



RICHMOND REGIONAL PLANNING DISTRICT COMMISSION

2035 RURAL LONG RANGE TRANSPORTATION PLAN



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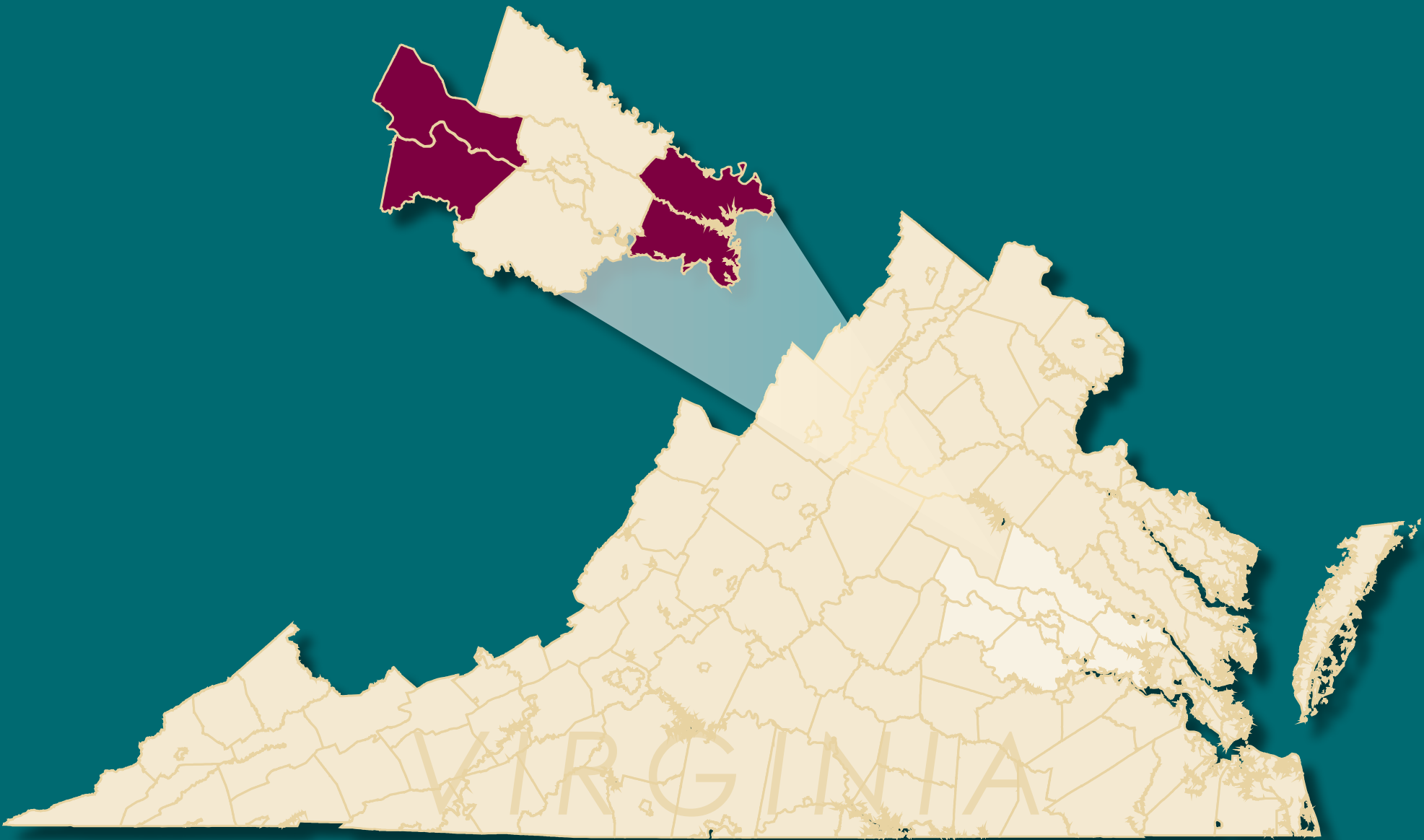


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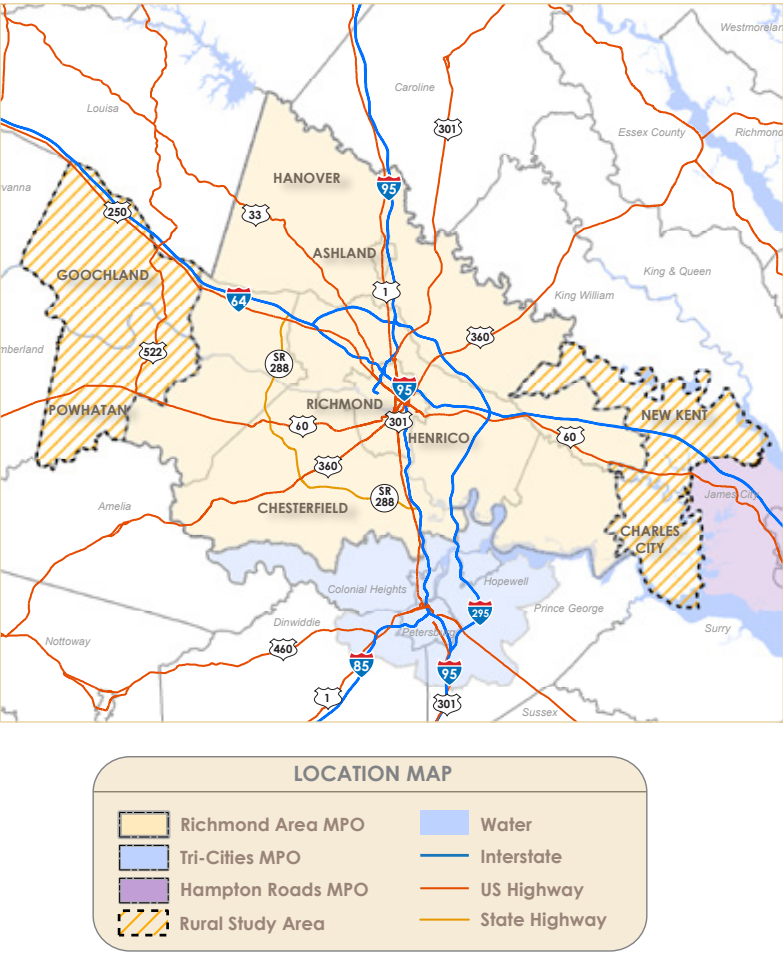
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INTRODUCTION & PURPOSE

The Virginia Department of Transportation (VDOT) instituted a new initiative in July 2006 for the Rural Transportation Planning Program (RTPP). The goal of the initiative is to create regional transportation plans in rural areas that complement those in the metropolitan areas of the state. By partnering with Virginia's Planning District Commissions and the local governments each represents, VDOT works with individual regions to evaluate the transportation system in the rural areas to recommend a range of transportation improvements that can best satisfy existing and future transportation needs. The regional rural plan is intended to identify needs based on the goals and objectives established by the region. Improving the transportation system remains vital to improving the quality of life and continued economic growth and prosperity in Virginia. The provision for the effective, safe and efficient movement of people and goods is an essential goal of all transportation programs in the Commonwealth of Virginia. The rural regional plans are developed with this goal in mind, as well as incorporating further consideration of environmental issues and local priorities.



Each Rural Plan was developed as a vision plan, exploring all needs of the transportation system regardless of anticipated funding availability.

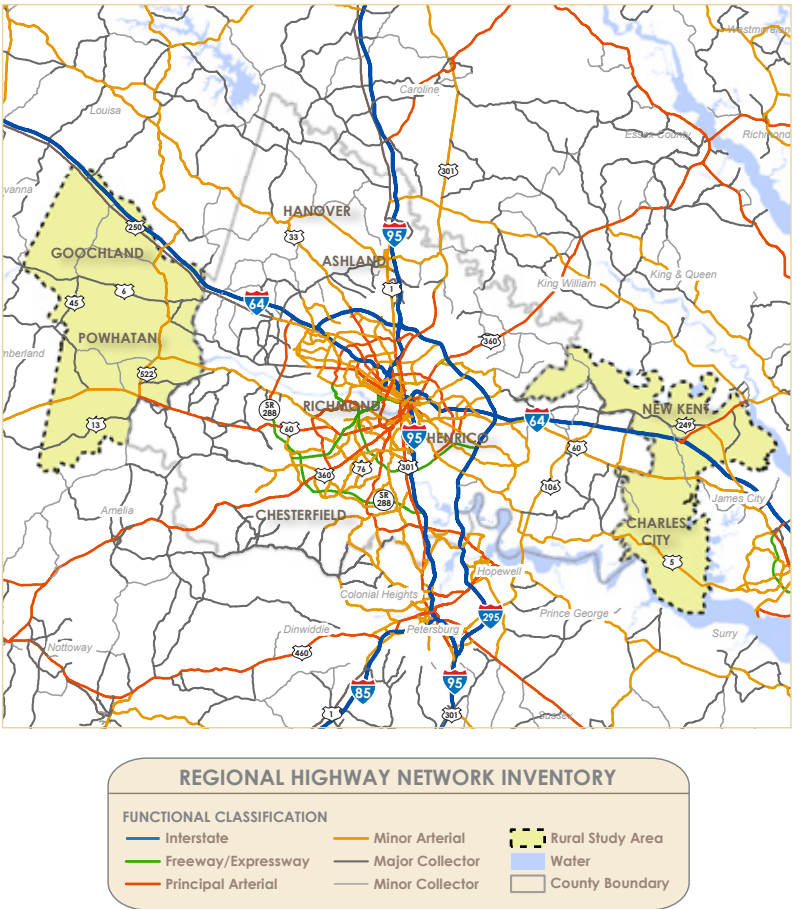
STUDY APPROACH

- Development of regional transportation goals and objectives,
- Public involvement,
- Data compilation and collection,
- Data Analysis,
- Identification of transportation deficiencies and recommendations, and
- Environmental overview.

OVERVIEW OF THE REGION

Function of the Richmond Regional Planning District Commission

The Richmond Regional Planning District Commission (RRPDC) serves the areas surrounding the city of Richmond and comprises the counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, and Powhatan along with the City of Richmond and the Town of Ashland. It encompasses an area of approximately 2,205 square miles. The Richmond Area Metropolitan Planning Organization (RAMPO) works with VDOT and other agencies to address transportation needs in the “urbanized” area. The areas included in this Rural Long Range Plan are two non-contiguous areas on the eastern and western edges of the Richmond region, which are not covered by the MPO. The eastern rural part includes portions of Charles City County and New Kent County, and the western rural part includes portions of Goochland County and Powhatan County. The total rural study area is approximately 590 square miles, and the two combined rural areas have a population of 25,902 according to the 2000 census and a population of 30,107 in the year 2008.



**Richmond Regional Planning District Commission
Regional Transportation Goals**

The following goals and objectives of the plan are intended to ensure the long-term productivity, efficiency, and safety of the region and maintain a high quality of life for its citizens over the next 20 years. These goals and objectives, combined with the known deficiencies of the transportation network, support the plan recommendations.

- GOAL 1** In partnership with the Commonwealth, provide a safe and efficient transportation network that serves the rural areas' diverse needs.
- GOAL 2** Develop a transportation system that serves the needs of the region's diverse population.
- GOAL 3** Maintain, enhance and promote the rural character of rural highways.
- GOAL 4** Promote the use of smart growth and traditional neighborhood development techniques to meet requirements of Urban Development Areas.
- GOAL 5** Recognize and promote the connection between land use planning and transportation.
- GOAL 6** Provide options for the efficient and effective movement of freight including rail, ports, airports, and over-the-road modes.

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 specific RRPDC goals, VDOT has identified a number of goals 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, which are presented 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 inter-modal 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 are working either to seek new and diversified economic growth 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 in proximity to urban areas. Many of the rural counties are trying to direct all 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 of the population 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.



Population Trends

The non-MPO study area has a relatively low population density of 51 persons per square mile, compared to approximately 600 persons per square mile in the urban or MPO portion of the region. The population growth rate from 2000 to 2008 for the entire RRPDC region is estimated to be 15.6 percent, or 135,470 persons. Growth in the rural study area is comparable, increasing 16.2 percent or just over 4,200 people. In the rural study area of New Kent County, population is concentrated in the Lanexa area along US Route 60, near the New Kent County/James City County border. Goochland has a relatively high concentration of population near the Goochland Village Area.

In addition, in Goochland and Powhatan counties, population is concentrated along the James River owing to the location of state correctional institutions. From census 2000, 3,540 persons, or 12.4 percent of the total rural study area population, reside in state correctional facilities in Goochland, New Kent, and Powhatan counties.

Although not all physically connected, the four counties of the rural study area display similar characteristics in their existing land use patterns.

The 590-square mile rural study area of the Richmond Regional Planning District represents almost 27 percent of the planning district's total area. However, less than three (3) percent of the regional population lives within the rural study area. Although not all physically connected, the four counties of the rural study area display similar characteristics in their existing land use patterns.

Two factors have affected land use in the Richmond Region: population growth within the region itself and population growth in the urban areas of the Richmond region. During the period from 2000 to 2008, growth in the rural area was 16.2 percent compared to 28.1percent in the MPO area of the four counties. This trend is expected to continue, which will affect future land use in these counties and affect travel demand on the regional roadway network.

2000 - 2008 Population of Richmond Region and Rural Study Area

Area	2000 Population	2008 Population	% change
Charles City Rural Study Area	1,247	1,201	-3.7%
Goochland Rural Study Area	10,004	11,004	10.0%
New Kent Rural Study Area	6,336	7,620	20.3%
Powhatan Rural Study Area	8,315	10,282	23.7%
Rural Study Area Total	25,902	30,107	16.2%
Charles City MPO Study Area	5,679	6,011	5.8%
Goochland MPO Study Area	6,859	9,952	45.1%
New Kent MPO Study Area	7,653	10,205	33.3%
Powhatan MPO Study Area	14,062	17,724	26.0%
Rural Counties MPO Study Area Total	34,253	43,892	28.1%
Chesterfield**	259,903	313,888	20.8%
Hanover	86,320	102,015	18.2%
Henrico	262,300	305,577	16.5%
Richmond	197,790	206,459	4.4%
Urban Counties MPO Area	806,313	927,939	15.1%
Regional Total	866,468	1,001,938	15.6%

Source: US Census 2000 and 2008 RRPDC Socioeconomic Data Report

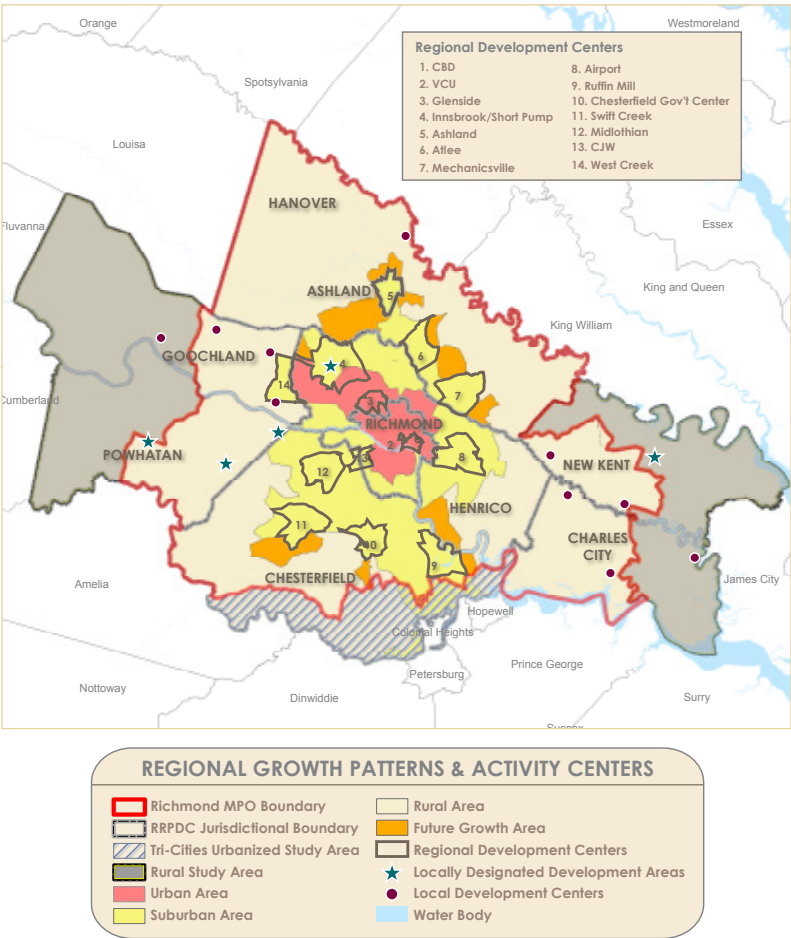
**Includes Chesterfield County population within Richmond Area MPO and Tri-Cities Area MPO

Demographic Trends

The location and extent of disadvantaged population groups was identified in order to determine any gaps or deficiencies in the transportation service network affecting these groups. Disadvantaged groups include low-income, minority, elderly, and people with disabilities, as defined by the US Census as potential indicators of special needs.

The highest concentrations of persons over 65 years of age are located within certain census blocks within approximately three miles of US Route 522 in both Goochland and Powhatan counties. The easternmost Transportation Analysis Zone (TAZ) in New Kent County and the TAZ to the west of US Route 522 in Powhatan County are the rural areas with the largest number of disabled persons according to the 2000 census.

In Goochland County, the highest concentration of persons living below the level of poverty is in the western part of the county. The northeastern area of New Kent County has the highest concentration of persons living below the poverty level in that county.



Future growth areas were defined based on 2035 population and employment projections.

Existing Land Use

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. Existing land uses in the rural study area for Charles City and New Kent counties are principally forested lands with scattered residences. In New Kent County, the five miles along Route 33 between Route 249 and the York River include industrial operations, commercial establishments, and nearby subdivisions. Route 33 also provides an important transportation route between Interstate 64 and many counties in the Middle Peninsula and the Northern Neck. In the rural study area in Charles City County, in addition to forested and agricultural uses, most housing is along the local roads and waterfront of the James and Chickahominy rivers.

In Goochland County, most of the existing land uses are agricultural and forested and scattered residences, except in the Courthouse and Sandy Hook villages. In Powhatan County, the Powhatan Wildlife Management Area on US Route 60 and state-owned land for a future park along near the James River provide open space and recreation; the institutional public/semi-public uses are for correctional facilities; and small subdivisions are located throughout the rural study area of the county.

Using the most recent data from the recently adopted RRPDC 2008 - 2035 Socioeconomic Data, regional growth patterns and activity centers were also identified for the four counties. Future growth areas were defined based on 2035 population and employment projections. No future growth areas have been designated in the rural study area. Additionally, RRPDC staff worked with county planners to identify areas that have been rezoned for development or areas where future development is expected to occur, as well as following each county's Comprehensive Plan. Through this process locally designated development areas (also known as Urban Development Areas or UDAs) and local development centers (designated towns or villages) were identified in the rural study area.

RURAL TRANSPORTATION SYSTEM

Each mode of the travel network relevant to the rural area– roadways, public transportation, para-transit, commuter services, rail, bicycle and pedestrian facilities– has been independently analyzed for both current and forecasted conditions.

Roadway Network

The primary corridors in the rural portion of the region include Interstate Route-64, Route 250 (called Broad Street Road in the area), US Route 60 named Anderson Highway and Virginia Route-711 (Huguenot Trail) that traverse the region in an east-west direction. The north-south corridors include Virginia Route 522 (Sandy Hook Road and Maidens Road), Virginia Route VA-33 (Eltham Road), and Virginia Route A-5 (John Tyler Memorial Highway).

Public Transportation

Public transportation is extremely limited in the rural study area due to the relatively low density of population which cannot economically be supported by a fixed-route bus systems or passenger rail stops. GRTC fixed-route network is only available within the urban area. The nearest AMTRAK stop for the RRPDC area is the Staples Mill Road Station in Henrico or the Main Street Station in Richmond, as well as stops at Ashland in Hanover County and Ettrick in Chesterfield County. Airports, ports, and rail freight facilities are located nearby and serve the area, but are not physically located within the rural study area.

Ridefinders, a division of the GRTC Transit System, assists commuters, including those living in the rural study areas, to find carpools.



Private Transit

On-demand para-transit service for residents of Charles City and New Kent counties is provided by Bay Transit and available to the general public from Monday to Friday from 6:00 AM to 6:00 PM. There is Greyhound bus service in Richmond. Other transportation services are available to commuters or to persons qualified for paratransit services based on age, income, or disability.

Commuter Services

Of the dozen Park and Ride lots in the Richmond region, two (2) provide immediate service to the rural population, including I-64/Route 623 in Goochland and at Bottoms Bridge in New Kent County. Ridefinders, a division of the GRTC Transit System, assists commuters, including those living in the rural study areas, to find carpools. Commuters in the eastern rural study area who are traveling to jobs in Hampton Roads may use a carpool matching service called Traffix.

Bicycle and Pedestrian Facilities

The Charles City Courthouse phase of the Virginia Capital Trail is built and in use. Two subsequent phases are funded and expected to be built in 2012. In the Goochland County Courthouse Village area, there are sidewalks along River Road West from the courthouse area west to the junction of Route 6 and US Route 522. In New Kent Courthouse, there are sidewalks connecting the courthouse and government offices with nearby schools. There are also seven extensive bicycle touring routes throughout the county. There are also sidewalks in Powhatan's Courthouse area.

Goods Movement

The rural study area does not contain any intermodal connections for freight, but rail lines do cross through parts of the region. In New Kent County, freight trains and passenger trains operated by Amtrak move east and west on the CSX freight rail line south of Route 60 between the cities of Richmond and Newport News; there are no passenger stops in the county. Rail freight also passes through New Kent County on the Norfolk Southern freight rail line which crosses the Pamunkey River and terminates in the Town of West Point. Goochland County also has a CSX freight rail line which runs the length of the county along the James River. As one indicator of traffic patterns in the rural area, freight generators and shippers information within TAZs was obtained from the VDOT in 2006.



TRANSPORTATION SYSTEM PERFORMANCE AND RECOMMENDATIONS FOR THE FUTURE

Roadway Network

Roadway analysis focused on identifying safety, geometry and structure, and congestion problems and recommendations for correction. At the beginning of the project, twenty-three (23) locations were selected by the RRPDC to be studied. These were locations in the rural area of the RRPDC with known or potential deficiencies with respect to highway and intersection design characteristics, traffic congestion problems and safety-related issues. Deficiencies and recommendations for the detailed study locations were determined both for the base year and forecast year (2035) conditions. To arrive at the final list of deficiencies within the RRPDC rural area, additional roadways were selected from the following studies/projects: the detailed study locations, the state planning system (SPS), local recommendations, other separate studies, and the Six-Year Improvement Program (SYIP). Recommendations were based on capacity and safety conditions, structural sufficiency, and roadway geometrics. For some of the locations, recommendations have already been proposed, which were reviewed to determine if any updates were needed to be made. A more detailed discussion of all deficiencies and recommendations with planning-level cost estimates is located in the Technical Report.

Recommendations were based on capacity and safety conditions, structural sufficiency, and roadway geometrics.

Bridge Deficiency

Bridge Sufficiency Rating	Functionally Obsolete			Structurally Deficient		
	REPLACE	REPAIR		REPLACE	REPAIR	
	0-50	51-80	80+	0-50	51-80	80+
Charles City	0	0	0	0	0	0
Goochland	1	5	0	2	3	0
New Kent	0	2	0	0	2	0
Powhatan	1	3	0	1	0	0
RRPC Rural Area	2	10	0	3	5	0
Total						



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 lane width, shoulder width, or horizontal and vertical curvature, were identified from the VDOT Statewide Planning System (SPS) database. Higher priorities were given to those roadways with potential geometric concerns that also carried higher levels of traffic. Recommendations to address these needs are identified by jurisdiction. More detailed deficiency data appear in the Technical Report.

b. Bridge Condition

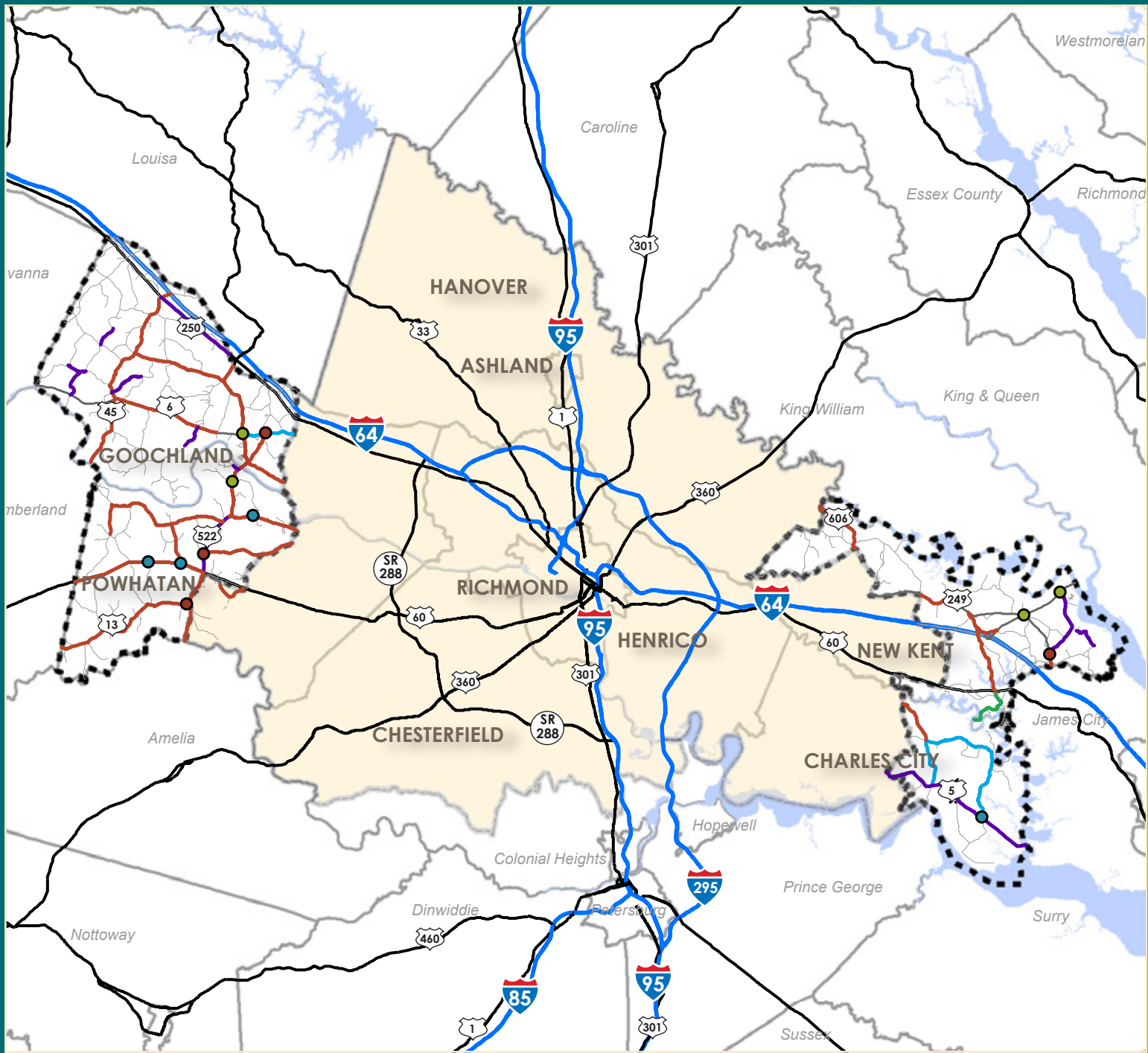
Current bridge sufficiency ratings were reviewed and those structures with a rating of less than 50 were considered deficient and in need of structural upgrade or replacement. These appear in a separate table by jurisdiction.

3. Capacity

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

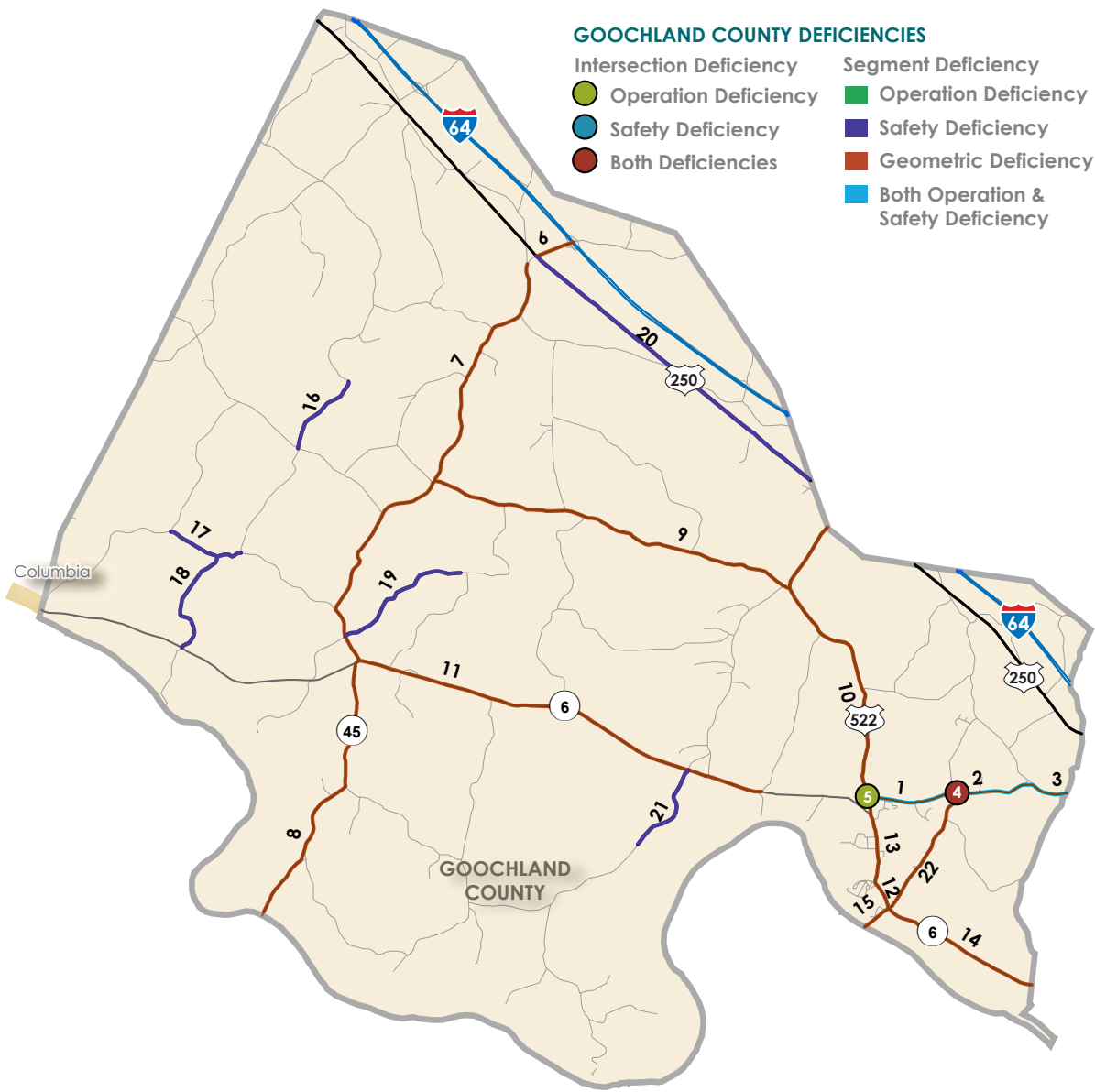
ROADWAY SYSTEM DEFICIENCIES



GOOCHLAND COUNTY RECOMMENDATIONS

- 1
- VA 632 (Fairground Rd.)/US 522 to VA 634
- Long-term install bicycle/pedestrian facilities from US 522 to Rt. 1080; grade, stabilize, and surface treat; increase pavement width as necessary to meet state and local standards for a rural major collector.
- 2
- VA 632 (Fairground Rd.)/VA 634 to VA 637
- Long-term grade, stabilize and surface treat; increase pavement width as necessary pavement width as necessary to meet state and local standards for a rural major collector.
- 3
- VA 632 (Fairground Rd.)/VA 637 to US 250
- Long-term grade, stabilize and surface treat; increase pavement width as necessary to meet state and local standards for rural major collector.
- 4
- VA 632 (Fairground Rd.) at VA 634 (Maidens Rd.)
- Short-term install stop bars on Maidens Rd. approaches; Mid-term install right-turn bay on Maidens Rd. approaches; Long-term remove upgrade on WB approach of Fairground Rd.
- 5
- VA 632 (Fairground Rd.) at US 522 (Sandy Hook Rd.)
- Mid-term continue to pursue roundabout or signalization.
- 6
- VA 629 (Old Fredericksburg Rd.)/I-64 to US 250
- Long-term improve to state and local standards for a rural minor collector.
- 7
- VA 606 (Hadensville-Fife Rd.)/VA 629 to VA 6
- Long-term reconstruct road to address geometric deficiencies; grade, stabilize and surface treat from US 6 to US 250.
- 8
- VA 45/VA 6 to Cumberland CL
- Long-term reconstruct road to address geometric deficiencies; improve safety by straightening curves and widening to a the state and local standards for a rural major collector.
- 9
- VA 673 (Whitehall Rd.)/VA 606 to US 522
- Mid-term replace bridge over Branch of Lickinghole Creek; Long-term reconstruct road to address geometric deficiencies.
- 10
- US 522 (Sandy Hook Rd.)/Louisa CL to VA 6 N.
- Long-term reconstruct road to address geometric deficiencies; grade, stabilize and surface treat from Louisa CL to VA 632.

- 11
- VA 6 (River Rd. West)/VA 45 to VA 607
- Mid-term replace bridge over Branch of James River; Long-term reconstruct road to address geometric deficiencies up to state and local standards for a rural minor arterial.
- 12
- VA 6 (River Rd. W.)/US 522 W. to Valley View Ln.
- Long-term install bicycle/pedestrian facilities.
- 13
- VA 6 (River Rd. West)/Valley View Ln. to US 522 E.
- Short-term construct left turn lanes and install signal – 0.3 mi E. of US 522 to 0.3 mi W. of US 522; Long-term reconstruct road to address geometric deficiencies; install bicycle/pedestrian facilities.
- 14
- VA 6 (River Rd. West)/US 522 to VA 628
- Long-term improve to state and local standards; install bicycle and pedestrian facilities.
- 15
- US 522 (Maidens Rd.)/VA 6 S. to Powhatan CL
- Mid-term repair bridge over CSX tracks; Long-term widen; install bicycle/pedestrian facilities and otherwise bring to state and local standards for a rural minor collector.
- 16
- VA 603 (Tabscott Rd.)/VA 603 (Tabscott Rd.) to VA 610 (Community House Rd.)
- Mid-term repair bridge over Byrd Creek.
- 17
- VA 667 (Old Columbia Rd.)/VA 651 (Lowry Rd.) to VA 603
- Mid-term repair bridges over White Hall Creek and Little Byrd Creek.
- 18
- VA 603 (Elk Island Rd.)/VA 667 (Old Columbia Rd.) to VA 6 (River Rd. W.)
- Mid-term replace bridge over North Branch James River.
- 19
- VA 608 (Davis Mill Rd.)/Griffith Ln. to VA 606 (Hadensville-Fife Rd.)
- Mid-term repair bridge over Allen's Branch.
- 20
- US 250 (Broad St. W.)/VA 606 (Hadensville-Fife Rd.) to Louisa CL
- Mid-term repair bridges over Lickinghole Creek.
- 21
- VA 600 (Rock Castle Rd.)/VA 6 (River Rd. W.) to Boiling Hill Farm Rd.
- Mid-term repair bridge over Big Lickinghole Creek.
- 22
- VA 634 (Maidens Rd.)/VA 6 (River Rd. W.) to VA 632 (Fairground Rd.)
- Long-term straighten and increase pavement width, bringing the road to the state and local standards for a rural major collector.



POWHATAN COUNTY RECOMMENDATIONS

- 23

US 522 (Maidens Rd.)/US 60 to VA 711
Mid-term widen to four lane with grassy median, realign intersection and add turn lanes as necessary and bring to state and local standards of rural minor arterial.
- 24

US 522 (Maidens Rd.)/VA 711 to Goochland CL
Mid-term widen to four lane with grassy median, realign intersection and add turn lanes as necessary; repair bridge over James River and bring to state and local standards for rural minor arterial.
- 25

VA 609/Amelia CL to VA 13
Short-term widen pavement, straighten, realign intersections and add turn lanes as necessary; Long-term bring to state and local standards for rural minor collector.
- 26

PR 13 (Old Buckingham Rd.) at VA 609 (Giles Bridge Rd.)
Short-term install curve warning signs at VA 13 approaches; Long-term reconstruct road to address geometric deficiencies, assess intersection for installation of right-turn bays on Giles Bridge Rd. and NB Rt. 13 approaches and monitor intersection for future safety and functionality upgrades.
- 27

US 522 (Maidens Rd.) at VA 615 (Three Bridge Rd.)
Short-term install curve warning signs on US 522 approaches. Install stop bars on Rt. 615 approaches; Mid-term assess intersection for installation of left-turn bay on WB Three Bridge Rd. and monitor intersection for future safety and functionality upgrades; Long-term reconstruct road to address geometric deficiencies.
- 28

US 522 (Maidens Rd.) at VA 617 (Old River Trail)
Short-term reconstruct road to address geometric deficiencies, add turn lanes, shoulders and realign intersection to accommodate state park traffic and otherwise bring the road up to state and local standards for a rural minor arterial. Project should be funded with state or federal and not local money.
- 29

VA 711 (Huguenot Trail) VA 1285 (Timberview Dr.)
Long-term remove upgrade on southbound approach of Timberview Dr.
- 30

VA 629/VA 630 to VA 684
Long-term reconstruct road to address geometric deficiencies, rectify curvature issues and bring to state and local standards for rural major collector.

- 35

VA 711 (Huguenot Trail)/US 522 to VA 628
Short-term widen pavement, straighten, realign intersections and add turn lanes as necessary; Mid-term repair bridge over Fine Creek; Long-term reconstruct road to address geometric deficiencies and bring to state and local standards.
- 36

VA 615/US 522 to VA 711
Short-term widen pavement, straighten, realign intersections and add turn lanes as necessary; Long-term reconstruct road to address geometric deficiencies.
- 37

VA 13/Cumberland CL to VA 609
Mid-term straighten, realign intersections and add turn lanes as necessary; Long-term reconstruct road to address geometric deficiencies, bridge rehabilitation over Sallee Creek.
- 38

VA 313 (Beaumont Rd.)/Beaumont Rd. to US 522
Mid-term replace bridge over Grigg Lake. Project should be funded using state or federal, and not local, money.
- 39

VA 13/VA 609 to VA 13 Spur
Mid-term widen pavement, straighten, realign intersections and add turn lanes as necessary to meet state and local standards for a rural major connector.
- 40

US 60 (Anderson Hwy)/US 522 to Cumberland CL
Mid-term widen to four lane with grassy median, realign intersection and add turn lanes, as necessary and widen as necessary to meet state and local standards for rural minor arterial.
- 41

US 60 (Anderson Hwy) at VA 627 (Ridge Rd.)
Short-term intersection improvement, add turn lanes and improve sight distance as necessary to meet state and local standards for rural minor arterial.
- 42

US 60 (Anderson Hwy) at VA 684 (Bell Rd.)
Short-term intersection improvement, add turn lanes and improve sight distance as necessary to meet state and local standards for rural minor arterial.

- 31

VA 684 (Cartersville Rd.)/VA 600/VA 621 to VA 629
Long-term reconstruct road to address geometric deficiencies and bring to state and local standards for rural minor collector.
- 32

VA 684 (Bell Rd.)/US 60 to VA 621 (Cosby Rd.)
Mid-term repair bridge over Steger’s Creek; Long-term reconstruct road to address geometric deficiencies.
- 33

VA 621/VA 684 to US 522
Long-term reconstruct road to address geometric deficiencies and to rectify curvature issues.
- 34

VA 13 Spur/VA 13 to US 60
Long-term reconstruct road to address geometric deficiencies; reconstruct to rectify sight distance issues.





NEW KENT COUNTY RECOMMENDATIONS

- 43

VA 273 (Farmer’s Dr.)/VA 30/33 to VA 30
Mid-term repair bridge over Eltham Creek; Long-term raise to state and local standards for rural major collector.
- 44

VA 627 (S. Waterside Dr.)/US 60 (Pocahontas Trail) to VA 1001
Short-term drainage improvements at Fannie’s Creek; Long-term reconstruct road to address geometric deficiencies with shoulders, according to state and local standards for rural minor collector.
- 45

VA (Old Stage Hwy. – New Kent Hwy.) at VA 273 (Farmers Dr.)
Short-term investigate roundabout; Long-term right-turn bay on Farmer’s Dr. and signalization.
- 46

VA 30-33 (Eltham Rd.) at VA 273 (Farmers Dr.)
Mid-term introduce signalization changes to include right-turn overlap for Farmer’s Dr. approach; Long-term intersection improvements.
- 47

VA 33-30 (Eltham Rd.) at VA 30/VA 249 (New Kent Hwy.)
Mid-term introduce signalization changes to include permissive phasing for New Kent Hwy. approaches; Long-term investigate roundabout.
- 48

VA 249 (New Kent Hwy.)/VA 155 to VA 637
Long-term reconstruct road to address geometric deficiencies; widen shoulders and bring to state and local standards for rural major collector.
- 49

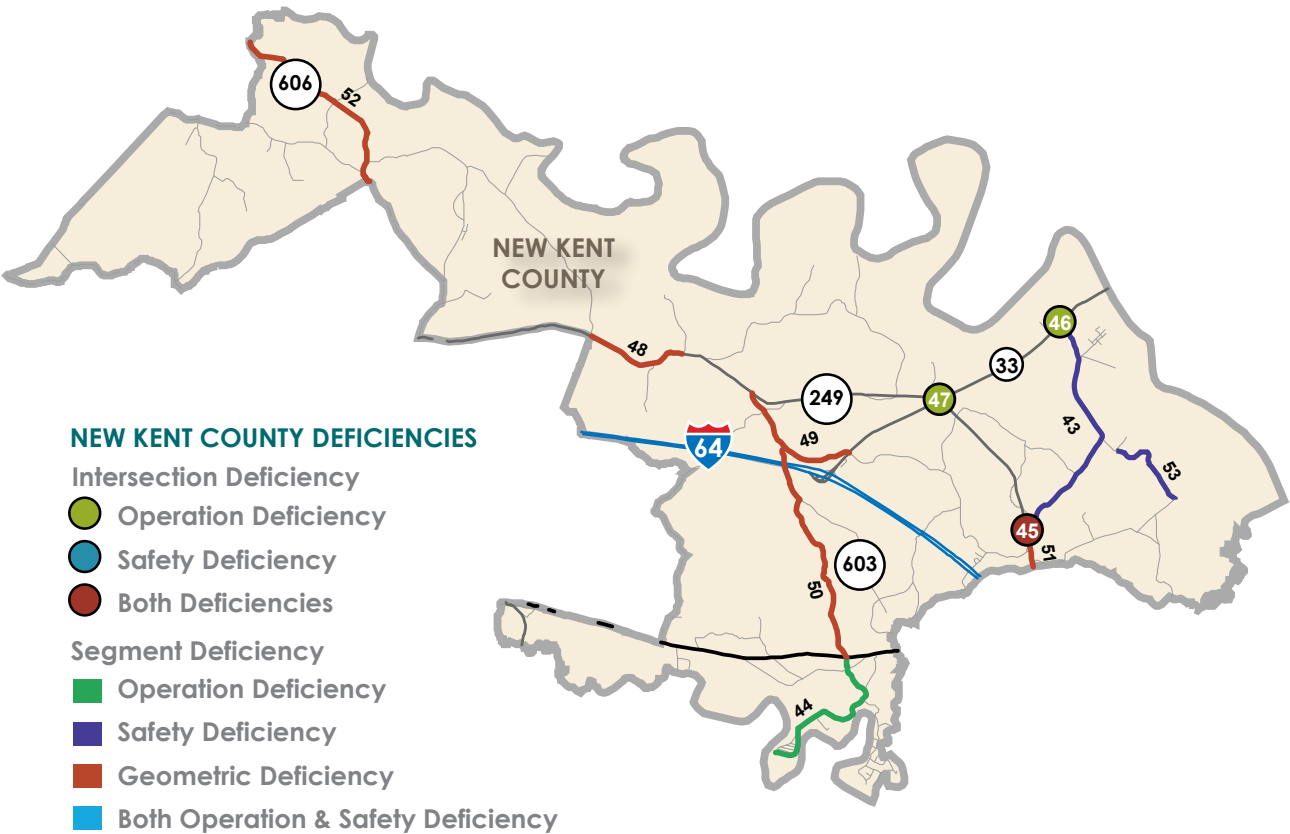
VA 627 (Stage Rd.)/VA 249 to VA 33
Long-term reconstruct road to address geometric deficiencies; widen shoulders and eradicate crown issues and bring to state and local standards for rural minor collector.
- 50

VA 627 (Good Hope Rd./N. Waterside Dr.)/VA 632 to US 60
Long-term reconstruct road to address geometric deficiencies; widen shoulders and bring to state and local standards for rural minor collector.
- 51

VA 30 (Old Stage Hwy.)/VA 273 S. to James City CL
Long-term raise the road to the state and local standards for rural minor arterial.
- 52

VA 606 (Old Church Rd.)/Hanover CL to VA 612
Long-term reconstruct road to address geometric deficiencies and bring to state and local standards for rural major collector.
- 53

VA 600 (Holly Fork Rd.)/VA 673 (Stewart Rd.) to Kirby’s Farm Rd.
Long-term repair bridge over Goddins Mill Pond.





CHARLES CITY COUNTY RECOMMENDATIONS

- 54

VA 623 (Wilcox Neck Rd.)/VA 615 to VA 5
Short-term install horizontal alignment (W 1-2) signage at appropriate locations, paint roadway edgelines; Long-term reconstruct road to address geometric deficiencies (12-foot lanes) with shoulders.
- 55

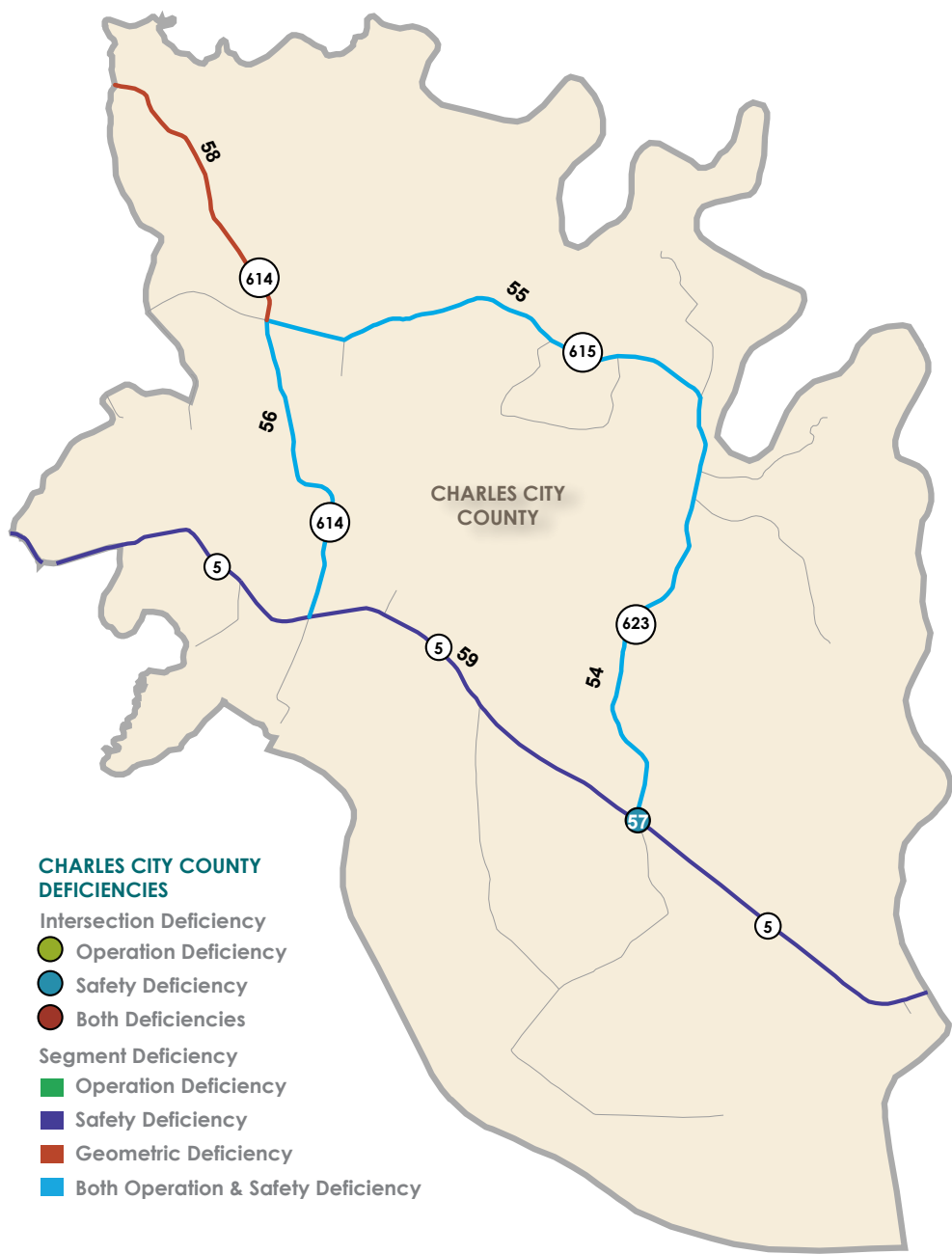
VA 615 (The Glebe Ln.)/VA 614 to VA 623
Short-term paint centerline and edgelines; Long-term reconstruct road to address geometric deficiencies (12-foot lanes) with shoulders.
- 56

VA 614 (Sturgeon Point Rd.)/VA 615 to VA 5
Short-term install horizontal alignment (W 1-2) signage at appropriate locations, paint roadway centerline and edgelines; Long-term reconstruct road to address geometric deficiencies up to state and local standards for a rural minor collector.
- 57

PR 5 (John Tyler Memorial Hwy.) at VA 623 (Wilcox Neck Rd.)
Short term install horizontal alignment and deer warning signage on VA 5 east of intersection.
- 58

VA 614 (Sturgeon Point Rd.)/ VA 155 to VA 615
Long-term reconstruct road to address geometric deficiencies up to state and local standards for a rural minor collector.
- 59

VA 5 (John Tyler Memorial Hwy) from JCC line to MPO boundary
Short term install roadside reflectors along the entire length of roadway similar to that in James City County.



Public and Para-Transit Transportation

Deficiencies and recommendations were compiled from a variety of sources. The Coordinated Human Service Mobility Plan (CHSM, April 2008) prepared for the Richmond/Petersburg Metropolitan Planning Area for the Virginia Department of Rail and Public Transportation (DRPT) covers projects within the MPO boundary. Recommendations included expansion of “current demand-response services to serve greater rural areas” with the initial suggested strategy being expansion of “availability and inclusiveness of demand-response and specialized transportation services to provide additional trips for older adults, people with disabilities, and people with lower incomes.” Possibilities that need to be explored for future service into the rural areas include:

1. Senior Connections which is nonprofit organization to provide information, advocacy, and direct services to seniors and their families and serving the Greater Richmond area, has received a grant from Greater Richmond Transit Company (GRTC) to begin the Richmond Regional Coordinated Mobility Management program called “Ride Connection”. However, the service area will be the urban areas.
2. New Kent and Charles City Counties are serviced by Bay Transit, a division of Bay Aging, providing on-demand, advanced-schedule transit services to residents for a nominal fee.

All of the counties’ comprehensive plans call for bicycle and pedestrian improvements, including sidewalks, trails and touring routes.

3. The Richmond/Hampton Roads Passenger Rail project is evaluating two alternatives – the existing CSXT/Amtrak route from Richmond to Newport News and the Norfolk Southern rail route south of the James River between Petersburg and Norfolk. The CSXT/Amtrak route passes through New Kent County on the north of James River, but no stations have been proposed in the rural counties.
4. The expansion of flexible fixed-route transit service to the western part of Goochland County and northwest part of Powhatan County and fixed-route and flexible fixed-route transit service to the eastern part of New Kent County, along the principal arterials would provide better mobility and access to and from these areas and populations.



Bicycle and Pedestrian Facilities

The primary source of recommendations was the individual jurisdictions' bike plans and/or comprehensive plans. Charles City, New Kent and Powhatan counties have specific bicycle and pedestrian routes in its comprehensive plans. The RRPDC prepared a Regional Bicycle and Pedestrian Plan in 2004 which provides a comprehensive assessment of facilities and recommendations for all jurisdictions in the RRPDC area; however, the plan was not adopted.

In the western part of the study area, majority of the freight generators and shippers are located on the US-250 and I-64 corridors including the Goochland and Powhatan Courthouse areas.

Goods Movement

The Richmond Area Metropolitan Planning Organization (RAMPO) recently released the Richmond/Tri-Cities Intermodal Strategies Study which looked at identification of infrastructural concerns and policies which hindered the efficient movement of goods throughout the Richmond and Tri-Cities region. The transfer of 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). In the western part of the study area, majority of the freight generators and shippers are located on the US-250 and I-64 corridors including the Goochland and Powhatan Courthouse areas. VA-249, VA-33 and US-60 comprise of the majority of the freight generators in Charles City and New Kent counties.

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 going. Designated Local Development Centers also indicate where the individual jurisdictions wish to direct future growth based on the presence of existing transportation infrastructure, water and sewer existing and future capacity, existing retail locations, and major employers. By directing development and in particular businesses and industries that move freight towards these growth areas, there is the potential to maximize the future performance of the region's transportation system and protect and enhance the region's existing agricultural landscape and setting. Each of the Comprehensive Plans offer a future picture of growth as a general guide:

- 1. The **Charles City Comprehensive Plan** states that the location of the county between the two growth areas of Richmond and Williamsburg/ James City County "offers a variety of employment, shopping and recreational opportunities that are not found in rural areas." The plan also discusses plans to protect the natural beauty of Route 5 and other scenic corridors.
- 2. The **Goochland 2028 Plan** states encouragement of "new development in designated growth areas" and designation of rural enhancement areas and protection of the rural character in these areas.

The Charles City Comprehensive Plan also discusses plans to protect the natural beauty of Route 5 and other scenic corridors.

- 3. The **New Kent 2020 Comprehensive Plan** calls for creation of a new "Economic Opportunity" land use classification and includes a future land use map which includes areas of "economic opportunity" mostly along the I-64 corridor and in the north-eastern part of the county. In addition, it also calls for providing "approximately 9-12,000 acres of land for future commercial and industrial development to lessen the fiscal burden on existing residents."
- 4. The **Powhatan County 2010 Long-Range Comprehensive Plan** general land use recommendations include accommodation of "new and diverse residential growth in a compact and mixed-use pattern along the Route 60 Corridor and along Route 711 east of the Route 288 interchange on large parcels in rural areas."

By directing development and in particular businesses and industries that move freight towards these growth areas, there is the potential to maximize the future performance of the region's transportation system and protect and enhance the region's existing agricultural landscape and setting.



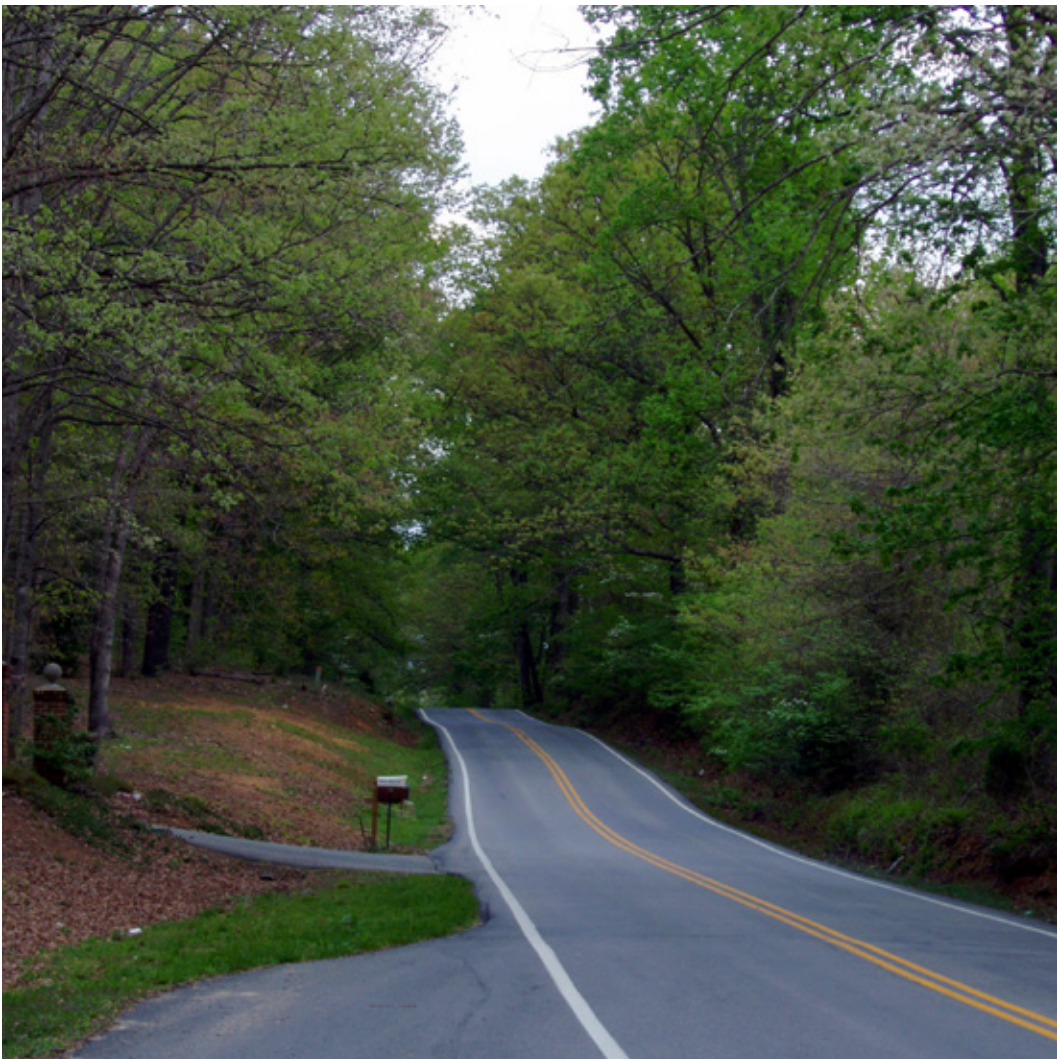
Travel Demand Management

In rural areas, low residential densities and dispersed work destinations are not conducive to high public transportation use. A majority of the work commutes are to Henrico County and the City of Richmond. Decreases in single-occupant vehicle trips are possible in and around the towns and on heavily traveled commuter routes.

RideFinders, a division of GRTC, provides transportation demand management services in the region including promotion of carpooling and vanpooling, and other employer-based trip reduction, single occupant vehicle-diversion activities and other TDM strategies in the region. Ride Finders promotes use of park and ride lots provided by VDOT or local jurisdictions, runs a guaranteed-ride-home program, and bicycling and walking as a part of its multimodal program approach.

A decrease in single-occupant vehicle trips is possible through the continued and expanded use of the Ridefinders services based in the Richmond region. Further reductions could be possible if fixed-route service was expanded throughout the region. Commuter bus service, to Richmond from the eastern part of the Goochland County and anticipated growth areas and UDAs in New Kent and Powhatan counties could reduce single-occupant trips along the major roadway corridors throughout the region. The park and ride lots in the region are expected to maintain their importance to the commuting population.

This Plan will serve as a long term strategy for the rural transportation network of the region and as a component of the 2035 Surface Transportation Plan currently underway.



PLAN COMPLETION

The Rural Long Range Transportation Plan will serve as a long-term strategy for the rural transportation network of the region and as a component of the 2035 Surface Transportation Plan currently underway. 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.

REFERENCES

Charles City County, *Comprehensive Land Use Plan draft*, 2009.

Goochland County, *2028 Comprehensive Plan*, February 2009.

New Kent County, *Comprehensive Plan, Vision 2020*, August 2003.


County of Powhatan, *2010 Long-Range Comprehensive Plan*, June 2010.

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

Virginia Department of Rail and Public Transportation, *Richmond Regional Planning District Commission Coordinated Human Service Mobility Plan*. Richmond, VA: DRPT, 2008.

Virginia Department of Transportation, *Richmond Regional Bicycle and Pedestrian Plan*, July 2004.

Richmond Area Metropolitan Planning Organization (RAMPO), *Richmond Regional Socio Economic Data Analysis*, February 2011.



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

www.richmondregional.org

www.virginiadot.org

