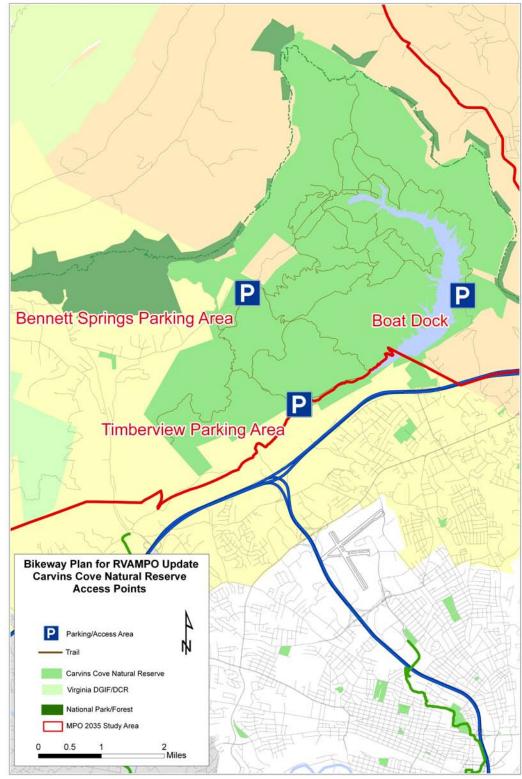


Figure 3.15: Carvins Cove Access /Parking



### 3.1.3.3.2 Virginia's Explore Park

Explore Park is located at Milepost 115 on the Blue Ridge Parkway. The Explore Park trail system, which was professionally built by International Mountain Biking Association (IMBA) volunteers, offers approximately 12 miles of technical single track mountain bike and hiking trails. Although the future of Explore Park remains uncertain, consistent with the Roanoke Valley Conceptual Greenway Plan and other planning documents, the Bikeway Plan endorses the inclusion of the planned Roanoke River Greenway through explore Park to the Franklin County line. See Section 3.1.2.7 for additional discussion of Explore Park, Blue Ridge Parkway, and cycling on National Park Service lands.

### 3.1.3.3.4 Other Trails

Other off road cycling trails are located within or in close proximity to the RVAMPO study area. These include several miles hiking/cycling trails Greenhill Park (Roanoke County) and Fishburn Park (City of Roanoke) and the Greenfield Center (Botetourt County). There are also numerous trails in Havens Wildlife Management Area in Roanoke County, which is managed by the Virginia Department of Game and Inland Fisheries). Additionally, there are numerous hiking and cycling trails in the Jefferson Nation Forest in Botetourt, Craig, and Roanoke counties.



Trailhead signage at Explore Park IMBA trails in Roanoke County









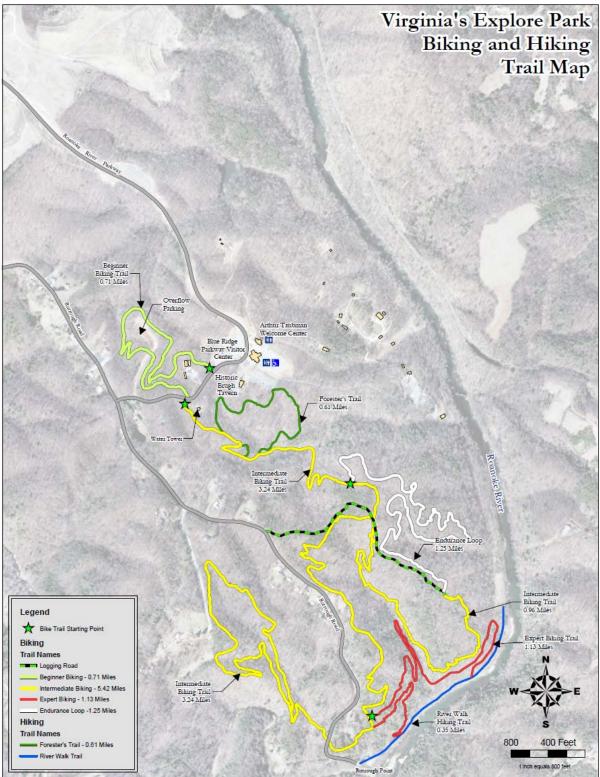


Figure 3.16: Explore Park Trails



## 3.1.4 Ancillary Bicycle Accommodations

Ancillary facilities are the supporting facilities and accommodations located at bicyclists' destinations or along preferred routes. Examples of ancillary accommodations include:

- bicycle racks
- bicycle storage areas or lockers
- showers and changing rooms
- bicycle racks on public transit
- information kiosks

## 3.1.4.1 Bicycle Racks and Storage

Bicycle racks are by far the most common ancillary bicycle accommodation in the RVAMPO study area with bicycle racks at approximately 90 locations in the RVAMPO study area (Figure 3.17). Of these locations, the vast majority (72) are in the City of Roanoke with the greatest concentration of bicycle racks located in downtown Roanoke (Figure 3.18). The remaining bicycle rack locations include Roanoke County City of Salem, and Town of Vinton. There are currently no bicycle rack locations in the Botetourt County portion of the RVAMPO study area.

Common types of bicycle racks include grid, wave, and inverted U, and have been installed over the years by local governments, private businesses, and employers (Table 3.10). While many type of bicycle racks are available, the inverted U, or similar style that sufficient supports a bicycle and allows it to be secured to the rack at least two points, is recommended in local and regional guidance documents. However, grid style bicycle racks continues to be the most commonly installed type of rack by private businesses. Since completion of the 2005 *Bikeway Plan*, formal efforts to document (i.e., map) existing bicycle racks; provide guidance and design standards; and install additional bicycle racks at locations throughout the region have been initiated.

Bicycle rack location mapping and documentation efforts include:

- Regional Bicycle Accommodations GIS Database
- RVARC Interactive Map
- RIDE Solutions Interactive Bicycle Map
- Downtown Roanoke Bicycle Parking Map

Bicycle rack design guidance and standards include:

- City of Roanoke Street Design Guidelines
- Roanoke County Parking Standards
- Roanoke County Design Handbook
- APBP Bicycle Parking Guidelines

Bicycle rack installation efforts include:

- RIDE Solutions Bicycle Rack Donation Program (Red Rack Program)
- City of Roanoke Rack installation Program
- City of Roanoke Public Art Program







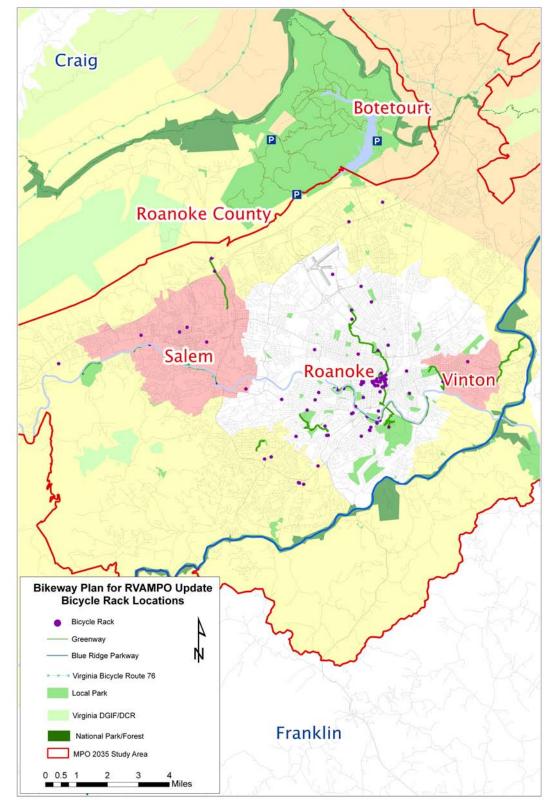


Figure 3.17: Bicycle Rack Locations







## Table 3.10

## RVAMPO Bicycle Rack Locations

Location	Covered (Y/N)	Rack Design	Location Specifics	Locality
AEP - parking lot	no	grid	behind YWCA	City of Roanoke
Campbell Avenue	no	wave	corner of Jefferson and Campbell (north side of Campbell)	City of Roanoke
Campbell Avenue	no	inverted U	in front of Science Museum	City of Roanoke
Campbell Avenue	no	inverted U	in front of Mill Mountain Coffee	City of Roanoke
Campbell Avenue - Market Building	no	inverted U	corner of Campbell and Market St.	City of Roanoke
Campbell Court (Valley Metro bus terminal)	yes	inverted U	Campbell Ave front entrance	City of Roanoke
Carilion Riverside Center	yes	3 post	to left of the main entrance	City of Roanoke
Carilion Riverwalk Garage	yes	grid	north end of first floor	City of Roanoke
Carilion Roanoke Memorial Hospital	yes	inverted U	near front door, at entrance of valet parking	City of Roanoke
Carilion Roanoke Memorial Hospital	yes	wave	inside the Emergency Room parking garage, to the left of the main entrance	City of Roanoke
Carilion Terrace View Garage	yes	grid	at the exit near the elevator	City of Roanoke
Church Avenue	no	inverted U	in front of Texas Tavern	City of Roanoke
Church Avenue	no	inverted U	in front of Tudors Biscuits	City of Roanoke
Church Avenue	no	inverted U	in front of Downtown Athletic Club	City of Roanoke
Church Avenue	no	inverted U	corner of Church and Market St	City of Roanoke
City of Roanoke - Public Works Center	no	inverted U	front entrance	City of Roanoke
City of Roanoke Courthouse	no	inverted U	Church Ave across from Oakeys	City of Roanoke
Convention and Visitors Bureau	no	inverted U	front entrance	City of Roanoke
Cotton Mill Apartments - 6th and Marshall	no	inverted U	U rental office 6th and Marshall City o	
Crystal Spring Avenue	no	inverted U	U in median between Crystal Spring Avenue and Richileu, near benches City of	
Crystal Spring Elementary School	no	grid	side of school along 27th Street City of Road	







## Table 3.10 (continued) RVAMPO Bicycle Rack Locations

Location	Covered (Y/N)	Rack Design	Location Specifics	Locality
Crystal Spring Village	no	inverted U	corner of Crystal Spring Avenue and 23rd St, next to Post Office.	City of Roanoke
Discovery Center Mill Mountain	no	inverted U	front entrance	City of Roanoke
Family Dollar - Brandon and Edgewood	no	wave	end of building nearest Brandon Avenue	City of Roanoke
Federal Building	no	grid	front entrance near 2nd St	City of Roanoke
Fire Station - Williamson Road	no	wave	front entrance	City of Roanoke
Fork in the Alley	no	inverted U	2123 Crystal Spring Ave	City of Roanoke
Fork in the City	no	inverted U	front entrance 6th and Marshall	City of Roanoke
Grandin Gardens	yes	inverted U	Grandin Road near front entrance	City of Roanoke
Grandin Village	no	inverted U	Grandin Rd. in front of Roanoke Food Coop	City of Roanoke
Highland Park	no	grid	front entrance of park across from Highland Park Elementary School	City of Roanoke
Huff Lane Park	no	grid	next to softball field	City of Roanoke
James Madison Middle School	no	grid	across from visitor parking, left of main entrance.	City of Roanoke
Jefferson Center	no	wave	6th and Luck Ave side entrance	City of Roanoke
Jefferson School of Health Sciences	no	grid	Jefferson St parking lot	City of Roanoke
Kirk Avenue	no	inverted U	in front of Kirk Ave Music Hall	City of Roanoke
Library - Jackson Park Branch	no	grid	front entrance	City of Roanoke
Library - Main Branch	no	grid	front entrance	City of Roanoke
Library - Melrose Branch	no	grid	front entrance	City of Roanoke
Library - Raleigh Court Branch	no	grid	front entrance	City of Roanoke
Mill Mountain Greenway	no	inverted U	behind Main Library / terminus of Bullitt Ave	City of Roanoke
Mojo Café	no	wave	front entrance	City of Roanoke
Noel C. Taylor Municipal Building	no	grid	front entrance, top of stairs	City of Roanoke
Norfolk Southern Building	no	grid	front entrance	City of Roanoke
Parking Garage - Campbell Avenue	yes	inverted U	inside of parking garage	City of Roanoke
Parking Garage - Church Avenue	yes	grid	front entrance	City of Roanoke







## Table 3.10 (continued) RVAMPO Bicycle Rack Locations

Location	Covered (Y/N)	Rack Design	Location Specifics	Locality
Parking Garage - Williamson Rd.	no	wave	outside of parking garage	City of Roanoke
Parking Garage - Williamson Rd.	yes	wave	inside of parking garage	City of Roanoke
Pedestrian Bridge - Market and Norfolk	yes	inverted U	entrance to pedestrian bridge	City of Roanoke
Regional Commission	yes	inverted U	Church Ave entrance	City of Roanoke
Regional Commission	no	inverted U	Luck Ave entrance	City of Roanoke
Rivers Edge Sports complex	no	inverted U	near tennis courts	City of Roanoke
Roanoke Higher Education Center	no	grid	front entrance	City of Roanoke
Roanoke Regional Airport	yes	grid	front entrance	City of Roanoke
Rotary Park Salem - Roanoke River Greenway	no	inverted U	near kiosk	City of Roanoke
Salem Avenue	no	inverted U	corner of Salem and Wall Street	City of Roanoke
Smith Park	no	inverted U	near picnic shelter	City of Roanoke
TAP - Crystal Tower	no	inverted U	Campbell Ave parking lot	City of Roanoke
Target - Valley View	no	grid	right of front entrance, behind shopping-cart staging area.	City of Roanoke
Tinker Creek Greenway	no	inverted U	between Dale/24 and Roanoke River	City of Roanoke
Towers Mall	yes	inverted U	lower level outside main entrance	City of Roanoke
Towers Mall	yes	inverted U	lower Level near Planet Fitness	City of Roanoke
Transportation Museum	yes	inverted U	front entrance	City of Roanoke
Valley Metro - Administrative Office	no	inverted U	1108 Campbell Ave., SE	City of Roanoke
Valley Metro - Campbell Court	yes	inverted U	Campbell Ave inside of building near Greyhound buses	City of Roanoke
Verizon Building	no	grid	Franklin Rd	City of Roanoke
Vic Thomas Park	no	inverted U	near park benches	City of Roanoke
Virginia Western Community College	no	grid	near entrance to Humanities Building	City of Roanoke
Virginia Western Community College	no	grid	behind bookstore	City of Roanoke
Wachovia Tower	no	inverted U	near entrance to parking garage	City of Roanoke







## Table 3.10 (continued) RVAMPO Bicycle Rack Locations

Location	Covered (Y/N)	Rack Design	Location Specifics	Locality
Washington Park Pool	no	grid	front entrance of main building	City of Roanoke
YMCA - Kirk Family	no	inverted U	Church St entrance	City of Roanoke
YMCA - Kirk Family	no	grid	Luck Ave entrance	City of Roanoke
Liberty Medical Supply	yes	inverted U	front entrance	City of Salem
Library - Salem Branch	no	grid	front entrance	City of Salem
Roanoke College	some	grid	throughout campus	City of Salem
Roanoke River Wayside - Mill Lane	no	inverted U	near canoe launch	City of Salem
Spartan Square Shopping Center	no	grid	front entrance	City of Salem
YMCA - Salem	no	grid	front entrance	City of Salem
Brambleton Center	no	grid	parking lot	Roanoke County
Cave Spring Corners	no	wave	in front of Sally Beauty Supply	Roanoke County
Hollins University	no	inverted U	throughout campus	Roanoke County
Hollins University	no	inverted U	throughout campus	Roanoke County
Library - Glenvar Branch	no	grid	front entrance	Roanoke County
Library - Hollins Branch	no	grid	front entrance	Roanoke County
Library - Hollins Branch	no	grid	front entrance	Roanoke County
Orange Market Park and Ride Lot	no	wave	near end of Hanging Rock Battlefield Trail Greenway	Roanoke County
Roanoke Athletic Club	no	grid	front entrance	Roanoke County
Roanoke County Administration Center	yes	wave	front entrance	Roanoke County
Roanoke County Administration Center	yes	wave	rear entrance, near employee parking	Roanoke County
Roanoke County Parks, Recreation and Tourism Offices	no	inverted U	near front entrance	Roanoke County
Tanglewood Mall	no	grid	front entrance near Applebees	Roanoke County
Library - Vinton Branch	no	grid	front entrance	Town of Vinton

Source: RVARC







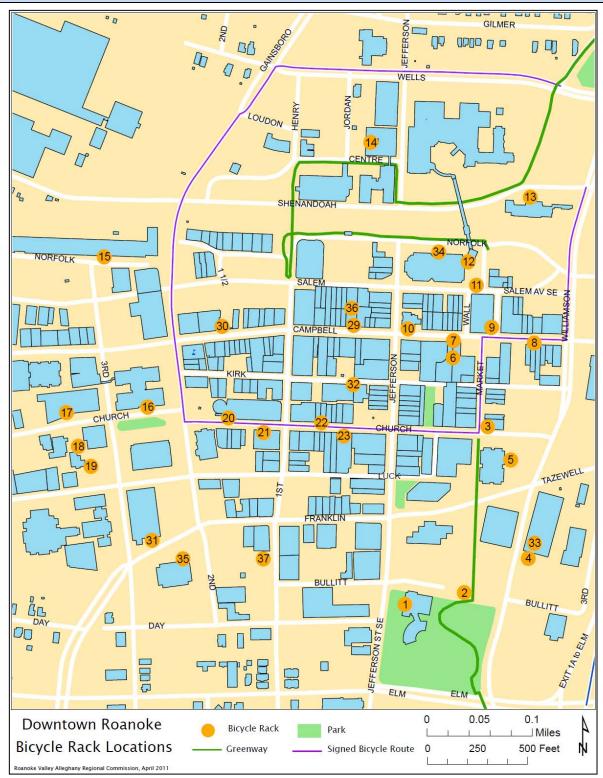


Figure 3.18: Downtown Roanoke Bicycle Rack Locations



## **3.1.4.1.1** Regional Bicycle Rack Donation Program (Red Rack Program)

In 2007, RIDE Solutions and the Roanoke Valley-Alleghany Regional Commission initiated a Bicycle Rack Donation Program (now the <u>Red Rack</u> <u>Program</u>) to encourage and facilitate bicycling as a viable means of transportation in the



region through the donations of bicycle racks to local businesses and other activity centers. Qualifying area businesses and organizations can apply to receive a free bicycle rack from RIDE Solutions. Applications for the Bicycle Rack Donation Program are accepted throughout the fiscal year.

The Red Rack Program includes:

- donation of one or more bicycle racks per applicant
- bicycle rack location assistance
- Cycling, Walking, Public Transit, and Multimodal Information Packet
- recognition of recipients news releases, Regional Commission newsletter, web site, and other media
- inclusion of bicycle rack location on the Interactive Bicycle Map and Regional Bicycle Accommodations Database

Since initiation of the Bicycle Rack Donations Program more than 40 bicycle racks (and associated alternative transportation information) have been distributed to area businesses and other locations.

For more information on Bicycle Rack Donation Program contact RIDE Solutions at (540) 342-9393 or <u>www.ridesolutions.org</u>.

# **3.1.4.2** City of Roanoke Bicycle Rack Installation Program

In recent years, the City of Roanoke has installed numerous bicycle racks within city parks, libraries, central business district (i.e., downtown), parking garages, and public buildings. The City of Roanoke's Transportation Division is responsible for installation of bicycle racks in the public rightsof-way (i.e., sidewalks, parking garages) with the Parks and Recreation Department responsible for installation of bicycle racks in city parks. Inverted-U style bicycle racks are the designated design standard, with exceptions for special racks such as public art racks.

#### Inverted –U style bicycle racks in the Grandin Village









The City of Roanoke, with support from Norfolk Western, also installed a "fix-it" bicycle station/rack in the Church Street parking garage which provides tools for basic bicycle maintenance. The City of Roanoke is also working with area businesses and stakeholders to install additional in-street parking such as bicycle corrals in locations throughout downtown Roanoke.



Bicycle "fix-it" station and rack in the Market Square parking garage.

## 3.1.4.3 City of Roanoke Public Art Program

The City of Roanoke's Public Arts Commission has partnered with area cycling advocates and stakeholders to install and promote several "public art" bicycle racks in the city. Examples include art pieces titled *Bicycle Rack No. 9*, located in downtown Roanoke (Market St. and Salem Ave.), and *In a Tangle*, located in the Grandin Village. These pieces are included in the Art by Bike touring route (Figure 3.5) and serve a functioning bicycle racks for area establishments. Additional public art installations are planned throughout the City of Roanoke including an installation in Highland Park in the Old Southwest Neighborhood.



Bike Rack No.9 public art/bicycle rack on the downtown Roanoke market



City of Roanoke Public Art Program for "In a Tangle" bicycle rack ribbon cutting

#### 3.1.4.4 Private Businesses

Bicycle racks installed by private businesses and organizations represent a large portion of the bicycle racks in the RVAMPO study area. Likely due to factors such as availability, costs, and ease of installation, the most common type of bicycle rack at these locations is the grid-style rack. Generally, grid-style bicycle racks are not preferred by cyclists as they do not provide sufficient support and locking points.







While many of these racks were installed prior to availability of newer bicycle rack designs, many area businesses continue to purchase and install the grid style bicycle racks. As previously noted, the inverted-U or similar designs that provide sufficient support and security are the preferred bicycle rack design standard.



Grid style bicycle rack at the Virginia Museum of Transportation

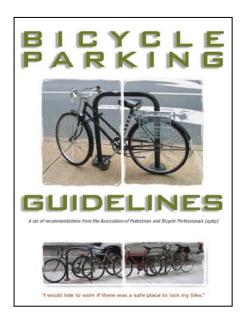
Beyond, the type or style available, bicycle racks at many establishments in the study area are often not located in a convenient, visible, secure, and accessible location protected from the elements. Additionally, cyclists often do not properly use the rack as designed reducing the utility of the rack and the number of bicycles a rack can accommodate.

#### 3.1.4.5 Bicycle Parking Guidance

The <u>APBP Bicycle Parking Guidelines</u> provide guidance and recommendations on bicycle parking options, design, location, use and related particulars. Additionally, RIDE Solutions and the Regional Commission offer bicycle parking guidance and assistance through the previously referenced Red Rack Donation Program and related outreach efforts.



Improper use of inverted-U type bicycle rack in downtown Roanoke









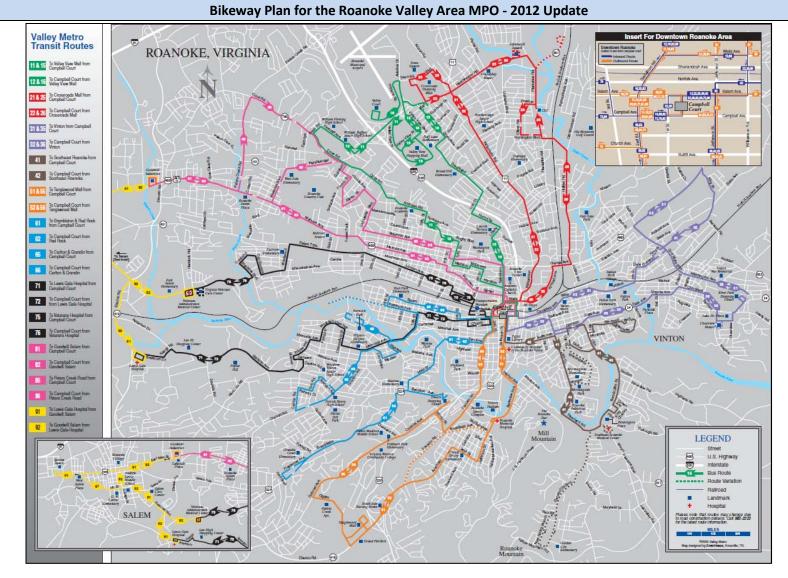


Figure 3.19: Valley Metro Bus Routes



## **3.1.4.5** Public Transit - Valley Metro "Bike 'N Ride"

Valley Metro (Greater Roanoke Transit Service) is the public transit service provider in the Roanoke Valley. Valley Metro also operates the Smartway Commuter Bus, deviated route and paratransit services (RADAR, CORTRAN), and transit services to area colleges (Ferrum Express, Hollins Express, Roanoke Express). Valley Metro primarily serves the City of Roanoke and selected areas/routes in the City of Salem and Town of Vinton (Figure 3.19). Currently public transit service is generally not available in Botetourt and Roanoke Counties. However, Valley Metro does serve many areas adjacent or in close proximity to Roanoke County, providing potential multimodal (i.e., bike and bus) opportunities in which cyclists bike from their residences (or other origin) to area served by Valley Metro or the Smartway Commuter Bus.

In the fall of 2006, as part of its Bike "n" Ride program, Valley Metro began installing front mounted racks with a two bicycle capacity on its fleet of approximately 45 buses. Currently, nearly half of Valley Metro buses are equipped with bicycle racks. Valley Metro also allows cyclists to bring bicycle onto buses not equipped with bicycle racks. Currently, all Smartway Commuter buses are now equipped with front-mounted, two bicycle capacity racks. Additionally, Smartway buses have been retrofitted (2010) to carry additional bicycles in the underneath compartments on occasions when the front mounted racks are not sufficient to carry all bicycles. This retrofit is the result of ongoing dialog and compromise between Valley Metro, MPOs (Roanoke Valley Area MPO and Blacksburg/ Christiansburg/Montgomery MPO), and area

cyclists and stakeholders. Although Valley Metro was aware of this issue, funding was not available to retrofit the buses with bicycle racks designed for the underneath luggage compartments (approximately \$5,000 per rack). However, through ongoing dialog and review of various options, a considerably less expensive retrofit was developed and has been well-received by Smartway ridership. Additional information on Valley Metro bus routes, schedules, and instructions for using the bicycle racks are available at www.valleymetro.com.



Valley Metro Bike N Ride ribbon cutting (2007)



Valley Metro Bike "n" Ride program bicycle rack and advertisement







### 3.2 Education, Encouragement, and Enforcement

Since completion of the 2005 Bikeway Plan for the RVAMPO, significant progress has been made in the areas of bicycle education, encouragement, and enforcement. In general, bicycle education includes a range of activities that focus on cyclists and motorists and may include teaching cyclists of all ages how to ride safely congested city streets, share multi-use paths and teaching motorists how share the road safely with cyclists. to Encouragement involves activities and efforts to promote cycling and include items such as Bike Month events production of bicycle-related items such as bike maps, wayfinding signage, community bicycle rides, Safe Routes to School programs, commuter incentive programs, and related events. This section provides a general examples overview and of education, encouragement, and enforcement activities implemented since the completion of the 2005 Bikeway Plan.



Cyclists illustrating the need for increased cycling education on Colonial Avenue

## **3.2.1** League of American Bicyclists Bicycle Friendly Community Workshop

In 2008, the League of American Bicyclists conducted a Bicycle-Friendly Community workshop in Roanoke. The workshop concluded with a series of action items that to assist Roanoke Valley communities in encouraging and promoting cycling and generally becoming more bicycle-friendly. Action items developed by the group include:

- Roanoke Valley-Alleghany Regional Commission establishing a Bicycle Committee
- Each local jurisdiction establishing a Bicycle Advisory Committee
- Each local jurisdiction adopting the *Bikeway Plan for the Roanoke Valley Area MPO* – 2012 *Update*
- Encouraging local interest groups to include non-motorized transit issues in their platform
- Hosting a candidate forum
- Creating an awards program to recognize government officials or agencies that are instrumental in improving conditions for cycling
- Organizing a community bike ride series
- Organizing a "big ride" with a large number of participants including elected officials
- Notifying businesses of the availability of free bicycle racks through the Bicycle Rack Donation Program from RIDE Solutions and the Roanoke Valley-Alleghany Regional Commission
- Launching a bike education program
- Airing television public service announcements to educate bicyclists on how







to ride safely and motorists on how to share the road

- Promoting bicycle rodeos, helmet give-away programs, and Safe Routes to Schools projects
- Participating in VDOT and National Park Service public meetings
- Each attendee participating in his or her Neighborhood Plan update process
- Determining outcomes of action plan

Since the BFC workshop the majority of the action items have been completed, initiated, are currently underway or on-going. The following items provide an overview of these action items, as well as other education, encouragement, and enforcement activities in the RVAMPO study area.

## 3.2.2 Bicycle Mapping

In addition to use planning, mapping and documentation of bicycle resources are also major education and encouragement activities. Since completion of the 2005 *Bikeway Plan*, the Regional Commission/RVAMPO, RIDE Solutions, and local governments have developed a range interactive and printable bicycle-related mapping resources. Examples of these resources include:

- Bike, Hike, Bus Roanoke Valley Mobility Map
- RIDE Solutions Interactive Bicycle Map
- RIDE Solutions Bike Commuter Route Maps
- RVARC Interactive Map
- City of Roanoke Signed Bicycle Route Maps
- Roanoke Valley Greenways Interactive Map

- Roanoke Valley Greenways Individual PDF Maps
- Carvins Cove Trail Map
- Carvins Cove Interactive Trail Map
- Mill Mountain Trail Map
- Downtown Roanoke Bicycle Parking Map
- Roanoke River Greenway Status Map
- Transportation Enhancement (TE) grant application maps
- Trailhead kiosks maps
- Regional Bicycle Accommodations Geodatabase

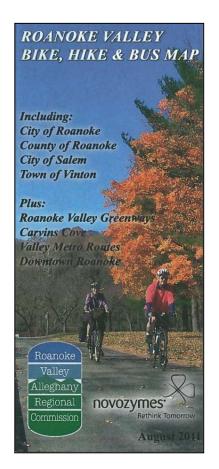
# **3.2.3** Bike, Hike Bus Roanoke Valley Mobility Map

In January 2007 the Roanoke Valley-Alleghany Regional Commission developed the initial Bike, Hike, Bus Roanoke Valley, Virginia "mobility" map. The *Bike, Hike, and Bus map* provides a range of bicycle, pedestrian, greenway and trail, and public transit information and resources, and covers the cities of Roanoke and Salem, Roanoke County, and the Town of Vinton. Updated versions of the *Bike, Hike, and Bus map* were produced in August 2007, July 2008, and August 2011. To date, approximately 30,000 free copies of the map have been distributed to local governments, bike shops, businesses, and other locations throughout the Roanoke Valley.









## 3.2.4 Bike Roanoke Interactive Bicycle Map

In 2008, RIDE Solutions and the Roanoke Valley-Alleghany Regional Commission developed the Bike Roanoke Interactive Bike Map. The Bike Roanoke Interactive Bicycle Map includes both traditional and non-traditional bicycle with accommodations an emphasis on accommodations most useful for bicycle commuters. The Interactive Bike Map is available on the Bike Roanoke website.

## 3.2.5 Regional Bicycle Accommodations Geodatabase

The RVAMPO has developed and maintains a range of GIS data layers (i.e., shapefiles) to use in various bicycle, pedestrian, greenway, and alternative transportation planning process. Development of the geodatabase allows for documentation of existing bicycle accommodations, production of printable and interactive maps, exporting of tabular data (i.e., spatial attribute data), and other functions. Bicycle-related GIS data layers developed and maintained by the RVAMPO include:

- bicycle lanes
- wide travel lanes
- paved shoulders
- signed bicycle routes
- greenways (current and planned)
- greenway amenities (restrooms, parking, etc.)
- Share the Road signs
- shared lane markings (sharrows)
- bicycle racks
- bicycle shops
- RVAMPO *Bikeway Plan* Priority List Corridors
- RVAMPO Bikeway Plan Vision List Corridors
- Carvins Cove trails
- RVAMPO Transportation Improvement Program (TIP) projects
- Carvins Cove access/parking
- Mill Mountain trails
- Greenhill Park trail
- Blue Ridge Parkway
- Blue Ridge Parkway access
- Virginia Bicycle Route 76
- LAB Bicycle Friendly Businesses







Accommodations and associated attribute data in the Regional Bicycle Accommodations Geodatabase are viewable on the <u>RVARC Online</u> <u>Map</u> and can also be displayed on printed media (i.e., maps). Data are also available to local governments and stakeholders for general planning and mapping purposes.

## 3.2.6 Websites

The Internet is an effective way to encourage cycling, distribute bicycle safety information, and promote cycling related resources and events. Currently, the primary local and regional websites for bicycle-related information in the Roanoke Valley include:

- <u>Bike Roanoke</u> (RIDE Solutions and RVARC)
- <u>RVARC Bicycle, Pedestrian, and Greenway</u> <u>Planning</u> (RVARC)
- <u>Bicycle-Friendly Community</u> (City of Roanoke)
- <u>Roanoke Outside</u> (Roanoke Regional Partnership)

Other relevant and useful bicycle-related websites include:

- <u>State Bicycle and Pedestrian Planning</u> <u>Program</u> (VDOT)
- League of American Bicyclists
- <u>Share the Road</u> (BikeWalk Virginia)

## 3.2.6.1 Bike Roanoke

Bike Roanoke, a service of RIDE Solutions and the RVARC, provides a range of cycling-related resources with emphasis on encouraging and promoting cycling and multi-modal transportation





in the region. Information includes maps, bike routes, cycling tips, cycling events, bicycle rack donation program, bicycle friendly business/community information, and other resources.

### 3.2.6.2 RVARC Bicycle and Pedestrian Planning

The Regional Commission's Bicycle and Pedestrian website provide a range of bicycle, pedestrian, and greenway planning resources and information including news; bike/ped plans, policies, and studies; interactive and printable maps; paving schedules; and other resources.

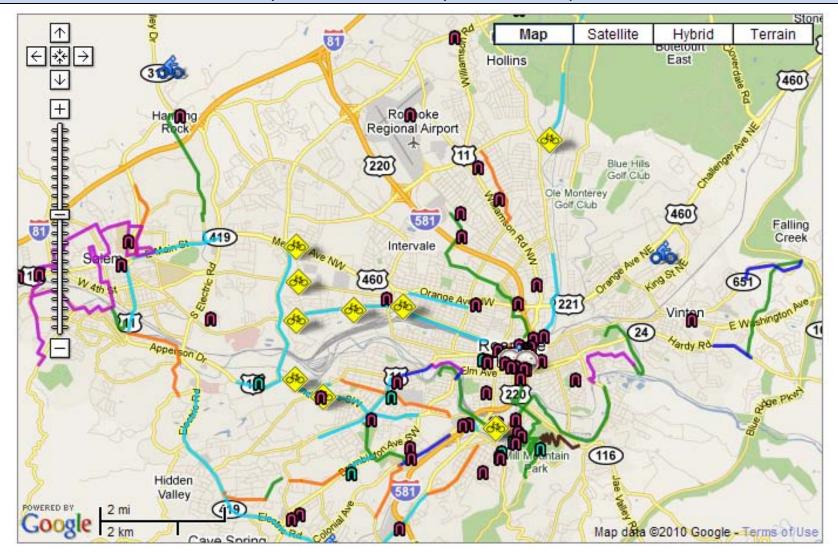
# 3.2.6.3 City of Roanoke Bicycle-Friendly Community

The Bicycle-Friendly Community webpage, maintained by the City of Roanoke Planning, Building, and Development Department, provides information on the City of Roanoke's effort to be designated as a Bicycle-Friendly Community and associated resources. The site provides safety information (brochures, videos, etc.), bicyclerelated planning documents, greenway and trail information, and links to other useful websites.

## 3.2.6.4 Roanoke Outside

Roanoke Outside, developed and maintained by the Roanoke Regional Partnership, is a one-stop portal for information on outdoor recreation and active living opportunities in the greater Roanoke Region. The site provides a range of cyclingrelated information including bike commuting, on-road recreational, and mountain biking.





Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

Figure 3.20: Bike Roanoke Interactive Bicycle Map



## 3.2.7 PSA's, Brochures, Guides, Videos, and Media Coverage

In recent years, several local and regional bicycleeducation and safety guidance documents, resources, and guides have been developed to promote, encourage, and facilitate bicycling in the Roanoke area.

<u>Guide to Safe Cycling</u> (City of Roanoke Bicycle Advisory Committee)

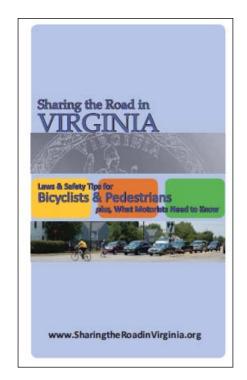
<u>Guide to Bicycle Commuting in the Roanoke and</u> <u>New River Valleys</u> (RVARC and RIDE Solutions)

<u>Greenway Etiquette Video</u> (Roanoke Valley Greenway Commission)

Bike Roanoke Media Coverage (RIDE Solutions)

<u>Sharing the Road in Virginia Pocket Guide</u> (BikeWalk Virginia)

While many of these resources are available Online, the Regional Commission and RIDE Solutions also maintain a supply of many of the printed resources available including the Bike, Hike, Bus map, Sharing the Road in Virginia Pocket Guide, and the City of Roanoke Guide to Safe Cycling brochure. The Regional Commission also maintains and distributes outreach and education material from other local, regional, state, and federal agencies (FHWA, VDOT, VDH, VDRPT), as well as cycling advocacy groups (Bike League, APBP).



BikeWalk Virginia Sharing the Road in Virginia Pocket Guide

## 3.2.8 Regional Bike Awards

In 2009, the RVARC initiated a regional <u>Bike</u> <u>Awards</u> program to recognize individuals in the greater Roanoke Valley area who are improving the opportunities for bicycling as a form of transportation, either through their individual effort and example as a cycling enthusiast, or through their professional work. Each year the Regional Bicycle Advisory Committee selects winners for the two regional Bike Awards – Bike Hero Award and Extraordinary Bike Professional Award.

The Bike Hero Award is awarded by the Roanoke-Valley Alleghany Regional Commission's Bicycle Advisory Committee to an individual who has







shown dedication to the use and advocacy of the bicycle as a transportation alternative in their day-to-day activities, their work in the community to improve bicycle accommodations, and their encouragement through advocacy or by example for others to replace vehicle trips with bicycle trips. The Extraordinary Bicycle Professional Award is given to an employee in the public or private sector who has shown remarkable leadership in encouraging the use of bicycling as a transportation alternative. The award is given once per year and recognizes work in a broad range of activities. Additional information on the Regional Bike Awards Program is available at <u>www.bikeroanoke.com</u>.



2010 Bike Hero Award recipient

## **3.2.9 APBP Professional Development Series** Webinars

Each year since 2009, the Regional Commission has hosted Association of Pedestrian and Bicycle Professionals (APBP) Professional Development Series webinars. APBP webinars are provided at no cost to participants open to all interested parties. Webinar attendees generally include a mix of staff (local, regional, state), cycling advocates, and other stakeholders. Beyond the





educational material presented in the webinars, they also provide an opportunity and forum for attendees to discussion various cycling-related issues. Additional information on the APBP Profession Development webinars is available at www.apbp.org.

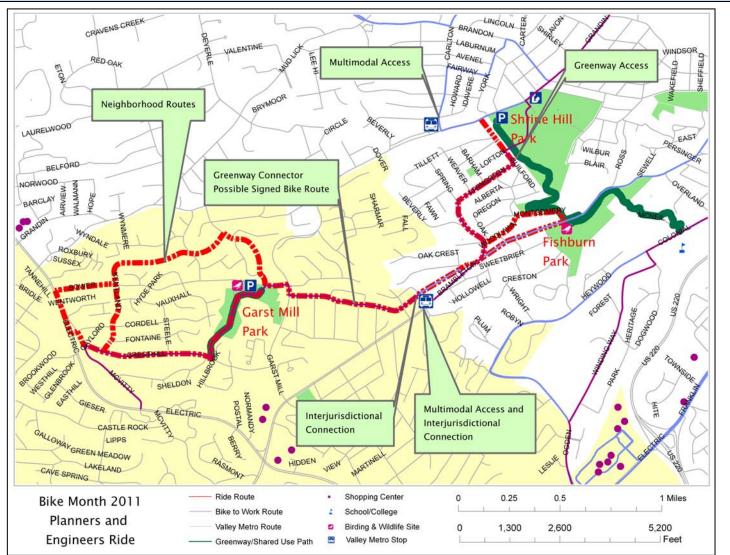
### 3.2.10 Planners and Engineers Ride

In 2009, the Regional Commission and Regional Bicycle Advisory Committee organized the inaugural "Planners and Engineers Bike Ride." These rides are generally conducted quarterly and focus on a different area, route, or issue. These rides provide a range of benefits including discussion of possible or needed bicycle accommodations; route development; fieldwork/groundtruthing; and increasing staff and stakeholder familiarity with on-street cycling and related issues.



Inaugural Planner and Engineers Ride (2009) participants





Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

Figure 3.21: Planners and Engineers Ride Route







### 3.2.11 Bike Month

Each May Bike Month events are held throughout the region. RIDE Solutions, a program of the Roanoke Valley Alleghany Regional Commission, is the lead entity responsible for coordinating and conducting local and regional Bike Month events. Examples of past bike month events include

- Bike to Work Day
- Valley Metro bus tours and demonstrations on using the bus bicycle racks
- Bicycle inspections
- Clean Commute Challenges
- Mayor's Ride
- Art by Bike Tours
- Bicycle Friendly Business workshop
- Ciclovia

Additional Bike Month information is available from RIDE Solutions and Bike Roanoke.



Bike Month/Clean Commute Day activities 2007

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Selection Notification Bike of Violation
To the owner of the following Vehicle: <u>Schulten</u> <u>Green</u> Moke
Your: human powered freight hauler human sowered freight hauler liaid back ofty onuser liaid back ofty onuser gravity defying trickster onopoed franken-bike onopoed franken-bike Other
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Bike Roanoke Notice of Violation







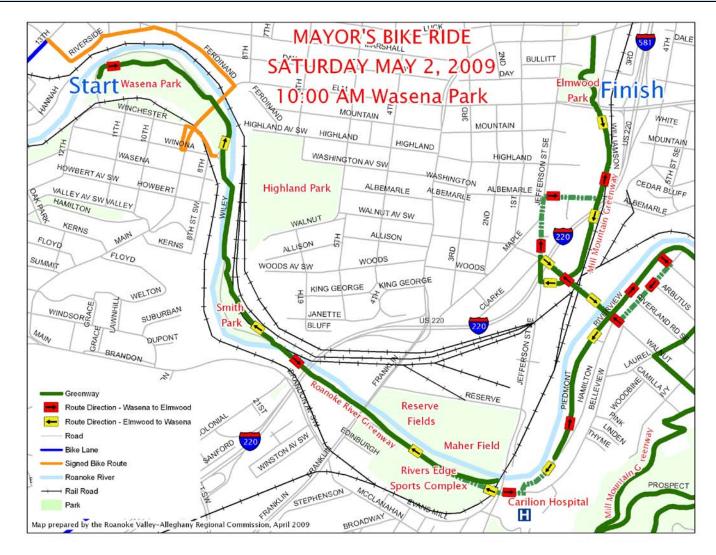


Figure 3.22: Mayor's Bike Ride 2010 Route



## 3.2.12 Safe Routes to School

The <u>Virginia Safe Routes to School Program</u> (SRTS) is a federally-funded program administered by the Virginia Department of Transportation that encourages more walking and biking to school through education and promotional activities, as well as engineering improvements to create a safer walking and biking environment. Only elementary and middle schools (K-8) are eligible for SRTS funding. The Virginia SRTS Program funds two types of activities for the implementation of School Travel Plans. These include:

• Non-infrastructure "programs" - activities that educate, facilitate, or encourage safe walking and bicycling for students. These can include inschool safety education, public outreach activities, traffic enforcement, and education on the benefits of walking and bicycling and other related activities. These are also referred to as "program" grants and are eligible for up to \$25,000 in funding.

• Infrastructure "projects" – improvements to the physical or 'built' walking and bicycling environment around schools and may include improvements such as installing sidewalks or crosswalks, fixing hazards, spot improvement, and traffic calming in or near school zones.

Development of a School Travel Plan (also referred to as a Safe Routes to School Plan or Action Plan) is required component in advance of any funding application to the Virginia Safe Routes to School (SRTS) Program. A School Travel Plan is a written document that outlines a school community's intentions for making travel to and from school more sustainable and safe.

Several Schools in the MPO study area have received SRTS funding since 2005. The City of Roanoke and Roanoke City Public Schools were awarded three Safe Routes to School (SRTS) grants from the Virginia Department of Transportation in 2007. Two pilot schools have been chosen for the program - Addison Middle School and Forest Park Elementary School. A \$25,000 non-infrastructure program grant was awarded for training a physical education teacher on the Bike Smart Virginia curriculum, purchasing bicycles and helmets to teach students how to ride safely, as well as conducting educational activities with their families. Two pilot schools have been chosen for the program - Addison Middle School and Forest Park Elementary School. Two project (infrastructure) grants totaling \$544,653 will be used to provide infrastructure improvements around two schools and in the surrounding neighborhoods. Projects will include new shared-use path connections, new lighting along the Lick Run greenway in Washington Park, and infill sidewalk construction in the neighborhoods.

In 2008, Roanoke County and Roanoke County Schools were awarded \$ 17,610 noninfrastructure "program" grant for William Bryd Middle School (Note: Town of Vinton residents attend Roanoke County Schools). Program grant funding was used for SRTS Plan development, purchase of bicycles and storage containers, and to implement the bicycle education and safety curriculum. In 2008, Roanoke County Schools also applied for a \$395,808 SRTS "project" (infrastructure) grant for safety improvements to







streets surrounding the William Byrd campus and formal connections between the Wolf Creek Greenway and the school campus. Requested improvements include traffic control devices, pedestrian and bicycle crossing improvements and off-street (i.e., greenway) accommodations. VDOT did not fund the infrastructure grant request. The William Byrd SRTS Travel Plan is available at <u>www.rvarc.org/bike</u>.

The City of Salem also received a noninfrastructure program grant in 2008 to develop a Safe Routes to School Travel Plan. The City of Salem also applied SRTS "project" (infrastructure) grant for sidewalk and safety improvements to near Carver Elementary School Andrew Lewis Middle School.

The *Bikeway Plan* encourages local governments and school systems to continue to implement or develop Safe Routes to School programs and pursue funding for needed structure improvements to encourage increased cycling or walking to school.

## 3.3 Evaluation and Planning

A range of local, regional, and state planning is available to provide guidance on improving bicycling conditions in the region. Since the 2005 Update of the *Bikeway Plan* considerable progress has been in efforts to better accommodate cyclist within the regional transportation and greenway network and generally promote and encourage cycling in the region. As noted in Section 1, a major component of the *Bikeway Plan* is documentation and evaluation of progress and planning for future improvements. Section 2 provides an overview of the primary planning and

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guidance documents and resources available in the region. Major evaluation efforts and processes in place in the region include, but are not limited to:

- Regional Bicycle Accommodations Geodatabase (see Section 3)
- Roanoke Valley Greenways Geodatabase
- Regional Greenway and Trail User Count
   Program
- Roanoke River Greenway Status Map
- Bicycle Friendly Business Designation
- Bicycle Friendly Community Designations
- Regional Bicycle Suitability Study

## **3.3.1** Regional Bicycle Accommodations Geodatabase

See Section 3.2.5 for discussion of the Regional Bicycle Accommodations Geodatabase.

## 3.3.2 Roanoke Valley Greenways Geodatabase

addition the Regional Bicycle In to Accommodation Database, Regional the Commission also maintains a Roanoke Valley Geodatabase to document and map greenway progress and amenities. Greenway facilities and amenities in the Regional Greenways Geodatabase are uploaded to the Roanoke Valley Greenways Interactive Map for public viewing and guidance. Information included in the greenways geodatabase includes:

existing greenways



- planned/proposed greenways
- greenway distances
- greenway access points and parking areas
- information kiosks
- shelters
- picnic shelters/tables
- public restrooms
- canoe launch areas
- exercise equipment
- interpretative signage

# 3.3.3 Regional Greenway and Trail User Count Program

In 2009 the Regional Commission initiated the Regional Greenway and Trail User Count Program to obtain baseline data (i.e., current use) for general planning and maintenance purposes and to compare to future use as the greenway network is expanded, connected, and promoted. The count program utilizes both automatic infrared and magnetic counters that provide a range of information on trail use data including total number of counts; date and time of each count, and hourly, weekly, and yearly summaries, which can be displayed in various table, charts, and graphs.

Currently, infrared counters, which count all trail users (pedestrian, bicyclists) are in place at two locations along the Roanoke River Greenway (near Rivers Edge Sports Complex; and 17<sup>th</sup> St). A magnetic counter, which counts only bicyclists, is also in place on the Four Gorges Trail in the Carvins Cove Natural Reserve. Additionally an infrared counter collected data on the Appalachian Trail (between Route 311 parking lot and McAfees Knob) during 2010 and 2011. Periodic use counts have also been conducted on the Murray Run Greenway and Lick Run Greenway. Figures 3.23 and 3.24 provide examples of trail use data available for area greenways and trails.



TRAFx infrared trail counter and housing



TRAFx trail counter on Roanoke River Greenway in Salem (Riverside Drive)







#### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

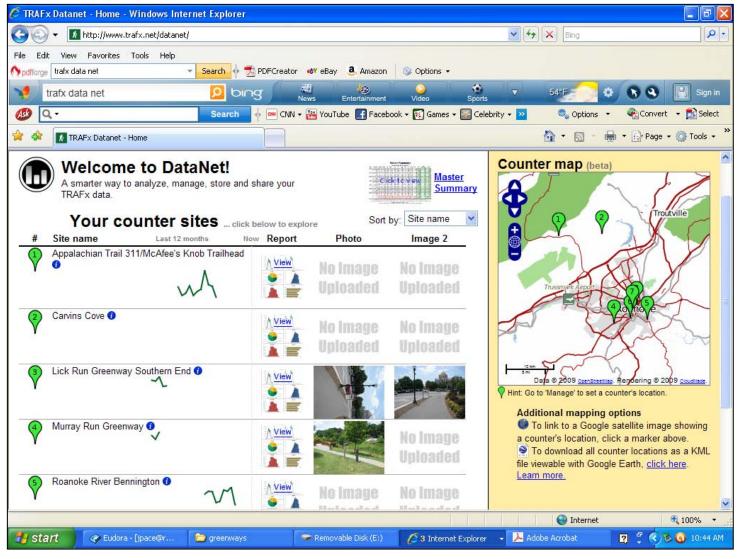


Figure 3.23: DataNet Trail Counter Data Management Website







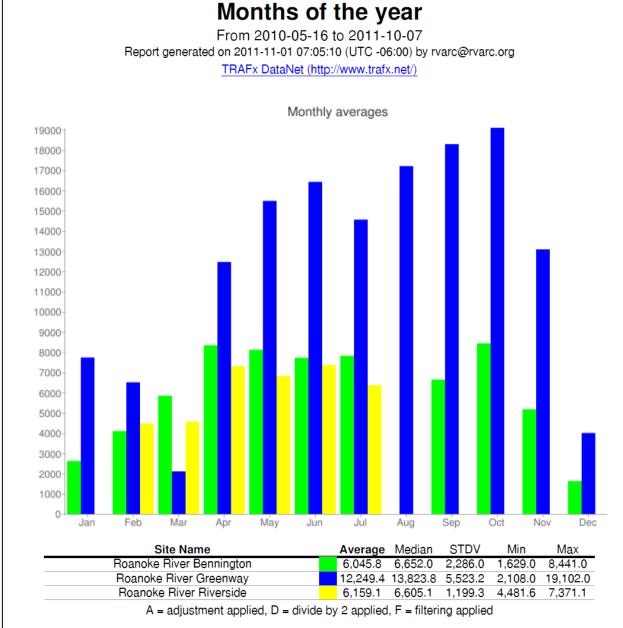


Figure 3.24: Roanoke River Greenway Use Data







# **3.3.4** Bicycle Friendly Business and Community Designations

The League of American Bicyclists Bicycle Friendly America programs include several bicycle-friendly programs and designations including:

- Bicycle Friendly Business
- Bicycle Friendly Community
- Bicycle Friendly University
- Bicycle Friendly State

Each application to the Bicycle Friendly America program is reviewed by a panel of national bicycle experts and several local reviewers are consulted to share their perspectives of the applicant.

The Bicycle Friendly Community Program (BFC) provides incentives, hands-on assistance, and award recognition for communities that actively support bicycling. In 2010, the City of Roanoke was designated a BFC at the Bronze Level, becoming one of only five BFC in Virginia (Alexandria, Arlington, Charlottesville, Harrisonburg, and Roanoke). Additional information on the LAB Bicycle Friendly America program is available at www.bikeleague.org.



The Bicycle Friendly Business (BFB) program recognizes employers' efforts to encourage a more bicycle friendly atmosphere for employees and customers. The program honors innovative bike-friendly efforts and provides technical assistance and information to help companies and organizations become even better for bicyclists. This new initiative complements the League's Bicycle Friendly Community (BFC) program, which has been recognizing cities and towns for their bicycle friendliness since 2003.



In 2008, the Roanoke Valley Alleghany Regional Commission became the first League of American Bicyclists designated BFB in Virginia (as of 2012, there are 24 total BFB in Virginia). Other BFB in Roanoke include ShareBike (2010), Carilion Riverside Center (2012), and East Coasters (2012). The Regional Commission and RIDE Solutions offer information and assistance to area businesses interested in BFB designation.







# SECTION 4: CORRIDORS FOR CONSIDERATION OF BICYCLE ACCOMMODATION

Section 4 provides an overview of the Priority Lists and Vision Lists of corridors for consideration of bicycle accommodations for each locality within the RVAMPO study area. This section also references other state, regional, and local plans and policies relevant to the planning and provision of bicycle accommodations in the study area (see also Section 2).

While Priority and Vision lists of corridors have been developed, the Bikeway Plan generally endorses consideration of efforts to better accommodate cyclists on all corridors in the MPO study area, regardless of inclusion on the *Bikeway Plan* Priority and/or Vision lists, and installation of accommodation(s), appropriate where practicable, through a range of approaches (Sections 2 and 3). Moreover, specific accommodations are not recommended for Priority or Vision lists corridors. Instead, appropriate bicycle accommodation(s) should be considered and installed based on locationspecific characteristics (i.e., context sensitive design), geometric and operational design parameters, and other considerations.

As previously noted the *Bikeway Plan* for the RVAMPO should be used in conjunction with other state, regional, and local plans, policies, and practices to better accommodate cyclists within the regional transportation network. Examples include but are not limited to the following documents:

- RVAMPO Transportation Improvement Plan
- City of Roanoke Complete Streets Policy





- City of Roanoke Street Design Guideline
- Annual Paving Schedules (local governments)
- CTB Policy for Integrating Bicycle and Pedestrian Accommodations
- VDOT State Bicycle Policy Plan
- VDOT annual paving schedule
- VDOT Maintenance and Construction Policy (VDOT has set goal of spending a minimum of 2 percent of a district's asset number 400 and associated paving activities budget on paved shoulders)

# 4.1 RVAMPO Transportation Improvement Plan (2012-2015)

The Transportation Improvement Program (TIP) is a 4-year financial program that describes the schedule for obligating federal funds to state and local projects. The TIP contains federal funding information for all modes of transportation including highways, transit and pedestrian facilities. Additionally, the TIP also reflects projects and priorities identified in the RVAMPO Long Range Transportation Plan. The RVAMPO works closely with the Virginia Departments of Transportation (VDOT) and Rail & Public Transportation (VDRPT), as well as local transit operators (Valley Metro, RADAR), to update and amend the TIP each year as funding conditions change.

Projects listed in the RVAMPO TIP include spot improvements (bridges, intersections, crosswalks, etc.) as well as corridors improvements along portions of a roadway (widening, construction, etc). Projects from the 2012-2015 TIP are provided in Table 4.1 (spot improvements) and 4.2 (corridor improvements) and Figure 4.1. TIP project are also available at www.rvarc.org/mpo/tip.htm.

#### 4.2 City of Roanoke Complete Streets Policy

As discussed in Section 2, in 2008 the City of Roanoke adopted a "complete streets" policy (Appendix E). Through this policy, the City of Roanoke seeks to ensure that all transportation agencies within the City shall routinely plan, fund, design, construct, operate, and maintain their streets according to the Complete Street principles of the City's Street Design Guidelines, creating an attractive connected multimodal network that balances the needs of all users, except where there are demonstrated exceptional circumstances. More specifically, the Street Guidelines encourage Design bicycle accommodation along all arterial and collector streets. Additionally, bicycle accommodation on local streets should be provided within the travel lanes shared with motor vehicles and no additional markings, signage, or pavement should be provided unless a designated bicycle route requires the use of a local street. All corridors covered by the City of Roanoke's Complete Streets Policy are listed in Table 4.4.

#### 4.3 Annual Paving Schedules

As previously noted, the cities of Roanoke and Salem, and the Town of Vinton are responsible for roadway maintenance and construction within their respective jurisdictions. As outlined in Section 3, the City of Roanoke has made significant progress in the provision of bicycle accommodations through its annual paving program. Also as previously noted, VDOT is responsible for roadway maintenance and construction in Botetourt and Roanoke counties. Despite numerous requests over a several year period by the RVAMPO and local government staff, VDOT has been unable or unwilling to provide a copy of the Salem District's annual paving schedule to allow for review and development of possible bicycle accommodations along corridors slated for maintenance.

# 4.4 VDOT Policies and Plans

As previously noted, VDOT has developed several guidance documents and policies related to bicycle accommodation. While VDOT policies are be in place, the provision of bicycle accommodation on VDOT maintained roads in the RVAMPO study area has been minimal with limited documentation of the application of the various VDOT plans, policies, and procedures for accommodating cyclists (e.g., CTB Policy for Bicycle and Pedestrian Integrating VDOT Accommodations. Maintenance and Construction Policy, annual paving schedule, etc.) The Bikeway Plan encourages greater cooperation between VDOT, RVAMPO, and local governments on efforts, strategies, and opportunities for accommodating cyclists in the RVAMPO study area.







### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

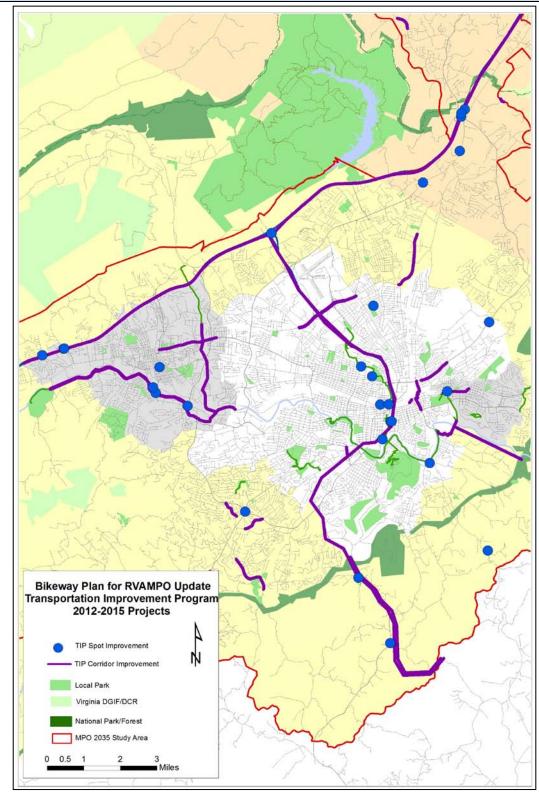


Figure 4.1: RVAMPO Transportation Improvement Program 2012-2015 Projects



# Table 4.1 RVAMPO Transportation Improvement Program 2012-2015 (Spot Improvements)

UPC	System	Jurisdiction	Project	Limits
79039	INTERSTATE	BOTETOURT COUNTY	RTE 81 - INTERIM SAFETY/OPERATIONAL IMPROVEMENTS AT EXIT 150	N/A
97577	INTERSTATE	BOTETOURT COUNTY	RTE 11 BRIDGE (STR# 3212)	I-81 NBL OVER RTE 11
93082	INTERSTATE	BOTETOURT COUNTY	I-81 PAVING AND GUARDRAIL UPGRADES AT EXIT 150	INTERCHANGE AREA AT EXIT 150
77300	PRIMARY	BOTETOURT COUNTY	RTE 11 - REPLACE STRUCTURE OVER TINKER CREEK (STR# 1012)	0.15 MILE EAST RTE 1039 (0.09 MILE)
77302	PRIMARY	BOTETOURT COUNTY	RTE 11 - REPLACE STRUCTURE OVER TINKER CREEK (STR# 1013)	0.38 MILE EAST RTE 822 (0.09 MILE)
90086	SECONDARY	BOTETOURT COUNTY	RTE 738 BRIDGE REPLACEMENT	BRIDGE REPLACEMENT OVER GLADE CREEK (STR # 6142 AND 6143)
90086	SECONDARY	BOTETOURT COUNTY	RTE 738 BRIDGE REPLACEMENT	BRIDGE REPLACEMENT OVER GLADE CREEK (STR # 6142 AND 6143)
17993	SECONDARY	BOTETOURT COUNTY	RTE 738 (WEBSTER BRICK RD) BRIDGE RECONSTRUCTION (STR# 6141)	0.043 MI SOUTH of RTE 607 NORTH TO 0.069 MI NORTH OF RTE 607 NORTH (0.112 MI)
80518	INTERSTATE	CITY OF ROANOKE	I-581 - INTERIM SAFETY/OPERATIONAL IMPROVEMENTS AT ELM AVE	FROM: SB RAMP ACCESSING ELM AVENUE TO: 6TH STREET TO JEFFERSON STREET ON ELM AVENUE







CITY OF ROANOKE CITY OF ROANOKE CITY OF ROANOKE CITY OF	SAFE ROUTES TO SCHOOL - MONTEREY ES TO BRECKINRIDGE MS 10TH STREET - CONSTRUCT 2- STAGE X-ING WITH WARNING DEVICES RIVERLAND ROAD - INTERSECTION IMPROVEMENT	WINSLOW DRIVE AND PRESTON AVENUE TO OLIVER ROAD AND OAKLAWN DRIVE FROM: 130' S. SYRACUSE AVE. TO: 110' S. SYRACUSE AVE. FROM: INT. OF GARDEN CITY BOULEVARD TO: 0.08 MILE EAST OF INT. WITH BENNINGTON STREET (0.24 MILE)
NEOUS CITY OF ROANOKE CITY OF ROANOKE	BRECKINRIDGE MS 10TH STREET - CONSTRUCT 2- STAGE X-ING WITH WARNING DEVICES RIVERLAND ROAD -	FROM: 130' S. SYRACUSE AVE. TO: 110' S. SYRACUSE AVE. FROM: INT. OF GARDEN CITY BOULEVARD TO: 0.08 MILE EAST OF INT.
CITY OF ROANOKE CITY OF ROANOKE	10TH STREET - CONSTRUCT 2- STAGE X-ING WITH WARNING DEVICES RIVERLAND ROAD -	FROM: INT. OF GARDEN CITY BOULEVARD TO: 0.08 MILE EAST OF INT.
CITY OF ROANOKE	STAGE X-ING WITH WARNING DEVICES RIVERLAND ROAD -	FROM: INT. OF GARDEN CITY BOULEVARD TO: 0.08 MILE EAST OF INT.
CITY OF ROANOKE	DEVICES RIVERLAND ROAD -	
ROANOKE	RIVERLAND ROAD -	
ROANOKE		
	INTERSECTION IMPROVEMENT	WITH BENNINGTON STREET (0.24 MILE)
CITY OF		
	CITY OF ROANOKE -	USE OF PASSENGER STATION FOR VISITOR'S CENTER AND MUSEUM
ROANOKE	RENOVATION OF N&W RAILWAY	
	STATION	
CITY OF	DR. MLK, JR. BRIDGE	FROM: SALEM AVE. TO: CENTRE AVE.(0.10 MILE)
ROANOKE	REPLACEMENT	
CITY OF	O. WINSTON LINK MUSEUM	DESIGN AND CONSTRUCTION OF VARIOUS MUSEUM COMPONENTS
ROANOKE		
CITY OF	SAFE ROUTES TO SCHOOL -	AREA WITHIN 1.2 MILES OF ADDISON MS - SIDEWALK AND GREENWAY
ROANOKE	ADDISON MS	CONNECTIONS
CITY OF	RTE 460 (ORANGE AVE)-RTE	FROM: RTE 460 AT BLUE HILLS DR TO: MEXICO WAY (0.25 MI)
ROANOKE	460/BLUE HILLS E/WB LT LANES-	
	SIGNAL	
CITY OF	ROANOKE RIVER GREENWAY	PH. C504 (2C MOYER CONNECTOR)
MENT		
-	ROANOKE CITY OF ROANOKE CITY OF ROANOKE CITY OF ROANOKE CITY OF ROANOKE CITY OF	ROANOKE       RENOVATION OF N&W RAILWAY STATION         CITY OF       DR. MLK, JR. BRIDGE         ROANOKE       REPLACEMENT         CITY OF       O. WINSTON LINK MUSEUM         ROANOKE       O. WINSTON LINK MUSEUM         CITY OF       O. WINSTON LINK MUSEUM         CITY OF       SAFE ROUTES TO SCHOOL - ADDISON MS         CITY OF       RTE 460 (ORANGE AVE)-RTE         ROANOKE       460/BLUE HILLS E/WB LT LANES- SIGNAL         CITY OF       ROANOKE RIVER GREENWAY







UPC	System	Jurisdiction	Project	Limits
78751	URBAN	CITY OF SALEM	RTE 11 (COLORADO ST) BRIDGE REPLACEMENT OVER ROANOKE RIVER	N/A
97199	URBAN	CITY OF SALEM	SAFE ROUTES TO SCHOOL - ANDREW LEWIS MS	E. 4TH STREET AND S. COLLEGE AVENUE TO WALNUT STREET AND PENNSYLVANIA AVENUE
975600	INTERSTATE	ROANOKE COUNTY	I-81 SB RAMP TO I-581 SB (STR# 14891)	I-81 SB TO I-581 SB
975760	INTERSTATE	ROANOKE COUNTY	RTE 112 WILDWOOD ROAD (STR #14865)	I-81 OVER WILDWOOD ROAD
97580	INTERSTATE	ROANOKE COUNTY	RTE 112 WILDWOOD ROAD (STR #14863)	I-81 OVER WILDWOOD ROAD
97581	INTERSTATE	ROANOKE COUNTY	RTE 641 TEXAS HOLLOW ROAD (STR #14861)	I-81 OVER TEXAS HOLLOW ROAD
87694	PRIMARY	ROANOKE COUNTY	RTE 11 (W. MAIN STREET) - DEMOLITION OF BLDGS, BRIDGES, ETC.	PARCEL 57 AT INT. RTE 11 AND 777
82193	PRIMARY	ROANOKE COUNTY	RTE 220 - BRIDGE OVER BACK CREEK (STR#1039)	FROM: 4.45 MILE RTE 419 TO: 3.68 MILE FRANKLIN COUNTY LINE
77305	PRIMARY	ROANOKE COUNTY	RTE 116 BRIDGE REPLACEMENT OVER BACK CREEK	0.10 MILE NORTH RTE 939 (0.24 MI)







UPC	System	Jurisdiction	Project	Limits
95658	PRIMARY	ROANOKE COUNTY	RTE 419 ELECTRIC ROAD - UPGRADE SIGNAL AT RTE 221	INTERSECTION OF RTE 419 AND RTE 221
93160	URBAN	TOWN OF VINTON	WALNUT AVENUE INTERSECTION IMPROVEMENT	WALNUT AVENUE AT 8TH STREET

Source: RVAMPO TIP 2012-2015







### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

# Table 4.2 RVAMPO Transportation Improvement Program 2012-2015 (Corridor Improvements)

UPC	System	Jurisdiction	Project	Limit
18719	SECONDARY	BOTETOURT COUNTY	RTE 652 (MOUNTAIN PASS ROAD) - RECONSTRUCTION (CURVE IMPROVEMENTS)	FROM: 0.09 MILE WEST RTE 658 SOUTH TO: 0.06 MILE EAST RTE 658 SOUTH (0.15 MILE)
18721	SECONDARY	BOTETOURT COUNTY	RTE 652 - RECONSTRUCTION (CURVE IMPROVEMENTS)	FROM: 0.06 MILE WEST RTE 653 TO: 0.07 MILE EAST RTE 653 (0.13 MILE)
52803	SECONDARY	BOTETOURT COUNTY	RTE 779 (CATAWBA RD) - INTERS IMP & BRIDGE OVER TINKER CREEK	FROM: 0.19 MILE EAST RTE 672 EAST TO: 0.24 MILE WEST RTE 672 EAST (0.4213 MILE)
53097	INTERSTATE	BOTETOURT COUNTYI-81 - WIDEN FROM 4 TO 8 LANES - PE & RW ONLYFROM: 0.28 MILE SOUTH OF RTE 648 MP 147.45 TO: 0.NORTH OF RTE 779E 220 - MP 152.4 (4.9 MILE)		FROM: 0.28 MILE SOUTH OF RTE 648 MP 147.45 TO: 0.79 MILE NORTH OF RTE 779E 220 - MP 152.4 (4.9 MILE)
75910	INTERSTATE	BOTETOURT COUNTY	I-81 - IMPROVEMENTS FOR SAFETY & CONGESTION AT EXIT 150	FROM: 0.15 MILE NORTH RTE 1039 (AT NS RR) TO: RTE 653 (1.65 MILE)
92691	INTERSTATE	BOTETOURT COUNTY	I-81 CONCRETE UNDERSEALING/PAVING/GUARDRAIL UPGRADES	RTE 779 BRIDGE, RTE 640 BRIDGE (9.64 MILE)
688	URBAN	CITY OF ROANOKE	13TH STREET AND HOLLINS ROAD - 4 LANE	FROM: JAMISON AVE TO: 0.05 MILE NORTH INT. ORANGE AVE (0.957 MILE)
16595	INTERSTATE	CITY OF ROANOKE	I-581 - VALLEY VIEW INTERCHANGE PHASE II	FROM: 0.881 MILE NORTH OF I-581 MP144.5 TO: HERSHBERGER ROAD
19029	URBAN	CITY OF ROANOKE	COLONIAL AVENUE TO BRANDON AVENUE (0.30 MILE)	WONJU STREET - TRAFFIC/SAFETY IMPROVEMENTS







UPC	System	Jurisdiction	Project	Limit
80558	URBAN	CITY OF ROANOKE	CORRIDOR IMPROVEMENTS ON HERSHBERGER ROAD	FROM COVE ROAD TO: WILLIAMSON ROAD
80560	URBAN	CITY OF ROANOKE	DEVELOP NORFOLK AVENUE TO URBAN 3 LANES	FROM: CAMPBELL AVE TO: WISE AVE
80561	URBAN	CITY OF ROANOKE	DEVELOP ORANGE AVENUE TO URBAN 6 LANES	FROM: 11TH STREET TO: GUS NICKS BLVD (1.05 MILE)
93116	URBAN	CITY OF ROANOKE	HERSHBERGER ROAD LANDSCAPING	FROM: COVE ROAD TO: RUTGERS STREET
93201	ENHANCEMENT	CITY OF ROANOKE	EXISTING PARKING LOT AT 13TH STREET TO EXISTING TINKER CREEK TRAIL	ROANOKE RIVER GREENWAY
93201	ENHANCEMENT	CITY OF ROANOKE	ROANOKE RIVER GREENWAY - TINKER CREEK GREENWAY CONNECTION	13TH STREET PARKING LOT TO UNDERHILL AVE
8753	URBAN	CITY OF SALEM	RTE 460 (EAST MAIN STREET) - WIDEN TO 3 LANES WITH CURB & SIDEWALK	FROM: RTE 311 (THOMPSON MEMORIAL BLVD) TO: 0.05 MILE EAST INTERSECTION KESSLER MILL ROAD (1.23 MILE)
12532	URBAN	CITY OF SALEM	RTE 460 (EAST MAIN STREET) û WIDEN TO 4 LNS, CURB, GUTTER, SWLK, REPLACE BR	FROM: 0.013 MILE EAST OF KESSLER MILL ROAD TO: 0.145 EAST RTE 419 (NORTH) (ELECTRIC ROAD) (0.38 MILE)
56409	URBAN	CITY OF SALEM	CONSTRUCTION OF 7 MILE BICYCLE/PEDESTRIAN	FROM: WESTERN LIMITS OF GREEN HILL PARK TO: ECL CITY OF SALEM
72658	URBAN	CITY OF SALEM	MASON CREEK GREENWAY - 5 MILE BICYCLE/PEDESTRIAN TRAIL	FROM: CITY OF SALEM PARALLELING MASON CREEK AT BRANCH DRIVE TO: CITY OF ROANOKE







UPC	System	Jurisdiction	Project	Limit
86530	URBAN	CITY OF SALEM	CONSTRUCT SHARED USE PATHWAY	FROM: MILL LANE TO: KINGSMILL DRIVE
92944	ENHANCEME NT	CITY OF SALEM	COLORADO STREET TO ROTARY PARK AT RTE 419	ROANOKE RIVER GREENWAY
93200	ENHANCEME NT	CITY OF SALEM	MILL LANE TO EDDY STREET	ROANOKE RIVER GREENWAY
16596	INTERSTATE	MULTIPLE	I-73 PROPOSED CORRIDOR LOCATION ALIGNMENT-PE ONLY	FROM: ROANOKE TO NORTH CAROLINA LINE
3672	SECONDARY	ROANOKE COUNTY	RTE 601 (HOLLINS ROAD) - RECONSTRUCTION & BRIDGE OVER TINKER CREEK	N/A
15187	SECONDARY	ROANOKE COUNTY	RTE 1662 (MCVITTY RD)-RECON & REPL BRIDGE OVER MUD LICK CK	FROM: INT OF RTE 1663 TO: INT OF RTE 419 (0.47 MILE)
15189	SECONDARY	ROANOKE COUNTY	RTE 720 (COLONIAL AVENUE) - RECONSTRUCTION	FROM: 0.05 MILE WEST RTE 687 TO: RTE 419 (0.58 MILE)
15190	SECONDARY	ROANOKE COUNTY	RTE 688 (COTTON HILL ROAD) - RECONSTRUCTION	FROM: 0.09 MILE SOUTH RTE 221 TO: 0.15 MILE SOUTH RTE 934 (0.61 MILE)
16591	INTERSTATE	ROANOKE COUNTY	I-81 - WIDEN FROM 4 TO 8 LANES - PE ONLY	FROM: 0.047 MILE NORTH OF BUTT HOLLOW ROAD (RTE 641) MP 135.9 TO: 0.20 MILE NORTH OF GOODWIN AVENUE (RTE 635) MP 138.6 (2.566 MILE)
16593	INTERSTATE	ROANOKE COUNTY	I-81 - WIDEN FROM 4 TO 8 LANES - PE ONLY	FROM: 0.881 MILE NORTH OF I-581 MP 144.5 TO: 0.28 MILE SOUTH OF RTE 648 MP 147.45 (3 MILE)







UPC	System	Jurisdiction	Project	Limit
17698	PRIMARY	ROANOKE COUNTY	RTE 11/460 (W. MAIN STREET)- WIDEN TO 4- LN W/CURB, GUTTER, AND RAISED MEDIAN	FROM: 0.055 MILE EAST OF WCL SALEM TO: 0.10 MILE WEST RTE 830 (2.188 MILE)
18723	SECONDARY	ROANOKE COUNTY	RTE 613 (MERRIMAN ROAD) - RECONST. & WIDEN DRAINAGE STRUCTURE AT STREAM	N/A
50006	PRIMARY	ROANOKE COUNTY	RTE 221 - RECONSTRUCT TO 4 LANES - RW	FROM: 0.02 MILE SOUTH RTE 688 TO: 0.92 MILE NORTH RTE 688 (0.94 MILE)
53094	INTERSTATE	ROANOKE COUNTY	I-81 - WIDEN FROM 4 TO 8 LANES - PE ONLY	FROM: 0.20 MILE NORTH OF GOODWIN AVENUE (RTE 635) MP 138.6 TO: 0.75 MILE NORTH OF THOMPSON MEMORIAL DRIVE (RTE 311) MP 140.9 (2.5 MILE)
53095	INTERSTATE	ROANOKE COUNTY	I-81 - WIDEN FROM 4 TO 8 LANES - PE ONLY	FROM: 0.75 MILE NORTH OF THOMPSON MEMORIAL DRIVE (RTE 311) MP 140 TO: 0.786 MILE SOUTH OF I-581 MP 143.1 (2.2 MILE)
53096	INTERSTATE	ROANOKE COUNTY	I-81 - WIDEN FROM 4 TO 8 LANES - PE ONLY	FROM: 0.786 MILE SOUTH OF I-581 MP 143.1 TO: 0.881 MILE NORTH OF I-581 MP 144.5 (1.667 MILE)
80056	INTERSTATE	ROANOKE COUNTY	I-73 ENGINEERING AND RIGHT-OF-WAY	ROANOKE COUNTY
91191	ENHANCEME NT	ROANOKE COUNTY	ROANOKE RIVER GREENWAY	FRPM: ROANOKE CITY EASTERN LIMIT TO: BLUE RIDGE PARKWAY/EXPLORE PARK
95812	PRIMARY	ROANOKE COUNTY	RTE 221 - RECONSTRUCT TO 4 LANES - CN	FROM: 0.02 MILE SOUTH RTE 688 TO: 1.93 MILE SOUTH RTE 419 (0.82 MILE)







UPC	System	Jurisdiction	Project	Limit
96139	PRIMARY	ROANOKE COUNTY	RTE 221 - RECONSTRUCT TO 4 LANES - CN	FROM: 0.02 MILE SOUTH RTE 688 TO: 0.92 MILE NORTH RTE 688 (0.94 MILE)
97171	ENHANCEME NT	ROANOKE COUNTY	GREEN HILL PARK TO MILL LANE	ROANOKE RIVER GREENWAY
76677	URBAN	TOWN OF VINTON	WALNUT AVENUE - UPGRADE CORRIDOR WITH CURB, GUTTER, BIKE LANES & SIDEWALK	FROM: WCL TO: LEE AVENUE

Source: RVAMPO TIP 2012-2015







# 4.5 Bikeway Plan Priority List and Vision Lists Corridors

As previously noted, the *Bikeway Plan for the RVAMPO* generally endorses consideration of efforts to better accommodate cyclists on all corridors in the MPO study area, regardless of inclusion the roadways on the *Bikeway Plan* Priority List Vision lists for the respective MPO localities. However, the Priority and Vision lists will assist in prioritizing corridors within the RVAMPO study area to receive limited funding for needed improvements.

Corridors comprising the Priority List generally form the foundation of the current and/or planned bikeway system in the RVAMPO with Vision List corridors supporting the framework of the Priority List and fill in any gaps in connectivity. In developing the Priority and Vision lists of corridors for consideration of bicycle accommodation the RVAMPO sought input and guidance from a range of stakeholders including local government staff, the Regional Bicycle Advisory Committee, Roanoke Valley Greenway Commission, area cyclists, and the general public (see Bicycle User Survey summary in Section 5).

The roadways included in the Priority and Vision lists generally serve to connect the regional transportation network to activity centers (e.g., employment centers, commercial/retail, public spaces, etc.), area greenways, transit systems, and other points of interest or destinations in the RVAMPO study area. Additionally the lists include many popular recreational cycling routes. Priority and Vision corridors for each RVAMPO locality are provided in Table 4.3-4.7 and Figure 4.2). Additionally, these corridors and associated





attribute data (e.g., road segment, speed limit, existing bicycle accommodation(s), design geometrics, etc.) are viewable on the RVARC Online Map available at www.rvarc.org/onlinemap (Figure 4.3).



# Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

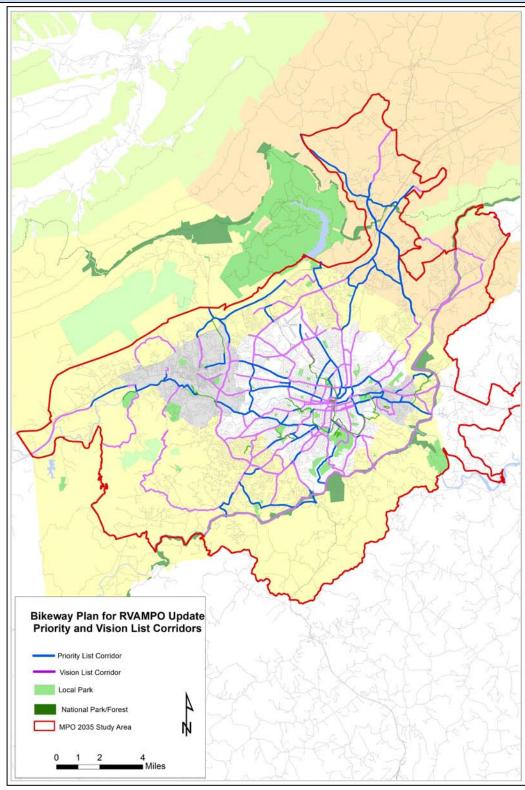
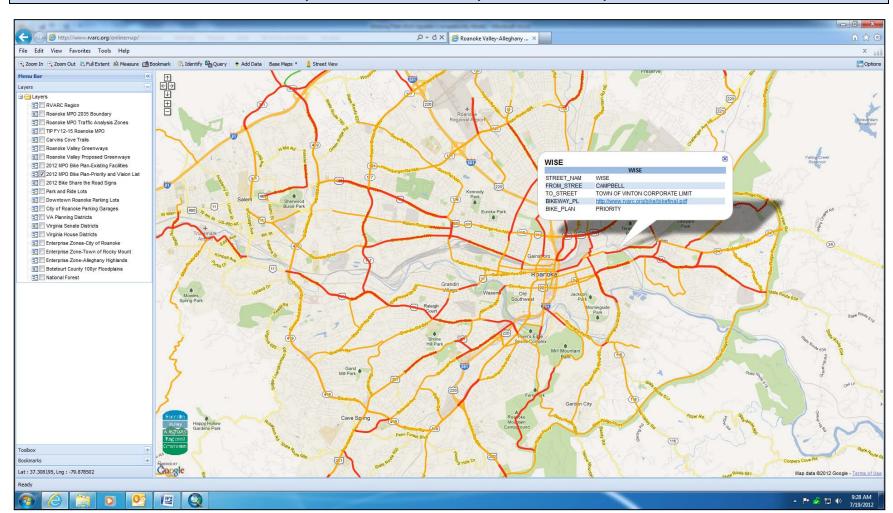


Figure 4.2: Bikeway Plan Priority List and Vision List Corridors





#### Bikeway Plan for the Roanoke Valley Area MPO - 2012 Update

Figure 4.3: RVARC Online Map



STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
ALTERNATE US220 (CLOVERDALE RD)	ROANOKE COUNTY CORPORATE LIMIT	US 11	PRIORITY	Botetourt County	Roanoke County	No
BLUE RIDGE PARKWAY	ROANOKE COUNTY CORPORATE LIMIT	US460	VISION	National Park Service (Botetourt County)	Roanoke County	No
BLUE RIDGE PARKWAY	US460	MPO BOUNDARY	VISION	National Park Service (Botetourt County)	No	No
CATAWBA (779)	US220 (ROANOKE RD)	MPO BOUNDARY	PRIORITY	Botetourt County	No	No
LEE HIGHWAY/US 11	ROANOKE COUNTY CORPORATE LIMIT	STONEY BATTERY ROAD	PRIORITY	Botetourt County	Roanoke County	No
MOUNTAIN PASS (652)	US11 (LEE HWY)	US460	VISION	Botetourt County	No	No
READ MOUNTAIN (654)	ALTERNATE US220 (CLOVERDALE RD)	US 11	PRIORITY	Botetourt County	No	No
RESERVOIR (648)	ROANOKE COUNTY CORPORATE LIMIT	TERMINUS	RURAL, CCNR	Botetourt County	Roanoke County	Carvins Cove Trails
SANDERSON (605)	ROANOKE COUNTY CORPORATE LIMIT	READ MOUNTAIN	PRIORITY	Botetourt County	Roanoke County	No
STONEY BATTERY (651)	US11 (LEE HWY)	MPO BOUNDARY	VISION	Botetourt County	No	No
US 220	GLEBE (675)	MPO BOUNDARY	VISION	Botetourt County	No	No
US 220 (ROANOKE RD)	US11 (LEE HWY)	GLEBE (675)	PRIORITY	Botetourt County	No	No
VALLEY (779)	US11 (LEE HWY)	MPO BOUNDARY	PRIORITY	Botetourt County	No	No
WEBSTER (738)	US460	US460	VISION	Botetourt County	No	No

Table 4.3 Bikeway Plan Priority List and Vision List Corridors Botetourt County







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
10TH NW	MOORMAN	SALEM	VISION	City of Roanoke	No	No
10TH SW	MOORMAN	ORANGE	PRIORITY	City of Roanoke	No	Lick Run
10TH SW	SALEM	CAMPBELL	VISION	City of Roanoke	No	No
13TH SE	JAMISON	WISE	PRIORITY	City of Roanoke	No	Tinker Creek
13TH SE	JAMISON	TAYLOE	PRIORITY	City of Roanoke	No	Tinker Creek, Roanoke River
13TH SE	TAYLOE	BROWNLEE	PRIORITY	City of Roanoke	No	Tinker Creek, Roanoke River
13TH SW	MEMORIAL BRIDGE	PATTERSON	VISION	City of Roanoke	No	Roanoke River
24TH	BAKER	MELROSE	PRIORITY	City of Roanoke	No	No
2ND	FRANKLIN	SALEM	VISION	City of Roanoke	No	Lick Run
5TH NW	GILMER	ORANGE	VISION	City of Roanoke	No	No
5TH NW	NORFOLK SOUTHERN BRIDGE	GILMER NORFOLK SOUTHERN	VISION	City of Roanoke	No	No
5TH SW	SALEM	BRIDGE	PRIORITY	City of Roanoke	No	No
5TH SW	SALEM	ELM	VISION	City of Roanoke	No	No
9TH	TAZEWELL	HIGHLAND	VISION	City of Roanoke	No	Roanoke River
9TH	HIGHLAND	RIVERLAND	VISION	City of Roanoke	No	Roanoke River

Table 4.4 Bikeway Plan Priority List and Vision List Corridors City of Roanoke







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
AVENHAM	FRANKLIN	BROADWAY	VISION	City of Roanoke	No	Roanoke River
AVIATION	MUNICIPAL	HERSHBERGER	PRIORITY	City of Roanoke	No	No
BELLE	KING	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
BENNINGTON	RIVERLAND	13TH SE	VISION	City of Roanoke	No	Roanoke River
BOULEVARD	PATTERSON	BAKER	VISION	City of Roanoke	No	No
BRAMBLETON	ROANOKE COUNTY CORPORATE LIMIT	MONTGOMERY	PRIORITY	City of Roanoke	Roanoke County	Murray Run
BRAMBLETON	MONTGOMERY	BRANDON	VISION	City of Roanoke	Roanoke County	No
BRAMBLETON	SEWELL	WELCH	PRIORITY	City of Roanoke	Roanoke County	No
BRANDON	EDGEWOOD	BRAMBLETON	PRIORITY	City of Roanoke	City of Salem	No
BRANDON	BRAMBLETON	MAIN	VISION	City of Roanoke	No	No
BRANDON	MAIN	23RD	PRIORITY	City of Roanoke	No	No
BRANDON	COLONIAL	FRANKLIN	PRIORITY	City of Roanoke	No	No
BRANDON	COLONIAL	23RD	PRIORITY	City of Roanoke	No	No
BRANDON	EDGEWOOD	CITY OF SALEM CORPORATE LIMIT	PRIORITY	City of Roanoke	City of Salem	Roanoke River
BROADWAY	FRANKLIN	MCCLANAHAN	VISION	City of Roanoke	No	No
BULLITT	6TH SE	13TH SE	VISION	City of Roanoke	No	No
BURRELL	ORGANGE	LIBERTY	PRIORITY	City of Roanoke	No	Lick Run
CAMPBELL	WILLIAMSON	NORFOLK	PRIORITY	City of Roanoke	No	Lick Run
CAMPBELL	13TH SW	WILLIAMSON	VISION	City of Roanoke	No	Lick Run







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
COLONIAL	WINDING WAY	26TH	PRIORITY	City of Roanoke	No	Murray Run
COLONIAL	WONJU	BRANDON	PRIORITY	City of Roanoke	No	Murray Run
COLONIAL	26TH	BRANDON	PRIORITY	City of Roanoke	No	Murray Run
COLONIAL	WINDING WAY	ROANOKE COUNTY CL	VISION	City of Roanoke	Yes	Murray Run
COVE	PETERS CREEK	HERSHBERGER	VISION	City of Roanoke	Roanoke County	No
COVE	PETERS CREEK	GREEN RIDGE	VISION	City of Roanoke	Roanoke County	No
COVE	HERSHBERGER	LAFAYETTE	VISION	City of Roanoke	No	No
DALE	13TH SE	VERNON	PRIORITY	City of Roanoke	Town of Vinton	Tinker Creek
DALE	MT. VERNON	TOWN OF VINTON CORPORATE LIMIT	VISION	City of Roanoke	Town of Vinton	Tinker Creek
DEYERLE	BRANDON	MUD LICK	VISION	City of Roanoke	No	No
EDGEWOOD	BRANDON	MEMORIAL	VISION	City of Roanoke	No	No
ELM SE	WILLIAMSON	6TH SE	VISION	City of Roanoke	No	Mill Mountain
ELM SW	MAIN	WILLIAMSON	VISION	City of Roanoke	No	Mill Mountain, Roanoke River
FRANKLIN	ELECTRIC	AVENHAM	PRIORITY	City of Roanoke	Roanoke County	No
FRANKLIN	AVENHAM	BRANDON	VISION	City of Roanoke	No	No
FRANKLIN	BRANDON	RESERVE	VISION	City of Roanoke	No	Roanoke River
FRANKLIN	RESERVE	ELM	VISION	City of Roanoke	No	Roanoke River
FRANKLIN	ELM	WILLIAMSON	VISION	City of Roanoke	No	Mill Mountain
FRANKLIN/US220	ELECTRIC/419	BLUE RIDGE PARKWAY	VISION	City of Roanoke	Roanoke County	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
GAINSBORO	ORANGE	GILMER	PRIORITY	City of Roanoke	No	Lick Run
GAINSBORO	GILMER	SALEM	VISION	City of Roanoke	No	Lick Run
GARDEN CITY	YELLOW MOUNTAIN ROAD	RIVERLAND	VISION	City of Roanoke	No	No
GRANDIN	GARST MILL	BRANDON	VISION	City of Roanoke	Roanoke County	No
GRANDIN	BRANDON	MEMORIAL	PRIORITY	City of Roanoke	No	Murray Run, Roanoke River
GRANDIN	ELECTRIC/419	DOVER	VISION	City of Roanoke	Roanoke County	No
GRANDIN	MAIDEN	MEMORIAL	VISION	City of Roanoke	No	No
GUS NICKS	ORANGE	TOWN OF VINTON CORPORATE LIMIT	PRIORITY	City of Roanoke	Town of Vinton	No
HERSHBERGER	PETERS CREEK	COVE	VISION	City of Roanoke	No	No
HERSHBERGER	COVE	WILLIAMSON	VISION	City of Roanoke	No	No
HERSHBERGER	WILLIAMSON	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
HOLLINS	WISE	ORANGE	PRIORITY	City of Roanoke	No	No
HOLLINS	ORANGE	PLANTATION	VISION	City of Roanoke	No	No
JAMISON	6TH SE	13TH SE	VISION	City of Roanoke	No	No
JB FISHBURN PKWY	SYLVAN	BLUE RIDGE PARKWAY	VISION	City of Roanoke	No	Mill Mountain
JEFFERSON	RESERVE	WELLER	PRIORITY	City of Roanoke	No	Roanoke River
JEFFERSON	WELLER	MCCLANAHAN	VISION	City of Roanoke	No	Roanoke River







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
JEFFERSON	RESERVE	SALEM	VISION	City of Roanoke	No	Mill Mountain, Roanoke River, Lick Run
KIMBALL	WILLIAMSON	ORANGE	PRIORITY	City of Roanoke	No	Lick Run
KING	TOWN OF VINTON CORPORATE LIMIT	ORANGE	VISION	City of Roanoke	Town of Vinton	No
LAFAYETTE	COVE	MELROSE	VISION	City of Roanoke	No	No
LIBERTY	PLANTATION	HOLLINS	VISION	City of Roanoke	No	No
LIBERTY	BURRELL	COURTLAND	PRIORITY	City of Roanoke	No	Lick Run
LIBERTY	COURTLAND	WILLIAMSON	VISION	City of Roanoke	No	No
LIBERTY	PLANTATION	HOLLINS	VISION	City of Roanoke	No	No
MAIN	BRANDON	WINONA	VISION	City of Roanoke	No	Roanoke River
MAIN	ELM	WINONA	PRIORITY	City of Roanoke	No	Roanoke River
MAIN	BRANDON	WINONA	VISION	City of Roanoke	No	Roanoke River
MCCLANAHAN	FRANKLIN	JEFFERSON	VISION	City of Roanoke	No	Roanoke River
MELROSE	PETERS CREEK	LAFAYETTE	PRIORITY	City of Roanoke	No	No
MELROSE	CITY OF SALEM CORPORATE LIMIT	PETERS CREEK	PRIORITY	City of Roanoke	City of Salem	No
MELROSE	LAFAYETTE	SALEM TURNPIKE	VISION	City of Roanoke	No	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
MEMORIAL	CAMPBELL	GRANDIN	PRIORITY	City of Roanoke	No	Roanoke River
MEMORIAL	CAMBRIDGE	EDGEWOOD	VISION	City of Roanoke	No	No
MILL MOUNTAIN PARK SPUR	J B FISHBURN PARKWAY	BLUE RIDGE PARKWAY	PRIORITY	City of Roanoke	Roanoke County	Mill Mountain
MOUNT PLEASANT	RIVERLAND	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
MOUNT PLEASANT	RUTROUGH	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	Roanoke River
MUD LICK	BRANDON	GRANDIN	VISION	City of Roanoke	Roanoke County	No
OLD MOUNTAIN	HOLLINS	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
ORANGE	WILLIAMSON	GUS NICKS	PRIORITY	City of Roanoke	No	No
ORANGE	GUS NICKS	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
ORANGE	SALEM TURNPIKE	5TH	VISION	City of Roanoke	No	Lick Run
ORANGE	5TH	WILLIANMSON	VISION	City of Roanoke	No	Lick Run
OVERLAND	COLONIAL	BRAMBLETON	PRIORITY	City of Roanoke	No	No
PATTERSON	BOULEVARD	CAMPBELL	VISION	City of Roanoke	No	No
PETERS CREEK	MELROSE	ROANOKE COUNTY CORPORATE LIMIT (COVE)	VISION	City of Roanoke	City of Roanoke	No
PETERS CREEK EXTENSION	MELROSE	BRANDON	PRIORITY	City of Roanoke	Roanoke County	Roanoke River







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
PIEDMONT	WALNUT	RIVERLAND	VISION	City of Roanoke	No	Roanoke River, Mill Mountain
PLANTATION	HOLLINS	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Yes	No
PLANTATION	ORANGE	HOLLINS	VISION	City of Roanoke	No	No
RESERVE	FRANKLIN	JEFFERSON	VISION	City of Roanoke	No	Roanoke River
RIVERLAND	GARDEN CITY	MOUNT PLEASANT	VISION	City of Roanoke	No	No
RIVERLAND	GARDEN CITY	BENNINGTON	PRIORITY	City of Roanoke	No	No
RIVERLAND	PIEDMONT	GARDEN CITY	VISION	City of Roanoke	No	Roanoke River
RUTGERS	HERSHBERGER	TOWNE SQUARE	VISION	City of Roanoke	Roanoke County	No
SALEM	10TH	WILLIAMSON	VISION	City of Roanoke	No	Lick Run
SALEM TURNPIKE	24TH	30TH	PRIORITY	City of Roanoke	No	No
SALEM TURNPIKE	ЗОТН	CITY OF SALEM CORPORATE	VISION	City of Roanoke	City of Salem	No
SALEM TURNPIKE	ORANGE	MELROSE	VISION	City of Roanoke	No	No
SHENANDOAH	PETERS CREEK	24TH	PRIORITY	City of Roanoke	City of Salem	No
SHENANDOAH	24TH	5TH	PRIORITY	City of Roanoke	City of Salem	No
SHENANDOAH	PETERS CREEK	CITY OF SALEM CORPORATE	VISION	City of Roanoke	City of Salem	No
SHENANDOAH	5TH	WILLIAMSON	VISION	City of Roanoke	City of Salem	Lick Run
TAZEWELL	WILLIAMSON	13TH SE	VISION	City of Roanoke	No	No
VALLEY VIEW	HERSHBERGER	I-581	VISION	City of Roanoke	No	Lick Run







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
WALNUT	JEFFERSON	J B FISHBURN PARKWAY	PRIORITY	City of Roanoke	No	Mill Mountain, Roanoke River
WELLS	GAINSBORO	WILLIAMSON	VISION	City of Roanoke	No	Lick Run
WILLIAMSON	ANGELL	HERSHBERGER	PRIORITY	City of Roanoke	Roanoke County	No
WILLIAMSON	HERSHBERGER	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	Roanoke County	No
WILLIAMSON	WELLS	ELM	VISION	City of Roanoke	No	Lick Run, Mill Mountain
WILLIAMSON	ORANGE	WELLS	PRIORITY	City of Roanoke	No	Lick Run, Mill Mountain
WILLIAMSON	ANGELL	ORANGE	PRIORITY	City of Roanoke	No	No
WISE	CAMPBELL	TOWN OF VINTON CORPORATE LIMIT	PRIORITY	City of Roanoke	Town of Vinton	Tinker Creek, Lick Run, Mill Mountain
WISE	NORFOLK	18TH SE	VISION	City of Roanoke	Town of Vinton	Tinker Creek, Lick Run, Mill Mountain
WISE	CAMPBELL	14TH SE	VISION	City of Roanoke	No	Tinker Creek, Lick Run, Mill Mountain
WONJU	COLONIAL	FRANKLIN	VISION	City of Roanoke	No	No
YELLOW MOUNTAIN	JEFFERSON	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Roanoke	City of Roanoke	Mill Mountain, Roanoke River







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
ALTERNATE US220 (CLOVERDALE RD)	CHALLENGER (US 460)	BOTETOURT COUNTY CORPORATE LIMIT	VISION	Roanoke County	Botetourt County	No
BELLE HAVEN (1836)	LOCH HAVEN	NORTH BARRENS (1832)	VISION	Roanoke County	No	No
BENT MOUNTAIN (US 221)	COTTON HILL (688)	TWELVE O'CLOCK KNOB (694)	VISION	Roanoke County	No	No
BENT MOUNTAIN (US 221)	CRYSTAL CREEK (897)	COTTON HILL (688)	PRIORITY	Roanoke County	No	No
BLUE RIDGE PARKWAY	BOTETOURT COUNTY CORPORATE LIMIT	STEWARTSVILLE (SR 24)	VISION	National Park Service (Roanoke County)	Roanoke County	No
BLUE RIDGE PARKWAY	STEWARTSVILLE (SR 24)	MILL MOUNTAIN PARKWAY SPUR	VISION	National Park Service (Roanoke County)	City of Roanoke	Roanoke River
BLUE RIDGE PARKWAY	MILL MOUNTAIN PARKWAY SPUR	US 220 (FRANKLIN)	VISION	National Park Service (Roanoke County)	City of Roanoke	No
BLUE RIDGE PARKWAY	US220 (FRANKLIN)	MPO BOUNDARY	VISION	National Park Service (Roanoke County)	City of Roanoke	No
BONSACK (603)	CHALLENGER (US 460)	CHALLENGER (US 460)	VISION	Roanoke County	Botetourt County	No
BRAMBLETON (US221)	CRYSTAL CREEK (897)	CITY OF ROANOKE CORPORATE LIMIT	VISION	Roanoke County	City of Roanoke	No
BUCK MOUNTAIN (679)	STARKEY (904)	FRANKLIN (US 220)	PRIORITY	Roanoke County	No	No
CARSON (758)	CITY OF ROANOKE CORPORATE LIMIT	CHALLENGER (US 460)	VISION	Roanoke County	City of Roanoke	No

Table 4.5 Bikeway Plan Priority List and Vision List Corridors Roanoke County







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
CARVINS COVE (740)	CATAWBA VALLEY (SR311)	BOTETOURT COUNTY CORPORATE LIMIT	RURAL, CCNR	Roanoke County	Botetourt County	Carvins Cove
CATAWBA VALLEY (311)	ELECTRIC/419	MPO BOUNDARY	PRIORITY	Roanoke County	No	Hanging Rock Battlefield Trail
COLONIAL (687/720)	BRAMBLETON (US 221)	ELECTRIC/419	PRIORITY	Roanoke County	No	No
COLONIAL (720)	ELECTRIC/419	CITY OF ROANOKE CORPORATE LIMIT	VISION	Roanoke County	No	No
COTTON HILL (688)	BENT MOUNTAIN (US 221)	BLUE RIDGE PARKWAY	PRIORITY	Roanoke County	No	No
DALLAS (1807)	WEBSTER (1808)	ENON (1806)	VISION	Roanoke County	No	No
DIUGUIDS (760)	CITY OF SALEM CORPORATE LIMIT	GREEN HILL PARK (1185)	PRIORITY	Roanoke County	City of Salem	Roanoke River
DUTCH OVEN	ELECTRIC/419	TIMBERVIEW (1404)	RURAL, CCNR	Roanoke County	No	Hanging Rock Battlefield Trail, Carvins Cove
ELECTRIC/419	CITY OF SALEM CORPORATE LIMIT	CATAWBA VALLEY (SR 311)	PRIORITY	Roanoke County	City of Salem	Hanging Rock Battlefield Trail
ELECTRIC/419	CITY OF ROANOKE CORPORATE LIMIT (FRANKLIN)	CITY OF SALEM CORPORATE LIMIT (KEAGY)	VISION	Roanoke County	City of Roanoke, City of Salem	Roanoke River, Mill Mountain
ENON (1806)	DALLAS (1807)	WALROND (1804)	VISION	Roanoke County	No	No
FEATHER (654)	WASHINGTON (SR 24)	HARDY (634)	VISION	Roanoke County	Town of Vinton	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
FRANKLIN/US 220	CITY OF ROANOKE CORPORATE LIMIT	BUCK MOUNTAIN (679)	PRIORITY	Roanoke County	City of Roanoke	Blue Ridge Parkway
GARST MILL (682)	BRAMBLETON (US 221)	CITY OF ROANOKE CORPORATE LIMIT	VISION	Roanoke County	City of Roanoke	No
HARBORWOOD (639)	RIVERSIDE	POOR MOUNTAIN	VISION	Roanoke County	City of Salem	Roanoke River
HARDY (634)	TOWN OF VINTON CORPORATE LIMIT	BLUE RIDGE PARKWAY	PRIORITY	Roanoke County	Town of Vinton	Wolf Creek
HOLLINS (601)	SHADWELL (627)	PLANTATION (SR 115)	PRIORITY	Roanoke County	No	No
JAE VALLEY (SR 116)	CITY OF ROANOKE CORPORATE LIMIT	BLUE RIDGE PARKWAY	VISION	Roanoke County	City of Roanoke	No
JOHN RICHARDSON (743)	PLANTATION (SR115)	OAKLAND (1855)	PRIORITY	Roanoke County	Yes	No
LABAN (1849)	NORTH BARRENS (1832)	WEBSTER (1808)	VISION	Roanoke County	No	Yes
LOCH HAVEN (F- 071/1894)	ELECTRIC/419	BELLE HAVEN (1836)	PRIORITY	Roanoke County	No	Yes
MERRIMAN (613)	RANCHCREST (907)	STARKEY (904)	PRIORITY	Roanoke County	No	No
MOUNTAIN VIEW (651)	TOWN OF VINTON CORPORATE LIMIT	BLUE RIDGE PARKWAY	PRIORITY	Roanoke County	Town of Vinton	No
NORTH BARRENS (1832)	BELLE HAVEN (1836)	LABAN (849)	VISION	Roanoke County	No	No
OGDEN (687)	COLONIAL (720)	ELECTRIC/419	VISION	Roanoke County	City of Roanoke	No
PETERS CREEK (SR 117)	CITY OF ROANOKE CORPORATE LIMIT	WILLIAMSON	VISION	Roanoke County	City of Roanoke	No
PLANTATION	1-81	CROWE HOLLOW	PRIORITY	Roanoke County	Botetourt County	Tinker Creek (Hollins)
PLANTATION (SR 115)	I-81	WILLIAMSON/US11	PRIORITY	Roanoke County	No	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
PLANTATION (SR 115)	WILLIAMSON/US 11	CITY OF ROANOKE CORPORATE	VISION	Roanoke County	City of Roanoke	No
RANCHCREST(907)	BRAMBLETON (US 221)	MERRIMAN (613)	PRIORITY	Roanoke County	No	No
RESERVOIR (648)	WILLIAMSON/US11	BOTETOURT COUNTY CL	RURAL, CCNR	Roanoke County	Botetourt County	Carvins Cove Trails
SANDERSON (605)	SHADWELL (601)	BOTETOURT CL	PRIORITY	Roanoke County	Botetourt County	No
SHADWELL (601)	WILLIAMSON/US11	HOLLINS (605)	PRIORITY	Roanoke County	Botetourt County	No
STARKEY (904)	ELECTRIC/419	BUCK MOUNTAIN (679)	VISION	Roanoke County	No	No
STARKEY (904)	MERRIMAN (613)	BUCK MOUNTAIN (679)	PRIORITY	Roanoke County	No	No
THIRLANE (626)	PETERS CREEK (SR 117)	WOOD HAVEN (628)	PRIORITY	Roanoke County	City of Roanoke	No
THOMPSON MEMORIAL (SR 311)	CITY OF SALEM CORPORATE LIMIT	CATAWBA VALLEY (SR 311)	PRIORITY	Roanoke County	City of Salem	Hanging Rock Battlefield Trail, Mason Creek
TIMBERVIEW (1404)	DUTCH OVEN (683)	TERMINUS	RURAL, CCNR	Roanoke County	No	Carvins Cove, Hanging Rock Battlefield Trail
	CITY OF SALEM CORPORATE	BENT MOUNTAIN (US 221)	VISION	Roanoke County	City of Salem	No
WALROND (1804)	WALDRON PARK RD (843)	PLANTATION (SR 115)	VISION	Roanoke County	No	No
WEBSTER (1808)	LABAN (849)	DALLAS (1807)	VISION	Roanoke County	No	No
WEST MAIN (US 460)	CITY OF SALEM CORPORATE LIMIT	TECHNOLOGY (830)	PRIORITY	Roanoke County	City of Salem	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
WEST MAIN (US 460)	TECHNOLOGY (830)	MONTGOMERY COUNTY CORPORATE LIMIT	VISION	Roanoke County	Montgomery County	No
WEST RIVERSIDE (639)	CITY OF SALEM CORPORATE LIMIT	DIUGUIDS (760)	PRIORITY	Roanoke County	City of Salem	Roanoke River
WILDWOOD (619)	CITY OF SALEM CORPORATE LIMIT	CITY OF SALEM CORPORATE LIMIT (ACADEMY)	VISION	Roanoke County	City of Salem	No
WILLIAMSON/US11	PETERS CREEK (SR 117)	BOTETOURT COUNTY	VISION	Roanoke County	Botetourt County	No
WOOD HAVEN (628)	VALLEYPOINTE PARKWAY (1947)	THIRLANE (626)	PRIORITY	Roanoke County	No	No
WOOD HAVEN (628)	VALLEYPOINTE PARKWAY (1947)	PETERS CREEK (SR 117)	VISION	Roanoke County	City of Roanoke	No
WOOD HAVEN (628)	VALLEYPOINTE PARKWAY (1947)	PETERS CREEK (SR 117)	VISION	Roanoke County	City of Roanoke	No
WOOD HAVEN (628)	THIRLANE (626)	TANNEY (1507)	VISION	Roanoke County	No	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
APPERSON	CITY OF ROANOKE CORPORATE LIMIT	ELECTRIC/419	PRIORITY	City of Salem	City of Roanoke	Roanoke River
BOULEVARD ROANOKE	COLLEGE	CITY OF ROANOKE CORPORATE LIMIT	VISION	City of Salem	No	No
DIUGUIDS	WEST MAIN (US 460)	RIVERSIDE	PRIORITY	City of Salem	Roanoke County	Roanoke River
EAST MAIN (US 460)	ELECTRIC/419	CITY OF ROANOKE CORPORATE LIMIT	VISION	City of Salem	City of Roanoke	No
EAST MAIN (US 460)	KESSLER MILL	LYNCHBURG TURNPIKE	PRIORITY	City of Salem	No	Hanging Rock Battlefield
ELECTRIC/419	ROANOKE COUNTY CORPORATE LIMIT	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Salem	Roanoke County	Hanging Rock Battlefield Trail
FRONT	RIVERSIDE	MULBERRY	PRIORITY	City of Salem	Yes	Roanoke River
KESSLER MILL	EAST MAIN (US 460)	STOUTAMIRE	PRIORITY	City of Salem	Νο	Hanging Rock Battlefield Trail, Mason Creek
LYNCHBURG TURNPIKE	EAST MAIN (US 460)	IDAHO	VISION	City of Salem		
MAIN/US 460	ROANOKE COUNTY CORPORATE LIMIT	DIUGUIDS (760)	VISION	City of Salem	Roanoke County	Roanoke River

Table 4.6 Bikeway Plan Priority List and Vision List Corridors City of Salem







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
MILL	WEST MAIN (US 460)	RIVERSIDE	PRIORITY	City of Salem	Roanoke County	Roanoke River
MULBERRY	FRONT	ROANOKE COUNTY CORPORATE LIMIT	PRIORITY	City of Salem	Yes	Roanoke River
PIEDMONT	MULBERRY	RIVERSIDE	PRIORITY	City of Salem	Yes	Roanoke River, Mill Mountain
RIVERSIDE	PIEDMONT	ROANOKE COUNTY CORPORATE LIMIT	PRIORITY	City of Salem	Yes	Roanoke River
RIVERSIDE	COLORADO	FRONT	PRIORITY	City of Salem	Yes	Roanoke River
SPARTAN	WEST MAIN (US 460)	SALEM HIGH SCHOOL	VISION	City of Salem	No	Roanoke River
TEXAS	LYNCHBURG TURNPIKE	BOULEVARD ROANOKE	VISION	City of Salem	City of Roanoke	No
THOMPSON MEMORIAL 311	EAST MAIN (US 460)	ROANOKE COUNTY CORPORATE LIMIT	VISION	City of Salem	Roanoke County	No
TWELVE O'CLOCK KNOB	ROANOKE COUNTY CORPORATE LIMIT	RIVERSIDE	VISION	City of Salem	Roanoke County	No







STREET	FROM	то	BIKEWAY PLAN	LOCALITY	INTERJURISDICTIONAL CONNECTION	GREENWAY CONNECTION
BYPASS	VIRGINIA	WASHINGTON	PRIORITY	Town of Vinton	No	No
GUS NICKS	CITY OF ROANOKE CORPORATE LIMIT	WASHINGTON	VISION	Town of Vinton	City of Roanoke	No
HARDY (634)	SPRUCE	BYPASS	PRIORITY	Town of Vinton	No	No
HARDY (634)	BYPASS	ROANOKE COUNTY CORPORATE LIMIT	PRIORITY	Town of Vinton	Roanoke County	Wolf Creek
MOUNTAIN VIEW	WASHINGTON	RUDDELL	PRIORITY	Town of Vinton	Roanoke County	Wolf Creek
MOUNTAIN VIEW	RUDDELL	ROANOKE COUNTY CORPORATE LIMIT	VISION	Town of Vinton	Roanoke County	Wolf Creek
NIAGARA	WYNDHAM	VIRGINIA	VISION	Town of Vinton	No	No
POLLARD	WASHINGTON	VIRGINIA	PRIORITY	Town of Vinton	City of Roanoke	No
THIRD	VIRGINIA	WYNDHAM	VISION	Town of Vinton	No	Glade Town Loop
VIRGINIA	CITY OF ROANOKE CORPORATE LIMIT	HARDY	PRIORITY	Town of Vinton	City of Roanoke	Tinker Creek
WALNUT	CITY OF ROANOKE CORPORATE LIMIT	LEE	PRIORITY	Town of Vinton	City of Roanoke	Tinker Creek
WASHINGTON (SR 24)	CITY OF ROANOKE CORPORATE LIMIT	BLUE RIDGE PARKWAY	VISION	Town of Vinton	Roanoke County	Wolf Creek
WYNDHAM	THIRD	NIAGARA	VISION	Town of Vinton	No	No

### Table 4.7 Bikeway Plan Priority List and Vision List Corridors Town of Vinton







#### SECTION 5: BICYCLE USER SURVEY

The Roanoke Valley Area Metropolitan Planning Organization (RVAMPO), in cooperation with the participating local governments, VDOT, and other stakeholders, conducted an Online bicycle user survey as a component of the *Bikeway Plan for the RVAMPO* – 2012 Update and to provide general information on bicycle use, perceptions, and preferences in the region.

#### 5.1 Bicycle User Survey Overview

The Bicycle User Survey was conducted via the Internet from September 15 - October 23, 2009 and consisted of thirty-three (33) quantitative and open-ended questions. The survey was completed by 297 of the 307 respondents started the survey, for a 97.1% completion rate. While the survey was oriented toward cyclists, it was open to anyone interested in completing the survey, with many questions relevant to non-cyclists. Bicycle User Survey respondents were "self selecting" and do not constitute a representative (i.e., random) sample of the RVAMPO study area population. However, analysis of the survey responses is statistically valid and feedback received is invaluable to efforts to better accommodate cyclists in the region. Additionally, many of the questions provided the opportunity for respondents to provide open-ended responses and comments.

#### 5.2 Survey Highlights

• The vast majority of respondents indicated that they were not members of a bicycle club, organization or advocacy group. Additionally, most respondents indicated having never participated in official Bike Month activities organized by RIDE Solutions and other stakeholders each year during the month of May.

- Respondents indicated that most bicycle miles traveled (BMT) were for exercise and recreation respectively, followed by commuting, visiting friends/socializing, and shopping/errands.
- Most respondents classified themselves as "experienced" or "moderate" in terms of cycling ability regard cycling skills, knowledge of traffic laws and safety, and ability of ride on shared roadways with motorized vehicles.
- Traffic speed, traffic volume, and driver behavior were consistently cited as major impediments to cycling more often.
- Nearly all respondents indicated having another means of transportation other than a bicycle. Additionally, very few respondents indicated that they bicycled to access another mode of transportation, such as Valley Metro or a park-and-ride lot.
- The vast majority of respondents with children indicated that their child(ren) did not ride a bicycle to school.
- Overwhelmingly, respondents indicated they are willing to take a longer route to their destination(s) in order to avoid traffic and/or access a bicycle accommodation, greenway or lower traffic corridor.







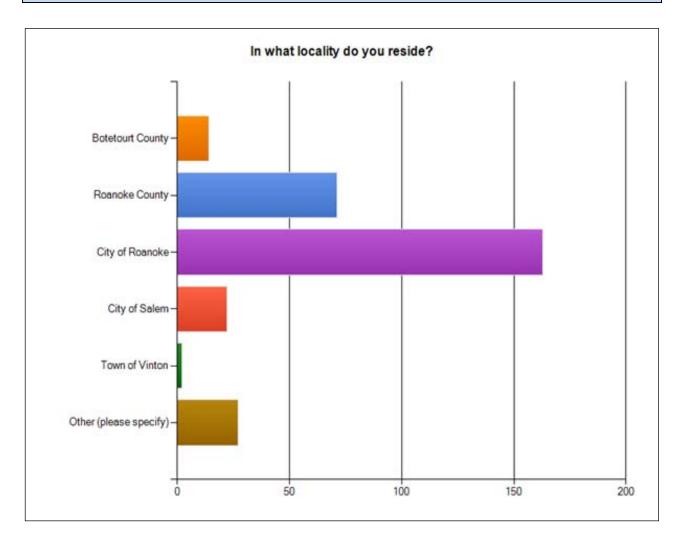
# 5.3 Survey Question Responses

This section provides a summary of responses to the Bicycle User Survey quantitative questions, and associated graphs, charts, and tables. Responses to openended survey questions and all other survey respondent comments are included in Appendix I. Bicycle User Survey responses are available at <u>www.rvarc.org/bike</u>.







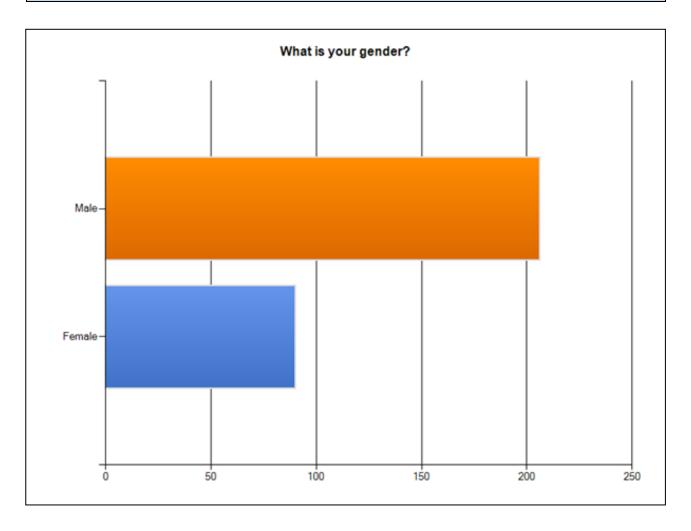


**Question 1:** Respondents were given the option to indicate the locality in which they reside - Botetourt County, Roanoke County, the City of Roanoke, the City of Salem, the Town of Vinton, and Other. The majority of respondents, approximately 160 individuals, identified the City of Roanoke as their home. The second most represented locality was Roanoke County, followed by Other.







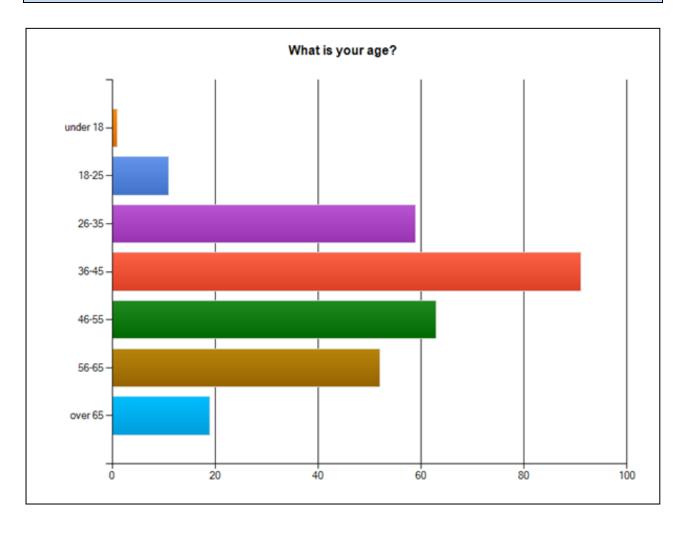


**Question 2:** Respondents were asked to indicate their gender. The majority of the respondents identified their gender as "male", with considerably fewer female respondents. While the male-to-female response ratio is disproportionate compared to the overall demographics in the RVAMPO study area, it may reflect the actual male-to-female ratio in term of the number of cyclists.







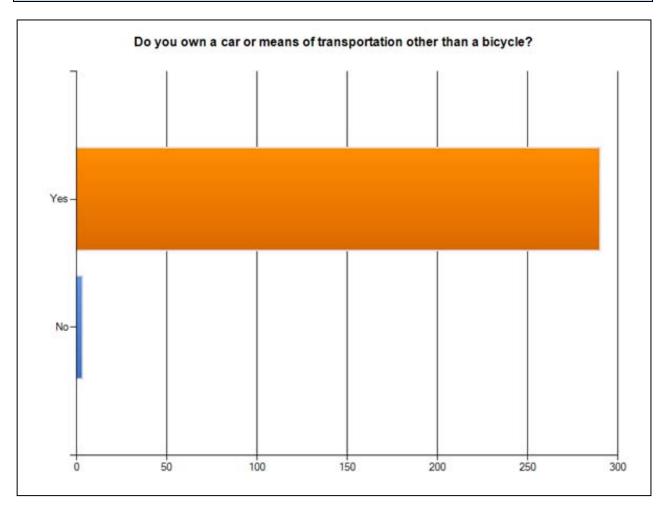


**Question 3:** Respondents were also given the option of indicating their age by selecting one of several age cohorts. The largest respondent age cohort was 36-45, followed by the 46-55 and 26-35 age cohorts, which were roughly equal in number of respondents. However, collectively the 56 and over age cohort represents the second largest number of respondent. Given recent and projected demographic trends, in which the population is aging or "graying" as well as the greater Roanoke area being a retirement destination this age cohort will likely increase in the future as baby boomers progress in age).









**Question 4:** Respondents were asked whether or not they owned a means of transportation other than a bicycle, with nearly all respondents replying "Yes." This response suggests that the use of a bicycle for various activities is very likely "optional" and that a bicycle is likely not the primary mode of transportation for these respondents.







Resident Zip Code	Response Number
24015	72
24018	54
24014	36
24153	28
24019	18
24017	17
24012	14
24016	13
24013	8
24060	5

**Question 5:** Respondents were asked to identify the zip code in which they are residents. The most common zip codes included 24015, 24018, 24014, and 24153.

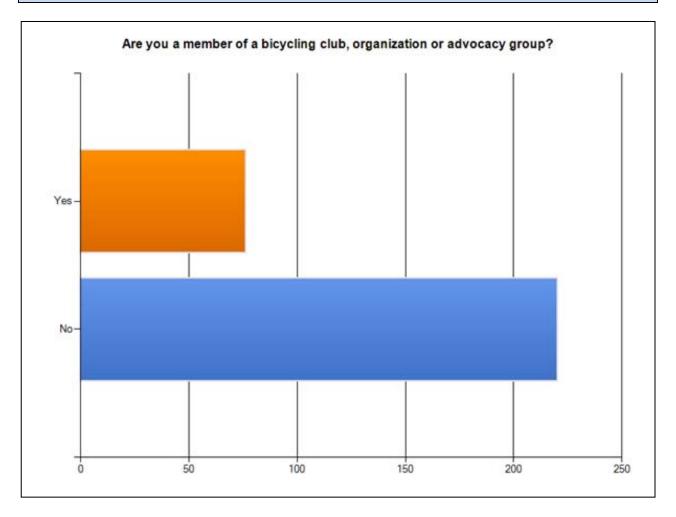
	Response
Work Zip Code	Number
24153	40
24016	33
24011	30
24012	22
24018	22
24014	21
24015	20
24019	20
24017	11
24013	5
24060	4

**Question 6:** Respondents were asked to identify the zip code in which they work. The most common zip codes included 24153, 24016, 24011, 24012, 24018, 24014, 24015, and 24019.





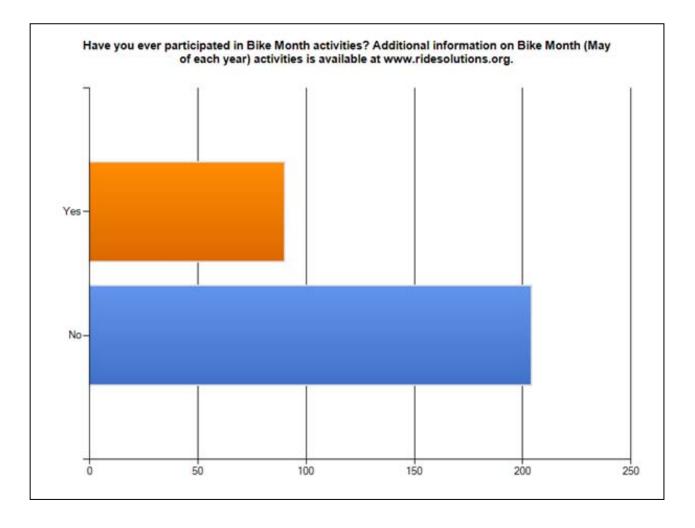




**Question 7:** To determine the respondents' level of participation in "formal" bicycling-related activities they were asked to indicated membership to a bicycling club, organization, or advocacy group. The vast majority of respondents indicated that they were not members of a bicycle club, organization or advocacy group. This may indicate the Bicycle User Survey was completed by a range of stakeholders, beyond those affiliated with a bicycle clubs or organizations which generally have more recreational cyclists. Additionally, the large percentage of "unaffiliated" survey respondents represents a large cohort of stakeholders to engage in the planning process, as well as potential members of area clubs, organizations, or advocacy groups involved in promoting cycling.

For respondents indicating membership in a bicycle-related club, organization, or advocacy groups the most comment entities include the Blue Ridge Bicycle Club, International Mountain Biking Association (IMBA), League of American Bicyclists, Virginia Bicycle Federation, and the Roanoke Cycling Organization.



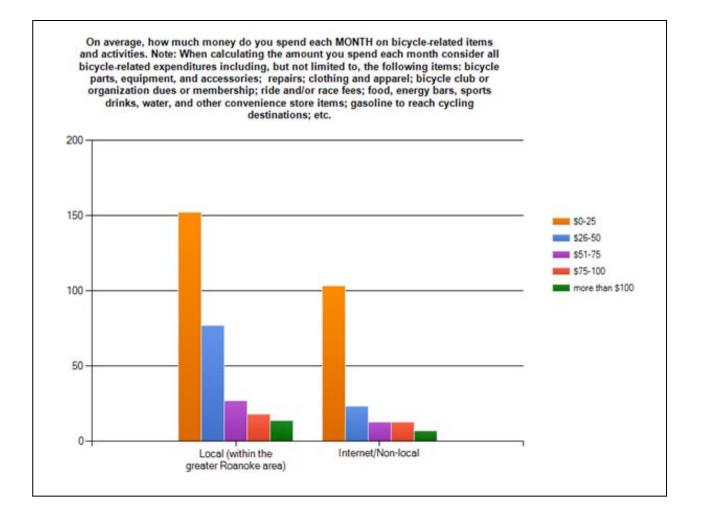


**Question 8:** Most respondents indicated having never participated in official Bike Month activities organized by RIDE Solutions and other stakeholders each year during the month of May. Similar to Question 7, this response indicated that completed by a range of stakeholders beyond what may be considered the typical bicycling community. Additionally, this indicates a potential cohort of cyclists to engage in future Bike Month activities. Additional information on Bike Month is available at RIDE Solutions and BikeRoanoke.com.





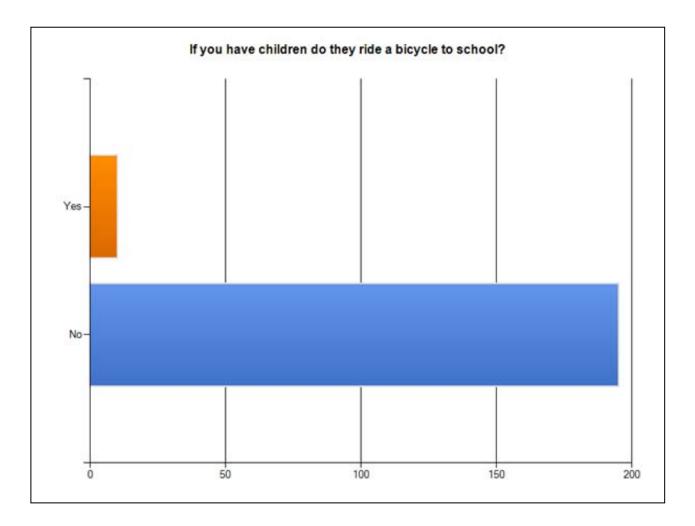




**Question 9:** To determine the investment in bicycle-related items and activities, respondents were asked to identify the amount they spend on such items each month and whether that money is spent locally (within the greater Roanoke area) or elsewhere. Most respondents indicated spending less than \$25 each month on bicycle-related items and activities, be it locally or non-locally/Internet.

When respondents were asked what factors would encourage to increase the amount of money you spend LOCALLY on bicycling-related items the most common responses included: more bicycle accommodations (on-street, greenway, etc.) in the area, which would encourage more cyclists to ride more mile, thus creating the need for more bicycle-related gear and accessories; and make accessing area bicycle shops (and other businesses) easier and safer. Increasing the number of bicycle-related events held in the area; better/more competitive pricing; increased selection (especially gear and accessories) at local bicycle shops were also commonly cited factors.

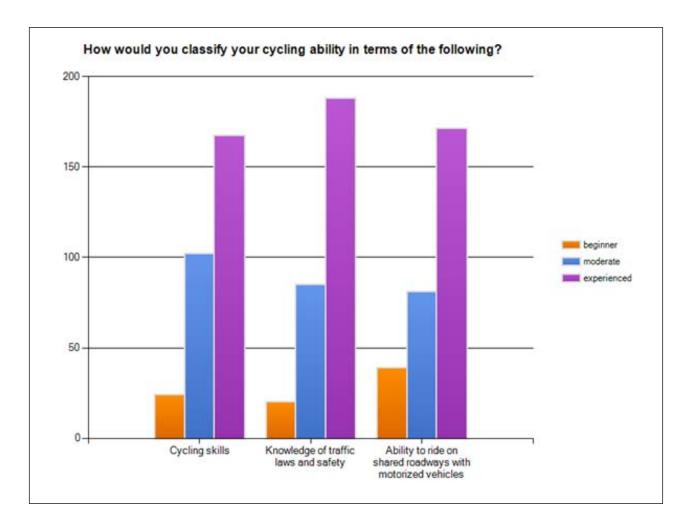




**Question 10:** Overwhelmingly, respondents with children indicated that their child (ren) did not ride a bicycle to school. Responses to this question are consistent with findings from surveys completed a part of area Safe Routes to School (SR2S) programs. Generally, "safety" was cited most often as the most common reason cited for children not riding a bicycle to school. However, respondents identified a range of issues that contributed to the perceived lack of safety. The most common safety issues include motor vehicle traffic/busy streets near schools; persons of questionable character; and lack of bicycle accommodations or safe routes to area schools.

Additionally, several respondents indicated that school policy and/or administration prohibit or discourages students from bicycling to school. Distance to school was also cited as a major impediment. Survey responses, general perceptions, and administrative policies regarding biking to school may significantly influence the success and/or effectiveness of Safe Routes to School Programs with the core goal of encouraging and facilitating biking/walking to school and the associated benefits.



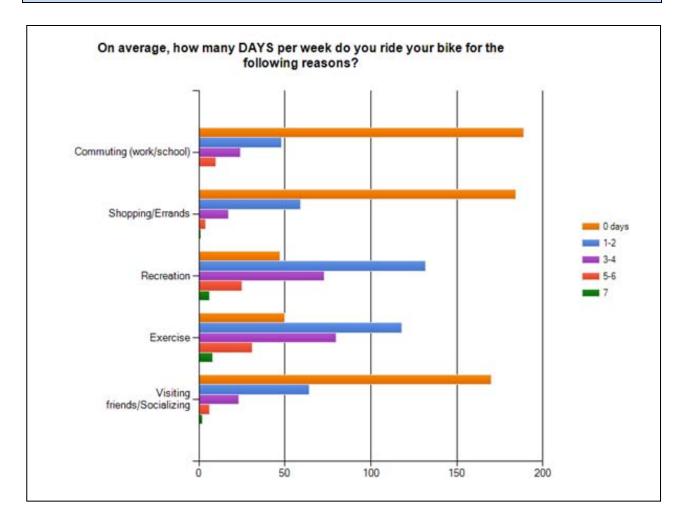


**Question 11:** To gauge the level of experience of the respondents, they were asked to classify their cycling ability as either "beginner," "moderate," or "experienced" in regard cycling skills, knowledge of traffic laws and safety, and ability of ride on shared roadways with motorized vehicles. Most of the respondents classified themselves as "experienced" in each category, with "moderate" being the next most common response.







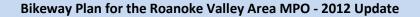


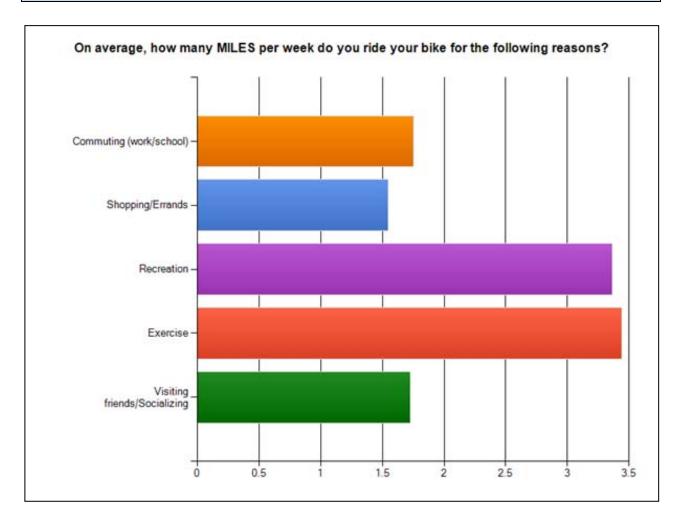
**Question 12:** To better understand cycling habits and characteristics, respondents were asked to indicate how often they use their bicycle for purposes such as commuting, shopping/errands, recreation, exercise, and visiting friends/socializing. Recreation and exercise were the most common activities conducted via bicycle. Additionally, responses indicate that a large number of respondents do not regularly commute, shop or visit/socialize via bicycle.









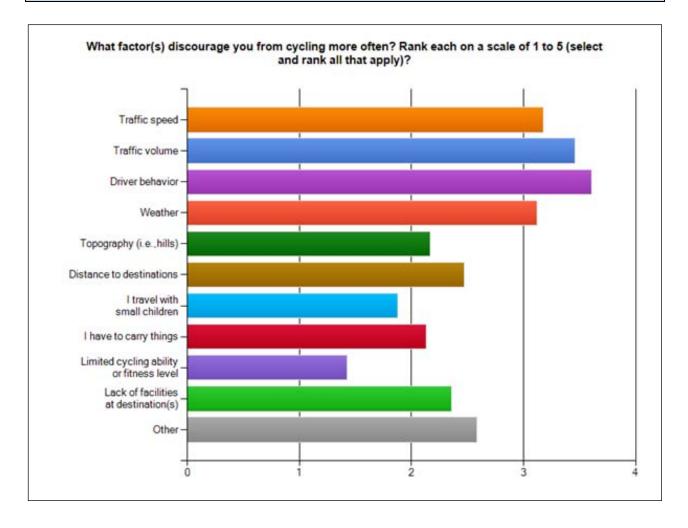


**Question 13:** respondents were asked how many miles they ride their bike for each activity noted in Question 12 - commuting, shopping/errands, recreation, exercise, and visiting friends/socializing. Most bicycle mile traveled (BMT) were for exercise and recreation respectively, followed by commuting, visiting friends/socializing, and shopping/errands. While responses to Question 12 indicate commuting, visiting friends/socializing, and shopping/errands were not commonly cited reasons for bicycle, Question 13 responses indicate that the distance traveled for these reasons (less than 2 miles) is easily within cycling distance.





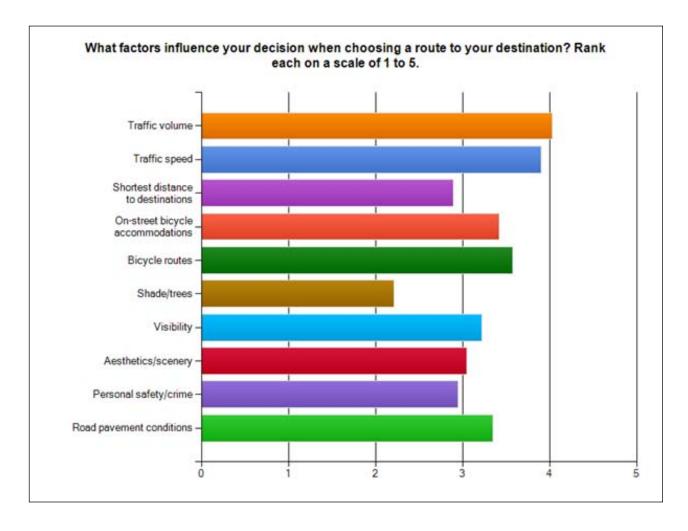




**Question 14:** Respondents were asked to identify which factor(s) discourage them from cycling more often. Respondents ranked each factor on a scale of 1 to 5, with 5 indicated in most prominent factor. The most commonly cited factors include driver behavior, traffic volume, traffic speed, and weather. Factors such as traffic volume and traffic speed can be addressed through development of alternate routes on lower traffic corridors and/or neighborhood streets. However, to be effective and utilized route development should include a combination of signage, pavement markings, and wayfinding and information along the route. Additionally, topographic challenges can also potentially be mitigated through proper route selection.

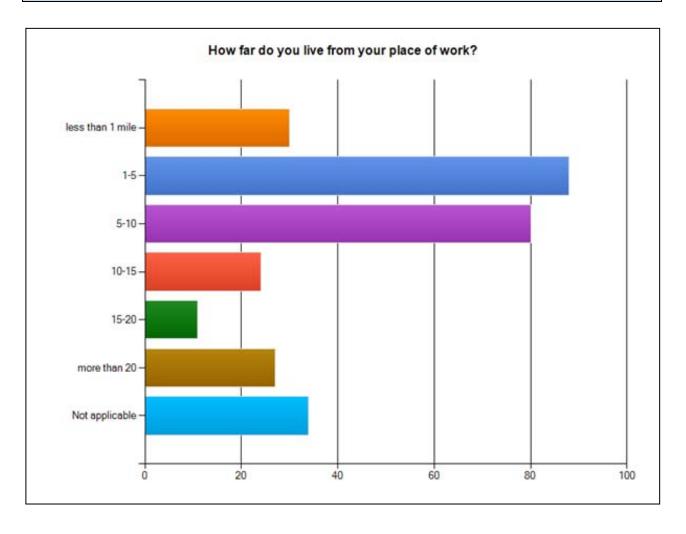






**Question 15:** To better understand why cyclists chose some routes over others to reach their destinations, respondents were asked to identify which factors influenced their decision and rank them on a scale of 1 to 5. As with Question 14, traffic volume and traffic speed were cited as major factors. The presence bicycle routes, on-street accommodations, and road pavement conditions also commonly cited factors. Apart from shade/trees, shortest distance to destination was the least commonly cited factors influencing route selection. This response correlates with responses from Questions 17 in which the vast majority of cyclists indicated willingness to take a longer route in terms of distance in order to avoid traffic and/or access a bicycle accommodation, greenway or lower traffic/neighborhood corridor.



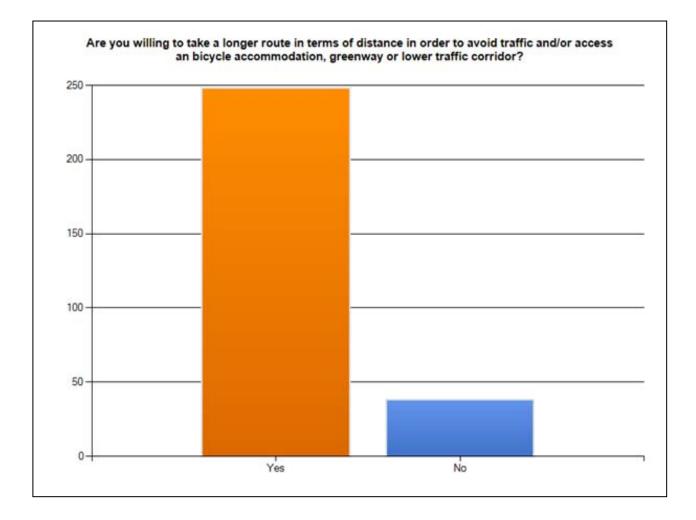


**Questions 16:** Respondents were asked to indicate how far they lived from their place of employment. The majority of respondents indicated living within 1-5 miles from work, a distance that can potentially be easily traveled by bicycle, followed by 5-10 miles. The next most common responses were not applicable, suggesting a number of respondents were retired, less than one mile. A significant number of respondents indicated living more than 10 miles from their place of employment, which is consistent with commuting patterns and indicative of recent development patterns and metropolitan growth (i.e., suburban sprawl).



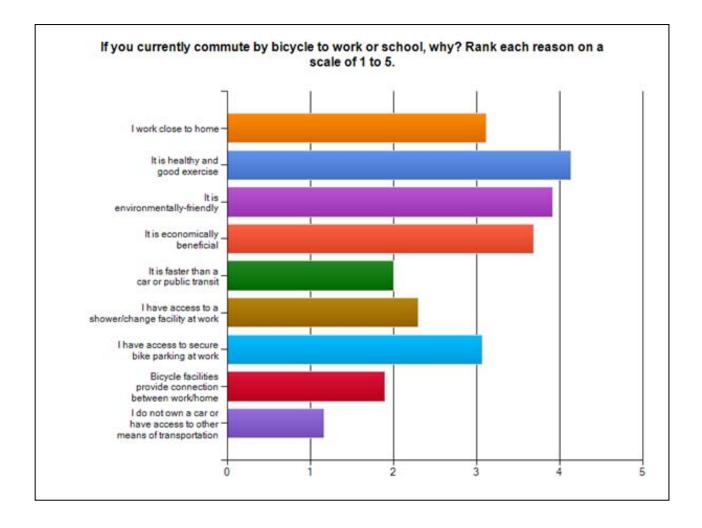






**Question 17:** Overwhelmingly, respondents indicated willingness to take a longer route in terms of distance in order to avoid traffic and/or access a bicycle accommodation, greenway or lower traffic corridors. As previously noted, this response correlates well with responses to Questions 15 in which respondents indicated that "shortest distance to destination" was not a primary factor in route selection. This willingness is important in allowing for flexibility in alternative route development that utilize lower traffic corridors or neighborhood street which may not represent to most direct route or shortest distance to a specific location. Examples include the RIDE Solutions "Bike to Work" routes that, when practicable, avoid major arterial and other high traffic corridors in favor of lower traffic corridors, neighborhood street or existing on-street accommodation. Additionally, the Interactive Bicycle Accommodations Map provides information on all bicycle accommodation in the MPO study area.



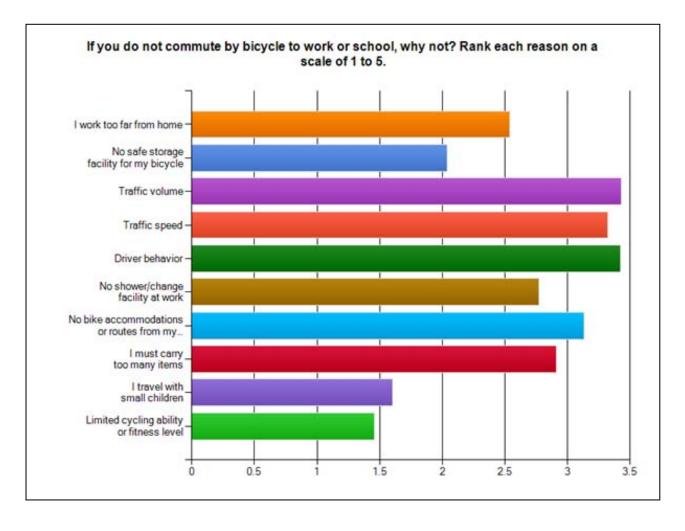


**Question 18:** To understand what factors influence a person's decision to commute by bicycle to work or school, respondents who currently commute by bicycle were asked to rank the reasons for their decision on a scale of 1 to 5. Similar to responses in Question, health/exercise was the most commonly cited reasons for bicycle commuting, followed closely by environmental and economic reasons. Working close to home (i.e., short distance) and access to secure bicycle parking at work were also commonly cited factors impacted current bicycle commuters. Consistent with responses from Question, not owning a car or access to other means of transportation was least important reason why currently bicycle commuters do so.







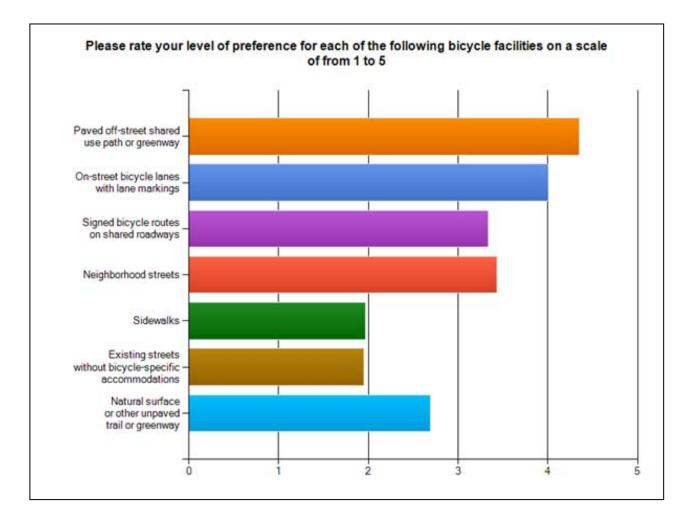


**Question 19:** Respondents who do not currently commute by bicycle were asked to rank the reasons why they do not do so on a scale of 1 to 5. The most common responses included traffic volume, driver behavior, and traffic speed. Other common responses include lack of bicycle accommodations on cyclists route to destination, need to carry many items, and lack of shower/change facilities at work. As previously noted, development of bicycle routes that utilize lower traffic corridors would address traffic volume and traffic speed.







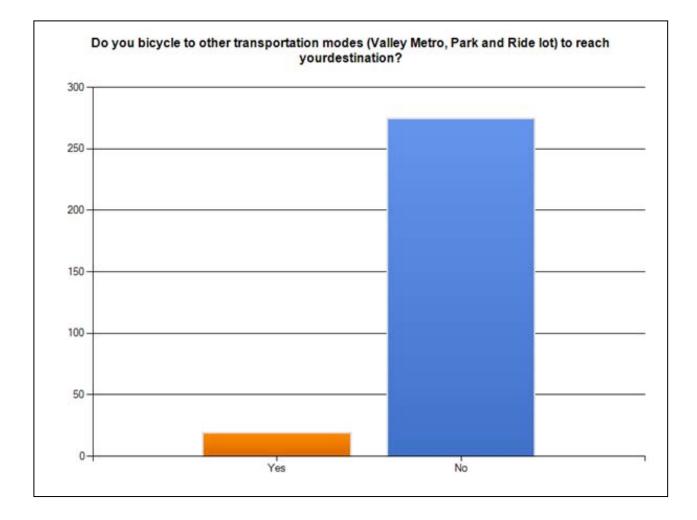


**Question 20:** Respondents ranked bicycle facilities on a scale of 1 to 5 according to preference. The most preferred facility was paved off-street shared use path or greenway, followed by on-street bicycle lanes with lane markings. Additionally, neighborhood streets and signed bicycle routes were also preferred bicycle accommodations. Utilization of neighborhood streets and signed bicycle routes, were practicable, are often cost-effective approaches to better accommodating cyclists in that the lower traffic corridor is the actual "accommodation." Additionally, ancillary accommodation such as signage, wayfinding and pavement markings are much less expensive than roadway reconstruction.







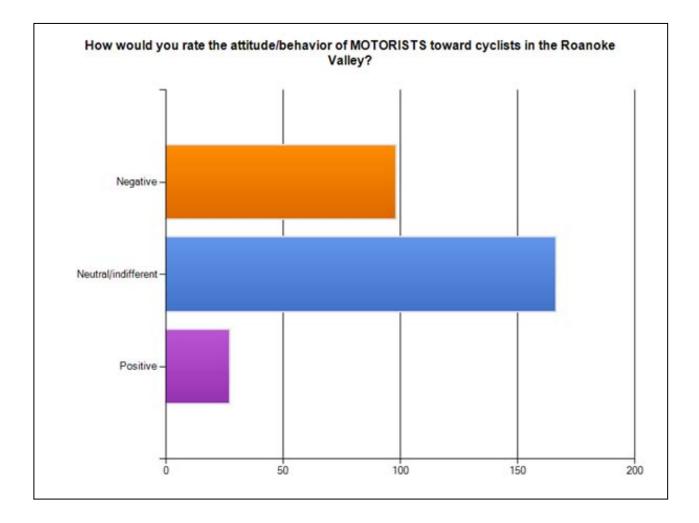


**Question 21.** Very few respondents indicated that they bicycled to access another mode of transportation, such as Valley Metro or a park-and-ride lot. However, multimodalism (i.e., using more than one mode of transportation for a trip) can increase mobility and extend the distance a cyclist can travel. Many Valley Metro buses are equipped with front-mounted racks with a two bicycle capacity. All Smartway Commuter buses are equipped with front-mounted racks with a two-bike capacity, with additional bicycle storage in the underneath compartments.



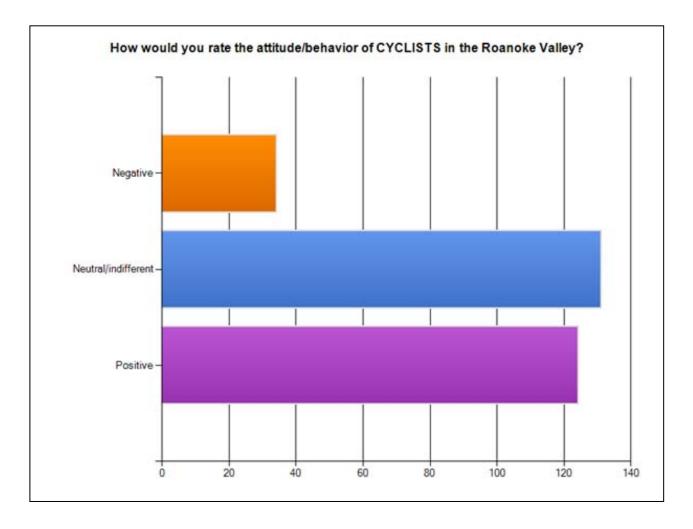






**Question 22:** In rating the attitude/behavior of MOTORIST toward cyclists in the area, neutral/indifferent was by far the most common response. However, a significant percentage of respondents rated driver behavior as negative. A relatively small number of respondents rated motorist attitude/behavior as positive. Beyond engineering approaches, increased public outreach, motorist (and cyclist) education, and other strategies can effectively address driver attitude/behavior, as well as cyclists' perception of motorists' intentions. Additionally, as an increased number of cyclists begin using the transportation network (i.e., critical mass) drivers will become more accustomed to interacting will cyclists and sharing the road. Question 22 also provided the opportunity for respondents to provide open ended comments regarding motorist behavior and provide considerable insight into cyclist perception of motorist behavior. All comments received are provided in Appendix I.



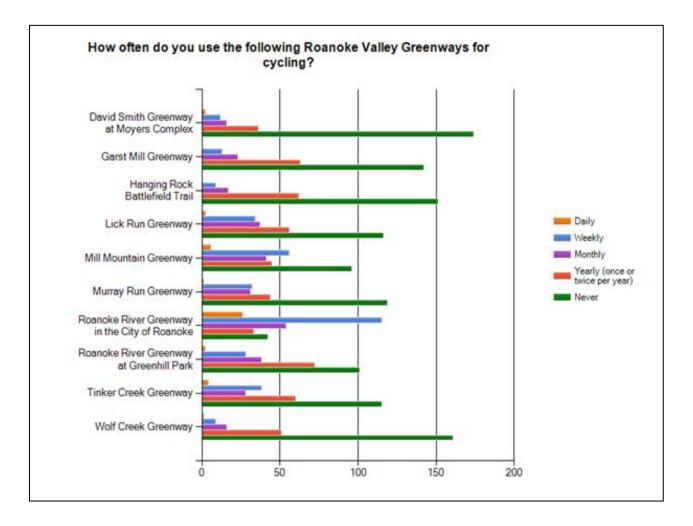


**Question 23:** In rating the attitude/behavior of CYCLISTS in the area, neutral/indifferent was again the common response, followed very closely by positive. In contrast to Question 22, relatively few respondents rated cyclists' behavior as negative. Question 23 also provided the opportunity for respondents to provide open ended comments regarding cyclist attitude/behavior. All comments received are provided in Appendix I.

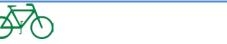






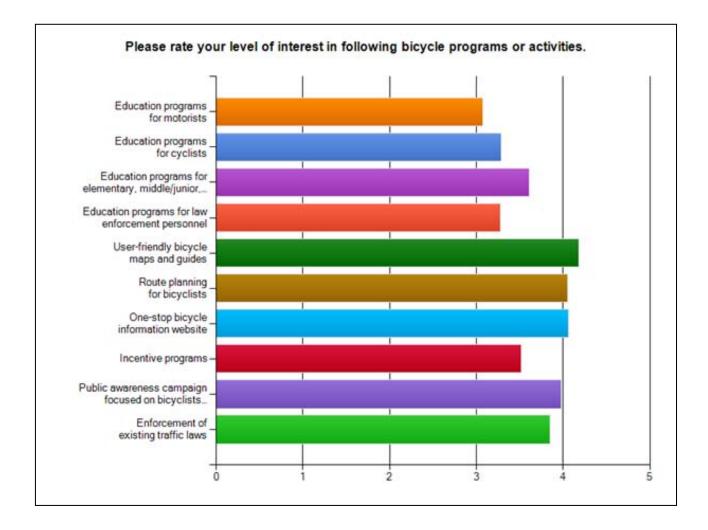


**Question 28:** Respondents were asked to indicate which (and how often) area greenways are used for cycling. The Roanoke River Greenway (City of Roanoke) was most often cycled greenway followed, respectively, by Mill Mountain Greenway, and Tinker Creek Greenway. In terms of how often respondents use area greenways for cycling, never was the most common response for all area greenways, with the exception of the Roanoke River Greenway (City of Roanoke). Question 28 also provided the opportunity for respondents to provide open ended comments regarding the use of greenway for cycling. The most commonly cited reason for not using area greenways for cycling is the lack of interconnection among area greenways. All comments received are provided in Appendix I.





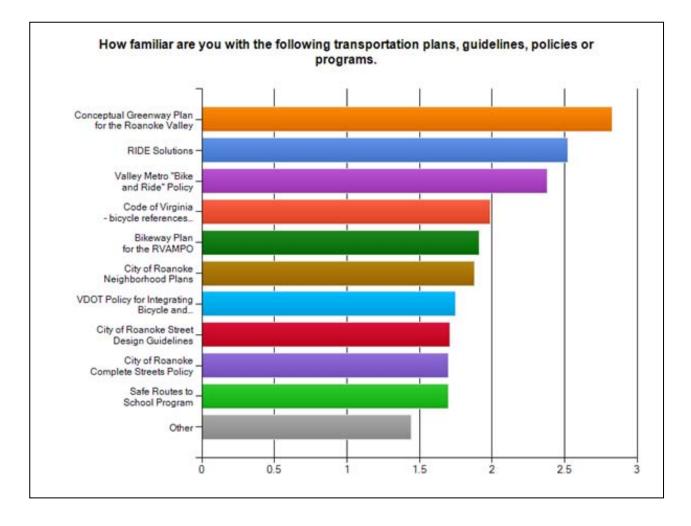




**Question 31**: Respondents were asked to rate their level of interest in a variety of bicycle-related programs and activities. Respondents indicated a high level of interest in all programs with the top responses user-friendly bicycle maps and guides; one-stop bicycle information website; route planning for bicyclists; and public awareness campaign(s) were the highest rates, respectively. Enforcement of existing traffic laws was also highly rated. Interestingly, although driver behavior was consistently cited as a major impediment to cycling, education programs for motorists ranked lowest in terms of level of interest among all listed programs.

In general, the referenced programs and activities are relatively inexpensive approaches to improving cycling conditions in the area. Additionally, many references resources are already available or in development. Existing bicycling resources are discussed in Sections 2 and 3 of this document.





**Question 32:** The most recognized bicycle-related "planning" resource is the Conceptual Greenway Plan for the Roanoke Valley, followed by RIDE Solutions, and Valley Metro's "Bike and Ride" policy. Sections 2 and 3 of this document provides an overview of many of the plans, guidelines, policies, and programs that guide and facilitate development of a regional transportation network that accommodates and encourages bicycling as an alternative mode of travel.







Appendix A

VDOT Virginia Roadway Functional Classification Definitions and Maps







# **VDOT Roadway Functional Classification Definitions**

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. The Virginia Department of Transportation's (VDOT) Transportation and Mobility Planning Division (TMPD) is responsible for maintaining the Commonwealth's official Federal Functional Classification System.

# **Geographic Areas**

Urbanized - Areas designated by the Census Bureau having a population of 50,000 or more

**Small Urban** - Areas designated by the Census Bureau having a population of 5,000 or more and not part of an urbanized area, also referred to as urban clusters on the maps

Rural - All areas not designated urbanized or small urban

# **Rural Functional Classification System**

# Rural principal arterial

- Serves corridor movements of substantial statewide or interstate travel
- Serves all urban areas of 50,000 and over population and a majority of those over 25,000
- Provide an integrated network without stub connections

### Rural minor arterial

- Link cities and large towns (and other generators, such as major resorts)
- Spaced at such intervals so that all developed areas of the state are within a reasonable distance of an arterial highway
- Provide service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems
- Design should be expected to provide for relatively high overall speeds, with minimum interference to through movement

### Rural major collector

• Provide service to any county seat not on an arterial system, to larger towns not directly served by higher systems







- Link the above to nearby larger towns or routes of higher classification
- Serve the more important intra-county travel corridors

# Rural minor collector

- Spaced at intervals, consistent with population density
- Collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road
- Provide service to the remaining smaller communities
- Link local traffic generators with their rural hinterland

# Rural local

- Serves primarily to provide direct access to adjacent land
- Provide service to travel over relatively short distances as compared to collectors or other higher systems
- All facilities not on one of the higher systems

### **Urban Functional Classification System**

### Urban principal arterial

- Serves the major centers of activity of a metropolitan area
- Highest traffic volume corridors
- Roads serving the longest trip desires
- Carry a high proportion of the total urban area travel on a minimum of mileage
- Carry significant amounts of intra-area travel

### Urban minor arterial

- Interconnect with and augment the urban principal arterial system and provide service to trips of moderate length at a lower level of travel mobility than principal arterials
- Include all arterials not classified as a principal and contains facilities that place more emphasis on land access, and offer a lower level of traffic mobility







# Urban collector

- Provides land access and traffic circulation within residential neighborhoods, commercial, and industrial areas
- Distributes trips from the arterials through these areas to their ultimate destination
- Collects traffic from local streets and channels it to the arterial system

# Urban local

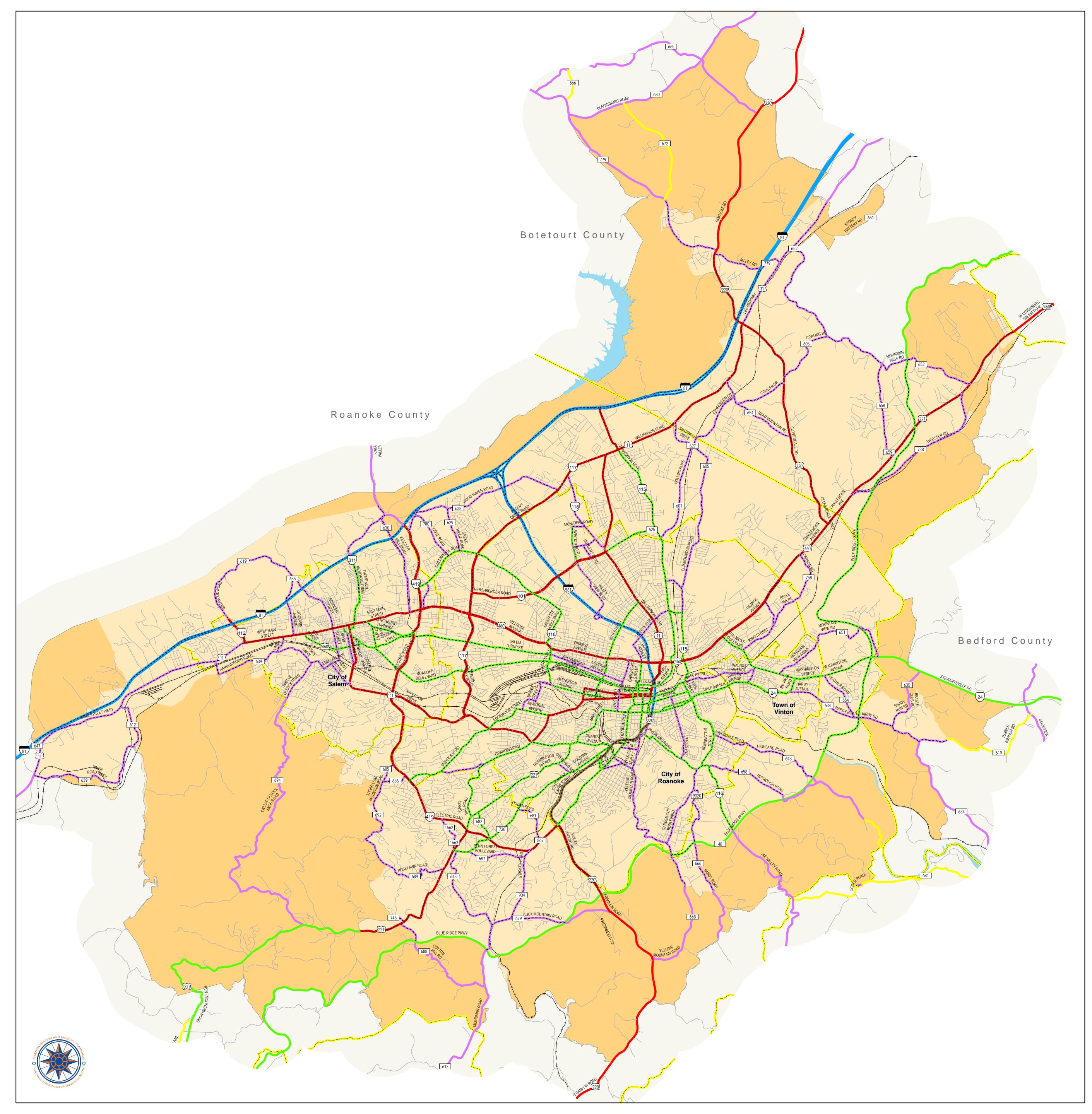
- All facilities not on one of the higher systems
- Serves primarily as direct access to abutting land
- Serves as access to the higher order systems
- Through traffic movement is deliberately discouraged

Source: <u>http://www.virginiadot.org/projects/fxn\_class/definitions.asp</u>







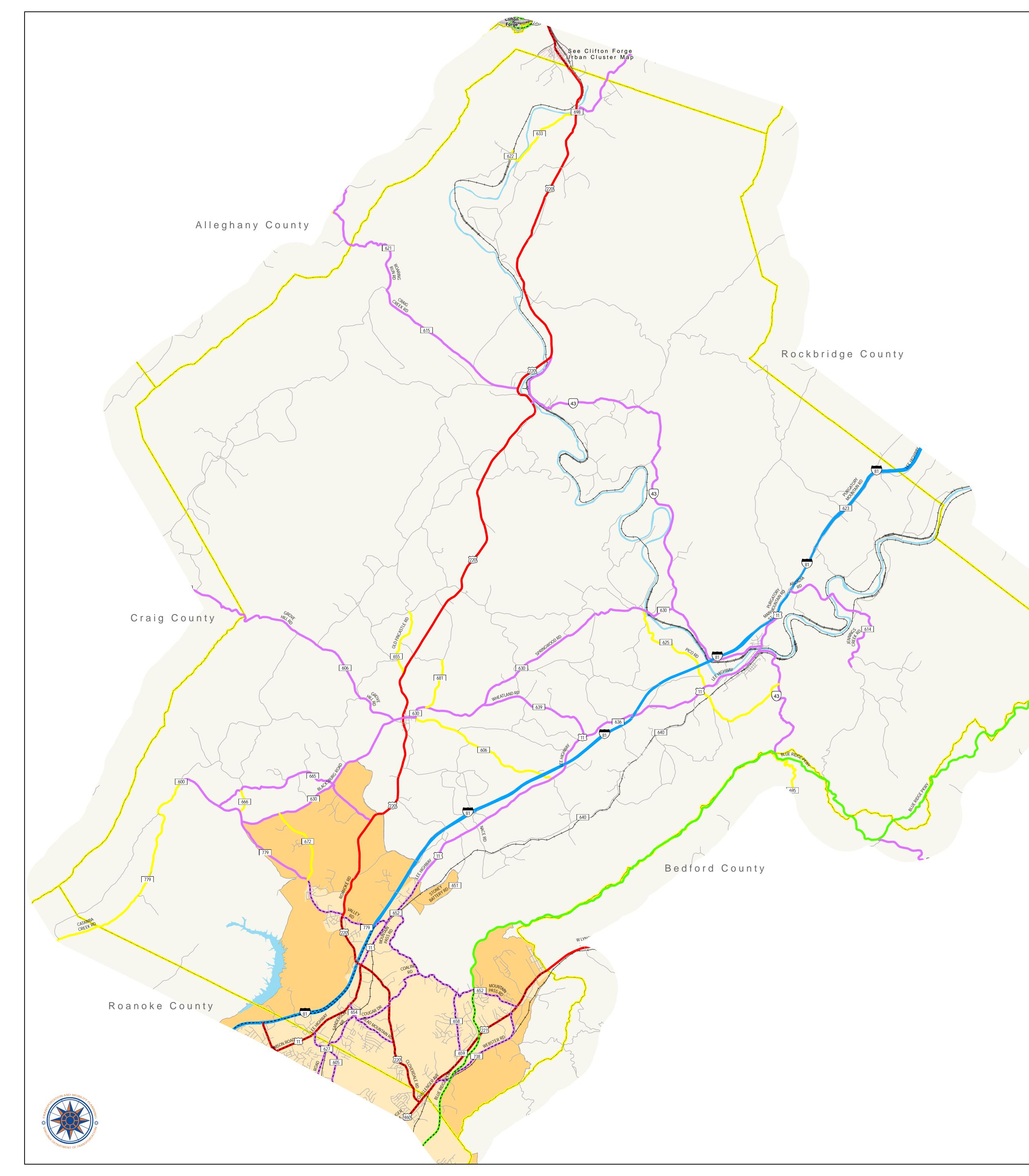


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5	Major Water	Feature

Raonoke-Valley MPO

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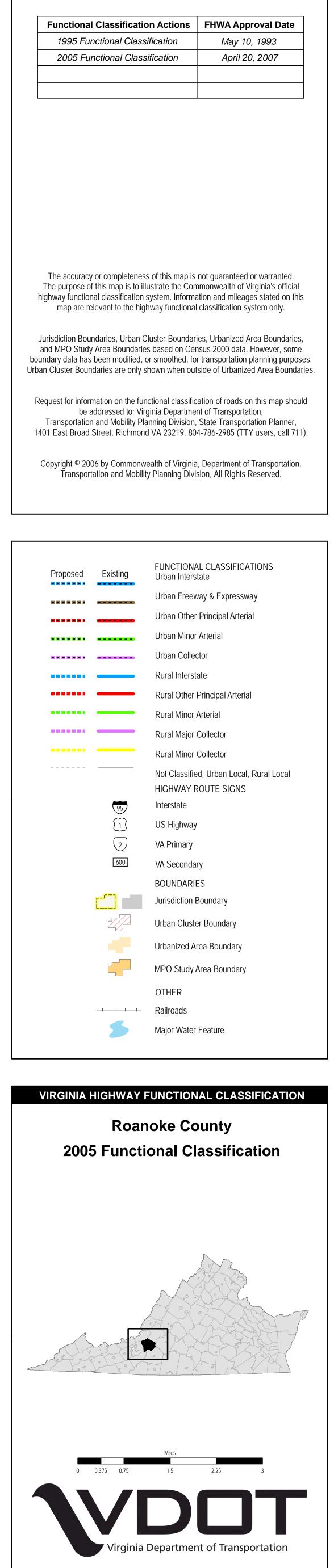
Virginia Department of Transportation

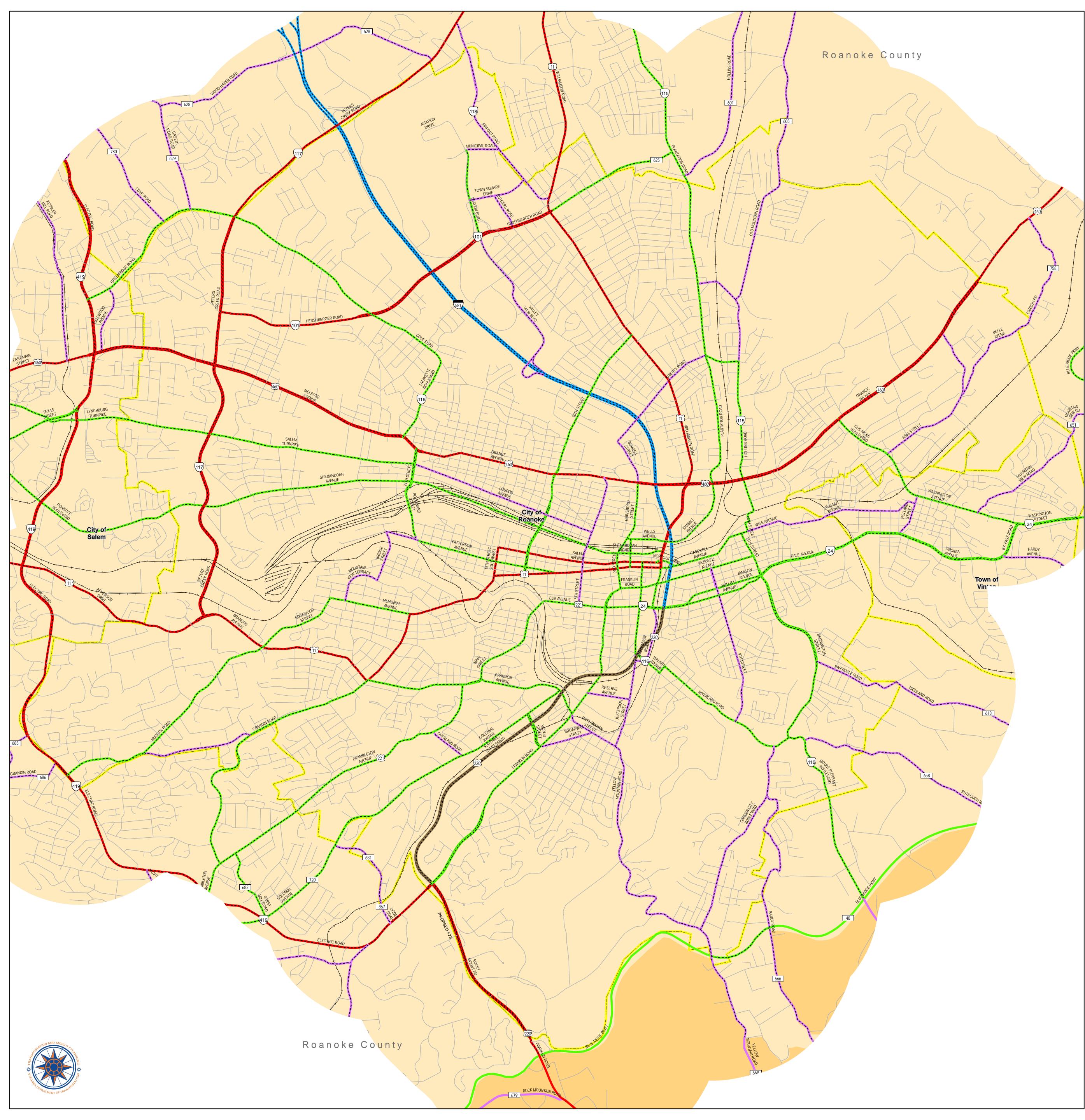


Functiona	I Classification	on Actions	FHWA Approval Date
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2005 Fu	nctional Class	sification	March 20, 2007
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highway function	nal classification	system. Informa	ation and mileages stated on this classification system only.
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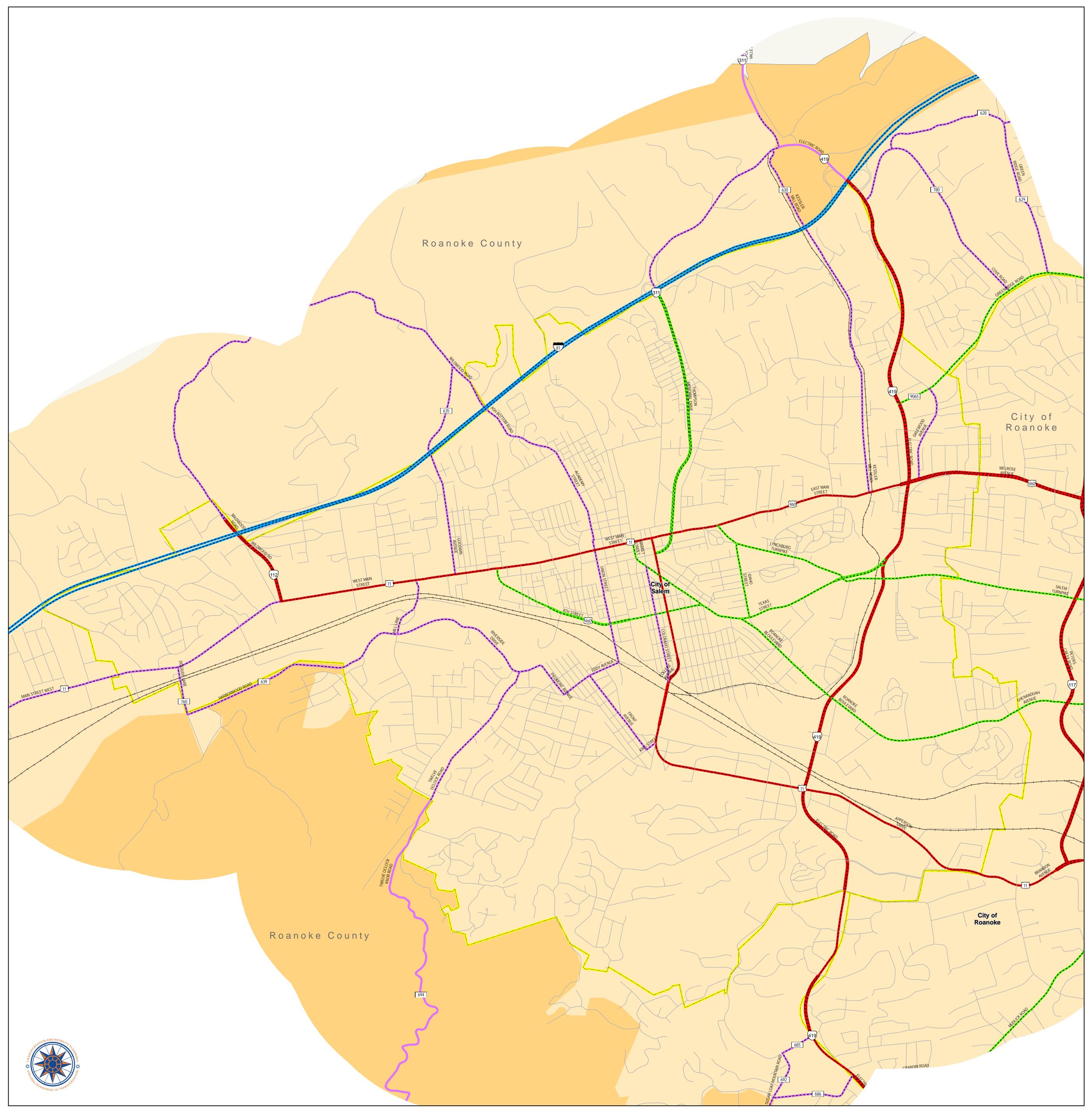




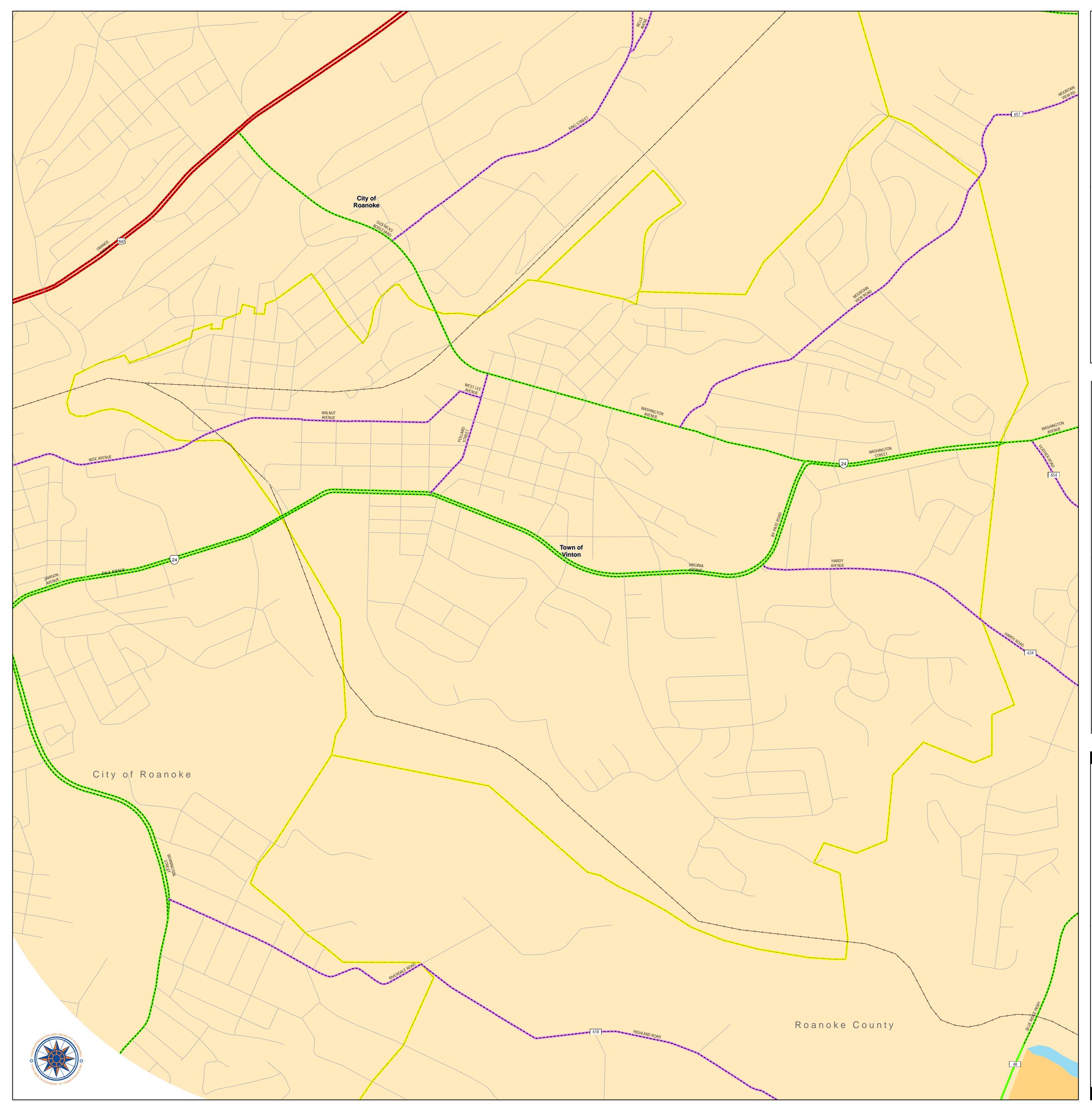
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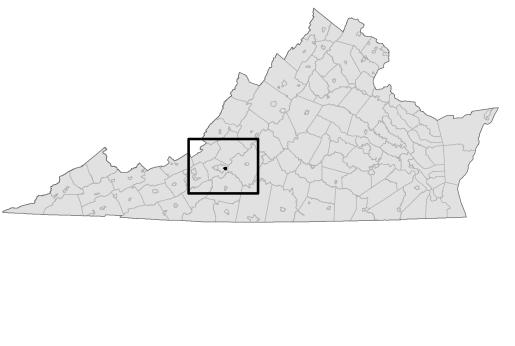
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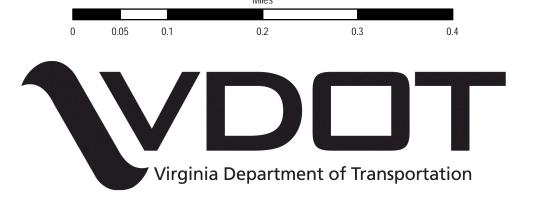


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Appendix B

Virginia Department of Transportation Policy for Integrating Bicycle and Pedestrian Accommodations







# Virginia Department of Transportation Policy for Integrating Bicycle and Pedestrian Accommodations

#### 1. Introduction

Bicycling and walking are fundamental travel modes and integral components of an efficient transportation network. Appropriate bicycle and pedestrian accommodations provide the public, including the disabled community, with access to the transportation network; connectivity with other modes of transportation; and independent mobility regardless of age, physical constraints, or income. Effective bicycle and pedestrian accommodations enhance the quality of life and health, strengthen communities, increase safety for all highway users, reduce congestion, and can benefit the environment. Bicycling and walking are successfully accommodated when travel by these modes is efficient, safe, and comfortable for the public. A strategic approach will consistently incorporate the consideration and provision of bicycling and walking accommodations into the decision- making process for Virginia's transportation network.

#### 2. Purpose

This policy provides the framework through which the Virginia Department of Transportation will accommodate bicyclists and pedestrians, including pedestrians with disabilities, along with motorized transportation modes in the planning, funding, design, construction, operation, and maintenance of Virginia's transportation network to achieve a safe, effective, and balanced multimodal transportation system.

For the purposes of this policy, an accommodation is defined as any facility, design feature, operational change, or maintenance activity that improves the environment in which bicyclists and pedestrians travel. Examples of such accommodations include the provision of bike lanes, sidewalks, and signs; the installation of curb extensions for traffic calming; and the addition of paved shoulders.

#### 3. Project Development

The Virginia Department of Transportation (VDOT) will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking. Factors that support the need to provide bicycle and pedestrian accommodations include, but are not limited to, the following:

- project is identified in an adopted transportation or related plan
- project accommodates existing and future bicycle and pedestrian use
- project improves or maintains safety for all users
- project provides a connection to public transportation services and facilities







- project serves areas or population groups with limited transportation options
- project provides a connection to bicycling and walking trip generators such as employment, education, retail, recreation, and residential centers and public facilities
- project is identified in a Safe Routes to School program or provides a connection to a school
- project provides a regional connection or is of regional or state significance
- project provides a link to other bicycle and pedestrian accommodations
- project provides a connection to traverse natural or man- made barriers
- project provides a tourism or economic development opportunity

Project development for bicycle and pedestrian accommodations will follow VDOT's project programming and scheduling process and concurrent engineering process. VDOT will encourage the participation of localities in concurrent engineering activities that guide the project development.

#### 3.1 Accommodations Built as Independent Construction Projects

Bicycle and pedestrian accommodations can be developed through projects that are independent of highway construction, either within the highway right-of-way or on an independent right-of-way. Independent construction projects can be utilized to retrofit accommodations along existing roadways, improve existing accommodations to better serve users, and install facilities to provide continuity and accessibility within the bicycle and pedestrian network. These projects will follow the same procedures as those for other construction projects for planning, funding, design, and construction. Localities and metropolitan planning organizations will be instrumental in identifying and prioritizing these independent construction projects.

#### **3.2 Access-Controlled Corridors**

Access-controlled corridors can create barriers to bicycle and pedestrian travel. Bicycling and walking may be accommodated within or adjacent to access-controlled corridors through the provision of facilities on parallel roadways or physically separated parallel facilities within the right-of-way. Crossings of such corridors must be provided to establish or maintain connectivity of bicycle and pedestrian accommodations.

#### **3.3 Additional Improvement Opportunities**







Bicycle and pedestrian accommodations will be considered in other types of projects. Non-construction activities can be used to improve accommodations for bicycling and walking. In addition, any project that affects or could affect the usability of an existing bicycle or pedestrian accommodation within the highway system must be consistent with state and federal laws.

### **3.3.1 Operation and Maintenance Activities**

Bicycling and walking should be considered in operational improvements, including hazard elimination projects and signal installation. Independent operational improvements for bicycling and walking, such as the installation of pedestrian signals, should be coordinated with local transportation and safety offices. The maintenance program will consider bicycling and walking so that completed activities will not hinder the movement of those choosing to use these travel modes. The maintenance program may produce facility changes that will enhance the environment for bicycling and walking, such as the addition of paved shoulders.

### 3.3.2 Long Distance Bicycle Routes

Long distance bicycle routes facilitate travel for bicyclists through the use of shared lanes, bike lanes, and shared use paths, as well as signage. All projects along a long distance route meeting the criteria for an American Association of State Highway and Transportation Officials (AASHTO) or *Manual on Uniform Traffic Control Devices* (MUTCD) approved numbered bicycle route system should provide the necessary design features to facilitate bicycle travel. Independent construction projects and other activities can be utilized to make improvements for existing numbered bicycle routes. Consideration should be given to facilitating the development of other types of long distance routes.

#### 3.3.3 Tourism and Economic Development

Bicycling and walking accommodations can serve as unique transportation links between historic, cultural, scenic, and recreational sites, providing support to tourism activities and resulting economic development. Projects along existing or planned tourism and recreation corridors should include bicycle and pedestrian accommodations. In addition, the development of independent projects to serve this type of tourism and economic development function should be considered and coordinated with economic development organizations at local, regional, and state levels, as well as with other related agencies. Projects must also address the need to provide safety and connectivity for existing and planned recreational trails, such as the Appalachian Trail, that intersect with the state's highway system.

# **3.4 Exceptions to the Provision of Accommodations**

Bicycle and pedestrian accommodations should be provided except where one or more of the following conditions exist:







- scarcity of population, travel, and attractors, both existing and future, indicate an absence of need for such accommodations
- environmental or social impacts outweigh the need for these accommodations
- safety would be compromised total cost of bicycle and pedestrian accommodations to the appropriate system (i.e.,
- interstate, primary, secondary, or urban system) would be excessively disproportionate to the need for the facility
- purpose and scope of the specific project do not facilitate the provision of such accommodations (e.g., projects for the Rural Rustic Road Program)
- bicycle and pedestrian travel is prohibited by state or federal laws

#### **3.5 Decision Process**

The project manager and local representatives will, based on the factors listed previously in this section, develop a recommendation on how and whether to accommodate bicyclists and pedestrians in a construction project prior to the public hearing. The district administrator should confirm this recommendation prior to the public hearing. Public involvement comments will be reviewed and incorporated into project development prior to the preparation of the design approval recommendation. When a locality is not in agreement with VDOT's position on how bicyclists and pedestrians will or will not be accommodated in a construction project, the locality can introduce a formal appeal by means of a resolution adopted by the local governing body. The resolution must be submitted to the district administrator to be reviewed and considered prior to the submission of the design approval recommendation to the chief engineer for program development. Local resolutions must be forwarded to the chief engineer for program development for consideration during the project design approval or to the Commonwealth Transportation Board for consideration during location and design approval, if needed for a project. The resolution and supporting information related to the recommendation must be included in the project documentation.

The decisions made by VDOT and localities for the provision of bicycle and pedestrian travel must be consistent with state and federal laws regarding accommodations and access for bicycling and walking.

#### 4. Discipline Participation in Project Development

VDOT will provide the leadership to implement this policy. Those involved in the planning, funding, design, construction, operation, and maintenance of the state's highways are responsible for affecting the guidance set forth in this policy. VDOT recognizes the need for interdisciplinary coordination to







efficiently develop, operate, and maintain bicycle and pedestrian accommodations. Procedures, guidelines, and best practices will be developed or revised to implement the provisions set forth in this policy. For example, objective criteria will be prepared to guide decisions on the restriction of bicycle and pedestrian use of access-controlled facilities. VDOT will work with localities, regional planning agencies, advisory committees, and other stakeholders to facilitate implementation and will offer training or other resource tools on planning, designing, operating, and maintaining bicycle and pedestrian accommodations.

#### 4.1 Planning

VDOT will promote the inclusion of bicycle and pedestrian accommodations in transportation planning activities at local, regional, and statewide levels. These planning activities include, but are not limited to, corridor studies, small urban studies, regional plans, and the statewide multimodal long-range transportation plan. To carry out this task, VDOT will coordinate with local government agencies, regional planning agencies, and community stakeholder groups. In addition, VDOT will coordinate with the Virginia Department of Rail and Public Transportation (VDRPT) and local and regional transit providers to identify needs for bicycle and pedestrian access to public transportation services and facilities.

#### 4.2 Funding

Highway construction funds can be used to build bicycle and pedestrian accommodations either concurrently with highway construction projects or as independent transportation projects. Both types of bicycle and pedestrian accommodation projects will be funded in the same manner as other highway construction projects for each system (i.e., interstate, primary, secondary, or urban). VDOT's participation in the development and construction of an independent project that is not associated with the interstate, primary, secondary, or urban systems will be determined through a negotiated agreement with the locality or localities involved.

Other state and federal funding sources eligible for the development of bicycle and pedestrian accommodations may be used, following program requirements established for these sources. These sources include, but are not limited to, programs for highway safety, enhancement, air quality, congestion relief, and special access.

VDOT may enter into agreements with localities or other entities in order to pursue alternate funding to develop bicycle and pedestrian accommodations, so long as the agreements are consistent with state and federal laws.

#### 4.3 Design and Construction







VDOT will work with localities to select and design accommodations, taking into consideration community needs, safety, and unique environmental and aesthetic characteristics as they relate to specific projects. The selection of the specific accommodations to be used for a project will be based on the application of appropriate planning, design, and engineering principles. The accommodations will be designed and built, or installed, using guidance from VDOT and AASHTO publications, the MUTCD, and the *Americans with Disabilities Act Accessibility Guidelines (ADAAG)*. Methods for providing flexibility within safe design parameters, such as context sensitive solutions and design, will be considered.

During the preparation of an environmental impact statement (EIS), VDOT will consider the current and anticipated future use of the affected facilities by bicyclists and pedestrians, the potential impacts of the alternatives on bicycle and pedestrian travel, and proposed measures, if any, to avoid or reduce adverse impacts to the use of these facilities by bicyclists and pedestrians.

During project design VDOT will coordinate with VDRPT to address bicyclist and pedestrian access to existing and planned transit connections.

Requests for exceptions to design criteria must be submitted in accordance with VDOT's design exception review process. The approval of exceptions will be decided by the Federal Highway Administration or VDOT's Chief Engineer for Program Development.

VDOT will ensure that accommodations for bicycling and walking are built in accordance with design plans and VDOT's construction standards and specifications.

#### 4.4 Operations

VDOT will consider methods of accommodating bicycling and walking along existing roads through operational changes, such as traffic calming and crosswalk marking, where appropriate and feasible.

VDOT will work with VDRPT and local and regional transit providers to identify the need for ancillary facilities, such as shelters and bike racks on buses that support bicycling and walking to transit connections.

VDOT will enforce the requirements for the continuance of bicycle and pedestrian traffic in work zones, especially in areas at or leading to transit stops, and in facility replacements in accordance with the MUTCD, *VDOT Work Area Protection Manual*, and *VDOT Land Use Permit Manual* when construction, utility, or maintenance work, either by VDOT or other entities, affects bicycle and pedestrian accommodations.

VDOT will continue to research and implement technologies that could be used to improve the safety and mobility of bicyclists and pedestrians in Virginia's transportation network, such as signal detection systems for bicycles and in-pavement crosswalk lights.







#### 4.5 Maintenance

VDOT will maintain bicycle and pedestrian accommodations as necessary to keep the accommodations usable and accessible in accordance with state and federal laws and VDOT's asset management policy. Maintenance of bike lanes and paved shoulders will include repair, replacement, and clearance of debris. As these facilities are an integral part of the pavement structure, snow and ice control will be performed on these facilities.

For sidewalks, shared use paths, and bicycle paths built within department right-of-way, built to department standards, and accepted for maintenance, VDOT will maintain these bicycle and pedestrian accommodations through replacement and repair. VDOT will not provide snow or ice removal for sidewalks and shared use paths. The execution of agreements between VDOT and localities for maintenance of such facilities shall not be precluded under this policy.

#### 5. Effective Date

This policy becomes effect upon its adoption by the Commonwealth Transportation Board on March 18, 2004, and will apply to projects that reach the scoping phase after its adoption.

This policy shall supersede all current department policies and procedures related to bicycle and pedestrian accommodations. VDOT will develop or revise procedures, guidelines, and best practices to support and implement the provisions set forth in this policy, and future departmental policies and procedural documents shall comply with the provisions set forth in this policy.

Source: <a href="http://virginiadot.org/infoservice/resources/Policy">http://virginiadot.org/infoservice/resources/Policy</a> on Integrating BP Accommodations.pdf







Appendix C

VDOT State Bicycle Policy Plan Recommendations Summary Table









# Virginia Department of Transportation State Bicycle Policy Plan



Action	Short (0-3 yr)	Mid (3-5 yr)	Long (5-10 yr)	Ongoing
Action 1.1a: Develop Supplemental Design Policies (Appendix A)	1			
Action 1.2a: Add policy clarification to decision tree process chart	1	2		1
Action 1.2b: Semi-annual review of the policy implementation process				4
Action 1.3a: Consider a new directive allowing narrower lane widths	1			
Action 1.3b: Proactive review of lane widths during projects to provide bike lanes or shoulders				4
Action 1.4a: Value engineering consistently applies the Policy				1
Action 1.5a: Routine upgrades to USBR 1 and 76 during highway projects				4
Action 1.5b: Identify re-alignments and spur routes for USBR 1 and 76	1			
Action 1.5c: Installation of new signs and route map development for long distance bike routes			4	
Action 1.5d: Develop an Adopt-a-Route Program	1			<u></u>
Action 1.6a: Develop list of current roadways where bicycle access is restricted	4			
Action 1.6b: Establish protocol to determine when prohibitions are warranted	1	-		
Action 1.6c: Develop policy to permit shared use paths in limited access rights-of-way		4		
Action 1.7a: Prepare directive to preserve and/or replace existing bicycle accommodations	1			
Action 1.7b: Expand bicycle information in the Maintenance Division Best Practices Manual		1		
Action 1.7c: Establish procedures addressing the routine maintenance of bikeways, per Policy		1		
Action 1.8a: District offices ID locations where shoulders should be repaved				*
Action 1.9a: Update Traffic Calming Guide to include bicycle friendly design provisions		1		
Action 1.10a: Incorporate bicycle facility design guidance in VDOT geometric standards		() ()		4
Action 1.11a: Website updates to ensure all bike/ped policies are in one place		-		1

VDOT

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# Virginia Department of Transportation State Bicycle Policy Plan



Element 2: Provide Staff with Necessa	Element 2: Provide Staff with Necessary Resources			
Action	Short (0-3 yr)	Mid (3-5 yr)	Long (5-10 yr)	Ongoing
Action 2.1a: Establish mission and core responsibilities of the Bike and Pedestrian program (Appendix D)	1			
Action 2.1b: Review/revise responsibilities of District bicycle and pedestrian coordinators	1			
Action 2.1c: Establish communication methods between Central and District office bicycle staff	1			
Action 2.2a: Offer multimodal training to VDOT staff and others				1
Action 2.2b: Expand training opportunities to include webinars	1			
Action 2.3a: Include bicycle responsibilities in job descriptions for new VDOT employees, where appropriate				1
Action 2.4a: Continue to provide guidance on liability issues				1

Action	Short (0-3 yr)	Mid (3-5 yr)	Long (5-10 yr)	Ongoing
Action 3.1a: Maintain a database of adopted local plans that address bicycling			4	
Action 3.1b: Ensure local plans are reviewed during project scoping				*
Action 3.1c: Work with local governments to ensure Policy is applied to locally-administered projects				*
Action 3.2a: Periodic review of the content of the Bicycle and Pedestrian Program website				*
Action 3.2b: Create centralized information area on website that provides easy-to-access guidance		*		
Action 3.3a: Increase communication with VDOT Marketing, Communication, and Public Affairs Offices				4
Action 3.4a: Continue to coordinate with Virginia Tourism Authority and others to promote bicycling				*
Action 3.5a: Continue to involve the Bicycle Advisory Committee in Program activities				1
Action 3.5b: Clarify the scope and responsibilities of the Committee	1			1
Action 3.6a: Collaborate with the Department of Education, particularly on Safe Routes to Schools issues	1			



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Virginia Department of Transportation State Bicycle Policy Plan



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Action	Short (0-3 yr)	Mid (3-5 yr)	Long (5-10 yr)	Ongoing
Action 3.6b: Participate in Road Safety Audits for schools on state- maintained roads			*	
Action 3.6c: Encourage good bicycle access in new school site design		1		
Action 3.7a: Work with colleges and universities to promote bicycling to campus	4			
Action 3.7b: Support the inclusion of a bike/ped transportation course at colleges and universities	1		2	
Action 3.7c: Partner with colleges and universities on training courses	1			
Action 3.8a: Work with parks agencies at the national, state, and local level to build a network of bikeways	_			*
Action 3.9a: Support projects and programs that encourage bike access to transit	4			
Action 3.9b: Play a lead role in improving bike access to transit for smaller transit agencies			4	

Element 4: Measure and Evalue	ate Progress			
Action	Short (0-3 yr)	Mid (3-5 yr)	Long (5-10 yr)	Ongoing
Action 4.1a: Establish benchmarks needed to measure progress toward the goals of this Plan	4			
Action 4.2a: Provide leadership for a long-term bicycle and pedestrian data collection program				*
Action 4.2b: Coordinate with organizations that already collect data to incorporate bicycle data				*
Action 4.2c: Explore potential improvements to the collection and categorization of bicycle crash data	4			

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Appendix D

Regional Bicycle Advisory Committee Representatives







# Roanoke Valley-Alleghany Regional Commission Regional Bicycle Advisory Committee

The Regional Bicycle Advisory Committee (RBAC) is a standing committee organized and hosted by the Roanoke Valley Alleghany Regional Commission. The Regional BAC was established in 2009 following a recommendation from a 2008 Bicycle Friendly Community workshop hosted in Roanoke by the League of American Bicyclist (LAB). The Regional BAC is composed of appointed representatives from local government (cities of Roanoke and Salem, the counties of Botetourt and Roanoke, and the Town of Vinton); the Regional Commission; Roanoke Valley Area MPO, VDOT, Roanoke Valley greenway Commission, RIDE Solutions, Roanoke Regional Partnership, Blue Ridge Bicycle Club, and citizen advocates. The RBAC meets bi-monthly and serves a forum for discussion of bicycle-related topics and to facilitate the provision of bicycle accommodations, information, and resources in the greater Roanoke area. More specifically, the RBAC assists in updating and implementing the *Bikeway Plan for the RVAMPO*, hosts periodic Planners and Engineers Rides, and distributes the annual Regional Bike Awards (Bike Hero and Extraordinary Bicycle Professional). Additional information is available at www.rvarc.org/bike.

Regional Bicycle Advisory Committee Representatives (December 2012)

Liz Belcher - Roanoke Valley Greenways

Lindsay Blankenship - Roanoke County Parks and Recreation Department

Jeff Busby – Botetourt County Planning Department

Tom Carr - City of Roanoke Planning Department

Richard Caywood, Virginia Department of Transportation

Barbara Duerk - Virginia Bicycle Federation

Pete Eshelman - Roanoke Regional Partnership

Andrea Garland – Alta Planning

Dawn Godwin – Blue Ridge Parkway, National Park Service

Michael Gray – Virginia Department of Transportation

David Harrison – Blue Ridge Bicycle Club

Jeremy Holmes – RIDE Solutions

Mark Jamison - City of Roanoke Transportation Department

Jim Lee – Roanoke Valley Greenways

- Hong Liu City of Roanoke Transportation Department
- Ron McCorkle Sharebike.org

Chris Patriarca – Roanoke County Planning Department

James Rosar – Cyclo-Ward Bicycle Repair

Jim Ritchie – Citizen advocate

Shane Sawyer – Roanoke Valley-Alleghany Regional Commission

Benjamin Trip – City of Salem Planning Department

Donnie Underwood – City of Roanoke Parks and Recreation Department







Appendix E

City of Roanoke Complete Streets Policy







# City of Roanoke Complete Streets Policy Adopted March 17, 2008

Complete Streets are streets that safely accommodate street users of all ages and abilities such as pedestrians, bicyclists, transit riders, and motorists. Through this policy, the City of Roanoke intends to ensure that all transportation agencies within the City shall routinely plan, fund, design, construct, operate, and maintain their streets according to the Complete Street principles of the City's "Street Design Guidelines" with the goal of creating an attractive connected multimodal network that balances the needs of all users, except where there are demonstrated exceptional circumstances.

By adopting this policy the City of Roanoke:

- Affirms that Improving Streetscapes to create great streets, a strategic initiative of the City's Comprehensive Plan Vision 2001-2020, will improve both Roanoke's image and its function by providing a safe and attractive environment for street users of all ages and abilities such as pedestrians, bicyclists, transit riders, and motorists;
- Recognizes that the development of pedestrian and bicycle infrastructure supports Vision 2001-2020's strategic initiative Investing in Critical Amenities because it enhances recreational opportunities and well-designed cityscapes, thus promoting active lifestyles;
- Appreciates the positive role that good pedestrian and bicycle facilities play in attracting population growth and sustainable economic development;
- Values the long-term cost savings of developing pedestrian and bicycle infrastructure as they relate to improved public health, improved environmental stewardship, reduced fuel consumption, and the reduced demand for motor vehicle infrastructure.
- Recognizes that Complete Streets may be achieved through single projects or incrementally through a series of smaller improvements or maintenance activities overtime, and that all sources of transportation-related funding be drawn upon to implement Complete Streets.
- Intends to maximize the number of transportation options available within the public right-ofway.

Additionally, Roanoke City Council declares it is the City of Roanoke's policy to:

- 1. Use the Street Design Guidelines to guide the planning, funding, design, construction, operation, and maintenance of new and modified streets in Roanoke while remaining flexible to the unique circumstances of different streets where sound engineering and planning judgment will produce context sensitive designs.
- 2. Incorporate the Street Design Guidelines' principles into all City plans, manuals, rules, regulations and programs as appropriate.
- 3. Keep street pavement widths to the minimum necessary.
- 4. Provide pedestrian accommodation in the form of sidewalks or shared-use pathways on all arterial and collector streets and on local streets in the Downtown, Village Center,
- 5. Traditional Neighborhood, Suburban Neighborhood, Local Commercial, Regional Commercial, and Industrial character districts.







- 6. Provide bicycle accommodation along all arterial and collector streets. Bicycle accommodation on local streets should be provided within the travel lanes shared with motor vehicles and no additional markings, signage, or pavement should be provided unless a designated bicycle route requires the use of a local street. Where physical conditions warrant, plant trees whenever a street is newly constructed, reconstructed, or relocated.
- 7. The Director of Public Works, Director of Parks and Recreation and the Director of Planning, Building and Development will present a written explanation to the City Manager for approval when policies 3-6 above are not reasonable or feasible per the following exceptional circumstances:
  - a. Public safety would be compromised
  - b. Severe topographic constraints exist
  - c. Environmental or social impacts outweigh the need for these accommodations
  - d. The purpose and scope of the project does not facilitate provision of such accommodation
  - e. The total cost of constructing and/or maintaining the accommodation, including potential right-of-way acquisition, would be excessively disproportionate to the need for the facility
  - f. A public consensus determines the accommodation is unwanted

In support of this Complete Streets Policy, the City of Roanoke will:

- Update all necessary and appropriate codes, standards and ordinances to ensure that design components for all new or modified streets follow the intent of the Street Design Guidelines.
- Update the process of evaluating requests for new curb and/or pedestrian accommodations.
- Identify all current and potential future sources of funding for street improvements
- Continue inter-departmental project coordination among city departments with an interest in the activities that occur within the public right-of-way in order to better use fiscal resources.
- Train pertinent staff in the engineering, parks and recreation, planning, and transportation departments on the content of the Street Design Guidelines
- Use the following process when planning improvements within the public right-of-way
  - a. Identify the street type according to Roanoke's street hierarchy
  - b. Identify the current and future character district(s) that pertain to the project
  - c. Identify the most appropriate street typical section according to the street type and character district
  - d. Identify any general elements that may apply to the work
- Measure the success of this complete streets policy using the following performance measures:
  - a. Total miles of on-street bicycle routes defined by streets with clearly marked or signed bicycle accommodation
  - b. Linear feet of new pedestrian accommodation
  - c. Number of new curb ramps installed along city streets
  - d. Number of new street trees planted along city streets
- Update the Street Design Guidelines as needed







# Appendix F

Roanoke County Code of Ordinances Appendix A - Zoning Ordinance Article 5 - Development Standards Sec. 30-91-Bicycle Parking Standards







#### Sec. 30-91-Bicycle Parking Standards

- A. In lots with greater than fifty (50) spaces, a minimum of one (1) bicycle parking space shall be provided on-site for each twenty (20) off-street automobile parking spaces.
- B. Bicycle parking spaces shall have minimum dimensions of six (6) feet in length and two (2) feet in width.
- C. Fractional space computation: when the computation of the number of bicycle parking spaces results in a fractional requirement, any fraction less than one-half shall be disregarded and any fraction equaling or exceeding one-half shall be construed as requiring one full parking space.
- D. When bicycle parking is required, there shall be a minimum of two (2) spaces provided but not more than twenty (20) bicycle spaces will be required at a single site.
- E. For every four (4) bicycle parking space provided above the minimum requirement, the number of impervious vehicular parking spaces required by Section 30-91-3-3 may be reduced by one (1). The number of impervious vehicular parking spaces shall not be reduced by an amount exceeding five (5) percent.
- F. If the vehicular parking area is lighted, the required bicycle parking shall also be lighted.
- G. Bicycle parking shall be located within fifty (50) feet of an entrance to the building or within a building if the location is easily accessible for bicycles and shall comply with the design standards set forth in Roanoke County's Design Handbook.
- H. Bicycle parking shall be accessed by an aisle that is a minimum of five (5) feet wide.
- I. Areas set aside for required bicycle parking shall be clearly marked and reserved for bicycle parking only.
- J. Bicycle racks shall be provided for all bicycle parking areas and shall hold bicycles securely by the frame and be securely anchored to the ground or to the building structure to prevent the racks from being removed from the location. See the Roanoke County Design Handbook for bicycle rack recommendations.
- K. The Zoning Administrator may grant exemptions to bicycle parking requirements in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.







Appendix G

League of American Bicyclist 2008 Bicycle Friendly Community Workshop Action Items







# League of American Bicyclist 2008 Bicycle Friendly Community Workshop Action Items

- Roanoke Valley-Alleghany Regional Commission establishing a Bicycle Committee
- Each local jurisdiction establishing a Bicycle Advisory Committee
- Each local jurisdiction adopting the *Bikeway Plan for the Roanoke Valley Area MPO* Encouraging local interest groups to include non-motorized transit issues in
- their platform
- Hosting a candidate forum
- Creating an awards program to recognize government officials or agencies that are instrumental in improving conditions for cycling
- Organizing a community bike ride series
- Organizing a "big ride" with a large number of participants including elected officials
- Notifying businesses of the availability of free bicycle racks through the Bicycle Rack Donation Program from RIDE Solutions and the Roanoke Valley-Alleghany Regional Commission
- Launching a bike education program this spring
- Airing television public service announcements to educate bicyclists on how to ride safely and motorists on how to share the road Promoting bicycle rodeos, helmet give-away programs, and Safe Routes to Schools projects
- Participating in VDOT and National Park Service public meetings
- Each attendee participating in his or her Neighborhood Plan update process
- Determining outcomes of action plan







Appendix H

Virginia Logos Supplemental Guides Signs Program VDOT Traffic Engineering Division Memorandum TE-150







	<b>TELEPHONE #</b>	CONTRACT #	<b>#</b> (Internal Use Only)
COMPANY/BILLING NAME	TELEPHONE #	BUSINESS W	<b>/EBSITE</b> (If applicable)
CONTACT NAME	TITLE	EMAIL ADDR	ESS
BUSINESS ADDRESS (NO. AND STREET) (CITY	OR TOWN) (STA	TE) (ZIP)	
MAILING/BILLING ADDRESS (IF DIFFERENT)	(CITY OR TOWN)	(STATE)	(ZIP)
Number of Signs Requested: Loc	ation of Signs:		
MINIMUM REQUIRED SE		MENTAL GUIDE	SIGNS
<ul> <li>Located within 15 miles of the initial location of signage</li> <li>Be open to the general public, on a continuous basis, observances of official state holidays are allowed.</li> </ul>	either year-round or during th		
<ul> <li>Comply with all applicable laws concerning the provision origin, or accessibility by the physically handicapped.</li> <li>Agree to abide by all rules, regulations, policies, proce</li> </ul>			, race, religion, color, sex, national
<ul> <li>Agree that in any cases of dispute or other disagreeme program, the decision of the State Traffic Engineer sha</li> </ul>	ent with the rules, regulations		and criteria or applications of the
<ul> <li>Be one or more of the following "Acceptable Sites": <u>tural</u>: Historic Building (1,2); Historic Site (1,2); Historic Distrivernmental: Correctional Facility; Courthouses; Dept. of Gar</li> </ul>		es; Dept. of Motor Vehi	cles Facilities; Government Offices;
ndfills/Transfer Stations; Police/Sheriff Offices or Facilities (1); creational: Boat Landings (Public); Natural Attractions (1); Na nools: High Schools; Middle Schools; Elementary Schools; Ju	; Prisons; Regional Jails; Rec ational Park (1); Municipal Pa	ycling Facilities; rk (1); Regional Park (	1); State Park (1)
itutions (1) t <u>ary (1)</u> : Military Facilities			
scellaneous (1): Arlington National Cemetery; Virginia Veteral	ns Cemetery; Tourist Informa	tion Centers; weicome	e Centers
<ol> <li>Permitted on Interstate &amp; Limited Access Highways</li> <li>If Supplemental Guide Signs are installed for a historic allowed</li> </ol>	district, separate signs for ir	dividual historic sites v	within the historic district shall not be
PLEASE PROVID	E THE FOLLOWING	INFORMATION	
1. Approximate distance from intersection or	interchange (Accurate	measurement will	be done by VL):
2. Does your establishment have a license of		e of Virginia (if re	quired)? Yes No
3. Are Federal funds being used to pay for si			
<ol> <li>Are restroom facilities provided for public u</li> <li>Hours of Operation: Monday</li> </ol>	use : res ino Tuesdav	Wedn	esday
	Saturday	Sund:	iesuay
Thursday Friday			av
<ol> <li>Hours of Operation: Monday</li> <li>Thursday Friday</li> <li>Under which of the above list of "Acceptab</li> </ol>	le Sites" does vour faci	litv/establishment	ay qualify?
<ol> <li>Onder which of the above list of "Acceptab 7. Approximate number of visitors to your fac</li> </ol>	ole Sites" does your faci cility per vear:	lity/establishment	ay qualify?
<ol> <li>Onder which of the above list of "Acceptab</li> <li>Approximate number of visitors to your fac</li> <li>Can your facility/establishment be described</li> </ol>	ble Sites" does your faci sility per year: ed as nonprofit or gove	lity/establishment rnmental? Yes	ay qualify?  No
<ol> <li>Onder which of the above list of "Acceptab 7. Approximate number of visitors to your fac</li> <li>8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur</li> <li>9. If applicable, please provide your seasona</li> </ol>	ile Sites" does your fact ility per year: ed as nonprofit or gove nber:	lity/establishment rnmental? Yes ates:	qualify?
<ol> <li>Onder which of the above list of "Acceptab 7. Approximate number of visitors to your fac 8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur 9. If applicable, please provide your seasona Opening Date:</li> <li>10. Do you currently have Supplemental Guide If YES, please provide the location(s) of your opening</li> </ol>	ile Sites" does your fact sility per year: ed as nonprofit or gove nber: l opening and closing d Closing I e Signs for your establis current signs:	lity/establishment rnmental? Yes ates: Date: shment? Yes	qualify? - No - No
<ol> <li>Onder which of the above list of "Acceptab 7. Approximate number of visitors to your fac 8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur 9. If applicable, please provide your seasona Opening Date:</li></ol>	ole Sites" does your fact sility per year: ed as nonprofit or gove mber: I opening and closing of Closing I e Signs for your establis current signs: ertifies that it will remain in to the premises and furthe mational origin. Unless other	lity/establishment rnmental? Yes ates: Date: Shment? Yes	qualify?         No         No         pplicable laws and regulations for e premises to the general public rements of the State Criteria shall
<ul> <li>6. Under which of the above list of "Acceptab 7. Approximate number of visitors to your fac 8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur 9. If applicable, please provide your seasona Opening Date:</li> <li>10. Do you currently have Supplemental Guide If YES, please provide the location(s) of your of NOTE: At all times material hereto, Applicant hereby or providing for accessibility by the physically handicapped without regard to race, creed, color, religion, age, sex, or be satisfied entirely on the premises of the business estat the premises on the business establishment.</li> </ul>	ole Sites" does your fact sility per year: ed as nonprofit or gove mber: I opening and closing d Closing I e Signs for your establis current signs: ertifies that it will remain in to the premises and furthe mational origin. Unless other blishment and any facilities r	lity/establishment rnmental? Yes ates: Date: Shment? Yes compliance with all ap r agrees to provide th rewise noted, all require equired by the State C	qualify?         No         No         pplicable laws and regulations for e premises to the general public rements of the State Criteria shall be located entirely on
<ul> <li>6. Under which of the above list of "Acceptab 7. Approximate number of visitors to your fac 8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur 9. If applicable, please provide your seasona Opening Date:</li> <li>10. Do you currently have Supplemental Guide If YES, please provide the location(s) of your of NOTE: At all times material hereto, Applicant hereby or providing for accessibility by the physically handicapped without regard to race, creed, color, religion, age, sex, or be satisfied entirely on the premises of the business esta</li> </ul>	ole Sites" does your fact cility per year: ed as nonprofit or gove mber: I opening and closing d Closing I e Signs for your establis current signs: ertifies that it will remain in to the premises and furthe inational origin. Unless other blishment and any facilities re- re true and correct and agr o these statements. I un s or inspections to insure to	lity/establishment rnmental? Yes ates: Date: Shment? Yes compliance with all ap r agrees to provide th rrwise noted, all requir equired by the State C ee to promptly inform derstand that eithe hat the minimum rec	qualify?         No         No         pplicable laws and regulations for e premises to the general public rements of the State Criteria shall be located entirely on         m Virginia Logos, in writing, by er the Virginia Department of quirements of the State Criteria
<ul> <li>6. Under which of the above list of "Acceptab 7. Approximate number of visitors to your fac 8. Can your facility/establishment be describe If nonprofit, please provide your tax ID nur 9. If applicable, please provide your seasona Opening Date:</li> <li>10. Do you currently have Supplemental Guide If YES, please provide the location(s) of your of NOTE: At all times material hereto, Applicant hereby or providing for accessibility by the physically handicapped without regard to race, creed, color, religion, age, sex, or be satisfied entirely on the premises of the business estat the premises on the business establishment.</li> <li>I hereby certify that the above statements an certified mail, within 10 days, of any changes to Transportation or Virginia Logos may make inquiries are being met. I further certify that all required licenter</li> </ul>	ole Sites" does your fact cility per year: ed as nonprofit or gove mber: I opening and closing d Closing I e Signs for your establis current signs: ertifies that it will remain in to the premises and furthe rational origin. Unless other blishment and any facilities re- re true and correct and agr o these statements. I un so inspections to insure to ses and/or permits require	lity/establishment rnmental? Yes ates: Date: Shment? Yes compliance with all ap r agrees to provide th rewise noted, all requir equired by the State C ee to promptly inform derstand that either hat the minimum red d to operate the bus	qualify?         No         No         pplicable laws and regulations for e premises to the general public rements of the State Criteria shall be located entirely on         m Virginia Logos, in writing, by er the Virginia Department of quirements of the State Criteria

THIS APPLICATION MUST BE RETURNED WITH A \$250 NON-REFUNDABLE APPLICATION FEE PER SIGN

#### VIRGINIA LOGOS SUPPLEMENTAL GUIDE SIGN PROGRAM

Please provide the legend (wording), mileage, and directional arrow (if applicable) you would like to be used for your sign. All designs and layouts are subject to approval by Virginia Logos and the Virginia Department of Transportation. A separate application must be completed for each Supplemental Guide Sign desired.

Please use an "X" for spaces between words and indicated desired directional arrow (if applicable): Example: Virginia National Park

I	v	i	r	g	i	n	i	a	х	Х	х	Х	х	Х	х	х	<b>→</b>
ſ	N	a	t	i	0	n	а	1	х	Р	a	r	k	х	х	х	

Series C, with a maximum 10" lettering, shall be used with a maximum of 3 lines of text.

Logos or symbols you wish to use on the sign may be submitted by either attaching a hard copy or by emailing a copy to jnewcomb@interstatelogos.com (all emailed copies must be in either Adobe Illustrator or Corel Draw format).

Please draw a map from the main highway to the facility, with distances and directions. Also, please indicate where you would like the new Supplemental Guide Sign(s) to be located as well as any Supplemental Guide Signs currently installed for your location.

#### VIRGINIA DEPARTMENT OF TRANSPORTATION

# TRAFFIC ENGINEERING DIVISION

# MEMORANDUM

GENERAL SUBJECT:		NUMBER:
		T&S-150
Trailblazers		DATE:
SPECIFIC SUBJECT:		February 1, 1978
Signing for Facilities on Highway Right of	Way	SUPERSEDES:
DIRECTED TO:	SIGNATURE:	
District Engineers	J. P. Mills, J1	r.

The State Highway and Transportation Commission passed a resolution on March 18, 1958, permitting trailblazer signs on highway right of way at those locations where they will be of service in directing traffic to a special facility and are within a reasonable distance of the facility.

The erection of trailblazers must be approved by the State Traffic and Safety Engineer and the attached application and agreement has been prepared to receive and approve requests.

The specifications governing the erection of trailblazer are:

The applicant will bear all costs in connection with the purchase, installation and ma4-ntexiance of the trailblazers.

In the event that trailblazers are not maintained in a condition satisfactory to the Department of Highways and Tran3portation, they will, after 10 days written notice to the applicant, be removed at the applicant's expense.

The exact location of each trailblazer will be decided by the State Traffic and Safety Engineer or his representative, but in no case shall it interfere with the placement of the Department of Highways and Transportation's signs.

No one trailblazer shall be larger than  $24" \ge 36"$  and shall be of a distinctive design; the colors to be approved by the State Traffic and Safety Engineer.

a. All trailblazers larger than  $24" \ge 24"$  are to be erected on  $4" \ge 4"$  wood posts dressed on 4 sides and having a pyramidal, shed or flat top cut before being treated and shall conform to all applicable sections of the Departments Road and Bridge Specifications.

b. All trailblazers  $24" \ge 24"$  or smaller may be placed on steel "U" posts meeting the requirements of all applicable sections of the Department's Road and Bridge Specifications. Where posts are to be set in sidewalks, a 2" steel pipe may be substituted for the 4"  $\ge$  4" wood posts.

a. The vertical distance from the bottom of the trailblazer to the ground line shall be no less than 5 feet in rural areas and 7 feet in urban areas.

b. The horizontal clearance of trailblazers from the edge of pavement shall be consistent with other guide signs in the area.

Trailblazers shall be permitted only where they will be of service in directing traffic, and the extent of this service should be within a reasonable distance from the facility.

The Commonwealth of Virginia, Department of Highways and Transportation, will assume no responsibility whatsoever for these trailblazers.

Upon receiving an application for trailblazers, the District Traffic Engineer is to review the locations for signing. If satisfactory, the application and agreement form provides for the recommended approval of the District Traffic Engineer as well as for the District Engineer. The application and agreement is to be forwarded to the State Traffic and Safety Engineer for approval and disposition.

LHD: rlp Attachment cc: Mr. L. E. Busser, III Mr. T. A. Newby Mr. J. M. Wray, Jr. Mr. J. P. Royer, Jr. Mr. H. R. Forkinson, Jr. Mr. W. L. Brittle, Jr. Division Heads Resident Engineers District Traffic Engineers Note: This revises Form T&S-234 issued in August 1972.

#### APPLICATION AND AGREEMENT FOR THE INSTALLATION OF TRAILBLAZERS ON HIGHWAY RIGHTS OF WAY

\_\_\_\_19\_\_\_

Mr. J. P. Mills, Jr. State Traffic and Safety Engineer Virginia Department of Highways & Transportation 1221 East Broad Street Richmond, Virginia 23219

Dear Sir:

Pursuant to a resolution passed by the Highway Commission on March 18, 1958, the undersigned wishes to apply for permission to erect Trailblazers on the State Highway and Transportation Department's rights of way on the following sections of highway:

If additional space is required, use back of sheet or attach additional sheets.

The following specifications will govern the erection of Trailblazers:

- 1. The applicant will bear all costs in connection with the purchase, installation and maintenance of the Trailblazers.
- 2. In the event that Trailblazers are not maintained in a condition satisfactory to the Department of Highways and Transportation, they will, after 10 days written notice to the applicant, be removed at the applicant's expense.
- 3. The exact location of each Trailblazer will be decided by the State Traffic and Safety Engineer or his representative, but in no case shall it interfere with the placement of the Department of Highways and Transportation's signs.
- 4. No one Trailblazer shall be larger than 24" x 36" and shall be of distinctive design; the colors to be approved by the State Traffic and Safety Engineer.
- 5. a. All Trailblazers larger than 24" x 24" are to be erected on 4" x 4" wood posts dressed on 4 sides and having a pyramidal, shed or flat top cut before being treated and shall conform to all applicable sections of the Department's Road and Bridge Specifications.
  - b. All trailblazers 24" x 2411 or smaller may be placed on steel fluff posts meeting the requirements of all applicable sections of the

Department's Road and Bridge Specifications. Where posts are to be set in side-4alks, a 2" steel pipe may be substituted for the 4" x 4" wood posts.

- 6. a. The vertical distance from the bottom of the Trailblazer to the ground line shall be no less than 5 feet in rural areas and 7 feet in urban areas.
  - b. The horizontal clearance of Trailblazers from the edge of pavement shall be consistent with other guide signs in the area.
- 7. Trailblazers shall be permitted only where they will be of service in directing traffic, and the extent of this service should be within a reasonable distance from the facility.
- 8. The Commonwealth of Virginia, Department of Highways and Transportation, will assume no responsibility whatsoever for these Trailblazers.

The undersigned is familiar with and agrees to abide by the foregoing specifications.

NAME	
TITLE	
REPRESENTING	
ADDRESS	

Location of Trailblazers has been established and the application recommended for approval by \_\_\_\_\_\_\_\_, District Traffic Engineer on \_\_\_\_\_\_, 19\_\_\_\_.

Recommended for Approval		,19
	(District Engineer)	
Approved:	, 19	

State Traffic and Safety Engineer

(The original and 4 copies are to be executed. The approved original is to be returned to the applicant. The State Traffic and Safety Engineer, District Engineer, District Traffic Engineer and Resident Engineer will each receive one approved copy.)

Appendix I

Bicycle User Survey Open-Ended Responses and Comments







Dive Didge Disuele	
Blue Ridge Bicycle	
Blue Ridge Bicycle	
	club, Mill Mtn Mountain Bike Patrol American Bicyclists Ride Solutions
¥	
Adventure Cycling BRBC	Association
	g organization official)
	cal Chapter of the American Society of Highway Engineers promoting the transportation industry in the western half of
Virginia.	carchapter of the American Society of Fighway Engineers promoting the transportation industry in the western han of
BRBC	
	and Social Club Employee of Virginia Tech Transportation and Campus Services
Carvins Cove Trail	Crew CCCC
Bike Va. and Blue	Ridge Bicycle Club and Adventure Cycling Inc.
Roanoke valley mo	ountain bike patrol
BRBC	
Team Pegasus, Chi	icago IL
Blue Ridge Bicycle	Club Franklin Freewheelers
Blue Ridge Bicycle	Club
Blue Ridge Bicycle	Club
BLUE RIDGE BICYC	LE CLUB
Blue Ridge Bicycle	Club, IMBA, League of American Bicyclists
Blue Ridge Bicycle	Club of VA
<b>v</b> 1	Club; BikeWalk; Bike Smart Instructor; Virginia Bicycle Federation
Blue Ridge Bike Clu	Jb
IMBA	







Roanoke Cycling Organization
RCO & BRBC
IMBA
Sort ofRoanoke Outdoor and Social Club, which hosts biking events. Participated in Ciclovia.
BRBC
But I attend the Blue Ridge Bicycle Tues. night ride. I plan to join.
BRBC
IMBA, USAC, Roanoke Cycling Organization
New River Valley Bicycle Association
BRBC
Roanoke Cycling Organization
Roanoke Cycling
RCO
Blue Ridge Bicycle Club, Roanoke Cycling, Adventure Cycling
Pathfinders for Greenways, Roanoke Cycling Organization
Blue Ridge Bicycle Club
Pathfinders for Greenways Rails to Trails Conservancy
Blue Ridge Bicycle Club, Roanoke Greenways, Cool Cities Coalition
Blue Ridge Bike Club
Blue Ridge Bike Club, Adventure Cycling Association, League of American Cyclists, and Bike Walk Virginia
BRBC
BRBC, RCO
Backroad Bikers
Blue Ridge Bicycle Club
Backroad Bikers (8 retired GE engineers)
small group of retirees
Shenandoah valley bicycle coalition
IMBA
Bicycle Advisory Committee BikeWalk Roanoke chapter Bike Roanoke







BRBC
BRBC
811 Velo Central Virginia Cyclists Central Va. Mt. Bike Association
not a member but was semi-active until I found out I was pregnant, of the Roanoke cycling org
Roanoke Outdoor Social Club
Blue Ridge Bicycle Club
BBRC
International Mountain Bike Association
BLUE RIDGE BICYCLE CLUB
BRBC
Pathfinders for Greenways
Blue Ridge Bicycle Club BikeWalk Virginia Bicycling Federation
BRBC
BRBC
Blue Ridge Bicycle Club
Blue Ridge Bicycle Club
Blue Ridge Bicycle Club-Roanoke
Blue Ridge Bicycle Club
BRBC
BRBC
BRBC
BRBC







#### Question 9: What factors would encourage you to increase the amount of money you spend LOCALLY on bicycling-related items?

Better prices, wider selection

weather, spare time, availability of areas to ride

more bike related shops in the Salem area and more places to bike in the Salem area where there is pavement but no car traffic

more competitive pricing

Bicycle venues on the greenways. More bicycle events in the valley.

Greater selection; current retailers have too little inventory, selection Seasonal sales and advertising thereof

None try to ride as inexpensively as possible. Safety is number one. Try to protect myself from injury.

more info about/from local cycling shops and bike clubs

Ease of reaching these locations by public transportation or bicycle. Variety of products offered. Demonstrations of various products, e.g., lights for night time riding.

If I became more active, join club, etc

I would need to ride my bike more often.

If I could ride my bike to Virginia Western Community College, places on Brambleton, and to the Grandin area safely, I would ride a lot more.

Therefore I may even buy a new bike, and the increased use would make me buy new parts etc.

More bike paths.

wider selection of women's clothing

more available routes

A shop close to my home or workplace

Expanded greenway system.

Using my bike more on bike-friendly roads (roads with a bike lane) and the Greenway.

I try to buy all my bicycling needs from local dealers.

Ease of availability... recently I found out that the sports beverage that I like will be harder to get because a local grocery store is closing. My income also plays a major role.

better / safer / more convenient riding opportunities in local area

nice bike paths, bike lanes on the roads with-in the city, more wooded trails for riding







Safer area for bikers to ride. There needs to be a barrier between bikers and motorized traffic. I mainly stick to mountain biking now because I don't have to worry about motorized vehicle traffic. In years prior to the introduction of the cell phone I use to ride long distances on the roadway. But now most motorized are paying attention to their cell phones, text messaging, or gadgets in their cars and aren't paying attention to the road ahead. It just isn't worth risking your life to ride on the road.

Becoming less lazy and riding more, thus requiring more bike parts

More bike trails throughout Roanoke County and the City of Salem

Improvements in the trail networks would increase the mileage I can put on my bike and in turn I would purchase more equipment from bike shops to maintain items such as tires, brakes, etc... Currently, I understand the strategy has been to build segments of greenways/bike paths to allow opportunities for different areas to receive some benefit of a trail. The current system is very fragmented and does not provide the best opportunity for a full commute or challenging exercise. I suggest the focus should be on completing the backbone along the Roanoke River and next on spurs that would serve the largest populations. I understand that dollars are limited and believe that the staff has done a great job managing what resources we have to date.

More events for everyday working people that are not professional riders. The big bike rides are intimidating to a non-professional rider. More family events that include the younger riders as well.

my time is the only factor for limiting my bicycling activities

Area bike shops do not carry a great deal of variety in terms of brands, models or sizes. Additionally, local shops tend to set prices at a level that encourage consumers to go elsewhere to make purchases. Helping either of these factors or establishing some sort of loyalty programs could help drive more purchases locally.

Price

Increased Greenways and Bikeways

If I felt that there was an adequate bicycle network (bike lanes, Greenways that can be used for commuting rather than excursive and recreation) in Roanoke so that I could cycle to places instead of using my car. FYI - I live very close to places that I would GLADLY ride my bike to but will not because I must get on busy roadways without bike lanes, shoulders or sidewalks.

None, I buy whatever I need for repairs and maintenance on my townie or mountain bike as the needs arise. I typically buy a new mountain bike in the \$3000 range every four years, although I don't upgrade my townie unless its stolen.

A Performance Bicycle Shop in Roanoke

More bike shops and services on my main routes

nothing







Bikes are cheaper. Items are cheaper packs for sale that are created to have everything you need for a bike ride. i.e. energy bar, water, food, sports drinks all in a pack ready to go. But it needs to be cheaper than buying the items separate and the drinks have to be in a reusable container to help the environment.

Bike shop closer to my home

Fees to park my bicycle, or the need for major repairs or overhaul to my bike, would cause me to spend more locally.

better job

Flat tires, repairs

Affordability, Availability of second hand items

Bigger selection, more bike stores in Roanoke

The local places having lower prices, and more inventory. Also deals like combo's and such. These could consist of stuff like buy a helmet and get 20% off gloves type of thing.

more bicycle lanes would increase my frequency of use

I only buy necessary items, and I buy them locally if they are available.

More bike trails within the city

better, competitive pricing

more clothing options for women in particular

Wife working!!!

None

None. I ride a bike in part to save money not to increase the amount I spend.

More bicycle races in Roanoke.

Having more convenient and further reaching bicycle paths.

Certainly the ability to use the bicycle on a daily basis. Wear and tear on the bike would require additional expenditure. Also, clothing for all weather occasions would require additional expenditure.

Competitive prices and increased selection and delivery

If I had the opportunity to ride my bike more (say from home over on Colonial Ave. over to work at Valley Pointe). The more you use it, the more likely you are to increase the amount of money spent.

better prices

I buy my cycling needs at the local shops as much as possible even if they need to order it.







Sufficient on-street bicycle accommodations that allow me to commute in all seasons, including after-dark winter commutes, would encourage me to purchase light systems and other winter commuting gear. The absence of a prominent bike commuting culture in the Roanoke area limits the amount of commuting gear that local bike shops are willing to stock.

On line catalog or listing of sale items

That depends.

Better prices and services

Better infrastructure

Sales of bicycle equipment and clothing

More bike shops with lower prices and an accommodating bike culture that includes bike lanes, friendly drivers, friendly Park rangers on the Blue Ridge Parkway. Bike shops with fewer racer-heads and staff more inclined to the average person.

Better selections of bike clothing and accessories, like packs and lights.

Needs

Wider bike lanes. It's too dangerous to bike around Roanoke.

Bigger Bike shops in the area. None carry a lot of gear besides bikes. Bike Rentals would be a great thing too!

???

More selection, more bike shops, and sales people not trying to charge me \$80 for a part I know I can get for \$20 online.

Getting the new bike I've been hoping to buy!

Better discount prices--not much can be found to match or top Performance.

GOOD SELECTION AND PRICE.

availability, price

Better service, better product selection, better pricing.

Not enough time in my busy schedule to get out on the bike.

More shops with a greater range of goods

Riding more - The more you ride, the more supplies you need.

I spend based on necessarily, so my bike's condition dictates how, when, and where I spend money on it.

More bike trails and greenways

The availability and reasonable cost of items when encourage me to spend more money.

A good (better than what's available) bicycle shop

convenience

Selection. Some items are bought used on eBay.







More trails and retailers carrying bike related items. Advertising for bicycle rights and safety.

More clothing choices

I always try to buy local. Support our local shops that support our sport locally.

Cost

A bike shop like performance bike that is mostly parts that are sold for very good prices. I just feel when you go to a bike shop here it is all bikes and not a very big section for do it yourself people. I also feel that the cost for tune ups here is extremely high compared to bigger cities. Better Prices

I would spend more if I increased the amount of time that I dedicate to riding.

# of mechanical failures and flat tires.

The ability to ride in areas that are safe, i.e. pathways or bike lanes. I used to ride to Kroger @ Towers Mall until the bike lane on Colonial Avenue was removed during the recent construction at the intersection of Wonju & Colonial.

Bike Lanes, Bike Parking, Driver Awareness

Easier access to store by bike, a shop on a green way with food or drink

More bike friendly riding areas.

Security and visibility of bike storage locations within downtown.

safe to ride, i.e., bike lanes, etc.

If I had more money... If I sold my car

Network of safe bikeways that actually take you places you want or need to go.

Friendlier roads, better work environment (i.e.: Place to shower etc)

More surfaced Greenway trails.

More daily biking opportunities

Being able to ride more will mean I need to spend more! More bike paths! Please!

Wider roads with bike lane. Speed limit (45 mph) actually enforced on the Blue Ridge Parkway. More off road trails for Mtn bikes.

Better selection and lower prices at local bike shops. Bike shops that focus on items other than high-end bicycles.

Local events, more tails, shops, Roanoke related cycling clothing, gravity events, more trails.

Off the top of my head there are no known factors to encourage me to increase my local spending.

The wife letting me get a fancy new bike.

Greater bicycle access to shopping centers. This means bike lanes on all major roads in Roanoke County and Roanoke city.







More inclusive bike shops, where you can find a better selection for commuting accessories such as, bells, baskets, bags, casual clothing, etc. Fund raising events for bicycle advocacy or programs, ex; music/beer festivals, races (like gallops for greenways, I like that), weekend rides or bike tours (like the tour of vine)

More bicycle friendly city.

More safe biking trails closer to my home.

more sponsored events

Not a lot of gear is necessary to use a bicycle as your main form of transportation. Locally, bike shops seem to be focused toward a sportier cyclist community and less toward the community that uses bicycles as a form of transportation.

If local bike shops would match prices found on the internet

More shops on bike accessible roadways

For local prices to be competitive with Internet prices. Hands-on service provided at local shops is good.

More user friendly riding areas.

Participation in more organized activities

Decent bike shop with a good selection of in-stock components and commuter accessories.

better bike lanes so that I could ride more locally

Availability of items; sometimes you have to order online or non-locally to get what you need

Cheaper prices than the internet.

Safe riding areas in my home zip code. Now, there is NOTHING!!! The roads around here are not safe to ride a bike on.

better/safer place to ride

Entry fees for local (in Roanoke City and County) organized bike rides to benefit charitable organizations. The thing about in-towner's spending money is that once you have your bike and clothes, there really isn't much reason to spend more money except on bike maintenance & upgrades to your bike. I bought my new bike locally (@ East Coasters) in 08 and spent \$2,000. I buy all of my bike clothes on line because the local shops don't carry much in women's clothing. I try to make local purchases of other items: water bottles, energy drinks, tires etc.

Stores convenient to my work or home.

More access to be capable of riding. The more riding that I do, the more money I will spend for maintenance on my bikes

If I had a bike that would provide comfort to sit back more. Due to back injury, I can no longer ride a bike with my back hunched to the handle bars.

More selection.







I SPEND AN ABUNDANT AMOUNT OF MONEY IN THE VALLY ON CYCLING EVENTS. I RIDE EVERY WEEKEND AND NORMALLY EAT AT LOCAL RESTAURANTS. IF WE HAD MORE TRAILS IN THE AREA, LINKING THE CITY AND THE COUNTIES, WITH FACILITYS FOR DRINKS, FOOD, ETC ON OR JUST OFF THE ROUTE, THERE WOULD BE MORE CASH FLOW FROM CYCLISTS.

A store such as Performance

More local trails.

Most of what I spend on bicycling is done locally. However, bicycling doesn't cost a lot after the initial bike purchase...

Being able to bike to work without risking death.

More bike-friendly roads and greenways

I already have so much gear, etc that I don't need much. Lack of time is a problem also.

A save place and way to get to the locations.

More trails.

Safe commuter route from Bonsack to downtown Roanoke

having more disposable income

More bike friendly pathways or lanes.

More local events Performance Store in Roanoke Showers at the Mill Mountain Campground Nicer, bike friendly people at the Visitor's Center

Safe place to ride

A better paying job.

price selection

No factors come to mind. Most bike gear is overpriced and largely unnecessary.

Having more bike lanes to make riding safer....or greenways.

Flat tires.

Spandex failure

Better retail selection of bikes, parts and accessories.

Bike Trails

Not sure; part of what I love about bike-riding is NOT spending any money. :-)







Question 10: If you have children do they ride a bicycle to school? If no, briefly list why? too far not safe	
Too dangerous	
six years old	
Not school-aged kids yet.	
N/A	
Too young.	
there is no safe way as we have to travel on Peter's Creek Road	
Now adults	
No kids at home	
I do not have children, but every road near where I reside is incredibly unfriendly to bikes.	
No children at home	
Off road paths not available.	
no children	
No children	
My children do not go to school.	
too young	
Safety! Both because of persons of questionable character and drivers who are not courteous a	and don't yield to bicyclist or pedestrians.
Children are grown	
no children at home	
n/a	
We home school our children.	
Sports activities after school that requires equipment.	
out of area	
No children	
N/A (no kids)	
There is no safe bike path between our neighborhood and the school.	







They are 5 and 7 years old and are just learning to ride a bike...age is too young to travel without adult supervision.

They are not in school yet, Pre-K but they ride their bikes at least 3 days a week. We encourage them to do it mostly for the exercise but also encouraging the enjoyment of the exercise.

no children

N/A

Not old enough to attend school yet

Roads to school do not offer paved shoulder or wide lane; specifically, Red Lane has narrow lanes and no shoulders in Roanoke County connecting to our neighborhood, yet there are hundreds of residential houses connecting to red lane in Roanoke county.

No Children

She doesn't consider it "cool" to ride a bike to school.

no children

More than 30 miles.

Young in age

She is not school age yet...but if she were, due to the lack of bike lanes, shoulders, and sidewalks from our house to the school (again a close enough distance for walking/biking) I would not allow her to do this.

No Children

would require going on main roads(peters creek)

Lack of interest - he does walk and may try riding this year

I don't have children

no children

According to rules - not allowed...

No children.

They are too young, and it's too far away.

too young

No safe routes, too far

No safe route

No children.

No children







too young

I can see the school from my house but the county does not allow walkers/bikers.

Two school principals and one school administrator have told me that they do not want to see kids riding to school on bikes. One of the principals said that her goal was for every child to arrive at school in a vehicle.

Absences of bike lanes to 2 of the schools and inadequate/unsupervised area to leave bike for the third school (Woodrow Wilson)

I do not wish my child to ride a distance on the street without me due to age.

No children

No children

Under age.

I do not have children.

No good route and too far.

School is too far.

My children are all grown.

Have no children

too young no infrastructure

They are too old now, but it never felt safe or realistic for them to do so with laptops, heavy book bags etc. Seems odd since I rode to school all the time!

No kids yet.

Too young... ages 4 and 1

No children

They live on Brambleton Ave. there isn't a wide bike land. They may die.

He rides the bus. He would have to cross route 419 to get to his school from our house and it is not safe.

My daughter is in 2nd grade and has ridden her bicycle to school accompanied by her father. Her route includes a busy intersection with 419. Roanoke needs more bike lanes and education for drivers regarding sharing the road with cyclists.

School is too far away around here. And where I grew up (Floyd County, VA)

Not in school yet.

Too dangerous to ride on the road in the neighborhood. Too hilly. Crossing major intersection to get to school--kids too young to do this at this point.







Not in the area.
Too young.
No children
Roanoke City street not safemotorists do not use caution in Garden City.
NO CHILDREN
no children
No. They are too young for school and it would be dangerous (live in rural Franklin County)
N/A
No children.
n/a
No safe bike lane
There are no safe bicycle lanes in our area.
Roads are too busy and dangerous.
Too dangerous, poor provisions for bicycles, poor law enforcement, too far at an early hour, poor drivers
no children
No children
I do not have children
Not convinced that the infrastructure exists for my son to safely ride to Woodrow Wilson. He certainly would if I let him.
Schools are not close enough and no safe passage.
no children
I do not have children
Actually, I have no children.
no children
too young
No safe bike access to their school
Not old enough
No there is not a safe path, 220 is too busy
No Children
not safe







because of traffic and no bike lane also distance
I do not have children
Adults
Not safe, would have to ride in the road.
She did in 5th grade, but not in 6th grade. She has a violin to carry.
roads not friendly
We do not live close enough. If we lived closer they could ride.
In one case, not safe as we live on a steep hill. In another case, too far (Bonsack to WBMS)
child no yet school age
both walk only .75 miles to school on greenway
Not old enough yet.
no children
No children
More convenient to put them on the bus.
No Children
Not old enough yet.
no kids
I don't consider Grandin Rd west of Murray Run trailhead to be bicycle friendly, especially for children
too young
Kids are in college
To dangerous
6.5 months is too young for school :)
NA
No children.
Too young. They will ride once they are in the 3rd grade.
distance
No children
no children in school
Not applicable - No children







No children
Roanoke County does not have safe shared use paths to their elementary & jr. high schools
Too far - ~12 miles from home
Not old enough to go to school
Virginia Western Community College too far away. The youngest one is 6 years old - too young & traffic is outrageous.
Too far, roads to busy, child only 11 years old.
The roads are dangerous and would YOU let YOUR kids ride alone around here?!?!! Too many large/dangerous intersections where jerks run
red lights.
NO CHILDREN
Not of the age yet to do so.
Youngest child now attending VWCC - no bike friendly route from our house
It would not be safe to do so.
This yes/no answer doesn't work for me since I don't have children.
Too young to attend school.
No children
Not safe, too much traffic.
No children
No safe route and distance
congested roads
NA
Too young.
Too young. No bike lanes and I feel it is not safe for the kids.
School too far from home and on a major highway
too young
Goes to school out of district. Too far to ride. Drives to school.
They walk/skateboard to school.
Too dangerous on main roads
across to many busy roads, colonial, 419 and Brambleton
Bus and dangerous roads







1) I have no children. 2) I wouldn't let young children ride in traffic. 3) I live 3 blocks from PHHS, so if I did have children, they could walk.

no children

Too young, but will ride to Crystal Spring in a couple of years.

Not school age yet

No kids.







Question 18: If you currently commute by bicycle to work or school, why? Rank each reason on a scale of 1 to 5.

"Bike to Work Routes" by RIDE Solutions was empowering and is an excellent tool. This was the catalyst I needed to select bicycling as an alternative mode of transport, as it revealed routes/greenways that I did not know existed and enabled me to bypass high traffic roads that otherwise would have kept me from commuting by bicycle at all. My routes still require some negotiation of high traffic areas without safe road margins for sharing the road, and would love to see the expansion of greenways and dedicated bike lanes.

There are no bicycle facilities along my commute from Salem to Roanoke - this is important to me but didn't know how to answer next to last in the list.

I ride my bikes for fun.

I don't own a bike

I currently ride the Smartway and have an extra car in Salem. I used to use the bicycle instead of the car, but when my work required me to carry things back and forth and I was required to dress more professionally, it became less convenient to bicycle to and from the park n' ride. However, I still wanted to provide input on the questions below. Before that I used to ride to work in Salem from Christiansburg several times a week and then ride the Smartway bus home.

If I could get access to a greenway I could. If the Roanoke River Greenway and some good spurs are completed I would strongly consider it.

I don't currently commute by bike

I currently catch the Smart Way Bus in Christiansburg and get off of the bus at the Exit 140 Park-n-Ride. From this point, I ride a bicycle to my place of work.

NA Retired

as stated before I work for the fire dept and I never know when I will be transferred due to vacancies

I do not commute to work/school by bike

I mainly work at home or with various schools on short notice; I cannot commute to work when I mainly work at home. This also applies to your next question, #19.

I have a live work site

On #19 below one other important reason (5) for not commuting is lack of time.

Currently I don't ride to work although would more than welcome the opportunity.

Avoids paying parking fees







Don't commute to school or work

NA--don't bike to commute at this point

Don't commute

I plan on starting to bike commute next week when my wife begins to stay at home to watch our newborn twins. I've commuted in the past. The nicest thing is that my employer has showers (municipal building).

Retired

I'M RETIRED

I work from home, no need to commute

We take back roads including Mountain Pass Rd rather than Rt 11 to our mechanic for safety reasons. That is a LOT of extra distance and terrain for safety!

No shower/change facility at work. Would ride more often if there was one.

I would ride more often if I could shower at work once I got there, but my schedule is also weird so it would mean riding in the dark some mornings which I don't feel at all safe doing. I've ridden only occasionally so I'm doing both sections of the survey

I am a teacher and I want my students to see that there are options!

retired

I would be more than willing to bike the 8 miles each way to work at least 3 days a week. I have tried to map this out but have discovered that there isn't a safe way for me to go. Either there is no shoulder on the road for a significant distance or I would be crossing busy intersections.

I would like to be able to rank shower/change facility at work higher, but unfortunately it does not exist.

I don't currently bike-commute to work. I don't currently work.

I just enjoy the ride.

Free parking; parking under shelter and close to work

I do not commute.

Again, I sometimes commute to school but usually do not. I'll fill out both 18 & 19 though.

I have access to a shower/change facility (my gym) \*near\* work but I pay for that --- no facilities \*at\* work. Re: question 19 below, some days I have to carry things to work that my bike can't handle -- those days I drive.

do not currently commute

I work from home. 0 commute time

I WISH! I'm looking for a job that enables me to commute by bicycle. I'd love to sell my car.







**Question 22: Comments regarding motorists' behavior?** 

People in cars only care about themselves. They can't wait 10 seconds to pass someone and would rather put a cyclist at risk than give them the 2' of passing room that is required by law.

In general, I think motorists are very selfish of the roadways. Unless a driver is also runner or cyclist, he or she doesn't always exhibit patience or understanding for the person who is trying to utilize the roadway for commuting or fitness reasons.

They lack education and tolerance for cyclists.

some are extremely negative, some are extremely positive but most are neutral

Some need to pay attention to road cyclists.

-Motorists pass on blind hills -Motorists pass too closely (side view mirrors are very close) -Motorists honk their horn -Motorists don't yield to cyclists when cyclist signals to change lanes, e.g., merging left into a turn lane; some motorists won't yield to allow lane change

They aren't even courteous to other motorists, let alone bike riders

Bicycling is hazardous for both the bicyclist and the motorist because there are no bike lanes, not even an adequate shoulder.

Rarely do I encounter hostility. Most motorists seem to be supportive.

Some motorists are courteous but many are not. It's the ones that are not, that worry us.

I have been nearly run off the road; yelled at; flipped off... The worst was been being smacked on my hip, by what I believe was a textbook, by a group of teenagers while traveling through the tunnels at Schafer's Crossing. On that occasion I thought I was going to be severely injured. Nothing but laughter from the kids.

In too much of a hurry; will not slow down when oncoming traffic puts biker abreast with cars passing in opposite directions.

They have no respect for the right of bicyclists to share the road; and they are in too much of a hurry to wait for slower cyclists and therefore try to pass in locations that are not safe for them or put the cyclists at risk

for the most part tolerant but the exceptions make it dangerous

We're pretty much invisible and RARELY will anyone slow down for the obstruction (me) in their lane. They drive out in front of oncoming traffic leaving me to take the ditch so they can swerve back in.

Depends on time of day.

I grew up/raced/trained/commuted/worked as a bike messenger in the D.C. area, so Roanoke motorists & traffic seem like no problem at all in comparison.







I hear people at work say they can't stand a cyclist to be on a road because of the speed variance and difficulty passing. Although I love to ride a bicycle, when I am in a car I don't like to encounter a cyclist on the road and find it difficult to maneuver around them. I don't ride a bike on any major road.

I'm sure there are some bad attitudes; there are always a few in any circumstance. I know there are people who resent that they pay to drive their car (licenses, etc.) bikes have the same rights.

I drive and I do not like to share the road with bikes. All users should pay road taxes. I used the road when I was young, but I always got out of the road when cars came. I was taught that autos had the right of way and I respected that. After all, common sense should be used. Do you know what a 3,000 pound auto would do to you?

The majority of motorists seem to be neutral toward cyclists, although it is not uncommon to encounter motorists who are overly aggressive or do not provide enough room when passing.

Motorists I know have trouble seeing cyclists. Most think cyclists are "in the way"

Motorists have a bad attitude towards other drivers none the less cyclists!

For the most part driver attitude is pretty favorable as long as cyclists do not "get in the way". On some rare occasions drivers have bad attitudes and sometimes voice those vocally as they pass.

Again, if there were more bike lanes this would probably improve as the cyclists would have their own "spot" and would not be slowing down the cars.

This question isn't easily answered--most folks are neutral, although there are some with a clearly negative bent. This issue is too complicated for a survey question and instead requires dialogue and specific research.

99% of drivers are very good but the other 1% are dangerous.

People blow the horn and try to pass as close as possible, intentionally making biking unpleasant. Motorists everywhere, not just in Roanoke, must be made to understand that bikers must be respected.

Motorist are becoming more tolerant, but still have very little patience or knowledge of laws regarding cyclist.

Generally have not had problems with motorists. Biggest issue is interactions at intersections were motorists (and I) are not sure of the best way for a bike to proceed through...

It's not a popular thing to do and people look down on you or make fun of you or consider you a nuisance when having to travel behind/next to you.

It has improved some over the past year, but many motorists seem too distracted to notice cyclists.

They mostly consider cyclists to be an annoyance, or to simply not exist. But I haven't had any real problems.







too distracted, cell phone, texting, putting on makeup,

Typically impatient.

They act like non-motorized users have no right to use the streets. At best they are grudgingly tolerant. At worst they are belligerent, hostile, and sometimes dangerous. They clearly do not know or do not care what state law says about the rights of bicyclists to use the streets and roads.

Most are accommodating.

Unknown for Roanoke however; NJ is NOT good!

Motorist either don't know how to behave when they come upon a biker on the side of the road, making it unsafe for not only the biker, but on-coming traffic, or they don't care and pretty much run a biker off the side of the road. Seen it happen too many times, which keeps me from wanting to get out there and join those bikers.

I have ridden and raced thousands of miles in New England especially Massachusetts. Aggressive, angry, impatient and dangerous drivers were the norm. In my 6+ years in the Roanoke area, city and counties, drivers are polite, give room and wait. However, the cyclist must not antagonize or expect more lane than what they need- two abreast racing cyclists are frustrating even for me. I ride courteously and carefully and feel safe here.

Although I only commute to work a few times per year, I have never had a commute in which I did not experience honking, jeering, and/or unsafe passing, with the latter being the behavior that most discourages me from commuting on a regular basis.

In the past ten years motorists have become more accepting of bicyclist on major roads such as 419 but not so on 220 S near Hunting Hills Plaza where there are trucks and no shoulders for bicyclists to ride. Speed limit is high and trucks and vehicles speed past you causing a wind back draft which can be very difficult to ride through.

When I go on a ride 99 out of 100 cars are no issue, but there is almost always one that passes too closely or the driver is actually aggressive. It only takes one.

Have had one apparently try to enforce his "right" to the streets over mine.

Most problems seem to be caused by motorists not paying attention.

I think the attitude of drivers in the area has improved although there are still some drivers with negative attitudes towards bikers.

I've never had any issues but my husband has

I've been cursed off the road a few times, and was not actually on the road at the time! (well out of 3-4 ft from edge)

motorist don't pay attention to other vehicles, and least of all bikes and motorcycles

Grossly inattentive would be a best description.

Better if riding with a group







Most motorists barley know the motor vehicle laws, much less the bicycle laws. Motorists yell for you to get on the sidewalk, pedestrians yell for you to get in the road. Nobody knows that bikes are considered vehicles. It's a depressing situation and I will luckily be relocating to Northern VA / DC area, which is completely connected by bike paths.

Once you get outside of the city, people do not seem to "share the road" as well as they do inside the city limits.

Maybe they are fearful of hitting me, so they act like jerks.

A small no. of people are negative.

Most motorists are OK, but some are just plain jerks.

There are always rotten apples that spoil the bunch, but those rotten apples will kill someone.

Most don't bother making accommodations for bicyclists and seem to consider them a nuisance.

Cyclists are in their way.

Arrogant; bicycles don't belong on the road; unlawful, threatening driving; dangerous; inattentive

Rare hostility

Most are very accommodating. You can always find a jerk.

Not totally negative, I feel like they think "we" are a nuisance.

Most motorists don't understand the laws governing cycling and/or disagree with our rights to use the same streets as they do.

I believe the majority of drivers wish cyclists would not ride their bikes on the roads. They truly believe the roads are for automobiles and trucks only.

Aggressive!

Most are ok but there is an occasional driver that is rude of dangerous.

MOST DRIVERS ARE UNAWARE OF THEIR OBLIGATION TO OR HOW MUCH SPACE THEY NEED TO GIVE THE CYCLIST OR HOW MUCH SPACE THE CYCLIST HAS A RIGHT TO ON THE ROAD.

I have had all 3 (Negative, Neutral, and Positive). It is generally neutral, but neutral doesn't mean safe, in fact it probably means they are not paying attention. Also, it only takes one negative to kill someone on a bike.

Better than a lot of other cities, but it also depends on which road your riding on. Busy roads they do not care as much they are rushing to get somewhere and if they clip or force a bike off the road no big deal it will not hurt there car as much

cyclist are in their way

Drivers are usually courteous, but often clueless or uncertain how to respond to cyclists. They are not always expecting cyclists or even paying attention carefully to the road. On major roads they don't slow down.

It slowly continues to get better.







Most behave safely. There are a few jerks. It only takes one to kill you. We need to provide at least dedicated bike lanes on existing streets.

Most local drivers are clueless about bikes and the fact that they are supposed to share the road. The cell phone people are just downright frightening!!! They don't share the road well at all.

most are beginning to appreciate the fact that a bike on the road means more room for cars

Many people honk! I love that! I wish they all did. That way I know for certain that they are there behind me. A lot of people want to make sure that I have enough room.

Motorist on the whole are very accommodating; have had very few negative experiences with motorists

From what I have seen of motorists in the area they are ignorant as to driving safely with cyclists on the road.

Commercial vehicles (i.e., logging trucks, delivery trucks, etc) are the most dangerous operators. These vehicles rarely slow down or yield to oncoming traffic or bicycles when passing a bicyclist.

Mostly positive, I think they are very tolerant for the most part and surprisingly educated as how to behave with bicycles in the road.

I believe that I'm going to say 95% of motorists give you the room or "space" you need to navigate down the roadway while the others crowd you and just don't give you enough room, turn down a street in front of you....common aggravating things

Cyclists appear to cause road rage, this is a major deterrent to someone who is not an avid cyclist

Some motorists are rude at times, but that's brought on, in some cases, by cyclers who don't obey the rules of the road. Some motorists consider bikers a nuisance and a joke and will go out of their way to intimidate the biker, making a dangerous situation.

Speed and lack of driver attention concern me more than driver attitude of cyclists.

Motorists here seem friendly to bikes, allowing plenty of room and often yielding to bicyclists.

Depends on the route and street location

For the most part motorists are aware of cyclists and respond appropriately on the road. However, this seems to be due to the fact that cyclists on the road are such a novelty. Drivers are often nervous around, which seems to point to a need for more driver education.

When motorist see bicycles, they automatically think "slow". It is their natural instinct to pass the bike, even if there is a stop sign less than 50 feet ahead. They cut back into the lane, right in front of the bike and stop. It is hard to avoid running into their car.

Not all but the few make it very dangerous, i.e. get very close to you with car and make very negative comments.

I'm happier with them when they don't honk obnoxiously as driving by. Or don't hit me when I am cycling. Either is good.

The most negative I have ever encountered. They need education about sharing the road, how to pass bikes, manners.

Most seem neutral, but I am aware that as a female, I often get more accommodation than my male friends. I ALWAYS wave a thank you to motorists in hopes of building good will. To date I have never had a negative encounter with a motorist.







Don't see a bunch of road cyclist on the road, and aggressive driving.

Most people have their radios on, are on cell phones, windows rolled up, don't look in their blind sides & all around do not pay attention, look to see that bicycles are around - not making sure of their surroundings...the same issues with motorcycles (which I do ride0

Too many drivers have nearly hit or knocked me over at intersections, etc they don't look & are too bust cell phone/texting/eating/etc to notice anything but other cars or cops.

THIS IS A HARD ONE TO ANSWER. I'D ESTIMATE 50/50 I RIDE THE ROADS QUITE OFTEN. MY MAJOR CONCERN IS MOTORISTS THAT PASS ON A TWO LANE ROAD WITH ONCOMING TRAFFIC AND NOT ENOUGH BIKE FACILITY FOR THE CYCLIST MANY MOTORISTS ARE NOT AWARE THAT WE HAVE THE SAME RULES AS THEY DO AND DO NOT ABIDE OUR PRESENCE ON THE ROADS

I think that motorists are getting use to seeing cyclists on the roads, but for the safety of all it would be better if there were more bike lanes.

No negative occurrences in last few years

Many/most motorists are neutral/indifferent. But it only takes a few aggressive or carelessly indifferent motorists to make for a scary & dangerous biking experience.

This is a touch question but I think it trends to the negative side...there have been several instances when motorists challenged or threatened me on a bike but often you get the 'serious motor revving', telling you that the motorist is angry

The attitude is getting better since more people are riding...but bad cycling behavior by a few causes irritation by motor vehicle drivers. Example: running red lights; not stopping for stop signs, riding the wrong direction, riding on sidewalks

For the most part drivers in the Roanoke Valley have come a long way since the days of Bradshaw resident Jackie Wimmer who declared "open season" on Cyclists in a Roanoke Times letter to the editor in the late 80's.

Very dangerous with intense anger even when following the rules. I cycle at 15-18 mph. My wife was killed on a bike in 2003.

There are both negative and positive attitudes and behaviors. Some very respectful, others not. Teenagers can be awful. I wish there was a greater emphasis in Driver Ed. courses on how to share the road with cyclists.

There are always rednecks regardless of where one cycles. Some cyclists are their own worst enemy in not being thoughtful to motorists.

In my opinion motorists are uneducated about sharing the road. On EVERY ride I have at least one incident of someone honking, yelling, passing too fast or too close, revving their engine, etc. However, there are some considerate motorists but all it takes is ONE inconsiderate motorist to take a life!

Most are OK... Some are not and those are the dangerous ones.







I was run off the road by a motorist on the parkway last week. They are not paying attention. Parkway speed limit should be lowered to 35 in the Roanoke area.

Most are courteous, but there are definitely some bad apples out there...

Overall good, but unfriendly connecting from the Tinker Creek Trail to downtown. I've had several people shout and honk their horn on Norfolk Ave. in Roanoke.

It seems to me that most people -- myself included -- become complete jerks behind the wheel. I have no interest in sharing a car's path; I want my OWN strip of the roadway. I don't trust vehicles to be respectful of my space.







**Question 23: Comments regarding cyclists' behavior?** 

Some good, some bad. But everyone lives in fear of cars because of the way the people around here drive.

As a new person to the sport of cycling, it's hard to rate the attitude/behavior of cyclists in the valley as a whole. I know that I am intimidated by using roadways for cycling, mainly because I don't trust the drivers to be aware of, and courteous to, cyclists on the road.

Many cyclists are very inconsiderate on greenway of other users. I use for cycling, socializing/walking dog and running and the cyclists are the rudest users.

Cyclists need to obey traffic laws, e.g., don't blow through stop signs Cyclists should wear helmets

I have seen too many "serious" bikers only slow down at busy intersections. They rode through red lights when traffic was light.

We cannot ride our bikes everywhere we'd like to safely!

As with most things some are very good and some are not!

Most are careful and considerate. Some do not respect traffic enough

It depends on the cyclist. Some are come across as "holier than thou" and do not share the road but expect the operator of a moving vehicle. to do so.

Some completely disregard road rules, others are very conscientious, most are somewhere in between. On average, I call it a neutral rating.

There are many local cyclists that I have observed over the years that the greenways have been open, that have shown that have no notion of practicing proper cycling manners. (such as passing pedestrians, right of way, speed in some sections)

Sometimes the really good ones think they are too good to wave or acknowledge a less experienced biker or one on a hybrid.

need to keep single file more often

Wish road bicyclists (usually the serious ones) would call out more when approaching pedestrians. The underestimate how much people can hear. They are very fast and very silent.

Most cyclists are responsible and friendly toward other cyclists and pedestrians, and as accommodating as possible toward motorized traffic. A few are overly defensive and/or break traffic laws but you'll see that anywhere.







Most I have spoken to are hostile about the lack of accommodations in the Valley but most seem to not support projects that improve the accommodations, they want a separate wide area to ride in. Most are negative towards drivers as well.

I have witnessed some bad behavior from cyclists at times. I travel the Parkway a lot & sometimes they ride side by side & take the whole lane. It's risky to them & vehicles.

Road hogs, very rude. Followed some riders for several miles on a back road. They were in the whole road when a car was not coming. Had to set on my horn before they would let me by.

I see a lot of cyclists ignoring traffic laws, running stop signs passing stopped cars, etc.

I see a lot that do NOT obey traffic laws, like traffic lights etc.

As a commuter on a bicycle my main objective is to get from the Smart Way Bus stop to work safely and in a timely manner. My policy has been to always yield to vehicles and stay out of their way as much as possible even if it is an inconvenience to me.

Again, this question isn't easily answered.

Like motorists, most are good but a few bad apples that hurt all of us.

Too many cyclists are also in the wrong and don't follow rules of bike safety when riding.

I only say that because I've seen more "inexperienced" bicyclist ride diagonally through big intersections in front of cars, etc. that reflects negatively on other cyclists

Great mountain bike community!!!

Some don't obey traffic rules--need to consider ourselves as vehicles.

I see many that do not obey traffic laws.

I see bicyclists breaking the law (e.g., running stop lights, failing to signal). These should be corrected but they pale in comparison to motorist bad behavior. The bicyclist behavior that seems to anger motorists most - taking one's place on the street and refusing to be intimidated - is not bad behavior.

Most are accommodating.

Unknown for Roanoke however; NJ cyclists would be frustrated!

Some 'bikers' don't need to be out on the roadways. They have no knowledge of biker rules or lack the hyper-sensitivity to have fore-thought on what a motorist might do. That is why off-road/greenway paths would be much much better!

That question needs finer categories. Most regular folks on bikes here have a positive attitude. Numerous of the racer types though are arrogant and take too much lane or ride expecting too much from the motorist.







There's a small percentage of cyclists who blatantly disregard laws and are less than courteous to other road users; however, I think the majority of cyclists are conscientious road users who follow the rules to the extent that those rules provide for a cyclists safety (which isn't always the case).

Experienced riders generally ride legally and responsibly. Large group rides are a problem for drivers because of long pace lines and side-byside riding. Inexperienced older riders and young people often ride unsafely on sidewalks, the wrong way on streets, without helmets, disobey traffic signals, etc.

Cyclist in the Roanoke Valley is appearing on roads and greenways in larger numbers. Those that have had the proper training in the rules of the road and greenways are very polite and accommodating. There needs to be bicycle educations for riders just like there is for cars. People can't drive a car without training and so it should be for riding a bicycle. There should be bicycle education classes just like there are driver's ed. classes. This would help people to be better prepared when riding their bicycle on the road with cars.

Most cyclists I know behave appropriately and in accordance with the law. They may not come to a complete stop at a stop sign -- but don't dart into traffic either. Any misbehavior I have ever witnessed was in response to driver aggression or ignorance.

Bike laws are not taught from the actions of cyclists. Wrong side of road, stopping, etc.

I think most cyclists are pretty good, but there are still too many who either don't know or don't follow common "rules of the road".

I've been embarrassed on group rides b/c of the other riders riding double wide or running stop lights/signs and therefore do not participate in large group rides anymore

Most are friendly, hey, they are environmentalists, right? Not bicycling for no reason!

Appropriately Paranoid

I have observed road bikers blatantly blowing through stop signs, stop lights, and not wearing helmets. Bicyclist groups stage events where they call attention to themselves, but do not wear or promote helmets or bike safety.

It would help if more cyclists would follow the rules of the road. I saw someone riding on the wrong side of the road up a blind curve/hill just two days ago. A recipe for disaster.

Although there have been some recent deaths of cyclists, people still seem to keep their chins up!

Ride against traffic, on sidewalks, blow thru stop signs and red lights. Some cyclists act like jerks on the Roanoke river greenway.

I think most obey traffic rules.







Cyclists need to remember they are a vehicle, obey the traffic laws and be respectful of cars. I have seen cyclists give those of us considerate riders a bad reputation.

Some cyclists think they own the roads.

Most are lawful and considerate; some are unlawful and arrogant

We want cycle friendly streets so we can ride to work. I would like to see pedestrians on the greenways be more aware of cyclists and not walk 3 or more wide and not be aware that bicycles are coming up behind them. I find pedestrians and runners indifferent to cyclists.

Some cyclists blatantly disregard traffic signals and stops. Some are pretty nasty to motorists. It's a situation that perpetuates itself mostly because of the attitudes on both sides. In reality, I don't think we're that far apart.

I believe cyclists abuse their ability on the roads. They run stop signs and traffic lights and block traffic. Cyclists need to be better educated on riding etiquette.

Some cyclists disobey rules of the road; most adhere to caution.

I am very encouraged by the increased number of cyclists on the greenway and impressed with the small increase in bike commuters.

For the most part good, as a cyclist you sometimes get upset when autos do not share the road

cyclist have become used to horn honks and unsafe driving practices

They as well don't always know how to interact with traffic... the rules of the road

Perfect is the enemy of good. A 1.5 ft shoulder would work, but we get nothing because we can't afford the desired full-with bike lane.

For the most part cyclists are easy to get along with. I've seen a fair share of bad apples though!

Inconsiderate bikers riding abreast instead of single file on side of road, holding up motorized traffic and creating a public relations problem.

Share-a-Bike is awesome.

Many cyclists, especially the spandex/lycra lot, consistently do things that piss drivers off, such as riding two or three abreast, taking more of the travel lane than necessary, running stop signs and traffic signals. Cyclist must give respect in order to receive it. General elitist attitude of many primarily recreational cyclists.

I believe that, in my opinion, all of the cyclists in the greater Roanoke Valley are well mannered, all of them I've seen wave at me and I've seen







them wave at each other like what I have been saying is a big family of people.

Some cyclist are very courteous but some are very arrogant and believe the road belongs to them. When cars approach from behind, I move to the right side of the road to give cars enough room to pass. A lot of cyclers don't, and force the driver into the other lane to pass. I think City Police should conduct classes on Bike safety and rules of the road. And exercise warnings to those bikers and drivers who break the traffic laws and then ticket those individuals who continue to violate and if that continues, take their biking or driving privileges away.

From numerous observations, sport cyclists in the valley (the ones on racing bikes) are usually rude and demonstrate more risky behavior. I've seen them glance-and-roll through red lights at intersections a lot.

Probably negative towards the few who make very dangerous to ride road routes.

In general they seem to try to do things to encourage biking around the community and share their knowledge with non-bikers who exhibit healthy curiosity about bicycling.

Cyclists have a very poor attitude. Mr. River Laker and his offensive Manif Spaciale event are excellent examples of the attitude of bicyclists in the Valley.

All in my circle act as ambassadors for the sport, encouraging non cyclists to try the sport.

too many cyclists that a) do not obey traffic laws, and b) many are too aggressive

They have a destination & are more aware of what is around them.

Generally positive. Some bikers ignore traffic lights & signs, not a good thing...

ANOTHER HARD ON. CYCLISTS NEED TO UNDERSTAND THAT THEY HAVE THE SAME REGULATIONS/RULES AS THE VEH. THERE ARE EDUCATED CYCLISTS THAT DO NOT RIDE IN SINGLE FILE, THEN THERE ARE UNEDUCATED CYCLISTS THAT RIDE IN THE WRONG DIRECTION WITH NO SAFETY EQUIPMENT.

I see the cyclists as somewhat aggressive; this may be due to the defensive nature they must possess in order to stay alive on the streets. I totally agree with SHARE THE ROAD, but that should go both ways.

Some rides will not ride single file in traffic. Overall, though, very good

Some cyclists on the greenways do not pay attention to others and block the greenway making it difficult to pass etc.







Most cyclists seem to share the roads appropriately (considering their size and speed disadvantage), but there are many who give bikers a bad name by slowing traffic when they shouldn't. Riding side-by-side on a main road is just plain dangerous. And while I applaud people who bike to work, they must realize that the majority of road users just want to get to work on time without having to swerve around a bicyclist at rush-hour.

Do not always follow laws of the road (stop signs, yielding right of way)

See above. More people need to take cycling education. Many of the experienced riders are the worst for poor cycling behavior. These cyclists will never take a course...but they might take a survey with a yes/no test and then the answer with an explained reason for the answer. Well, they probably will not do that either. Best to learn by the positive example of other cyclists.

Again there is a mixture. Because we (cyclists) are in the more vulnerable position on the road we tend to be more respectful and law-abiding by en large.

There are always some rednecks - even on bikes.

Negative and positive. I know some cyclists who do not obey traffic laws as they should and then grumble about inconsiderate motorists. Then there are others such as myself who stop at stop signs, red lights, etc even if it means dropping back from the group!

We try to obey all traffic laws including stop signs.

Though not to the level of motorist, but there are also some cyclist bad apples...

I think there are some cyclists in this town that might be fostering a bike vs. car feud. I hope this isn't the case.







1	2	3	4	5
Brandon Ave. from Patrick Henry to 419	Apperson Rd.	Riverside Dr.	5th St, SW (Walnut - Campbell Ave)	Campbell Ave (5th St 8th St)
Colonial Avenue (Penn Forest Blvd - Overland)	Colonial Avenue (Wonju - Brandon)	Franklin Road (Brandon - Walnut Avenue)	Grandin	419
Windsor	Brandon	Apperson	Brandon or River Greenway	Peters Creek Rd
none	Brambleton to electric road to Starkey	Brambleton to 419 to Franklin	Mill Mountain	Blue Ridge Parkway
Brambleton to Gars Mill to Grand in	colonial	Murray Run (to avoid the heavy traffic of colonial where to bike lane is not present) on one route to my work	Peters Creek Road	Green Ridge Rd NW
"sidewinder Route"; Winding way road	Avenham	Roanoke River Greenway	Riverside Blvd	Marshall Avenue SW
Franklin Road	Peters Creek between Brandon Ave. and Roanoke Blvd.	Roanoke Blvd. (Salem) between Peters Creek and 419	Grandin Rd.	Colonial (Virginia Western Community College)
Brandon Ave. between Grandin Rd. and Peters Creek	Rt. 419 across Exit 141 bridge	Cove Road	Memorial Ave	Campbell Ave
From Salem Park and Ride: Rt. 311 to Rt. 419	Maiden Lane	Memorial Avenue	Wasena Park Greenway	Downtown
Roanoke River Greenway	Brambleton Ave.	Electric Rd.	Franklin Road	N/A







Garst Mill Rd.	Grandin Road entire length	Grandin Ave	N/A	Baldwin Ave
I don't because I think it is dangerous	Windsor Ave	Brambleton Springwood to Carilion	Orange Avenue (Salem line to downtown Roanoke)	Dale Ave. SE - 11th St, SE to 4th St, SE
Garst Mill Road entire length	Arden Road	Memorial Ave past Mountain View to Main Street	Wise Ave	West Main Street, Salem
Wasena Park to Smith Park Greenway	Grandin Rd Memorial to Patrick Henry HS	Riverland	Campbell Ave. along the Railroad in SE	Melrose
Rke River GW Wasena to RMH	Memorial Avenue	N/A	Red Lane, Salem	Lick Run Greenway
Memorial Ave Grandin Rd. to Campbell Ave.	N/A	Shenandoah Avenue to downtown Roanoke	Main in Salem	Campbell Ave.
Grandin Road	Kessler Mill Road	Campbell Avenue	Franklin Road SW between Elm Ave and Williamson Rd	Salem Ave
N/A	5th Street SW	Church Ave. Downtown	Red Lane	Brandon Rd to Salem
Main Street, Salem (Roanoke city line to downtown Salem)	Franklin Ave. Downtown	Craig Avenue, Salem	Lick Run Greenway	Melrose
Mountain Avenue SW	North & South Broad Streets, Salem	Boulevard	Roanoke River Greenway	Roanoke River Greenway
Tazewell - 11th St., SE to Jefferson St. Downtown	Texas in Salem	Elm Avenue SW between Main St. Bridge and Franklin Rd	Grandin	Grandin Rd
Thompson Memorial Drive, Salem	big lick	Kesler Mill Rd	Grandin RD.	Colonial Avenue (near 419 intersection)
Lynchburg Turnpike	Main Street SW between Brandon and Elm	Jefferson - Williamson	Main St. Salem	NA







memorial	Main Street (Salem)	Grandin Road/Memorial Ave.	Main Street (Wasena Bridge to Sherwood)	neighborhood streets
Roanoke River Greenway	Roanoke River Greenway (Wasena & Smith Park)	Memorial Ave	Maiden Lane	10th St
Thompson Memorial	Blue Ridge Parkway	Liberty Rd. and 2nd Street	View Avenue (Brambleton to Colonial)	Apperson
None	Craig Avenue	Williamson	NA	Salem Ave
Grandin - Memorial - Ferdinand Rd	13th street	Elm Street (Franklin to Wasena Bridge)	Loch Haven Drive	Brandon/ between Grandin and Keagy
Brambleton/Bent Mountain Road - Traffic sucks!	Lick Run Greenway	Brambleton	Brambleton Ave	LEE HIGHWAY
Route 311 (Thompson Memorial Road)	various neighborhood streets	Brambleton Avenue (from Spring Road South)	Electric Rd	noble
Campbell Ave	cove rd	NA	5th St	Woodhaven Rd (all)
	Campbell Ave (13th to 2nd)	Edgewood	Orange Ave. between 10th and Salem Turnpike	Campbell Ave from 3rd St SW to Wise Ave SE
Rke. River Greenway	Maiden Ln	Peters Creek Road (Barrens Rd to Williamson Rd)	Shenandoah	Old Hollins Rd NE
Memorial Ave	Brandon		GRANDIN ROAD	Arden road
peters creek rd	Guilford > Spring Rd (Grandin to Brambleton)	Electric Rd	Gainesboro	Brandon Ave to Towers to Jefferson Ave to downtown
Memorial Ave./13th Street (Winborne to Campbell)	NA	College Lane	Grandin Rd (from Brandon Rd to Memorial Av)	Blue Ridge Parkway
Rd	Peters Creek off of Brandon	Riverside Dr Salem	Campbell Ave from 3rd St SW to 13th St. SW	Kimball
Main Street Wasena	Williamson Road (Peters Creek to Florist Rd)	Shenandoah Ave	Plantation Rd NE	Brambleton
Grandin Road	Wasena Greenway	13th/Memorial between Salem Ave and Grandin Rd	Fishburn Park and Wasena Park	McClanahan St







NA	Colonial Ave	Boulevard from Hershberger to VAMC	Grandin Rd to Brambleton Ave to Rt. 419 to Ave	Lick Run Greenway
Brandon	Riverside Dr.	Grissom - Blacksburg	Brambleton	Jefferson Street (north and south)
I don't bike for transportation	Parkway	CAMPBELL AVENUE	Plantation	WILLIAMSON RD.
Lick Run Greenway	4th Street Salem	Campbell	Williamson	Main St./Elm Ave
Tazwell	Melrose Ave	Thompson Memorial Drive (from Edgebrook Dr to Rt 419)	Wiley Drive	419 / Electric
Williamson Rd	Williamson Road between Happy's and Downtown	Roanoke River Greenway from Wasena to Bennington	2nd St and Wells to Lick Run greenway	Airport Rd
Brambleton	Hershberger from Brandon to Boulevard	Hollins Rd NE	Riverland Road	Rte 460
	Palmer Street - Blacksburg	Woodrow Wilson middle school area	FRANKLIN RD.	Franklin
Rt. 311 in Roanoke County	FRANKLIN ROAD	Tinker Creek Greenway to Wise Ave to Campbell Ave	116 (from Boones Mill Rd to downtown)	Luck Ave. downtown
Main Street Salem	Grandin road	Route 419	Brandon Rd	Franklin Rd
Peters Creek Rd	Downtown area	Valley View Mall	Salem Turnpike	Williamson b/t Downtown & Peters Creek
10th Street between Williamson and Campbell	Dr (all)	South Jefferson	Municipal Dr	Roanoke River Greenway between Winona and Franklin
Brandon from Edgewood to Hershberger	Jefferson Street from Campbell to 26th St SW	Roanoke River Greenway	Diuguids Road, Salem	Springwood RD
Main Street - Blacksburg	Valley Rd. between Troutville and Daleville	Market, downtown area	Brandon	Jefferson (hospital to downtown)







ROANOKE RIVER GREENWAY IN CITY	Campbell Ave SE	Roanoke River Greenway	Jefferson Ave	Lick Run GW
Murray run	Grandin village area	Carolina Ave.	Church Ave. downtown	Wasena from Main to Grandin area
Liberty from Plantation to Gainsboro	from college to 419	PETER'S CREEK RD.	Frontage Rd.	Occasionally will use Jefferson/Williamson (both are higher traffic)
Brandon Av (all)	Jefferson St from Roanoke Memorial Hospital to downtown	Bradshaw Rd Roanoke county	2nd st	Loudon Ave (10th to 24th)
Franklin Road from Reserve Ave to 3rd St SW	Starkey Road	Franklin Rd (from Starkey to downtown)	Jefferson b/t Downtown & RMH	elm street
Rt. 11 to Daleville and Cloverdale	Hershberger Rd	Memorial Avenue	Campbell Ave between 13th and 2nd	Mill Mountain/Parkway
9th St SE	Memorial	Peters Creek Extension	43	Colonial Avenue - Brandon to Winding Way
Murray run	Main Street, Salem	Greenwood	Brandon - > Maclanahan	Franklin Road
College avenue from Main street to	Maiden Lane	Valley View Blvd	Small roads to Valley View	Jefferson St (south Roanoke to Downtown)
Memorial Ave crossing the Memorial Bridge	Jefferson, downtown area	Riverside Dr. Salem	Main Street Bridge	Campbell
All roads in the Cave Spring Area.	Campbell SE and Downtown	colonial	Franklin Rd to Rivers Edge Area	Franklin Rd
Peaceful Valley Road	28th St.	Roanoke river greenway	Patterson Ave (10th to 24th)	Grandin road
Williamson rd	RT. 419	5th St in Old SW	memorial Ave	Jefferson, Franklin to Carilion Memorial
Campbell Ave	Rt 640 Botetourt county	Hershberger	downtown Roanoke	Campbell Ave







				SW/Downtown
Roanoke Boulevard, Salem (near General Electric)	Oakland Blvd.	Williamson Rd Greenway	Electric Road/Route 419 - 220 to Salem City limit at Keagy Road	Franklin Road
Grandin Road	Melrose Ave	Lick Run Greenway Downtown to Valley View	Jefferson st	Williamson
Campbell, downtown area	Merriman Rd/Buck Mtn Rd/ to Starkey Rd	Colonial Ave between Brandon and Winding Way	Penn Forest between Colonial Ave and Starkey Rd	Brandon Ave
13th Street/Bennington/Garden City Blvd.	Grandin Rd	Greenfield st	Roanoke River Green way (Wasena to Walnut)	old mountain road
Avenham Ave.	Brambleton Ave	Campbell Ave	Jefferson St	Shenandoah Ave.
BRAMBLETON AVE.		Florist Rd	Wise	Williamson Rd
Rt 11 Botetourt county	Wasena Park	Ferdinand	McClanahan	Blue Hills Parkway
Plantation	10th Street	Gainsboro Rd/2nd Street from Orange Ave to Franklin Road	10th to the lick run greenway	elm Ave
forest park blvd	Brandon//Colorado	Avenham (29th to Broadway)	Marshall Ave, 10th st to 3rd St	PLANTATION ROAD
US220 Webb Rd to Starlight Ln (by necessity)	Starkey	Grandin	Grandin to Brandon to Colonial	Grandin Road SW Between Brandon and Memorial
Roanoke River Greenway	blue ridge parkway	Shenandoah Avenue	Campbell Avenue	Lick Run: Rutgers to Sam's to Frontage Road by airport - need a protective line really bad in this area
Grandin Road	Grandin Rd., near the Grandin Village	riverside drive	memorial	Franklin







Sherwood	Lick Run Greenway	Grandin - Memorial Avenue to Garst Mill Road	Elm/Main St.	Franklin to Williamson
Lick Run Greenway	Jefferson St	Walnut Avenue	Jefferson Street from Reserve to Downtown	Main St / Elm
Deyerle Road	Campbell b/t Memorial & Downtown	Colonial Ave between VWCC and rte 221	Hollins road	Electric
419	Grandin Ave between PH and Memorial	Grandin Road in Raleigh court area	Murray Run Greenway	Williamson Rd from Orange to Courtland Rd
pitter road	220/604	Williamson Rd from Liberty Rd to Hershberger Rd	Florist Rd	Anywhere near the Evergreen Cemetery
Memorial Ave., near Grandin Rd.	Jefferson St. to Kirk Avenue	Campbell Ave	Hardy Road	Franklin Road
Franklin Road	4th street Salem	Belle Ave	Elm	Anywhere else my bike can go!
BRAMBLETON, COLONIAL,	Memorial - >	King	main st	
Roanoke River Greenway - Memorial Hospital section	Greenway Drive	Richlieu Ave	APPERSON DR/BRANDON	
Memorial b/t Grandin and Campbell	Memorial from Grandin Village to 13th St	Salem from 10th to downtown	Elm Avenue SW between Wasena Bridge and Elmwood Park	
Brambleton Ave between Roselawn and city limits	Lick Run Greenway from Target to Downtown	Roanoke River Greenway, Carilion Memorial to Wasena	Riverdale Road	
HWY 11	10th street - NW	Memorial to Raleigh Court	Wasena	
Salem Avenue, between 5th & Jefferson St.	greenway Wasena	Jefferson Street	Campbell from downtown to SW	
west main st Salem	Roanoke city greenway	Campbell	Peters Creek Road: Brandon to #581	
Grandin Road	Electric Road	Church Avenue	Colonial Avenue	
Grandin Village - >	Grandin	Reserve Avenue	Jefferson	







Peters Creek	Brambleton	Sanderson drive	from there to Franklin
Grandin from Garst Mill Rd to Grandin Village	Tinker Creek Greenway	Riverside Dr.	Grandin/Garst Mill
Rutgers Ave from Hershberger to the neighborhood near Huff Lane Park	rte 419 between Hanging Rock and I-581	Williamson Road between Hershberger and Breck. Middle	Brandon
River Greenway (Hospital to Wasena)	wolf creek greenway	Main & Jefferson	Orange Av from Gainsboro to Williamson Rd
main street	Memorial St	Lick Run	Greenways (all)
Grandin road	Franklin Rd from Williamson Rd to Wonju St	Airport Rd	Memorial Ave
Cove Road	Grandin Road/ Memorial Ave	King Street	The Grandin Area Memorial Bridge
Brandon to Salem	Berkley Rd	Main	
Brandon	Belle	Memorial Ave between Grandin and Salem Ave.	
Roanoke River Greenway	Grandin rd	Brambleton rd	
n/a	Campbell Ave sw from 10th to downtown	VALLEY VIEW AVE	
rte 221 between Bent Mt and rte 419	Memorial Ave, Grandin to 13th st	Franklin Road SW between Reserve and downtown	
greenway from 13th st to Wasena park	Lick Run Greenway 10th to Valley View Terminus	Railside Linear / Norfolk Ave	
n/a	Belleview Avenue	Elm	
Campbell St (from 13th to downtown)	Franklin	parkway	
Williamson Rd from Liberty Rd to Franklin Rd	Jefferson St.	greenway between se and Wasena	
Roanoke River Greenway	Brandon/Franklin	Wasena Greenway	







	Intersection		
King St	cougar drive	Elm Avenue: Franklin to Main street bridge	
Carson	Memorial Ave.	Greenway (the one going by Carilion)	
crystal springs blvd	Hershberger between Cove and 581 or Williamson Rd	Drive	
n/a	Old SW	Murray Run Greenway	
memorial into Grandin (like the bike lane)	Grandin Road	Elm	
Grandin Rd, Brandon to Memorial	Murray Run	Grandin to end of Grandin	
Williamson Rd. from 10th past Peter's Creek	Greenway from Valley View Mall to downtown	Brandon /	
Walnut Avenue	460 - Orange Avenue	Franklin	
Franklin road, through old southwest neighborhood and downtown Roanoke city	Brandon	Shenandoah from PC to 5th St	
elm	Grandin Road between PHHS and Grandin	Norfolk Ave.	
Franklin Road	Brandon rd	Brandon Ave	
Brandon Road	ROANOKE RIVER TRAIL	Wasena Park	
Cloverdale road - between Daleville and hopsack	Brandon Avenue SW between Grandin and Colonial		
Grandin Road	GREENWAY - RKE MEMORIAL - WASENA		







Cove Rd between Peters Creek and Hershberger	Mill Mtn Greenway		
Downtown - Campbell Ave.	memorial		
Roanoke River Greenway	Roanoke city greenway		
Roanoke River	9th SE		
All of Plantation Rd	Salem Bike route		
	Valley View to Roanoke		
	Memorial Hospital - Lick		
	Run/Market Street		
Gus Nicks	Pedestrian Bridge/Market		
GUS NICKS	Street/Elmwood Park to		
	Mill Mnt Greenway on		
	Williamson to Roanoke		
	River Greenway		
	Blue Ridge Parkway		
Brambleton Ave between	Wildwood Road		
Brandon and Cave Spring			
Grandin rd	Brandon Avenue		
LICK RUN	Virginia Ave		
Murray run	Brandon to Grandin		
Main Street SW	Brambleton Ave		
GREENWAY -RKE MEMORIAL - RIVERLAND	Avenham		
	Peters Creek from		
Roanoke River Greenway	Brandon to Shenandoah		
Grandin	Grandin Road		
Orange Ave/460	Colonial Ave		
Franklin rd	The Greenway by Roanoke Memorial		
Williamson			







Lick Run Greenway	
5561 Westbriar Court	
Franklin Road between	
Reserve and Jefferson	
221/Brambleton	
Shenandoah Avenue	
Windsor Avenue end-to-	
end	
Hardy Road	
Brambleton from cave	
springs corner to Brandon	
Wasena Park / Smith Park	
Jefferson	
Brandon Av from Keagy to	
Peters Creek	
Wasena Park	
Brambleton Ave	
Franklin Road	







Question 25: When bicycling for RECREATION/EXERCISE, list the five streets, greenways or trails you most often use? Include specific street
segments and/or intersections for reference.

1	2	3	4	5
Walnut Ave to Mill	Blue Ridge Parkway	Greenways when they	greenway behind PHHS	311
Mountain		aren't packed with people		
Roanoke River Greenway	explore	parkway	explore park trails	Campbell Ave. to downtown
greenway	streets in my neighborhood in North Beverly Heights in Roanoke County	Huckleberry Trail - Christiansburg to Blacksburg	Bradshaw Road	Willetta Dr.
Wasena	Carvins cove trails	parkway	Memorial Ave. Bridge to Campbell Ave.	Wolf Creek Greenway
Roanoke Greenway between Roanoke Memorial and the sewage treatment plant	greenways from Wasena to 13th st to Fallon park to Vinton	Carvins cove	Lick Run Greenway	
Entire Roanoke Greenway from Wasena to sewage treatment plant	Roanoke river greenway	Blue Ridge Parkway	Garst Mill Park	Brandon AV/
Blue Ridge parkway by Brambleton to Brandon to main to Wasena to RMH to mill mountain	Sylvan Road	Wasena Ave. between Brighton Rd. & Memorial Ave.	Grandin Road entire length	Merriman Road
Murray Run Greenway	Roanoke River Greenway (Wasena Park)	Loch haven	Waid Park	Explorer Park Trail







Avenham	Webster	Main Street	West Main/East Main (Salem) Melrose	South Roanoke area
Smith Greenway	Roanoke River greenway	lick run greenway	Blue Ridge Parkway MP 120-136	13th St., SE to Roanoke River Greenway, City of Roanoke
Roanoke River Greenway	Brandon Avenue	Chesterton St and surrounding	Greenway	Teel Brooke Road, Brick Church Road, Route 919, Anchor Drive, Windlass Drive
barrens road	Elmwood park	Garst Mill Rd.	Greenway	buck mountain road
Raleigh Court neighborhood streets	New River Trail	Tinker Creek Greenway	rest are out of the area	Wildwood Road
Roanoke River Greenway	Grandin Rd.	Carvins Cove	Raleigh Court area	Norwood
Murray run greenway	Roanoke River Greenway	Lick Run Greenway	Bullitt Ave., SE to 13th St., SE	Va Creeper Trail or New River Trail
Greenbrier River Trail	Explore Park	Crystal Creek	Personal Trails on our family farm	Blue Ridge Parkway
Willowlawn St.	Tinker Creek Greenway	Secondary low traffic	mill mountain road to parkway	All county back roads (Starlight Lane, Back Creek Rd, etc.)
Garst Mill Road entire length	neighborhood streets	Mill Mt. old road	Greenhill Park greenway	Blue Ridge Park Way
Roanoke River Greenway	Brambleton to Crystal Creek	Salem residential streets	Belford	Fishburn
same as above	Cemetery	Grandin Road area	Peters Creek	Carvins cove trails
Roanoke River Greenway	Carvins Cove	Salem Ave. Downtown	Fishburn Parkway	Campbell Avenue
Roanoke river	Riverside Road (along Roanoke River to Green Hill park)	Creeper Trail	Red Lane	Roanoke city greenways
Rke River GW	Mill Mountain Greenway	walnut avenue	Mason Creek trail	Kessler Mill Road in Salem







Roanoke River greenway	Rails to Trails out of town e.g., Va Creeper	River Road	Lick Run Greenway	Jacob's Drop
same as above	Campbell Ave. along the Railroad in SE	Chesterton	New River Trail	Greenbrier Trail (WV)
Neighborhood streets	Explore Park	Kessler Mill	Riverside Drive in Salem to Greenhill Park	Barrens Rd
Back roads to Blue Ridge Parkway	southeast Roanoke beside east end n& w shops	"Old Road" up Mill Mountain	Greenhill Park Greenway	Garst Mill Park
Hanging Rock trail	Harborwood Road	Kesler Mill Rd trail	Patrick Henry	WALNUT AVENUE FROM DOWNTOWN TO PARKWAY
Roanoke River Greenway - Wasena Park to Water Treatment Plant		Wasena Park Greenway	mill mtn trails	10th street
Smith Park Greenway east to Greenway terminus	Battle in Salem	Carson cove trails	Windsor Ave	wood thrush trail
Roanoke River Greenway City of Roanoke	Lick Run Greenway	Tinker Creek Greenway	Mill Mountain trails	Fishburn Pkwy
new river trail	Main Street (Salem)	Huckleberry Trail	Mill Mountain	Roanoke River Greenway
Various Streets, Christiansburg	Greenhill Park Greenway	Bradshaw Road	Murray Run Greenway	Country Club Dr.
Waid Park	Greenway along Roanoke river	Garst Mill Greenway	explorer park	Falling Creek Park
blue ridge parkway	Roanoke River Greenway	Vista Heights Neighborhood	Brandon	Lick Run greenway
Poor Mountain Road	Mountain Heights Dr.	mill mountain	Fire Road	skate park in Wasena and Wasena park







Deyerle	Crystal Creek Road	blue ridge parkway	Carvins Cove	Shenandoah Ave to Shaffer's Crossing to Roanoke Ave to Ghent Park to Roanoke River Greenway to Tinker Creek Greenway to Wise Ave to Campbell Ave to Elm Ave
River (Wasena to Tinker Creek)	All Wiley Drive Greenway	Maiden Lane	Parkway	Blue Ridge Parkway
Roanoke River Greenway	Carvins Cove	Mill Mountain	Thirlane Rd	43
Thompson Memorial	Pandapas pond	Riverside	Wiley Drive and neighborhood streets in South Roanoke	Tinker Creek
Garst Mill Park	Rt 779 from 311 to Daleville	Memorial Ave>13th Street	Greenway near Roanoke river	Blue Ridge Parkway
Greenway (Roanoke River Area at Carilion Roanoke Hospital)	Wasena Ave	wood thrush	STARKKEY ROAD TO BLUE RIDGE PARKWAY	Mill Mountain Trails and Greenway
Greenhill Park	Roanoke River	Roanoke River Greenway	Grandview rd	Kenwood/link to tinker creek greenway from Roa River
Yellow Mountain Rd.	Blue Ridge Parkway	Mill Mountain parkway	Old road	Franklin Ave.
Use my local bike lanes in Blacksburg	Grandin Road	Buck	Botetourt County back roads	MURRAY RUN GREENWAY
Hanging Rock	monument trail	Blue Ridge Parkway	Murray Run Greenway	Wildwood Rd Salem
Blue Ridge Parkway	Norwood/Westchester/Lytham	Greenway	Shenandoah Ave	Murray Run Greenway
Huckleberry Trail (Blacksburg/Christiansburg)	Roanoke River Greenway	Peters Creek Rd	Trinity	Blue Ridge Park Way
Penn Forest Neighborhood	Hi Dee Ho	Lick Run Greenway	Montvale Park	Wolf Creek Greenway







Streets				
Roanoke Greenway from Sewage plant to Wasena Park	Roanoke River Greenway	Blue Ridge Parkway	Cove Rd. N.W.	Parkway
Carvins cove	Greenhill	Wasena Park	Fishburn park	Rt 24 to the Blue ridge parkway
Same as above	Green Hill Park	LEE HIGHWAY	10th St. to Lick Run Greenway to Huff Park to Williamson Rd	Roanoke River Greenway
various neighborhood streets	Loch Haven Rd	Williamson rd	Buck Mountain Road	Loc haven
Bradshaw rd. to Ironto	Neighborhood streets in Old Southwest	Parkway.	618	Franklin
Roanoke River Greenway	Access road up Mill Mountain to the Parkway	Mill Mtn (the winding old road that goes up the backway)	Rivers Edge	Pandapas Pond
Lick Run	Meadowbrook	riser trail	Walnut Avenue	Tinker greenway
Greenway	FRANKLIN ROAD	Nace-Lithia road	GreenwayWasena Park stretch	Roanoke River Greenway(Salem) and (Roanoke City)
Roanoke River Greenway	Roanoke river gw	Roanoke River Greenway	Lick Run Greenway	Rutrough road
Carvins cove trail system	Walnut Ave	Carvins Cove Trails		Greenways
	Jefferson Street from Riverland Greenway to Downtown Roanoke	Nace	Wildwood Road	Mill Mountain MTB trails
Westchester Ave/Chesterton/Deyerle	monument trail	residential streets	Wise Avenue	Salem Avenue - heading into downtown
Bradshaw in Salem	Williamson/Plantation neighborhood streets	Explore Park	13th Street Bridge area	Explore Park
Carvins Trail System	Mill Mt trail system	Peters Creek Rd. N.W.	BLUE RIDGE PARKWAY	Merriman Road







Mill Mountain Trails	Blue Ridge Parkway	DuPont forest	Loch Haven Rd Roanoke count	220/604
My recreational cycling is outside the Roanoke Valley.	Blue Ridge Turnpike	Roanoke River Greenway from Wasena to Mill mountain	Parkway Spur	Jefferson
Wasena Greenway	lick run greenway	Memorial Ave to to Peters Creek to Kessler Mill to Hanging Rock at Rt. 311	Hanging Rock Battlefield Trail	Salem Turnpike -> 311 - > Bradshaw Rd
parkway	Carvins Cove	Franklin Road from downtown to S.W. County	Mill Mountain	Mill Mountain Park off road trail system
New River Trail	Portland Ave. onto Lewiston n.w.	311	Springwood Road	Mill Mountain Trails
Carvins Cove	Murray run	Whole area	Blue Ridge Parkway	Windsor Avenue
Woodhaven Rd	Greenhill park	Lick Run Greenway	Bradshaw Rd	Many different back roads (most frequent rides)
Neighborhood streets in Williamson Road area	Roanoke River Greenway to 13th St.	Wasena Park	Sylvan to the Roanoke Star	Mill Mountain/Parkway
Roanoke River Greenway	Route 419	Hanging Rock Battlefield Trail, Salem	Old Hollins Road	Mtn bikes trails at Carvins Cove
Huckleberry Trail - Blacksburg/Christiansburg	And Hershberger to Liberty	Parkway	Route 779 (Daleville to Catawba)	Grandin Road
Laura Rd	Wasena Neighborhood	Roanoke River Greenway	Brandon	Franklin Road
ROANOKE RIVER GREENWAY IN CITY	Blue Ridge Pkwy. (NOT in the Fall)	Explore Parkall trails	Roanoke River Greenway	Franklin Road
lick run gw	Carvins Cove	All roads in rural areas	River greenway	Elm Ave from Franklin Rd to Brandon Ave
Jefferson Street	Walnut (?) up to Mill Mtn	Tinker Creek Greenway	Grandin Road Extension (Roanoke C0)	Jefferson St







Riverland Greenway	Maiden Lane	Bradshaw/Catawba/Route 11 (Glenvar)	Roanoke river greenway	Campbell Ave
walnut	plantation rd to Oakland blvd nw	Tinker Creek	Blue Ridge Parkway	Explore Park
Roanoke River greenway	Mill Mountainall trails	Tinker Creek Greenway	Surface streets in South Roanoke	lick run valley view
Carvins Cove trail system	RT. 11	HANGING ROCK GREENWAY	Tinker Creek Greenway	Mill Mtn trails
Mill Mountain Trails (all)	Roanoke River Greenway	Bradshaw Rd Roanoke county	Blue Ridge Parkway	we use the whole greenway every wk and would use more
Brughs Mill	Carvins Cove Trails	Route 11 N of Troutville	Crystal Creek Road	Tinker Creek Greenway
river greenway	Brandon, Grandin, Memorial, Brambleton	Shenandoah Ave	Springwood	Memorial Ave.
Roanoke River Greenway	Roanoke river	Garst Mill Greenway	Tinker Creek	Jefferson St & Elm Ave
Wasena park's greenway	Wasena Greenway	Blue Ridge Parkway	Wiley Drive	Mill Mountain
explore park	CARVIN'S COVE TRAILS	Gradin Court Area	Garst mill park	DOWNTOWN ROANOKE
Moyer park	Rt 640 Botetourt county	J.P. Fishburn Parkway	Williamson Road -> Route 11	Raleigh Court neighborhoods
Memorial Ave to Grandin Rd to Brandon Ave	Carvins Cove	Route 607	Grandin from Garst Mill to Grandin Village	Botetourt back roads
Starkey Road	Garst mill	Explore Park	Carvins Cove Trails	SW Roanoke Neighborhoods
611	Blue Ridge Parkway	Riverland Road Salem	Grandin Road	Blue Ridge Parkway
From Williamson to	Roanoke River Greenway at	Walnut to the Roanoke	Virginia Creeper Trail	Wasena
Plantation	Greenhill Park	Star		
Roanoke Greenway	Greenway on Kessler Mill Road	Loch Haven	downtown Roanoke	Jefferson st to Church
Electric Rd/Franklin Ave	Mill Mountain	Blue Ridge Parkway	BRP from 460 to Peaks of	460 west to Allegany
			Otter	Springs Rd to
				Christiansburg via Pilot







				Mountain Road back to Salem via 460
Roanoke Greenway near Smith/Walrond Parks	Rivers Edge	colonial		Rt 220
greenway thru Wasena Park & out towards Vinton	Murray Run Greenway	Explore Park	Roanoke mtn	Greenway in Vinton
Grandin Road	Rt. 11	Walnut	Mill Mountain Greenway and trails	Tues. night "beer ride"
Roanoke river greenway in Roanoke city	Mill Mountain	Fairway Forest Drive (Roanoke Co.)	Jefferson St	Brandon/
Carvins Coveall trails	Explore Park	blue ridge parkway	Roanoke River Greenway	River Rd / 460 / Red Lane / Thompson / Kessler Mill
Rt 640 (Bot. County)	greenway that runs from Bennington to RMH	Blue Ridge Parkway	Bend Mountain	Crystal Creek
Wasena / Riverside Greenway	Brandon//Colorado	Roanoke Mtn Spur	Salem Bike route	Jefferson Street
Roanoke River Greenway	Lithia - Nace Route 640	MILL MOUNTAIN GREENWAY	Gus Nicks Blvd from Orange Ave and into Vinton,Va	Brambleton/Garst Mill/Grandin/Memorial
BRP	Starkey	Wasena Park neighborhood streets	Welcome Valley Road	Blue Ridge Parkway
Lick Run	Mill Mountain	Mill Mountain roadway	Mt View Rd	
Roanoke River Greenway	Grandin	Penn Forest Blvd	Wasena Park Thru to 9th st	
WASENA/RKE. RIVER GREENWAY	Roanoke River Greenway in The City of Roanoke	43	Blue ridge parkway	
Rt 11 Botetourt county	Franklin St (Salem)	Lick run	Mill Mtn. Greenway	
Blue Ridge Parkway, N & S	Brookridge road	North County	Fallon park	







of Roanoke		neighborhood streets		
Wasena	Blue Ridge Parkway	Roanoke River Greenway	Lick Run Greenway	
Roanoke River Greenway	Mill Mountain Spur	Roanoke river greenway	Grandin Rd.	
(when my son is in a trailer)				
Mill Mountain Greenway	ROANOKE RIVER GREENWAY	Greenway (Wasena - >	Blacksburg road	
	SYSTEM	Treatment plant > Tinker		
		Creek)		
Greenway near Wiley Drive	Jefferson	Roanoke River GW +	Roanoke River Greenway	
		other GWs connected or		
		almost connected		
Roanoke River Greenway	Lick Run Greenway	Walnut - Fishburn	Carvins Cove Trails	
		Parkway to BRP		
Garst Mill	Roanoke River Greenway-	Loch Haven Road	Sterling Road & 116	
	entire length			
Green Hill Park (Salem VA)	HWY 11	Less traveled roads	Hanging Rock	
Brambleton Ave	Roanoke River	Route 11 (Mud Lick to	Explore Park	
		Route 419)		
BRPW	Greenhill Park	Huckleberry Trail	Starkey Road	
Carvins Cove	Riverland	Shenandoah Avenue	BRANDON/APPEARSON	
Carvins Cove	lake dr so	BRP from 460 to Mill Mtn	Grandin Court	
			neighborhoods	
Bennington SE Roanoke	Brambleton 221 - > Parkway	residential streets	Bradshaw	
Peters Creek	Back roads parallel to Rt 11 to	mill mountain		
	Greenway for Lunch			
Bradshaw Road	Old road up Mill Mountain	Carvins Cove trails	Roanoke River Greenway	
		(mountain biking)		
419	Roanoke River Greenway	Overland to Bluefield st to	Prospect	
		end		
Carvins Cove	Greenways	Walnut Avenue	Mill Mtn.	
Memorial Ave	Tinker Greenway	Tinker Creek Greenway	Tinker Creek Greenway	







Wasena Park	New River Trail	Blue Ridge Parkway (normally from Roanoke to Vinton)	Murray Run	
New River Trail (Pulaski)	Electric Road	Wells Ave. starting point to the Mall	all roads downtown	
Pitzer road	King rd Bonsack to Vinton	Hollins Rd from Plantation Rd to Orange Ave	Smart Way Bus to Blacksburg w bike to ride back to Roanoke	
Blue Ridge Parkway	marked bicycle streets	Yellow Mountain Road	East Coasters to Greenhill Park via Lee Highway, River Road, Wildwood Road and return.	
BRP	Carvins cove	Belle Ave	Rt 11	
TINKER CREEK GREENWAY	Murray Run Greenway (mountain biking)	Walnut	Greenway by Carilion	
Roanoke River greenway	from Rke mem hosp. bridge to 13th street	Salem	Blue Ridge Parkway	
Roanoke Greenway b/t Wasena & 13th Street	Richelieu Ave	tinker creek	Starkey road	
Blue Ridge Parkway MP 121 to 128	Wise Ave	Roanoke River Greenway, complete	Blue Ridge Parkway	
Blue Ridge Parkway	Roanoke Greenway by hospital	Carvins cove (limited)	also greenway at the river	
Wiley Dr	downtown area in general	valley view	12 O'clock Knob	
Hanging Rock Greenway	Rural roads outside of city	Avenham Avenue (full length)		
Carvins cove	Mill Mountain greenway	Carvins Cove	Memorial Avenue	
Garden City Boulevard	Tinker Creek	Wasena Ave.	Wise/Campbell	
lake dr	Orange Ave from Williamson	Catawba road	Roanoke River Greenway	







	Rd to King St		
Wasena Park to Sewage	Garden City Blvd	Green Hill Park	
Treatment Plant Greenway			
Walnut Ave -> Blue Ridge	Berkley Rd	Mill Mountain	
Parkway (Tuesday night		Greenway/Trails	
ride)			
Loch Haven Dr to Salem for	Jefferson	Raleigh Ct. GW	
lunch.			
Roanoke River Greenway	Blue Ridge parkway	Mt Pleasant Blvd.	
bike trail	-	Blue Ridge Parkway	
Lick Run Greenway	Roanoke river	Lick Run	
Trails	Roanoke river greenway	Meadow Crest Rd	
River Greenway - whole	Grandin Rd, Brandon to	Roanoke Greenway from	
length	Memorial	Fallon Park to Wasena	
		Park	
Roanoke River Greenway	Lick Run	Buck Mountain Road	
roads in the countryside	Hollins Road in Hollins area	HOLLINS ROAD/ COUNTY	
Cove Road	Parkway	Persinger Road /	
		Blenheim Rd to Greenway	
		trails behind Patrick Henry	
460 to BRP	10th	Hollins Road	
greenway	Roanoke River Greenways (all	Mill Mountain Greenway	
	of them)		
12oclock knob	Roanoke River Greenway	Blue Ridge Parkway/Mill	
		Mountain Access Road	
Roanoke River Greenway	Wiley Drive	Wasena Road	
Wasena park to hospital	route 42	North Salem - Red Lane	
bridge			
greenway	Hanging Rock Trail	Grandin Rd.	
8th street NE	Roanoke River Greenway	Highland Rd. / Rutrough	







		Road	
Salem - Market and Main	Mill Mtn. GW	Mill Mountain	
blue ridge parkway	116 & Bennington	electric	
Roanoke river greenway	And: Road up to Mill Mtn	blue ridge parkway near	
		Roanoke	
Roanoke River Greenway	Murray Run	Wasena Greenway	
(entire length)			
Roanoke Rover Greenway	Greenway from Valley View	City Bus to E Main St	
	Mall to downtown	Salem, Kessler Mill Rd,	
Brandon Ave from	Subdivision	Salem to Buchanan via	
Jefferson St and into		Daleville to Nace/Lithia to	
Salem,Va		Buchanan	
Ventnor Road	Walnut/Fishburn Parkway	Rt 221	
Roanoke River Greenway	ROANOKE RIVER TRAIL	Fishburn Parkway	
King St	Wasena Park	Botetourt	
Blue Ridge Parkway	Lee Highway/Brandon	419	
Riverland bike way	Franklin County Roads	Rt. 460 W out of Salem to	
		Shawsville	
Wasena	Garst Mill Greenway	Buchanan Route 76	
lick run greenway	Grandin Road SW	up to parkway	
Murray Run Greenway,	Grandin Road	Blue Ridge Parkway	
complete			
River Front Greenway	GREENWAY - RKE MEMORIAL -	Kessler Mill Rd	
	WASENA		
	Roanoke River Greenway	Grandin Avenue	
Greenway from Wasena to	Riverside Dr. Salem	Brandon/	
Sewage Treatment Plant			
River Edge	Roanoke River Greenway	Three Peaks Ride (12	
		Oʻclock Knob, Mt	
		Chestnut, Sugarloaf Mtn	







Harborwood area	Explore Park	Murray Run Greenway	
Wasena	Roanoke city greenway		
Jefferson Street (between	greenways		
Carilion and 26th St.)			
Wiley Dr	Salem Bike Route		
Walnut Ave to Mill	Jefferson to Hamilton Terrace,		
Mountain	Walnut, Jefferson, Campbell		
blue ridge parkway	Bradshaw Road		
Murray Run Greenway	Rt 460		
Murray Run Greenway	Bandy Rd.		
Blue Ridge Parkway	Bradshaw Rd.		
Ferncliff Ave	Franklin road		
Hamilton Terrace GW	Carvins cove		
Jae Valley Road	Bradshaw Rd. in its entirety		
Same as above	Greenway southeast		
Roanoke River	Jefferson to walnut		
Wasena	Walnut up to star		
Carvins Cove	Mill Mountain Old Road / Spur		
Blue Ridge Parkway	Brambleton		
LICK RUN	Tinker Creek Greenway		
Grandin Road (from	Blue Ridge Parkway		
Guilford Ave to Memorial			
Ave)			
Roanoke River Greenway	Sylvan/Prospect (Old Road up		
	Mill Mountain)		
Roanoke River/Wasena	Brandon		
G/way			
River's Edge Greenway	Old Southwest/Highland Park		
	area		
Murray Run			







Greenway between			
Wasena and Vinton			
Roanoke River greenway			
GREENWAY -RKE			
MEMORIAL - RIVERLAND			
Carvins Cove			
Roanoke River Greenways			
Edgerton / Eastland			
Carvins Cove			
Wolf Creek			
parkway			
mill mountain old road			
Lick Run Greenway			
parkway			
Brandon to Grandin,			
Memorial to Main to			
Greenway			
Blacksburg Road aka			
Catawba Valley Road rte			
785.			
Rt 311			
BRP			
Sample Rd., Alean,			
3214 Allendale Street			
Roanoke River Greenway-			
various segments	ļ ļ		
Rt. 311 from 419 to			
Newport Rd.	ļ ļ		
Roanoke River Greenway	ļ ļ		
Blue Ridge Parkway	<u> </u>		







Franklin to Jefferson		
Blue Ridge Parkway		
River Road / Wildwood		
(Salem)		
Blue Ridge Parkway		
Roanoke River Greenway		
Roanoke River Greenway		
BRBC's Tuesday night Ride		
on the BR Parkway		
See above		
(toward Greenhill Park		
from Brandon)		
Same as above mostly		
the Raleigh Ct. area		
greenways		







Question 26: List the top fiv segments and/or intersection	•	d be upgraded in some way t	o better accommodate cyclists.	Include specific street
1	2	3	4	5
Brandon Ave.	Brandon Ave.	Brandon Ave.	Brandon Ave.	Brandon Ave.
Franklin Road	Jefferson St	Campbell Avenue	Colonial Avenue	Electric Road
Greenway	Brandon Road	419/Electric Rd.	Grandin	Oh hell - all of them
haven't biked enough yet to have a suggestion, just more bike/pedestrian only paved paths would be nice	Brambleton	Franklin	Brambleton to electric road/ 419 to main street Salem	Starkey / Merriman
419	Brambleton to main to Wasena	Brambleton to 12 o'clock knob	Cove Road	Grandin Ave
419/electric road/ Franklin road	colonial Ave south of Virginia western, north of intersection at Wonju	Brambleton Ave	something from the Hollins area to the new Greenridge center	Roanoke river greenway extension
Extend Roanoke river greenway (west along river, to Salem if possible?)	US 116	Elm Ave. between Main Street and Jefferson St.	Jefferson St. (from Reserve Ave to Williamson Rd)	College Ave
311	Williamson Road above Orange Ave.	Peters Creek Road (plenty of should space to upgrade facilities)	Colonial, from Virginia Western to Towers	Franklin Ave. Downtown
Brandon Ave. from Main St. to Franklin Rd.	Route 311/Thompson Mem. Blvd (many people go from park and ride to Roanoke College or GE or Carilion)	barrens road	Garst Mill / Grandin	Electric Road Route 419







Route 419 (many people cycle to GE / Carilion)	Peters Creek	Main St (from Brandon Ave to Riverside Blvd)	Brandon Ave	460
Loch Haven	Brandon Avenue from Franklin Rd to Grandin Ave	Greenway system	Roanoke to green hill park	main st Salem
Extend the greenway from Salem to SML	Brandon	Grandin Rd./Garst Mill Rd.	Colonial Ave.	Battlefield towards Catawba or along 419 to Rd north of and parallel to 81
Campbell Avenue (from Jefferson to 13th St)	Electric Rd.	Colonial Avenue	Salem Turnpike	Garst Mill Road between Brambleton and Grandin Road
Campbell Avenue downtown	Brambleton Avenue	Colonial Ave	Colorado St	Complete some major connection from the Rt. 221 corridor, Grandin Rd, etc, to the main Roanoke River Greenway.
Grandin	Salem Ave	Brandon/Lee Highway	Church Ave. Downtown	Buck Mountain Road/Starkey Road
Brambleton Rd., at least up to Cave Spring Middle School	peters creek rd extension	Franklin Road	Salem Turnpike for GE Employees to Park n' Ride	Hershberger
	Brandon Road	Brandon Avenue/ Drive	mud lick road	connection from RR Gway to Towers
Greenways in Roanoke Valley and surrounding	Brambleton Ave to Virginia Western CC	Kimball Ave		Franklin Road (419 to Downtown)
Electric Road	Franklin Road	Campbell Ave. along the Railroad in SE	Link the pieces we have. They're too short	NA
Campbell Ave	Downtown Campbell Ave SW	Red Lane, Salem	Franklin Road SW between Wonju St. and Avenham Ave.	Loch Haven Rd







link neighborhoods to downtown Campbell Ave corridor	Main StreetSalem	419	Murray Run	Any part of 419
Garst Mill road	Franklin St	Deyerle	Colonial Ave/ Penn Forest Blvd	Williamson Road
Grandin Rd Patrick	Tazewell from	Brambleton	460	CAMPBELL/13TH
Henry HS to Garst Mill	Downtown to 13th St.	accommodations and		ST/MEMORIAL
Park		linked to River Trail		AVE/GRANDIN RD
Brandon Avenue	Craig Avenue, Salem	Brandon Avenue from	some bike connection from	Colorado St/College Av
		Franklin Road SW to	downtown to Hotel	
		Brambleton Avenue	Roanoke side	
419 - from 581 to Cave	220	Mason Creek Greenway	Garst Mill Road	Wonju St
Spring Corner				
Orange AvenueRoanoke	Mud Lick	Bike access from Rte 116/	NA	Rt 11/460 from Kessler Mill
		Jay Valley Rd directly to		to Glenvar
		Parkway		
Upland Dr	Brandon to	Brambleton Avenue	Garst Mill Greenway	peters creek
	Brambleton		(expanded)	
Bullitt Ave. from	Franklin Road SW	Peters Creek	5th St. downtown	Roanoke River Greenway to
Downtown to 13th St.	between Elm Ave. and			Memorial Ave Bike lane
	Williamson Rd.,			
	especially between			
	Jefferson and First			
Thompson Memorial	Red Lane	Mountain Heights Dr.	We need to sit people down	
Drive, Salem			with a map and discuss this.	
	Garst Mill	Brandon Ave./ Drive	Dr	Route 221
All streets and	Elm Ave from	Williamson Rd.	Woodhaven Rd	South Jefferson
intersections.	downtown to Vinton			
221	Brandon Avenue	bike lanes on heavily	Brandon/ west of Edgewood	Keep up all the great work
		trafficked streets		on Mill Mountain and







				Explore
River Road in Salem		All of Hollins Rd. NE	SW City	More patrolling by volunteers to inform pedestrians of rules, nightly offenses observed
Brandon	Rte. 311/Thompson Memorial From Hanging rock Trail to Downtown Salem	Brambleton	JEFFERSON STREET HOSPITAL TO DOWNTOWN	Elm Avenue/Franklin (old southwest) should have bike lanes like Memorial Avenue
If I could ride sidewalk on Peters Creek. Legal?	Brambleton Ave./Bent Mountain Road	10th Street SW/NW	Brambleton Av (Brandon Av to Rt 419)	Elm and Jefferson Ave.
	Downtown Roanoke	Greenway from Wasena Park across River	Any three lane intersection with an exclusive right turn lane	PETERS CREEK RD.
Elm Avenue SW between Main St. Bridge & Franklin Road	greenway system from Vinton to Salem	NA	Plantation Rd. full length especially Enon Rd. to Hollins Rd.	Jefferson Street
Thompson Memorial	All of 10th Street	Mudlick Rd.	Melrose	Roanoke to Green Hill Park
Roanoke River Greenway	colonial Ave	Campbell going downtown	Tinker Creek to Lick Run Greenway	Williamson Rd
Orange Ave from 581 toward Botetourt	Colonial	Peters Creek Road	Starkey Road et al	Colonial Ave
downtown Salem	Jefferson/Downtown	Riverside Dr	Grandin	Cove Rd
Electric Road		Thirlane Rd	Residential areas to Roanoke County Schools (all)	riverside
Brandon - Colonial	Brandon Avenue	Melrose Ave between Salem Turnpike and Salem	Don't let new management tear down the trails at Explore Pk	Wasena area







	NA	NW City	More signage with the RULES of greenway use	Grandin to Salem:, Colorado, Broad
Red Lane from Connors	Deyerle Rd.	MTN VIEW RD/WASH	Williamson Road County	Williamson between
Run Dr. to Carrollton Ave.		AVE/WISE/CAMPBELL/DO WNTOWN	line to Downtown	Orange and Elm
Riverside Drive to	Electric Road and	From Downtown Roanoke -	10th St. Bridge and Main St.	311
Greenhill Park - narrow	Franklin	branch off many routes so		
road with lots of bicycle		NE, NW, SE, SW cities &		
and car traffic		counties can feel invited		
Route 311 (Thompson	10th Street	water treatment plant end	FRANKLIN RD.	Elm (Jefferson to Vinton)
Memorial)		of greenway		
Rke River Corridor	Tazwell	Grandin Rd (Patrick Henry	Blue Ridge Parkway (at non	Grandin Road from Garst
Greenway Rke City to Rke		High School to Memorial	accessible intersections)	Mill to Southwest Plaza
County		Av)		
Plantation Rd.	Williamson Rd	Rutgers Ave/Hershberger	Franklin Rd	North VA 419/Electric Road
		Rd intersection		near I-81 to Salem (bike
				lanes?)
bike lanes on one way	bike lane	Rt. 311 from Orange Mkt to	460 West	Melrose Avenue
streets downtown		Bradshaw Rd.		
Extend all three paved	Main St Salem 4th St	Virginia Ave Vinton	J.P. Fishburn Parkway	Electric Road: wide
greenways	west to Glenvar			shoulders, and signs
Brandon, near Towers	Peters Creek Rd and	college Ave Salem	Colonial Ave	Garden City Blvd
Shopping Center	Melrose Ave			
Franklin rd	Orange Ave. east of	Tinker Creek to Roanoke	Peters Creek Rd (Williamson	Link from Salem to
	10th Street	River Greenway	Rd to Melrose Rd)	Downtown Roanoke
Elm Ave/Main Street -	Brandon from	Blue Ridge Parkway	116	Hollins/Plantation
Franklin through Wasena	Edgewood to Franklin			
neighborhood	Road			
rd	Brandon Ave	Brambleton	Grandin Road	Brandon Ave







Brambleton from Brandon	LEE HIGHWAY FROM	24 at the end of the	Brandon Ave	Franklin road
to Overland Rd	CITY TO SALEM	Wasena-Riverside-Vinton		
		greenway		
Mill Mountain	419 - All the way from	Roanoke River Greenway to	All of 5th St. SW	Finish Roanoke River
	220 up to Lakeside	Trail by Community		greenway!!
	Plaza	Hospital		
Colonial Avenue - VWCC to	rmh	More trails on Mill	Jefferson: Downtown to	Campbell Avenue
Brambleton		Mountain	RMH	Downtown
NA	Make an all red signal	Anywhere downtown	Brandon between Franklin	Orange!
	for the trail crossing of		and Brambleton	
	Orange			
Grandin Rd. area	Dr (all)	13th Street/Bennington	Williamson Rd	Make greenway safer as it
		Road SE (needs more		enters Valley View
		space)		
Brandon/	Valley View Blvd	Franklin Rd. from Old SW	Extend greenway	Orange Ave.
		sidewalks to include	connections to above roads	
		handicap /bike access		
Extend Colonial Ave bike	Rt. 11 from the	WILLIAMSON RD.	Walnut Ave.	Jefferson from Fern Park to
lane	Daleville exit through			downtown
	Cloverdale			
Jamison		221 (from Bent Mountain	Williamson Rd	419/ Franklin rd
		to downtown)		
419/Electric Rd	Jamison Ave	Brambleton Rd from	Legalize the safe accesses to	BRAMBLETON AVE
		Brandon Ave to Roanoke	BR PkWay	
		County		
Parkway bike lane	Down town	419	Mudlick Road - all of it	Mill Mountain (Bike Access
				to all trails & add more!!!)
Electric Rd	Roanoke county	Grandin Road	Valley View Blvd/Airport	Wise Ave
			Area (add a bike lane!)	
Peters Creek Rd		Franklin	Brambelton Avenue	Hershberger Road from







				Cove to Rutgers
Peters Creek Extension between Melrose and Brandon	Garst Mill to Brambleton Ave	Colonial Ave	419	Rt 11
Boulevard from Hershberger to VAMC/Salem line	Route 419	Brandon Avenue	Franklin: signs	Electric Road, esp. near Towers Mall
Main Street, Blacksburg, entire	18	US 419 (Tanglewood to Salem)	Williamson Road	Rt. 419 from Hanging Rock to Franklin Rd.
Peters Creek Road	Campbell Avenue	Brambleton	Hardy Road	walnut to parkway
FRANKLIN ROAD	Brandon, from Towers to Franklin Rd	Williamson Road	Link from Vinton to Downtown Roanoke	Cove Road
Williamson rd	Community Hospital to the Lick Run Greenway	colonial Ave	Merriman to Brambleton	Widen Rt 311 going north from 419 to Catawba
Colonial Ave All the way from 419 to Brandon - there is VWCC, Towers, etc. on that route	peters creek rd the entire route	Franklin Rd. in SW	Colonial Ave	peters Creek road
near towers	Same for Blue Ridge Pkwyfor the road bikers	Colonial: Towers to 419	Main Street	Plantation Rd from Orange Av to North City Limits
Liberty Road from Plantation to downtown end	Murray run had mulch dumped all over the dirt trail impeding both foot and cycle traffic	Brambleton between City Limits and Brandon	Brambleton Ave	Extend Greenway to Carvins Cove
Brandon Av (all)	extend Roanoke River Greenway	220	Williamson road	
Franklin Rd from Mountain Ave to Tazewell	419- major artery and wide enough to add a lane.	Route 419	Jefferson - Elm Ave south to Carilion Memorial	







220 from Bonsack to Ashley Plantation	Shenandoah	Riverland	Walnut Avenue from Roanoke River to Blue Ridge Pkwy	
Orange Ave	Roanoke to Salem	24 in Vinton	Mcclanahan	
Orange Ave. N.W.	RT. 419	Extend the Lick Run GW	Complete greenway connection at Roanoke Memorial	
419	419 (from Hanging Rock to downtown)	Brandon at RMH to downtown Salem via Colorado St	Walrond Park	
All of 419	Grandin Rd from Virginia Heights to Roanoke County	Some sort of crossing at Orange Avenue for the greenway	Route 419	
Green Hill Park to Dr.	Garst Mill	the Grandin area	Franklin from I581 to downtown	
	/ Brandon Ave	Brandon Avenue	Downtown Vinton	
Buck Mountain Road	419	Franklin rd	main st	
311	Colonial Ave	Colonial: signs, continuous bike lane.	GARST MILL RD	
Plantation, especially narrow/crooked areas	Downtown Roanoke all of it	Jefferson St	Elm Aveentire length	
Williamson Road	Grandin Road	Valley View Mall area near Sears, Wal-mart	Jefferson St.	
Colonial Ave, spec. between VWCC & Electric Rd	US 460 (Botetourt to Salem)	Campbell Ave	Blue Ridge Parkway (TRAILS- Mt. Bike Access)	
Grandin Road/419/Carriage Lane to Oak Grove Elem	Mudlick	Link from Old Southwest to Downtown	Campbell Ave	
Williamson rd nw	Jefferson towards	Riverside Dr	Brandon/Grandin/Peters	







	hospital		Creek area/Melrose	
	Williamson road	Route 419	Rt 221	
Mill MountainRoad should be widened maybe with bike lane barrier		Brandon Avenue	Franklin Road	
?????	Franklin Rd. in old SW	Merriman Ave sw co	Brandon/	
Roanoke River split segment needs to be connected ASAP	Downtown to Grandin (Campbell, Memorial)	Salem from 10th to downtown	Jefferson	
something to link downtown Rnk and Salem	Franklin between Reserve and Tanglewood	Colonial - all of it	Washington St. in Vinton	
	11 & 220	Jefferson Street from Crystal Spring to Downtown	re-pave bridge on Kessler mill rd	
Hardy Roadkeep a bike lane all the waywith trailers it is impt to have the extra space.	Jefferson St	do like England and use interstate right of ways to create bike and foot paths	Melrose Avenue	
Orange Avenue/Melrose	Williamson Road	fifth Ave (from about elm toward and past downtown)	10th St from Williamson Rd to Ferdinand Av	
Roanoke Memorial area	Garden City Boulevard	Jefferson	Extend Greenway to Dixie Caverns (and Blacksburg)	
BRAMBLETON AVE.	Deyerle rd beginning to end	Williamson Road from Elm to Wells		
836 Hugh Ave	419 near Park and ride and Salem and Franklin after Roanoke river	Colonial Ave.		







	bridge to Ogden Rd		
US220 (from Rocky Mount	Make BR PrkWay a	Green Hill Park (needs	
to Roanoke)	scenic BYWAY, not	more dedicated riding	
	Highway	space)	
Grandin Road (the old	Brambleton from	Jefferson St.	
Grandin Road ext portion	Brandon to Cave Spring		
near Rte. 419) - no	Corners		
sidewalks or shoulder to			
ride on			
Brandon Rd from Franklin	Plantation Road (the	Brambleton from 419 to	
Road to Salem	two lane section)	Brandon	
Blue Ridge Park Way	Patterson Avenue	Brambleton from ft of Bent	
		Mtn to Brandon	
Franklin Rd / 419 / Electric	Brandon Ave	Blue Hills Parkway	
Road			
Grandin/Garst Mill	Cove Road	All streets leading into	
		Downtown Roanoke	
Colonial Ave	route into downtown	Brambleton rd	
	from sw		
Rt 24 in SE Roanoke	Route 419	APPERSON/BRANDON AVE	
towards Vinton			
Riverside Drive Salem	valley view mall area	Main Street from Brandon	
		to Wasena	
US 311 (Hanging Rock to	Franklin Road	Walnut to Blue Ridge	
Bradshaw Rd)		Parkway	 
colonial	220 Alt in Botetourt	Main Streetentire length	
Elm Avenue	Colonial Ave, entire		
	length.		







Complete Roanoke River	elm Ave	Shenandoah Ave	
Greenway		Roanoke to Salem	
Jefferson Ave	Jefferson: signs,	Riverside Dr. Salem	
	sharrrows, bike lane w/		
	right turn design		
All of downtown	Franklin Road	Williamson	
581 - needs connection to	Hollins Rd from	Franklin Rd/419	
surface streets on side	Plantation Rd to		
opposite of Mall	Orange Ave(narrow)		
Williamson Road b/t	Yellow Mountain	Wise Avenue/Campbell	
Downtown & Peters Creek		from e city line to	
		downtown	
Colonial between Brandon	Link from Downtown	Rt 220	
and Broadway	to Roanoke River		
Hwy 11	311 to Catawba	419 (all of it)	
Downtown area	Franklin Rd	419-make shoulder a bike	
		lane	
Peters Creek Road	Grandin Road	Rt. 24 from Stewartsville to	
		Vinton	
Riverland Salem	peters creek road	Franklin	
Jefferson Street	Campbell Ave sw all	Franklin	
	the way downtown		
mud lick road beginning to	Grandin, Brandon Ave	PHHS to VWCC and VWCC	
end	west to Cave Spring	to Crystal Spring	
Brambleton Ave 221	Avenham from	re-pave 6th street between	
	KMart/Franklin to	Campbell and Elm	
	McClannahan		
Tinker Creek GW needs to	There are no bike	Rutrough Road	
be connected to Hollins	corridors in the Hollins		
	area		







Grandin/Garst Mill from	parkway	Melrose from West City	1	
Beverly Blvd to Cave	[·······/	Limits to 10th St		
Spring Corners				
Williamson Road (bike	elm avenue (ALL)	Extend Greenway to Smith		
lane)		, Mountain Lake		
Expand Greenways	Franklin (near Kmart)			
	Downtown Rke from			
	Elmwood Park to Hotel			
10th street, SW	Rke			
Roanoke River Greenway				
West Salem to Explore	Brandon Ave, from			
Park	Grandin to Franklin			
	Cloverdale road - I-81			
Grandin rd	intersection			
Electric Road	Red Lane in Salem			
460 from Roanoke Civic				
Center to Blue Ridge Pkwy	Franklin Rd.			
	Grandin from			
greenway at Roanoke	Memorial to Grandin			
memorial garage	Rd Ext & 419			
	Colonial Ave from VA			
green way from Wiley	Western to			
drive to Salem	Brambleton			
	Carvins Cove to			
Brambleton Avenue	downtown			
cove rd/Hershberger	Gus Nicks			
	Franklin			
Jefferson Street	Road/419/Electric			
Plantation Road (From				
Orange Avenue going	Brandon rd			







North)			
Orango Avo	PLANTATION RD		
Orange Ave	-		
Rte 221 between Bent Mt	Colonial Ave from		
and Rte 419!!!	VWCC to Route 419	 	
460 i.e. challenger,			
Melrose, main st	Rt. 460 west of Salem		
Downtown Roanoke:			
signs, and bike racks	Wonju		
	Upgrade greenway to		
	make it contiguous		
	from all the way to		
Rt. 419	Salem		
Brandon Rd from Grandin	Brambleton from		
Rd to Mudlick Rd(narrow)	Brandon to city limits		
	DOWNTOWN TO THE		
	STAR (AND THE		
Jefferson St	PARKWAY)		
Link from Grandin Village			
area to downtown	Lee Highway//Brandon		
Eastern City to Bonsack -			
King, Belle/Carson	Colonial Ave		
	Paved link between		
	Rutrough Rd. and		
King Street from	Explore Park entrance		
Belle/Carson to Gus Nicks	at BRP.		
Williamson Rd	Elm Ave		
Brambleton Avenue	Williamson Rd		
route 311 add more	Shenandoah Avenue -		
shoulder	Williamson to 24th		







	Street to 419		
Cuendia need	Dt 460		
Grandin road	Rt 460	 	
	Buck Mountain Road		
Brandon Ave - all of it	(Starkey to 220)		
Franklin Road downtown			
to Brandon/Ukrops area.			
Maybe all the way to			
Tanglewood if possible.	Catawba RD		
Hollins Road in Hollins			
area	finish other greenways		
	Rt. 460/Main St.		
	Salem/Melrose/Orange		
460	Ave./Challenger		
Franklin road (ALL)	Colonial Avenue		
Williamson!!!!	Franklin		
Carilion intersection w/			
Jefferson & Greenways	Brambleton		
	Electric		
	311 from Hanging Rock		
Jefferson Ave.	to Bradshaw Rd		
cougar/Sanderson/Hollins/			
old mountain - to	rail road tracks on		
downtown	Campbell Ave		
	Colonial Avenue		
Salem City (need	Deyerle Rd/Mudlick		
greenway routes)	Rd/Grandin Rd Ext		
	Build a safe/ bike		
	friendly connector		
Brandon Ave.	from the Tinker Creek		







	Trail to downtown		
	Roanoke		
None of the streets in #24	Link Grandin Road to		
are really safe for cyclists	Rivers Edge (underway)		
Hamilton Terrace GW -			
Make it one way by Hosp.			
Garage!	Ditto Franklin Road.		
same as above			
Jefferson from Carilion to			
Campbell			
Shenandoah from			
downtown to Salem			
Hardy Road towards Smith			
Mountain Lake			
Brambleton Ave			
Grandin rd			
VALLEY VIEW MALL			
Franklin Road & Elm			
Avenue			
Brambleton Ave from			
Brandon to Hidden Valley			
HS			
BR Parkway (I wish)			
Better mapping for all			
greenways			
Brandon Road from			
towers area to Salem			
Elm Avenue			
Grandin from city limits to			







Grandin Village			
DOWNTOWN TO AIRPORT			
Electric Rd - Roanoke to			
Salem			
Campbell Ave			
Franklin Rd between			
downtown and			
Tanglewood area.			
Grandin			
Orange Ave/460			
220 south			
any and all links between			
greenways			
blue ridge parkway			
Elm Avenue - Jefferson to			
Main Street, add bike			
lanes			
same as above			
Rt 311	<u> </u>		
221, specifically the curves			
near Cotton Hill Road.			
Many of us don't mind			
Brambleton but getting			
through the curvy section			
is a major deterrent.			
Bradshaw Rd	<u> </u>		
3214 Allendale Street	ļ		
finish Roanoke River	l		
Greenway	L		







Rt. Rt. 311 from 419 to		
Newport Rd. (can I list this		
5 times?!)		
Brandon Avenue! At least		
slope the sidewalk curbs at		
street corners!		
Vinton		
colonial		
Colonial		
220 S from Crowell Gap to		
Yellow Mountain		
419 and Ave		
Brambleton Avenue		
Rt 419		
The bridge connecting by		
Carilion		
Crossing at Franklin and		
Brandon		
Colonial Avenue is		
horrible.		
Cyclists do not belong on		
any corridors where they		
are not currently		
accommodated.		







1	sections for reference.	3	4	5
Elmwood Park	Tanglewood Mall	Towers Mall	Lewis Gale Hospital	Cave Spring Corners
Down Town Roanoke	Salem Civic Center	Grandin Village	All along the river	River trail
Downtown - Market area,	rec centers	down town areas	Grandin	Mudlick Rd.
Municipal building, etc.				
gyms	transportation museum	downtown market area	mallsis, tanglewood, towers, valleyview	Cave Spring Middle School
Arts Museum	Southwest Roanoke	Grandin Ave with	NW Roanoke	Cardinal Bicycle shop
	County with Roanoke City	dedicated Bike route	neighborhoods to Main St.	
	via Colonial Ave with		in Salem	
	dedicated bike route			
Connection Roanoke River	SE Roanoke	NE and NW Roanoke	Grandin Village and	Greenhill Park
with Roanoke River/David	neighborhoods to	neighborhoods to	Roanoke River Greenway	
Greenway	downtown	downtown		
Old Southwest/Wasena	Intermodal connections	Business parks (e.g.,	Downtown Vinton	NA
neighborhood to downtown	on Valley	Valley Pointe)		
	Metro/Smartway			
Park and Rides	Grandin Village and Valley	Grandin Village and	the RAC	Roanoke River Greenway -
	View	Keagy Village		Downtown
greenridge center	Downtown Roanoke	Downtown Salem	Fishburn Park / PHHS /	Salem to NRV
			Grandin Village	
Grandin Village and the	Kroger, Goodwill, and	Grandin area (CO-OP)	Tinker Creek back	TINKER CREEK GREENWAY /
Downtown Market	drug store on Brambleton		downtown. I ride by Bus	DOWNTOWN LOOP
			station and Norfolk now	
Mill Mt	Starkey Park / New RC	VWCC / Towers SC	Just The Right Gear bike	Roanoke's Market Square
	Library HQ		shop	







Virginia Western Community College	Towers Mall	James Madison Middle School	SW Roanoke County (Rt. 419/221/Starkey Ball fields to Roanoke River Greenway)	Wayfinding is needed from between all greenways
Downtown Roanoke	Gainesboro	smith mountain lake	Downtown Salem	We should be able to bike to Carvins Cove from all directions
Tanglewood Mall area	Rke Memorial to Tanglewood	Towers to Cave Springs	NA	220 WalMart to Tanglewood Mall to Roanoke City Market
Tanglewood Mall	Grandin Village	downtown Roanoke	Roanoke-Salem route(s)	Tanglewood area/Parkway
downtown	downtown Salem	Industrial Parks	Mill Mountain	Downtown - Any
Tanglewood to Raleigh Court	Park n' Ride Lots	Peters Creek north to some of those neighborhoods that follow Williamson	Roanoke to SML and Salem	Garden City Rec. Center via Garden City Blvd.
City Market	Garst mill park	New DMV offices at Valley Pointe	Hollins University	Elm and Jefferson Ave.
Malls and major shopping area	A long flattish segment	SW Roanoke City	Wasena to Mill Mountain	TOWERS MALL
Grandin Village	Crossroads Mall	Downtown Salem	ROANOKE RIVER GREENWAYS	Tanglewood Mall
Salem YMCA	Downtown Roanoke	Route 220 Shops (Wal- Mart, etc)	Patrick Henry High School (the Grandin Rd / Brandon Rd intersection is a mess)	Catawba to Blacksburg
All streets and intersections.	Roanoke Civic Center area	Williamson Rd	Wayfinding from neighborhoods is needed to all greenways	DOWNTOWN ROANOKE!
Tanglewood	Tanglewood Mall	NA	Blue Ridge Parkway 220 exit to Tanglewood Mall	rivers edge







			area	
Roanoke memorial hospital	Too many short segments on the Roanoke river Greenway	Downtown Roanoke	Tanglewood Mall to VWCC to Roanoke City Market	Towers Mall area
Lynchburg turnpike or Shenandoah from Salem to downtown Rke	Crossroads Mall Area	Tanglewood	Towers Mall	PHHS
Tanglewood Mall	Lane to get thru Valley View Blvd	Raleigh Court to Southwest County	Roanoke County Library Headquarters	Tanglewood Area
Salem	valley view	We need to sit people down with a map and discuss this.	VWCC - most important - greenway ends in traffic on both ends, useless	Valley View
Valley View Mall parking lots	Franklin Rd (Ukrops, K Mart area)	Troutville area to Roanoke	Valley View Mall from Greenland/Huff Lane neighborhood	Daleville/Troutville
Towers Mall	NA	Valley View Mall	10th St. Bridge and Main St.	Brambleton hardware, restaurants, grocery
Hanging Rock Trail better connected	Grandin Rd. area	Rivers Edge to Greenwood Park	TANGLEWOOD MALL	Grandin Village
Downtown Roanoke	Downtown	SOUTH ROANOKE AT POST OFFICE	Towers Mall	Williamson Road, from downtown to orange Ave.
Airport	Downtown to Raleigh Court	Anything that leads to necessities, especially if weather is bad for driving - grocery stores, convenience stores, etc.	Roanoke to Catawba	Parkway
Towers Shopping Center	shopping centers	Green Ridge Recreation Center on Woodhaven	Green Ridge Recreation Center	Vinton







		Rd		
better access to downtown from outlying areas	Downtown Roanoke	Downtown Roanoke from neighborhoods south of the railroad via 5th St., Williamson Rd and the King Bridge	Blue Ridge Parkway	Grandins "downtown"
better connection from Wiley Drive area to Crystal Spring Village Center	Airport area including Valley Pointe	Botetourt Commons to LBHS and Ashley Plantation	Explore Park	Parks/Recreational Areas
Tanglewood Mall	Raleigh Court to Wasena Park	the mall	ymca Salem	mill mountain
Greenway should connect Roanoke, Salem, and Botetourt	Virginia Tech	Parks	Garden City area	Roanoke Regional Airport
NA	Areas between parks - create a greenway	Roanoke County Gym to Roanoke City Market	Tanglewood Mall	new county rec ctr
Hollins University	GRANDIN ROAD	Grandin Village	Grandin	Valley View Mall
Valley View	Anything that leads to libraries, sports complexes/fields, workout facilities (RAC, YMCA, etc.)	conflict.	Route to Blue Ridge Parkway	SALEM/VINTON
Connect Multiple Mountain Bike trail systems	Carilion Medical School and Hospital Complex	Hidden Valley High School	Valley View (well connected to target, but dangerous after you get there)	Downtown Salem
Downtown to South Roanoke	Colonial Ave and Brandon - connections to S Roanoke via Wonju and	Greenways	BR Pkway	School within 1 mile radii







	Brandon/McClanahan			
Schools	Crossroads and Rutgers needs connected to Valley View	Towers Mall	Southwest Plaza	all schools
Downtown/Market St	the civic center	Gainsboro neighborhood to downtown	Tanglewood Mall	Roanoke Salem Plaza
Valley View and Crossroads Mall area via Thirlane Rd	YMCA	Rd. from Old SW sidewalks to include handicap /bike access	Raleigh Court: designate a bike route to the are more signs	Crystal Spring Village Center - Rt 419, Franklin Rd, Avenham, Yellow Mountain
William Fleming High School	Grandin Village to Roanoke City Market	DOWNTOWN SALEM	Valley View Mall	Take the abandoned RR spur along the river behind Wheelers, make that a bike pathaccess from Brandon
Raleigh Court to Center in the Square/Taubman Art Museum	VV Mall	Fishburn Park	Salem	
Corporate Research Center	Hospital	Roanoke to Boones Mill	Valley View mall	
Valley View Mall and NW Roanoke	that you have continuous paths/loops without auto	Blue Ridge Parkway	Route 24 needs a bike path added	
DOWNTOWN MARKET AREA	City of Salem Greenways are too segmented and need to be connected to make a longer route.	towers mall	Carilion complex	
If you're going to build the amphitheatre in Elmwood downtown, then again, branch off many routes so NE, NW, SE, & SW cities &	Hidden Valley Middle School	Explore Park	VWCC/City Schools	
	5	I	5	l







counties can utilize				
Start of Lick Run needs to	plantation rd nw to	Greenridge Sports	civic center	
connect to neighborhood	Williamson rd to Peters			
across back of Cinemas	Creek rd			
Western VA Comm. College	Explore Park	new Roanoke county	Roanoke County Admin.	
(fix the bike lane to		recreation center	Offices	
nowhere)				
Reserve Ave/River's Edge -all	Jefferson Center Area	Grandin area	Tanglewood Mall	
approaching streets				
Access to Valley View from	area college campuses to	Brandon Ave.	all of Williamson Rd &	
Botetourt	downtown Roanoke		Hershberger Rd	
down town	Downtown Roanoke	VWCC	DOWNTOWN	
	cannot link to it from			
	martin L. Bridge from Lick			
	Run			
Schools	Roanoke to Salem	Williamson Road Area	Lakewood Park	
All Public Libraries to	DOWNTOWN ROANOKE	Greenfield	RKE CIVIC CENTER	
Roanoke City Market				
RCC	River's Edge Park	Carvins Cove	VA Medical	
			Center/General Electric	
Downtown	Wasena to Vinton	Downtown Roanoke	Blue Ridge Parkway	
			(TRAILS-Mt. Bike Access)	
Just connect the various	Explore Park	Towers	Tanglewood Mall area	
segments of Greenways so				
Hanging Rock Battlefield	Tanglewood mall	river greenway to	Williamson Road from	
Trail to other		Salem's river road	Peters Creek to Jefferson	
streets/greenways				







	Mill Mountain	Valley View Mall	all libraries	
Oak Grove Elementary School	YMCA Salem	Grandin Area	Tanglewood Mall	
	Roanoke athletic club	Towers Mall: green way connection to Brandon Road	William Fleming High School - Hershberger, Ferncliff, Cove Rd, PC	
valley view mall to downtown via 581	towers shopping center	Brambleton Road Area	Towers Shopping Center to Greenway (behind Wheelers)	
Mill Mountain	South Roanoke	Reserve Avenue		
Old SW by Highland park needs a bridge over to the greenway / park on the other side. This would be a monumental improvement in access without going into heavy traffic. area college campuses to	Towers Shopping Center Salem	Grandin Rd area		
downtown Salem		419 in sw county		
Towers Mall (colonial avenue)	BAC	a route to Hollins from old sw/downtown/Grandin		
Roanoke Memorial area	Access to the parkway where it crosses over and under roads	Cave Spring area to Grandin Village		
VALLEY VIEW MALL	Roanoke College & Salem	Grocery Stores/Shopping Centers (Franklin Road/Brandon)		
836 Hugh Ave	Cave Spring Corners	towers & ukrops		







		shopping centers	
Carvins Cove to the City	Easier access to downtown (again Orange Ave is a danger)	Tanglewood Mall	
Downtown	bypass Roanoke hospital intersection - connect greenways	Downtown	
Green Hill Park to Wasena	Rivers Edge Sports Complex	Mt Pleasant Elementary School - Mt Pleasant Blvd	
Carvins Cove	Patrick Henry High School	Roanoke to Downtown Salem	
Roanoke Memorial	Ukrops: Franklin road	all high, middle, & elementary schools	
Carvins Cove	bike to is bike- friendlyfor me that is	any local parks	
Carvins Cove	Towers Mall	Williamson Rd/Hershberger Rd intersection	
Finish the greenway at RMH	Grandin Village	Downtown	
downtown	Vinton	TANGLEWOOD	
city market	Williamson road downtown add bike path	Ukropps	
Downtown	bike lanes to greenways from city streets	Fishburn Park	
Roanoke memorial Hospital	Raleigh Ct to downtown (although it's not bad now)	JEFFERSON CENTER	
Downtown	Art Museum	Virginia Western Community College	







Roanoke River Greenway	Salem city	All segments of the	
and Downtown Market area	,	Roanoke river	
Downtown	Grandin theatre	Carvins Cove	
Local parks	Carvins Cove	Vinton	
	blue ridge parkway -	Salem to Greenhill Park	
	entrance from more	(Roanoke River)	
	places		
all of main street Salem	VA Hospital	Village Centers: South	
		Roanoke, Grandin	
		Village, Melrose, at	
		24th Street area, 9th	
		Street village center,	
		Williamson road village	
		center	
Towers Shopping Center	Marshall and 5th/6th St.	Cave Spring Corner	
(sugg- ped bike bridge to old	SW		
SW)			
Hollins College	Roanoke Civic Center	VWCC	
Neighborhood			
Downtown	Downtown to Hollins	Patrick Henry High	
	College area	School-Deyerle	
		Rd/Mudlick Rd/Grandin	
		Rd Ext	
Peters Creek Road to Salem	downtown ROA, Salem,	Virginia Tech	
other than by Melrose Ave.	Vinton		
River greenway to Tinker	Tanglewood Mall		
Greenway			
downtown streets			
Valley View Mall from Salem	Downtown Roanoke -		
	especially the viaduct		







	bridge		
Downtown Roanoke	Parks		
Valley View Mall	VALLEY VIEW MALL	·	
Downtown Roanoke	Link up Roanoke City &		
	Roanoke County routes		
n/a	Tanglewood (might be		
	too hard to change?)		
downtown area in general	Grandin Village		
Virginia Western: Colonial,	THE STAR		
and Brandon			
All trails linked	Downtown		
	Salem/Roanoke College		
nowhere, I feel as though	Roanoke river and Tinker		
every destination I	Creek		
Marketplace	Discovery Center		
Downtown Roanoke	Valley View Mall		
downtown	Downtown Roanoke		
Can't think of any	Downtown to Tinker		
	Creek Greenway		
greenway should be	downtown Roanoke		
extended from Valley view			
to Salem			
all of downtown from old	Ukrops		
sw, Grandin			
South Roanoke to			
downtown			
City Market/Center in the	all of Roanoke city,		
Square	county, Vinton and Salem		
Roanoke city downtown	Grandin Village		







valley view and downtown	Tanglewood Mall		
social security office	Valley View/Huff Lane		
	Park - Hershberger,		
	Aviation, Town Square,		
	V.V. Blvd		
Downtown Rke	Smith Mountain Lake		
downtown from Botetourt	Is Blacksburg a		
	possibility?		
Salem			
Salem Civic Center			
Kirk YMCA			
Elm Ave & Jefferson -			
Elmwood Park			
Oak Grove to Downtown			
Roanoke			
Valley View from points			
north, east & west			
Valley View Mall			
Roanoke Civic Center			
Shopping Malls			
ALL SCHOOLS			
Downtown			
Towers Mall (because of its			
two grocery stores)			
Downtown			
DOWNTOWN ROANOKE -			
SHOULD BE FED FROM			
EVERYWHERE			
Downtown Roanoke			
Roanoke River Greenway-			







Lick Run		
Explore Park		
Downtown Roanoke		
downtown		
Roanoke River Greenway		
Downtown Market area -		
connect Lick Run Greenway		
to Mill Mountain Greenway		
Catawba		
Tanglewood area		
3214 Allendale Street		
downtown Salem to		
Downtown Roanoke		
green hill park in Salem to		
greenway off walnut		
Market Bldg &c		
2333 Ross Ln		
Mill Mountain		
Grandin Rd Village Center -		
Edgewood/Memorial from		
Brandon to Grandin		
From Raleigh Court to		
downtown and over to		
Salem		
Greenhill Park		
Hollins University!		







Question 28: How often do you use the following Roanoke Valley Greenways for cycling? Comments

It is imperative to get the greenways interconnected as soon as possible.

Many greenway segments too short to ride.

mapping of these greenways and marketing them would be helpful for cyclists

Enjoy the greenways tremendously. Take my kids there to ride and teach them the rules of the greenway.

I would ride these trails more frequently, but too difficult to get to from my office.

None connect well with my neighborhood

Tinker Creek Greenway seems unsafe and dirty to me.

Love the Greenway along the Roanoke River - glad to see the completion near the Roanoke Memorial Hospital. The Greenway is wonderful and needs to be continued.

longer, uninterrupted segments will promote more use as will better connection to destination points

I don't own a bike

I used to walk them all when I could walk, but they're too short to ride. Not worth carrying bike to them.

My wife and I ride our tandem on the weekends for fun and exercise and try to do each greenway trail at least twice a year.

Great effort so far to spread the greenway system throughout the valley. I suggest an effort be focused on providing the core population of the valley access by completing the Roanoke River line between Salem and Roanoke, and completing major arterial lines serving the Roanoke River Greenway such as the Mason Creek Greenway and something along the Grandin/Rt. 221 corridor. This will afford major local populations better access to the greenway.

I don't currently ride a bike

Hanging Rock Trail could be easily extended over Mason Creek if there was a bridge; suggest asking local Boy Scouts and area communities to sponsor a bridge to be built.

I live in Christiansburg and none of these trails takes me to the location of my work.

Will use greenway more when the segment is completed near my house (below Black Dog Salvage)

I don't know where most these places are and have never heard of them. It would be nice to get mailings about the different places for

bicyclists to encourage more biking.

I just haven't gotten to some of them yet.







I would use them more if they were all connected. 5 miles is not long enough to make it worthwhile for exercise - 20+ is.

I can't wait until all of these greenways are inter-connected. It would make it more worthwhile to get out for a long day of recreation activity, instead of an hour or so actually biking from one end to the other.

Keep expanding the Roanoke River greenway in Roanoke- nice job on that so far!!

I would use them a lot more, but I live in Botetourt.

Remember serious cyclists use greenways differently than families with kids and roller blade folks. Greenways are a fine solution if there is ample room etc. If I am out for a 30-50 mile ride at 16 mph, I am not typically interested in tooling along the greenway behind walkers and people on a beach cruiser type bike. I would rather be on the road in a lane that is safe from vehicles.

I don't know the names of the greenways

Greenways are great for riding with the family-- Wonder about security of Greenways in some sections

Greenways need to be connected ASAP, dead ends are not only frustrating, but inexplicable where they dump you out in traffic to get to the next greenway, and this causes confusion with greenway users, pedestrians, and motorists.

I would use them more often if more were connected!

Need to keep Greenways free of gravel and debris from Storm water run-off

Connecting the Roanoke River Greenway to Tinker Creek without having to go thru SE would be nice.... on continuous run beside the river. Perhaps Hotel Roanoke (Lick Run) could be better connected to the Roanoke River Greenway. The Roanoke River water is dirty. It could be a MAJOR attraction for all, if it were clean.

I do plan to ride on the greenways more often.

Shorter greenways are great for families with children and runners but most recreational cyclists want to ride an uninterrupted (no stopping, no dodging pedestrians required) 20 miles minimum. However, the fact that there are no cars to run over you is very nice.

Need Better Maps on Internet

I have never heard of many of the Greenways listed on the survey.

I don't live in the Roanoke Valley, but use the streets when riding in the area.

I don't' feel safe on the Tinker Creek greenway. It is too isolated and a lot of vagrants walk that area. It is too short of a greenway. But mostly I don't use it very often because I don't feel safe as female riding alone on it. I do not know where the other green ways are located. I like to ride from my home to the greenways and would love to see them linked so I can ride more than 4 miles one way.

I would love to see the greenways connect and have one from Botetourt to the others. If people did not have to worry about traffic as much I think more people would ride. The silver comet trail in Atlanta is a great trail with traffic lights at intersections for the cyclist to cross







Hanging Rock is too short and doesn't connect to anything. RR, Tinker & Wolf creeks can be sort of connected to make ride which we get to by Lick Run and home by scary roads when we should be riding the rest of Tinker Creek GW

Would use all these more often if they were connected to each other.

I had the chance to GPS these greenways for Roanoke Outside. They are all marvelous in a different way. If more people could see them as a family destination, they would use them more often. We host nature club for families events at the greenways because they are safe, wonderful places to play.

Great work at Wiley drive. the Murray run greenway is really nice

I think that a great effort has been made to connect several of the greenways and I am grateful for this.

I haven't heard of a lot of these, not sure where they are.

the greenways should be patrol by the Roanoke PD regularly, cyclist have been confronted by "thugs" in several different areas of the greenways, it is only a matter of time before some opportunist steals a bicycle or assaults a woman

wolf creek needs to be paved and connected to the parkway

I just moved here and haven't tried many of the greenways yet.

I would love to have a safe way to get to Carvins Cove from S. Roanoke

I am mostly trying to use the bike for commuting, not sure that these get me where I am trying to go but I will look into it.

Hamilton Terrace GW would be much improved if traffic was limited to one way to access the Carilion garage on HT, much like the way it is now that construction is under way. It is a high traffic area with pedestrian, cyclists, and motorists heading in both directions and crossing Belleview at the crosswalk.

I currently do not ride a bike, due to the behavior of the drivers not paying attention and running up on the cyclist.

I ride daily (assuming good weather, winter & summer). Always using the Rke River Greenway as a connector/take off point. We need maps on the greenway for out of towners. If you don't know the area you wouldn't know where you're going or where you'll end up. Although I am grateful for the system, it is not very tourist friendly.

Murray Run is part of my daily commute.

I love the greenway idea/projects. Please keep the going!

Currently I drive to Roanoke River Greenway so that I can ride my bike - Would like to be able to ride from my house off Brambleton to the greenway but don't feel safe on Brambleton/Brandon/Main streets as the traffic is heavy and there are no bike lanes.

Could not read the Greenway map to know where these greenways started or ended. Did not know about these other Greenways.

Ban Horses on trails. Allow Mountain Bike Access to Blue Ridge Parkway trails and Star Trail!!!!!!!!!!

Connect Greenways to Greenways Connect Greenways to Neighborhoods via Neighborhood Connectors







I use main roads, most of my rides are 40-100 miles each ride

Personally, I ride the road. I am traffic. I leave use the greenways to avoid bad intersections at rush hour, but I'm wary of the other recreational users. I have to slow way down. The best solution in my book is good manners and good pavement. Enforcement of laws on all vehicles, motorized or otherwise.

The greenways will become far more useful as more of the sections are connected. As they exist now, short unconnected segments are not useful for transportation purposes.

I Greenways have come a long way in recent years! Thanks. Moving forward: I honestly don't know why the old RR spur from Franklin upstream on the Roanoke River is not converted to a bike path??? There has got to be enough political will to get this done. Building expense bridges across the river is not the best solution from my point of view. Take out the low water bridges along the old Wiley Drive. Access the Smith Park (? near Rivers Edge) via Franklin Road. Run the Greenway where the old RR line is. I haven't seen a train on that track in many moons.

I want to try EVERY greenway! I grew up in Reston, VA, and am a product of their extensive and well-connected trails. I can't wait until all of Roanoke is interlinked in the same way.







Question 29: As a cyclist, what are the top	three things or messages you would like motori	sts to know?
1	2	3
People on bikes have families just like	The law says motorists must give cyclist 2' of	Cyclists pay the same taxes and have the same
people in cars do, and there are people at	passing room.	legal rights to the road as motorists.
home that love them just as much.		
Please be considerate of cyclists	Don't talk on phone or text while driving	I know your there. I'm not stupid
Just go by me. Don't slow down	DON'T HONK. I can hear you	do not run them off road
share the road	treat cyclist as you would another vehicle	be respectful
share the road	look and be prepared	Take your time
Would rather not share the road, but have	You don't have to accelerate when passing	Don't assume that a cyclist is trying to make
bike lanes eliminating conflict		driving harder for you.
Pay attention	It's better to give a cyclist on the road too	Don't honk your horn: scares the hell out of a
	much room than not enough.	cyclist
I ride my bike as if it were a carusing	When passing, give at least 3 feet: it's okay to	I have a great lawyer
signals, stopping at lights, etc.	cross the yellow line to pass safely	
Don't pass on blind hill: wait a few	Just because we can't go as fast as a car, we	Give us room
seconds	still have a right to the right of way	
Always be aware that I am there	Share the road	Please don't tailgate us.
Hang up and drive	Cyclists are saving resources motorists use	Hang up the cell phone
They have to leave their car sometime	Even if you tap us lightly we will crash!	A bike isn't there to tick you off; it's a means of transportation as well as recreation.
They should switch to biking if they can!	Be attentive at all times	Try putting yourself in my place for a moment, hmmmm.
How to safely pass a bicyclist	Bicyclists are supposed to follow the rules of the road.	cycling makes roadways less congested







We can't stop on a dime!	Scaring the out of me does not help.	Do not text while driving!
Be observant	look out for cyclists not just other motorists	Bicyclists don't stand a chance if they tangle with a car.
Cyclists are human and have rights.	The penalty by law they could face if they strike a cyclist.	don't honk before passing
Go around me widely.	Don't crowd a cyclist when meeting traffic. The bicyclist has the same right as you do to be on the road.	When passing cyclists do not pass too closely
Keep your distance when passing us.	pass with plenty of clearance when no oncoming traffic is coming	I will obey the traffic laws
Share the road	Don't pass cyclists when there is no room to do so	Sometimes you just can't go first!
Bicycles are legally required to ride on the road, not the sidewalk.	I will move over when possible	Please be aware. we are everywhere
Give me some room to work with, PLEASE!!!	It is dangerous for a rider to hug the edge. Give me room, especially uphill!	Cyclists have to supply their own power
cyclists deserve same respect as motorists	Please be aware. we are everywhere	as a slower vehicle I will stay to the right
Cyclists have a right to use the roadway.	Cyclists have to pay road taxes too	Move over when approaching from rear and/or wait until traffic passes to pass cyclist
Be aware of cyclist and pay attention to the road.	cyclist have rights on the road	Obey the law
slow down	Not every bicyclist is a Lance Armstrong.	Cyclists can be going faster than you think
Share the road and respect cyclists rights to use the road too	When passing cyclists, need to allow for more than a few inches	existing rules of the road
I'm going as fast as I can	obey traffic laws	Slow down and get over
If it's in your lane, YOU should yield	Slow down when approaching from rear	we wish you were having as good a time as we are







Please be aware. we are everywhere	Share the road	Know to watch for cyclists - cyclists have right of way if cars have right of way in the same spot
Bikes are vehicles with rights	Look for cyclists before making any turn	Use your turn signals!
slow down and pass when visibility is best	awareness of alternative modes of transport	I don't go as fast as a car - it's ok to turn into traffic if I'm still half a block away.
Be considerate of bicyclists, not all of them ride for fun, some ride to live.	We are vehicles not toys	know how to pass a cyclist
I'm here, slow down & pass me carefully.	You do not have the right to blow the horn at a cyclist	Yes I know that is a red light and I should stop
Cyclists have a right to be in travel lane	you are wasting gas by flooring it when you pass us	Don't even think about texting!
have a right to the road	How to relate to bicycles at multi-lane intersections/turn lanes (I'd like to know this too)	You don't need to swerve into oncoming traffic to avoid hitting me. Three feet of clearance is reasonable.
We have as much legal right to the road as motorists	I am stopping at this light too so no need to try and pass me.	We're doing good for the environment
Be courteous	Share the Road	to not honk at from behind
Pass cyclists with plenty of room	It is unnerving when you ride by me while texting.	Relax and remember not to feel time pressure behind the wheel.
awareness of presence	pay attention	get off your butt and ride too
We belong on the road	I know that you are there and will not pull in front of you	follow road rules
Bikes belong on the road	Stop messing with your iPod	Sidewalks are not for bikes
We own cars and pay taxes too. the bike does not wear out the roads like the cars do	Please stop thinking it's hilarious to blast your horn as you ride next to me.	Do not make right turns in front of a passed bicycle.







Need to treat bicycles in the same manner as another car	Please be careful around us	Might doesn't make right. Being in a car doesn't give you the right to bully and harass people who are not in cars.
I am here!	to not pass on blind corners	Don't Honk
Pay attention	Be aware that cyclists can swerve to avoid a pothole.	If you hit me, I will sue you.
Bikes can go from 0-10 mph quickly, so letting one turn in front of you won't spoil your day.	Don't hit and run	Please do not text while driving
share the roads	don't get too close	CHECK FOR CYCLIST WHEN TURNING RIGHT
You weigh more than us and it hurts when you hit us	Do not pass me and then turn right in front of me	Do not harass cyclist.
Please pull over to use your cell phone	Give cyclists more space when passing.	Cyclists aren't out to slow down your day by staying fit, lazy people! :)
Please stop trying to "teach me a lesson" by coming dangerously close to me while I'm riding. This is mostly from elderly women.	You don't own the road. Gas taxes don't begin to pay the costs of road construction and maintenance.	hang up and watch out for me
We are trying to accommodate you	Share the Road	I'm saving gas for your SUV
to treat cyclists as vehicles	I have as much right to be on the road as you do.	With proper road improvements, cars and bicycles can coexist.
Be aware of cyclists when making a right turn.	Don't cut us off	Pretend that I'm your father or brother when you see me
Share the Road	Please allow room for bicycles	Pay attention when you drive-stay off the phone
Be respectful	CYCLIST CAN NOT ALWAYS RIDE SAFELY ON BERM OF ROAD	the vehicle can be a weapon
pay attention	Give adequate space when passing.	Quit racing me to the intersection or turns







We pay taxes also	Be more aware of cyclists - blind spots are	
	dangerous	
Bicycles have a right to be on the road.	it hurts to get hit by a car	give bikes right of way
Bicyclists belong on the road. Bicycles are vehicles and have a legal right to be on the streets like any other vehicle.	Bikes need 3' room for safety	patience
Give wide space when passing	Provide plenty of space when passing	Cyclists reduce the carbon footprint on communities by saving fossil fuels.
Hang up your cell phone and pay attention!	Your car can easily kill me	Cyclists that are forced into the dirt beside the shoulder can easily be injured or die.
Give us room when passing us.	Please do not crowd me	Most of us already own cars. Don't suggest we get one.
Please do not litter	be attentive	Bike a mile on Williamson Rd, then you'll know
ALLOW ROOM FOR PASSING BICYCLE	Pass as there is an opening	Put your phone down
Cyclists are permitted on the road.	give bikes space	If you've just passed a bicycle, be aware when making a right hand turn.
Share the road - don't push bikers off the side/don't linger behind them.	3 foot passing zone	Follow for a bit, then pass, so we know where you are.
bikers are out there	Cyclists save green space because they don't need paved parking lots to park their bikes.	Anticipate potential incoming traffic if trying to go around cyclist on a 2 lane road
Bikes can turn left from left turn lanes.	Cyclists should be regarded as a slow moving vehicle, wait till its safe, and then pass.	l already own a car
It won't hurt to slow up	We don't know you're behind us. It's hard to hear with the ambient wind noise.	If you don't like me being on the road, vote to fund more bike paths!
I'm going faster than you think I am	follow the laws just as if I were a car	And I am not a liberal hippy!
Cyclists are allowed on the road	Be alert	Don't drink and drive.







share the road	Bicycles are vehicles just like cars with the same rights/responsibilities.	USE CARE WHEN PASSING A CYCLIST
Pay attention at stop signs	Cycling is more fun.	Drive and don't be distracted!!!
watch for bikers	Keep your distancepassing close to a cyclist is very different from passing a car close	For the most part we have to follow the same rules of the road as you.
Share the road	I don't want to be verbally assaulted	Patience
Cyclists reduce road repairs saving taxpayer dollars.	We're all safer if we pay close attention.	Obey the law!
Cyclists have a right to ride in the same lane as the cars	Don't hover over me.	Be alert and expect bicycles to be on the road. SLOW DOWN!
Don't honk right behind or next to cyclists. It scares us.	keep a safe distance	You don't have to be first to a stoplight. To sit and wait.
I'm here	Bicyclists are told to ride with the traffic these days.	I don't purposely ride on the streets to slow you down
share the road	LOOK BEFORE YOU OPEN YOUR DOOR DOWNTOWN	Stopping at an empty stop sign or signal is frustrating
We have the right to be on the road too.	Slow down	Be patient.
Don't buzz bicyclists. Leave 5 feet of clearance.	Bicycles can travel very fast so a motorist may not have enough time to pull out into an intersection before the bike gets there.	be patient
We want to work with motorists, and if there were more room on the edge of the road, we'd move over.	Slow down around us	do not honk your horn
It is very easy to kill a cyclist in a moment of carelessness.	Importance of giving plenty of room	That it will not hurt to put your brakes on, don't swerve around a cyclist into oncoming traffic just to keep from braking
We are tax payers and would like a little respect	My life is in your hands.	Learn bicycle signals







I belong here	Drive lawfully, don't pass without a long sight line and give us a wide berth when passing	I am entitled to some of the road
I try to be a good bike citizen; please respect my choice.	Be patient.	Please give me space and be aware of your mirrors
Don't beep right next to meby that time I already know you're there!	we know you the motorist is on the road so please watch out for us	Do not pass us when view ahead is restricted
I have right to roadway	We cycle in a group because it's fun and safer.	we care
Please don't buzz me, by being too close as you pass.	Be courteous.	It's my road too.
CYCLISTS PAY TAXES FOR ROAD USE	cyclists don't have airbags	slow down
Share the road	Be careful passing on two lane road	If the lane is not wide enough for both, I will take it all
Please give us room on the road	That cyclist pay the same taxes as you	DON'T HONK YOUR DAMN HORN WHEN APPROACHING ME!
share the road	don't honk	cyclists are people too, and are also motorists
Always stay alert on back roads because this is where we like to ride.	Slow down	obey the speed limit
Give plenty of space - don't forget about your mirror	I'm trying to behave predictably as a vehicle	I love my family!
Right of way at stop and yields	This is what my turn signals look like	Share the Road - its the law
I am human.	Wait for oncoming traffic on two lane roads to pass before passing us.	we have a right to be on the road
We are vehicles and have the right to be on the road	we have families too	acknowledge cyclists right to use the road
We have EQUAL rights on the roadways	I'm not doing this to annoy you	road does not belong only to the cars
Cyclists have the same rights motorist do.	Don't pass me with only 1 foot between me and your car.	Treat me the way you would like to be treated







WE try to ride as close to the right side of	visibility issues	actively pass bikes, do not try to pass while
the road as we can		staying in your lane
Don't honk your horn as you pass. It scares the bejeebers out of us.	look out	I'm safe
We can be easily killed by automobiles.	You have no right to endanger my life.	give us some right-of-ways as you would a pedestrian
be alert	Do not squeeze between cycle and oncoming car on narrow streets	Don't ignore traffic rules
Learn bicycle traffic signals	I speed across the intersections as quickly as you.	the bike lane is full of broken glass and debris
On that bicycle is a living, breathing human	give cyclists room on the road and don't cut corners	Happy motoring and cycling
we go faster than you think	be aware of sharing the road	bikes have an equal right to the road as cars
Don't honk!!! I can hear you coming!!!	most bikers have cars too and pay road taxes	I have a right to the road
Yield	Please be aware.	Slow down
WE HAVE A RIGHT TO BE ON THE ROAD	Lets agree to both obey the traffic laws	be patient
I'm a vehicle	don't hold traffic up, pass me	how fun it is to ride a bike
I am here, please be aware of that	patience	Slow down
Slow down and pass with care!!!!	If possible. move over to left a bit	Share the road
Share the road	drive the speed limit	Don't honk at me when I'm doing what's right
give space to bikers	Slow down for bikes.	Use your signals
I don't want to die	We pay taxes for roads also	Cycling is great exercise
There's only so far over in the road I can	no where you have to be is more important	Please give us as wide a pass as possible
move.	than a cyclist life	
right of way issues	I'm visible	safe bike gear (lights, etc)
I am a vehicle, treat me like one	Watch for us!! were a lot lighter and slower	Learn the laws of the road as bicyclist have to
	than you	obey the same laws as a motorized vehicle.
	<u> </u>	<u> </u>







Be diligent	Wait until it is safe to pass!
Share the road	remember driving & cycling rules
Don't pass me too closely	GIVE PROPER DISTANCE WHEN PASSING
Pass at a safe distance from bikes	Being passed with only 6 inches of clearance is scary
We are moving slower so please be careful	Give more clearance as they pass
Get off your cell phone / stop texting while driving	Most of us are motorist too.
slow down around cyclists-your car is a lethal weapon	Some bicyclists choose to cycle because of concern for air quality and the environment
Your car can kill me	don't use cell phone when driving
Cyclists don't have the safety features that a car has. Be careful around them.	Don't honk.
Give cyclist room	Don't blow your horn behind a cyclist
Just give ample room	be careful when passing if you have wide rear view mirrors
STOP when you don't have right of way	Don't expect me to take a pothole for you!
that the roads are for all to use	Do not pass us with oncoming traffic
I may not see you behind me	feel free to pass us, just give us a bit of space
If more people would ride a bike instead of a car, the roads would be much more pleasant.	Be patient
Don't blow the horn when you're right behind us	Pay attention to your driving.
	Share the roadDon't pass me too closelyPass at a safe distance from bikesWe are moving slower so please be carefulGet off your cell phone / stop texting while drivingslow down around cyclists-your car is a lethal weaponYour car can kill meCyclists don't have the safety features that a car has. Be careful around them.Give cyclist roomJust give ample roomSTOP when you don't have right of waythat the roads are for all to useI may not see you behind meIf more people would ride a bike instead of a car, the roads would be much more pleasant.Don't blow the horn when you're right behind







be aware of the Bicyclist on the road	Share the road	Share the road
Bikers belong on the road too.	I can't travel as fast as you can	Cycling will help you lose that belly fat (which will lower all of our health insurance premiums)
Give us a little more space.	Pass when it is safe	expect to see bikes around every turn
Bicyclist are equally entitled to use the roadways	Cyclist don't know when autos are making sudden lane changes	It's not cool when you flick cigarette butts and stuff at me, but I guess it's not cool to flick them at ANYthing.
we're not here to intentionally piss you off	Yes, we do pay taxes for road use.	
Share the road	they should understand that they are just as liable as if we were driving a motorized vehicle	
I'm a vehicle	safe cycling with traffic	
Share the road	don't cut us off when changing lanes or at taking off from a stoplight	
give us room when driving around us	Cyclists have the same rights as motorists	
We share road space	look for cyclists	
Pay attention to cyclist hand signals	UNDERSTAND WE HAVE THE RIGHT TO BE ON THE ROAD	
I have a right to be here	We can't slow down as fast as they can	
Share the road	Slow down.	
We are courteous to drivers	FOLLOW TRAFFIC LAWS	
Slow down	Do not blow horn as they pass	
we need a 2 ft distance between	Be respectful when passing.	
three feet of space	Pay attention	
don't be in a hurry	Be patient	
Give cyclist three feet of space, even if it means waiting to pass	share the road	







Cyclists are vehicles that deserve their	Bicyclists are not all convicted felons or have	
part of the road.	lost their drivers license and/or cannot afford	
	a car	
Share the road	leave the anger home	
Slow down instead of squeezing through	Don't come too close.	
when there is oncoming traffic		
LOOK BOTH WAYS when crossing an	It's OK to pass carefully	
intersection.		
how to pass a bike	be careful passing when pulling a trailer	
I have a right to the road	Slow down when passing and give me at least	
	24"	
Cyclists are to be treated as any other	Give us room	
moving vehicle on the road		
Please give me some space	please don't run over us	
they should hang up the phone and drive	Do NOT blow horn as this is often scary	
It's scary when you speed by and try to	Pay attention to your driving.	
crowd us		
Share the road	Do NOT blow the horn behind us	
I have the right to be on the highway	Share the road	
Get off the phone and pay attention	Motorist gasoline taxes do not directly pay for	
	road construction or maintenance so they	
	have not "paid for the roads" any more than	
	cyclists	
Everyone should cycle to understand	share the road	
Yes, we do have the right to use the road.	The speed limit in residential neighborhoods	
	is typically 25 mph. Thanks.	
they must look for us		
safe cycling paths point-to-point		
Pay attention, quit using the phone		







be aware of your surroundings	
Slow down, wait until it is safe to pass	
take it easy at intersections	
DO NOT PASS ON TWO LANE ROAD	
Road can be respectfully shared by both	
Treat us like cars	
Patience in passing a cyclist	
We can't accelerate as fast as they can	
Give bicycles the right of way.	
MAKE SURE BICYCLES KNOW YOU ARE	
THERE	
We have the same rights to be on the road	
Most of us are not out to make motorist	
feel guilty about enviro issues.	
Give us room	
I try to stay to the right as far as I can	
that I am a vehicle	
treat cyclists with respect	
Bicycles are considered vehicles used for	
transportation	
pass normally	
Don't pass and then turn.	
We need 3 ft. clearance	
do as wide a circle around us as possible	
don't pass too close	
SHARE THE ROAD!	
Watch their mirrors	
that we have the right to ride	
Keep distance from me when passing	
I'm here, I am traffic, and you can share.	







Give us some space	
Share the road	
By law, cyclists have the same rights to use the road that motorists do	
Patience	
don't use cell phones while drivingstay	
alert	
DON'T "wave me" through anything if I've paused for a moment to sip some water or something. I just want you to KEEP DRIVING.	
Thank you for sharing your road with us.	







1	2	3
Not all motorists are out to kill cyclists,		
even though it often appears that way.	Obey all traffic laws if you share the road	You're smaller. get out of the way
		move over to side of road to allow vehicle to
Wear a helmet	Act like a car, that's where I'm looking	pass
Obey the traffic rules.	use of mirrors/hand-turn signals	be respectful
be aware of vehicle presence	look and be prepared	Wear a helmet
		Many drivers still think of bikes as toys that
share the road	Follow rules of the road	have no place on the road.
		Learn how to change lanes properly by
stick to bike routes or roads with margins	All cyclists should wear a good helmet and	scanning, signaling and moving when okay to
wide enough to stay out of middle of road	reflective/safety gear.	do so
	Ride smoothly; learn to scan over shoulder	
Ride in a straight line	without swerving	the guy with the most metal wins
Cyclists are safer when they obey traffic		
laws and will be respected more.	obey stop signs and traffic signals	Use bike lanes if available
Obey all traffic laws: including stop signs	Make yourself visible	Hang up the cell phone
you are not a car, but still need to follow all		Have good control of your bike (wobbling,
street rules	motorists have rights too	weaving are road hazards).
		Do not rido on the wrong side of the read
Obou troffic lows	Dow attention to the troffic	Do not ride on the wrong side of the road -
Obey traffic laws	Pay attention to the traffic	regardless of your lack of cycling experience.
	I'm going to drive around you when you're	
ride single file on busy streets	going significantly slower than the speed limit.	wear safety colored clothing, be visible
Wear a helmet!	Do not blow through stop lights.	Ride in single file.







Stay off of winding roads as it's hard for		I will respect your right to travel on the
everyone involved	follow safe riding practices	roadway.
Obey traffic laws	It shows when you are not comfortable in traffic. Until you comfort level increases, stay on roads that have less traffic.	don't pass stopped traffic
motorists deserve respect	Please do not ride through stop lights are between lines of traffic that have stopped for a red light.	How about using some hand signals, including stop signals, and calling out so people can hear you?
	l care	Please be aware. we are everywhere
Stay on the side of the road so I can pass.	Give hand signals when planning to turn	If you are moving at traffic speed, obey road rules
Do not ride in the middle of the road	single file	give signals
Know the road rules and use them.	You are a vehicle, and you have to stop, not run lights and signs.	Understand that to widen routes for accommodations it takes money and property that may relocate families.
Don't weave in your lane! It makes it hard to get around you and makes you easier to hit!	Please be aware. we are everywhere	Children need to be taught how to ride on roadways
When in groups of two or more, use a pace line when cars are trying to pass.	If you are not moving at traffic speed, ride as far right as safely possible	as a slower vehicle stay to the right
be sensitive to speed differential / don't hog road	some roads are better than others to ride on	I will treat with you respect and with regard to your safety
Be predictable.	Funding to improve routes should be used to improve now, not build a fancy design that takes years to get the funding for.	Don't expect space when riding on busy two lane roads.
Obey the same traffic laws a motorists	Obey the traffic signs just as I do.	Stay to the right of the lane so that cars can pass at an appropriate time/distance







	Always signal your intent to turn or change	
Bike on!	direction	personal safety issues such as helmets, etc.
Comply with the rules of the road	make sure you are visible	
		Let me know if you are going to turn or stop
obey the traffic laws	/SPREAD OUT WHEN I NGROUPS	(be predictable)
You should be on the same side of the road		
as cars.	You have the legal right to be on the road	Signal where you're going
Please be aware. we are everywhere		Signaling does help
Cyclists should get equal treatment, not		I don't mind slowing down behind you so don't
special treatment	Wear visible clothing	freak out.
be conscious of blind spots	Obey all traffic laws	Ride single file
Be patient, we live in a vehicle dependant		
society, it takes time to shift to a more pro-	Follow the laws of the road when cycling on	
bike society	roadways	NA
Don't be pushy; allow me to pass you safely	existing rules of the road	Please don't assume that I see you.
	Follow traffic rules.	Try to let us pass when you can
Give autos respect by moving over as far as		On uphill's - stop and let cars pass if a long
you can.	Avoid long pace lines	stretch
Traveling on sidewalks for extended	Multiple riders should ride single file, close to	
distances is dangerous	shoulder. Don't take up the lane	Don't assume
	Not to run through stop signs/red lights,	
	disregarding signs makes an accident more	
obey the traffic laws	likely	Where a helmet.
		Even if the driver IS an asshole, if there's a
STAY CLOSE TO EDGE OF [AVEMENT	be aware of traffic around you	collision, you lose.
They must obey traffic laws, too	follow the rules of the road	
Ride predictably	Give us clear signals on your attentions	Please follow the laws of the road.







NA Please wear lights when riding at dusk	GIVE CARS AS MUCH PASSING ROOM AS POSSIBLE
	POSSIBLE
Please wear lights when riding at dusk	
Please wear lights when riding at dusk	
	Be considerate.
	If you are biking into the sun, I'm probably
We often don't see you	catching the suns glare and may not see you.
	oh am I still driving
Look	Ride predictably
	With proper road improvements, cars and
No 4, 3, 2 abreast when I am behind you	bicycles can coexist.
Act like a vehicle.	Obey all of the traffic laws
	Be respectful of motorists. Don't abuse your
Being on a higycle doesn't make you morally	right to be on the road and make the rest of us
	look bad by being a jerk.
	Please tell people what you are going to do on
Wait your turn at traffic lights	the greenways
	don't ride in the middle of the street
, , , , , , , , , , , , , , , , , , ,	
, 3	signal
	Motorist want cyclist to wear high visibility
RIDE SIGNAL ELLE IN TRAFFIC	clothing.
	Full body armor not nec, helmet is
Wear colors that make you more visible - if I	
	Obey the traffic laws (stop and yield signs)
	We often don't see youWear bright clothing and blinking light at dusk LookNo 4, 3, 2 abreast when I am behind youAct like a vehicle.Being on a bicycle doesn't make you morally superior to people in cars.Wait your turn at traffic lights You need to have lights on your bike when you ride at night.Stay to the right of the lane if going slower than traffic.RIDE SIGNAL FILE IN TRAFFIC Ride single file.Wear colors that make you more visible - if I 







You are invisible to us	talk talk	Flashy lights are more visible!
Please make it easy for me to pass you; I		
want to give you a reasonable berth.	Stay to right, move to single file to let car pass	Don't trust motoriststry mountain biking :)
	Give cars opportunities to pass when on group	
Please ride single file on busy roads.	rides	I may not actually see you!
	Big groups make it difficult and dangerous to	
We don't want to wait from you	pass	Sorry for polluting the air.
	Cyclist must ride the same side of the street as	
Ride single file	, a car. Not opposite like walkers or runners.	ALL CYCLISTS NEED TO WEAR A HELMET
	be attentive	Don't weave around the road.
Learn the laws	Quit riding side by side	Use Single file and rear view mirrors
Be mindful	don't ride in front of cars	Cyclists' negative actions affect all cyclists.
follow road rules	pull over	Use lights at night
	Motorist want cyclist to use signals to let them	
	know what they are going to do.	It's not about you all the time.
Obey traffic laws (stop sign)		I will pass you if there is enough room
Obey the traffic laws.	It's hard for me to see you at dusk	Respect all users of the roadway.
You have to obey the traffic laws like		
everybody else.	Ride in a straight line where possible	don't ride on roads with no shoulder
Stay to far right in lane	You can't always be seen	Do not ride into traffic
Riding two (or three) abreast on public		
roads is rude (and probably illegal).	Use proper reflectors/lights	ride properly in mixed traffic
Traffic Laws are for bicyclists too - if on		
street.	Wear a helmet.	signal
	Bike lanes here are used as just another	
Share the road	passing lane	Use reflectors
		Taking the whole lane or riding 2 & 3 abreast
OBEY TRAFFIC SIGNALS	Give clear hand signals	is not good riding etiquette







		You should be wearing a helmet and have
Obey the traffic laws.	l won't run you over	proper lighting
Practice bike safety and don't just come out		
from a side street or into an intersection		
without stopping/slowing down.		Get a mirror for bike or helmet
without stopping/slowing down.	OBEY TRAFFIC SIGNALS/SIGNS-SIGNAL YOUR	
I'm in a hurry	INTENTIONS	be predictable
	INTENTIONS	
Follow all the traffic nulse	a have traffic laves	Use hand signals or make eye contact with
Follow all the traffic rules	obey traffic laws	me.
Ride single-file on busy roads	Don't run red lights	I admire and respect your ability and fitness
Don't ride side by side	obey traffic signals	signal so motorist knows what to expect
You must follow the same laws as		
motorists.	Wear a helmet and buckle that helmet!	l see you.
		you are not special because you ride a bike, so
share the road	Obey the traffic laws	do not act as such
If you're going to run a stop sign do it with		
caution	Weather related cautions	wear helmet
Keep up to riding	Bicycles are vehicles.	Be diligent of your surroundings
	Ride as far to the right as possible; get single	Pack riding impedes traffic and we despise
get over	file when a car approaches	that
Motorist want cyclist to stay to the right		Always be visible, not just with lights but
side of the road.	They need to get where they are going.	clothing as well.
		Be nice/show thanks when drivers
	I will try to not "run" you off the road	thoughtfully yield/give you the right of way
Please don't ride two abreast in front of		
me.	Obey traffic rules.	be visible
Use the streets as a car would	don't ride in the middle of the road	you are hard to see
Be alert	Do not run stop signs	Stop signs apply to you, too







Ride with traffic not against	Be courteous to motorist	Curb the attitude
When a car is coming, move over!	go single file	Share the road
Don't trust motorists even on straight wide		
roads	Use lights at dusk/night	Don't hog the road
	I'll accommodate you, but you need to be	Lack of room on roadways for 2 autos passing
Please ride on the right side of the road	predictable	& a bicycle
	I know you are there and am sharing the road	Say thanks for courtesy
Dide single file	Do not uso IDode eta urbila riding	Don't wear headphones - you can't hear the traffic warnings/horns.
Ride single file	Do not use IPods etc while riding.	
I value your presence on the road	share the road do not hog	Thank you for cycling!
	Try not to hog the road.	WEAR HELMETS, RIDE ON RIGHT SIDE OF THE ROAD AND ALWAYS USE A MIRROR
WEAR APPROPRIATE CLOTHING/HAVE		let cars pass whenever possible if you can't go
APPROPRIATE LIGHTING	visibility issues	the speed limit
Share the road	use lights at night	Obey all laws and signs
	You are a vehicle; behave like one in every	Don't ride in disregard of traffic laws. Use
Obey the laws	way.	signals.
know the rules of the road	Single file, please.	Loose the I have the right to be hear attitude
Please don't run stoplights because it		
projects a bad image on cyclist	stay to the right, ride single file	Don't assume that I see you
Be conscientious of the cars - don't cut in		
front of us	hard to see you	Be respectful.
Bicyclists must follow all traffic laws just like		
cars.	Help me keep you safe.	be predictable
	Please obey the traffic laws and don't give us a	RIDE IN SINGLE FILE IN HIGH TRAFFIC AREAS!
Visibility	bad rap	Be respectful!
	take as only as much of the lane as needed	Obey all traffic laws.







Obey the law!	wear bright clothing	I would rather be talking on the phone
Ride lawfully!!	respect the car drivers	be courteous
We have EQUAL responsibilities	Use hand signals all the time.	Cyclists better be the defensive drivers because motorists can kill a cyclist seemingly without repercussions by simply using the "I didn't see him/her" defense
Don't impede traffic.	Use lights after dark	use lights at night
I will be careful when passing you	Ride on the same side as traffic	I'm jealous of you guys who never, ever have to get behind the wheel of a car. I wish I were on MY bike right now, too.
When you blow through a red light it means u r unpredictable.	Wear a helmet!	Don't wear your "cyclist" outfit around other people after you're done riding. Go change.
Share the road.	Do not ride in the middle of a lane	
be alert	Share the road	
Obey the laws	Obey the traffic laws like everyone else	
Be visible	When traffic is behind you, especially on the parkway, don't intentionally ride in the middle of the road, that's dangerous.	
ride straight	If you want to share the road, don't assume right of way all the time	
Follow the traffic laws	move over at stop signs or lights to let me pass safely	
Use signals	Follow all traffic laws	
OBEY THE RULES (LIKE STOP AT	Pick a section of the lane and don't swerve	
STOPLIGHTS)	erratically.	
There are rules to follow as a cyclist	Don't ride in very large groups	
Crazy Riding is not acceptable	signal your intent	







When riding in groups, ride in single file not	Try and stay to the right side unless turning	
side by side.	left	
	You should move over to accommodate faster	
	traffic when possible out of respect (being	
We care	polite)	
stay in bike lanes	Don't ride opposite the direction of traffic	
ride only on roads designed to	Obey the traffic signs and signals just like	
accommodate bicycles safely	drivers	
WEAR A HELMET!!!!	Share the road	
right of way issues	Obey the rules of the road	
	Use hand signals	
you are a vehicle, ride on the right side of	Motorist are nervous driving behind /beside	
the road	cyclist	
If it is not safe to pass, don't invite me to.	Signal turns.	
	they shouldn't expect motorist to bend over	
Stoplights/stop sign apply to you.	backwards for them	
Don't hog the road	Move over to allow traffic flow	
	Do not pass in & out through traffic just	
	because you have a smaller mode of	
always follow the rules of the road	transportation.	
Courtesy and safety extend both ways	Ride so that I can predict your behavior	
obey traffic rules	RESPECT THE MOTORIZED VEHICLE	
Be aware!	don't hog the road (no riding side-by-side)	
l see you	Obey traffic signs and lights.	
ride single file	FOLLOW TRAFFIC LAWS	
keep to far right	Do not ride side by side	







	Hold your line of travel. Avoid erratic	
stay on the right side of the road	maneuvers	
Cars belong on the road too.	Don't wear spandex. Lance?	
	Understand that you are usually the slower	
Use a helmet	traffic	
Cars are bigger than you, so be alert	Obey traffic laws	
sharing the road means bikes as well	ride single file	
obey traffic regulations	Stay to the side of the road.	
	Allow motorists to make a right turn on red -	
follow stop light rules	don't block	
don't drive	if it is a curvy rode slow down so we can pass	-
Try to ride on less trafficked roads	Be predictable! Signal well in advance!	
Don't meander in the middle of		
neighborhood streets as a group when		
traffic is coming	obey traffic laws	
Don't pass me on the right at stoplights	Pay attention to your driving.	
Stay to the right when sharing the road	our car is bigger than we think	
Don't take the attitude that you are the		
only ones on the road.	Obey traffic signs and lights	
	Early morning/late evening rides are fine as	
Glancing and rolling through red lights is	long as the bike can be seen by having	
dangerous	front/rear lights	
Use hand signals!	ride single file if no bike lane	
on busy roads, ride single file	l like you. :-)	
	Don't ride in the center of the lane. You have	
Share the road means sharing the road	to "share the road" too.	
If you are traveling slower than the speed		
limit, stay single file for cars to get around.		
Don't ride side by side.		







Obey traffic laws	
stay right	
use hand signals and lights	
you need to obey the laws too	
I may not know where you are going	
You must obey the traffic laws	
Don't ride at night without lights	
Don't take the whole road	
Share the road	
Move to the side and not slow traffic when	
possible	
Bright colors	
Turn signals are a must	
Please travel single file, makes it easier to	
pass you and give you more room and not	
run head first into another car coming the	
opposite way.	
Follow the traffic laws.	
Obey the law or get off!	
Wear a helmet!	
Don't hog the road	
There are blind spots - take this into	
consideration	
Use more/better lighting	
I am not gonna	
RIDE IN SINGLE FILE	
Wear a helmet and reflective gear	
Don't cut in front of me	
Pay attention to what is behind you	
Stay off of main roads at rush-hour	







You have to follow the same rules as	
motorists.	
Ride single file.	
CARS ARE BIGGER THAN BIKES	
Stay as far right on the road	
Respect motorists when traveling in groups.	
Sorry, I like to text while I drive.	
Please move over where you can so traffic	
can pass	
that they should wear helmets	
do not ride double	
Drive your bike predictably	
wear bright jerseys	
Hold your line.	
Stay to the right	
never ride two abreast	
ride single file to the right	
Obey ALL laws and signs just as you were	
driving a car!	
Stay straight do not wobble	
please ride in single file	
obey traffic laws	
Obey all traffic laws, anticipate what others	
are doing	
we are stupid and like to drive off the side	
of the road	
Ride single file in groups	







By law, cyclists have the same responsibility as motorists to obey traffic markings and signals	
don't hog the road	
If you're holding up traffic, MOVE someplace else! Don't make a bunch of cars furious just so you can make a point.	
Get out of the way. Stay off roads where you don't belong.	







Question 31: Please rate your level of interest in following bicycle programs or activities. Comments.

Many police officers I've spoken with aren't even aware of the laws regarding cyclists.

Education of bus drivers on assisting riders with bike racks

INTEGRATE THE SYSTEM

Public education about Road, Greenway etiquette

Teach pedestrians how to safely share a bike trail. They cause many near accidents.

dedicate majority of funds to separate bike lanes and paths

Programs geared towards safe riding for children and teens are desperately needed

more emphasis on mountain biking mill mountain trails

connect greenways please

Automobile drivers just don't get it, and older drivers are so afraid to deviate from their line in the lane, that I wonder if there are any solutions.

Who are you incentivizing??

True dedicated bike lanes

Pedestrian rules on greenways - which side to walk on, language of coming cyclists

Adopt a Bike Lane Program

What is an incentive program?

police should allow cyclists to treat stop signs as yield signs on quiet streets

A monthly ride to raise awareness of cyclists.

As long as the enforcement includes motorists also.

Safe Routes to School plan implemented; Complete Streets policy implemented

Regional cycling trips

Enlightened real estate development patterns.

Education for Cyclist/Motorist will only be preaching to the choir, the worst offenders will not be in the classes







**Question 33: Other comments or suggestions:** 

Why is it they have made little or no effort to let the public know about these programs?

You're not doing a very good job of informing those of us who choose not to join clubs, wear spandex, or cycle in large groups.

I pull a Burky w/ my bike so I can take my children and worry about motor vehicle awareness and the safety of my children.

I use bikeways and greenways to walk my dog. I would love to see them expanded as I enjoy them too.

I don't own a bike

Wish I knew if it was legal to ride the sidewalks. Some still don't have ramps at crossings though. If it is legal to ride sidewalks and they were limbed up higher and swept I would use them.

discounts on water for avid bicyclist city and county wide

Completion of the Roanoke River Greenway should be a top transportation project priority for the Roanoke Valley. If one travels to cities with lengthy trail systems typically these trails are used extensively and are a good tourist attraction for families. The greenway would be a good marketing opportunity to attract visitors to the valley and enhance the quality of life of current residents.

I would like to see connectivity between the Smart Way buses to the Valley metro system other than downtown ROA. Example. I work on Harrison Ave in Salem and could ride the Smart Way Bus to just off Exit 140. The nearest Valley Metro bus comes up Main St Salem. It would be nice in the event it rains that I could coordinate my commute with the bus system to get to work. Currently that option is not there and therefore I am hesitant to use commuter options because of it.

Red Lane is a relatively minor upgrade to add paved shoulders from Carlton to the end which would greatly benefit all of the residents in the area. It's also Possible the Old Baptist Children's home may even allow an alternative route to go through some of their property.







Very disappointed that recent repaving projects ignored cyclists completely and even made conditions worse: Repaving of Brambleton/Bent Mountain Road eliminated shoulders for bikes; with 5 lanes for traffic available, there was ample opportunity to incorporate bike lanes in both directions. I have no choice but to ride on this road, but feel that it is very unsafe. Grandin Road/Memorial Ave. improvements missed opportunity to incorporate bike lanes. Riverside Road in Salem to Greenhill Park should have priority in incorporating bike lanes or wider lanes to accommodate bikes. This road is heavily used by cyclists of all abilities and is used extensively by motorists as a commuter pathway.

Generally, I'm pretty comfortable riding on streets with a fair amount of traffic. My biggest concern is negotiating intersections where, as a bicyclist, I have to cross traffic to get in the correct lane. Education for bicyclists and motorists on these situations, I think, is the most important area from a safety perspective.

Do we ever get this information sent to us via mail? that would be helpful

I see there is a lot I don't know about bicycling and transportation planning!

On #15 the fact that shade trees minimally influence my route decisions only means that factors like time and distance are on balance more important. The absence of spreading street trees to shade asphalt is a major impediment to routine use of a bicycle for transportation in the summer. Roanoke city is bad enough but the county is total sewer in this regard. On #26 your road building bias is showing. Corridors that aren't safe for bicyclists need to be downgraded not upgraded. The reason that they are not safe now is because the morons at VDOT overengineered them in the first place. For example, on Melrose Ave. the worst feature is the intersection at 419. That miserable ocean of asphalt is totally intimidating for someone on a bicycle. The intersection at Peters Creek is not much better. On #27 the main problem with Valley View is not so much access to the place as it is safe circulation once there. Concerning the other destinations, who knows what routes to use to provide connections. The major connectors in this part of town are a total automobile only nightmares. Hershberger Rd west of Williamson is the main problem, with Peters Creek being a close second. And 581 is a total barrier. On #31 I support a public awareness campaign only if it includes motorist responsibilities. Motorists must be educated about their legal obligations vis-a-vis bicyclists (e.g., min 2 foot clearance on overtaking). I strongly support student education programs but only if they are aimed at creating competent cyclists who can share the road with motorists, not if they aim to reinforce the bicyclists as second class road users message. Concerning education for cops, the only time I have been struck by a motor vehicle I had to explain the relevant state law to the cop. I have also been told by the cops in Roanoke County that in a bicycle car accident they will not charge the driver unless they personally witness the accident.

Stop talking and start building. We are too far behind in the Roanoke Valley. We're known for our hiking trails and fishing streams, but we need additional healthy means to get out and enjoy it all (aka cycling).

Roanoke Greenway is great. Very nice asset to the area is always busy. Change the SE 13th St parking entrance to the side street so drivers can park from either direction. Put up lots more share the road signs.

No commute to work - work at home







Bicycling is one of the keys to making Roanoke an actual outdoor destination. We need to be cyclist friendly, and runner friendly. Local leaders do not understand the difference between greenway cycling and road cycling. Please be sure they do know. Having said that, continuous miles of greenway can be a destination attraction, but it needs to me more than 10 miles to attract serious cyclists. The New River Trail is 50 miles and serves as a destination attraction for people from out of state. Plans to link all the Valley greenways could well create the same option. I would enjoy that -- but again Greenways should not be seen as a replacement for safe road riding.

Retired. Would be glad to help with educational programs.

I would like to know more!

Valley Metro needs racks on all their buses! I can't count of them!

I've not really heard of any of the above.

I don't ride much now due to family obligations but cycling is in my blood and I plan to start commuting more in the future. It would be great if Virginia could adopt the "Stop" as "Yield" rules similar to Oregon where a cyclist only is required to slow at a stop sign and yield but is not required to come to a complete stop if not necessary. Oregon has a similar law and it has been shown to be safer for the cyclist. It would be great if major roads had paved shoulders that were available for cyclist. Next time I buy a home I am looking for a house located close to a greenway or recreational/commuter friendly road. I live on a fantastic rural road now but am cut off by US220. More park and ride locations would be nice and they should be bike friendly (i.e. close to major roads and bike routes and have covered bike racks). The Parkway really needs to provide sidewalks on-ramps at intersections where recreational users may want to get on it. Places like Yellow Mtn Road, Bandy Rd, 116, Rutrough Rd/Highland Rd, Buck Mnt Rd, Starkey, Cotton Hill, etc. I understand limiting automobile access but why are they also limiting its access to recreational users? While we're at it lets put a greenway along the parkway in the RVAMPO (I know it's a long shot but someone needs to bring this up to the State).

I think it's great that you're doing this!! I look forward to positive improvements for our region.

For what use is this really going to be used? I lived in Roanoke and these things have been talked about for years without any action. These conditions/problems exist in most communities. Law enforcement and punishment are key elements in providing safe streets for bicyclists. Accommodations and education are other key elements.

I love to ride my bike for exercise and stress relief. I would love to see more greenways and to see the green ways linked so I can ride farther. But pedestrians tend to cause me to only use the green way as a way to get to Mill Mountain where there isn't "foot traffic" and I can ride without having to always say "on your right, left etc." I really hope green ways can be linked and shared by pedestrians and cyclists.

Glad to see the survey. Spend a few tax dollars and see how it's done right, in Portland, OR.







I do not bike to work because I live close enough than I can walk in 5 minutes. I would consider biking to work if I lived within 5 or 10 miles.

Thanks so much for doing this survey!

I am new to the area, I have not heard or seen a lot of info to support cycling

The current inverted "U" bike racks are difficult to recognize and cannot accommodate more than 2 bicycles at a time. The City should explore alternative bicycle storage systems that are functional and appealing. If Roanoke wants to tout itself as a bicycle friendly city, one of the most important initiatives should be to proved recognizable bicycle storage locations. Think "brand identity", the current racks say "these are the cheapest things we could find to serve the purpose of providing a place for someone to lock a bike. To get people interested and keep them interested in cycling around town (more than recreation) it needs to do/say more. Please don't misunderstand this as a call to slap advertisements on every bike rack around town. The bicycle storage locations need to have their own unique identity that reflects the city's commitment to cycling.

If VDOT were interested in safety instead of building and widening interstates, the world would be a better place. The traffic speed on Plantation Rd over a blind hill at ITT serves no utility for that little distance but may bury me yet. Roanoke City has become amazing! They make the county seem to be sleeping.

Thank you for putting together this survey. More visibility!

I think Roanoke has made great strides to becoming a more bicycle friendly city. The changes that have been made since I lived here 10 years ago are very apparent. I love the new greenways. In particular, I have spent a lot of time on the Murray run gw and the mill mtn gw. Every time I am on them I see other people using them. I think word is getting out and people really appreciate what the city/county/Salem are doing. I am in favor of any new greenways. I think they encourage recreation and promote bicycle commuting. Thanks for the hard work, keep it up.

Mutual respect or at least acceptance that cyclists and motorists are equally entitled to use public roads.

I would like to repeat how import the patrol of law enforce on the greenways is. I personally witnessed a man urinating on, yes on, the greenway near Wasena park as pedestrians and cyclists went by. This was a Sunday morning and he was obviously hammered from Saturday night. I've had cyclist also tell me they have been confronted by, what I would say are thugs, asking questions like how much is your bike worth or do you have any money. Some cyclists are riding bikes that cost in excess of \$2000 that would be very tempting for someone to take. In my opinion it's only a matter of time before someone is assaulted either sexually or simply for money or their bike. Some parts of the greenways are very secluded, particularly around Wise Ave by Indian Village, and something like this could easily take place. I would truly hate to see them pulling a body out of the river on the news over a bike.







I took this survey with most answers in mind, as of about two years ago -- before I found out I was pregnant and had the baby. Once I found out I was pregnant, I stopped riding (only because I had been struck by a motorist on Franklin road and did not want to risk it again while pregnant). I haven't been active recently because I stay at home with the baby and she is still too young to safely ride. So while my answers are "two years old", they are what I estimate would be my answers today, and in the future when I plan on riding again.

I'd be interested in attending meetings related to the further development/improvement of the Roanoke bike trails and system. I'd also be interested in participating in education programs.

I am not familiar with all the laws pertaining to bikes, so maybe my understanding is flawed. But it's simply not reasonable to say that the same road laws that apply to cars apply to bikes: they can't go as fast or accelerate as fast so they are passed on no-passing roads and at stop lights. Bikes are more similar to pedestrians than cars in terms of speed and size, so they should be able to cross at crosswalks (for safety reasons). I also think bicycles should be able to use sidewalks as long as they deferring to pedestrians and don't go faster than 15 or 20 MPH. There are many areas in the valley where there are sidewalks on streets that would otherwise be unsafe to bike on.

I just ride when I can and it is a good alternative to driving. I have to account for my schedule, what I'll be carrying, my budget (as to how well I can equip myself), and my other obligations. Overall, Roanoke is doing a great job.

Build off-street bike lanes. Build sidewalks. Let the rest take care of itself. I'd rather all the money go into hard, capital improvements than fluffy education campaigns that no one will pay attention to. People know what to do with bike lanes and sidewalks--just build the damn things.

1. Ban Horses from Carvins Cove 2. Allow bikes on all Mill Mountain Trails 3. Publish Trail Etiquette Literature (Bikes, pedestrians, etc) 4. Host Events (duathalons, etc) on City Trails 5. Identify Single Point of Contact/Authorized Agent/Site for Trail Information. Info is everywhere. What is credible?

none

Roanoke Valley elected officials need to walk the talk and work to YES to make Roanoke Bicycling Friendly.

All these above I have not heard about and I cycle 12 months a year...why have I not heard about them...who should be telling me as a taxpayer?

I am a fan of wider roads in order to share the road. With bicycle lanes that are designated bike lanes on the regular street all the debris (rocks, gravel, twigs and glass) get push there so I end up not riding in them anyway for fear of a flat.

There needs to be much more education in the valley for motorists and cyclists!

Just moved here from Charlotte, NC. If no bike lanes then how about road shoulders wider than 3"







This is not complex. 1) Sprawling development patterns is the underlying problem. 2) Planning a viable city is the solution. 3) Manners solve most problems on the road. 4) Outlaw cell phone use on the road.

Roanoke has a tremendous opportunity to attract people with bike paths/greenways. The quality of life is greatly improved with these facilities. When I ride on the Rivers Edge greenway there are always people enjoying it. These people represent every demographic in the area. Make expanding the Greenways a top priority and move ahead with the projects at a rapid rate.

Current bicycle planning activities are more than adequate for the small number of cyclists.





