

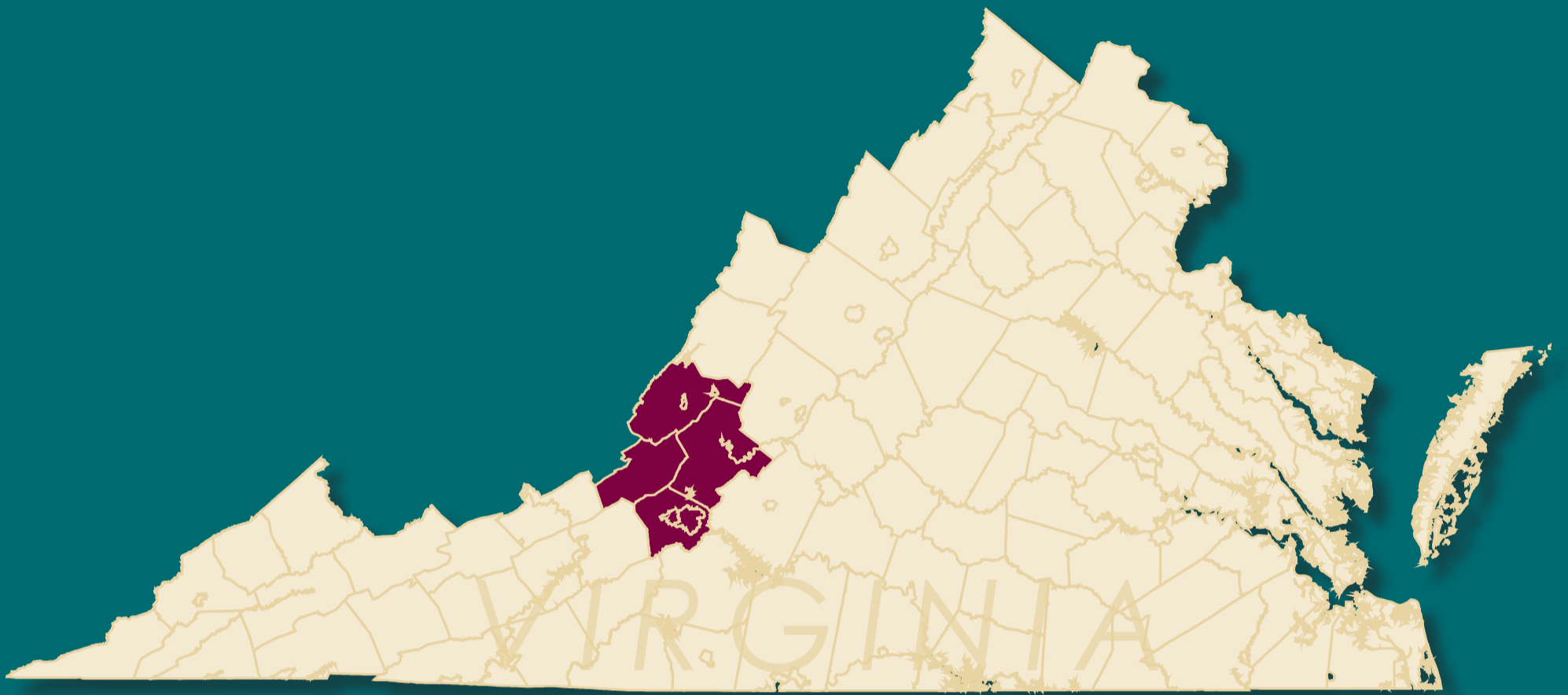
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[www.vdot.org](http://www.vdot.org)  
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## ROANOKE VALLEY-ALLEGHANY REGIONAL COMMISSION 2035 RURAL LONG RANGE TRANSPORTATION PLAN



# ROANOKE VALLEY-ALLEGHANY REGIONAL COMMISSION



## TABLE OF CONTENTS

### INTRODUCTION AND PURPOSE

#### OVERVIEW OF THE REGION

Description and Function of the  
Roanoke Valley-Alleghany Regional Commission  
Summary of Transportation Network  
Goals and Objectives

#### DEMOGRAPHIC AND LAND USE TRENDS

Relationship of Land Use and Development to Transportation  
Population Trends  
Transportation Implications  
Demographic Trends

#### REGIONAL TRANSPORTATION SYSTEM

Roadways  
Public Transportation  
Bicycle and Pedestrian Facilities  
Airports  
Goods Movement  
Land Use  
Travel Demand Management

### TRANSPORTATION SYSTEM PERFORMANCE & RECOMMENDATIONS

Roadways  
Safety  
Operations and Maintenance  
Capacity  
Public Transportation  
Bicycle and Pedestrian Facilities  
Airports  
Goods Movement  
Land Use and Future Growth  
Travel Demand Management

#### PUBLIC INVOLVEMENT

#### PLAN ADOPTION

#### REFERENCES

## 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 Roanoke Valley-Alleghany Regional Commission (RVARC), there is an urbanized area whose transportation needs are coordinated by an MPO. The Roanoke Valley Area Metropolitan Planning Organization (RVAMPO) conducts the transportation planning for the Cities of Roanoke and Salem, the Town of Vinton, and the urbanized areas of Bedford, Botetourt, and Roanoke Counties. The transportation needs of this area are analyzed in its 2035 Long Range Transportation Plan, which is a separate component of the *2035 Surface Transportation Plan*. For the purposes of this Plan, only the transportation network outside of the MPO is analyzed and addressed in this report.



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.

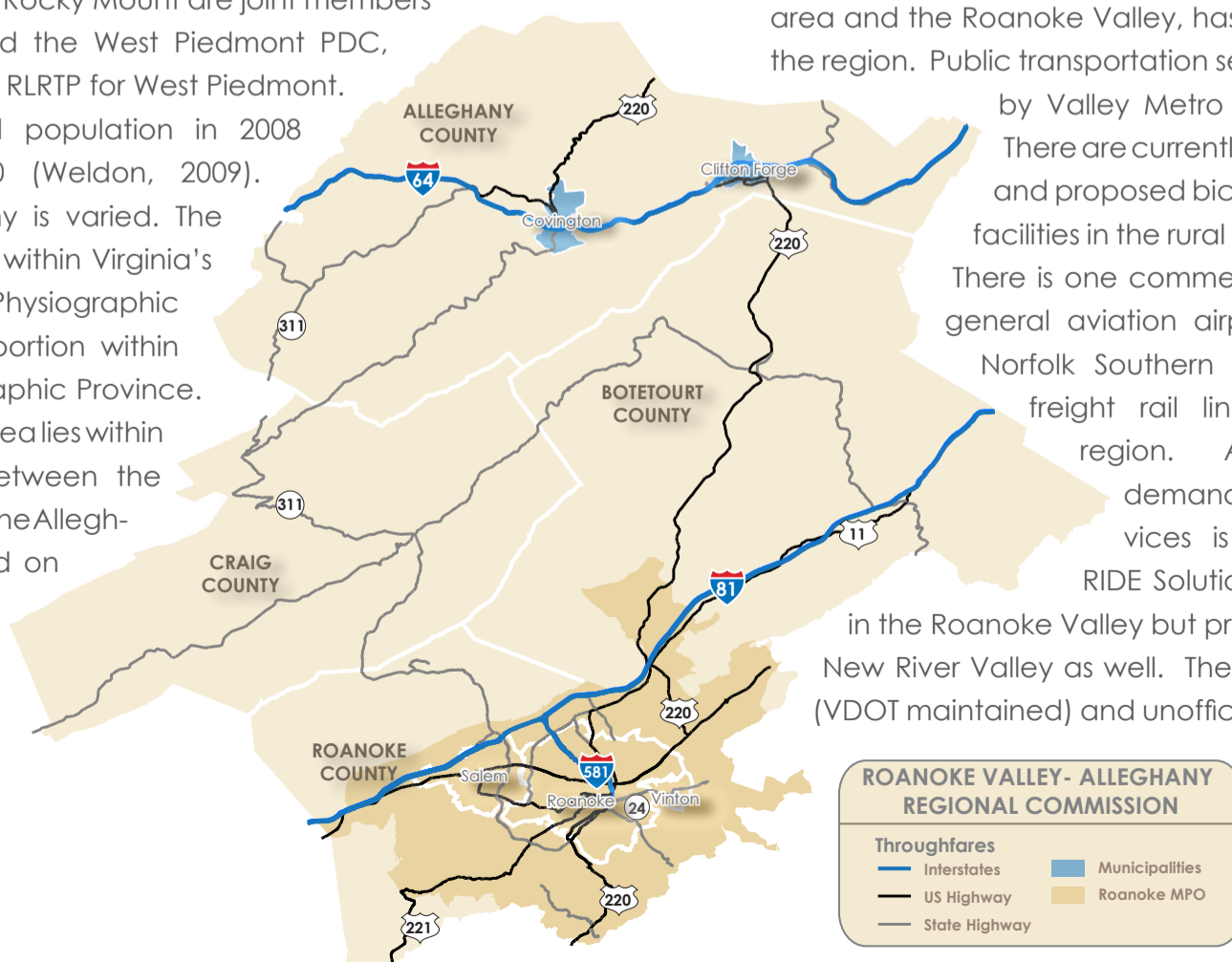
## OVERVIEW OF THE REGION

### Description and Function of the Roanoke Valley-Alleghany Regional Commission

The Roanoke Valley-Alleghany region is located in southwest Virginia within the valley around the Cities of Roanoke and Salem and the Appalachian Mountains west of the valley to West Virginia. The RVARC serves the Counties of Alleghany, Botetourt, Craig, and Roanoke, the Cities of Covington, Roanoke, and Salem, and the Towns of Clifton Forge and Vinton. Franklin County and the Town of Rocky Mount are joint members of both the RVARC and the West Piedmont PDC, and are discussed in the RL RTP for West Piedmont.

The region's estimated population in 2008 was just over 269,000 (Weldon, 2009).

The region's topography is varied. The majority of the area lies within Virginia's Valley and Ridge Physiographic Province with a small portion within the Blue Ridge Physiographic Province. Much of the urbanized area lies within the Roanoke Valley between the Southern Blue Ridge and the Allegheny Mountains centered on the Roanoke River. The surrounding rural areas are very mountainous with small valleys.



### Summary of Transportation Network

I-81 passes through the south central portion of the region, traveling northeast to southwest. I-581 is a spur from I-81 and serves the County and City of Roanoke. I-64 passes through the Alleghany Highlands in the northern portion of the region running east to west and connects with I-81 further east of the RVARC. Other primary corridors include US 11, US 60, US 460, US 220, US 221, VA 42, and VA 311. Ridesharing and commuting, particularly between the Blacksburg/Christiansburg area and the Roanoke Valley, has been a concern in the region. Public transportation services are provided

by Valley Metro based in Roanoke. There are currently 549 miles of existing and proposed bicycle and pedestrian facilities in the rural areas of the RVARC. There is one commercial airport and no general aviation airports in the region.

Norfolk Southern and CSX own the freight rail lines throughout the region. A range of travel demand management services is available through RIDE Solutions, which operates in the Roanoke Valley but provides service in the New River Valley as well. There are seven official (VDOT maintained) and unofficial park and ride lots within the region.

## Goals and Objectives

Needs for each regional plan were developed based on regional and state-wide 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 Roanoke Valley-Alleghany region was developed with this primary goal in mind, along with other goals including consideration for 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 RVARC is guided by the Rural Transportation Technical Committee. This committee reviewed the needs of the region and formulated the following goals.

- GOAL 1** Reduce congestion and impact of incidents on I-81 and I-64.
- GOAL 2** Strengthen transportation linkages between the Roanoke Valley and the surrounding regions (Alleghany Highlands, New River Valley, West Piedmont, and Region 2000).
- GOAL 3** Preserve and maintain the existing transportation system and encourage efficient system management and operations.
- GOAL 4** Promote recreational travel and tourism within the region.
- GOAL 5** Expand public transit and passenger rail service.
- GOAL 6** Provide a safe and secure transportation system.
  
- GOAL 7** Consider freight needs in transportation facility re-design.
- GOAL 8** Provide on-road and off-road bicycle and pedestrian accommodations.



## 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* and are listed below:

- 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.

# DEMOGRAPHIC AND LAND USE TRENDS

## Relationship of Land Use and Development to Transportation

Rural counties throughout the Commonwealth and in the Roanoke Valley-Alleghany region 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 in the amount of growth and land use changes occurring throughout the Commonwealth and in the RVARC, based particularly on proximity to urban areas. Many of the rural counties 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.

*Many of the rural counties are trying to direct any new growth towards existing towns, village centers, or service districts.*

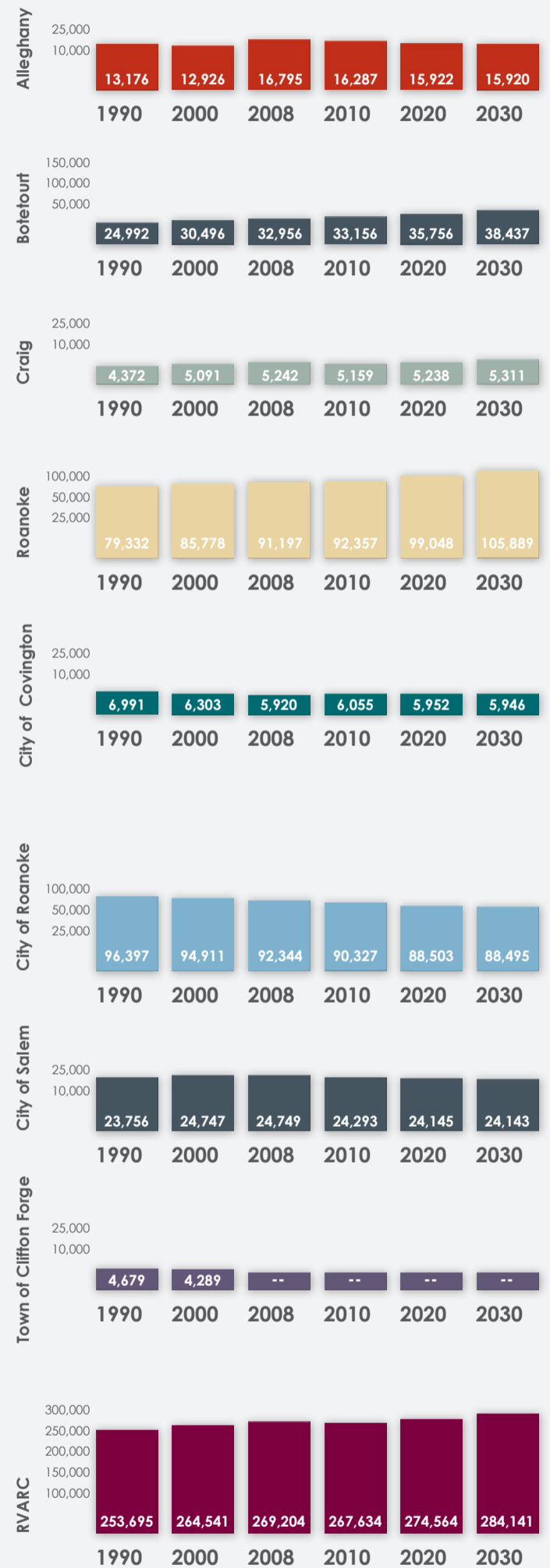
Several factors have affected land use in the RVARC: population growth within the region; the location of four state-wide roadway corridors which traverse the region (I-81, I-64, US 220 and US 460); and the region's topography. The population in Roanoke County and the Cities of Roanoke and Salem comprises approximately three-quarters of the population of the region and is projected to remain in this proportion, even as the overall population increases. The pressure on existing development and adjacent areas is likely to intensify and more intensive land uses will put additional demands on the transportation network. Development along the transportation corridors has intensified, which can affect access to and mobility on the transportation network. In the northern part of the region, steep topography and forested lands, particularly the George Washington and Jefferson National Forests, have limited development to certain areas in the past. This is expected to continue. Therefore, it is foreseeable that land use would continue to concentrate where it already exists, further affecting the transportation network.

## Population Trends

Population in the region is expected to steadily increase. The rate of growth has not been distributed evenly throughout the region. The Counties of Botetourt and Roanoke, which incorporate advanced manufacturing and certain key service industries in the urban area, experienced the vast majority of the growth. Alleghany and Craig Counties are expected to maintain their



## Current and Projected Population



Sources: RVARC, 2005; Weldon, 2009; and VEC, 2009.

populations, while Botetourt County is expected to see a 16% increase in population by 2030. Population projections indicate a large increase in population in Alleghany County between 2000 and 2008; this is due to the fact that Census data and projections for Clifton Forge are now included in the data for the County.

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 RVARC, increasing pressure on the network has already resulted in changes to the network such as additional capacity demands on the roadways and additional demand for public transportation and travel demand management services. The region has experienced growth in through traffic along I-64 and I-81. Development pressures from urban growth have also contributed to reductions in mobility. Finally, access from more rural areas of the region into the towns and to Roanoke and Salem for commercial and economic purposes has been affected by increased population and development.



New River Valley Planning District Commission (NRVP-DC) to research mobility needs and commuting options between the regions in the *New River Valley and Roanoke Valley Public Mobility Project*.

### 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 fixed route 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 demand-responsive transit in a rural area than in an urban area. This is due to the smaller network of fixed transit routes in rural areas when compared to urban areas. The RVARC, in conjunction with the Virginia Department of Rail and Public Transportation's (DRPT) statewide effort, recently completed a *Coordinated Human Service Mobility Plan* (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. Only some of these needs were identified in the RVARC due to the existence of fixed-route and demand-responsive service in parts of the region. In addition, the RVARC recently teamed with the

### 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 low-income, minority, elderly, and people with disabilities, as defined by the US Census. In the 2000 US Census, none of the jurisdictions had a minority population percentage higher than that of the state (29.9%). The portion of the population with disabilities in all counties except Roanoke is above the state percentage of 18.1%. All of the counties have elderly portions of the population in a higher proportion than the state in 2000 (11.2%). In 2000, only Craig County had low-income populations above the state percentage of 9.6%.

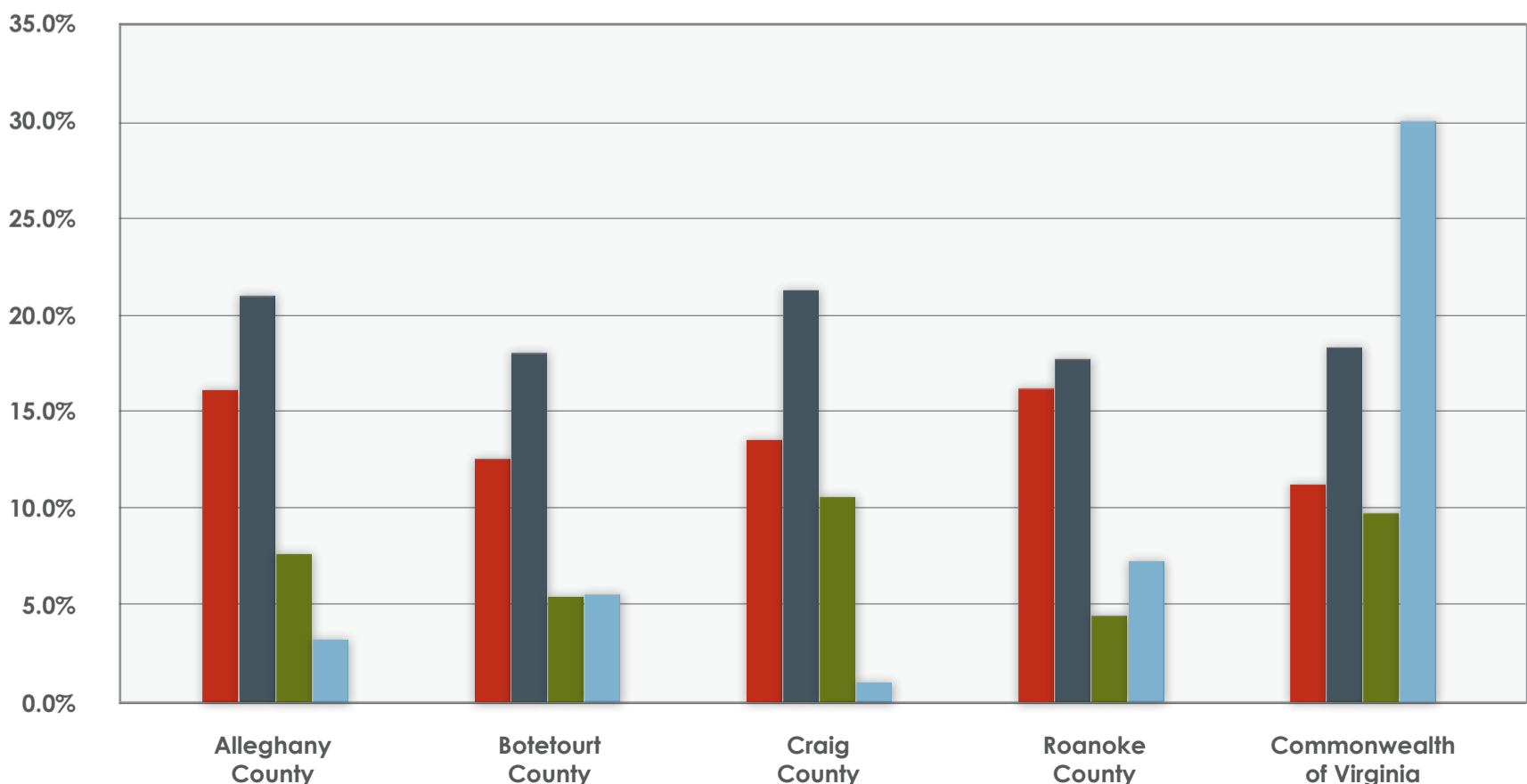
*Any segment of the population without a vehicle available is more dependent on demand-responsive transit in a rural area than in an urban area.*

#### LEGEND

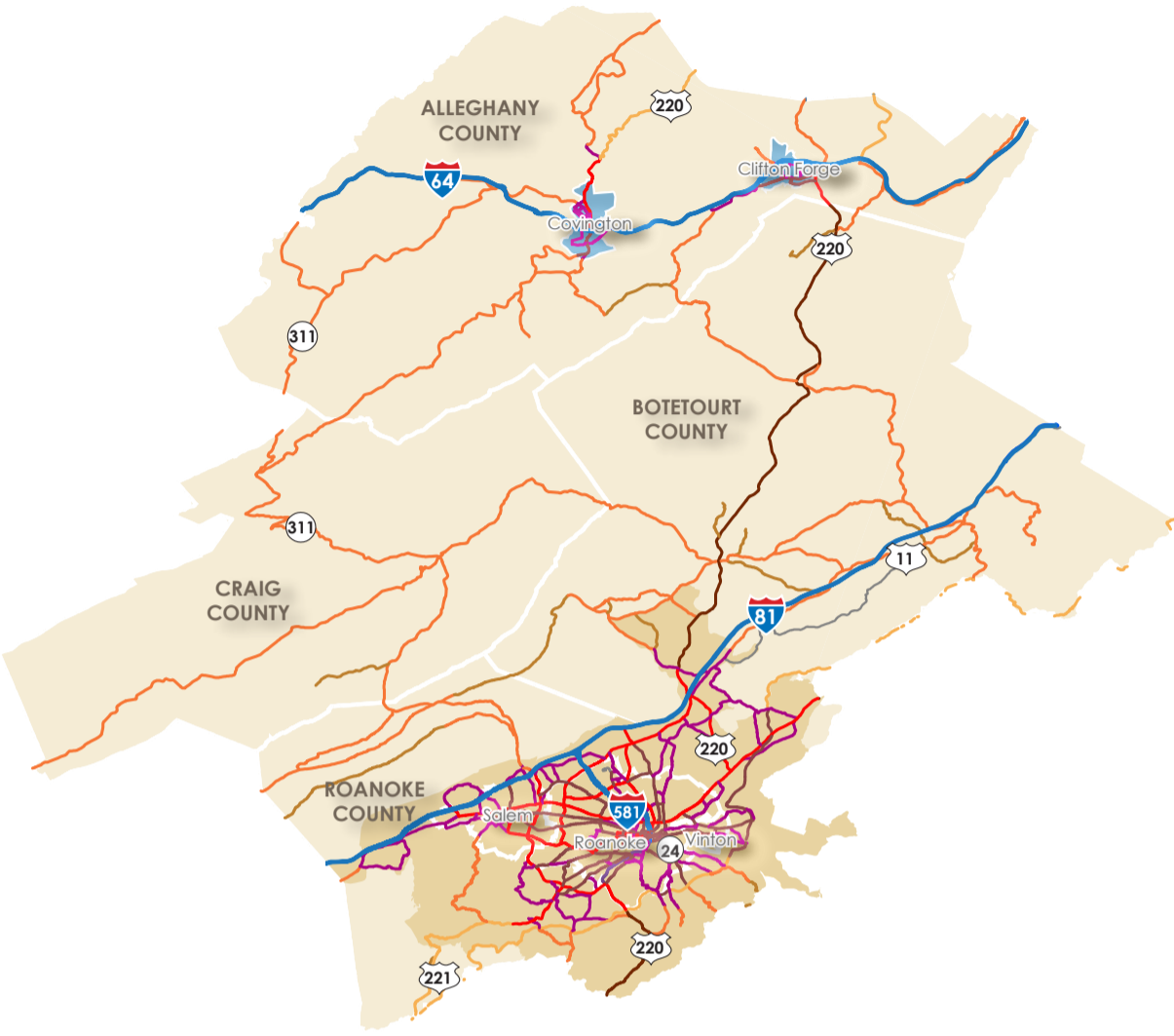
- Elderly
- Disability
- Low-Income
- Minority

Source: US Census, 2000. Note: Disabilities is based on the population over 5 years of age. Low-income is a percentage of the population for whom poverty is determined.

**Elderly, Disability, Low-Income, and Minority Populations in the RVARC**



# REGIONAL TRANSPORTATION SYSTEM



FUNCTIONAL CLASSIFICATIONS	
Interstate	Urban Interstate
Major Collector	Urban Collector
Minor Arterial	Urban Freeways/Expressways
Minor Collector	Urban Minor Arterial
Local	Urban Other Principal Arterials
Other Principal Arterial	Urban Local
	Roanoke MPO

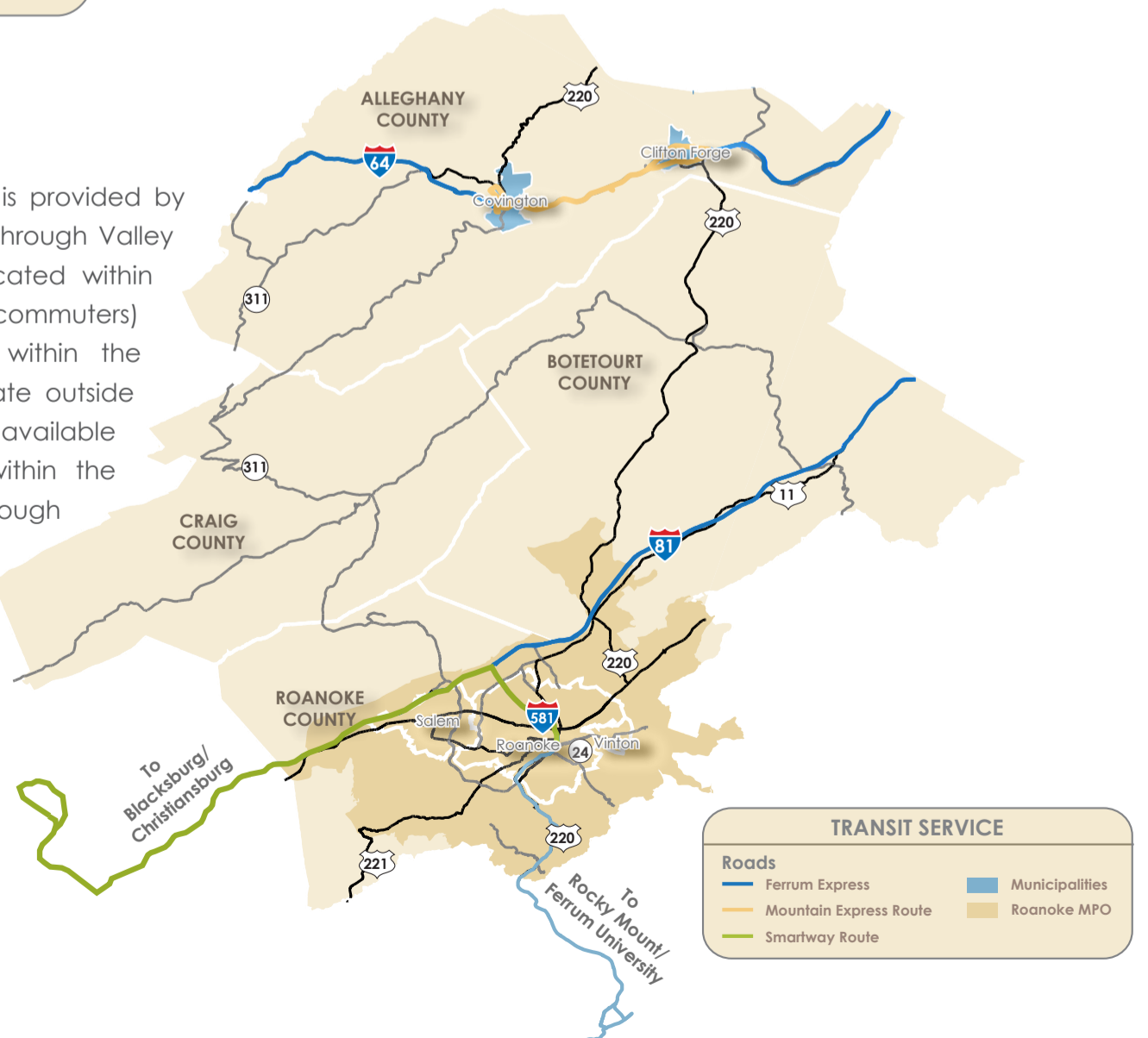
Each mode of travel – roadways, public transportation, rail, bicycle and pedestrian facilities, and airports – has been independently analyzed for both current and forecasted conditions.

## Roadways

I-81 passes through the south-central portion of the region, traveling northeast to southwest through Roanoke and Botetourt Counties. I-581 is a spur from I-81 and serves the County and City of Roanoke and lies completely within the RVAMPO. I-64 passes through the Alleghany Highlands in the northern portion of the region running east to west and connects with I-81 northeast of the RVARC. Other primary corridors include US 11, US 60, US 460, US 220, US 221, VA 42, and VA 311. Four of these roadways (I-64, I-81, US 220, and US 460) have been designated as Corridors of Statewide Significance. These corridors have been identified as multi-modal connections to foster mobility and long-distance travel. In the rural portion of the RVARC, there are 121 miles of interstate, 78 miles of arterials, and 358 miles of collectors.

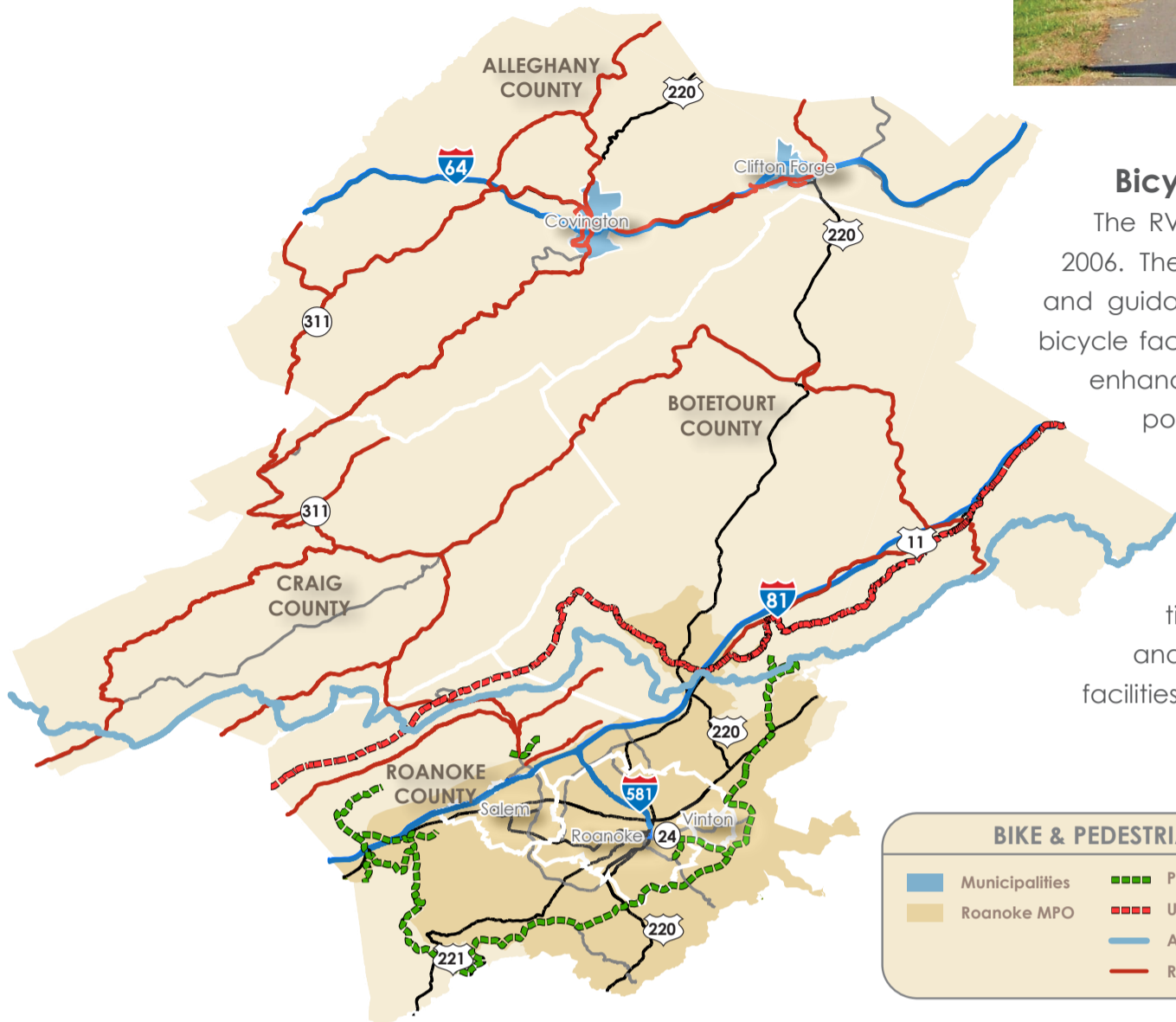
## Public Transportation

Fixed-route transit service in the region is provided by the Greater Roanoke Transit Company through Valley Metro. Almost all fixed routes are located within the RVAMPO. The Smart Way Bus (for commuters) and the Ferrum Express (with stops within the RVAMPO and in Franklin County) operate outside the MPO. Demand-responsive transit is available in the region through Valley Metro within the MPO and in the rest of the PDC through Roanoke Area Dial-A-Ride (RADAR). RADAR is a non-profit corporation that contracts with area agencies, governments, and organizations to provide transportation services primarily in the Roanoke Valley. It has fixed-route, flexible fixed-route, and demand-responsive services.



TRANSIT SERVICE	
<b>Roads</b>	
Ferrum Express	Municipalities
Mountain Express Route	Roanoke MPO
Smartway Route	

The RVARC updated its Rural Bikeway Plan in 2006.

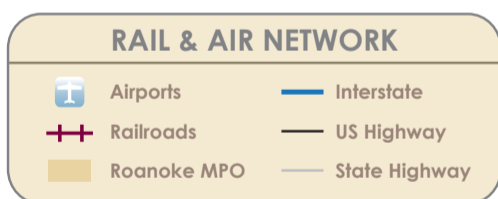


### Bicycle and Pedestrian Facilities

The RVARC updated its Rural Bikeway Plan in 2006. The Rural Bikeway Plan provides information and guidance on the planning and provision of bicycle facilities at the local and regional levels to enhance and encourage bicycling in the rural portions of the RVARC service area. It makes both general recommendations and specific suggestions for on-road corridors that should be considered for bicycle accommodation in the counties. There are currently 549 miles of existing and proposed bicycle and pedestrian facilities in the rural areas of the RVARC.

### Airports

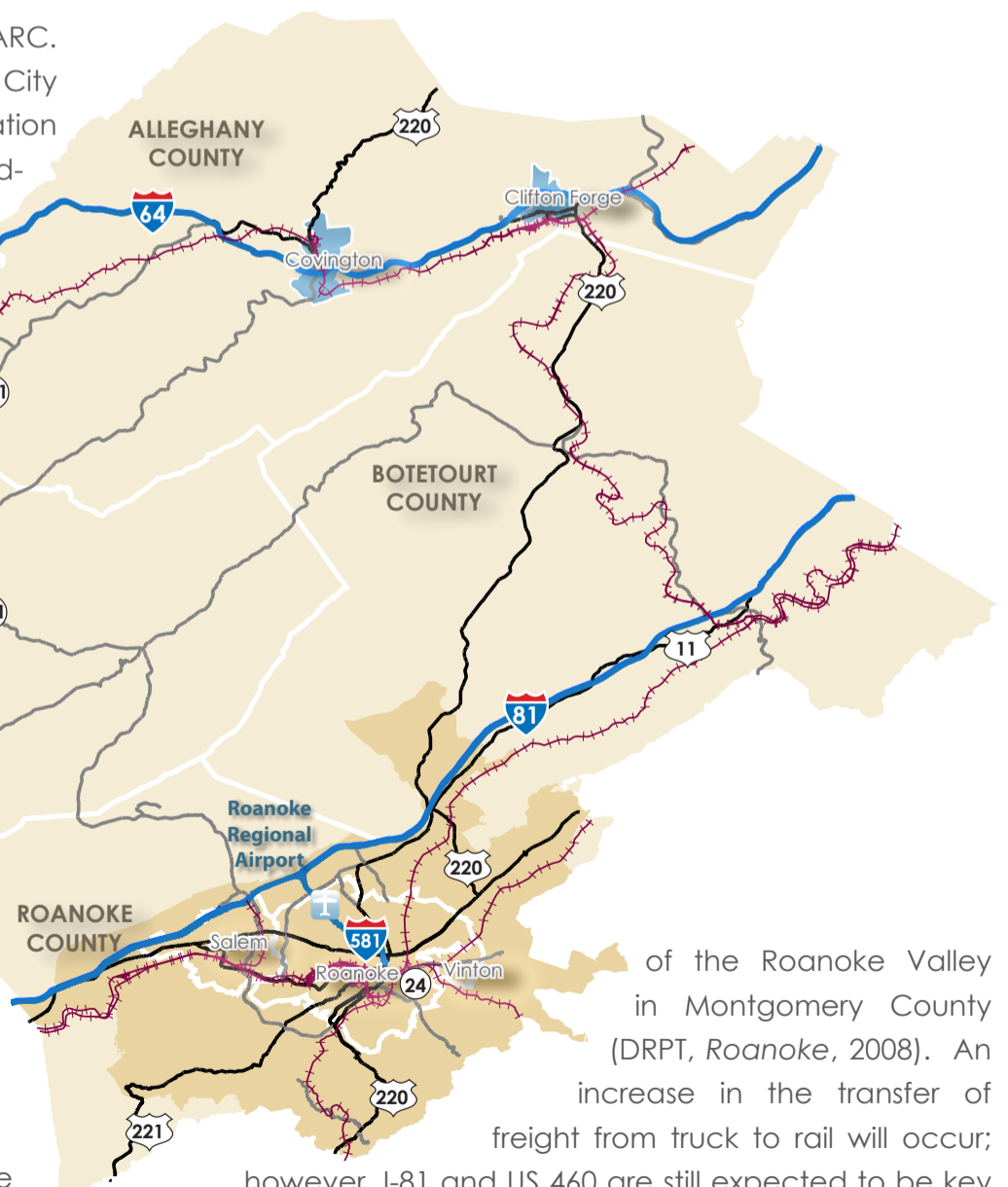
There are no airports located in the rural portion of the RVARC. Roanoke Regional Airport is located within the RVAMPO in the City of Roanoke and provides both commercial and general aviation services. It serves not only the RVARC region but also the surrounding areas in southwestern Virginia.



### Goods Movement

Goods movement in the region takes place by both truck and rail. Truck freight primarily utilizes I-64, I-81, and US 460. Major destinations include North Carolina and the ports in Hampton Roads. The RVARC Regional Freight Study (2003) examined the freight industry and worked directly with shippers and carriers to fully assess the needs of the industry. The Roanoke Valley region is a net exporter of products due primarily to the location of warehousing and distribution centers in the region and due to production in the region.

The rail lines in the southern portion of the region are part of the Norfolk Southern Heartland and Crescent corridors. Both are slated for improvements to expand freight rail operations while continuing to serve existing passenger rail service. The improvements to the Heartland Corridor include an intermodal transfer facility. Ten sites were investigated by DRPT, nine of which are in the Roanoke Valley. The site chosen, Elliston, is just west



of the Roanoke Valley in Montgomery County (DRPT, Roanoke, 2008). An increase in the transfer of freight from truck to rail will occur; however, I-81 and US 460 are still expected to be key freight corridors. CSX rail lines traverse northern Botetourt County and Alleghany County; these lines are part of the CSX Coal Corridor that, primarily, transports coal from West Virginia to the CSX coal terminal in Newport News.





## Land Use

Existing land use/land cover 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. The land use in the region varies widely from agricultural and forested in Alleghany, Craig, and part of Botetourt County, with residential and commercial development intensifying towards Roanoke and Salem. Large portions of both Alleghany and Craig Counties are part of the George Washington and Jefferson National Forests, respectively. Both forests also have smaller parcels in Botetourt and Roanoke Counties.

## Travel Demand Management

Travel Demand Management (TDM) holds the potential for enhancing many elements of the transportation network and, with other improvements, has been shown to greatly aid in reducing single-occupant 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 in the RVARC could be realized. Because of the concentration of work destinations in Salem and Roanoke, enhanced public transportation can increase usage through expanded peak period service and commuter routes.

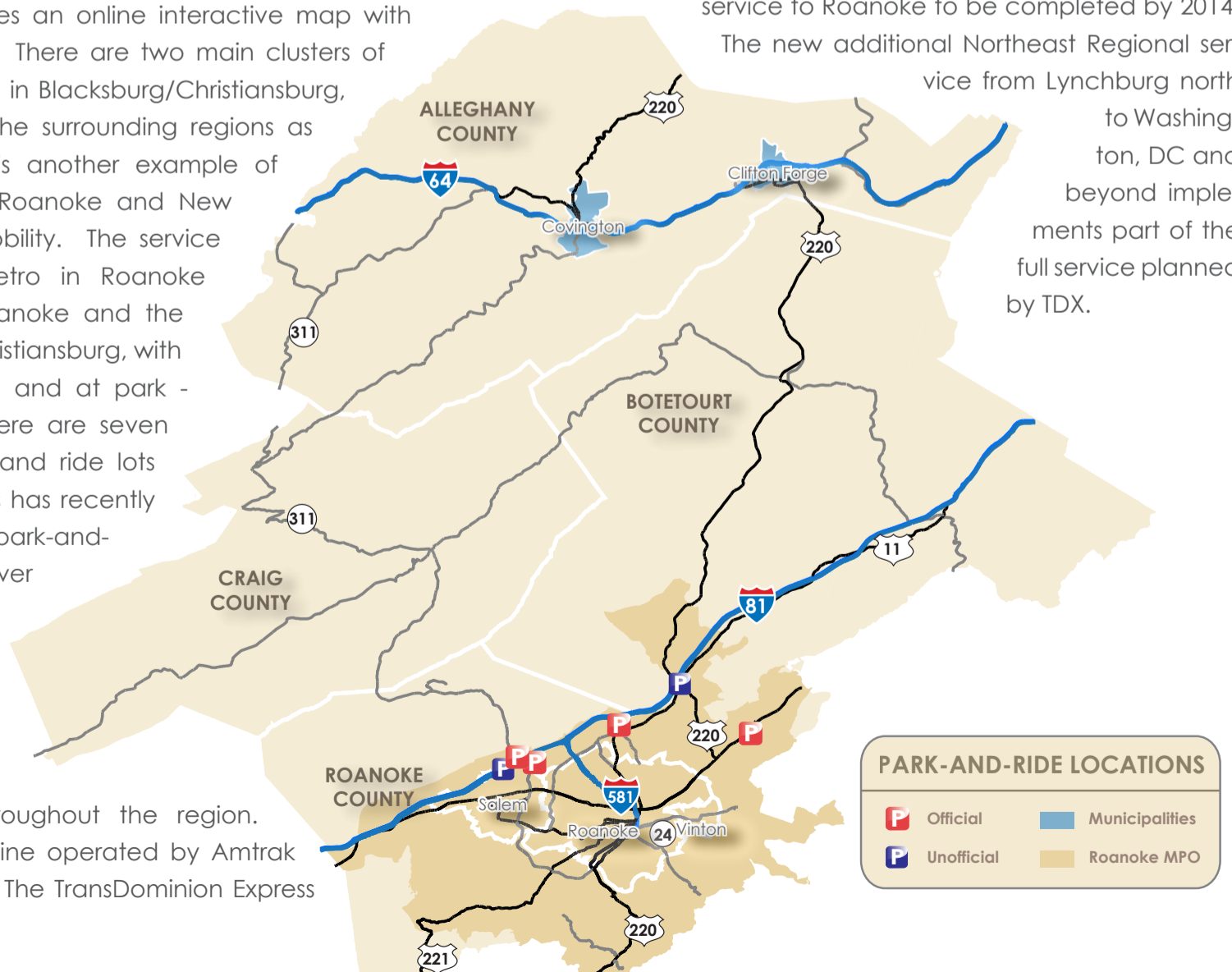
TDM measures in the region are coordinated by RIDE Solutions, which offers alternative transportation information and assistance in the Roanoke Valley-Alleghany region. It is a joint effort between the RVARC and the New River Valley PDC, to match funding received from DRPT. RIDE Solutions provides commuter matching, a guaranteed ride home program, vanpool assistance, and bicycle information and resources. The commuter matching includes an online interactive map with posts of potential carpools. There are two main clusters of commuters, in Roanoke and in Blacksburg/Christiansburg, and there are riders from the surrounding regions as well. The SmartWay bus is another example of cooperation between the Roanoke and New River valleys to improve mobility. The service is operated by Valley Metro in Roanoke and operates between Roanoke and the Towns of Blacksburg and Christiansburg, with stops within the jurisdictions and at park-and-ride lots on I-81. There are seven official and unofficial park and ride lots in the region. RIDE Solutions has recently completed a study of the park-and-ride lots in both the New River Valley and the Roanoke Valleys.

Passenger rail service is an additional link in travel demand management but is currently not available throughout the region. The Cardinal/Hoosier State line operated by Amtrak has a stop in Clifton Forge. The TransDominion Express

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.

(TDX) is a proposed service line that crosses the Commonwealth from Bristol with a split at Lynchburg into two branches, one to Richmond and one to Washington, DC. Roanoke is proposed to have a staffed station on the main line. Service is proposed to be extended to Lynchburg with additional analysis of service to Roanoke to be completed by 2014.

The new additional Northeast Regional service from Lynchburg north to Washington, DC and beyond implements part of the full service planned by TDX.



# 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 RVARC, in conjunction with the local jurisdictions, prepared a list of priority locations. The priority study location list is based on roadway performance measures, safety considerations, 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

Within the RVARC, 21 priority locations were analyzed.

the RVARC, 21 priority locations were analyzed; recommendations for these locations are identified separately in the list of recommendations that follow. Eight of these locations were identified for assessment of safety and congestion concerns, while the remaining 13 were analyzed only for safety. The safety assessment locations were identified using safety and crash database information, and input from local officials and the public. A more detailed discussion of all deficiencies and recommendations with planning-level cost estimates is located in the Technical Report.

Roadway analysis focused on safety, geometry and structure, and congestion.

## Bridge Deficiency Summary

Bridge Sufficiency Rating	Functionally Obsolete			Structural Deficiency		
	REPLACE	UPGRADE/REPAIR		REPLACE	UPGRADE/REPAIR	
	0-50	51-80	80+	0-50	51-80	80+
Alleghany	2	22	8	16	19	0
Botetourt*	6	34	14	17	14	0
Craig	1	9	4	7	6	0
Roanoke*	0	13	4	4	1	0
<b>RVARC Total</b>	<b>9</b>	<b>78</b>	<b>30</b>	<b>44</b>	<b>40</b>	<b>0</b>

\* Outside of RVAMPO



## 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 Conditions

Roadways and intersections with geometric deficiencies such as substandard land 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

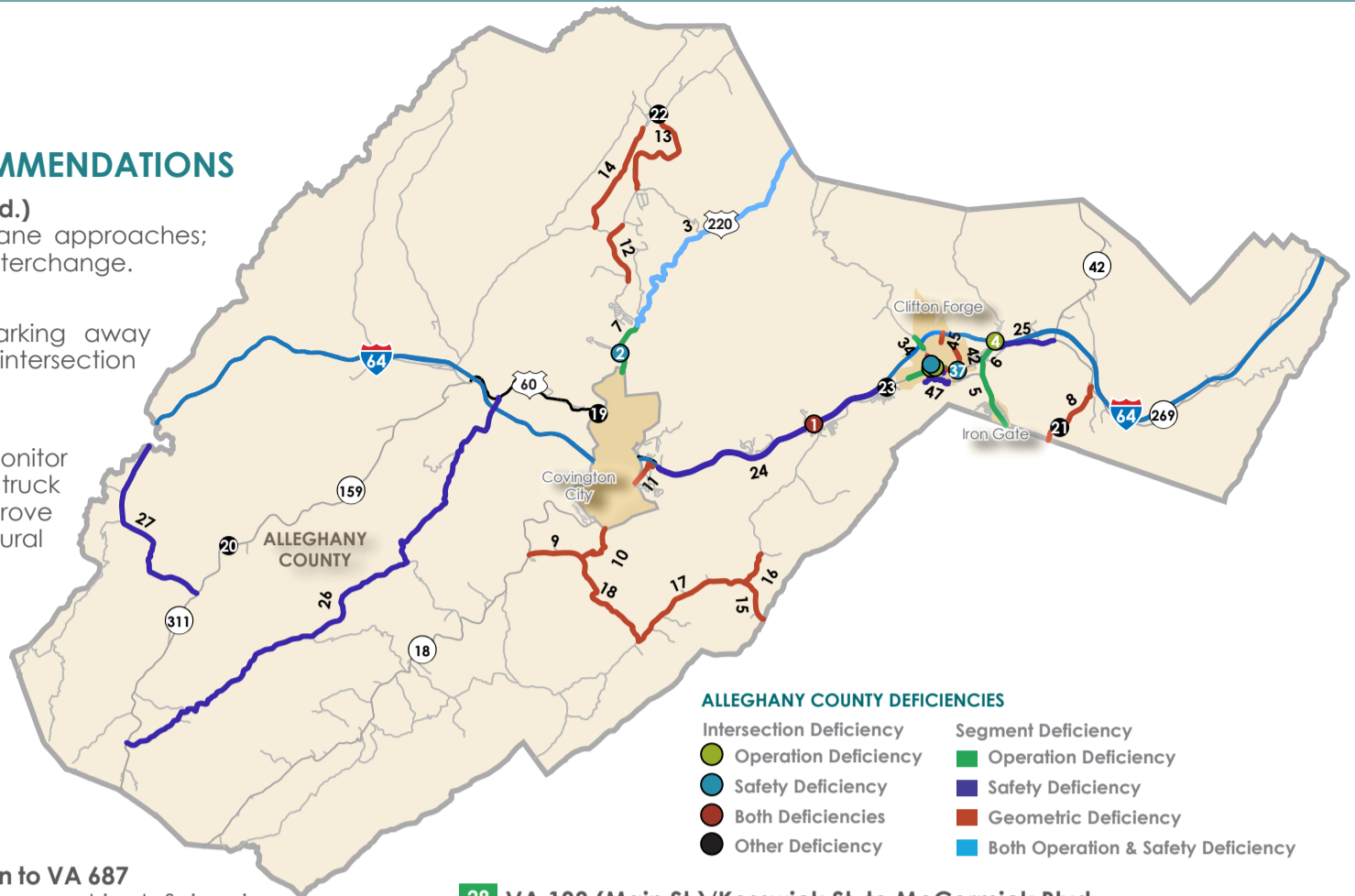
Level of service analyses were performed on all functionally classified roadways in the rural portion of the RVARC to assess current and projected year 2035 operations. In addition, analyses were conducted for intersections identified by RVARC and local governments as priority study locations. The recommendations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

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.



## ALLEGHANY COUNTY RECOMMENDATIONS

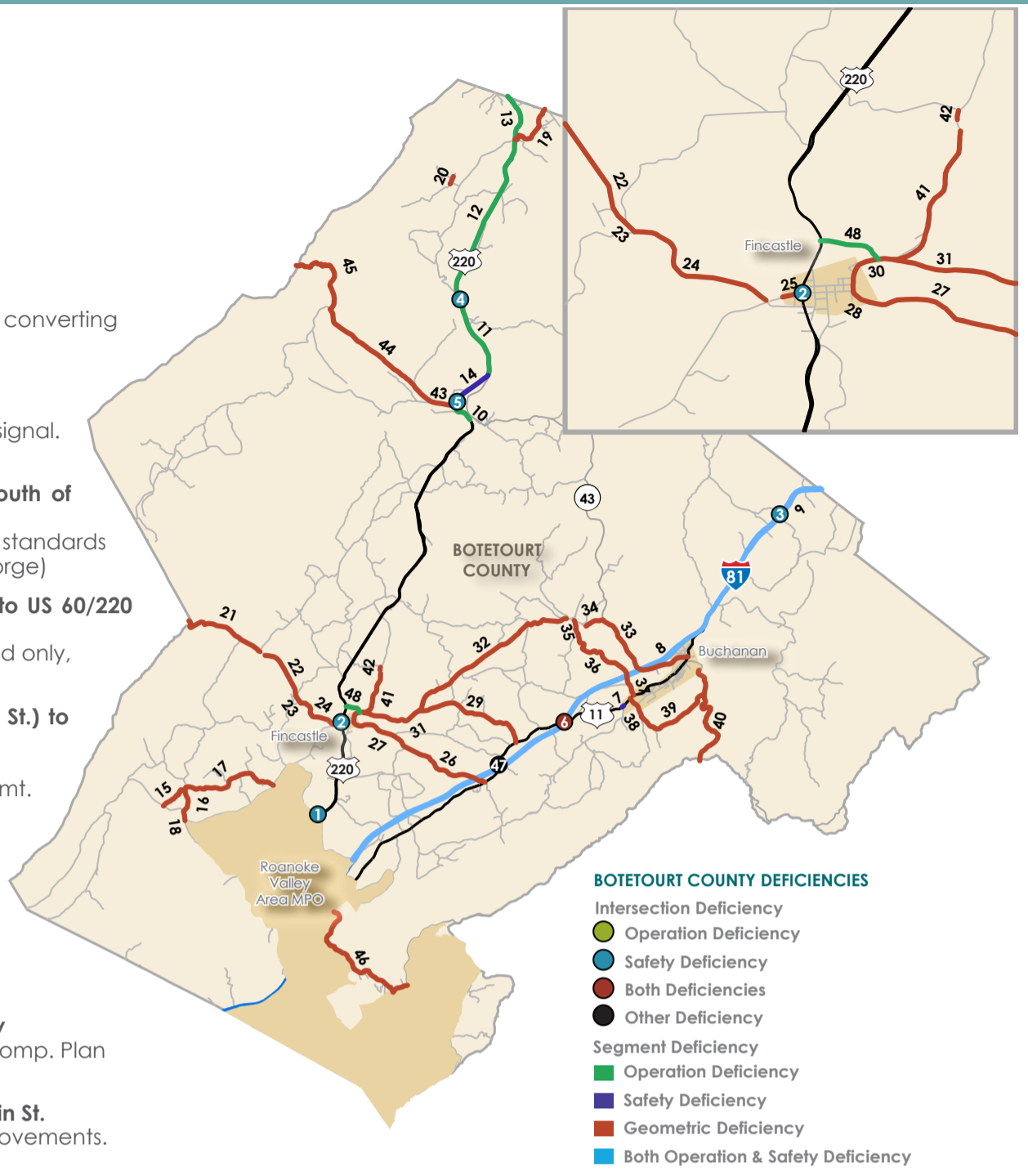
- 1 I-64, exit 21/VA 696 (Selma Low Moor Rd.)**  
Mid-term add right turn bay for exit-lane approaches;  
Long-term consider reconstruction of interchange.
- 2 US 220/VA 778**  
Mid-term reconfigure or relocate parking away from intersection; Long-term relocate intersection to address geometric issues.
- 3 US 220 from VA 687 to Bath Co. Line**  
Short-term maintenance; Mid-term monitor truck volumes to assess need for truck runaway ramps; Long-term improve shoulders and consider widening to rural three-lane roadway.
- 4 I-64/US 220**  
Long-term upgrade interchange.
- 5 US 220/Botetourt Co. Line to US 60 Bus.**  
Long-term widen to urban four-lane roadway with median.
- 6 US 60 Bus./US 220 to I-64**  
Long-term widen to urban four-lane roadway with median.
- 7 US 220/Northern Corp. Limits – Covington to VA 687**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8 VA 633 (McKinney Hollow Rd.)/Botetourt Co. Line to VA 269**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9 VA 657/VA 18 to VA 619**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 10 VA 657/VA 619 to Covington Corp. Limits**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 11 VA 647/Eastern Corp. Limits – Covington to VA 648**  
Long-term widen to urban two-lane roadway.
- 12 VA 687 (Jackson River Rd.)/VA 642 to 0.35 miles North of VA 641**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 13 VA 687/VA 640 to VA 638 S.**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 14 VA 666/VA 641 to VA 638**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 15 VA 621/Botetourt Co. Line to VA 616**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 16 VA 616 (Rich Patch Rd.)/VA 621 to VA 622**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 17 VA 619 (Rich Patch Rd.)/VA 619 S. to VA 621**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 18 VA 619 (Hayes Gap Rd.)/VA 616 to VA 657**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 19 US 60 (Midland Trail) at Jackson River**  
Mid-term replace bridge.
- 20 VA 159 at Crow Run**  
Mid-term replace bridge.
- 21 VA 633 (Longdale Furnace) at Cowpasture River**  
Mid-term replace bridge and reconstruct bridge approaches.
- 22 VA 638 (Natural Well Rd.) at Jackson River**  
Mid-term replace bridge and reconstruct bridge approaches.
- 23 VA 696 over CSX R.R.**  
Short-term replace bridge and upgrade approaches (ongoing).
- 24 I-64/Jackson River/SAB (near milepost 17) to US 60 (near milepost 24)**  
Short-term replace guardrail and median rail (ongoing).
- 25 VA 633 (Rural Rustic Rd.)/US 60 to VA 42**  
Short-term improve roadway as per Alleghany Co. Comp. Plan.
- 26 VA 600/VA 311 (Kanawha Trail) to US 60**  
Short-term improve roadway as identified by Alleghany Co.
- 27 VA 311 (Kanawha Trail)/VA 159 to West Virginia Co. Line**  
Short-term perform study to identify needed improvements to address geometric deficiencies in the corridor; Long-term construct improvements identified in study.



- 28 VA 188 (Main St.)/Kesswick St. to McCormick Blvd.**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 29 US 60 (Main St.)/Kesswick St. to Ridgeway St.**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 30 A St./Church St. to US 60**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 31 VA 188 (Commercial Ave.)/Main St. to Church St.**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 32 VA 188 (Church St.)/Commercial Ave. to McCormick Blvd.**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 33 VA 188 (McCormick Blvd.)/Main St. to Church St.**  
Long-term consider access mgmt. and alternative methods of traffic control. (Town of Clifton Forge)
- 34 Sioux Ave./Northern Corp. Limits – Clifton Forge to Tremont St.**  
Long-term consider widening to 12-foot lanes and maintaining clear areas near shoulders. (Town of Clifton Forge)
- 35 US 60 (Ridgeway St.)/5th St. to Roxbury St.**  
Long-term convert to three-lane roadway. (Town of Clifton Forge)
- 36 VA 188 (Commercial Ave.)/Church St.**  
Short-term eliminate on-street parking. (Town of Clifton Forge)
- 37 US 60 Bus. (Main St.) at Ingalls St.**  
Short-term reconfigure intersection. (Town of Clifton Forge)



- 38 US 60/220 Bus. (Main St.)/Smith Creek**  
Short-term replace bridge. (Town of Clifton Forge)
- 39 US 60/220 Bus. (Ridgeway St.)/Smith Creek**  
Short-term replace bridge. (Town of Clifton Forge)
- 40 US 60/220 Bus. (Ridgeway St.)/Commercial Ave.**  
Short-term modify intersection treatment to facilitate converting Commercial Ave. to a Northbound one-way street. (Town of Clifton Forge)
- 41 US 60/220 Bus. (Main St.)/Jefferson Ave.**  
Short-term replace existing traffic signal with new signal. (Town of Clifton Forge)
- 42 Ingalls St./US 60/220 Bus. (Main St.) to 0.49 miles south of Jefferson Ave.**  
Short-term reconstruct to urban two-lane roadway standards including guardrail in cut sections. (Town of Clifton Forge)
- 43 Commercial Ave./US 60/220 Bus. (Commercial St.) to US 60/220 Bus. (Main St.)**  
Short-term convert Commercial Ave. to a Northbound only, one-way facility. (Town of Clifton Forge)
- 44 US 60/220 Bus. (Main St.)/US 60/220 Bus. (Ridgeway St.) to Hazel Hollow**  
Mid-term reconstruct to urban two-lane roadway standards, with curb and gutter and access mgmt. (Town of Clifton Forge)
- 45 Jefferson Ave./Benton St. to I-64**  
Long-term reconstruct to urban two-lane roadway standards. (Town of Clifton Forge)
- 46 Rose Ave./Church St. to Lafayette St.**  
Long-term reconstruct to urban two-lane roadway standards. (Town of Clifton Forge)
- 47 VA 664/Old Verge St. to Western terminus of roadway**  
Short-term improve roadway as per Alleghany Co. Comp. Plan (Town of Clifton Forge)
- 48 Chessie Site Access Rd./Main St. to 0.2 miles East Main St.**  
Short-term construct access road and roadway improvements. (Town of Clifton Forge)



**BOTETOURT COUNTY DEFICIENCIES**

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

**BOTETOURT COUNTY RECOMMENDATIONS**

- 1 US 220 (Roanoke Rd.)/VA 670 (North and South)**  
Long-term consider realigning Trinity Rd. to the South to create four-legged intersection with Shavers Farm Rd.
- 2 US 220 (Botetourt Rd.)/T-630 (Main St.)**  
Short-term maintenance; Long-term install curb and gutter and upgrade pedestrian access.
- 3 US 11 (Lee Hwy.)/I-81 Frontage Rd./VA 622 (Rocky Rd./Alpine Rd.)**  
Short-term enclose exposed drainage ditch.
- 4 US 220/VA 622 (Gala Loop Rd./Prices Bluff Rd.)**  
Mid-term install turn lanes at Gala Loop; Long-term reconfigure Prices Bluff Rd. intersection to address geometric issues.
- 5 US 220/VA 615**  
Mid-term consider lengthening Southbound right turn lane.
- 6 I-81, exit 162/US 11**  
Mid-term check signal warrants and consider installation of traffic signal and add right turn bays in Eastbound and Westbound approaches.
- 7 US 11 (Lee Hwy.)/New Western Corp. Limit – Buchanan to VA 640 (Lithia Rd.)**  
Mid-term add turn lanes.
- 8 I-81/Roanoke MPO to VA 614**  
Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 9 I-81/VA 614 to Rockbridge Co. Line**  
Short-term resurface pavement and improve drainage; Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 10 US 220/VA 43Y (or 870) to VA 615**  
Long-term reconstruct to rural four-lane roadway with median (including full-width lanes and shoulders).
- 11 US 220/VA 43 to VA 622 (N.)**  
Long-term reconstruct to rural four-lane roadway with median (including full-width lanes and shoulders).
- 12 US 220/VA 622 N. to VA 633 (Pinney Hollow Rd.)**  
Short-term acquire right-of-way for future four-lane roadway expansion; Mid-term construct two-lane roadway; Long-term expand to rural four-lane roadway with median.
- 13 US 220/VA 633 (Pinney Hollow Rd.) to Alleghany Co. Line**  
Long-term reconstruct to rural four-lane roadway with median (including full-width lanes and shoulders).

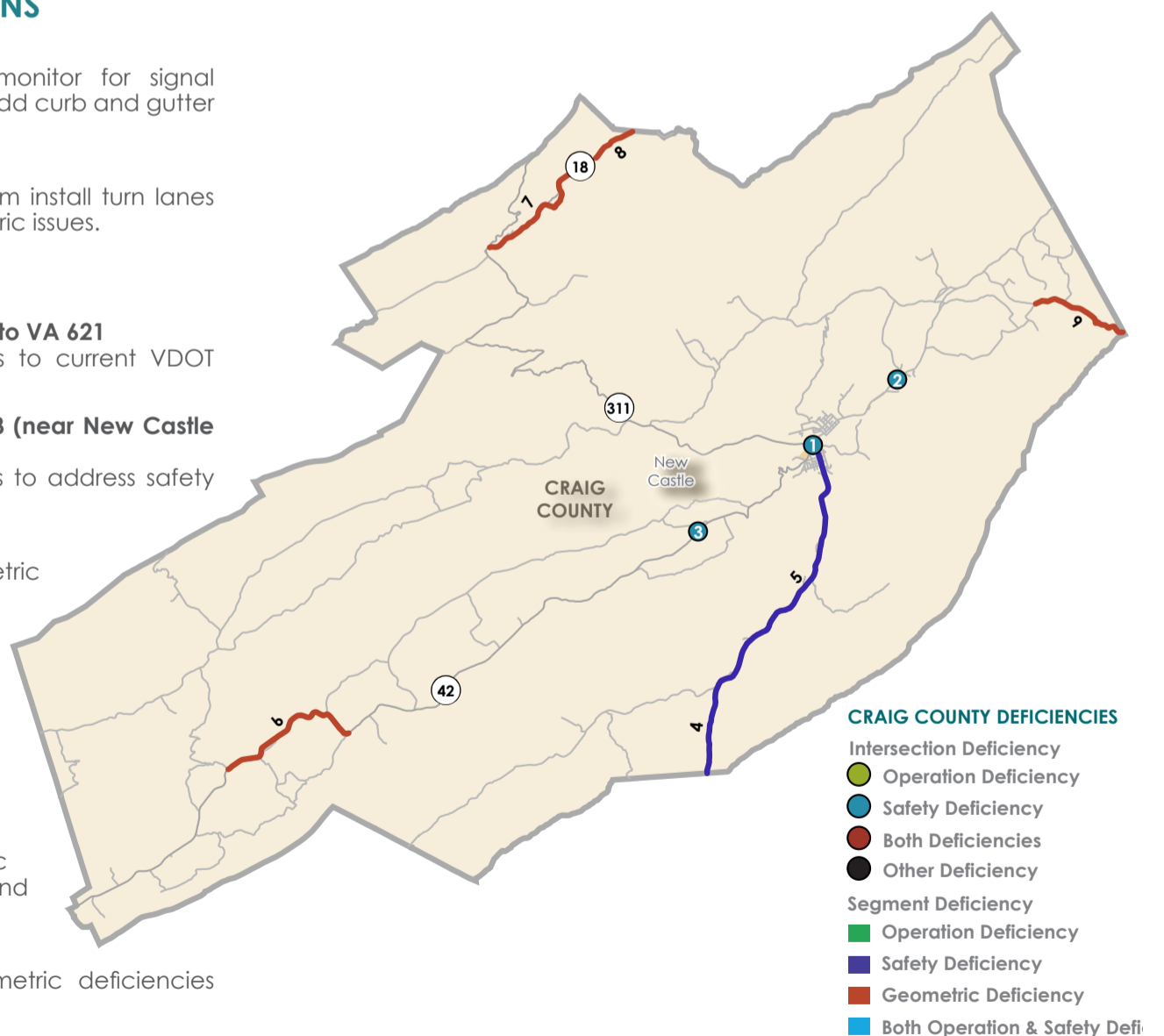
- 14 US 220/VA 615 to VA 43**  
Long-term reconstruct to rural four-lane roadway with median (including full-width lanes and shoulders).
- 15 VA 664/VA 779 to VA 666**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 16 VA 666/VA 779 to VA 665**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 17 VA 665/VA 666 to VA 630**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 18 VA 779/VA 666 to VA 630**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 19 VA 633/US 220 to Alleghany Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 20 VA 622/VA 633 (W.) to VA 718 (S.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 21 VA 606/Craig Co. Line to VA 666 (E.)**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 22 VA 606/0.22 miles East of VA 666 to VA 600 (W.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 23 VA 606/VA 600 (W.) to VA 600 (E.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 24 VA 606/VA 600 (E.) to VA 630**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 25 T-630/Western Corp. Limit – Fincastle to US 220**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 26 VA 606/VA 812 to US 11 (W.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 27 VA 606/Eastern Corp. Limit – Fincastle to VA 812**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

- 28 VA 606/T-630 to VA 812**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 29 VA 639/US 11 to VA 630**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 30 VA 630/VA 606 (E.) to VA 681**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 31 VA 630/VA 681 to VA 639**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 32 VA 630/VA 639 (W.) to VA 625 (W.)**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 33 VA 43/US 11 (N.) to VA 630**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 34 VA 630/VA 9479 (E.) to VA 43**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 35 VA 601/VA 630 to VA 625**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 36 VA 625/VA 772 to VA 601**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 37 VA 625/US 11 to VA 772**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 38 VA 625/VA 643 to US 11**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

- 39 VA 625/VA 43 to VA 643**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 40 Blue Ridge Pkwy./Bedford Co. Line to Southern Corp. Limit – Buchanan**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 41 VA 681/VA 630 to 0.4 miles South of VA 679**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 42 VA 681/0.2 miles South of VA 679 to VA 679**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 43 VA 615 (Craig Creek Rd.)/VA 759 to VA 685**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 44 VA 615 (Craig Creek Rd.)/VA 685 to VA 621**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 45 VA 621/Alleghany Co. Line to VA 615**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 46 VA 652 (Mountain Pass Rd.)/US 11 to VA 1530**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 47 US 11 at Beckner Branch**  
Mid-term replace bridge.
- 48 Fincastle Bypass (proposed)/US 220 to North Hancock St.**  
Long-term construct new two-lane arterial road (Fincastle Bypass).

## CRAIG COUNTY RECOMMENDATIONS

- 1 VA 311 (Salem Ave.)/VA 42/VA 615 (Main St.)**  
Mid-term improve pedestrian access and monitor for signal warrants or the need for turn lanes; Long-term add curb and gutter access mgmt.
- 2 VA 615/VA 609**  
Short-term install stop sign on VA 609; Long-term install turn lanes and reconfigure intersection to address geometric issues.
- 3 VA 42/VA 645 (S.)**  
Short-term improve pavement markings.
- 4 VA 311 (Catawba Valley Dr.)/Roanoke Co. Line to VA 621**  
Long-term upgrade lane and shoulder widths to current VDOT design standards.
- 5 VA 311 (Catawba Valley Dr.)/VA 621 to VA 678 (near New Castle Town Limit)**  
Long-term upgrade to current VDOT standards to address safety and geometric issues.
- 6 VA 42/0.38 miles West of VA 658 to VA 667**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 7 VA 18/VA 311 to 1.92 miles South of Alleghany Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8 VA 18/1.26 miles South of Alleghany Co. Line to Alleghany Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9 VA 606/VA 614 to Botetourt Co. Line**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

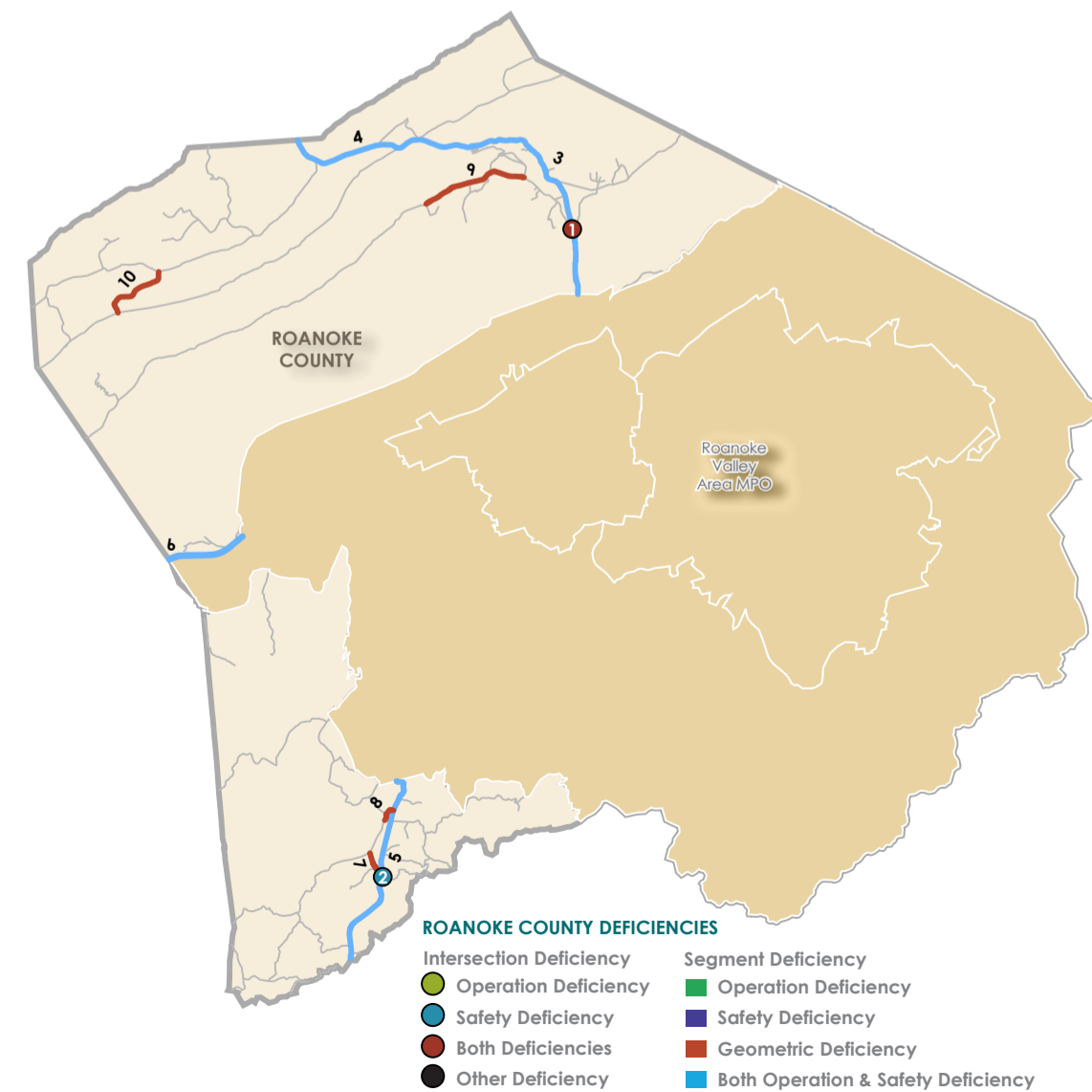
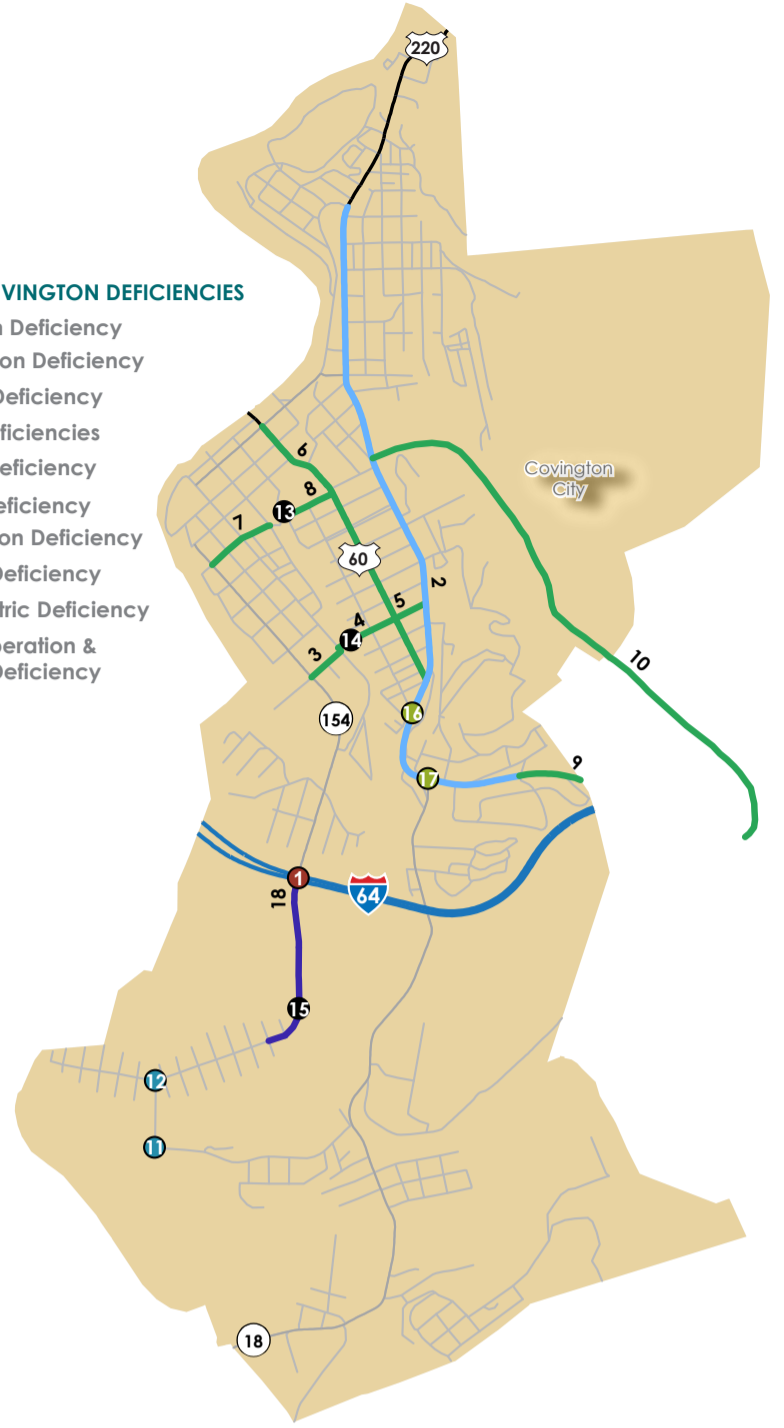


## CITY OF COVINGTON RECOMMENDATIONS

- 1 I-64, exit 14/VA 154 (S. Durant Rd.)**  
Mid-term lengthen Northbound left-turn lane; Long-term widen median.
- 2 US 220 (North Alleghany Dr./E. Madison St.)/North Magazine Ave. to E. Echols Ln.**  
Short-term repaint pavement markings; Long-term widen roadway to urban four-lane roadway standards (including curb and gutter, turn lanes and access mgmt.).
- 3 W. Chestnut St./Craig Ave. to Lexington Ave.**  
Long-term widen to urban two-lane roadway.
- 4 E. Chestnut St./Lexington Ave. to Highland Ave.**  
Long-term widen to urban two-lane roadway.
- 5 E. Chestnut St./Highland Ave. to Alleghany Ave.**  
Long-term widen to urban two-lane roadway.
- 6 US 60 (S. Monroe Ave.)/W. Riverside Dr. to S. Alleghany St.**  
Long-term consider adding turn lanes.
- 7 W. Hawthorne St./North Maple Ave. to South Craig Ave.**  
Long-term consider adding turn lanes.
- 8 E. Hawthorne St./Monroe Ave. to Court Ave.**  
Long-term consider adding turn lanes.
- 9 US 220/US 60 (E. Madison St.)/E. Echols Ln. to Eastern Corp. Limit – Covington**  
Long-term widen to urban four-lane roadway with median.
- 10 Covington Truck Bypass (proposed)/I-64 to US 220/N. Magazine Ave.**  
Mid-term construct four-lane divided facility on new alignment (Covington Truck Bypass).
- 11 W. Edgemont Dr. at S. Rayon Dr.**  
Short-term add signage warning of tight turn and advising reduced speed.
- 12 W. Jackson St. at S. Rayon Dr.**  
Short-term add signage warning of tight turn and advising reduced speed.
- 13 Hawthorne St. at bridge of CSX R.R.**  
Short-term replace bridge.
- 14 E. Chestnut St. at CSX R.R. underpass**  
Short-term rehabilitate retaining walls East of bridge.
- 15 W. Jackson St. at the Wal-Mart**  
Short-term rehabilitate retaining walls.
- 16 US 60/220 (S. Alleghany Dr.) at S. Highland Ave.**  
Mid-term add traffic signal and Southbound left-turn lane.
- 17 VA 18 (S. Carpenter Dr.) at US 60/220 (E. Madison St.)**  
Mid-term extend Northbound right-turn lane.
- 18 Durant St./Jackson St./S. Byrd Ave. to I-64**  
Long-term reconstruct roadway.

### CITY OF COVINGTON DEFICIENCIES

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



### ROANOKE COUNTY DEFICIENCIES

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

## ROANOKE COUNTY RECOMMENDATIONS

- 1 VA 311 (Catawba Valley Dr.)/VA 864**  
Short-term maintenance; Mid-term add turn bays and consider signalization; Long-term reconstruct intersection to current standards, with appropriate turn lanes.
- 2 US 221 (Bent Mountain Rd.)/VA 711 S. (Tinsley Rd.)**  
Short-term install pavement markings on VA 711 and consider adding flashing lights; Long-term reconstruct intersection with turn lanes and standard lane and shoulder widths.
- 3 VA 311 (Catawba Valley Dr.)/Northern MPO Limits (from VA 419 within the MPO limits) to VA 864**  
Mid-term add turn lanes at VA 864; Long-term reconstruct to rural four-lane roadway with median (including full-width lanes and shoulders).
- 4 VA 311 (Catawba Valley Dr.)/VA 864 to Craig Co. Line**  
Long-term spot improvements to address geometric deficiencies as needed; continue to monitor for capacity needs.
- 5 US 221/Floyd Co. Line to Roanoke MPO**  
Long-term upgrade lane and shoulder widths to current VDOT design standards.
- 6 I-81/Montgomery Co. Line to VA 647**  
Long-term reconstruct to rural six-lane roadway with median (project in environmental stage).
- 7 VA 711/US 221 (S.) to VA 607**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8 VA 711/VA 612 (S.) to US 221 (N.)**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9 VA 622/VA 873 to VA 864**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 10 VA 697/VA 785 to VA 624**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).

## Public Transportation

Deficiencies and recommendations were compiled primarily from Valley Metro's Transit Development Plan for FY 2010 through 2015. The recommendations were identified based on the plan's service and capital needs assessment. The plan includes: service and capital recommendations, a capital improvement program, and a financial plan. There are several new transit services in the TDP that would extend into the region's rural planning area, including: service to unincorporated Roanoke County, regional service to Bedford and Lynchburg, and express service between Fincastle and Roanoke. Demand-responsive transit is a vital service offered in many rural areas throughout the state because it offers transportation services to critical destinations for those with no other means of travel. Recommendations for fixed-route and demand-responsive service appear together.

The review of disadvantaged population groups determined that outside of the MPO, there is limited access to fixed-route or public demand-responsive service by these populations. The Mountain Express serves Iron Gate, Clifton Forge, and Covington through limited fixed-route service; this route provides access within Alleghany County for these populations,



but not to the rest of the region. The CORTAN service, provided by RADAR, provides demand-responsive service to the residents of Roanoke County; expansion of services beyond the county boundary would increase access to low-income persons, the elderly, and populations with disabilities within Botetourt and Craig Counties, which currently have no public transit. A regional brokerage entity that could assign trips throughout the region to an available provider could provide access to the transportation disadvantaged groups in these counties.

## RVARC Public Transportation Recommendations

Jurisdiction	Identified Need	Recommendation
Alleghany County	Demand response service between Clifton Forge and Roanoke Valley activity centers	Complete feasibility study of new service
Botetourt County	Express service from Fincastle to Roanoke	Complete feasibility study of new service
Craig County	Demand-response service between New Castle and Roanoke Valley activity centers	Complete feasibility study of new service
Roanoke County	Access to activity centers outside of Valley Metro service area	Expand Valley Metro service outside of the Cities of Roanoke and Salem
Bedford & Lynchburg	Regional Service between Bedford, Lynchburg, and Roanoke	Complete feasibility study of new service

The RVARC Rural Bikeway Plan includes many recommendations, including encouraging bicycling through education, awareness, and advocacy.



## Bicycle and Pedestrian Facilities

The primary source of recommendations was the individual jurisdictions' bike plans and/or comprehensive plans. The specific suggestions for on-road corridors that should be considered for bicycle accommodation in the counties are in the Technical Report. The general recommendations from the RVARC Rural Bikeway Plan include:

- Apply, by default, the VDOT Policy for Integrating Bicycle and Pedestrian Accommodations to all corridors in the transportation network;
- Utilize cost-effective techniques, where applicable and practicable, to better accommodate bicyclists;
- Improve ancillary bicycle accommodations, signage, and support facilities;
- Encourage bicycling through education, awareness, and advocacy; and
- Market the region's outdoor recreation and tourism resources.

In addition, the Rural Bikeway Plan presents a list of recommended corridors for bicycle accommodations by jurisdiction emphasizing accessibility and connectivity between town centers and outdoor recreation facilities. Some of the improvements recommended for these corridors are limited to: roadway and shoulder maintenance, striping on the right edge of lanes to provide a paved shoulder for bicyclists, and improved signage and roadway facilities.



## Airports

There is one commercial airport within the RVARC, Roanoke Regional Airport. It lies within the City of Roanoke and the MPO, and therefore, recommendations for it are not discussed here. The Virginia Air Transportation System Plan Update forecasted an average annual growth rate of 1.6% of based aircraft through 2020, the highest in the state (DOAV, 2003).

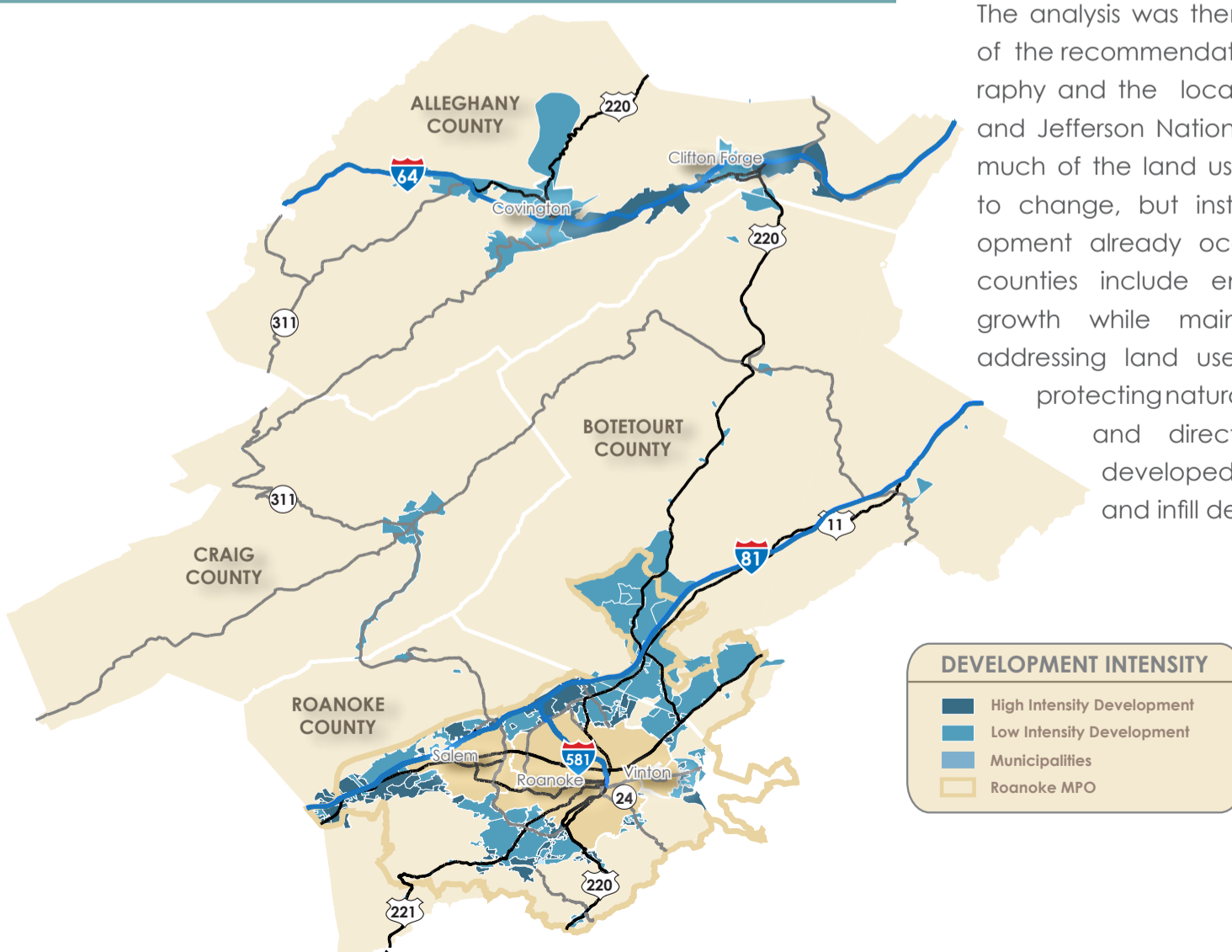
## Goods Movement

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. The freight study completed for the region in 2003 highlighted several strategies to continue to include the needs of freight carriers and freight shippers in the transportation planning process. There needs to be a focus on key freight corridors, formation of economic development strategies in the area to reduce empty backhauls, land use planning and zoning to ensure sustainable growth of distribution centers and warehousing facilities, creation of a formal freight advisory group, and continued consideration of freight and goods movement in all transportation planning (RVARC, 2003). The key freight corridors identified include: I-64, I-81, US 11, US 220, US 221, and US 460. In the 2003 study, potential freight projects were recommended for inclusion in future transportation improvement plans, but all lie within the MPO.



The intermodal transfer facility currently planned in eastern Montgomery County in Elliston is just west of the Roanoke County line. If the facility is completed, it would have effects on both the rail and roadway networks within both the New River and Roanoke valleys. Shipments could be transferred to rail combined with a short-haul truck trip, as opposed to a long-haul truck trip. The intermodal facility is a part of the Heartland Corridor of Norfolk Southern. The corridor is expected to double the intermodal rail capacity along the existing line terminating in Hampton Roads.

*There is one commercial airport within the RVARC, Roanoke Regional Airport.*



## Land Use and Future Growth

Future land use and potential future growth areas were reviewed and identified by the RTC in conjunction with the individual jurisdictions (see adjacent map). These areas were used in the analysis of the roadway network to review existing traffic forecasts for the individual roadways and to update the forecasts. The analysis was then used to develop the specifics of the recommendations. Due to the regional topography and the location of the George Washington and Jefferson National forests in most of the region, much of the land use in the region is not expected to change, but instead to intensify where development already occurs. Land use goals for the counties include encouraging development and growth while maintaining the rural character, addressing land use needs while conserving and protecting natural, cultural and historical resources and directing growth towards existing developed areas to promote contiguous and infill development.

## Travel Demand Management

In rural areas, low residential densities and dispersed work destinations are generally not conducive to high public transportation use. Some gains in usage of transit and commuter services are possible in and near the towns and in Roanoke/Salem by providing additional public transportation service and by modifying transit routes and schedules connecting residential areas with employment centers.

The services of Valley Metro Transit and RIDE Solutions will continue to be important tools for decreasing single-occupant vehicle trips, particularly during the peak hour. Park and ride lots in the region are also expected to maintain their importance to the commuting population. RIDE Solutions recently conducted a new study of park and ride lots in both the Roanoke Valley-Alleghany region and the New River Valley. The lots were assessed based on connectivity, occupancy, access, amenities, condition, and security. Officials in the City of Roanoke have proposed and are seeking funding for a bus connector between the Roanoke Valley and Lynchburg that would coordinate with Amtrak's passenger rail schedule. The bus could also possibly serve as a commuter connection between Roanoke, Bedford, and Lynchburg.

RIDE Solutions is currently in the process of completing a 20-year Long-Range Transportation Demand Management plan to coordinate with the MPO's 2035 long range plan, this Plan, and other local comprehensive and other planning efforts. The plan includes immediate efforts to expand into the Region 2000 PDC service area under the same model that RIDE Solutions used to expand into the New River Valley in 2006; this will strengthen service and promotional efforts in those rural areas whose commuters may be split between Roanoke and Lynchburg as destinations, and could strengthen efforts to establish bus service between the two regions.

## PUBLIC INVOLVEMENT

The advancement and acceptance of the study depended greatly upon outreach to the public, local governing bodies, and the PDCs. Public involvement elements incorporated into this study included: development of a Master Communications Plan; information sharing with the general public and public officials through meetings and use of the VDOT and RVARC websites; provision of media relations through the development and use of press kits, press releases, and the coordination of media-related events; a transportation survey completed by the general public using touch-screen kiosk deployed throughout the RVARC region; focus groups to determine needs of the traditionally underserved; public meetings and public hearings; and presentations to local government Boards of Supervisors and Councils during their public meetings.

A public meeting introducing the project to the region's citizens was held on October 22, 2008. An open house was held at the Regional Commission on June 23, 2010 and provided an opportunity for the public to review interim planning documents and mapping. A meeting was held to present the draft Plan to the public on April 21, 2011, as well as an open house on June 6, 2011. Comments on the draft Plan obtained from these public meetings have been addressed in the plan.

## PLAN ADOPTION

The 2035 Rural Long Range Transportation Plan for the Roanoke Valley-Alleghany region was adopted by the RVARC Board on June 23, 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](http://www.vdot.virginia.gov).



## RVARC Travel Demand Management Recommendations

Jurisdiction	Recommendation
Botetourt County	Expand park and ride lot at I-81 Exit 150; Upgrade pavement and lighting
Roanoke County	Provide bicycle racks at the two park and ride lots which access Hanging Rock Greenway (Hanging Rock and VA 311/VA 419)
Roanoke County	Complete expansion of park and ride lot at I-81 Exit 140
Roanoke County	Formalize lot at VA 311/VA 419
Roanoke County	Add park and ride lot at I-81 Exit 137 or at I-81 Exit 141 at VA 419

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