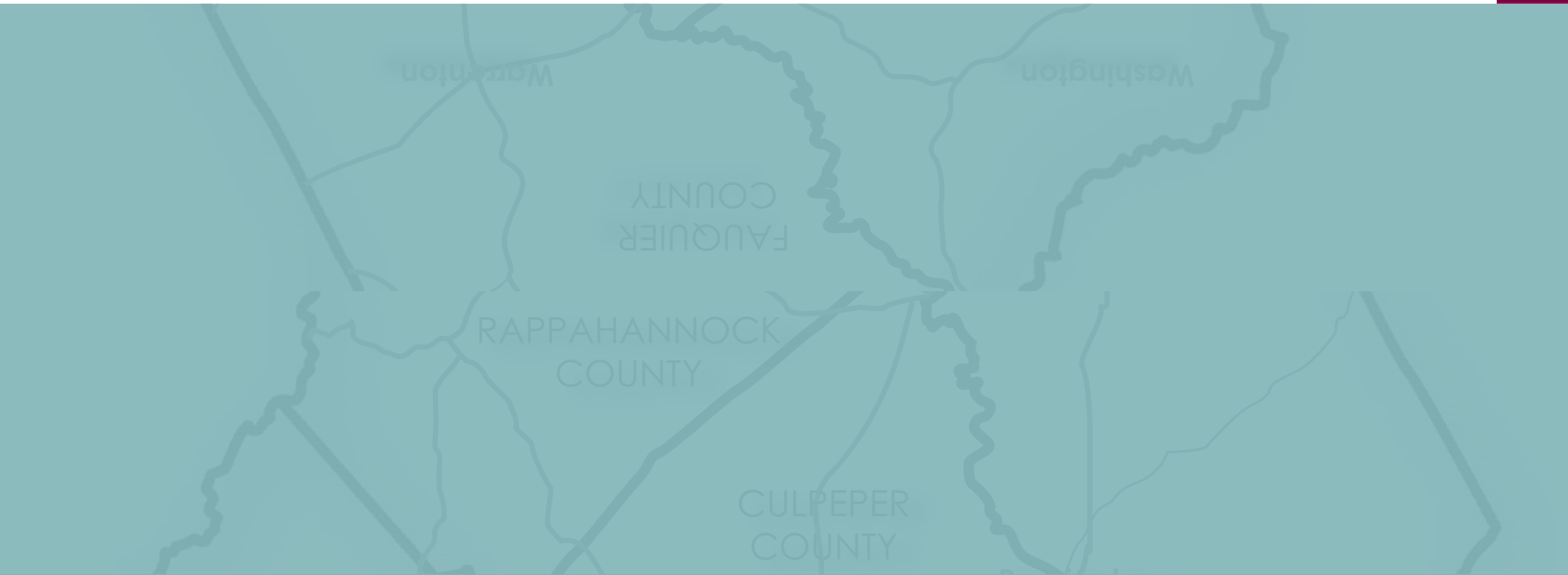




Please visit the VDOT website to find additional information regarding this and other important transportation initiatives in your area.

[www.virginia.gov](http://www.virginia.gov)

[www.rtrregion.org](http://www.rtrregion.org)

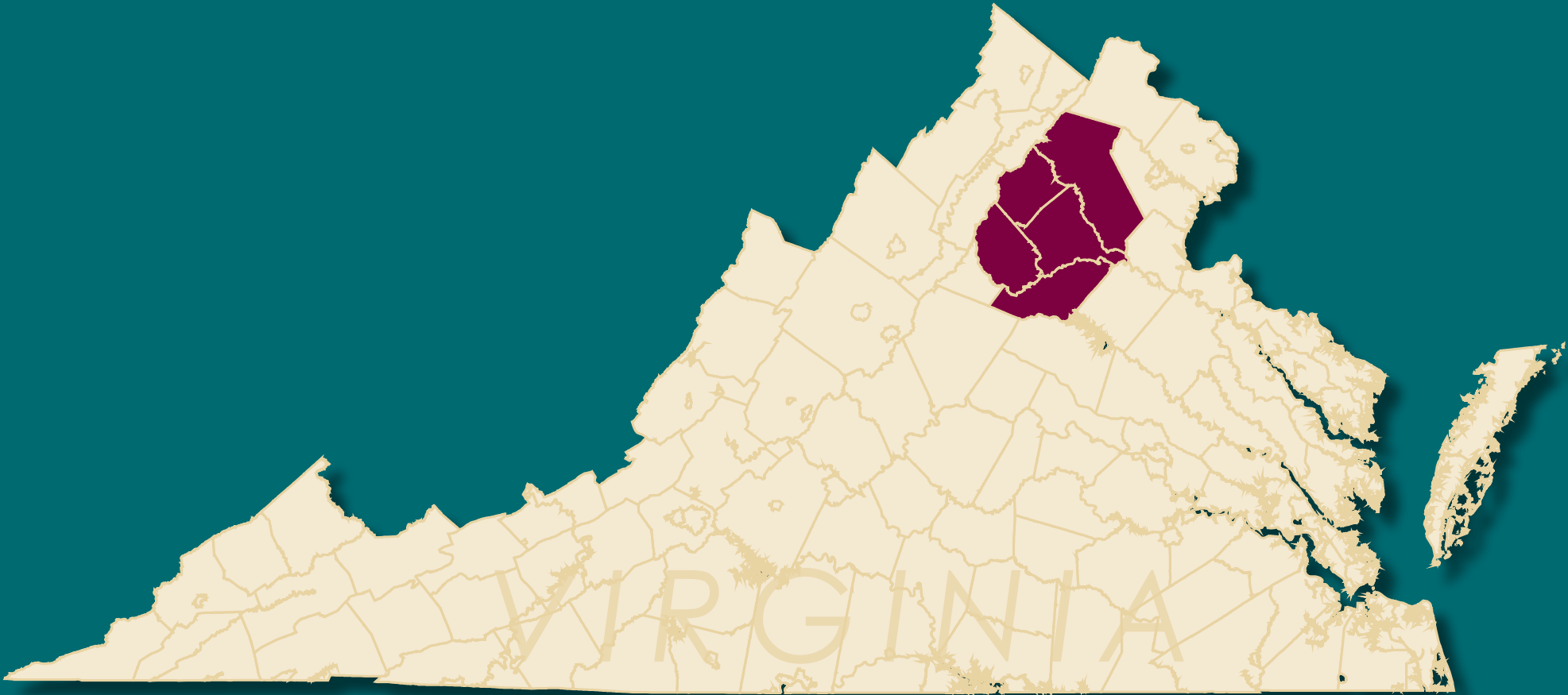


## RAPPAHANNOCK-RAPIDAN REGIONAL COMMISSION

### 2035 REGIONAL LONG RANGE TRANSPORTATION PLAN



# RAPPAHANNOCK-RAPIDAN REGIONAL 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 areas that complement those in Virginia's metropolitan and small urban 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 an MPO. In the case of the Rappahannock-Rapidan region, there is no MPO and the entire transportation network within the Rappahannock-Rapidan Regional Commission (RRRC) was analyzed and addressed in this report.

Each rural regional plan has a horizon year of 2035 and addresses the anticipated impacts of population and employment growth upon the transportation system. This plan will be reviewed and updated as needed.

Each rural plan was developed as a vision plan, addressing all needs of the transportation system studied regardless of anticipated funding availability. It is envisioned that each regional plan will be used to identify transportation funding priorities. Therefore, this plan is financially unconstrained and projects have not been prioritized. The needs were identified based on reviews of roadway mobility performance, safety and crash information, bridge sufficiency data, and roadway geometrics such as narrow lanes, inadequate sight distance, or availability of turn lanes.

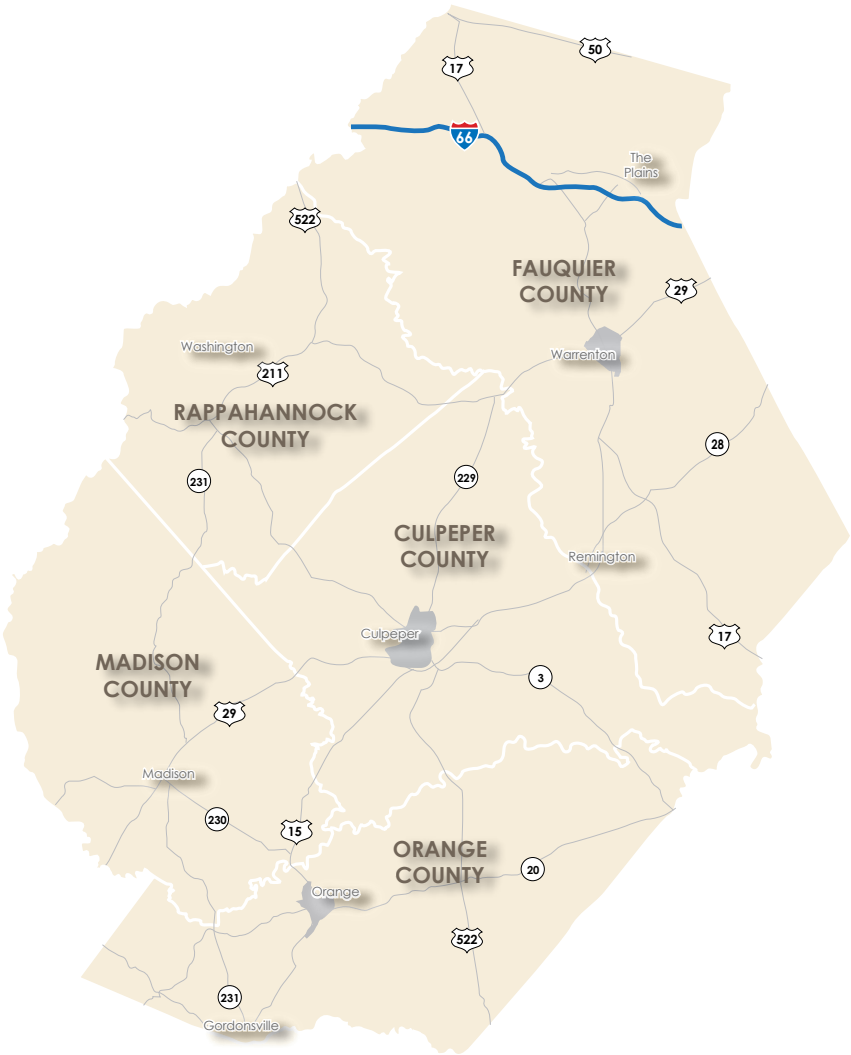


*Each rural plan was developed as a vision plan, addressing all needs of the transportation system studied regardless of anticipated funding availability.*

## OVERVIEW OF THE REGION

### Description and Function of the Rappahannock-Rapidan Regional Commission

The RRRC serves the counties of Culpeper, Fauquier, Madison, Orange, and Rappahannock and the towns of Culpeper, Gordonsville, Madison, Orange, Remington, Warrenton, and Washington. Located in the northern portion of Virginia's Piedmont region, the Rappahannock-Rapidan region is an area of approximately 1,965 square miles, with a current estimated population of over 168,000 people (Weldon, 2009). The region is defined by the Rappahannock and Rapidan rivers, which form the borders between several of the counties. The geographic setting is characterized by compact, historic towns, surrounded by rolling topography and scenic



rural landscapes. The region is in itself rural, but surrounded to the north, east, and south by larger metropolitan areas: Washington DC, Fredericksburg, and Charlottesville. Fauquier County is part of the Washington, DC-Maryland-Virginia-West Virginia Metropolitan Statistical Area. Due largely to its proximity to these metropolitan areas, the region is currently experiencing population growth and additional residential and commercial development.



Goals and Objectives

Needs for each regional plan were developed based on regional and statewide goals and objectives. A basic goal for all transportation programs in Virginia is the provision for the effective, safe, and efficient movement of people and goods. The plan for the RRRC was developed with this primary goal in mind, along with other goals including consideration for environmental issues and local travel desires. Each PDC developed transportation goals and objectives that were used to guide the development of the *Rural Long Range Transportation Plan* for their area. Goals for the RRRC include:

- GOAL 1** Promote land use patterns that maximize the efficiency of the transportation network.
- GOAL 2** Establish regional transportation priorities based on consensus and consistency throughout the region, while recognizing the autonomy of each jurisdiction's planned growth and/or economic development efforts.
- GOAL 3** Provide for the effective, safe, and efficient movement of people and goods.
- GOAL 4** Develop an efficient regional transportation network, that provides for the efficient movement of goods and people, and improves upon the existing system to serve both local and through traffic.
- GOAL 5** Develop a safe regional transportation network.
- GOAL 6** Promote transportation improvements that enhance quality of life.
- GOAL 7** Encourage development of multi-modal transportation such as bicycle, pedestrian, carpooling and ridesharing, public transit, air, and rail to reduce congestion, complement existing transportation facilities, and improve air quality.



Common Rural Long Range Plan Goals

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

- GOAL 1** Enhance the connectivity of the existing transportation network within and between regions across all modes for both people and freight.
- GOAL 2** Provide a safe and secure transportation system.
- GOAL 3** Support and improve the economic vitality of the individual regions by providing access to economic opportunities, such as industrial access or recreational travel and tourism, as well as enhancing 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

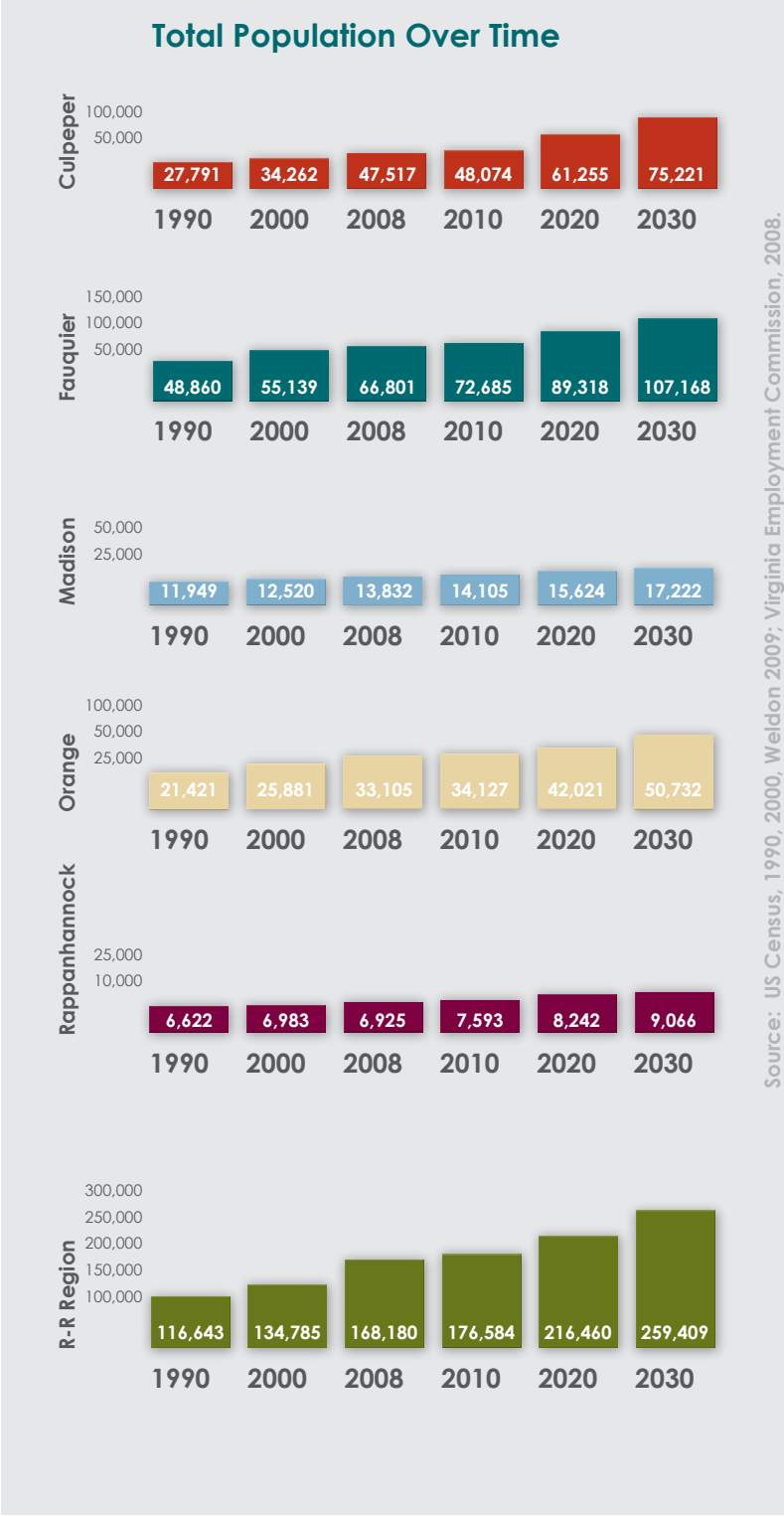
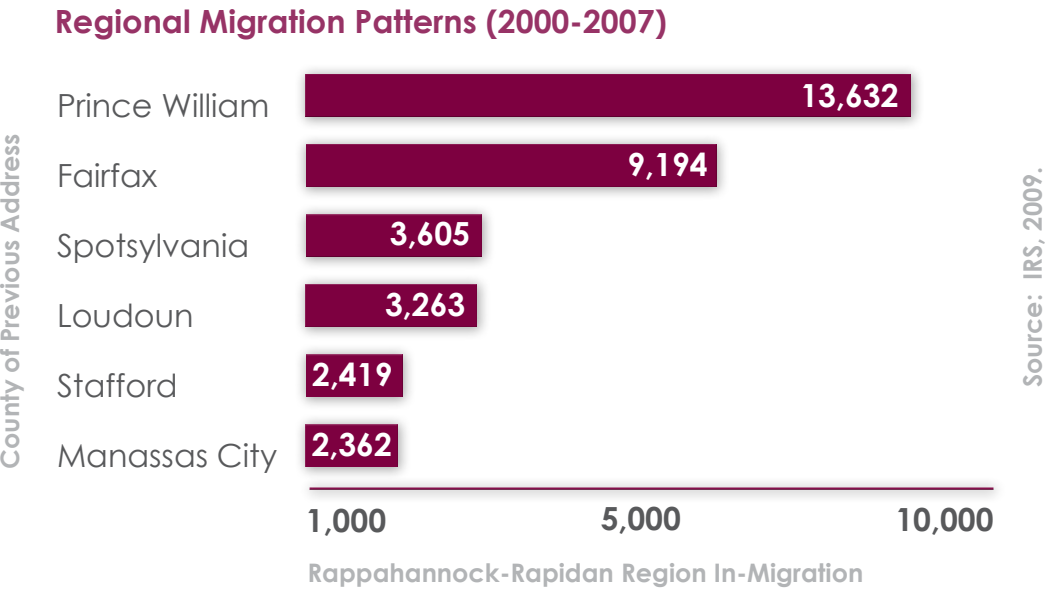
Rural counties throughout the Commonwealth and the Rappahannock-Rapidan region are working to balance growth seeking new economic growth and diversification, while striving to preserve the rural character of the landscape. Most of the land in these counties is in agricultural or forested use, with more intensive land use in the towns and village centers, typically at the intersection of two roadways. There is a broad spectrum of the amount of growth and land use changes occurring throughout the Commonwealth and the Rappahannock-Rapidan

region, based particularly on proximity to urban areas. Many of the rural counties are trying to direct any new growth towards existing towns, village centers, or service districts in order to provide services and to continue to address the needs of residents as well as maintain a general agricultural setting. As the population fluctuates, either through in- or out-migration or shifting within the region, the needs of the communities (including education, health care, social services, employment, and transportation) shift and fluctuate as well. Land use and development changes that particularly affect transportation in rural areas include, but are not limited to, school consolidation,

*The region ranked second among all the PDCs in Virginia in terms of population growth from 2000-2008, with a growth rate of 24.8% over the eight-year period (Weldon, 2009).*

loss or gain of a new 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.

Even though the Rappahannock-Rapidan region has its roots in agriculture with the associated rural landscapes and traditional small, historic towns, it is experiencing considerable growth because of its proximity to large metropolitan areas and, in particular, because people and businesses are seeking less expensive housing and land, second homes, and retirement



opportunities. The region ranked second among all the PDCs in Virginia in terms of population growth from 2000-2008, with a growth rate of 24.8% over the eight-year period (Weldon, 2009). This growth has contributed to increased traffic congestion and related issues that pose challenges for county and town leaders and planners to address through their planning processes.

## Population Trends

Regional population increased by 24.8% between 2000 and 2008. The rate of growth was not distributed evenly throughout the region. The counties of Culpeper, Fauquier, and Orange, which border the Northern Virginia/Washington DC metropolitan area, Fredericksburg, and Charlottesville, experienced the vast majority of the growth. Population projections for the region exhibit these trends as well. The populations in Culpeper, Fauquier, and Orange counties are expected to increase by more than 50% by 2030; in Madison and Rappahannock counties, the projections are for a 25% increase.

Increase in county populations is not only due to natural increase (more births than deaths) but also due to greater in-migration to the region than out-migration from the region. Migration into the region from 2000 to 2007 primarily came from localities to the north and east of the Rappahannock-Rapidan region, with migration from the Washington, DC and Fredericksburg areas exceeding 34,000. This population growth and increased development have created changes in transportation patterns and traffic congestion.

Population trends have implications for the transportation network of any geographic area. As the population and traffic increases, mobility and safety can suffer. In the case of the Rappahannock-Rapidan region, increasing pressure on the network has already resulted in changes to the network such as additional capacity demands on the roadways and additional demand for public transportation and travel demand management services. The region has experienced growth in through traffic between Northern Virginia and Charlottesville. US 17, US 29, US 15, and VA 20 have become alternatives to the heavily traveled interstates located east and west of the Rappahannock-Rapidan region.

### Demographic Trends

Disadvantaged population groups were studied in order to determine if there are any gaps or deficiencies in the transportation network that could affect these groups. Disadvantaged groups studied include low-income, minority, elderly, and people with disabilities, as defined by the US Census. Currently, the counties within the region have minority populations and low-income populations at or below the state percentages of 29.9% and 9.6%, respectively. However, the portion of the population with disabilities in both Madison and Orange counties are above the state percentage of 18.1%. All of the counties, except for Fauquier County, have elderly populations in a higher proportion than the state proportions in 2000 (11.2%).



### 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, are more dependent on demand responsive transit in a rural area than in urban areas. This is due to the smaller network of fixed transit routes in rural areas when compared to urban areas. The RRRC, in conjunction with the Virginia Department of Rail and Public Transportation (DRPT)'s statewide effort, recently completed a Coordinated Human Service Mobility (CHSM) Plan that assessed the mobility needs of these target populations. Additional demand responsive transit or in some cases, determining a single point of contact for providers, is a need that is being identified throughout the Commonwealth.

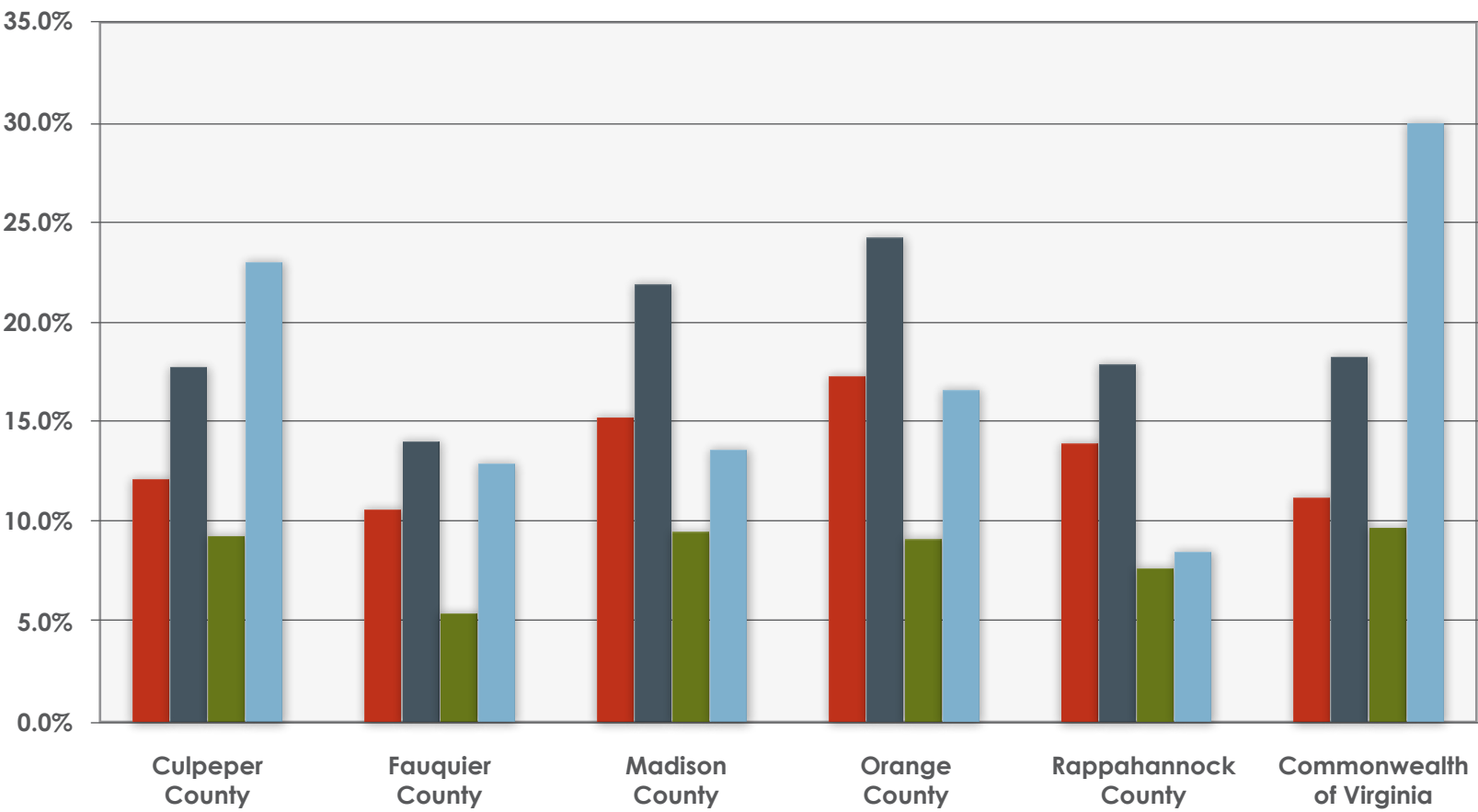
*As the population and traffic increases, mobility and safety can suffer.*

#### LEGEND

- Elderly
- Disability
- Low-Income
- Minority

Source: US Census, 2000.  
Note: Disability 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 R-R Region





# REGIONAL TRANSPORTATION SYSTEM



Each mode of travel – roadways, human services transportation (public transportation), freight, rail, bicycle and pedestrian facilities, airports, and travel demand management – has been independently analyzed for both current and forecasted conditions.

## Roadways

Primary east-west corridors include: I-66, US 211, VA 3, VA 28, and VA 20; north-south corridors are US 15, US 17, US 29, US 522, and VA 231. Scenic Byways, identified by both the U.S. Department of Transportation and VDOT, are an important part of the transportation system in the region. The *Journey Through Hallowed Ground National Scenic Byway*, follows parts of VA 20, VA 231 and US 15, and there are more than 30 State Scenic Byways identified by VDOT in the region.

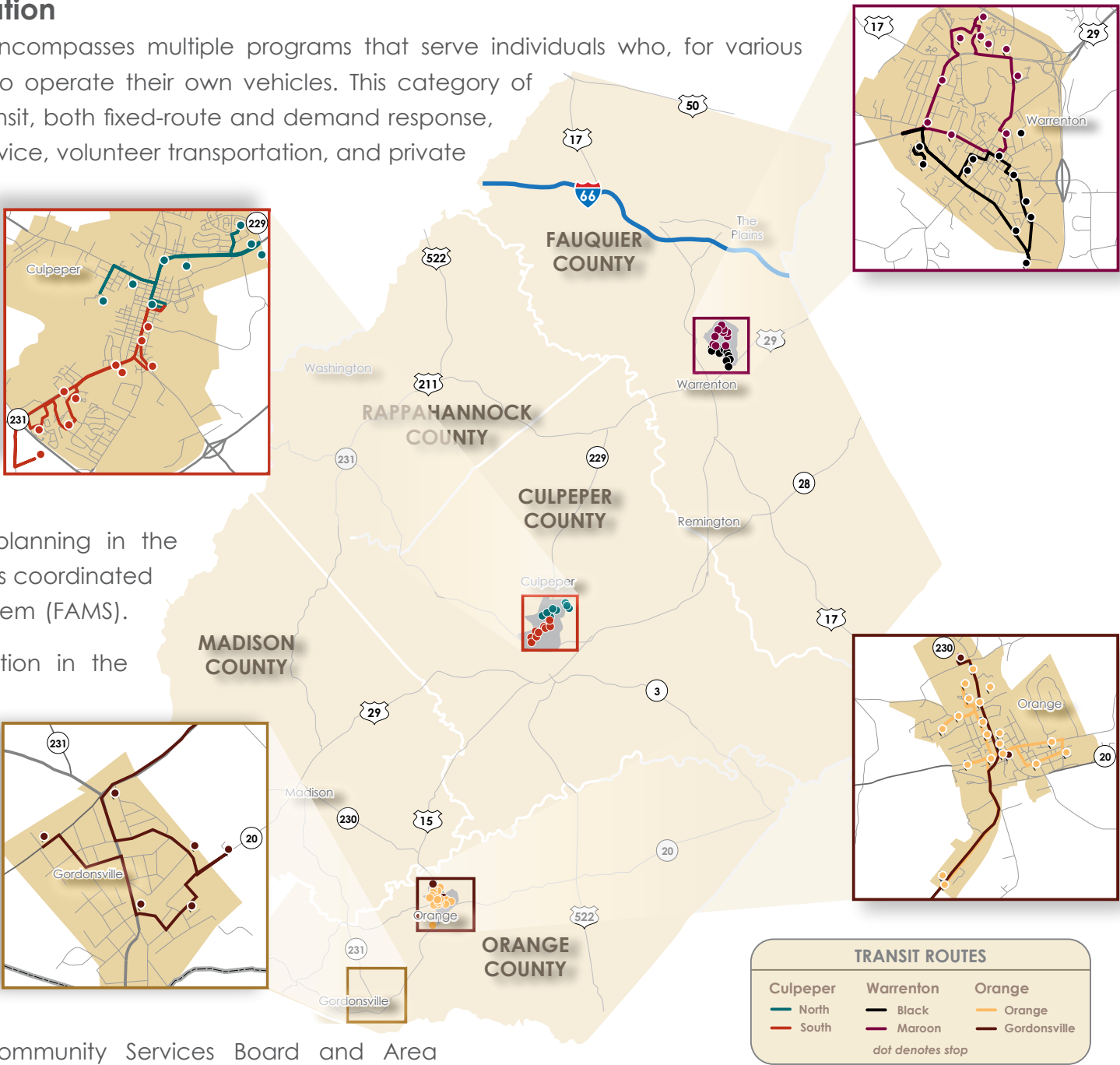


## Human Services Transportation

Human services transportation encompasses multiple programs that serve individuals who, for various reasons, cannot or choose not to operate their own vehicles. This category of transportation includes public transit, both fixed-route and demand response, specialized demand response service, volunteer transportation, and private providers, including taxi and medical transport companies. Most public transportation programs are designed to meet the needs of elderly and low-income residents, and residents with disabilities; however, some of these services also serve the objectives of travel demand management. Human services transportation planning in the Rappahannock-Rapidan Region is coordinated by the Foothills Area Mobility System (FAMS).

All fixed-route public transportation in the region is provided by Virginia Regional Transit (VRT), which operates in the Towns of Culpeper, Warrenton, Orange and Gordonsville. VRT also provides demand response service along these fixed routes, and in the Counties of Fauquier and Culpeper. There is no inter-county public transit service.

The Rappahannock-Rapidan Community Services Board and Area Agency on Aging (RRCSB/AAA) is the largest specialized demand response provider in the region. It also operates the largest volunteer transportation program.



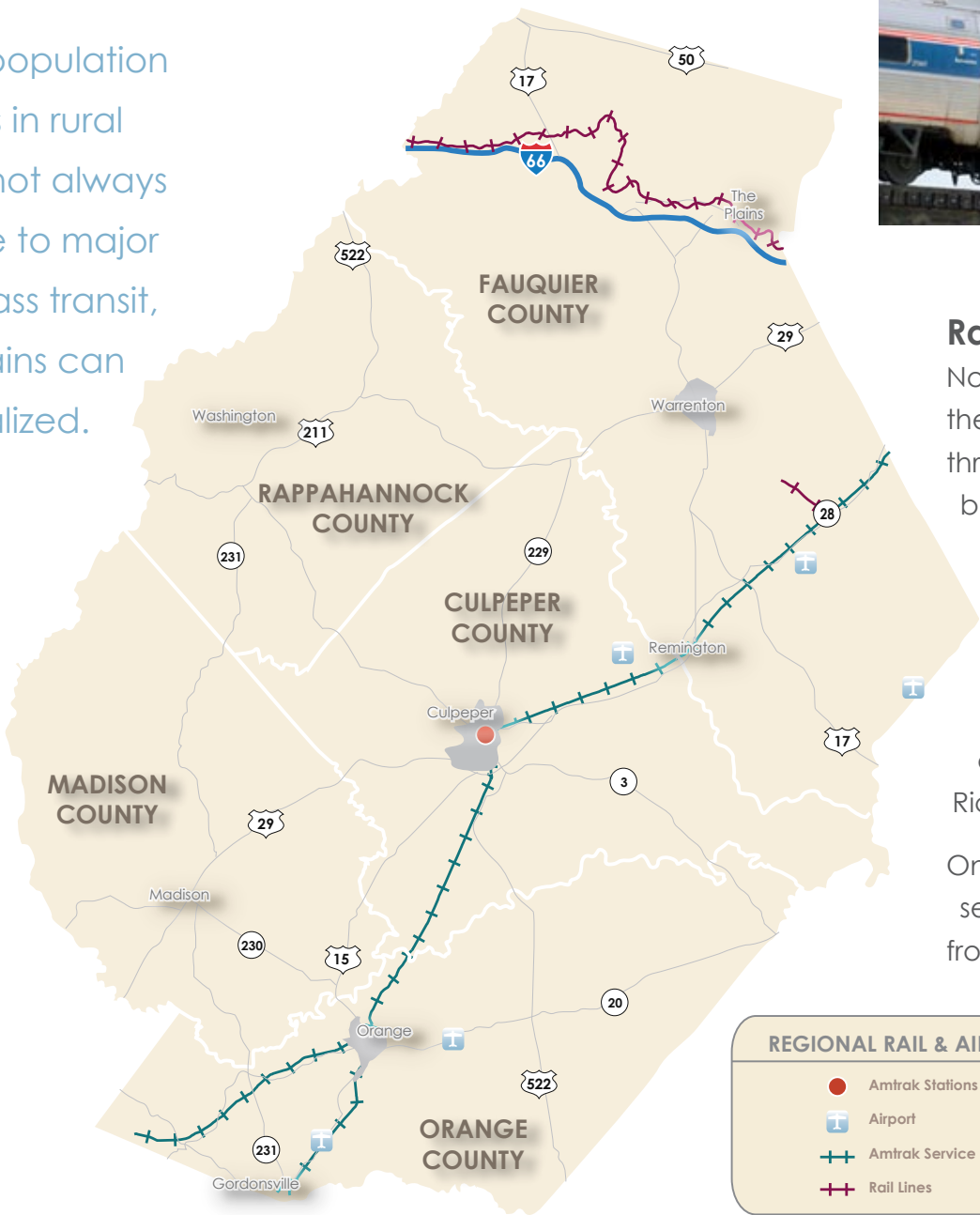
While low population densities in rural areas are not always conducive to major shifts to mass transit, some gains can be realized.



Rail and Airports

Norfolk Southern owns the freight rail lines in the region. Twelve freight trains operate daily through the region, providing service to businesses and industries. There are five general aviation facilities located in the Rappahannock-Rapidan region: in Elkwood (Culpeper Regional); Gordonsville; Midland (Warrenton-Fauquier); Orange; and Somerville. The nearest commercial airports are in Dulles, Charlottesville, and Richmond.

One Amtrak station, in the Town of Culpeper, serves three routes: the Crescent, which runs from New York to New Orleans, and the Cardinal/ Hoosier State, which operates between New York and Chicago three days per week. An additional daily Amtrak route originating in Lynchburg with destinations as far north as Boston began service in October 2009.



REGIONAL RAIL & AIRPORTS

Amtrak Stations

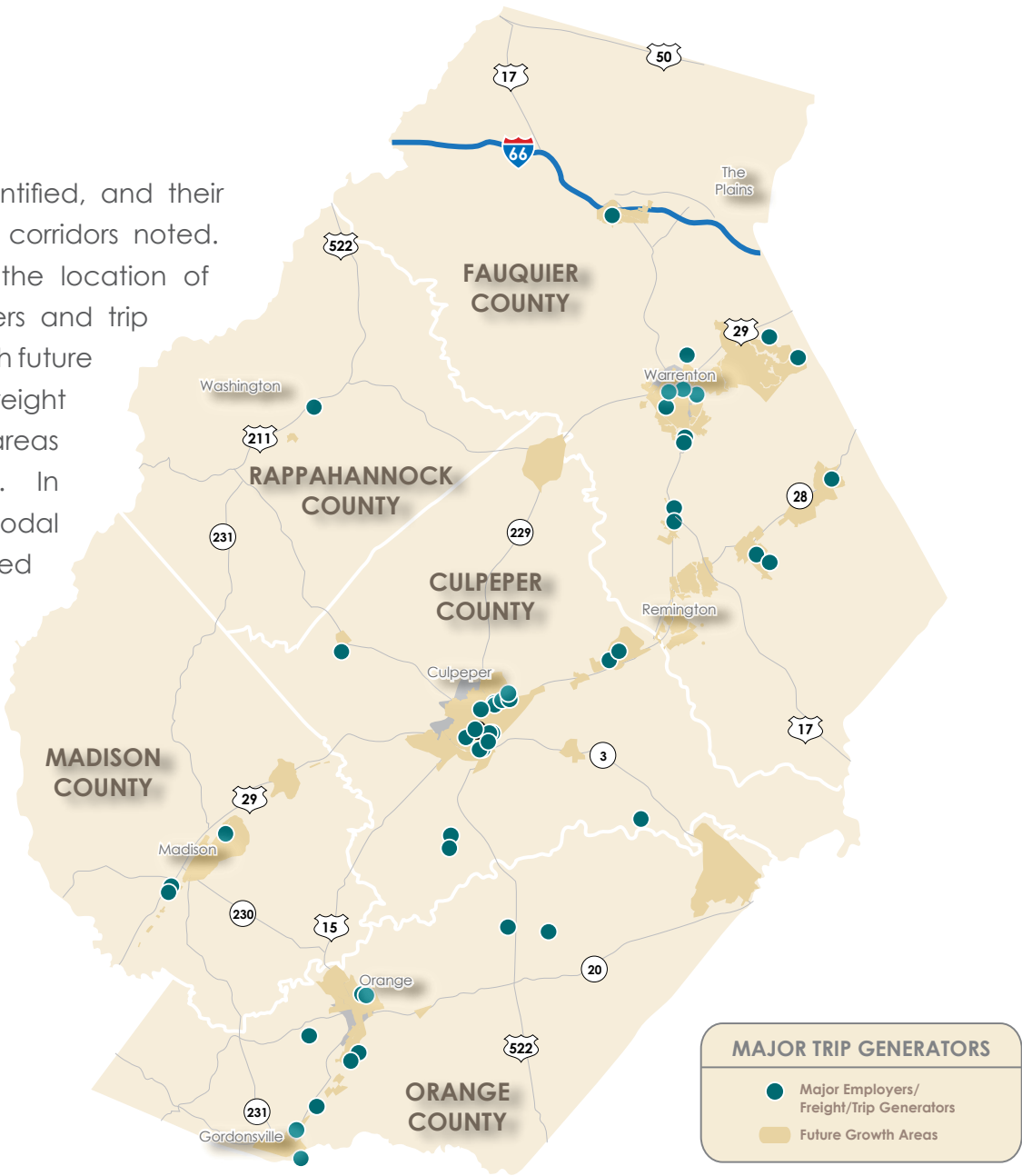
Airport

Amtrak Service

Rail Lines

Freight and Future Growth Areas

Freight generators within the RRRC were identified, and their proximity to nearby major roadway and rail corridors noted. The RRRC, working with VDOT, determined the location of freight generators along with major employers and trip generators. These sites were mapped along with future growth areas in the region; it is clear that freight generators are generally located in and near areas identified as growth areas within the region. In collaboration with the Office of Intermodal Investment, the RRRC has prepared a detailed Regional Freight Study, which was released in 2010.

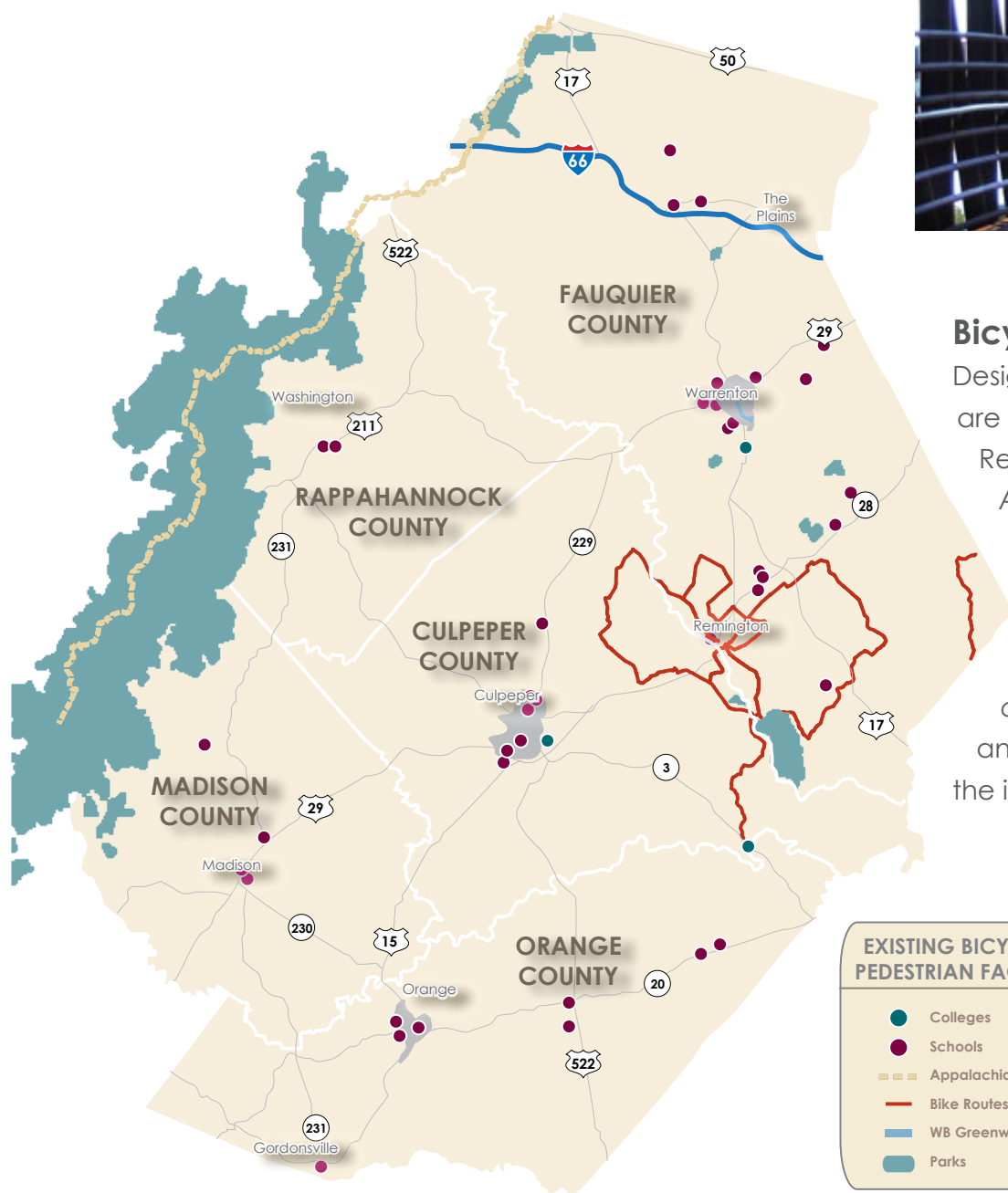


MAJOR TRIP GENERATORS

Major Employers/  
Freight/Trip Generators

Future Growth Areas





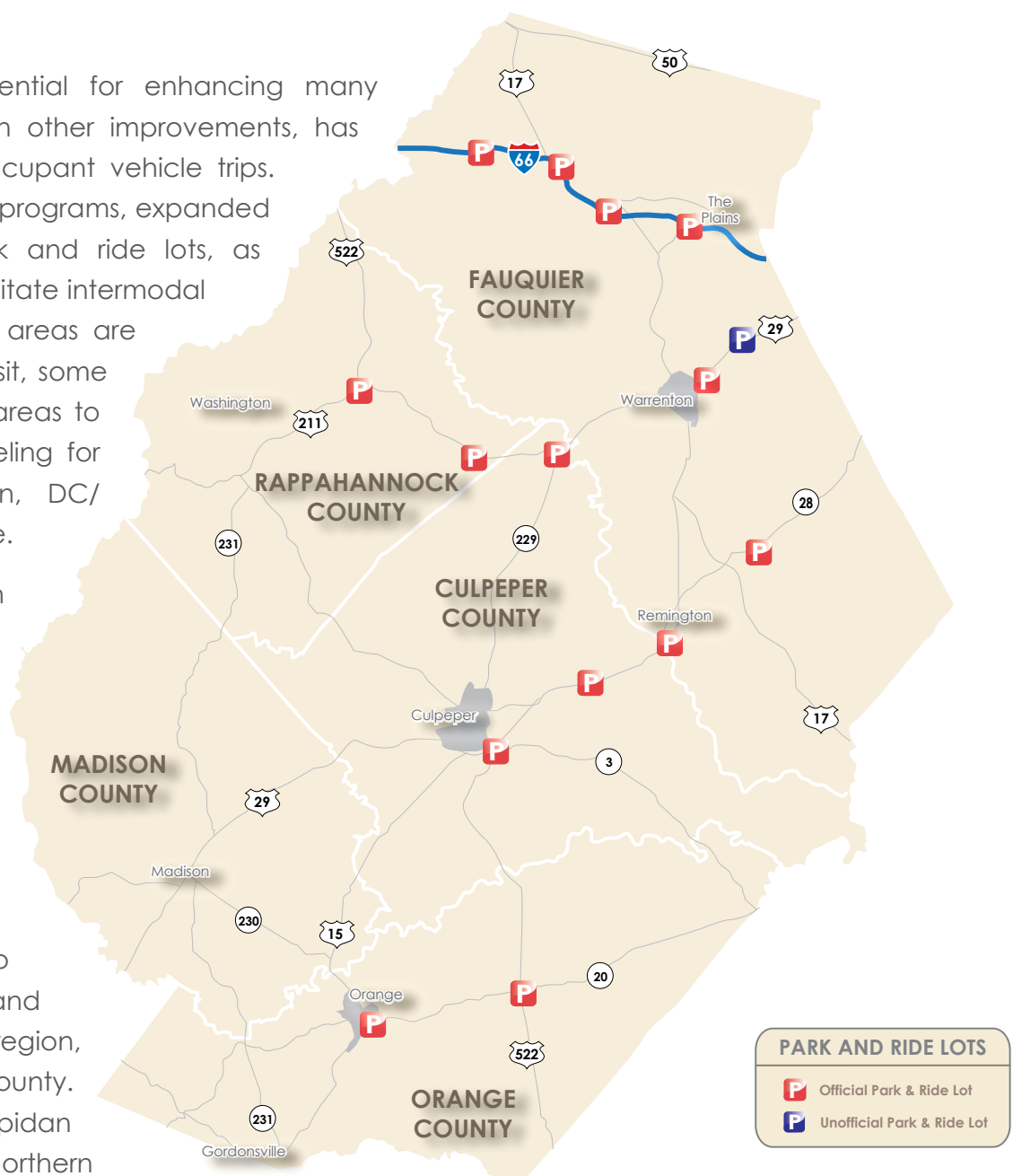
## Bicycle and Pedestrian Facilities

Designated bicycle routes and pedestrian facilities are currently located in the Towns of Culpeper, Remington, and Warrenton. In addition, the Appalachian Trail runs across the entire northwest portion of the region. Plans to expand the bicycle network are underway in parts of the region. Several local plans and the *RRRC Regional Bicycle and Pedestrian Plan* (2007) detail the existing and potential future facilities for the region and the individual member jurisdictions.

## Travel Demand Management

Travel demand management (TDM) holds potential for enhancing many elements of the transportation network, and with other improvements, has been shown to greatly aid in reducing single-occupant vehicle trips. TDM measures include carpooling and vanpooling programs, expanded peak hour public transit, commuter buses, park and ride lots, as well as better coordination between modes to facilitate intermodal transfers. While low population densities in rural areas are not always conducive to major shifts to mass transit, some gains can be realized. There are concentrated areas to which commuters in the RRRC are currently traveling for employment, primarily, Northern VA/Washington, DC/ Northern Virginia, Fredericksburg, and Charlottesville.

RRRC Commuter Services, made possible through funding from DRPT, provides rideshare/vanpool matching services for residents of the region, in addition to other TDM-related assistance. In addition, Commuter Services currently partnered with Scenic America, Inc. to provide and market daily commuter bus service from Culpeper and Fauquier counties to Northern Virginia and Washington, DC. The service was started in January 2009 through a demonstration grant awarded to RRRC by DRPT. There are presently 14 official and unofficial park-and-ride lots throughout the region, with approximately half of these in Fauquier County. Lots in the northern half of the Rappahannock-Rapidan region serve, in general, commuters to Northern Virginia, while those in the southern half serve commuters to Fredericksburg and Charlottesville. There is no commuter rail service in the region, but the current western terminus of the Manassas line of Virginia Railway Express (VRE) is seven miles east of Fauquier County at Broad Run/ Airport Station in Prince William County.



# TRANSPORTATION SYSTEM PERFORMANCE & RECOMMENDATIONS

## Roadways

Roadway analysis focused on safety, geometry and structure, and congestion. The RRRC, in conjunction with member local jurisdictions, prepared a list of roadway priority study locations and safety assessment locations based on reviews of available data sources, input at public meetings, and information provided by local and regional officials. 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

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

updated analysis. Within the R-R Region, 43 priority locations were analyzed; recommendations for these locations are identified separately in the list of recommendations that follow. Ten of these locations were identified for assessment of congestion concerns, while the remaining 33 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.

The priority study location list is based on roadway performance measures, safety considerations, or a combination of the two.

## Bridge Deficiency Summary

Bridge Sufficiency Rating	Functionally Obsolete			Structural Deficiency		
	REPLACE	REPAIR		REPLACE	REPAIR	
	0-50	51-80	80+	0-50	51-80	80+
Orange	0	4	0	1	1	0
Culpeper	1	16	1	3	2	0
Fauquier	4	45	6	19	4	0
Rappahannock	2	13	4	14	3	1
Madison	3	9	1	1	2	0
PDC Total	10	87	12	38	12	1



### 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. Sufficiency evaluates factors such as load, visual structural deficiencies (cracks, concrete visibly missing), adequacy of the foundation, and the remaining life of the superstructure including pavement condition. These appear in a separate table by jurisdiction.

### 3. Capacity

Level of service analyses were performed on all functionally classified roadways in the RRRC to assess current and projected year 2035 operations. In addition, analyses were conducted for intersections identified by the RRRC and local governments as priority study locations. The recommendations to address the deficient locations are identified as operational or safety, by jurisdiction. Current Day, 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

### Intersection Deficiency

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

### Segment Deficiency

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

CULPEPER COUNTY RECOMMENDATIONS

- 1

US 29/VA 663 (Alanthus Rd.)  
Mid-term extend turn lanes; Reconfigure/relocate parking near the intersection.
- 2

VA 666 (Greens Corner Rd.)/VA 663 (Stevensburg Rd.)  
Short-term maintenance; Long-term relocate/realign VA 663 to improve sight distance.
- 3

VA 685 (Chestnut Fork Rd.)/VA 729 (Eggbornsville Rd.)  
Short-term maintenance; Long-term straighten/realign curves.
- 4

VA 643 (South Merrimac Rd.)/VA 603 (White Shop Rd.)/VA 645 (Kirtley Trail)  
Short-term maintenance; Long-term reconstruct to widen all approaches.
- 5

VA 604 (Emerald Hill Rd.)/VA 605 (Major Brown Rd.)  
Short-term maintenance; Long-term straighten/realign curves.
- 6

US 29 (James Madison Hwy.)/VA 666 (Braggs Corner Rd./Greens Corner Rd.)  
Short-term monitor new signal's performance and consider prohibiting U-turns and right turn on red from 666 onto Rt. 29 Northbound; Mid-term add turn lanes; Long-term construct interchange.
- 7

US 29/VA 718 (Mountain Run Lake Rd.)  
Short-term consolidate entrances and improve sight distance; Mid-term relocate/realign Mt. Run Lake Rd.; Long-term consider installation of traffic signal at US 29 and Granite Blvd.
- 8

US 211/VA 229  
Deficiency with low priority; Continue to monitor for potential improvements.
- 9

VA 229 (Rixeyville Rd.)/VA 621 (Jeffersonton Rd./ Colvin Rd.)  
Deficiency with low priority; Continue to monitor for potential improvements.
- 10

VA 229 (Rixeyville Rd.)/VA 785 (Richmond Rd.)  
Deficiency with low priority; Continue to monitor for potential improvements.
- 11

US 29/VA 609 (Hoover Rd.)  
Deficiency with low priority; Continue to monitor for potential improvements.
- 12

VA 229 (Rixeyville Rd.)/VA 640 (Monumental Mills Rd.)  
Deficiency with low priority; Continue to monitor for potential improvements.
- 13

US 15/US 29 (James Madison Hwy.)/VA 676 (Beverly Ford Rd./Berry Hill Rd.)  
Mid-term add turn lanes on Berry Hill Road.
- 14

US 15/US 29/Remington Rd.  
Mid-term consider installation of traffic signal.

- 28

VA 729 (Eggbornsville Road) from VA 638 (Alum Springs road) West to Western Outer Loop  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). Continue to monitor from Western Outer Loop to VA 229 (Rixeyville Road) and widen as needed.
- 29

VA 627 (Homeland Rd.) from VA 729 (Eggbornsville Rd.) to VA 640 (Monumental Mills Rd.)  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 30

VA 640 (Monumental Mills Rd.) from VA 627 (Homeland Rd.) to VA 229 (Rixeyville Rd.)  
Long-term reconstruct road to address geometric deficiencies.
- 31

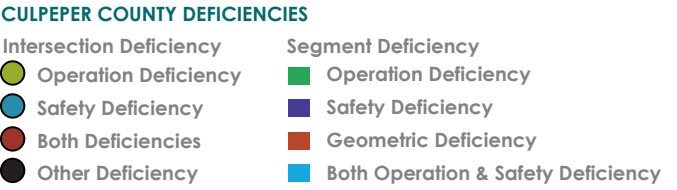
VA 611 (Waterford Dr.) from Rappahannock Co. Line to VA 618 (Gray Horse Ln.)  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 32

VA 621 (Lakota Rd.) from VA 625 (Ryland Chapel Rd.) to Fauquier Co. Line  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 33

VA 640 (Ryland Chapel Rd.) from VA 229 (Rixeyville Rd.) to VA 625 (Mount Zion Church Rd.)  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 34

VA 669 (Carrico Mills Rd.) from VA 700 (Mount Dumplin Rd.) to VA 3  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 35

VA 700 (Mount Dumplin Rd.) from VA 663 (Stevensburg Rd.) to VA 669 (Carrico Mills Rd.)  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).



- 15

Loop Rd. from Ira Hoffman Ln. to Keyser Rd.  
Long-term construct new roadway.
- 16

Western Outer Loop from VA 729 to US 522  
Long-term construct new roadway.
- 17

VA 3 from Stevensburg to Lignum  
Long-term widen to four lanes with median.
- 18

US 15/29 Bus. from VA 666 to Inlet/VA 665  
Long-term widen to four lanes with median.
- 19

Regional Airport/VA 677 (Beverly Ford Rd.)  
Long-term apron expansion; Hangar development; New Terminal; Expansion of water and sewer lines; Development on east side of runway based on new airport layout plan.
- 20

VA 229 from VA 685 to VA 211  
Mid-term - implement safety spot improvement program for installing right and left turn lanes along entire length of route 229.
- 21

VA 522 from Rappahannock Co. Line to the Western Boundary of the Town of Culpeper  
Mid-term implement spot improvement projects to add right and left turn lanes. Long-term provide full-width lanes and shoulders.
- 22

VA 15 from Madison Co. Line to VA 686  
Mid-term implement spot improvement projects to add right and left turn lanes.
- 23

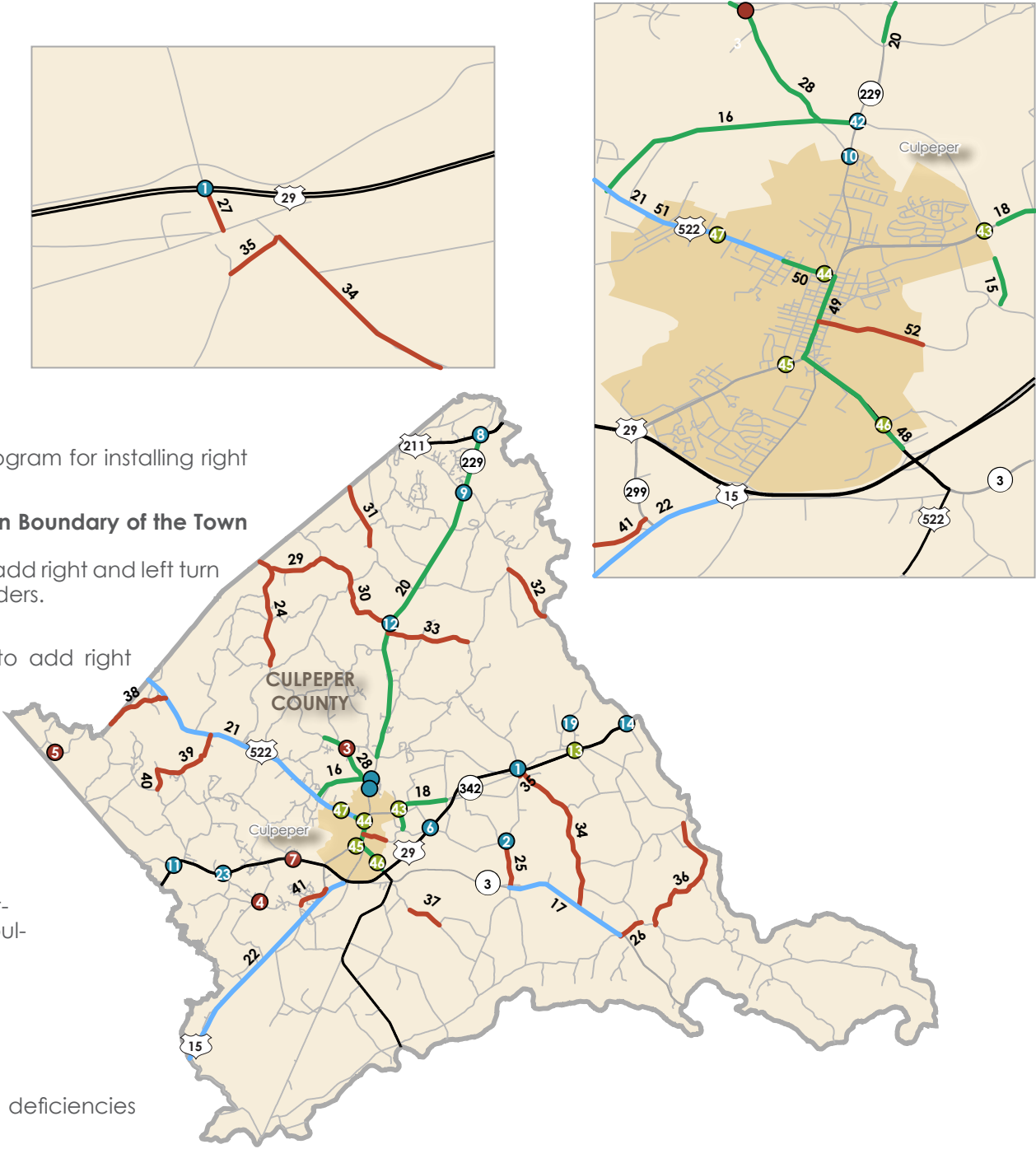
US 29/VA 603 (White Shop Rd.)  
Short-term maintenance; Long-term lengthen turn lanes and realign VA 603 northbound to crossover.
- 24

VA 729 (Eggbornsville Rd.) from VA 714 (Dunkard Church Rd.) to Rappahannock Co. Line  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 25

VA 663 (Stevensburg Rd.) from VA 3 to VA 666  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 26

VA 647 (Revercomb Rd.) from VA 3 to VA 610  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 27

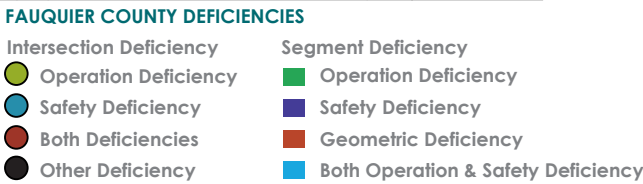
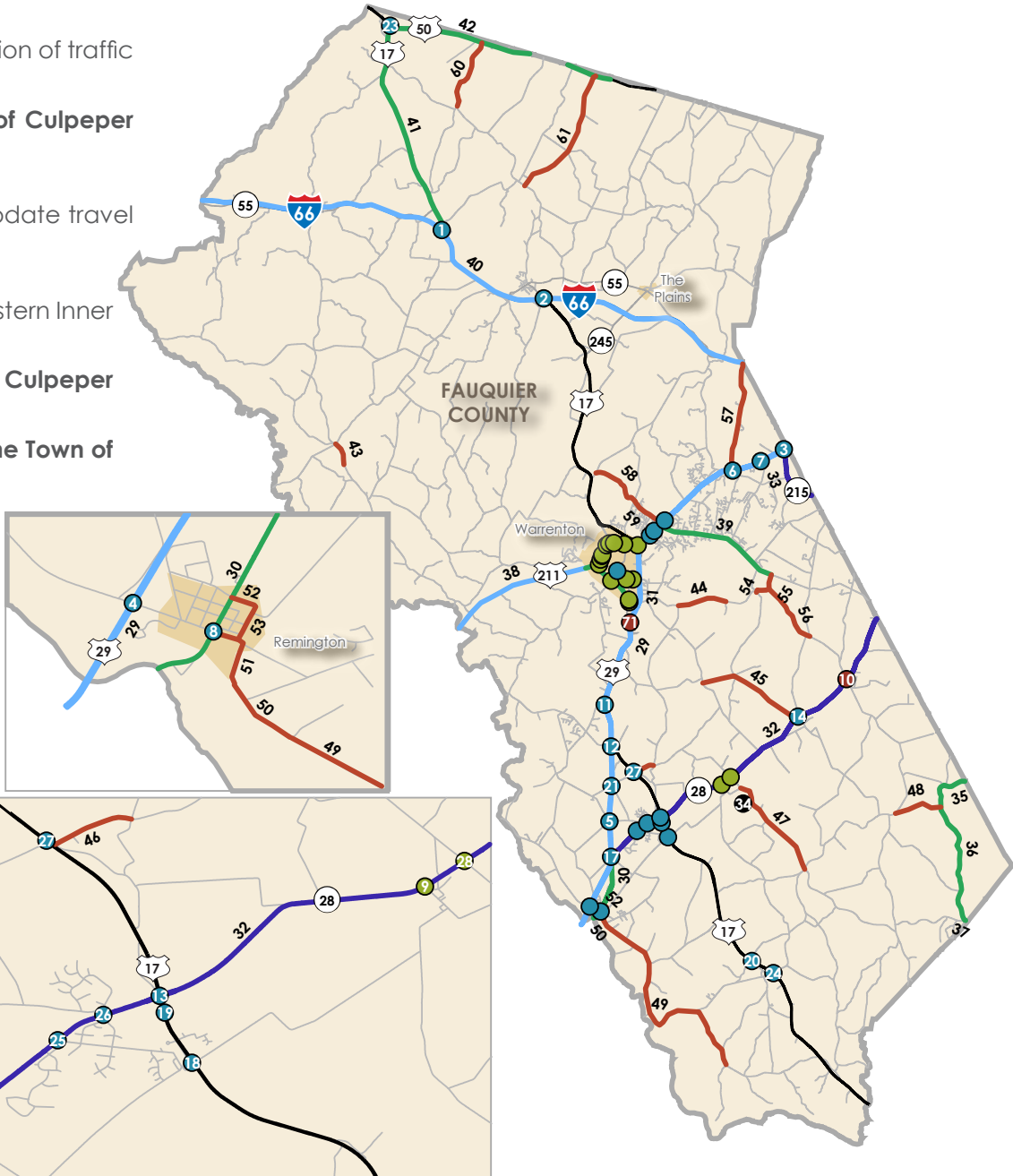
VA 663 (Alanthus Road) from US 15 to VA 762 (Brandy Road)  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).





CULPEPER COUNTY RECOMMENDATIONS (continued)

- 36
- VA 620 (Edwards Shop Road) from VA 610 (Eley’s Ford Road) to Fauquier County Line
- Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 37
- VA 658 (Mount Pony Rd.) from 0.5 Mi. S. VA 656 (Woolens Ln.) to VA 661 (Blackjack Dr.)
- Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 38
- VA 707 (Slate Mills Rd.) from Rappahannock Co. Line to US 522 (Sperryville Pk.)
- Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 39
- VA 634 (Griffinsburg Rd.) from VA 637 (Shanktown Rd.) to US 522 (Sperryville Pk.)
- Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 40
- VA 637 (Shanktown Rd.) from VA 634 (Griffinsburg Rd.) to VA 644 (Reva Rd.)
- Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 41
- VA 692 (Old Orange Rd.) from VA 603 (White Shop Rd.) to VA 299 (Madison Rd.)
- Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 42
- VA 229 (Rixeyville Rd.)/VA 694 (Ira Hoffman Ln.)
- Mid-term monitor intersection to assess impact of recent upgrades on overall safety.
- 43
- James Madison Hwy./Ira Hoffman Ln.
- Mid-term add turn lanes; Long-term reconstruct intersection to improve operations and safety. (Town of Culpeper)
- 44
- West St./Evans St.
- Mid-term add turn lanes; Long-term reroute/divert left-turn traffic to Main St., and develop the Western Inner Connector. (Town of Culpeper)
- 45
- Madison Rd./Blue Ridge Ave.
- Mid-term add turn lanes. (Town of Culpeper)
- 46
- McDevitt Dr./Fredericksburg Rd./Germanna Hwy.
- Mid-term add turn lanes; Long-term reconstruct intersection to provide median space for two-stage left turns. (Town of Culpeper)
- 47
- Blossom Tree Rd./Sperryville Pk.
- Mid-term straighten/realign curves; Long-term consider installation of traffic signal. (Town of Culpeper)
- 48
- VA 3 from South Main St. to Southeastern Boundary of Town of Culpeper
- Long-term widen to four lanes. (Town of Culpeper)
- 49
- VA 15 (Main St.) from S. Main St. to Evans St.
- Long-term widen road to increase capacity and/or accommodate travel demand on alternative corridors or modes.
- 50
- VA 522 (Sperryville Pike) from Virginia Ave. to West St.
- Long-term widen road to increase capacity or develop the Western Inner Connector. (Town of Culpeper)
- 51
- US 522 from Virginia Ave. to the Western Boundary of the Town of Culpeper
- Reconstruct as urban three-lane roadway. (Town of Culpeper)
- 52
- VA 699 (Chandler St.) from East St. to the Eastern Boundary of the Town of Culpeper
- Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Town of Culpeper)



FAUQUIER COUNTY RECOMMENDATIONS

- 1
- I-66/Exit 23 (US 17) near Delaplane
- Long-term lengthen merge area; Extend acceleration lane from US 17 SB to Interstate 66 eastbound.
- 2
- I-66/Exit 28 (US 17) near Marshall
- Long-term continue to move the planned improvements from the Marshall Service District Plan study through the review process. Improvements include installing roundabouts at ramp termini and adjacent intersections.
- 3
- US 15 / US 29/VA 215 (Vint Hill Rd.)
- Long-term modify intersection in manner consistent with historic character of this battlefield location.
- 4
- US 15/US 29/VA 651 (Freeman’s Ford Rd.)
- Short-term maintenance; Consider upgrading shoulder width; Mid-term reconfigure/relocate parking near the intersection and add turn lanes.
- 5
- US 15/US 29 (James Madison Hwy.)/VA 661 (Oak Shade Rd./Botha)/VA 786 (Okeefe Rd.)
- Short-term maintenance; Mid-term extend/add turn lanes; Long-term consider installation of traffic signal or intersection reconfiguration consistent with Rt. 29 Study.
- 6
- US 15/US 29/VA 600 (Beverlys Mill Rd./Broad Run Church Rd.)
- Short-term maintenance; Mid-term monitor intersection to assess impact of recent upgrades on overall safety.
- 7
- US 15/US 29/VA 676 (Riley Rd.)
- Long-term continue to monitor intersection for safety issues and possible signalization or intersection reconfiguration consistent with Rt. 29 Study.
- 8
- US 15/US 29 Bus. (James Madison St.)/Main St.
- Short-term add crosswalks; Mid-term re-grade to address drainage issues.
- 9
- VA 28/VA 610
- Mid-term add turn lanes.
- 10
- VA 28/VA 667 (Old Dumfries Rd.)/VA 806 (Elk Run Rd.)
- Mid-term add turn lanes and consolidate/close/relocate adjacent driveways; Long-term monitor intersection to assess impact of recent upgrades on overall safety.

FAUQUIER COUNTY RECOMMENDATIONS (continued)

- 11

**US 15/US 29/VA 651 (Lees Mill Rd.)**  
Mid-term extend turn lanes; Long-term create single entrance/exit point for VA 651.
- 12

**US 15/US 17/US 29/VA 687(Opal Rd.)/Marsh Rd.**  
Long-term construct interchange.
- 13

**US 17 (Marsh Rd.)/VA 28**  
Short-term maintenance and consider right-turn-on-red restrictions; Mid-term relocate intersection-adjacent driveways. Long-Term construct front-age roads.
- 14

**VA 28/VA 616**  
Short-term consider prohibiting U-turns; Mid-term add turn lanes and close/relocate driveways; Long-term realign Casanova Rd. to Bastable Mill Rd.
- 15

**US 29/VA 861**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 16

**US 29/VA 1405 (Nordix Rd./Cedar Run Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 17

**US 29/VA 28/VA 657**  
Short-term maintenance; Mid-term improve the signal operation and extend shoulder.
- 18

**US 17 (Marsh Rd.)/VA 656 (Remington Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements. Intersection is southern gateway to Bealeton Service District and needs to convey entry into a town.
- 19

**US 17 (Marsh Rd.)/VA 859 (Village Center Dr.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 20

**US 17 (Marsh Rd.)/VA 637 (Shipp's Store Rd./Razor Hill Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 21

**US 29/VA 663 (Covington's Corner Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 22

**US 29/FR 973 (Comfort Inn Dr.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 23

**US 17 (Winchester Rd.)/US 50 (John S. Mosby Hwy.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 24

**US 17 (Marsh Rd.)/VA 634 (Courtney's Corner Rd.)/VA 806 (Elk Run Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 25

**VA 661 (Schoolhouse Rd.)/VA 28**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 26

**VA 661 (Oak Shade Rd.)/VA 28**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 27

**US 17 (Marsh Rd.)/VA 663 (Covington's Corner Rd./ Old Marsh Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 28

**VA 28 /VA 649 (Germantown Rd.)**  
Mid-term add turn lanes; Long-term reconstruct intersection to provide median space for two-stage left turns or consider installation of traffic signal.
- 29

**US 29 from S. Main St. to US 15/29 Bus. (S. of Culpeper Co. Line )**  
Mid-term spot safety and intersection improvements, including the addition of turn lanes and closure/consolidation of median crossovers. Long term provide additional capacity through conversion to non-arterial roadway (i.e., no traffic signals) or widening to six lanes.
- 30

**US 15/29 Bus. (Town of Remington) from US 29 to Culpeper Co. Line**  
Mid-term improve to provide full-width lanes and shoulders throughout. Long term control access to support ultimate conversion to non-arterial roadway (i.e., no traffic signals).
- 31

**US 29 from US 17 (E. Shirley Ave.) to Prince William Co. Line**  
Mid-term: spot safety and intersection improvements, including the addition of turn lanes and closure/consolidation of median crossovers. Long term: provide additional capacity through conversion to non-arterial roadway (i.e., no traffic signals), consider long term planning of new Park & Ride lots.
- 32

**VA 28 from US 15/29 to Prince William Co. Line**  
Mid-term spot safety and intersection improvements. Long-term construct Bealeton Connector to take traffic off Route 28, apply access management techniques to the Route 28 corridor to consolidate driveways and to provide inter-parcel connectivity, and to provide safety enhancements.
- 33

**VA 215 from VA 15/29 to Vint Hill**  
Increase capacity while respecting battlefield setting. Potential improvements include traffic calming techniques, and installation of roundabouts as opposed to widening. Desire of Co. is to delay widening to four lanes as long as possible.
- 34

**Fauquier/Warrenton Airport/Airport Rd./VA 28**  
Long-term monitor intersection for impacts due to new terminal and hangars and improvements to entrances/exits on VA 28 and future access roads.
- 35

**VA 611 (Sowego Rd.) from VA 612 to Prince William Co. Line**  
Long-term reconstruct road to address geometric deficiencies.
- 36

**VA 612 (Brent Town Rd.) from VA 610 to VA 609**  
Long-term reconstruct road to address geometric deficiencies.

- 37

**SC 610 (Aquia Rd.) from VA 612 N. to Stafford Co. Line**  
Long-term reconstruct road to address geometric deficiencies.
- 38

**US 211 from Culpeper Co. Line to Western Boundary of the Town of Warrenton**  
Study ways to increase capacity and/or accommodate travel demand on alternative corridors or modes.
- 39

**SC 605 (Dumfries Road) from US 29/15 to VA Route 602 (Rogues Rd)**  
Intersection and safety improvements; Possible expansion to 4 lanes.
- 40

**I-66 from Warren Co. Line to Prince William Co. Line**  
Long-term explore ways to increase capacity and/or accommodate travel demand on alternative corridors or modes.
- 41

**US 17 from US 50 to I-66**  
Long-term retain two lanes with minor safety improvements.
- 42

**US 50 from 0.25 Mi. E. US 17 to VA 611**  
Long-term minor safety improvements building upon existing traffic calming measures.
- 43

**VA 688 (Leeds Manor Rd.) from 0.7 Mi. S. VA 647 to VA 647**  
Long-term reconstruct road to address geometric deficiencies.
- 44

**VA 670 (Old Auburn Rd.) from VA 674 E. to VA 692**  
Long-term reconstruct road to address geometric deficiencies.
- 45

**VA 616 from VA 28 W. to VA 643 E.**  
Long-term reconstruct road to address geometric deficiencies.
- 46

**VA 663 (Balls Mill Rd.) from US 17 to VA 674 Green Rd.**  
Long-term reconstruct road to address geometric deficiencies.
- 47

**VA 610 (Midland Rd.) from VA 649 to VA 806**  
Long-term reconstruct road to address geometric deficiencies.
- 48

**VA 609 from VA 806 to VA 612**  
Long-term reconstruct road to address geometric deficiencies.
- 49

**VA 651 from VA 820 to VA 632 E.**  
Long-term reconstruct road to address geometric deficiencies and periodic flooding.
- 50

**VA 651 from VA 820 to Southern Boundary of the Town of Remington**  
Long-term reconstruct road to address geometric deficiencies.
- 51

**VA 651 from Southern Boundary of the Town of Remington to US 15**  
Long-term upgrade to urban two-lane roadway with full-width lanes and curb and gutter.
- 52

**VA 656 from VA 651 to VA 1203**  
Long-term upgrade to urban two-lane roadway with full-width lanes and curb and gutter.
- 53

**VA 1203 from VA 656 to US 15 Bus.**  
Long-term upgrade to urban two-lane roadway with full-width lanes and curb and gutter.
- 54

**VA 602 from VA 670 S. to VA 670 N.**  
Long-term reconstruct road to address geometric deficiencies.
- 55

**VA 670 from VA 602 to VA 605**  
Long-term reconstruct road to address geometric deficiencies.
- 56

**VA 667 from VA 670 to VA 603 W.**  
Long-term reconstruct road to address geometric deficiencies.
- 57

**VA 600 from VA 55 to US 29**  
Long-term reconstruct road to address geometric deficiencies.
- 58

**VA 605 from VA 628 to VA 672**  
Long-term reconstruct road to address geometric deficiencies.
- 59

**VA 605 from VA 672 to US 29**  
Long-term reconstruct road to address geometric deficiencies.
- 60

**VA 712 from VA 710 N. to US 50**  
Long-term reconstruct road to address geometric deficiencies.
- 61

**VA 713 from VA 710 to US 50**  
Long-term reconstruct road to address geometric deficiencies.
- 62

**US 29 Bus./US 211**  
Short-term and mid-term maintenance; Long-term flatten vertical curvature on westbound lanes. (Town of Warrenton)
- 63

**US 17/US 211 (Frost Ave.)/Waterloo St.**  
Long-term construct interchange. (Town of Warrenton)
- 64

**US 17/US 29/US 211 Bus. (Broadview Ave.)/Church St.**  
Mid-term implement access management to consolidate private entrances and exits. (Town of Warrenton)
- 65

**US 17/US 29/US 211 Bus. (Broadview Ave.)/Gold Cup Dr.**  
Mid-term implement access management to consolidate private entrances and exits. (Town of Warrenton)
- 66

**US 17/US 29/US 211 Bus. (Broadview Ave.)/Stuyvesant St.**  
Mid-term implement access management to consolidate private entrances/exits; Consider right-in/right-out only operations with traffic rerouted to Chappell St. (Town of Warrenton)



- 67

**US 17/US 29/US 211 Bus. (Broadview Ave.) at Roebling St/Old Broadview Ave.**  
Mid-term consider installation of traffic signal. (Town of Warrenton)
- 68

**US 15/US 29 Bus./Broadview Ave./Winchester St.**  
Mid-term add turn lanes; Long-term consider construction of interchange at this location. (Town of Warrenton)
- 69

**US 15/US 29 Bus. (Lee Hwy.)/Branch Drive**  
Short-term modify southbound approach lane configuration. (Town of Warrenton)
- 70

**US 15/US 29 Bus. (Lee Hwy.)/Blackwell Rd.**  
Mid-term add turn lanes. (Town of Warrenton)
- 71

**US 15/US 29/Lord Fairfax Dr./James Madison Hwy.**  
Short-term maintenance to improve safety; Long-term construct interchange. (Town of Warrenton)
- 72

**East Shirley Ave./Industrial Rd.**  
Long-term consider grade separation if warranted. (Town of Warrenton)
- 73

**East Shirley Ave./Alwington Farm Blvd.**  
Long-term consider modification of approach lane configuration in the future if warranted. (Town of Warrenton)
- 74

**Shirley Ave./Culpeper St.**  
Mid-term reconstruct intersection and modify eastbound approach lane configuration to improve operations and safety. (Town of Warrenton)
- 75

**Shirley Ave./Falmouth St.**  
Mid-term consider modifications/enhancements of traffic control at this intersection. (Town of Warrenton)
- 76

**Walker Drive/East Lee St.**  
Mid-term consider modifications/enhancements of traffic control at this intersection. (Town of Warrenton)
- 77

**Waterloo St./Main St./Alexandria Pike/Winchester St.**  
Short-term maintenance to improve safety; Mid-term based on current analysis, consider modifications/enhancements of traffic control at this intersection in the future. (Town of Warrenton)
- 78

**Main St./Falmouth St./East Lee St./Metzee Rd.**  
Mid-term based on current analysis, consider modifications/enhancements of traffic control at this intersection in the future. (Town of Warrenton)

- 79

**VA 211 (Frost Ave.) from Western Boundary of the Town of Warrenton to US 17 Bus. (Shirley Ave.)**  
Long-term widen road to increase capacity and/or accommodate travel demand on alternative corridors or modes. (Town of Warrenton)
- 80

**US 17 (Broadview Ave.) from US 211 Bus. (Waterloo St) to US 29 Bus. (Lee Hwy.)**  
Long-term widen road to increase capacity and/or accommodate travel demand on alternative corridors or modes. (Town of Warrenton)
- 81

**US 15 (Lee Hwy.) from US 17 to Northern Boundary of the Town of Warrenton**  
Long-term widen road to increase capacity and/or accommodate travel demand on alternative corridors or modes. (Town of Warrenton)
- 82

**US 17 (West Shirley Ave.) from 0.31 Mi. S. US 211 Bus. to US 15 Bus. (Falmouth St.)**  
Long-term based on current analysis, consider some degree of widening to accommodate future travel demand. (Town of Warrenton)

ORANGE COUNTY RECOMMENDATIONS

- 1

**US 15/US 33/High St.**  
Mid-term add crosswalks and improve turning radii on all approaches; Long-term straighten/realign curves and modify traffic patterns.
- 2

**VA 231/High St.**  
Short-term install warning signage; Mid-term improve turning radius for northbound approach; Long-term monitor need for signalization.
- 3

**VA 20/US 522**  
Long-term relocate commercial entrances.
- 4

**VA 20/VA 3**  
Short-term maintenance to improve safety; Long-term consider speed limit reduction.
- 5

**VA 611/VA 20**  
No recommendation based on analysis. Continue to monitor for potential deficiencies.
- 6

**VA 601/VA 20**  
No recommendation based on analysis. Continue to monitor for potential deficiencies.
- 7

**US 33/VA 20**  
No recommendation based on analysis. Continue to monitor for potential deficiencies.
- 8

**US 33 (Spotswood Trail)/VA 20 (Constitution Hwy.)**  
No recommendation based on analysis. Continue to monitor for potential deficiencies.
- 9

**VA 231 (Blue Ridge Tnpk./Gordon Ave.)/US 15 Bus. (Main St.)**  
No recommendation based on analysis. Continue to monitor for potential deficiencies.
- 10

**Radney Road Extension-Poplar Forest-Harper from Radney Road to VA 20**  
Long-term construct new roadway.
- 11

**US 15 (Gordonsville truck route) from US 15 N. of Town of Gordonsville to US 15/33 S. of Town of Gordonsville**  
Long-term construct new four-lane roadway.
- 12

**VA 20 from Eastern Boundary of the Town of Orange to VA 3**  
Mid-term safety and intersection improvements. Long-term reconstruct roadway to 4 lanes with median and implement traffic calming measures in the Town of Orange.
- 13

**VA 20 from VA 231 to US 15 (James Madison Hwy.)**  
Long-term reconstruct with full-width lanes and shoulders, as appropriate, to ensure continued safety. All improvements need to consider the cultural and historic significance of this corridor, and minimize/mitigate potential impacts. Major changes that significantly alter the character and/or capacity of this roadway are not supported by Orange County.
- 14

**US 15 from Madison Co. Line to Northern Boundary of the Town of Orange**  
Long-term reconstruct with full-width lanes and shoulders, as appropriate, to ensure continued safety. All improvements need to consider the cultural and historic significance of this corridor, and minimize/mitigate potential impacts. Major changes that significantly alter the character and/or capacity of this roadway are not supported by Orange County.

ORANGE COUNTY DEFICIENCIES

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

ORANGE COUNTY RECOMMENDATIONS (continued)

- 15

**US 33 from Greene Co. Line to US 15**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 16

**US 15 from US 33/VA 231 to Louisa Co. Line**  
Continue to monitor roadway safety and operations – deficiencies on this roadway segment are anticipated to be addressed by the construction of the proposed Gordonsville truck route (Orange County recommendation #11). Major changes that significantly alter the character and/or capacity of this roadway are not supported by the Town of Gordonsville.
- 17

**VA 231 from Louisa Co. Line to US 33**  
Continue to monitor roadway safety and operations – deficiencies on this roadway segment are anticipated to be addressed by the construction of the proposed Gordonsville truck route (Orange County recommendation #11). Major changes that significantly alter the character and/or capacity of this roadway are not supported by the Town of Gordonsville.
- 18

**US 15 from US 33/231 to Northern Boundary of the Town of Gordonsville**  
Continue to monitor roadway safety and operations – deficiencies on this roadway segment are anticipated to be addressed by the construction of the proposed Gordonsville truck route (Orange County recommendation #11). Major changes that significantly alter the character and/or capacity of this roadway are not supported by the Town of Gordonsville.
- 19

**VA 692 (Burr Hill Rd.) from VA 20 E. to VA 602**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 20

**US 522 from Culpeper Co. Line to 0.47 Mi. N. Spotsylvania Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 21

**VA 20 from Albemarle Co. Line to US 33**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 22

**VA 611 from VA 20 to VA 604**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 23

**VA 608 from VA 606 to Spotsylvania Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).

- 24

**VA 1014 (Mill St.) from VA 1013 to VA 643**  
Long-term upgrade to urban two-lane roadway with full-width lanes and curb and gutter.
- 25

**VA 20/VA 631 (Brick Church Rd.)**  
Short-term install westbound left-turn lane.
- 26

**VA 20/VA 625 (Porter Rd.)**  
Short-term install westbound left-turn lane.
- 27

**VA 20/VA 600 East (Kendall Rd.)**  
Short-term install eastbound right-turn lane and westbound left-turn lane.
- 28

**VA 20/VA 671 (Village Rd.)**  
Short-term install eastbound right-turn lane.
- 29

**VA 20/VA 650 (Independence Rd.)**  
Short-term shift intersection to the east to come in across from Rt. 741 and add turn lanes.
- 30

**VA 621 East (Mine Run Road) at VA 20**  
Upgrade intersection: add turn lanes on all approaches, shift intersection of VA 621 and VA 742 to the south.
- 31

**VA 20/VA 692 N. (Burr Hill Rd.) and S. (Grasty Gold Mine Rd.)**  
Short-term consolidate east and west intersections.
- 32

**US 15 (James Madison Hwy.)/Old Gordonsville Rd.**  
Mid-term relocate/reconfigure intersection, add turn lanes on US 15.
- 33

**VA 20/Monrovia Rd.**  
Short-term maintenance, reconfigure/relocate parking near the intersection; Mid-term consolidate/close/relocate intersection-adjacent driveways; Long-term add turn lanes and consider the installation of a traffic signal or a roundabout. (Town of Orange)
- 34

**US 15 (Madison Rd.)/Main St.**  
Short-term install warning signs; Mid-term relocate signal pole or ADA ramp; (Town of Orange)

- 35

**US 15/VA 633 (Spicers Mill Rd.)**  
Mid-term improve sidewalk connectivity; Long-term consolidate/close/relocate intersection-adjacent driveways. (Town of Orange)
- 36

**US 15 (James Madison Hwy.)/VA 20 (Berry Hill Rd.)**  
Short term lengthen the westbound right turn lane; Mid-term construct turn lanes and modify lane configurations for intersection approaches. Add sidewalk on south side of Route 20 with crosswalks. (Town of Orange)
- 37

**US 15 (Caroline Ave.)/VA 20 (West Main St.)**  
Mid-term add turn lanes, modify lane configurations for intersection approaches; Long-term reconstruct intersection to improve turning radii. (Town of Orange)
- 38

**Selma Rd./VA 20 (Berry Hill Rd.)**  
Mid-term modify lane configurations for intersection approaches and straighten minor street. (Town of Orange)
- 39

**North Madison Rd./Washington St.**  
Mid-term consolidate driveways, build May-Fray Ave. Connector; Long-term widen to four lanes and consider installation of traffic signal. (Town of Orange)
- 40

**North Madison Rd./Newton St.**  
Mid-term consolidate driveways, build May-Fray Ave. Connector; Long-term widen to four lanes. (Town of Orange)
- 41

**North Madison Rd./West Nelson St./Woodmark St.**  
Mid-term consolidate driveways, build May-Fray Ave. Connector and install signal; Long-term widen to four lanes. (Town of Orange)
- 42

**North Madison Rd./South Entrance to Orange Village Shopping Center**  
Mid-term prohibit left turn movement from minor street in conjunction with North Entrance improvement. (Town of Orange)
- 43

**North Madison Rd./North Entrance to Orange Village Shopping Center**  
Mid-term consider installation of traffic signal. Long-term extend Radney road to Spicers Mill Road.
- 44

**North Madison Rd./Montebello Rd./Radney Rd.**  
Mid-term extend turn lanes; Long-term continue to monitor intersection for safety issues and possible installation of traffic signal or install roundabout. (Town of Orange)

- 45

**US 15 from Northern Boundary of the Town of Orange to Montebello Rd.**  
Short-term install two (2) roundabouts; Long-term widen to four lanes with median. (Town of Orange)
- 46

**VA 20 (Berry Hill Rd.)from VA 15S (Caroline St) to VA 612 (Monrovia Rd.)**  
Long-term widen to four lanes with median. (Town of Orange)
- 47

**US 15 from Montebello Rd. to VA 20 (Main St.)**  
Mid-term build May-Fray Avenue Connector; Long-term continue to monitor US 15 and widen to four lanes as needed.
- 48

**Berry Hill Rd. Extended from US 15S (Caroline St) to VA 20W near Western Town Limit.**  
Long-term extend Berry Hill Rd. from US 15S (Caroline St) to VA 20W near WTL. (Town of Orange)
- 49

**Spicers Mill Rd. from US 15 (Madison Rd.) to Western Town Limit.**  
Mid-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders). (Town of Orange)
- 50

**Spicers Mill Rd. Extended from US 15 (Madison Rd.) to May-Fray Ave. Connector.**  
Mid-term extend Spicers Mill Rd. east to connect with the new May-Fray Ave. Connector. (Town of Orange)
- 51

**Rapidan Rd. from Selma Rd. to Western Town Limit.**  
Mid-term widen to standard 2-lane urban roadway. (Town of Orange)
- 52

**VA 20 (Berry Hill Rd.)/Byrd St.**  
Mid-term reconstruct/reconfigure intersection. (Town of Orange)
- 53

**VA 741 at VA 20**  
Close intersection at VA 20 and VA 741 West, and upgrade intersection of VA 20 and VA 741 East (add turn lanes on all approaches)



MADISON COUNTY RECOMMENDATIONS

- 1

**US 29/VA 230 (Wolftown Hood Rd.)/VA 626 (Gibbs Rd.)**  
Mid-term extend turn lanes; Long-term widen secondary road to 12-foot lanes and continue to monitor intersection for safety issues.
- 2

**US 15 (James Madison Hwy.)/VA 634 (Oak Park Rd.)/VA 614 (Locust Dale Rd.)**  
Short-term maintenance to improve safety; Long-term straighten/realign curves and consolidate/close/relocate intersection-adjacent driveways.
- 3

**US 29/VA 634 (Oak Park Rd./Washington St.)**  
Mid-term extend turn lanes and straighten/realign curves.
- 4

**US 29/VA 662 (Shelby Rd.)**  
Deficiency with low priority; Continue to monitor for potential improvements.
- 5

**US 29/VA 230/VA 231 (Orange Rd.)**  
Mid-term add turn lanes; Long-term consider installation of traffic signal.
- 6

**US 15 from Orange Co. Line to Culpeper Co. Line**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders) balancing with the historic character of the area.
- 7

**VA 230 from US 29 E. to VA 231 E.**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 8

**VA 230 from VA 607 to VA 705**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 9

**VA 616 from VA 230 to VA 621**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 10

**VA 621 from VA 616 to VA 230**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 11

**VA 614 from VA 705 to US 15**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 12

**VA 638 from VA 231 N. to VA 603**  
Long-term reconstruct road to address geometric deficiencies (10-foot lanes).

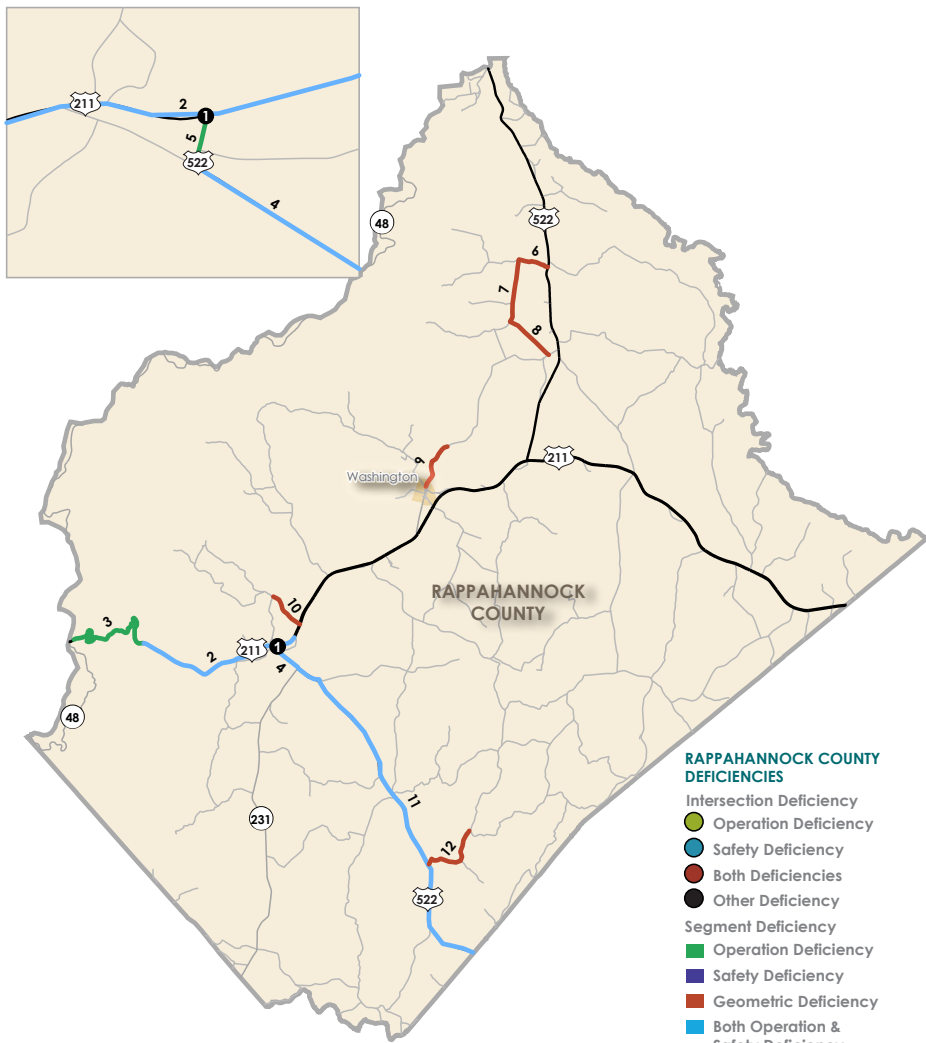
- 13

**VA 600 from VA 643 N. to VA 643 S.**  
Long-term reconstruct road to address geometric deficiencies (11-foot lanes).
- 14

**VA 643 from VA 670 to VA 600 S.**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 15

**VA 643 from VA 600 N. to VA 231**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).
- 16

**VA 657 from VA 230 to US 29 Bus.**  
Long-term reconstruct road to address geometric deficiencies (including full-width lanes and shoulders).



RAPPAHANNOCK COUNTY RECOMMENDATIONS

- 1

**US 522/Thornton River Bridge (reconstruction near intersection of US 522/211)**  
Reconstruct bridge.
- 2

**US 211 from 3.41 Mi. E. of Page Co. Line to Sons Rd.**  
Mid-term implement spot improvements to address geometric and safety needs. Long-term consideration should be given to reconstruction with full-width lanes and shoulders and/or other measures such as speed reductions to ensure continued safety. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 3

**US 211 from 0.28 Mi. E. of Page Co. Line to 3.41 Mi. E. of Page Co. Line**  
Mid-term implement spot improvements and turn lanes to address geometric and safety needs. Long-term consideration should be given to reconstruction and/or widening with full-width lanes and shoulders and/or other measures such as speed reductions to ensure continued safety. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 4

**US 522 from VA 1001 to VA 231 S.**  
Mid-term implement spot improvements to address geometric and safety needs. Long-term consideration should be given to reconstruction with full-width lanes and shoulders and/or other measures such as speed reductions to ensure continued safety. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 5

**US 522 from US 211 to VA 1001**  
Mid-term implement spot improvements to address geometric deficiencies. Long-term consideration should be given to reconstruction with full-width lanes and shoulders and/or other measures such as speed reductions to ensure continued safety. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 6

**VA 630 from US 522 to VA 628**  
Long-term implement spot improvements to address geometric and safety needs. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 7

**VA 628 from VA 630 to VA 659**  
Long-term reconstruct road to address geometric deficiencies. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 8

**VA 659 from VA 628 to VA 641**  
Long-term reconstruct road to address geometric deficiencies. Major changes that alter the character and/or capacity of this roadway are not supported by Rappahannock County.
- 9

**VA 628 from VA 622 to 0.95 Mi. N. of the North Boundary of the Town of Washington**  
Long-term spot improvements to address geometric and safety needs.
- 10

**VA 612 from VA 600 E. to US 211**  
Long-term spot improvements to address geometric and safety needs.
- 11

**US 522 from VA 231 to Culpeper Co. Line**  
Long-term spot improvements to address geometric and safety needs.
- 12

**VA 626 from US 522 to VA 616**  
Long-term spot improvements to address geometric and safety needs.

Human Services Transportation

In the CHSM, developed in 2008, five goals and related strategies were developed based on the analysis of regional demographics and unmet needs. In addition to the initial strategies listed here, which are currently under development, other activities that meet CHSM goals are also under development by FAMS partner agencies. VRT, for example, has developed a long-range plan for transit services for the region and is pursuing expanded service with local jurisdictions. The full CHSM Plan includes mid-term and long-term recommendations as well. A more detailed discussion of the deficiencies and recommendations is located in the Technical Report.

Freight, 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. These locations are where the individual jurisdictions wish to direct future

The forecast year for the local transit provider, Virginia Regional Transit, is six years.



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 moves 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.

Conducted in conjunction with the regional long-range planning process, the RRRC has completed a regional freight study to assess the impacts of freight in and through the Rappahannock-Rapidan region. The study examines the movement of freight by truck, rail and air, originating, destined to, or passing through the

region in order to identify strategies on how the region can best position itself to accommodate future freight growth while minimizing adverse impacts on the region's transportation system and environment. It also provides recommendations for future infrastructure investments and policies that enable the region's transportation system to continue to operate at the highest levels of efficiency and safety in years ahead.

The analysis of current and future freight movement in the region explores the relationships between land use, transportation, and investments. It discusses the importance of making strategic policies and investments that will improve the goods movement capabilities of local employers, the economic competitiveness of the region, and overall quality of life of its residents.

Regional Human Services Transportation Deficiencies and Recommendations

Unmet Need/Deficiency	Recommendation	Initial Strategies
Sustained regional coordination of human services transportation. Increased outreach to human service providers on available transportation services. Attendants or escorts to provide assistance as needed. Greater safety training and oversight, including improved training of drivers in wheelchair assistance techniques.	Establish a formal regional partnership and programs to promote collaboration and effectiveness and efficiency of human services mobility.	Establish Foothills Area Mobility System (FAMS) to formalize and systematize the regional CHSM collaboration.  Create Mobility Management program to oversee current and future human services transportation planning.
Effective dissemination of information on available transportation services.	Provide effective information and referral (I&R) and outreach to ensure that target populations can and will access transportation services.	Establish one-call travel center to provide information on all travel modes and directly assist targeted population with travel arrangements and training.
Expanded transportation options for non-Medicaid funded medical trips. Expanded transportation services in rural areas, especially service to Culpeper, Orange, and Fauquier Counties.	Provide flexible quality transportation options and more specialized one-to-one services through expanded use of volunteers.	Develop Volunteer Transportation Network to create incentives for county volunteer programs and offer support to improve program quality and transportation access.
Expanded transportation services in rural areas. Increased service to reduce customer ride time. More secure funding stream to support transit providers and transportation programs.	Support existing transit and human service transportation providers in their efforts to continue and improve their services.	Support collaborative efforts of VRT, RRCSB/AAA, and private providers to improve reach and efficiency of their services.
Transportation to access job opportunities that require evening and weekend shifts. Expanded transportation options for people with disabilities for recreational trips. Transportation services that do not require advance notice and are available for spontaneous trips. Expanded transportation services to medical facilities outside the area.	Identify and support implementation of new and expanded transportation services, other than volunteer programs, to meet identified needs.	Establish pilot service, operated by VRT, for persons with disabilities between Culpeper and Charlottesville for medical appointments and treatment.



The primary source of recommendations was the individual jurisdictions' bike plans and/or comprehensive plans.



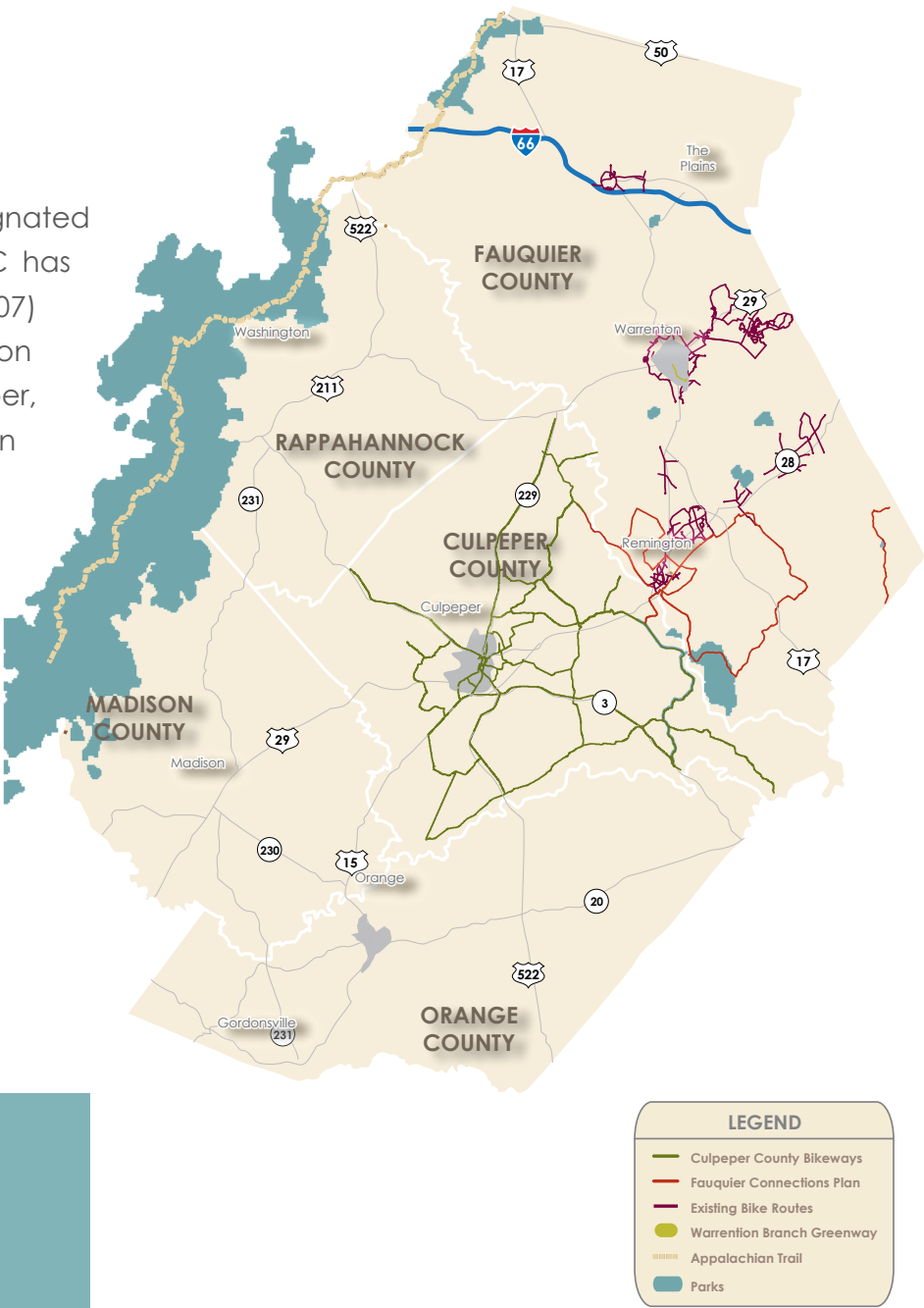
**Bicycle and Pedestrian Facilities**

**Deficiencies in Existing Network**

The towns of Warrenton, Culpeper, and Remington have designated bicycle routes and facilities in and around their towns. The RRRC has prepared a *Draft Regional Bicycle and Pedestrian Plan* (2007) that details the existing and potential future facilities for the region and the individual jurisdictions. In addition, the Town of Culpeper, Culpeper County, and Town of Warrenton/Fauquier County, in collaboration with the RRRC, have each recently completed detailed individual bicycle and pedestrian planning initiatives.

**Recommendations**

The primary source of recommendations was the individual jurisdictions' bike plans and/or comprehensive plans. Currently, the only jurisdiction to include specific bicycle and pedestrian routes in its comprehensive plan is Culpeper County, although adoption of proposed bicycle/pedestrian facilities is pending in several other jurisdictions.



*The Towns of Warrenton, Culpeper, and Remington have established bicycle routes and facilities in and around their towns.*



**Airports**

The *Virginia Air Transportation System Plan Update* (2003) contains future forecasts (2020) of operations and aircraft based at the airports ranging from growth of 4% of based aircraft at Culpeper Regional to no growth at Orange County. Review of regional and local planning documents identified the need for a new terminal and new hangars at the Warrenton-Fauquier Airport. Two of the roadway detailed study locations are located at access points to the Culpeper Regional Airport and the Warrenton-Fauquier Airport. The recommendations included adding a turn lane at the intersection of Berry Hill Road with US 15/US 29 in Culpeper County and adding additional turn lanes at the intersection of VA 610 with VA 28 in Fauquier County. Improvements are currently underway at Orange County Airport, including new terminal construction in accordance with the county's adopted Airport Layout Plan. The airport is accessed via VA 20 and an improved air facility could affect traffic volumes.



Travel Demand Management

The programs and services of VRT and Commuter Services of the RRRC will continue to be important tools for decreasing single-occupant vehicle trips, particularly during the peak hour. Because of the concentration of work destinations in Northern Virginia and Washington, DC, enhanced public transportation can increase usage through expanded peak period service, which is proposed for the region. Decreases in single-occupant vehicle trips are possible in and around the towns and on heavily traveled commuter routes.

Park and ride lots in the region are expected to continue to be of importance to the commuting population, particularly as in-migration from northern Virginia, Charlottesville, and Fredericksburg continues. RRRC Commuter Services staff currently monitor the lots on a quarterly basis; further monitoring will assess the need to improve or add lots. As migration from the surrounding metropolitan regions continues to affect both area land use and employment, the rideshare service currently offered by the RRRC is expected to serve an even greater role in preserving the viability of the regional transportation network. Commuting to jobs not only outside of the region but also within the region is expected to increase and therefore increase the demand for commuter services provided by the RRRC.

Although the VRE Strategic Plan 2004-2025 identifies expansion along the Gainesville/Haymarket corridor first, expansion into the RRRC (Fauquier County) is also put forward as a future possibility. This would occur along the Norfolk Southern Piedmont main line from the current terminus at Broad Run to either Bealeton or Remington.



PLAN ADOPTION

The 2035 Regional Long Range Transportation Plan for the RRRC could be adopted by the Regional Commission in 2011. This Plan will serve as a long term strategy for the transportation network of the region and as a component of the 2035 Surface Transportation Plan. Projects can be prioritized for funding based on the recommendations that have been identified. Further information on this Plan and the 2035 Surface Transportation Plan and VTrans 2035 can be found at [www.vdot.virginia.gov](http://www.vdot.virginia.gov)

Commuting to jobs not only outside of the region but also within the region is expected to increase and therefore further influence the commuter services offered by the RRRC.



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All photographs courtesy of VDOT and the Rappahannock-Rapidan Regional Commission