

8. TRANSPORTATION

INTRODUCTION

Roads in Culpeper County are historically linked to the earliest settlements in the area, whose location in turn was influenced by soils, hydrology and topography. A network of roads and trails first evolved linking the farmers to the markets at Culpeper and other settlements. Since then, the transportation system in Culpeper County has changed in size and function to meet the changing transportation needs of its users.

Today the automobile is the dominant form of transportation for Culpeper County's citizens. VDOT statistics show that in 2007, Culpeper County had 75.13 miles of primary roadways, all paved, and 484.68 miles of secondary roadways, including 158.52 miles of gravel roads¹. As this road network has developed, it has provided access to the furthest reaches of the County and beyond. In addition to an 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 that transportation investments can have to the overall development goals of the County.

TRANSPORTATION PLAN VISION:

To create a countywide 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 main 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 the design of roads scheduled for perpetual maintenance meets State design guidelines and that construction practices on these roads meet State requirements. In addition, VDOT is responsible for the maintenance of all public roads in Culpeper County.

¹ Commonwealth of Virginia Department of Transportation Maintenance Division, "Mileage Tables, The State Highway System", December 31, 2008, p. 60

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 minor arterials 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. Because of the consequences of these impacts, transportation decisions should be coordinated between the County and the Town.

A final 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, as an example, can make it easier for people to live in Culpeper while working somewhere more distant. Culpeper County needs to be aware of such regional transportation projects to adequately plan for how they might affect the County.

TRANSPORTATION NEEDS ASSESSMENT

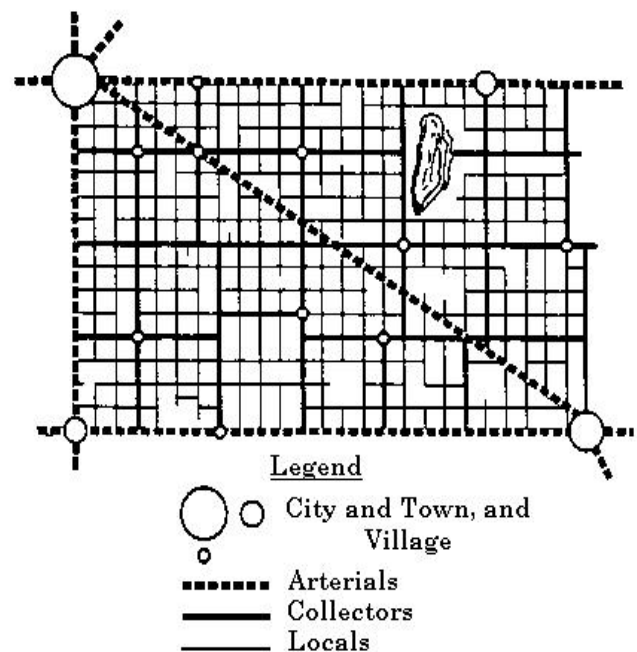
Road Network: Existing Conditions

Roadway Classifications

The Virginia Department of Transportation uses the volume of traffic a road carries and the destination of the road to functionally classify roads in Virginia. Definitions of functional classifications for Culpeper County's roads are listed below. (See figure 8.1 for visual depiction²)

- **Rural Principal Arterial** - These roads form an integrated network of continuous highways intended to serve intra- and interstate travel demand. Their primary function is moving goods and people at high volumes and high speeds. Access is a secondary function of these roads. Routes 211 and 29 (15/29) are principal arterials in Culpeper County.
- **Rural Minor Arterial** - These routes link cities and towns to each other and provide intrastate and intercounty service for local through traffic. Mobility is their primary function; with access to rural communities and major developments a secondary function. County minor arterials include Routes 229, 522, 3 and 15.

Figure 8.1
Schematic Illustration of a Functionally Classified Rural Highway Network



² Federal Highway Administration, FHWA Functional Classifications Guidelines, Section II - Concepts, Definitions, and System Characteristics, (Revised 1989)

- **Major Collectors** - The collector system accommodates the bulk of traffic movements within the County, linking subdivisions and rural villages to each other and to the arterial network. Mobility and land access functions are equal and speeds are generally lower due to local road access and vehicle turning. There are numerous major collectors in the County, examples of which include Routes 685, 729, 633, 621 and 663.
- **Minor Collectors and Local Roads** - These roads provide direct access to adjacent land and generally serve short distance travel. Their primary function is access: linking houses, shops and services to the major collector and arterial system. They are the local roads, subdivision streets and private lanes of the County.

The Federal Aid System (FAS) uses a different road classification system to identify roads. The categories are: 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. The primary classification roughly corresponds to arterial roads and secondary roughly corresponds to collector 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. Recognizing the important linkage between land use and transportation, the State has adopted new processes, including "Chapter 527" traffic impact analysis reviews and access management regulations (see below), in an attempt to more thoroughly address traffic impacts on both the local and regional scale. But until a corridor wide strategy is implemented by the State, it will be the responsibility of localities along the Route 29 corridor, such as Culpeper County, to work toward alleviating the issues associated with continued growth on the local level.

The Culpeper County Functional Roadway Classification Map provides a visual representation of the roadway network and the hierarchy of roads in the County (Map 8.1).

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 new residents commute to northern Virginia to work. According to the 2000 Census, approximately 46.08% of the County’s labor force works outside Culpeper County. A 2003 Rappahannock – Rapidan Regional Labor Survey indicates that out-commuters are now 48.3% of the labor force while a 2006 commuter study indicates that out-commuters are 46% of the labor force. According to data collected for the 2000 US Census, there were 4,449 in-commuters to 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), which is simply 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.

The draft 2035 Virginia Statewide Highway Plan assesses selected County roadways and projects demand on the transportation network through the year 2040 based on projected growth in Culpeper and surrounding counties.

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 rural arterial roads is LOS "C". The minimum design standard for a rural collector road 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.

LEVELS OF SERVICE
for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. No delays
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. No delays
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. Minimal delays
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. Minimal delays
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. Significant delays
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. Considerable delays

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

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 8.1. 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 suffer from decreasing levels of service in the future.

Culpeper County's Minor Arterial Roads are also carrying significant volumes of traffic. Of the County's Minor Arterials (Routes 3, 15, 229 and 522), all are projected to experience a LOS D on some segments by 2015. Future projections indicate even further deterioration of LOS.

Table 8.1

LEVEL OF SERVICE/CAPACITY ANALYSIS										
Principal Arterials										
Route	Facility name	Segment From	Segment To	(mi.)	2005	2015	2025	2030	2035	2040
15	RTES 15/29	RTES 15/29BUS	RTE 663	2.65	B	B	B	C	C	C
15	RTES 15/29	ROUTE 663	RTE 15 BUS	4.31	B	B	B	C	C	C
15	RTES 15/29	ROUTE 15 BUS	FAUQUIER CL	0.24	B	B	B	B	C	C
15	RTES 15/29 BYPASS	RTE 15 BUS	RTES 3/522	1.48	A	B	B	B	B	C
15	RTES 15/29 BYPASS	RTES 3/522	RTES 15/29 BUS	3.71	A	B	B	B	B	B
29	SEMINOLE TRAIL	MADISON CL	RTE 643	4.39	A	A	B	B	B	B
29	JAMES MONROE	RTE 643	RTE 29 SOUTH	2.05	B	B	B	B	B	B
29	MADISON RD	RTE 29/29 BYP	CULPEPER SCL	0.28	A	B	B	B	B	B
29	JAMES MONROE	RTE 29 BUS SOUTH	RTE 15 BUS	0.99	A	B	B	B	B	C
211	LEE HIGHWAY	RAPPAHANNO CK CL	RTE 229	2.95	A	A	B	B	B	C
211	LEE HIGHWAY	RTE 229	FAUQUIER CL	0.95	A	B	C	D	F	F
Minor Arterials										
3	GERMANNA HWY	CULPEPER ECL	RTE 15/29 BYP	0.34	A	A	B	B	B	B
3	GERMANNA HWY	ROUTE 29	ROUTE 522	0.46	A	B	B	B	B	B
3	GERMANNA HWY	ROUTE 522	.24 EAST RTE 522	0.24	A	A	A	A	A	A
3	GERMANNA HWY	.24 MI EAST RTE 522	RTE 663	4.39	C	D	D	D	D	D
3	GERMANNA HWY	RTE 663	RTE 647 EAST	4.63	C	C	C	D	D	D
3	GERMANNA HWY	RTE 647 EAST	2.49 MI WEST ORANGE	1.03	A	A	A	A	A	A

Route	Facility name	Segment From	Segment To	(mi.)	2005	2015	2025	2030	2035	2040
3	GERMANNA HWY	2.49 MI WEST ORANGE	ORANGE CL	2.49	A	A	A	A	A	A
15	MADISON HWY	MADISON CL	RTE 649	5.1	C	C	C	C	C	C
15	MADISON HWY	ROUTE 649	ROUTE 299	2.75	C	C	D	D	D	D
15	MADISON HWY	ROUTE 299	ROUTE 686	0.36	C	C	C	D	D	D
15	MADISON HWY	RTE 686	RTE 15 BUS	0.15	A	A	A	A	A	A
15	RTES 15/29 BUS	RTE 15/29 BYP	FAUQUIER CL	0.56	B	B	B	B	B	B
15	RTES 15/29 BUS	CULPEPER NCL	RTE 15/29 BYPASS	2.07	D	D	D	D	D	D
15	RTES 15/29 BUS	RTE 15 BYPASS	CULPEPER SCL	0.07	A	A	A	A	A	A
229	MAIN STREET	CULPEPER NCL	RTE 694	0.3	E	E	E	E	E	E
229	MAIN STREET	RTE 694	RTE 631	3.69	D	D	D	E	E	E
229	RIXEYVILLE RD	RTE 631	RTE 640 NORTH	2.14	C	D	D	D	E	E
229	RIXEYVILLE RD	RTE 640 NORTH	RTE 802	4.1	C	D	D	E	E	E
229	RIXEYVILLE RD	RTE 802	RTE 211	3.5	C	D	E	E	E	E
299	MADISON RD	RTE 15	RTE 29	0.95	A	A	A	A	A	A
522	ZACHARY TAYLOR	ORANGE CL	RTE 617 SOUTH	4.16	C	C	C	C	C	C
522	ZACHARY TAYLOR	RTE 617 SOUTH	RTE 3	3.12	C	C	C	C	C	C
522	SPERRYVILLE PIKE	CULPEPER WCL	RTE 634	5.05	C	C	C	C	D	D
522	SPERRYVILLE PIKE	RTE 634	RAPPAHANNO K CL	3.22	C	C	C	D	D	D
Secondary Roads with Identified LOS Deficiencies										
610	MADDENS TAVERN	RTE 647	RTE 620 SOUTH	1.02	D	E	E	E	E	E
615	RAPIDAN RD	ORANGE CL	RTE 647	0.97	D	D	D	D	D	E
621	LAKOTA RD	RTE 625	RTE 229	3.86	D	D	E	E	E	E
634	GRIFFINSBURG RD	RTE 716	RTE 522	2.01	D	E	E	E	E	E
637	SHANKTOWN RD	RTE 644	RTE 634	0.8	E	E	E	E	E	E
640	DOCS RD	RTE 627	RTE 628 SOUTH	1.7	E	E	E	E	E	E

Route	Facility name	Segment From	Segment To	(mi.)	2005	2015	2025	2030	2035	2040
640	MONUMENTAL	0.71 MI EAST RTE 628	RTE 229 NORTH	1.79	D	E	E	E	E	E
644	REVA RD	RTE 633	RTE 637	2.85	E	E	E	E	E	E
647	REVERCOMB RD	RTE 3	RTE 610	0.9	D	E	E	E	E	E
663	BATNA RD	RTE 3	RTE 15	4.46	D	E	E	E	E	E
663	ALANTHUS RD	RTE 15	RTE 685	0.08	E	E	E	E	E	E
663	ALANTHUS RD	RTE 685	RTE 625	3.44	D	D	E	E	E	E
666	BRAGGS CORNER RD	RTE 15 EAST	RTE 29	1.02	E	D	E	E	E	E
669	CARRICO MILLS RD	RTE 3	RTE 672	1.6	E	E	E	E	E	E
669	CARRICO MILLS RD	RTE 672	RTE 675	2.1	E	E	E	E	E	E
669	CARRICO MILLS RD	RTE 675	RTE 762	2.28	E	E	E	E	E	E
685	CHESTNUT FORK RD	RTE 729	RTE 229	1.25	D	E	E	E	E	E
700	MT DUMPLING RD	RTE 663	RTE 669	0.16	E	E	E	E	E	E
729	EGGBORNSVILLE RD	RTE 229	RTE 638 WEST	2.58	D	E	D	E	E	E
802	SPRINGS RD	RTE 229	RTE 621 NORTH	1.57	E	E	E	E	E	E

Traffic Crash & Casualty Information

Table 8.2

VIRGINIA DEPARTMENT OF MOTOR VEHICLES TRAFFIC CRASH FACTS							2000 - 2008 ³
Year	Crashes	Fatalities	Injuries	Licensed Drivers in County	Death Rate Per 1,000 Drivers	Statewide Death Rate Per 1,000 Drivers	
2000	660	5	408	24,186	0.21	0.22	
2001	739	9	460	24,908	0.36	0.21	
2002	783	9	483	25,903	0.35	0.21	
2003	752	9	429	27,154	0.33	0.22	
2004	680	14	417	28,335	0.49	0.21	
2005	820	9	471	29,781	0.30	0.22	
2006	742	10	389	30,666	0.33	0.21	
2007	744	11	401	31,113	0.35	0.22	
2008	638	6	354	31,251	0.19	0.17	

³ Commonwealth of Virginia Department of Motor Vehicles, Highway Safety Office

According to the table 8.2, Culpeper County had a significantly higher death rate per 1,000 licensed drivers than the State of Virginia for the years 2001 through 2007. In 2008, the death rate fell dramatically to 0.19 which is much more in line with the reduced statewide death rate per 1,000 licensed drivers of 0.17.

Future Development Commitments

Current Valid Building Permits Outstanding: In analyzing commercial and residential building permit data over the last five fiscal years (July 1 to June 30); the data shows 98% of building permits issued for new residential and new commercial structures during this timeframe obtained Certificates of Occupancy. The table below documents the number of both building permits issued and Certificates of Occupancy issued per fiscal year.

Table 8.3

BUILDING PERMITS AND CERTIFICATES OF OCCUPANCY					2004-2009	
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	5 Year Totals
# Permits Issued	917	790	424	203	84	2,418
# COs Issued	570	884	564	268	81	2,367
% of Building Permits Closed with COs Being Issued	62%	112%	133%	132%	96%	98%
% of Open Building Permits	38%	-12%	-33%	-32%	4%	2%
Difference Between Building Permits Issued per Fiscal Year and COs Issued per Fiscal Year	347	-94	-140	-65	3	51

Approved and Pending Subdivisions and Site Plans: Table 8.4 indicates approved projects which are not yet fully developed or not started as of August 2009.

Table 8.4

CULPEPER COUNTY APPROVED DEVELOPMENT PROJECTS						
Project Name	Zoning District	Acreage	Total Dwelling Units/ Total Square Footage	Total	Completed	Notes
Residential Projects (Subdivision Plan Approved)						
Three Flags-Phase 1	R-3	100 ac.	231 SFD	231	69	
Three Flags-Phase 2	R-1, R-2	250 ac.	463 SFD, 200 MF	663	0	MF- age restricted
Northridge	R-1, R-2	295 ac.	287 SFD	287	69	
Rillhurst IV	R-1	114 ac.	43 SFD	43	12	
Madison Grove	R-2	40 ac.	93 SFD	93	60	
Stone Ridge	R-1	176 ac.	54 SFD	54	2	
Lakemont	R-1	108 ac.	34 SFD	34	0	
Glendale	R-1	30 ac.	17 SFD	17	4	

Bowen Tract	R-1	100 ac.	38 SFD	38	0
Dove Hill Estates	R-1	87 ac.	41 SFD	41	0
Clevenger's Village	PUD	1,754 ac.	774 SFD, TH	774	0
Total				2,275	216
Commercial/ Industrial Projects (Site Plan Approved)					
Culpeper Colonnade	M-2	40.0 ac.	357,412 retail/ restaurants		206,454 retail
Jameson's Crossroads	M-2	1.16 ac.	9,500 retail/restaurants		
Stillwell Plumbing	M-1	7.0 ac.	24,000 warehouse/ 4,860 office		
Terremark Worldwide, Inc	LI	30.12 ac.	207,200 data center/ 60,000 office		53,200 data
CAPL, LLC – Hampton Inn	M-1	13.45 ac.	98 room hotel		
Boxwood Recovery Facility	RA	22.28 ac.	21,500 residential care		
Northridge Commercial Center	VC	17.14 ac	137,579 retail		
Culpeper Business Park	M-1	9.0 ac.	11,420 retail		

The data in tables 8.3 and 8.4 provide some insight into the additional traffic generation that can be expected in the near future. In addition there are parcels zoned commercial or industrial for which no site plan has been submitted, such as the Wingspread development located between Lovers Lane and Route 522. In order to create a complete picture of the potential traffic generated by future development, these parcels must be included in the overall analysis.

Other Modes

Air

The Culpeper Regional Airport (T.I. Martin Field) is located on Rt. 677, Beverly Ford Road in Brandy Station (red airplane in graphic) and provides aviation services to the community through maintenance of facilities and services. 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 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. There are 130 based aircraft as of 2008. There is a full parallel taxiway, a new ramp of 25,000 sq. ft. and in FY 2004 a runway extension project of an additional 1000 feet affording a total of 5000 ft. was completed, resulting in the ability to attract larger corporate traffic. A Localizer approach became available in late 2005, a new terminal building is planned by FY 2010 and additional parking was added in 2008. The airport is growing to better accommodate all types of private and corporate aircraft.

The Culpeper Regional Airport serves the County of Culpeper by several specific means. The first is as an engine for Economic Development. In 1984, the County separated 106 acres of the airport property for the Culpeper County Industrial Air Park to capitalize on the availability of the airport infrastructure. The County has 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 enables corporations that desire to locate in Culpeper to be near 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.



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 introduction of the Micro-Jet or Very Light Jet Market, the paradigm of air travel has begun to shift to the smaller regionally located airports. Add to this, the runway and ramp improvements and there has already been an increase in the number of corporate aircraft utilizing the airport facilities. With the 9-11 attack on America and the advent of the Washington DC Air Defense Zone, commonly referred to as ADIZ, the airport location has become even more desirable to pilots seeking a base outside this restricted zone. This location has become so desirable that the number of people on the current T-hangar waiting list exceeds the total number of currently based aircraft. Along with these amenities, a full service maintenance shop and competitive fuel prices enhance the airport's appeal to modern corporate aircraft.

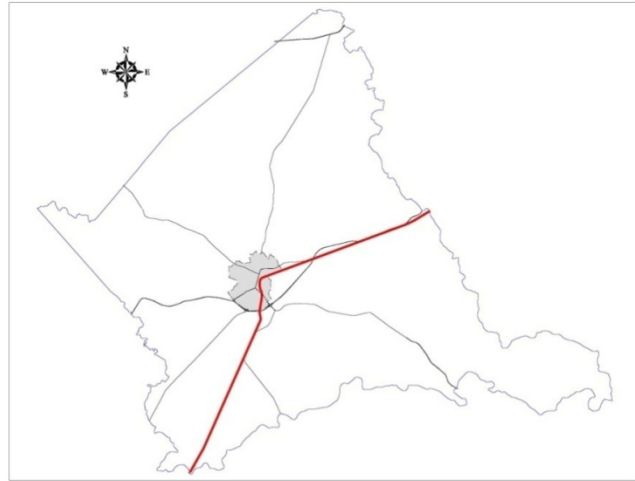
Recreational aviation is well served at the Culpeper Regional Airport. The installation of a 24-hour self-fueling tank will afford this group more freedom and will generate additional revenue. Recreational aviators with aircraft based in Culpeper bring in tax revenue and fuel sales dollars, as well as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

While no one can predict the future, the current trends indicate that general aviation is on the rise. Culpeper County is poised to embrace the future and realize the goal of making Culpeper Regional Airport 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 southeast; through Mitchells and Winston to the Town of Culpeper; and then east along Route 29 through Brandy Station and Elkwood to the County line (red line in graphic). 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.

Twelve freight trains move 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. There have been discussions concerning the increase in train freight traffic due to the expanding capacity of both the Hampton Roads Port and the inland ports. An increase in freight traffic could have an adverse effect on current passenger rail service. Amtrak, the National Railroad Passenger Corporation, operates three routes that travel through, and 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. 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, but only stops in Culpeper with prior notification to the conductor.



Commuter rail service now connects both Manassas and Fredericksburg with Washington. This service currently sees very limited ridership by Culpeper citizens. Any consideration of extending service to Culpeper should be undertaken carefully. Prior to extending commuter rail service, all impacts, including fiscal, would need to be thoroughly studied. 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.

Finally, Culpeper County has supported, and continues to support an effort to provide passenger rail service from Bristol, VA to Washington, D.C. This service would include stops in several hubs such as Lynchburg and Charlottesville. Many tourist locations and colleges are included. The Town of Culpeper is slated as a stop.

Public

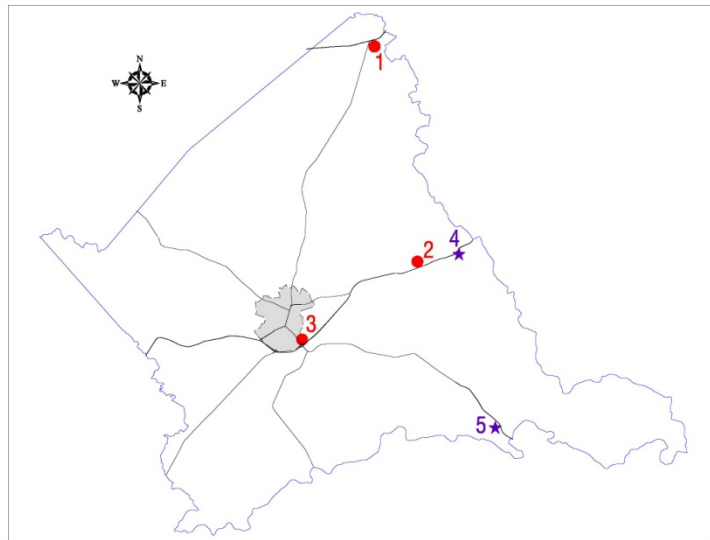
Public transportation in Culpeper County is limited to the services provided by the Virginia Regional Transit (VRT). Currently, two buses provide service within Town limits. Both buses have fixed routes and stops. The County currently provides one bus to run from locations outside Town limits to destinations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

Another organization involved in public transportation and mobility services is the Foothills Area Mobility System (FAMS), a program of the Rappahannock-Rapidan Regional Commission. 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 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 commuter

park and ride lots and a potential additional lot (see graphic below) in the County, where carpools 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, the area proposed for the Brandy Station/Route 29 interchange and (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, a new park and ride lot (number 4 on the graphic) is being proposed north of this intersection which would increase capacity of the park and ride program dramatically. Lastly, as capacity decreases and 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, the Commission 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 guarantees a ride home when unexpected emergencies arise. As other commuter opportunities become economically feasible, Culpeper County will diligently pursue their implementation.



As the park and ride lot located at the intersection of Route 15/29 and Alanthus Road is being fully utilized, a new park and ride lot (number 4 on the graphic) is being proposed north of this intersection which would increase capacity of the park and ride program dramatically. Lastly, as capacity decreases and 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, the Commission 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 guarantees a ride home when unexpected emergencies arise. As other commuter opportunities become economically feasible, Culpeper County will diligently pursue their implementation.

PLANNING GUIDELINES

Transportation-Land Use Link

Culpeper County's transportation network provides a framework upon 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 the long-range development goals. Past investments in the road network have locked the County into 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's village centers. 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 necessarily impact projected land use in the vicinity of such facilities.

The Virginia Department of Transportation has recently updated or created several programs to help better manage the Transportation-Land Use Link. The first program to be instituted 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. These guidelines now dictate that roads scheduled to come under perpetual state maintenance meet certain 'connectivity' requirements. By requiring this connectivity, the state is attempting to ensure that all future roads included in the state system will add to the capacity and safety of the local transportation network. 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 system⁴. Currently, developments impacting primary roads are being reviewed using the Access Management Guidelines. 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. Over time, all development, whether impacting primary or secondary roads, will be reviewed using these guidelines.

Traffic Impact Studies

A traffic impact study is used to assess the impact a proposed 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. Cumulative impacts require special consideration.

⁴ Virginia Department of Transportation, Road Design Manual, Appendix F "Access Management Design Standards for Entrances and Intersections: Principal Arterials", July 1, 2008

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. Any traffic impact study should follow the basic format outlined in the VDOT Land Development manual, and should be based upon the latest edition of the Institute of Traffic Engineers (ITE) Manual. As of January 1, 2008, new legislation known as 'Chapter 527' became effective which requires a Traffic Impact Analysis for any land development proposal which meets a set of defined traffic generation criteria and is designed to identify both local and regional impacts. This legislation further builds on a practice which has been utilized in Culpeper County to a great degree for many years.

Regional Transportation Projects

Route 29 Corridor Development Study: VDOT completed a study of the Route 29 corridor from Warrenton to Charlottesville in 2002. The study examined projected growth along this segment of Route 29 and developed different scenarios to improve the road to accommodate projected demand. The potential impacts of this study on Culpeper County are addressed in more detail in the Transportation Plan section.

US Route 29 Corridor Crossover Study, December 2006: VDOT contracted with Vanasse Hagen Brustlin, Inc. to conduct a comprehensive study of the US Route 29 crossovers within the VDOT Culpeper Construction District. The study provided an assessment of the median crossover issues that need to be addressed.

Rappahannock-Rapidan Regional Commission Long Range Regional Transportation Plan: VDOT, Virginia's Planning District Commissions, 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 areas. These plans, once completed, will be utilized by VDOT to help create the State's 2035 Transportation Plan.

Route 29 Corridor Study (ongoing): The Commonwealth Transportation Board initiated this study of 219 miles of Route 29 from the Virginia/North Carolina border to Interstate 66 in Gainesville. The study focuses on concerns related to the overall safety and congestion in the corridor, the ability to serve local and longer distance trips both currently and in the future, the effects of local traffic and limited levels of access control on travel within the corridor, and the need for improved integration of the corridor as a statewide scenic resource. This study also represents an effort to assess and consolidate the findings and recommendations from numerous other studies that have been performed along the 219 mile corridor.

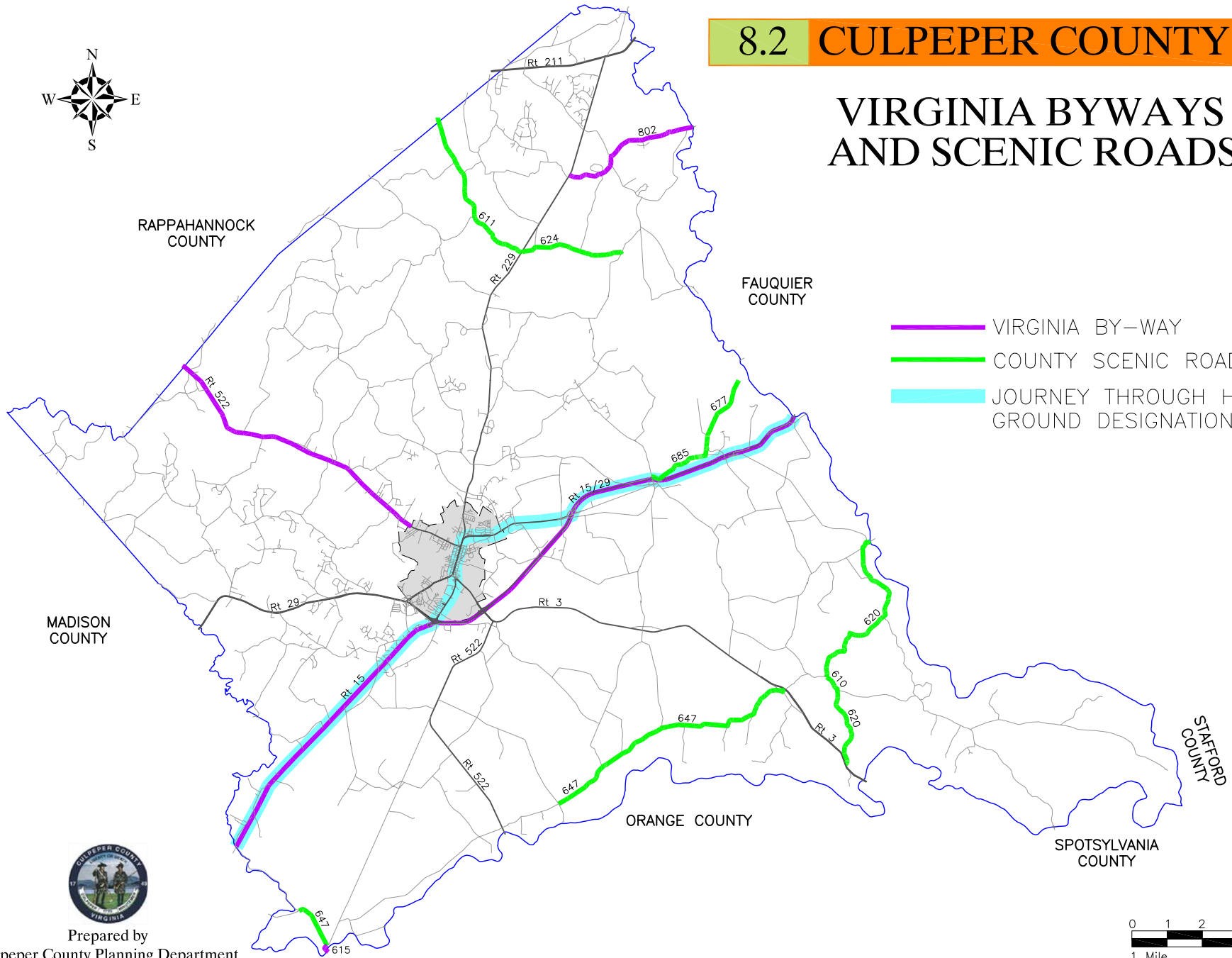
Scenic Roads

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. As a County, Culpeper's citizens are proud of the natural beauty that Culpeper has to offer, and should highlight this to travelers to the County. The County should designate certain major or minor collectors that provide travelers with views of unique scenic natural and historic areas as scenic roads. Such a program will provide the County an additional tool when planning transportation improvements. Map 8.2 shows existing Virginia Byways and potential scenic roads.

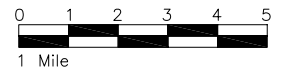
8.2 CULPEPER COUNTY 2010 2030

VIRGINIA BYWAYS AND SCENIC ROADS

-  VIRGINIA BY-WAY
-  COUNTY SCENIC ROAD
-  JOURNEY THROUGH HALLOWED GROUND DESIGNATION



Prepared by
Culpeper County Planning Department



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. Road improvements on these roads should be designed to reflect the character of the area. Lower design speeds should be used on minor collector and local streets, since these streets stress access. Trees should be preserved along the sides of roads when they do not pose a safety hazard. Special guidelines for signs should 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 (Map 8.2). In addition, on October 16, 2009 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.

Road Improvement Programs

The Virginia Department of Transportation identifies 75.13 miles of primary roadways in Culpeper County, which include 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 (Primary) Improvement Program. This program is revised annually and approved by the Commonwealth Transportation Board. County officials are given an opportunity to request that projects be added to the program at an annual public hearing. Projects are included in the program based on need and available funding.

Culpeper County currently has several projects in the FY 10 - FY 15 Six-Year Improvement Program which are at least partially funded:

- Construction of two parallel lanes on 15/29 Business from the north Town limits to Inlet. This project is divided into two segments. The first segment from the Town Limits to Route 666 was completed in the fall of 2009. The second segment of this project, for which preliminary engineering is currently underway, has no funding for either right-of-way acquisition or construction through the year 2015.

- The four laning of Route 229 from the Town Corporate Limits to just beyond Ira Hoffman Lane. Work on this project is scheduled for completion in early 2010.
- The construction of a grade separated interchange on Route 15/29 at Route 666. Preliminary engineering and environmental work should be completed with existing funds by the end of 2010. All additional funding for this project has been cut from the current Six-Year Improvement Program.
- Completion of the four-laning of Route 3 from the Route 29 Interchange to the Orange County line. The final segment of Route 3 to be four-laned in Culpeper County, from just west of Stevensburg to Lignum, has had all money cut from the current Six Year Improvement Program.

In addition to the projects on VDOT's Six-Year Improvement list, the County Board of Supervisors annually adopts a Primary Road Priority List, which prioritizes the County's projects on VDOT's Primary System Improvement Program and identifies new projects the County will request to be added to this program.

Secondary Road Improvement Program

The Virginia Department of Transportation identifies 484.68 miles of secondary roadways in Culpeper County which includes approximately 89 miles of secondary roads serving as major collectors for the County. In the past, these have been farm-to-market roads that now serve rural residences and subdivisions. 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 reviewed and evaluated by the Culpeper County Planning Commission and prioritized and approved by the Board of Supervisors. The update and review process occurs every other year. The list generally identifies 20 to 25 local and collector roads and bridges scheduled for improvement. New projects are added to the bottom of the list and move up as projects at the top are completed.

Projects included in the Secondary Road Improvement Program are subject to certain funding constraints imposed by VDOT. Approximately 30 to 35 percent of the money must be used to pave dirt and gravel roads. 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 and Revenue Sharing funds.

VDOT also administers the Federal Transportation Enhancement 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 Transportation Efficiency Act (TEA-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 rezonings. Proffers should be used in the future to accomplish needed road improvements. An additional source of funding may be the Town of Culpeper. The Town-County Loop Road and Lovers Lane Industrial Area Plans are very beneficial to alleviating traffic congestion within the Town Corporate Limits.

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.

In 2007, the Virginia General Assembly passed HB 3202 which included a provision enabling Culpeper County to impose Transportation Impact Fees. In the future, the option to impose these fees could be utilized to help pay for needed road construction within the County.

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

GOALS AND OBJECTIVES

General

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

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 and secondary 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 context of the surrounding land use.

GOAL: PARTICIPATE IN THE DEVELOPMENT AND IMPLEMENTATION OF A REGIONAL TRANSPORTATION SYSTEM, WHICH UTILIZES 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 Rappahannock-Rapidan Regional Commission.
3. Encourage the preservation of the Route 29 Corridor as a high-speed, traffic flow facility within Culpeper County.
4. Encourage the Commonwealth to provide 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. Raise the priority of rail access as one of the key factors to promote economic development in the County.
2. Utilize 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. Increase security measures.
3. Seek to improve revenues for Airport operations such that it becomes a self-supporting facility.
4. Control land use zoning around the Airport to encourage primarily business and economic development.
5. Expand additional terminal area facilities in a coordinated manner, making maximum use of those areas currently serving general aviation users. With expansion, enhance operational safety of the facility.
6. Connect airport facilities to County water and sewer services.
7. Minimize impacts, where reasonable, to historic areas on and near the site.
8. Obtain aviation easements or obtain land fee simple to preclude conflict with airspace requirements for proposed expansion and related safety and FAA clearance requirements.
9. Explore and encourage business and commercial aviation use of the Airport.

THE TRANSPORTATION PLAN

Arterial Plans

The network of arterials serving Culpeper County is the backbone of the transportation system and should have 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. When completed, this work should increase safety on this road as well as provide needed additional capacity.

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 poor levels of service, as no improvements are currently planned. This road should be considered for inclusion on the County's Primary Road Priority List and at a minimum, spot improvement projects installing left and right turn lanes should be considered to increase safety and capacity.

Route 229: The improvements planned for this road on the Primary Road Priority List will address the existing capacity deficiencies and safety problems on the segment from the Town to Catalpa. Since funding will continue to be an issue, spot improvement projects installing left and right turn lanes should be considered to increase safety and capacity.

Route 15: No improvements are currently planned for Route 15. The existing LOS D is expected to deteriorate to LOS E by 2025. 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. At a minimum, spot improvement projects installing left and right turn lanes should be considered to increase safety and capacity.

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 in the next few years. 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. With a focus on maintaining a village center viewscape at this County entrance corridor, no grade separated improvements are proposed/proffered, although they could be easily justified.

Route 29: Route 29 is the main roadway in Culpeper County, providing intracounty 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. In order to increase capacity and safety on Route 29, grade separated interchanges are planned for its intersection with Route 1250 (Granite Boulevard) and Route 666 (Braggs Corner Road/Green Corners Road). The construction of a grade separated interchange at the Route 29/Route 666 intersection is Culpeper County's number one transportation construction project priority.

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 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 8.3)

Route 29 is the primary road linking Culpeper County to the northern and central Virginia regions. This road is a major transportation corridor in Virginia and has experienced significant traffic volume increase during the past decade. The plan developed for this corridor emphasizes two objectives. First, this road should primarily serve to move traffic, so access should be limited to promote mobility. Second, safety is a major issue on this road, particularly at intersections on the segment which runs southwest from the Town of Culpeper.

VDOT, working with the consulting firm of Post, Buckley, Schuh and Jernigan (PBSJ), completed a study of the Route 29 corridor from Warrenton to Charlottesville in 2002. The goal of this study was to project future use of this corridor and to develop a plan to accommodate anticipated increases in traffic volumes. One result of this study was a plan alternative which proposed developing Route 29 as a freeway. The entire length of Route 29 would have controlled access and interchanges would be built to provide exit and entrance points. Access to properties adjacent to Route 29 would be provided through a series of frontage roads.

There was a mixed reaction to the freeway concept plan proposed by PBSJ from the communities included in the study area. Several counties opposed it on the grounds that they wanted to preserve their right to access Route 29, particularly for commercial and industrial purposes. 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 and mobility and capacity, the area plan for the Route 29 South Corridor has been prepared. Highlights of this plan include:

- Reservation of right-of-way for a new third lane to be implemented on both the northbound and southbound portions of Route 29.
- Review of the road geometrics and upgrade to a 60 mile per hour design speed.
- 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 an interchange at the intersection with Granite Boulevard (Route 1250).
- Construction of collector roads behind existing commercial uses to serve the areas of the County which are zoned for commercial and medium density residential development.
- Construction of Field Stone Boulevard from the intersection of Scenic Creek Lane/Lakeford Drive and Field Stone Boulevard (this intersection is located in Three Flags) to its intersection with Route 29 at Granite Boulevard. The Route 29 intersection could be constructed as either an at-grade 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 8.4)

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, its access to major roads and the airport. 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 industrial uses.

The 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 should be constructed to act as a service road to provide some traffic relief for Route 15/29 Business. Care must be taken to insure that this parallel road does not become congested by excessive development, but some development is appropriate. The area north of this parallel road is designated as rural, and as such, commercial/industrial development should be contained between this parallel road and Route 15/29. Residential development should be of rural density along this corridor.
- 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 the Route 29 Bypass. The construction of this interchange is Culpeper County's top priority transportation construction project.
- A connection from Braggs Corner Road (Route 666) to Ira Hoffman Lane utilizing the existing Enterprise Way.
- 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)

Town Vicinity Improvements: Loop Road (Map 8.5)

One long-range project that Culpeper County will implement in phases is a system of roads creating a loop around the Town of Culpeper. One of the most congested road segments in the County is Main Street, 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 would extend from Route 729 to Route 522 west. The connection from Route 729 to Route 522 is detailed on Map 8.6. The final connection, from Route 522 south to Route 29, is the most extensive and likely the most problematic. 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.

Lovers Lane Industrial Area (Map 8.7)

The Lovers Lane Industrial Area Plan focuses on the industrial area south of Lovers Lane (Route 686), between Route 15 and Route 522. Based on planned future development, a major connector road will be appropriate from Route 15 at Route 299 to Route 522 at Route 652. This road would effectively be an extension of Route 299. The road could relieve congestion at the intersection of Route 3 and Route 522 and at the Route 3 – Route 15/29 interchange by providing another outlet to major arterials such as Route 15 and Route 29. Minor connector roads between Lover’s Lane (Route 686) and the new major collector road described above would further alleviate traffic congestion by providing multiple access points. In addition, once development commences, the feasibility of establishing a commuter rail station within this area should be investigated.

Brandy Station/Elkwood Area Plan (Map 8.8)

The Brandy Station/Elkwood Area Plan, located to the south of Route 15/29, is a new addition to the 2010 Comprehensive Plan. This area plan replaces the Elkwood Business/Industrial Area Plan which was located to the north of Route 15/29. Much of the area which comprised the Elkwood Business/Industrial Area Plan is now under an historic easement which is held by the Department of Historic Resources.

In 2007, House Bill 3202 was signed into law. This law requires localities meeting certain population growth thresholds to establish Urban Development Areas (UDAs). Culpeper County is one of 67 counties required to establish UDA(s) by 2011. The Brandy Station/Elkwood area plan envisions a transportation network which supports the creation of a UDA as well as furthering Culpeper County’s goal of establishing this area as a Village Center. The transportation components of the area plan include

- A major collector road which would run from the intersection of Route 663 and Rowdy Road, crossing Carrico Mills Road to an intersection with Berry Hill Road. This new road would provide access to the UDA/Village Center and help to keep local traffic off Route 15/29.
- A new interchange to alleviate potential transportation issues with the two railroad track crossings at Route 669 (Carrico Mills Road) and Route 676 (Berry Hill Road) connecting Route 15/29 and the new major collector road identified above.
- Investigate the feasibility of establishing a commuter rail station within this UDA/Village Center.

An additional project not shown on the area plan is contemplated in the Brandy Station/Elkwood Village Center. This project would extend Route 786 (Airpark Drive) along the east side of the airport to an intersection with Route 676 (Beverly Ford Road) which would allow for the creation of a cul-de-sac on Route 676 which in turn would enable the County to operate the airport without an FAA exemption. Currently, Route 676 constitutes an obstruction based upon its elevation and proximity to the runway.

Clevenger's Corner Area Plan (Map 8.9)

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 another rezoning for a major residential and mixed use development has been submitted for the southwest quadrant of the intersection, both of which 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 element of this plan is:

- The realignment of Route 622 to intersect with a future road serving new development and providing a parallel road system to Route 229 all the way from Route 211 to Route 621. A commuter parking area has been established and will need to be relocated during construction.

Airport (Map 8.10)

The specific improvements at the Culpeper County Airport are detailed in the County's adopted Airport Master Plan, which is hereby incorporated into the Comprehensive Plan by reference. The Airport Master Plan has recently been 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 improvement projects recently completed at the Airport include the extension of Runway 4-22 (with associated taxiways and safety areas), upgrading the existing non-precision approach, obstruction clearing, land purchases, and hangar/apron expansion. These improvements were a multi-year effort, completed in 2004.

Future Projects:

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 may need to be relocated in the future.

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 the building design is nearing completion.

Hangar Development: An area planned for additional hangar space has been identified, and an archaeological study to clear the site for development has been completed. Site preparation design is funded and should occur in 2010. Building design and construction is not funded by the DOAV or the FAA, therefore construction will be dependent upon funding availability. In the past, a public / private partnership was utilized to construct hangars and such an arrangement could again be considered.

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. Such projects are anticipated to arise from time to time and are addressed by the Airport Advisory Committee and the County Board of Supervisors.

Airport Master Plan Update: The update to the Airport Master Plan includes new projects such as installation of a self-service fueling station, new hangar development, apron and taxiway expansion, runway lengthening, and other items. Due to the level of development of airport facilities on the west side of the airfield currently, the Master Plan Update focuses primarily upon improvements and development on the west side of the airfield.

Environmental Assessment: Following the completion of the Airport Master Plan Update, an environmental assessment will be required prior to implementation of any planned improvements. This environmental assessment is scheduled to be done in 2010-2011, pending funding by the DOAV and the FAA.

Area Plan Maps

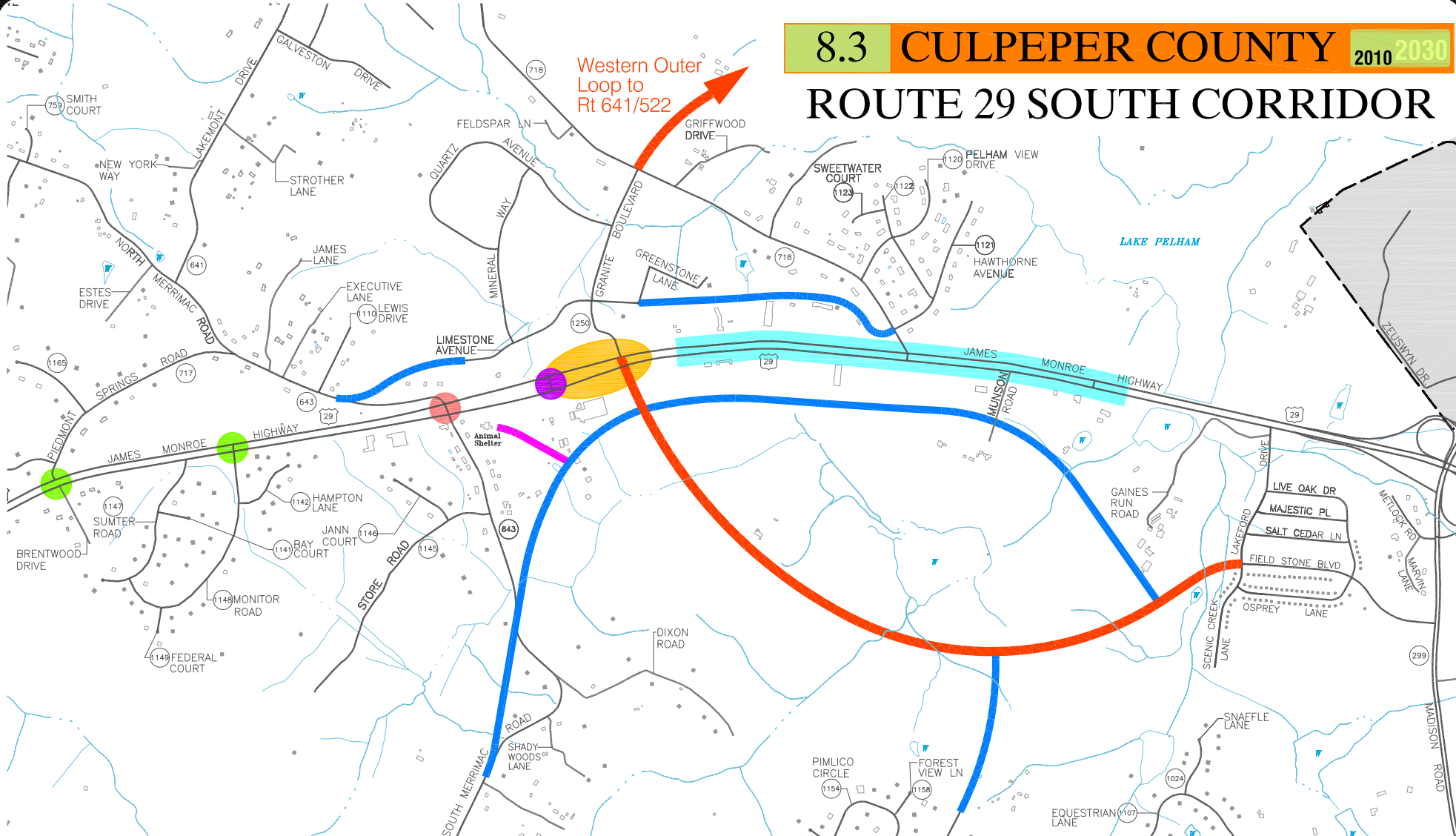
Each of the maps that follow is intended to set forth a variety of long-range planning efforts which would ultimately serve Culpeper's projected transportation needs well into the future. With the exception of the Airport Development Plan which is subject to strict national standards, it is unlikely 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 utilized 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 right-of-way at a minimum. These plans should also be flexible enough to permit alternative solutions to meet the County's transportation needs.









8.3 CULPEPER COUNTY 2010 2030

ROUTE 29 SOUTH CORRIDOR

Western Outer Loop to Rt 641/522



LEGEND

-  FUTURE INTERCHANGE
-  REVIEW AND UPGRADE ROAD GEOMETRICS
-  SAFETY IMPROVEMENTS
-  ELIMINATE ACCESS
-  CLOSE CROSSOVER
-  MAJOR COLLECTOR
-  MINOR COLLECTOR
-  ACCESS TO ANIMAL SHELTER

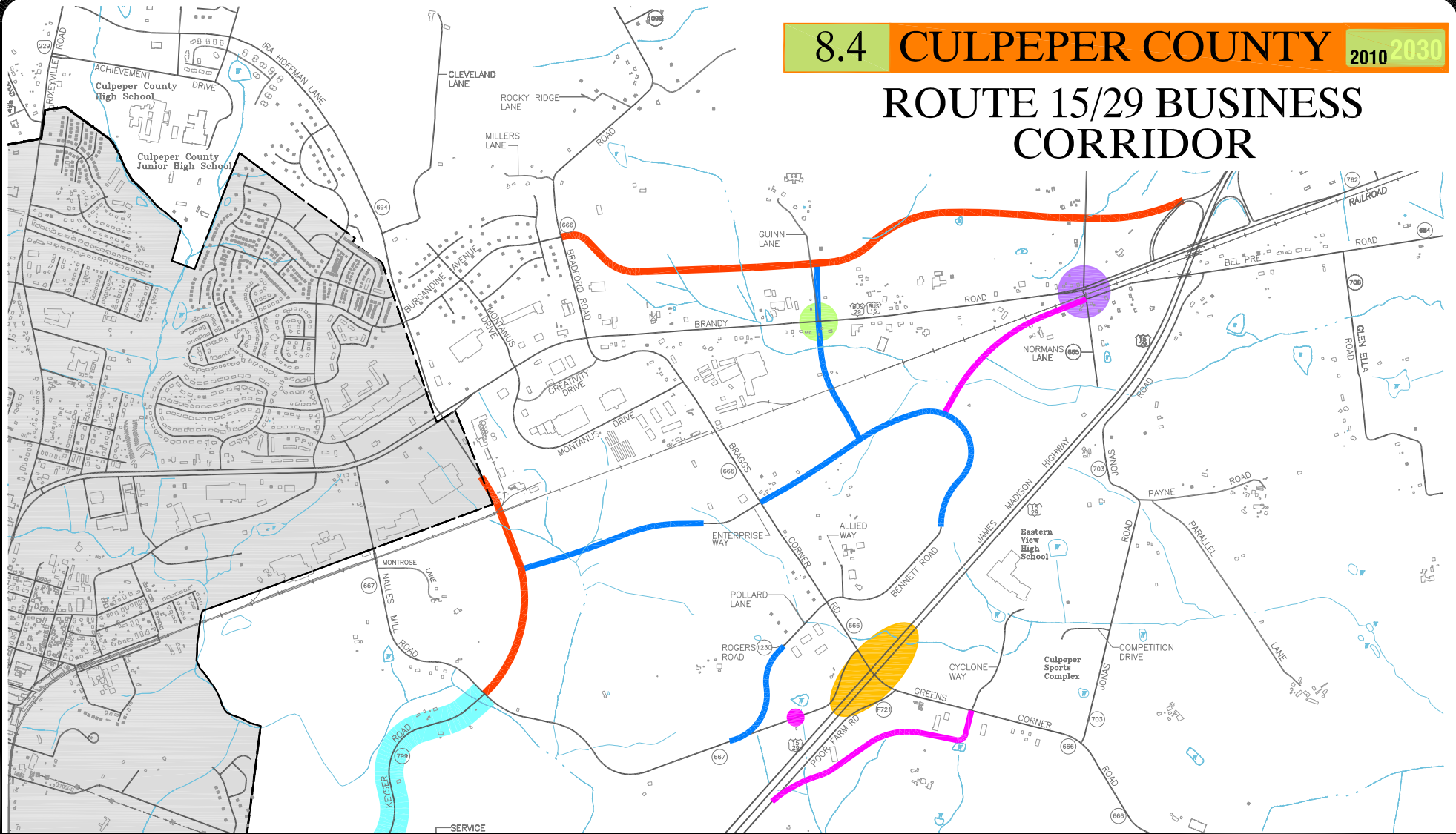


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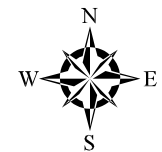
8.4 CULPEPER COUNTY 2010 2030

ROUTE 15/29 BUSINESS CORRIDOR







LEGEND

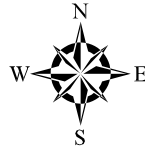
- | | | | |
|---|-----------------------------|---|------------------------------------|
|  | FUTURE INTERCHANGE |  | MAJOR COLLECTOR |
|  | INTERSECTION STUDY REQUIRED |  | MINOR COLLECTOR |
|  | POTENTIAL SIGNALIZATION |  | RE-ALIGN ROAD |
|  | CUL-DE-SAC ROAD |  | REVIEW AND UPGRADE ROAD GEOMETRICS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



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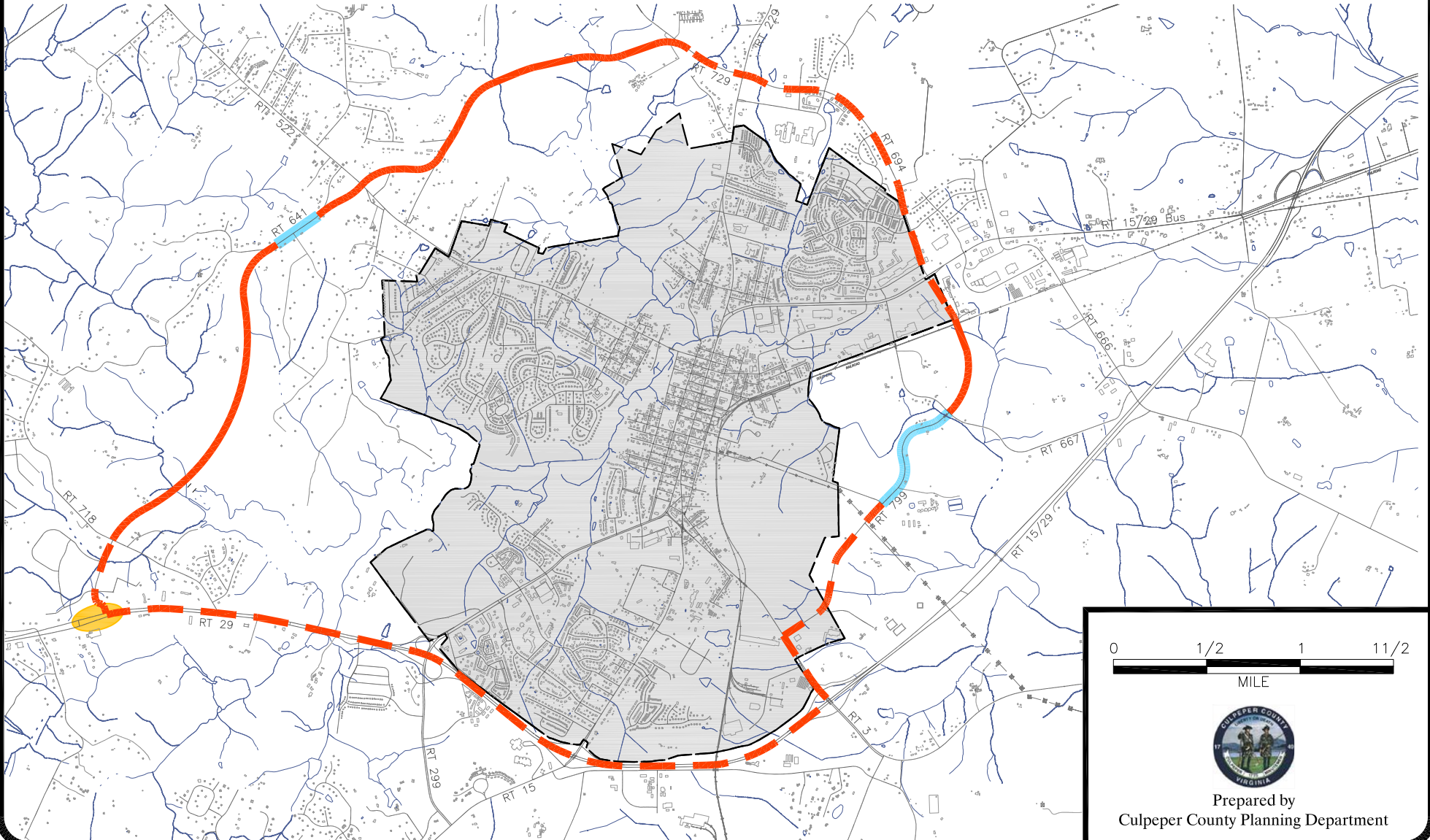
LEGEND

-  LOOP ROAD (NEW CONSTRUCTION OR UPGRADE)
-  LOOP ROAD (EXISTING SEGMENTS)
-  FUTURE INTERCHANGE
-  REVIEW AND UPGRADE ROAD GEOMETRICS



8.5 CULPEPER COUNTY 2010 2030

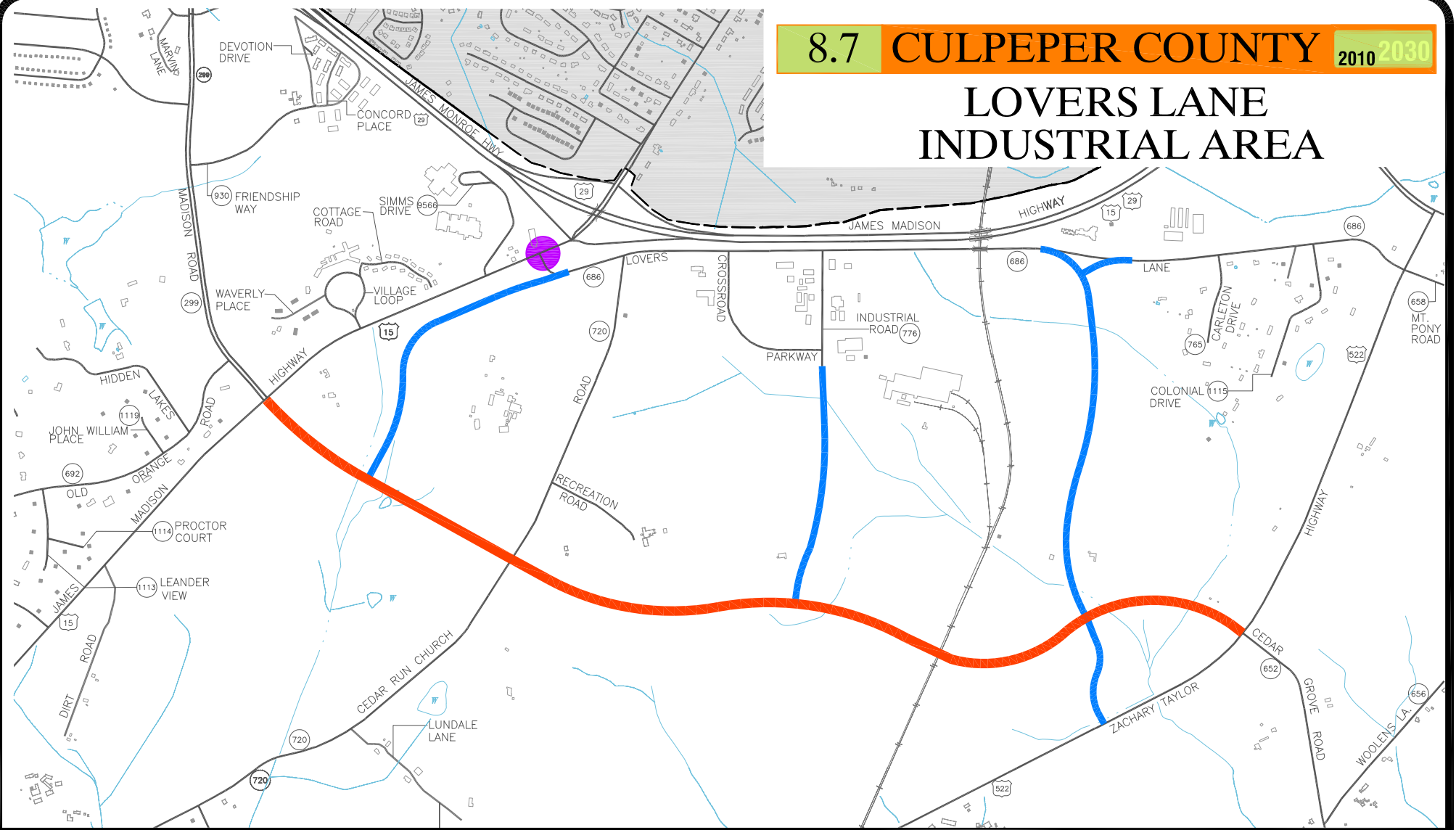
TOWN VICINITY IMPROVEMENTS TOWN/COUNTY LOOP ROAD






Prepared by
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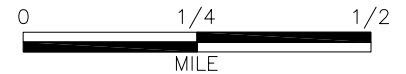
8.7 CULPEPER COUNTY 2010 2030

LOVERS LANE INDUSTRIAL AREA



LEGEND

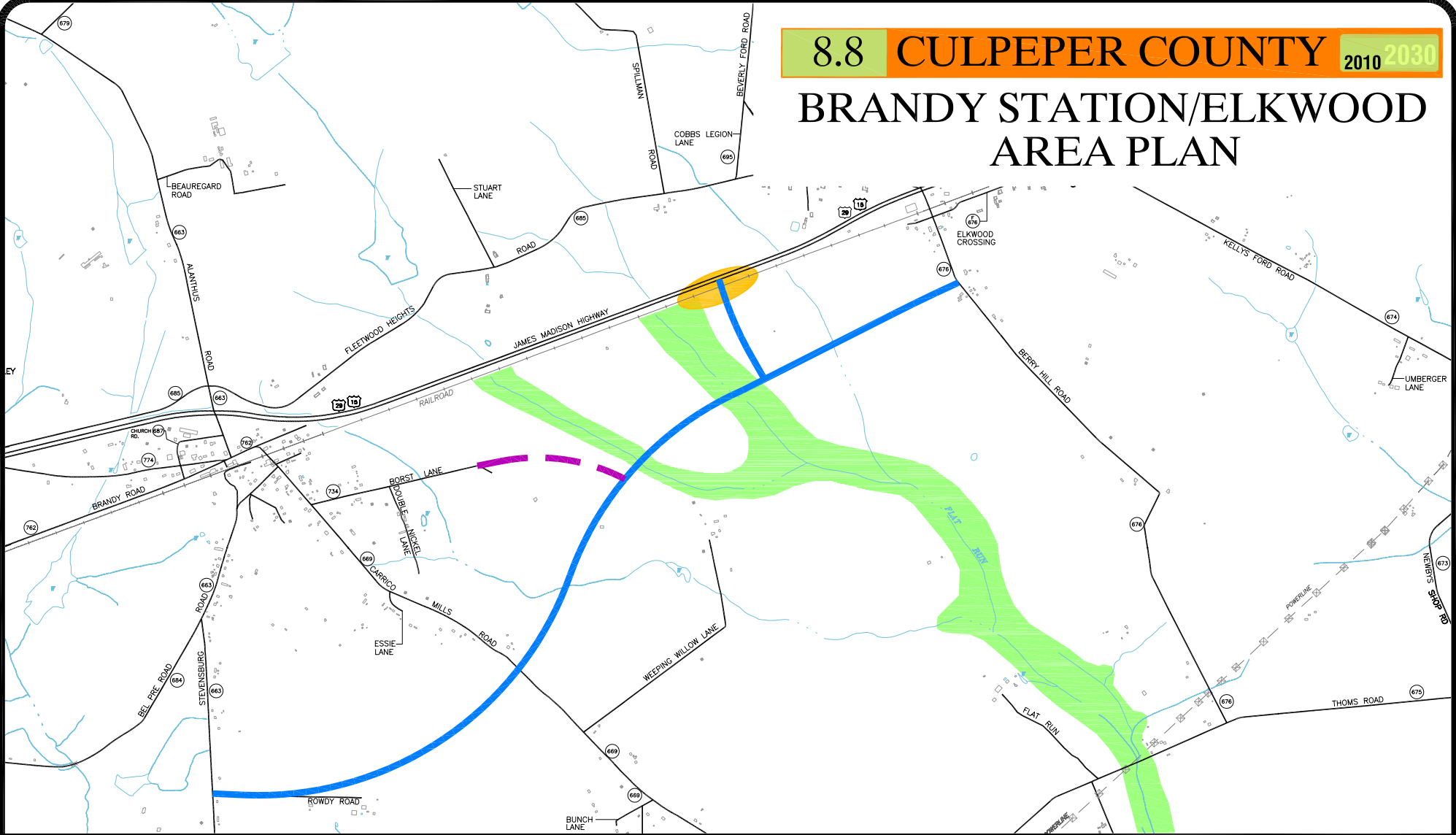
-  MAJOR COLLECTOR
-  MINOR COLLECTOR
-  CLOSE INTERSECTION







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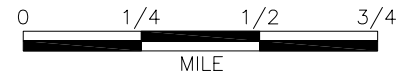
8.8 CULPEPER COUNTY 2010 2030

BRANDY STATION/ELKWOOD AREA PLAN



LEGEND

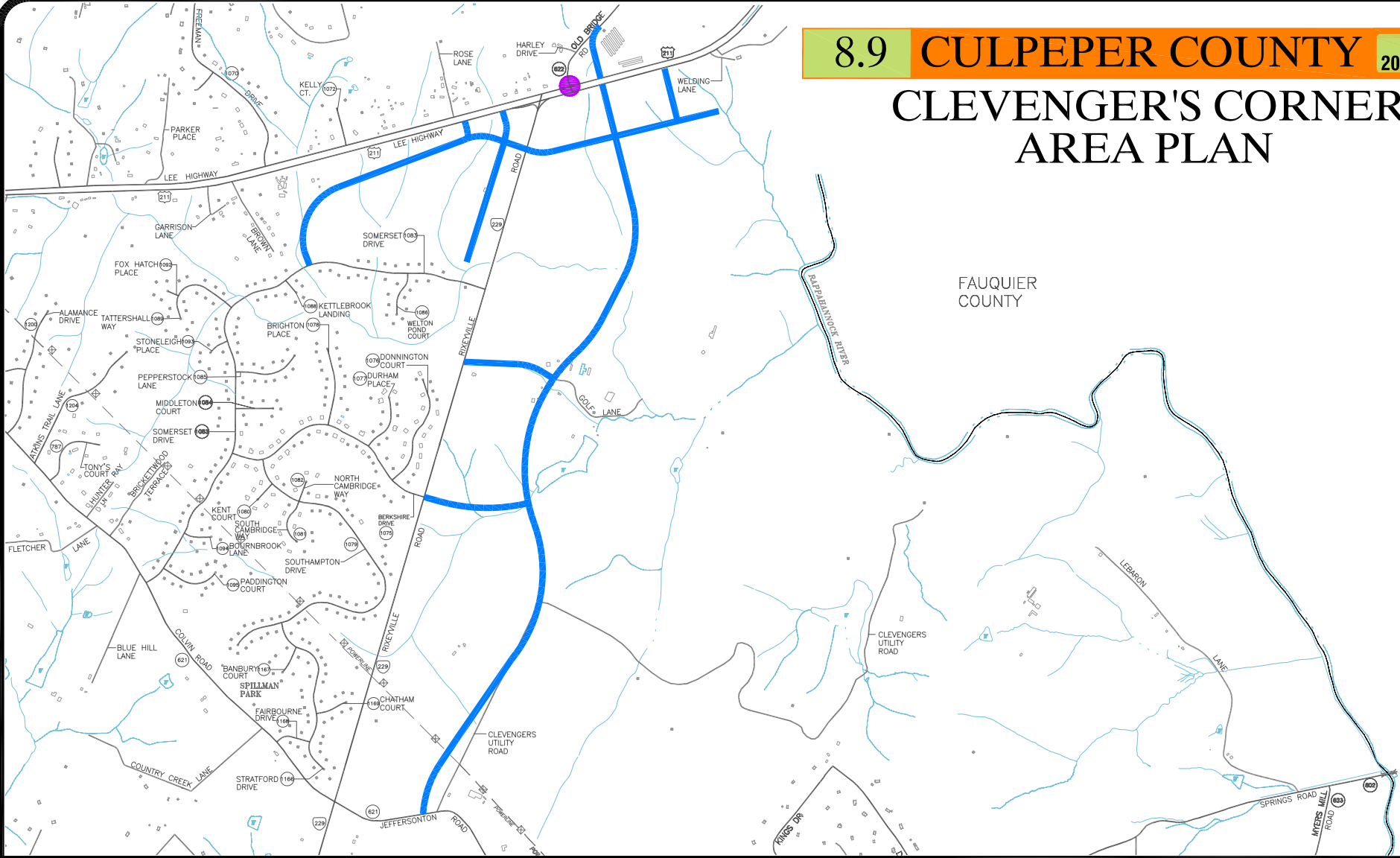
-  FUTURE INTERCHANGE
-  MINOR COLLECTOR
-  POSSIBLE FUTURE CONNECTION
-  GREENWAY (CONCEPTUAL)



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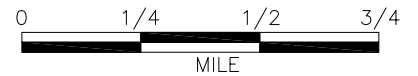
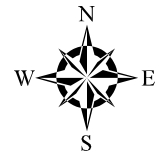
8.9 CULPEPER COUNTY 2010 2030

CLEVINGER'S CORNER AREA PLAN



LEGEND

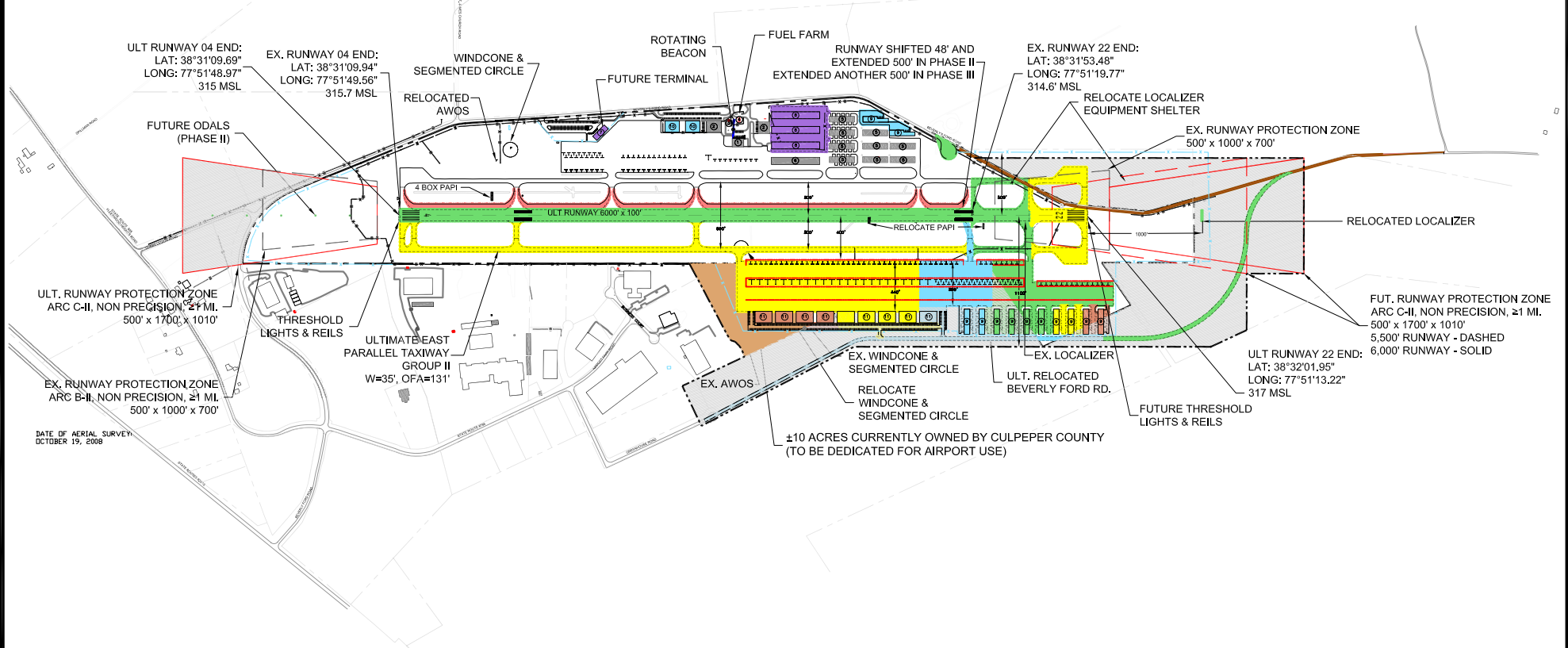
-  MINOR COLLECTOR
-  CLOSE INTERSECTION



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8.10 CULPEPER COUNTY 2010 2030

CULPEPER REGIONAL AIRPORT ALP EXHIBIT



Prepared by
Culpeper County Planning Department

DESCRIPTION	LEGEND		PHASING	
	EXISTING	FUTURE	PHASE	SYMBOL
RUNWAY PROTECTION ZONE	---	---	UNDER CONSTRUCTION	■
AIRPORT REFERENCE POINT	⊕	⊙	I (0-5 YEARS)	■
AIRPORT PROPERTY LINE	—●—●—●—	—●—●—●—	II (6-10 YEARS)	■
FENCELINE	—x—x—x—	—x—x—x—	III (11-20 YEARS)	■
ROADWAYS	—	SEE PHASE	IV (20+ YEARS)	■
LAND TO BE ACQUIRED	—	—	TO BE DEMOLISHED	■
HOLD LINES	NOT SHOWN	—		
ON AIRPORT BUILDINGS	■	SEE PHASE		

