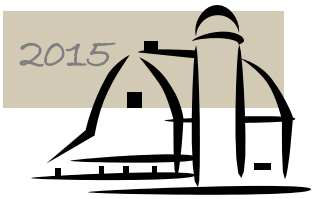


9. TRANSPORTATION

INTRODUCTION

The automobile is the dominant form of transportation for Culpeper County's citizens. VDOT statistics show that in 2014, Culpeper County had 75.13 miles of primary roadways, all paved, and 489.66 miles of secondary roadways, including 127.92 miles of gravel roads. As this road network has developed, it now provides access to virtually any property within the County. In addition to the extensive rural road network, the citizens of Culpeper County have access to the County's airport (commercial and private aircraft) and to a rail line that serves commercial interests and Amtrak customers in the County.

Culpeper County has made a tremendous investment in its transportation infrastructure, primarily in the road system. This chapter provides guidelines for improving the County-wide transportation network so that it will continue to meet the changing needs of Culpeper's citizens and businesses. At the same time, this chapter recognizes the power that transportation decisions have to shape the growth of a community, and it attempts to relate the impacts of transportation investments to the overall development goals of the County.

TRANSPORTATION PLAN VISION:

Create a County-wide multi-modal transportation plan that fosters the movement of people and goods in an efficient manner and effectively promotes economic development while maintaining a predominantly rural development pattern.

Transportation Decision-Makers

The transportation network in Culpeper County develops primarily based upon the actions of three entities: Culpeper County, the Town of Culpeper and the Virginia Department of Transportation (VDOT). The Culpeper County Board of Supervisors, working with VDOT, makes decisions about where new roads will be located and what improvements will be made to existing roads in the County. Culpeper County relies on VDOT to ensure that roads scheduled for perpetual maintenance meet State design guidelines and that construction practices on these roads meet State requirements. VDOT is responsible for the maintenance of all public roads in Culpeper County.

The Town of Culpeper is an integral component of the overall road network in the County. It is completely surrounded by the County, and it is the central point where all of the primary roads in the County converge. While the unincorporated County is affected to a certain extent by transportation decisions made by the Town, any changes and improvements made to the County roadway system can have significant impacts on the Town. Therefore, transportation decisions should be coordinated between the County and the Town.

"There is no such thing as a Democratic or Republican road, bridge, port, airfield or rail system." – Anthony Foxx, United States Secretary of Transportation

An additional factor affecting Culpeper County's transportation network is proposed transportation improvements in the central and northern Virginia region. Large regional projects can have impacts on Culpeper County even if the final route for such a project does not lie within County boundaries. By increasing access on a regional level, these projects can make it more attractive for people to live in Culpeper while working elsewhere. Culpeper County needs to be aware of such regional transportation projects to plan adequately for the effects.

TRANSPORTATION NEEDS ASSESSMENT

Roadway Classifications

The Virginia Department of Transportation functionally classifies and defines roads in Virginia by their character of service as follows:

Urban Principal Arterial

- Serves corridor movements of substantial statewide or interstate travel
- Serves all urban areas of 50,000 and over population and a majority of those over 25,000
- Collectively, provide an integrated network without stub connections

Urban Minor Arterial

- Link cities and large towns (and other traffic generators, such as major resorts)
- Spaced at intervals so that all developed areas of the state are within a reasonable distance of an arterial highway
- Provide service to corridors with trip lengths and travel density greater than those served by rural collectors or local systems
- Design should be expected to provide for relatively high overall speeds, with minimum interference to through movement

Urban Major Collector

- Provide service to county seats not on an arterial system, to larger towns not directly served by higher systems
- Link the above to nearby larger towns or routes of higher classification
- Serve the more important intra-county travel corridors

The Virginia Department of Transportation provides the most up to date, Culpeper County specific Transportation data available.

Culpeper District VDOT Office

Quick Link: Virginia Department of Transportation

Urban Minor Collector

- Spaced at intervals, consistent with population density
- Collect traffic from local roads and bring all developed areas within a reasonable travel time to a collector road
- Provide service to smaller communities
- Link local traffic generators with their rural hinterland

Urban Local

- Serves primarily to provide direct access to adjacent land
- Provide service to travel over relatively short distances as compared to collectors or other higher systems
- All facilities not on one of the higher systems

The Federal Aid System (FAS) uses a different road classification system to identify roads: interstate, primary, urban, secondary and non-federal aid. VDOT uses the FAS classifications for purposes of road funding and classifying the roads in Culpeper County as either primary or secondary roads.

There are no interstate highways in Culpeper. However, four interstates are within a short traveling distance of the County. Interstate 95, thirty miles east of Culpeper, serves the north-south Atlantic Coast corridor. Thirty miles to the west is Interstate 81 that serves the corridor along the Appalachian Mountain chain. Interstate 64, thirty miles south of Culpeper, and Interstate 66, twenty miles north of Culpeper, both connect Interstate 95 with Interstate 81.

Route 29 is one of three four-lane primary highways serving Culpeper County (the other two being Route 211 and Route 3). Although Route 29 is not classified as an interstate highway by either Federal or State transportation agencies, Route 29 does serve in such a capacity for travelers and shippers. Route 29 is also one of three major North-South Highways serving Culpeper County and the Commonwealth of Virginia (the other two being Interstates 81 and 95). When first constructed, Route 29 was not designated as limited access and over time access, capacity, and safety issues have arisen. Ongoing and past studies have recommended various strategies for alleviating these issues, without much success. Portions of Route 29 in Culpeper County are designated as limited access. Culpeper County welcomes this designation and seeks to preserve Route 29 as a high capacity roadway.

The Culpeper County Functional Roadway Classification Map provides a visual representation of the roadway network and the hierarchy of roads in the County (Map 9.1).

Travel Patterns

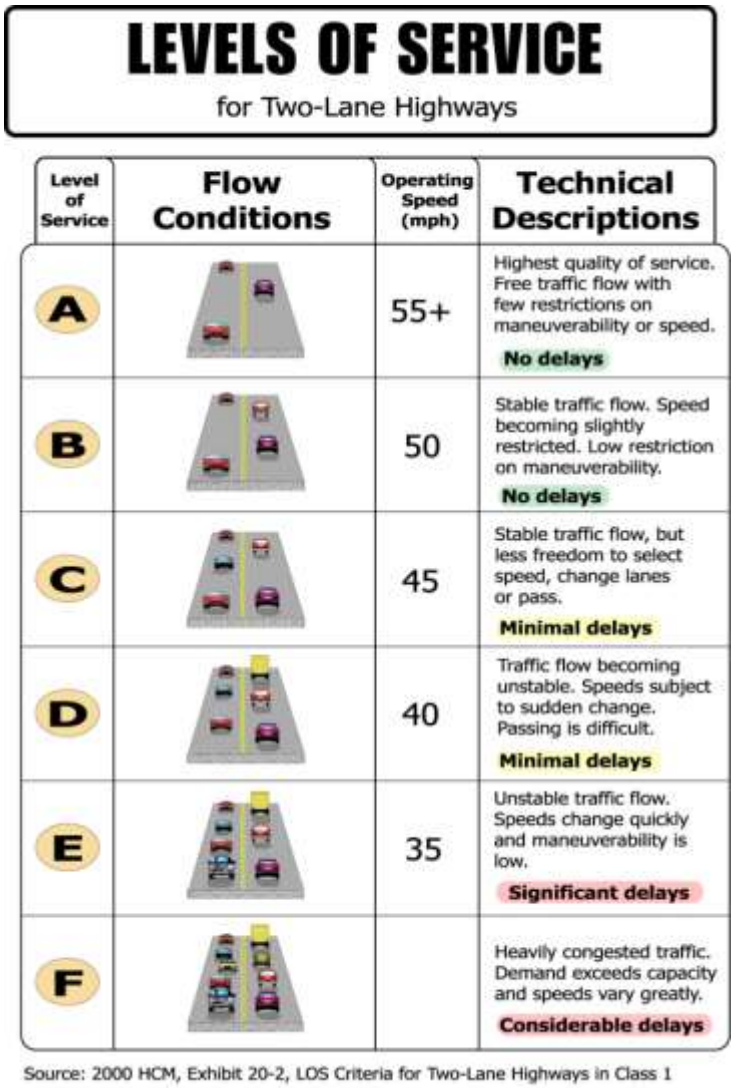
When looking at a map of Culpeper County's road network, it is immediately apparent that the Town is the focal point of the system. The Town of Culpeper was established as the regional government center and grew into the regional market town. The original roads and trails providing access to the Town have evolved into the arterial roadway system serving intra-county travel. Since the Town is still the County government seat and the County's commercial and industrial activity center, this road layout is still

practical. However, it creates a bottleneck as traffic from five of the County's arterial roads converges on Main Street in Culpeper.

While most County residents still focus their activities on the Town of Culpeper, a growing number of residents live in the County but work and shop in other communities. This is particularly true of the northern portion of Culpeper County, where many residents commute to northern Virginia to work. According to the 2012 Census, approximately 53.3% of the County's labor force works outside Culpeper County.

Level of Service (LOS) / Capacity Analysis

The Virginia Department of Transportation provides annual updates of traffic counts for roadways in the County. These are reported in terms of average daily traffic (ADT), an estimate of how many vehicles use the specified roadway segment on an average day. Traffic counts are one of the primary tools used to plan for future transportation system improvements.



Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

An important indicator of road capacity is the level of service (LOS) at which a road performs with a given amount of traffic. Currently, VDOT places significant emphasis on Level of Service. According to the Virginia Statewide Highway Plan, the minimum design standard for arterial roads in a rural area is LOS "C". The minimum design standard for a collector road in a rural area is "C" or "D" depending on whether the terrain is level or rolling. LOS "C" is defined as having stable traffic flow with traffic speeds of at least 45 mph. LOS "D" is defined as having unstable traffic flow and speeds of at least 40 mph. Existing and projected LOS for Culpeper County's Principal and Minor Arterial roads as well as a number of Secondary roads are shown in Table 9.1. The County's Principal Arterial Roads, Routes 15, 29 and 211, currently operate with an acceptable LOS. VDOT traffic projections indicate that most of these roadways will decline one full level of service in the foreseeable future.

Culpeper County's Minor Arterial Roads are also carrying significant volumes of traffic. All the County's Minor Arterials (Routes 3, 15, 229 and 522) are experiencing a LOS D on some segments as of 2015. Future projections indicate deterioration of LOS on all segments. The bold print "D's" in Table 9.1 indicate the extent of this issue.

Table 9.1

LEVEL OF SERVICE/CAPACITY ANALYSIS									
Principal Arterials									
Route	**Facility name**	**Segment From**	**Segment To**	**(mi.)**	**2015**	**2025**	**2030**	**2035**	**2040**
15	RTES 15/29	RTES 15/29BUS	RTE 663	2.65	B	B	C	C	C
15	RTES 15/29	ROUTE 663	RTE 15 BUS	4.31	B	C	C	C	**D**
15	RTES 15/29	ROUTE 15 BUS	FAUQUIER CL	0.24	B	C	C	C	**D**
15	RTES 15/29 BYPASS	RTE 15 BUS	RTES 3/522	1.82	B	B	B	C	C
15	RTES 15/29 BYPASS	RTES 3/522	RTES 15/29 BUS	3.71	B	B	B	C	C
29	SEMINOLE TRAIL	MADISON CL	RTE 643	4.39	A	B	B	B	B
29	JAMES MONROE	RTE 643	RTE 299	1.84	B	B	B	C	C
29	MADISON RD	RTE 29/29 BYP	CULPEPER SCL	0.28	B	B	B	C	C
29	JAMES MONROE	RTE 29 BUS SOUTH	RTE 15 BUS	0.99	B	B	B	B	C
211	LEE HIGHWAY	RAPPAHANNOCK CL	RTE 229	2.95	A	A	A	A	A
211	LEE HIGHWAY	RTE 229	FAUQUIER CL	0.95	B	B	B	C	C
Minor Arterials									
Route	**Facility name**	**Segment From**	**Segment To**	**(mi.)**	**2015**	**2025**	**2030**	**2035**	**2040**
3	GERMANNA HWY	CULPEPER ECL	RTE 15/29 BYP	0.34	A	B	B	B	B
3	GERMANNA HWY	ROUTE 29	ROUTE 522	0.32	A	B	B	B	B
3	GERMANNA HWY	ROUTE 522	.63 EAST RTE 522	0.63	A	A	A	A	A
3	GERMANNA HWY	.63 MI EAST RTE 522	RTE 663	4.00	**D**	**D**	**D**	**D**	**D**
3	GERMANNA HWY	RTE 663	RTE 647 EAST	4.63	C	C	**D**	**D**	**D**
3	GERMANNA HWY	RTE 647 EAST	2.49 MI WEST ORANGE	1.03	A	A	A	A	A
3	GERMANNA HWY	2.49 MI WEST ORANGE	ORANGE CL	2.49	A	A	A	A	A
15	MADISON HWY	MADISON CL	RTE 649	5.1	C	C	**D**	**D**	**D**
15	MADISON HWY	ROUTE 649	ROUTE 299	2.75	C	**D**	**D**	**D**	**D**
15	MADISON HWY	ROUTE 299	ROUTE 686	0.36	C	**D**	**D**	**D**	**D**

15	MADISON HWY	RTE 686	RTE 15 BUS	0.15	A	A	A	A	A
15	RTES 15/29 BUS	RTE 15/29 BYP	FAUQUIER CL	0.56	B	B	B	B	B
15	RTES 15/29 BUS	CULPEPER NCL	RTE 15/29 BYPASS	2.07	**D**	**D**	**D**	**D**	**D**
15	RTES 15/29 BUS	RTE 15 BYPASS	CULPEPER SCL	0.07	A	A	A	A	A
229	MAIN STREET	CULPEPER NCL	RTE 694	0.3	**D**	**D**	**D**	**D**	E
229	MAIN STREET	RTE 694	RTE 631	3.69	C	C	**D**	**D**	**D**
229	RIXEYVILLE RD	RTE 631	RTE 640 NORTH	2.14	C	**D**	**D**	**D**	E
229	RIXEYVILLE RD	RTE 640 NORTH	RTE 802	4.1	C	**D**	**D**	**D**	**D**
229	RIXEYVILLE RD	RTE 802	RTE 211	3.5	C	**D**	**D**	**D**	E
299	MADISON RD	RTE 15	RTE 29	0.79	A	A	A	A	A
522	ZACHARY TAYLOR	ORANGE CL	RTE 617 SOUTH	4.16	C	C	C	C	D
522	ZACHARY TAYLOR	RTE 617 SOUTH	RTE 3	3.12	A	A	A	A	A
522	SPERRYVILLE PIKE	CULPEPER WCL	RTE 634	5.05	C	**D**	**D**	**D**	**D**
522	SPERRYVILLE PIKE	RTE 634	RAPPAHANNOK CL	3.22	C	**D**	**D**	**D**	**D**
Secondary Roads with Identified LOS Deficiencies									
Route	**Facility name**	**Segment From**	**Segment To**	**(mi.)**	**2015**	**2025**	**2030**	**2035**	**2040**
610	MADDENS TAVERN	RTE 647	RTE 620 SOUTH	1.02	A	A	B	B	B
615	RAPIDAN RD	ORANGE CL	RTE 647	0.97	A	B	B	B	B
621	LAKOTA RD	RTE 625	RTE 229	3.86	A	A	B	B	B
634	GRIFFINSBURG RD	RTE 716	RTE 522	2.01	A	A	A	B	B
637	SHANKTOWN RD	RTE 644	RTE 634	0.8	A	A	A	A	A
640	DOCS RD	RTE 627	RTE 628 SOUTH	1.7	B	B	B	B	B
640	MONUMENTAL	0.71 MI EAST RTE 628	RTE 229 NORTH	1.79	B	B	B	B	B
644	REVA RD	RTE 633	RTE 637	2.85	B	C	C	C	C
647	REVERCOMB RD	RTE 3	RTE 610	0.9	A	A	B	B	B
663	BATNA RD	RTE 3	RTE 15	4.46	A	B	B	B	B
663	ALANTHUS RD	RTE 15	RTE 685	0.08	B	C	C	C	C

663	ALANTHUS RD	RTE 685	RTE 625	3.44	B	B	B	B	B
666	BRAGGS CORNER RD	RTE 15 EAST	RTE 29	1.02	B	B	C	C	C
669	CARRICO MILLS RD	RTE 3	RTE 672	1.6	B	C	C	C	C
669	CARRICO MILLS RD	RTE 672	RTE 675	2.1	B	C	C	C	C
669	CARRICO MILLS RD	RTE 675	RTE 762	2.28	B	C	C	C	C
685	CHESTNUT FORK RD	RTE 729	RTE 229	1.25	B	B	B	B	B
700	MT DUMPLING RD	RTE 663	RTE 669	0.16	B	B	B	B	B
729	EGGBORNSVILLE RD	RTE 229	RTE 638 WEST	2.39	C	C	C	**D**	**D**
802	SPRINGS RD	RTE 229	RTE 621 NORTH	1.57	A	A	A	A	A

OTHER TRANSPORTATION

Air

The Culpeper Regional Airport (T.I. Martin Field) is located on Rt. 677, Beverly Ford Road in Brandy Station. Built in 1966 on a 274–acre parcel, the airport was dedicated as a general aviation facility to serve not only recreation but also corporate aircraft activity. The airport is listed in the Virginia Air Transportation System Plan and is designated as a "Regional Airport Facility," hence recognizing the airport's potential to serve both regional and local general aviation needs and to provide a role in regional aviation services. The airport offers a complete range of aviation services including aircraft fueling, maintenance, and flight school. The County owns 105 "T" hangars and 2 corporate hangars which house the current 130 based aircraft. The airport plans to build an additional 26 nested T-hangars and six, 60x60 corporate hangars in 2015. Other airfield amenities include: a full parallel taxiway, a 25,000 sq. ft. ramp with 69 tie-down spaces. In 2004, the runway was extended from 4,000 ft. to 5,000 ft. providing the ability to attract larger corporate traffic. A Localizer approach became available in 2005, additional parking was added in 2008 and a renovated terminal building is scheduled for completion in early 2015.

The Culpeper Regional Airport serves the County of Culpeper by several specific means. The airport is first and foremost an engine for economic development. In 1984, the County separated 106 acres of airport property as the Culpeper County Industrial Air Park to capitalize on the availability of the airport infrastructure. The County subdivided the land into 14 industrial sites, (some with potential access to the runway), installed access roads using the State Industrial Access Program and developed water and sewer facilities using industrial revenue bonds. Located adjacent to the Industrial Airpark, the airport provides access to a viable Foreign Trade Zone. The proximity to a limited access highway and rail service makes Culpeper a small inter-modal port, geographically centered on the airport.

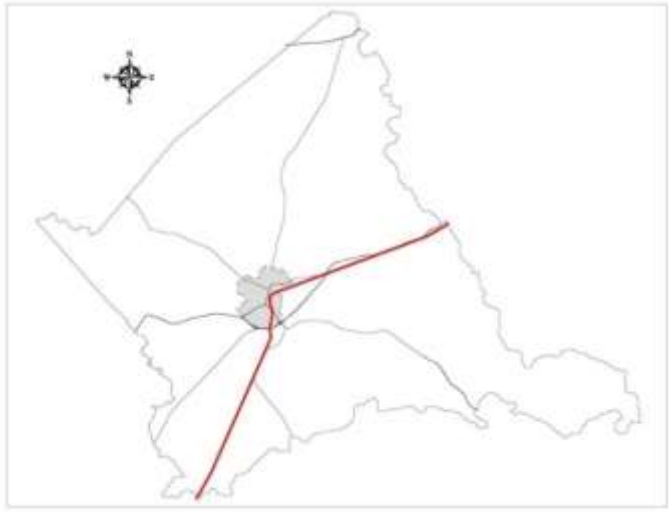
Secondly, as business expansion continues to move west and south from the Washington D.C. area, a marked increase in corporate aviation traffic is becoming apparent. With the 9-11 attack on America and the advent of the Washington DC Air Defense Zone, commonly referred to as SFRA or Special Flight Rules Area, the airport location has become even more desirable to pilots seeking a base outside this restricted zone. The additional security, cost and time consuming requirements at the larger hub airports have made smaller regional aircraft travel much more palatable to the business sector. The paradigm of air travel has begun to shift. The runway and ramp improvements have increased the number of corporate aircraft using the airport facilities. A full service maintenance shop and competitive fuel prices enhance the airport's appeal to modern corporate aircraft.

Thirdly, recreational aviation is well served at the Culpeper Regional Airport. The installation of a 24-hour self-fueling tank would potentially afford this group more freedom and will generate additional revenue. Recreational aviators with aircraft based in Culpeper bring in tax revenue and fuel sales dollars, as well as maintenance and hangar fees.

Current trends indicate that general aviation is on the rise. Culpeper Regional Airport is second in the General Aviation sector in the State of Virginia for aircraft traffic with approximately 67,000 annual operations. Culpeper Regional Airport seeks to become the finest airport of its size in Virginia.

Rail

Culpeper's sole rail line is a two-track right-of-way which traverses the County from Rapidan in the southwest; through Mitchells and Winston to the Town of Culpeper; and then east along Route 29 through Brandy Station and Elkwood to the eastern County border. Owned by the Norfolk-Southern Railway, the line connects with Charlottesville to the south and with Manassas, Alexandria and Washington, D.C. to the north, providing freight and passenger service. The right-of-way also provides utility easements for communication lines and other services taking advantage of this continuous line to access different communities.



As of 2015, twelve freight trains travel through the County daily providing industrial service to County and other businesses. Local demand generates approximately 25 cars per week in freight activity. Existing sidings in Culpeper include Rapidan Station, Buena Quarry, Cedar Mountain Stone Quarry, Winston Station, ITT Teves (Route 686), Cargill/Keller (Route 29 Bypass), Old Dominion (Route 667), Farmers Co-op (Route 29 Business), County Farm Service (Route 666), Culpeper Wood Preservers (Route 666), Brandy Station, Elkwood; and in the Town of Culpeper, Culpeper Station, Bingham-Taylor, and TYCO Electronics (formerly the Rochester Corporation). It is expected that rail will continue to play an important role in the economic development of the County. Expansion of the Panama Canal is expected to be completed in 2015 and is projected to increase freight traffic at the Port of Virginia. This may lead to additional demands on rail infrastructure in Culpeper County. An increase in freight traffic is not likely to have an adverse effect on current passenger rail service.

Amtrak, the National Railroad Passenger Corporation, operates three routes that stop in Culpeper. Daily round-trip service from Lynchburg to Washington D.C. is available on the Northeast Regional route with a stop in Culpeper. Virginia's Commonwealth Transportation Board (CTB) recently included full funding for a second daily train along this route as part of its adopted FY 2015-2020 Six-Year Improvement Program. In addition to the daily Northeast Regional Service, Culpeper County has supported, and continues to support, an effort to provide passenger rail service from Bristol, VA to Washington, D.C. The Cardinal Route runs from New York to Chicago via Washington, D.C., Cincinnati and Indianapolis three times per week with stops in Culpeper. Likewise, the Crescent Route runs from New York to New Orleans via Washington, D.C. and Atlanta daily.

Commuter rail service, operated by Virginia Railway Express (VRE), now connects both Manassas and Fredericksburg with Washington. This service currently sees very limited ridership by Culpeper citizens. VRE's 2040 System Plan does not include expansion into Culpeper County. Consideration by the County must include careful study of all impacts, including fiscal. Clear benefits to the community must be identified and the concept must ultimately be supported by the community. Potential stops in Culpeper County include Brandy Station, downtown Culpeper and Winston. Such service would suggest high density development around stations coupled with strict limits on development in rural and agricultural areas.

Public Transportation

Public transportation in Culpeper County is limited to the services provided by the Virginia Regional Transit (VRT). Currently, two buses provide service within the Town limits. Both buses have fixed routes and stops. The County currently provides one bus to run from locations outside Town limits to destinations in Town and to employment destinations. Additional buses are desired for the future.

The Foothills Area Mobility System (FAMS), a program of the Rappahannock-Rapidan Regional Commission provides mobility services. FAMS is a partnership of transportation and human services organizations, and other stakeholders working to plan, coordinate and expand transportation options for identified populations, including disabled, low-income and aging segments of the population. Current FAMS activities include establishing a regional one-call travel center, supporting local and regional volunteer transportation programs, initiating a pilot bus service between Culpeper and Charlottesville, and designing processes for collecting data on unmet transportation needs.

Commute Alternatives

The Rappahannock-Rapidan Planning Regional Commission (RRRC) operates a Rideshare program that matches commuters with carpools and vanpools. Commuters contact the program and are matched based on their destinations. In support of this program, there are three (and a potential fourth) commuter park and ride lots in the County, where carpoolers can leave their cars for the day. These lots are: (1) Clevenger's Corner with spaces for 40 cars located at the intersection of Routes 211 and 229, (2) Alanthus Road with spaces for 40 cars located at the intersection of Route 29 and Route 663, (3) Rabbit Run with spaces for 17 cars located at the intersection of Route 3 and Rabbit Run. As the park and ride lot located at the intersection of Route 15/29 and Alanthus Road is being fully utilized, expansion or a new park and ride lot in this vicinity is needed. The lot at Routes 229 and 211 is also near capacity and requires relocation/expansion. This project is currently proffered and may be realized through future development. As demand increases along the Route 3 corridor, the County envisions a park and ride lot along the southern end of Route 3, possibly in conjunction with the proposed commercial development near the intersection of Route 3 and Yellowbottom Road (Route 620). In addition, RRRC has contracted with a private bus service to provide commuter bus service between Culpeper, Warrenton and Northern Virginia. Other commuting services provided by the Commission are Vanpool Assistance: temporary financial support for vanpools having trouble filling all their seats and the Guaranteed Ride Home Program, which provides rides when unexpected emergencies arise. As other commuter opportunities become economically feasible, Culpeper County will pursue their implementation.

PLANNING GUIDELINES

Transportation-Land Use Link

Culpeper County's transportation network provides a framework on which the community is built. While the transportation system is designed to support the County's goals of efficiently moving goods and people, it also should support long-range development goals. Past investments in the road network have resulted in certain patterns of development. Future road improvements should be carefully designed to promote the development patterns envisioned throughout this Comprehensive Plan.

The location and improvement of roads can be used to help direct growth to certain areas. Road improvements should be planned that will support the planned growth of the County. Areas designated for commercial and industrial development should be provided with transportation access in advance of demand. Major thoroughfares which are improved or newly constructed may impact projected land use in the vicinity of such facilities.

The Virginia Department of Transportation has several programs to assist managing the Transportation-Land Use Link. Its first program was the Chapter 527 Review, which is discussed below in the Traffic Impact Studies section. The second program to be brought online is an updated version of the Secondary Street Acceptance guidelines. The third program utilized in the management of the transportation-land use link is Access Management. Access Management can be defined as the process of managing access to land development, while simultaneously preserving the flow of traffic on the surrounding public road system. Initially, developments impacting primary roads were reviewed using the Access Management Guidelines adopted in 2008. In Culpeper County the primary arterials impacted by these regulations are: Route 29, Route 15/29, Route 211, Route 522, Route 15 and Route 3. In 2009, all development impacting secondary roads became subject to access management. In 2013, standards for primary and secondary roads were combined.

Traffic Impact Analysis

A traffic impact analysis (TIA) is used to assess the impact a proposed land development may have on the transportation system. It determines if the capacity and level of service of adjacent roadways is adequate to serve the development, and evaluates the potential impacts of the development on local and regional road networks.

The need for a traffic impact study should be determined by Culpeper County, in consultation with VDOT, on a case-by-case basis. In general, all applications for rezonings, major subdivisions, special use permits, and site plans should be reviewed to determine the need for a traffic impact study. VDOT has guidelines that determine when a TIA is required for rezonings and comprehensive plan revisions. The County may also require a TIA based on its requirements.

The landowner or developer is responsible for preparing a traffic impact study. Applicants should work with Culpeper County and VDOT in determining the extent of the study area and the specific issues to be addressed.

Statewide Transportation Plan (VTRANS)

VTrans is the long-range, statewide multimodal policy plan that lays out overarching Vision and Goals for transportation in the Commonwealth. It identifies transportation investment priorities and provides direction to transportation agencies on strategies and programs to be incorporated into their plans and programs. Virginia's transportation system is a complex network of highways, sidewalks, trails, rail corridors, transit systems, information systems, airports and runways, shipping ports and docks, intermodal connectors, and even a space port. This variety is the essence of a "multimodal" transportation system. The multimodal transportation system serves residents, businesses, tourists and other visitors, all of whom have different needs and desires. Virginia's transportation providers are facing ever-increasing challenges to address growing demands for facilities and services with limited public funds. Consequently, it is more important than ever to identify the most critical needs and cost-effective means to operate, maintain and improve the Commonwealth's transportation systems. This chapter of the Comprehensive Plan is specifically intended to be consistent with VTRANS.

Corridors of Statewide Significance

There are transportation corridors throughout Virginia that represent the multimodal connections to the Commonwealth's major activity centers. These corridors help people and goods move between regions in Virginia and to areas outside Virginia. The corridors are transportation facilities that must be protected to ensure appropriate levels of mobility to allow for long distance travel. Route 29 is one of these established corridors. As such, it will remain a priority of Culpeper County to enhance statewide mobility and maintain system performance for the Route 29 corridor.

Scenic Roads

Culpeper County currently has several roads designated as official Virginia Byways: Route 15/29, Route 15/29 Business, Route 15, Route 522 / Sperryville Pike, Route 802, and a portion of Route 615. Culpeper County's citizens are proud of the natural beauty that the area has to offer, and it should be highlighted for travelers to the County. The Scenic Road Program provides travelers with views of unique scenic natural and historic areas; encourages tourism and patronage of local businesses. It is an important additional consideration when planning transportation improvements. Map 9.2 shows existing Virginia Byways and potential scenic roads.

A scenic road designation is intended to highlight certain roads or road segments that should receive additional attention during the design of road improvements to preserve their scenic qualities. It also is intended to highlight certain roads that may merit special improvements to increase the quality of the road or provide travelers with the opportunity to view the County's scenic resources. Such improvements may include roadside stops and/or historic markers.

The designation of a County scenic road should not prevent VDOT from exercising its duties to improve and maintain roads in Culpeper County. When planning improvements for County scenic roads the County should work with VDOT to preserve, protect and enhance to the extent practical the aesthetic, environmental and cultural resources in the road corridor. Roadway improvements on these roads should be designed to reflect the character of the area. Trees should be preserved along the sides of roads when they do not pose a safety hazard. Special guidelines for signs could be developed.

The Journey Through Hallowed Ground

The Journey Through Hallowed Ground follows US Route 15 and Virginia Routes 20, 231, 22 and 53 from Gettysburg, PA to Monticello in Charlottesville, VA. The Journey is the primary touring route through an area which is rich in American history, featuring many presidential homes, Civil War battlefields, and unparalleled scenic landscapes. As the Journey has been developed, the route through Culpeper County has been designated as not only a State Scenic Byway, but also a National Heritage Area. The route was named a National Scenic Highway. The route in Culpeper County runs from the Fauquier County line following Route 15/29, takes Route 15/29 Business through the Town of Culpeper, and then follows Route 15 South to the Madison County line (Map 9.2).

Road Improvement Programs

The Virginia Department of Transportation identifies 75.13 miles of primary roadways in Culpeper County, including Routes 3, 15, 29, 211, 229, 299, and 522. Improvements to these primary roads are controlled by the Virginia Department of Transportation (VDOT) through the Six-Year Improvement Program (SYIP). This program is revised annually and approved by the Commonwealth Transportation Board. County officials, Planning District Commissions (PDC), and Metropolitan Planning Organizations (MPO's) are given an opportunity to request that projects be added to the program annually. Projects are included in the program based generally on need and available funding. Beginning with the 2017-2022 SYIP, all requested projects will be evaluated and ranked.

Culpeper County currently has several projects in the Six-Year Improvement Program which are at least partially funded:

- Construction of two parallel lanes on 15/29 Business from Route 666 to Inlet. Some preliminary engineering has been completed, however this project has no funding for either right-of-way acquisition or construction.

- The construction of a grade separated interchange on Route 15/29 at Route 666. This became fully funded in 2014.

- Completion of the four-laning of Route 3. The final segment of Route 3 to be four-laned in Culpeper County, from just west of Stevensburg to Lignum is fully funded.

- Signalization of the intersection of Route 29 at Route 718. This project includes modification of the vertical alignment of the northbound lanes on Route 29. It is fully funded and scheduled to begin in 2017.

Secondary Road Improvement Program

The Virginia Department of Transportation identifies 484.68 miles of secondary roadways in Culpeper County. Improvements to the secondary road system are accomplished through a number of public and private resources. The principal mechanism is the Six-Year Secondary Road Improvement Program jointly administered by Culpeper County and VDOT. Projects are proposed by County staff, citizens and VDOT. Projects are evaluated, prioritized and approved by the Board of Supervisors. The update and review process occurs annually. The list generally identifies 3 to 6 local and collector roads and bridges scheduled for improvement.

Projects included in the Secondary Road Improvement Program are subject to VDOT funding constraints. Generally, Culpeper County allocates the majority of funding to paving projects. Bridge replacement or renovation project utilizing FAS (Federal Aid Secondary) funds also must be included.

Funding Road Improvements

The main sources of funds for roadway construction and improvement in Culpeper County are VDOT's Primary and Secondary Road Improvements Programs. Other public road funding programs include Industrial Access funds, Recreational Access Funds and Revenue Sharing funds.

VDOT also administers the Transportation Alternatives Program (TAP) grant program. This program is intended to finance activities which go beyond the normal elements of a transportation improvement project. Such projects as bike or walking paths, or the rehabilitation of historic transportation related buildings can be funded through this program. Funds are allocated through a competitive application process. These funds are provided through the Moving Ahead for Progress in the 21st Century Act (MAP-21).

Culpeper County received authority in 1989 to accept off-site transportation improvements or proffers as part of conditional zonings. These proffers are typically received from the developer and incorporated into the approval of rezoning. Proffers should be used in the future to accomplish needed road improvements which result from proposed development.

VDOT administers a "Revenue Sharing Program" which provides additional funding for use by a county, city, or town to construct, reconstruct, or improve the highway systems within that jurisdiction. Locality funds are matched with state funds. Culpeper County has in the past, and continues to fully utilize this funding mechanism to improve its transportation network.

Road Maintenance – All public roads within Culpeper County are maintained by the Virginia Department of Transportation. Continued funding issues have forced the VDOT to minimize not only its construction program, but also how and when it performs maintenance.

TRANSPORTATION GOALS AND OBJECTIVES

General

GOAL: PLAN AND DEVELOP A SAFE, EFFICIENT, AND ACCESSIBLE TRANSPORTATION NETWORK TO MEET CURRENT AND FUTURE NEEDS OF RESIDENTS, BUSINESSES AND VISITORS.

OBJECTIVES:

1. Ensure that future developments include necessary transportation improvements funded by the developer, including adequate infrastructure for additional traffic and for connectivity to intersections.

2. Encourage the completion of beneficial links in the arterial road system.

3. Define the functional order of roads within the system and protect the system's integrity to maximize traffic flow.

4. Discourage residential and commercial strip development along primary roadways.

5. Maximize pedestrian and vehicular accessibility to commercial, recreational, and other public areas.

6. Encourage use of the railroad by industries and passengers.

7. Design road improvements to a scale that is appropriate for the intended land uses to be served.

8. Design road improvements to be aesthetically pleasing and to fit within the context of the surrounding land use.

GOAL: PARTICIPATE IN THE DEVELOPMENT AND IMPLEMENTATION OF A REGIONAL TRANSPORTATION SYSTEM, WHICH USES BUSES, RAILWAY, RIDESHARING, PUBLIC HIGHWAYS, AIRPORTS, AND TRANSIT FACILITIES.

OBJECTIVES:

1. Actively support and participate in the regional planning activities sponsored by Virginia Department of Transportation (VDOT).

2. Actively support and participate in the regional planning activities sponsored by the Rappahanock-Rapidan Regional Commission.

3. Encourage the preservation of the Route 29 Corridor as a high-speed, traffic flow facility within Culpeper County.

4. Encourage funding for railways, buses, transit facilities, ridesharing programs, and commuter parking areas, as well as increased funding for public highways and airports.

Rail

GOAL: ENCOURAGE EXPANDED USE OF RAIL FOR THE ECONOMIC DEVELOPMENT OF THE COUNTY.

OBJECTIVES:

1. Consider the priority of rail access as one of the key factors to promote economic development in the County.

2. Take full advantage of rail access funds that are provided by the Commonwealth.

3. Consider studies necessary to determine the advisability of extending commuter rail into the County.

Airport

GOALS: PROMOTE AND PRESERVE A SAFE AND EFFICIENT AIRPORT THAT WILL PLAY A VITAL ROLE IN THE LOCAL, STATE, AND NATIONAL SYSTEM.

CREATE AND PRESERVE A BALANCE BETWEEN CORPORATE, COMMERCIAL, AND RECREATIONAL AVIATION ACTIVITIES.

OBJECTIVES:

1. Maximize the use of existing Airport facilities.

2. Improve revenues for Airport operations such that it continues to be a self-supporting facility.

3. Manage land use around the Airport to encourage primarily business and economic development and discourage residential development.

4. Expand additional terminal area facilities in a coordinated manner, making maximum use of areas currently serving general aviation users. With expansion, enhance operational safety of the facility.

5. Connect airport facilities to County water and sewer services.

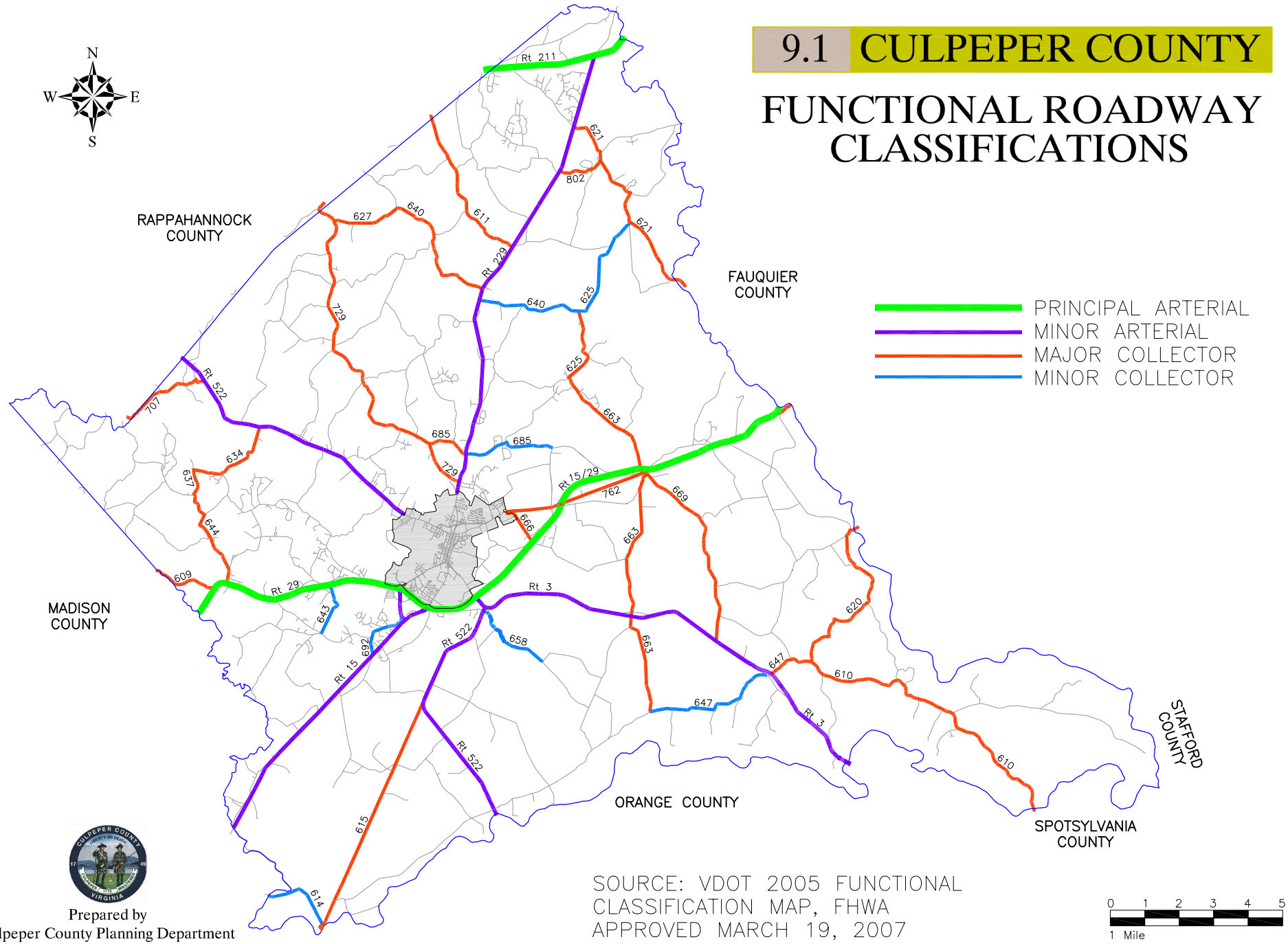
6. Minimize impacts, where reasonable, to historic areas on and near the airport.

8. Obtain aviation easements or obtain land fee simple to preclude conflict with expansion, safety, and FAA clearance requirements.

9. Explore and encourage business and commercial aviation use of the Airport.

9.1 CULPEPER COUNTY

FUNCTIONAL ROADWAY CLASSIFICATIONS

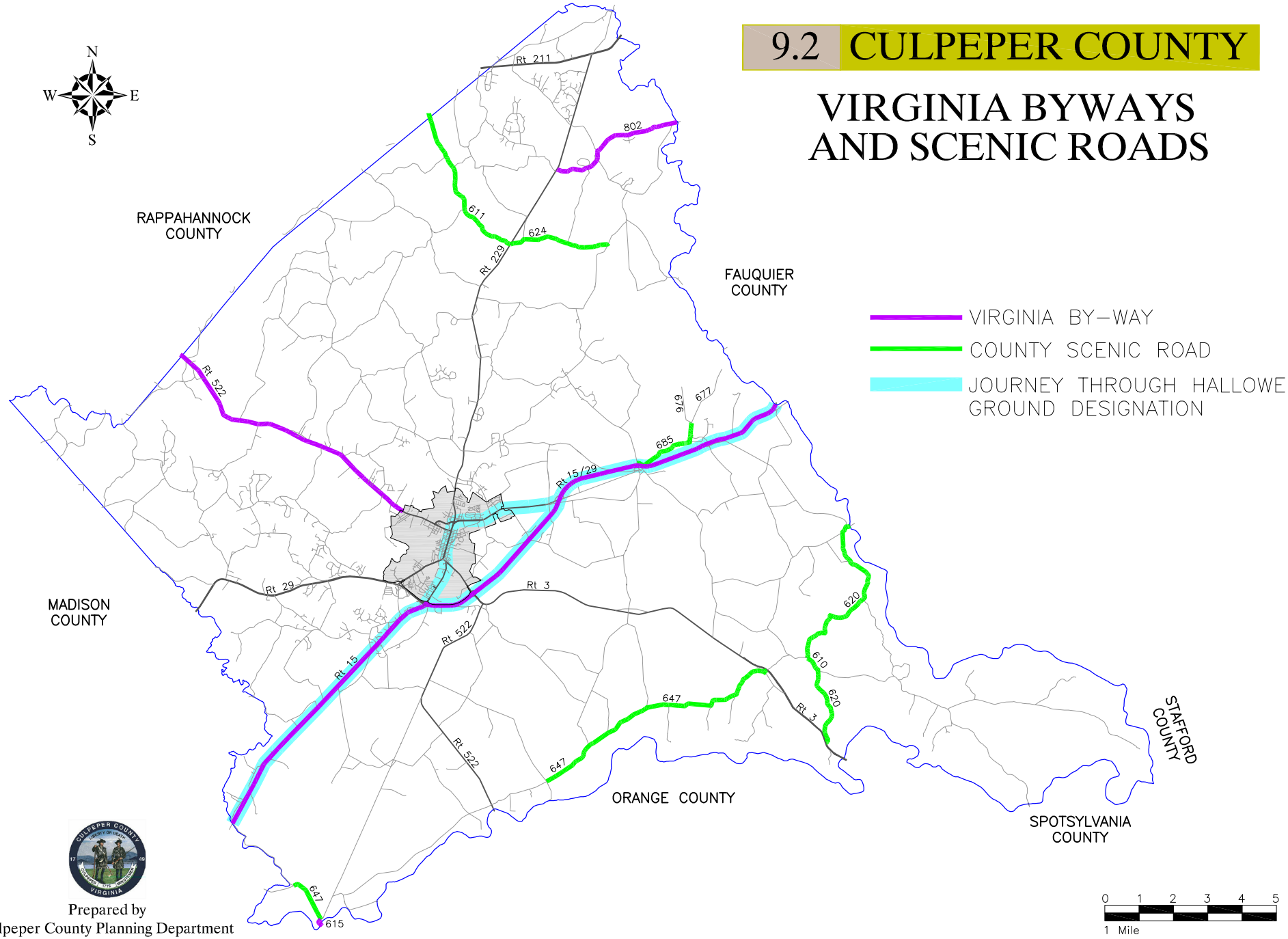


Prepared by
Culpeper County Planning Department

SOURCE: VDOT 2005 FUNCTIONAL CLASSIFICATION MAP, FHWA APPROVED MARCH 19, 2007

9.2 CULPEPER COUNTY

VIRGINIA BYWAYS AND SCENIC ROADS



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THE TRANSPORTATION PLAN

Arterial Plans

The network of arterials serving Culpeper County is the backbone of the transportation system and should be subject to a long range plan. These arterial plans should be based on projected increases in demand and should ensure that each arterial will continue to provide the mobility required by this classification of roads. In general, access to all of these roads should be limited to the extent practical; and improvements should focus on preserving mobility and increasing safety.

Route 3: Route 3 provides the main connection between Culpeper and Fredericksburg, where motorists can access Interstate 95. This road passes primarily through farmland but also through the Stevensburg Village Center. Almost the entire length of Route 3 has been expanded from two lanes to four lanes. The final segment of Route 3 to be four-laned in Culpeper County, from just west of Stevensburg to Lignum, is a high County priority and is nearing commencement. When completed, this work should increase safety on Route 3 as well as provide needed additional capacity well into the future.

Route 522: Route 522 consists of a segment running southeast of Town and a segment running west of Town. VDOT projects that Route 522 will continue to have acceptable levels of service. This road should be considered for inclusion on the County's Primary Road Priority List for spot improvement projects such as installing left and right turn lanes to increase safety and capacity.

Route 229*:* Prior improvements on this road have addressed the existing capacity deficiencies and safety problems on the segment from the Town to just south of Catalpa. Since funding will continue to be an issue, spot improvement projects such as installing left and right turn lanes should be considered to increase safety and capacity. Two areas which should be analyzed for additional improvements include the intersections of Route 229 with Route 685 and also with Route 211.

Route 15: No improvements are currently planned for Route 15. Orange County has requested that VDOT consider widening this road to four lanes. Such an improvement coupled with additional development in Orange County may necessitate widening the segment in Culpeper County as well.

Route 211: This is a major east-west route, but only four miles of it lie within Culpeper County. Planning for this roadway should focus on the development of the Clevenger's Corner area, which is located at the intersection of Route 229 and Route 211. Currently, the 229 / 211 intersection is signalized, and this area is expected to become increasingly congested. This area will require substantial improvements in conjunction with any future development. Based on approved development projects, there are transportation proffers in place which will, once constructed, improve the Route 229/211 intersection. An area plan for Clevenger's Corner is included in this chapter.

Route 29: Route 29 is the main roadway through Culpeper County, providing intra-county and regional access. The County's policy is to preserve this road to the extent practical as a limited access roadway. An area plan for the southwestern half of Route 29 is presented in this chapter. The remaining portion of Route 29 is already a limited access facility. To increase capacity and improve safety on Route 29, grade separated interchanges are planned for its intersections with Route 1250 (Granite Boulevard) and Route 666 (Braggs Corner Road/Green Corners Road). Construction of the latter is currently funded and is a top priority transportation construction project.

Route 15/29 Business: Route 15/29 Business is the primary access route to the Town and County's business and industrial centers. The segment to the east of Town runs through one of the three primary areas targeted by the County for future commercial/ industrial development. This road bears the dual responsibility of providing access while at the same time accommodating significant volumes of through traffic. Ultimately, the County's transportation plan calls for the four-laning of Route 15/29 from Route 666 to Inlet. An area plan for Route 15/29 Business from the Town limits to Inlet is presented in this chapter.

Area Plans

Route 29 South Corridor (Map 9.3)

Route 29 is the primary road linking Culpeper County to the northern and central Virginia regions. This road is a Corridor of Statewide Significance in Virginia and has experienced significant overall traffic volume increase over the last two decades. The plan developed for this corridor emphasizes two objectives. First, this road should primarily serve to move traffic, so access should be limited in order to promote mobility. Second, safety is an issue on this road, particularly at intersections on this segment, from the Town of Culpeper to the Madison County line.

Culpeper County has always recognized the need to control access to this roadway. The portion of Route 29 from just south of the Route 29 Business/Route 299 interchange to the Fauquier County line is already a limited access highway. It is Culpeper County's current intention to maintain mobility on this road by controlling access to the greatest extent possible.

In response to the issues of safety, mobility and capacity, an area plan for the Route 29 South Corridor has been prepared. Highlights of this plan include:

- Review of the road geometrics in the vicinity of Route 718.
- Creation of an Access Management Plan from Route 299 (the southern end of limited access right-of-way) south to the Culpeper/Madison County line.
- The construction of a future interchange at the intersection with Granite Boulevard (Route 1250).
- Construction of collector roads to serve the areas of the County which are zoned for commercial and medium density residential development.
- Construction of Field Stone Boulevard from its current location within the Three Flags Development to its intersection with Route 29 at Granite Boulevard. The Route 29 intersection could be constructed as either an at-grade intersection or as a grade-separated interchange.
- Construction of a portion of the Western Outer Loop beginning at the intersection of Granite Boulevard (Route 1250) and Mountain Run Lake Road (Route 718) to an intersection with Gibson Mill Road (Route 641).
- Closure of existing crossovers where access to an interchange can be provided.

Route 15/29 Business to Inlet (Map 9.4)

This area is strategically located for industrial and commercial development due to its proximity to the Town of Culpeper, the availability of water and sewer service, and its access to major roads. If this area is to develop to the extent envisioned in the Comprehensive Plan (see Chapter 11, Future Land Use), the transportation network serving it must provide internal access and accommodate the expected increases in traffic, including the heavy vehicles associated with commercial/industrial uses.

The Route 15/29 Business area plan anticipates the transportation needs of this area. While 15/29 Business provides access to this area, it is also a gateway to the Town of Culpeper, and should be developed as such. This plan represents a vision of future area access and circulation and may not be built in its entirety for many years. Major elements include:

- A road parallel to Route 15/29 business. This road could be constructed to act as a service road to provide some local traffic relief for Route 15/29 Business.
- Construction of a diamond interchange at the intersection of 15/29 Bypass and Route 666 will provide both a safer travel route for students and faculty of Eastern View High School, and added capacity and safer traveling conditions for drivers on Route 15/29 Bypass. The construction of this interchange is Culpeper County's top priority transportation construction project.
- Extension of Ira Hoffman Lane to the south over the railroad tracks to an intersection with Nalles Mill Road (route 687) at Keyser Road (Route 799).
- Various other road connections to encourage interconnectivity.

Town Vicinity Improvements: Loop Road (Map 9.5)

One long-range project that Culpeper County will implement in phases is a system of roads creating a loop around the Town of Culpeper. Main Street is one of the most congested road segments in the County, which occurs as a result of the convergence of all the County's minor arterials. The loop road concept will provide through traffic with a convenient and efficient way to bypass the Town.

The first phases of this planned loop are complete. Route 694, Ira Hoffman Lane, has been extended to connect Route 15/29 Business with Route 229. This road is currently four lanes from 15/29 Business to Northridge Boulevard and two lanes from Northridge Boulevard to Route 229. No schedule has been set for four-laning this latter section of Ira Hoffman Lane.

Future road construction plans call for Route 694 to be extended south of 15/29 Business and connect with Route 799, Keyser Road. McDevitt Drive has been extended north from Route 3 to connect with Route 699, East Chandler Street, and Route 799, Keyser Road. When Ira Hoffman Lane (Route 694) is extended to intersect with Keyser Road (Route 799) at its intersection with Nalles Mill Road (Route 667), the eastern half of the loop around Culpeper will be complete.

To the west, Route 729 has been realigned to connect with Route 229 across from Route 694, creating a signalized 4-way intersection. The next segment will extend from Route 729 to Route 522 west. This segment is known as the Western Outer Loop Road. The connection from Route 729 to Route 522 is detailed on Map 9.6**.** The final connection, from Route 522 south to Route 29, is the most extensive. The Plan calls for a connection utilizing a small portion of the existing Route 641, and a new alignment to connect with Route 29 at the location of a proposed diamond interchange. A small segment between Route 29 and Route 718, known as Granite Boulevard, has already been constructed. It is a two-lane road on a four-lane right-of-way.

Lovers Lane Area (Map 9.7)

The Lovers Lane Area Plan focuses on the area south of Lovers Lane (Route 686), between Route 522 and the railroad. There is already right-of-way in place to realign Route 686 (Lovers Lane) in order to tie it into Route 522, routing industrial traffic away from a residential area. This plan also addresses a residentially zoned area between Route 15 and Route 720 (Cedar Run Church Road). This area has commercial potential as well. If developed, it may offer an opportunity to extend Route 686 (Lovers Lane) and eliminate its current connection to Route 15, which is not ideal.

Clevenger's Corner Area Plan (Map 9.8)

The Clevenger's Corner area, which is focused on the intersection of Routes 211 and 229, is designated by the Comprehensive Plan as a Village Center. As such, it is planned for a mix of residential, commercial and light industrial growth. A large rezoning of the southeast quadrant of the Route 211/Route 229 intersection was approved in 2005 and existing residential and commercial zoning is in place for the southwest quadrant of the intersection, both of which could dramatically increase the amount of traffic on area roads. The goal of this plan is to preserve high mobility on Route 211 while providing access to the surrounding properties. The major elements of this plan are:

- The realignment of Route 622 to intersect with Route 211 across from a future road which would serve new development.
- Providing an internal road system from Route 211 to Route 621 to allow future residences to access future commercial uses without travelling on Route 229. A commuter parking area has been established and will need to be relocated and expanded.
- The intersection of Routes 211/229 may require dual left-turn lanes to accommodate an acceptable Level of Service.

Airport Layout Plan

Specific improvements at the Culpeper Regional Airport are detailed in the County's adopted Airport Master Plan Update, finalized in March 2011, which is hereby incorporated into the Comprehensive Plan by reference. The Airport Master Plan was updated through a cooperative effort by the County, the County's airport engineers (Campbell and Paris Engineers), the Virginia Department of Aviation (DOAV) and the Federal Aviation Administration (FAA). The objectives of the improvement projects identified in the Master Plan are:

- Maximize the safety and utility of the airfield for the aircraft currently operating at the airport.
- Maximize the economic benefit of the airport to the County of Culpeper.

The 2011 Airport Master Plan Update includes a detailed Airport Layout Plan (ALP) map which is replicated at the end of this chapter. The entire scope of the ALP was subject to an environmental assessment. The Culpeper Regional Airport 2014 Environmental Assessment was subject to intense reviews by numerous agencies and received a finding of No Significant Impact (FONSI) from the Federal Aviation Administration on May 27, 2014. Future Airport projects include:

- ***Beverly's Ford Road Relocation:*** State Secondary Route 677 (Beverly's Ford Road) presents an obstruction to the airport on the north end. As a safety measure required by the FAA, the road is planned to be replaced in part by an alternate route on the east side of the airport which will also facilitate future development on the east side of the airfield.
- ***New Terminal Facility:*** The Master Plan finds the current terminal to be inadequate and recommends that it be replaced. A Terminal Area Layout Plan has been prepared, the future terminal site has been graded, the parking area has been installed, and a preliminary building design is complete.
- ***Hangar Development:*** A new hangar development expected to be completed in 2015 will include 32 new hangars: two buildings containing 13 T-hangars each and one building containing six executive hangars. This project will generate significant revenue to improve the airport's potential as a self-supporting enterprise without any subsidy from County taxpayers.
- ***Other Projects:*** Other projects at the airport, such as the installation of a localizer, placement of supplemental windcones, and the installation of an automated weather system, have been implemented as needed. Similar projects will arise in the future and will be considered on a case-by-case basis.

Area Plan Maps

The maps that follow display a variety of long-range planning efforts which would ultimately serve Culpeper's projected transportation needs well into the future. With the exception of the Airport Development Plan which is subject to strict national standards, it is unlikely that all of the proposed plans will be realized exactly as shown. The plans contain concepts which may be altered as a result of engineering or other constraints. Additionally, funding of proposed improvements will act as the most obvious constraint.

The plans should be used as a guide. Projects may be prioritized and implemented as they become feasible. Consideration of development proposals should always take into account the conceptual plans in this chapter, and should be required to implement them to the extent possible, preserving rights-of-way at a minimum. These plans should also be flexible enough to permit alternative solutions to meet the County's transportation needs, unexpected needs, and changing priorities.

An overall Transportation Plan Map which reflects a 'big picture' outlook on future transportation needs has been prepared and follows the Area Plan Maps.

ONLINE RESOURCES

Virginia Department of Transportation

Rappahanock-Rapidan Regional Planning District

The Journey Through Hallowed Ground Official Site

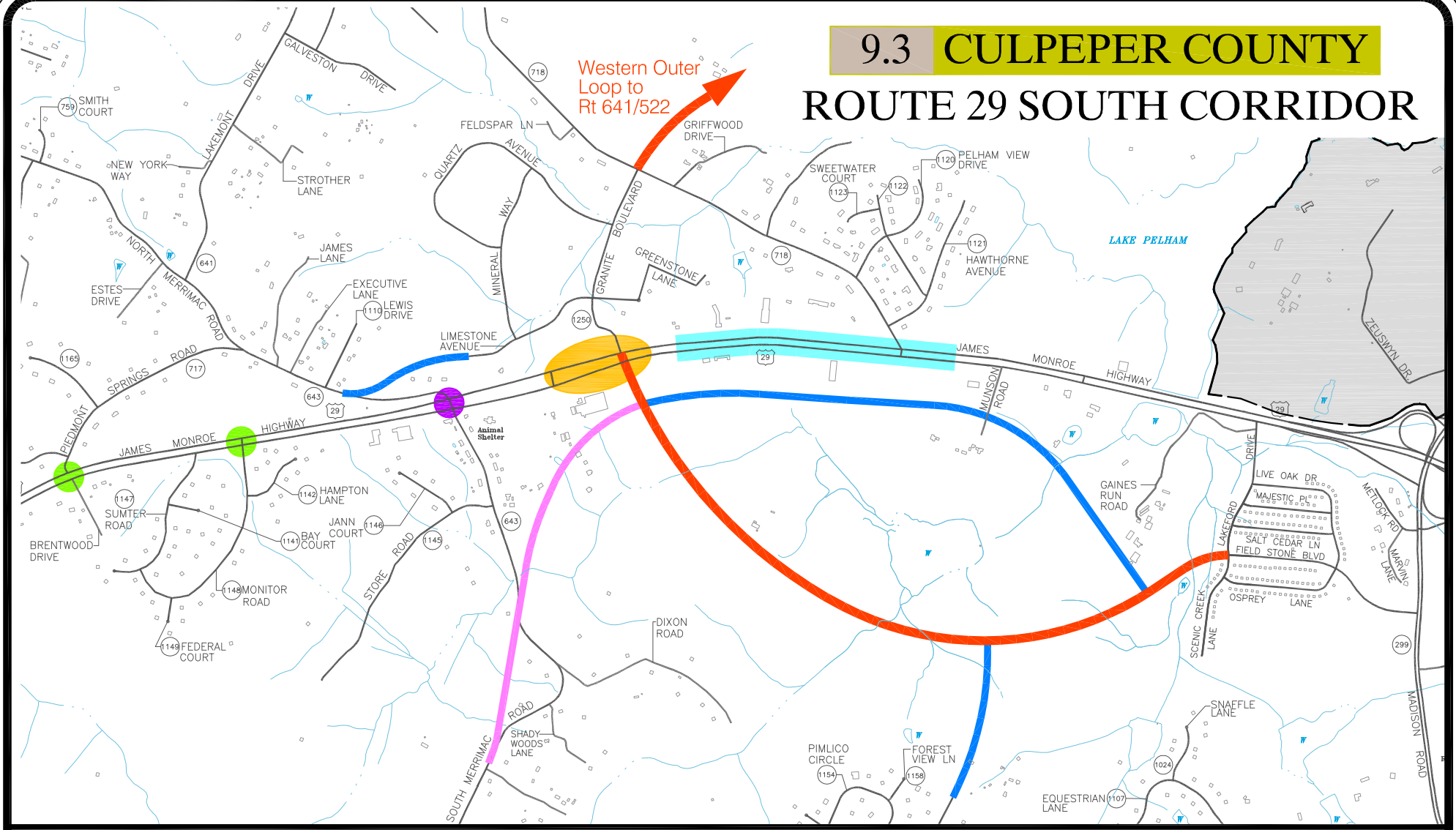
Virginia Regional Transit

Norfolk Southern Railroad

Culpeper Airport

9.3 CULPEPER COUNTY

ROUTE 29 SOUTH CORRIDOR



LEGEND

- FUTURE INTERCHANGE
- SAFETY IMPROVEMENTS
- ELIMINATE ACCESS
- REVIEW AND UPGRADE ROAD GEOMETRICS
- MAJOR COLLECTOR
- MINOR COLLECTOR
- RE-ALIGN ROAD

N W E S

0 1/4 1/2 MILE

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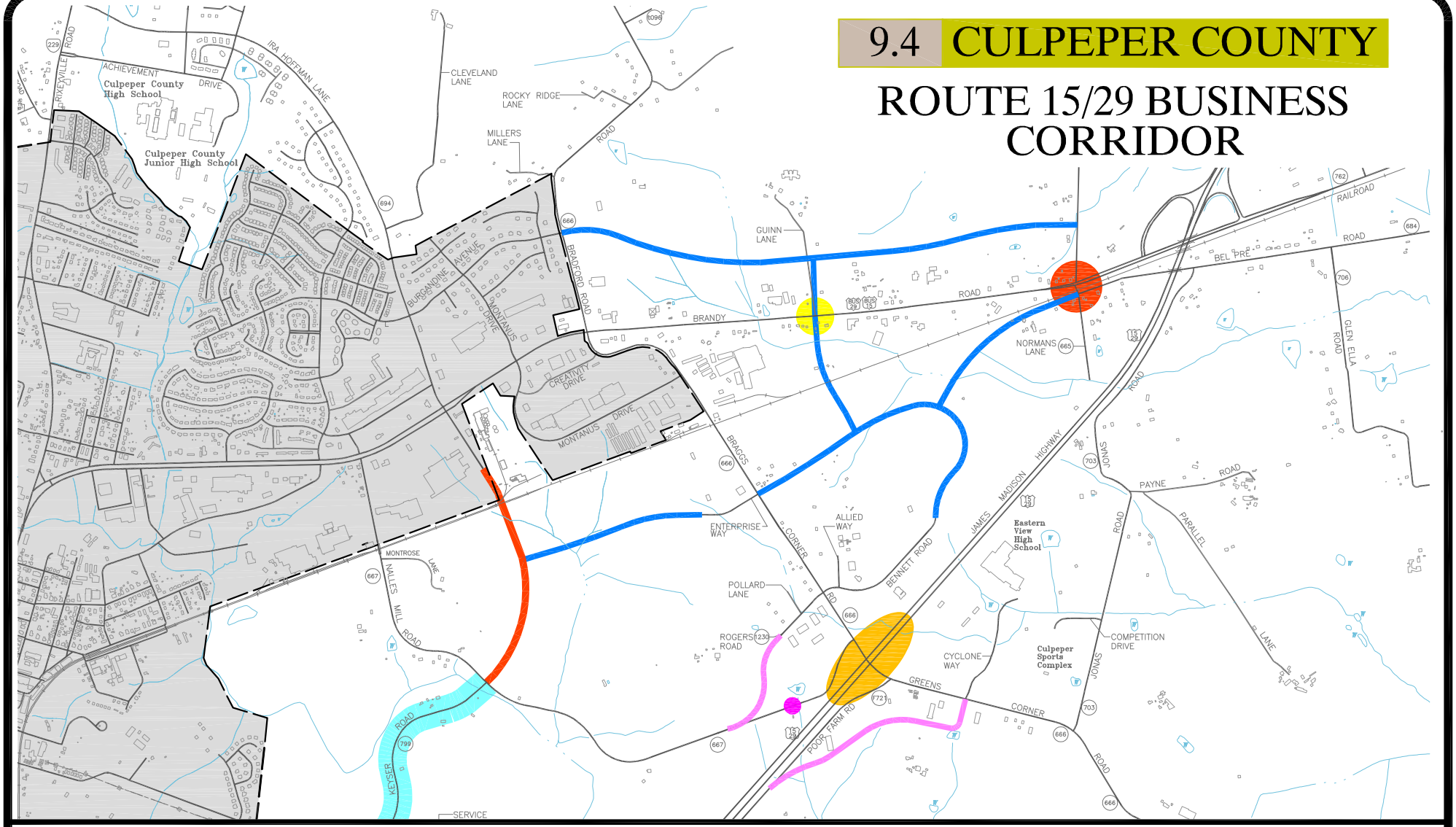
Culpeper County Planning Department

9.4 CULPEPER COUNTY

ROUTE 15/29 BUSINESS CORRIDOR



LEGEND

- FUTURE INTERCHANGE
- INTERSECTION STUDY REQUIRED
- POTENTIAL SIGNALIZATION
- CUL-DE-SAC ROAD
- MAJOR COLLECTOR
- MINOR COLLECTOR
- RE-ALIGN ROAD
- REVIEW AND UPGRADE ROAD GEOMETRICS

N W E S

0 1/4 1/2 3/4 MILE

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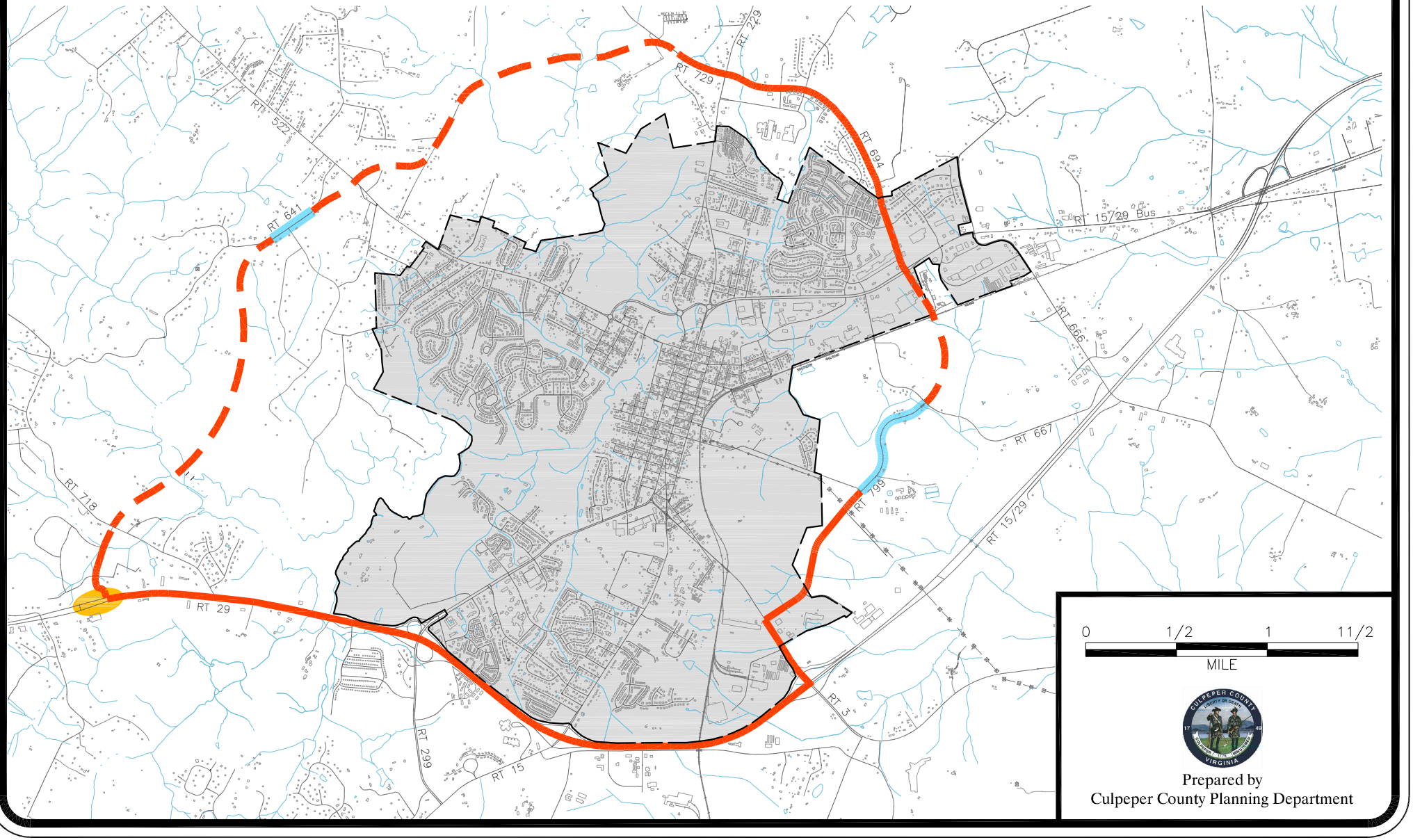
Culpeper County Planning Department

9.5 CULPEPER COUNTY

TOWN VICINITY IMPROVEMENTS
TOWN/COUNTY LOOP ROAD



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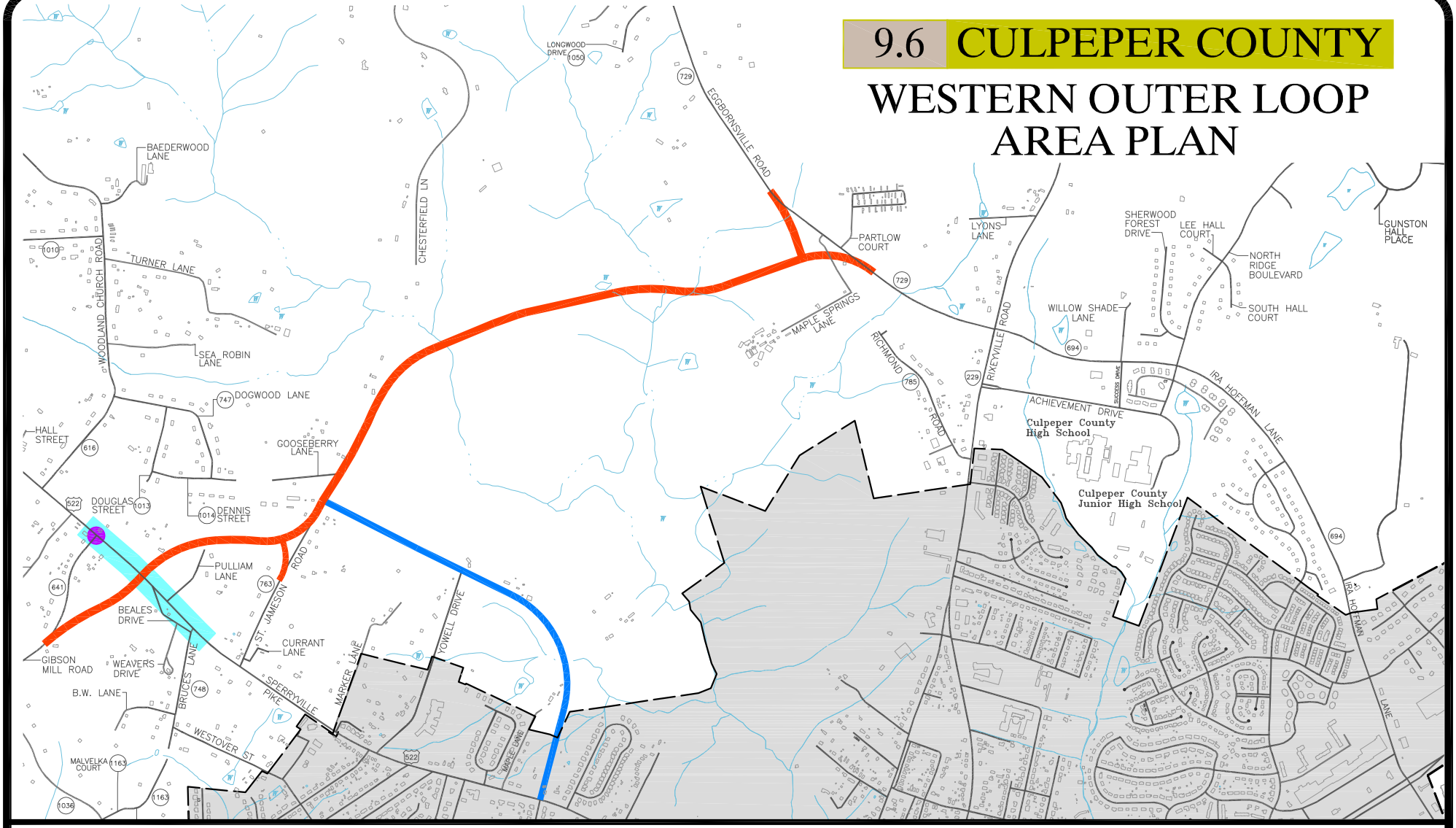
Culpeper County Planning Department

9.6 CULPEPER COUNTY

WESTERN OUTER LOOP AREA PLAN



LEGEND

- REVIEW SIGHT DISTANCE & ROAD/LANE GEOMETRICS
- MAJOR COLLECTOR
- MINOR COLLECTOR
- ELIMINATE ACCESS

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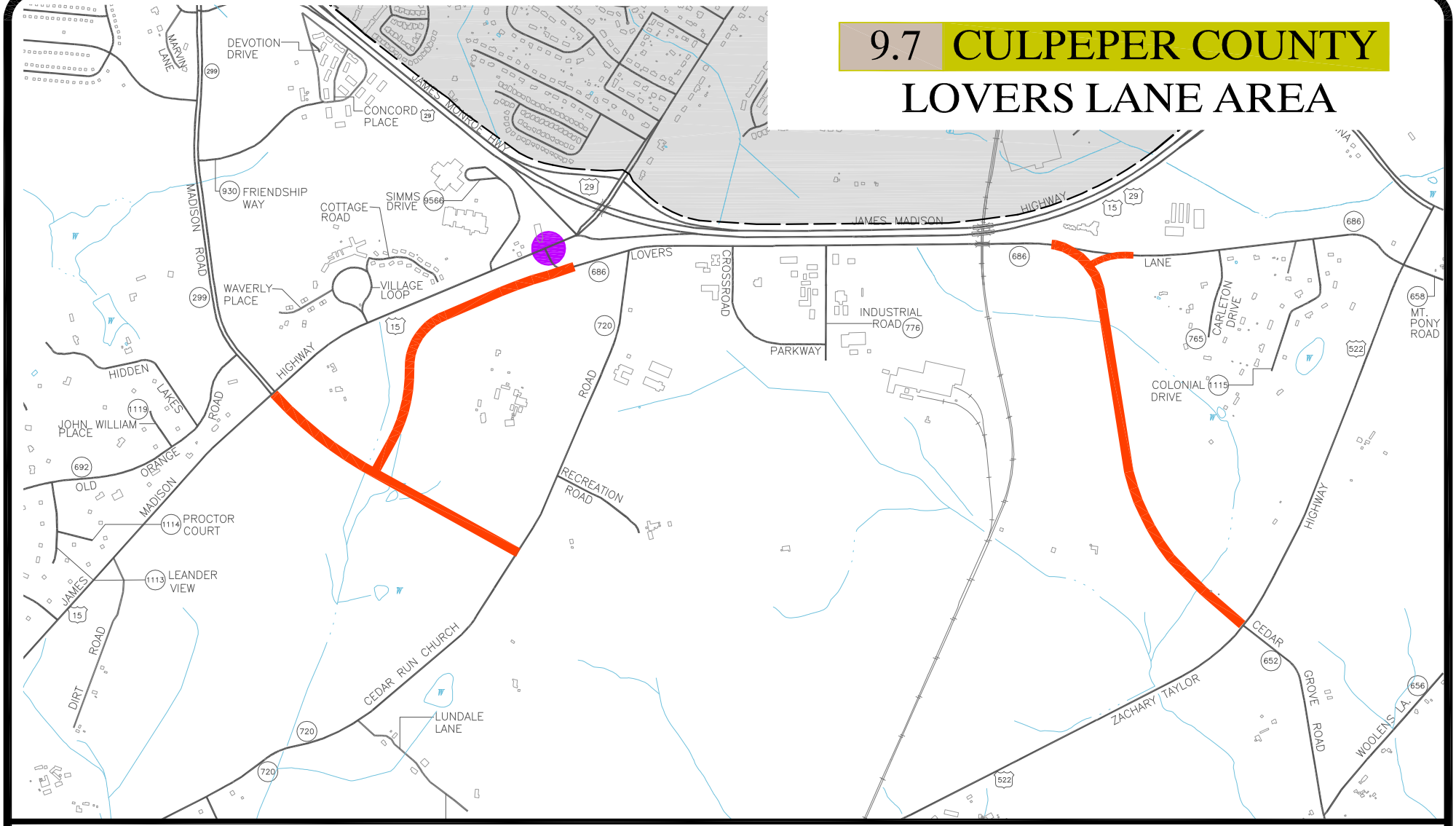
Culpeper County Planning Department

9.7 CULPEPER COUNTY

LOVERS LANE AREA



LEGEND

MAJOR COLLECTOR

ELIMINATE ACCESS

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Culpeper County Planning Department

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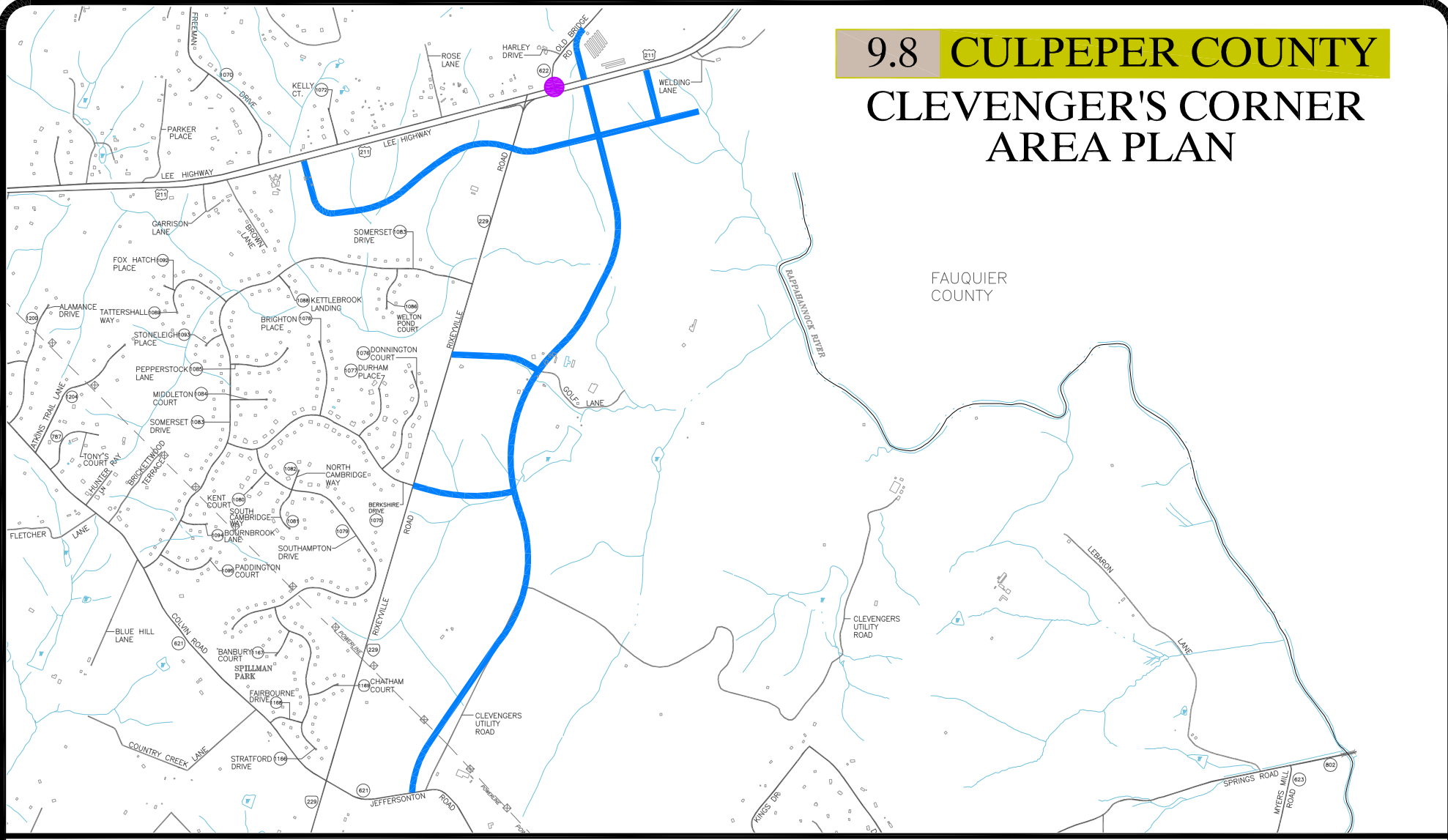
9.8 CULPEPER COUNTY

CLEVENGER'S CORNER AREA PLAN



LEGEND

MINOR COLLECTOR

ELIMINATE ACCESS

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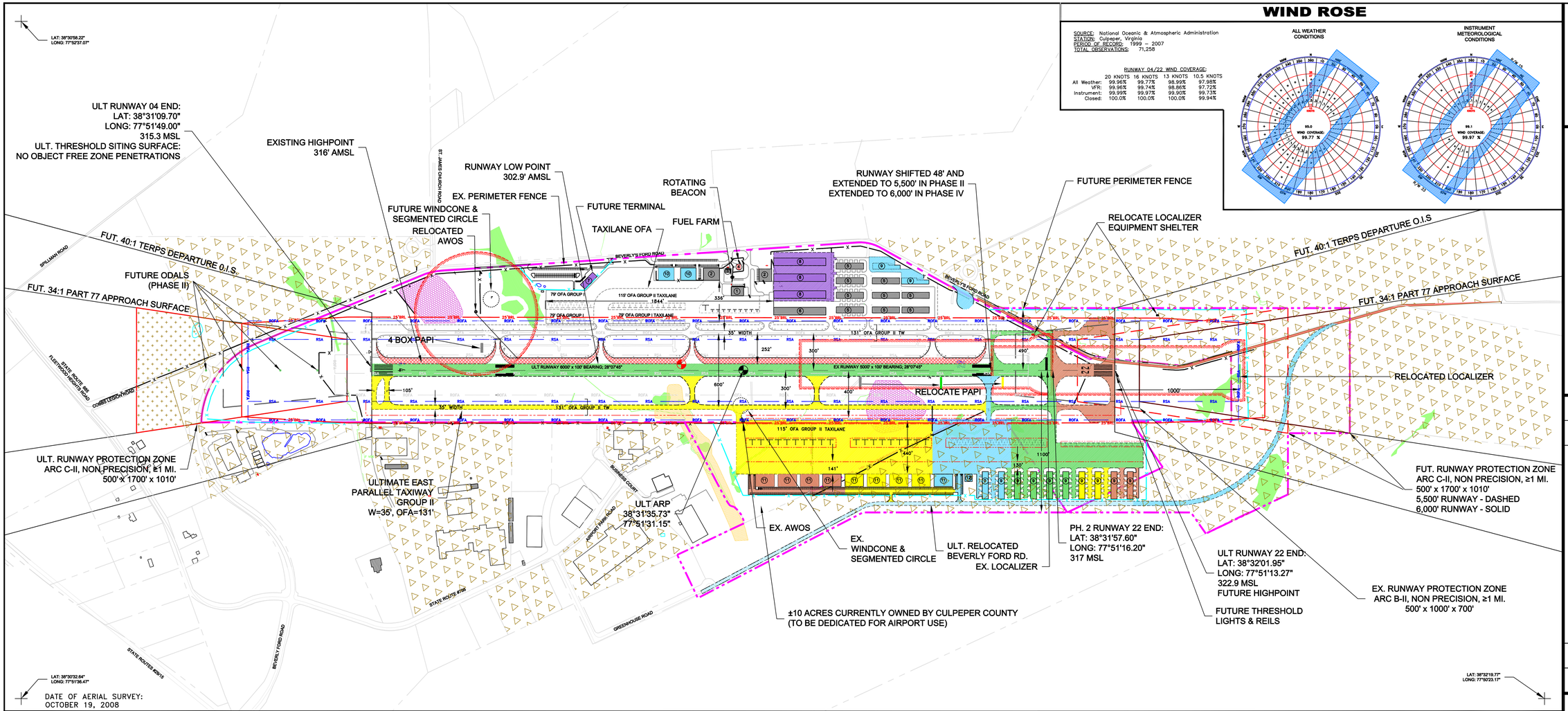
Culpeper County Planning Department



WIND ROSE

SOURCE: National Oceanic & Atmospheric Administration
STATION: Culpeper, Virginia
PERIOD OF RECORD: 1999 – 2007
TOTAL OBSERVATIONS: 71,258

RUNWAY 04/22 WIND COVERAGE:

	20 KNOTS	16 KNOTS	13 KNOTS	10.5 KNOTS
All Weather:	99.96%	99.77%	98.99%	97.98%
VFR:	99.96%	99.74%	98.86%	97.72%
Instrument:	99.99%	99.97%	99.90%	99.73%
Closed:	100.0%	100.0%	100.0%	99.94%

APPROVED
ALP

CAMPBELL & PARIS ENGINEERS
Suite 2 4215 Lafayette Center Dr.
Chantilly, Va. 20151 (703) 802-0093

DESIGNED BY: DEM
DRAWN BY: AJL
CHECKED BY: GTP
APPROVED BY: GTP
DATE: SEPT. 2010
SCALE: AS SHOWN
C&P JOB #: 0007-17
FILE NAME: SHEET2_3_4

REVISIONS

NO.	DATE	BY	APPR.
1			
2			
3			
4			
5			
6			

AIRPORT DATA TABLE

	EXISTING	ULTIMATE
AIRPORT REFERENCE POINT	38°31'31.71"N 77°51'34.67"W	38°31'35.73"N 77°51'31.15"W
MEAN DAILY MAX TEMPERATURE	88.0°F	SAME
WIND COVERAGE (All Weather)	98.99%	SAME
AIRPORT MAGNETIC VARIATION AND DATE	10°-8' W 2009	SAME
AIRPORT REFERENCE CODE	B-II	C-II
NPIAS SERVICE LEVEL	GA	SAME
STATE SERVICE ROLE	GA REGIONAL	SAME
TAXIWAY LIGHTING	M.I.T.L.	SAME
EST. AIRPORT ELEVATION	316' MSL	322.9' MSL
AIRPORT NAVAIDS	ROTATING BEACON, AWOS, COMPASS CALIBRATION PAD, LOCALIZER, PAPI, SEGMENTED CIRCLE , WINDCONES, RUNWAY LIGHTS, REILS	
HOLDING POSITIONS	LOCATED 250' RUNWAY CL, 35' WIDE	

NONSTD. CONDITIONS

RUNWAY END ID	NON STANDARD CONDITION	ACTION
RW 4	----------	----------
RW 22	----------	

NOTES

NO OBJECT FREE ZONE PENETRATIONS

RUNWAY DATA TABLE

	EXISTING		ULTIMATE	
	RUNWAY 04	RUNWAY 22	RUNWAY 04	RUNWAY 22
LATITUDE	38°31'09.94" N	38°31'53.48"N	38°31'09.70" N	38°32'01.95"N
LONGITUDE	77°51'49.56" W	77°51'19.77"W	77°51'49.00" W	77°51'13.27"W
RUNWAY ELEVATION	315.3' MSL	314.5' MSL	315.3' MSL	322.9' MSL
TOUCHDOWN ZONE ELEVATION	316	315	316	322.9
APPROACH VIS. MINIMUMS	≥ 1.0 MI	≥ 1.0 MI	SAME	SAME
FAR PART 77 CAT.	NON-PRECISION	NON-PRECISION	SAME	SAME
APPROACH SLOPE	34:1	34:1	SAME	SAME
RUNWAY LENGTH / WIDTH	5,000' x 100'		6,000' x 100'	
PAVEMENT TYPE	BITUMINOUS CONCRETE		SAME	
PAVEMENT DESIGN STRENGTH	40,000 LBS (DW)		91,000 LBS (DW)	
RUNWAY LIGHTING	M.I.R.L.		SAME	
MARKING	NON-PRECISION	NON-PRECISION	SAME	SAME
PERCENT EFFECTIVE GRADIENT	0.0002%		0.0012%	
VISUAL APPROACH AIDS	BOTH RUNWAYS: PAPI-4, REIL, WINDCONE, ROTATING BEACON		RW 04: ODALS BOTH: SAME	
INSTRUMENT APPROACH AIDS	BOTH: GPS RW 04: LOC		SAME	
CRITICAL AIRCRAFT	FALCON 500/90		GULFSTREAM 350	
STAGE LENGTH	2,000 NAUTICAL MILES		SAME	
RUNWAY SAFETY AREA DIMENSIONS	5,600' x 150'		8,000' x 500'	
OBJECT FREE AREA DIMENSIONS	5,600' x 500'		8,000' x 800'	
OBSTACLE FREE ZONE DIMENSIONS	5,400' x 400'		6,400' x 400'	
OBSTACLE FREE ZONE PENETRATIONS	NONE		NONE	
EFFECTIVE RUNWAY LENGTH	5,000 '		6,000 '	
RUNWAY HIGH/LOW POINTS	H: 316' MSL, L: 302.9' MSL		H: 322.9' MSL, L: 302.9' MSL	
MAXIMUM GRADE WITHIN RUNWAY LENGTH	2.65%		0.8%	
DISPLACED THRESHOLD	NONE		NONE	

APPROVAL

CULPEPER COUNTY
APPR: _____
DATE: _____

VIRGINIA DEPARTMENT OF AVIATION
APPR: _____
DATE: _____

FEDERAL AVIATION ADMINISTRATION
APPR: _____
EASTERN REGION
DATE: _____

APPROVAL SUBJECT TO COMMENTS AND RECOMMENATIONS IN LETTER DATED:

BUILDING TABLE

NO.	DESCRIPTION/USE
1	EX. TERMINAL / FBO
2	EX. CORPORATE HANGAR
3	CIVIL AIR PATROL
4	EX. FUEL FARM
5	EX. T-HANGARS (10-UNIT)
6	EX. T-HANGARS (13-UNIT)
7	FUT. TERMINAL BUILDING (To Be *Completed 2011*)
8	FUT. T-HANGARS (To Be *Completed 2011*)
9	FUT. T-HANGARS (10-UNIT)
10	FUT. HANGARS (12,500 SF)
11	FUT. HANGARS (15,000 SF)
12	FUT. 60' x 60' JET POD (3,600 SF)

FAA'S APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED. DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS, AND EXTERIOR FINISHES OF STRUCTURES. FAA'S CONCERNS ARE OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS AND ADVERSE EFFECT OF CONTROLLER VIEW OF AIRCRAFT APPROACHES AND GROUND MOVEMENTS WHICH WOULD ADVERSLY AFFECT THE SAFETY, EFFICIENCY OR UTILITY OF THE AIRPORT.

MAGNETIC NORTH
10 8' WEST
DATUM 2009
(NOAA)

GRAPHIC SCALE
400 0 200 400 800 1600
(IN FEET)
1 inch = 400 ft.

MODIFICATIONS OF STANDARDS

LEGEND

DESCRIPTION	EXISTING	FUTURE
RUNWAY SAFETY AREA	RSA	RSA
RUNWAY OBJECT FREE AREA	ROFA	ROFA
RUNWAY PROTECTION ZONE		
TAXIWAY/TAXILANE OFA		
BUILDING RESTRICTION LINE	NOT SHOWN	25'BRL
SPOT ELEVATIONS	× 170	SAME
AIRPORT REFERENCE POINT		
AIRPORT PROPERTY LINE		
FENCELINE	x	x
ROADWAYS		SEE PHASE
2' CONTOURS		SAME
LAND TO BE ACQUIRED		
HOLD LINES	NOT SHOWN	
ON AIRPORT BUILDINGS		SEE PHASE
ARCHAEOLOGICAL SITES		SAME
FLOODPLAIN		SAME
WETLANDS		SAME
AVIATION EASEMENTS		

PHASING

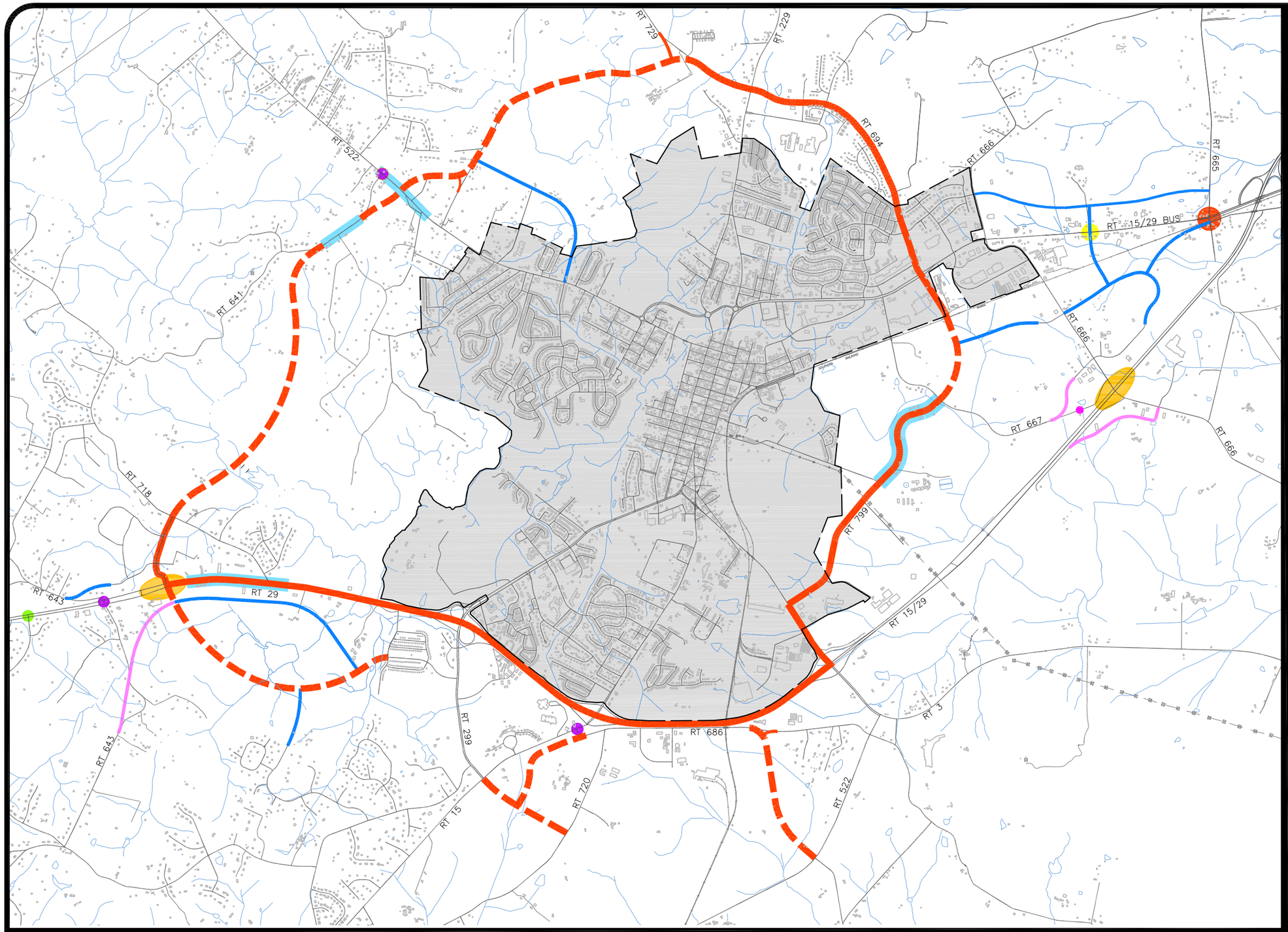
PHASE	SYMBOL
UNDER CONSTRUCTION	
I (0-5 YEARS)	
II (6-10 YEARS)	
III (11-20 YEARS)	
IV (20+ YEARS)	
TO BE DEMOLISHED	

CULPEPER REGIONAL AIRPORT
CULPEPER, VIRGINIA
2010 MASTER PLAN UPDATE

AIRPORT LAYOUT PLAN

A.I.P. PROJECT NO.
3-51-0010-018

SHEET NO.
3
OF
9



TRANSPORTATION PLAN
CULPEPER COUNTY, VIRGINIA

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LEGEND

- REVIEW & UPGRADE ROAD GEOMETRICS
- MAJOR COLLECTOR
- MINOR COLLECTOR
- REALIGN ROAD
- LOOP ROAD (EX. SEGMENTS)
- FUTURE INTERCHANGE
- INTERSECTION STUDY REQUIRED
- POTENTIAL SIGNALIZATION
- ELIMINATE ACCESS
- SAFETY IMPROVEMENTS
- CUL-DE-SAC ROAD

Prepared by
Culpeper County Planning Department