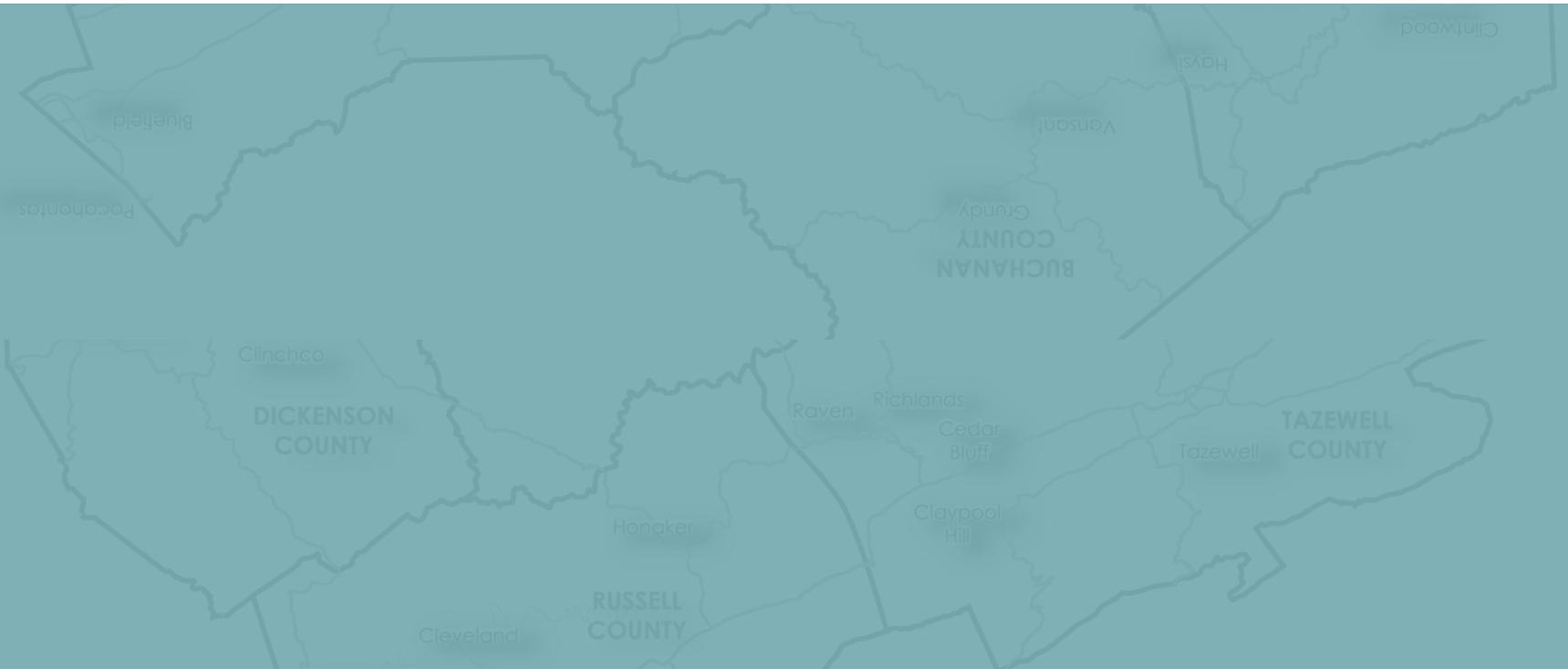


Please visit the VDOT website to find additional information regarding this and other important transportation initiatives in your area.

www.virginia.gov

www.cppdc.com



CUMBERLAND PLATEAU PLANNING DISTRICT COMMISSION

2035 REGIONAL LONG RANGE TRANSPORTATION PLAN



CUMBERLAND PLATEAU PLANNING DISTRICT COMMISSION

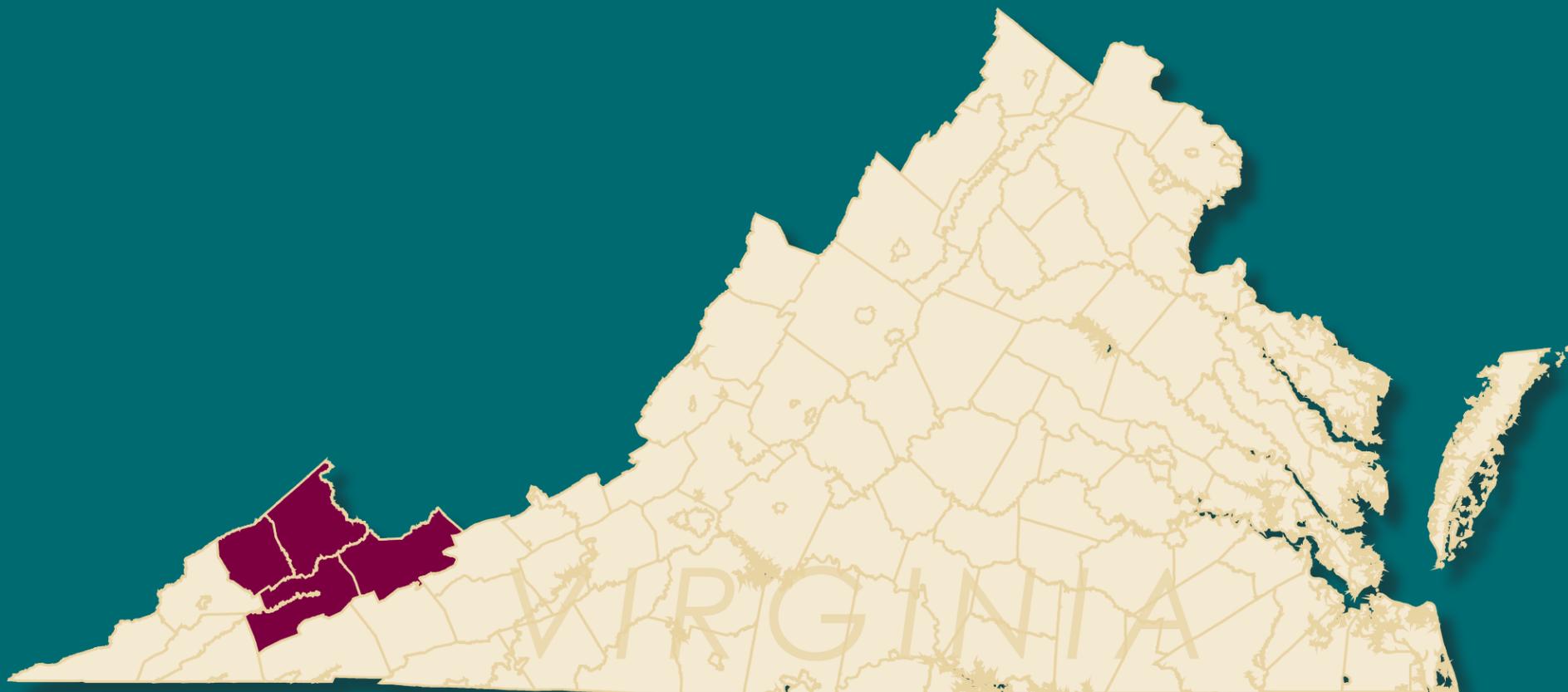


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INTRODUCTION & PURPOSE

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 *Regional 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 Cumberland Plateau Planning District (CPPDC), there is no MPO and the entire area is considered rural; therefore the entire transportation network within the region was analyzed and is 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.

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

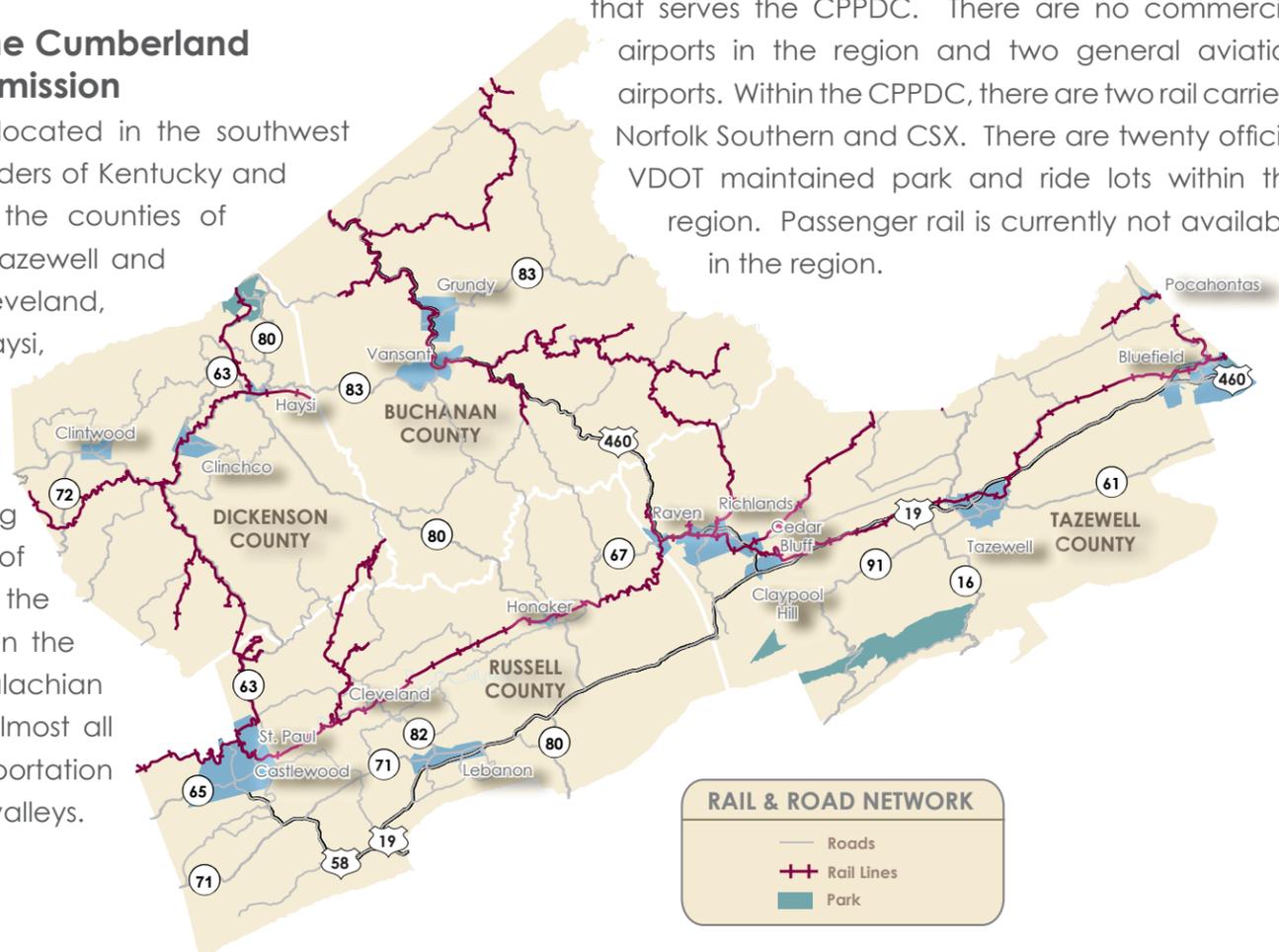
OVERVIEW OF THE REGION

Description and Function of the Cumberland Plateau Planning District Commission

The Cumberland Plateau region is located in the southwest corner of Virginia and lies on the borders of Kentucky and West Virginia. The CPPDC serves the counties of Buchanan, Dickenson, Russell, and Tazewell and the towns of Bluefield, Cedar Bluff, Cleveland, Clinchco, Clintwood, Grundy, Haysi, Honaker, Lebanon, Pocahontas, Richlands, and Tazewell. The CPPDC region is a predominantly rural area with denser development occurring around the towns. The geography of the region is primarily influenced by the topography. The entire PDC is within the ridge and valley system of the Appalachian Mountains. The towns, cities, and almost all development, including the transportation network, are situated along the river valleys.

Summary of Transportation Network

I-77 and I-81 pass east and southeast of the region within the ridge and valley system. The transportation network is largely influenced by the ridges and valleys that generally travel northeast to southwest; many of the primary arterials also run in this direction, including US 460, VA 61, VA 67, VA 71, and VA 83. Corridors that provide connections to the north and south include US 19, Alternate US 58, VA 16, VA 63, and VA 80. Four County Transit is the public transit agency that serves the CPPDC. There are no commercial airports in the region and two general aviation airports. Within the CPPDC, there are two rail carriers, Norfolk Southern and CSX. There are twenty official VDOT maintained park and ride lots within the region. Passenger rail is currently not available in the region.



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 CPPDC 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 Regional Long Range Transportation Plan for their area. Rural transportation planning in the CPPDC is guided by a transportation technical committee. This transportation committee reviewed the needs of the region and formulated goals:

- GOAL 1** Provide a transportation system that facilitates the efficient movement of people and goods.
- GOAL 2** Provide a safe and secure transportation system.
- GOAL 3** Improve CPPDC's economic vitality and provide access to economic opportunities for all District businesses and residents.
- GOAL 4** Improve quality of live and minimize potential impacts to the environment.
- GOAL 5** Preserve the existing transportation system and promote efficient system management.

A basic goal for all transportation programs in Virginia is the provision for the effective, safe and efficient movement of people and 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.

DEMOGRAPHIC AND LAND USE TRENDS

Relationship of Land Use and Development to Transportation

Rural counties throughout the Commonwealth and in the Cumberland Plateau 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 of the amount of growth and land use changes occurring throughout the Commonwealth, based particularly on proximity to urban areas. In the CPPDC, the nearest urban areas are Bristol, Virginia and Kingsport, Tennessee, which have not had a large influence on the land use and development in the region. Many of the rural counties throughout the Commonwealth are trying to direct 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.



Total Population Over Time



Source: US Census, 1990, 2000, Weidon 2009; Virginia Employment Commission, 2009.

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

Land use in the Cumberland Plateau region has not changed dramatically. Due to the steep slopes throughout most of the region, development has 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: primarily US 19 and US 460. This trend will affect future land use in the counties and could intensify travel demand on the regional roadway network.

Population Trends

The CPPDC region has experienced a general decline in population since 1980. Only Dickenson County experienced any growth in population between 2000 and 2008; total regional population was estimated in 2008 at 113,957. This trend in decreasing population is expected to continue in Buchanan and Dickenson Counties but then stabilize by 2030. In contrast, the population projections forecast that by 2030, Russell and Tazewell Counties are expected to have growth in population by over 10 percent.

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 Cumberland Plateau, the effects of population changes on the transportation network can be exacerbated by the topographic constraints within the region.

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 defined 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 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 an urban area. This is due to the smaller network of fixed transit routes in rural areas when compared to urban areas. The CPPDC, in conjunction with the Virginia Department of Rail and Public Transportation's (DRPT) statewide effort, completed a Coordinated Human Service Mobility (CHSM) Plan that assessed the mobility needs of these target populations. Certain needs were 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 Cumberland Plateau, along with funding constraints.

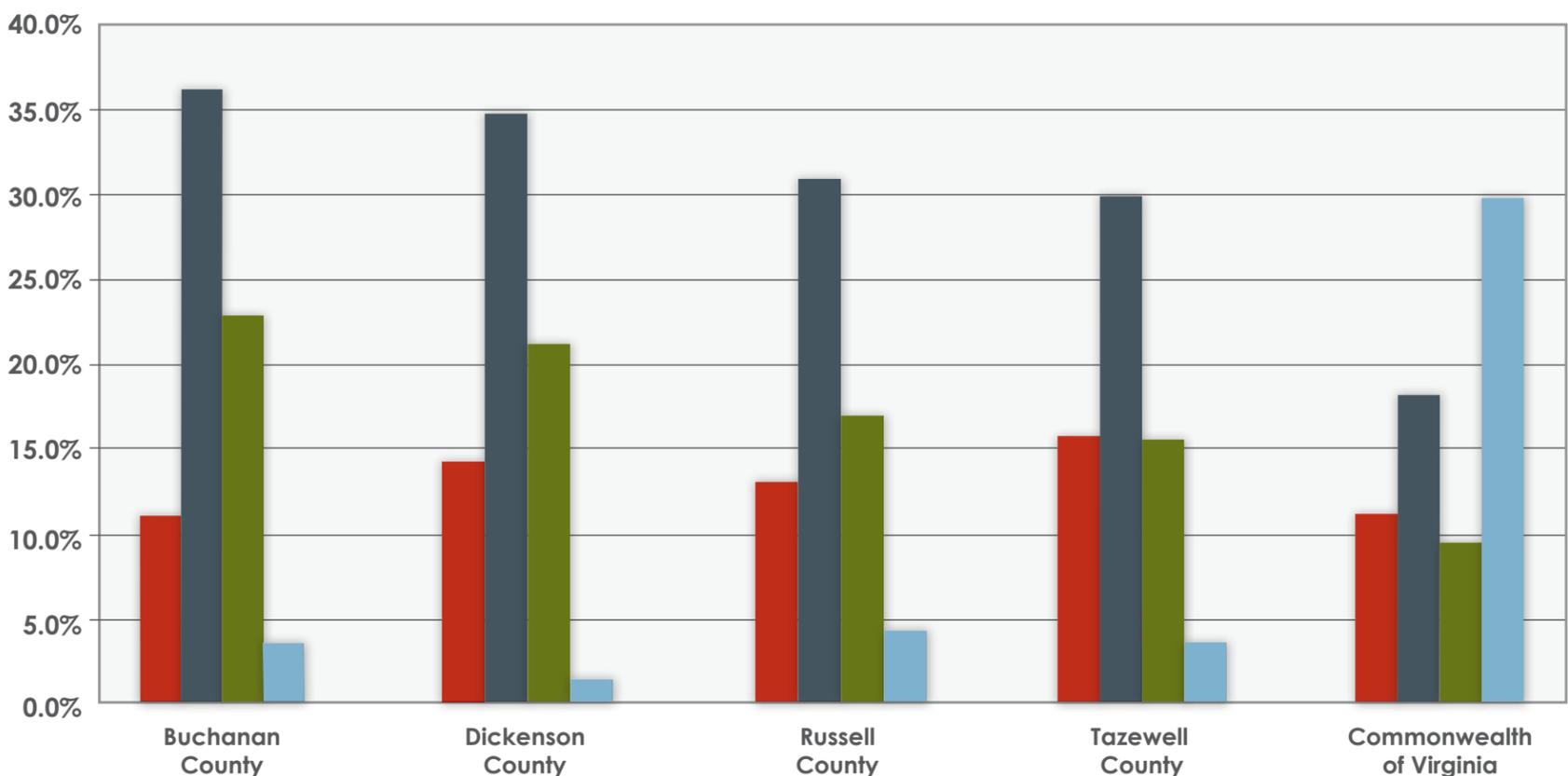
In 2000, all jurisdictions had low-income populations above the state percentage of 9.6 percent.

LEGEND

- Elderly
- Disability
- Low-Income
- Minority

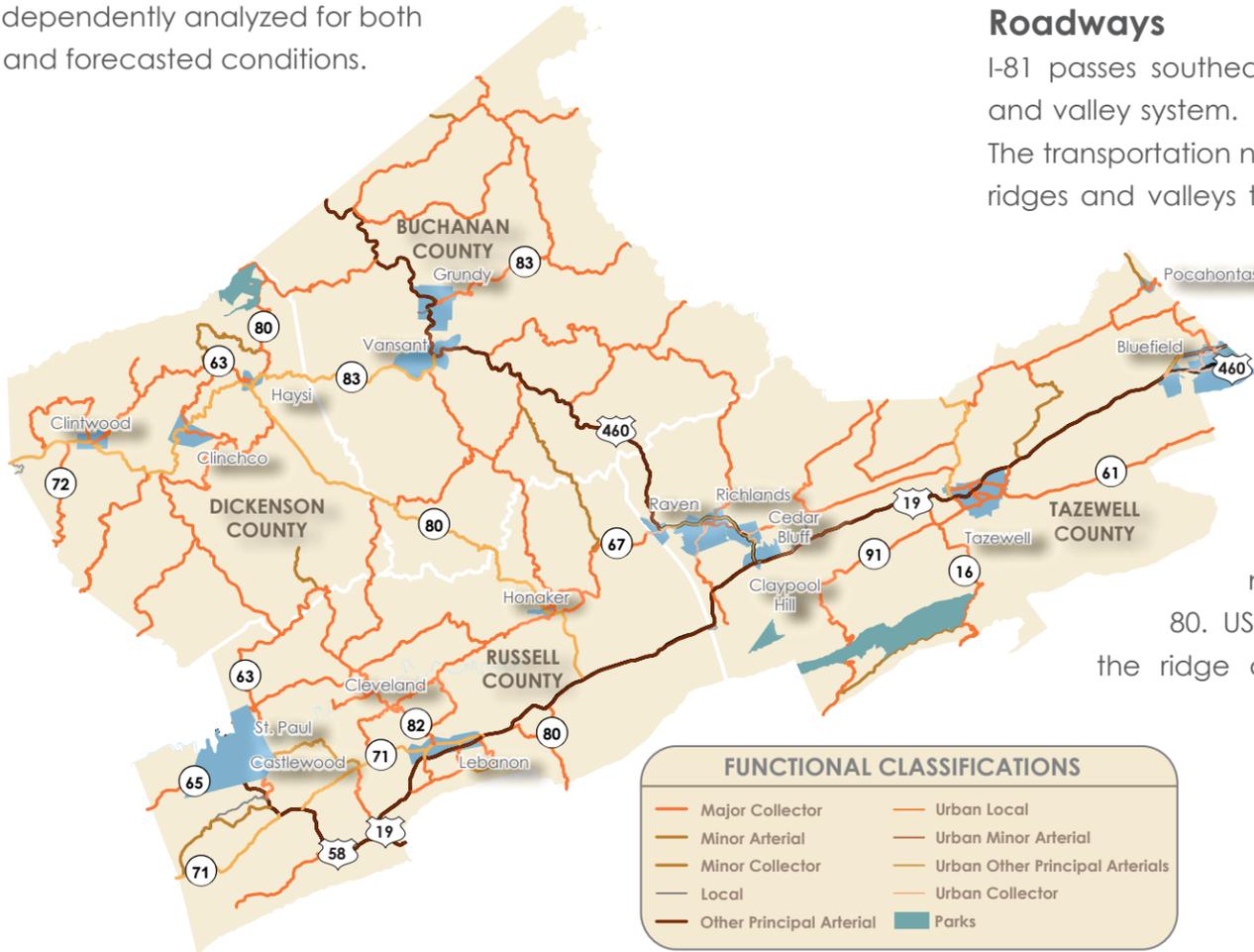
Source: US Census, 2000.
Note: People with disabilities is based on the population over 5 years of age. Low-income is a percentage of the population for whom poverty is determined.

Elderly, Disability, Low-Income, and Minority Populations in the Cumberland Plateau PDC



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

I-81 passes southeast of the region within the ridge and valley system. I-77 passes just east of the region. The transportation network is largely influenced by the ridges and valleys that generally run from the northeast to southwest; many of the primary arterials also run in this direction. Primary corridors running northeast to southwest include US 460, VA 61, VA 67, VA 71, and VA 83. Corridors that provide connections to the north and south include US 19, Alternate US 58, VA 16, VA 63, and VA 80. US 460 turns northwest to cut through the ridge and valley system at Richlands.

The transportation network is largely influenced by the ridges and valleys that generally run from the northeast to southwest.

Public Transportation

Public transportation includes public transit, both fixed-route and demand-responsive, volunteer transportation, and private providers. Four County Transit is the primary transit agency in the CPPDC. It is provided by the Appalachian Agency for Senior Citizens (AASC), the region's area agency on aging. Multiple fixed routes are currently available in each county during the week as well as demand-responsive transit. The Work Express Routes operate along US 19 and VA 71 and connect to other routes and three park and ride lots.

The fixed routes also serve two adult day facilities and eight nutrition sites operated by the AASC. An additional connection to other transit service is the Veterans Transport to Veteran's Administration Hospitals and other medical facilities outside of the region. Riders can contact District Three Governmental Cooperative in the Mount Rogers PDC to arrange transportation on the Wytheville to Tri-Cities route or the Bristol to Roanoke route. Riders then contact Four County Transit to coordinate their transfer. There is an additional transit system in the region, Graham Transit, which is operated by the Town of Bluefield and has three fixed routes. In addition, connections are available through both transit agencies to Bluefield Area Transit in Bluefield, West Virginia. Ridership in FY2006 on Four County Transit was almost 99,000.





Bicycle and Pedestrian Facilities

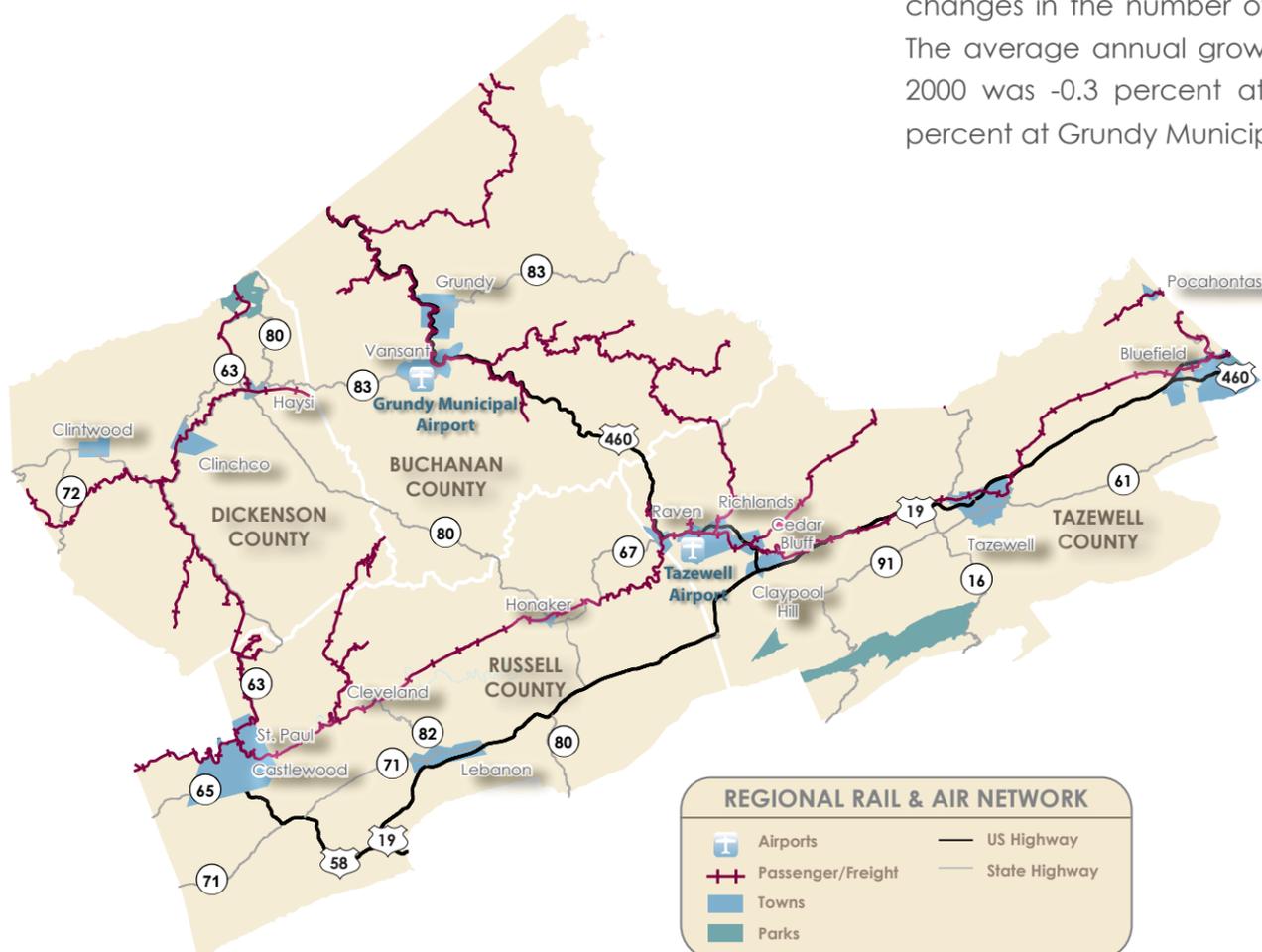
The topography in the CPPDC is not as conducive as in other PDCs for numerous recreational trails on gentle terrain used by casual bikers. However, the PDC currently does have some rugged trails for more advanced bicycle users, including: the Appalachian Trail, Breaks Interstate Park Trail System, Crane's Nest River Trail, Heart of Appalachia Bike Trail, US Bike Route 76, Sugar Hill Loop Hiking and Biking Trail, Roaring Fork Trail, Witten Lake Nature Trail, Town of Pocahontas Rail Trail, Cedar Bluff Overlook Trail, Clinch River Walking Trail, Laurel Meadows Park Trail, Clinch Mountain Loop, and St. Paul Loop. The 2008 Tazewell County Comprehensive Plan includes objectives to provide designated bicycle and pedestrian facilities.

The topography in the CPPDC is not as conducive as other PDCs for numerous recreational trails on gentle terrain used by casual bikers.

There are two general aviation airports in the region, Tazewell County Airport in Cedar Bluff and Grundy Municipal Airport, just west of Grundy.

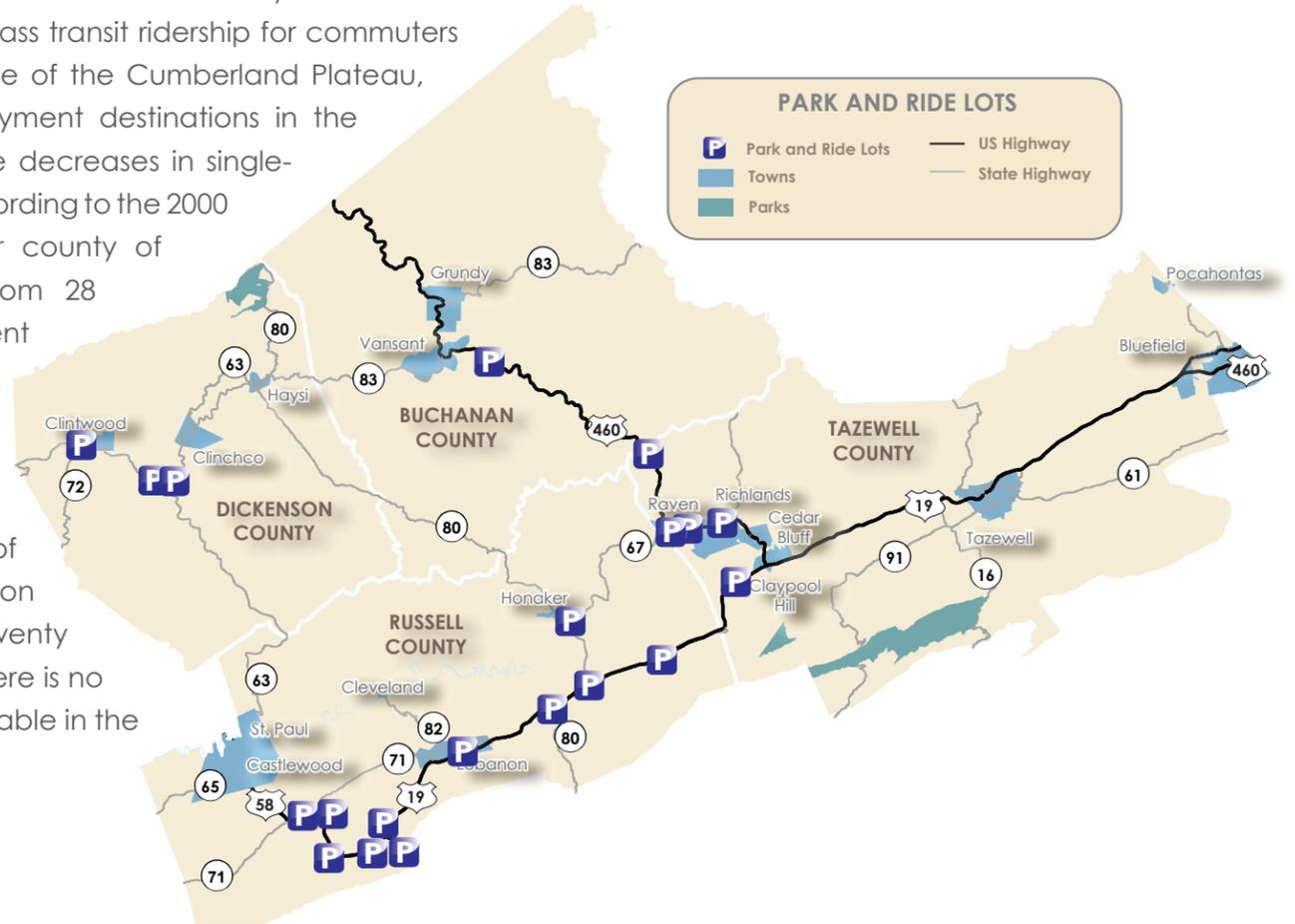
Airports

There are no commercial airports in the region. The nearest commercial airports are Roanoke Regional Airport, 120 miles east, and Tri-Cities Regional, 40 miles south of the southern portion of the region. There are two general aviation airports in the region, Tazewell County Airport in Cedar Bluff and Grundy Municipal Airport, just west of Grundy. 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 -0.3 percent at Tazewell County and 0.2 percent at Grundy Municipal (DOAV, 2003).



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, gains in mass transit ridership for commuters can sometimes be realized. In the case of the Cumberland Plateau, there is some concentration of employment destinations in the towns. There is the potential that some decreases in single-occupant vehicle trips could occur. According to the 2000 Census, workers traveling outside their county of residence for employment ranged from 28 percent in Buchanan County to 45 percent in Dickenson County. These workers are targets for travel demand management strategies already in place as discussed above in public transportation. Additional commuter-oriented pieces of the transportation network in the region include park and ride lots. There are twenty VDOT maintained park and ride lots. There is no commuter or passenger rail service available in the region.



The Norfolk Southern lines are a part of the company's Coal Corridor which carries most of the Virginia coal (90 percent) shipped to the port of Hampton Roads.

Goods Movement

The majority of goods movement in the region, other than coal, is by truck and utilizes US 19, Alternate US 58, US 460, VA 80, and VA 83. The majority of freight moving through the region is coal via the rail network. Due to the topography of the area and its current economic development, the goods movement in the region that is currently via truck is not expected to shift to rail.

There are numerous rail lines within the area. They currently only carry freight as there is no Amtrak service in the region. The rail lines are owned by Norfolk Southern and by CSX. The Norfolk Southern lines are a part of the company's Coal Corridor. The corridor carries most of the Virginia coal (90 percent) shipped to the port of Hampton Roads (DRPT, Virginia, 2008). The CSX lines are a part of the Coal Corridor of CSX which terminates in Newport News, Virginia.

Land Use

The land use/land cover in the Cumberland Plateau is generally forested, rural residential, and surface mined, with slightly more dense residential and commercial uses centered around the existing towns. Land use has been influenced primarily by the topography. Steep slopes have discouraged development in favor of stream beds and valleys where roads are located. However, flooding potential has also constrained development. Growth areas and activity centers are within the existing towns and have not changed dramatically in recent years. The location and extent of land use and development throughout the region is 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.

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 CPPDC, 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 the Cumberland Plateau, 38 priority locations were analyzed; recommendations for these locations are identified separately in the list of recommendations that follow. Nine of these locations were identified for assessment of congestion concerns, while the remaining 29 were analyzed 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.



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. The total number of bridges, by jurisdiction, in need to replacement or upgrade/repair, are shown in a separate table on this page.

3. Capacity

Level of service analyses were performed on all functionally classified roadways in the CPPD to assess current and projected year 2035 operations. In addition, analyses were conducted for intersections identified by the CPPDC 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.

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.

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

Bridge Deficiency Summary

Bridge Sufficiency Rating	Functionally Obsolete			Structural Deficiency		
	REPLACE 0-50	UPGRADE/REPAIR 51-80	UPGRADE/REPAIR 80+	REPLACE 0-50	UPGRADE/REPAIR 51-80	UPGRADE/REPAIR 80+
Buchanan	2	31	1	4	7	0
Dickenson	2	7	1	12	2	0
Russell	2	24	7	8	7	0
Tazewell	11	29	9	25	11	0
CPPDC	17	91	18	49	27	0





ROADWAY SYSTEM DEFICIENCIES

Intersection Deficiency

- Operation Deficiency
- Safety Deficiency
- Both Deficiencies
- Other Deficiencies

Segment Deficiency

- Operation Deficiency
- Safety Deficiency
- Geometric Deficiency
- Both Operation and Safety Deficiency

BUCHANAN COUNTY RECOMMENDATIONS

1 VA 80 (Helen Henderson Hwy.)/VA 623 (Council Mountain Rd.)

Short-term install signage along VA 80 warning drivers to watch for turning vehicles; Mid-term install eastbound and westbound turn lanes; Long-term reconstruct to improve grade and horizontal alignment.

2 US 460 (Riverside Dr.)/VA 604 (Poplar Creek Rd.)

Mid-term install turn lanes on US 460 and consider improvements from US 460 Study.

3 VA 83 (Lovers Gap Rd.)/VA 718 (Airport Rd.)

Short-term install signage along VA 83 warning drivers to watch for turning vehicles; Long-term reconstruct to improve grade and horizontal alignment.

4 US 460/VA 83

Short-term refresh pavement markings; Mid-term improve pedestrian accommodations and reconfigure southbound approach to add an additional through lane.

5 US 460 (Riverside Dr.)/VA 638 (Dismal River Rd.)

Short-term install "Intersection Ahead" advance warning signs and flashing beacons; Mid-term perform intersection study to identify mid to long-term improvements.

6 US 460 (Riverside Dr.)/VA 680

Short-term cover exposed drainage inlet; Mid-term install exclusive left and right turn lanes on VA 680 and offset right turn lane stop bar to improve sight distance.

7 US 460 (Riverside Dr.) from VA 684 to VA 624

Short-term install signage warning drivers of switch backs and reduced speed zones; Long-term reconstruct to standards to improve horizontal alignment.

8 US 460 (Riverside Dr.) from VA 1101 to VA 680

Short-term install signage warning drivers of switch backs and reduced speed zones; Long-term reconstruct to standards to improve horizontal alignment.

9 US 460 (Riverside Dr.) from VA 626 to VA 618

Short-term install signage warning drivers to watch for entering vehicles; Mid-term apply access management, install right turn lane at VA 626, and lengthen all other turn lanes at both intersections.

10 VA 121 (Coalfields Expressway) from Dickenson Co. Line to West Virginia State Line

Long-term construct proposed Coalfields Expressway.

11 US 460 (Coalfield Expressway Connector) from Kentucky State Line to Coalfields Expressway

Long-term construct proposed US 460 Connector.

12 VA 83 from VA 673 to 0.23 Mi. W. VA 718

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

13 VA 83 (Edgewater Dr.) from VA 689 E. to VA 642

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

14 VA 83 from VA 642 to VA 643

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

15 VA 83 from VA 643 to VA 640

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

16 VA 83 from VA 640 to West Virginia State Line

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

17 US 460 from VA 655 to VA 609

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

18 US 460 from VA 609 to VA 609 (Big Bend Circle N.)

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

19 VA 600 (Hurricane) from VA 80 to VA 657

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

20 VA 609 from Dickenson Co. Line to 1.39 Mi. E. VA 748

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

21 VA 609 from VA 601 to US 460

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

22 VA 624 from VA 665 to VA 683

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

23 VA 635 from VA 638 W. to VA 616 N./West Virginia State Line

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

24 VA 638 from VA 654 to VA 628 W.

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

25 VA 638 from VA 635 W. to VA 635 E.

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

26 VA 643 (Hurley Rd.) from 2.80 Mi. N. VA 83 to VA 653

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

27 VA 643 (Hurley Rd.) from VA 653 to VA 652 N.

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

28 VA 643 from VA 652 N. to 1.00 Mi. N. VA 649

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

29 VA 643 from VA 646 to VA 697

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

30 VA 643 from VA 697 to Kentucky State Line

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

31 VA 645 from US 460 to VA 700 S.

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

32 VA 645 from VA 691 to VA 644

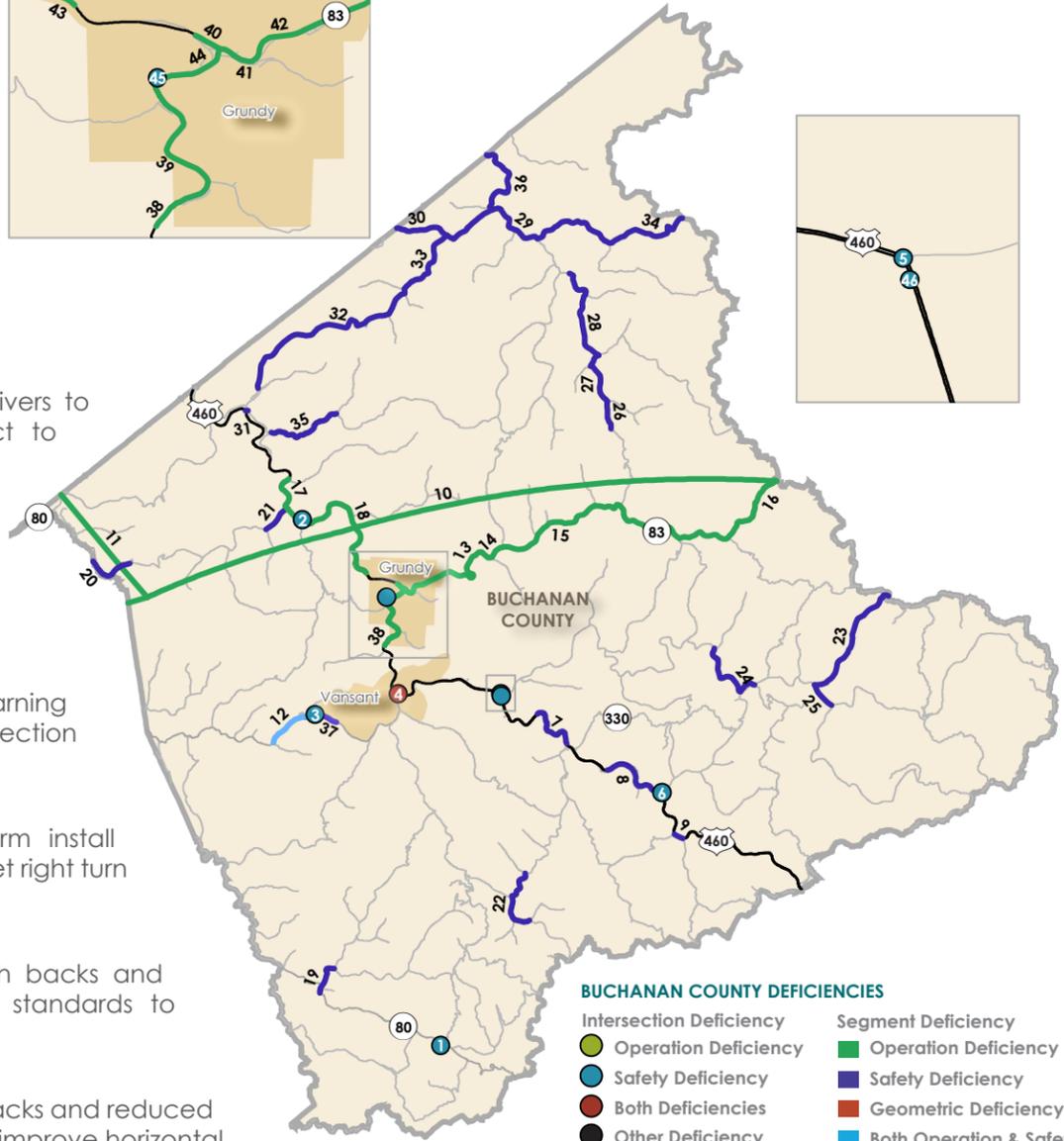
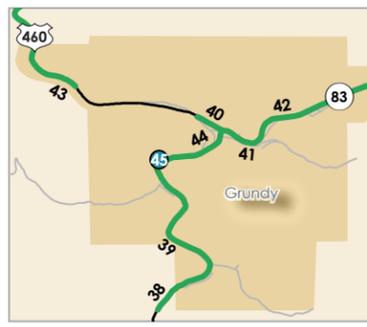
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

33 VA 645 from VA 644 to VA 643

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

34 VA 646 (Guesses Fork) from VA 643 to West Virginia State Line

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

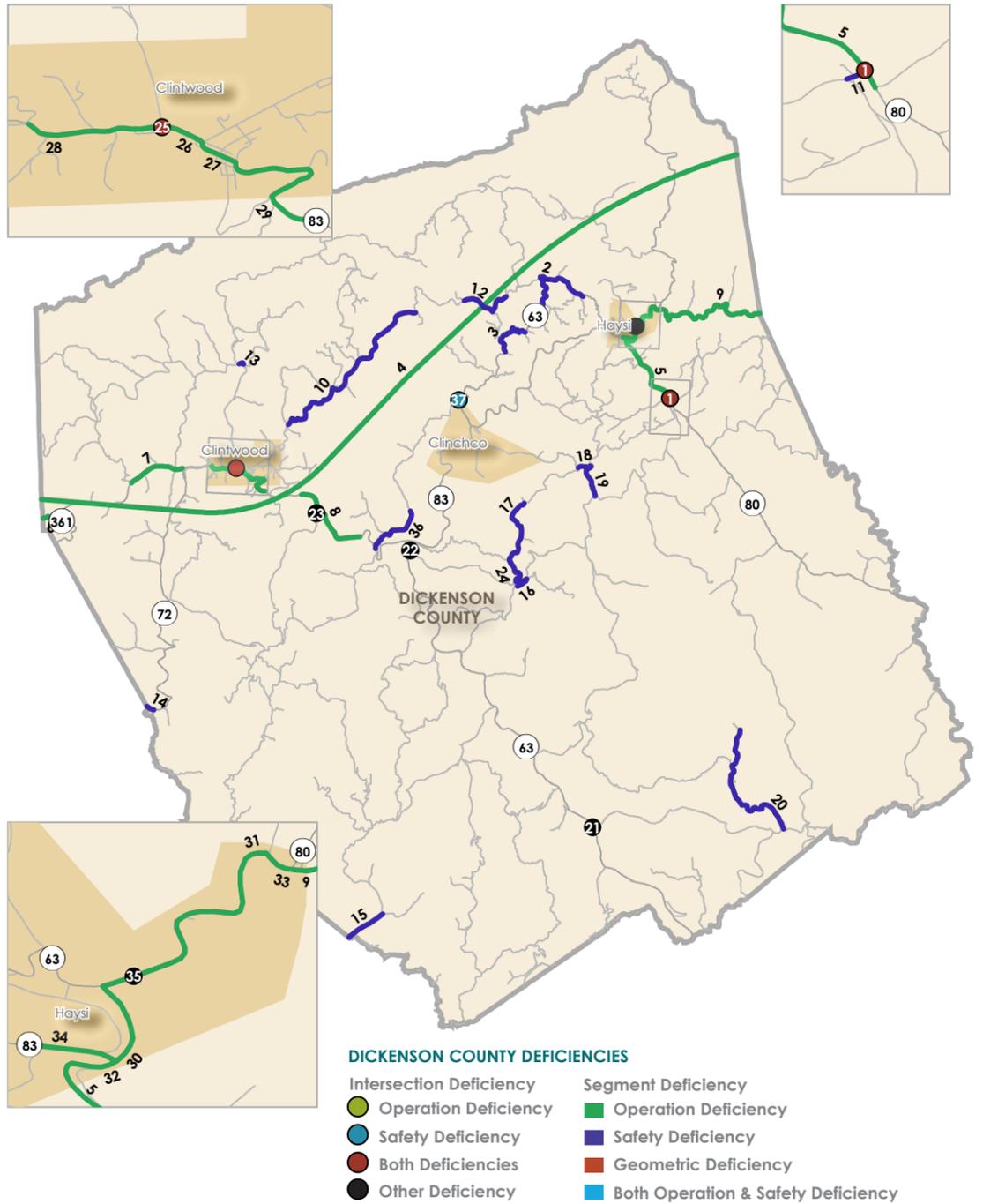


BUCHANAN COUNTY DEFICIENCIES

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

BUCHANAN COUNTY RECOMMENDATIONS (continued)

- 35 VA 650 (Home Creek Rd.) from VA 700 to VA 659**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 36 VA 697 (Cedar Branch) from VA 643 to Kentucky State Line**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 37 VA 83 from 0.23 Mi. W. VA 718 to 0.81 Mi. E. VA 718**
Mid-term reconstruct roadway to two-lane standards.
- 38 US 460 from 0.4 Km. S. SCL Grundy at Royal City to SCL of Grundy**
Short-term widen roadway to four-lane standards.
- 39 US 460 (Riverside Dr.) from .12 Mi. N. SCL Grundy to Back St.**
Short-term widen to urban four-lane roadway with median. (Grundy)
- 40 460 (Riverside Dr.) from Back St. to VA 83 N. (Edgewater Dr.)**
Short-term widen to urban four-lane roadway with median. (Grundy)
- 41 VA 83 (Edgewater Dr.) from US 460 N. to .13 Mi. E. VA 1004**
Long-term consider access management, relocating parking to off-street facilities, or upgrading traffic control devices. (Grundy)
- 42 VA 83 (Edgewater Dr.) from .13 Mi. E. VA 1004 to VA 689 E.**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders), apply access management, and add turn lanes where appropriate. (Grundy)
- 43 US 460 from Big Bend Circle N. to .57 Mi. E. Sutherland Hill Dr.**
Long-term reconstruct to rural four-lane roadway with median. (Grundy)
- 44 US 460 from VA T-1006 (Back St.) to VA 83 (Edgewater Dr.)**
Long-term widen to urban four-lane roadway with median. (Grundy)
- 45 US 460/Proposed Parking Structure Location**
Short-term construct parking deck. (Grundy)



DICKENSON COUNTY RECOMMENDATIONS

- 1 VA 80 at VA 607 (W.)**
Short-term install warning signage along eastbound approach to watch for turning school bus traffic; Mid-term improve pedestrian facilities and install eastbound right and westbound left turn lanes to accommodate school buses.
- 2 VA 63 from VA 795 to VA 752**
Long-term upgrade to design standards.
- 3 VA 63 from VA 799 to VA 747**
Long-term upgrade to design standards.
- 4 VA 121 (Coalfields Expressway) from Wise Co. Line to Buchanan Co. Line**
Long-term construct proposed Coalfields Expressway.
- 5 VA 80 (Cumberland Scenic Hwy.) from VA 607 S. to SCL of Haysi**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 6 VA 83 (Dickenson Hwy.) from Wise Co. Line to .14 Mi. E. Wise Co. Line**
Long-term consider reconstructing road to rural two-lane standards with truck climbing and turn lanes where appropriate.
- 7 VA 83 (Cumberland Scenic Hwy.) from VA 624 to VA 72**
Long-term consider reconstructing road to rural two-lane standards with truck climbing and turn lanes where appropriate.
- 8 VA 83 (Cumberland Scenic Hwy.) from .86 Mi. E. VA 632 to 1.55 Mi. E. VA 649**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders) and add truck climbing and turn lanes where appropriate.
- 9 VA 83 from VA 80 E. to Buchanan Co. Line**
Long-term consider reconstructing road to rural two-lane standards with truck climbing and turn lanes where appropriate.
- 10 VA 607 (The Lake Rd.) from VA 689 W. to VA 614**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 11 VA 607 from VA 670 to VA 80 N.**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 12 VA 614 (The Lake Rd.) from VA 755 to VA 720**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 13 VA 631 from VA 611 to VA 754**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 14 VA 634 (Bean Gap Rd.) from Wise Co. Line to VA 72**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 15 VA 652 (Doctor Ralph Stanley Hwy.) from Wise Co. Line to VA 642**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 16 VA 652 (Dog Branch Gap Rd.) from VA 661 W. to VA 661 E.**
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 17 VA 652 (Nealy Ridge) from VA 663 to VA 778**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 18 VA 652 from VA 664 W. to VA 664 E.**
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 19 VA 664 from VA 652 to VA 670**
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 20 VA 699 from VA 657 to 1.0 Mi. N. VA 660**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 21 VA 63/Bridge over Roaring Fork - just S. of VA 656**
Short-term replace bridge.
- 22 VA 63/Bridge over Big Branch at Fremont**
Short-term replace bridge.
- 23 VA 83/Bridge - 3.75 Mi. from VA 63 to 1.8 Mi. to Clintwood**
Short-term replace bridge.
- 24 VA 652 (Nealy Ridge) from VA 663 to VA 661**
Mid-term reconstruct roadway to two-lane standards and improve horizontal alignment.
- 25 VA 83 (Cumberland Scenic Hwy.) at VA 631 (Brush Creek Rd.)**
Mid-term implement access management; Long-term upgrade to urban design standards and monitor for congestion-related improvements. (Clintwood)

RUSSELL COUNTY RECOMMENDATIONS (continued)

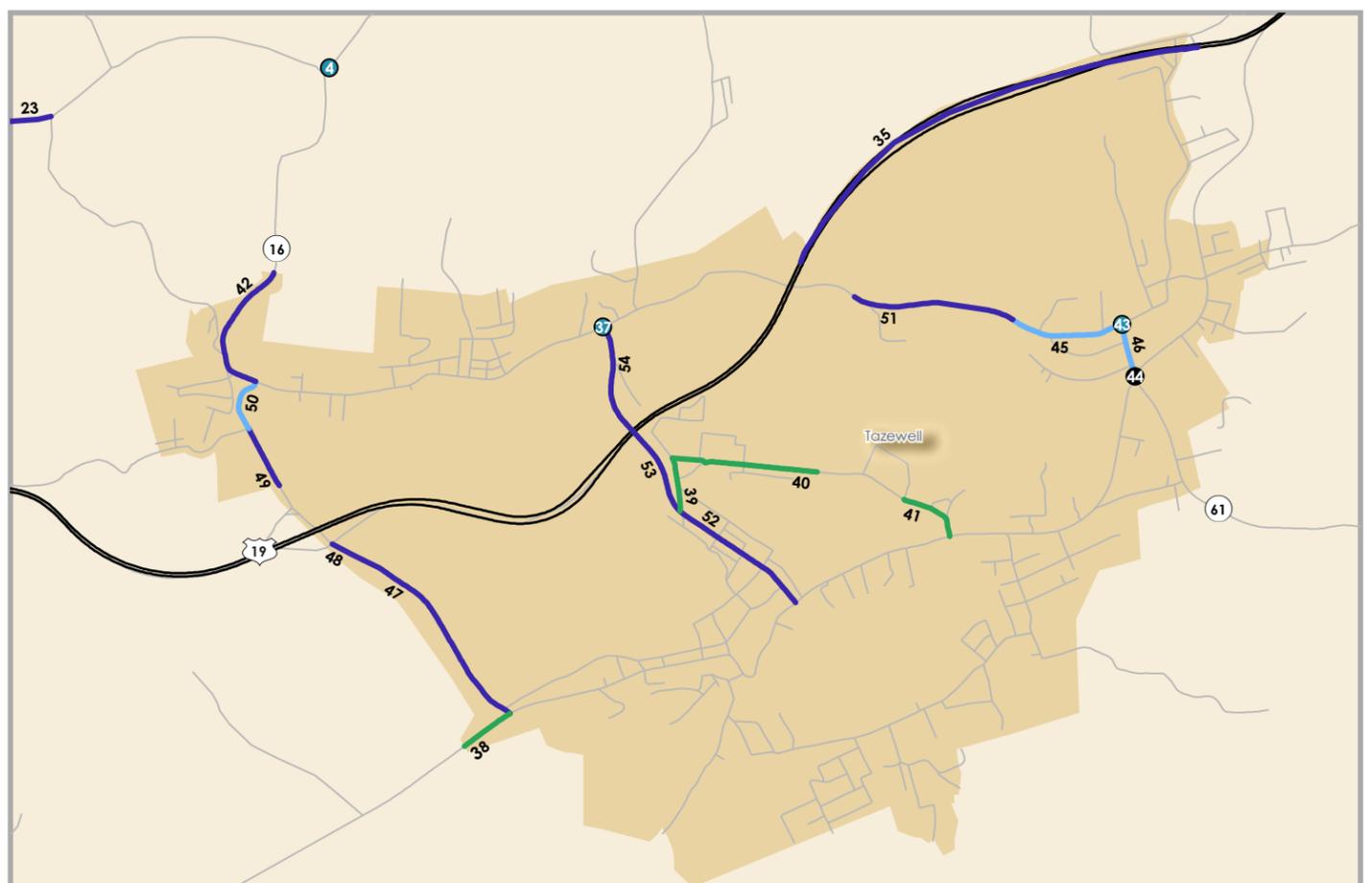
- 23 VA 632 (Lynn Springs) from VA 617 to 1.35 Mi. N. VA 617**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 24 VA 637 (Putnam Rd.) from VA 624 to VA 67 E.**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 25 VA 637 (Putnam Rd.) from ECL of Honaker to New VA 637**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 26 VA 640 from VA 615 S. to VA 690**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 27 VA 614 from VA 690 to VA 614 S.**
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 28 VA 640 from E. VA 82 to VA 740**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 29 VA 645 from 1.16 Mi. E. VA 800 to VA 82 N.**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 30 VA 645 (New Garden Rd.) from VA 82 S. to VA 661**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 31 VA 645 from .95 Mi. E. VA 646 to 2.48 Mi. E. VA 646**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 32 VA 645 from VA 692 to .49 Mi. E. VA 692**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 33 VA 656 from US 19 E. to VA 80**
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 34 VA 657 from VA 660 to VA 654**
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 35 VA 657 from VA 654 to VA 658**
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 36 VA T-683 from VA 669 to US 58 Alt. S.**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 37 VA 654 (Pittston Dr.) from US 19 Bypass (Eastbound Ramp) to US 19 Bus. (Main St.)**
Long-term continue raised median cross-section along entire length of VA 654, with appropriate turn lanes. (Lebanon)
- 38 US 19 Bus./Pioneer Dr. Intersection**
Short-term consider signalization. (Lebanon)
- 39 VA 71 (Fincastle Rd.)/US 19 Bus.**
Mid-term reconstruct intersection to improve turn radius for trucks. (Lebanon)
- 40 Big Cedar Dr./US 19 Bus.**
Mid-term reconstruct intersection to improve sight distance and turn radius for trucks. (Lebanon)
- 41 Stoots St./Bridge over Little Cedar Creek**
Short-term replace bridge. (Lebanon)
- 42 US 19 Bus. from Pioneer Dr. Intersection to VA 71**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 43 US 19 Bus. from VA 71 to VA 82**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 44 US 19 Bus. from VA 82 to Fugate St.**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 45 US 19 Bus. from Fugate St. to Church St./VA 701**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 46 US 19 Bus. from Flannagan Rd. to VA 654 (Pittston Dr.)**
Mid-term widen roadway to three-lane urban standards; Long-term widen roadway to four-lane urban standards. (Lebanon)
- 47 US 19 Bus. from VA 654 (Pittston Dr.) to Memorial Dr.**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 48 US 19 Bus. from Memorial Dr. to ECL**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 49 VA 71 (Fincastle Rd.) from WCL to US 19 Bus.**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 50 Big Cedar Dr. from US 19 Bus. to SCL**
Mid-term reconstruct roadway to two-lane rural standards. (Lebanon)
- 51 VA 82 (Cleveland Rd.) from US 19 Bus. to NCL**
Mid-term widen roadway to four-lane urban standards. (Lebanon)
- 52 VA 80 (The Redbud Hwy.) from VA 645 to Northern City Limits of Honaker**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Honaker)
- 53 VA T-637 (Putnam Rd.) from VA 80 N to ECL of Honaker**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Honaker)
- 54 VA 80 (Hayters Gap Rd.) from Washington Co. Line to VA 656**
Short-term perform study to identify signage and spot physical improvements to support tourism.
- 55 VA 67/VA 622**
Mid-term add appropriate turn lanes from VA 67 to VA 622.
- 56 VA 82 from NCL of Lebanon to Cleveland Corporate Limits**
Mid-term reconstruct roadway to standards to address geometric deficiencies.
- 57 VA 67/Swords Creek Elementary School**
Short-term install flashing beacons on both directions of VA 67 to warn drivers of upcoming school zone.

TAZEWELL COUNTY RECOMMENDATIONS (continued)

- 26 VA 637 (Dry Fork Rd.) from VA 643 to West Virginia State Line**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 27 VA 643 (Mud Fork Rd.) from VA 655 W. to VA 655 E.**
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 28 VA 644 (Horsepen Rd.) from VA 16 to VA 668**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 29 VA 651 (T. R. Barrett Rd.) from US 19 to VA 650**
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 30 VA 655 (Joe Hunt) from VA 643 W. to VA 644**
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).
- 31 US 19/460 at VA 656 (Stony Ridge Rd.)**
Short-term install stop bar on minor approach and "Intersection Ahead" warning signs for the eastbound and westbound US 19 / US 460 approaches.
- 32 VA 91 at Bridge 1 Mi. from Smyth Co. Line**
Short-term replace bridge.
- 33 VA 610 (Indian Paint Rd.)/Bridge over Little River - approx 0.8 Mi. N. of 609**
Short-term replace bridge.
- 34 VA 744 (Triangle Rd.)/Bridge over Bluestone River**
Mid-term replace bridge.
- 35 US 19 from 1.25 Mi. N. Ramp to VA 61 (Milepost 73.2) to 0.11 Mi. N. VA 678 (MP 73.62)**
Short-term pave shoulders and add pavement markings.
- 36 VA 643 (Dix Creek) from 0.90 Mi. E. VA 810 to 2.40 Mi. E. VA 810**
Mid-term reconstruct and pave roadway.
- 37 VA 16 (Tazewell Ave.)/VA 61 (Riverside Dr.)**
Short-term refresh pavement markings and provide crosswalks; Long-term upgrade to urban standards with curb and gutter and consider access management. (Tazewell)
- 38 US 19 (Main St.) from WCL of Tazewell to Fairground (Alt. VA 16)**
Long-term consider access management and study to identify appropriate traffic control at each intersection. (Tazewell)
- 39 Carline Ave. from Tazewell Ave. (VA 16) to Maplewood Ln.**
Long-term consider access management and study to identify appropriate traffic control at each intersection. (Tazewell)
- 40 VA 793 (Maplewood Ln.) from Old Tazewell Rd. to Old ECL Tazewell Town**
Long-term widen to urban two-lane roadway. (Tazewell)
- 41 VA 793 (Maplewood Ln.) from VA 9708 to US 19 (Fincastle Tpke.)**
Long-term widen to urban two-lane roadway. (Tazewell)
- 42 VA 16 (Riverside Dr.) from Alt. VA 16 (Fairground Rd.) to NCL of Tazewell**
Long-term widen to urban two-lane roadway. (Tazewell)
- 43 VA 61 (Riverside Dr.)/Market St.**
Short-term realign intersection to include fourth leg in signal control and lengthen turn lanes as needed. (Tazewell)
- 44 VA 61 (Riverside Dr.)/Fincastle Tpke.**
Short-term replace bridge and include transition into intersection. (Tazewell)
- 45 VA 61 (Riverside Dr.) from old WCL to Market St.**
Short-term apply access management and widen roadway to two-lane urban arterial with left turn lanes where appropriate; Long-term widen roadway to four-lane urban standards. (Tazewell)
- 46 VA 61 (Riverside Dr.) from Market St. to Fincastle Tpke.**
Short-term widen roadway to three-lane urban standards. (Tazewell)
- 47 Alt. VA 16 (Fairground Rd.) from US 19/460 Bus. (West Main St.) to 0.85 Mi. N. on VA 16**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 48 Alt. VA 16 (Fairground Rd.) from 0.85 Mi. N. on VA 16 to US 19/460 eastbound ramps**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 49 Alt. VA 16 (Fairground Rd.) from old SCL to Pisgah Rd.**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 50 Alt. VA 16 (Fairground Rd.) from Pisgah Rd. to Riverside Dr.**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 51 VA 61 (Riverside Dr.) from old WCL to old NCL**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 52 VA 16 (Tazewell Ave.) from Fincastle Tpke. to Lyons Ave.**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 53 VA 16 (Tazewell Ave.) from Lyons Ave. to US 19/460 westbound ramps**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 54 VA 16 (Tazewell Ave.) from US 19/460 westbound ramps to Riverside Dr.**
Mid-term reconstruct roadway to two-lane urban standards. (Tazewell)
- 55 US 460/Leatherwood Ln.**
Short-term extend eastbound left turn lane and change yield control to signal control for southbound right turn movement. (Bluefield)
- 56 Montrose St. from Hockman Pk. to Virginia Ave.**
Long-term widen to urban two-lane roadway. (Bluefield)

TOWN OF TAZEWELL DEFICIENCIES

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

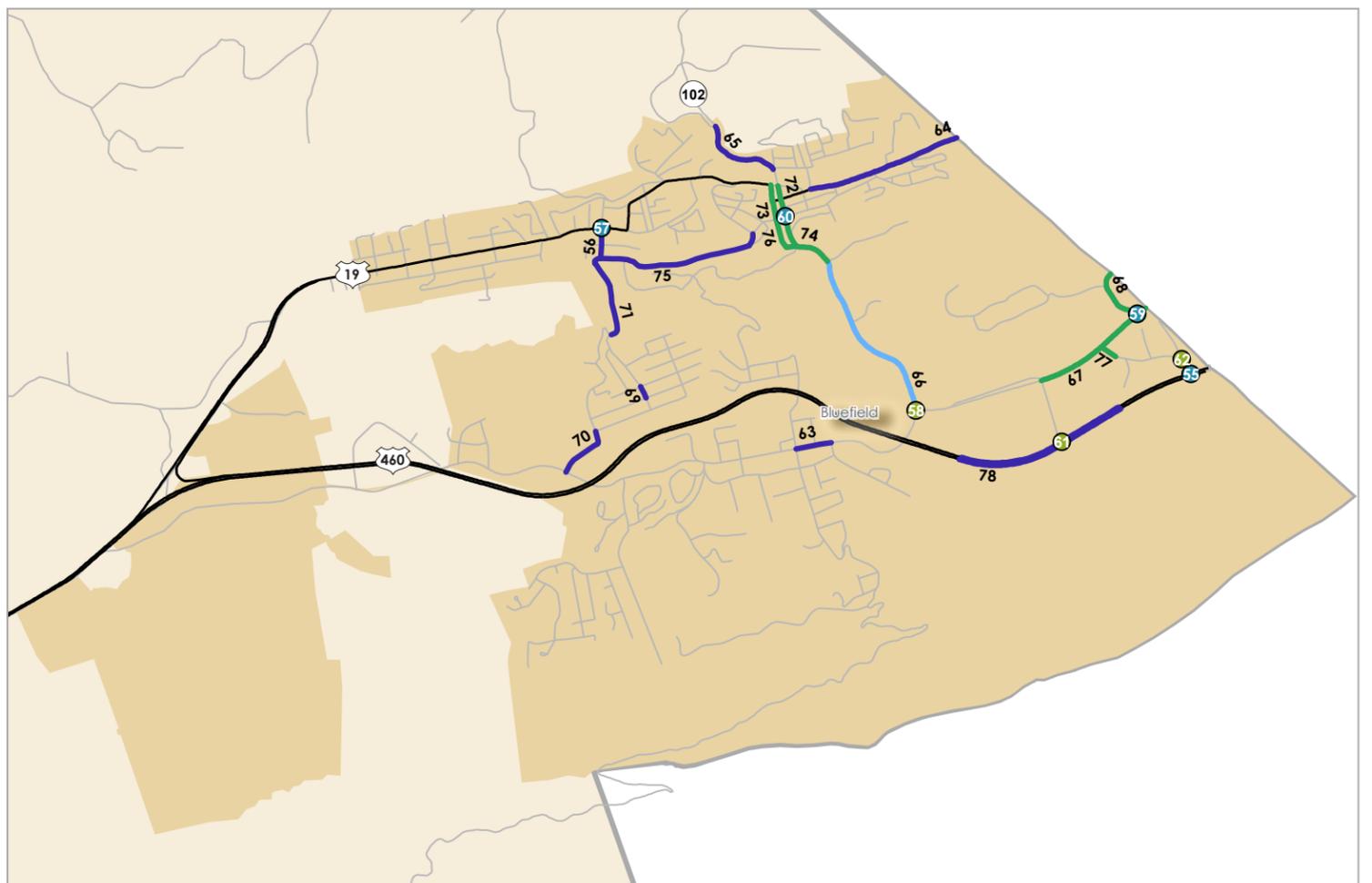


TAZEWELL COUNTY RECOMMENDATIONS (continued)

- 57 Virginia Ave./Montrose St.**
Short-term reconstruct intersection to correct vertical alignment and sight distance issues, add a double gate system at the railroad crossing, and consider signalization. (Bluefield)
- 58 South College Ave./Valley Dale St.**
Short-term extend southbound left turn lane. (Bluefield)
- 59 South College Ave./Stadium Dr.**
Short-term realign intersection to the west and provide signal for safety. (Bluefield)
- 60 Tazewell Ave./South College Ave.**
Short-term reconstruct intersection to correct sight distance issues and consider signalization. (Bluefield)
- 61 US 460 Bypass/Commerce Dr.**
Long-term perform study to identify needed improvements such as additional through and/or turning lanes or upgrading to an interchange. (Bluefield)
- 62 Leatherwood Ln./West Cumberland Rd.**
Short-term realign intersection to improve capacity and apply access management. (Bluefield)
- 63 Valley Dale St. from Mountain Lane Rd. to Fincastle Lane**
Short-term reduce speed limit to 25 mph; Long-term reconstruct roadway to two-lane urban standards. (Bluefield)
- 64 US 19 (Virginia Ave.) from Depot St. to West Virginia State Line**
Short-term install curbing along roadway where missing, apply access management, and add on-street parking to one side of roadway. (Bluefield)
- 65 North College Ave. from Thayer St. to NCL of Bluefield**
Mid-term reconstruct roadway to two-lane urban standards to eliminate geometric deficiencies. (Bluefield)
- 66 South College Ave. from Valley Dale St. to Rollins St.**
Short-term apply access management; Mid-term widen roadway to four-lane urban standards. (Bluefield)
- 67 South College Ave. from Commerce Dr. to West Virginia State Line**
Short-term widen roadway to three-lane urban standards to provide appropriate turn lanes. (Bluefield)
- 68 Stadium Dr. from South College Ave. to West Virginia State Line**
Short-term widen roadway to three-lane urban standards to provide appropriate turn lanes and consider realigning and signalizing intersection with South College Ave. (Bluefield)
- 69 Edgewood Rd. from Hillcrest Dr. to Ridgeway Dr.**
Short-term improve sight distance. (Bluefield)
- 70 Hockman Pk. from Fincastle Tpke. to Parkview Dr.**
Short-term replace bridge; Mid-term reconstruct roadway to two-lane urban standards. (Bluefield)
- 71 Hockman Pk. from Edgewood Rd. to Montrose St.**
Mid-term reconstruct roadway to two-lane urban standards. (Bluefield)
- 72 South College Ave. from Tazewell Ave. to Graham Ave.**
Mid-term convert roadway to two-lane, one-way roadway in conjunction with Walnut St. conversion. (Bluefield)
- 73 Walnut St. from Tazewell Ave. to Graham Ave.**
Mid-term reconstruct roadway to two-lane urban standards and operate roadway as one-way in conjunction with South College Ave. conversion. (Bluefield)
- 74 South College Ave. from Rollins St. to Tazewell Ave.**
Mid-term widen roadway to four-lane urban standards. (Bluefield)
- 75 Tazewell Ave. from Montrose St. to Schenley Ave.**
Mid-term reconstruct roadway to two-lane urban standards. (Bluefield)
- 76 Walnut St. Ext. from Tazewell Ave. to a point on South College Ave. N. of Stockton St.**
Long-term extend Walnut St. southward from its terminus at Tazewell Ave. to a point on South College Ave. north of Stockton St. (Bluefield)
- 77 West Cumberland Rd. Ext. from West Cumberland Rd. terminus to South College Ave.**
Long-term extend West Cumberland Rd. from its western terminus to South College Ave. and install signal at South College Ave. (Bluefield)

TOWN OF BLUEFIELD DEFICIENCIES

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



TAZEWELL COUNTY RECOMMENDATIONS (continued)

- 78 US 460 from 0.74 Mi. E. Buchanan Co. Line to 1.92 Mi. E. of Buchanan Co. Line**
Short-term install raised pavement markings. (Bluefield)
- 79 US 460 (George C. Peery Hwy.)/VA 67 (Raven Rd.)**
Short-term consider constructing an acceleration lane and applying access management. (Bluefield)
- 80 US 460 (Front & Second St. as a one way pair)/Kents Ridge Rd.**
Short-term provide crosswalks, apply access management, lower railroad to eliminate humped crossing, and realign intersection with Rockbridge Ave.; Long-term upgrade to current urban standards with curb and gutter. (Bluefield)
- 81 US 460 (Richlands Bypass)/US 460 Bus. (Front St.)**
Short-term improve US 460 Bus. approach to the intersection as part of bridge replacement at west end Clinch River. (Richlands)
- 82 US 460 Bus. (Front St.)/Bridge over W. end Clinch River**
Short-term replace bridge and reconstruct nearby approaches. (Richlands)
- 83 460 Bus. (Front St.)/Scott St.**
Short-term add street name signs onto mast arms. (Richlands)
- 84 Second St./Scott St.**
Short-term add street name signs onto mast arms. (Richlands)
- 85 Second St./Suffolk Ave.**
Short-term add street name signs, "No U-turn" signs for westbound approach, and speed limit sign west of intersection. (Richlands)
- 86 Second St./Railroad Ave.**
Short-term add street name signs and "No U-turn" signs for westbound approach. (Richlands)
- 87 US 460 Bus. (Front St.)/Railroad Ave.**
Short-term add street name signs and speed limit sign just west of intersection. (Richlands)
- 88 US 460 Bus. (Front St.)/Allegheny St.**
Short-term add street name signs to mast arms. (Richlands)
- 89 US 460 Bus. (Front St.)/Floyd St.**
Short-term add street name signs to mast arms. (Richlands)
- 90 Second St./Rockbridge Ave.**
Short-term add street name signs to mast arms. (Richlands)
- 91 Clinch St./railroad crossing (near Altizer)**
Long-term lower railroad to eliminate humped crossing. (Richlands)
- 92 Clinch St./railroad crossing (near Lake Park Dr.)**
Long-term lower railroad to eliminate humped crossing. (Richlands)
- 93 US 460 Bus. (Front St.) from bridge over west end Clinch River to Second St.**
Short-term widen roadway to three-lane urban standards to provide two-way left turn lanes. (Richlands)
- 94 VA 67 (Big Creek Rd.) from Kentucky Ave. to 0.62 Mi. SW of NCL**
Long-term reconstruct to two-lane urban standards. (Richlands)
- 95 VA 67 (Big Creek Rd.) from 0.31 Mi. SW of NCL to NCL**
Long-term reconstruct to two-lane urban standards. (Richlands)
- 96 Edgewater St. from SCL to US 460 Bus. (Front St.)**
Long-term reconstruct to two-lane urban standards. (Richlands)
- 97 Veterans Dr. Ext. from Second St./Veterans Dr. intersection to US 460 Bypass**
Long-term extend Veterans Dr. from Second St. to US 460 Bypass and construct to two-lane urban standards, including new bridge over Clinch River. (Richlands)
- 98 US 460 Bus. (Front St.)/Bridge over E. end Clinch River**
Mid-term upgrade bridge. (Richlands)
- 99 US 460 Bus. (Second St.)/Bridge over E. end Clinch River**
Mid-term upgrade bridge. (Richlands)
- 100 VA 609 (Veterans Dr.) at Bridge W. of Incubator**
Mid-term upgrade bridge. (Richlands)
- 101 VA 91 from Smyth Co. Line to VA 607**
Long-term reconstruct roadway to standards.
- 102 VA 609 from VA 610 to VA 91**
Long-term reconstruct roadway to standards.
- 103 VA 610 from VA 609 to US 19/460 (Trail of the Lonesome Pine)**
Long-term reconstruct roadway to standards.

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 CPPDC. 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;

The review of the disadvantaged population groups determined that there is very good access to public transportation by these populations through both fixed-route and demand-responsive service.

- 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 very good access to public transportation by these populations through both fixed-route and demand-responsive service. There are several census tract block group areas that had a high portion of one or more transportation disadvantaged groups, clustered in northern Buchanan County, southeast and northwest Dickenson County, the central part of Russell County, and western Tazewell County. 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 the PDC, which is not always common in rural areas.



Airports

The *Virginia Air Transportation System Plan Update* forecasted average annual growth rates of based aircraft through 2020 for the two general aviation airports in the region (DOAV, 2003). Aircraft based at Grundy Municipal Airport are expected to grow by 0.1 percent annually, while no growth in based aircraft is projected to occur at Tazewell County Airport. Future growth at these airports is not expected to have long-term effects on the existing transportation network.

There is potential
for a widespread
mountain trail system
in the region through
the Southwest Regional
Recreation Authority.

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.

Due to the topography in the CPPDC, there is not an extensive network of bicycle and pedestrian facilities for casual use. The existing facilities are for more advanced bicycle users. Currently, only the Tazewell County Comprehensive Plan includes objectives and strategies to address a bicycle and pedestrian network. The types of facilities include a county-wide system, working with the US Forest Service on trails within the national forests, and facilities in towns and developed areas.

There is potential for a widespread mountain trail system in the region. The Southwest Regional Recreation Authority (SRRA) was established by the Virginia General Assembly as a recreational, tourism, and economic development initiative to oversee the development and management of a network of trails throughout the CPPDC and the LENOWISCO PDC to the southwest. The trails would primarily serve all terrain vehicles, mountain bicycles, hikers, and horseback riders.



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 Level-of-Service (LOS). 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. Even though there is an extensive rail network in the CPPDC, these types of transfers are not as likely to happen due to the dominance of coal on the existing rail networks. Key truck freight corridors will continue to include the major arterials and collectors in the region, US 19, Alternate US 58, US 460, VA 80, and VA 83.

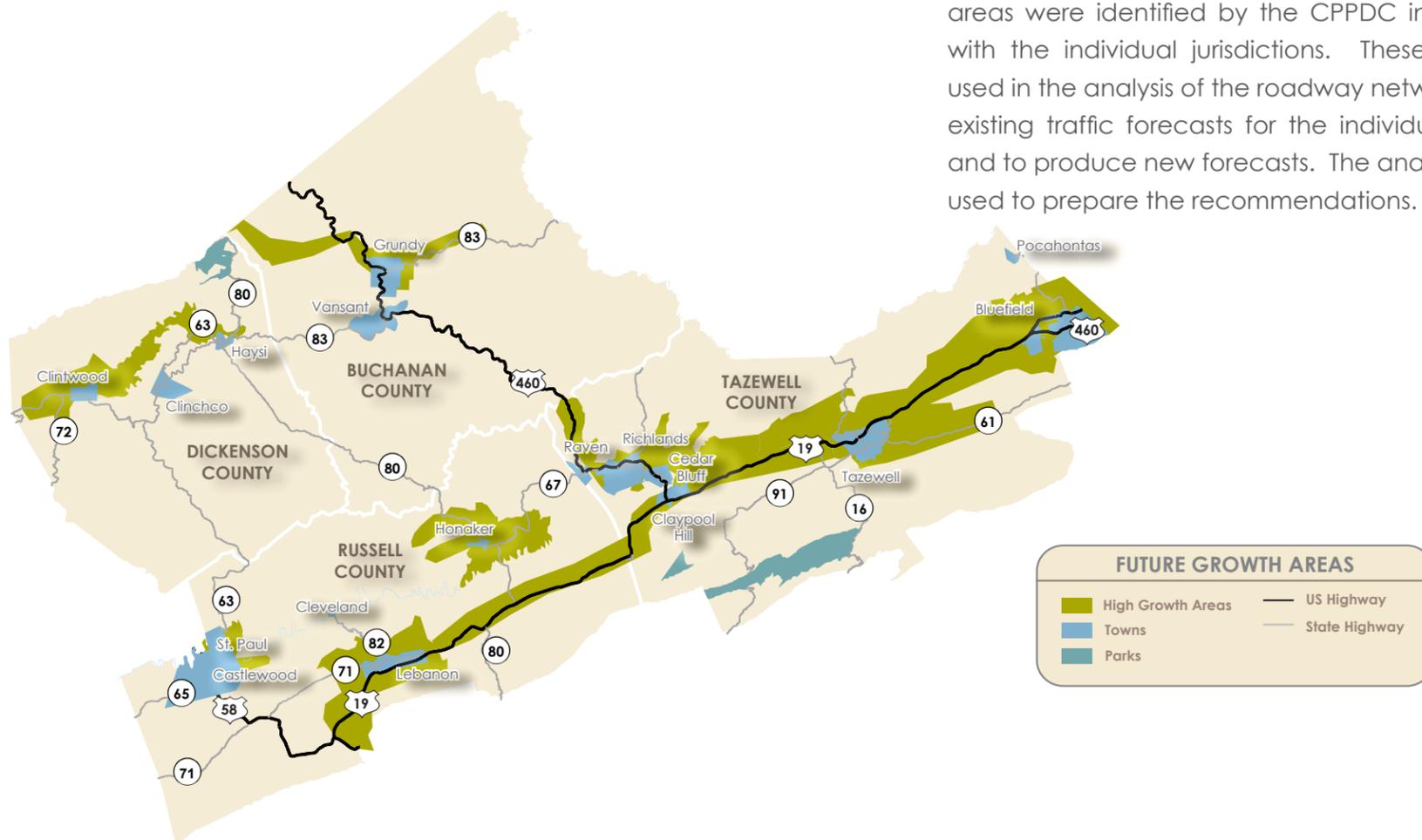
The Norfolk Southern Coal Corridor has improvements planned throughout its length. These improvements primarily include additional track for capacity purposes and is not expected to shift any freight movements from rail to truck. The CSX Coal Corridor currently has no improvements planned (DRPT, Virginia, 2008).

Key truck freight corridors will continue to include the major arterials and collectors in the region, US 19, Alternate US 460, VA 80 and VA 83.

The Norfolk Southern Coal Corridor has improvements planned throughout its length.

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 CPPDC region is generally forested and rural agricultural or residential in nature; therefore, future development is expected to focus in existing towns, along major roadway corridors, and where general infrastructure, particularly water and sewer service, is currently available. These growth areas were identified by the CPPDC 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.



Travel Demand Management

In rural areas, low residential densities and dispersed work destinations are generally not conducive to high public transportation use. This is particularly true in the CPPDC. Some decreases in single-occupant 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. A key intermodal connection to transit service is already being addressed through Four County Transit's work express routes. Continued assessment of the use of these routes in conjunction with park and ride lot usage can also prove useful in meeting the access and mobility needs of commuters.



PLAN ADOPTION

The 2035 Rural Long Range Transportation Plan for the CPPDC was adopted by the Planning District Commission on May 26, 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.



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