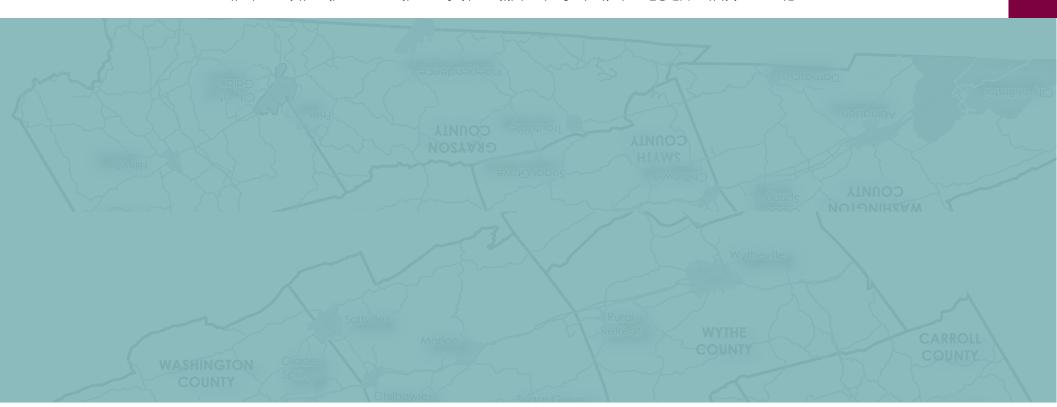
MOUNT ROGERS PLANNING DISTRICT COMMISSION

2035 RURAL LONG RANGE TRANSPORTATION PLAN



important transportation initiatives in your area. Please visit the VDOT website to find additional information regarding this and other

www.virginiadot.org

www.mrpdc.org









2011

MOUNT ROGERS PLANNING DISTRICT COMMISSION

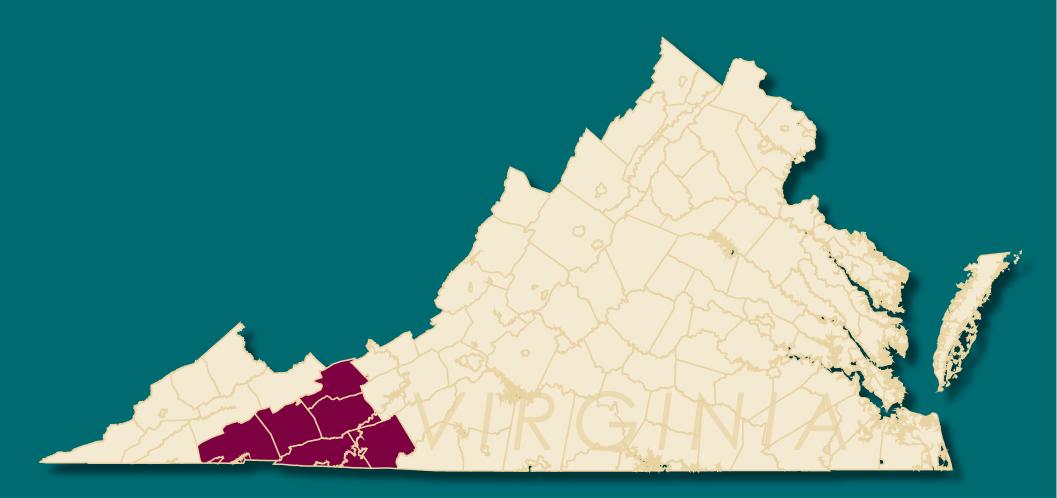


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INTRODUCTION & PURPOSE

The Transportation and Mobility Planning Division (TMPD) of the Virginia Department of Transportation (VDOT) has worked with other modal agencies to develop VTrans 2035, the Commonwealth's multi-modal long range plan and a more detailed subset report known as the 2035 Surface Transportation Plan. The highway element of the 2035 Surface Transportation Plan includes proposed improvements on Virginia's federal functionally classified roadways. This Rural Long Range Transportation Plan is one piece of the 2035 Plan. VDOT, Virginia's Planning District Commissions (PDCs), and the local governments they represent are partners in the development of this new initiative to create regional transportation plans in rural and small urban areas that complement those in Virginia's metropolitan areas.

The transportation system within the rural areas for each region was evaluated, and a range of transportation improvements - roadway, rail, transit, air, bicycle, and pedestrian - are recommended that can best satisfy existing and future needs. Some of the PDCs contain urbanized areas whose transportation needs are coordinated by a metropolitan planning organization (MPO). In the case of the Mount Rogers Planning District Commission (MRP-DC), there is a joint MPO between Bristol, Virginia and Bristol, Tennessee. The Bristol Metropolitan Planning Organization (BMPO) conducts the transportation planning for both cities of Bristol, the immediately adjacent urbanized portions of Washington County, and other jurisdictions in Tennessee, Bluff City, and the urbanized areas of Sullivan County. The transportation needs of this area are analyzed in the MPO's 2035 Long Range Transportation Plan, which is a separate component of the Virginia 2035 Surface Transportation Plan. For the purposes of this plan, only those areas outside the BMPO are considered rural and are analyzed and addressed in this Plan.

Each rural plan was developed as a vision plan, addressing all needs of the transportation system studied regardless of anticipated funding availability.

OVERVIEW OF THE REGION

Description and Function of the Mount Rogers Planning District Commission

The Mount Rogers region is located in the southwest corner of Virginia and lies on the border of Tennessee. The MRPDC serves the Counties of Bland, Carroll, Grayson, Smyth, Washington, and Wythe, the Cities of Bristol and Gal-



Each rural regional plan has a horizon year of 2035 and addresses the anticipated impacts of population and employment growth upon the transportation system. This plan will be reviewed and updated as needed. Each rural plan was developed as a vision plan, addressing all needs of the transportation system studied regardless of anticipated funding availability. It is envisioned that each regional plan will be used as a basis to identify transportation funding priorities. Additional details on topics discussed in this plan can be found in the Technical Report.

STUDY APPROACH

- Development of regional transportation goals and objectives,
- Public involvement,
- Data compilation and collection,
- Data analysis,
- Identification of transportation deficiencies and recommendations, and
- Environmental and cost reviews.

Summary of Transportation Network

I-77 and I-81 both traverse the region. The ridge and valley system generally travels northeast to southwest; many of the primary arterials also follow the valleys such as US 11, US 58, US 221, VA 42, and VA 61. Corridors that provide connections to the north and south include US 19, US 21, US 52, Alternate US 58, VA 16, and VA 80. The District Three Governmental Cooperative is a government agency owned and operated by the MRPDC member jurisdictions and is the region's primary transit agency. Fixed-route and demandresponsive services are currently available in Abingdon, Galax, Marion, and Wytheville, with flexible, fixed routes throughout the counties. There are currently 184 miles of existing bicycle and pedestrian facilities throughout the region. There are no commercial airports in the region and three general aviation airports. Within the Mount Rogers region, there is one rail carrier, Norfolk Southern. There are twelve official VDOT maintained BLAND park and ride lots within the ROAD AND RAIL NETWORK 61 COUNTY Roads (42) region. Passenger rail is currently Railroads Bristol MPC not available in the region. 52 91 81 58 16 WYTHE CARROLL 100 COUNTY COUNTY 16 52 (94) 77 21) SMYTH GRAYSON COUNTY COUNTY 58 58

> 148) (48)

52

1

(97)

(94)

(89)

(274)

21)

58

ax, and the Towns of Abingdon, Chilhowie, Damascus, Fries, Glade Spring, Hillsville, Independence, Marion, Rural Retreat, Saltville, Troutdale, and Wytheville. The MRPDC region is a predominantly rural area with denser development occurring around the cities and towns.

(42)

58

16

(107

(91)

58

The geography of the region is primarily influenced by the topography. The PDC lies between the ridge and valley system of the Appalachian Mountains and the Blue Ridge Mountains. In the ridge and valley system, the towns, cities, and almost all development, including the transportation network, are situated along the river valleys. The 80 valleys and more rolling hills of WASHINGTON COUNTY 193 the southeastern part of the PDC have allowed slightly more development. (75)

Goals and Objectives

Needs for each regional plan were developed based on regional and statewide goals and objectives. Similar concepts within the goals of the PDCs were found and used to shape common regional long range plan goals (at right) to address rural transportation planning across the Commonwealth. A basic goal for all transportation programs in Virginia is the provision for the effective, safe, and efficient movement of people and goods. The plan for the MRPDC was developed with this primary goal in mind, along with other goals including consideration of environmental issues and local travel desires. Each PDC developed transportation goals and objectives that were used to guide the development of the Rural Long Range Transportation Plan for their area. Rural transportation planning in the Mount Rogers PDC is guided by the Rural Technical Committee, which was formed in 2006. The transportation committee reviewed the needs of the region and formulated goals:

GOAL 1 Provide efficient and smooth movement through the Mount Rogers region of passenger and commercial vehicles along safe, well-maintained highways with capacity sufficient for all anticipated circumstances.

Objectives:

- The separation of the concurrent portions of I-81 and I-77 in Wythe County.
- Improvements to I-81 interchanges at Exits 7, 14, 17, and 35.
- The creation of climbing lanes for trucks on long grades of I-77 both northbound and southbound.
- Continued planned improvements to US Route 58 within the Mount Rogers PDC.
- GOAL 2 To provide improved conditions for economic development, tourism, and existing business and industrial hubs in the Mount Rogers region by highway and by rail.

Objectives:

- Improvements to the utilization of rail for industrial access and public transportation.
- Creation of intermodal exchange locations for rail and truck movement of goods.





Common Rural Long Range Plan Goals

In addition to the regional goals, a number of goals have been developed to address rural transportation planning across the Commonwealth. These were developed using input from each of the 20 PDCs in Virginia that include rural areas within their boundaries. These goals are consistent with those of VTrans 2035:

- GOAL 1 Enhance the connectivity of the existing transportation network within and between regions across all modes for both people and freight.
- **GOAL 2** Provide a safe and secure transportation system.
- GOAL 3 Support and improve the economic vitality of the individual regions by providing access to economic opportunities, such as industrial access or recreational travel and tourism, as well as enhancing intermodal connectivity.
- GOAL 4 Ensure continued quality of life during project development and implementation by considering natural, historic, and community environments, including special populations.
- **GOAL 5** Preserve the existing transportation network and promote efficient system management in order to

promote access and mobility for both people and freight.

GOAL 6 Encourage land use and transportation coordination, including but not limited to, development of procedures or mechanisms to incorporate all modes, while engaging the private sector.

MOUNT ROGERS PLANNING DISTRICT COMMISSION



DEMOGRAPHIC AND LAND USE TRENDS

Relationship of Land Use and Development to Transportation

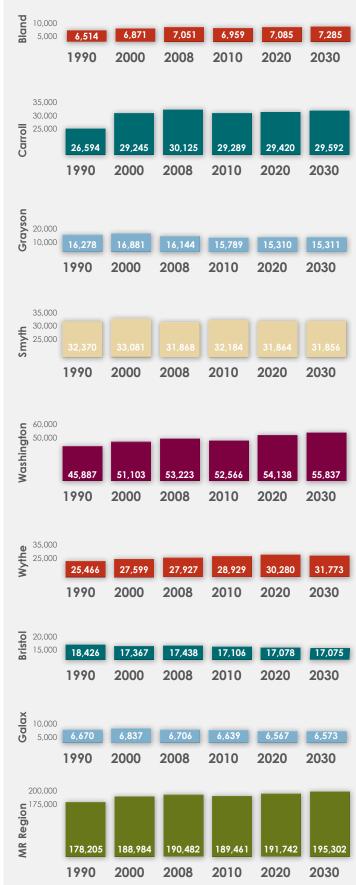
Rural counties throughout the Commonwealth and in the MRP-DC are working either to seek new economic growth and diversification or to balance growth, while striving to preserve the rural character of the landscape. Most of the land in these counties is in agricultural or forested use, with more intensive land use in the towns and village centers, typically at the intersection of two roadways. There is a broad spectrum of the amount of growth and land use changes occurring throughout the Commonwealth and in the Mount Rogers region, based particularly on proximity to urban areas. Many of the rural counties throughout the Commonwealth are trying to direct any new growth towards

existing towns, village centers, or service districts in order to provide services and to continue to address the needs of residents as well as maintain a general agricultural setting. As the population fluctuates, either through in- or out-migration or shifting within the region, the needs of the communities - including education, health care, social services, employment, and transportation - shift and fluctuate as well. Land use and development changes that particularly affect transportation in rural areas include, but are not limited to, school consolidation, loss or gain of a major employer, movement of younger sectors of the population to more urban areas, retirement community development, and growth of bedroom-community type developments for nearby urban areas.

Due to steep slopes throughout most of the region, development is almost exclusively concentrated in the valleys.

Land use in the Mount Rogers region has not changed dramatically. Due to the steep slopes throughout most of the region, development is almost exclusively concentrated in the valleys. Population changes have not been remarkable enough in the region to prompt major changes in growth and development. All development is expected to remain along the valley floors and the major roadways: I-77, I-81, US 11, US 19, US 52, US 58, Alt US 58, and US 221. This trend will affect future land use in the counties and could intensify travel demand on the regional roadway network.





Population Trends

The MRPDC region has experienced a slowdown in its population growth. Population in all jurisdictions, except for the City of Bristol, grew by a higher percentage between 1990 and 2000 than between 2000 and 2008. Grayson and Smyth Counties and the City of Galax have all experienced a decrease in population since 2000. Total population for the region in 2008 was just over 190,000. Current projections for 2010 have only Smyth and Wythe Counties experiencing any increase in population. By 2030, the population projections forecast that Bland, Washington, and Wythe Counties are expected to have growth in population. However, the decreases in population forecasted for the remaining jurisdictions are relatively minimal.

Population trends have implications for the transportation network of any geographic area. Improvements to the network are needed because mobility and safety are affected by increases in population. In the case of the MRPDC, increasing pressure on the network has already resulted in changes **MOUNT ROGERS PLANNING DISTRICT COMMISSION**

to the network such as additional capacity demands on the roadways and additional demand for public transportation. The region has experienced growth in through traffic along both I-77 and I-81. Access from more rural areas of the region into the towns and to Bristol for commercial and economic purposes has been affected by increased population and development. Agriculture and forestry, particularly the Jefferson National Forest and Mount Rogers National Recreation Area, comprise a sizeable portion of the current land use. The land use in these parcels is unlikely to change. In addition, the topography in parts of the region limits land use and development to some extent. Therefore, it is foreseeable that land use could intensify where it already exists, pressuring the transportation network. Disadvantaged groups studied include low-income, minority, elderly, and people with disabilities, as defined by the US Census.

Demographic Trends

Disadvantaged population groups were studied in order to determine if there are any gaps or deficiencies in the transportation network that could affect these groups. Disadvantaged groups studied include the elderly, persons with disabilities, persons with low-income, and minorities, as d efined by the US Census. In the 2000 US Census, all of the jurisdictions had a minority population percentage lower than that of the state (29.9 percent). In 2000, all jurisdictions had low-income populations above the state percentage of 9.6 percent. The portion of the population with disabilities in all jurisdictions is above the state percentage of 18.1 percent. All of the jurisdictions also have elderly populations in a higher proportion than the state in 2000 (11.2 percent).



Transportation Implications

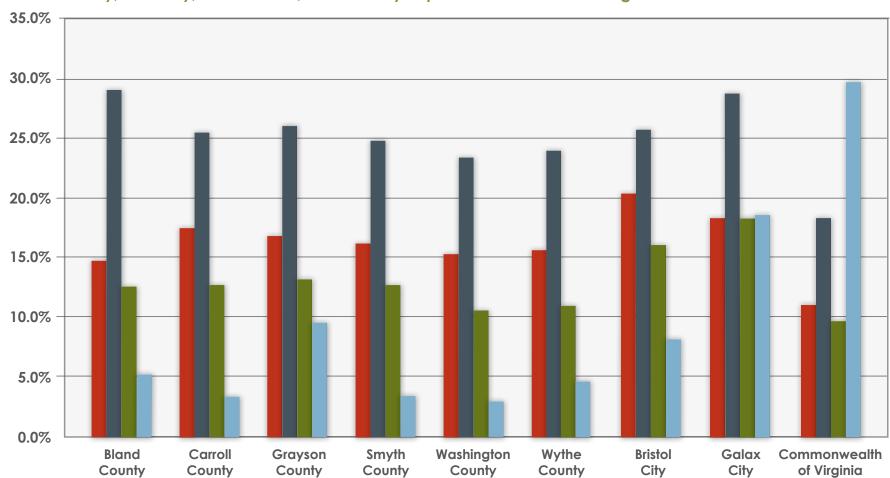
US Census data from 2000 were reviewed at the block group level in order to provide enough detail to assess possible areas of service expansion for fixedroute and demand-responsive transit. Any segment of the population without a vehicle available, which can include elderly, people with disabilities, and low-income groups, is more dependent on demandresponsive transit in a rural area than in an urban areas. This is due to the smaller network of fixed transit routes in rural areas when compared to urban areas. The MRPDC, in conjunction with the Virginia Department of Rail and Public Transportation's (DRPT) statewide effort, recently completed a Coordinated Human Service Mobility (CHSM) Plan that assessed the mobility needs of these target populations. Certain needs are being identified throughout the state, such as limited demand-responsive transit service, limited fixed-route service, and determination of a single point of contact for providers. Some of these needs were also identified in the Mount Rogers region, along with funding constraints.

In 2000, all jurisdictions had low-income populations above the state percentage of 9.6 percent.

LEGEND Elderly Disability Low-Income Minority

Source: US Census, 2000. Note: People with disabilities is based on the population over 5 years of age. Lowincome is a percentage of the population for whom poverty is determined.





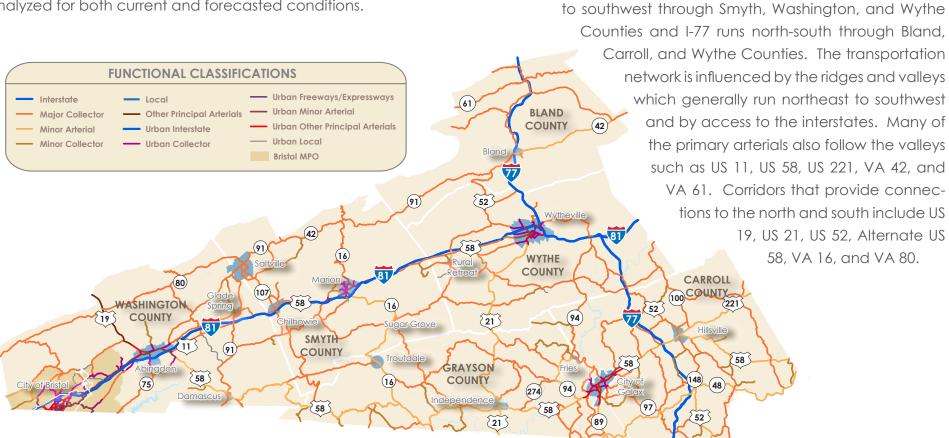


I-77 and I-81 both traverse the region. I-81 runs northeast

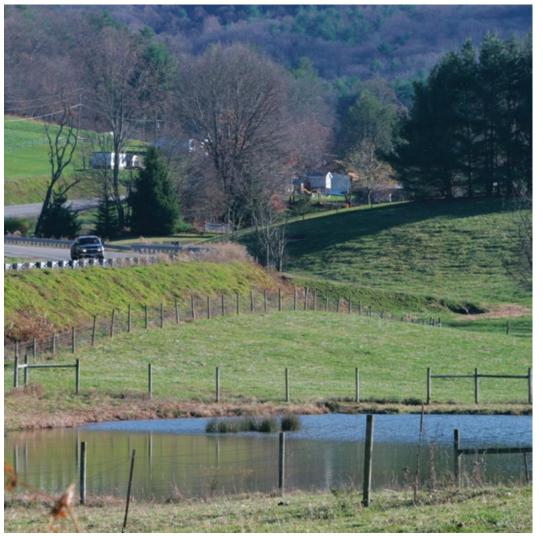
REGIONAL TRANSPORTATION SYSTEM

Each mode of travel – roadways, public transportation, rail, bicycle and pedestrian facilities, and airports – has been independently analyzed for both current and forecasted conditions.

Roadways



The transportation network is influenced by the ridges and valleys which generally run northeast to southeast and by access to the interstates.



Public Transportation

The District Three Governmental Cooperative is a government agency owned and operated by the MRPDC member jurisdictions. It is the region's primary transit agency, as well as the Area Agency on Aging, and provides a myriad of services for residents. Fixedroute and demand-responsive services are currently available in Abingdon, Galax, Marion, and Wytheville, with flexible, fixed routes throughout the counties. Ridership in Fiscal Year 2006 was 185,000. The Mount Rogers Community Services Board Employment Services Division offers fixed-route and demandresponsive service to adults with disabilities. The City of Bristol also has fixed-route transit service, which lies entirely within the MPO.

In addition, there are five fixed routes provided by the District Three Governmental Cooperative that originate or travel through the region that serve long-distance trips. These New Freedom routes access major shopping centers and medical facilities in Virginia, North Carolina, and Tennessee. Two of these New Freedom routes also connect to the Veterans Transport to Veterans Administration Hospitals provided in the Cumberland Plateau PDC.

Bicycle and Pedestrian Facilities

The rolling and mountainous topography of the MRPDC is not as conducive as the more gentle terrain in much of the rest of Virginia for numerous recreational trails used by casual bikers and pedestrians. However, the PDC does have a range of relatively easy trails to more rugged trails for more advanced bicycle and pedestrian users, including: the Appalachian Trail (pedestrian only); US Bike Route 76; Jefferson National Forest trail system; Grayson Highland State Park trails; New River Trail; Virginia Creeper Trail; Iron Mountain Trail; Chestnut Knob Trail; Wolf Creek Trail; Little Wolf Creek Trail; Hungry Mother State Park trail system; Salt Trail; and Bear Tree Recreation Area trails. The Grayson, Smyth, Washington, and Wythe County Comprehensive Plans include objectives to provide designated bicycle and pedestrian facilities. There are 184 miles of existing bicycle and pedestrian facilities in the MRPDC.





There are no commercial airports in the region. The nearest commercial airports are Roanoke Regional Airport and Tri-Cities Regional in Tennessee.

Airports

There are no commercial airports in the region. The nearest commercial airports are Roanoke Regional Airport and Tri-Cities Regional in Tennessee. There are three general aviation airports in the region: Mountain Empire Airport, jointly owned by Smyth and Wythe Counties and the Towns of Marion and Wytheville; Twin County Airport, owned by Grayson and Carroll Counties and the City of Galax; and Virginia Highlands Airport in Abingdon. The Virginia Air Transportation System Plan Update includes data on changes in the number of based aircraft at airports. The average annual growth rate between 1990 and 2000 was -1.1 percent at Mountain BLAND COUNTY Empire, 0.4 percent at Twin County, (42) and -0.5 percent at Virginia Highlands

REGIONAL RAIL & AIR NETWORK



(61)

Goods Movement

The majority of goods movement in the region is by truck and utilizes I-77, I-81, US 21, US 52, US 58, and US 221. MRPDC and VDOT coordinated to provide data on freight generators and shippers in the region. I-81 is one of the primary corridors on the eastern seaboard, not only for passenger cars but also for truck freight. There is one primary rail line within the area, that parallels I-81. It currently carries only freight; there is no Amtrak service in the region. The rail line is owned by Norfolk Southern and is a part of the company's Crescent Corridor. This Corridor has two segments that generally parallel I-81 and US 29, respectively, through the state and carry intermodal trains, general cargo, and auto trains (DRPT, Virginia, 2008).



Land Use

The land use/land cover in the MRPDC region is generally forested, pasture and cropland, and rural residential, with more dense residential and commercial uses centered around I-81 and the existing cities and towns. The location and extent of land use and development throughout the region was reviewed as a part of traffic analysis. Changes in existing land use and geographic shifts of land use and development can have a long-term effect on traffic forecasts and demand on the transportation network. Land use in the region has been influenced primarily by the topography. Steep slopes in some areas have discouraged development in favor of stream beds and valleys where roads are located. Growth areas and activity centers are within the existing cities and towns and have not changed dramatically in recent years.

Travel Demand Management

Travel Demand Management (TDM) holds the poten-The majority of goods movement in the region is tial for enhancing many elements of the transportation by truck and utilizes I-77, I-81, US 21, US 52, US 58 network and, along other improvements, has been shown to greatly aid in reducing single-occupant and US 221. vehicle trips. TDM measures include carpooling and vanpooling programs, expanded peak hour public transit, commuter buses, park and ride lots, as well as better coordination between modes to facilitate intermodal transfers. While low population densities in rural areas are not always conducive to major shifts to mass transit, some gains in mass transit ridership for commuters can sometimes be realized. In the MRPDC, this is generally true. There is concentration of employment destinations in Bristol, Galax, and the towns. **PARK-AND-RIDE LOCATIONS** BLAND There is the potential that some decreases in single-Official Park and Ride Lots — Interstates (61) COUNTY occupant vehicle trips could occur. According Towns (42) State Highway Bristol MPC to the 2000 US Census, workers traveling outside their county of residence for employment ranged 52 from 20 percent in Smyth County to 68 percent in Grayson County. These workers are candidates for travel demand manage-(42) 81 (91) ment strategies already in place. (16 WYTHE Additional commuter-oriented CARROLL WASHINGTON (100 COUNTY COUNTY (107 elements of the transporta-16 COUNTY 52 (94) tion network in the region ugar Grov 81 GRAYSON SMYTH include park and ride (91) COUNTY COUNTY routdale 58 lots. There are twelve 148) (16) (48) VDOT maintained park (274) (94 (75) and ride lots in the 52 (89) region. There is no commuter or passenger rail service available in the region. 7





TRANSPORTATION SYSTEM **PERFORMANCE &** RECOMMENDATIONS

Roadways

Roadway analysis focused on safety, geometry and structure, and congestion. Through the review of available data, input at public meetings, and information provided by local and regional officials, the MRPDC, in conjunc-

tion with the local jurisdictions, prepared a list of priority locations. The priority study location list is based on roadway performance measures, considersafety

ations, or a combination of the two. Some priority locations had current improvement recommendations from recent studies and required no further analysis. Other priority locations required a new or updated analysis. Within the MRPDC, thirty-two priority locations were analyzed. Eleven of these locations were identified for assessment of congestion concerns, three were analyzed for safety and congestion, while the

remaining eighteen

input from local

database

and

were analyzed for Within the region, safety. The safety assessment locasafety assessment tions were identified locations were identified using safety and as the highest priority. crash information,

> officials and the public. A more detailed discussion of all deficiencies and recommendations with planning-level cost estimates is located in the Technical Report.

Higher priorities were given to those roadways with potential geometric concerns that also carried higher levels of traffic.

Bridge Deficiency Summary

	Functionally Obsolete			Structural Deficiency		
	REPLACE	UPGRADE/REPAIR		REPLACE	UPGRADE/REPAIR	
Bridge Sufficiency Rating	0-50	51-80	80+	0-50	51-80	80+
Bland	3	13	3	14	9	0
Carroll	3	19	12	12	11	0
Grayson	1	26	4	18	25	0
Smyth	5	37	6	31	10	1
Washington*	10	41	5	31	12	0
Wythe	2	27	11	19	12	3
Bristol	0	0	0	0	0	0
Galax	0	3	1	0	0	0
MRPDC Total	24	166	42	125	79	0



1. Safety

The roadway safety assessments identified deficiencies such as sight distance and visibility, access management, and inadequate signage. Recommendations were developed for both intersections and segments throughout the region. The recommendations are identified by jurisdiction. More detailed deficiency data appear in the Technical Report.

2. Operations and Maintenance

a. Geometric Weaknesses

Roadways and intersections with geometric deficiencies such as substandard lane width, shoulder width, or horizontal and vertical curvature, were identified from the VDOT Statewide Planning System (SPS) database. Higher priorities were given to those roadways with potential geometric concerns that also carried higher levels of traffic. Recommendations to address these needs are

identified by jurisdiction. More detailed deficiency data appear in the Technical Report.

b. Bridge Condition

Current bridge sufficiency ratings were reviewed and those structures with a rating of less than 50 were considered deficient and in need of structural upgrade or replacement. These appear in a separate table by jurisdiction.

3. Capacity

Level of service analyses were performed on all functionally classified roadways in the MRPDC to assess current and projected year 2035 operations. In addition, analyses were conducted for intersections identified by the MRPDC and local governments as priority study locations. The recommendations to address the deficient locations are identified as congestion or safety, by jurisdiction. Short-term, mid-term, and long-term recommendations were combined in the tables and maps.

*Outside of MPO

Deficiencies in the forecast year were noted for the functionally classified roadway network. Forecasted deficiencies are applicable only to anticipated mobility performance measures, since it is not possible to forecast safety issues or geometric and structural deficiencies.



ROADWAY SYSTEM DEFICIENCIES

Intersection Deficiency

- Operation Deficiency
- O Safety Deficiency
- **Both Deficiencies**
- Other Deficiencies

Segment Deficiency

- Operation Deficiency
- _ _ _ _ _ _ _ _ _

Safety Deficiency
Geometric Deficiency
Both Operation and Safety Deficiency

BLAND COUNTY RECOMMENDATIONS

- 1) US 52 (Main St.)/VA 42 E. (Bluegrass Trail) Mid-term apply access management and improve turn radii, sight distance, and school crossing.
- 2 I-77 from VA 61 Off Ramp to US 52/VA 598 OP Mid-term consider truck climbing lanes; Long-term widen to rural six-lane roadway with median.
- 3 I-77 from Wythe Co. Line to SE Big Walker Mountain Tunnel

rural six-lane roadway with median.

- I-77 from VA 606 (Wilderness Rd.) to VA 61 Off Ramp Mid-term consider truck climbing lanes; Long-term widen to rural six-lane roadway with median.
- 5 VA 614 (Grapefield Rd.) from VA 657 to US 52 Long-term reconstruct road-
- 6 VA 42 (E. Bluegrass Trail) from US 52 E. (Main St.) to 2.04 Mi. E. of VA 604 Long-term reconstruct roadway to standards, realign skewed intersection, and add appropriate turn lanes.
- US 52 (N. Scenic Highway) Bridge over Wolf Creek Short-term replace bridge.
- 8 VA 601 (Ruby's Rd.) Bridge over Little Walker Creek Short-term replace bridge.

CARROLL COUNTY RECOMMENDATIONS

US 58 (Carrollton Pike)/VA 706/VA 743 (Airport Rd.)

Short-term install "Do not Block Intersection" signs at driveways on south leg; Long-term relocate driveways further south.

VA 607/VA 721 (N.)

Mid-term install wayfinding signs; Long-term reconstruct roadway to two-lane standards.

3 VA 607/VA 721 (S.)

Mid-term install wayfinding signs; Long-term reconstruct roadway to two-lane standards.

4 US 58/I-77 Northbound Off Ramp

Deficiency with low priority; Continue to monitor for potential improvements.

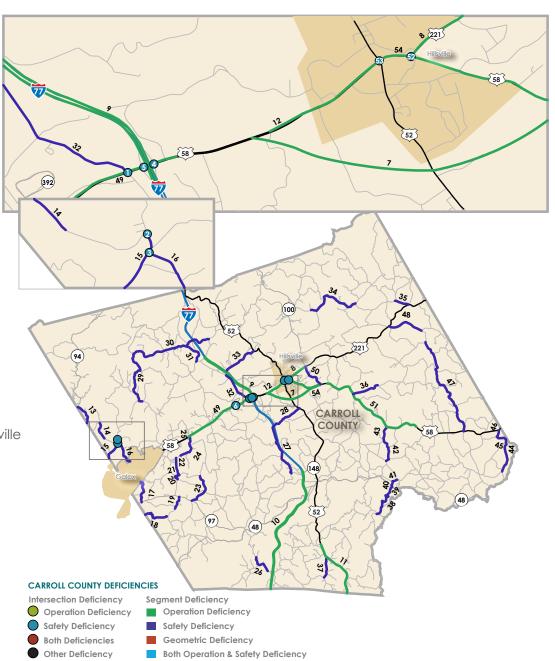
US 58/I-77 Southbound Off Ramp

Deficiency with low priority; Continue to monitor for potential improvements.

US 58/VA 707 Short-term improve signage.

7 Proposed Hillsville Bypass from VA 703 to US 58 & VA 670 Long-term construct proposed Hillsville Bypass.

- 8 US 221 (Floyd Pike) from US 58 to VA 100 Long-term widen to rural four-lane roadway with median.
- 9 I-77 from US 58 to VA 620 Long term widen to rural six-lane roadway with median.
- 10 I-77 from North Carolina State Line to VA 148 Long term widen to rural six-lane roadway with median.
- US 52 (Fancy Gap Hwy.) from North Carolina State Line to VA



Both Operation & Safety Deficiency



Other Deficiency

691 S. (Flower Gap Rd.)

Long-term widen to rural four-lane roadway with median.

12 US 58 (W. Stuart Dr.) from VA 703 to 0.41 Mi. E. of VA 703 Long-term monitor for traffic flow after construction of Hillsville Bypass.

13 VA 758 (Hilltown Rd.) from Grayson Co. Line to VA 94

Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

14 VA 721 from VA 606 to 1.10 Mi. S. of VA 606

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

15 VA 607 from VA 721 N. to Grayson Co. Line

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

16 VA 721 from VA 607 S. to NCL of Galax

(11-foot lanes).

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

17 VA 792 (Tower Rd.) from VA 97 (Pipers Gap Rd.) to ECL of Galax Long-term reconstruct road to address geometric deficiencies

CARROLL COUNTY RECOMMENDATIONS (continued)

- 18 VA 608 (Coal Creek Rd.) from Gravson Co. Line to VA 815 N. Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 19 VA 815 (Shepherds Place) from 0.20 Mi. S. of VA 727 to VA 97 (Pipers Gap Rd.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 20 VA 683 from VA 712 N. (Forest Oak Rd.) to VA 724 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 21 VA 712 (Forest Oak Rd.) from VA 683 to VA 723 (Trapper Dr.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 22 VA 723 (Trapper Dr.) from VA 712 (Forest Oak Rd.) to VA 722 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 23 VA 713 from VA 97 (Pipers Gap Rd.) to VA 712 S. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 24 VA 722 from VA 1097 to VA 888 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 25 VA 72 from VA 888 to US 58 (Stuart Dr.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 26 VA 620 (Lambsburg Rd.) from 0.21 Mi. E. of VA 788 to VA 944 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 27 VA 702 (Stable Rd.) from VA 775 (Chances Creek Rd.) to VA 960 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 28 VA 702 (Stable Rd.) from VA 960 to US 52 (Main St.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 29 VA 635 (Hebron Rd.) from VA 735 to VA 740 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 30 VA 740 from VA 635 (Pot Rock Rd.) to VA 620 S. (Coulson Church Rd.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 31 VA 743 from VA 620 W. (Coulson Church Rd.) to VA 740 S. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 32 VA 743 (Airport Rd.) from US 58 (Carrollton Pike) to VA 705 (Coon Ridge Rd.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 33 VA 705 (Coon Ridge Rd.) from VA 744 to US 52 (Main St.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 34 VA 753 (Double Cabin Rd.) from VA 902 to VA 611 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 35 VA 753 (Double Cabin Rd.) from VA 757 to US 221 (Floyd Pike) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 36 VA 664 (Silverleaf Rd.) from US 58 (Danville Pike) to VA 663 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

43 VA 680 (Crooked Oak Rd.) from VA 677 (Crooked Oak Rd.) to US 58 (Danville Pike) Long-term reconstruct road to address geometric deficiencies

(10-foot lanes).

- 44 VA 610 (Terrys Mill Rd.) from VA 645 to VA 634 E. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 45 VA 634 (Germantown Rd.) from VA 610 W. to VA 610 E. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 46 VA 610 (Terrys Mill Rd.) from VA 634 W. (Germantown Rd.) to US 58 (Danville Pike) Long-term reconstruct road to address geometric deficiencies

(10-foot lanes).

- 47 VA 638 (Bellspur Rd.) from US 58 (Danville Pike) to VA 624 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 48 VA 638 (Dugspur Rd.) from VA 625 to US 221 (Floyd Pike) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 49 US 58 (Carrollton Pike) from 0.131 Km. S. of intersection VA 722 E. to 0.160 Km. E. VA 714

Short-term widen roadway to four-lane standards.

- 50 VA 669 from VA 100 (at US 221) to US 58 Short-term reconstruct roadway to two-lane standards.
- 51 US 58 (Danville Pike) from VA 820 to 0.492 Km. E. of Big Reed Island Creek

Long-term widen to rural four-lane roadway with median.

- 52 VA 221 (Floyd Pike)/US 58 (E. Stuart Dr.) Mid-term improve northbound right turn radius; Long-term reconstruct bridge to the south. (Hillsville)
- 53 US 58/US 52 Deficiency with low priority; Continue to monitor for potential improvements. (Hillsville)
- 54 US 58 (W. Stuart Dr.) from 0.41 Mi. E. of VA 703 to ECL of Hillsville Long-term monitor for traffic flow after construction of Hillsville Bypass. (Hillsville)

CITY OF GALAX RECOMMENDATIONS

- 1 US 58 (Stuart Dr.) from Jefferson St. to Main St. Long-term monitor for potential improvements to address congestion issues.
- 2 Grayson St. from Jefferson St. to Main St. Long-term monitor for potential improvements to address congestion issues.
- 3 Glendale Rd. from US 58 (Stuart Dr.) to Cliffview Rd. Long-term widen roadway to four-lane urban divided standards.
- 4 Iron Ridge Rd. from NCL of Galax to Fries Rd. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 5 Cranberry Rd. from US 58 (Stuart Dr.) to ECL of Galax Long-term reconstruct to urban two-lane standards.
- 6 Poplar Knob Rd. from Oak St. to ECL of Galax Long-term reconstruct to urban two-lane standards.
- 7 Country Club Rd. from US 58 (Stuart Dr.) to Glendale Rd. Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

37 VA 690 (Brushy Fork Rd.) from VA 831 to US 52 (Fancy Gap Hwy.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

38 VA 691 (Orchard Gap Rd.) from VA 679 E. to VA 608 S. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

39 VA 608 (Orchard Gap Rd.) from VA 608 S. to VA 608 N. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

- 40 VA 691 (Orchard Gap Rd.) from VA 608 N. to VA 640 (Keno Rd.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 41 VA 640 (Keno Rd.) from VA 691 (Orchard Gap Rd.) to VA 670 W. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 42 VA 677 (Crooked Oak Rd.) from VA 670 N. to VA 680 S. (Buffalo View Rd.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

8 VA 89 (Main St.)/VA 97 (Pipers Gap Rd.) Short-term install signal.

9 US 58/221 (E. Stuart Dr.) Fries Rd.

Short-term install flashing beacons to warn drivers of upcoming intersection and install street lighting.

10 Poplar Knob Rd./Country Club Ln.

Short-term maintenance and apply access management.

11 Glendale Rd./US 58

Short-term improve intersection as per VDOT Six Year Improvement Program.

12 VA 89 (Main St.) from SCL to Meadow St.

Short-term widen roadway to four-lane urban divided standards.

13 Meadow St. from Poplar Knob Rd. to US 58/221 (E. Stuart Dr.)

Short-term widen roadway to four-lane urban divided standards.

14 Glendale Rd. from Cliffview Rd. to Cranberry Rd.

Long-term widen roadway to four-lane urban divided standards.

15 Cranberry Rd. from Glendale Rd. to US 58/221 (E. Stuart Dr.)

Long-term widen roadway to four-lane urban divided standards.

CITY OF GALAX RECOMMENDATIONS (continued)

16 Meadow St. from VA 89 (Main St.) to Poplar Knob Rd.

Mid-term widen roadway to four-lane urban standards. When project is completed, re-designate Meadow St. to urban principal arterial and demote Main St. to urban minor arterial.

- 17 US 58/221 (E. Stuart Dr.) from VA 89 (Main St.) to Meadow St. Short-term implement coordinated signal system and install street lighting and pedestrian facilities.
- 18 US 58/221 (E. Stuart Dr.) from Meadow St. to Cranberry Rd. Short-term install street lighting and pedestrian facilities; Mid-term implement coordinated signal system; Long-term consider widening to six-lane urban standards.
- 19 US 58 (E. Stuart Dr.) from Cranberry Rd. to ECL Short-term install street lighting and pedestrian facilities.

GRAYSON COUNTY RECOMMENDATIONS

1 US 58/VA 16

- Mid-term reconstruct intersection to improve sight distance and add turn lanes.
- 2 Proposed Independence Bypass from VA 703 to VA 888 Mid-term construct proposed Independence Bypass.
- 3 US 58 (Highlands Pkwy.) from VA 751 E. to VA 703 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 4 VA 16 (Troutdale Hwy.) from US 58 N. to 0.21 Mi. N. VA 735 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 5 VA 16 (Troutdale Hwy.) from 0.21 Mi. N. VA 735 to 0.20 Mi. S. VA 735 Short-term install guardrails; Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- VA 16 (Troutdale Hwy.) from 0.20 Mi. S. VA 735 to Smyth Co. Line Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 7 VA 89 (Skyline Hwy.) from VA 613 to SCL of Galax Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8 US 58 (E. Main St.) from ECL of Independence to VA 888 Long-term monitor traffic flow after construction of Independence Bypass.
- 9 VA 821 from VA 89 S. (Skyline Hwy.) to VA 89 N. (Skyline Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 10 VA 622 from VA 624 to VA 617

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

- 11 VA 607 from NCL of Galax to Carroll Co. Line Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 12 VA 815 (Tanglewood Rd.) from VA 94 (J.E.B Stuart Hwy.) to VA 647 (Stevens Creek)

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

- 13 VA 647 (Stevens Creek) from VA 815 (Tanglewood Rd.) to VA 759 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 14 VA 647 (Stevens Creek) from VA 759 to VA 644 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

GALAX DEFICIENCIES

- Intersection Deficiency
- Operation Deficiency
- Safety Deficiency Both Deficiencies
- Other Deficiency
- Segment Deficiency
- Operation Deficiency
- Safety Deficiency
- Geometric Deficiency
- Both Operation & Safety Deficiency

- 20 VA 777 (Liberty Hill Rd.) from VA 805 (Spring Valley Rd.) to VA 760 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 21 VA 760 from VA 777 (Liberty Hill Rd.) to VA 604 (Jerusalem Rd.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 22 VA 604 (Jerusalem Rd.) from VA 760 to VA 644 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 23 VA 604 from VA 644 to VA 647

2

89

2

(89)

58

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).



15 VA 647 from VA 644 to VA 770

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

16 VA 648 from VA 770 to VA 604

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

17 VA 644 (Freedom Ln.) from VA 94 (J.E.B Stuart Hwy.) to VA 770

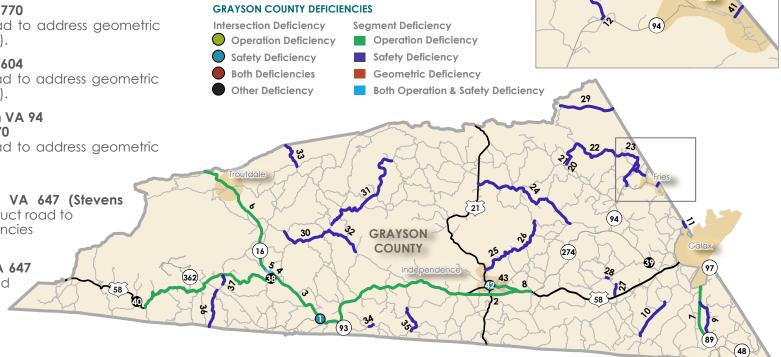
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

18 VA 644 from VA 770 to VA 647 (Stevens Creek) Long-term reconstruct road to address geometric deficiencies

(10-foot lanes).

19 VA 770 from VA 644 to VA 647

Long-term reconstruct road to address geometric deficiencies (10-foot lanes).



GRAYSON COUNTY RECOMMENDATIONS (continued)

- 24 VA 660 from US 21 to VA 691 Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 25 VA 654 (Peach Bottom Rd.) from US 21 to VA 686 W. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 26 VA 654 (Peach Bottom Rd.) from VA 686 W. to VA 695 Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 27 VA 636 from 0.16 Mi. N. of US 58 to VA 623 Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 28 VA 636 from VA 636 W. to VA 636 E. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 29 VA 602 from VA 653 to Carroll Co. Line Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 30 VA 658 (Flatridge Rd.) from VA 731 W. to VA 601 S. Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 31 VA 658 (Flatridge Rd.) from VA 601 N. to VA 670 Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 32 VA 601 from VA 680 to VA 658 S. (Flatridge Rd.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 33 VA 601 from S. VA 603 to Smyth Co. Line Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 34 VA 708 from VA 766 W. to VA 766 E. Long-term reconstruct road to address geometric deficiencies (9-foot lanes). 35 VA 601 (Bridge Creek Road) from VA 708 S. to VA 711 N. Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 36 VA 743 from N. Carolina State Line to VA 725 S. Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 37 VA 743 from VA 723 to US 58 (Highlands Pkwy.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes). 38 US 58 Over Big Wilson Creek/Volney Short-term replace bridge. 39 VA 94 Over New River, near VA 634 Short-term replace bridge. 40 US 58 over M. Fork Helton Creek Short-term replace bridge. 41 VA 758 from VA 1001 (W. Main) to Carroll Co. Line Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Fries)
 - 42 US 58/US 21 Mid-term reconstruct intersection to improve turn radius for trucks. (Independence)
 - 43 US 58 (E. Main St.) from VA 802 to ECL of Independence

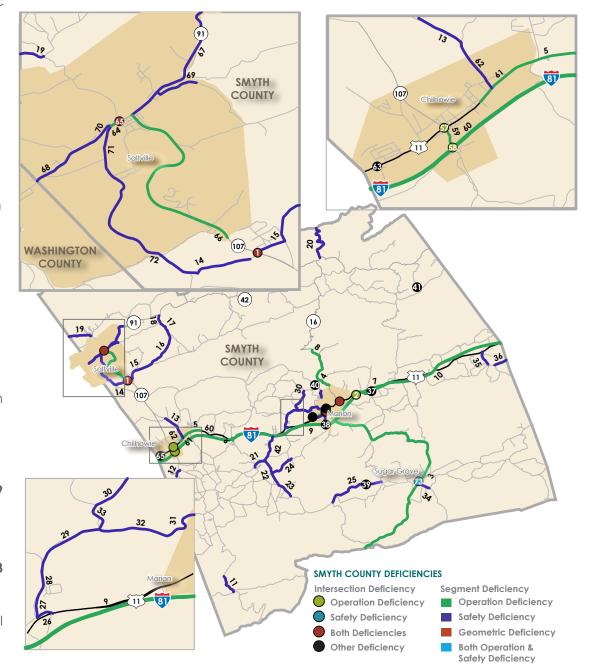
- 7 US 11 (Lee Hwy.) from I-81 Connector Rd. to VA 690 Long term widen to rural four-lane roadway with median.
- **8** VA 16 (B.F. Buchanan Hwy.) from VA 348 to 0.59 Mi. N. of VA 348 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9 I-81 from US 11 (Lee Hwy.) to SCL of Marion Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 10 I-81 from NCL of Marion to Wythe Co. Line Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 11 VA 600 (White Top Rd.) from VA 603 S. to 1.46 Mi. N. of VA 603 S. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 12 VA 607 (Flatwood Acres Rd.) from VA 762 (White Top Rd.) to VA 649 (Need More Rd.)

Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

- 13 VA 774 (Lyons Gap Rd.) from VA 637 to VA 609 N. (Fraizer Lane) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 14 VA 610 (Old Quarry Rd.) from SCL of Saltville to 0.70 Mi. E. of VA 696 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 15 VA 610 (Old Quarry Rd.) from VA 107 to VA 723 (Possum Hollow Rd.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 16 VA 723 (Possum Hollow Rd.) from VA 610 (Old Quarry Rd.) to VA 633 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 17 VA 633 from VA 723 (Possum Hollow Rd.) to VA 632 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 18 VA 633 (Possum Hollow Rd.) from 0.16 Mi. N. of VA 632 to VA 91 (E. Main St.)

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

19 VA 613 (Poor Valley Rd.) from Washington County Line to VA 634 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).



Long-term monitor traffic flow after construction of Independence Bypass. (Independence)

SMYTH COUNTY RECOMMENDATIONS

1 VA 107/VA 610 (Old Quarry Rd.)

Short-term install "Intersection Ahead" warning signs on eastbound approach; Long-term apply access management.

2 I-81/Exit 47

Long-term reconstruct interchange

3 VA 16 (Sugar Grove Hwy.) from Grayson County Line to VA 689 Long-term upgrade to rural three-lane roadway.

4 VA 16 from VA 689 to VA 348

Long-term upgrade to rural three-lane roadway.

- 5 US 11 (Lee Hwy.) from ECL of Chilhowie to 0.45 Mi. E. of VA 9858 Long-term upgrade to rural three-lane roadway.
- **6** US 11 (Lee Hwy.) from VA 645 W. to VA 645 E. Long-term reconstruct interchange (project in environmental stage).

SMYTH COUNTY RECOMMENDATIONS (continued)

- 20 VA 16 (B. F. Buchanan Hwy.) from VA 42 (Bluegrass Trail) to Tazewell Co. Line Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 21 VA 660 (Riverside Rd.) from VA 718 to VA 657 E. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 22 VA 657 (Thomas Bidge Rd.) from VA 650 (S. Fork Rd.) to VA 660 E. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 23 VA 650 (S. Fork Rd.) from VA 657 (Thomas Bidge Rd.) to VA 720 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 24 VA 658 (Scratch Gravel Rd.) from VA 657 (Thomas Bidge Rd.) to VA 702 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 25 VA 670 from VA 650 (S. Fork Rd.) to VA 601 W. Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 26 VA 660 (Tallwood Drive) from VA 659 to US 11 (Lee Hwy.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 27 VA 659 from VA 660 to Middle of Fork Holston River Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 28 VA 659 from Middle of Fork Holston River to VA 665 (W. Chilhowie St.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 29 VA 665 (W. Chilhowie St.) from VA 659 (Old Ebnezer Rd.) to VA 658 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 30 VA 655 (Greenwood Rd.) from VA 658 N. to VA 645 W. Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 31 VA 658 (Scratch Gravel Rd.) from WCL of Marion to Hungry Mother Creek Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 32 VA 658 (Scratch Gravel Rd.) from Hungry Mother Creek to VA 665 S. (W. Chilhowie St.)

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

33 VA 658 (Scratch Gravel Rd.) from VA 665 S. (W. Chilhowie St.) to VA 655 N. (Greenwood Rd.)

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

- 34 VA 601 (Flat Ridge Rd.) from VA 676 E. to VA 16 (Sugar Grove Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 35 VA 679 (Dutton Rd.) from VA 615 N. (Citizens Rd.) to US 11 (Lee Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 36 VA 616 (Parsannage Ave.) from VA 615 N. (Citizens Rd.) to Wythe Co. Line Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 37 I-81 Bridges over Hutton Branch (northbound and southbound) Short-term replace bridge.
- 38 I-81 Bridges over VA 658 (Scratch Gravel Rd) Short-term replace bridge.

46 US 11/VA 16 (E. Main St.)/Pendleton St.

Short-term improve westbound left turn movement; Long-term realign, upgrade, and install signal at Main/Pendleton Streets intersection or develop a new alignment of VA 16 away from downtown core. (Marion)



Chatham Hill Rd. over middle fork of Holston River Short-term replace bridge. (Marion)

(16

(16)

- **Baughman Avenue Bridge over middle fork of Holston River** Short-term replace bridge. (Marion)
- 49 I-81 from SCL of Marion to NCL of Marion Long-term reconstruct roadway (project in environmental stage). (Marion)
- 50 US 11 (S. Main St.) from Greenway Ave. to College St. Mid-term widen roadway to four-lane urban standards. (Marion)
- 51 S. Poston St. from US 11 (S. Main St.) to W. Cherry St. Mid-term reconstruct roadway to urban two-lane standards and improve radius at Poston St. and Cherry St. roadway bend. (Marion)
- 52 Cherry St. from S. Poston St. to VA 16 (S Commerce St.) Mid-term reconstruct roadway to urban two-lane standards and improve radius at Poston St. and Cherry St. roadway bend. (Marion)
- 53 Chatham Hill Rd. from Fowler St. to NCL of Marion Long-term reconstruct to urban two-lane standards. (Marion)
- 54 W. Chilhowie St. from WCL of Marion to N. Church St. Long-term reconstruct to urban two-lane standards. (Marion)
- 55 E. Chilhowie St. from N. Church St. to Chatham Hill Rd.



81

Intersection Deficiency
Operation Deficiency
Safety Deficiency
Both Deficiencies
Other Deficiency
Segment Deficiency
Safety Deficiency
Geometric Deficiency
Both Operation &
Safety Deficiency

- - **VA 670 Bridge over South Fork Holston River** Short-term replace bridge.
- VA 617 (Walkers Creek Rd.) Over Hungry Mother Creek Short-term replace bridge.
- 41 VA 619 (Dotson Ridge Rd.) Bridge over N. Fork Holston River Short-term replace bridge.
- 42 VA 660 (Ad Wolfe Rd.) from VA 657 E. to US 11 S. Mid-term reconstruct to urban two-lane standards.
- 3 US 11 (Main St.)/VA 16 (S. Commerce St.)

Long-term realign, upgrade, and install signal at Main/Pendleton Streets intersection or develop a new alignment of VA 16 away from downtown core. (Marion)

4 US 11 (N. Main St.)/VA 16 (Park Blvd.)

Short-term install "Intersection Ahead" warning signs; Mid-term improve pedestrian accommodations; Long-term provide dual southbound left turn lanes. (Marion)

45 VA 16 (S. Commerce St.) from SCL of Marion to 0.16 Mi. S. of SCL of Marion Long-term reconstruct road to address geometric deficiencies

(including full-width lanes and shoulders). (Marion)

Long-term reconstruct to urban two-lane standards. (Marion)

56 S. Church St. from SCL of Marion to US 11 (Main St.)

Short-term provide drainage improvements. (Marion)

57 US 11 (Lee Hwy.)/VA 107 (White Top Ave.)

Long-term provide northbound and southbound left turn lanes and provide protected left turn at signal. (Chilhowie)

58 I-81/Exit 35 (VA 107/ 762)

Mid-term install signal and provide turn lanes where feasible; Long-term reconstruct interchange. (Chilhowie)

59 VA 107 (White Top Ave.) from Northbound Ramp I-81 to US 11

Long-term reconstruct to urban two-lane standards. (Chilhowie)

60 I-81 from Washington Co. Line to US 11 (Lee Hwy.)

Long-term reconstruct to rural six-lane roadway with median (project in environmental stage). (Chilhowie)

61 US 11 (Lee Hwy.) from VA 1009 to ECL of Chilhowie

Long-term upgrade to rural three-lane roadway. (Chilhowie)

62 VA 774 (Lyons Gap Rd.) from US 11 (Lee Hwy.) to VA 637 (Carlock Creek)

Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

SMYTH COUNTY RECOMMENDATIONS (continued)

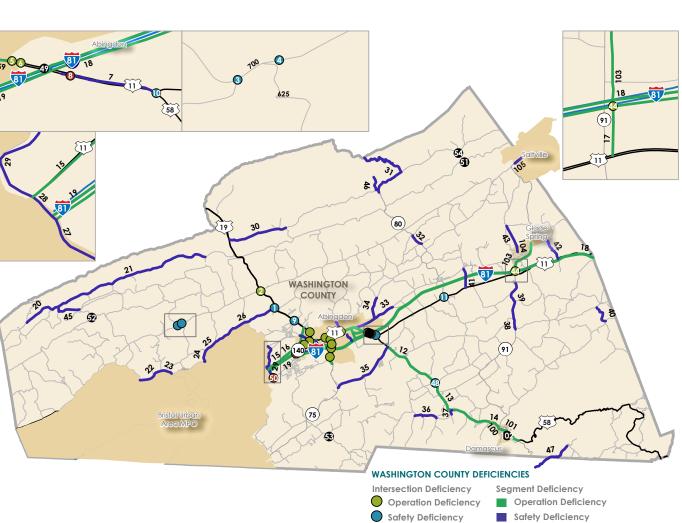
	12 US 58 (Jeb Stuart Hwy.) fr
US 11 Bridge over Norfolk Southern Railroad Short-term replace bridge. (Chilhowie)	Short-term widen roadwo
64 VA 91 (Main St.) from Palmer Avenue to Allison Gap Rd.	13 US 58 (Jeb Stuart Hwy.) fro Mid-term widen roadway
Deficiency with low priority; Continue to monitor for potential improvements. (Saltville)	14 US 58 (Jeb Stuart Hwy.) fro Long-term widen to rural
65 VA 91 (Main St.)/VA 634 (Allison Gap Rd.)/First Avenue Long-term install signal, add eastbound left turn bay, and improve truck turning radius. (Saltville)	15 US 11 (Lee Hwy.) from VA Long-term widen to urba
66 VA 107 (Worthy Blvd.) from VA 91 (Main St.) to SCL of Saltville Short-term reconstruct roadway and install truck climbing lanes. (Saltville)	16 US 11 (Lee Hwy.) from VA Long-term widen to urba
67 VA 91 (Main St.) from VA 107 (Worthy Blvd.) to NCL of Saltville Mid-term reconstruct to urban two-lane standards. (Saltville)	17 VA 91 from US 11 (Lee Hw Long-term widen to rural
VA 91 (Main St.) from Smyth/Washington Co. Line to Palmer Ave. Long-term reconstruct to urban two-lane standards. (Saltville)	18 I-81 from SO. On/Off Ram Long-term reconstruct to (project in environmenta)
69 Buckeye St. from VA 91 (Main St.) to 0.50 Mi. E. of VA 91 Mid-term reconstruct roadway to urban two-lane standards and improve drainage. (Saltville)	19 I-81 from VA 611 to SO. C Long-term reconstruct (project in environmenta
70 Palmer Ave. from VA 91 (Main St.) to 0.32 Mi. N. of Lake Dr. Mid-term reconstruct roadway to urban two-lane standards, including sidewalks, and apply access management. (Saltville)	20 VA 802 (Mendota Rd.) fro Long-term reconstruct r (11-foot lanes).
71 Palmer Ave. from 0.32 Mi. N. of Lake Dr. to Wiley Place Dr. Mid-term reconstruct roadway to urban two-lane standards, including sidewalks, and apply access management. (Saltville)	21 VA 802 (Mendota Rd.) fro Long-term reconstruct r (10-foot lanes).
72 Palmer Ave. from Wiley Place Dr. to SCL of Saltville Mid-term reconstruct roadway to urban two-lane standards, including sidewalks, and apply access management. (Saltville)	22 VA 633 (Reedy Creek Rd (Reedy Creek Rd.) Long-term reconstruct r
73 VA 16 (Sugar Grove Hwy.)/VA 601 (Flat Ridge Rd.) Long-term realign intersection to improve sight distance and widen	(including full-width lanes
approaches to design standards. (Sugar Grove)	23 VA 659 (Parigin Rd.) from Long-term reconstruct r (including full-width lanes)
	24 VA 661 (Black Hollow Rd. (Black Hollow Rd.) Long-term reconstruct r (11-foot lanes).
 WASHINGTON COUNTY RECOMMENDATIONS US 19 (R Porterfield Hwy.)/VA 633 (Black Hollow Rd.) Long-term improve sight distance by correcting vertical alignment. 	25 VA 633 (Black Hollow Rd.) Long-term reconstruct r (11-foot lanes).
 US 19 (R Porterfield Hwy.)/VA 700 (Rich Valley Rd.) Long-term lengthen eastbound right turn bay and apply access management. 	26 VA 633 (Black Hollow Ro Memorial Hwy.) Long-term reconstruct r (including full-width lanes
3 VA 700/VA 625 (Jasper Creek Rd.) Long-term reconstruct intersection to design standards.	27 VA 611 (Spring Creek Rd Ramps
 VA 700/VA 625 (Pine Hill Rd.) Long term reconstruct intersection to design standards. 	Long-term widen to urba

Long-term reconstruct intersection to design standards.

5 US 11/Empire Rd.

Mid-term widen north leg to provide right turn lane and add signal.

- **US 11/I-81 Exit 19 Southbound Off-ramp** Mid-term widen north leg to provide right turn lane and add signal; Longterm improve interchange (project in environmental stage).
- 7 US 11/US 58 (Lee Hwy.) from I-81 Northbound Ramp to US 11 (Lee Hwy.)



Both Deficiencies

Other Deficiency

- US 58 (Jeb Stuart Hwy.) from VA 677 to VA 638 S. Short-term widen roadway to four-lane rural standards.
 US 58 (Jeb Stuart Hwy.) from VA 638 S to 0.10 Mi. E. of VA 75
- 13 US 58 (Jeb Stuart Hwy.) from VA 638 S. to 0.10 Mi. E. of VA 757 Mid-term widen roadway to four-lane rural standards.
- 14 US 58 (Jeb Stuart Hwy.) from 0.10 Mi. E. of VA 757 to VA 1201 Long-term widen to rural four-lane roadway with median.
- 15 US 11 (Lee Hwy.) from VA 611 (Providence Rd.) to VA 895 Long-term widen to urban four-lane roadway with median.
- 16 US 11 (Lee Hwy.) from VA 895 to WCL of Abingdon Long-term widen to urban four-lane roadway with median.
- **17** VA 91 from US 11 (Lee Hwy.) to I-81 Southbound On/Off Ramps Long-term widen to rural four-lane roadway with median.
- 18 I-81 from SO. On/Off Ramps/US 11 to Smyth County Line Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 19 I-81 from VA 611 to SO. On/Off Ramps/US 11 Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 20 VA 802 (Mendota Rd.) from VA 612 to VA 621 (Barnrock Rd.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 21 VA 802 (Mendota Rd.) from VA 621 (Barnrock Rd.) to VA 831 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 22 VA 633 (Reedy Creek Rd.) from VA 640 (Benham Rd.) to VA 659 E. (Reedy Creek Rd.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 23 VA 659 (Parigin Rd.) from VA 633 (Reedy Creek Rd.) to MPO Border Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 24 VA 661 (Black Hollow Rd.) from VA 657 (Reedy Creek Rd.) to VA 633 (Black Hollow Rd.)

Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

- 25 VA 633 (Black Hollow Rd.) from VA 661 (Black Hollow Rd.) to VA 614 W. Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 26 VA 633 (Black Hollow Rd.) from VA 614 W. to US 19 (R Porterfield Memorial Hwy.)

Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

27 VA 611 (Spring Creek Rd.) from VA 647 (Old Jonesboro Rd.) to I-81 Ramps

ong-term widen to urban four-lane roadway with median.

/US 58 (Jeb Stuart Hwy.) Long-termmonitorroadway for additional improvements.

8 I-81/Exit 19 Northbound Off Ramp (US 11/ US 58)

Long-term improve interchange (project in environmental stage).

9 US 19 (R Porterfield Hwy.)/VA 1502

Deficiency with low priority; Continue to monitor for potential improvements.

10 US 11 (Lee Hwy.)/US 58

Deficiency with low priority; Continue to monitor for potential improvements.

11 US 11 (Lee Hwy.)/VA 80/VA 803

Short-term maintenance and improve signage; Mid-term add signs and flashers to warn of turning vehicles; Longterm apply access management.



WASHINGTON COUNTY RECOMMENDATIONS (continued)

- 28 VA 611 from I-81 Ramps to US 11 (Lee Hwy.) Long-term widen to urban four-lane roadway with median.
- 29 VA 611 (Providence Rd.) from US 11 (Lee Hwy.) to VA 645 S. (Wyndale Rd.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 30 VA 689 (Brumbly Gap Rd.) from US 19 (R Porterfield Memorial Hwy.) to VA 687 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 31 VA 80 (Hayers Gap Rd.) from VA 689 to Russell Co. Line Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 32 VA 80 (Hayers Gap Rd.) from VA 830 to VA 703 S. Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 33 VA 609 (Hillman Hwy.) from N. ECL of Abingdon to VA 879 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 34 VA 740 (Old Saltworks Rd.) from NCL of Abingdon to VA 699 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 35 VA 677 (Watauga Rd.) from VA 75 (Green Spring Rd.) to US 58 (Jeb Stuart Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 36 VA 711 from VA 710 to VA 712 Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 37 VA 833 from VA 711 to US 58 (Jeb Stuart Hwy.) Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 38 VA 91 (Monroe Rd.) from VA 762 to VA 734 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 39 VA 91 (Monroe Rd.) from VA 734 to VA 1320 S. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 40 VA 604 (Bishop Rd.) from VA 605 N. to VA 762 Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 41 VA 737 from US 11 (Lee Hwy.) to VA 609 (Hillman Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 42 VA 751 (Fleet Rd.) from VA 609 to US 11 (Lee Hwy.) Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 43 VA 750 (Old Mill Rd.) from NCL of Glade Spring to VA 751 N. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- I-81/Exit 29 interchange (VA 91) Short-term construct turn lanes on off-ramps.
- 45 VA 614/VA 621 (Barnrock Rd.) from VA 802 to VA 622 Short-term reconstruct to urban two-lane standards.
- 46 VA 691 (Clinch Mountain) from VA 80 to end of State Maintenance (1.0 Mi.) Short-term pave roadway.

47 VA 725 (Taylors Valley) from VA 91/725 to VA 726 Short-term reconstruct to urban two-lane standards.

- 55 US 11 (Main St.) from VA 140 (Jonesboro Rd.) to VA 19 (Porterfield Rd.) Mid-term improve drainage; Long-term apply access management, close median breaks, and monitor traffic flow after improvements. (Abingdon)
- 56 VA 75 (Cummings St.) from Country Club Drive to SCL Long-term widen roadway to four-lane rural standards and install signal at Vance Mill Rd. (Abingdon)
- 57 VA 75 (Cummings St.) from Washington Crossing (Magic Mart Entrance) to Bradley St. Long-term apply access management, install signal at Green Springs

Rd., and add southbound right turn bay and second eastbound turn lane at Cook St. (Abingdon)

58 VA 75 (Cummings St.) from Bradley St. to Valley St.

Short-term add advance warning signs of railroad bridge; Longterm improve railroad bridge and apply access management. (Abingdon)

59 US 11 (Main St.) from Hillman Hwy. to I-81 Southbound Ramps (Exit 19)/Eastern City Limits of Abingdon

Long-term widen roadway to four-lane standards with appropriate turn lanes and perform signalization study at Old Eleven Drive. (Abingdon)

60 I-81/Exit 14

Short-term replace bridge; Long-term reconstruct interchange (project in environmental stage). (Abingdon)

61 I-81/Exit 17

Long-term reconstruct interchange (project in environmental stage). (Abingdon)

62 Proposed VA 140 Extension (Jonesboro Rd.) from Intersection of US 11 and Jonesboro Rd to N. City Limits of Abingdon, near VA 848 (Brianwood Ln.)

Long-term construct proposed VA 140 Extension. (Abingdon)

- **VA 140 (Jonesboro Rd.) from I-81 to US 11 (Main St.)** Long-term monitor traffic flow after improvements on I-81 interchange completed (project in environmental stage). (Abingdon)
- 64 Valley St. from US 58 Alternate (Russell Rd.) to Whites Mill Rd. Deficiency with low priority; Continue to monitor for potential improvements. (Abingdon)
- 65 US 11 (Main St.) from Boone St. to Hillman Hwy. Deficiency with low priority; Continue to monitor for potential improvements. (Abingdon)

66 I-81 from VA 140 to WCL of Abingdon Long-term reconstruct to rural six-lane roadway with median (project in environmental stage). (Abingdon)

67 Whites Mill Rd. from Valley St. to Old NCL of Abingdon Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Abingdon)

US 11 (Main St.)/Alt US 58 (Cummings St.) Short-term restripe westbound approach to accommodate a second left turn lane; Mid-term widen northbound approach to provide separate left turn lane. (Abingdon)

Alt US 58 (Porterfield Hwy.)/US 19 (Porterfield Hwy.) Short-term add signage at intersection to prohibit southbound left turns onto US 58 Alternate during peak periods. (Abingdon)

70 VA 140 (Jonesboro Rd.)/US 11 (Main St.)

Short-term provide second northbound right turn lane and modify signal operations as needed. (Abingdon)

48 US 58/VA 722 (Osceola Rd./Blue Spring Rd.)

Short-term improve pavement markings and signage and assess need for turn lanes; Mid-term install turn lanes if warranted.

49 I-81 US 11 and 58

Short-term replace southbound bridge; Long-term improve interchange (project in environmental stage).

50 VA 611/VA 647

Short-term improve intersection as per Six Year Improvement Program.

- 51 VA 611 Bridge over Tumbling Creek Short-term replace southbound bridge.
- 52 VA 616 (Walnut Groove) W. of VA 625 Short-term replace bridge.

53 VA 670 near VA 664 Short-term replace bridge.

54 VA 747 Bridge over Tumbling Creek Short-term replace bridge.



WASHINGTON COUNTY RECOMMENDATIONS (continued)

71 Valley St./Court St.

Short-term restripe roadway to add an eastbound left turn lane. (Abingdon)

72 US 11 (Main St.)/Old Reedy Creek Rd.

Mid-term prohibit northbound left turn movement and sign Colonial Rd. to divert all left turning traffic to Main St./Colonial Rd. intersection. (Abingdon)

73 US 11 (Main St.)/Colonial Rd.

Mid-term signalize intersection. (Abingdon)

74 VA 75 (Cummings St.)/Fairway Dr.

Mid-term signalize intersection. (Abingdon)

75 US 11 (Main St.)/Pecan St.

Long-term widen northbound approach to provide a separate left turn lane. (Abingdon)

73 ALT US 58 (Cummings St.) Kroger Entrance

Long-term signalize intersection. (Abingdon)

77 Valley St./White's Mill Rd.

Long-term signalize intersection. (Abingdon)

78 ALT US 58 (Cummings St.)/Cook St.

Long-term widen southbound approach to provide a separate right turn lane and widen northbound approach to provide a second left turn lane. (Abingdon)

79 US 11 (Main St.)/Tanner St.

Long-term widen southbound approach to provide a separate right turn lane. (Abingdon)

80 US 11 (Main St.)/Deadmore St.

Long-term widen southbound approach to provide a separate short right turn lane. (Abingdon)

- 81 VA 75 (Cummings St.) from I-81 interchange to Country Club Dr. Long-term widen to four lanes and realign intersections with Commerce St. and Country Club Rd. into a single signalized intersection. (Abingdon)
- 82 US 11 (Main St.) from Alt US 58 (Russell Rd.) to Boone St. Short-term improve pavement markings, signage, and pedestrian crosswalks. (Abingdon)

83 Cook St. from Alt US 58 (Cummings St.) to Lowry Dr.

Short-term reconstruct and extend roadway to urban two-lane standards. (Abingdon)

84 Lowry Drive from Cook St. extension to Stone Mill Rd.

Short-term reconstruct and extend roadway to urban two-lane standards. (Abingdon)

- 85 VA 372 (VA Highlands Access Rd.) from Stone Mill Rd. to existing terminus Mid-term extend roadway to Stone Mill Rd. at urban two-lane standards. (Abingdon)
- 86 VA 372 (VA Highlands Access Rd.) from existing terminus to VA 140 (Jonesboro Rd.)

Mid-term reconstruct to urban two-lane standards. (Abingdon)

- 87 VA 645 (Wyndale Rd.) from US 11 (Main St.) to WCL of Abingdon Mid-term reconstruct to urban two-lane standards. (Abingdon)
- 88 Hillman Hwy. from US 11 (Main St.) to ECL of Abingdon Mid-term reconstruct to urban two-lane standards. (Abingdon)

89 US 11 (Main St.) from WCL to VA 140 (Jonesboro Rd.) Long-term widen roadway to four-lane urban standard. (Abingdon)

90 Old Saltworks Rd. from Hillman Hwy. to Northeastern Corporate Limits Long-term reconstruct roadway to two-lane urban standards, including Long-term reconstruct existing roadway and extend to Main St. at two-lane urban standards. (Abingdon)
94 S. Trigg St. from Nicholas St. to SCL Long-term reconstruct to two-lane urban standards. (Abingdon)
95 Stone Mill Rd. from US 11 (Main St.) to Colonial Rd. Long-term extend roadway to Main St. at two-lane urban standards, including new bridge over Norfolk Southern Railroad. (Abingdon)
96 Stone Mill Rd. from Colonial Rd. to SCL Long-term reconstruct to two-lane urban standards. (Abingdon)
97 Derek St. from Langare St. to Partia stan Place

93 Nicholas St. from Morgan St. to US 11 (Main St.)

- 97 Park St. from Tanner St. to Partington Place Long-term reconstruct to two-lane urban standards. (Abingdon)
- 98 Bonnycastle Drive extension from existing terminus to VA 647 Long-term extend roadway to VA 647 at two-lane urban standards. (Abingdon)
- 99 I-81 from WCL of Abingdon to ECL of Abingdon Long-term reconstruct roadway (project in environmental stage). (Abingdon)
- 100 US 58 (Jeb Stuart Hwy.) from VA 1201 to VA 1202 Long-term widen to rural four-lane roadway with median. (Damascus)
- **101 US 58 (Jeb Stuart Hwy.) from VA 1202 to VA 91 (Mountain City Rd.)** Long-term conduct study for Damascus Bypass. (Damascus)
- VA 1212 Bridge over Laurel Creek Short-term replace bridge. (Damascus)
- 103 VA 91 from I-81 Southbound On/Off Ramps to VA 752 Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Glade Spring)
- 104 VA 750 (Old Mill Rd.) from VA 609 to NCL of Glade Spring Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Glade Spring)
- 105 VA 91 (Main St.) from WCL to Smyth/Washington Co. Line Short-term reconstruct roadway to two-lane urban standards. (Saltville)

reconstruction of the railroad overpass. (Abingdon)

91 Short St. Extension from US 11 (Main St.) to Triggs St.

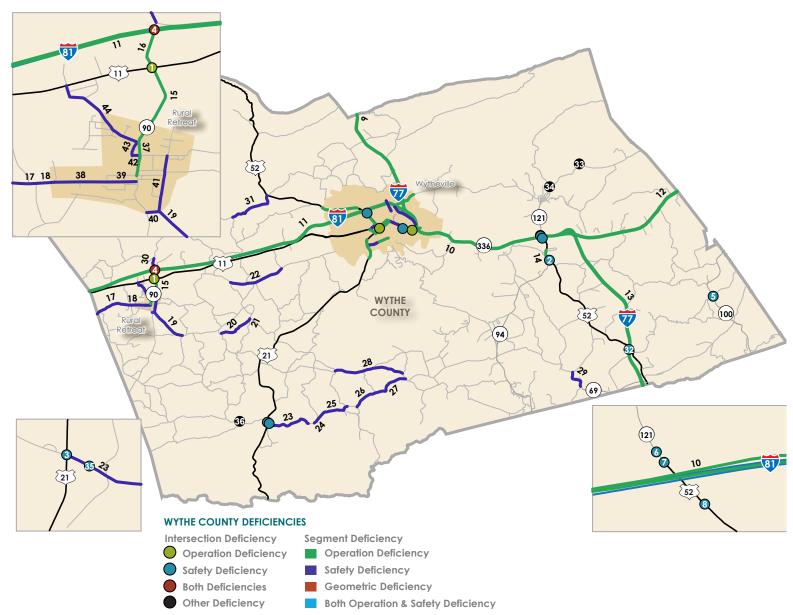
Long-term reconstruct existing roadway and extend to Triggs St. at twolane urban standards. (Abingdon)

92 Morgan St. from Norfolk St. to Short St. extended

Long-term reconstruct existing roadway and extend to Short St. extended at two-lane urban standards. (Abingdon)

WYTHE COUNTY RECOMMENDATIONS (continued)

- 23 VA 619 (St. Peters Rd.) from US 21 (Grayson Tnpk.) to 1.96 Mi. E. of VA US 11 (Lee Hwy.)/VA 90 (N. Main St.) 684 Long-term install left turn lanes on VA 90 approaches and provide protected Long-term reconstruct road to address geometric deficiencies left turns at signal. (including full-width lanes and shoulders). 2 US 52 (Fort Chiswell Rd.)/VA 94 (Ivanhoe Rd.) 24 VA 619 (St. Peters Rd.) from 2.26 Mi. E. of VA 684 to VA 707 Short-term reconfigure entrances/exits to high school; Mid-term monitor for Long-term reconstruct road to address geometric deficiencies additional improvements. (11-foot lanes). US 21 (Grayson Turnpike)/VA 749 (Cedar Spring Rd.)/VA 619 (St. Peters Rd.) 25 VA 619 (St. Peters Rd.) from VA 707 to VA 602 W. Long-term apply access management and add left turn lanes. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). I-81/VA 90 Short-term improve signage; Long-term reconstruct interchange (project in 26 VA 619 (St. Peters Rd.) from VA 602 E. to VA 646 W. environmental stage). Long-term reconstruct road to address geometric deficiencies (11-foot lanes). VA 100 (Wysor Hwy.)/VA 608 (Foster Falls Rd./Gardner Rd.) Long-term realign east leg of intersection and add northbound and 27 VA 619 (St. Peters Rd.) from VA 646 W. to VA 642 W. southbound left turn lanes. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). VA 121/F-044 Mid-term apply access management and improve northbound to 28 VA 690 (Slate Spring Branch Rd.) from VA 602 E. (Cripple Creek Rd.) eastbound turn radius; Long-term explore potential relocation of F-044 to VA 642 further north to increase separation from I-81 interchange. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 7 VA 121/US 52 Mid-term improve turn radii on all corners to better accommodate trucks; 29 VA 636 from VA 69 N. (Lead Mine Rd.) to VA 619 (Huddle Rd.) Long-term continue to monitor for other potential improvements. Long-term reconstruct road to address geometric deficiencies (10-foot lanes). F-42/US 52 Deficiency with low priority; Continue to monitor for potential 30 VA 680 (Black Lick Rd.) from VA 679 to VA 617 W. improvements. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). I-77 from N. City Limits of Wytheville to Bland Co. Line Mid-term consider truck climbing lanes; Long-term widen to rural four-lane 31 VA 680 (Black Lick Rd.) from VA 666 to US 52 (Stoney Fork Rd.) roadway with median. Long-term reconstruct road to address geometric deficiencies (11-foot lanes). 10 I-81 from E. City Limits of Wytheville to Off Ramp to VA 619 Long-term reconstruct roadway (project in environmental stage). 32 I-77/Southbound bridge over New River Short-term maintenance, improve signage, and evaluate pavement I-81 from Smyth County Line to W. City Limits of Wytheville and aeometry at curve: Mid-term continue to monitor: Long-term Long-term reconstruct roadway (project in environmental stage). consider redesigning southbound approach to improve drainage and curvature of roadway. 12 I-81 from Off Ramp to VA 619 to Pulaski County Line Long-term reconstruct roadway (project in environmental stage). VA 610 (Peppers Ferry Rd.) 2 Mi. E. of VA 712 Short-term replace bridge. 13 I-77 from Carroll County Line to I-81 Long-term widen to rural six-lane roadway with median. 14 US 52 (Fort Chiswell Rd.) from VA 94 (Ivanhoe Rd.) to 0.31 Mi. N. of VA 736 34 VA 610 (Peppers Ferry Rd.) Bridge over Millers Creek
 - Long-term widen to rural four-lane roadway with median.
 - 15 VA 90 from NCL of Rural Retreat to US 11 (Lee Hwy.) Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
 - 16 VA 680 from US 11 (Lee Hwy.) to I-81 W. Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
 - 17 VA 616 (Parsannage Avenue) from Smyth Co. Line to VA 689 Long-term reconstruct road to address geometric deficiencies (11-footlanes).
 - 18 VA 616 (Murphyville Rd.) from VA 689 to Rural Retreat Corporate Limits Long-term reconstruct to two-lane urban standards.
 - 19 VA 674 (Ridge Aux) from



Short-term replace bridge.

Short-term replace bridge.

36

35 VA 619 (St. Peters Rd.) Approaches to bridge(s) over Dry Run Creek

Short-term reconstruct approaches of bridge to standards.

VA 749 (Cedar Springs Rd.) Bridge over Cripple Creek

Long-term reconstruct road to address geometric deficiencies (11-footlanes).

- 20 VA 668 (Kings Grove Lane) from VA 625 to VA 669 Long-term reconstruct road to address geometric deficiencies (11-footlanes).
- 21 VA 625 (Kings Grove Ln.) from VA 668 (Kings Grove Lane) to VA 690 S. (Crockett Rd.)

Long-term reconstruct road to address geometric deficiencies (11-footlanes).

22 VA 667 (Old Stage Rd.) from VA 625 E. (Crockett Rd.) to VA 663

Long-term reconstruct road to address geometric deficiencies (10-footlanes).

WYTHE COUNTY RECOMMENDATIONS

- 37 VA 90 from VA 616 to NCL of Rural Retreat Long-term reconstruct road to address geometric deficiencies (11-foot lanes). (Rural Retreat)
- 38 VA 616 from Rural Retreat Corporate Limits to VA 1101 Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- 39 VA 1101 (Parsonage Ave.) from VA 616 to VA 749 (Cedar Spring Rd.) Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- 40 VA 1112 (Ridge Ave.) from VA 749 (Cedar Spring Rd.) to VA 674 (Greever St.) Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- 41 VA 674 (Greever St.) from VA 1112 (Ridge Avenue) to VA 675 (Buck St.) Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- 42 VA 675 (Chinquapin Ave.) from VA 1111 to VA 90 Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- **43** VA 675 (Chinquapin Avenue) from Chiquapin Rd. to VA 1111 Long-term reconstruct to urban two-lane standards. (Rural Retreat)
- 44 VA 675 (Chinquapin Avenue) from US 11 (Lee Hwy.) to Chiquapin Rd. Long-term reconstruct road to address geometric deficiencies including full-width lanes and shoulders). (Rural Retreat)
- 45 VA 21 (4th St.)/ Commonwealth Drive/Tazewell St. Mid-term convert all driveways on the west leg to right in/right out only, refresh pavement markings on the west leg, and install "No Turn on Red" sign. (Wytheville)
- **46 I-77 from I-81 W. to N. City Limits of Wytheville** Long-term widen to rural six-lane roadway with median. (Wytheville)
- 47 I-81 from I-77 N. to E. City Limits of Wytheville Long-term reconstruct roadway (project in environmental stage). (Wytheville)
- 48 I-81 from W. City Limits of Wytheville to I-77 N. Long-term reconstruct roadway (project in environmental stage). (Wytheville)
- 49 Tazewell St. from Monroe St. to US 11 (Main St.) Long-term eliminate on-street parking on west side and restripe to 12-foot lanes. (Wytheville)
- 50 US 11 (12th St.) from Pine St. to US 21 (Main St.) Long-term widen to urban four-lane roadway. (Wytheville)
- 51 Marshall St. from Chapman Rd. to US 11 (E. Main St.) Long-term widen to urban four-lane roadway. (Wytheville)
- 52 US 21 (4th St.) from Monroe St. to Ridge Rd. Deficiency with low priority; Continue to monitor for potential improvements. (Wytheville)
- 53 US 21 (4th St.) from Ridge Rd. to Tazewell St. Long-term widen to urban five-lane roadway and apply access management. (Wytheville)

WYTHEVILLE DEFICIENCIES

Intersection Deficiency

Safety Deficiency

Both Deficiencies

Other Deficiency

Segment Deficiency

Safety Deficiency

Geometric Deficiency

Both Operation & Safety Deficiency

🔴 Operation Deficiency 🛛 📕 Operation Deficiency

54 US 21 (4th St.) from Tazewell St. to I-81 Northbound Ramps Long-term reconstruct to urban six-lane roadway with median. (Wytheville)

55 Pine St. from US 11 (Lee Hwy.) to US 21 (4th St.) Long-term reconstruct to urban twolane standards. (Wytheville)

- 4th St./US 11 (W Main St.) Short-term reconfigure intersection to provide separate northbound and southbound left turn lanes. (Wytheville)
- 57 Marshall St./Chapman Rd.

- 61 VA 610 (Peppers Ferry Rd.) from 0.06 Mi. S. of I-81 Northbound to ECL Mid-term widen roadway to four-lane divided rural standards. (Wytheville)
- 62 Spring St. extension from 11th St. to US 11 (E Main St.) Mid-term extend roadway to US 11 at three-lane urban standards and include new signals at 11th St. and Main St. (Wytheville)
- US 11 (E Main St.)/Lithia Rd. Mid-term realign Lithia Rd. approach and signalize intersection. (Wytheville)
- **64 US 11 (E Main St.) from 11th St. to I-77/81 interchange ramps** Mid-term implement coordinated signal system. (Wytheville)
- **65 US 21 (Grayson Rd.) from US 21 (W Main St.) to SCL** Long-term widen to urban four-lane standards and replace existing Norfolk Southern railroad bridge. (Wytheville)
- 66 US 52 (N. 4th St.) from Fairview Rd. to WCL Long-term widen to four-lane rural divided standards. (Wytheville)
- 67 Cove Rd. from Peppers Ferry Rd. to Holston Rd. Long-term reconstruct roadway to urban two-lane standards. (Wytheville)
- 68 Spring St. from S. 12th St. to US 11 (E Main St.) Long-term convert roadway to one-way pairs, improve to urban three-lane standards, upgrade signals, and improve pedestrian facilities. (Wytheville)
- 69 Monroe St. from US 11 (W. Lee Hwy.) to N. 11th St. Long-term convert roadway to one-way pairs, improve to urban two-lane standards, upgrade signals, and improve pedestrian facilities. (Wytheville)
- 70 W/E Main St. from N/S 12th St. to N/S 11th St. Long-term convert Main St. to local roadway oriented to pedestrian use. (Wytheville)
- 71 Connector Rd. from VA 610 (Peppers Ferry Rd.) to Lithia Rd. Mid-term reconstruct roadway to urban two-lane standards and reclassify roadway as Marshall St. (Wytheville)

Short-term signalize intersection and improve roadway striping and sight distance. (Wytheville)

58 US 11 (E Main St.) extension from US 11 (E Main St.) to Nye Rd.

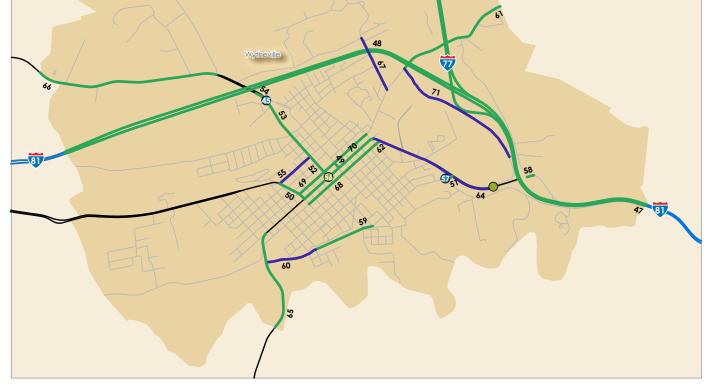
Mid-term extend roadway to Nye St., construct to four-lane rural divided standards, and modify ramps to/from I-81 as needed. (Wytheville)

59 Marshall St. extension from 4th St. to eastern terminus

Mid-term extend roadway to tie into Railroad Avenue, including new bridge over railway. (Wytheville)

60 Railroad Avenue from eastern terminus to US 21 (Grayson Rd.)

Mid-term reconstruct to urban twolane standards and reclassify roadway as Marshall St. (Wytheville)



77

Public Transportation

One set of deficiencies and recommendations (base year and forecast year) was developed for both fixed-route and demand-responsive transit. They were developed primarily from the Coordinated Human Service Mobility Plan prepared by DRPT in conjunction with the MRPDC. These are vision goals/recommendations for improvements that the plan identified:

- Continue to support capital needs of coordinated human service/ public transportation providers;
- Expand availability of demand-response service and specialized transportation services to provide additional trips for older adults, people with disabilities, and low-income populations;
- Build coordination among existing public transportation and human service transportation providers;
- Provide targeted shuttle services to access employment opportunities;
- Establish a ride-sharing program for long-distance medical transportation;
- Expand outreach and information on available transportation options in the region;
- Implement new public transportation services or operate existing public transit services on a more frequent basis;
- Provide flexible transportation options and more specialized transportation services or one-to-one services through the use of volunteers;
- Expand access to taxi services and other private transportation operators;
- Establish or expand programs that train customers, human service agency staff, medical facility personnel, and others in the use and availability of transportation services; and
- Bring new funding partners to public transit/human service transportation.

The review of disadvantaged population groups determined that there is good access to public transportation by these populations through both fixed-route and demand-responsive service. Even though the area is very rural, the fixed routes extend into most of the PDC and provide access and mobility for these populations. In addition, demand-responsive service is available throughout most of the PDC, which is not always common in rural areas.



Bicycle and Pedestrian Facilities

Determination of the need for bikeways and pedestrian facilities is dependent on several factors. One is to define areas for development that have numerous trip generators and attractors, such as neighborhoods, parks, schools, and shopping areas. Another factor in development is the determination of areas appropriate for extensions of existing routes and paths to provide better links between facilities. Analysis is more qualitative than quantitative in nature with recommendations closely aligned with local desires.

Even though the topography in the MRPDC is mountainous, there is a basic network of bicycle and pedestrian facilities. The Virginia Creeper and Appalachian trails are particularly popular facilities. Planning to use these facilities as the foundation of a regional system is already underway. Both Washington County and Wythe County have proposals in their respective Recreation Plan and Comprehensive Plan for establishing connections between existing facilities and connecting public facilities and population centers.

> Even though the topography in the MRPDC is mountainous, there is a basic network of bicycle and pedestrian facilities.



Airports

The Virginia Air Transportation System Plan Update forecasted average annual growth rates of based aircraft through 2020 for the three general aviation airports in the region (DOAV, 2003). Aircraft based at Twin County are expected to grow by 0.5 percent annually, but no growth in based aircraft is projected for both Mountain Empire and Virginia Highlands airports (DOAV, 2003). Future growth at these airports is not expected to have long-term effects on the existing transportation network.



Goods Movement

The transfer of some goods shipments from roadway to rail has the potential to strengthen rail freight services offered, while also reducing the number of long-haul tractor-trailers trips, and preserving or possibly enhancing roadway levels of service. This transfer is possible when rail sidings are available both at the origin and destination of the goods. Even with this transfer, short-distance truck shipments are still necessary between the shipper and the siding. Because there is existing access to the rail network in the MRPDC region, particularly the Norfolk Southern Crescent Corridor, these type of transfers may occur in the future. Key truck freight corridors will continue to include the major arterials and collectors in the region: I-77, I-81, US 21, US 52, US 58, and US 221.

There are currently improvements proposed for the Norfolk Southern rail corridor in the region. Added capacity along the Crescent Corridor, which generally parallels I-81 through the region, is expected to transfer more truck shipments from I-81 to this rail corridor (DRPT, Virginia, 2008).

Key truck freight corridors will continue to include the major arterials and collectors in the region: I-77, I-81, US 21, US 52, US 58 and US 221.

Future development is expected to focus in existing towns, along major roadway corridors, and where gneral infrastructure, particularily water and sewer service, is currently available.

Land Use and Future Growth

A review of the jurisdictions' comprehensive plans, zoning, and proposed future land use determined where future growth areas could be. Existing land use/ land cover in the MRPDC region is generally forested and rural residential with more dense residential and commercial uses centered around I-81 and the existing cities and towns. Growth areas were identified by the MRPDC in conjunction with the individual jurisdictions. These areas were used in the analysis of the roadway network to review existing traffic forecasts for the individual roadways and to produce new forecasts. The analysis was then used to prepare the recommendations. Future development is ex-



pected to focus in existing towns, along major roadway corridors, and where general infrastruc-

> ture, particularly water and sewer service, is currently available (map below). Most of the counties state in their current comprehensive plans that they wish to temper growth and development while preserving existing forested or agricultural areas. These two land uses are currently the largest for every county in the PDC.

Travel Demand Management

In rural areas, low residential densities and dispersed work destinations are generally not conducive to high public transportation use and/or other travel demand management strategies. In the MRPDC, this is largely the case, however, there is some concentration of employment locations, particularly Bristol, Galax, and the towns. Some decreases in singleoccupant vehicle trips are possible through the promotion and continued use of park and ride lots throughout the region. A survey of existing lots and their amenities and usage would be useful to assess any changes that may be needed to better serve commuters. Assessment of the use of the fixedroute transit routes and the New Freedom routes could also prove useful in meeting the regional access and mobility needs.

The TransDominion Express (TDX) is a proposed rail service that crosses the Commonwealth on existing rail lines from Bristol with a split at Lynchburg into two branches, one to Richmond and one to Washington, DC. The DRPT Resource Allocation Plan (2008) identifies improvements to the state's rail corridors. The I-81/US 29 Corridor discussed in the report is the Trans Dominion Express corridor. In Phase I, to be completed by 2014, service is proposed to be extended to Lynchburg with additional analysis of service to Roanoke. Proposed stops in Mount Rogers PDC include Bristol, Abingdon, Marion, and Wytheville. The newly expanded Northeast Regional service from Lynchburg north to Washington, DC and beyond implements part of the full service planned by TDX.



LOCALITY CONCERNS

There is a local concern that was not identified as a part of the study process. In both the Mount Rogers PDC and Cumberland Plateau PDC, there is a desire to perform a feasibility study for improved connections between the Chilhowie and Claypool Hill areas in the long-term.

PLAN ADOPTION

The 2035 Rural Long Range Transportation Plan for the MRPDC was adopted by the Planning District Commission on June 2, 2011. This Plan will serve as a long term strategy for the transportation network of the region and as a component of the 2035 Surface Transportation Plan. Projects can be prioritized for funding based on the recommendations that have been identified. Further information on this Plan and the 2035 Surface Transportation Plan and VTrans 2035 can be found at www.vdot.virginia.gov.

Some decreases in single-occupant vehicle trips are possible through the promotion and continued use of park and ride lots throughout the region.



REFERENCES

U.S. Department of Commerce, Bureau of the Census, SF3, 1990, 2000.

Virginia Department of Aviation, The Virginia Air Transportation System Plan Update: 2003 Technical Report. Richmond, VA: DOAV, 2003.

VirginiaDepartmentofRailandPublicTransportation, Mount Rogers Planning District Commission Coordinated Human Service Mobility Plan. Richmond, VA: DRPT, 2008.

Virginia Department of Rail and Public Transportation, Virginia Statewide Rail Plan - Draft. Richmond, VA: DRPT, 2008.

Virginia Employment Commission, Population Projections by Gender, Age, and Race/Ethnicity, www.vec.virginia.gov. Richmond, VA: VEC, 2009.

Weldon Cooper Center for Public Service, University of Virginia, Population Estimates for Virginia Localities, Planning Districts, and Metropolitan Areas: Final 2007 and Provisional 2008. Charlottesville, VA: Weldon Cooper Center for Public Service, January 2009.